Initial Study/Mitigated Negative Declaration

Fagundes Residential Development

Prepared for:

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223
(559) 734-8737
Contact: Karl Schoettler

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October 2024

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PROJECT INFORMATION

This document is the Initial Study/Mitigated Negative Declaration on the potential environmental effects of the City of Farmersville (City) Fagundes Residential Project (Project). The City of Farmersville will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials referenced in this report are available for review in the project file during regular business hours at 909 W. Visalia Road, Farmersville, CA 93223.

Project title

Fagundes Residential Project

Lead agency name and address

City of Farmersville
909 W. Visalia Road
Farmersville, California 93223

Contact person and phone number

Karl Schoettler, City Planner
City of Farmersville: (559) 734-8737 ext. 8032

Project location

The proposed Project site is currently located within the City of Farmersville Sphere of Influence (SOI), within the Farmersville Urban Area Boundary, and is adjacent to existing Farmersville City Limits on three sides. The site is within the northern portion of Tulare County (see Figure 1). The approximate 22-acre Project site is located south of W. Walnut Avenue, between Road 156 to the west and N. Ventura Road to the east (see Figure 2). The site would occupy Assessor's Parcel Numbers (APNs) 128-030-036 and a portion of 128-030-056. State Route 198 runs east-west through northern Farmersville, approximately 1.2 miles north of the Project site.

Figure 1 – Location

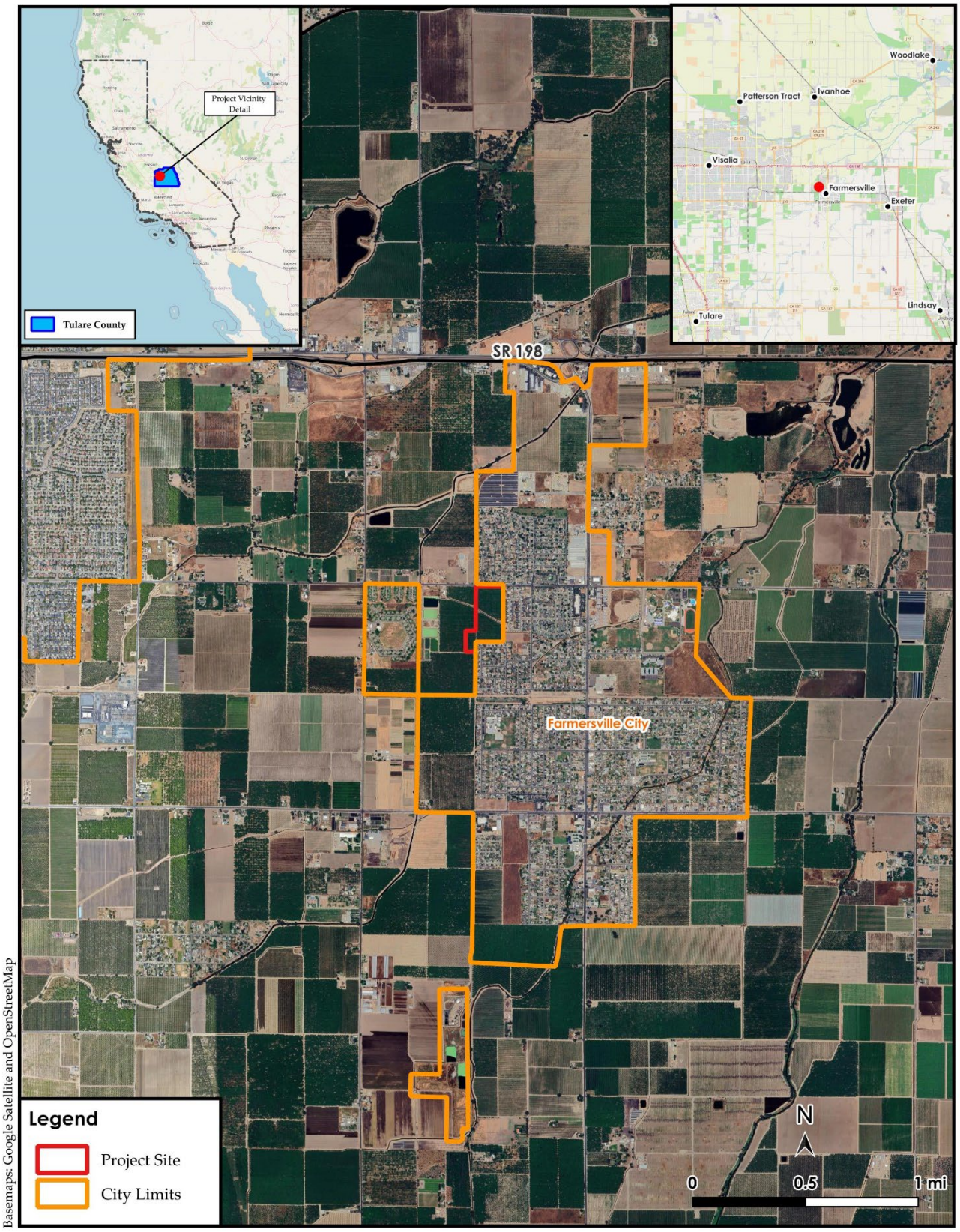


Figure 2 – Site Aerial

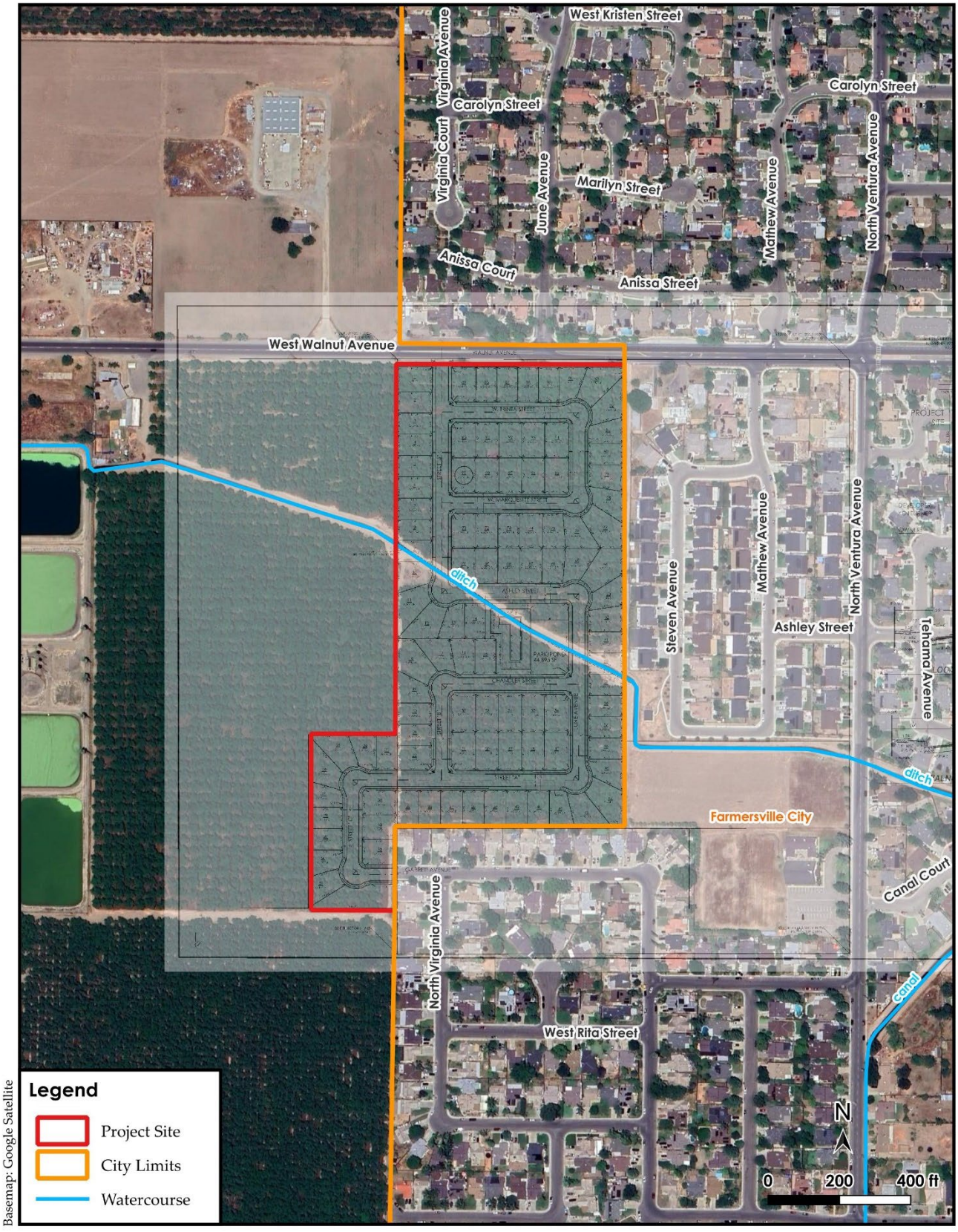
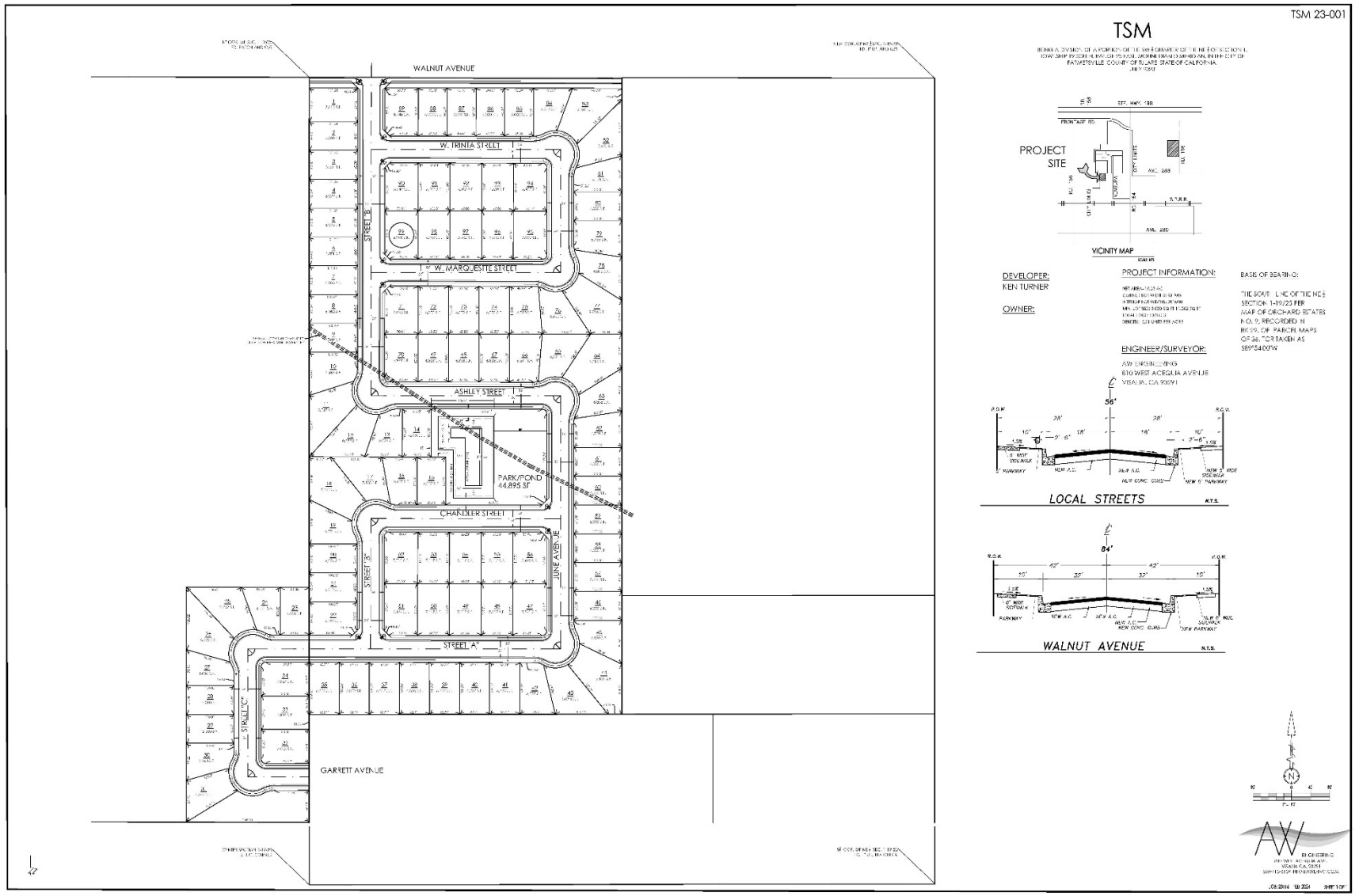


Figure 3 – Site Plan



Project sponsor's name/address

Ken Turner
P.O. Box 8053
Visalia, CA 93290

General plan designation

Medium Density Residential and Agriculture/Urban Reserve

Zoning

A-1 (Agricultural Zone, Tulare County Zoning)

Project Description

The Fagundes Residential Project (proposed Project) consists of an Annexation, General Plan Amendment, Rezone, and approval of a Tentative Subdivision Map to allow for the development of 99 single-family residential units in the City of Farmersville. The Project site is currently located outside of and adjacent to the western part of Farmersville, within the Urban Area Boundary (UAB) and Sphere of Influence (SOI). Specifically, the proposed Project includes:

- Approve the Annexation of the site into the City of Farmersville
- Approve a General Plan Amendment for the proposed land parcels from "Agricultural/Urban Reserve" to "Medium Density Residential" on the Farmersville General Plan land use map
- Approve a Zone Change to R-1, Single Family Residential
- Approve the Project's Tentative Tract Map
- Construction of a 0.47-acre ponding basin/park
- Undergrounding of an unnamed canal

Phasing/Construction Schedule

The proposed Project construction will require site preparation activities such as site grading activities. The Project will be constructed in one phase and is anticipated to start in September 2025.

Site Circulation and Access

The Project is located south of W. Walnut Avenue between Road 156 to the west and N. Ventura Road to the east. The site has been designed with points of ingress and egress at Garrett Avenue to the south and Walnut Avenue to the north. The Project will be responsible for the construction of internal roadways as well as for improvements to surrounding roadways to accommodate the Project.

Surrounding Land Uses/Existing Conditions

The site is currently developed with orchards. An unnamed canal bisects the site.

Lands surrounding the proposed Project are described as follows:

- North: W. Walnut Avenue, single-family residences, City of Farmersville.
- South: Single-family residences, W. Garrett Avenue, City of Farmersville.
- East: Single-family residences, irrigation canal, fallowed agricultural land, City of Farmersville.
- West: Orchards and irrigation canal, Tulare County.

Approvals Needed

- The adoption of a Mitigated Negative Declaration by the City of Farmersville
- Approval of Annexation by the City of Farmersville
- Approval of a General Plan Amendment by the City of Farmersville
- Approval of a Zone Change by the City of Farmersville
- Approval of a Tentative Subdivision Map by the City of Farmersville
- Approval of Building Permits by the City of Farmersville
- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District

- Compliance with other federal, state and local requirements.

Tribal Consultation

The City of Farmersville notified the following California Native American Tribes pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) on behalf of the City of Farmersville on March 21, 2022. Because the Project involves an amendment to the General Plan, the City provided additional Tribal notification pursuant to Government Code Section 65352.3 (SB 18). Tribes identified by the Native American Heritage Commission, as identified below, were notified of the Project by Certified US Mail on May 20 2024. No comments were received as of this writing.

- Santa Rosa Rancheria Tachi Yokut Tribe
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

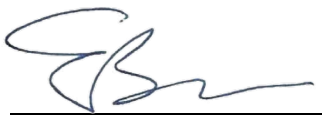
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



For Karl Schoettler

9/27/2024

Karl Schoettler

Date

City Planner

City of Farmersville

ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The Project site is currently located in Tulare County, adjacent to existing Farmersville City Limits on three sides. The proposed Project includes the development of 99 single-family residential units within the Farmersville SOI and UAB. The proposed Project also includes developments and improvements typically associated with a new residential development, including access roads, lighting and site landscaping. The structures will conform to design standards set forth by

the City's General Plan and Zoning Ordinance. The site is currently comprised of orchards and contains no structures requiring demolition and removal.

The City of Farmersville General Plan does not identify any scenic vistas within the Project area. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area.

Construction activities will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. There are no state designated scenic highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 198 east of SR 99 as an Eligible State Scenic Highway. This is the closest highway, located approximately 1.2 miles north of the Project site; however, the Project site is both physically and visually separated from SR 198 by intervening land uses. In addition, no scenic highways or roadways are listed within the Project area in the City of Farmersville's General Plan or Tulare County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less Than Significant Impact. Site construction will include residences, internal access roads, lighting, site landscaping and additional related improvements. The residences will be single-family and will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is substantially surrounded by urban uses, including residential and

agricultural, and as such, will not result in a use that is visually incompatible with the surrounding area. The proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings.

The impact will be ***less than significant***.

Mitigation Measures: None are required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently, the sources of light in the Project area are from streetlights, the vehicles traveling along W. Walnut Avenue and nearby residential streets, and nighttime lighting from adjacent residences. The

Project would necessitate street and residential nighttime lighting and such lighting that would be subject to City standards. Accordingly, potential impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant Impact. The Project site is located in an area of the County considered *Prime Farmland* by the State Farmland Mapping and Monitoring Program.[1] The Project site is located adjacent to and west of the Farmersville City limits, within the Farmersville UAB and SOI, approximately 0.6 miles east of Road 156, 0.2 miles west of N. Ventura Avenue, and south of West Walnut Avenue, in Tulare County. The majority of the site has been designated Medium Density Residential while the small southwestern portion of the site is designated Agriculture/Urban Reserve.

Agricultural conversion impacts resulting from the changing the land use designation from Agriculture/Urban Reserve were analyzed using the California Land Evaluation & Site Assessment (LESA) Model. The LESA model is a point-based approach for rating the relative importance of agricultural land resources based upon specific measurable features. The California LESA Model was developed to provide lead agencies with an optional methodology to ensure that potentially significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process (Public Resources Code Section 21095), including in CEQA reviews.[2]

The LESA model consists of two Land Evaluation (LE) factors and four Site Assessment (SA) factors. The final LESA score was 67, with the LE subscore as 47.5 and the SA subscore as 19.5 and the model worksheets are provided in Appendix A. Per LESA scoring thresholds, the impacts are considered significant only if LE and SA subscores are each greater than or equal to 20 points.[3] Therefore, impacts of conversion of Farmland to non-agricultural use are less than significant.

Mitigation Measures: None are required.

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[1] Farmland Mapping and Monitoring Program, Division of Land Resource Protection, California Department of Conservation.. https://maps.conservation.ca.gov/DLRP/CIFF. Accessed June 2024.

[2] Land Evaluation & Site Assessment (LESA) Model. Department of Conservation. https://www.conservation.ca.gov/dlrp/Pages/qh_lesa.aspx. Accessed August 2022.

[3] Table 9. California LESA Model Scoring Thresholds. California Agricultural Land Evaluation and Site Assessment Model, Instruction Manual.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed Project site is not under a Williamson Act Contract. There are ***no impacts.***

Mitigation Measures: None are required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is ***no impact***.

Mitigation Measures: None are required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is ***no impact***.

Mitigation Measures: None are required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less Than Significant Impact. As described in Impact II(a), a LESA analysis was utilized to assess farmland conversion impacts. The LESA found that impacts resulting from farmland conversion would be less than significant. Additionally, the majority of the site has been designated for residential development by the Farmersville General Plan and is within the SOI and UAB. As such, the proposed Project does not have the potential to result in the new conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. Potential impacts are ***less than significant.***

Mitigation Measures: None are required.

III. AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

The following information was provided by an Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum that was performed on behalf of the proposed Project by LSA Consulting Services, report date June 12, 2023. The report can be read in its entirety in Appendix B.

Regional Emissions Thresholds

The SJVAPCD defines emissions thresholds in the GAMAQI, established based on the attainment status of the air basin in regards to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. The related impacts are discussed further in the Project Impacts section. The SJVAPCD regional emission thresholds for construction and operation are shown in Table 1.

Table 1
Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (tons per year)					
	CO	NO_X	ROG	SO_X	PM_{10}	$PM_{2.5}$
Construction	100	10	10	27	15	15
Operations	100	10	10	27	15	15

Source: *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

Health Risk Thresholds

Both the State and federal governments have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximum exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations, 350 days per year. The SJVAPCD's Update to the District's Risk Management Policy to Address the OEHHA Revised Risk Assessment Guidance Document states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 20 in 1 million.

• **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multi pathway consideration when applicable. The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

• **Acute HI**: Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level. The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

RESPONSES

a. Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The proposed project is in a region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the 2022 Plan for the 2015 8-Hour Ozone Standard in December 2022 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.

To ensure the SJVAB's continued attainment of the USEPA PM10 standard, the SJVAPCD adopted the 2007 PM10 Maintenance Plan in September 2007. The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards in November 2018 to address the USEPA 1997 annual PM2.5 standard of 15 μg/m3 and 24-hour PM2.5 standard of 65 μg/m3, the 2006 24-hour PM2.5 standard of 35 $\mu g/m^3$, and the 2012 annual PM2.5 standard of 12 $\mu g/m^3$.

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the proposed project would not conflict with or obstruct the implementation of SJVAPCD air quality plans. The impact would be ***less than significant***.

Mitigation Measures: None are required.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact with Mitigation Incorporation.

Criteria Pollutant Analysis

The Basin is currently designated nonattainment for the federal and State standards for O3 and PM2.5. In addition, the Basin is in nonattainment for the PM10 standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts.

Construction Emissions (Regional)

During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading and building activities. Emissions from construction equipment are also anticipated and would include CO, NOx, reactive organic gases (ROG), directly emitted PM2.5 or PM10, and toxic air contaminants such as diesel exhaust particulate matter.

Project construction would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions (PM10). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM10 emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SOx), NOx, ROG, and some soot particulate (PM2.5 and PM10) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table 2. Appendix B provides CalEEMod output sheets.

Table 2
Short-term Regional Construction Emissions

Construction Year	Annual Pollutant Emissions (tons per year)					
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2025	<0.1	1.6	1.2	<0.1	0.2	0.1
2026	0.5	2.6	2.1	<0.1	0.1	0.1
2027	0.2	0.4	0.3	<0.1	<0.1	<0.1
Maximum Annual Emissions	**0.5**	**2.6**	**2.1**	**<0.1**	**0.2**	**0.1**
SJVAPCD Threshold	**10.0**	**10.0**	**100.0**	**27.0**	**15.0**	**15.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2024).
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_x = sulfur oxides

As shown in Table 2, construction emissions associated with the proposed Project would not exceed the SJVAPCD's thresholds for ROG, NOx, CO, SOx, PM10, and PM2.5 emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. Construction emissions associated with the proposed project would be less than significant with implementation of Regulatory Compliance Measure **AIR-1** (See Mitigation Measures described below). Therefore, construction of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Operational Emissions (Regional)

Long-term air pollutant emission impacts associated with the proposed project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

Mobile source emissions include ROG and NOX emissions that contribute to the formation of ozone. Additionally, PM10 emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products. Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table 3 provides the proposed project's estimated operational emissions. Attachment B in the assessment provides CalEEMod output sheets.

Table 3
Project Operational Emissions

Emission Type	Pollutant Emissions (tons per year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	0.7	0.9	5.9	<0.1	1.4	0.4
Area Sources	0.9	<0.1	0.5	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Total Project Emissions	**1.6**	**1.1**	**6.5**	**<0.1**	**1.4**	**0.4**
SJVAPCD Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2024).
Note: Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_x = sulfur oxides

The results shown in Table 3 indicate the proposed project would not exceed the significance criteria for annual ROG, NOX, CO, SOX, PM10, or PM2.5 emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Microscale (CO Hot Spot) Analysis.

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in Tulare County are not available. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

As described in the Project Description section, the proposed Project is estimated to generate 1,000 average daily trips. Therefore, given the extremely low level of CO concentrations in the project area and the anticipated lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

Mitigation Measures:

AIR-1 Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM10 Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water or

chemical stabilizer/suppressant or covered with a tarp or other suitable cover or vegetative ground cover.

• All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

• When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.

• All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

• Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/ suppressant.

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The project site is surrounded primarily by agricultural and residential uses. The closest sensitive receptors to the project site include single family homes located east of the project site at approximately 50 feet. The nearest worker receptor to the project is located west of the project site at approximately 100 feet and the nearest school receptor to the project site is located south of the project site at 1,800 feet.

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table 4, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment as proposed by the Project. Model snapshots of the sources are shown in Attachment C of Appendix B.

Table 4
Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	19.27	0.017	0.000
Worker Receptor Risk	0.17	0.008	0.000
School Receptor	0.10	<0.001	0.000
SCAQMD Significance Threshold	**20.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (June 2024).
SCAQMD = South Coast Air Quality Management District

As shown in Table 4, the maximum cancer risk for the residential receptor MEI would be 19.27 in one million, which would not exceed the SJVAPCD cancer risk threshold of 20 in one million. The worker receptor risk would be lower at 0.17 in one million and the school receptor risk would be 0.10 in one million, which would also not exceed the SJVAPCD cancer risk thresholds. The total chronic hazard index would be 0.017 for the residential receptor MEI, 0.008 for the worker receptor MEI, and less than 0.001 for the school receptor MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations. No significant health risk would occur from project construction emissions.

The proposed Project would include the construction of a 99-unit single-family residential development. As identified in Table 3, project operational emissions of criteria pollutants would be below SJVAPCD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. In addition, the proposed project would be required to implement District Rule 9510, Indirect Source Review (ISR). Implementation of Rule 9510 would reduce operational emissions of NOX and PM10 by 33.3 percent and 50 percent, respectively. Compliance with SJVAPCD rules would further limit doses and exposures, reducing potential health risk related to vehicle and equipment emissions to a level that is not significant. Once the proposed project is constructed, the proposed project would not be a source of substantial emissions. Therefore, implementation of the proposed project would not result in new sources of TACs. Therefore, the project would not expose sensitive receptors to substantial levels of TACs.

Valley Fever

The closest sensitive receptors to the Project site include single-family homes located approximately 50 feet east of the site. Except under high wind conditions, this distance is sufficient that particulate matter would settle prior to reaching the nearest sensitive receptor. In addition, crosswinds influenced by the adjacent roadways would help dissipate any particulate matter associated with the construction phase of the project. Therefore, any Valley fever spores suspended with the dust would not be anticipated to reach the sensitive receptors. However, during project construction, it is possible that workers could be exposed to Valley fever through fugitive dust. Dust control measures, consistent with SJVAPCD Regulation VIII, would reduce the exposure to the workers and sensitive receptors. Therefore, dust from the construction of the project is not anticipated to significantly add to the existing exposure of people to Valley fever.

Naturally Occurring Asbestos

The project is in Tulare County, which is among the counties found to have serpentine and ultramafic rock in their soils. However, according to the California Geological Survey, no such rock has been identified in the project vicinity. When demolition is proposed during construction, the demolition of existing buildings may expose asbestos used in building materials. However, the proposed Project would not involve any demolition or renovation as no current development exists on the Project site. Therefore, the potential risk for naturally occurring asbestos during Project construction is small and would not be significant.

In summary, the Project would not exceed SJVAPCD localized emission daily screening levels for any criteria pollutant. The Project is not a significant source of TAC emissions during construction or operation. The Project is not in an area with suitable habitat for Valley fever spores and is not in area known to have naturally occurring asbestos. Therefore, the Project would result in ***less than significant impacts*** to sensitive receptors.

Mitigation Measures: None are required.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. The SJVAPCD addresses odor criteria within the GAMAQI. The district has not established a rule or standard regarding odor emissions, rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact."

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed uses are not anticipated to emit any objectionable odors. Any odors in general would be confined mainly to the project site and would readily dissipate. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Thus, impacts would be ***less than significant.***

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐

e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include walnut orchards and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is about 10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the site.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

A Biological Resource Evaluation (BRE) was performed on behalf of the Project by Colibri Ecological Consulting in July 2024 and is the basis of the impact analysis. The BRE report can be found in its entirety in Appendix C.

A search of the California Natural Diversity Database (CNDDB) and a field reconnaissance survey of the Project site was conducted as part of the BRE. The Project site and a 50-foot buffer surrounding the Project site were walked and thoroughly inspected to evaluate and document the potential for the area to support state- or federally protected resources. All plants except those under cultivation or planted in residential areas and all vertebrate wildlife species observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes,

streams, and other waters as defined by the USACE, CDFW and under the Porter-Cologne Water Quality Act. An additional buffer of 0.5 miles around the Project site was inspected for potential nesting sites for special-status raptors. The 0.5-mile buffer was surveyed by driving public roads and identifying the presence of large trees or other potentially suitable substrates for nesting raptors as well as open areas that could provide foraging habitat.

RESPONSES

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. A CNDDB search for records of special-status species from the Exeter 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles (Cairns Corner, Ivanhoe, Lindsay, Monson, Rocky Hill, Tulare, Visalia, and Woodlake) produced 214 records of 49 species (see Table 1 of Appendix B in the BRE). Of those 49 species, nine were not considered further because they are not CEQA-recognized as special-status species by state or federal regulatory agencies or public interest groups or are considered extirpated in California. Of the remaining 40 species, 11 are known from within 5 miles of the Project site. Of those 11 species, none is those species are expected to occur on or near the Project site.

Searching the CNPS inventory of rare and endangered plants of California yielded 27 species (CNPS 2024, Appendix C of the BRE), 21 of which have a CRPR of 1 or 2 and seven of which are also state or federally listed. Of those 21 plant species, none could occur on or near the Project site due to the lack of habitat. Thus, the impact remains ***less than significant.***

Mitigation Measures: None are required.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. The Project site consists of an irrigated, maintained walnut orchard. Ruderal herbaceous vegetation is distributed throughout the Project site. The site is bordered by residential development to the north, south, and east and a walnut orchard to the west. Aerial imagery indicates the Project site has been used for agricultural production since at least 1994.

An irrigation ditch, a distributary of Extension Ditch, bisects the Project site, with flows entering the east side of the Project site and exiting on its west side. The ditch is listed in the National Wetlands Inventory as riverine with a classification of R5UBFx, which means unknown perennial, unconsolidated bottom, semipermanently flooded, and excavated. The ditch contained flowing water during the 8 May 2024 reconnaissance survey. As the feature contains surface water, it is likely regulated by the SWRCB. Since the ditch is classified as a stream, it would be regulated by the CDFW under California Fish and Game Code Section 1600 et sec. As this ditch appears to be hydrologically connected to the Tule River and Tulare Lake, it would likely also fall under the regulatory jurisdiction of the USACE.

The Project design will include measures for properly undergrounding the portion of irrigation ditch and also constructing a 0.47-acre ponding basin/park. Thus, the proposed Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Additionally, the proposed Project will not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means as no impacts to wetlands will occur. As such, there will be ***less than significant impacts.***

Mitigation Measures: None are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact with Mitigation. Migratory birds could nest on or near the Project site. Bird species that may nest on or near the property include, but are not limited to, California scrub-jay (*Aphelocoma californica*) and house finch (*Haemorhous mexicanus*). Large trees within 0.5 miles of the Project site could provide nesting substrates for raptors.

The Project has the potential to impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes

nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant effect. We recommend that the mitigation measure BIO-1 (below) be included in the conditions of approval to reduce the potential effect to a ***less than significant*** level.

Mitigation Measures:

BIO-1: Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.

2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. According to the BRE, the proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance as no trees or biologically sensitive areas will be impacted. The development will also not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved

local, regional, or state habitat conservation plan as no such plan has been adopted. As such, there is ***no impact***.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant Impact with Mitigation. A cultural records search was conducted by the Southern San Joaquin Valley Information Center (SSJVIC) on June 3, 2024 (RS 24-233, Appendix B).

The records search conducted at the SSJVIC indicated that there are no recorded cultural resources within the Project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks. There have been seven cultural resource studies completed within the one-half mile radius: TU-00121, 00134, 01144, 01171, 01718, 01944, & 01968. According to the information in our files, there are no recorded resources within the project area, and it is not known if any exist there. There are 5 recorded resources within the one-half mile radius: P-54-003229, 004626, 004877, 005296, & 005667.

While no archaeological or built environment resources were identified within the area, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however, implementation of Mitigation Measure CUL-1 will ensure that significant impacts remain ***less than significant with mitigation incorporation.***

Mitigation Measures:

CUL-1: The following measures shall be implemented:

- Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources; and

- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and

- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Farmersville shall implement said measures.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would require inadvertent discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would be ***less than significant with mitigation incorporation.***

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of ***less than significant with mitigation incorporation***.

Mitigation Measures:

CUL-2: The Project applicant shall incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the Project applicant, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

The following information was provided by an Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum that was performed on behalf of the proposed Project by LSA Consulting Services, report date June 12, 2023. The report can be read in its entirety in Appendix B.

The energy requirements for the proposed Project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Attachment A of Appendix B for related CalEEMod output files). The calculation worksheets for diesel fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Attachment C (Energy Consumption Calculations) of Appendix B.

RESPONSES

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. This impact addresses energy consumption from the short-term construction and long-term operations, discussed separately below.

Short-Term Energy Demand - Construction

The anticipated construction schedule assumes that the proposed project would be built in approximately 18 months. Construction-specific phases were assessed for their energy consumption

under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be ***less than significant***.

Long-Term Operations

Energy use associated with the proposed project would consist of natural gas, electricity, and vehicle fuel use associated with project operations.

Table 5 shows the estimated potential increased natural gas, electricity, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data and using the USEPA's fuel economy estimates for 2020 and the California diesel fuel economy estimates for 2021.

Table 5
Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh) per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	879,760	36,146	133,066	106,284

Source: Compiled by LSA (June 2024)
kBTU=thousand British thermal units
kWh=kilowatt hours

As shown in Table 5, the estimated increase in electricity demand associated with the operation of the proposed project would be 879,760 kWh per year. Total electricity consumption in Tulare County in 2022 was 4,957,696,254 kWh;27 therefore, operation of the proposed project would negligibly increase the annual electricity consumption in Tulare County by approximately less than 0.1 percent.

Also shown in Table 5, the estimated increase in natural gas demand associated with the operation of the proposed project would be 36,146 therms per year. Total natural gas consumption in Tulare County in 2022 was 164,629,109 therms; therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Tulare County by approximately less than 0.1 percent.

In addition, the Project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. As shown above in Table 5, the proposed Project would result in the consumption of 133,066 gallons of gasoline and 106,284 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 184.4 million gallons of gasoline and approximately 63 million gallons of diesel will be consumed from vehicle trips in Tulare County in 2027. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in Tulare County by approximately 0.1 percent for gasoline fuel usage and approximately 0.2 percent for diesel fuel usage. The proposed project would result in fuel usage that is a small fraction of current annual fuel use in Tulare County, and fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Electrical and natural gas demand associated with Project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The Project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Furthermore, the proposed Project would be constructed using energy efficient modern building materials and construction practices, and the proposed Project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed Project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. As such, the proposed Project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. Impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The CEC recently adopted the 2023 Integrated Energy Policy Report. The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, energy usage associated with operation of the proposed Project would be relatively small in comparison to the region's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed Project would not lead to new or substantially more severe energy impacts and impacts would be ***less than significant***.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?	☐	☐	☒	☐

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

RESPONSES

a-i. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The proposed Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone.[4] Since no known surface expression of active faults are believed to cross the site, fault rupture through the site is not anticipated. ***No impacts*** would occur.

Mitigation Measures: None are required.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant Impact. There are no known active earthquake faults in the City of Farmersville. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The closest known faults likely to affect the community are the Independence fault and Owens Valley fault, located about 65 miles to the east along the base of the Sierra Nevada in the Owens Valley, and the San Andreas fault located approximately 71 miles to the southwest in the coastal range. According to the Five County Seismic Safety Element (FCSSE), Farmersville is located in the V-1 zone, defined as an area "of hard rock alluvium on valley floors". The FCSSE further

[4] California Earthquake Hazards Zone Application, California Department of Conservation. https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed June 2024.

states that, "the distance to either of the faults expected to be a source of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal facilities".[5]

Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Tulare County has extremely low seismic activity levels, although shaking may be felt from earthquakes whose epicenter lie to the south and west. The proposed Project would comply with existing building code standards or design and construction, which would minimize any impacts resulting from ground shaking or liquefaction. Due to the relatively flat topography of the proposed Project area, impacts associated with landslides are not anticipated. Impacts would be ***less than significant.***

Mitigation Measures: None are required.

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less Than Significant Impact. The City of Farmersville sits on the floor of the San Joaquin Valley. The City is nearly flat which precludes the occurrence of landslides. Any potential impact is ***less than significant***.

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The City of Farmersville sits on top of the alluvial fans of the Kaweah River and its distributaries. The soil in the proposed Project area is characterized as moderately deep,

[5] City of Farmersville General Plan Update Community Profile. 2002. Page 2-4.

well-drained, and with low shrink/swell potential.[6] The proposed Project site has a generally flat topography, is in an established urban area and does not include any Project features that would result in soil erosion or loss of topsoil. Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The City of Farmersville is nearly flat and soils in the area are moderately deep, well-drained with a low shrink/swell potential. See also Response a-ii. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less Than Significant Impact. See Responses (a-ii) and (c) above. The impact is ***less than significant***.

Mitigation Measures: None are required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project will tie into the City's existing wastewater system and will not require the installation of septic tanks or alternate wastewater disposal system. There is ***no impact.***

Mitigation Measures: None are required.

[6] City of Farmersville General Plan Update Community Profile. 2002. Page 2-2.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. As identified in the cultural evaluation performed for the Project site, there are no known paleontological resources on or near the site (See Section V. for more details). Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Therefore, there is a ***less than significant impact.***

Mitigation Measures: None are required.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

The following information was provided by an Air Quality, Energy and Greenhouse Gas Emissions Technical Memorandum that was performed on behalf of the proposed Project by LSA Consulting Services, report date June 12, 2023. The report can be read in its entirety in Appendix B.

RESPONSES

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant with Mitigation Incorporation. Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO2, CH4, and N2O. Furthermore, CH4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the annual emissions associated with construction of the proposed project would be approximately 589.1 metric tons of CO2e per year. Construction GHG emissions were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the project, amortized construction emissions would be approximately 19.6 MT CO2e per year.

Operational Greenhouse Gas Emissions.

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Following guidance from the SJVAPCD, GHG emissions for operation of the project were calculated using CalEEMod. Based on the analysis results, summarized in Table 6, the proposed project would result in emissions of approximately 1,878.4 MT CO2e per year. These estimated emissions are provided for informational purposes, and the significance of the proposed project is further analyzed below. CalEEMod output sheets are provided in Attachment B of the memorandum.

Table 6
Greenhouse Gas Emissions

Emission Type	Operational Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Mobile Sources	1,417.7	0.1	0.1	1,442.9
Area Sources	1.2	<0.1	<0.1	1.2
Energy Sources	372.6	<0.1	<0.1	374.0
Water Sources	5.1	0.1	<0.1	9.5
Waste Sources	8.9	0.9	0.0	31.2
Amortized Construction Emissions				19.6
Total Operational Emissions				**1,878.4**

Source: Compiled by LSA (June 2024).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

As discussed, the SJVAPCD has not established a numeric threshold for GHG emissions. The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds or consistency with a regional GHG reduction plan (such as a Climate Action Plan [CAP]). Neither the City nor the SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, the proposed Project was analyzed for consistency with the 2022 Scoping Plan.

The 2022 Scoping Plan includes key project attributes that reduce operational GHG emissions in Appendix D, Local Actions of the 2022 Scoping Plan. As discussed in Appendix D of the 2022 Scoping Plan, absent consistency with an adequate, geographically specific GHG reduction plan such as a CEQA-qualified CAP, the first approach the State recommends for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions.

The project's consistency with key project attributes from the 2022 Scoping Plan that would be applicable to residential and mixed-use development is shown in Table 7.

Table 7
Project Consistency with the 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attribute	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	**Consistent.** CALGreen Code requires provision of infrastructure to accommodate EV chargers. The proposed project would provide EV charging to comply with the CALGreen Code, which requires 10 percent of the total parking spaces to be equipped with Level 2 EV chargers and that at least half of the required EV chargers be equipped with J17772 connectors. Therefore, the proposed project would be consistent with this key project attribute.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	**Consistent.** The project site is located in an area with other residential uses that are presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer). Therefore, the proposed project would be consistent with this key project attribute.

	Does not result in the loss or conversion of natural and working lands.	**Consistent.** The project site would require a GPA, a change in land use designation of from Agricultural/ Urban Reserve to Medium Density Residential, and pre-zoning of the site to Single Family Residential (R 1). However, the State Department of Conservation classifies the project site as Non-Enrolled Land. The project site is not located on land that is designated as Prime Farmland or Farmland of State Importance. As such, the proposed project would be consistent with this key project attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre) or is in proximity to existing transit stops (within a half mile) or satisfies more detailed and stringent criteria specified in the region's SCS.	**Consistent.** The proposed project would include the construction of 99 single-family units on a 19.55-acre project site. Therefore, the proposed project would result in less than 20 residential dwelling units per acre. However, the project site is located within 0.5 mile of a transit stop. The proposed project would also provide pedestrian infrastructure connecting to neighboring uses. As such, the project would promote initiatives to reduce vehicle trips and VMT and would increase the use of alternate means of transportation. As such, the proposed project would be consistent with this key project attribute.
	Reduces parking requirements by: eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units	**Consistent.** The proposed project would consist of 99 single-family units and would be consistent with the City's parking requirements for single homes. The proposed

	or square feet); or providing residential parking supply at a ratio of less than one parking space per dwelling unit; or for multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	project would not provide additional on-site street parking space. In addition, the project site is located within 0.5 mile of a transit stop. The proposed project would also provide pedestrian infrastructure connecting to neighboring uses. As such, the project would promote initiatives to reduce vehicle trips and VMT and would increase the use of alternate means of transportation. Thus, the project would be consistent with the intent of this measure for reducing VMT.
	At least 20 percent of units included are affordable to lower-income residents.	**Consistent.** The proposed project would not include affordable residential units. However, the proposed project would include residential units that would be in close proximity to other residential uses and would allow residents to live within walking distance to other neighborhoods. Although the proposed project would not include affordable housing, the proposed project would provide needed single-family housing. Therefore, the proposed project would be consistent with this key project attribute.
	Results in no net loss of existing affordable units.	**Consistent.** The proposed project would not result in the removal of any existing residential units. As such, the proposed project would be consistent with this key project attribute.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other	**Consistent with Mitigation Measure GHG-1.** The proposed project would include natural gas;

	fossil fuels for space heating, water heating, or indoor cooking.	therefore, implementation of Mitigation Measure GHG-1 would be required to ensure that the proposed project would prohibit the use of natural gas connections and appliances. With implementation of Mitigation Measure GHG-1, the proposed project would be consistent with this key Scoping Plan Consistency project attribute.
CALGreen Code = California Green Building Standards Code EV = electric vehicle GHG = greenhouse gas GPA = General Plan Amendment SCS = Sustainable Communities Strategy VMT = vehicle miles traveled.		

As a residential project that has all of the key project attributes as outlined in Table 7, the Project would be considered to accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals as outlined in the 2022 Scoping Plan. The Proposed project includes natural gas connections and would not be consistent with the building decarbonization goal from the 2022 Scoping Plan key residential and mixed-use project attributes. Mitigation Measure (MM) GHG-1 would be required to prohibit the use of natural gas as part of the proposed Project.

With implementation of Mitigation Measure GHG-1, the proposed Project would be consistent with the 2022 Scoping Plan key residential and mixed-use project attributes related to building decarbonization. Therefore, with implementation of Mitigation Measure GHG-1, the proposed project would be consistent with all project attributes in the 2022 Scoping Plan GHG emission thresholds. As such, the proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment with mitigation. See Mitigation Measures below.

Consistency with Greenhouse Gas Reduction Plans

As demonstrated in the preceding section, with the implementation of Mitigation Measure GHG-1, the proposed Project would be consistent with the 2022 Scoping Plan key project attributes for residential and mixed-use projects. The proposed Project is further analyzed for consistency with the goals of the 2022 Scoping Plan and Tulare County's Regional Transportation Plan (RTP).

2022 Scoping Plan

The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,31 to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building

practices to reduce the carbon footprint of California's new and existing inventory of buildings. The elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. As such, if a project does not utilize natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change. With implementation of Mitigation Measure GHG-1, the proposed project would be implementing its "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. In addition, the proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures, with mitigation.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The project would comply with the CALGreen Code, which includes a variety of different measures, including the reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Tulare 2022 RTP/SCS.

The TCAG RTP/SCS reflects transportation planning for Tulare County through 2046. The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short- and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (highways, local streets and roads, mass transportation, rail, bicycle, aviation facilities and services) and consists of short- and

long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them support multiple goals and policies. Some actions are intended to support the Sustainable Communities Strategy and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The 2022 RTP does not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed project would not interfere with the TCAG's ability to achieve the region's GHG reductions. Furthermore, the proposed project is not regionally significant per State CEQA Guidelines Section 15206 and as such, it would not conflict with the 2022 RTP targets since those targets were established and are applicable on a regional level. The proposed project would include the construction of 99 single-family residential units and associated site improvements. As such, the proposed project land uses would be consistent with the growth assumptions used in the 2022 RTP. Therefore, it is anticipated that implementation of the proposed project would not interfere with the TCAG's ability to implement the regional strategies outlined in the 2022 RTP. The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Conclusion

Based on the analysis presented above, with implementation of Regulatory Compliance Measure AIR-1, construction and operational activities associated with the proposed Project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. In addition, the proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people. With implementation of Mitigation Measure GHG-1, the project would also not result in the emission of substantial GHG emissions. Additionally, the project would not conflict with the State's GHG emissions reductions objectives embodied in the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197. Therefore, the proposed Project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable with mitigation. The impact is ***less than significant.***

Mitigation Measures:

GHG-1 In order to meet the consistency requirements of the 2022 Scoping Plan for greenhouse gas (GHG) reduction and equity prioritization goals, the proposed project shall prohibit the use of natural gas connections and appliances as part of the proposed project.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact with Mitigation Incorporation. As discussed under Impact VIII(a), neither the City of Farmersville nor the County of Tulare have adopted a GHG reduction plan that would be applicable to the proposed Project. In addition, the City of Farmersville has not completed the GHG inventory, benchmarking, or goal-setting process required to identify a reduction target and take advantage of the streamlining provisions contained in the CEQA Guidelines. The SJVAPCD has adopted a Climate Action Plan, but it does not contain measures that are applicable to the Project. Therefore, the SJVAPCD Climate Action Plan cannot be applied to the Project. The County of Tulare has adopted a Climate Action Plan; however, the County of Tulare's Climate Action Plan is only applicable to unincorporated areas of Tulare County and would not be appliable to the proposed Project because the Project includes an annexation into the City of Farmersville. Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plans. This assessment is included under Impact VIII(a) above. As demonstrated in the analysis contained under Impact VIII (a), the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of greenhouse gases with the incorporation of Mitigation Measure GHG-1, described above. This impact would be ***less than significant with mitigation incorporation***.

Mitigation Measures: See above.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

g.	Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

RESPONSES

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed Project includes the construction of up to 99 single-family residential homes, including internal access roads, lighting, landscaping, and associated improvements. Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

The operational phase of the proposed Project would occur after construction is completed and residents move in to occupy the structures on a day-to-day basis. The proposed Project includes land uses that are considered compatible with the surrounding uses. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household and commercial cleaners, paint, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See Response (a) above. Any accumulated hazardous construction or operational wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Farmersville Junior High School is approximately 0.4 miles to the south, and Freedom Elementary School and Farmersville High School are approximately 0.7 miles southeast of the proposed Project site. As the proposed Project includes the development of single-family residences, it is not reasonably foreseeable that the proposed Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials within one-quarter mile of an existing or proposed school. Residential land uses do not generate, store, or dispose of significant quantities of hazardous materials. Such uses also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses (a) and (b) regarding hazardous material handling. The impact is ***less than significant.***

Mitigation Measures: None are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker[7] and Envirostor[8] databases – accessed in June 2024). There are no hazardous materials sites that impact the Project. As such, ***no impacts*** would occur that would create a significant hazard to the public or the environment.

Mitigation Measures: None are required.

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[7] GeoTracker, State Water Resources Control Board. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=farmersville. Accessed June 2024.

[8] EnviroStor, Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=farmersville. Accessed June 2024.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed Project site is approximately 5.7 miles northwest of the Exeter Airport and the airport's safety zones do not extend into the City of Farmersville. There is ***no impact***.

Mitigation Measures: None are required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The Project will not interfere with any adopted emergency response or evacuation plan. Construction activities will take place within right-of-ways of existing roadways. Construction activities will be temporary in nature and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. The construction contractor will be required to work with the City and County (public works, police/fire, etc.) if and when roadway diversions are required to ensure that adequate access is maintained for residents and emergency vehicles. There is ***less than significant impact.***

Mitigation Measures: None are required.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The site currently contains an active orchard and is surrounded by urban development and agricultural land. There are no wildlands on or near the Project site. There is ***no impact***.

Mitigation Measures: None are required.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

The City of Farmersville provides water services to all residential, commercial, and industrial customers, as well as to the unincorporated Cameron Creek Colony. On average, the wells can each produce around 700 gallons per minute (gpm), and are considered fairly shallow, with groundwater depths encountered approximately 60 feet below ground surface.[9] The proposed Project site is within the Farmersville Urban Area Boundary.

The Kaweah Basin is the source of all drinking water supply for the City of Farmersville and surrounding communities. The Kaweah Delta Water Conservation District (KDWCD) manages the Basin. KDWCD and other irrigation districts and companies have historically managed groundwater through the conjunctive use of surface water. KDWCD regularly provides programs that benefit local agricultural customers by making available additional surface water supplies for irrigation. These programs effectively reduce the withdrawals of groundwater resulting in in-lieu recharge of the aquifer. Groundwater is normally used by agriculture as an alternate source when surface supplies are not available and is the sole source in areas within KDWCD jurisdiction that do not have access to surface water.

RESPONSES

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

[9] Chapter 4 Water System, City of Farmersville Comprehensive Infrastructure Master Plan. Page 4-2. Accessed July, 2023.

Less than Significant Impact. The State Water Resources Control Board requires any new construction project over an acre to complete a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP involves site planning and scheduling, limiting disturbed soil areas, and determining best management practices to minimize the risk of pollution and sediments being discharged from construction sites. Implementation of the SWPPP will minimize the potential for impacts associated with erosion or siltation onsite or offsite.

The proposed Project will result in wastewater from residential units that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater.

Additionally, there will be no discharge to any surface or groundwater source. As such, the proposed Project will not violate any water quality standards and will not impact waste discharge requirements. The impact will be ***less than significant***.

Mitigation Measures: None are required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The information below provides a comparison of existing (baseline) conditions versus potential water use based on full buildout of the proposed Project. Existing agricultural water use is based on crop information contained in Tulare County's *Phase I Water Supply Evaluation.*[10] The site is currently and has historically been farmed with 22 acres of walnuts. Water usage for orchards in Tulare County is documented to 3.6 acre/feet per year[11], so it is estimated that the site currently uses 79.2 acre/ft per year (22 acres X 3.6 ac/ft).

According to the California Department of Water Resources, the current statewide median indoor residential water use is 48 gallons per capita per day (gpcpd); however, indoor water residential water use is expected to decline due to plumbing code requirements and more efficient appliances and fixtures

[10] Tulare County General Plan 2030 Update. Recirculated Draft Environmental Impact Report. Appendix G - Phase I Water Supply Evaluation for Tulare County. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://generalplan.co.tulare.ca.us/documents/GP/002Board%20of%20Supervisors%20Materials/001BOS%20Agenda%20Items%20-%20Public%20Hearing%20August,%2028%202012/002Attachment%20A.%20FEIR/001Exhibit%201.%20FEIR%20Exec%20Summary%20&%20Chap%201-6/Appendix%20G%20-%20Phase%20I%20Water%20Supply%20Evaluation.pdf. Accessed August 2024.

[11] Ibid.

being used in existing and new homes.[12] To determine the number of persons (water users) that would result from the proposed Project, this analysis uses the City's General Plan Land Use Element, which shows an average household size of 3.66 persons per household in Farmersville.[13]

The proposed Project would include the construction of up to 99 single family residences. Applying the City's average of 3.66 persons per household, this equates to approximately 363 persons. At 48 gallons per day per capita, the Project would require approximately 6.36 MG per year of potable water, or 19.52 acre/feet per year (363 residents X 48 gpcpd X 365 days = 6,359,760 gallons of potable water per year). As discussed above, the existing agricultural operations on-site require approximately 79.2 acre/feet per year, which is more than what the residential development will utilize.

As such, the impact to water supply is determined to be ***less than significant.***

Water Availability

The Kaweah River Basin Groundwater Management Plan acknowledges a continuing decline in groundwater levels of the aquifer system below the Farmersville area. The City of Farmersville's water supply comes from groundwater extraction. To assist in mitigating this groundwater decline, the City of Farmersville has established fees that are charged to new developments, which will fund groundwater recharge and other water resource projects within the City. The City has also approved a five stage progressively restrictive water conservation ordinance that is applicable to all customers who receive water from the City of Farmersville.

Additionally, actual population growth within the City has not kept up with the population growth projections of the General Plan. Chart 2-2 of the Farmersville General Plan estimated the high population to be 20,155 in 2025 and the low population to be 17,854 in 2025; however, the 2024 population was estimated to be 10,327.[14] The 2024 population is approximately 58% of the General Plan low estimation and approximately 51% of the General Plan high estimation. Therefore, the actual water use in the City was less than what was projected under the City's General Plan. Additionally, as discussed above, the

[12] California Department of Water Resources. State Agencies Recommend Indoor Residential Water Use Standard to Legislature. November 30, 2021. https://water.ca.gov/News/News-Releases/2021/Nov-21/State-Agencies-Recommend-Indoor-Residential-Water-Use-Standard. Accessed September 2024.

[13] Farmersville General Plan. 2002-2025. Chapter 2: Land Use Element. Page 2-5. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cityoffarmersville-ca.gov/DocumentCenter/View/387/Part-I-The-General-Plan. Accessed August 2024.

[14] State of California. Department of Finance. https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed August 2024.

proposed Project will demand less water than what is currently being utilized to grow orchards. As such, there is ***a less than significant impact*** to this impact area.

Mitigation Measures: None are required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on- or offsite;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

   iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

   iv. impede or redirect flood flows?

Less Than Significant Impact. The proposed Project site consists of active orchards, bisected by an irrigation canal. The Project design will include measures for undergrounding the canal and constructing a 0.47-acre ponding basin/park. The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and structures (houses, driveways, streets, etc.) and will be required by the City to be graded to facilitate proper stormwater drainage into the previously mentioned ponding basin included with the Project. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

The proposed Project site is located within Flood Zone "X" as indicated by FEMA flood hazard map 06107C0962E, effective 6/16/2009. Flood Zone "X" is defined as defined as having a 0.2% Annual Chance Flood Hazard. The residential units will be built in accordance with the current California Building Code. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote. Impacts are ***less than significant.***

Mitigation Measures: None are required.

d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As discussed in Impact X(c), the proposed Project site is located within Flood Zone "X" which has a 0.2% chance of annual flood hazard. The site will be designed for adequate storm drainage and will be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System. This plan must be reviewed and approved by the City Engineer prior to the start of construction.

An unnamed manmade irrigation canal bisects the Project site, which will be properly undergrounded during site construction. There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Farmersville. This precludes the possibility of a mudflow inundating the Project site.

Any impacts are ***less than significant***.

Mitigation Measures: None are required.

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

RESPONSES

a. Physically divide an established community?

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project consists of development of 99 single-family residential units on an approximately 22-acre parcel. The Project site is currently located outside of and adjacent to the western part of City of Farmersville, within the UAB and SOI. Specifically, the proposed Project includes an annexation, General Plan Amendment (GPA), rezone, and approval of a tentative subdivision map to allow for the residential development. A majority of the site is designated Medium Density Residential in the General Plan; a small section is currently designated as Agricultural/Urban Reserve and will be converted to Medium Density Residential, upon approval of the GPA. Upon approval of the zone change, the site will be zoned R-1, Single Family Residential. Surrounding land uses include residential and agriculture.

The Project has no characteristics that would physically divide the City of Farmersville. Access to the existing surrounding areas will be improved. ***No impacts*** would occur as a result of this Project.

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

RESPONSES

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The most economically important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. The four streams that have provided the main source of high-quality sand and gravel in Tulare County to make Portland cement concrete and asphaltic concrete are the Kaweah River, Lewis Creek, Deer Creek and the Tule River[15].

The proposed Project area is not included in a State classified mineral resource zone[16], and the Kaweah River is approximately 1.7 miles north-northwest of the Project site. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

[15] Tulare County General Plan 2030 Update Recirculated Draft EIR. February 2010. Page 3.7-9.

[16] Ibid. Page 3.7-10.

XIII. NOISE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

RESPONSES

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The City of Farmersville General Plan does not include a noise element, but rather states that the City has adopted Tulare County's Noise Element. The County of Tulare Noise Element of the General Plan (August 2012) establishes noise level criteria in terms of the Day-Night Average Level (Ldn) metric. The Ldn is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The Ldn represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

Site development may increase ambient noise levels in the Project vicinity beyond those already present on the site from the residential activity. In the short term, noise levels would be raised during construction of the Project phases by the operation of heavy equipment and other associated activities. Because construction noise would generally occur intermittently on Monday through Saturdays during daylight hours, per the Farmersville Noise Ordinance, the impact of noise in surrounding land uses is not expected to be significant.

In the long term, any development would add traffic and other sources of noise that will somewhat increase the ambient noise levels in the vicinity. However, these noise levels should be relatively consistent with those experienced in the area and other existing developed areas of Farmersville.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes the construction of residences and roadways.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 8 describes the typical construction equipment vibration levels. [17]

Table 8
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Authority threshold for the nearest residences which are located adjacent to the Project site on the eastern boundary. As such, any impacts resulting from an increase in ambient noise levels or excessive groundborne vibration will be ***less than significant.***

[17] Transit Noise and Vibration Impact Assessment Manual (Report 0123), U.S. Federal Transit Administration. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Table 7-4. Accessed July 2024.

c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project is not located within an airport land use plan. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIV. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

RESPONSES

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would include the construction of up to 99 single-family residences, internal access roads, and other associated improvements. Based on the per-unit average of 3.66 persons for the City of Farmersville[18], the site would provide housing for approximately 363 people. The proposed Project includes an annexation, General Plan Amendment (GPA), rezone, and approval of a tentative subdivision map to allow for the residential development. As such, the site is planned for development and the associated increase in population has been accounted for. As such, any impacts are ***less than significant***.

Mitigation Measures: None are required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

[18] Farmersville General Plan. 2002-2025. Chapter 2: Land Use Element. Page 2-5. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cityoffarmersville-ca.gov/DocumentCenter/View/387/Part-I-The-General-Plan. Accessed August 2024.

Less Than Significant. There are no residential structures currently on-site. The site consists of active orchards and an unnamed canal. The Project will not displace any housing and therefore there is ***less than significant***.

Mitigation Measures: None are required.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

RESPONSES

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Less Than Significant Impact. The Farmersville Fire Department maintains a fleet of specialized fire apparatus including a 4-wheel drive Brush Fire Patrol Unit, a Quick Attack Squad Unit (250 GPM Pumper), an Engine (1,500 GPM Pumper), a 55 Ft. Ladder Truck (1,500 GPM Pumper), and several Command/Utility Vehicles. The Fire Department is located at 909 W. Visalia Road, approximately 0.8 miles south of the Project site.

The Project site is already serviced by the Fire Department. The proposed Project at full buildout will add to the number of "customers" served, however, the Fire Department has capacity for the additional service need. No additional fire equipment, personnel, or services will be required by Project implementation. In addition, the Project applicant will be required to pay all associated impact fees related to public services.

As such, any impacts would be ***less than significant***.

Police Protection?

Less Than Significant Impact. The proposed Project site will continue to be served by the City of Farmersville Police Department., also located at 909 W. Visalia Road. Implementation of the proposed Project would result in an increase in demand for police services; however, this increase would be minimal compared to the number of officers currently employed by the Farmersville Police Department and would not trigger the need for new or physically altered police facilities. No additional police personnel or equipment is anticipated. In addition, each home will be assessed a public safety impact fee by the City that is used to make capital improvements for the Police Department. The impact is ***less than significant.***

Schools?

Less Than Significant Impact. The proposed Project site is located within the Farmersville Unified School District. Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The Project applicant would be required to pay such fees to reduce any impacts of new residential development of school services. Payment of the developer fees will offset the addition of school-age children within the district. As such, any impacts would be ***less than significant.***

Parks?

Less than Significant Impact. The City Municipal Code states that parks must be constructed or expanded commensurate with growth of the City. To ensure sufficient recreational opportunities, the City has established a Park Impact Fee, implemented by Chapter 4.01, Development Fees, of the Municipal Code. The City Council determined that a park impact fee is required to assist in the financing of these public park improvements and to pay for new development's fair share of the acquisition and development costs of these improvements. The Project applicant would be required to comply with the Municipal Code. As such, any impacts would remain ***less than significant.***

Other public facilities?

Less Than Significant Impact. The proposed Project is within growth projections identified in the City's General Plan and other infrastructure studies. As such, the Project would not result in increased demand on other public facilities such as library services that has not already been planned for. As applicable, a development impact fee may be required to assist in the financing of public service facilities improvements and to pay for new development's fair share of the acquisition and development costs of these improvements. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

RESPONSES

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. As described in Impact XIV(a), the City has established a Park Impact Fee through the Municipal Code, which states that parks must be constructed or expanded commensurate with growth of the City. The Project applicant will be required to comply with that Municipal Code, as well as any fees that apply. As such, any impacts will be ***less than significant***.

Mitigation Measures: None are required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed Project includes development of 99 single-family residences and the associated improvements. As described in Impact XIV(a), the City has established a Park Impact Fee through the Municipal Code, which states that parks must be constructed or expanded commensurate with growth of the City. The City requires the applicant to pay a Park Impact Fee, which will be paid as part of the development fees collected by the City. As such, any impacts will be ***less than significant.***

Mitigation Measures: None are required.

XVII. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

The impact analysis in this resource area is based off of the Traffic Study prepared by Ruettgers & Schuler Civil Engineering in August, 2024. The Traffic Study is provided in Appendix C of this document.

RESPONSES

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. The City of Farmersville General Plan Circulation Element contains Goals, Objectives and Action Plans to Ensure that streets in Farmersville are not congested and that the traffic on Farmersville's streets operates in an efficient and safe manner. Objective 1 states that "A level of service C will be the desirable minimum service level in Farmersville at which intersections will operate.

Trip Generation[19]

[19] Traffic Study for the Single Family Residential Located South of Walnut Ave, West of Ventura Ave. in the City of Farmersville. Prepared in August 2024. Appendix C, Page 6.

The project trip generation volumes shown in Table 9 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip rates, equations, and directional splits for ITE Land Use Code 210 (Single Family Detached Housing) were used to estimate project trips for weekday peak hour of adjacent street traffic. The AM and PM peak hours of adjacent street traffic were determined to be between 7:00 AM and 8:00 AM, and between 4:30 PM and 5:30 PM, based on a review of two-hour AM & PM peak hour vehicle turn movement counts taken June 2024.

Table 9
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	99 Dwelling Units	eq	1000	eq	25% 18	75% 56	eq	63% 62	37% 36

Trip Distribution and Assignment

The distribution of Project peak hour trips is shown in Table 10 and represents the movement of traffic accessing the Project site by direction. The Project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 10
Project Trip Distribution

Direction	Percent
North	5
East	25
South	65
West	5

Existing and Future Traffic

Existing peak hour turning movement counts were obtained in June 2024. Average annual growth rates ranging between 0.5 and 2.38 percent were applied to the 2024 peak hour volumes to estimate peak hour volumes for the years 2028 and 2044. These growth rates were developed based on a review of historical

count data and output from TCAG's regional travel demand model as well as a discussion with the City of Farmersville Planning Consultant. Cumulative volumes were estimated based on information provided by the City of Farmersville regarding build year, land use, size, and location for each pending development. See Appendix C for figures.

Intersection Analysis

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual (HCM 7th Edition). The analysis was performed for each of the following traffic scenarios.

- Existing (2024)
- Existing (2024) + Project
- Near Term (2028)
- Near Term (2028) + Project
- Future Cumulative (2044)
- Future Cumulative (2044) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 7th Edition are presented in the tables below. The City of Farmersville's Circulation Element designates LOS C as the minimum acceptable intersection peak hour level of service.

Level of Service Criteria Unsignalized Intersection

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

Level of Service Criteria Signalized Intersections

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Peak hour level of service for the study intersections is presented in Tables 11 and 12. Intersection delay in seconds per vehicle is shown within parentheses for intersections operating below LOS C.

Table 11
Intersection Level of Service Weekday PM Peak Hour

#	Intersection	Control Type	2024	2024+ Project	2028	2028+ Project	2044	2044+ Project	2044+ Project w/Mitigation[1]
1	Ventura Ave & Walnut Ave	NB SB	C B	C C	C C	C C	D (27.5) C	D (33.4) D (25.7)	A
2	Farmersville Blvd & Walnut Ave	Signal	C	C	C	C	C	C	-
3	Farmersville Blvd & Front St	AWSC	B	C	C	C	F (52.0)	F (63.6)	B
4	Farmersville Blvd & Visalia Rd	Signal	C	C	C	C	C	C	-
5	Street B & Walnut Ave	NB	-	B	-	B	-	B	-

[1] *See Table 17 for mitigation measures.*

Table 12
Intersection Level of Service Weekday AM Peak Hour

#	Intersection	Control Type	2024	2024+ Project	2028	2028+ Project	2044	2044+ Project	2044+ Project w/Mitigation[1]
1	Ventura Ave & Walnut Ave	NB SB	B B	B B	B B	B B	C B	C B	A[2]
2	Farmersville Blvd & Walnut Ave	Signal	C	C	C	C	C	C	-
3	Farmersville Blvd & Front St	AWSC	B	B	B	B	B	C	A[2]
4	Farmersville Blvd & Visalia Rd	Signal	C	C	C	C	C	C	-
5	Street B & Walnut Ave	NB	-	A	-	A	-	B	-

[1] *See Table 17 for mitigation measures,* [2]*Mitigation required due to PM Peak Hour.*

Traffic Signal Warrant Analysis

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices. Peak hour signal warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 13 and 14.

Table 13
Traffic Signal Warrants Weekday PM Peak Hour

		2024			2028			2044		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	638	60	NO	738	62	NO	1015	66	NO
3	Farmersville Blvd at Front St	959	119	YES	1154	130	YES	1518	167	YES
5	Street "B" at Walnut Ave	-	-	-	-	-	-	-	-	-

		2024+Project			2028+Project			2044+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	731	60	NO	831	62	NO	1108	66	NO
3	Farmersville Blvd at Front St	1005	119	YES	1200	130	YES	1564	167	YES
5	Street "B" at Walnut Ave	691	36	NO	753	36	NO	1069	36	NO

Table 14
Traffic Signal Warrants Weekday AM Peak Hour

		2024			2028			2044		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	342	83	NO	404	85	NO	563	92	NO
3	Farmersville Blvd at Front St	544	103	NO	662	112	NO	868	142	YES
5	Street "B" at Walnut Ave	-	-	-	-	-	-	-	-	-

		2024+Project			2028+Project			2044+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	411	83	NO	473	85	NO	632	92	NO
3	Farmersville Blvd at Front St	580	103	NO	698	112	NO	904	142	YES
5	Street "B" at Walnut Ave	411	56	NO	450	56	NO	648	56	NO

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

Roadway Analysis

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020. The City of Farmersville Circulation Element states that the peak hour level of service for roadways shall be no lower than LOS "C" for urban areas. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2024)
- Existing (2024) + Project
- Near Term (2028)
- Near Term (2028) + Project
- Future Cumulative (2044)
- Future Cumulative (2044) + Project

Table 15
PM Roadway Level of Service

Roadway Segment	2024 Two-Way LOS		2028 Two-Way LOS		2044 Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	629	C	727	C	1007	C
Walnut Ave: Ventura Ave - Farmersville Blvd	634	C	725	C	959	C
Farmersville Blvd: Walnut Ave - Front St	1105	C	1306	C	1710	C
Farmersville Blvd: Front St - Visalia Rd	787	C	973	C	1273	C

Roadway Segment	2024+Project Two-Way LOS		2028+Project Two-Way LOS		2044+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	722	C	820	C	1100	C
Walnut Ave: Ventura Ave - Farmersville Blvd	727	C	818	C	1052	C
Farmersville Blvd: Walnut Ave - Front St	1168	C	1369	C	1773	C
Farmersville Blvd: Front St - Visalia Rd	831	C	1017	C	1317	C

Table 16
AM Roadway Level of Service

Roadway Segment	2024 Two-Way LOS		2028 Two-Way LOS		2044 Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	394	C	456	C	631	C
Walnut Ave: Ventura Ave - Farmersville Blvd	383	C	442	C	587	C
Farmersville Blvd: Walnut Ave - Front St	792	C	832	C	1084	C
Farmersville Blvd: Front St - Visalia Rd	439	C	551	C	718	C

Roadway Segment	2024+Project Two-Way LOS		2028+Project Two-Way LOS		2044+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	463	C	525	C	700	C
Walnut Ave: Ventura Ave - Farmersville Blvd	453	C	512	C	657	C
Farmersville Blvd: Walnut Ave - Front St	839	C	879	C	1131	C
Farmersville Blvd: Front St - Visalia Rd	472	C	584	C	751	C

Intersection Improvements

Intersection improvements needed by the year 2044 to maintain or improve the operational level of service of the street system in the Project vicinity are presented in Table 17.

Table 17
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2044	Project Percent Share
1	Ventura Ave & Walnut Ave	Signal	47.45%
3	Farmersville Blvd & Front St	Signal	18.85%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{\text{(Future+Project Traffic) - Existing Traffic}} \times 100\%$$

The four existing intersections and one project intersection currently operate at or above LOS C during peak hours prior to and with the addition of project traffic and are expected to do so through the year 2028. In 2044, the intersections of Ventura Avenue & Walnut Avenue and Farmersville Boulevard & Front Street are anticipated to operate below an acceptable level of service prior to the addition of project traffic. The three remaining intersections are expected to continue to operate at an acceptable level of service prior to, and with the addition of project traffic. All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of project traffic in 2024, 2028, and 2044. As such, potential impacts will be ***less than significant with mitigation incorporation.***

Mitigation Measures:

TRA-1

The Applicant shall pay the City of Farmersville for their Fair Share Portion of the intersection improvements described in Table 17, in order to maintain or improve the operational level of service of the street system in the Project vicinity.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant with Mitigation Incorporation. An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements. The City of Farmersville has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contains recommendations regarding VMT assessment, significance thresholds and mitigation measures.

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential project is located in Traffic Analysis Zone (TAZ) 2757, which has an average VMT/capita of 11.27 miles. The proposed residential project is considered a typical project within the TAZ and therefore the project would be expected to have the same VMT per capita. There are no special considerations with the project to assume the project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential project VMT/capita is if the project VMT is below the average in the TAZ where the project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed project will have a significant transportation impact prior to mitigation.

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, it is proposed that sidewalks be constructed on the south side of Walnut Avenue from the east boundary of the tract, approximately 215 feet east and connecting to existing sidewalk. Two ADA compliant driveways are proposed to be constructed along the stretch of sidewalk. Additionally, two ADA accessible curb ramps are proposed to be constructed at Garrett Avenue and Virginia Avenue. These proposed improvements are proposed to be constructed as provided in Figure 4 and included as Mitigation Measure TRA-2. The total project cost is estimated at approximately $20,670 with a 20% contingency. The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the project or 0.5% of the total construction cost of the project (not including land acquisition). As shown in Table 9, the project is anticipated to generate 1,000 daily trips, which equates to a target value of improvements of $20,000.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.27 or 0.11. The resulting VMT/capita after mitigation is 11.16 which is below the average VMT/capita in the TAZ which the project is located. After mitigation, the project will have a ***less than significant*** transportation impact.

Mitigation Measures:

TRA-2: The applicant shall install: 1) Sidewalk on the south side of Walnut Avenue from the east boundary of the tract, approximately 215 feet east and connect to existing sidewalk. Construct two ADA compliant driveways along the stretch of sidewalk. 2) Two ADA accessible curb ramps at Garrett Avenue and Virginia Avenue.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of residential developments in the City of Farmersville. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be an increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered ***less than significant.***

Mitigation Measures: None are required.

d. Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project does not involve a change to any emergency response plan. The site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are ***less than significant.***

Mitigation Measures: None are required.

Figure 4 – VMT Mitigation

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

RESPONSES

a-i, a-ii. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact with Mitigation. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Farmersville, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site. As discussed under criterion (b) implementation of Mitigation Measure CUL-1 would reduce impacts to unknown archaeological deposits, including TCRs, to a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans.

The City of Farmersville notified the following California Native American Tribes pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) on behalf of the City of Farmersville on March 21, 2022. Because the Project involves an amendment to the General Plan, the City provided additional Tribal notification pursuant to Government Code Section 65352.3 (SB 18). Tribes identified by the Native American Heritage Commission, as identified below, were notified of the Project by Certified US Mail on May 20 2024. No comments were received as of this writing.

- Santa Rosa Rancheria Tachi Yokut Tribe
- Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band

Tribes were provided 90 days, to request consultation pursuant to those statutes. No comments have been received to date. As such,, impacts relating to Tribal Resources are ***less than significant.***

Mitigation Measures:

None required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

RESPONSES

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. Wastewater service, water, electric power, natural gas and telecommunications facilities would all provide service to the proposed Project from their respective existing facilities and as such, would not be required to construct new or expanded facilities. The Project will have a ***less than significant impact*** to this analysis area.

Mitigation Measures: None are required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. As discussed in Impact X(b), the proposed Project will increase demands on the Farmersville water production and distribution area. The City's water system consists of a series of wells, pump stations, treatment facilities and distribution lines. The system draws from the groundwater system underlying Farmersville and the Central Valley. While groundwater supplies can accommodate multiple dry years, the City of Farmersville, Tulare County, and nearby cities are engaging in groundwater management activities to monitor and enhance recharge capabilities to accommodate future demands. The City will have sufficient supply to serve the proposed Project. As such, the proposed Project will have a ***less than significant impact*** to this impact area.

Mitigation Measures: None are required.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project will result in wastewater from residential units that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban/residential developments consisting of bathrooms, kitchen drains and other similar features. The Project will not discharge any unusual or atypical wastewater that would violate the City's waste discharge requirements. The City of Farmersville Public Works Department has reviewed the Project and

determined that it can accommodate the wastewater generated from the Project. Therefore, the impact of the Project on wastewater treatment is ***less than significant***.

Mitigation Measures: None are required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Disposal services in the City are provided by a private contractor, Mid Valley Disposal. Solid waste is usually hauled to the Visalia Landfill, north of Visalia on Road 80. The State of California requires that all cities and counties reduce the amount of waste going to landfills and the City is meeting its recycling requirements. Mid Valley Disposal has a program of recycling pick-ups in Farmersville; materials separated for recycling include paper, glass, metals and plastics to provide a diversion of portions of the waste stream resulting in a reduction of the solid waste stream going to landfills and similar disposal locations. The majority of the site has been designated for residential uses by the General Plan and as such, the demand for City infrastructure, such as disposal services, has been accounted for in City planning documents. Impacts to this resource area are ***less than significant.***

Mitigation Measures: None are required.

e. Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. See Response d, above. The proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

RESPONSES

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in an area developed with residential and agricultural uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

RESPONSES

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of

a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to ***less than significant.***

LIST OF PREPARERS

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- Land Evaluation and Site Assessment – Crawford & Bowen Planning, Inc.

Persons and Agencies Consulted

City of Farmersville

- Karl Schoettler, Contract City Planner

California Historic Resources Information System

- Jeremy David, Assistant Coordinator

Appendix A

Land Evaluation Site Assessment

NOTES

Calculation of the Land Evaluation (LE) Score

Part 1. Land Capability Classification (LCC) Score:

(1) Determine the total acreage of the project.
(2) Determine the soil types within the project area and enter them in **Column A** of the **Land Evaluation Worksheet** provided on page 2-A.
(3) Calculate the total acres of each soil type and enter the amounts in **Column B**.
(4) Divide the acres of each soil type (**Column B**) by the total acreage to determine the proportion of each soil type present. Enter the proportion of each soil type in **Column C**.
(5) Determine the LCC for each soil type from the applicable Soil Survey and enter it in **Column D**.
(6) From the LCC Scoring Table below, determine the point rating corresponding to the LCC for each soil type and enter it in **Column E**.

LCC Scoring Table

LCC Class	I	IIe	IIs,w	IIIe	IIIs,w	IVe	IVs,w	V	VI	VII	VIII
Points	100	90	80	70	60	50	40	30	20	10	0

(7) Multiply the proportion of each soil type (**Column C**) by the point score (**Column E**) and enter the resulting scores in **Column F**.
(8) Sum the LCC scores in **Column F**.
(9) Enter the LCC score in box <1> of the **Final LESA Score Sheet** on page 10-A.

Part 2. Storie Index Score:

(1) Determine the Storie Index rating for each soil type and enter it in **Column G**.
(2) Multiply the proportion of each soil type (**Column C**) by the Storie Index rating (**Column G**) and enter the scores in **Column H**.
(3) Sum the Storie Index scores in **Column H** to gain the Storie Index Score.
(4) Enter the Storie Index Score in box <2> of the **Final LESA Score Sheet** on page 10-A.

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
130	21.5	1.0	1	100	100	90	90
Totals	1.0	(Must Sum to 1.0)		***LCC Total Score***	100	***Storie Index Total Score***	90

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
	21.5		
Total Acres	21.5		
Project Size Scores	50		

Highest Project Size Score 50

NOTES

Calculation of the Site Assessment (SA) Score

Part 1. Project Size Score:.

(1) Using **Site Assessment Worksheet 1** provided on page 2-A, enter the acreage of each soil type from **Column B** in the **Column - I, J or K** - that corresponds to the LCC for that soil. (Note: While the Project Size Score is a component of the Site Assessment calculations, the score sheet is an extension of data collected in the Land Evaluation Worksheet, and is therefore displayed beside it).
(2) Sum **Column I** to determine the total amount of class I and II soils on the project site.
(3) Sum **Column J** to determine the total amount of class III soils on the project site.
(4) Sum **Column K** to determine the total amount of class IV and lower soils on the project site.
(5) Compare the total score for each LCC group in the Project Size Scoring Table below and determine which group receives the highest score.

Project Size Scoring Table

Class I or II		**Class III**		**Class IV or Lower**	
Acreage	Points	Acreage	Points	Acreage	Points
>80	100	>160	100	>320	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19	30	40-59	60	40-99	20
10<	0	20-39	30	40<	0
		10-19	10		
		10<	0		

(6) Enter the **Project Size Score** (the highest score from the three LCC categories) in box <3> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Part 2. Water Resource Availability Score:

(1) Determine the type(s) of irrigation present on the project site, including a determination of whether there is dryland agricultural activity as well.

(2) Divide the site into portions according to the type or types of irrigation or dryland cropping that is available in each portion. Enter this information in **Column B** of **Site Assessment Worksheet 2. - Water Resources Availability**.

(3) Determine the proportion of the total site represented for each portion identified, and enter this information in **Column C**.

(4) Using the Water Resources Availability Scoring Table, identify the option that is most applicable for each portion, based upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. Enter the applicable Water Resource Availability Score into **Column D**.

(5) Multiply the Water Resource Availability Score for each portion by the proportion of the project area it represents to determine the weighted score for each portion in **Column E**.

(6) Sum the scores for all portions to determine the project's total Water Resources Availability Score

(7) Enter the Water Resource Availability Score in box <4> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	Groundwater	1	80	80
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	80

Water Resource Availability Scoring Table

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
5	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	-- --	-- --	50
9	YES	NO	YES	NO	-- --	-- --	45
10	YES	YES	NO	NO	-- --	-- --	35
11	YES	YES	YES	NO	-- --	-- --	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
14	Neither irrigated nor dryland production feasible						0

NOTES

Part 3. Surrounding Agricultural Land Use Score:

(1) Calculate the project's Zone of Influence (ZOI) as follows:

(a) a rectangle is drawn around the project such that the rectangle is the smallest that can completely encompass the project area.

(b) a second rectangle is then drawn which extends one quarter mile on all sides beyond the first rectangle.

(c) The ZOI includes all parcels that are contained within or are intersected by the second rectangle, less the area of the project itself.

(2) Sum the area of all parcels to determine the total acreage of the ZOI.

(3) Determine which parcels are in agricultural use and sum the areas of these parcels

(4) Divide the area in agriculture found in step (3) by the total area of the ZOI found in step (2) to determine the percent of the ZOI that is in agricultural use.

(5) Determine the Surrounding Agricultural Land Score utilizing the Surrounding Agricultural Land Scoring Table below.

Surrounding Agricultural Land Scoring Table

Percent of ZOI in Agriculture	Surrounding Agricultural Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

(5) Enter the Surrounding Agricultural Land Score in box <5> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 3.
Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
261.3	87.3	35.1	33.41%	13.44%	0.0	0.0

NOTES

Part 4. Protected Resource Lands Score:

The Protected Resource Lands scoring relies upon the same Zone of Influence information gathered in Part 3, and figures are entered in Site Assessment Worksheet 3, which combines the surrounding agricultural and protected lands calculations.

(1) Use the total area of the ZOI calculated in Part 3. for the Surrounding Agricultural Land Use score.

(2) Sum the area of those parcels within the ZOI that are protected resource lands, as defined in the California Agricultural LESA Guidelines.

(3) Divide the area that is determined to be protected in Step (2) by the total acreage of the ZOI to determine the percentage of the surrounding area that is under resource protection.

(4) Determine the Surrounding Protected Resource Land Score utilizing the Surrounding Protected Resource Land Scoring Table below.

Surrounding Protected Resource Land Scoring Table

Percent of ZOI Protected	Protected Resource Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

(5) Enter the Protected Resource Land score in box <6> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

(1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
(2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
(3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
(4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 100	0.25	25
Storie Index	<2> 90	0.25	22.5
LE Subtotal		***0.50***	47.5
SA Factors			
Project Size	<3> 50	0.15	7.5
Water Resource Availability	<4> 80	0.15	12
Surrounding Agricultural Land	<5> 0	0.15	0
Protected Resource Land	<6> 0	0.05	0
SA Subtotal		***0.50***	19.5
		Final LESA Score	67

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

Appendix B

Air Quality, Health Risk, GHG & Energy Technical Memo

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: June 12, 2024

TO: Emily Bowen, Crawford & Bowen Planning, Inc.

FROM: Jessica Coria, Associate
Bianca Martinez, Air Quality Specialist

SUBJECT: Air Quality, Energy, and Greenhouse Gas Emissions Technical Memorandum for the Proposed Farmersville Residential Development Project

INTRODUCTION

LSA has prepared this Air Quality, Energy, and Greenhouse Gas Emissions Technical Memorandum to evaluate the impacts associated with construction and operation of the proposed Farmersville Residential Development Project (project) in Farmersville, Tulare County, California. This analysis was prepared using methods and assumptions recommended in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI).[1] This analysis includes a description of the existing regulatory framework, an assessment of project construction and operation period emissions, and an assessment of greenhouse gas (GHG) emissions and energy impacts resulting from the proposed project.

PROJECT DESCRIPTION

The 19.55-acre project site is located at West Walnut Avenue south of the intersection of North June Avenue and West Walnut Avenue, in Farmersville. The project site is currently planted with orchards, with no existing buildings on site, and is surrounded by agricultural and residential uses. Local access to the site is provided by West Walnut Avenue. The proposed project would include the annexation of two parcels to the City of Farmersville (City) and would require a General Plan Amendment (GPA) and land use designation of the project site from Agricultural/Urban Reserve to Medium Density Residential and pre-zoning of the site to Single Family Residential (R-1). Figure 1 shows the project location, and Figure 2 shows the project's site plan (figures are provided in Attachment A).

The proposed project would include the construction of a 99-unit single-family residential development. The proposed project would include approximately 38,650 square feet (sq ft) of landscaped area and a 0.47-acre pond basin. In addition, the proposed project would include

[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. *Guidance for Assessing and Mitigating Air Quality Impacts*. March 19. Website: www.valleyair.org/transportation/ceqa_idx.htm (accessed June 2024).

165,600 sq ft of paved area for internal roadways. The proposed project would also comply with the 2022 California Green Building Standards Code (CALGreen Code) building measures and Title 24 standards for solar and electric vehicles (EV). Based on the project's trip generation, the proposed project is estimated to generate 1,000 average daily trips.[2]

Construction activities for the project would include site preparation, grading, building construction, paving, and architectural coating. Construction of the proposed project is anticipated to begin in September 2025 and would occur for approximately 18 months. The proposed project would not require the import or export of soil. Grading, site preparation, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment.

EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is surrounded primarily by agricultural and residential uses. The closest sensitive receptors to the project site include single-family homes located east of the project site at approximately 50 feet.

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project is in Tulare County and is within the jurisdiction of the SJVAPCD, which regulates air quality in the San Joaquin Valley Air Basin (SJVAB).

The SJVAB is comprised of approximately 25,000 square miles and covers all of seven counties including Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare Counties, and the western portion of an eighth, Kern County. The SJVAB is defined by the Sierra Nevada mountains in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi Mountains in the south (6,000 to 8,000 feet in elevation). The valley is topographically flat with a slight downward gradient to the northwest. The valley opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay. An

[2] Crawford & Bowen Planning, Inc. 2024. *Farmersville Residential Trip Generation.* May.

aerial view of the SJVAB would simulate a "bowl" opening only to the north. These topographic features restrict air movement through and out of the basin.

Both the State of California (State) and federal government have established health-based Ambient Air Quality Standards for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter ($PM_{2.5}$ and PM_{10}). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and Pb are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United States Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table A, the SJVAB is designated as nonattainment by federal standards for O_3 and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and nonattainment by State standards for O_3, particulate matter less than 10 microns in diameter (PM_{10}), and $PM_{2.5}$.

Table A: Attainment Status of Criteria Pollutants in the San Joaquin Valley Air Basin

Pollutant	State	Federal
Ozone (1-hour)	Revoked	Nonattainment/Severe
Ozone (8-hour)	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified

Source: San Joaquin Valley Air Pollution Control District (2024).
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

Ozone levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the SJVAPCD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the SJVAPCD still exceeds the State standard for 1-hour and 8-hour O_3 levels. In addition, the SJVAB was designated as a serious nonattainment area for the

federal 1997 8-hour ozone level in June 2004. The USEPA lowered the 1997 0.80 parts per million (ppm) national 8-hour ozone standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The valley is classified as nonattainment for the 1-hour and 8-hour ozone standards at the State and federal levels, although a request for redesignation as attainment of the 1-hour ozone standard was submitted to the USEPA in 2014. During the 2021–2023 period, the Visalia Air Monitoring Station located on 2005 West Ashland Avenue (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour O_3 standards:[3]

- The federal 8-hour ozone standard had an unknown number of exceedances in 2021, 62 exceedances in 2022, and 27 exceedances in 2023.
- The State 8-hour ozone standard had an unknown number of exceedances in 2021, 64 exceedances in 2022, and an unknown number of exceedances in 2023.
- The federal 1-hour ozone standard had an unknown number of exceedances in 2021, no exceedances in 2022 and 2023.
- The State 1-hour ozone standard had an unknown number of exceedances in 2021, 8 exceedances in 2022, and an unknown number of exceedances in 2023.

National and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On February 7, 2024, the USEPA strengthened the NAAQS for $PM_{2.5}$ by revising the primary (health-based) annual standard from 12.0 micrograms per cubic meter ($\mu g/m^3$) to 9.0 $\mu g/m^3$; however, a new attainment designation has not been issued. The SJVAB is considered a nonattainment area for the $PM_{2.5}$ standard at the State and federal levels. During the 2021–2023 period, the Visalia Air Monitoring Station recorded the following exceedances of the federal 24-hour $PM_{2.5}$ standards:

- The State 24-hour $PM_{2.5}$ standards had no exceedances in the 3-year period.
- The federal 24-hour $PM_{2.5}$ standard had no exceedances in 2021, 17 exceedances in 2022, and an unknown number of exceedances in 2023.

The SJVAPCD is classified as a PM_{10} nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM_{10} standard in 2008. Because the SJVAPCD was redesignated from nonattainment to attainment, a PM_{10} maintenance plan was adopted in 2007 and is required to be updated every 10 years. From 2021 to 2023, the Visalia Air Monitoring Station recorded the following exceedances of the federal and State 24-hour PM_{10} standards:

[3] California Air Resources Board (CARB). 2020. iADAM Air Quality Data Statistics. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php (accessed June 2024).

- The federal 24-hour PM_{10} standard had no exceedances in the 3-year period.
- The State 24-hour PM_{10} standard had no exceedances in 2021, 111 exceedances in 2022, and an unknown number of exceedances in 2023.

No exceedances of the State or federal CO standards have been recorded at any of the region's monitoring stations since 1991. The SJVAB is currently considered an attainment area for State and federal 8-hour and 1-hour CO standards.

Toxic Air Contaminants Background

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in the State of California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. Health and Safety Code §39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Subsection (b) of United States Code [USC] Title 42, Section 7412, is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (the Tanner Air Toxics Act), AB 2588 (the Air Toxics "Hot Spot" Information and Assessment Act of 1987), and Senate Bill (SB) 25 (the Children's Environmental Health Protection Act). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once TACs are identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987 (AB 2588). Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the designated air quality management district or air pollution control district. High-priority facilities are required to perform a Health Risk Assessment (HRA) and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

To date, CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM).

Energy

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, refrigeration, operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2022, California's electricity was generated primarily by natural gas (47.5 percent), renewable sources (52.2 percent), large hydroelectric (7.2 percent), nuclear (8.7 percent), coal (<1.0 percent), and other unspecified sources. Total electric generation in California in 2022 was 287,220 gigawatt-hours (GWh), up 3.4 percent from the 2021 total generation of 277,764 GWh.[4]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[5] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2022 was 107,876 GWh (39,400 GWh for the residential sector). Total electricity consumption in Tulare County in 2022 was 4,957.7 GWh (or 4,957,696,254 kilowatt-hours [kWh]).[6]

Natural Gas

Natural gas is a nonrenewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[7]

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4 California Energy Commission (CEC). 2022a. *2022 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation (accessed June 2024).

5 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed June 2024).

6 CEC. 2022a. Electricity Consumption by County and Entity. Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed June 2024).

7 CEC. 2021b. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed June 2024).

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[8] According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 6,567 million therms (2,275 million therms for the residential sector). Total natural gas consumption in Tulare County in 2022 was 164.6 million therms (164,629,109 therms).[9]

Fuel

Petroleum is also a nonrenewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the Earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (e.g., autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2021.[10] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This act, which originally mandated a national fuel economy standard of 35 mpg by year 2020,[11] applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and SUVs. According to the most recent data available, in 2022, total gasoline consumption in California was 316,425 thousand barrels or 1,597.6 trillion British Thermal Units (BTU).[12] Of the total gasoline consumption, 299,304 thousand barrels or 1,511.2 trillion BTU were consumed for transportation.[13] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 197.1 million gallons of gasoline and approximately 65 million gallons of diesel will be consumed from vehicle trips in Tulare County in 2024.

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8 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed June 2024).

9 CEC. 2022b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed June 2024).

10 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed June 2024).

11 U.S. Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed June 2024).

12 U.S. Energy Information Administration (EIA). 2022. California State Profile and Energy Estimates, Data. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed June 2024).

13 Ibid.

Greenhouse Gas Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, such as HFCs, PFCs, and SF_6, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

REGULATORY FRAMEWORK

This section provides regulatory background information for air quality, GHGs, and energy.

Air Quality

Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the

national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

San Joaquin Valley Air Pollution Control District. The SJVAPCD has specific air quality-related planning documents, rules, and regulations. This section summarizes the local planning documents and regulations that may be applicable to the proposed project as administered by the SJVAPCD with CARB oversight.

- **Rule 8011—General Requirements: Fugitive Dust Emission Sources.** Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources.

- **Regulation VIII—Fugitive PM_{10} Prohibitions.** Rules 8011–8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, and carryout and track out. All development projects that involve soil disturbance are subject to at least one provision of the Regulation VIII series of rules.

- **Rule 2201—New and Modified Stationary Source Review Rule.** This rule provides the review of new and modified stationary sources of air pollution to operate without interfering with the attainment or maintenance of ambient air quality standards and results in no net increase in emissions above specified thresholds.

- **Rule 4901—Wood Burning Fireplaces and Wood Burning Heaters.** The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices.

- **Rule 9510—Indirect Source Review.** This rule reduces the impact of nitrogen oxides (NO_x) and PM_{10} emissions from new development projects. The rule places application and emission reduction requirements on development projects meeting applicability criteria in order to reduce emissions through on-site mitigation, off-site SJVAPCD-administered projects, or a combination of the two. Compliance with SJVAPCD Rule 9510 reduces emissions impacts through incorporation of on-site measures as well as payment of an off-site fee that funds emission reduction projects in the Air Basin. The emissions analysis for Rule 9510 is detailed and is dependent on the exact project design that is expected to be constructed or installed. Compliance with Rule 9510 is separate from the California Environmental Quality Act (CEQA) process, though the control measures used to comply with Rule 9510 may be used to mitigate significant air quality impacts.

Guidance for Assessing and Mitigating Air Quality Impacts. The SJVAPCD prepared the GAMAQI to assist lead agencies and project applicants in evaluating the potential air quality impacts of projects in the SJVAB. The GAMAQI provides SJVAPCD-recommended procedures for evaluating potential air quality impacts during the CEQA environmental review process. The GAMAQI provides guidance on evaluating short-term (construction) and long-term (operational) air emissions. The most recent version of the GAMAQI, adopted on March 19, 2015, was used in this evaluation. It contains guidance on the following:

- Criteria and thresholds for determining whether a project may have a significant adverse air quality impact
- Specific procedures and modeling protocols for quantifying and analyzing air quality impacts
- Methods to mitigate air quality impacts
- Information for use in air quality assessments and environmental documents, including air quality, regulatory setting, climate, and topography data

Tulare County Association of Governments. The Tulare County Association of Governments (TCAG) is responsible for regional transportation planning in Tulare County and participates in developing mobile source emission inventories used in air quality attainment plans.***Regional Transportation Plan/Sustainable Communities Strategy.*** Regional Transportation Plans (RTPs) are State-mandated plans that identify long-term transportation needs for a region's transportation network. The TCAG 2022 RTP/SCS charts the long-range vision of regional transportation in Tulare County through the year 2046. The RTP identifies existing and future transportation-related needs, while considering all modes of travel, analyzing alternative solutions, and identifying priorities for the anticipated available funding for the projects and multiple programs included within it. SB 375, which went into effect in 2009, added statutes to the California Government Code to encourage planning practices that create sustainable communities. It calls for each metropolitan planning organization to prepare a Sustainable Communities Strategy (SCS) as an integrated element of the RTP that is to be updated every 4 years. The SCS is intended to show how integrated land use and transportation planning can lead to lower GHG emissions from autos and light trucks. The TCAG has included the SCS in its 2022 RTP.

Local Regulations

City of Farmersville General Plan. The City of Farmersville addresses air quality in the Conservation, Open Space, Parks, and Recreation Element of the City's General Plan.[14] The Conservation, Open Space, Parks, and Recreation Element contains goals and policies that work to protect air quality from negative impacts. Applicable air quality policies and action items from the Conservation, Open Space, Parks, and Recreation Element are listed below:

- Consider traffic flow in the planning of residential, commercial, and industrial developments.
- Develop an organized and efficient circulation system to reduce vehicle trips in the planning area, idling time, intersection delays, and other emissions-producing activities.
- The City shall encourage residents to use alternative modes of transportation.

Energy

Federal and State agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. On the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy.

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs State response to energy emergencies. The applicable federal, State, regional, and local regulatory framework is discussed below.

Federal Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing

[14] City of Farmersville. 2002. *City of Farmersville General Plan, Chapter 4: Conservation, Open Space, Parks, and Recreation.* September. Website: https://www.cityoffarmersville-ca.gov/DocumentCenter/View/387/Part-I-The-General-Plan (accessed June 2024).

fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy Standards. On March 31, 2022, the NHTSA finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gasoline between model years 2030 to 2050.

State Regulations

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023*

Integrated Energy Policy Report.[15] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standard. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[16]

California Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, in Part 6 of Title 24 of the California Code of Regulations (CCR), known as the Energy Code. The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The Energy Code is updated every 3 years, with the most recent update consisting of the 2022 Energy Code that became effective January 1, 2023. Mid-cycle supplements to the 2022 Code will become effective on July 1, 2024. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in the Energy Code.

California Green Building Standards Code (CALGreen Code). In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and nonresidential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation,

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15 CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

16 California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed June 2024).

(4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and nonresidential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Strategic Plan was updated in 2011. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

Regional Regulations

There are no regional regulations that apply to the proposed project.

Local Regulations

City of Farmersville General Plan. The City of Farmersville addresses energy conservation in the Conservation, Open Space, Parks, and Recreation Element of the City's General Plan.[17] The Conservation, Open Space, Parks, and Recreation Element contains goals and policies that consider energy conservation in the planning design of new and existing development in Farmersville. Applicable energy conservation policies and action items from the Conservation, Open Space, Parks, and Recreation Element are listed below:

- Development in the planning area shall be designed in a fashion that maximizes energy efficiency.
    - Street standards shall be revised to increase shading along all future streets. Residential street widths for future streets shall be narrowed, thereby reducing the amount of pavement area - reducing heat buildup. Shade trees will also help to reduce heat buildup.
    - The City shall work with subdividers to design subdivisions so that a majority of dwelling units are properly oriented with respect to the sun, to take advantage of passive solar heating and cooling opportunities.

[17] City of Farmersville. 2002. *City of Farmersville General Plan, Chapter 4: Conservation, Open Space, Parks, and Recreation.* September. Website: https://www.cityoffarmersville-ca.gov/DocumentCenter/View/387/Part-I-The-General-Plan (accessed June 2024).

- The City shall work with developers to maximize the planting of deciduous shade trees around buildings and in paved areas.

Greenhouse Gas Emissions

This section describes regulations related to global climate change at the federal, State, and local level.

Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA.

While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO_2, CH_4, N_2O, HFCs, NF_3, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort set a GHG emission reduction target to reduce GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) CO_2e. The emissions target of 427 MMT CO_2e requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The CARB approved the Scoping Plan on December 11, 2008. It contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reduction of 31.7 MMT CO_2e);

- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);

- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and

- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. The CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[18] to reflect the 2030 target set by EO B-30-15 and codified by SB 32.

The 2022 Scoping Plan[19] was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, the CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). The CARB may update the targets every 4 years and must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by the CARB through SCSs. The SCSs are included with the Regional Transportation Plan, a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction target, it may prepare an Alternative Planning Strategy (APS). The APS identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

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18 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November. Website: ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf (accessed June 2024).

19 CARB. 2022. *2022 Scoping Plan Update*. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed June 2024).

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. The CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the CPUC for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed and the Governor signed SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air pollutant emissions data that are collected by the CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the Western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs the CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279. AB 1279 was signed in September of 2022 and codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

Regional Regulations

San Joaquin Valley Air Pollution Control District. Tulare County is located within the SJVAB, which is under the jurisdiction of the SJVAPCD. The SJVAPCD has regulatory authority over certain stationary and industrial GHG emission sources and provides voluntary technical guidance on addressing GHGs for other emission sources in a CEQA context. SJVAPCD initiatives related to GHGs are described below:

Climate Change Action Plan. The San Joaquin Valley Air Pollution Control District Climate Change Action Plan (CCAP) was adopted on August 21, 2008. The CCAP includes suggested best performance standards (BPS) for proposed development projects. However, the SJVAPCD's CCAP was adopted in 2009 and was prepared based on the State's 2020 GHG targets, which are now superseded by State policies (i.e., the 2022 California Green Building Code) and the 2030 GHG targets, established in SB 32.

San Joaquin Valley Carbon Exchange and Rule 2301. The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The Exchange was implemented with the adoption of Amendments to Rule 2301 Emission Reduction Credit Banking on January 19, 2012. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley.

The SJVAPCD incorporated a method to register voluntary GHG emission reductions with amendments to Rule 2301. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.

- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.

- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

The SJVAPCD is participating in a new program developed by the California Air Pollution Control Officers Association (CAPCOA) to encourage banking and use of GHG reduction credits referred to as the CAPCOA Greenhouse Gas Reduction Exchange (GHGRx). The GHGRx provides information on GHG credit projects within participating air districts. The SJVAPCD is one of the first districts to have offsets available for trading on the Exchange.

Local Regulations

City of Farmersville General Plan. The City's General Plan[20] contains policies indirectly related to GHGs. This includes measures to improve transit efficiency, reduce air emissions, increase ridesharing, promote mixed land uses, and require the implementation of energy saving features such as solar energy systems, water efficient landscaping, and energy efficient, sustainable building standards.

METHODOLOGY

Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model (CalEEMod) Version 2022.1 computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. Construction of the proposed project is anticipated to begin in September 2025 and would occur for approximately 18 months, which was included in CalEEMod. The proposed project would not require the import or export of soil, which was also included in CalEEMod. This analysis also assumes use of Tier 2 construction equipment and that the proposed project would comply with SJVAPCD Regulation VIII for fugitive dust control. Other detailed construction information is currently unavailable; therefore, this analysis utilizes CalEEMod default assumptions.

Construction Health Risk Assessment

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project, and the analysis is presented below. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including diesel particulate matter), a dispersion model was used to translate an emission rate from the

[20] City of Farmersville. 2002. *City of Farmersville General Plan.* September. Website: https://www.cityoffarmersville-ca.gov/DocumentCenter/View/387/Part-I-The-General-Plan (accessed June 2024).

source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

Operational Emissions

The air quality analysis includes estimating emissions associated with long-term operation of the proposed project. Consistent with the SJVAPCD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project.

As discussed in the Project Description section, the proposed project would include the construction of 99 single-family residential units and associated site improvements. The proposed project analysis was conducted using land use codes *Single Family Housing, Other Asphalt Surfaces,* and *City Park.* City Park was used as a representative land use for the proposed pond basin. Trip generation rates used in CalEEMod for the project were based on the project's trip generation estimates, which identifies that the proposed project would generate approximately 1,000 average daily trips.[21] In addition, consistent with SJVAPCD Rule 4901, this analysis assumes that the proposed project would not include any wood burning (or natural gas) fireplaces. Where project-specific data were not available, default assumptions (e.g., energy usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions. CalEEMod output sheets are included in Attachment B.

Energy Use

The analysis focuses on the three sources of energy that are relevant to the proposed project: natural gas, electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Tulare County. The electricity and natural gas use of the proposed project is analyzed an annual basis. Electricity and natural gas use was estimated for the project using default energy intensities by land use type in CalEEMod.

Greenhouse Gas Emissions

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related area sources, energy consumption, water conveyance and treatment, and waste generation.

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[21] Crawford & Bowen Planning, Inc. 2024. *Farmersville Residential Trip Generation.* May.

THRESHOLDS OF SIGNIFICANCE

Air Quality

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or State ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

Regional Emissions Thresholds

The SJVAPCD defines emissions thresholds in the GAMAQI, established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. The related impacts are discussed further in the Project Impacts section. The SJVAPCD regional emission thresholds for construction and operation are shown in Table B.

Table B: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (tons per year)					
	CO	NO_X	ROG	SO_X	PM_{10}	$PM_{2.5}$
Construction	100	10	10	27	15	15
Operations	100	10	10	27	15	15

Source: *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015).
CO = carbon monoxide
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm

- California State 8-hour CO standard of 9 ppm

Health Risk Thresholds

Both the State and federal governments have established health-based ambient air quality standards (AAQS) for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximum exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations, 350 days per year. The SJVAPCD's *Update to the District's Risk Management Policy to Address the OEHHA Revised Risk Assessment Guidance Document* states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 20 in 1 million.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multi-pathway consideration when applicable. The project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level. The project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

Energy

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse impact related to energy if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Greenhouse Gas Thresholds

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse GHG emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Neither the City nor the SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, this analysis evaluates the GHG emissions based on the project's consistency with applicable State GHG reduction goals.

PROJECT IMPACTS

This section identifies the air quality, GHG, and energy impacts associated with implementation of the proposed project.

Air Quality

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

Consistency with Applicable Air Quality Plans

The proposed project is in a region classified as a nonattainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the *2022 Plan for the 2015 8-Hour Ozone Standard* in December 2022 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard.[22]

To ensure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007.[23] The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards in November 2018 to address the USEPA 1997 annual $PM_{2.5}$ standard of 15 µg/m^3 and 24-hour $PM_{2.5}$ standard of 65 µg/m^3, the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m^3, and the 2012 annual $PM_{2.5}$ standard of 12 µg/m^3.[24]

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset

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22 SJVAPCD. 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm (accessed June 2024).

23 SJVAPCD. 2007. *2007 PM_{10} Maintenance Plan and Request for Redesignation*. Website: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed June 2024).

24 SJVAPCD. 2018. *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*. November 15. Website: http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed June 2024).

requirements are a major component of the SJVAPCD air quality plans. As discussed below, the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the proposed project would not conflict with or obstruct implementation of SJVAPCD air quality plans.

Criteria Pollutant Analysis

The Basin is currently designated nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading and building activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, reactive organic gases (ROG), directly emitted $PM_{2.5}$ or PM_{10}, and toxic air contaminants such as diesel exhaust particulate matter.

Project construction would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions (PM_{10}). With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_x), NO_x, ROG, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table C. Attachment B provides CalEEMod output sheets.

Table C: Short-Term Regional Construction Emissions

Construction Year	Annual Pollutant Emissions (tons per year)					
	ROG	**NO_x**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2025	<0.1	1.6	1.2	<0.1	0.2	0.1
2026	0.5	2.6	2.1	<0.1	0.1	0.1
2027	0.2	0.4	0.3	<0.1	<0.1	<0.1
Maximum Annual Emissions	**0.5**	**2.6**	**2.1**	**<0.1**	**0.2**	**0.1**
SJVAPCD Threshold	**10.0**	**10.0**	**100.0**	**27.0**	**15.0**	**15.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2024).
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_x = sulfur oxides

As shown in Table C, construction emissions associated with the proposed project would not exceed the SJVAPCD's thresholds for ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. Implementation of Regulatory Compliance Measure (RCM) AIR-1 would ensure that the proposed project complies with Regulation VIII.

RCM AIR-1 Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant or covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/ suppressant.

Construction emissions associated with the proposed project would be less than significant with implementation of Regulatory Compliance Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Operational Air Quality Impacts. Long-term air pollutant emission impacts associated with the proposed project are those related to mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment).

Mobile source emissions include ROG and NO_X emissions that contribute to the formation of ozone. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table D provides the proposed project's estimated operational emissions. Attachment B provides CalEEMod output sheets.

Table D: Project Operational Emissions

Emission Type	Pollutant Emissions (tons per year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	0.7	0.9	5.9	<0.1	1.4	0.4
Area Sources	0.9	<0.1	0.5	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Total Project Emissions	**1.6**	**1.1**	**6.5**	**<0.1**	**1.4**	**0.4**
SJVAPCD Threshold	10.0	10.0	100.0	27.0	15.0	15.0
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2024).
Note: Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxides

The results shown in Table D indicate the proposed project would not exceed the significance criteria for annual ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in Tulare County are not available. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

As described in the Project Description section, the proposed project is estimated to generate 1,000 average daily trips.[25] Therefore, given the extremely low level of CO concentrations in the project area and the anticipated lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The project site is surrounded primarily by agricultural and residential uses. The closest sensitive receptors to the project site include single-family homes located east of the project site at approximately 50 feet. The nearest worker receptor to the project is located west of the project site at approximately 100 feet and the nearest school receptor to the project site is located south of the project site at 1,800 feet.

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table E, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment as proposed by the project. Model snapshots of the sources are shown in Attachment C.

Table E: Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	19.27	0.017	0.000
Worker Receptor Risk	0.17	0.008	0.000
School Receptor	0.10	<0.001	0.000
SCAQMD Significance Threshold	**20.0 in one million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: LSA (June 2024).
SCAQMD = South Coast Air Quality Management District

As shown in Table E, the maximum cancer risk for the residential receptor MEI would be 19.27 in one million, which would not exceed the SJVAPCD cancer risk threshold of 20 in one million. The worker receptor risk would be lower at 0.17 in one million and the school receptor risk would be 0.10 in one million, which would also not exceed the SJVAPCD cancer risk thresholds. The total chronic hazard index would be 0.017 for the residential receptor MEI, 0.008 for the worker receptor MEI, and less than 0.001 for the school receptor MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, construction of the proposed project would not exceed SJVAPCD

[25] Crawford & Bowen Planning, Inc. 2024. *Farmersville Residential Trip Generation.* May.

thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations. No significant health risk would occur from project construction emissions.

The proposed project would include the construction of a 99-unit single-family residential development. As identified in Table D, project operational emissions of criteria pollutants would be below SJVAPCD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. In addition, the proposed project would be required to implement District Rule 9510, Indirect Source Review (ISR). Implementation of Rule 9510 would reduce operational emissions of NO_X and PM_{10} by 33.3 percent and 50 percent, respectively. Compliance with SJVAPCD rules would further limit doses and exposures, reducing potential health risk related to vehicle and equipment emissions to a level that is not significant. Once the proposed project is constructed, the proposed project would not be a source of substantial emissions. Therefore, implementation of the proposed project would not result in new sources of TACs. Therefore, the project would not expose sensitive receptors to substantial levels of TACs.

Odors

The SJVAPCD addresses odor criteria within the GAMAQI. The district has not established a rule or standard regarding odor emissions, rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact."

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed uses are not anticipated to emit any objectionable odors. Any odors in general would be confined mainly to the project site and would readily dissipate. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Naturally Occurring Asbestos

The project is in Tulare County, which is among the counties found to have serpentine and ultramafic rock in their soils.[26] However, according to the California Geological Survey, no such rock has been identified in the project vicinity. When demolition is proposed during construction, the demolition of existing buildings may expose asbestos used in building materials. However, the proposed project would not involve any demolition or renovation as no current development exists on the project site. Therefore, the potential risk for naturally occurring asbestos during project construction is small and would not be significant.

Valley Fever

The closest sensitive receptors to the project site include single-family homes located east of the project site at approximately 50 feet. Except under high wind conditions, this distance is sufficient that particulate matter would settle prior to reaching the nearest sensitive receptor. In addition, crosswinds influenced by the adjacent roadways would help dissipate any particulate matter

[26] California Department of Conservation (DOC). California Geological Survey. Asbestos. Website: https://www.conservation.ca.gov/cgs/minerals/mineral-hazards (accessed June 2024).

associated with the construction phase of the project. Therefore, any Valley fever spores suspended with the dust would not be anticipated to reach the sensitive receptors. However, during project construction, it is possible that workers could be exposed to Valley fever through fugitive dust. Dust control measures, consistent with SJVAPCD Regulation VIII, would reduce the exposure to the workers and sensitive receptors. Therefore, dust from the construction of the project is not anticipated to significantly add to the existing exposure of people to Valley fever.

Energy Use

This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Construction

The anticipated construction schedule assumes that the proposed project would be built in approximately 18 months. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.

Operation

Energy use associated with the proposed project would consist of natural gas, electricity, and vehicle fuel use associated with project operations.

Table F shows the estimated potential increased natural gas, electricity, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data and using the USEPA's fuel economy estimates for 2020 and the California diesel fuel economy estimates for 2021.

Table F: Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	879,760	36,146	133,066	106,284

Table F: Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)

Source: Compiled by LSA (June 2024).
kBTU = thousand British thermal units
kWh = kilowatt hours

As shown in Table F, the estimated increase in electricity demand associated with the operation of the proposed project would be 879,760 kWh per year. Total electricity consumption in Tulare County in 2022 was 4,957,696,254 kWh;[27] therefore, operation of the proposed project would negligibly increase the annual electricity consumption in Tulare County by approximately less than 0.1 percent.

As shown in Table F, the estimated increase in natural gas demand associated with the operation of the proposed project would be 36,146 therms per year. Total natural gas consumption in Tulare County in 2022 was 164,629,109 therms;[28] therefore, operation of the proposed project would negligibly increase the annual natural gas consumption in Tulare County by approximately less than 0.1 percent.

In addition, the project would result in energy usage associated with motor vehicle gasoline to fuel project-related trips. As shown above in Table F, the proposed project would result in the consumption of 133,066 gallons of gasoline and 106,284 gallons of diesel per year. Based on fuel consumption obtained from EMFAC2021, approximately 184.4 million gallons of gasoline and approximately 63 million gallons of diesel will be consumed from vehicle trips in Tulare County in 2027. Therefore, vehicle trips associated with the proposed project would increase the annual fuel use in Tulare County by approximately 0.1 percent for gasoline fuel usage and approximately 0.2 percent for diesel fuel usage. The proposed project would result in fuel usage that is a small fraction of current annual fuel use in Tulare County, and fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Electrical and natural gas demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Furthermore, the proposed project would be constructed using energy efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and

[27] CEC. 2022b. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed June 2024).

[28] Ibid.

equipment, in accordance with the Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608). The expected energy consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. As such, the proposed project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Conflict with or Obstruction of a State or Local Plan for Renewable Energy or Energy Efficiency

The CEC recently adopted the 2023 Integrated Energy Policy Report.[29] The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the region's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed project would not lead to new or substantially more severe energy impacts.

Greenhouse Gas Emission Impacts

Generation of Greenhouse Gas Emissions

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

Construction Greenhouse Gas Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the

[29] CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the annual emissions associated with construction of the proposed project would be approximately 589.1 metric tons of CO_2e per year. Construction GHG emissions were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the project, amortized construction emissions would be approximately 19.6 MT CO_2e per year.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Following guidance from the SJVAPCD, GHG emissions for operation of the project were calculated using CalEEMod. Based on the analysis results, summarized in Table G, the proposed project would result in emissions of approximately 1,878.4 MT CO_2e per year. These estimated emissions are provided for informational purposes, and the significance of the proposed project is further analyzed below. CalEEMod output sheets are provided in Attachment B.

Table G: Greenhouse Gas Emissions

Emission Type	Operational Emissions (metric tons per year)			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
Mobile Sources	1,417.7	0.1	0.1	1,442.9
Area Sources	1.2	<0.1	<0.1	1.2
Energy Sources	372.6	<0.1	<0.1	374.0
Water Sources	5.1	0.1	<0.1	9.5
Waste Sources	8.9	0.9	0.0	31.2
Amortized Construction Emissions				19.6
Total Operational Emissions				**1,878.4**

Source: Compiled by LSA (June 2024).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

As discussed, the SJVAPCD has not established a numeric threshold for GHG emissions. The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds or consistency with a regional GHG reduction plan (such as a Climate Action Plan [CAP]). Neither the City nor the SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, the proposed project was analyzed for consistency with the 2022 Scoping Plan.

The 2022 Scoping Plan includes key project attributes that reduce operational GHG emissions in Appendix D, Local Actions,[30] of the 2022 Scoping Plan. As discussed in Appendix D of the 2022 Scoping Plan, absent consistency with an adequate, geographically specific GHG reduction plan such as a CEQA-qualified CAP, the first approach the State recommends for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions.

The project's consistency with key project attributes from the 2022 Scoping Plan that would be applicable to residential and mixed-use development is shown in Table H.

Table H: Project Consistency with the 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attribute	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	***Consistent.*** CALGreen Code requires provision of infrastructure to accommodate EV chargers. The proposed project would provide EV charging to comply with the CALGreen Code, which requires 10 percent of the total parking spaces to be equipped with Level 2 EV chargers and that at least half of the required EV chargers be equipped with J17772 connectors. Therefore, the proposed project would be consistent with this key project attribute.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	***Consistent***. The project site is located in an area with other residential uses that are presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer). Therefore, the proposed project would be consistent with this key project attribute.
	Does not result in the loss or conversion of natural and working lands.	***Consistent.*** The project site would require a GPA, a change in land use designation of from Agricultural/ Urban Reserve to Medium Density Residential, and pre-zoning of the site to Single Family Residential (R-1). However, the State Department of Conservation classifies the project site as Non-Enrolled Land. The project site is not located on land that is designated as Prime Farmland or Farmland of State Importance. As

[30] CARB. 2022. *2022 Scoping Plan Appendix D Local Actions.* November. Website: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf (accessed June 2024).

Table H: Project Consistency with the 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attribute	Project Consistency
		such, the proposed project would be consistent with this key project attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre) or is in proximity to existing transit stops (within a half mile) or satisfies more detailed and stringent criteria specified in the region's SCS.	***Consistent.*** The proposed project would include the construction of 99 single-family units on a 19.55-acre project site. Therefore, the proposed project would result in less than 20 residential dwelling units per acre. However, the project site is located within 0.5 mile of a transit stop. The proposed project would also provide pedestrian infrastructure connecting to neighboring uses. As such, the project would promote initiatives to reduce vehicle trips and VMT and would increase the use of alternate means of transportation. As such, the proposed project would be consistent with this key project attribute.
	Reduces parking requirements by: eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or providing residential parking supply at a ratio of less than one parking space per dwelling unit; or for multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	***Consistent.*** The proposed project would consist of 99 single-family units and would be consistent with the City's parking requirements for single homes. The proposed project would not provide additional on-site street parking space. In addition, the project site is located within 0.5 mile of a transit stop. The proposed project would also provide pedestrian infrastructure connecting to neighboring uses. As such, the project would promote initiatives to reduce vehicle trips and VMT and would increase the use of alternate means of transportation. Thus, the project would be consistent with the intent of this measure for reducing VMT.
	At least 20 percent of units included are affordable to lower-income residents.	***Consistent.*** The proposed project would not include affordable residential units. However, the proposed project would include residential units that would be in close proximity to other residential uses and would allow residents to live within walking distance to other neighborhoods. Although the proposed project would not include affordable housing, the proposed project would provide needed single-family housing. Therefore, the proposed project would be consistent with this key project attribute.
	Results in no net loss of existing affordable units.	***Consistent.*** The proposed project would not result in the removal of any existing residential units. As such, the proposed project would be consistent with this key project attribute.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking.	***Consistent with Mitigation Measure GHG-1.*** The proposed project would include natural gas; therefore, implementation of Mitigation Measure GHG-1 would be required to ensure that the proposed project would prohibit the use of natural gas connections and appliances. With implementation of Mitigation Measure GHG-1, the proposed project would be consistent with this key Scoping Plan Consistency project attribute.

Source: Compiled by LSA (June 2024).

Table H: Project Consistency with the 2022 Scoping Plan Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attribute	Project Consistency

CALGreen Code = California Green Building Standards Code
EV = electric vehicle
GHG = greenhouse gas
GPA = General Plan Amendment
SCS = Sustainable Communities Strategy
VMT = vehicle miles traveled.

Residential and mixed-use projects that have all of the key project attributes as outlined in Table H would be considered to accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals as outlined in the 2022 Scoping Plan. The proposed project includes natural gas connections and would not be consistent with the building decarbonization goal from the 2022 Scoping Plan key residential and mixed-use project attributes. Mitigation Measure (MM) GHG-1 would be required to prohibit the use of natural gas as part of the proposed project.

MM GHG-1 In order to meet the consistency requirements of the 2022 Scoping Plan for greenhouse gas (GHG) reduction and equity prioritization goals, the proposed project shall prohibit the use of natural gas connections and appliances as part of the proposed project.

With implementation of Mitigation Measure GHG-1, the proposed project would be consistent with the 2022 Scoping Plan key residential and mixed-use project attributes related to building decarbonization. Therefore, with implementation of Mitigation Measure GHG-1, the proposed project would be consistent with all project attributes in the 2022 Scoping Plan GHG emission thresholds. As such, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment with mitigation.

Consistency with Greenhouse Gas Reduction Plans

As demonstrated in the preceding section, with the implementation of Mitigation Measure GHG-1, the proposed project would be consistent with the 2022 Scoping Plan key project attributes for residential and mixed-use projects.

The proposed project is further analyzed for consistency with the goals of the 2022 Scoping Plan and Tulare's RTP.

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[31] to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent

[31] CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. As such, if a project does not utilize natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change.[32] With implementation of Mitigation Measure GHG-1, the proposed project would be implementing its "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. In addition, the proposed project would be required to comply with the latest Title 24 standards of the CCR, established by the CEC, regarding energy conservation and green building

[32] Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans.* April. Website: Microsoft Word - FINAL CEQA Thresholds Report for Climate Impacts 03_30_22 revisions with tracked changes (baaqmd.gov) (accessed June 2024).

standards. Therefore, the proposed project would comply with applicable energy measures, with mitigation.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The project would comply with the CALGreen Code, which includes a variety of different measures, including the reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

Tulare 2022 RTP/SCS. The TCAG RTP/SCS reflects transportation planning for Tulare County through 2046. The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short- and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (highways, local streets and roads, mass transportation, rail, bicycle, aviation facilities and services) and consists of short- and long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them support multiple goals and policies. Some actions are intended to support the Sustainable Communities Strategy and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The 2022 RTP does not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed project would not interfere with the TCAG's ability to achieve the region's GHG reductions. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and as such, it would not conflict with the 2022 RTP targets since those targets were established and are applicable on a regional level. The proposed project would include the construction of 99 single-family residential units and associated site improvements. As such, the proposed project land uses would be consistent with the growth assumptions used in the 2022 RTP. Therefore, it is anticipated that implementation of the proposed project would not interfere with the TCAG's ability to implement the regional strategies outlined in the 2022 RTP. The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals and would be consistent with applicable plans and programs designed to reduce

GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

CONCLUSION

Based on the analysis presented above, with implementation of Regulatory Compliance Measure AIR-1, construction and operational activities associated with the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. In addition, the proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people. With implementation of Mitigation Measure GHG-1, the project would also not result in the emission of substantial GHG emissions. Additionally, the project would not conflict with the State's GHG emissions reductions objectives embodied in the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197. Therefore, the proposed project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable with mitigation.

Attachments: A: Figures
B: CalEEMod Outputs
C: Construction HRA

ATTACHMENT A

FIGURES

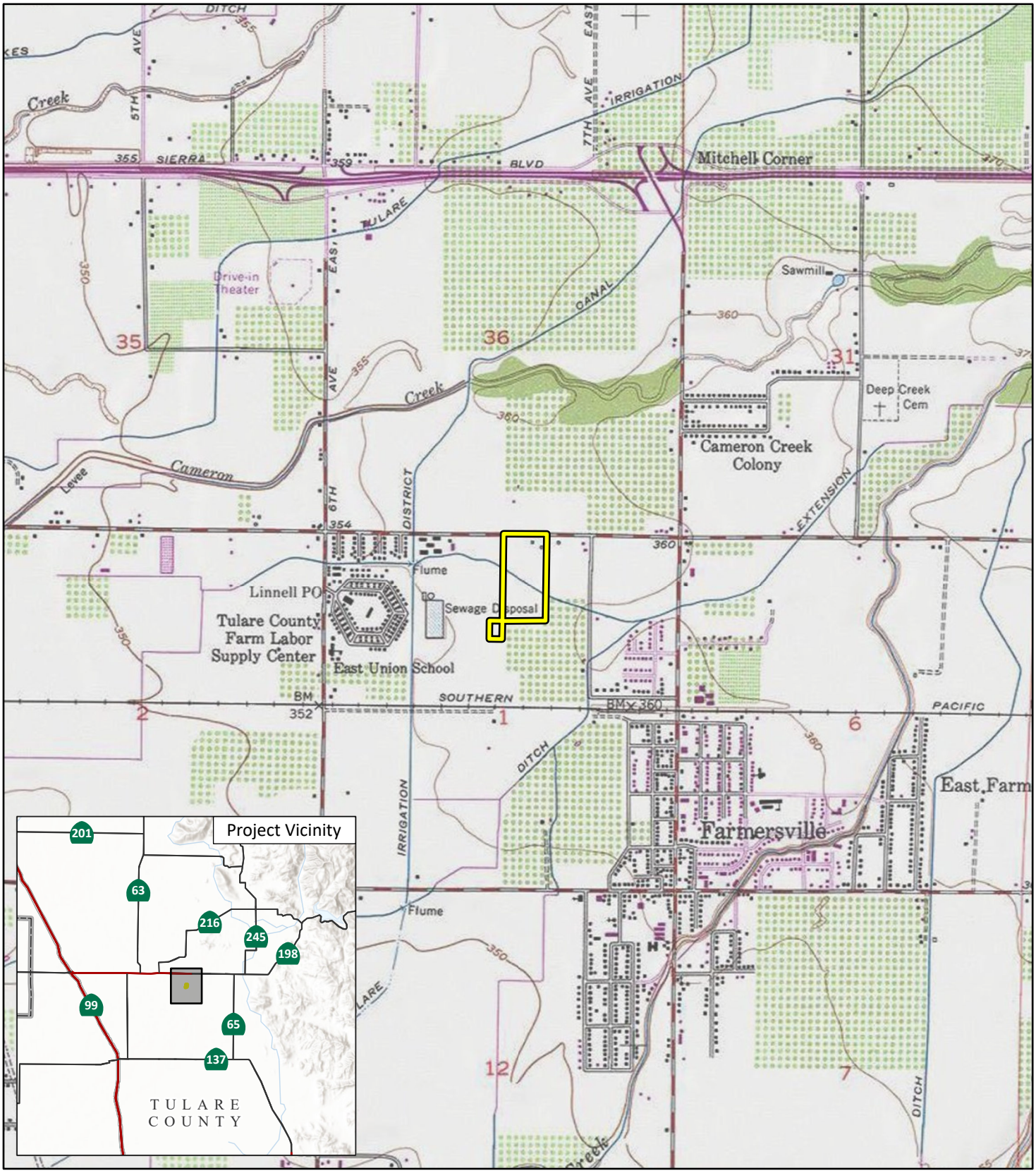

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FIGURE 1

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SOURCE: *Exeter CA*, 7.5' Quad (USGS 1969)

Farmersville Residential Development Project

Project Location and Regional Vicinity

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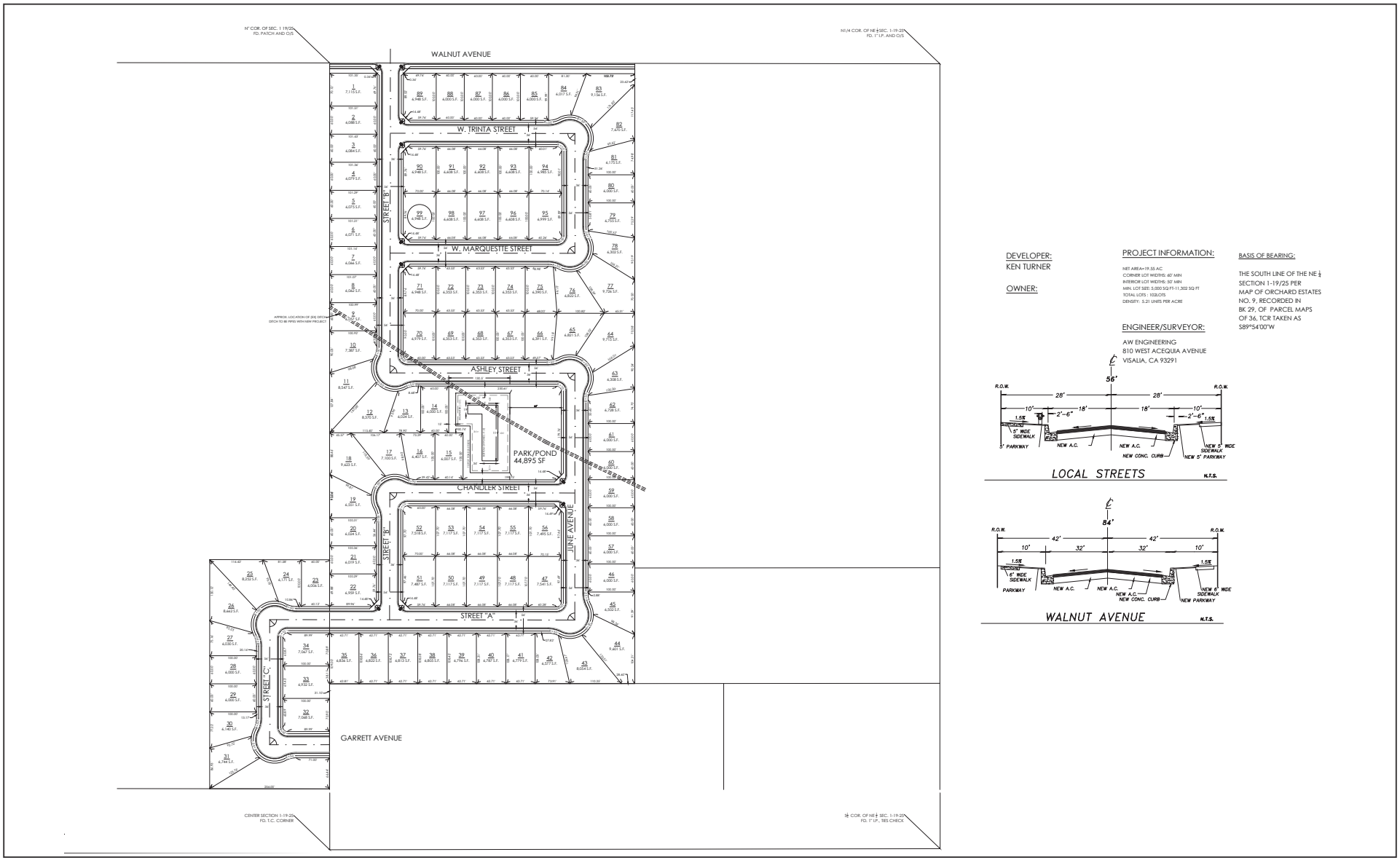

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FIGURE 2

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SOURCE: AW Engineering

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Farmersville Residential Development Project

Project Site Plan

ATTACHMENT B

CALEEMOD OUTPUTS

Farmersville Residential development Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Farmersville Residential development
Construction Start Date	9/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	24.4
Location	36.312126543008276, -119.21635314366983
County	Tulare
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2757
EDFZ	9
Electric Utility	Eastside Power Authority
Gas Utility	Southern California Gas
App Version	2022.1.1.24

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Single Family Housing	99.0	Dwelling Unit	15.3	193,050	38,650	0.00	335	—
Other Asphalt Surfaces	166	1000sqft	3.80	0.00	0.00	0.00	—	—
City Park	0.47	Acre	0.47	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.73	48.9	36.3	0.06	1.36	7.76	8.88	1.23	3.96	4.98	—	6,720	6,720	0.28	0.07	6,744
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.15	48.9	36.1	0.06	1.36	3.70	5.06	1.23	1.45	2.68	—	6,706	6,706	0.28	0.07	6,730
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.01	14.1	11.6	0.02	0.51	0.80	1.05	0.48	0.36	0.59	—	2,063	2,063	0.09	0.05	2,079
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55	2.58	2.11	< 0.005	0.09	0.15	0.19	0.09	0.07	0.11	—	342	342	0.01	0.01	344

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.44	48.9	36.3	0.06	1.36	7.76	8.88	1.23	3.96	4.98	—	6,720	6,720	0.28	0.06	6,744
2026	8.73	20.4	17.3	0.03	0.76	0.29	1.05	0.71	0.07	0.78	—	3,007	3,007	0.12	0.07	3,031
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.42	48.9	36.1	0.06	1.36	3.70	5.06	1.23	1.45	2.68	—	6,706	6,706	0.28	0.06	6,730
2026	8.70	20.4	16.9	0.03	0.76	0.29	1.05	0.71	0.07	0.78	—	2,978	2,978	0.13	0.07	3,000
2027	9.15	20.4	16.7	0.03	0.76	0.29	1.05	0.71	0.07	0.78	—	2,968	2,968	0.12	0.07	2,991
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	8.58	6.44	0.01	0.25	0.80	1.05	0.23	0.36	0.59	—	1,187	1,187	0.05	0.01	1,193
2026	3.01	14.1	11.6	0.02	0.51	0.19	0.70	0.48	0.05	0.53	—	2,063	2,063	0.09	0.05	2,079
2027	1.10	2.05	1.70	< 0.005	0.08	0.03	0.11	0.08	0.01	0.08	—	284	284	0.01	0.01	286
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.05	1.57	1.18	< 0.005	0.05	0.15	0.19	0.04	0.07	0.11	—	197	197	0.01	< 0.005	197
2026	0.55	2.58	2.11	< 0.005	0.09	0.03	0.13	0.09	0.01	0.10	—	342	342	0.01	0.01	344
2027	0.20	0.37	0.31	< 0.005	0.01	< 0.005	0.02	0.01	< 0.005	0.01	—	47.1	47.1	< 0.005	< 0.005	47.4

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.38	5.49	44.6	0.10	0.15	7.59	7.74	0.15	1.93	2.08	62.0	11,405	11,467	6.73	0.45	11,802

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.42	6.10	31.8	0.09	0.15	7.59	7.74	0.15	1.93	2.08	62.0	10,614	10,676	6.77	0.48	10,991
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.72	5.83	35.4	0.09	0.15	7.47	7.62	0.15	1.90	2.05	62.0	10,844	10,906	6.75	0.47	11,229
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.59	1.06	6.47	0.02	0.03	1.36	1.39	0.03	0.35	0.37	10.3	1,795	1,806	1.12	0.08	1,859

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.34	4.52	38.6	0.09	0.08	7.59	7.67	0.07	1.93	2.00	—	9,116	9,116	0.33	0.42	9,281
Area	4.98	0.05	5.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	15.0	15.0	< 0.005	< 0.005	15.1
Energy	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	2,251	2,251	0.18	0.01	2,259
Water	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Waste	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
Total	9.38	5.49	44.6	0.10	0.15	7.59	7.74	0.15	1.93	2.08	62.0	11,405	11,467	6.73	0.45	11,802
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.88	5.19	31.4	0.08	0.08	7.59	7.67	0.07	1.93	2.00	—	8,340	8,340	0.37	0.45	8,485
Area	4.49	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Energy	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	2,251	2,251	0.18	0.01	2,259
Water	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Waste	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
Total	8.42	6.10	31.8	0.09	0.15	7.59	7.74	0.15	1.93	2.08	62.0	10,614	10,676	6.77	0.48	10,991
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.94	4.89	32.3	0.08	0.08	7.47	7.55	0.07	1.90	1.97	—	8,563	8,563	0.35	0.44	8,715
Area	4.73	0.03	2.77	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.41	7.41	< 0.005	< 0.005	7.43
Energy	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	2,251	2,251	0.18	0.01	2,259
Water	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Waste	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
Total	8.72	5.83	35.4	0.09	0.15	7.47	7.62	0.15	1.90	2.05	62.0	10,844	10,906	6.75	0.47	11,229
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.72	0.89	5.89	0.02	0.01	1.36	1.38	0.01	0.35	0.36	—	1,418	1,418	0.06	0.07	1,443
Area	0.86	< 0.005	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.23	1.23	< 0.005	< 0.005	1.23
Energy	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	373	373	0.03	< 0.005	374
Water	—	—	—	—	—	—	—	—	—	—	1.34	3.75	5.09	0.14	< 0.005	9.50
Waste	—	—	—	—	—	—	—	—	—	—	8.93	0.00	8.93	0.89	0.00	31.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23
Total	1.59	1.06	6.47	0.02	0.03	1.36	1.39	0.03	0.35	0.37	10.3	1,795	1,806	1.12	0.08	1,859

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	—	5,295	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	2.18	1.55	< 0.005	0.06	—	0.06	0.06	—	0.06	—	290	290	0.01	< 0.005	291
Dust From Material Movement	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.0	48.0	< 0.005	< 0.005	48.2
Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.05	0.83	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	0.01	< 0.005	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.31	5.31	< 0.005	< 0.005	5.40
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	0.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	—	6,599	6,599	0.27	0.05	6,622
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	48.8	35.3	0.06	1.36	—	1.36	1.23	—	1.23	—	6,599	6,599	0.27	0.05	6,622
Dust From Material Movement	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	4.68	3.39	0.01	0.13	—	0.13	0.12	—	0.12	—	633	633	0.03	0.01	635
Dust From Material Movement	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.85	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	105
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.06	0.95	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	121	121	0.01	0.01	123

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.75	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	0.01	0.01	109
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.76	1.76	< 0.005	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,398	2,398	0.10	0.02	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.66	1.26	< 0.005	0.06	—	0.06	0.06	—	0.06	—	211	211	0.01	< 0.005	212
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.0	35.0	< 0.005	< 0.005	35.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.13	1.33	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	190	190	0.02	0.01	193
Vendor	0.01	0.34	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	228	228	< 0.005	0.03	238
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.4	17.4	< 0.005	< 0.005	17.7
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.0	20.0	< 0.005	< 0.005	20.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.88	2.88	< 0.005	< 0.005	2.93
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.32	3.32	< 0.005	< 0.005	3.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	13.5	10.2	0.02	0.49	—	0.49	0.46	—	0.46	—	1,712	1,712	0.07	0.01	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	2.46	1.86	< 0.005	0.09	—	0.09	0.08	—	0.08	—	283	283	0.01	< 0.005	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.09	1.56	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	210	210	0.01	0.01	214
Vendor	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	223	223	< 0.005	0.03	234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	1.23	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	186	186	0.02	0.01	189
Vendor	0.01	0.33	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	223	223	< 0.005	0.03	234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.08	0.90	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	138	138	0.01	0.01	140
Vendor	0.01	0.23	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	160	160	< 0.005	0.02	167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.17	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	23.3
Vendor	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	27.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.33	1.01	< 0.005	0.05	—	0.05	0.05	—	0.05	—	169	169	0.01	< 0.005	169
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.24	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.0	28.0	< 0.005	< 0.005	28.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	1.13	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	183	183	0.01	0.01	186
Vendor	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	< 0.005	0.03	229
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	13.6
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	16.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.21	2.21	< 0.005	< 0.005	2.25
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.55	2.55	< 0.005	< 0.005	2.67
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	—	1,511	1,511	0.06	0.01	1,516
Paving	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.55	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	62.1	62.1	< 0.005	< 0.005	62.3
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.3
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.47	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	76.8	76.8	< 0.005	< 0.005	78.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.27	3.27	< 0.005	< 0.005	3.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	0.55
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	7.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	7.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.34	0.30	< 0.005	0.02	—	0.02	0.02	—	0.02	—	41.3	41.3	< 0.005	< 0.005	41.4
Architectural Coatings	2.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.83	6.83	< 0.005	< 0.005	6.86
Architectural Coatings	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.31	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.1	42.1	< 0.005	< 0.005	42.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.3	37.3	< 0.005	< 0.005	37.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	12.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	2.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	7.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	16.7	16.7	< 0.005	< 0.005	16.8
Architectural Coatings	0.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	2.78
Architectural Coatings	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.5	36.5	< 0.005	< 0.005	37.1

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.74	4.74	< 0.005	< 0.005	4.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.34	4.52	38.6	0.09	0.08	7.59	7.67	0.07	1.93	2.00	—	9,116	9,116	0.33	0.42	9,281
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	4.34	4.52	38.6	0.09	0.08	7.59	7.67	0.07	1.93	2.00	—	9,116	9,116	0.33	0.42	9,281

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.88	5.19	31.4	0.08	0.08	7.59	7.67	0.07	1.93	2.00	—	8,340	8,340	0.37	0.45	8,485
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	3.88	5.19	31.4	0.08	0.08	7.59	7.67	0.07	1.93	2.00	—	8,340	8,340	0.37	0.45	8,485
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.72	0.89	5.89	0.02	0.01	1.36	1.38	0.01	0.35	0.36	—	1,418	1,418	0.06	0.07	1,443
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.72	0.89	5.89	0.02	0.01	1.36	1.38	0.01	0.35	0.36	—	1,418	1,418	0.06	0.07	1,443

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1,092	1,092	0.08	0.01	1,097

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,092	1,092	0.08	0.01	1,097
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1,092	1,092	0.08	0.01	1,097
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,092	1,092	0.08	0.01	1,097
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	181	181	0.01	< 0.005	182
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	181	181	0.01	< 0.005	182

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	1,158	1,158	0.10	< 0.005	1,162
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	1,158	1,158	0.10	< 0.005	1,162
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	1,158	1,158	0.10	< 0.005	1,162
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.05	0.91	0.39	0.01	0.07	—	0.07	0.07	—	0.07	—	1,158	1,158	0.10	< 0.005	1,162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	192	192	0.02	< 0.005	192
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	192	192	0.02	< 0.005	192

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	4.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.49	0.05	5.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.0	15.0	< 0.005	< 0.005	15.1
Total	4.98	0.05	5.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	15.0	15.0	< 0.005	< 0.005	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	4.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.49	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipmen	0.04	< 0.005	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.23	1.23	< 0.005	< 0.005	1.23
Total	0.86	< 0.005	0.51	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.23	1.23	< 0.005	< 0.005	1.23

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	8.07	22.7	30.7	0.83	0.02	57.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	1.34	3.75	5.09	0.14	< 0.005	9.50
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	1.34	3.75	5.09	0.14	< 0.005	9.50

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	0.08
Total	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	0.08
Total	—	—	—	—	—	—	—	—	—	—	53.9	0.00	53.9	5.39	0.00	189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	8.92	0.00	8.92	0.89	0.00	31.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	—	—	—	—	—	—	—	—	—	—	< 0.005	0.00	< 0.005	< 0.005	0.00	0.01
Total	—	—	—	—	—	—	—	—	—	—	8.93	0.00	8.93	0.89	0.00	31.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	9/1/2025	9/26/2025	5.00	20.0	—
Grading	Grading	9/29/2025	11/14/2025	5.00	35.0	—
Building Construction	Building Construction	11/17/2025	2/5/2027	5.00	320	—
Paving	Paving	2/8/2027	2/26/2027	5.00	15.0	—
Architectural Coating	Architectural Coating	7/27/2026	3/5/2027	5.00	160	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38

Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	6.80	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	35.6	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	10.6	6.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	6.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	7.13	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	6.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	390,926	130,309	0.00	0.00	9,936

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	30.0	0.00	—
Grading	0.00	0.00	105	0.00	—
Paving	0.00	0.00	0.00	0.00	4.89

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	1.09	0%
Other Asphalt Surfaces	3.80	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2025	0.00	453	0.03	< 0.005
2026	0.00	453	0.03	< 0.005
2027	0.00	453	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,000	1,000	1,000	364,963	10,679	10,679	10,679	3,897,697
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
390926.25	130,309	0.00	0.00	9,936

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	879,760	453	0.0330	0.0040	3,614,589
Other Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00
City Park	0.00	453	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	4,213,702	681,752

Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	100.0	—
Other Asphalt Surfaces	0.00	—
City Park	0.04	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

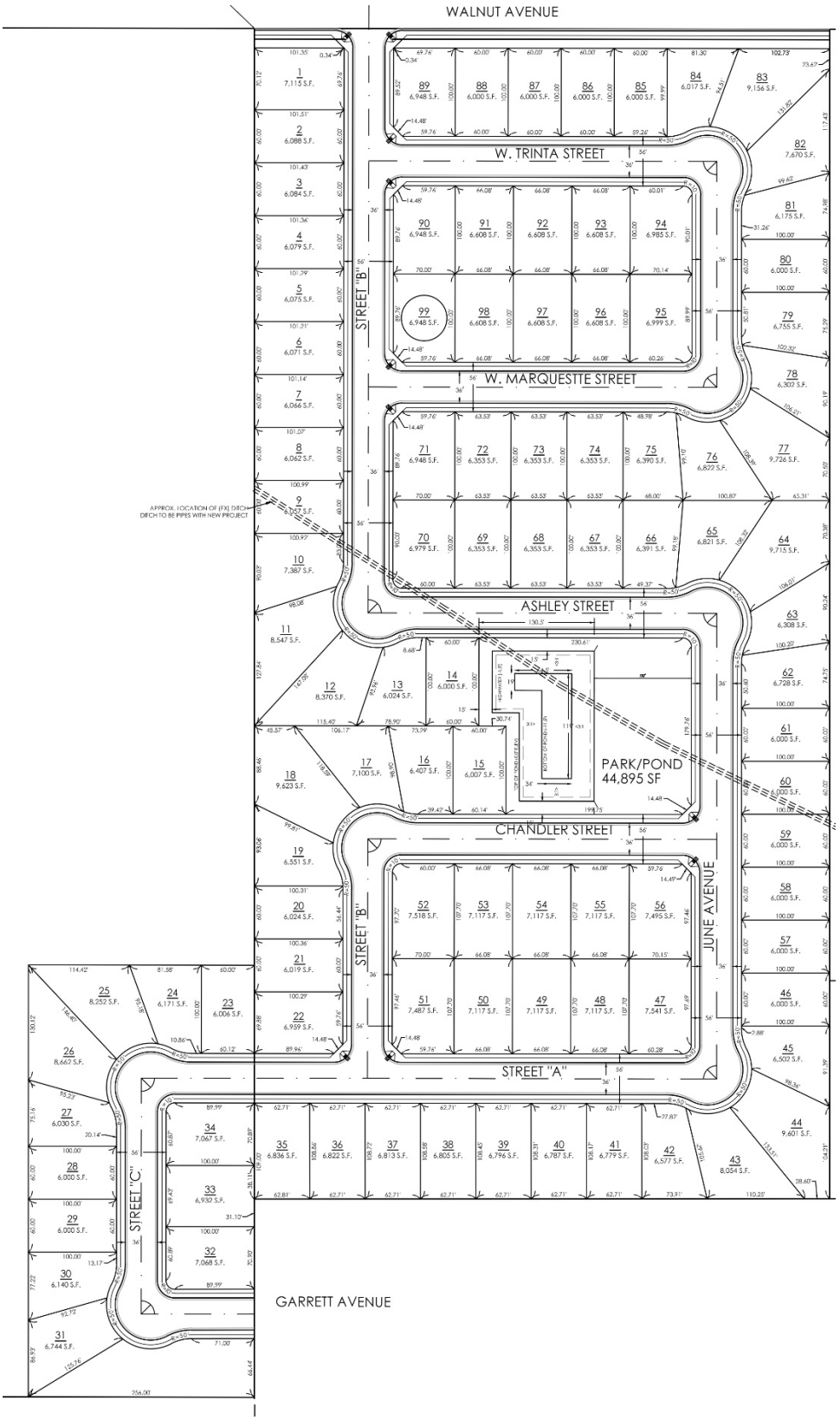
Screen	Justification
Land Use	total project site is 19.55 acres. Project would involve the construction of 99 single family residential units, including 165,600 sf of paved area, 38,650 sf of landscape area, and a 0.47 acre pond basin
Construction: Construction Phases	No demolition. Construction is expected to begin in September 2025 and occur for 18 months. Assuming overlap between building construction, paving, and architectural coating phases.
Construction: Off-Road Equipment	Default equipment with Tier 2
Operations: Vehicle Data	Based on the project's trip generation of 1,000 ADT Trip rate = 1,000 ADT / 99 units = 10.10
Operations: Hearths	Assuming no wood burning hearths

ATTACHMENT C

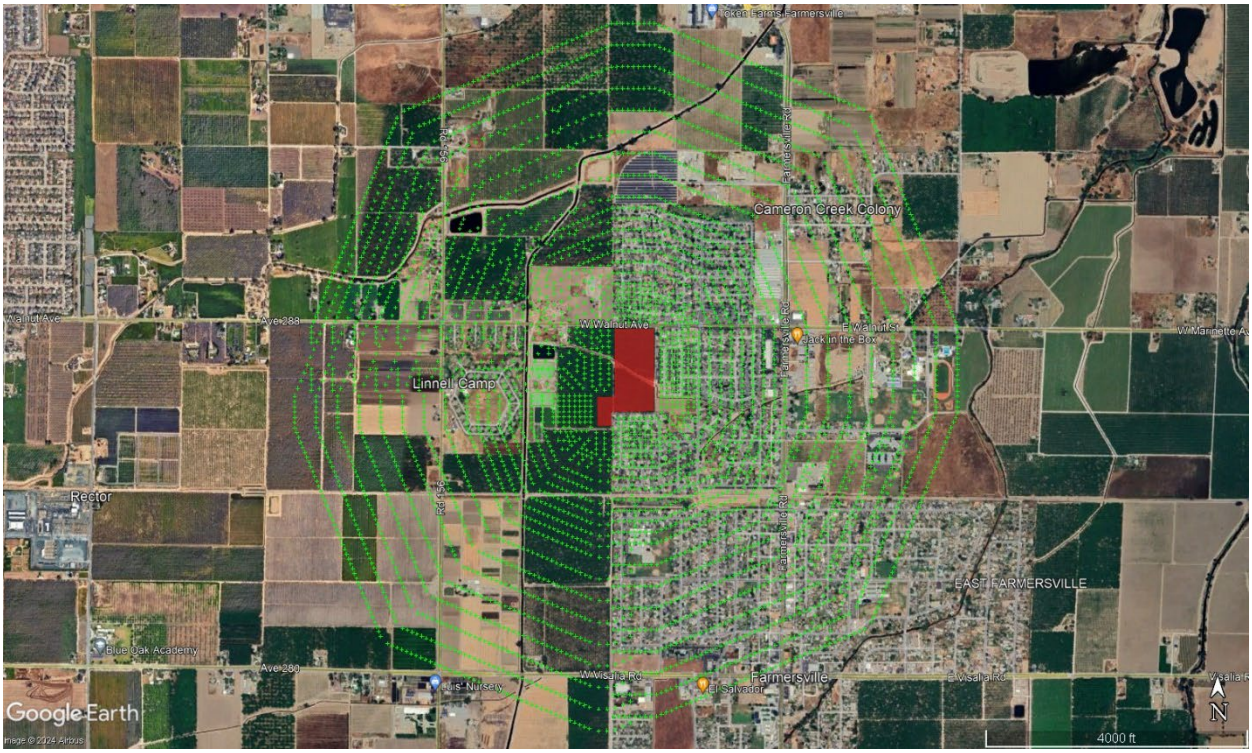
CONSTRUCTION HRA

Project Location

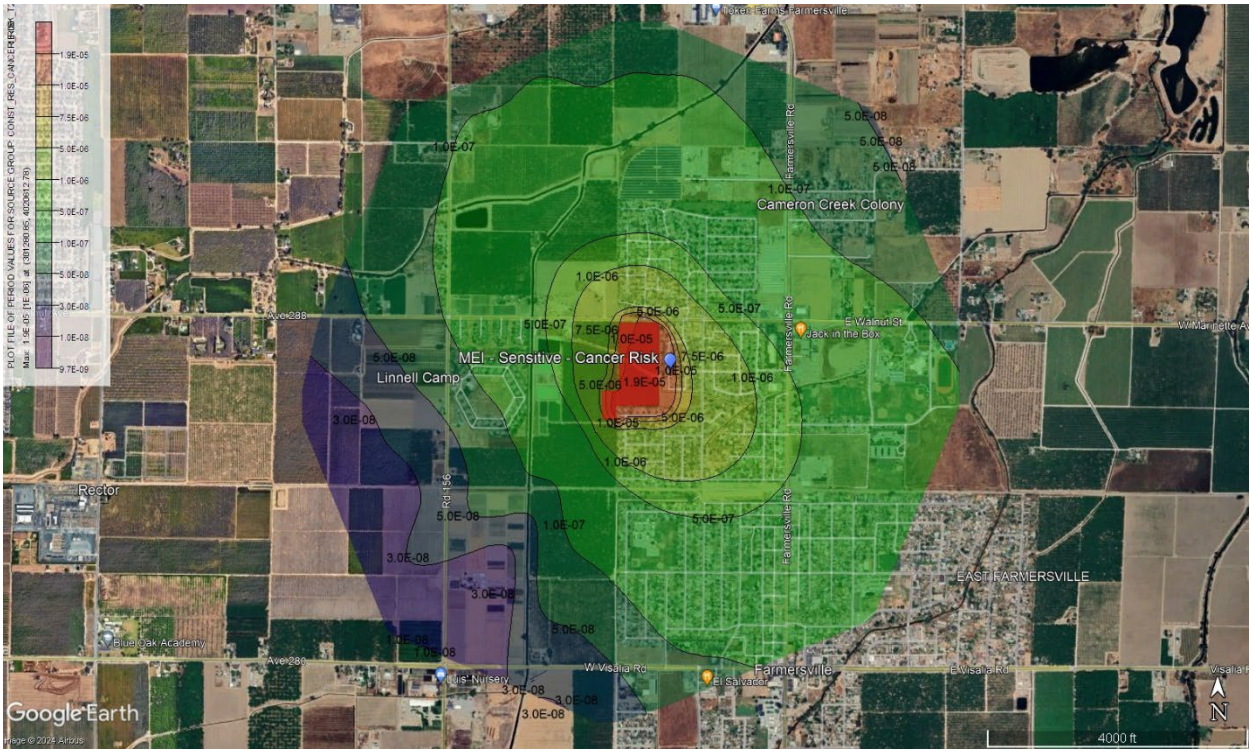
Project Layout



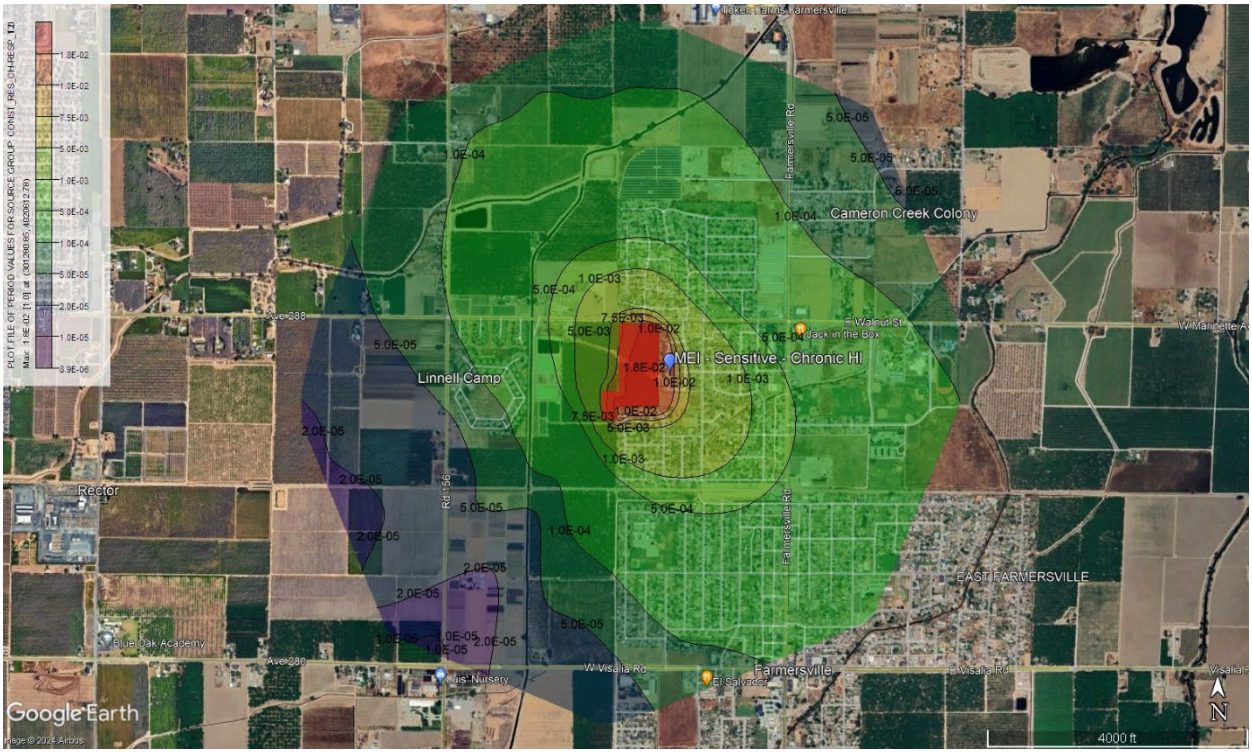
Receptor Grid



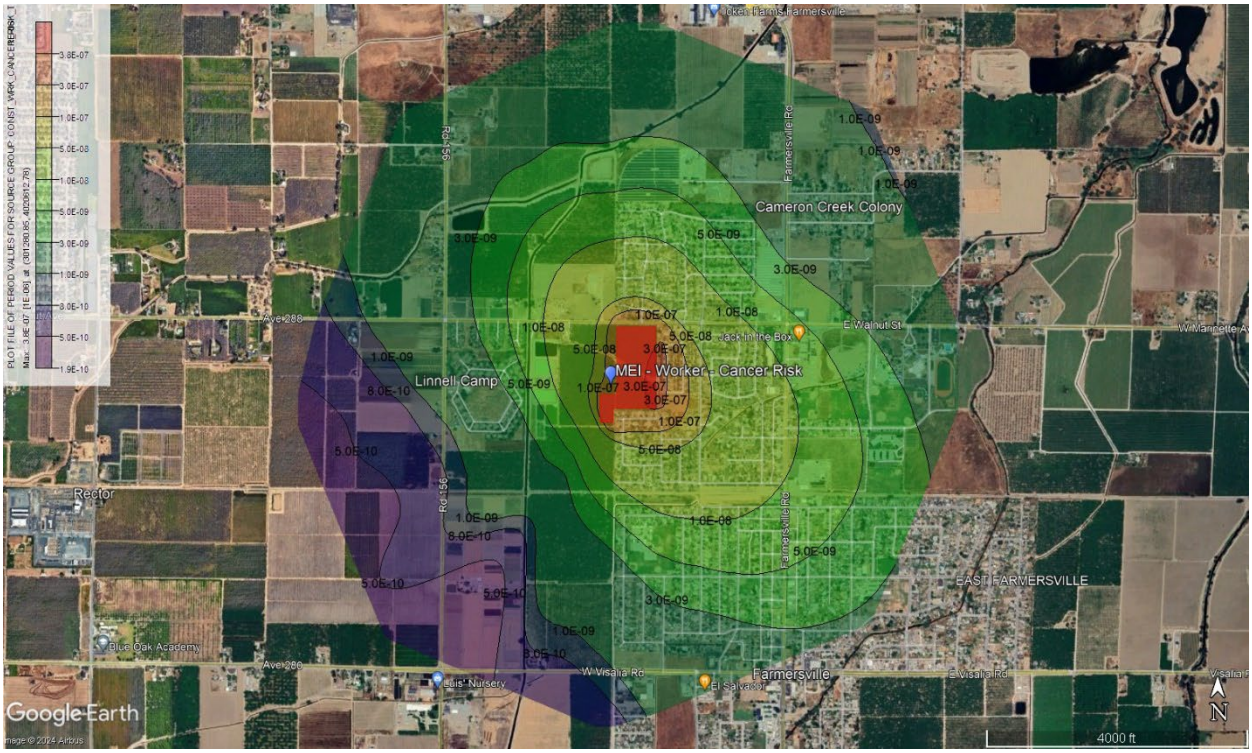
Construction Cancer Risk – Sensitive Receptor



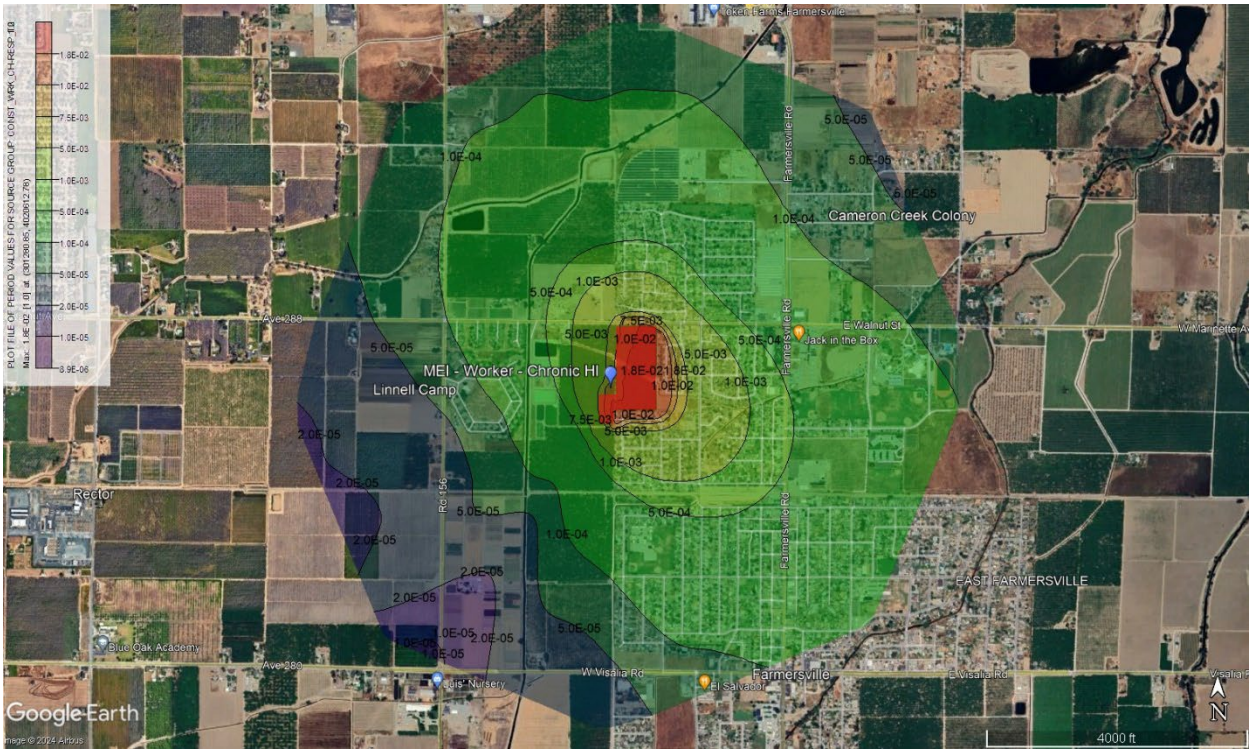
Construction Chronic Index - Sensitive Receptor



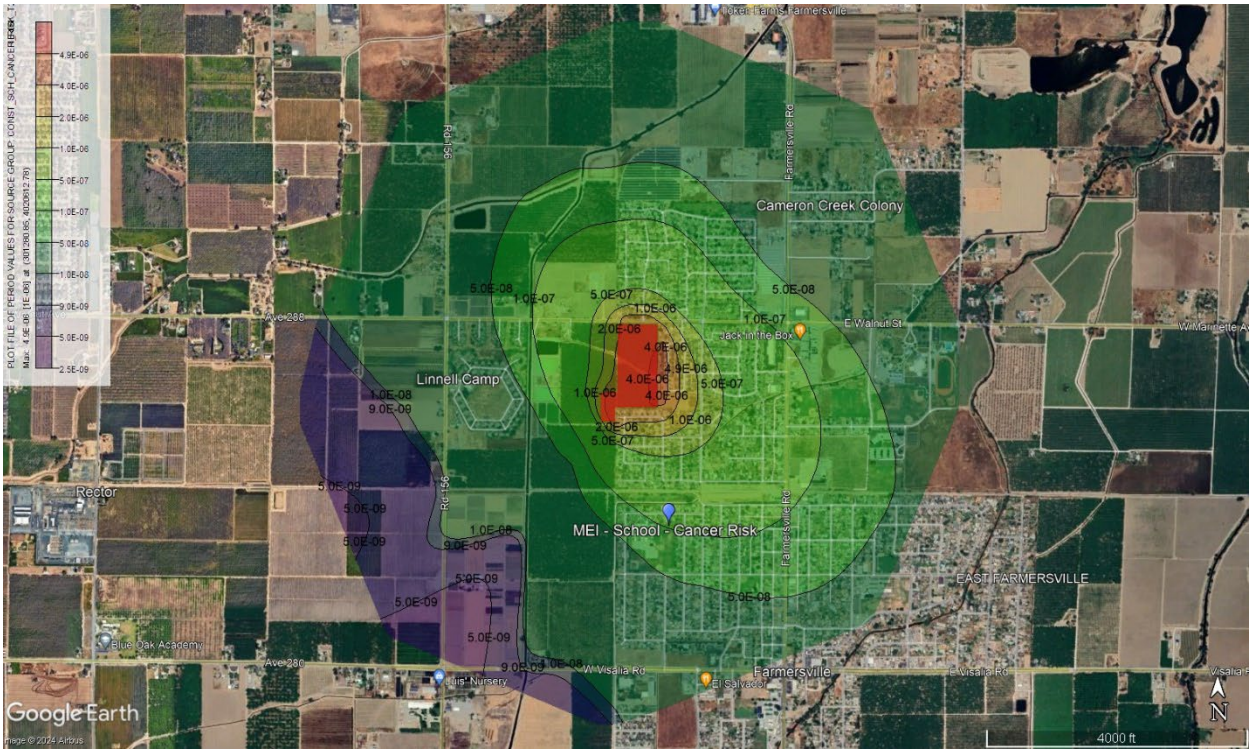
Construction Cancer Risk – Worker Receptor



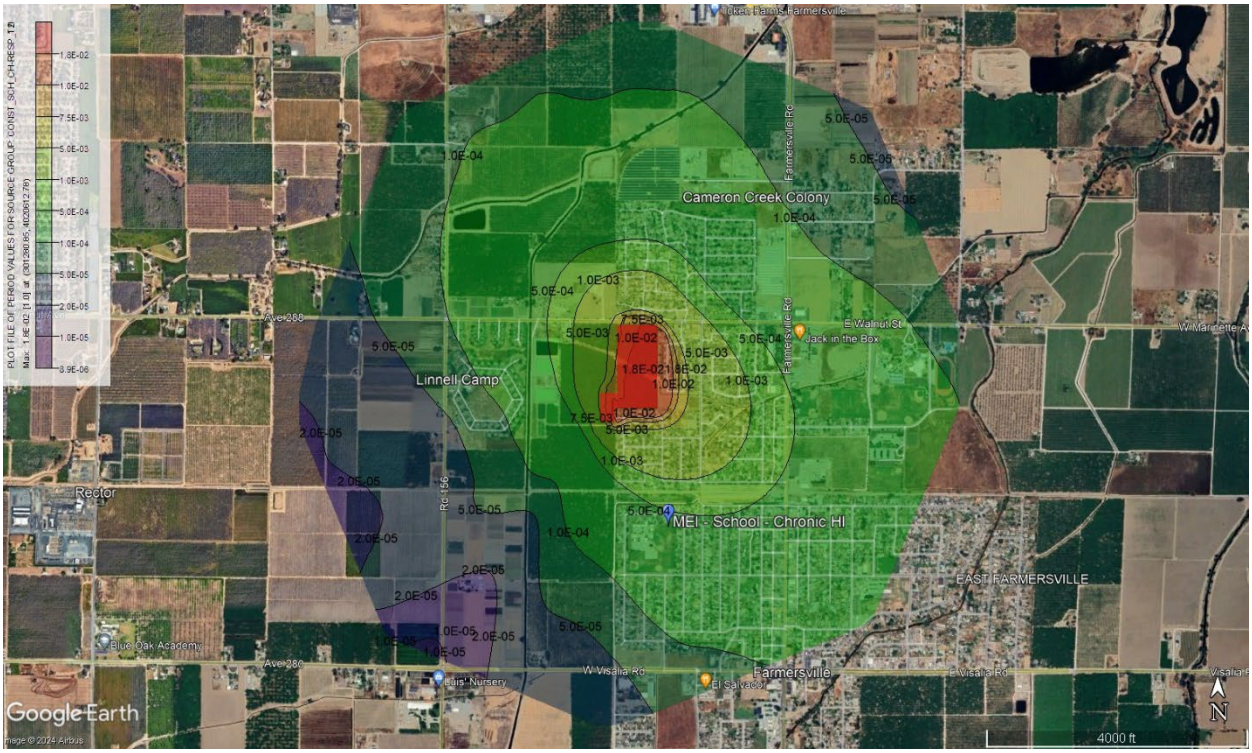
Construction Chronic Index - Worker Receptor



Construction Cancer Risk – School Receptor



Construction Chronic Index - School Receptor



Construction MEI (Sensitive) - Cancer Risk (in a Million) HARP Rec #: 3441 X: 301280.85 Y: 4020612.78			
T2	T4f	0	0
19.27	0.06	0.00	0.00
MEI (Sensitive) - Chronic Hazard Index HARP Rec #: 3441 X: 301280.85 Y: 4020612.78			
T2	T4f	0	0
1.77E-02	7.78E-05	0.00E+00	0.00E+00
MEI (Sensitive) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T4f	0	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (Sensitive) - PM 2.5 HARP Rec #: 3441 X: 301280.85 Y: 4020612.78			
T2	T4f	0	0
0.088	0.000	0.000	0.000

Construction MEI (Worker) - Cancer Risk (in a Million) HARP Rec #: 2134 X: 301015.64 Y: 4020574.3			
T2	T4f	0	0
0.17	0.00	0.00	0.00
MEI (Worker) - Chronic Hazard Index HARP Rec #: 2134 X: 301015.64 Y: 4020574.3			
T2	T4f	0	0
7.85E-03	3.46E-05	0.00E+00	0.00E+00
MEI (Worker) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T4f	0	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (Worker) - PM 2.5 HARP Rec #: 2134 X: 301015.64 Y: 4020574.3			
T2	T4f	0	0
0.039	0.000	0.000	0.000

Construction MEI (School) - Cancer Risk (in a Million) HARP Rec #: 286 X: 301263.87 Y: 4019924.11			
T2	T4f	0	0
0.10	0.00	0.00	0.00
MEI (School) - Chronic Hazard Index HARP Rec #: 286 X: 301263.87 Y: 4019924.11			
T2	T4f	0	0
3.67E-04	1.62E-06	0.00E+00	0.00E+00
MEI (School) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T4f	0	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEI (School) - PM 2.5 HARP Rec #: 286 X: 301263.87 Y: 4019924.11			
T2	T4f	0	0
0.0018	0.0000	0.0000	0.0000

Operational Sensitive Receptor			
Parameter	**HARP Rec #**	**X & Y Coordinate**	**Result**
30 Yr Cancer Risk (in a Million)	0	0 0	0.00
70 Yr Cancer Risk (in a Million)	0	0 0	0.00
Chronic HI	0	0 0	0.00E+00
Acute HI	0	0 0	0.00E+00
PM 2.5	0	0 0	0.0000

Operational Worker Receptor			
Parameter	**HARP Rec #**	**X & Y Coordinate**	**Result**
25 Yr Cancer Risk (in a Million)	0	0 0	0.00
Chronic HI	0	0 0	0.00E+00
Acute HI	0	0 0	0.00E+00
PM 2.5	0	0 0	0.00E+00

Operational School Receptor			
Parameter	**HARP Rec #**	**X & Y Coordinate**	**Result**
9 Yr Cancer Risk (in a Million)	0	0 0	0.00
Chronic HI	0	0 0	0.00E+00
Acute HI	0	0 0	0.00E+00
PM 2.5	0	0 0	0.0000

	Zone	**11**	Process Coordinates									
	Datum	**WGS 1984**										
	KML File Name	**20241731 Project MEI**										
										Sensitive		
Description	**Receptor Type**	**Model Type**	**UTM X**	**UTM Y**	**Latitude**	**Longitude**			Unmitigated	T2	T2L3	T4	**Row**
Construction	Sensitive	Cancer Risk	301280.85	4020612.78	36.31005719	-119.2133954	**Col**		2	3	4	5	4
Construction	Sensitive	Chronic HI	301280.85	4020612.78	36.31005719	-119.2133954			2	3	4	5	7
Construction	Sensitive	Acute HI	0	0					2	3	4	5	10
Construction	Sensitive	PM 2.5	301280.85	4020612.78	36.31005719	-119.2133954			2	3	4	5	13
Construction	School	Cancer Risk	301263.87	4019924.11	36.30384964	-119.2134089			12	13	14	15	4
Construction	School	Chronic HI	301263.87	4019924.11	36.30384964	-119.2134089			12	13	14	15	7
Construction	School	Acute HI	0	0					12	13	14	15	10
Construction	School	PM 2.5	301263.87	4019924.11	36.30384964	-119.2134089			12	13	14	15	13
Construction	Worker	Cancer Risk	301015.64	4020574.30	36.30965582	-119.2163375			7	8	9	10	4
Construction	Worker	Chronic HI	301015.64	4020574.30	36.30965582	-119.2163375			7	8	9	10	7
Construction	Worker	Acute HI	0	0					7	8	9	10	10
Construction	Worker	PM 2.5	301015.64	4020574.30	36.30965582	-119.2163375			7	8	9	10	13
Operational	Sensitive	Cancer Risk 30 yr	0	0					3	4	5	2	18
Operational	Sensitive	Cancer Risk 70 yr	0	0					3	4	5	2	20
Operational	Sensitive	Chronic HI	0	0					3	4	5	2	22
Operational	Sensitive	Acute HI	0	0					3	4	5	2	24
Operational	Sensitive	PM 2.5	0	0					3	4	5	2	26
Operational	Worker	Cancer Risk 25 yr	0	0					8	9	10	7	18
Operational	Worker	Chronic HI	0	0					8	9	10	7	20
Operational	Worker	Acute HI	0	0					8	9	10	7	22
Operational	Worker	PM 2.5	0	0					8	9	10	7	24
Operational	School	Cancer Risk 9 yr	0	0					13	14	15	12	18
Operational	School	Chronic HI	0	0					13	14	15	12	20
Operational	School	Acute HI	0	0					13	14	15	12	22
Operational	School	PM 2.5	0	0					13	14	15	12	24

General AERMOD Input Parameters			
Project Boundary			
	Based on site plan		
Project Elevation Data			
	Source	**Lakes Environmental**	
	Link	http://www.webgis.com/terraindata.html	
	Evel Data Descr.	**7.5 min DEM not available**	
Project Receptor Grid			
	Telescoping Grid	Spacing (m)	Distance (m)
	Grid 1	**10**	**200**
	Grid 2	**20**	**200**
	Grid 3	**30**	**300**
	Grid 4	**40**	**400**
	Comments	**Receptors on roads or paring lot areas have been removed.**	
Meteorological Dataset			
	Location	**Fontana**	
	Provided By	**South Coast AQMD**	
	Years	**2011 - 2013, 2015-2016**	
	Elevation (m)	**367**	
	Link	https://www.aqmd.gov/docs/default-source/air-quality/meterorological-data/aermod-ready-meteorological-data/table-1-meteorological-sites/2017/FontanaADJU.zip?sfvrsn=7	
Construction Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period & Hourly**	
	Dispersion Coefficient	**Urban**	
	County	**San Bernardino**	
	Urban Grouping / Pop	**Y**	**2,035,210**
	# of Worker Receptors	**6,308**	
	# of Sensitive Receptors	**4,339**	
	# of School Receptors		
Construction Area Parameters			
	Source Type	**Polygon Area**	
	Project Area (m^2)	**12617.7**	
	Ht. of Source (m)	**3.048**	
Operational Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period / Hourly**	
	Dispersion Coefficient	**Urban**	
	Urban Grouping / Pop	**Y**	**2,035,210**
	# Worker Receptors	**6308**	
	# Sensitive Receptors	**4339**	
	# of School Receptors	**0**	

Diesel Truck Idling Parameters		
	Source Type	**Point**
	Stack Ht. (m)	**3.658**
	Stack Dia (m)	**0.044**
	Stack Temp (k)	**388.7**
	Velocity (m/s)	**25**
Diesel Truck Travel Parameters		
	Source Type	**Line Volume**
	Initial Vertical (m)	**1.42**
	Initial Lateral (m)	**2.84**
	Release Ht (m)	**Surface**
	Volume Length (m)	**Roadway Segment Specific**
Vehicle Travel Parameters		
	Source Type	**Line Volume**
	Initial Vertical (m)	**0.85**
	Initial Lateral (m)	**1.70**
	Release Ht (m)	**Surface**
	Comments	**Combined if trucks travel the same path**
I.C. Engine Parameters		
	Source Type	**Point**
	Stack Ht. (m)	**2.44**
	Stack Dia (m)	**0.1**
	Stack Temp (k)	**422**
	Velocity (m/s)	**50**

General HARP Input Parameters		
Construction		
School Receptors		
School Scenario Parameters		
	Class Grade	**K-12**
	Starting Age	**4**
	Age Range	**4 Year Old - 7 Years Old**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**RMP using the Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
School Pathway Parameters		
	Pathways	**SCAQMD Manadatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**
Sensitive Receptors		
Sensitive Scenario Parameters		
	Starting Age	**3rd Trimester**
	Age Range	**3rd Trimester - 4 Year**

	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**RMP using the Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Sensitive Pathway Parameters		
	Pathways	**SCAQMD Manadatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**Y**
	TAH ≥ 16 yrs	**Y**
Worker Receptors		
Worker Scenario Parameters		
	Starting Age	**16**
	Age Range	**16 - 19**
	Receptor Type	**Worker**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Worker Pathway Parameters		
	Pathways	**OEHHA minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**

PM 10				
Tons/Yr	T2	T4f		
Year 1	0.04607	0.000051	0	0
Year 2	0.09385	0.000414	0	0
Year 3	0.01473	0.000041	0	0
Year 4	0	0	0	0

PM 2.5				
Tons/Yr	T4			
Year 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 4	0.00E+00	0.00E+00	0.00E+00	0.00E+00

PM 10				
Lbs /Yr	T2	T4f	0	0
Year 1	92.14	0.102	0	0
Year 2	187.7	0.827	0	0
Year 3	29.46	0.082	0	0
Year 4	0	0	0	0

PM 2.5				
Lbs /Yr	T4	0	0	0
Year 1	0	0	0	0
Year 2	0	0	0	0
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 10				
% Chng	T2	T4f	0	0
Year 1	100%	0.11%	0%	0%
Year 2	100%	0.44%	0%	0%
Year 3	100%	0.28%	0%	0%
Year 4	0%	0%	0%	0%

PM 2.5				
g/sec	T4	0	0	0
Year 1	0	0	0	0
Year 2	0	0	0	0
Year 3	0	0	0	0
Year 4	0	0	0	0

						3448
			3441	301280.85	4020612.78	
	Max Yr	**2**	8.83E-02	3.89E-04	0.00E+00	0.00E+00
	Row	**19**	T2	T4f	0	0
		Col	**3**	**4**	**5**	**6**
		Adjustment	**100%**	**0%**	**0%**	**0%**
			Year 2	Year 2	Year 2	Year 2
1	301252.1	4020440	5.80E-02	2.55E-04	0.00E+00	0.00E+00
2	301227.1	4020441	6.33E-02	2.79E-04	0.00E+00	0.00E+00
3	301202.2	4020441	6.42E-02	2.83E-04	0.00E+00	0.00E+00
4	301177.2	4020442	6.32E-02	2.78E-04	0.00E+00	0.00E+00
5	301152.2	4020442	6.14E-02	2.71E-04	0.00E+00	0.00E+00
6	301127.2	4020443	5.99E-02	2.64E-04	0.00E+00	0.00E+00
7	301102.3	4020443	6.02E-02	2.65E-04	0.00E+00	0.00E+00
8	301077.3	4020444	6.79E-02	2.99E-04	0.00E+00	0.00E+00
9	301269.4	4020422	4.14E-02	1.82E-04	0.00E+00	0.00E+00
10	301294.9	4020446	4.43E-02	1.95E-04	0.00E+00	0.00E+00
11	301226.6	4020416	4.26E-02	1.88E-04	0.00E+00	0.00E+00
12	301201.6	4020416	4.29E-02	1.89E-04	0.00E+00	0.00E+00
13	301176.6	4020417	4.22E-02	1.86E-04	0.00E+00	0.00E+00
14	301151.7	4020417	4.13E-02	1.82E-04	0.00E+00	0.00E+00
15	301126.7	4020418	4.11E-02	1.81E-04	0.00E+00	0.00E+00
16	301101.7	4020418	4.34E-02	1.91E-04	0.00E+00	0.00E+00
17	301076.8	4020419	5.29E-02	2.33E-04	0.00E+00	0.00E+00
18	301268.8	4020397	3.13E-02	1.38E-04	0.00E+00	0.00E+00
19	301312.2	4020428	3.35E-02	1.48E-04	0.00E+00	0.00E+00
20	301226.1	4020391	3.11E-02	1.37E-04	0.00E+00	0.00E+00
21	301201.1	4020391	3.11E-02	1.37E-04	0.00E+00	0.00E+00
22	301176.1	4020392	3.06E-02	1.35E-04	0.00E+00	0.00E+00
23	301151.1	4020392	3.02E-02	1.33E-04	0.00E+00	0.00E+00
24	301126.2	4020393	3.05E-02	1.34E-04	0.00E+00	0.00E+00
25	301101.2	4020393	3.26E-02	1.43E-04	0.00E+00	0.00E+00
26	301076.2	4020394	3.81E-02	1.68E-04	0.00E+00	0.00E+00
27	301051.3	4020394	4.61E-02	2.03E-04	0.00E+00	0.00E+00
28	301268.3	4020372	2.44E-02	1.08E-04	0.00E+00	0.00E+00
29	301304	4020386	2.50E-02	1.10E-04	0.00E+00	0.00E+00
30	301329.5	4020410	2.65E-02	1.17E-04	0.00E+00	0.00E+00
31	301344.9	4020445	2.91E-02	1.28E-04	0.00E+00	0.00E+00
32	301225.5	4020366	2.38E-02	1.05E-04	0.00E+00	0.00E+00
33	301200.5	4020366	2.37E-02	1.04E-04	0.00E+00	0.00E+00
34	301175.6	4020367	2.33E-02	1.03E-04	0.00E+00	0.00E+00
35	301150.6	4020367	2.31E-02	1.02E-04	0.00E+00	0.00E+00
36	301125.6	4020368	2.32E-02	1.02E-04	0.00E+00	0.00E+00
37	301100.7	4020368	2.39E-02	1.05E-04	0.00E+00	0.00E+00
38	301075.7	4020369	2.51E-02	1.11E-04	0.00E+00	0.00E+00
39	301050.7	4020369	2.49E-02	1.10E-04	0.00E+00	0.00E+00
40	301272.2	4020349	1.97E-02	8.69E-05	0.00E+00	0.00E+00

41	301294.5	4020357	2.04E-02	8.98E-05	0.00E+00	0.00E+00
42	301316.8	4020366	2.05E-02	9.03E-05	0.00E+00	0.00E+00
43	301348.7	4020397	2.19E-02	9.66E-05	0.00E+00	0.00E+00
44	301358.3	4020419	2.34E-02	1.03E-04	0.00E+00	0.00E+00
45	301368	4020440	2.42E-02	1.06E-04	0.00E+00	0.00E+00
46	301249.9	4020340	1.87E-02	8.22E-05	0.00E+00	0.00E+00
47	301225	4020341	1.87E-02	8.26E-05	0.00E+00	0.00E+00
48	301200	4020341	1.86E-02	8.18E-05	0.00E+00	0.00E+00
49	301175	4020342	1.83E-02	8.04E-05	0.00E+00	0.00E+00
50	301150.1	4020342	1.79E-02	7.90E-05	0.00E+00	0.00E+00
51	301125.1	4020343	1.77E-02	7.79E-05	0.00E+00	0.00E+00
52	301100.1	4020343	1.74E-02	7.68E-05	0.00E+00	0.00E+00
53	301075.2	4020344	1.68E-02	7.41E-05	0.00E+00	0.00E+00
54	301050.2	4020344	1.52E-02	6.70E-05	0.00E+00	0.00E+00
55	301270.8	4020323	1.60E-02	7.07E-05	0.00E+00	0.00E+00
56	301292.2	4020332	1.67E-02	7.37E-05	0.00E+00	0.00E+00
57	301313.6	4020340	1.71E-02	7.53E-05	0.00E+00	0.00E+00
58	301335	4020348	1.71E-02	7.53E-05	0.00E+00	0.00E+00
59	301365.6	4020378	1.82E-02	8.02E-05	0.00E+00	0.00E+00
60	301374.9	4020399	1.94E-02	8.53E-05	0.00E+00	0.00E+00
61	301384.1	4020420	2.01E-02	8.88E-05	0.00E+00	0.00E+00
62	301393.4	4020441	2.05E-02	9.04E-05	0.00E+00	0.00E+00
63	301249.4	4020315	1.51E-02	6.67E-05	0.00E+00	0.00E+00
64	301224.4	4020316	1.51E-02	6.65E-05	0.00E+00	0.00E+00
65	301199.5	4020316	1.49E-02	6.55E-05	0.00E+00	0.00E+00
66	301174.5	4020317	1.45E-02	6.40E-05	0.00E+00	0.00E+00
67	301149.5	4020317	1.41E-02	6.22E-05	0.00E+00	0.00E+00
68	301124.6	4020318	1.36E-02	6.00E-05	0.00E+00	0.00E+00
69	301099.6	4020318	1.29E-02	5.70E-05	0.00E+00	0.00E+00
70	301074.6	4020319	1.19E-02	5.23E-05	0.00E+00	0.00E+00
71	301049.6	4020319	1.04E-02	4.57E-05	0.00E+00	0.00E+00
72	301269.7	4020298	1.32E-02	5.83E-05	0.00E+00	0.00E+00
73	301311.3	4020314	1.43E-02	6.31E-05	0.00E+00	0.00E+00
74	301352.9	4020331	1.45E-02	6.40E-05	0.00E+00	0.00E+00
75	301382.7	4020359	1.54E-02	6.78E-05	0.00E+00	0.00E+00
76	301400.6	4020400	1.70E-02	7.50E-05	0.00E+00	0.00E+00
77	301418.6	4020441	1.76E-02	7.74E-05	0.00E+00	0.00E+00
78	301223.9	4020291	1.23E-02	5.44E-05	0.00E+00	0.00E+00
79	301198.9	4020291	1.21E-02	5.32E-05	0.00E+00	0.00E+00
80	301174	4020292	1.17E-02	5.15E-05	0.00E+00	0.00E+00
81	301149	4020292	1.12E-02	4.95E-05	0.00E+00	0.00E+00
82	301124	4020293	1.06E-02	4.69E-05	0.00E+00	0.00E+00
83	301099	4020293	9.85E-03	4.34E-05	0.00E+00	0.00E+00
84	301074.1	4020294	8.84E-03	3.90E-05	0.00E+00	0.00E+00
85	301049.1	4020294	7.65E-03	3.37E-05	0.00E+00	0.00E+00
86	301268.7	4020273	1.10E-02	4.86E-05	0.00E+00	0.00E+00
87	301309.5	4020289	1.21E-02	5.31E-05	0.00E+00	0.00E+00

88	301350.2	4020305	1.25E-02	5.52E-05	0.00E+00	0.00E+00
89	301399.8	4020341	1.32E-02	5.81E-05	0.00E+00	0.00E+00
90	301417.4	4020381	1.46E-02	6.42E-05	0.00E+00	0.00E+00
91	301435	4020421	1.52E-02	6.69E-05	0.00E+00	0.00E+00
92	301223.4	4020266	1.02E-02	4.50E-05	0.00E+00	0.00E+00
93	301198.4	4020266	9.92E-03	4.37E-05	0.00E+00	0.00E+00
94	301173.4	4020267	9.53E-03	4.20E-05	0.00E+00	0.00E+00
95	301148.5	4020267	9.05E-03	3.99E-05	0.00E+00	0.00E+00
96	301123.5	4020268	8.46E-03	3.73E-05	0.00E+00	0.00E+00
97	301098.5	4020268	7.72E-03	3.40E-05	0.00E+00	0.00E+00
98	301073.5	4020269	6.88E-03	3.03E-05	0.00E+00	0.00E+00
99	301048.6	4020269	5.95E-03	2.62E-05	0.00E+00	0.00E+00
100	301269.5	4020224	7.96E-03	3.51E-05	0.00E+00	0.00E+00
101	301291.8	4020232	8.45E-03	3.72E-05	0.00E+00	0.00E+00
102	301314.1	4020241	8.87E-03	3.91E-05	0.00E+00	0.00E+00
103	301336.4	4020250	9.21E-03	4.06E-05	0.00E+00	0.00E+00
104	301358.7	4020258	9.44E-03	4.16E-05	0.00E+00	0.00E+00
105	301381	4020267	9.57E-03	4.21E-05	0.00E+00	0.00E+00
106	301403.3	4020276	9.56E-03	4.21E-05	0.00E+00	0.00E+00
107	301435.2	4020306	1.01E-02	4.44E-05	0.00E+00	0.00E+00
108	301444.8	4020328	1.07E-02	4.70E-05	0.00E+00	0.00E+00
109	301454.4	4020350	1.11E-02	4.91E-05	0.00E+00	0.00E+00
110	301464.1	4020372	1.15E-02	5.06E-05	0.00E+00	0.00E+00
111	301473.7	4020394	1.17E-02	5.14E-05	0.00E+00	0.00E+00
112	301483.3	4020416	1.17E-02	5.16E-05	0.00E+00	0.00E+00
113	301492.9	4020438	1.16E-02	5.11E-05	0.00E+00	0.00E+00
114	301247.3	4020215	7.41E-03	3.27E-05	0.00E+00	0.00E+00
115	301222.3	4020216	7.21E-03	3.18E-05	0.00E+00	0.00E+00
116	301197.3	4020216	6.92E-03	3.05E-05	0.00E+00	0.00E+00
117	301172.3	4020217	6.55E-03	2.89E-05	0.00E+00	0.00E+00
118	301147.4	4020217	6.13E-03	2.70E-05	0.00E+00	0.00E+00
119	301122.4	4020218	5.64E-03	2.48E-05	0.00E+00	0.00E+00
120	301097.4	4020218	5.11E-03	2.25E-05	0.00E+00	0.00E+00
121	301072.5	4020219	4.55E-03	2.01E-05	0.00E+00	0.00E+00
122	301047.5	4020219	4.00E-03	1.76E-05	0.00E+00	0.00E+00
123	301267.6	4020173	5.87E-03	2.59E-05	0.00E+00	0.00E+00
124	301289	4020182	6.24E-03	2.75E-05	0.00E+00	0.00E+00
125	301310.4	4020190	6.58E-03	2.90E-05	0.00E+00	0.00E+00
126	301331.8	4020198	6.89E-03	3.04E-05	0.00E+00	0.00E+00
127	301353.2	4020207	7.15E-03	3.15E-05	0.00E+00	0.00E+00
128	301374.5	4020215	7.36E-03	3.24E-05	0.00E+00	0.00E+00
129	301395.9	4020223	7.49E-03	3.30E-05	0.00E+00	0.00E+00
130	301417.3	4020232	7.55E-03	3.33E-05	0.00E+00	0.00E+00
131	301438.7	4020240	7.54E-03	3.32E-05	0.00E+00	0.00E+00
132	301469.4	4020269	7.90E-03	3.48E-05	0.00E+00	0.00E+00
133	301478.6	4020290	8.31E-03	3.66E-05	0.00E+00	0.00E+00
134	301487.9	4020311	8.66E-03	3.82E-05	0.00E+00	0.00E+00

135	301497.1	4020332	8.94E-03	3.94E-05	0.00E+00	0.00E+00
136	301506.3	4020353	9.14E-03	4.03E-05	0.00E+00	0.00E+00
137	301515.6	4020374	9.25E-03	4.08E-05	0.00E+00	0.00E+00
138	301524.8	4020395	9.26E-03	4.08E-05	0.00E+00	0.00E+00
139	301534.1	4020416	9.19E-03	4.05E-05	0.00E+00	0.00E+00
140	301543.3	4020437	9.03E-03	3.98E-05	0.00E+00	0.00E+00
141	301246.2	4020165	5.46E-03	2.40E-05	0.00E+00	0.00E+00
142	301221.2	4020166	5.26E-03	2.32E-05	0.00E+00	0.00E+00
143	301196.2	4020166	5.01E-03	2.21E-05	0.00E+00	0.00E+00
144	301171.3	4020167	4.71E-03	2.07E-05	0.00E+00	0.00E+00
145	301146.3	4020167	4.37E-03	1.92E-05	0.00E+00	0.00E+00
146	301121.3	4020168	4.00E-03	1.76E-05	0.00E+00	0.00E+00
147	301096.4	4020168	3.63E-03	1.60E-05	0.00E+00	0.00E+00
148	301071.4	4020169	3.27E-03	1.44E-05	0.00E+00	0.00E+00
149	301046.4	4020169	2.92E-03	1.28E-05	0.00E+00	0.00E+00
150	301267.8	4020124	4.47E-03	1.97E-05	0.00E+00	0.00E+00
151	301290.5	4020133	4.78E-03	2.11E-05	0.00E+00	0.00E+00
152	301313.2	4020142	5.07E-03	2.23E-05	0.00E+00	0.00E+00
153	301335.9	4020150	5.34E-03	2.35E-05	0.00E+00	0.00E+00
154	301358.6	4020159	5.58E-03	2.46E-05	0.00E+00	0.00E+00
155	301381.3	4020168	5.79E-03	2.55E-05	0.00E+00	0.00E+00
156	301403.9	4020177	5.95E-03	2.62E-05	0.00E+00	0.00E+00
157	301426.6	4020186	6.06E-03	2.67E-05	0.00E+00	0.00E+00
158	301449.3	4020195	6.10E-03	2.69E-05	0.00E+00	0.00E+00
159	301472	4020203	6.09E-03	2.68E-05	0.00E+00	0.00E+00
160	301504.5	4020235	6.38E-03	2.81E-05	0.00E+00	0.00E+00
161	301514.3	4020257	6.70E-03	2.95E-05	0.00E+00	0.00E+00
162	301524.1	4020279	6.98E-03	3.07E-05	0.00E+00	0.00E+00
163	301533.9	4020301	7.21E-03	3.18E-05	0.00E+00	0.00E+00
164	301543.7	4020324	7.38E-03	3.25E-05	0.00E+00	0.00E+00
165	301553.5	4020346	7.48E-03	3.29E-05	0.00E+00	0.00E+00
166	301563.3	4020368	7.50E-03	3.31E-05	0.00E+00	0.00E+00
167	301573.1	4020391	7.46E-03	3.29E-05	0.00E+00	0.00E+00
168	301582.9	4020413	7.35E-03	3.24E-05	0.00E+00	0.00E+00
169	301592.7	4020435	7.18E-03	3.16E-05	0.00E+00	0.00E+00
170	301245.1	4020115	4.13E-03	1.82E-05	0.00E+00	0.00E+00
171	301220.1	4020116	3.96E-03	1.75E-05	0.00E+00	0.00E+00
172	301195.2	4020116	3.75E-03	1.65E-05	0.00E+00	0.00E+00
173	301170.2	4020117	3.52E-03	1.55E-05	0.00E+00	0.00E+00
174	301145.2	4020117	3.25E-03	1.43E-05	0.00E+00	0.00E+00
175	301120.3	4020118	2.98E-03	1.31E-05	0.00E+00	0.00E+00
176	301095.3	4020118	2.72E-03	1.20E-05	0.00E+00	0.00E+00
177	301070.3	4020119	2.47E-03	1.09E-05	0.00E+00	0.00E+00
178	301045.3	4020119	2.23E-03	9.83E-06	0.00E+00	0.00E+00
179	301266	4020074	3.46E-03	1.52E-05	0.00E+00	0.00E+00
180	301287.9	4020082	3.70E-03	1.63E-05	0.00E+00	0.00E+00
181	301309.9	4020091	3.92E-03	1.73E-05	0.00E+00	0.00E+00

182	301331.8	4020099	4.14E-03	1.82E-05	0.00E+00	0.00E+00
183	301353.7	4020108	4.35E-03	1.91E-05	0.00E+00	0.00E+00
184	301375.7	4020116	4.53E-03	2.00E-05	0.00E+00	0.00E+00
185	301397.6	4020125	4.70E-03	2.07E-05	0.00E+00	0.00E+00
186	301419.6	4020133	4.84E-03	2.13E-05	0.00E+00	0.00E+00
187	301441.5	4020142	4.94E-03	2.18E-05	0.00E+00	0.00E+00
188	301463.5	4020150	5.00E-03	2.20E-05	0.00E+00	0.00E+00
189	301485.4	4020159	5.03E-03	2.22E-05	0.00E+00	0.00E+00
190	301507.3	4020168	5.02E-03	2.21E-05	0.00E+00	0.00E+00
191	301538.8	4020198	5.23E-03	2.30E-05	0.00E+00	0.00E+00
192	301548.3	4020219	5.47E-03	2.41E-05	0.00E+00	0.00E+00
193	301557.7	4020241	5.68E-03	2.50E-05	0.00E+00	0.00E+00
194	301567.2	4020262	5.86E-03	2.58E-05	0.00E+00	0.00E+00
195	301576.7	4020284	6.01E-03	2.65E-05	0.00E+00	0.00E+00
196	301586.2	4020305	6.12E-03	2.70E-05	0.00E+00	0.00E+00
197	301595.7	4020327	6.18E-03	2.72E-05	0.00E+00	0.00E+00
198	301605.1	4020349	6.18E-03	2.72E-05	0.00E+00	0.00E+00
199	301614.6	4020370	6.14E-03	2.71E-05	0.00E+00	0.00E+00
200	301624.1	4020392	6.06E-03	2.67E-05	0.00E+00	0.00E+00
201	301633.6	4020413	5.94E-03	2.62E-05	0.00E+00	0.00E+00
202	301643.1	4020435	5.79E-03	2.55E-05	0.00E+00	0.00E+00
203	301244	4020065	3.21E-03	1.41E-05	0.00E+00	0.00E+00
204	301219.1	4020066	3.07E-03	1.35E-05	0.00E+00	0.00E+00
205	301194.1	4020066	2.90E-03	1.28E-05	0.00E+00	0.00E+00
206	301169.1	4020067	2.71E-03	1.19E-05	0.00E+00	0.00E+00
207	301144.1	4020067	2.51E-03	1.11E-05	0.00E+00	0.00E+00
208	301119.2	4020068	2.31E-03	1.02E-05	0.00E+00	0.00E+00
209	301094.2	4020068	2.12E-03	9.32E-06	0.00E+00	0.00E+00
210	301069.2	4020069	1.94E-03	8.53E-06	0.00E+00	0.00E+00
211	301044.3	4020069	1.76E-03	7.76E-06	0.00E+00	0.00E+00
212	301265.9	4020024	2.76E-03	1.21E-05	0.00E+00	0.00E+00
213	301288.8	4020033	2.95E-03	1.30E-05	0.00E+00	0.00E+00
214	301311.7	4020042	3.13E-03	1.38E-05	0.00E+00	0.00E+00
215	301334.6	4020051	3.32E-03	1.46E-05	0.00E+00	0.00E+00
216	301357.6	4020060	3.49E-03	1.54E-05	0.00E+00	0.00E+00
217	301380.5	4020069	3.66E-03	1.61E-05	0.00E+00	0.00E+00
218	301403.4	4020078	3.81E-03	1.68E-05	0.00E+00	0.00E+00
219	301426.3	4020086	3.95E-03	1.74E-05	0.00E+00	0.00E+00
220	301449.3	4020095	4.06E-03	1.79E-05	0.00E+00	0.00E+00
221	301472.2	4020104	4.14E-03	1.82E-05	0.00E+00	0.00E+00
222	301495.1	4020113	4.19E-03	1.85E-05	0.00E+00	0.00E+00
223	301518	4020122	4.21E-03	1.86E-05	0.00E+00	0.00E+00
224	301540.9	4020131	4.20E-03	1.85E-05	0.00E+00	0.00E+00
225	301573.8	4020163	4.37E-03	1.93E-05	0.00E+00	0.00E+00
226	301583.7	4020185	4.57E-03	2.01E-05	0.00E+00	0.00E+00
227	301593.6	4020208	4.74E-03	2.09E-05	0.00E+00	0.00E+00
228	301603.5	4020230	4.89E-03	2.15E-05	0.00E+00	0.00E+00

229	301613.4	4020253	5.01E-03	2.21E-05	0.00E+00	0.00E+00
230	301623.3	4020275	5.11E-03	2.25E-05	0.00E+00	0.00E+00
231	301633.2	4020298	5.16E-03	2.27E-05	0.00E+00	0.00E+00
232	301643.1	4020320	5.18E-03	2.28E-05	0.00E+00	0.00E+00
233	301653	4020343	5.16E-03	2.27E-05	0.00E+00	0.00E+00
234	301662.9	4020365	5.10E-03	2.25E-05	0.00E+00	0.00E+00
235	301672.8	4020388	5.00E-03	2.21E-05	0.00E+00	0.00E+00
236	301682.7	4020410	4.89E-03	2.15E-05	0.00E+00	0.00E+00
237	301692.6	4020433	4.74E-03	2.09E-05	0.00E+00	0.00E+00
238	301243	4020015	2.55E-03	1.13E-05	0.00E+00	0.00E+00
239	301218	4020016	2.43E-03	1.07E-05	0.00E+00	0.00E+00
240	301193	4020016	2.30E-03	1.01E-05	0.00E+00	0.00E+00
241	301168	4020017	2.15E-03	9.46E-06	0.00E+00	0.00E+00
242	301143.1	4020017	1.99E-03	8.78E-06	0.00E+00	0.00E+00
243	301118.1	4020018	1.84E-03	8.10E-06	0.00E+00	0.00E+00
244	301093.1	4020018	1.69E-03	7.47E-06	0.00E+00	0.00E+00
245	301068.2	4020019	1.56E-03	6.86E-06	0.00E+00	0.00E+00
246	301043.2	4020019	1.43E-03	6.29E-06	0.00E+00	0.00E+00
247	301264.2	4019974	2.23E-03	9.81E-06	0.00E+00	0.00E+00
248	301286.4	4019982	2.37E-03	1.05E-05	0.00E+00	0.00E+00
249	301308.7	4019991	2.52E-03	1.11E-05	0.00E+00	0.00E+00
250	301331	4020000	2.66E-03	1.17E-05	0.00E+00	0.00E+00
251	301353.3	4020008	2.80E-03	1.23E-05	0.00E+00	0.00E+00
252	301375.6	4020017	2.94E-03	1.29E-05	0.00E+00	0.00E+00
253	301397.9	4020026	3.07E-03	1.35E-05	0.00E+00	0.00E+00
254	301420.2	4020035	3.20E-03	1.41E-05	0.00E+00	0.00E+00
255	301442.5	4020043	3.31E-03	1.46E-05	0.00E+00	0.00E+00
256	301464.7	4020052	3.40E-03	1.50E-05	0.00E+00	0.00E+00
257	301487	4020061	3.48E-03	1.53E-05	0.00E+00	0.00E+00
258	301509.3	4020069	3.53E-03	1.56E-05	0.00E+00	0.00E+00
259	301531.6	4020078	3.57E-03	1.57E-05	0.00E+00	0.00E+00
260	301553.9	4020087	3.58E-03	1.58E-05	0.00E+00	0.00E+00
261	301576.2	4020095	3.57E-03	1.57E-05	0.00E+00	0.00E+00
262	301608.1	4020126	3.70E-03	1.63E-05	0.00E+00	0.00E+00
263	301617.7	4020148	3.85E-03	1.69E-05	0.00E+00	0.00E+00
264	301627.3	4020170	3.98E-03	1.75E-05	0.00E+00	0.00E+00
265	301637	4020191	4.10E-03	1.81E-05	0.00E+00	0.00E+00
266	301646.6	4020213	4.21E-03	1.85E-05	0.00E+00	0.00E+00
267	301656.2	4020235	4.29E-03	1.89E-05	0.00E+00	0.00E+00
268	301665.9	4020257	4.35E-03	1.92E-05	0.00E+00	0.00E+00
269	301675.5	4020279	4.38E-03	1.93E-05	0.00E+00	0.00E+00
270	301685.1	4020301	4.39E-03	1.93E-05	0.00E+00	0.00E+00
271	301694.7	4020323	4.37E-03	1.92E-05	0.00E+00	0.00E+00
272	301704.4	4020345	4.32E-03	1.90E-05	0.00E+00	0.00E+00
273	301714	4020367	4.25E-03	1.87E-05	0.00E+00	0.00E+00
274	301723.6	4020388	4.16E-03	1.83E-05	0.00E+00	0.00E+00
275	301733.3	4020410	4.06E-03	1.79E-05	0.00E+00	0.00E+00

276	301742.9	4020432	3.93E-03	1.73E-05	0.00E+00	0.00E+00
277	301241.9	4019965	2.07E-03	9.12E-06	0.00E+00	0.00E+00
278	301216.9	4019966	1.97E-03	8.69E-06	0.00E+00	0.00E+00
279	301191.9	4019966	1.86E-03	8.20E-06	0.00E+00	0.00E+00
280	301167	4019967	1.74E-03	7.67E-06	0.00E+00	0.00E+00
281	301142	4019967	1.62E-03	7.13E-06	0.00E+00	0.00E+00
282	301117	4019968	1.50E-03	6.61E-06	0.00E+00	0.00E+00
283	301092.1	4019968	1.39E-03	6.12E-06	0.00E+00	0.00E+00
284	301067.1	4019969	1.28E-03	5.65E-06	0.00E+00	0.00E+00
285	301042.1	4019969	1.18E-03	5.19E-06	0.00E+00	0.00E+00
286	301263.9	4019924	1.84E-03	8.10E-06	0.00E+00	0.00E+00
287	301286.9	4019933	1.96E-03	8.64E-06	0.00E+00	0.00E+00
288	301310	4019942	2.08E-03	9.16E-06	0.00E+00	0.00E+00
289	301333.1	4019951	2.19E-03	9.67E-06	0.00E+00	0.00E+00
290	301356.2	4019960	2.31E-03	1.02E-05	0.00E+00	0.00E+00
291	301379.2	4019969	2.43E-03	1.07E-05	0.00E+00	0.00E+00
292	301402.3	4019978	2.55E-03	1.12E-05	0.00E+00	0.00E+00
293	301425.4	4019987	2.66E-03	1.17E-05	0.00E+00	0.00E+00
294	301448.5	4019996	2.77E-03	1.22E-05	0.00E+00	0.00E+00
295	301471.5	4020005	2.86E-03	1.26E-05	0.00E+00	0.00E+00
296	301494.6	4020014	2.94E-03	1.29E-05	0.00E+00	0.00E+00
297	301517.7	4020023	3.00E-03	1.32E-05	0.00E+00	0.00E+00
298	301540.7	4020032	3.04E-03	1.34E-05	0.00E+00	0.00E+00
299	301563.8	4020041	3.07E-03	1.35E-05	0.00E+00	0.00E+00
300	301586.9	4020050	3.07E-03	1.35E-05	0.00E+00	0.00E+00
301	301610	4020059	3.06E-03	1.35E-05	0.00E+00	0.00E+00
302	301643	4020090	3.17E-03	1.40E-05	0.00E+00	0.00E+00
303	301653	4020113	3.30E-03	1.45E-05	0.00E+00	0.00E+00
304	301662.9	4020136	3.41E-03	1.50E-05	0.00E+00	0.00E+00
305	301672.9	4020158	3.51E-03	1.55E-05	0.00E+00	0.00E+00
306	301682.9	4020181	3.60E-03	1.58E-05	0.00E+00	0.00E+00
307	301692.8	4020204	3.67E-03	1.62E-05	0.00E+00	0.00E+00
308	301702.8	4020226	3.72E-03	1.64E-05	0.00E+00	0.00E+00
309	301712.8	4020249	3.75E-03	1.65E-05	0.00E+00	0.00E+00
310	301722.8	4020272	3.77E-03	1.66E-05	0.00E+00	0.00E+00
311	301732.7	4020294	3.75E-03	1.65E-05	0.00E+00	0.00E+00
312	301742.7	4020317	3.72E-03	1.64E-05	0.00E+00	0.00E+00
313	301752.7	4020340	3.67E-03	1.62E-05	0.00E+00	0.00E+00
314	301762.6	4020362	3.60E-03	1.59E-05	0.00E+00	0.00E+00
315	301772.6	4020385	3.51E-03	1.55E-05	0.00E+00	0.00E+00
316	301782.6	4020408	3.42E-03	1.51E-05	0.00E+00	0.00E+00
317	301792.5	4020430	3.31E-03	1.46E-05	0.00E+00	0.00E+00
318	301240.8	4019915	1.71E-03	7.53E-06	0.00E+00	0.00E+00
319	301215.8	4019916	1.63E-03	7.17E-06	0.00E+00	0.00E+00
320	301190.9	4019916	1.53E-03	6.76E-06	0.00E+00	0.00E+00
321	301165.9	4019917	1.44E-03	6.34E-06	0.00E+00	0.00E+00
322	301140.9	4019917	1.34E-03	5.91E-06	0.00E+00	0.00E+00

323	301115.9	4019918	1.25E-03	5.50E-06	0.00E+00	0.00E+00
324	301091	4019918	1.16E-03	5.11E-06	0.00E+00	0.00E+00
325	301066	4019919	1.07E-03	4.73E-06	0.00E+00	0.00E+00
326	301041	4019919	9.91E-04	4.36E-06	0.00E+00	0.00E+00
327	301262.2	4019874	1.53E-03	6.76E-06	0.00E+00	0.00E+00
328	301284.8	4019883	1.63E-03	7.19E-06	0.00E+00	0.00E+00
329	301307.3	4019891	1.73E-03	7.60E-06	0.00E+00	0.00E+00
330	301329.8	4019900	1.82E-03	8.01E-06	0.00E+00	0.00E+00
331	301352.3	4019909	1.91E-03	8.40E-06	0.00E+00	0.00E+00
332	301374.8	4019918	2.00E-03	8.81E-06	0.00E+00	0.00E+00
333	301397.4	4019926	2.09E-03	9.22E-06	0.00E+00	0.00E+00
334	301419.9	4019935	2.19E-03	9.65E-06	0.00E+00	0.00E+00
335	301442.4	4019944	2.28E-03	1.01E-05	0.00E+00	0.00E+00
336	301464.9	4019953	2.37E-03	1.05E-05	0.00E+00	0.00E+00
337	301487.5	4019962	2.45E-03	1.08E-05	0.00E+00	0.00E+00
338	301510	4019970	2.52E-03	1.11E-05	0.00E+00	0.00E+00
339	301532.5	4019979	2.58E-03	1.14E-05	0.00E+00	0.00E+00
340	301555	4019988	2.62E-03	1.15E-05	0.00E+00	0.00E+00
341	301577.5	4019997	2.65E-03	1.17E-05	0.00E+00	0.00E+00
342	301600.1	4020005	2.66E-03	1.17E-05	0.00E+00	0.00E+00
343	301622.6	4020014	2.67E-03	1.18E-05	0.00E+00	0.00E+00
344	301645.1	4020023	2.66E-03	1.17E-05	0.00E+00	0.00E+00
345	301677.3	4020054	2.74E-03	1.21E-05	0.00E+00	0.00E+00
346	301687.1	4020076	2.84E-03	1.25E-05	0.00E+00	0.00E+00
347	301696.8	4020098	2.93E-03	1.29E-05	0.00E+00	0.00E+00
348	301706.5	4020120	3.02E-03	1.33E-05	0.00E+00	0.00E+00
349	301716.3	4020142	3.09E-03	1.36E-05	0.00E+00	0.00E+00
350	301726	4020164	3.15E-03	1.39E-05	0.00E+00	0.00E+00
351	301735.7	4020187	3.20E-03	1.41E-05	0.00E+00	0.00E+00
352	301745.5	4020209	3.24E-03	1.43E-05	0.00E+00	0.00E+00
353	301755.2	4020231	3.26E-03	1.43E-05	0.00E+00	0.00E+00
354	301764.9	4020253	3.26E-03	1.44E-05	0.00E+00	0.00E+00
355	301774.7	4020275	3.25E-03	1.43E-05	0.00E+00	0.00E+00
356	301784.4	4020297	3.22E-03	1.42E-05	0.00E+00	0.00E+00
357	301794.1	4020319	3.18E-03	1.40E-05	0.00E+00	0.00E+00
358	301803.8	4020341	3.13E-03	1.38E-05	0.00E+00	0.00E+00
359	301813.6	4020363	3.06E-03	1.35E-05	0.00E+00	0.00E+00
360	301823.3	4020386	2.99E-03	1.32E-05	0.00E+00	0.00E+00
361	301833	4020408	2.90E-03	1.28E-05	0.00E+00	0.00E+00
362	301842.8	4020430	2.81E-03	1.24E-05	0.00E+00	0.00E+00
363	301239.7	4019865	1.43E-03	6.31E-06	0.00E+00	0.00E+00
364	301214.8	4019866	1.36E-03	6.01E-06	0.00E+00	0.00E+00
365	301189.8	4019866	1.29E-03	5.67E-06	0.00E+00	0.00E+00
366	301164.8	4019867	1.21E-03	5.33E-06	0.00E+00	0.00E+00
367	301139.8	4019867	1.13E-03	4.98E-06	0.00E+00	0.00E+00
368	301114.9	4019868	1.05E-03	4.65E-06	0.00E+00	0.00E+00
369	301089.9	4019868	9.82E-04	4.33E-06	0.00E+00	0.00E+00

370	301064.9	4019869	9.11E-04	4.01E-06	0.00E+00	0.00E+00
371	301040	4019869	8.44E-04	3.72E-06	0.00E+00	0.00E+00
372	301260.3	4019774	1.12E-03	4.92E-06	0.00E+00	0.00E+00
373	301283	4019783	1.18E-03	5.22E-06	0.00E+00	0.00E+00
374	301305.6	4019792	1.25E-03	5.50E-06	0.00E+00	0.00E+00
375	301328.3	4019800	1.31E-03	5.77E-06	0.00E+00	0.00E+00
376	301351	4019809	1.37E-03	6.03E-06	0.00E+00	0.00E+00
377	301373.7	4019818	1.43E-03	6.30E-06	0.00E+00	0.00E+00
378	301396.4	4019827	1.49E-03	6.58E-06	0.00E+00	0.00E+00
379	301419.1	4019836	1.56E-03	6.87E-06	0.00E+00	0.00E+00
380	301441.8	4019845	1.63E-03	7.17E-06	0.00E+00	0.00E+00
381	301464.5	4019853	1.70E-03	7.48E-06	0.00E+00	0.00E+00
382	301487.2	4019862	1.77E-03	7.78E-06	0.00E+00	0.00E+00
383	301509.9	4019871	1.83E-03	8.06E-06	0.00E+00	0.00E+00
384	301532.6	4019880	1.89E-03	8.32E-06	0.00E+00	0.00E+00
385	301555.3	4019889	1.94E-03	8.54E-06	0.00E+00	0.00E+00
386	301577.9	4019898	1.98E-03	8.73E-06	0.00E+00	0.00E+00
387	301600.6	4019906	2.02E-03	8.88E-06	0.00E+00	0.00E+00
388	301623.3	4019915	2.04E-03	8.99E-06	0.00E+00	0.00E+00
389	301646	4019924	2.06E-03	9.07E-06	0.00E+00	0.00E+00
390	301668.7	4019933	2.07E-03	9.11E-06	0.00E+00	0.00E+00
391	301691.4	4019942	2.07E-03	9.11E-06	0.00E+00	0.00E+00
392	301714.1	4019951	2.06E-03	9.08E-06	0.00E+00	0.00E+00
393	301746.6	4019982	2.12E-03	9.32E-06	0.00E+00	0.00E+00
394	301756.4	4020004	2.18E-03	9.61E-06	0.00E+00	0.00E+00
395	301766.2	4020026	2.24E-03	9.89E-06	0.00E+00	0.00E+00
396	301776	4020049	2.30E-03	1.01E-05	0.00E+00	0.00E+00
397	301785.8	4020071	2.35E-03	1.04E-05	0.00E+00	0.00E+00
398	301795.6	4020093	2.40E-03	1.06E-05	0.00E+00	0.00E+00
399	301805.4	4020115	2.44E-03	1.07E-05	0.00E+00	0.00E+00
400	301815.2	4020138	2.47E-03	1.09E-05	0.00E+00	0.00E+00
401	301825	4020160	2.49E-03	1.10E-05	0.00E+00	0.00E+00
402	301834.8	4020182	2.51E-03	1.10E-05	0.00E+00	0.00E+00
403	301844.6	4020205	2.51E-03	1.11E-05	0.00E+00	0.00E+00
404	301854.4	4020227	2.51E-03	1.10E-05	0.00E+00	0.00E+00
405	301864.2	4020249	2.49E-03	1.10E-05	0.00E+00	0.00E+00
406	301874	4020271	2.47E-03	1.09E-05	0.00E+00	0.00E+00
407	301883.8	4020294	2.43E-03	1.07E-05	0.00E+00	0.00E+00
408	301893.6	4020316	2.39E-03	1.05E-05	0.00E+00	0.00E+00
409	301903.4	4020338	2.34E-03	1.03E-05	0.00E+00	0.00E+00
410	301913.3	4020361	2.28E-03	1.01E-05	0.00E+00	0.00E+00
411	301923.1	4020383	2.22E-03	9.79E-06	0.00E+00	0.00E+00
412	301932.9	4020405	2.15E-03	9.49E-06	0.00E+00	0.00E+00
413	301942.7	4020427	2.08E-03	9.18E-06	0.00E+00	0.00E+00
414	301237.6	4019765	1.05E-03	4.61E-06	0.00E+00	0.00E+00
415	301212.6	4019766	9.97E-04	4.39E-06	0.00E+00	0.00E+00
416	301187.6	4019766	9.44E-04	4.16E-06	0.00E+00	0.00E+00

417	301162.7	4019767	8.89E-04	3.91E-06	0.00E+00	0.00E+00
418	301137.7	4019767	8.34E-04	3.68E-06	0.00E+00	0.00E+00
419	301112.7	4019768	7.81E-04	3.44E-06	0.00E+00	0.00E+00
420	301087.8	4019768	7.30E-04	3.22E-06	0.00E+00	0.00E+00
421	301062.8	4019769	6.81E-04	3.00E-06	0.00E+00	0.00E+00
422	301037.8	4019769	6.36E-04	2.80E-06	0.00E+00	0.00E+00
423	301258.2	4019674	8.50E-04	3.74E-06	0.00E+00	0.00E+00
424	301281.1	4019683	8.98E-04	3.96E-06	0.00E+00	0.00E+00
425	301303.9	4019692	9.44E-04	4.16E-06	0.00E+00	0.00E+00
426	301326.7	4019701	9.87E-04	4.35E-06	0.00E+00	0.00E+00
427	301349.5	4019710	1.03E-03	4.53E-06	0.00E+00	0.00E+00
428	301372.3	4019718	1.07E-03	4.70E-06	0.00E+00	0.00E+00
429	301395.2	4019727	1.11E-03	4.89E-06	0.00E+00	0.00E+00
430	301418	4019736	1.15E-03	5.08E-06	0.00E+00	0.00E+00
431	301440.8	4019745	1.20E-03	5.29E-06	0.00E+00	0.00E+00
432	301463.6	4019754	1.25E-03	5.52E-06	0.00E+00	0.00E+00
433	301486.5	4019763	1.30E-03	5.74E-06	0.00E+00	0.00E+00
434	301509.3	4019772	1.36E-03	5.97E-06	0.00E+00	0.00E+00
435	301532.1	4019781	1.41E-03	6.20E-06	0.00E+00	0.00E+00
436	301554.9	4019790	1.45E-03	6.41E-06	0.00E+00	0.00E+00
437	301577.7	4019798	1.50E-03	6.60E-06	0.00E+00	0.00E+00
438	301600.6	4019807	1.54E-03	6.77E-06	0.00E+00	0.00E+00
439	301623.4	4019816	1.57E-03	6.92E-06	0.00E+00	0.00E+00
440	301646.2	4019825	1.60E-03	7.04E-06	0.00E+00	0.00E+00
441	301669	4019834	1.62E-03	7.13E-06	0.00E+00	0.00E+00
442	301691.8	4019843	1.63E-03	7.20E-06	0.00E+00	0.00E+00
443	301714.7	4019852	1.64E-03	7.25E-06	0.00E+00	0.00E+00
444	301737.5	4019861	1.65E-03	7.27E-06	0.00E+00	0.00E+00
445	301760.3	4019869	1.65E-03	7.26E-06	0.00E+00	0.00E+00
446	301783.1	4019878	1.64E-03	7.24E-06	0.00E+00	0.00E+00
447	301815.8	4019910	1.68E-03	7.41E-06	0.00E+00	0.00E+00
448	301825.7	4019932	1.73E-03	7.62E-06	0.00E+00	0.00E+00
449	301835.5	4019954	1.77E-03	7.81E-06	0.00E+00	0.00E+00
450	301845.4	4019977	1.81E-03	8.00E-06	0.00E+00	0.00E+00
451	301855.2	4019999	1.85E-03	8.16E-06	0.00E+00	0.00E+00
452	301865.1	4020022	1.89E-03	8.31E-06	0.00E+00	0.00E+00
453	301875	4020044	1.91E-03	8.44E-06	0.00E+00	0.00E+00
454	301884.8	4020067	1.94E-03	8.55E-06	0.00E+00	0.00E+00
455	301894.7	4020089	1.96E-03	8.64E-06	0.00E+00	0.00E+00
456	301904.5	4020111	1.98E-03	8.71E-06	0.00E+00	0.00E+00
457	301914.4	4020134	1.99E-03	8.76E-06	0.00E+00	0.00E+00
458	301924.3	4020156	1.99E-03	8.78E-06	0.00E+00	0.00E+00
459	301934.1	4020179	1.99E-03	8.77E-06	0.00E+00	0.00E+00
460	301944	4020201	1.98E-03	8.73E-06	0.00E+00	0.00E+00
461	301953.8	4020223	1.97E-03	8.66E-06	0.00E+00	0.00E+00
462	301963.7	4020246	1.94E-03	8.57E-06	0.00E+00	0.00E+00
463	301973.6	4020268	1.92E-03	8.45E-06	0.00E+00	0.00E+00

464	301983.4	4020291	1.88E-03	8.30E-06	0.00E+00	0.00E+00
465	301993.3	4020313	1.85E-03	8.13E-06	0.00E+00	0.00E+00
466	302003.1	4020336	1.80E-03	7.95E-06	0.00E+00	0.00E+00
467	302013	4020358	1.76E-03	7.74E-06	0.00E+00	0.00E+00
468	302022.9	4020380	1.71E-03	7.51E-06	0.00E+00	0.00E+00
469	302032.7	4020403	1.65E-03	7.28E-06	0.00E+00	0.00E+00
470	302042.6	4020425	1.60E-03	7.03E-06	0.00E+00	0.00E+00
471	301235.4	4019665	7.99E-04	3.52E-06	0.00E+00	0.00E+00
472	301210.4	4019666	7.61E-04	3.35E-06	0.00E+00	0.00E+00
473	301185.5	4019666	7.22E-04	3.18E-06	0.00E+00	0.00E+00
474	301160.5	4019667	6.81E-04	3.00E-06	0.00E+00	0.00E+00
475	301135.5	4019667	6.41E-04	2.83E-06	0.00E+00	0.00E+00
476	301110.6	4019668	6.02E-04	2.65E-06	0.00E+00	0.00E+00
477	301085.6	4019668	5.65E-04	2.49E-06	0.00E+00	0.00E+00
478	301060.6	4019669	5.29E-04	2.33E-06	0.00E+00	0.00E+00
479	301035.7	4019669	4.97E-04	2.19E-06	0.00E+00	0.00E+00
480	301256.2	4019574	6.69E-04	2.95E-06	0.00E+00	0.00E+00
481	301279.1	4019583	7.06E-04	3.11E-06	0.00E+00	0.00E+00
482	301302	4019592	7.40E-04	3.26E-06	0.00E+00	0.00E+00
483	301325	4019601	7.71E-04	3.40E-06	0.00E+00	0.00E+00
484	301347.9	4019610	8.00E-04	3.53E-06	0.00E+00	0.00E+00
485	301370.8	4019619	8.28E-04	3.65E-06	0.00E+00	0.00E+00
486	301393.7	4019628	8.56E-04	3.77E-06	0.00E+00	0.00E+00
487	301416.6	4019637	8.86E-04	3.90E-06	0.00E+00	0.00E+00
488	301439.6	4019645	9.18E-04	4.04E-06	0.00E+00	0.00E+00
489	301462.5	4019654	9.53E-04	4.20E-06	0.00E+00	0.00E+00
490	301485.4	4019663	9.90E-04	4.36E-06	0.00E+00	0.00E+00
491	301508.3	4019672	1.03E-03	4.54E-06	0.00E+00	0.00E+00
492	301531.3	4019681	1.07E-03	4.72E-06	0.00E+00	0.00E+00
493	301554.2	4019690	1.11E-03	4.89E-06	0.00E+00	0.00E+00
494	301577.1	4019699	1.15E-03	5.06E-06	0.00E+00	0.00E+00
495	301600	4019708	1.19E-03	5.22E-06	0.00E+00	0.00E+00
496	301623	4019717	1.22E-03	5.37E-06	0.00E+00	0.00E+00
497	301645.9	4019726	1.25E-03	5.50E-06	0.00E+00	0.00E+00
498	301668.8	4019735	1.28E-03	5.62E-06	0.00E+00	0.00E+00
499	301691.7	4019744	1.30E-03	5.72E-06	0.00E+00	0.00E+00
500	301714.6	4019753	1.32E-03	5.80E-06	0.00E+00	0.00E+00
501	301737.6	4019761	1.33E-03	5.86E-06	0.00E+00	0.00E+00
502	301760.5	4019770	1.34E-03	5.90E-06	0.00E+00	0.00E+00
503	301783.4	4019779	1.35E-03	5.93E-06	0.00E+00	0.00E+00
504	301806.3	4019788	1.35E-03	5.94E-06	0.00E+00	0.00E+00
505	301829.3	4019797	1.35E-03	5.93E-06	0.00E+00	0.00E+00
506	301852.2	4019806	1.34E-03	5.91E-06	0.00E+00	0.00E+00
507	301885	4019838	1.37E-03	6.03E-06	0.00E+00	0.00E+00
508	301894.9	4019860	1.40E-03	6.19E-06	0.00E+00	0.00E+00
509	301904.8	4019883	1.44E-03	6.33E-06	0.00E+00	0.00E+00
510	301914.7	4019905	1.47E-03	6.46E-06	0.00E+00	0.00E+00

511	301924.6	4019928	1.49E-03	6.58E-06	0.00E+00	0.00E+00
512	301934.5	4019950	1.52E-03	6.69E-06	0.00E+00	0.00E+00
513	301944.4	4019973	1.54E-03	6.79E-06	0.00E+00	0.00E+00
514	301954.3	4019995	1.56E-03	6.88E-06	0.00E+00	0.00E+00
515	301964.2	4020018	1.58E-03	6.95E-06	0.00E+00	0.00E+00
516	301974.1	4020040	1.59E-03	7.02E-06	0.00E+00	0.00E+00
517	301984.1	4020063	1.60E-03	7.07E-06	0.00E+00	0.00E+00
518	301994	4020085	1.61E-03	7.11E-06	0.00E+00	0.00E+00
519	302003.9	4020108	1.62E-03	7.13E-06	0.00E+00	0.00E+00
520	302013.8	4020130	1.62E-03	7.13E-06	0.00E+00	0.00E+00
521	302023.7	4020153	1.61E-03	7.11E-06	0.00E+00	0.00E+00
522	302033.6	4020175	1.61E-03	7.07E-06	0.00E+00	0.00E+00
523	302043.5	4020198	1.59E-03	7.01E-06	0.00E+00	0.00E+00
524	302053.4	4020220	1.57E-03	6.93E-06	0.00E+00	0.00E+00
525	302063.3	4020243	1.55E-03	6.84E-06	0.00E+00	0.00E+00
526	302073.2	4020265	1.53E-03	6.72E-06	0.00E+00	0.00E+00
527	302083.1	4020288	1.49E-03	6.59E-06	0.00E+00	0.00E+00
528	302093	4020310	1.46E-03	6.44E-06	0.00E+00	0.00E+00
529	302102.9	4020333	1.42E-03	6.27E-06	0.00E+00	0.00E+00
530	302112.8	4020355	1.38E-03	6.10E-06	0.00E+00	0.00E+00
531	302122.7	4020378	1.34E-03	5.91E-06	0.00E+00	0.00E+00
532	302132.6	4020400	1.30E-03	5.72E-06	0.00E+00	0.00E+00
533	302142.5	4020423	1.25E-03	5.52E-06	0.00E+00	0.00E+00
534	301233.3	4019565	6.31E-04	2.78E-06	0.00E+00	0.00E+00
535	301208.3	4019566	6.01E-04	2.65E-06	0.00E+00	0.00E+00
536	301183.3	4019566	5.71E-04	2.51E-06	0.00E+00	0.00E+00
537	301158.4	4019567	5.40E-04	2.38E-06	0.00E+00	0.00E+00
538	301133.4	4019567	5.09E-04	2.24E-06	0.00E+00	0.00E+00
539	301108.4	4019568	4.79E-04	2.11E-06	0.00E+00	0.00E+00
540	301083.4	4019568	4.50E-04	1.98E-06	0.00E+00	0.00E+00
541	301058.5	4019569	4.24E-04	1.87E-06	0.00E+00	0.00E+00
542	301033.5	4019570	4.00E-04	1.76E-06	0.00E+00	0.00E+00
543	301254.1	4019474	5.41E-04	2.39E-06	0.00E+00	0.00E+00
544	301277.1	4019483	5.70E-04	2.51E-06	0.00E+00	0.00E+00
545	301300.1	4019492	5.97E-04	2.63E-06	0.00E+00	0.00E+00
546	301323.1	4019501	6.21E-04	2.74E-06	0.00E+00	0.00E+00
547	301346.1	4019510	6.43E-04	2.83E-06	0.00E+00	0.00E+00
548	301369.1	4019519	6.63E-04	2.92E-06	0.00E+00	0.00E+00
549	301392.2	4019528	6.82E-04	3.01E-06	0.00E+00	0.00E+00
550	301415.2	4019537	7.02E-04	3.09E-06	0.00E+00	0.00E+00
551	301438.2	4019546	7.23E-04	3.19E-06	0.00E+00	0.00E+00
552	301461.2	4019555	7.47E-04	3.29E-06	0.00E+00	0.00E+00
553	301484.2	4019564	7.73E-04	3.41E-06	0.00E+00	0.00E+00
554	301507.2	4019573	8.02E-04	3.53E-06	0.00E+00	0.00E+00
555	301530.2	4019582	8.33E-04	3.67E-06	0.00E+00	0.00E+00
556	301553.2	4019591	8.64E-04	3.81E-06	0.00E+00	0.00E+00
557	301576.2	4019600	8.96E-04	3.95E-06	0.00E+00	0.00E+00

558	301599.2	4019608	9.27E-04	4.09E-06	0.00E+00	0.00E+00
559	301622.2	4019617	9.57E-04	4.22E-06	0.00E+00	0.00E+00
560	301645.2	4019626	9.86E-04	4.34E-06	0.00E+00	0.00E+00
561	301668.2	4019635	1.01E-03	4.46E-06	0.00E+00	0.00E+00
562	301691.2	4019644	1.04E-03	4.57E-06	0.00E+00	0.00E+00
563	301714.2	4019653	1.06E-03	4.66E-06	0.00E+00	0.00E+00
564	301737.2	4019662	1.08E-03	4.74E-06	0.00E+00	0.00E+00
565	301760.2	4019671	1.09E-03	4.81E-06	0.00E+00	0.00E+00
566	301783.2	4019680	1.10E-03	4.86E-06	0.00E+00	0.00E+00
567	301806.2	4019689	1.11E-03	4.90E-06	0.00E+00	0.00E+00
568	301829.2	4019698	1.12E-03	4.93E-06	0.00E+00	0.00E+00
569	301852.3	4019707	1.12E-03	4.95E-06	0.00E+00	0.00E+00
570	301875.3	4019716	1.12E-03	4.95E-06	0.00E+00	0.00E+00
571	301898.3	4019725	1.12E-03	4.94E-06	0.00E+00	0.00E+00
572	301921.3	4019734	1.12E-03	4.93E-06	0.00E+00	0.00E+00
573	301954.2	4019765	1.14E-03	5.02E-06	0.00E+00	0.00E+00
574	301964.2	4019788	1.16E-03	5.13E-06	0.00E+00	0.00E+00
575	301974.1	4019811	1.19E-03	5.24E-06	0.00E+00	0.00E+00
576	301984	4019833	1.21E-03	5.34E-06	0.00E+00	0.00E+00
577	301994	4019856	1.23E-03	5.43E-06	0.00E+00	0.00E+00
578	302003.9	4019878	1.25E-03	5.51E-06	0.00E+00	0.00E+00
579	302013.8	4019901	1.27E-03	5.58E-06	0.00E+00	0.00E+00
580	302023.8	4019924	1.28E-03	5.65E-06	0.00E+00	0.00E+00
581	302033.7	4019946	1.30E-03	5.71E-06	0.00E+00	0.00E+00
582	302043.7	4019969	1.31E-03	5.77E-06	0.00E+00	0.00E+00
583	302053.6	4019991	1.32E-03	5.82E-06	0.00E+00	0.00E+00
584	302063.5	4020014	1.33E-03	5.86E-06	0.00E+00	0.00E+00
585	302073.5	4020037	1.34E-03	5.89E-06	0.00E+00	0.00E+00
586	302083.4	4020059	1.34E-03	5.91E-06	0.00E+00	0.00E+00
587	302093.4	4020082	1.34E-03	5.92E-06	0.00E+00	0.00E+00
588	302103.3	4020104	1.34E-03	5.91E-06	0.00E+00	0.00E+00
589	302113.2	4020127	1.34E-03	5.89E-06	0.00E+00	0.00E+00
590	302123.2	4020149	1.33E-03	5.86E-06	0.00E+00	0.00E+00
591	302133.1	4020172	1.32E-03	5.80E-06	0.00E+00	0.00E+00
592	302143.1	4020195	1.30E-03	5.74E-06	0.00E+00	0.00E+00
593	302153	4020217	1.28E-03	5.65E-06	0.00E+00	0.00E+00
594	302162.9	4020240	1.26E-03	5.56E-06	0.00E+00	0.00E+00
595	302172.9	4020262	1.24E-03	5.45E-06	0.00E+00	0.00E+00
596	302182.8	4020285	1.21E-03	5.33E-06	0.00E+00	0.00E+00
597	302192.8	4020308	1.18E-03	5.20E-06	0.00E+00	0.00E+00
598	302202.7	4020330	1.15E-03	5.06E-06	0.00E+00	0.00E+00
599	302212.6	4020353	1.11E-03	4.91E-06	0.00E+00	0.00E+00
600	302222.6	4020375	1.08E-03	4.76E-06	0.00E+00	0.00E+00
601	302232.5	4020398	1.05E-03	4.61E-06	0.00E+00	0.00E+00
602	302242.5	4020421	1.01E-03	4.46E-06	0.00E+00	0.00E+00
603	301231.1	4019465	5.11E-04	2.25E-06	0.00E+00	0.00E+00
604	301206.1	4019466	4.88E-04	2.15E-06	0.00E+00	0.00E+00

605	301181.2	4019466	4.63E-04	2.04E-06	0.00E+00	0.00E+00
606	301156.2	4019467	4.38E-04	1.93E-06	0.00E+00	0.00E+00
607	301131.2	4019467	4.14E-04	1.82E-06	0.00E+00	0.00E+00
608	301106.3	4019468	3.90E-04	1.72E-06	0.00E+00	0.00E+00
609	301081.3	4019468	3.68E-04	1.62E-06	0.00E+00	0.00E+00
610	301056.3	4019469	3.48E-04	1.53E-06	0.00E+00	0.00E+00
611	301031.4	4019470	3.30E-04	1.45E-06	0.00E+00	0.00E+00
612	301252	4019374	4.48E-04	1.97E-06	0.00E+00	0.00E+00
613	301275.1	4019383	4.72E-04	2.08E-06	0.00E+00	0.00E+00
614	301298.2	4019392	4.93E-04	2.17E-06	0.00E+00	0.00E+00
615	301321.3	4019401	5.13E-04	2.26E-06	0.00E+00	0.00E+00
616	301344.3	4019410	5.30E-04	2.34E-06	0.00E+00	0.00E+00
617	301367.4	4019419	5.45E-04	2.40E-06	0.00E+00	0.00E+00
618	301390.5	4019428	5.59E-04	2.46E-06	0.00E+00	0.00E+00
619	301413.5	4019437	5.73E-04	2.52E-06	0.00E+00	0.00E+00
620	301436.6	4019446	5.87E-04	2.59E-06	0.00E+00	0.00E+00
621	301459.7	4019455	6.03E-04	2.66E-06	0.00E+00	0.00E+00
622	301482.8	4019464	6.20E-04	2.73E-06	0.00E+00	0.00E+00
623	301505.8	4019473	6.40E-04	2.82E-06	0.00E+00	0.00E+00
624	301528.9	4019482	6.62E-04	2.92E-06	0.00E+00	0.00E+00
625	301552	4019491	6.86E-04	3.02E-06	0.00E+00	0.00E+00
626	301575.1	4019500	7.12E-04	3.13E-06	0.00E+00	0.00E+00
627	301598.1	4019509	7.37E-04	3.25E-06	0.00E+00	0.00E+00
628	301621.2	4019518	7.63E-04	3.36E-06	0.00E+00	0.00E+00
629	301644.3	4019527	7.88E-04	3.47E-06	0.00E+00	0.00E+00
630	301667.3	4019536	8.12E-04	3.58E-06	0.00E+00	0.00E+00
631	301690.4	4019545	8.34E-04	3.68E-06	0.00E+00	0.00E+00
632	301713.5	4019554	8.55E-04	3.77E-06	0.00E+00	0.00E+00
633	301736.6	4019563	8.75E-04	3.85E-06	0.00E+00	0.00E+00
634	301759.6	4019572	8.92E-04	3.93E-06	0.00E+00	0.00E+00
635	301782.7	4019581	9.07E-04	4.00E-06	0.00E+00	0.00E+00
636	301805.8	4019590	9.20E-04	4.06E-06	0.00E+00	0.00E+00
637	301828.9	4019599	9.31E-04	4.10E-06	0.00E+00	0.00E+00
638	301851.9	4019608	9.40E-04	4.14E-06	0.00E+00	0.00E+00
639	301875	4019617	9.46E-04	4.17E-06	0.00E+00	0.00E+00
640	301898.1	4019626	9.50E-04	4.19E-06	0.00E+00	0.00E+00
641	301921.1	4019635	9.53E-04	4.20E-06	0.00E+00	0.00E+00
642	301944.2	4019644	9.53E-04	4.20E-06	0.00E+00	0.00E+00
643	301967.3	4019653	9.51E-04	4.19E-06	0.00E+00	0.00E+00
644	301990.4	4019662	9.48E-04	4.18E-06	0.00E+00	0.00E+00
645	302023.4	4019693	9.63E-04	4.24E-06	0.00E+00	0.00E+00
646	302033.4	4019716	9.83E-04	4.33E-06	0.00E+00	0.00E+00
647	302043.3	4019739	1.00E-03	4.41E-06	0.00E+00	0.00E+00
648	302053.3	4019761	1.02E-03	4.49E-06	0.00E+00	0.00E+00
649	302063.3	4019784	1.03E-03	4.55E-06	0.00E+00	0.00E+00
650	302073.2	4019807	1.05E-03	4.62E-06	0.00E+00	0.00E+00
651	302083.2	4019829	1.06E-03	4.67E-06	0.00E+00	0.00E+00

652	302093.2	4019852	1.07E-03	4.73E-06	0.00E+00	0.00E+00
653	302103.2	4019875	1.08E-03	4.78E-06	0.00E+00	0.00E+00
654	302113.1	4019897	1.09E-03	4.82E-06	0.00E+00	0.00E+00
655	302123.1	4019920	1.10E-03	4.86E-06	0.00E+00	0.00E+00
656	302133.1	4019942	1.11E-03	4.90E-06	0.00E+00	0.00E+00
657	302143	4019965	1.12E-03	4.94E-06	0.00E+00	0.00E+00
658	302153	4019988	1.13E-03	4.96E-06	0.00E+00	0.00E+00
659	302163	4020010	1.13E-03	4.99E-06	0.00E+00	0.00E+00
660	302172.9	4020033	1.13E-03	5.00E-06	0.00E+00	0.00E+00
661	302182.9	4020056	1.13E-03	5.00E-06	0.00E+00	0.00E+00
662	302192.9	4020078	1.13E-03	4.99E-06	0.00E+00	0.00E+00
663	302202.8	4020101	1.13E-03	4.97E-06	0.00E+00	0.00E+00
664	302212.8	4020124	1.12E-03	4.94E-06	0.00E+00	0.00E+00
665	302222.8	4020146	1.11E-03	4.89E-06	0.00E+00	0.00E+00
666	302232.7	4020169	1.10E-03	4.83E-06	0.00E+00	0.00E+00
667	302242.7	4020192	1.08E-03	4.76E-06	0.00E+00	0.00E+00
668	302252.7	4020214	1.06E-03	4.68E-06	0.00E+00	0.00E+00
669	302262.7	4020237	1.04E-03	4.59E-06	0.00E+00	0.00E+00
670	302272.6	4020260	1.02E-03	4.49E-06	0.00E+00	0.00E+00
671	302282.6	4020282	9.95E-04	4.38E-06	0.00E+00	0.00E+00
672	302292.6	4020305	9.69E-04	4.27E-06	0.00E+00	0.00E+00
673	302302.5	4020328	9.43E-04	4.15E-06	0.00E+00	0.00E+00
674	302312.5	4020350	9.16E-04	4.03E-06	0.00E+00	0.00E+00
675	302322.5	4020373	8.89E-04	3.92E-06	0.00E+00	0.00E+00
676	302332.4	4020396	8.62E-04	3.80E-06	0.00E+00	0.00E+00
677	302342.4	4020418	8.36E-04	3.68E-06	0.00E+00	0.00E+00
678	301229	4019365	4.24E-04	1.87E-06	0.00E+00	0.00E+00
679	301204	4019366	4.04E-04	1.78E-06	0.00E+00	0.00E+00
680	301179	4019366	3.84E-04	1.69E-06	0.00E+00	0.00E+00
681	301154.1	4019367	3.64E-04	1.60E-06	0.00E+00	0.00E+00
682	301129.1	4019367	3.44E-04	1.51E-06	0.00E+00	0.00E+00
683	301104.1	4019368	3.25E-04	1.43E-06	0.00E+00	0.00E+00
684	301079.1	4019368	3.07E-04	1.35E-06	0.00E+00	0.00E+00
685	301054.2	4019369	2.91E-04	1.28E-06	0.00E+00	0.00E+00
686	301029.2	4019370	2.77E-04	1.22E-06	0.00E+00	0.00E+00
687	301249.9	4019274	3.78E-04	1.66E-06	0.00E+00	0.00E+00
688	301273.1	4019283	3.97E-04	1.75E-06	0.00E+00	0.00E+00
689	301296.2	4019292	4.16E-04	1.83E-06	0.00E+00	0.00E+00
690	301319.3	4019301	4.32E-04	1.90E-06	0.00E+00	0.00E+00
691	301342.5	4019310	4.46E-04	1.97E-06	0.00E+00	0.00E+00
692	301365.6	4019319	4.59E-04	2.02E-06	0.00E+00	0.00E+00
693	301388.7	4019328	4.70E-04	2.07E-06	0.00E+00	0.00E+00
694	301411.8	4019337	4.79E-04	2.11E-06	0.00E+00	0.00E+00
695	301435	4019346	4.89E-04	2.15E-06	0.00E+00	0.00E+00
696	301458.1	4019355	4.99E-04	2.20E-06	0.00E+00	0.00E+00
697	301481.2	4019364	5.11E-04	2.25E-06	0.00E+00	0.00E+00
698	301504.4	4019373	5.24E-04	2.31E-06	0.00E+00	0.00E+00

699	301527.5	4019382	5.40E-04	2.38E-06	0.00E+00	0.00E+00
700	301550.6	4019391	5.57E-04	2.45E-06	0.00E+00	0.00E+00
701	301573.8	4019400	5.76E-04	2.54E-06	0.00E+00	0.00E+00
702	301596.9	4019409	5.96E-04	2.63E-06	0.00E+00	0.00E+00
703	301620	4019418	6.17E-04	2.72E-06	0.00E+00	0.00E+00
704	301643.1	4019427	6.38E-04	2.81E-06	0.00E+00	0.00E+00
705	301666.3	4019436	6.59E-04	2.90E-06	0.00E+00	0.00E+00
706	301689.4	4019445	6.79E-04	2.99E-06	0.00E+00	0.00E+00
707	301712.5	4019454	6.99E-04	3.08E-06	0.00E+00	0.00E+00
708	301735.7	4019463	7.17E-04	3.16E-06	0.00E+00	0.00E+00
709	301758.8	4019472	7.34E-04	3.23E-06	0.00E+00	0.00E+00
710	301781.9	4019481	7.50E-04	3.30E-06	0.00E+00	0.00E+00
711	301805	4019490	7.64E-04	3.37E-06	0.00E+00	0.00E+00
712	301828.2	4019499	7.77E-04	3.42E-06	0.00E+00	0.00E+00
713	301851.3	4019508	7.88E-04	3.47E-06	0.00E+00	0.00E+00
714	301874.4	4019517	7.98E-04	3.51E-06	0.00E+00	0.00E+00
715	301897.6	4019526	8.05E-04	3.55E-06	0.00E+00	0.00E+00
716	301920.7	4019535	8.11E-04	3.57E-06	0.00E+00	0.00E+00
717	301943.8	4019544	8.16E-04	3.59E-06	0.00E+00	0.00E+00
718	301967	4019553	8.18E-04	3.61E-06	0.00E+00	0.00E+00
719	301990.1	4019562	8.20E-04	3.61E-06	0.00E+00	0.00E+00
720	302013.2	4019571	8.20E-04	3.61E-06	0.00E+00	0.00E+00
721	302036.3	4019580	8.18E-04	3.61E-06	0.00E+00	0.00E+00
722	302059.5	4019589	8.15E-04	3.59E-06	0.00E+00	0.00E+00
723	302092.6	4019621	8.27E-04	3.64E-06	0.00E+00	0.00E+00
724	302102.6	4019644	8.42E-04	3.71E-06	0.00E+00	0.00E+00
725	302112.6	4019666	8.57E-04	3.77E-06	0.00E+00	0.00E+00
726	302122.6	4019689	8.70E-04	3.83E-06	0.00E+00	0.00E+00
727	302132.6	4019712	8.81E-04	3.88E-06	0.00E+00	0.00E+00
728	302142.6	4019735	8.92E-04	3.93E-06	0.00E+00	0.00E+00
729	302152.6	4019757	9.02E-04	3.98E-06	0.00E+00	0.00E+00
730	302162.5	4019780	9.12E-04	4.02E-06	0.00E+00	0.00E+00
731	302172.5	4019803	9.20E-04	4.05E-06	0.00E+00	0.00E+00
732	302182.5	4019825	9.28E-04	4.09E-06	0.00E+00	0.00E+00
733	302192.5	4019848	9.36E-04	4.13E-06	0.00E+00	0.00E+00
734	302202.5	4019871	9.44E-04	4.16E-06	0.00E+00	0.00E+00
735	302212.5	4019894	9.51E-04	4.19E-06	0.00E+00	0.00E+00
736	302222.5	4019916	9.58E-04	4.22E-06	0.00E+00	0.00E+00
737	302232.5	4019939	9.64E-04	4.25E-06	0.00E+00	0.00E+00
738	302242.5	4019962	9.69E-04	4.27E-06	0.00E+00	0.00E+00
739	302252.5	4019985	9.72E-04	4.28E-06	0.00E+00	0.00E+00
740	302262.5	4020007	9.74E-04	4.29E-06	0.00E+00	0.00E+00
741	302272.5	4020030	9.74E-04	4.29E-06	0.00E+00	0.00E+00
742	302282.5	4020053	9.71E-04	4.28E-06	0.00E+00	0.00E+00
743	302292.5	4020075	9.66E-04	4.26E-06	0.00E+00	0.00E+00
744	302302.5	4020098	9.59E-04	4.23E-06	0.00E+00	0.00E+00
745	302312.4	4020121	9.50E-04	4.19E-06	0.00E+00	0.00E+00

746	302322.4	4020144	9.39E-04	4.14E-06	0.00E+00	0.00E+00
747	302332.4	4020166	9.25E-04	4.08E-06	0.00E+00	0.00E+00
748	302342.4	4020189	9.09E-04	4.01E-06	0.00E+00	0.00E+00
749	302352.4	4020212	8.92E-04	3.93E-06	0.00E+00	0.00E+00
750	302362.4	4020234	8.73E-04	3.85E-06	0.00E+00	0.00E+00
751	302372.4	4020257	8.53E-04	3.76E-06	0.00E+00	0.00E+00
752	302382.4	4020280	8.31E-04	3.66E-06	0.00E+00	0.00E+00
753	302392.4	4020303	8.09E-04	3.57E-06	0.00E+00	0.00E+00
754	302402.4	4020325	7.87E-04	3.47E-06	0.00E+00	0.00E+00
755	302412.4	4020348	7.65E-04	3.37E-06	0.00E+00	0.00E+00
756	302422.4	4020371	7.44E-04	3.28E-06	0.00E+00	0.00E+00
757	302432.4	4020393	7.24E-04	3.19E-06	0.00E+00	0.00E+00
758	302442.4	4020416	7.03E-04	3.10E-06	0.00E+00	0.00E+00
759	301226.8	4019265	3.58E-04	1.58E-06	0.00E+00	0.00E+00
760	301201.8	4019266	3.41E-04	1.50E-06	0.00E+00	0.00E+00
761	301176.9	4019266	3.24E-04	1.43E-06	0.00E+00	0.00E+00
762	301151.9	4019267	3.07E-04	1.35E-06	0.00E+00	0.00E+00
763	301126.9	4019267	2.91E-04	1.28E-06	0.00E+00	0.00E+00
764	301102	4019268	2.75E-04	1.21E-06	0.00E+00	0.00E+00
765	301077	4019269	2.61E-04	1.15E-06	0.00E+00	0.00E+00
766	301052	4019269	2.48E-04	1.09E-06	0.00E+00	0.00E+00
767	301027	4019270	2.37E-04	1.04E-06	0.00E+00	0.00E+00
768	301247.8	4019174	3.23E-04	1.42E-06	0.00E+00	0.00E+00
769	301271	4019183	3.40E-04	1.50E-06	0.00E+00	0.00E+00
770	301294.2	4019192	3.56E-04	1.57E-06	0.00E+00	0.00E+00
771	301317.4	4019201	3.70E-04	1.63E-06	0.00E+00	0.00E+00
772	301340.5	4019210	3.82E-04	1.68E-06	0.00E+00	0.00E+00
773	301363.7	4019219	3.93E-04	1.73E-06	0.00E+00	0.00E+00
774	301386.9	4019228	4.02E-04	1.77E-06	0.00E+00	0.00E+00
775	301410.1	4019237	4.09E-04	1.80E-06	0.00E+00	0.00E+00
776	301433.3	4019246	4.16E-04	1.83E-06	0.00E+00	0.00E+00
777	301456.4	4019256	4.23E-04	1.86E-06	0.00E+00	0.00E+00
778	301479.6	4019265	4.30E-04	1.90E-06	0.00E+00	0.00E+00
779	301502.8	4019274	4.39E-04	1.94E-06	0.00E+00	0.00E+00
780	301526	4019283	4.50E-04	1.98E-06	0.00E+00	0.00E+00
781	301549.1	4019292	4.62E-04	2.03E-06	0.00E+00	0.00E+00
782	301572.3	4019301	4.75E-04	2.09E-06	0.00E+00	0.00E+00
783	301595.5	4019310	4.90E-04	2.16E-06	0.00E+00	0.00E+00
784	301618.7	4019319	5.06E-04	2.23E-06	0.00E+00	0.00E+00
785	301641.9	4019328	5.23E-04	2.31E-06	0.00E+00	0.00E+00
786	301665	4019337	5.41E-04	2.38E-06	0.00E+00	0.00E+00
787	301688.2	4019346	5.59E-04	2.46E-06	0.00E+00	0.00E+00
788	301711.4	4019355	5.76E-04	2.54E-06	0.00E+00	0.00E+00
789	301734.6	4019364	5.93E-04	2.61E-06	0.00E+00	0.00E+00
790	301757.7	4019373	6.09E-04	2.68E-06	0.00E+00	0.00E+00
791	301780.9	4019382	6.24E-04	2.75E-06	0.00E+00	0.00E+00
792	301804.1	4019391	6.38E-04	2.81E-06	0.00E+00	0.00E+00

793	301827.3	4019400	6.51E-04	2.87E-06	0.00E+00	0.00E+00
794	301850.5	4019409	6.63E-04	2.92E-06	0.00E+00	0.00E+00
795	301873.6	4019418	6.74E-04	2.97E-06	0.00E+00	0.00E+00
796	301896.8	4019427	6.84E-04	3.01E-06	0.00E+00	0.00E+00
797	301920	4019436	6.92E-04	3.05E-06	0.00E+00	0.00E+00
798	301943.2	4019445	6.99E-04	3.08E-06	0.00E+00	0.00E+00
799	301966.3	4019454	7.05E-04	3.10E-06	0.00E+00	0.00E+00
800	301989.5	4019463	7.09E-04	3.12E-06	0.00E+00	0.00E+00
801	302012.7	4019472	7.12E-04	3.14E-06	0.00E+00	0.00E+00
802	302035.9	4019481	7.14E-04	3.14E-06	0.00E+00	0.00E+00
803	302059.1	4019490	7.14E-04	3.15E-06	0.00E+00	0.00E+00
804	302082.2	4019499	7.14E-04	3.15E-06	0.00E+00	0.00E+00
805	302105.4	4019508	7.13E-04	3.14E-06	0.00E+00	0.00E+00
806	302128.6	4019517	7.10E-04	3.13E-06	0.00E+00	0.00E+00
807	302161.8	4019549	7.19E-04	3.17E-06	0.00E+00	0.00E+00
808	302171.8	4019572	7.31E-04	3.22E-06	0.00E+00	0.00E+00
809	302181.8	4019594	7.43E-04	3.27E-06	0.00E+00	0.00E+00
810	302191.8	4019617	7.53E-04	3.32E-06	0.00E+00	0.00E+00
811	302201.8	4019640	7.62E-04	3.36E-06	0.00E+00	0.00E+00
812	302211.8	4019663	7.71E-04	3.40E-06	0.00E+00	0.00E+00
813	302221.9	4019685	7.78E-04	3.43E-06	0.00E+00	0.00E+00
814	302231.9	4019708	7.85E-04	3.46E-06	0.00E+00	0.00E+00
815	302241.9	4019731	7.92E-04	3.49E-06	0.00E+00	0.00E+00
816	302251.9	4019754	7.98E-04	3.52E-06	0.00E+00	0.00E+00
817	302261.9	4019777	8.05E-04	3.55E-06	0.00E+00	0.00E+00
818	302271.9	4019799	8.11E-04	3.57E-06	0.00E+00	0.00E+00
819	302281.9	4019822	8.18E-04	3.60E-06	0.00E+00	0.00E+00
820	302292	4019845	8.24E-04	3.63E-06	0.00E+00	0.00E+00
821	302302	4019868	8.30E-04	3.66E-06	0.00E+00	0.00E+00
822	302312	4019890	8.36E-04	3.68E-06	0.00E+00	0.00E+00
823	302322	4019913	8.40E-04	3.70E-06	0.00E+00	0.00E+00
824	302332	4019936	8.44E-04	3.72E-06	0.00E+00	0.00E+00
825	302342	4019959	8.46E-04	3.73E-06	0.00E+00	0.00E+00
826	302352	4019981	8.47E-04	3.73E-06	0.00E+00	0.00E+00
827	302362.1	4020004	8.46E-04	3.73E-06	0.00E+00	0.00E+00
828	302372.1	4020027	8.44E-04	3.72E-06	0.00E+00	0.00E+00
829	302382.1	4020050	8.39E-04	3.70E-06	0.00E+00	0.00E+00
830	302392.1	4020072	8.33E-04	3.67E-06	0.00E+00	0.00E+00
831	302402.1	4020095	8.24E-04	3.63E-06	0.00E+00	0.00E+00
832	302412.1	4020118	8.14E-04	3.59E-06	0.00E+00	0.00E+00
833	302422.1	4020141	8.02E-04	3.54E-06	0.00E+00	0.00E+00
834	302432.2	4020164	7.89E-04	3.48E-06	0.00E+00	0.00E+00
835	302442.2	4020186	7.74E-04	3.41E-06	0.00E+00	0.00E+00
836	302452.2	4020209	7.58E-04	3.34E-06	0.00E+00	0.00E+00
837	302462.2	4020232	7.40E-04	3.26E-06	0.00E+00	0.00E+00
838	302472.2	4020255	7.23E-04	3.18E-06	0.00E+00	0.00E+00
839	302482.2	4020277	7.04E-04	3.10E-06	0.00E+00	0.00E+00

840	302492.2	4020300	6.86E-04	3.02E-06	0.00E+00	0.00E+00
841	302502.3	4020323	6.68E-04	2.94E-06	0.00E+00	0.00E+00
842	302512.3	4020346	6.50E-04	2.86E-06	0.00E+00	0.00E+00
843	302522.3	4020368	6.33E-04	2.79E-06	0.00E+00	0.00E+00
844	302532.3	4020391	6.17E-04	2.72E-06	0.00E+00	0.00E+00
845	302542.3	4020414	6.01E-04	2.65E-06	0.00E+00	0.00E+00
846	301224.7	4019165	3.06E-04	1.35E-06	0.00E+00	0.00E+00
847	301199.7	4019166	2.92E-04	1.29E-06	0.00E+00	0.00E+00
848	301174.7	4019166	2.77E-04	1.22E-06	0.00E+00	0.00E+00
849	301149.7	4019167	2.63E-04	1.16E-06	0.00E+00	0.00E+00
850	301124.8	4019167	2.49E-04	1.10E-06	0.00E+00	0.00E+00
851	301099.8	4019168	2.37E-04	1.04E-06	0.00E+00	0.00E+00
852	301074.8	4019169	2.25E-04	9.92E-07	0.00E+00	0.00E+00
853	301049.9	4019169	2.15E-04	9.46E-07	0.00E+00	0.00E+00
854	301024.9	4019170	2.06E-04	9.06E-07	0.00E+00	0.00E+00
855	301245.7	4019074	2.80E-04	1.23E-06	0.00E+00	0.00E+00
856	301268.9	4019083	2.95E-04	1.30E-06	0.00E+00	0.00E+00
857	301292.2	4019092	3.08E-04	1.36E-06	0.00E+00	0.00E+00
858	301315.4	4019101	3.21E-04	1.41E-06	0.00E+00	0.00E+00
859	301338.6	4019111	3.32E-04	1.46E-06	0.00E+00	0.00E+00
860	301361.8	4019120	3.42E-04	1.50E-06	0.00E+00	0.00E+00
861	301385	4019129	3.49E-04	1.54E-06	0.00E+00	0.00E+00
862	301408.3	4019138	3.55E-04	1.57E-06	0.00E+00	0.00E+00
863	301431.5	4019147	3.61E-04	1.59E-06	0.00E+00	0.00E+00
864	301454.7	4019156	3.65E-04	1.61E-06	0.00E+00	0.00E+00
865	301477.9	4019165	3.70E-04	1.63E-06	0.00E+00	0.00E+00
866	301501.1	4019174	3.76E-04	1.66E-06	0.00E+00	0.00E+00
867	301524.4	4019183	3.82E-04	1.69E-06	0.00E+00	0.00E+00
868	301547.6	4019192	3.91E-04	1.72E-06	0.00E+00	0.00E+00
869	301570.8	4019201	4.00E-04	1.76E-06	0.00E+00	0.00E+00
870	301594	4019210	4.11E-04	1.81E-06	0.00E+00	0.00E+00
871	301617.2	4019219	4.23E-04	1.86E-06	0.00E+00	0.00E+00
872	301640.5	4019228	4.36E-04	1.92E-06	0.00E+00	0.00E+00
873	301663.7	4019237	4.50E-04	1.98E-06	0.00E+00	0.00E+00
874	301686.9	4019246	4.65E-04	2.05E-06	0.00E+00	0.00E+00
875	301710.1	4019255	4.79E-04	2.11E-06	0.00E+00	0.00E+00
876	301733.3	4019264	4.94E-04	2.18E-06	0.00E+00	0.00E+00
877	301756.5	4019273	5.09E-04	2.24E-06	0.00E+00	0.00E+00
878	301779.8	4019282	5.23E-04	2.30E-06	0.00E+00	0.00E+00
879	301803	4019291	5.36E-04	2.36E-06	0.00E+00	0.00E+00
880	301826.2	4019300	5.49E-04	2.42E-06	0.00E+00	0.00E+00
881	301849.4	4019309	5.60E-04	2.47E-06	0.00E+00	0.00E+00
882	301872.6	4019318	5.71E-04	2.52E-06	0.00E+00	0.00E+00
883	301895.9	4019327	5.82E-04	2.56E-06	0.00E+00	0.00E+00
884	301919.1	4019336	5.91E-04	2.60E-06	0.00E+00	0.00E+00
885	301942.3	4019345	6.00E-04	2.64E-06	0.00E+00	0.00E+00
886	301965.5	4019354	6.07E-04	2.68E-06	0.00E+00	0.00E+00

887	301988.7	4019364	6.14E-04	2.70E-06	0.00E+00	0.00E+00
888	302012	4019373	6.19E-04	2.73E-06	0.00E+00	0.00E+00
889	302035.2	4019382	6.23E-04	2.74E-06	0.00E+00	0.00E+00
890	302058.4	4019391	6.26E-04	2.76E-06	0.00E+00	0.00E+00
891	302081.6	4019400	6.28E-04	2.77E-06	0.00E+00	0.00E+00
892	302104.8	4019409	6.29E-04	2.77E-06	0.00E+00	0.00E+00
893	302128.1	4019418	6.29E-04	2.77E-06	0.00E+00	0.00E+00
894	302151.3	4019427	6.29E-04	2.77E-06	0.00E+00	0.00E+00
895	302174.5	4019436	6.28E-04	2.77E-06	0.00E+00	0.00E+00
896	302197.7	4019445	6.25E-04	2.76E-06	0.00E+00	0.00E+00
897	302231	4019477	6.33E-04	2.79E-06	0.00E+00	0.00E+00
898	302241	4019499	6.42E-04	2.83E-06	0.00E+00	0.00E+00
899	302251	4019522	6.51E-04	2.87E-06	0.00E+00	0.00E+00
900	302261.1	4019545	6.59E-04	2.91E-06	0.00E+00	0.00E+00
901	302271.1	4019568	6.67E-04	2.94E-06	0.00E+00	0.00E+00
902	302281.1	4019591	6.73E-04	2.97E-06	0.00E+00	0.00E+00
903	302291.2	4019614	6.79E-04	2.99E-06	0.00E+00	0.00E+00
904	302301.2	4019636	6.85E-04	3.02E-06	0.00E+00	0.00E+00
905	302311.2	4019659	6.90E-04	3.04E-06	0.00E+00	0.00E+00
906	302321.2	4019682	6.95E-04	3.06E-06	0.00E+00	0.00E+00
907	302331.3	4019705	7.00E-04	3.08E-06	0.00E+00	0.00E+00
908	302341.3	4019728	7.05E-04	3.11E-06	0.00E+00	0.00E+00
909	302351.3	4019750	7.11E-04	3.13E-06	0.00E+00	0.00E+00
910	302361.4	4019773	7.16E-04	3.16E-06	0.00E+00	0.00E+00
911	302371.4	4019796	7.22E-04	3.18E-06	0.00E+00	0.00E+00
912	302381.4	4019819	7.27E-04	3.20E-06	0.00E+00	0.00E+00
913	302391.5	4019842	7.32E-04	3.23E-06	0.00E+00	0.00E+00
914	302401.5	4019864	7.37E-04	3.25E-06	0.00E+00	0.00E+00
915	302411.5	4019887	7.41E-04	3.26E-06	0.00E+00	0.00E+00
916	302421.6	4019910	7.43E-04	3.28E-06	0.00E+00	0.00E+00
917	302431.6	4019933	7.45E-04	3.28E-06	0.00E+00	0.00E+00
918	302441.6	4019956	7.46E-04	3.29E-06	0.00E+00	0.00E+00
919	302451.7	4019978	7.45E-04	3.28E-06	0.00E+00	0.00E+00
920	302461.7	4020001	7.42E-04	3.27E-06	0.00E+00	0.00E+00
921	302471.7	4020024	7.37E-04	3.25E-06	0.00E+00	0.00E+00
922	302481.8	4020047	7.31E-04	3.22E-06	0.00E+00	0.00E+00
923	302491.8	4020070	7.24E-04	3.19E-06	0.00E+00	0.00E+00
924	302501.8	4020092	7.15E-04	3.15E-06	0.00E+00	0.00E+00
925	302511.9	4020115	7.04E-04	3.10E-06	0.00E+00	0.00E+00
926	302521.9	4020138	6.92E-04	3.05E-06	0.00E+00	0.00E+00
927	302531.9	4020161	6.79E-04	2.99E-06	0.00E+00	0.00E+00
928	302542	4020184	6.65E-04	2.93E-06	0.00E+00	0.00E+00
929	302552	4020206	6.50E-04	2.86E-06	0.00E+00	0.00E+00
930	302562	4020229	6.35E-04	2.80E-06	0.00E+00	0.00E+00
931	302572	4020252	6.19E-04	2.73E-06	0.00E+00	0.00E+00
932	302582.1	4020275	6.04E-04	2.66E-06	0.00E+00	0.00E+00
933	302592.1	4020298	5.89E-04	2.60E-06	0.00E+00	0.00E+00

934	302602.1	4020321	5.75E-04	2.53E-06	0.00E+00	0.00E+00
935	302612.2	4020343	5.61E-04	2.47E-06	0.00E+00	0.00E+00
936	302622.2	4020366	5.47E-04	2.41E-06	0.00E+00	0.00E+00
937	302632.2	4020389	5.35E-04	2.36E-06	0.00E+00	0.00E+00
938	302642.3	4020412	5.22E-04	2.30E-06	0.00E+00	0.00E+00
939	301222.5	4019065	2.66E-04	1.17E-06	0.00E+00	0.00E+00
940	301197.5	4019066	2.53E-04	1.12E-06	0.00E+00	0.00E+00
941	301172.6	4019066	2.41E-04	1.06E-06	0.00E+00	0.00E+00
942	301147.6	4019067	2.28E-04	1.01E-06	0.00E+00	0.00E+00
943	301122.6	4019067	2.17E-04	9.56E-07	0.00E+00	0.00E+00
944	301097.7	4019068	2.06E-04	9.09E-07	0.00E+00	0.00E+00
945	301072.7	4019069	1.97E-04	8.67E-07	0.00E+00	0.00E+00
946	301047.7	4019069	1.88E-04	8.29E-07	0.00E+00	0.00E+00
947	301022.7	4019070	1.81E-04	7.95E-07	0.00E+00	0.00E+00
948	301402.8	4020462	2.05E-02	9.02E-05	0.00E+00	0.00E+00
949	301452.8	4020461	1.50E-02	6.61E-05	0.00E+00	0.00E+00
950	301452.4	4020439	1.44E-02	6.36E-05	0.00E+00	0.00E+00
951	301502.8	4020460	1.13E-02	5.00E-05	0.00E+00	0.00E+00
952	301501.5	4020394	1.03E-02	4.52E-05	0.00E+00	0.00E+00
953	301552.8	4020459	8.80E-03	3.88E-05	0.00E+00	0.00E+00
954	301602.8	4020458	6.96E-03	3.06E-05	0.00E+00	0.00E+00
955	301601.4	4020392	6.64E-03	2.93E-05	0.00E+00	0.00E+00
956	301652.8	4020457	5.60E-03	2.47E-05	0.00E+00	0.00E+00
957	301752.7	4020455	3.79E-03	1.67E-05	0.00E+00	0.00E+00
958	301852.7	4020454	2.70E-03	1.19E-05	0.00E+00	0.00E+00
959	301851.4	4020387	2.74E-03	1.21E-05	0.00E+00	0.00E+00
960	301952.7	4020452	2.00E-03	8.83E-06	0.00E+00	0.00E+00
961	301951.4	4020385	2.05E-03	9.05E-06	0.00E+00	0.00E+00
962	302052.7	4020450	1.53E-03	6.76E-06	0.00E+00	0.00E+00
963	302051.4	4020383	1.59E-03	7.00E-06	0.00E+00	0.00E+00
964	302152.7	4020448	1.21E-03	5.32E-06	0.00E+00	0.00E+00
965	302151.3	4020381	1.25E-03	5.53E-06	0.00E+00	0.00E+00
966	302252.6	4020446	9.77E-04	4.30E-06	0.00E+00	0.00E+00
967	302251.3	4020379	1.02E-03	4.48E-06	0.00E+00	0.00E+00
968	302352.6	4020444	8.08E-04	3.56E-06	0.00E+00	0.00E+00
969	302351.3	4020377	8.41E-04	3.71E-06	0.00E+00	0.00E+00
970	302452.6	4020442	6.81E-04	3.00E-06	0.00E+00	0.00E+00
971	302451.3	4020375	7.08E-04	3.12E-06	0.00E+00	0.00E+00
972	301011.6	4020379	2.09E-02	9.20E-05	0.00E+00	0.00E+00
973	300972.3	4020380	8.21E-03	3.62E-05	0.00E+00	0.00E+00
974	301010.8	4020354	1.19E-02	5.25E-05	0.00E+00	0.00E+00
975	300971.6	4020355	6.12E-03	2.70E-05	0.00E+00	0.00E+00
976	301010.1	4020329	8.04E-03	3.54E-05	0.00E+00	0.00E+00
977	300970.8	4020330	4.82E-03	2.12E-05	0.00E+00	0.00E+00
978	301009.3	4020304	5.98E-03	2.64E-05	0.00E+00	0.00E+00
979	300970.1	4020305	3.93E-03	1.73E-05	0.00E+00	0.00E+00
980	301008.6	4020279	4.72E-03	2.08E-05	0.00E+00	0.00E+00

981	300969.4	4020280	3.29E-03	1.45E-05	0.00E+00	0.00E+00
982	301027.5	4020253	4.48E-03	1.97E-05	0.00E+00	0.00E+00
983	300988.2	4020254	3.30E-03	1.45E-05	0.00E+00	0.00E+00
984	301082.3	4020241	5.68E-03	2.50E-05	0.00E+00	0.00E+00
985	301026.8	4020228	3.73E-03	1.64E-05	0.00E+00	0.00E+00
986	300987.5	4020229	2.82E-03	1.24E-05	0.00E+00	0.00E+00
987	301135.5	4020237	6.83E-03	3.01E-05	0.00E+00	0.00E+00
988	301026	4020203	3.17E-03	1.40E-05	0.00E+00	0.00E+00
989	300986.8	4020204	2.46E-03	1.08E-05	0.00E+00	0.00E+00
990	301134	4020187	4.75E-03	2.09E-05	0.00E+00	0.00E+00
991	301231.7	4020239	8.53E-03	3.76E-05	0.00E+00	0.00E+00
992	301024.5	4020153	2.39E-03	1.05E-05	0.00E+00	0.00E+00
993	300985.3	4020154	1.93E-03	8.50E-06	0.00E+00	0.00E+00
994	301132.6	4020137	3.47E-03	1.53E-05	0.00E+00	0.00E+00
995	301289.4	4020256	9.79E-03	4.31E-05	0.00E+00	0.00E+00
996	301023.1	4020103	1.87E-03	8.23E-06	0.00E+00	0.00E+00
997	300983.8	4020104	1.56E-03	6.88E-06	0.00E+00	0.00E+00
998	301131.1	4020087	2.64E-03	1.16E-05	0.00E+00	0.00E+00
999	301021.6	4020053	1.50E-03	6.62E-06	0.00E+00	0.00E+00
1000	300982.3	4020054	1.29E-03	5.68E-06	0.00E+00	0.00E+00
1001	301147.6	4020044	2.27E-03	1.00E-05	0.00E+00	0.00E+00
1002	301358.4	4020183	6.30E-03	2.78E-05	0.00E+00	0.00E+00
1003	301420.4	4020324	1.14E-02	5.02E-05	0.00E+00	0.00E+00
1004	301020.1	4020003	1.23E-03	5.43E-06	0.00E+00	0.00E+00
1005	300980.9	4020004	1.08E-03	4.75E-06	0.00E+00	0.00E+00
1006	301146.1	4019994	1.82E-03	8.03E-06	0.00E+00	0.00E+00
1007	301392.9	4020147	5.21E-03	2.29E-05	0.00E+00	0.00E+00
1008	301454.9	4020288	8.83E-03	3.89E-05	0.00E+00	0.00E+00
1009	301018.6	4019953	1.03E-03	4.54E-06	0.00E+00	0.00E+00
1010	300979.4	4019954	9.14E-04	4.03E-06	0.00E+00	0.00E+00
1011	301144.6	4019944	1.49E-03	6.58E-06	0.00E+00	0.00E+00
1012	301427.3	4020111	4.37E-03	1.92E-05	0.00E+00	0.00E+00
1013	301481.6	4020234	6.72E-03	2.96E-05	0.00E+00	0.00E+00
1014	301520.4	4020322	7.98E-03	3.52E-05	0.00E+00	0.00E+00
1015	301017.2	4019903	8.72E-04	3.84E-06	0.00E+00	0.00E+00
1016	300977.9	4019904	7.82E-04	3.44E-06	0.00E+00	0.00E+00
1017	301143.2	4019894	1.25E-03	5.49E-06	0.00E+00	0.00E+00
1018	301461.8	4020074	3.71E-03	1.64E-05	0.00E+00	0.00E+00
1019	301516.1	4020198	5.49E-03	2.42E-05	0.00E+00	0.00E+00
1020	301562.7	4020303	6.59E-03	2.90E-05	0.00E+00	0.00E+00
1021	301015.7	4019853	7.49E-04	3.30E-06	0.00E+00	0.00E+00
1022	300976.4	4019854	6.76E-04	2.98E-06	0.00E+00	0.00E+00
1023	301051.8	4019810	7.37E-04	3.25E-06	0.00E+00	0.00E+00
1024	301087.8	4019823	8.52E-04	3.75E-06	0.00E+00	0.00E+00
1025	301123.7	4019837	9.83E-04	4.33E-06	0.00E+00	0.00E+00
1026	301496.3	4020038	3.20E-03	1.41E-05	0.00E+00	0.00E+00
1027	301550.6	4020162	4.56E-03	2.01E-05	0.00E+00	0.00E+00

1028	301589.4	4020250	5.33E-03	2.35E-05	0.00E+00	0.00E+00
1029	301620.4	4020320	5.60E-03	2.47E-05	0.00E+00	0.00E+00
1030	301014.2	4019803	6.50E-04	2.86E-06	0.00E+00	0.00E+00
1031	300975	4019804	5.90E-04	2.60E-06	0.00E+00	0.00E+00
1032	301048.9	4019710	5.65E-04	2.49E-06	0.00E+00	0.00E+00
1033	301084.8	4019723	6.44E-04	2.84E-06	0.00E+00	0.00E+00
1034	301120.8	4019737	7.35E-04	3.24E-06	0.00E+00	0.00E+00
1035	301541.9	4019913	2.09E-03	9.21E-06	0.00E+00	0.00E+00
1036	301557.5	4019948	2.32E-03	1.02E-05	0.00E+00	0.00E+00
1037	301619.5	4020089	3.28E-03	1.45E-05	0.00E+00	0.00E+00
1038	301658.3	4020177	3.78E-03	1.67E-05	0.00E+00	0.00E+00
1039	301689.4	4020248	4.00E-03	1.76E-05	0.00E+00	0.00E+00
1040	301728.1	4020336	3.96E-03	1.75E-05	0.00E+00	0.00E+00
1041	301011.3	4019703	5.05E-04	2.22E-06	0.00E+00	0.00E+00
1042	300972	4019704	4.62E-04	2.04E-06	0.00E+00	0.00E+00
1043	301045.9	4019610	4.47E-04	1.97E-06	0.00E+00	0.00E+00
1044	301081.9	4019623	5.05E-04	2.22E-06	0.00E+00	0.00E+00
1045	301117.8	4019637	5.71E-04	2.52E-06	0.00E+00	0.00E+00
1046	301610.9	4019841	1.68E-03	7.40E-06	0.00E+00	0.00E+00
1047	301626.4	4019876	1.83E-03	8.08E-06	0.00E+00	0.00E+00
1048	301665.2	4019964	2.24E-03	9.87E-06	0.00E+00	0.00E+00
1049	301680.7	4019999	2.40E-03	1.06E-05	0.00E+00	0.00E+00
1050	301696.2	4020034	2.55E-03	1.12E-05	0.00E+00	0.00E+00
1051	301711.8	4020070	2.69E-03	1.18E-05	0.00E+00	0.00E+00
1052	301727.3	4020105	2.81E-03	1.24E-05	0.00E+00	0.00E+00
1053	301742.8	4020140	2.90E-03	1.28E-05	0.00E+00	0.00E+00
1054	301758.3	4020175	2.98E-03	1.31E-05	0.00E+00	0.00E+00
1055	301773.8	4020210	3.02E-03	1.33E-05	0.00E+00	0.00E+00
1056	301789.3	4020246	3.03E-03	1.33E-05	0.00E+00	0.00E+00
1057	301804.8	4020281	3.00E-03	1.32E-05	0.00E+00	0.00E+00
1058	301820.4	4020316	2.94E-03	1.29E-05	0.00E+00	0.00E+00
1059	301835.9	4020351	2.85E-03	1.26E-05	0.00E+00	0.00E+00
1060	301008.3	4019603	4.04E-04	1.78E-06	0.00E+00	0.00E+00
1061	300969	4019604	3.73E-04	1.64E-06	0.00E+00	0.00E+00
1062	301042.9	4019510	3.64E-04	1.60E-06	0.00E+00	0.00E+00
1063	301078.9	4019523	4.07E-04	1.79E-06	0.00E+00	0.00E+00
1064	301114.8	4019537	4.56E-04	2.01E-06	0.00E+00	0.00E+00
1065	301679.8	4019768	1.38E-03	6.07E-06	0.00E+00	0.00E+00
1066	301695.4	4019803	1.49E-03	6.56E-06	0.00E+00	0.00E+00
1067	301734.1	4019891	1.77E-03	7.80E-06	0.00E+00	0.00E+00
1068	301749.7	4019927	1.88E-03	8.28E-06	0.00E+00	0.00E+00
1069	301765.2	4019962	1.98E-03	8.73E-06	0.00E+00	0.00E+00
1070	301780.7	4019997	2.08E-03	9.14E-06	0.00E+00	0.00E+00
1071	301796.2	4020032	2.16E-03	9.51E-06	0.00E+00	0.00E+00
1072	301811.7	4020068	2.23E-03	9.83E-06	0.00E+00	0.00E+00
1073	301827.2	4020103	2.29E-03	1.01E-05	0.00E+00	0.00E+00
1074	301842.8	4020138	2.33E-03	1.03E-05	0.00E+00	0.00E+00

1075	301858.3	4020173	2.35E-03	1.03E-05	0.00E+00	0.00E+00
1076	301873.8	4020208	2.35E-03	1.04E-05	0.00E+00	0.00E+00
1077	301889.3	4020244	2.33E-03	1.03E-05	0.00E+00	0.00E+00
1078	301904.8	4020279	2.28E-03	1.01E-05	0.00E+00	0.00E+00
1079	301920.3	4020314	2.22E-03	9.80E-06	0.00E+00	0.00E+00
1080	301935.9	4020349	2.15E-03	9.46E-06	0.00E+00	0.00E+00
1081	301005.3	4019503	3.32E-04	1.46E-06	0.00E+00	0.00E+00
1082	300966.1	4019505	3.09E-04	1.36E-06	0.00E+00	0.00E+00
1083	301040	4019410	3.03E-04	1.33E-06	0.00E+00	0.00E+00
1084	301075.9	4019423	3.35E-04	1.48E-06	0.00E+00	0.00E+00
1085	301111.9	4019437	3.74E-04	1.65E-06	0.00E+00	0.00E+00
1086	301748.8	4019696	1.15E-03	5.07E-06	0.00E+00	0.00E+00
1087	301764.3	4019731	1.23E-03	5.43E-06	0.00E+00	0.00E+00
1088	301803.1	4019819	1.43E-03	6.32E-06	0.00E+00	0.00E+00
1089	301818.6	4019854	1.51E-03	6.66E-06	0.00E+00	0.00E+00
1090	301834.1	4019889	1.59E-03	6.99E-06	0.00E+00	0.00E+00
1091	301849.6	4019925	1.65E-03	7.28E-06	0.00E+00	0.00E+00
1092	301865.2	4019960	1.71E-03	7.55E-06	0.00E+00	0.00E+00
1093	301880.7	4019995	1.76E-03	7.77E-06	0.00E+00	0.00E+00
1094	301896.2	4020030	1.81E-03	7.96E-06	0.00E+00	0.00E+00
1095	301911.7	4020066	1.84E-03	8.12E-06	0.00E+00	0.00E+00
1096	301927.2	4020101	1.87E-03	8.22E-06	0.00E+00	0.00E+00
1097	301942.7	4020136	1.88E-03	8.27E-06	0.00E+00	0.00E+00
1098	301958.3	4020171	1.88E-03	8.27E-06	0.00E+00	0.00E+00
1099	301973.8	4020207	1.86E-03	8.19E-06	0.00E+00	0.00E+00
1100	301989.3	4020242	1.83E-03	8.06E-06	0.00E+00	0.00E+00
1101	302004.8	4020277	1.78E-03	7.86E-06	0.00E+00	0.00E+00
1102	302020.3	4020312	1.73E-03	7.62E-06	0.00E+00	0.00E+00
1103	302035.8	4020347	1.66E-03	7.32E-06	0.00E+00	0.00E+00
1104	301002.4	4019403	2.78E-04	1.23E-06	0.00E+00	0.00E+00
1105	300963.1	4019405	2.60E-04	1.15E-06	0.00E+00	0.00E+00
1106	301037	4019310	2.56E-04	1.13E-06	0.00E+00	0.00E+00
1107	301073	4019324	2.82E-04	1.24E-06	0.00E+00	0.00E+00
1108	301108.9	4019337	3.12E-04	1.37E-06	0.00E+00	0.00E+00
1109	301817.7	4019623	9.78E-04	4.31E-06	0.00E+00	0.00E+00
1110	301833.3	4019658	1.04E-03	4.57E-06	0.00E+00	0.00E+00
1111	301872	4019747	1.19E-03	5.24E-06	0.00E+00	0.00E+00
1112	301887.6	4019782	1.25E-03	5.49E-06	0.00E+00	0.00E+00
1113	301903.1	4019817	1.30E-03	5.72E-06	0.00E+00	0.00E+00
1114	301918.6	4019852	1.35E-03	5.94E-06	0.00E+00	0.00E+00
1115	301934.1	4019887	1.39E-03	6.13E-06	0.00E+00	0.00E+00
1116	301949.6	4019923	1.43E-03	6.30E-06	0.00E+00	0.00E+00
1117	301965.1	4019958	1.46E-03	6.45E-06	0.00E+00	0.00E+00
1118	301980.7	4019993	1.49E-03	6.57E-06	0.00E+00	0.00E+00
1119	301996.2	4020028	1.51E-03	6.66E-06	0.00E+00	0.00E+00
1120	302011.7	4020064	1.53E-03	6.73E-06	0.00E+00	0.00E+00
1121	302027.2	4020099	1.54E-03	6.77E-06	0.00E+00	0.00E+00

1122	302042.7	4020134	1.53E-03	6.76E-06	0.00E+00	0.00E+00
1123	302058.2	4020169	1.52E-03	6.71E-06	0.00E+00	0.00E+00
1124	302073.8	4020205	1.50E-03	6.61E-06	0.00E+00	0.00E+00
1125	302089.3	4020240	1.47E-03	6.46E-06	0.00E+00	0.00E+00
1126	302104.8	4020275	1.43E-03	6.28E-06	0.00E+00	0.00E+00
1127	302120.3	4020310	1.38E-03	6.06E-06	0.00E+00	0.00E+00
1128	302135.8	4020345	1.32E-03	5.81E-06	0.00E+00	0.00E+00
1129	300999.4	4019303	2.37E-04	1.05E-06	0.00E+00	0.00E+00
1130	300960.2	4019305	2.23E-04	9.84E-07	0.00E+00	0.00E+00
1131	301034.1	4019210	2.21E-04	9.72E-07	0.00E+00	0.00E+00
1132	301070	4019224	2.41E-04	1.06E-06	0.00E+00	0.00E+00
1133	301106	4019237	2.65E-04	1.17E-06	0.00E+00	0.00E+00
1134	301886.7	4019551	8.42E-04	3.71E-06	0.00E+00	0.00E+00
1135	301902.2	4019586	8.88E-04	3.91E-06	0.00E+00	0.00E+00
1136	301941	4019674	1.00E-03	4.41E-06	0.00E+00	0.00E+00
1137	301956.5	4019709	1.04E-03	4.60E-06	0.00E+00	0.00E+00
1138	301972	4019745	1.09E-03	4.78E-06	0.00E+00	0.00E+00
1139	301987.5	4019780	1.12E-03	4.94E-06	0.00E+00	0.00E+00
1140	302003.1	4019815	1.16E-03	5.09E-06	0.00E+00	0.00E+00
1141	302018.6	4019850	1.18E-03	5.22E-06	0.00E+00	0.00E+00
1142	302034.1	4019886	1.21E-03	5.33E-06	0.00E+00	0.00E+00
1143	302049.6	4019921	1.23E-03	5.42E-06	0.00E+00	0.00E+00
1144	302065.1	4019956	1.25E-03	5.50E-06	0.00E+00	0.00E+00
1145	302080.6	4019991	1.26E-03	5.57E-06	0.00E+00	0.00E+00
1146	302096.2	4020026	1.28E-03	5.62E-06	0.00E+00	0.00E+00
1147	302111.7	4020062	1.28E-03	5.65E-06	0.00E+00	0.00E+00
1148	302127.2	4020097	1.28E-03	5.64E-06	0.00E+00	0.00E+00
1149	302142.7	4020132	1.27E-03	5.60E-06	0.00E+00	0.00E+00
1150	302158.2	4020167	1.25E-03	5.53E-06	0.00E+00	0.00E+00
1151	302173.7	4020203	1.23E-03	5.42E-06	0.00E+00	0.00E+00
1152	302189.3	4020238	1.20E-03	5.28E-06	0.00E+00	0.00E+00
1153	302204.8	4020273	1.16E-03	5.11E-06	0.00E+00	0.00E+00
1154	302220.3	4020308	1.12E-03	4.91E-06	0.00E+00	0.00E+00
1155	302235.8	4020343	1.07E-03	4.70E-06	0.00E+00	0.00E+00
1156	300996.5	4019203	2.05E-04	9.05E-07	0.00E+00	0.00E+00
1157	300957.2	4019205	1.94E-04	8.55E-07	0.00E+00	0.00E+00
1158	301031.5	4019110	1.93E-04	8.48E-07	0.00E+00	0.00E+00
1159	301068.1	4019124	2.09E-04	9.22E-07	0.00E+00	0.00E+00
1160	301104.8	4019138	2.29E-04	1.01E-06	0.00E+00	0.00E+00
1161	301955.8	4019479	7.34E-04	3.23E-06	0.00E+00	0.00E+00
1162	301971.6	4019515	7.70E-04	3.39E-06	0.00E+00	0.00E+00
1163	302011.2	4019604	8.60E-04	3.79E-06	0.00E+00	0.00E+00
1164	302027	4019640	8.94E-04	3.94E-06	0.00E+00	0.00E+00
1165	302042.8	4019676	9.25E-04	4.08E-06	0.00E+00	0.00E+00
1166	302058.6	4019712	9.54E-04	4.20E-06	0.00E+00	0.00E+00
1167	302074.4	4019748	9.79E-04	4.31E-06	0.00E+00	0.00E+00
1168	302090.3	4019784	1.00E-03	4.41E-06	0.00E+00	0.00E+00

1169	302106.1	4019820	1.02E-03	4.49E-06	0.00E+00	0.00E+00
1170	302121.9	4019856	1.04E-03	4.57E-06	0.00E+00	0.00E+00
1171	302137.7	4019892	1.05E-03	4.63E-06	0.00E+00	0.00E+00
1172	302153.5	4019928	1.07E-03	4.69E-06	0.00E+00	0.00E+00
1173	302169.4	4019964	1.08E-03	4.74E-06	0.00E+00	0.00E+00
1174	302185.2	4020000	1.08E-03	4.78E-06	0.00E+00	0.00E+00
1175	302201	4020036	1.09E-03	4.79E-06	0.00E+00	0.00E+00
1176	302216.8	4020071	1.09E-03	4.78E-06	0.00E+00	0.00E+00
1177	302232.6	4020107	1.08E-03	4.74E-06	0.00E+00	0.00E+00
1178	302248.5	4020143	1.06E-03	4.68E-06	0.00E+00	0.00E+00
1179	302264.3	4020179	1.04E-03	4.58E-06	0.00E+00	0.00E+00
1180	302280.1	4020215	1.01E-03	4.46E-06	0.00E+00	0.00E+00
1181	302295.9	4020251	9.78E-04	4.31E-06	0.00E+00	0.00E+00
1182	302311.8	4020287	9.41E-04	4.15E-06	0.00E+00	0.00E+00
1183	302327.6	4020323	9.01E-04	3.97E-06	0.00E+00	0.00E+00
1184	300993.5	4019104	1.80E-04	7.93E-07	0.00E+00	0.00E+00
1185	300954.3	4019105	1.71E-04	7.53E-07	0.00E+00	0.00E+00
1186	301028.5	4019010	1.70E-04	7.48E-07	0.00E+00	0.00E+00
1187	301065.1	4019024	1.84E-04	8.09E-07	0.00E+00	0.00E+00
1188	301101.7	4019038	2.00E-04	8.83E-07	0.00E+00	0.00E+00
1189	302024.7	4019406	6.46E-04	2.85E-06	0.00E+00	0.00E+00
1190	302040.5	4019442	6.75E-04	2.98E-06	0.00E+00	0.00E+00
1191	302080	4019532	7.46E-04	3.29E-06	0.00E+00	0.00E+00
1192	302095.8	4019568	7.73E-04	3.40E-06	0.00E+00	0.00E+00
1193	302111.6	4019604	7.97E-04	3.51E-06	0.00E+00	0.00E+00
1194	302127.4	4019639	8.19E-04	3.61E-06	0.00E+00	0.00E+00
1195	302143.2	4019675	8.39E-04	3.69E-06	0.00E+00	0.00E+00
1196	302159	4019711	8.55E-04	3.77E-06	0.00E+00	0.00E+00
1197	302174.8	4019747	8.70E-04	3.83E-06	0.00E+00	0.00E+00
1198	302190.6	4019783	8.83E-04	3.89E-06	0.00E+00	0.00E+00
1199	302206.4	4019819	8.95E-04	3.94E-06	0.00E+00	0.00E+00
1200	302222.2	4019855	9.07E-04	3.99E-06	0.00E+00	0.00E+00
1201	302238	4019891	9.18E-04	4.04E-06	0.00E+00	0.00E+00
1202	302253.8	4019926	9.27E-04	4.08E-06	0.00E+00	0.00E+00
1203	302269.6	4019962	9.34E-04	4.12E-06	0.00E+00	0.00E+00
1204	302285.4	4019998	9.37E-04	4.13E-06	0.00E+00	0.00E+00
1205	302301.2	4020034	9.36E-04	4.12E-06	0.00E+00	0.00E+00
1206	302317	4020070	9.29E-04	4.09E-06	0.00E+00	0.00E+00
1207	302332.8	4020106	9.17E-04	4.04E-06	0.00E+00	0.00E+00
1208	302348.6	4020142	9.00E-04	3.96E-06	0.00E+00	0.00E+00
1209	302364.4	4020177	8.78E-04	3.87E-06	0.00E+00	0.00E+00
1210	302380.2	4020213	8.51E-04	3.75E-06	0.00E+00	0.00E+00
1211	302396	4020249	8.21E-04	3.62E-06	0.00E+00	0.00E+00
1212	302411.8	4020285	7.89E-04	3.47E-06	0.00E+00	0.00E+00
1213	302427.6	4020321	7.56E-04	3.33E-06	0.00E+00	0.00E+00
1214	300990.6	4019004	1.59E-04	7.02E-07	0.00E+00	0.00E+00
1215	300951.3	4019005	1.52E-04	6.69E-07	0.00E+00	0.00E+00

1216	300948.1	4020405	6.23E-03	2.75E-05	0.00E+00	0.00E+00
1217	300948.5	4020429	8.33E-03	3.67E-05	0.00E+00	0.00E+00
1218	300949	4020454	1.14E-02	5.01E-05	0.00E+00	0.00E+00
1219	300949.5	4020478	1.41E-02	6.19E-05	0.00E+00	0.00E+00
1220	300950	4020502	1.60E-02	7.03E-05	0.00E+00	0.00E+00
1221	300950.5	4020526	1.71E-02	7.54E-05	0.00E+00	0.00E+00
1222	300951	4020551	1.72E-02	7.56E-05	0.00E+00	0.00E+00
1223	300929.9	4020388	4.05E-03	1.78E-05	0.00E+00	0.00E+00
1224	300923.6	4020430	5.16E-03	2.27E-05	0.00E+00	0.00E+00
1225	300924	4020454	6.51E-03	2.87E-05	0.00E+00	0.00E+00
1226	300924.5	4020478	7.94E-03	3.50E-05	0.00E+00	0.00E+00
1227	300925	4020503	9.22E-03	4.06E-05	0.00E+00	0.00E+00
1228	300925.5	4020527	1.02E-02	4.50E-05	0.00E+00	0.00E+00
1229	300926	4020551	1.07E-02	4.73E-05	0.00E+00	0.00E+00
1230	300904.9	4020389	3.01E-03	1.33E-05	0.00E+00	0.00E+00
1231	300936.1	4020345	3.34E-03	1.47E-05	0.00E+00	0.00E+00
1232	300898.6	4020430	3.67E-03	1.62E-05	0.00E+00	0.00E+00
1233	300899.1	4020455	4.39E-03	1.94E-05	0.00E+00	0.00E+00
1234	300899.6	4020479	5.22E-03	2.30E-05	0.00E+00	0.00E+00
1235	300900	4020503	6.06E-03	2.67E-05	0.00E+00	0.00E+00
1236	300900.5	4020527	6.80E-03	3.00E-05	0.00E+00	0.00E+00
1237	300901	4020552	7.34E-03	3.24E-05	0.00E+00	0.00E+00
1238	300879.9	4020389	2.39E-03	1.05E-05	0.00E+00	0.00E+00
1239	300893.7	4020354	2.26E-03	9.97E-06	0.00E+00	0.00E+00
1240	300918	4020328	2.48E-03	1.09E-05	0.00E+00	0.00E+00
1241	300873.6	4020431	2.81E-03	1.24E-05	0.00E+00	0.00E+00
1242	300874.1	4020455	3.25E-03	1.43E-05	0.00E+00	0.00E+00
1243	300874.6	4020479	3.78E-03	1.67E-05	0.00E+00	0.00E+00
1244	300875.1	4020504	4.35E-03	1.92E-05	0.00E+00	0.00E+00
1245	300875.5	4020528	4.90E-03	2.16E-05	0.00E+00	0.00E+00
1246	300876	4020552	5.35E-03	2.36E-05	0.00E+00	0.00E+00
1247	300856.7	4020385	1.95E-03	8.60E-06	0.00E+00	0.00E+00
1248	300865.3	4020363	1.90E-03	8.35E-06	0.00E+00	0.00E+00
1249	300873.9	4020341	1.83E-03	8.08E-06	0.00E+00	0.00E+00
1250	300904.2	4020309	1.99E-03	8.78E-06	0.00E+00	0.00E+00
1251	300925.9	4020299	2.36E-03	1.04E-05	0.00E+00	0.00E+00
1252	300947.6	4020289	2.82E-03	1.24E-05	0.00E+00	0.00E+00
1253	300848.1	4020407	2.00E-03	8.83E-06	0.00E+00	0.00E+00
1254	300848.6	4020432	2.25E-03	9.91E-06	0.00E+00	0.00E+00
1255	300849.1	4020456	2.56E-03	1.13E-05	0.00E+00	0.00E+00
1256	300849.6	4020480	2.92E-03	1.29E-05	0.00E+00	0.00E+00
1257	300850.1	4020504	3.32E-03	1.46E-05	0.00E+00	0.00E+00
1258	300850.6	4020528	3.72E-03	1.64E-05	0.00E+00	0.00E+00
1259	300851.1	4020553	4.08E-03	1.80E-05	0.00E+00	0.00E+00
1260	300831.3	4020386	1.65E-03	7.25E-06	0.00E+00	0.00E+00
1261	300839.6	4020365	1.61E-03	7.09E-06	0.00E+00	0.00E+00
1262	300847.8	4020344	1.57E-03	6.91E-06	0.00E+00	0.00E+00

1263	300856.1	4020323	1.52E-03	6.68E-06	0.00E+00	0.00E+00
1264	300885.2	4020292	1.59E-03	7.01E-06	0.00E+00	0.00E+00
1265	300906.1	4020283	1.83E-03	8.06E-06	0.00E+00	0.00E+00
1266	300926.9	4020273	2.15E-03	9.46E-06	0.00E+00	0.00E+00
1267	300947.8	4020264	2.48E-03	1.09E-05	0.00E+00	0.00E+00
1268	300823.1	4020408	1.68E-03	7.41E-06	0.00E+00	0.00E+00
1269	300823.6	4020432	1.87E-03	8.23E-06	0.00E+00	0.00E+00
1270	300824.1	4020456	2.10E-03	9.24E-06	0.00E+00	0.00E+00
1271	300824.6	4020480	2.36E-03	1.04E-05	0.00E+00	0.00E+00
1272	300825.1	4020505	2.65E-03	1.17E-05	0.00E+00	0.00E+00
1273	300825.6	4020529	2.95E-03	1.30E-05	0.00E+00	0.00E+00
1274	300826.1	4020553	3.22E-03	1.42E-05	0.00E+00	0.00E+00
1275	300806.1	4020388	1.41E-03	6.22E-06	0.00E+00	0.00E+00
1276	300822.2	4020346	1.36E-03	6.00E-06	0.00E+00	0.00E+00
1277	300838.2	4020305	1.28E-03	5.65E-06	0.00E+00	0.00E+00
1278	300866.5	4020275	1.31E-03	5.77E-06	0.00E+00	0.00E+00
1279	300907.1	4020257	1.69E-03	7.45E-06	0.00E+00	0.00E+00
1280	300947.6	4020239	2.20E-03	9.68E-06	0.00E+00	0.00E+00
1281	300798.6	4020433	1.59E-03	7.01E-06	0.00E+00	0.00E+00
1282	300799.1	4020457	1.76E-03	7.77E-06	0.00E+00	0.00E+00
1283	300799.6	4020481	1.95E-03	8.61E-06	0.00E+00	0.00E+00
1284	300800.1	4020505	2.17E-03	9.56E-06	0.00E+00	0.00E+00
1285	300800.6	4020529	2.40E-03	1.06E-05	0.00E+00	0.00E+00
1286	300801.1	4020554	2.61E-03	1.15E-05	0.00E+00	0.00E+00
1287	300781	4020389	1.23E-03	5.43E-06	0.00E+00	0.00E+00
1288	300796.7	4020348	1.19E-03	5.25E-06	0.00E+00	0.00E+00
1289	300812.4	4020307	1.15E-03	5.05E-06	0.00E+00	0.00E+00
1290	300848	4020258	1.10E-03	4.85E-06	0.00E+00	0.00E+00
1291	300887.7	4020240	1.37E-03	6.02E-06	0.00E+00	0.00E+00
1292	300927.4	4020223	1.77E-03	7.79E-06	0.00E+00	0.00E+00
1293	300773.6	4020433	1.38E-03	6.08E-06	0.00E+00	0.00E+00
1294	300774.1	4020457	1.51E-03	6.66E-06	0.00E+00	0.00E+00
1295	300774.6	4020482	1.65E-03	7.29E-06	0.00E+00	0.00E+00
1296	300775.1	4020506	1.82E-03	8.01E-06	0.00E+00	0.00E+00
1297	300775.6	4020530	1.99E-03	8.79E-06	0.00E+00	0.00E+00
1298	300776.1	4020554	2.16E-03	9.53E-06	0.00E+00	0.00E+00
1299	300731.7	4020388	9.75E-04	4.30E-06	0.00E+00	0.00E+00
1300	300740.3	4020365	9.53E-04	4.20E-06	0.00E+00	0.00E+00
1301	300748.9	4020343	9.36E-04	4.12E-06	0.00E+00	0.00E+00
1302	300757.5	4020321	9.25E-04	4.08E-06	0.00E+00	0.00E+00
1303	300766.1	4020299	9.14E-04	4.03E-06	0.00E+00	0.00E+00
1304	300774.7	4020277	8.91E-04	3.92E-06	0.00E+00	0.00E+00
1305	300783.3	4020255	8.47E-04	3.73E-06	0.00E+00	0.00E+00
1306	300813.6	4020223	8.18E-04	3.60E-06	0.00E+00	0.00E+00
1307	300835.3	4020213	8.79E-04	3.87E-06	0.00E+00	0.00E+00
1308	300857.1	4020203	9.86E-04	4.34E-06	0.00E+00	0.00E+00
1309	300878.8	4020194	1.13E-03	4.99E-06	0.00E+00	0.00E+00

1310	300900.5	4020184	1.29E-03	5.69E-06	0.00E+00	0.00E+00
1311	300922.2	4020174	1.44E-03	6.35E-06	0.00E+00	0.00E+00
1312	300943.9	4020165	1.59E-03	6.99E-06	0.00E+00	0.00E+00
1313	300723.1	4020410	9.98E-04	4.40E-06	0.00E+00	0.00E+00
1314	300723.6	4020434	1.07E-03	4.71E-06	0.00E+00	0.00E+00
1315	300724.1	4020458	1.15E-03	5.05E-06	0.00E+00	0.00E+00
1316	300724.6	4020483	1.23E-03	5.43E-06	0.00E+00	0.00E+00
1317	300725.1	4020507	1.33E-03	5.86E-06	0.00E+00	0.00E+00
1318	300725.6	4020531	1.44E-03	6.36E-06	0.00E+00	0.00E+00
1319	300726.1	4020555	1.55E-03	6.84E-06	0.00E+00	0.00E+00
1320	300681.4	4020390	7.97E-04	3.51E-06	0.00E+00	0.00E+00
1321	300689.6	4020368	7.83E-04	3.45E-06	0.00E+00	0.00E+00
1322	300697.9	4020347	7.67E-04	3.38E-06	0.00E+00	0.00E+00
1323	300706.1	4020326	7.55E-04	3.33E-06	0.00E+00	0.00E+00
1324	300714.4	4020304	7.49E-04	3.30E-06	0.00E+00	0.00E+00
1325	300722.6	4020283	7.45E-04	3.28E-06	0.00E+00	0.00E+00
1326	300730.9	4020262	7.35E-04	3.24E-06	0.00E+00	0.00E+00
1327	300739.2	4020241	7.11E-04	3.13E-06	0.00E+00	0.00E+00
1328	300747.4	4020219	6.72E-04	2.96E-06	0.00E+00	0.00E+00
1329	300776.5	4020189	6.31E-04	2.78E-06	0.00E+00	0.00E+00
1330	300797.4	4020179	6.57E-04	2.89E-06	0.00E+00	0.00E+00
1331	300818.2	4020170	7.11E-04	3.13E-06	0.00E+00	0.00E+00
1332	300839.1	4020161	7.97E-04	3.51E-06	0.00E+00	0.00E+00
1333	300859.9	4020151	9.06E-04	3.99E-06	0.00E+00	0.00E+00
1334	300880.8	4020142	1.02E-03	4.50E-06	0.00E+00	0.00E+00
1335	300901.6	4020133	1.13E-03	4.99E-06	0.00E+00	0.00E+00
1336	300922.5	4020123	1.23E-03	5.43E-06	0.00E+00	0.00E+00
1337	300943.3	4020114	1.33E-03	5.86E-06	0.00E+00	0.00E+00
1338	300673.1	4020411	8.07E-04	3.55E-06	0.00E+00	0.00E+00
1339	300673.6	4020435	8.49E-04	3.74E-06	0.00E+00	0.00E+00
1340	300674.1	4020459	8.96E-04	3.95E-06	0.00E+00	0.00E+00
1341	300674.6	4020484	9.50E-04	4.19E-06	0.00E+00	0.00E+00
1342	300675.1	4020508	1.02E-03	4.47E-06	0.00E+00	0.00E+00
1343	300675.6	4020532	1.09E-03	4.81E-06	0.00E+00	0.00E+00
1344	300676.1	4020556	1.17E-03	5.17E-06	0.00E+00	0.00E+00
1345	300631.9	4020389	6.58E-04	2.90E-06	0.00E+00	0.00E+00
1346	300640.6	4020367	6.52E-04	2.87E-06	0.00E+00	0.00E+00
1347	300649.4	4020344	6.42E-04	2.83E-06	0.00E+00	0.00E+00
1348	300658.1	4020322	6.31E-04	2.78E-06	0.00E+00	0.00E+00
1349	300666.9	4020299	6.24E-04	2.75E-06	0.00E+00	0.00E+00
1350	300675.7	4020276	6.21E-04	2.74E-06	0.00E+00	0.00E+00
1351	300684.4	4020254	6.20E-04	2.73E-06	0.00E+00	0.00E+00
1352	300693.2	4020231	6.11E-04	2.69E-06	0.00E+00	0.00E+00
1353	300701.9	4020209	5.88E-04	2.59E-06	0.00E+00	0.00E+00
1354	300710.7	4020186	5.52E-04	2.43E-06	0.00E+00	0.00E+00
1355	300741.6	4020154	5.05E-04	2.22E-06	0.00E+00	0.00E+00
1356	300763.7	4020144	5.16E-04	2.27E-06	0.00E+00	0.00E+00

1357	300785.8	4020134	5.50E-04	2.42E-06	0.00E+00	0.00E+00
1358	300807.9	4020124	6.11E-04	2.69E-06	0.00E+00	0.00E+00
1359	300830	4020114	6.97E-04	3.07E-06	0.00E+00	0.00E+00
1360	300852.1	4020104	7.95E-04	3.50E-06	0.00E+00	0.00E+00
1361	300874.2	4020094	8.90E-04	3.92E-06	0.00E+00	0.00E+00
1362	300896.4	4020084	9.75E-04	4.29E-06	0.00E+00	0.00E+00
1363	300918.5	4020075	1.05E-03	4.63E-06	0.00E+00	0.00E+00
1364	300940.6	4020065	1.12E-03	4.95E-06	0.00E+00	0.00E+00
1365	300623.1	4020412	6.58E-04	2.90E-06	0.00E+00	0.00E+00
1366	300623.6	4020436	6.84E-04	3.02E-06	0.00E+00	0.00E+00
1367	300624.1	4020460	7.15E-04	3.15E-06	0.00E+00	0.00E+00
1368	300624.6	4020485	7.54E-04	3.32E-06	0.00E+00	0.00E+00
1369	300625.1	4020509	8.02E-04	3.53E-06	0.00E+00	0.00E+00
1370	300625.6	4020533	8.59E-04	3.79E-06	0.00E+00	0.00E+00
1371	300626.1	4020557	9.22E-04	4.06E-06	0.00E+00	0.00E+00
1372	300581.6	4020391	5.46E-04	2.41E-06	0.00E+00	0.00E+00
1373	300590.1	4020369	5.48E-04	2.41E-06	0.00E+00	0.00E+00
1374	300598.5	4020347	5.45E-04	2.40E-06	0.00E+00	0.00E+00
1375	300607	4020326	5.39E-04	2.38E-06	0.00E+00	0.00E+00
1376	300615.5	4020304	5.32E-04	2.35E-06	0.00E+00	0.00E+00
1377	300623.9	4020282	5.28E-04	2.33E-06	0.00E+00	0.00E+00
1378	300632.4	4020260	5.27E-04	2.32E-06	0.00E+00	0.00E+00
1379	300640.9	4020238	5.28E-04	2.33E-06	0.00E+00	0.00E+00
1380	300649.3	4020216	5.26E-04	2.32E-06	0.00E+00	0.00E+00
1381	300657.8	4020195	5.15E-04	2.27E-06	0.00E+00	0.00E+00
1382	300666.3	4020173	4.92E-04	2.17E-06	0.00E+00	0.00E+00
1383	300674.7	4020151	4.59E-04	2.02E-06	0.00E+00	0.00E+00
1384	300704.6	4020119	4.14E-04	1.82E-06	0.00E+00	0.00E+00
1385	300726	4020110	4.15E-04	1.83E-06	0.00E+00	0.00E+00
1386	300747.4	4020100	4.30E-04	1.89E-06	0.00E+00	0.00E+00
1387	300768.8	4020091	4.64E-04	2.04E-06	0.00E+00	0.00E+00
1388	300790.1	4020081	5.17E-04	2.28E-06	0.00E+00	0.00E+00
1389	300811.5	4020072	5.87E-04	2.59E-06	0.00E+00	0.00E+00
1390	300832.9	4020062	6.66E-04	2.93E-06	0.00E+00	0.00E+00
1391	300854.3	4020053	7.41E-04	3.26E-06	0.00E+00	0.00E+00
1392	300875.7	4020043	8.07E-04	3.55E-06	0.00E+00	0.00E+00
1393	300897.1	4020034	8.64E-04	3.81E-06	0.00E+00	0.00E+00
1394	300918.5	4020024	9.17E-04	4.04E-06	0.00E+00	0.00E+00
1395	300939.8	4020014	9.66E-04	4.25E-06	0.00E+00	0.00E+00
1396	300573.1	4020413	5.42E-04	2.39E-06	0.00E+00	0.00E+00
1397	300573.6	4020437	5.60E-04	2.47E-06	0.00E+00	0.00E+00
1398	300574.1	4020461	5.83E-04	2.57E-06	0.00E+00	0.00E+00
1399	300574.6	4020486	6.14E-04	2.71E-06	0.00E+00	0.00E+00
1400	300575.1	4020510	6.53E-04	2.88E-06	0.00E+00	0.00E+00
1401	300575.6	4020534	6.99E-04	3.08E-06	0.00E+00	0.00E+00
1402	300576.1	4020558	7.48E-04	3.30E-06	0.00E+00	0.00E+00
1403	300531.4	4020393	4.57E-04	2.01E-06	0.00E+00	0.00E+00

1404	300539.7	4020371	4.61E-04	2.03E-06	0.00E+00	0.00E+00
1405	300547.9	4020350	4.63E-04	2.04E-06	0.00E+00	0.00E+00
1406	300556.2	4020329	4.62E-04	2.04E-06	0.00E+00	0.00E+00
1407	300564.4	4020307	4.59E-04	2.02E-06	0.00E+00	0.00E+00
1408	300572.7	4020286	4.56E-04	2.01E-06	0.00E+00	0.00E+00
1409	300580.9	4020265	4.53E-04	2.00E-06	0.00E+00	0.00E+00
1410	300589.2	4020244	4.53E-04	2.00E-06	0.00E+00	0.00E+00
1411	300597.4	4020222	4.56E-04	2.01E-06	0.00E+00	0.00E+00
1412	300605.7	4020201	4.57E-04	2.01E-06	0.00E+00	0.00E+00
1413	300614	4020180	4.53E-04	2.00E-06	0.00E+00	0.00E+00
1414	300622.2	4020158	4.41E-04	1.94E-06	0.00E+00	0.00E+00
1415	300630.5	4020137	4.19E-04	1.84E-06	0.00E+00	0.00E+00
1416	300638.7	4020116	3.89E-04	1.72E-06	0.00E+00	0.00E+00
1417	300667.8	4020085	3.47E-04	1.53E-06	0.00E+00	0.00E+00
1418	300688.7	4020076	3.42E-04	1.51E-06	0.00E+00	0.00E+00
1419	300709.5	4020067	3.47E-04	1.53E-06	0.00E+00	0.00E+00
1420	300730.4	4020057	3.65E-04	1.61E-06	0.00E+00	0.00E+00
1421	300751.2	4020048	3.97E-04	1.75E-06	0.00E+00	0.00E+00
1422	300772.1	4020039	4.44E-04	1.96E-06	0.00E+00	0.00E+00
1423	300792.9	4020029	5.04E-04	2.22E-06	0.00E+00	0.00E+00
1424	300813.8	4020020	5.68E-04	2.50E-06	0.00E+00	0.00E+00
1425	300834.6	4020011	6.29E-04	2.77E-06	0.00E+00	0.00E+00
1426	300855.5	4020001	6.81E-04	3.00E-06	0.00E+00	0.00E+00
1427	300876.3	4019992	7.26E-04	3.20E-06	0.00E+00	0.00E+00
1428	300897.2	4019983	7.66E-04	3.38E-06	0.00E+00	0.00E+00
1429	300918.1	4019974	8.02E-04	3.53E-06	0.00E+00	0.00E+00
1430	300938.9	4019964	8.34E-04	3.67E-06	0.00E+00	0.00E+00
1431	300523.1	4020414	4.54E-04	2.00E-06	0.00E+00	0.00E+00
1432	300523.6	4020438	4.68E-04	2.06E-06	0.00E+00	0.00E+00
1433	300524.1	4020462	4.87E-04	2.15E-06	0.00E+00	0.00E+00
1434	300524.6	4020487	5.13E-04	2.26E-06	0.00E+00	0.00E+00
1435	300525.1	4020511	5.46E-04	2.40E-06	0.00E+00	0.00E+00
1436	300525.6	4020535	5.83E-04	2.57E-06	0.00E+00	0.00E+00
1437	300526.1	4020559	6.23E-04	2.75E-06	0.00E+00	0.00E+00
1438	300481.8	4020393	3.88E-04	1.71E-06	0.00E+00	0.00E+00
1439	300490.4	4020371	3.91E-04	1.72E-06	0.00E+00	0.00E+00
1440	300499	4020348	3.95E-04	1.74E-06	0.00E+00	0.00E+00
1441	300507.6	4020326	3.97E-04	1.75E-06	0.00E+00	0.00E+00
1442	300516.2	4020304	3.97E-04	1.75E-06	0.00E+00	0.00E+00
1443	300524.8	4020282	3.95E-04	1.74E-06	0.00E+00	0.00E+00
1444	300533.4	4020260	3.94E-04	1.73E-06	0.00E+00	0.00E+00
1445	300542	4020238	3.94E-04	1.74E-06	0.00E+00	0.00E+00
1446	300550.6	4020215	3.96E-04	1.75E-06	0.00E+00	0.00E+00
1447	300559.2	4020193	4.00E-04	1.76E-06	0.00E+00	0.00E+00
1448	300567.8	4020171	4.01E-04	1.77E-06	0.00E+00	0.00E+00
1449	300576.4	4020149	3.97E-04	1.75E-06	0.00E+00	0.00E+00
1450	300585	4020127	3.85E-04	1.69E-06	0.00E+00	0.00E+00

1451	300593.6	4020104	3.64E-04	1.60E-06	0.00E+00	0.00E+00
1452	300602.2	4020082	3.37E-04	1.48E-06	0.00E+00	0.00E+00
1453	300632.5	4020050	2.95E-04	1.30E-06	0.00E+00	0.00E+00
1454	300654.2	4020041	2.88E-04	1.27E-06	0.00E+00	0.00E+00
1455	300675.9	4020031	2.89E-04	1.27E-06	0.00E+00	0.00E+00
1456	300697.6	4020021	3.00E-04	1.32E-06	0.00E+00	0.00E+00
1457	300719.4	4020012	3.23E-04	1.43E-06	0.00E+00	0.00E+00
1458	300741.1	4020002	3.60E-04	1.59E-06	0.00E+00	0.00E+00
1459	300762.8	4019992	4.09E-04	1.80E-06	0.00E+00	0.00E+00
1460	300784.5	4019983	4.65E-04	2.05E-06	0.00E+00	0.00E+00
1461	300806.2	4019973	5.21E-04	2.29E-06	0.00E+00	0.00E+00
1462	300828	4019963	5.70E-04	2.51E-06	0.00E+00	0.00E+00
1463	300849.7	4019953	6.11E-04	2.69E-06	0.00E+00	0.00E+00
1464	300871.4	4019944	6.45E-04	2.84E-06	0.00E+00	0.00E+00
1465	300893.1	4019934	6.75E-04	2.97E-06	0.00E+00	0.00E+00
1466	300914.8	4019924	7.00E-04	3.09E-06	0.00E+00	0.00E+00
1467	300936.6	4019915	7.23E-04	3.19E-06	0.00E+00	0.00E+00
1468	300473.1	4020415	3.86E-04	1.70E-06	0.00E+00	0.00E+00
1469	300473.6	4020439	3.98E-04	1.75E-06	0.00E+00	0.00E+00
1470	300474.1	4020463	4.15E-04	1.83E-06	0.00E+00	0.00E+00
1471	300474.6	4020488	4.38E-04	1.93E-06	0.00E+00	0.00E+00
1472	300475.1	4020512	4.66E-04	2.05E-06	0.00E+00	0.00E+00
1473	300475.6	4020536	4.97E-04	2.19E-06	0.00E+00	0.00E+00
1474	300476.1	4020560	5.29E-04	2.33E-06	0.00E+00	0.00E+00
1475	300431.6	4020394	3.35E-04	1.47E-06	0.00E+00	0.00E+00
1476	300440	4020373	3.36E-04	1.48E-06	0.00E+00	0.00E+00
1477	300448.4	4020351	3.39E-04	1.49E-06	0.00E+00	0.00E+00
1478	300456.8	4020329	3.41E-04	1.50E-06	0.00E+00	0.00E+00
1479	300465.2	4020308	3.43E-04	1.51E-06	0.00E+00	0.00E+00
1480	300473.6	4020286	3.44E-04	1.52E-06	0.00E+00	0.00E+00
1481	300482	4020264	3.44E-04	1.52E-06	0.00E+00	0.00E+00
1482	300490.4	4020243	3.44E-04	1.52E-06	0.00E+00	0.00E+00
1483	300498.8	4020221	3.45E-04	1.52E-06	0.00E+00	0.00E+00
1484	300507.3	4020199	3.49E-04	1.54E-06	0.00E+00	0.00E+00
1485	300515.7	4020177	3.53E-04	1.56E-06	0.00E+00	0.00E+00
1486	300524.1	4020156	3.56E-04	1.57E-06	0.00E+00	0.00E+00
1487	300532.5	4020134	3.56E-04	1.57E-06	0.00E+00	0.00E+00
1488	300540.9	4020112	3.50E-04	1.54E-06	0.00E+00	0.00E+00
1489	300549.3	4020091	3.36E-04	1.48E-06	0.00E+00	0.00E+00
1490	300557.7	4020069	3.17E-04	1.40E-06	0.00E+00	0.00E+00
1491	300566.1	4020047	2.93E-04	1.29E-06	0.00E+00	0.00E+00
1492	300595.8	4020016	2.55E-04	1.12E-06	0.00E+00	0.00E+00
1493	300617	4020007	2.47E-04	1.09E-06	0.00E+00	0.00E+00
1494	300638.2	4019997	2.44E-04	1.07E-06	0.00E+00	0.00E+00
1495	300659.5	4019988	2.48E-04	1.09E-06	0.00E+00	0.00E+00
1496	300680.7	4019978	2.62E-04	1.15E-06	0.00E+00	0.00E+00
1497	300702	4019969	2.85E-04	1.25E-06	0.00E+00	0.00E+00

1498	300723.2	4019959	3.18E-04	1.40E-06	0.00E+00	0.00E+00
1499	300744.4	4019950	3.61E-04	1.59E-06	0.00E+00	0.00E+00
1500	300765.7	4019940	4.08E-04	1.80E-06	0.00E+00	0.00E+00
1501	300786.9	4019931	4.55E-04	2.00E-06	0.00E+00	0.00E+00
1502	300808.1	4019921	4.96E-04	2.19E-06	0.00E+00	0.00E+00
1503	300829.4	4019912	5.30E-04	2.34E-06	0.00E+00	0.00E+00
1504	300850.6	4019902	5.58E-04	2.46E-06	0.00E+00	0.00E+00
1505	300871.9	4019893	5.81E-04	2.56E-06	0.00E+00	0.00E+00
1506	300893.1	4019883	6.00E-04	2.64E-06	0.00E+00	0.00E+00
1507	300914.3	4019874	6.17E-04	2.72E-06	0.00E+00	0.00E+00
1508	300935.6	4019864	6.31E-04	2.78E-06	0.00E+00	0.00E+00
1509	300423.2	4020416	3.34E-04	1.47E-06	0.00E+00	0.00E+00
1510	300423.7	4020440	3.46E-04	1.52E-06	0.00E+00	0.00E+00
1511	300424.2	4020464	3.61E-04	1.59E-06	0.00E+00	0.00E+00
1512	300424.7	4020489	3.81E-04	1.68E-06	0.00E+00	0.00E+00
1513	300425.1	4020513	4.04E-04	1.78E-06	0.00E+00	0.00E+00
1514	300425.6	4020537	4.30E-04	1.90E-06	0.00E+00	0.00E+00
1515	300426.1	4020561	4.56E-04	2.01E-06	0.00E+00	0.00E+00
1516	300381.9	4020395	2.93E-04	1.29E-06	0.00E+00	0.00E+00
1517	300390.6	4020372	2.94E-04	1.29E-06	0.00E+00	0.00E+00
1518	300399.2	4020350	2.95E-04	1.30E-06	0.00E+00	0.00E+00
1519	300407.9	4020327	2.97E-04	1.31E-06	0.00E+00	0.00E+00
1520	300416.6	4020305	2.98E-04	1.31E-06	0.00E+00	0.00E+00
1521	300425.3	4020283	3.00E-04	1.32E-06	0.00E+00	0.00E+00
1522	300434	4020260	3.01E-04	1.33E-06	0.00E+00	0.00E+00
1523	300442.7	4020238	3.02E-04	1.33E-06	0.00E+00	0.00E+00
1524	300451.4	4020215	3.04E-04	1.34E-06	0.00E+00	0.00E+00
1525	300460.1	4020193	3.07E-04	1.35E-06	0.00E+00	0.00E+00
1526	300468.8	4020170	3.11E-04	1.37E-06	0.00E+00	0.00E+00
1527	300477.5	4020148	3.17E-04	1.39E-06	0.00E+00	0.00E+00
1528	300486.2	4020126	3.20E-04	1.41E-06	0.00E+00	0.00E+00
1529	300494.8	4020103	3.19E-04	1.41E-06	0.00E+00	0.00E+00
1530	300503.5	4020081	3.12E-04	1.38E-06	0.00E+00	0.00E+00
1531	300512.2	4020058	3.00E-04	1.32E-06	0.00E+00	0.00E+00
1532	300520.9	4020036	2.81E-04	1.24E-06	0.00E+00	0.00E+00
1533	300529.6	4020014	2.59E-04	1.14E-06	0.00E+00	0.00E+00
1534	300560.3	4019981	2.23E-04	9.82E-07	0.00E+00	0.00E+00
1535	300582.2	4019972	2.14E-04	9.41E-07	0.00E+00	0.00E+00
1536	300604.1	4019962	2.09E-04	9.21E-07	0.00E+00	0.00E+00
1537	300626.1	4019952	2.11E-04	9.30E-07	0.00E+00	0.00E+00
1538	300648	4019942	2.20E-04	9.70E-07	0.00E+00	0.00E+00
1539	300670	4019932	2.38E-04	1.05E-06	0.00E+00	0.00E+00
1540	300691.9	4019923	2.64E-04	1.16E-06	0.00E+00	0.00E+00
1541	300713.9	4019913	2.99E-04	1.32E-06	0.00E+00	0.00E+00
1542	300735.8	4019903	3.41E-04	1.50E-06	0.00E+00	0.00E+00
1543	300757.8	4019893	3.83E-04	1.69E-06	0.00E+00	0.00E+00
1544	300779.7	4019883	4.23E-04	1.86E-06	0.00E+00	0.00E+00

1545	300801.7	4019874	4.56E-04	2.01E-06	0.00E+00	0.00E+00
1546	300823.6	4019864	4.82E-04	2.12E-06	0.00E+00	0.00E+00
1547	300845.6	4019854	5.02E-04	2.21E-06	0.00E+00	0.00E+00
1548	300867.5	4019844	5.19E-04	2.29E-06	0.00E+00	0.00E+00
1549	300889.5	4019834	5.32E-04	2.35E-06	0.00E+00	0.00E+00
1550	300911.4	4019825	5.44E-04	2.40E-06	0.00E+00	0.00E+00
1551	300933.4	4019815	5.54E-04	2.44E-06	0.00E+00	0.00E+00
1552	300373.2	4020417	2.95E-04	1.30E-06	0.00E+00	0.00E+00
1553	300373.7	4020441	3.05E-04	1.34E-06	0.00E+00	0.00E+00
1554	300374.2	4020465	3.19E-04	1.40E-06	0.00E+00	0.00E+00
1555	300374.7	4020490	3.36E-04	1.48E-06	0.00E+00	0.00E+00
1556	300375.2	4020514	3.55E-04	1.57E-06	0.00E+00	0.00E+00
1557	300375.7	4020538	3.77E-04	1.66E-06	0.00E+00	0.00E+00
1558	300376.2	4020562	3.98E-04	1.75E-06	0.00E+00	0.00E+00
1559	300281.9	4020396	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1560	300290.7	4020374	2.34E-04	1.03E-06	0.00E+00	0.00E+00
1561	300299.5	4020351	2.33E-04	1.03E-06	0.00E+00	0.00E+00
1562	300308.2	4020329	2.32E-04	1.02E-06	0.00E+00	0.00E+00
1563	300317	4020306	2.32E-04	1.02E-06	0.00E+00	0.00E+00
1564	300325.7	4020284	2.33E-04	1.03E-06	0.00E+00	0.00E+00
1565	300334.5	4020261	2.34E-04	1.03E-06	0.00E+00	0.00E+00
1566	300343.2	4020238	2.35E-04	1.03E-06	0.00E+00	0.00E+00
1567	300352	4020216	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1568	300360.8	4020193	2.38E-04	1.05E-06	0.00E+00	0.00E+00
1569	300369.5	4020171	2.41E-04	1.06E-06	0.00E+00	0.00E+00
1570	300378.3	4020148	2.46E-04	1.08E-06	0.00E+00	0.00E+00
1571	300387	4020126	2.52E-04	1.11E-06	0.00E+00	0.00E+00
1572	300395.8	4020103	2.58E-04	1.14E-06	0.00E+00	0.00E+00
1573	300404.5	4020080	2.62E-04	1.16E-06	0.00E+00	0.00E+00
1574	300413.3	4020058	2.64E-04	1.16E-06	0.00E+00	0.00E+00
1575	300422.1	4020035	2.61E-04	1.15E-06	0.00E+00	0.00E+00
1576	300430.8	4020013	2.53E-04	1.12E-06	0.00E+00	0.00E+00
1577	300439.6	4019990	2.41E-04	1.06E-06	0.00E+00	0.00E+00
1578	300448.3	4019967	2.25E-04	9.92E-07	0.00E+00	0.00E+00
1579	300457.1	4019945	2.06E-04	9.10E-07	0.00E+00	0.00E+00
1580	300488	4019912	1.76E-04	7.75E-07	0.00E+00	0.00E+00
1581	300510.1	4019903	1.66E-04	7.33E-07	0.00E+00	0.00E+00
1582	300532.2	4019893	1.60E-04	7.06E-07	0.00E+00	0.00E+00
1583	300554.3	4019883	1.58E-04	6.97E-07	0.00E+00	0.00E+00
1584	300576.4	4019873	1.61E-04	7.08E-07	0.00E+00	0.00E+00
1585	300598.5	4019863	1.69E-04	7.43E-07	0.00E+00	0.00E+00
1586	300620.6	4019853	1.82E-04	8.02E-07	0.00E+00	0.00E+00
1587	300642.8	4019843	2.02E-04	8.89E-07	0.00E+00	0.00E+00
1588	300664.9	4019833	2.28E-04	1.00E-06	0.00E+00	0.00E+00
1589	300687	4019824	2.59E-04	1.14E-06	0.00E+00	0.00E+00
1590	300709.1	4019814	2.92E-04	1.29E-06	0.00E+00	0.00E+00
1591	300731.2	4019804	3.25E-04	1.43E-06	0.00E+00	0.00E+00

1592	300753.3	4019794	3.53E-04	1.55E-06	0.00E+00	0.00E+00
1593	300775.5	4019784	3.75E-04	1.65E-06	0.00E+00	0.00E+00
1594	300797.6	4019774	3.91E-04	1.72E-06	0.00E+00	0.00E+00
1595	300819.7	4019764	4.03E-04	1.78E-06	0.00E+00	0.00E+00
1596	300841.8	4019754	4.12E-04	1.82E-06	0.00E+00	0.00E+00
1597	300863.9	4019745	4.19E-04	1.85E-06	0.00E+00	0.00E+00
1598	300886	4019735	4.24E-04	1.87E-06	0.00E+00	0.00E+00
1599	300908.1	4019725	4.29E-04	1.89E-06	0.00E+00	0.00E+00
1600	300930.3	4019715	4.36E-04	1.92E-06	0.00E+00	0.00E+00
1601	300273.2	4020419	2.38E-04	1.05E-06	0.00E+00	0.00E+00
1602	300273.7	4020443	2.47E-04	1.09E-06	0.00E+00	0.00E+00
1603	300274.2	4020468	2.57E-04	1.13E-06	0.00E+00	0.00E+00
1604	300274.7	4020492	2.69E-04	1.18E-06	0.00E+00	0.00E+00
1605	300275.2	4020516	2.82E-04	1.24E-06	0.00E+00	0.00E+00
1606	300275.7	4020540	2.96E-04	1.31E-06	0.00E+00	0.00E+00
1607	300276.2	4020564	3.11E-04	1.37E-06	0.00E+00	0.00E+00
1608	300181.7	4020399	1.98E-04	8.70E-07	0.00E+00	0.00E+00
1609	300190.1	4020377	1.96E-04	8.63E-07	0.00E+00	0.00E+00
1610	300198.6	4020356	1.94E-04	8.55E-07	0.00E+00	0.00E+00
1611	300207.1	4020334	1.92E-04	8.47E-07	0.00E+00	0.00E+00
1612	300215.6	4020312	1.90E-04	8.38E-07	0.00E+00	0.00E+00
1613	300224	4020290	1.89E-04	8.32E-07	0.00E+00	0.00E+00
1614	300232.5	4020268	1.88E-04	8.28E-07	0.00E+00	0.00E+00
1615	300241	4020246	1.88E-04	8.27E-07	0.00E+00	0.00E+00
1616	300249.4	4020225	1.88E-04	8.28E-07	0.00E+00	0.00E+00
1617	300257.9	4020203	1.89E-04	8.31E-07	0.00E+00	0.00E+00
1618	300266.4	4020181	1.90E-04	8.36E-07	0.00E+00	0.00E+00
1619	300274.8	4020159	1.92E-04	8.44E-07	0.00E+00	0.00E+00
1620	300283.3	4020137	1.94E-04	8.57E-07	0.00E+00	0.00E+00
1621	300291.8	4020115	1.99E-04	8.76E-07	0.00E+00	0.00E+00
1622	300300.2	4020094	2.05E-04	9.01E-07	0.00E+00	0.00E+00
1623	300308.7	4020072	2.11E-04	9.29E-07	0.00E+00	0.00E+00
1624	300317.2	4020050	2.17E-04	9.55E-07	0.00E+00	0.00E+00
1625	300325.6	4020028	2.21E-04	9.74E-07	0.00E+00	0.00E+00
1626	300334.1	4020006	2.23E-04	9.81E-07	0.00E+00	0.00E+00
1627	300342.6	4019984	2.21E-04	9.75E-07	0.00E+00	0.00E+00
1628	300351	4019963	2.17E-04	9.54E-07	0.00E+00	0.00E+00
1629	300359.5	4019941	2.09E-04	9.19E-07	0.00E+00	0.00E+00
1630	300368	4019919	1.97E-04	8.70E-07	0.00E+00	0.00E+00
1631	300376.5	4019897	1.84E-04	8.10E-07	0.00E+00	0.00E+00
1632	300384.9	4019875	1.69E-04	7.43E-07	0.00E+00	0.00E+00
1633	300414.8	4019844	1.44E-04	6.32E-07	0.00E+00	0.00E+00
1634	300436.2	4019834	1.35E-04	5.95E-07	0.00E+00	0.00E+00
1635	300457.5	4019825	1.28E-04	5.66E-07	0.00E+00	0.00E+00
1636	300478.9	4019815	1.25E-04	5.49E-07	0.00E+00	0.00E+00
1637	300500.3	4019806	1.24E-04	5.45E-07	0.00E+00	0.00E+00
1638	300521.7	4019796	1.26E-04	5.55E-07	0.00E+00	0.00E+00

1639	300543.1	4019787	1.31E-04	5.79E-07	0.00E+00	0.00E+00
1640	300564.5	4019777	1.40E-04	6.19E-07	0.00E+00	0.00E+00
1641	300585.9	4019767	1.53E-04	6.75E-07	0.00E+00	0.00E+00
1642	300607.2	4019758	1.70E-04	7.51E-07	0.00E+00	0.00E+00
1643	300628.6	4019748	1.92E-04	8.44E-07	0.00E+00	0.00E+00
1644	300650	4019739	2.16E-04	9.53E-07	0.00E+00	0.00E+00
1645	300671.4	4019729	2.42E-04	1.07E-06	0.00E+00	0.00E+00
1646	300692.8	4019720	2.67E-04	1.18E-06	0.00E+00	0.00E+00
1647	300714.2	4019710	2.89E-04	1.27E-06	0.00E+00	0.00E+00
1648	300735.6	4019701	3.06E-04	1.35E-06	0.00E+00	0.00E+00
1649	300756.9	4019691	3.19E-04	1.40E-06	0.00E+00	0.00E+00
1650	300778.3	4019681	3.27E-04	1.44E-06	0.00E+00	0.00E+00
1651	300799.7	4019672	3.33E-04	1.47E-06	0.00E+00	0.00E+00
1652	300821.1	4019662	3.37E-04	1.48E-06	0.00E+00	0.00E+00
1653	300842.5	4019653	3.39E-04	1.49E-06	0.00E+00	0.00E+00
1654	300863.9	4019643	3.41E-04	1.50E-06	0.00E+00	0.00E+00
1655	300885.3	4019634	3.44E-04	1.51E-06	0.00E+00	0.00E+00
1656	300906.6	4019624	3.48E-04	1.53E-06	0.00E+00	0.00E+00
1657	300928	4019615	3.53E-04	1.55E-06	0.00E+00	0.00E+00
1658	300173.2	4020421	1.99E-04	8.78E-07	0.00E+00	0.00E+00
1659	300173.7	4020445	2.05E-04	9.04E-07	0.00E+00	0.00E+00
1660	300174.2	4020470	2.12E-04	9.35E-07	0.00E+00	0.00E+00
1661	300174.7	4020494	2.20E-04	9.70E-07	0.00E+00	0.00E+00
1662	300175.2	4020518	2.30E-04	1.01E-06	0.00E+00	0.00E+00
1663	300175.7	4020542	2.40E-04	1.06E-06	0.00E+00	0.00E+00
1664	300176.2	4020567	2.51E-04	1.11E-06	0.00E+00	0.00E+00
1665	300081.8	4020401	1.69E-04	7.45E-07	0.00E+00	0.00E+00
1666	300090.3	4020379	1.68E-04	7.40E-07	0.00E+00	0.00E+00
1667	300098.9	4020357	1.67E-04	7.35E-07	0.00E+00	0.00E+00
1668	300107.4	4020335	1.65E-04	7.28E-07	0.00E+00	0.00E+00
1669	300115.9	4020313	1.63E-04	7.18E-07	0.00E+00	0.00E+00
1670	300124.5	4020291	1.61E-04	7.08E-07	0.00E+00	0.00E+00
1671	300133	4020269	1.58E-04	6.98E-07	0.00E+00	0.00E+00
1672	300141.6	4020247	1.57E-04	6.90E-07	0.00E+00	0.00E+00
1673	300150.1	4020225	1.55E-04	6.85E-07	0.00E+00	0.00E+00
1674	300158.6	4020203	1.55E-04	6.83E-07	0.00E+00	0.00E+00
1675	300167.2	4020181	1.55E-04	6.83E-07	0.00E+00	0.00E+00
1676	300175.7	4020159	1.55E-04	6.84E-07	0.00E+00	0.00E+00
1677	300184.3	4020137	1.56E-04	6.88E-07	0.00E+00	0.00E+00
1678	300192.8	4020115	1.58E-04	6.96E-07	0.00E+00	0.00E+00
1679	300201.4	4020093	1.61E-04	7.10E-07	0.00E+00	0.00E+00
1680	300209.9	4020071	1.66E-04	7.29E-07	0.00E+00	0.00E+00
1681	300218.4	4020049	1.71E-04	7.55E-07	0.00E+00	0.00E+00
1682	300227	4020027	1.78E-04	7.82E-07	0.00E+00	0.00E+00
1683	300235.5	4020005	1.83E-04	8.08E-07	0.00E+00	0.00E+00
1684	300244.1	4019983	1.88E-04	8.29E-07	0.00E+00	0.00E+00
1685	300252.6	4019961	1.91E-04	8.42E-07	0.00E+00	0.00E+00

1686	300261.1	4019939	1.91E-04	8.43E-07	0.00E+00	0.00E+00
1687	300269.7	4019917	1.89E-04	8.33E-07	0.00E+00	0.00E+00
1688	300278.2	4019895	1.84E-04	8.10E-07	0.00E+00	0.00E+00
1689	300286.8	4019873	1.76E-04	7.76E-07	0.00E+00	0.00E+00
1690	300295.3	4019851	1.66E-04	7.32E-07	0.00E+00	0.00E+00
1691	300303.8	4019828	1.55E-04	6.81E-07	0.00E+00	0.00E+00
1692	300312.4	4019806	1.42E-04	6.24E-07	0.00E+00	0.00E+00
1693	300342.5	4019775	1.20E-04	5.28E-07	0.00E+00	0.00E+00
1694	300364.1	4019765	1.12E-04	4.94E-07	0.00E+00	0.00E+00
1695	300385.6	4019756	1.06E-04	4.66E-07	0.00E+00	0.00E+00
1696	300407.2	4019746	1.02E-04	4.48E-07	0.00E+00	0.00E+00
1697	300428.8	4019736	9.96E-05	4.39E-07	0.00E+00	0.00E+00
1698	300450.4	4019727	9.98E-05	4.40E-07	0.00E+00	0.00E+00
1699	300471.9	4019717	1.02E-04	4.51E-07	0.00E+00	0.00E+00
1700	300493.5	4019707	1.07E-04	4.72E-07	0.00E+00	0.00E+00
1701	300515.1	4019698	1.14E-04	5.04E-07	0.00E+00	0.00E+00
1702	300536.6	4019688	1.24E-04	5.48E-07	0.00E+00	0.00E+00
1703	300558.2	4019678	1.37E-04	6.06E-07	0.00E+00	0.00E+00
1704	300579.8	4019669	1.54E-04	6.78E-07	0.00E+00	0.00E+00
1705	300601.3	4019659	1.73E-04	7.63E-07	0.00E+00	0.00E+00
1706	300622.9	4019650	1.95E-04	8.57E-07	0.00E+00	0.00E+00
1707	300644.5	4019640	2.16E-04	9.52E-07	0.00E+00	0.00E+00
1708	300666.1	4019630	2.35E-04	1.04E-06	0.00E+00	0.00E+00
1709	300687.6	4019621	2.51E-04	1.11E-06	0.00E+00	0.00E+00
1710	300709.2	4019611	2.63E-04	1.16E-06	0.00E+00	0.00E+00
1711	300730.8	4019601	2.71E-04	1.20E-06	0.00E+00	0.00E+00
1712	300752.3	4019592	2.76E-04	1.22E-06	0.00E+00	0.00E+00
1713	300773.9	4019582	2.78E-04	1.23E-06	0.00E+00	0.00E+00
1714	300795.5	4019573	2.79E-04	1.23E-06	0.00E+00	0.00E+00
1715	300817	4019563	2.80E-04	1.23E-06	0.00E+00	0.00E+00
1716	300838.6	4019553	2.80E-04	1.23E-06	0.00E+00	0.00E+00
1717	300860.2	4019544	2.82E-04	1.24E-06	0.00E+00	0.00E+00
1718	300881.8	4019534	2.84E-04	1.25E-06	0.00E+00	0.00E+00
1719	300903.3	4019524	2.88E-04	1.27E-06	0.00E+00	0.00E+00
1720	300924.9	4019515	2.93E-04	1.29E-06	0.00E+00	0.00E+00
1721	300073.2	4020423	1.70E-04	7.49E-07	0.00E+00	0.00E+00
1722	300073.7	4020447	1.74E-04	7.66E-07	0.00E+00	0.00E+00
1723	300074.2	4020472	1.79E-04	7.87E-07	0.00E+00	0.00E+00
1724	300074.7	4020496	1.84E-04	8.12E-07	0.00E+00	0.00E+00
1725	300075.2	4020520	1.91E-04	8.43E-07	0.00E+00	0.00E+00
1726	300075.7	4020544	1.99E-04	8.79E-07	0.00E+00	0.00E+00
1727	300076.2	4020569	2.08E-04	9.18E-07	0.00E+00	0.00E+00
1728	299981.9	4020403	1.46E-04	6.45E-07	0.00E+00	0.00E+00
1729	299990.5	4020381	1.46E-04	6.44E-07	0.00E+00	0.00E+00
1730	299999.1	4020359	1.46E-04	6.42E-07	0.00E+00	0.00E+00
1731	300007.7	4020336	1.45E-04	6.39E-07	0.00E+00	0.00E+00
1732	300016.3	4020314	1.44E-04	6.32E-07	0.00E+00	0.00E+00

1733	300024.9	4020292	1.42E-04	6.23E-07	0.00E+00	0.00E+00
1734	300033.5	4020270	1.39E-04	6.12E-07	0.00E+00	0.00E+00
1735	300042.1	4020248	1.36E-04	6.01E-07	0.00E+00	0.00E+00
1736	300050.7	4020226	1.34E-04	5.91E-07	0.00E+00	0.00E+00
1737	300059.3	4020203	1.32E-04	5.84E-07	0.00E+00	0.00E+00
1738	300067.9	4020181	1.31E-04	5.79E-07	0.00E+00	0.00E+00
1739	300076.5	4020159	1.31E-04	5.76E-07	0.00E+00	0.00E+00
1740	300085.1	4020137	1.30E-04	5.75E-07	0.00E+00	0.00E+00
1741	300093.7	4020115	1.31E-04	5.75E-07	0.00E+00	0.00E+00
1742	300102.3	4020093	1.31E-04	5.79E-07	0.00E+00	0.00E+00
1743	300110.9	4020070	1.33E-04	5.86E-07	0.00E+00	0.00E+00
1744	300119.5	4020048	1.36E-04	5.99E-07	0.00E+00	0.00E+00
1745	300128.1	4020026	1.40E-04	6.18E-07	0.00E+00	0.00E+00
1746	300136.7	4020004	1.46E-04	6.41E-07	0.00E+00	0.00E+00
1747	300145.3	4019982	1.51E-04	6.67E-07	0.00E+00	0.00E+00
1748	300153.9	4019959	1.57E-04	6.93E-07	0.00E+00	0.00E+00
1749	300162.5	4019937	1.62E-04	7.15E-07	0.00E+00	0.00E+00
1750	300171.1	4019915	1.66E-04	7.30E-07	0.00E+00	0.00E+00
1751	300179.7	4019893	1.67E-04	7.37E-07	0.00E+00	0.00E+00
1752	300188.3	4019871	1.67E-04	7.34E-07	0.00E+00	0.00E+00
1753	300196.9	4019849	1.64E-04	7.21E-07	0.00E+00	0.00E+00
1754	300205.5	4019826	1.59E-04	6.98E-07	0.00E+00	0.00E+00
1755	300214.1	4019804	1.51E-04	6.67E-07	0.00E+00	0.00E+00
1756	300222.7	4019782	1.43E-04	6.28E-07	0.00E+00	0.00E+00
1757	300231.3	4019760	1.32E-04	5.83E-07	0.00E+00	0.00E+00
1758	300239.9	4019738	1.21E-04	5.34E-07	0.00E+00	0.00E+00
1759	300270.2	4019706	1.02E-04	4.50E-07	0.00E+00	0.00E+00
1760	300291.9	4019696	9.50E-05	4.19E-07	0.00E+00	0.00E+00
1761	300313.6	4019686	8.92E-05	3.93E-07	0.00E+00	0.00E+00
1762	300335.4	4019677	8.50E-05	3.75E-07	0.00E+00	0.00E+00
1763	300357.1	4019667	8.25E-05	3.64E-07	0.00E+00	0.00E+00
1764	300378.8	4019657	8.19E-05	3.61E-07	0.00E+00	0.00E+00
1765	300400.5	4019648	8.28E-05	3.65E-07	0.00E+00	0.00E+00
1766	300422.2	4019638	8.53E-05	3.76E-07	0.00E+00	0.00E+00
1767	300444	4019628	8.94E-05	3.94E-07	0.00E+00	0.00E+00
1768	300465.7	4019619	9.51E-05	4.19E-07	0.00E+00	0.00E+00
1769	300487.4	4019609	1.03E-04	4.54E-07	0.00E+00	0.00E+00
1770	300509.1	4019599	1.13E-04	4.98E-07	0.00E+00	0.00E+00
1771	300530.8	4019589	1.26E-04	5.55E-07	0.00E+00	0.00E+00
1772	300552.6	4019580	1.41E-04	6.23E-07	0.00E+00	0.00E+00
1773	300574.3	4019570	1.59E-04	7.00E-07	0.00E+00	0.00E+00
1774	300596	4019560	1.77E-04	7.80E-07	0.00E+00	0.00E+00
1775	300617.7	4019551	1.95E-04	8.57E-07	0.00E+00	0.00E+00
1776	300639.4	4019541	2.10E-04	9.23E-07	0.00E+00	0.00E+00
1777	300661.1	4019531	2.21E-04	9.75E-07	0.00E+00	0.00E+00
1778	300682.9	4019522	2.29E-04	1.01E-06	0.00E+00	0.00E+00
1779	300704.6	4019512	2.34E-04	1.03E-06	0.00E+00	0.00E+00

1780	300726.3	4019502	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1781	300748	4019492	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1782	300769.7	4019483	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1783	300791.5	4019473	2.35E-04	1.04E-06	0.00E+00	0.00E+00
1784	300813.2	4019463	2.35E-04	1.03E-06	0.00E+00	0.00E+00
1785	300834.9	4019454	2.36E-04	1.04E-06	0.00E+00	0.00E+00
1786	300856.6	4019444	2.37E-04	1.05E-06	0.00E+00	0.00E+00
1787	300878.3	4019434	2.40E-04	1.06E-06	0.00E+00	0.00E+00
1788	300900.1	4019425	2.44E-04	1.07E-06	0.00E+00	0.00E+00
1789	300921.8	4019415	2.48E-04	1.09E-06	0.00E+00	0.00E+00
1790	299973.3	4020425	1.47E-04	6.46E-07	0.00E+00	0.00E+00
1791	299973.8	4020449	1.49E-04	6.58E-07	0.00E+00	0.00E+00
1792	299974.2	4020474	1.53E-04	6.73E-07	0.00E+00	0.00E+00
1793	299974.7	4020498	1.57E-04	6.93E-07	0.00E+00	0.00E+00
1794	299975.2	4020522	1.63E-04	7.17E-07	0.00E+00	0.00E+00
1795	299975.7	4020546	1.69E-04	7.46E-07	0.00E+00	0.00E+00
1796	299976.2	4020571	1.76E-04	7.77E-07	0.00E+00	0.00E+00
1797	299881.9	4020405	1.28E-04	5.64E-07	0.00E+00	0.00E+00
1798	299890.6	4020383	1.28E-04	5.65E-07	0.00E+00	0.00E+00
1799	299899.2	4020360	1.28E-04	5.66E-07	0.00E+00	0.00E+00
1800	299907.9	4020338	1.28E-04	5.66E-07	0.00E+00	0.00E+00
1801	299916.5	4020316	1.28E-04	5.64E-07	0.00E+00	0.00E+00
1802	299925.2	4020293	1.27E-04	5.58E-07	0.00E+00	0.00E+00
1803	299933.8	4020271	1.25E-04	5.50E-07	0.00E+00	0.00E+00
1804	299942.5	4020249	1.22E-04	5.39E-07	0.00E+00	0.00E+00
1805	299951.1	4020227	1.20E-04	5.28E-07	0.00E+00	0.00E+00
1806	299959.8	4020204	1.17E-04	5.17E-07	0.00E+00	0.00E+00
1807	299968.4	4020182	1.15E-04	5.08E-07	0.00E+00	0.00E+00
1808	299977.1	4020160	1.14E-04	5.02E-07	0.00E+00	0.00E+00
1809	299985.7	4020137	1.13E-04	4.97E-07	0.00E+00	0.00E+00
1810	299994.4	4020115	1.12E-04	4.93E-07	0.00E+00	0.00E+00
1811	300003	4020093	1.11E-04	4.91E-07	0.00E+00	0.00E+00
1812	300011.7	4020070	1.11E-04	4.91E-07	0.00E+00	0.00E+00
1813	300020.3	4020048	1.12E-04	4.94E-07	0.00E+00	0.00E+00
1814	300029	4020026	1.14E-04	5.01E-07	0.00E+00	0.00E+00
1815	300037.6	4020003	1.17E-04	5.14E-07	0.00E+00	0.00E+00
1816	300046.3	4019981	1.20E-04	5.31E-07	0.00E+00	0.00E+00
1817	300054.9	4019959	1.25E-04	5.52E-07	0.00E+00	0.00E+00
1818	300063.6	4019937	1.31E-04	5.76E-07	0.00E+00	0.00E+00
1819	300072.2	4019914	1.36E-04	6.00E-07	0.00E+00	0.00E+00
1820	300080.9	4019892	1.41E-04	6.21E-07	0.00E+00	0.00E+00
1821	300089.5	4019870	1.45E-04	6.38E-07	0.00E+00	0.00E+00
1822	300098.2	4019847	1.47E-04	6.48E-07	0.00E+00	0.00E+00
1823	300106.8	4019825	1.48E-04	6.51E-07	0.00E+00	0.00E+00
1824	300115.5	4019803	1.46E-04	6.45E-07	0.00E+00	0.00E+00
1825	300124.1	4019780	1.43E-04	6.31E-07	0.00E+00	0.00E+00
1826	300132.8	4019758	1.38E-04	6.09E-07	0.00E+00	0.00E+00

1827	300141.4	4019736	1.32E-04	5.81E-07	0.00E+00	0.00E+00
1828	300150.1	4019714	1.24E-04	5.46E-07	0.00E+00	0.00E+00
1829	300158.7	4019691	1.15E-04	5.06E-07	0.00E+00	0.00E+00
1830	300167.4	4019669	1.05E-04	4.64E-07	0.00E+00	0.00E+00
1831	300197.9	4019637	8.86E-05	3.90E-07	0.00E+00	0.00E+00
1832	300219.7	4019627	8.21E-05	3.62E-07	0.00E+00	0.00E+00
1833	300241.5	4019617	7.68E-05	3.38E-07	0.00E+00	0.00E+00
1834	300263.4	4019608	7.27E-05	3.20E-07	0.00E+00	0.00E+00
1835	300285.2	4019598	7.01E-05	3.09E-07	0.00E+00	0.00E+00
1836	300307.1	4019588	6.88E-05	3.03E-07	0.00E+00	0.00E+00
1837	300328.9	4019578	6.88E-05	3.03E-07	0.00E+00	0.00E+00
1838	300350.8	4019569	7.01E-05	3.09E-07	0.00E+00	0.00E+00
1839	300372.6	4019559	7.25E-05	3.19E-07	0.00E+00	0.00E+00
1840	300394.5	4019549	7.59E-05	3.34E-07	0.00E+00	0.00E+00
1841	300416.3	4019539	8.06E-05	3.55E-07	0.00E+00	0.00E+00
1842	300438.1	4019530	8.67E-05	3.82E-07	0.00E+00	0.00E+00
1843	300460	4019520	9.48E-05	4.18E-07	0.00E+00	0.00E+00
1844	300481.8	4019510	1.05E-04	4.63E-07	0.00E+00	0.00E+00
1845	300503.7	4019500	1.17E-04	5.17E-07	0.00E+00	0.00E+00
1846	300525.5	4019491	1.32E-04	5.80E-07	0.00E+00	0.00E+00
1847	300547.4	4019481	1.47E-04	6.48E-07	0.00E+00	0.00E+00
1848	300569.2	4019471	1.63E-04	7.16E-07	0.00E+00	0.00E+00
1849	300591.1	4019461	1.77E-04	7.78E-07	0.00E+00	0.00E+00
1850	300612.9	4019452	1.88E-04	8.29E-07	0.00E+00	0.00E+00
1851	300634.7	4019442	1.97E-04	8.66E-07	0.00E+00	0.00E+00
1852	300656.6	4019432	2.02E-04	8.88E-07	0.00E+00	0.00E+00
1853	300678.4	4019422	2.04E-04	8.99E-07	0.00E+00	0.00E+00
1854	300700.3	4019412	2.04E-04	9.00E-07	0.00E+00	0.00E+00
1855	300722.1	4019403	2.03E-04	8.96E-07	0.00E+00	0.00E+00
1856	300744	4019393	2.02E-04	8.90E-07	0.00E+00	0.00E+00
1857	300765.8	4019383	2.01E-04	8.84E-07	0.00E+00	0.00E+00
1858	300787.6	4019373	2.00E-04	8.82E-07	0.00E+00	0.00E+00
1859	300809.5	4019364	2.00E-04	8.83E-07	0.00E+00	0.00E+00
1860	300831.3	4019354	2.02E-04	8.89E-07	0.00E+00	0.00E+00
1861	300853.2	4019344	2.04E-04	8.99E-07	0.00E+00	0.00E+00
1862	300875	4019334	2.07E-04	9.11E-07	0.00E+00	0.00E+00
1863	300896.9	4019325	2.10E-04	9.25E-07	0.00E+00	0.00E+00
1864	300918.7	4019315	2.14E-04	9.41E-07	0.00E+00	0.00E+00
1865	299873.3	4020427	1.28E-04	5.64E-07	0.00E+00	0.00E+00
1866	299873.8	4020451	1.30E-04	5.73E-07	0.00E+00	0.00E+00
1867	299874.3	4020476	1.33E-04	5.86E-07	0.00E+00	0.00E+00
1868	299874.8	4020500	1.37E-04	6.02E-07	0.00E+00	0.00E+00
1869	299875.3	4020524	1.41E-04	6.21E-07	0.00E+00	0.00E+00
1870	299875.8	4020548	1.46E-04	6.44E-07	0.00E+00	0.00E+00
1871	299876.3	4020573	1.52E-04	6.69E-07	0.00E+00	0.00E+00
1872	299782	4020407	1.13E-04	4.98E-07	0.00E+00	0.00E+00
1873	299790.7	4020384	1.13E-04	5.00E-07	0.00E+00	0.00E+00

1874	299799.4	4020362	1.14E-04	5.02E-07	0.00E+00	0.00E+00
1875	299808.1	4020340	1.14E-04	5.04E-07	0.00E+00	0.00E+00
1876	299816.8	4020317	1.14E-04	5.04E-07	0.00E+00	0.00E+00
1877	299825.4	4020295	1.14E-04	5.03E-07	0.00E+00	0.00E+00
1878	299834.1	4020272	1.13E-04	4.99E-07	0.00E+00	0.00E+00
1879	299842.8	4020250	1.11E-04	4.91E-07	0.00E+00	0.00E+00
1880	299851.5	4020228	1.09E-04	4.82E-07	0.00E+00	0.00E+00
1881	299860.2	4020205	1.07E-04	4.71E-07	0.00E+00	0.00E+00
1882	299868.9	4020183	1.04E-04	4.60E-07	0.00E+00	0.00E+00
1883	299877.6	4020160	1.02E-04	4.51E-07	0.00E+00	0.00E+00
1884	299886.3	4020138	1.01E-04	4.44E-07	0.00E+00	0.00E+00
1885	299895	4020116	9.93E-05	4.38E-07	0.00E+00	0.00E+00
1886	299903.7	4020093	9.81E-05	4.32E-07	0.00E+00	0.00E+00
1887	299912.4	4020071	9.72E-05	4.28E-07	0.00E+00	0.00E+00
1888	299921	4020048	9.66E-05	4.26E-07	0.00E+00	0.00E+00
1889	299929.7	4020026	9.65E-05	4.25E-07	0.00E+00	0.00E+00
1890	299938.4	4020003	9.71E-05	4.28E-07	0.00E+00	0.00E+00
1891	299947.1	4019981	9.86E-05	4.35E-07	0.00E+00	0.00E+00
1892	299955.8	4019959	1.01E-04	4.46E-07	0.00E+00	0.00E+00
1893	299964.5	4019936	1.05E-04	4.62E-07	0.00E+00	0.00E+00
1894	299973.2	4019914	1.09E-04	4.81E-07	0.00E+00	0.00E+00
1895	299981.9	4019891	1.14E-04	5.02E-07	0.00E+00	0.00E+00
1896	299990.6	4019869	1.19E-04	5.24E-07	0.00E+00	0.00E+00
1897	299999.3	4019847	1.24E-04	5.45E-07	0.00E+00	0.00E+00
1898	300008	4019824	1.28E-04	5.62E-07	0.00E+00	0.00E+00
1899	300016.6	4019802	1.30E-04	5.75E-07	0.00E+00	0.00E+00
1900	300025.3	4019779	1.32E-04	5.81E-07	0.00E+00	0.00E+00
1901	300034	4019757	1.32E-04	5.80E-07	0.00E+00	0.00E+00
1902	300042.7	4019735	1.30E-04	5.72E-07	0.00E+00	0.00E+00
1903	300051.4	4019712	1.27E-04	5.58E-07	0.00E+00	0.00E+00
1904	300060.1	4019690	1.22E-04	5.38E-07	0.00E+00	0.00E+00
1905	300068.8	4019667	1.16E-04	5.12E-07	0.00E+00	0.00E+00
1906	300077.5	4019645	1.09E-04	4.81E-07	0.00E+00	0.00E+00
1907	300086.2	4019622	1.01E-04	4.45E-07	0.00E+00	0.00E+00
1908	300094.9	4019600	9.26E-05	4.08E-07	0.00E+00	0.00E+00
1909	300125.5	4019568	7.79E-05	3.43E-07	0.00E+00	0.00E+00
1910	300147.5	4019558	7.20E-05	3.17E-07	0.00E+00	0.00E+00
1911	300169.4	4019548	6.71E-05	2.96E-07	0.00E+00	0.00E+00
1912	300191.4	4019538	6.33E-05	2.79E-07	0.00E+00	0.00E+00
1913	300213.3	4019529	6.05E-05	2.67E-07	0.00E+00	0.00E+00
1914	300235.2	4019519	5.91E-05	2.60E-07	0.00E+00	0.00E+00
1915	300257.2	4019509	5.87E-05	2.59E-07	0.00E+00	0.00E+00
1916	300279.1	4019499	5.92E-05	2.61E-07	0.00E+00	0.00E+00
1917	300301.1	4019489	6.05E-05	2.67E-07	0.00E+00	0.00E+00
1918	300323	4019480	6.27E-05	2.76E-07	0.00E+00	0.00E+00
1919	300345	4019470	6.55E-05	2.89E-07	0.00E+00	0.00E+00
1920	300366.9	4019460	6.94E-05	3.06E-07	0.00E+00	0.00E+00

1921	300388.9	4019450	7.44E-05	3.28E-07	0.00E+00	0.00E+00
1922	300410.8	4019440	8.07E-05	3.56E-07	0.00E+00	0.00E+00
1923	300432.8	4019431	8.88E-05	3.91E-07	0.00E+00	0.00E+00
1924	300454.7	4019421	9.88E-05	4.35E-07	0.00E+00	0.00E+00
1925	300476.7	4019411	1.11E-04	4.87E-07	0.00E+00	0.00E+00
1926	300498.6	4019401	1.24E-04	5.45E-07	0.00E+00	0.00E+00
1927	300520.6	4019391	1.37E-04	6.05E-07	0.00E+00	0.00E+00
1928	300542.5	4019382	1.50E-04	6.62E-07	0.00E+00	0.00E+00
1929	300564.5	4019372	1.61E-04	7.11E-07	0.00E+00	0.00E+00
1930	300586.4	4019362	1.70E-04	7.49E-07	0.00E+00	0.00E+00
1931	300608.4	4019352	1.76E-04	7.75E-07	0.00E+00	0.00E+00
1932	300630.3	4019342	1.79E-04	7.88E-07	0.00E+00	0.00E+00
1933	300652.3	4019333	1.80E-04	7.91E-07	0.00E+00	0.00E+00
1934	300674.2	4019323	1.79E-04	7.87E-07	0.00E+00	0.00E+00
1935	300696.2	4019313	1.77E-04	7.80E-07	0.00E+00	0.00E+00
1936	300718.1	4019303	1.75E-04	7.72E-07	0.00E+00	0.00E+00
1937	300740.1	4019293	1.74E-04	7.65E-07	0.00E+00	0.00E+00
1938	300762	4019284	1.73E-04	7.62E-07	0.00E+00	0.00E+00
1939	300784	4019274	1.73E-04	7.63E-07	0.00E+00	0.00E+00
1940	300805.9	4019264	1.74E-04	7.68E-07	0.00E+00	0.00E+00
1941	300827.9	4019254	1.76E-04	7.76E-07	0.00E+00	0.00E+00
1942	300849.8	4019244	1.78E-04	7.86E-07	0.00E+00	0.00E+00
1943	300871.8	4019235	1.81E-04	7.97E-07	0.00E+00	0.00E+00
1944	300893.7	4019225	1.83E-04	8.08E-07	0.00E+00	0.00E+00
1945	300915.7	4019215	1.86E-04	8.21E-07	0.00E+00	0.00E+00
1946	299773.3	4020429	1.13E-04	4.98E-07	0.00E+00	0.00E+00
1947	299773.8	4020454	1.15E-04	5.06E-07	0.00E+00	0.00E+00
1948	299774.3	4020478	1.17E-04	5.17E-07	0.00E+00	0.00E+00
1949	299774.8	4020502	1.20E-04	5.30E-07	0.00E+00	0.00E+00
1950	299775.3	4020526	1.24E-04	5.46E-07	0.00E+00	0.00E+00
1951	299775.8	4020550	1.28E-04	5.64E-07	0.00E+00	0.00E+00
1952	299776.3	4020575	1.33E-04	5.85E-07	0.00E+00	0.00E+00
1953	299682	4020409	1.01E-04	4.45E-07	0.00E+00	0.00E+00
1954	299690.8	4020386	1.01E-04	4.46E-07	0.00E+00	0.00E+00
1955	299699.5	4020364	1.02E-04	4.48E-07	0.00E+00	0.00E+00
1956	299708.2	4020341	1.02E-04	4.51E-07	0.00E+00	0.00E+00
1957	299716.9	4020319	1.03E-04	4.53E-07	0.00E+00	0.00E+00
1958	299725.7	4020296	1.03E-04	4.54E-07	0.00E+00	0.00E+00
1959	299734.4	4020274	1.03E-04	4.53E-07	0.00E+00	0.00E+00
1960	299743.1	4020251	1.02E-04	4.50E-07	0.00E+00	0.00E+00
1961	299751.9	4020229	1.01E-04	4.43E-07	0.00E+00	0.00E+00
1962	299760.6	4020206	9.86E-05	4.35E-07	0.00E+00	0.00E+00
1963	299769.3	4020184	9.64E-05	4.25E-07	0.00E+00	0.00E+00
1964	299778	4020161	9.42E-05	4.15E-07	0.00E+00	0.00E+00
1965	299786.8	4020139	9.22E-05	4.06E-07	0.00E+00	0.00E+00
1966	299795.5	4020116	9.04E-05	3.98E-07	0.00E+00	0.00E+00
1967	299804.2	4020094	8.89E-05	3.92E-07	0.00E+00	0.00E+00

1968	299812.9	4020071	8.75E-05	3.86E-07	0.00E+00	0.00E+00
1969	299821.7	4020049	8.64E-05	3.81E-07	0.00E+00	0.00E+00
1970	299830.4	4020026	8.54E-05	3.76E-07	0.00E+00	0.00E+00
1971	299839.1	4020004	8.47E-05	3.73E-07	0.00E+00	0.00E+00
1972	299847.8	4019981	8.46E-05	3.73E-07	0.00E+00	0.00E+00
1973	299856.6	4019959	8.53E-05	3.76E-07	0.00E+00	0.00E+00
1974	299865.3	4019936	8.67E-05	3.82E-07	0.00E+00	0.00E+00
1975	299874	4019914	8.91E-05	3.93E-07	0.00E+00	0.00E+00
1976	299882.8	4019891	9.22E-05	4.06E-07	0.00E+00	0.00E+00
1977	299891.5	4019869	9.60E-05	4.23E-07	0.00E+00	0.00E+00
1978	299900.2	4019846	1.00E-04	4.42E-07	0.00E+00	0.00E+00
1979	299908.9	4019824	1.05E-04	4.62E-07	0.00E+00	0.00E+00
1980	299917.7	4019801	1.09E-04	4.81E-07	0.00E+00	0.00E+00
1981	299926.4	4019779	1.13E-04	4.98E-07	0.00E+00	0.00E+00
1982	299935.1	4019756	1.16E-04	5.11E-07	0.00E+00	0.00E+00
1983	299943.8	4019734	1.18E-04	5.20E-07	0.00E+00	0.00E+00
1984	299952.6	4019711	1.19E-04	5.23E-07	0.00E+00	0.00E+00
1985	299961.3	4019689	1.18E-04	5.20E-07	0.00E+00	0.00E+00
1986	299970	4019666	1.16E-04	5.12E-07	0.00E+00	0.00E+00
1987	299978.7	4019644	1.13E-04	4.98E-07	0.00E+00	0.00E+00
1988	299987.5	4019621	1.09E-04	4.79E-07	0.00E+00	0.00E+00
1989	299996.2	4019599	1.03E-04	4.55E-07	0.00E+00	0.00E+00
1990	300004.9	4019576	9.69E-05	4.27E-07	0.00E+00	0.00E+00
1991	300013.6	4019554	8.99E-05	3.96E-07	0.00E+00	0.00E+00
1992	300022.4	4019531	8.24E-05	3.63E-07	0.00E+00	0.00E+00
1993	300053.1	4019499	6.93E-05	3.05E-07	0.00E+00	0.00E+00
1994	300075.2	4019489	6.40E-05	2.82E-07	0.00E+00	0.00E+00
1995	300097.2	4019479	5.94E-05	2.62E-07	0.00E+00	0.00E+00
1996	300119.3	4019469	5.59E-05	2.46E-07	0.00E+00	0.00E+00
1997	300141.3	4019460	5.33E-05	2.35E-07	0.00E+00	0.00E+00
1998	300163.3	4019450	5.17E-05	2.28E-07	0.00E+00	0.00E+00
1999	300185.4	4019440	5.09E-05	2.24E-07	0.00E+00	0.00E+00
2000	300207.4	4019430	5.10E-05	2.25E-07	0.00E+00	0.00E+00
2001	300229.4	4019420	5.18E-05	2.28E-07	0.00E+00	0.00E+00
2002	300251.5	4019410	5.31E-05	2.34E-07	0.00E+00	0.00E+00
2003	300273.5	4019401	5.50E-05	2.42E-07	0.00E+00	0.00E+00
2004	300295.6	4019391	5.74E-05	2.53E-07	0.00E+00	0.00E+00
2005	300317.6	4019381	6.05E-05	2.67E-07	0.00E+00	0.00E+00
2006	300339.6	4019371	6.45E-05	2.84E-07	0.00E+00	0.00E+00
2007	300361.7	4019361	6.96E-05	3.07E-07	0.00E+00	0.00E+00
2008	300383.7	4019351	7.62E-05	3.36E-07	0.00E+00	0.00E+00
2009	300405.7	4019341	8.42E-05	3.71E-07	0.00E+00	0.00E+00
2010	300427.8	4019332	9.40E-05	4.14E-07	0.00E+00	0.00E+00
2011	300449.8	4019322	1.05E-04	4.63E-07	0.00E+00	0.00E+00
2012	300471.9	4019312	1.17E-04	5.16E-07	0.00E+00	0.00E+00
2013	300493.9	4019302	1.29E-04	5.67E-07	0.00E+00	0.00E+00
2014	300515.9	4019292	1.39E-04	6.14E-07	0.00E+00	0.00E+00

2015	300538	4019282	1.48E-04	6.53E-07	0.00E+00	0.00E+00
2016	300560	4019273	1.55E-04	6.81E-07	0.00E+00	0.00E+00
2017	300582	4019263	1.58E-04	6.98E-07	0.00E+00	0.00E+00
2018	300604.1	4019253	1.60E-04	7.04E-07	0.00E+00	0.00E+00
2019	300626.1	4019243	1.59E-04	7.02E-07	0.00E+00	0.00E+00
2020	300648.2	4019233	1.58E-04	6.95E-07	0.00E+00	0.00E+00
2021	300670.2	4019223	1.56E-04	6.86E-07	0.00E+00	0.00E+00
2022	300692.2	4019214	1.54E-04	6.77E-07	0.00E+00	0.00E+00
2023	300714.3	4019204	1.52E-04	6.70E-07	0.00E+00	0.00E+00
2024	300736.3	4019194	1.51E-04	6.67E-07	0.00E+00	0.00E+00
2025	300758.3	4019184	1.52E-04	6.68E-07	0.00E+00	0.00E+00
2026	300780.4	4019174	1.53E-04	6.72E-07	0.00E+00	0.00E+00
2027	300802.4	4019164	1.54E-04	6.78E-07	0.00E+00	0.00E+00
2028	300824.5	4019154	1.56E-04	6.86E-07	0.00E+00	0.00E+00
2029	300846.5	4019145	1.58E-04	6.95E-07	0.00E+00	0.00E+00
2030	300868.5	4019135	1.60E-04	7.05E-07	0.00E+00	0.00E+00
2031	300890.6	4019125	1.62E-04	7.15E-07	0.00E+00	0.00E+00
2032	300912.6	4019115	1.64E-04	7.24E-07	0.00E+00	0.00E+00
2033	299673.3	4020431	1.01E-04	4.46E-07	0.00E+00	0.00E+00
2034	299673.8	4020456	1.03E-04	4.53E-07	0.00E+00	0.00E+00
2035	299674.3	4020480	1.05E-04	4.61E-07	0.00E+00	0.00E+00
2036	299674.8	4020504	1.07E-04	4.72E-07	0.00E+00	0.00E+00
2037	299675.3	4020528	1.10E-04	4.85E-07	0.00E+00	0.00E+00
2038	299675.8	4020553	1.13E-04	5.00E-07	0.00E+00	0.00E+00
2039	299676.3	4020577	1.17E-04	5.17E-07	0.00E+00	0.00E+00
2040	299582.1	4020411	9.13E-05	4.02E-07	0.00E+00	0.00E+00
2041	299590.9	4020388	9.13E-05	4.02E-07	0.00E+00	0.00E+00
2042	299599.6	4020366	9.16E-05	4.04E-07	0.00E+00	0.00E+00
2043	299608.4	4020343	9.20E-05	4.05E-07	0.00E+00	0.00E+00
2044	299617.1	4020320	9.26E-05	4.08E-07	0.00E+00	0.00E+00
2045	299625.9	4020298	9.31E-05	4.10E-07	0.00E+00	0.00E+00
2046	299634.6	4020275	9.34E-05	4.12E-07	0.00E+00	0.00E+00
2047	299643.4	4020253	9.34E-05	4.12E-07	0.00E+00	0.00E+00
2048	299652.2	4020230	9.28E-05	4.09E-07	0.00E+00	0.00E+00
2049	299660.9	4020208	9.15E-05	4.03E-07	0.00E+00	0.00E+00
2050	299669.7	4020185	8.98E-05	3.96E-07	0.00E+00	0.00E+00
2051	299678.4	4020162	8.78E-05	3.87E-07	0.00E+00	0.00E+00
2052	299687.2	4020140	8.58E-05	3.78E-07	0.00E+00	0.00E+00
2053	299695.9	4020117	8.39E-05	3.70E-07	0.00E+00	0.00E+00
2054	299704.7	4020095	8.22E-05	3.62E-07	0.00E+00	0.00E+00
2055	299713.4	4020072	8.07E-05	3.56E-07	0.00E+00	0.00E+00
2056	299722.2	4020050	7.94E-05	3.50E-07	0.00E+00	0.00E+00
2057	299731	4020027	7.80E-05	3.44E-07	0.00E+00	0.00E+00
2058	299739.7	4020004	7.68E-05	3.38E-07	0.00E+00	0.00E+00
2059	299748.5	4019982	7.56E-05	3.33E-07	0.00E+00	0.00E+00
2060	299757.2	4019959	7.51E-05	3.31E-07	0.00E+00	0.00E+00
2061	299766	4019937	7.50E-05	3.30E-07	0.00E+00	0.00E+00

2062	299774.7	4019914	7.56E-05	3.33E-07	0.00E+00	0.00E+00
2063	299783.5	4019891	7.70E-05	3.39E-07	0.00E+00	0.00E+00
2064	299792.3	4019869	7.91E-05	3.49E-07	0.00E+00	0.00E+00
2065	299801	4019846	8.20E-05	3.61E-07	0.00E+00	0.00E+00
2066	299809.8	4019824	8.54E-05	3.76E-07	0.00E+00	0.00E+00
2067	299818.5	4019801	8.91E-05	3.93E-07	0.00E+00	0.00E+00
2068	299827.3	4019779	9.30E-05	4.10E-07	0.00E+00	0.00E+00
2069	299836	4019756	9.69E-05	4.27E-07	0.00E+00	0.00E+00
2070	299844.8	4019733	1.01E-04	4.44E-07	0.00E+00	0.00E+00
2071	299853.6	4019711	1.04E-04	4.57E-07	0.00E+00	0.00E+00
2072	299862.3	4019688	1.06E-04	4.67E-07	0.00E+00	0.00E+00
2073	299871.1	4019666	1.07E-04	4.72E-07	0.00E+00	0.00E+00
2074	299879.8	4019643	1.07E-04	4.73E-07	0.00E+00	0.00E+00
2075	299888.6	4019620	1.06E-04	4.69E-07	0.00E+00	0.00E+00
2076	299897.3	4019598	1.05E-04	4.61E-07	0.00E+00	0.00E+00
2077	299906.1	4019575	1.02E-04	4.48E-07	0.00E+00	0.00E+00
2078	299914.9	4019553	9.76E-05	4.30E-07	0.00E+00	0.00E+00
2079	299923.6	4019530	9.28E-05	4.09E-07	0.00E+00	0.00E+00
2080	299932.4	4019508	8.71E-05	3.84E-07	0.00E+00	0.00E+00
2081	299941.1	4019485	8.07E-05	3.56E-07	0.00E+00	0.00E+00
2082	299949.9	4019462	7.40E-05	3.26E-07	0.00E+00	0.00E+00
2083	299980.8	4019430	6.23E-05	2.74E-07	0.00E+00	0.00E+00
2084	300002.9	4019420	5.75E-05	2.53E-07	0.00E+00	0.00E+00
2085	300025	4019410	5.33E-05	2.35E-07	0.00E+00	0.00E+00
2086	300047.1	4019400	5.00E-05	2.20E-07	0.00E+00	0.00E+00
2087	300069.2	4019390	4.75E-05	2.09E-07	0.00E+00	0.00E+00
2088	300091.3	4019381	4.58E-05	2.02E-07	0.00E+00	0.00E+00
2089	300113.4	4019371	4.49E-05	1.98E-07	0.00E+00	0.00E+00
2090	300135.6	4019361	4.47E-05	1.97E-07	0.00E+00	0.00E+00
2091	300157.7	4019351	4.51E-05	1.99E-07	0.00E+00	0.00E+00
2092	300179.8	4019341	4.59E-05	2.02E-07	0.00E+00	0.00E+00
2093	300201.9	4019331	4.72E-05	2.08E-07	0.00E+00	0.00E+00
2094	300224	4019321	4.88E-05	2.15E-07	0.00E+00	0.00E+00
2095	300246.1	4019311	5.09E-05	2.24E-07	0.00E+00	0.00E+00
2096	300268.3	4019302	5.35E-05	2.36E-07	0.00E+00	0.00E+00
2097	300290.4	4019292	5.67E-05	2.50E-07	0.00E+00	0.00E+00
2098	300312.5	4019282	6.09E-05	2.68E-07	0.00E+00	0.00E+00
2099	300334.6	4019272	6.62E-05	2.92E-07	0.00E+00	0.00E+00
2100	300356.7	4019262	7.28E-05	3.21E-07	0.00E+00	0.00E+00
2101	300378.8	4019252	8.08E-05	3.56E-07	0.00E+00	0.00E+00
2102	300400.9	4019242	9.01E-05	3.97E-07	0.00E+00	0.00E+00
2103	300423.1	4019232	1.00E-04	4.43E-07	0.00E+00	0.00E+00
2104	300445.2	4019223	1.11E-04	4.89E-07	0.00E+00	0.00E+00
2105	300467.3	4019213	1.21E-04	5.34E-07	0.00E+00	0.00E+00
2106	300489.4	4019203	1.30E-04	5.73E-07	0.00E+00	0.00E+00
2107	300511.5	4019193	1.37E-04	6.03E-07	0.00E+00	0.00E+00
2108	300533.6	4019183	1.41E-04	6.22E-07	0.00E+00	0.00E+00

2109	300555.7	4019173	1.43E-04	6.32E-07	0.00E+00	0.00E+00
2110	300577.9	4019163	1.44E-04	6.33E-07	0.00E+00	0.00E+00
2111	300600	4019153	1.42E-04	6.27E-07	0.00E+00	0.00E+00
2112	300622.1	4019144	1.40E-04	6.18E-07	0.00E+00	0.00E+00
2113	300644.2	4019134	1.38E-04	6.08E-07	0.00E+00	0.00E+00
2114	300666.3	4019124	1.36E-04	6.00E-07	0.00E+00	0.00E+00
2115	300688.4	4019114	1.35E-04	5.93E-07	0.00E+00	0.00E+00
2116	300710.5	4019104	1.34E-04	5.91E-07	0.00E+00	0.00E+00
2117	300732.7	4019094	1.34E-04	5.91E-07	0.00E+00	0.00E+00
2118	300754.8	4019084	1.35E-04	5.95E-07	0.00E+00	0.00E+00
2119	300776.9	4019074	1.36E-04	6.00E-07	0.00E+00	0.00E+00
2120	300799	4019065	1.38E-04	6.07E-07	0.00E+00	0.00E+00
2121	300821.1	4019055	1.39E-04	6.14E-07	0.00E+00	0.00E+00
2122	300843.2	4019045	1.41E-04	6.22E-07	0.00E+00	0.00E+00
2123	300865.3	4019035	1.43E-04	6.30E-07	0.00E+00	0.00E+00
2124	300887.5	4019025	1.45E-04	6.38E-07	0.00E+00	0.00E+00
2125	300909.6	4019015	1.47E-04	6.46E-07	0.00E+00	0.00E+00
2126	299573.3	4020433	9.15E-05	4.03E-07	0.00E+00	0.00E+00
2127	299573.8	4020458	9.28E-05	4.09E-07	0.00E+00	0.00E+00
2128	299574.3	4020482	9.42E-05	4.15E-07	0.00E+00	0.00E+00
2129	299574.8	4020506	9.62E-05	4.24E-07	0.00E+00	0.00E+00
2130	299575.3	4020530	9.84E-05	4.34E-07	0.00E+00	0.00E+00
2131	299575.8	4020555	1.01E-04	4.47E-07	0.00E+00	0.00E+00
2132	299576.3	4020579	1.05E-04	4.61E-07	0.00E+00	0.00E+00
2133	300976.6	4020575	2.37E-02	1.04E-04	0.00E+00	0.00E+00
2134	301015.6	4020574	3.93E-02	1.73E-04	0.00E+00	0.00E+00
2135	300959.2	4020593	1.58E-02	6.96E-05	0.00E+00	0.00E+00
2136	300996.6	4020600	2.38E-02	1.05E-04	0.00E+00	0.00E+00
2137	301035.7	4020599	3.88E-02	1.71E-04	0.00E+00	0.00E+00
2138	300959.8	4020618	1.40E-02	6.15E-05	0.00E+00	0.00E+00
2139	300916.4	4020587	9.14E-03	4.03E-05	0.00E+00	0.00E+00
2140	300997.2	4020625	2.06E-02	9.07E-05	0.00E+00	0.00E+00
2141	301036.2	4020624	3.56E-02	1.57E-04	0.00E+00	0.00E+00
2142	300960.3	4020643	1.29E-02	5.68E-05	0.00E+00	0.00E+00
2143	300924.6	4020629	9.31E-03	4.10E-05	0.00E+00	0.00E+00
2144	300899.1	4020605	7.35E-03	3.24E-05	0.00E+00	0.00E+00
2145	300997.7	4020650	1.91E-02	8.43E-05	0.00E+00	0.00E+00
2146	301036.8	4020649	3.43E-02	1.51E-04	0.00E+00	0.00E+00
2147	300960.8	4020668	1.23E-02	5.42E-05	0.00E+00	0.00E+00
2148	300925.2	4020654	8.95E-03	3.94E-05	0.00E+00	0.00E+00
2149	300881.8	4020623	6.12E-03	2.70E-05	0.00E+00	0.00E+00
2150	300866.4	4020588	5.15E-03	2.27E-05	0.00E+00	0.00E+00
2151	300998.2	4020675	1.84E-02	8.12E-05	0.00E+00	0.00E+00
2152	301037.3	4020674	3.37E-02	1.48E-04	0.00E+00	0.00E+00
2153	300961.4	4020693	1.20E-02	5.27E-05	0.00E+00	0.00E+00
2154	300925.7	4020679	8.71E-03	3.84E-05	0.00E+00	0.00E+00
2155	300890	4020665	6.47E-03	2.85E-05	0.00E+00	0.00E+00

2156	300864.5	4020641	5.22E-03	2.30E-05	0.00E+00	0.00E+00
2157	300849.1	4020606	4.44E-03	1.96E-05	0.00E+00	0.00E+00
2158	300998.7	4020700	1.80E-02	7.95E-05	0.00E+00	0.00E+00
2159	301037.8	4020699	3.33E-02	1.47E-04	0.00E+00	0.00E+00
2160	300961.9	4020718	1.18E-02	5.18E-05	0.00E+00	0.00E+00
2161	300926.2	4020704	8.54E-03	3.76E-05	0.00E+00	0.00E+00
2162	300890.5	4020690	6.40E-03	2.82E-05	0.00E+00	0.00E+00
2163	300847.2	4020659	4.53E-03	2.00E-05	0.00E+00	0.00E+00
2164	300831.8	4020624	3.89E-03	1.71E-05	0.00E+00	0.00E+00
2165	300816.4	4020589	3.24E-03	1.43E-05	0.00E+00	0.00E+00
2166	300999.3	4020725	1.78E-02	7.84E-05	0.00E+00	0.00E+00
2167	301038.4	4020724	3.29E-02	1.45E-04	0.00E+00	0.00E+00
2168	300962.4	4020743	1.16E-02	5.11E-05	0.00E+00	0.00E+00
2169	300926.7	4020729	8.43E-03	3.72E-05	0.00E+00	0.00E+00
2170	300891.1	4020715	6.35E-03	2.80E-05	0.00E+00	0.00E+00
2171	300855.4	4020701	4.86E-03	2.14E-05	0.00E+00	0.00E+00
2172	300829.9	4020677	3.99E-03	1.76E-05	0.00E+00	0.00E+00
2173	300814.5	4020642	3.45E-03	1.52E-05	0.00E+00	0.00E+00
2174	300799.1	4020607	2.91E-03	1.28E-05	0.00E+00	0.00E+00
2175	300999.8	4020750	1.76E-02	7.74E-05	0.00E+00	0.00E+00
2176	301038.9	4020749	3.25E-02	1.43E-04	0.00E+00	0.00E+00
2177	300963.5	4020793	1.13E-02	4.97E-05	0.00E+00	0.00E+00
2178	300927.8	4020779	8.28E-03	3.65E-05	0.00E+00	0.00E+00
2179	300892.1	4020765	6.29E-03	2.77E-05	0.00E+00	0.00E+00
2180	300856.5	4020751	4.89E-03	2.15E-05	0.00E+00	0.00E+00
2181	300820.8	4020738	3.85E-03	1.69E-05	0.00E+00	0.00E+00
2182	300795.3	4020713	3.21E-03	1.42E-05	0.00E+00	0.00E+00
2183	300779.9	4020678	2.81E-03	1.24E-05	0.00E+00	0.00E+00
2184	300764.5	4020643	2.42E-03	1.06E-05	0.00E+00	0.00E+00
2185	300749.1	4020608	2.04E-03	9.00E-06	0.00E+00	0.00E+00
2186	301000.8	4020800	1.69E-02	7.45E-05	0.00E+00	0.00E+00
2187	301039.9	4020799	3.10E-02	1.37E-04	0.00E+00	0.00E+00
2188	300964.5	4020843	1.08E-02	4.74E-05	0.00E+00	0.00E+00
2189	300928.9	4020829	8.05E-03	3.55E-05	0.00E+00	0.00E+00
2190	300893.2	4020815	6.20E-03	2.73E-05	0.00E+00	0.00E+00
2191	300857.5	4020801	4.87E-03	2.15E-05	0.00E+00	0.00E+00
2192	300821.9	4020787	3.89E-03	1.71E-05	0.00E+00	0.00E+00
2193	300786.2	4020774	3.13E-03	1.38E-05	0.00E+00	0.00E+00
2194	300760.7	4020749	2.66E-03	1.17E-05	0.00E+00	0.00E+00
2195	300745.3	4020714	2.36E-03	1.04E-05	0.00E+00	0.00E+00
2196	300729.9	4020679	2.06E-03	9.09E-06	0.00E+00	0.00E+00
2197	300714.5	4020644	1.78E-03	7.84E-06	0.00E+00	0.00E+00
2198	300699.2	4020609	1.51E-03	6.65E-06	0.00E+00	0.00E+00
2199	301001.9	4020850	1.57E-02	6.93E-05	0.00E+00	0.00E+00
2200	301041	4020849	2.78E-02	1.23E-04	0.00E+00	0.00E+00
2201	300965.6	4020893	9.70E-03	4.27E-05	0.00E+00	0.00E+00
2202	300929.9	4020879	7.58E-03	3.34E-05	0.00E+00	0.00E+00

2203	300894.2	4020865	6.01E-03	2.65E-05	0.00E+00	0.00E+00
2204	300858.6	4020851	4.81E-03	2.12E-05	0.00E+00	0.00E+00
2205	300822.9	4020837	3.89E-03	1.71E-05	0.00E+00	0.00E+00
2206	300787.2	4020824	3.18E-03	1.40E-05	0.00E+00	0.00E+00
2207	300751.6	4020810	2.61E-03	1.15E-05	0.00E+00	0.00E+00
2208	300726	4020785	2.24E-03	9.89E-06	0.00E+00	0.00E+00
2209	300710.7	4020750	2.01E-03	8.87E-06	0.00E+00	0.00E+00
2210	300695.3	4020715	1.79E-03	7.88E-06	0.00E+00	0.00E+00
2211	300679.9	4020680	1.57E-03	6.92E-06	0.00E+00	0.00E+00
2212	300664.5	4020645	1.36E-03	5.99E-06	0.00E+00	0.00E+00
2213	300649.2	4020610	1.17E-03	5.14E-06	0.00E+00	0.00E+00
2214	301003	4020900	1.32E-02	5.80E-05	0.00E+00	0.00E+00
2215	301042	4020899	1.97E-02	8.66E-05	0.00E+00	0.00E+00
2216	300966.6	4020943	8.14E-03	3.59E-05	0.00E+00	0.00E+00
2217	300931	4020929	6.77E-03	2.98E-05	0.00E+00	0.00E+00
2218	300895.3	4020915	5.59E-03	2.46E-05	0.00E+00	0.00E+00
2219	300859.6	4020901	4.60E-03	2.03E-05	0.00E+00	0.00E+00
2220	300824	4020887	3.80E-03	1.67E-05	0.00E+00	0.00E+00
2221	300788.3	4020874	3.16E-03	1.39E-05	0.00E+00	0.00E+00
2222	300752.6	4020860	2.64E-03	1.17E-05	0.00E+00	0.00E+00
2223	300717	4020846	2.21E-03	9.74E-06	0.00E+00	0.00E+00
2224	300691.4	4020821	1.93E-03	8.49E-06	0.00E+00	0.00E+00
2225	300676.1	4020786	1.74E-03	7.68E-06	0.00E+00	0.00E+00
2226	300660.7	4020751	1.57E-03	6.90E-06	0.00E+00	0.00E+00
2227	300645.3	4020716	1.39E-03	6.14E-06	0.00E+00	0.00E+00
2228	300629.9	4020681	1.23E-03	5.42E-06	0.00E+00	0.00E+00
2229	300614.6	4020646	1.07E-03	4.73E-06	0.00E+00	0.00E+00
2230	300599.2	4020611	9.32E-04	4.11E-06	0.00E+00	0.00E+00
2231	301004	4020950	1.00E-02	4.43E-05	0.00E+00	0.00E+00
2232	301043.1	4020949	1.28E-02	5.65E-05	0.00E+00	0.00E+00
2233	300967.7	4020993	6.57E-03	2.89E-05	0.00E+00	0.00E+00
2234	300932	4020979	5.79E-03	2.55E-05	0.00E+00	0.00E+00
2235	300896.4	4020965	5.00E-03	2.20E-05	0.00E+00	0.00E+00
2236	300860.7	4020951	4.27E-03	1.88E-05	0.00E+00	0.00E+00
2237	300825	4020937	3.62E-03	1.60E-05	0.00E+00	0.00E+00
2238	300789.3	4020924	3.06E-03	1.35E-05	0.00E+00	0.00E+00
2239	300753.7	4020910	2.60E-03	1.15E-05	0.00E+00	0.00E+00
2240	300718	4020896	2.22E-03	9.78E-06	0.00E+00	0.00E+00
2241	300682.3	4020882	1.89E-03	8.32E-06	0.00E+00	0.00E+00
2242	300656.8	4020857	1.67E-03	7.37E-06	0.00E+00	0.00E+00
2243	300641.4	4020822	1.53E-03	6.74E-06	0.00E+00	0.00E+00
2244	300626.1	4020787	1.39E-03	6.11E-06	0.00E+00	0.00E+00
2245	300610.7	4020752	1.25E-03	5.49E-06	0.00E+00	0.00E+00
2246	300595.3	4020717	1.11E-03	4.90E-06	0.00E+00	0.00E+00
2247	300579.9	4020682	9.86E-04	4.35E-06	0.00E+00	0.00E+00
2248	300564.6	4020647	8.68E-04	3.83E-06	0.00E+00	0.00E+00
2249	300549.2	4020612	7.64E-04	3.37E-06	0.00E+00	0.00E+00

2250	301005.1	4021000	7.53E-03	3.32E-05	0.00E+00	0.00E+00
2251	301044.2	4020999	8.83E-03	3.89E-05	0.00E+00	0.00E+00
2252	300968.7	4021043	5.23E-03	2.31E-05	0.00E+00	0.00E+00
2253	300933.1	4021029	4.84E-03	2.13E-05	0.00E+00	0.00E+00
2254	300897.4	4021015	4.35E-03	1.92E-05	0.00E+00	0.00E+00
2255	300861.7	4021001	3.85E-03	1.70E-05	0.00E+00	0.00E+00
2256	300826.1	4020987	3.37E-03	1.48E-05	0.00E+00	0.00E+00
2257	300790.4	4020974	2.91E-03	1.28E-05	0.00E+00	0.00E+00
2258	300754.7	4020960	2.51E-03	1.11E-05	0.00E+00	0.00E+00
2259	300719.1	4020946	2.17E-03	9.58E-06	0.00E+00	0.00E+00
2260	300683.4	4020932	1.88E-03	8.29E-06	0.00E+00	0.00E+00
2261	300647.7	4020918	1.62E-03	7.16E-06	0.00E+00	0.00E+00
2262	300622.2	4020893	1.46E-03	6.43E-06	0.00E+00	0.00E+00
2263	300606.8	4020858	1.35E-03	5.97E-06	0.00E+00	0.00E+00
2264	300591.5	4020823	1.24E-03	5.46E-06	0.00E+00	0.00E+00
2265	300576.1	4020788	1.12E-03	4.95E-06	0.00E+00	0.00E+00
2266	300560.7	4020753	1.01E-03	4.46E-06	0.00E+00	0.00E+00
2267	300545.3	4020718	9.07E-04	4.00E-06	0.00E+00	0.00E+00
2268	300529.9	4020683	8.08E-04	3.56E-06	0.00E+00	0.00E+00
2269	300514.6	4020648	7.18E-04	3.16E-06	0.00E+00	0.00E+00
2270	300499.2	4020613	6.39E-04	2.81E-06	0.00E+00	0.00E+00
2271	301006.1	4021050	5.73E-03	2.52E-05	0.00E+00	0.00E+00
2272	301045.2	4021049	6.39E-03	2.81E-05	0.00E+00	0.00E+00
2273	300969.8	4021093	4.19E-03	1.85E-05	0.00E+00	0.00E+00
2274	300934.1	4021079	4.00E-03	1.76E-05	0.00E+00	0.00E+00
2275	300898.5	4021065	3.73E-03	1.64E-05	0.00E+00	0.00E+00
2276	300862.8	4021051	3.40E-03	1.50E-05	0.00E+00	0.00E+00
2277	300827.1	4021037	3.06E-03	1.35E-05	0.00E+00	0.00E+00
2278	300791.5	4021024	2.71E-03	1.20E-05	0.00E+00	0.00E+00
2279	300755.8	4021010	2.38E-03	1.05E-05	0.00E+00	0.00E+00
2280	300720.1	4020996	2.09E-03	9.23E-06	0.00E+00	0.00E+00
2281	300684.5	4020982	1.84E-03	8.11E-06	0.00E+00	0.00E+00
2282	300648.8	4020968	1.61E-03	7.11E-06	0.00E+00	0.00E+00
2283	300613.1	4020954	1.41E-03	6.21E-06	0.00E+00	0.00E+00
2284	300587.6	4020930	1.28E-03	5.64E-06	0.00E+00	0.00E+00
2285	300572.2	4020894	1.20E-03	5.29E-06	0.00E+00	0.00E+00
2286	300556.8	4020859	1.12E-03	4.92E-06	0.00E+00	0.00E+00
2287	300541.5	4020824	1.02E-03	4.50E-06	0.00E+00	0.00E+00
2288	300526.1	4020789	9.28E-04	4.09E-06	0.00E+00	0.00E+00
2289	300510.7	4020754	8.37E-04	3.69E-06	0.00E+00	0.00E+00
2290	300495.3	4020719	7.53E-04	3.32E-06	0.00E+00	0.00E+00
2291	300480	4020684	6.74E-04	2.97E-06	0.00E+00	0.00E+00
2292	300464.6	4020649	6.04E-04	2.66E-06	0.00E+00	0.00E+00
2293	300449.2	4020614	5.43E-04	2.39E-06	0.00E+00	0.00E+00
2294	301007.2	4021100	4.45E-03	1.96E-05	0.00E+00	0.00E+00
2295	301046.3	4021099	4.80E-03	2.11E-05	0.00E+00	0.00E+00
2296	300970.9	4021143	3.40E-03	1.50E-05	0.00E+00	0.00E+00

2297	300935.2	4021129	3.31E-03	1.46E-05	0.00E+00	0.00E+00
2298	300899.5	4021115	3.16E-03	1.39E-05	0.00E+00	0.00E+00
2299	300863.8	4021101	2.97E-03	1.31E-05	0.00E+00	0.00E+00
2300	300828.2	4021087	2.74E-03	1.21E-05	0.00E+00	0.00E+00
2301	300792.5	4021074	2.49E-03	1.10E-05	0.00E+00	0.00E+00
2302	300756.8	4021060	2.23E-03	9.83E-06	0.00E+00	0.00E+00
2303	300721.2	4021046	1.99E-03	8.76E-06	0.00E+00	0.00E+00
2304	300685.5	4021032	1.77E-03	7.80E-06	0.00E+00	0.00E+00
2305	300649.8	4021018	1.58E-03	6.95E-06	0.00E+00	0.00E+00
2306	300614.2	4021004	1.40E-03	6.17E-06	0.00E+00	0.00E+00
2307	300578.5	4020990	1.24E-03	5.44E-06	0.00E+00	0.00E+00
2308	300553	4020966	1.13E-03	4.98E-06	0.00E+00	0.00E+00
2309	300537.6	4020931	1.07E-03	4.70E-06	0.00E+00	0.00E+00
2310	300522.2	4020895	1.00E-03	4.42E-06	0.00E+00	0.00E+00
2311	300506.9	4020860	9.33E-04	4.11E-06	0.00E+00	0.00E+00
2312	300491.5	4020825	8.55E-04	3.77E-06	0.00E+00	0.00E+00
2313	300476.1	4020790	7.77E-04	3.42E-06	0.00E+00	0.00E+00
2314	300460.7	4020755	7.03E-04	3.10E-06	0.00E+00	0.00E+00
2315	300445.3	4020720	6.35E-04	2.80E-06	0.00E+00	0.00E+00
2316	300430	4020685	5.72E-04	2.52E-06	0.00E+00	0.00E+00
2317	300414.6	4020650	5.17E-04	2.28E-06	0.00E+00	0.00E+00
2318	300399.2	4020615	4.68E-04	2.06E-06	0.00E+00	0.00E+00
2319	301008.2	4021150	3.52E-03	1.55E-05	0.00E+00	0.00E+00
2320	301047.3	4021149	3.72E-03	1.64E-05	0.00E+00	0.00E+00
2321	300973	4021243	2.32E-03	1.02E-05	0.00E+00	0.00E+00
2322	300937.3	4021229	2.33E-03	1.03E-05	0.00E+00	0.00E+00
2323	300901.6	4021215	2.29E-03	1.01E-05	0.00E+00	0.00E+00
2324	300866	4021201	2.23E-03	9.81E-06	0.00E+00	0.00E+00
2325	300830.3	4021187	2.14E-03	9.42E-06	0.00E+00	0.00E+00
2326	300794.6	4021173	2.02E-03	8.92E-06	0.00E+00	0.00E+00
2327	300759	4021160	1.89E-03	8.32E-06	0.00E+00	0.00E+00
2328	300723.3	4021146	1.74E-03	7.66E-06	0.00E+00	0.00E+00
2329	300687.6	4021132	1.59E-03	6.99E-06	0.00E+00	0.00E+00
2330	300652	4021118	1.44E-03	6.36E-06	0.00E+00	0.00E+00
2331	300616.3	4021104	1.31E-03	5.79E-06	0.00E+00	0.00E+00
2332	300580.6	4021090	1.19E-03	5.26E-06	0.00E+00	0.00E+00
2333	300545	4021076	1.08E-03	4.75E-06	0.00E+00	0.00E+00
2334	300509.3	4021062	9.73E-04	4.29E-06	0.00E+00	0.00E+00
2335	300483.8	4021038	9.03E-04	3.98E-06	0.00E+00	0.00E+00
2336	300468.4	4021003	8.60E-04	3.79E-06	0.00E+00	0.00E+00
2337	300453	4020968	8.17E-04	3.60E-06	0.00E+00	0.00E+00
2338	300437.6	4020933	7.74E-04	3.41E-06	0.00E+00	0.00E+00
2339	300422.3	4020898	7.28E-04	3.21E-06	0.00E+00	0.00E+00
2340	300406.9	4020862	6.76E-04	2.98E-06	0.00E+00	0.00E+00
2341	300391.5	4020827	6.22E-04	2.74E-06	0.00E+00	0.00E+00
2342	300376.1	4020792	5.69E-04	2.51E-06	0.00E+00	0.00E+00
2343	300360.7	4020757	5.17E-04	2.28E-06	0.00E+00	0.00E+00

2344	300345.4	4020722	4.70E-04	2.07E-06	0.00E+00	0.00E+00
2345	300330	4020687	4.29E-04	1.89E-06	0.00E+00	0.00E+00
2346	300314.6	4020652	3.93E-04	1.73E-06	0.00E+00	0.00E+00
2347	300299.2	4020617	3.59E-04	1.58E-06	0.00E+00	0.00E+00
2348	301010.3	4021250	2.35E-03	1.03E-05	0.00E+00	0.00E+00
2349	301049.4	4021249	2.42E-03	1.07E-05	0.00E+00	0.00E+00
2350	300975.1	4021343	1.68E-03	7.38E-06	0.00E+00	0.00E+00
2351	300939.4	4021329	1.70E-03	7.49E-06	0.00E+00	0.00E+00
2352	300903.7	4021315	1.70E-03	7.50E-06	0.00E+00	0.00E+00
2353	300868.1	4021301	1.68E-03	7.42E-06	0.00E+00	0.00E+00
2354	300832.4	4021287	1.65E-03	7.28E-06	0.00E+00	0.00E+00
2355	300796.7	4021273	1.61E-03	7.10E-06	0.00E+00	0.00E+00
2356	300761.1	4021260	1.55E-03	6.84E-06	0.00E+00	0.00E+00
2357	300725.4	4021246	1.47E-03	6.50E-06	0.00E+00	0.00E+00
2358	300689.7	4021232	1.38E-03	6.09E-06	0.00E+00	0.00E+00
2359	300654.1	4021218	1.29E-03	5.67E-06	0.00E+00	0.00E+00
2360	300618.4	4021204	1.19E-03	5.25E-06	0.00E+00	0.00E+00
2361	300582.7	4021190	1.10E-03	4.85E-06	0.00E+00	0.00E+00
2362	300547.1	4021176	1.02E-03	4.48E-06	0.00E+00	0.00E+00
2363	300511.4	4021162	9.35E-04	4.12E-06	0.00E+00	0.00E+00
2364	300475.7	4021148	8.57E-04	3.77E-06	0.00E+00	0.00E+00
2365	300440.1	4021134	7.84E-04	3.46E-06	0.00E+00	0.00E+00
2366	300414.5	4021110	7.39E-04	3.25E-06	0.00E+00	0.00E+00
2367	300399.2	4021075	7.12E-04	3.14E-06	0.00E+00	0.00E+00
2368	300383.8	4021040	6.81E-04	3.00E-06	0.00E+00	0.00E+00
2369	300368.4	4021005	6.48E-04	2.86E-06	0.00E+00	0.00E+00
2370	300353	4020970	6.16E-04	2.71E-06	0.00E+00	0.00E+00
2371	300337.7	4020935	5.83E-04	2.57E-06	0.00E+00	0.00E+00
2372	300322.3	4020900	5.49E-04	2.42E-06	0.00E+00	0.00E+00
2373	300306.9	4020865	5.12E-04	2.26E-06	0.00E+00	0.00E+00
2374	300291.5	4020829	4.74E-04	2.09E-06	0.00E+00	0.00E+00
2375	300276.1	4020794	4.35E-04	1.92E-06	0.00E+00	0.00E+00
2376	300260.8	4020759	3.98E-04	1.75E-06	0.00E+00	0.00E+00
2377	300245.4	4020724	3.64E-04	1.60E-06	0.00E+00	0.00E+00
2378	300230	4020689	3.36E-04	1.48E-06	0.00E+00	0.00E+00
2379	300214.6	4020654	3.11E-04	1.37E-06	0.00E+00	0.00E+00
2380	300199.3	4020619	2.87E-04	1.26E-06	0.00E+00	0.00E+00
2381	301012.5	4021350	1.67E-03	7.36E-06	0.00E+00	0.00E+00
2382	301051.5	4021349	1.70E-03	7.47E-06	0.00E+00	0.00E+00
2383	300977.2	4021443	1.26E-03	5.55E-06	0.00E+00	0.00E+00
2384	300941.5	4021429	1.29E-03	5.70E-06	0.00E+00	0.00E+00
2385	300905.8	4021415	1.31E-03	5.77E-06	0.00E+00	0.00E+00
2386	300870.2	4021401	1.31E-03	5.77E-06	0.00E+00	0.00E+00
2387	300834.5	4021387	1.30E-03	5.71E-06	0.00E+00	0.00E+00
2388	300798.8	4021373	1.28E-03	5.64E-06	0.00E+00	0.00E+00
2389	300763.2	4021360	1.26E-03	5.55E-06	0.00E+00	0.00E+00
2390	300727.5	4021346	1.23E-03	5.42E-06	0.00E+00	0.00E+00

2391	300691.8	4021332	1.19E-03	5.23E-06	0.00E+00	0.00E+00
2392	300656.2	4021318	1.13E-03	4.97E-06	0.00E+00	0.00E+00
2393	300620.5	4021304	1.06E-03	4.68E-06	0.00E+00	0.00E+00
2394	300584.8	4021290	9.96E-04	4.39E-06	0.00E+00	0.00E+00
2395	300549.2	4021276	9.33E-04	4.11E-06	0.00E+00	0.00E+00
2396	300513.5	4021262	8.71E-04	3.84E-06	0.00E+00	0.00E+00
2397	300477.8	4021248	8.12E-04	3.58E-06	0.00E+00	0.00E+00
2398	300442.2	4021234	7.55E-04	3.33E-06	0.00E+00	0.00E+00
2399	300406.5	4021220	6.99E-04	3.08E-06	0.00E+00	0.00E+00
2400	300370.8	4021207	6.47E-04	2.85E-06	0.00E+00	0.00E+00
2401	300345.3	4021182	6.15E-04	2.71E-06	0.00E+00	0.00E+00
2402	300329.9	4021147	5.98E-04	2.64E-06	0.00E+00	0.00E+00
2403	300314.6	4021112	5.79E-04	2.55E-06	0.00E+00	0.00E+00
2404	300299.2	4021077	5.55E-04	2.45E-06	0.00E+00	0.00E+00
2405	300283.8	4021042	5.30E-04	2.33E-06	0.00E+00	0.00E+00
2406	300268.4	4021007	5.04E-04	2.22E-06	0.00E+00	0.00E+00
2407	300253	4020972	4.79E-04	2.11E-06	0.00E+00	0.00E+00
2408	300237.7	4020937	4.55E-04	2.01E-06	0.00E+00	0.00E+00
2409	300222.3	4020902	4.30E-04	1.89E-06	0.00E+00	0.00E+00
2410	300206.9	4020867	4.03E-04	1.78E-06	0.00E+00	0.00E+00
2411	300191.5	4020832	3.74E-04	1.65E-06	0.00E+00	0.00E+00
2412	300176.2	4020796	3.45E-04	1.52E-06	0.00E+00	0.00E+00
2413	300160.8	4020761	3.17E-04	1.40E-06	0.00E+00	0.00E+00
2414	300145.4	4020726	2.93E-04	1.29E-06	0.00E+00	0.00E+00
2415	300130	4020691	2.72E-04	1.20E-06	0.00E+00	0.00E+00
2416	300114.7	4020656	2.54E-04	1.12E-06	0.00E+00	0.00E+00
2417	300099.3	4020621	2.36E-04	1.04E-06	0.00E+00	0.00E+00
2418	301014.6	4021450	1.24E-03	5.48E-06	0.00E+00	0.00E+00
2419	301053.7	4021449	1.26E-03	5.53E-06	0.00E+00	0.00E+00
2420	300979.3	4021543	9.80E-04	4.32E-06	0.00E+00	0.00E+00
2421	300943.6	4021529	1.01E-03	4.46E-06	0.00E+00	0.00E+00
2422	300908	4021515	1.04E-03	4.57E-06	0.00E+00	0.00E+00
2423	300872.3	4021501	1.05E-03	4.62E-06	0.00E+00	0.00E+00
2424	300836.6	4021487	1.05E-03	4.61E-06	0.00E+00	0.00E+00
2425	300801	4021473	1.03E-03	4.56E-06	0.00E+00	0.00E+00
2426	300765.3	4021460	1.02E-03	4.51E-06	0.00E+00	0.00E+00
2427	300729.6	4021446	1.01E-03	4.47E-06	0.00E+00	0.00E+00
2428	300694	4021432	1.00E-03	4.41E-06	0.00E+00	0.00E+00
2429	300658.3	4021418	9.77E-04	4.30E-06	0.00E+00	0.00E+00
2430	300622.6	4021404	9.40E-04	4.14E-06	0.00E+00	0.00E+00
2431	300586.9	4021390	8.95E-04	3.94E-06	0.00E+00	0.00E+00
2432	300551.3	4021376	8.47E-04	3.73E-06	0.00E+00	0.00E+00
2433	300515.6	4021362	7.99E-04	3.52E-06	0.00E+00	0.00E+00
2434	300479.9	4021348	7.54E-04	3.32E-06	0.00E+00	0.00E+00
2435	300444.3	4021334	7.10E-04	3.13E-06	0.00E+00	0.00E+00
2436	300408.6	4021320	6.66E-04	2.94E-06	0.00E+00	0.00E+00
2437	300372.9	4021307	6.24E-04	2.75E-06	0.00E+00	0.00E+00

2438	300337.3	4021293	5.84E-04	2.57E-06	0.00E+00	0.00E+00
2439	300301.6	4021279	5.46E-04	2.40E-06	0.00E+00	0.00E+00
2440	300276.1	4021254	5.22E-04	2.30E-06	0.00E+00	0.00E+00
2441	300260.7	4021219	5.10E-04	2.25E-06	0.00E+00	0.00E+00
2442	300245.3	4021184	4.97E-04	2.19E-06	0.00E+00	0.00E+00
2443	300230	4021149	4.82E-04	2.12E-06	0.00E+00	0.00E+00
2444	300214.6	4021114	4.64E-04	2.04E-06	0.00E+00	0.00E+00
2445	300199.2	4021079	4.43E-04	1.95E-06	0.00E+00	0.00E+00
2446	300183.8	4021044	4.22E-04	1.86E-06	0.00E+00	0.00E+00
2447	300168.4	4021009	4.02E-04	1.77E-06	0.00E+00	0.00E+00
2448	300153.1	4020974	3.84E-04	1.69E-06	0.00E+00	0.00E+00
2449	300137.7	4020939	3.66E-04	1.61E-06	0.00E+00	0.00E+00
2450	300122.3	4020904	3.47E-04	1.53E-06	0.00E+00	0.00E+00
2451	300106.9	4020869	3.26E-04	1.44E-06	0.00E+00	0.00E+00
2452	300091.6	4020834	3.04E-04	1.34E-06	0.00E+00	0.00E+00
2453	300076.2	4020799	2.81E-04	1.24E-06	0.00E+00	0.00E+00
2454	300060.8	4020763	2.61E-04	1.15E-06	0.00E+00	0.00E+00
2455	300045.4	4020728	2.43E-04	1.07E-06	0.00E+00	0.00E+00
2456	300030.1	4020693	2.27E-04	1.00E-06	0.00E+00	0.00E+00
2457	300014.7	4020658	2.13E-04	9.38E-07	0.00E+00	0.00E+00
2458	299999.3	4020623	1.99E-04	8.75E-07	0.00E+00	0.00E+00
2459	301016.7	4021549	9.65E-04	4.25E-06	0.00E+00	0.00E+00
2460	301055.8	4021549	9.74E-04	4.29E-06	0.00E+00	0.00E+00
2461	300981.4	4021643	7.84E-04	3.45E-06	0.00E+00	0.00E+00
2462	300945.7	4021629	8.12E-04	3.58E-06	0.00E+00	0.00E+00
2463	300910.1	4021615	8.39E-04	3.70E-06	0.00E+00	0.00E+00
2464	300874.4	4021601	8.59E-04	3.79E-06	0.00E+00	0.00E+00
2465	300838.7	4021587	8.66E-04	3.82E-06	0.00E+00	0.00E+00
2466	300803.1	4021573	8.62E-04	3.80E-06	0.00E+00	0.00E+00
2467	300767.4	4021560	8.51E-04	3.75E-06	0.00E+00	0.00E+00
2468	300731.7	4021546	8.42E-04	3.71E-06	0.00E+00	0.00E+00
2469	300696.1	4021532	8.36E-04	3.68E-06	0.00E+00	0.00E+00
2470	300660.4	4021518	8.31E-04	3.66E-06	0.00E+00	0.00E+00
2471	300624.7	4021504	8.19E-04	3.61E-06	0.00E+00	0.00E+00
2472	300589.1	4021490	7.98E-04	3.52E-06	0.00E+00	0.00E+00
2473	300553.4	4021476	7.68E-04	3.38E-06	0.00E+00	0.00E+00
2474	300517.7	4021462	7.32E-04	3.23E-06	0.00E+00	0.00E+00
2475	300482.1	4021448	6.95E-04	3.06E-06	0.00E+00	0.00E+00
2476	300446.4	4021434	6.59E-04	2.90E-06	0.00E+00	0.00E+00
2477	300410.7	4021420	6.25E-04	2.75E-06	0.00E+00	0.00E+00
2478	300375.1	4021407	5.92E-04	2.61E-06	0.00E+00	0.00E+00
2479	300339.4	4021393	5.59E-04	2.46E-06	0.00E+00	0.00E+00
2480	300303.7	4021379	5.27E-04	2.32E-06	0.00E+00	0.00E+00
2481	300268.1	4021365	4.97E-04	2.19E-06	0.00E+00	0.00E+00
2482	300232.4	4021351	4.68E-04	2.06E-06	0.00E+00	0.00E+00
2483	300206.9	4021326	4.51E-04	1.99E-06	0.00E+00	0.00E+00
2484	300191.5	4021291	4.42E-04	1.95E-06	0.00E+00	0.00E+00

2485	300176.1	4021256	4.32E-04	1.90E-06	0.00E+00	0.00E+00
2486	300160.7	4021221	4.21E-04	1.85E-06	0.00E+00	0.00E+00
2487	300145.4	4021186	4.09E-04	1.80E-06	0.00E+00	0.00E+00
2488	300130	4021151	3.95E-04	1.74E-06	0.00E+00	0.00E+00
2489	300114.6	4021116	3.78E-04	1.67E-06	0.00E+00	0.00E+00
2490	300099.2	4021081	3.61E-04	1.59E-06	0.00E+00	0.00E+00
2491	300083.8	4021046	3.44E-04	1.52E-06	0.00E+00	0.00E+00
2492	300068.5	4021011	3.30E-04	1.45E-06	0.00E+00	0.00E+00
2493	300053.1	4020976	3.16E-04	1.39E-06	0.00E+00	0.00E+00
2494	300037.7	4020941	3.02E-04	1.33E-06	0.00E+00	0.00E+00
2495	300022.3	4020906	2.87E-04	1.26E-06	0.00E+00	0.00E+00
2496	300007	4020871	2.70E-04	1.19E-06	0.00E+00	0.00E+00
2497	299991.6	4020836	2.52E-04	1.11E-06	0.00E+00	0.00E+00
2498	299976.2	4020801	2.35E-04	1.04E-06	0.00E+00	0.00E+00
2499	299960.8	4020765	2.20E-04	9.69E-07	0.00E+00	0.00E+00
2500	299945.5	4020730	2.06E-04	9.09E-07	0.00E+00	0.00E+00
2501	299930.1	4020695	1.94E-04	8.55E-07	0.00E+00	0.00E+00
2502	299914.7	4020660	1.82E-04	8.02E-07	0.00E+00	0.00E+00
2503	299899.3	4020625	1.70E-04	7.49E-07	0.00E+00	0.00E+00
2504	301018.8	4021649	7.74E-04	3.41E-06	0.00E+00	0.00E+00
2505	301057.9	4021649	7.84E-04	3.45E-06	0.00E+00	0.00E+00
2506	300983.1	4021743	6.46E-04	2.84E-06	0.00E+00	0.00E+00
2507	300946.7	4021729	6.67E-04	2.94E-06	0.00E+00	0.00E+00
2508	300910.3	4021714	6.92E-04	3.05E-06	0.00E+00	0.00E+00
2509	300873.9	4021700	7.15E-04	3.15E-06	0.00E+00	0.00E+00
2510	300837.4	4021686	7.29E-04	3.21E-06	0.00E+00	0.00E+00
2511	300801	4021672	7.33E-04	3.23E-06	0.00E+00	0.00E+00
2512	300764.6	4021658	7.27E-04	3.20E-06	0.00E+00	0.00E+00
2513	300728.1	4021643	7.16E-04	3.15E-06	0.00E+00	0.00E+00
2514	300691.7	4021629	7.07E-04	3.12E-06	0.00E+00	0.00E+00
2515	300655.3	4021615	7.03E-04	3.10E-06	0.00E+00	0.00E+00
2516	300618.9	4021601	7.01E-04	3.09E-06	0.00E+00	0.00E+00
2517	300582.4	4021587	6.96E-04	3.07E-06	0.00E+00	0.00E+00
2518	300546	4021572	6.83E-04	3.01E-06	0.00E+00	0.00E+00
2519	300509.6	4021558	6.62E-04	2.92E-06	0.00E+00	0.00E+00
2520	300473.2	4021544	6.35E-04	2.80E-06	0.00E+00	0.00E+00
2521	300436.7	4021530	6.04E-04	2.66E-06	0.00E+00	0.00E+00
2522	300400.3	4021516	5.74E-04	2.53E-06	0.00E+00	0.00E+00
2523	300363.9	4021501	5.46E-04	2.40E-06	0.00E+00	0.00E+00
2524	300327.5	4021487	5.19E-04	2.29E-06	0.00E+00	0.00E+00
2525	300291	4021473	4.93E-04	2.17E-06	0.00E+00	0.00E+00
2526	300254.6	4021459	4.67E-04	2.06E-06	0.00E+00	0.00E+00
2527	300218.2	4021445	4.42E-04	1.95E-06	0.00E+00	0.00E+00
2528	300181.8	4021430	4.19E-04	1.84E-06	0.00E+00	0.00E+00
2529	300137.5	4021398	3.94E-04	1.74E-06	0.00E+00	0.00E+00
2530	300121.8	4021362	3.88E-04	1.71E-06	0.00E+00	0.00E+00
2531	300106.1	4021327	3.80E-04	1.67E-06	0.00E+00	0.00E+00

2532	300090.4	4021291	3.71E-04	1.63E-06	0.00E+00	0.00E+00
2533	300074.7	4021255	3.62E-04	1.59E-06	0.00E+00	0.00E+00
2534	300059	4021219	3.52E-04	1.55E-06	0.00E+00	0.00E+00
2535	300043.2	4021183	3.40E-04	1.50E-06	0.00E+00	0.00E+00
2536	300027.5	4021148	3.26E-04	1.44E-06	0.00E+00	0.00E+00
2537	300011.8	4021112	3.11E-04	1.37E-06	0.00E+00	0.00E+00
2538	299996.1	4021076	2.97E-04	1.31E-06	0.00E+00	0.00E+00
2539	299980.4	4021040	2.85E-04	1.25E-06	0.00E+00	0.00E+00
2540	299964.7	4021004	2.73E-04	1.21E-06	0.00E+00	0.00E+00
2541	299949	4020969	2.63E-04	1.16E-06	0.00E+00	0.00E+00
2542	299933.3	4020933	2.51E-04	1.11E-06	0.00E+00	0.00E+00
2543	299917.6	4020897	2.38E-04	1.05E-06	0.00E+00	0.00E+00
2544	299901.9	4020861	2.24E-04	9.86E-07	0.00E+00	0.00E+00
2545	299886.2	4020825	2.10E-04	9.24E-07	0.00E+00	0.00E+00
2546	299870.5	4020790	1.97E-04	8.67E-07	0.00E+00	0.00E+00
2547	299854.8	4020754	1.85E-04	8.16E-07	0.00E+00	0.00E+00
2548	299839.1	4020718	1.75E-04	7.69E-07	0.00E+00	0.00E+00
2549	299823.4	4020682	1.64E-04	7.23E-07	0.00E+00	0.00E+00
2550	299807.7	4020646	1.54E-04	6.77E-07	0.00E+00	0.00E+00
2551	299792	4020611	1.43E-04	6.30E-07	0.00E+00	0.00E+00
2552	301020.9	4021749	6.40E-04	2.82E-06	0.00E+00	0.00E+00
2553	301060	4021749	6.50E-04	2.87E-06	0.00E+00	0.00E+00
2554	300985.3	4021843	5.45E-04	2.40E-06	0.00E+00	0.00E+00
2555	300948.9	4021829	5.59E-04	2.46E-06	0.00E+00	0.00E+00
2556	300912.5	4021814	5.79E-04	2.55E-06	0.00E+00	0.00E+00
2557	300876.2	4021800	6.01E-04	2.65E-06	0.00E+00	0.00E+00
2558	300839.8	4021786	6.20E-04	2.73E-06	0.00E+00	0.00E+00
2559	300803.4	4021772	6.31E-04	2.78E-06	0.00E+00	0.00E+00
2560	300767.1	4021758	6.32E-04	2.79E-06	0.00E+00	0.00E+00
2561	300730.7	4021744	6.26E-04	2.76E-06	0.00E+00	0.00E+00
2562	300694.3	4021729	6.15E-04	2.71E-06	0.00E+00	0.00E+00
2563	300658	4021715	6.07E-04	2.67E-06	0.00E+00	0.00E+00
2564	300621.6	4021701	6.03E-04	2.66E-06	0.00E+00	0.00E+00
2565	300585.2	4021687	6.03E-04	2.66E-06	0.00E+00	0.00E+00
2566	300548.9	4021673	6.02E-04	2.65E-06	0.00E+00	0.00E+00
2567	300512.5	4021658	5.96E-04	2.63E-06	0.00E+00	0.00E+00
2568	300476.1	4021644	5.84E-04	2.57E-06	0.00E+00	0.00E+00
2569	300439.8	4021630	5.66E-04	2.49E-06	0.00E+00	0.00E+00
2570	300403.4	4021616	5.42E-04	2.39E-06	0.00E+00	0.00E+00
2571	300367	4021602	5.17E-04	2.28E-06	0.00E+00	0.00E+00
2572	300330.7	4021588	4.92E-04	2.17E-06	0.00E+00	0.00E+00
2573	300294.3	4021573	4.69E-04	2.07E-06	0.00E+00	0.00E+00
2574	300257.9	4021559	4.47E-04	1.97E-06	0.00E+00	0.00E+00
2575	300221.6	4021545	4.26E-04	1.88E-06	0.00E+00	0.00E+00
2576	300185.2	4021531	4.06E-04	1.79E-06	0.00E+00	0.00E+00
2577	300148.8	4021517	3.87E-04	1.70E-06	0.00E+00	0.00E+00
2578	300112.5	4021502	3.68E-04	1.62E-06	0.00E+00	0.00E+00

2579	300068.3	4021470	3.49E-04	1.54E-06	0.00E+00	0.00E+00
2580	300052.6	4021435	3.44E-04	1.52E-06	0.00E+00	0.00E+00
2581	300036.9	4021399	3.39E-04	1.49E-06	0.00E+00	0.00E+00
2582	300021.2	4021363	3.31E-04	1.46E-06	0.00E+00	0.00E+00
2583	300005.5	4021327	3.24E-04	1.43E-06	0.00E+00	0.00E+00
2584	299989.9	4021292	3.16E-04	1.39E-06	0.00E+00	0.00E+00
2585	299974.2	4021256	3.08E-04	1.36E-06	0.00E+00	0.00E+00
2586	299958.5	4021220	2.98E-04	1.31E-06	0.00E+00	0.00E+00
2587	299942.8	4021184	2.87E-04	1.26E-06	0.00E+00	0.00E+00
2588	299927.2	4021149	2.75E-04	1.21E-06	0.00E+00	0.00E+00
2589	299911.5	4021113	2.62E-04	1.16E-06	0.00E+00	0.00E+00
2590	299895.8	4021077	2.52E-04	1.11E-06	0.00E+00	0.00E+00
2591	299880.1	4021041	2.42E-04	1.07E-06	0.00E+00	0.00E+00
2592	299864.4	4021006	2.33E-04	1.03E-06	0.00E+00	0.00E+00
2593	299848.8	4020970	2.25E-04	9.89E-07	0.00E+00	0.00E+00
2594	299833.1	4020934	2.15E-04	9.46E-07	0.00E+00	0.00E+00
2595	299817.4	4020898	2.04E-04	8.99E-07	0.00E+00	0.00E+00
2596	299801.7	4020863	1.93E-04	8.49E-07	0.00E+00	0.00E+00
2597	299786	4020827	1.82E-04	8.02E-07	0.00E+00	0.00E+00
2598	299770.4	4020791	1.72E-04	7.58E-07	0.00E+00	0.00E+00
2599	299754.7	4020755	1.63E-04	7.18E-07	0.00E+00	0.00E+00
2600	299739	4020720	1.54E-04	6.78E-07	0.00E+00	0.00E+00
2601	299723.3	4020684	1.45E-04	6.38E-07	0.00E+00	0.00E+00
2602	299707.7	4020648	1.35E-04	5.97E-07	0.00E+00	0.00E+00
2603	299692	4020613	1.26E-04	5.55E-07	0.00E+00	0.00E+00
2604	301023	4021849	5.43E-04	2.39E-06	0.00E+00	0.00E+00
2605	301062.1	4021849	5.54E-04	2.44E-06	0.00E+00	0.00E+00
2606	300987.4	4021943	4.69E-04	2.07E-06	0.00E+00	0.00E+00
2607	300951.1	4021929	4.79E-04	2.11E-06	0.00E+00	0.00E+00
2608	300914.8	4021914	4.93E-04	2.17E-06	0.00E+00	0.00E+00
2609	300878.5	4021900	5.12E-04	2.26E-06	0.00E+00	0.00E+00
2610	300842.1	4021886	5.31E-04	2.34E-06	0.00E+00	0.00E+00
2611	300805.8	4021872	5.46E-04	2.41E-06	0.00E+00	0.00E+00
2612	300769.5	4021858	5.54E-04	2.44E-06	0.00E+00	0.00E+00
2613	300733.2	4021844	5.54E-04	2.44E-06	0.00E+00	0.00E+00
2614	300696.9	4021829	5.48E-04	2.41E-06	0.00E+00	0.00E+00
2615	300660.6	4021815	5.38E-04	2.37E-06	0.00E+00	0.00E+00
2616	300624.2	4021801	5.30E-04	2.33E-06	0.00E+00	0.00E+00
2617	300587.9	4021787	5.25E-04	2.32E-06	0.00E+00	0.00E+00
2618	300551.6	4021773	5.25E-04	2.31E-06	0.00E+00	0.00E+00
2619	300515.3	4021759	5.27E-04	2.32E-06	0.00E+00	0.00E+00
2620	300479	4021745	5.26E-04	2.32E-06	0.00E+00	0.00E+00
2621	300442.7	4021730	5.20E-04	2.29E-06	0.00E+00	0.00E+00
2622	300406.4	4021716	5.08E-04	2.24E-06	0.00E+00	0.00E+00
2623	300370	4021702	4.92E-04	2.17E-06	0.00E+00	0.00E+00
2624	300333.7	4021688	4.71E-04	2.08E-06	0.00E+00	0.00E+00
2625	300297.4	4021674	4.50E-04	1.98E-06	0.00E+00	0.00E+00

2626	300261.1	4021660	4.29E-04	1.89E-06	0.00E+00	0.00E+00
2627	300224.8	4021645	4.09E-04	1.80E-06	0.00E+00	0.00E+00
2628	300188.5	4021631	3.91E-04	1.72E-06	0.00E+00	0.00E+00
2629	300152.1	4021617	3.74E-04	1.65E-06	0.00E+00	0.00E+00
2630	300115.8	4021603	3.58E-04	1.58E-06	0.00E+00	0.00E+00
2631	300079.5	4021589	3.42E-04	1.51E-06	0.00E+00	0.00E+00
2632	300043.2	4021575	3.28E-04	1.44E-06	0.00E+00	0.00E+00
2633	299999	4021543	3.12E-04	1.38E-06	0.00E+00	0.00E+00
2634	299983.4	4021507	3.09E-04	1.36E-06	0.00E+00	0.00E+00
2635	299967.7	4021471	3.05E-04	1.34E-06	0.00E+00	0.00E+00
2636	299952.1	4021436	2.99E-04	1.32E-06	0.00E+00	0.00E+00
2637	299936.4	4021400	2.93E-04	1.29E-06	0.00E+00	0.00E+00
2638	299920.8	4021364	2.86E-04	1.26E-06	0.00E+00	0.00E+00
2639	299905.1	4021328	2.80E-04	1.23E-06	0.00E+00	0.00E+00
2640	299889.5	4021293	2.73E-04	1.20E-06	0.00E+00	0.00E+00
2641	299873.8	4021257	2.65E-04	1.17E-06	0.00E+00	0.00E+00
2642	299858.1	4021221	2.56E-04	1.13E-06	0.00E+00	0.00E+00
2643	299842.5	4021186	2.45E-04	1.08E-06	0.00E+00	0.00E+00
2644	299826.8	4021150	2.35E-04	1.04E-06	0.00E+00	0.00E+00
2645	299811.2	4021114	2.25E-04	9.92E-07	0.00E+00	0.00E+00
2646	299795.5	4021079	2.17E-04	9.55E-07	0.00E+00	0.00E+00
2647	299779.9	4021043	2.09E-04	9.21E-07	0.00E+00	0.00E+00
2648	299764.2	4021007	2.02E-04	8.90E-07	0.00E+00	0.00E+00
2649	299748.5	4020971	1.95E-04	8.58E-07	0.00E+00	0.00E+00
2650	299732.9	4020936	1.87E-04	8.22E-07	0.00E+00	0.00E+00
2651	299717.2	4020900	1.78E-04	7.83E-07	0.00E+00	0.00E+00
2652	299701.6	4020864	1.69E-04	7.44E-07	0.00E+00	0.00E+00
2653	299685.9	4020829	1.60E-04	7.07E-07	0.00E+00	0.00E+00
2654	299670.3	4020793	1.53E-04	6.72E-07	0.00E+00	0.00E+00
2655	299654.6	4020757	1.45E-04	6.39E-07	0.00E+00	0.00E+00
2656	299638.9	4020722	1.37E-04	6.05E-07	0.00E+00	0.00E+00
2657	299623.3	4020686	1.29E-04	5.70E-07	0.00E+00	0.00E+00
2658	299607.6	4020650	1.21E-04	5.32E-07	0.00E+00	0.00E+00
2659	299592	4020615	1.12E-04	4.95E-07	0.00E+00	0.00E+00
2660	301025.1	4021949	4.71E-04	2.07E-06	0.00E+00	0.00E+00
2661	301064.2	4021949	4.81E-04	2.12E-06	0.00E+00	0.00E+00
2662	300984.3	4020769	1.43E-02	6.32E-05	0.00E+00	0.00E+00
2663	300985.4	4020817	1.38E-02	6.08E-05	0.00E+00	0.00E+00
2664	300959.3	4020769	1.10E-02	4.86E-05	0.00E+00	0.00E+00
2665	300960.4	4020818	1.07E-02	4.71E-05	0.00E+00	0.00E+00
2666	300961.5	4020866	1.00E-02	4.42E-05	0.00E+00	0.00E+00
2667	300908.7	4020746	7.20E-03	3.17E-05	0.00E+00	0.00E+00
2668	300909.9	4020795	7.11E-03	3.13E-05	0.00E+00	0.00E+00
2669	300911	4020843	6.92E-03	3.05E-05	0.00E+00	0.00E+00
2670	300886	4020844	5.79E-03	2.55E-05	0.00E+00	0.00E+00
2671	300807.1	4020676	3.38E-03	1.49E-05	0.00E+00	0.00E+00
2672	300754.8	4020580	1.99E-03	8.77E-06	0.00E+00	0.00E+00

2673	300757.1	4020677	2.42E-03	1.07E-05	0.00E+00	0.00E+00
2674	300759.3	4020774	2.68E-03	1.18E-05	0.00E+00	0.00E+00
2675	300704.9	4020581	1.46E-03	6.44E-06	0.00E+00	0.00E+00
2676	300707.1	4020678	1.81E-03	7.98E-06	0.00E+00	0.00E+00
2677	300711.6	4020872	2.16E-03	9.53E-06	0.00E+00	0.00E+00
2678	300654.9	4020582	1.12E-03	4.95E-06	0.00E+00	0.00E+00
2679	300657.1	4020679	1.40E-03	6.16E-06	0.00E+00	0.00E+00
2680	300604.9	4020583	8.97E-04	3.95E-06	0.00E+00	0.00E+00
2681	300607.1	4020680	1.11E-03	4.88E-06	0.00E+00	0.00E+00
2682	300554.9	4020584	7.36E-04	3.24E-06	0.00E+00	0.00E+00
2683	300557.1	4020681	8.97E-04	3.95E-06	0.00E+00	0.00E+00
2684	300504.9	4020585	6.17E-04	2.72E-06	0.00E+00	0.00E+00
2685	300507.2	4020683	7.41E-04	3.27E-06	0.00E+00	0.00E+00
2686	300454.9	4020587	5.25E-04	2.31E-06	0.00E+00	0.00E+00
2687	300457.2	4020684	6.23E-04	2.75E-06	0.00E+00	0.00E+00
2688	300460.5	4020829	7.74E-04	3.41E-06	0.00E+00	0.00E+00
2689	300461.1	4020854	7.95E-04	3.50E-06	0.00E+00	0.00E+00
2690	300461.7	4020878	8.13E-04	3.58E-06	0.00E+00	0.00E+00
2691	300355	4020589	3.96E-04	1.74E-06	0.00E+00	0.00E+00
2692	300355.5	4020613	4.13E-04	1.82E-06	0.00E+00	0.00E+00
2693	300356.1	4020637	4.29E-04	1.89E-06	0.00E+00	0.00E+00
2694	300356.6	4020662	4.45E-04	1.96E-06	0.00E+00	0.00E+00
2695	300357.2	4020686	4.61E-04	2.03E-06	0.00E+00	0.00E+00
2696	300360.6	4020832	5.72E-04	2.52E-06	0.00E+00	0.00E+00
2697	300361.1	4020856	5.88E-04	2.59E-06	0.00E+00	0.00E+00
2698	300361.7	4020880	6.02E-04	2.65E-06	0.00E+00	0.00E+00
2699	300255	4020591	3.11E-04	1.37E-06	0.00E+00	0.00E+00
2700	300255.5	4020616	3.23E-04	1.42E-06	0.00E+00	0.00E+00
2701	300256.1	4020640	3.35E-04	1.48E-06	0.00E+00	0.00E+00
2702	300256.7	4020664	3.46E-04	1.52E-06	0.00E+00	0.00E+00
2703	300257.2	4020688	3.57E-04	1.57E-06	0.00E+00	0.00E+00
2704	300260.6	4020834	4.41E-04	1.94E-06	0.00E+00	0.00E+00
2705	300261.1	4020858	4.54E-04	2.00E-06	0.00E+00	0.00E+00
2706	300261.7	4020883	4.65E-04	2.05E-06	0.00E+00	0.00E+00
2707	300155	4020594	2.52E-04	1.11E-06	0.00E+00	0.00E+00
2708	300155.6	4020618	2.62E-04	1.15E-06	0.00E+00	0.00E+00
2709	300156.1	4020642	2.71E-04	1.19E-06	0.00E+00	0.00E+00
2710	300156.7	4020666	2.79E-04	1.23E-06	0.00E+00	0.00E+00
2711	300157.2	4020691	2.87E-04	1.27E-06	0.00E+00	0.00E+00
2712	300160.6	4020836	3.51E-04	1.55E-06	0.00E+00	0.00E+00
2713	300161.2	4020861	3.62E-04	1.59E-06	0.00E+00	0.00E+00
2714	300161.7	4020885	3.71E-04	1.64E-06	0.00E+00	0.00E+00
2715	300055	4020596	2.10E-04	9.25E-07	0.00E+00	0.00E+00
2716	300055.6	4020620	2.18E-04	9.60E-07	0.00E+00	0.00E+00
2717	300056.2	4020644	2.25E-04	9.91E-07	0.00E+00	0.00E+00
2718	300056.7	4020669	2.32E-04	1.02E-06	0.00E+00	0.00E+00
2719	300057.3	4020693	2.38E-04	1.05E-06	0.00E+00	0.00E+00

2720	300060.1	4020814	2.79E-04	1.23E-06	0.00E+00	0.00E+00
2721	300060.6	4020839	2.88E-04	1.27E-06	0.00E+00	0.00E+00
2722	300061.2	4020863	2.96E-04	1.30E-06	0.00E+00	0.00E+00
2723	300061.8	4020887	3.04E-04	1.34E-06	0.00E+00	0.00E+00
2724	299955.1	4020598	1.78E-04	7.85E-07	0.00E+00	0.00E+00
2725	299955.6	4020622	1.85E-04	8.14E-07	0.00E+00	0.00E+00
2726	299956.2	4020647	1.91E-04	8.41E-07	0.00E+00	0.00E+00
2727	299956.7	4020671	1.97E-04	8.66E-07	0.00E+00	0.00E+00
2728	299957.3	4020695	2.02E-04	8.91E-07	0.00E+00	0.00E+00
2729	299960.1	4020817	2.34E-04	1.03E-06	0.00E+00	0.00E+00
2730	299960.7	4020841	2.41E-04	1.06E-06	0.00E+00	0.00E+00
2731	299961.2	4020865	2.48E-04	1.09E-06	0.00E+00	0.00E+00
2732	299961.8	4020890	2.54E-04	1.12E-06	0.00E+00	0.00E+00
2733	299855.1	4020600	1.54E-04	6.77E-07	0.00E+00	0.00E+00
2734	299855.6	4020625	1.59E-04	7.02E-07	0.00E+00	0.00E+00
2735	299856.2	4020649	1.65E-04	7.26E-07	0.00E+00	0.00E+00
2736	299856.8	4020673	1.70E-04	7.49E-07	0.00E+00	0.00E+00
2737	299857.3	4020698	1.75E-04	7.71E-07	0.00E+00	0.00E+00
2738	299860.1	4020819	2.00E-04	8.82E-07	0.00E+00	0.00E+00
2739	299860.7	4020843	2.06E-04	9.07E-07	0.00E+00	0.00E+00
2740	299861.3	4020868	2.11E-04	9.32E-07	0.00E+00	0.00E+00
2741	299861.8	4020892	2.17E-04	9.55E-07	0.00E+00	0.00E+00
2742	299755.1	4020603	1.34E-04	5.93E-07	0.00E+00	0.00E+00
2743	299755.7	4020627	1.39E-04	6.14E-07	0.00E+00	0.00E+00
2744	299756.2	4020651	1.45E-04	6.37E-07	0.00E+00	0.00E+00
2745	299756.8	4020676	1.49E-04	6.58E-07	0.00E+00	0.00E+00
2746	299757.4	4020700	1.54E-04	6.78E-07	0.00E+00	0.00E+00
2747	299760.2	4020821	1.75E-04	7.70E-07	0.00E+00	0.00E+00
2748	299760.7	4020846	1.79E-04	7.89E-07	0.00E+00	0.00E+00
2749	299761.3	4020870	1.84E-04	8.09E-07	0.00E+00	0.00E+00
2750	299761.8	4020894	1.88E-04	8.27E-07	0.00E+00	0.00E+00
2751	299655.1	4020605	1.19E-04	5.25E-07	0.00E+00	0.00E+00
2752	299655.7	4020629	1.24E-04	5.45E-07	0.00E+00	0.00E+00
2753	299656.3	4020654	1.28E-04	5.65E-07	0.00E+00	0.00E+00
2754	299656.8	4020678	1.33E-04	5.85E-07	0.00E+00	0.00E+00
2755	299657.4	4020702	1.37E-04	6.04E-07	0.00E+00	0.00E+00
2756	299660.2	4020824	1.55E-04	6.83E-07	0.00E+00	0.00E+00
2757	299660.7	4020848	1.58E-04	6.98E-07	0.00E+00	0.00E+00
2758	299661.3	4020872	1.62E-04	7.13E-07	0.00E+00	0.00E+00
2759	299661.9	4020897	1.65E-04	7.27E-07	0.00E+00	0.00E+00
2760	301086.9	4020889	3.56E-02	1.57E-04	0.00E+00	0.00E+00
2761	301111.9	4020888	4.15E-02	1.83E-04	0.00E+00	0.00E+00
2762	301136.9	4020888	4.47E-02	1.97E-04	0.00E+00	0.00E+00
2763	301161.8	4020887	4.57E-02	2.01E-04	0.00E+00	0.00E+00
2764	301186.8	4020887	4.47E-02	1.97E-04	0.00E+00	0.00E+00
2765	301211.8	4020886	4.14E-02	1.83E-04	0.00E+00	0.00E+00
2766	301236.7	4020886	3.52E-02	1.55E-04	0.00E+00	0.00E+00

2767	301261.7	4020886	2.71E-02	1.19E-04	0.00E+00	0.00E+00
2768	301019.2	4020883	1.70E-02	7.50E-05	0.00E+00	0.00E+00
2769	301062.4	4020914	2.02E-02	8.92E-05	0.00E+00	0.00E+00
2770	301087.4	4020914	2.42E-02	1.07E-04	0.00E+00	0.00E+00
2771	301112.3	4020913	2.73E-02	1.20E-04	0.00E+00	0.00E+00
2772	301137.3	4020913	2.90E-02	1.28E-04	0.00E+00	0.00E+00
2773	301162.3	4020912	2.94E-02	1.30E-04	0.00E+00	0.00E+00
2774	301187.2	4020912	2.86E-02	1.26E-04	0.00E+00	0.00E+00
2775	301212.2	4020911	2.65E-02	1.17E-04	0.00E+00	0.00E+00
2776	301237.2	4020911	2.31E-02	1.02E-04	0.00E+00	0.00E+00
2777	301262.2	4020911	1.91E-02	8.43E-05	0.00E+00	0.00E+00
2778	301027.3	4020925	1.39E-02	6.11E-05	0.00E+00	0.00E+00
2779	301087.8	4020939	1.78E-02	7.86E-05	0.00E+00	0.00E+00
2780	301112.8	4020938	1.96E-02	8.62E-05	0.00E+00	0.00E+00
2781	301137.8	4020938	2.06E-02	9.07E-05	0.00E+00	0.00E+00
2782	301162.7	4020937	2.08E-02	9.15E-05	0.00E+00	0.00E+00
2783	301187.7	4020937	2.02E-02	8.88E-05	0.00E+00	0.00E+00
2784	301212.7	4020936	1.88E-02	8.28E-05	0.00E+00	0.00E+00
2785	301237.6	4020936	1.68E-02	7.42E-05	0.00E+00	0.00E+00
2786	301262.6	4020936	1.45E-02	6.40E-05	0.00E+00	0.00E+00
2787	300984.6	4020919	1.03E-02	4.53E-05	0.00E+00	0.00E+00
2788	301063.3	4020964	1.25E-02	5.49E-05	0.00E+00	0.00E+00
2789	301088.3	4020964	1.38E-02	6.08E-05	0.00E+00	0.00E+00
2790	301113.3	4020963	1.48E-02	6.54E-05	0.00E+00	0.00E+00
2791	301138.2	4020963	1.54E-02	6.80E-05	0.00E+00	0.00E+00
2792	301163.2	4020962	1.55E-02	6.84E-05	0.00E+00	0.00E+00
2793	301188.2	4020962	1.51E-02	6.65E-05	0.00E+00	0.00E+00
2794	301213.1	4020961	1.42E-02	6.27E-05	0.00E+00	0.00E+00
2795	301238.1	4020961	1.30E-02	5.72E-05	0.00E+00	0.00E+00
2796	301263.1	4020961	1.15E-02	5.07E-05	0.00E+00	0.00E+00
2797	301019.4	4020972	9.54E-03	4.20E-05	0.00E+00	0.00E+00
2798	301088.7	4020989	1.10E-02	4.85E-05	0.00E+00	0.00E+00
2799	301113.7	4020988	1.17E-02	5.14E-05	0.00E+00	0.00E+00
2800	301138.7	4020988	1.20E-02	5.30E-05	0.00E+00	0.00E+00
2801	301163.6	4020987	1.21E-02	5.32E-05	0.00E+00	0.00E+00
2802	301188.6	4020987	1.18E-02	5.20E-05	0.00E+00	0.00E+00
2803	301213.6	4020986	1.12E-02	4.94E-05	0.00E+00	0.00E+00
2804	301238.6	4020986	1.04E-02	4.58E-05	0.00E+00	0.00E+00
2805	301263.5	4020986	9.40E-03	4.14E-05	0.00E+00	0.00E+00
2806	301064.2	4021014	8.44E-03	3.72E-05	0.00E+00	0.00E+00
2807	301089.2	4021014	8.99E-03	3.96E-05	0.00E+00	0.00E+00
2808	301114.2	4021013	9.41E-03	4.15E-05	0.00E+00	0.00E+00
2809	301139.1	4021013	9.66E-03	4.25E-05	0.00E+00	0.00E+00
2810	301164.1	4021012	9.69E-03	4.27E-05	0.00E+00	0.00E+00
2811	301189.1	4021012	9.50E-03	4.19E-05	0.00E+00	0.00E+00
2812	301214	4021011	9.11E-03	4.01E-05	0.00E+00	0.00E+00
2813	301239	4021011	8.54E-03	3.76E-05	0.00E+00	0.00E+00

2814	301264	4021011	7.84E-03	3.45E-05	0.00E+00	0.00E+00
2815	301023.2	4021023	7.03E-03	3.10E-05	0.00E+00	0.00E+00
2816	300895.5	4020889	5.86E-03	2.58E-05	0.00E+00	0.00E+00
2817	301089.7	4021039	7.48E-03	3.30E-05	0.00E+00	0.00E+00
2818	301114.6	4021038	7.77E-03	3.42E-05	0.00E+00	0.00E+00
2819	301139.6	4021038	7.93E-03	3.50E-05	0.00E+00	0.00E+00
2820	301164.6	4021037	7.96E-03	3.51E-05	0.00E+00	0.00E+00
2821	301189.5	4021037	7.83E-03	3.45E-05	0.00E+00	0.00E+00
2822	301214.5	4021036	7.56E-03	3.33E-05	0.00E+00	0.00E+00
2823	301239.5	4021036	7.15E-03	3.15E-05	0.00E+00	0.00E+00
2824	301264.4	4021036	6.64E-03	2.93E-05	0.00E+00	0.00E+00
2825	301065.1	4021064	6.06E-03	2.67E-05	0.00E+00	0.00E+00
2826	301090.1	4021064	6.32E-03	2.79E-05	0.00E+00	0.00E+00
2827	301115.1	4021063	6.52E-03	2.87E-05	0.00E+00	0.00E+00
2828	301140	4021063	6.64E-03	2.93E-05	0.00E+00	0.00E+00
2829	301165	4021062	6.66E-03	2.93E-05	0.00E+00	0.00E+00
2830	301190	4021062	6.57E-03	2.90E-05	0.00E+00	0.00E+00
2831	301215	4021061	6.38E-03	2.81E-05	0.00E+00	0.00E+00
2832	301239.9	4021061	6.09E-03	2.68E-05	0.00E+00	0.00E+00
2833	301264.9	4021061	5.71E-03	2.52E-05	0.00E+00	0.00E+00
2834	300955	4021071	4.42E-03	1.95E-05	0.00E+00	0.00E+00
2835	300830.8	4020914	3.85E-03	1.69E-05	0.00E+00	0.00E+00
2836	301066	4021114	4.54E-03	2.00E-05	0.00E+00	0.00E+00
2837	301091	4021114	4.69E-03	2.07E-05	0.00E+00	0.00E+00
2838	301116	4021113	4.79E-03	2.11E-05	0.00E+00	0.00E+00
2839	301141	4021113	4.85E-03	2.14E-05	0.00E+00	0.00E+00
2840	301165.9	4021112	4.87E-03	2.14E-05	0.00E+00	0.00E+00
2841	301190.9	4021112	4.83E-03	2.13E-05	0.00E+00	0.00E+00
2842	301215.9	4021111	4.73E-03	2.08E-05	0.00E+00	0.00E+00
2843	301240.8	4021111	4.57E-03	2.01E-05	0.00E+00	0.00E+00
2844	301265.8	4021111	4.35E-03	1.92E-05	0.00E+00	0.00E+00
2845	300960.4	4021122	3.62E-03	1.59E-05	0.00E+00	0.00E+00
2846	300770.8	4020892	2.86E-03	1.26E-05	0.00E+00	0.00E+00
2847	301067	4021164	3.53E-03	1.56E-05	0.00E+00	0.00E+00
2848	301091.9	4021164	3.61E-03	1.59E-05	0.00E+00	0.00E+00
2849	301116.9	4021163	3.67E-03	1.62E-05	0.00E+00	0.00E+00
2850	301141.9	4021163	3.71E-03	1.63E-05	0.00E+00	0.00E+00
2851	301166.8	4021162	3.72E-03	1.64E-05	0.00E+00	0.00E+00
2852	301191.8	4021162	3.71E-03	1.63E-05	0.00E+00	0.00E+00
2853	301216.8	4021161	3.65E-03	1.61E-05	0.00E+00	0.00E+00
2854	301241.7	4021161	3.56E-03	1.57E-05	0.00E+00	0.00E+00
2855	301266.7	4021160	3.42E-03	1.51E-05	0.00E+00	0.00E+00
2856	301045.3	4021205	2.88E-03	1.27E-05	0.00E+00	0.00E+00
2857	301022.7	4021196	2.93E-03	1.29E-05	0.00E+00	0.00E+00
2858	301000	4021188	2.96E-03	1.30E-05	0.00E+00	0.00E+00
2859	300977.4	4021179	2.98E-03	1.31E-05	0.00E+00	0.00E+00
2860	300954.8	4021170	2.96E-03	1.31E-05	0.00E+00	0.00E+00

2861	300932.2	4021161	2.92E-03	1.29E-05	0.00E+00	0.00E+00
2862	300909.6	4021152	2.87E-03	1.26E-05	0.00E+00	0.00E+00
2863	300887	4021143	2.79E-03	1.23E-05	0.00E+00	0.00E+00
2864	300864.4	4021134	2.70E-03	1.19E-05	0.00E+00	0.00E+00
2865	300841.8	4021126	2.59E-03	1.14E-05	0.00E+00	0.00E+00
2866	300789.8	4021050	2.57E-03	1.13E-05	0.00E+00	0.00E+00
2867	300760.5	4020983	2.51E-03	1.11E-05	0.00E+00	0.00E+00
2868	300740.9	4020939	2.40E-03	1.06E-05	0.00E+00	0.00E+00
2869	300731.1	4020917	2.33E-03	1.03E-05	0.00E+00	0.00E+00
2870	301067.9	4021214	2.82E-03	1.24E-05	0.00E+00	0.00E+00
2871	301092.8	4021214	2.87E-03	1.27E-05	0.00E+00	0.00E+00
2872	301117.8	4021213	2.91E-03	1.28E-05	0.00E+00	0.00E+00
2873	301142.8	4021213	2.93E-03	1.29E-05	0.00E+00	0.00E+00
2874	301167.7	4021212	2.95E-03	1.30E-05	0.00E+00	0.00E+00
2875	301192.7	4021212	2.94E-03	1.30E-05	0.00E+00	0.00E+00
2876	301217.7	4021211	2.91E-03	1.28E-05	0.00E+00	0.00E+00
2877	301242.7	4021211	2.85E-03	1.26E-05	0.00E+00	0.00E+00
2878	301267.6	4021210	2.77E-03	1.22E-05	0.00E+00	0.00E+00
2879	300959.5	4021221	2.47E-03	1.09E-05	0.00E+00	0.00E+00
2880	300775.1	4021131	2.09E-03	9.22E-06	0.00E+00	0.00E+00
2881	300765.6	4021110	2.12E-03	9.32E-06	0.00E+00	0.00E+00
2882	300756.2	4021088	2.13E-03	9.37E-06	0.00E+00	0.00E+00
2883	300727.8	4021024	2.09E-03	9.22E-06	0.00E+00	0.00E+00
2884	300699.4	4020959	1.98E-03	8.74E-06	0.00E+00	0.00E+00
2885	301068.8	4021264	2.31E-03	1.02E-05	0.00E+00	0.00E+00
2886	301093.8	4021264	2.34E-03	1.03E-05	0.00E+00	0.00E+00
2887	301118.7	4021263	2.36E-03	1.04E-05	0.00E+00	0.00E+00
2888	301143.7	4021263	2.38E-03	1.05E-05	0.00E+00	0.00E+00
2889	301168.7	4021262	2.39E-03	1.05E-05	0.00E+00	0.00E+00
2890	301193.6	4021262	2.40E-03	1.06E-05	0.00E+00	0.00E+00
2891	301218.6	4021261	2.38E-03	1.05E-05	0.00E+00	0.00E+00
2892	301243.6	4021261	2.34E-03	1.03E-05	0.00E+00	0.00E+00
2893	301268.5	4021260	2.28E-03	1.01E-05	0.00E+00	0.00E+00
2894	301046.9	4021305	1.96E-03	8.65E-06	0.00E+00	0.00E+00
2895	301024	4021296	2.00E-03	8.83E-06	0.00E+00	0.00E+00
2896	301001.2	4021287	2.04E-03	8.98E-06	0.00E+00	0.00E+00
2897	300978.3	4021278	2.07E-03	9.10E-06	0.00E+00	0.00E+00
2898	300955.5	4021269	2.08E-03	9.17E-06	0.00E+00	0.00E+00
2899	300932.7	4021260	2.08E-03	9.18E-06	0.00E+00	0.00E+00
2900	300909.8	4021251	2.07E-03	9.13E-06	0.00E+00	0.00E+00
2901	300887	4021243	2.05E-03	9.03E-06	0.00E+00	0.00E+00
2902	300864.1	4021234	2.02E-03	8.90E-06	0.00E+00	0.00E+00
2903	300841.3	4021225	1.98E-03	8.74E-06	0.00E+00	0.00E+00
2904	300818.5	4021216	1.94E-03	8.53E-06	0.00E+00	0.00E+00
2905	300795.6	4021207	1.88E-03	8.28E-06	0.00E+00	0.00E+00
2906	300772.8	4021198	1.81E-03	7.99E-06	0.00E+00	0.00E+00
2907	300720.3	4021122	1.79E-03	7.87E-06	0.00E+00	0.00E+00

2908	300710.4	4021099	1.79E-03	7.87E-06	0.00E+00	0.00E+00
2909	300700.5	4021077	1.78E-03	7.83E-06	0.00E+00	0.00E+00
2910	300690.7	4021054	1.76E-03	7.76E-06	0.00E+00	0.00E+00
2911	300670.9	4021009	1.71E-03	7.55E-06	0.00E+00	0.00E+00
2912	300641.3	4020942	1.58E-03	6.95E-06	0.00E+00	0.00E+00
2913	301069.7	4021314	1.92E-03	8.46E-06	0.00E+00	0.00E+00
2914	301094.7	4021314	1.94E-03	8.55E-06	0.00E+00	0.00E+00
2915	301119.6	4021313	1.96E-03	8.63E-06	0.00E+00	0.00E+00
2916	301144.6	4021313	1.98E-03	8.70E-06	0.00E+00	0.00E+00
2917	301169.6	4021312	1.99E-03	8.76E-06	0.00E+00	0.00E+00
2918	301194.5	4021312	1.99E-03	8.77E-06	0.00E+00	0.00E+00
2919	301219.5	4021311	1.98E-03	8.73E-06	0.00E+00	0.00E+00
2920	301244.5	4021311	1.96E-03	8.62E-06	0.00E+00	0.00E+00
2921	301269.4	4021310	1.92E-03	8.45E-06	0.00E+00	0.00E+00
2922	300893	4021295	1.78E-03	7.84E-06	0.00E+00	0.00E+00
2923	300781.9	4021251	1.65E-03	7.27E-06	0.00E+00	0.00E+00
2924	300705.7	4021203	1.51E-03	6.64E-06	0.00E+00	0.00E+00
2925	300696.1	4021181	1.52E-03	6.69E-06	0.00E+00	0.00E+00
2926	300686.5	4021159	1.52E-03	6.71E-06	0.00E+00	0.00E+00
2927	300657.7	4021094	1.51E-03	6.65E-06	0.00E+00	0.00E+00
2928	300648.1	4021072	1.50E-03	6.59E-06	0.00E+00	0.00E+00
2929	300638.5	4021050	1.48E-03	6.52E-06	0.00E+00	0.00E+00
2930	300628.9	4021029	1.46E-03	6.41E-06	0.00E+00	0.00E+00
2931	301070.6	4021364	1.62E-03	7.16E-06	0.00E+00	0.00E+00
2932	301095.6	4021364	1.64E-03	7.23E-06	0.00E+00	0.00E+00
2933	301120.5	4021363	1.65E-03	7.29E-06	0.00E+00	0.00E+00
2934	301145.5	4021363	1.67E-03	7.36E-06	0.00E+00	0.00E+00
2935	301170.5	4021362	1.68E-03	7.41E-06	0.00E+00	0.00E+00
2936	301195.4	4021362	1.69E-03	7.43E-06	0.00E+00	0.00E+00
2937	301220.4	4021361	1.68E-03	7.40E-06	0.00E+00	0.00E+00
2938	301245.4	4021361	1.66E-03	7.33E-06	0.00E+00	0.00E+00
2939	301270.4	4021360	1.64E-03	7.21E-06	0.00E+00	0.00E+00
2940	301048.5	4021405	1.42E-03	6.26E-06	0.00E+00	0.00E+00
2941	301025.5	4021396	1.45E-03	6.39E-06	0.00E+00	0.00E+00
2942	301002.5	4021387	1.48E-03	6.53E-06	0.00E+00	0.00E+00
2943	300979.6	4021378	1.51E-03	6.66E-06	0.00E+00	0.00E+00
2944	300956.6	4021369	1.53E-03	6.76E-06	0.00E+00	0.00E+00
2945	300933.6	4021360	1.55E-03	6.82E-06	0.00E+00	0.00E+00
2946	300910.6	4021351	1.55E-03	6.84E-06	0.00E+00	0.00E+00
2947	300887.6	4021342	1.55E-03	6.83E-06	0.00E+00	0.00E+00
2948	300864.6	4021333	1.54E-03	6.78E-06	0.00E+00	0.00E+00
2949	300841.6	4021324	1.53E-03	6.72E-06	0.00E+00	0.00E+00
2950	300818.6	4021315	1.51E-03	6.65E-06	0.00E+00	0.00E+00
2951	300795.6	4021306	1.49E-03	6.57E-06	0.00E+00	0.00E+00
2952	300772.7	4021297	1.47E-03	6.46E-06	0.00E+00	0.00E+00
2953	300749.7	4021288	1.43E-03	6.31E-06	0.00E+00	0.00E+00
2954	300726.7	4021279	1.39E-03	6.14E-06	0.00E+00	0.00E+00

2955	300703.7	4021270	1.35E-03	5.93E-06	0.00E+00	0.00E+00
2956	300650.9	4021193	1.32E-03	5.80E-06	0.00E+00	0.00E+00
2957	300640.9	4021171	1.32E-03	5.80E-06	0.00E+00	0.00E+00
2958	300631	4021148	1.31E-03	5.78E-06	0.00E+00	0.00E+00
2959	300601.1	4021080	1.28E-03	5.64E-06	0.00E+00	0.00E+00
2960	300591.2	4021058	1.26E-03	5.55E-06	0.00E+00	0.00E+00
2961	300581.3	4021035	1.23E-03	5.44E-06	0.00E+00	0.00E+00
2962	300571.3	4021012	1.20E-03	5.29E-06	0.00E+00	0.00E+00
2963	301071.5	4021414	1.39E-03	6.14E-06	0.00E+00	0.00E+00
2964	301096.5	4021414	1.41E-03	6.20E-06	0.00E+00	0.00E+00
2965	301121.5	4021413	1.42E-03	6.26E-06	0.00E+00	0.00E+00
2966	301146.4	4021413	1.43E-03	6.32E-06	0.00E+00	0.00E+00
2967	301171.4	4021412	1.44E-03	6.36E-06	0.00E+00	0.00E+00
2968	301196.4	4021412	1.45E-03	6.38E-06	0.00E+00	0.00E+00
2969	301221.3	4021411	1.45E-03	6.37E-06	0.00E+00	0.00E+00
2970	301246.3	4021411	1.43E-03	6.32E-06	0.00E+00	0.00E+00
2971	301271.3	4021410	1.41E-03	6.23E-06	0.00E+00	0.00E+00
2972	300892.9	4021394	1.37E-03	6.02E-06	0.00E+00	0.00E+00
2973	300713.4	4021323	1.25E-03	5.52E-06	0.00E+00	0.00E+00
2974	300636.4	4021275	1.14E-03	5.03E-06	0.00E+00	0.00E+00
2975	300626.7	4021253	1.15E-03	5.06E-06	0.00E+00	0.00E+00
2976	300617	4021231	1.15E-03	5.07E-06	0.00E+00	0.00E+00
2977	300587.8	4021165	1.14E-03	5.04E-06	0.00E+00	0.00E+00
2978	300578.1	4021143	1.14E-03	5.01E-06	0.00E+00	0.00E+00
2979	300568.4	4021121	1.13E-03	4.96E-06	0.00E+00	0.00E+00
2980	300558.7	4021099	1.11E-03	4.89E-06	0.00E+00	0.00E+00
2981	300529.6	4021032	1.04E-03	4.59E-06	0.00E+00	0.00E+00
2982	300519.9	4021010	1.01E-03	4.46E-06	0.00E+00	0.00E+00
2983	300510.2	4020988	9.79E-04	4.31E-06	0.00E+00	0.00E+00
2984	300500.5	4020966	9.47E-04	4.17E-06	0.00E+00	0.00E+00
2985	300490.8	4020944	9.15E-04	4.03E-06	0.00E+00	0.00E+00
2986	300481.1	4020922	8.83E-04	3.89E-06	0.00E+00	0.00E+00
2987	300471.4	4020900	8.49E-04	3.74E-06	0.00E+00	0.00E+00
2988	301072.4	4021464	1.21E-03	5.34E-06	0.00E+00	0.00E+00
2989	301097.4	4021464	1.22E-03	5.39E-06	0.00E+00	0.00E+00
2990	301122.4	4021463	1.24E-03	5.45E-06	0.00E+00	0.00E+00
2991	301147.3	4021463	1.25E-03	5.50E-06	0.00E+00	0.00E+00
2992	301172.3	4021462	1.26E-03	5.54E-06	0.00E+00	0.00E+00
2993	301197.3	4021462	1.26E-03	5.55E-06	0.00E+00	0.00E+00
2994	301222.2	4021461	1.26E-03	5.54E-06	0.00E+00	0.00E+00
2995	301247.2	4021461	1.25E-03	5.51E-06	0.00E+00	0.00E+00
2996	301272.2	4021460	1.24E-03	5.45E-06	0.00E+00	0.00E+00
2997	300893.4	4021493	1.08E-03	4.77E-06	0.00E+00	0.00E+00
2998	300825.5	4021467	1.08E-03	4.75E-06	0.00E+00	0.00E+00
2999	300644.7	4021396	9.87E-04	4.35E-06	0.00E+00	0.00E+00
3000	300567.1	4021347	9.01E-04	3.97E-06	0.00E+00	0.00E+00
3001	300557.3	4021325	9.03E-04	3.98E-06	0.00E+00	0.00E+00

3002	300547.5	4021303	9.05E-04	3.99E-06	0.00E+00	0.00E+00
3003	300518.2	4021236	9.01E-04	3.97E-06	0.00E+00	0.00E+00
3004	300508.4	4021214	8.95E-04	3.94E-06	0.00E+00	0.00E+00
3005	300498.6	4021191	8.88E-04	3.91E-06	0.00E+00	0.00E+00
3006	300488.8	4021169	8.78E-04	3.87E-06	0.00E+00	0.00E+00
3007	300469.3	4021125	8.50E-04	3.75E-06	0.00E+00	0.00E+00
3008	300459.5	4021103	8.34E-04	3.67E-06	0.00E+00	0.00E+00
3009	300449.7	4021080	8.15E-04	3.59E-06	0.00E+00	0.00E+00
3010	300439.9	4021058	7.95E-04	3.50E-06	0.00E+00	0.00E+00
3011	300430.1	4021036	7.72E-04	3.40E-06	0.00E+00	0.00E+00
3012	300420.4	4021014	7.49E-04	3.30E-06	0.00E+00	0.00E+00
3013	300410.6	4020991	7.25E-04	3.20E-06	0.00E+00	0.00E+00
3014	300400.8	4020969	7.02E-04	3.09E-06	0.00E+00	0.00E+00
3015	300391	4020947	6.79E-04	2.99E-06	0.00E+00	0.00E+00
3016	300381.2	4020925	6.55E-04	2.88E-06	0.00E+00	0.00E+00
3017	300371.5	4020903	6.29E-04	2.77E-06	0.00E+00	0.00E+00
3018	301074.2	4021564	9.46E-04	4.17E-06	0.00E+00	0.00E+00
3019	301099.2	4021564	9.57E-04	4.22E-06	0.00E+00	0.00E+00
3020	301124.2	4021563	9.68E-04	4.26E-06	0.00E+00	0.00E+00
3021	301149.2	4021563	9.77E-04	4.30E-06	0.00E+00	0.00E+00
3022	301174.1	4021562	9.83E-04	4.33E-06	0.00E+00	0.00E+00
3023	301199.1	4021562	9.86E-04	4.34E-06	0.00E+00	0.00E+00
3024	301224.1	4021561	9.85E-04	4.34E-06	0.00E+00	0.00E+00
3025	301249	4021561	9.80E-04	4.32E-06	0.00E+00	0.00E+00
3026	301274	4021560	9.74E-04	4.29E-06	0.00E+00	0.00E+00
3027	300825.9	4021566	8.91E-04	3.93E-06	0.00E+00	0.00E+00
3028	300575.8	4021468	8.03E-04	3.54E-06	0.00E+00	0.00E+00
3029	300497.8	4021419	7.33E-04	3.23E-06	0.00E+00	0.00E+00
3030	300487.9	4021397	7.34E-04	3.23E-06	0.00E+00	0.00E+00
3031	300478.1	4021374	7.34E-04	3.24E-06	0.00E+00	0.00E+00
3032	300448.6	4021307	7.30E-04	3.22E-06	0.00E+00	0.00E+00
3033	300438.8	4021285	7.26E-04	3.20E-06	0.00E+00	0.00E+00
3034	300428.9	4021263	7.21E-04	3.17E-06	0.00E+00	0.00E+00
3035	300419.1	4021240	7.13E-04	3.14E-06	0.00E+00	0.00E+00
3036	300399.4	4021196	6.94E-04	3.06E-06	0.00E+00	0.00E+00
3037	300389.6	4021173	6.83E-04	3.01E-06	0.00E+00	0.00E+00
3038	300379.7	4021151	6.71E-04	2.96E-06	0.00E+00	0.00E+00
3039	300369.9	4021129	6.59E-04	2.90E-06	0.00E+00	0.00E+00
3040	300360.1	4021106	6.45E-04	2.84E-06	0.00E+00	0.00E+00
3041	300350.2	4021084	6.29E-04	2.77E-06	0.00E+00	0.00E+00
3042	300340.4	4021061	6.12E-04	2.70E-06	0.00E+00	0.00E+00
3043	300330.6	4021039	5.93E-04	2.61E-06	0.00E+00	0.00E+00
3044	300320.7	4021017	5.75E-04	2.53E-06	0.00E+00	0.00E+00
3045	300310.9	4020994	5.57E-04	2.45E-06	0.00E+00	0.00E+00
3046	300301.1	4020972	5.39E-04	2.37E-06	0.00E+00	0.00E+00
3047	300291.2	4020950	5.21E-04	2.30E-06	0.00E+00	0.00E+00
3048	300281.4	4020927	5.03E-04	2.22E-06	0.00E+00	0.00E+00

3049	300271.5	4020905	4.85E-04	2.13E-06	0.00E+00	0.00E+00
3050	301076.1	4021664	7.66E-04	3.37E-06	0.00E+00	0.00E+00
3051	301101	4021664	7.75E-04	3.42E-06	0.00E+00	0.00E+00
3052	301126	4021663	7.84E-04	3.45E-06	0.00E+00	0.00E+00
3053	301151	4021663	7.91E-04	3.49E-06	0.00E+00	0.00E+00
3054	301175.9	4021662	7.96E-04	3.51E-06	0.00E+00	0.00E+00
3055	301200.9	4021662	7.97E-04	3.51E-06	0.00E+00	0.00E+00
3056	301225.9	4021661	7.97E-04	3.51E-06	0.00E+00	0.00E+00
3057	301250.9	4021661	7.95E-04	3.50E-06	0.00E+00	0.00E+00
3058	301275.8	4021660	7.91E-04	3.49E-06	0.00E+00	0.00E+00
3059	300895.2	4021692	7.23E-04	3.19E-06	0.00E+00	0.00E+00
3060	300826.7	4021666	7.51E-04	3.31E-06	0.00E+00	0.00E+00
3061	300643.9	4021594	7.22E-04	3.18E-06	0.00E+00	0.00E+00
3062	300461.2	4021523	6.33E-04	2.79E-06	0.00E+00	0.00E+00
3063	300428.5	4021491	6.12E-04	2.70E-06	0.00E+00	0.00E+00
3064	300418.6	4021469	6.12E-04	2.69E-06	0.00E+00	0.00E+00
3065	300408.7	4021446	6.11E-04	2.69E-06	0.00E+00	0.00E+00
3066	300379.1	4021379	6.07E-04	2.67E-06	0.00E+00	0.00E+00
3067	300369.2	4021356	6.03E-04	2.66E-06	0.00E+00	0.00E+00
3068	300359.3	4021334	5.99E-04	2.64E-06	0.00E+00	0.00E+00
3069	300329.7	4021267	5.80E-04	2.56E-06	0.00E+00	0.00E+00
3070	300319.8	4021244	5.73E-04	2.52E-06	0.00E+00	0.00E+00
3071	300309.9	4021222	5.64E-04	2.48E-06	0.00E+00	0.00E+00
3072	300300.1	4021199	5.55E-04	2.45E-06	0.00E+00	0.00E+00
3073	300290.2	4021177	5.46E-04	2.40E-06	0.00E+00	0.00E+00
3074	300280.3	4021154	5.36E-04	2.36E-06	0.00E+00	0.00E+00
3075	300270.4	4021132	5.25E-04	2.31E-06	0.00E+00	0.00E+00
3076	300260.5	4021109	5.12E-04	2.26E-06	0.00E+00	0.00E+00
3077	300250.7	4021087	4.98E-04	2.19E-06	0.00E+00	0.00E+00
3078	300240.8	4021065	4.83E-04	2.13E-06	0.00E+00	0.00E+00
3079	300230.9	4021042	4.68E-04	2.06E-06	0.00E+00	0.00E+00
3080	300221	4021020	4.53E-04	2.00E-06	0.00E+00	0.00E+00
3081	300211.1	4020997	4.39E-04	1.94E-06	0.00E+00	0.00E+00
3082	300201.3	4020975	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3083	300191.4	4020952	4.13E-04	1.82E-06	0.00E+00	0.00E+00
3084	300181.5	4020930	4.00E-04	1.76E-06	0.00E+00	0.00E+00
3085	300171.6	4020907	3.86E-04	1.70E-06	0.00E+00	0.00E+00
3086	301077.9	4021764	6.39E-04	2.81E-06	0.00E+00	0.00E+00
3087	301102.9	4021764	6.47E-04	2.85E-06	0.00E+00	0.00E+00
3088	301127.8	4021763	6.54E-04	2.88E-06	0.00E+00	0.00E+00
3089	301152.8	4021763	6.59E-04	2.91E-06	0.00E+00	0.00E+00
3090	301177.8	4021762	6.63E-04	2.92E-06	0.00E+00	0.00E+00
3091	301202.7	4021762	6.63E-04	2.92E-06	0.00E+00	0.00E+00
3092	301227.7	4021761	6.62E-04	2.92E-06	0.00E+00	0.00E+00
3093	301252.7	4021761	6.61E-04	2.91E-06	0.00E+00	0.00E+00
3094	301277.6	4021760	6.59E-04	2.90E-06	0.00E+00	0.00E+00
3095	300827.6	4021765	6.40E-04	2.82E-06	0.00E+00	0.00E+00

3096	300644.2	4021693	6.19E-04	2.73E-06	0.00E+00	0.00E+00
3097	300460.8	4021622	5.85E-04	2.58E-06	0.00E+00	0.00E+00
3098	300392.1	4021595	5.40E-04	2.38E-06	0.00E+00	0.00E+00
3099	300359.2	4021563	5.22E-04	2.30E-06	0.00E+00	0.00E+00
3100	300349.3	4021541	5.20E-04	2.29E-06	0.00E+00	0.00E+00
3101	300339.4	4021518	5.19E-04	2.29E-06	0.00E+00	0.00E+00
3102	300309.6	4021451	5.14E-04	2.27E-06	0.00E+00	0.00E+00
3103	300299.7	4021428	5.11E-04	2.25E-06	0.00E+00	0.00E+00
3104	300289.8	4021405	5.08E-04	2.24E-06	0.00E+00	0.00E+00
3105	300260.1	4021338	4.94E-04	2.18E-06	0.00E+00	0.00E+00
3106	300250.2	4021315	4.89E-04	2.15E-06	0.00E+00	0.00E+00
3107	300240.2	4021293	4.83E-04	2.13E-06	0.00E+00	0.00E+00
3108	300230.3	4021270	4.76E-04	2.10E-06	0.00E+00	0.00E+00
3109	300220.4	4021248	4.69E-04	2.07E-06	0.00E+00	0.00E+00
3110	300210.5	4021225	4.62E-04	2.03E-06	0.00E+00	0.00E+00
3111	300200.6	4021203	4.54E-04	2.00E-06	0.00E+00	0.00E+00
3112	300190.7	4021180	4.46E-04	1.96E-06	0.00E+00	0.00E+00
3113	300180.7	4021158	4.37E-04	1.92E-06	0.00E+00	0.00E+00
3114	300170.8	4021135	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3115	300160.9	4021113	4.15E-04	1.83E-06	0.00E+00	0.00E+00
3116	300151	4021090	4.02E-04	1.77E-06	0.00E+00	0.00E+00
3117	300141.1	4021068	3.90E-04	1.72E-06	0.00E+00	0.00E+00
3118	300131.2	4021045	3.78E-04	1.67E-06	0.00E+00	0.00E+00
3119	300121.3	4021022	3.67E-04	1.62E-06	0.00E+00	0.00E+00
3120	300111.3	4021000	3.56E-04	1.57E-06	0.00E+00	0.00E+00
3121	300101.4	4020977	3.47E-04	1.53E-06	0.00E+00	0.00E+00
3122	300091.5	4020955	3.37E-04	1.48E-06	0.00E+00	0.00E+00
3123	300081.6	4020932	3.27E-04	1.44E-06	0.00E+00	0.00E+00
3124	300071.7	4020910	3.16E-04	1.39E-06	0.00E+00	0.00E+00
3125	301079.7	4021864	5.46E-04	2.41E-06	0.00E+00	0.00E+00
3126	301104.7	4021864	5.53E-04	2.44E-06	0.00E+00	0.00E+00
3127	301129.7	4021863	5.59E-04	2.46E-06	0.00E+00	0.00E+00
3128	301154.6	4021863	5.63E-04	2.48E-06	0.00E+00	0.00E+00
3129	301179.6	4021862	5.64E-04	2.49E-06	0.00E+00	0.00E+00
3130	301204.6	4021862	5.65E-04	2.49E-06	0.00E+00	0.00E+00
3131	301229.5	4021861	5.64E-04	2.48E-06	0.00E+00	0.00E+00
3132	301254.5	4021861	5.62E-04	2.48E-06	0.00E+00	0.00E+00
3133	301279.5	4021860	5.61E-04	2.47E-06	0.00E+00	0.00E+00
3134	300828.7	4021865	5.50E-04	2.42E-06	0.00E+00	0.00E+00
3135	300575.8	4021766	5.37E-04	2.36E-06	0.00E+00	0.00E+00
3136	300391.9	4021694	5.08E-04	2.24E-06	0.00E+00	0.00E+00
3137	300322.9	4021667	4.69E-04	2.06E-06	0.00E+00	0.00E+00
3138	300290	4021635	4.52E-04	1.99E-06	0.00E+00	0.00E+00
3139	300280	4021613	4.50E-04	1.98E-06	0.00E+00	0.00E+00
3140	300270.1	4021590	4.48E-04	1.97E-06	0.00E+00	0.00E+00
3141	300240.2	4021522	4.43E-04	1.95E-06	0.00E+00	0.00E+00
3142	300230.3	4021500	4.41E-04	1.94E-06	0.00E+00	0.00E+00

3143	300220.3	4021477	4.38E-04	1.93E-06	0.00E+00	0.00E+00
3144	300190.5	4021409	4.28E-04	1.88E-06	0.00E+00	0.00E+00
3145	300180.6	4021387	4.24E-04	1.87E-06	0.00E+00	0.00E+00
3146	300170.6	4021364	4.20E-04	1.85E-06	0.00E+00	0.00E+00
3147	300160.7	4021342	4.15E-04	1.83E-06	0.00E+00	0.00E+00
3148	300150.7	4021319	4.10E-04	1.80E-06	0.00E+00	0.00E+00
3149	300140.8	4021296	4.04E-04	1.78E-06	0.00E+00	0.00E+00
3150	300130.8	4021274	3.98E-04	1.75E-06	0.00E+00	0.00E+00
3151	300120.9	4021251	3.91E-04	1.72E-06	0.00E+00	0.00E+00
3152	300111	4021229	3.85E-04	1.70E-06	0.00E+00	0.00E+00
3153	300101	4021206	3.78E-04	1.67E-06	0.00E+00	0.00E+00
3154	300091.1	4021183	3.70E-04	1.63E-06	0.00E+00	0.00E+00
3155	300081.1	4021161	3.61E-04	1.59E-06	0.00E+00	0.00E+00
3156	300071.2	4021138	3.52E-04	1.55E-06	0.00E+00	0.00E+00
3157	300061.2	4021116	3.41E-04	1.50E-06	0.00E+00	0.00E+00
3158	300051.3	4021093	3.31E-04	1.46E-06	0.00E+00	0.00E+00
3159	300041.3	4021070	3.21E-04	1.42E-06	0.00E+00	0.00E+00
3160	300031.4	4021048	3.12E-04	1.38E-06	0.00E+00	0.00E+00
3161	300021.5	4021025	3.04E-04	1.34E-06	0.00E+00	0.00E+00
3162	300011.5	4021003	2.96E-04	1.31E-06	0.00E+00	0.00E+00
3163	300001.6	4020980	2.89E-04	1.27E-06	0.00E+00	0.00E+00
3164	299991.6	4020957	2.81E-04	1.24E-06	0.00E+00	0.00E+00
3165	299981.7	4020935	2.73E-04	1.20E-06	0.00E+00	0.00E+00
3166	299971.7	4020912	2.64E-04	1.16E-06	0.00E+00	0.00E+00
3167	301081.5	4021964	4.76E-04	2.10E-06	0.00E+00	0.00E+00
3168	301106.5	4021964	4.82E-04	2.12E-06	0.00E+00	0.00E+00
3169	301131.5	4021963	4.86E-04	2.14E-06	0.00E+00	0.00E+00
3170	301156.4	4021963	4.89E-04	2.16E-06	0.00E+00	0.00E+00
3171	301181.4	4021962	4.90E-04	2.16E-06	0.00E+00	0.00E+00
3172	301206.4	4021962	4.90E-04	2.16E-06	0.00E+00	0.00E+00
3173	301231.3	4021961	4.89E-04	2.15E-06	0.00E+00	0.00E+00
3174	301256.3	4021961	4.87E-04	2.15E-06	0.00E+00	0.00E+00
3175	301281.3	4021960	4.86E-04	2.14E-06	0.00E+00	0.00E+00
3176	301060.3	4022055	4.20E-04	1.85E-06	0.00E+00	0.00E+00
3177	301037.3	4022046	4.19E-04	1.85E-06	0.00E+00	0.00E+00
3178	301014.2	4022037	4.19E-04	1.85E-06	0.00E+00	0.00E+00
3179	300991.2	4022028	4.20E-04	1.85E-06	0.00E+00	0.00E+00
3180	300968.1	4022019	4.23E-04	1.86E-06	0.00E+00	0.00E+00
3181	300945.1	4022010	4.28E-04	1.88E-06	0.00E+00	0.00E+00
3182	300922	4022001	4.35E-04	1.92E-06	0.00E+00	0.00E+00
3183	300899	4021992	4.44E-04	1.96E-06	0.00E+00	0.00E+00
3184	300875.9	4021983	4.54E-04	2.00E-06	0.00E+00	0.00E+00
3185	300852.9	4021974	4.65E-04	2.05E-06	0.00E+00	0.00E+00
3186	300829.9	4021965	4.76E-04	2.10E-06	0.00E+00	0.00E+00
3187	300806.8	4021956	4.86E-04	2.14E-06	0.00E+00	0.00E+00
3188	300783.8	4021947	4.94E-04	2.18E-06	0.00E+00	0.00E+00
3189	300760.7	4021938	5.00E-04	2.20E-06	0.00E+00	0.00E+00

3190	300737.7	4021929	5.03E-04	2.22E-06	0.00E+00	0.00E+00
3191	300714.6	4021920	5.03E-04	2.22E-06	0.00E+00	0.00E+00
3192	300691.6	4021911	5.00E-04	2.20E-06	0.00E+00	0.00E+00
3193	300668.5	4021902	4.95E-04	2.18E-06	0.00E+00	0.00E+00
3194	300645.5	4021893	4.89E-04	2.16E-06	0.00E+00	0.00E+00
3195	300622.4	4021883	4.83E-04	2.13E-06	0.00E+00	0.00E+00
3196	300599.4	4021874	4.78E-04	2.11E-06	0.00E+00	0.00E+00
3197	300576.4	4021865	4.75E-04	2.09E-06	0.00E+00	0.00E+00
3198	300553.3	4021856	4.73E-04	2.08E-06	0.00E+00	0.00E+00
3199	300530.3	4021847	4.73E-04	2.08E-06	0.00E+00	0.00E+00
3200	300507.2	4021838	4.74E-04	2.09E-06	0.00E+00	0.00E+00
3201	300484.2	4021829	4.75E-04	2.09E-06	0.00E+00	0.00E+00
3202	300461.1	4021820	4.76E-04	2.10E-06	0.00E+00	0.00E+00
3203	300438.1	4021811	4.76E-04	2.10E-06	0.00E+00	0.00E+00
3204	300415	4021802	4.74E-04	2.09E-06	0.00E+00	0.00E+00
3205	300392	4021793	4.71E-04	2.07E-06	0.00E+00	0.00E+00
3206	300368.9	4021784	4.65E-04	2.05E-06	0.00E+00	0.00E+00
3207	300345.9	4021775	4.57E-04	2.01E-06	0.00E+00	0.00E+00
3208	300322.9	4021766	4.47E-04	1.97E-06	0.00E+00	0.00E+00
3209	300299.8	4021757	4.36E-04	1.92E-06	0.00E+00	0.00E+00
3210	300276.8	4021748	4.25E-04	1.87E-06	0.00E+00	0.00E+00
3211	300253.7	4021739	4.12E-04	1.82E-06	0.00E+00	0.00E+00
3212	300220.7	4021707	3.97E-04	1.75E-06	0.00E+00	0.00E+00
3213	300210.7	4021685	3.95E-04	1.74E-06	0.00E+00	0.00E+00
3214	300200.8	4021662	3.93E-04	1.73E-06	0.00E+00	0.00E+00
3215	300170.9	4021594	3.88E-04	1.71E-06	0.00E+00	0.00E+00
3216	300160.9	4021571	3.86E-04	1.70E-06	0.00E+00	0.00E+00
3217	300150.9	4021549	3.83E-04	1.69E-06	0.00E+00	0.00E+00
3218	300121	4021481	3.75E-04	1.65E-06	0.00E+00	0.00E+00
3219	300111	4021458	3.72E-04	1.64E-06	0.00E+00	0.00E+00
3220	300101.1	4021436	3.69E-04	1.63E-06	0.00E+00	0.00E+00
3221	300091.1	4021413	3.66E-04	1.61E-06	0.00E+00	0.00E+00
3222	300081.1	4021390	3.62E-04	1.60E-06	0.00E+00	0.00E+00
3223	300071.2	4021368	3.58E-04	1.58E-06	0.00E+00	0.00E+00
3224	300061.2	4021345	3.53E-04	1.55E-06	0.00E+00	0.00E+00
3225	300051.2	4021322	3.48E-04	1.53E-06	0.00E+00	0.00E+00
3226	300041.3	4021300	3.42E-04	1.51E-06	0.00E+00	0.00E+00
3227	300031.3	4021277	3.37E-04	1.49E-06	0.00E+00	0.00E+00
3228	300021.3	4021254	3.32E-04	1.46E-06	0.00E+00	0.00E+00
3229	300011.4	4021232	3.26E-04	1.44E-06	0.00E+00	0.00E+00
3230	300001.4	4021209	3.19E-04	1.41E-06	0.00E+00	0.00E+00
3231	299991.4	4021186	3.11E-04	1.37E-06	0.00E+00	0.00E+00
3232	299981.4	4021164	3.03E-04	1.33E-06	0.00E+00	0.00E+00
3233	299971.5	4021141	2.94E-04	1.30E-06	0.00E+00	0.00E+00
3234	299961.5	4021118	2.86E-04	1.26E-06	0.00E+00	0.00E+00
3235	299951.5	4021096	2.78E-04	1.22E-06	0.00E+00	0.00E+00
3236	299941.6	4021073	2.70E-04	1.19E-06	0.00E+00	0.00E+00

3237	299931.6	4021050	2.64E-04	1.16E-06	0.00E+00	0.00E+00
3238	299921.6	4021028	2.57E-04	1.13E-06	0.00E+00	0.00E+00
3239	299911.7	4021005	2.51E-04	1.11E-06	0.00E+00	0.00E+00
3240	299901.7	4020983	2.45E-04	1.08E-06	0.00E+00	0.00E+00
3241	299891.7	4020960	2.39E-04	1.05E-06	0.00E+00	0.00E+00
3242	299881.8	4020937	2.32E-04	1.02E-06	0.00E+00	0.00E+00
3243	299871.8	4020915	2.25E-04	9.89E-07	0.00E+00	0.00E+00
3244	301083.4	4022064	4.21E-04	1.86E-06	0.00E+00	0.00E+00
3245	301108.3	4022064	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3246	301133.3	4022063	4.30E-04	1.89E-06	0.00E+00	0.00E+00
3247	301158.3	4022063	4.32E-04	1.90E-06	0.00E+00	0.00E+00
3248	301183.2	4022062	4.32E-04	1.91E-06	0.00E+00	0.00E+00
3249	301208.2	4022062	4.32E-04	1.90E-06	0.00E+00	0.00E+00
3250	301233.2	4022061	4.31E-04	1.90E-06	0.00E+00	0.00E+00
3251	301258.1	4022061	4.29E-04	1.89E-06	0.00E+00	0.00E+00
3252	301283.1	4022060	4.28E-04	1.89E-06	0.00E+00	0.00E+00
3253	301062.1	4022155	3.77E-04	1.66E-06	0.00E+00	0.00E+00
3254	301039	4022146	3.75E-04	1.65E-06	0.00E+00	0.00E+00
3255	301015.9	4022137	3.74E-04	1.65E-06	0.00E+00	0.00E+00
3256	300992.8	4022128	3.74E-04	1.65E-06	0.00E+00	0.00E+00
3257	300969.7	4022119	3.75E-04	1.65E-06	0.00E+00	0.00E+00
3258	300946.6	4022110	3.78E-04	1.66E-06	0.00E+00	0.00E+00
3259	300923.5	4022101	3.83E-04	1.69E-06	0.00E+00	0.00E+00
3260	300900.4	4022092	3.89E-04	1.71E-06	0.00E+00	0.00E+00
3261	300877.3	4022083	3.97E-04	1.75E-06	0.00E+00	0.00E+00
3262	300854.2	4022074	4.07E-04	1.79E-06	0.00E+00	0.00E+00
3263	300831.2	4022064	4.16E-04	1.83E-06	0.00E+00	0.00E+00
3264	300808.1	4022055	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3265	300785	4022046	4.35E-04	1.92E-06	0.00E+00	0.00E+00
3266	300761.9	4022037	4.43E-04	1.95E-06	0.00E+00	0.00E+00
3267	300738.8	4022028	4.48E-04	1.97E-06	0.00E+00	0.00E+00
3268	300715.7	4022019	4.52E-04	1.99E-06	0.00E+00	0.00E+00
3269	300692.6	4022010	4.52E-04	1.99E-06	0.00E+00	0.00E+00
3270	300669.5	4022001	4.50E-04	1.98E-06	0.00E+00	0.00E+00
3271	300646.4	4021992	4.46E-04	1.97E-06	0.00E+00	0.00E+00
3272	300623.3	4021983	4.41E-04	1.94E-06	0.00E+00	0.00E+00
3273	300600.2	4021974	4.35E-04	1.92E-06	0.00E+00	0.00E+00
3274	300577.1	4021965	4.30E-04	1.89E-06	0.00E+00	0.00E+00
3275	300554	4021956	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3276	300530.9	4021947	4.23E-04	1.86E-06	0.00E+00	0.00E+00
3277	300507.8	4021938	4.22E-04	1.86E-06	0.00E+00	0.00E+00
3278	300484.7	4021929	4.22E-04	1.86E-06	0.00E+00	0.00E+00
3279	300461.7	4021920	4.23E-04	1.86E-06	0.00E+00	0.00E+00
3280	300438.6	4021911	4.24E-04	1.87E-06	0.00E+00	0.00E+00
3281	300415.5	4021902	4.26E-04	1.88E-06	0.00E+00	0.00E+00
3282	300392.4	4021893	4.27E-04	1.88E-06	0.00E+00	0.00E+00
3283	300369.3	4021884	4.27E-04	1.88E-06	0.00E+00	0.00E+00

3284	300346.2	4021875	4.25E-04	1.87E-06	0.00E+00	0.00E+00
3285	300323.1	4021866	4.21E-04	1.85E-06	0.00E+00	0.00E+00
3286	300300	4021856	4.15E-04	1.83E-06	0.00E+00	0.00E+00
3287	300276.9	4021847	4.07E-04	1.79E-06	0.00E+00	0.00E+00
3288	300253.8	4021838	3.98E-04	1.76E-06	0.00E+00	0.00E+00
3289	300230.7	4021829	3.88E-04	1.71E-06	0.00E+00	0.00E+00
3290	300207.6	4021820	3.78E-04	1.66E-06	0.00E+00	0.00E+00
3291	300184.5	4021811	3.67E-04	1.62E-06	0.00E+00	0.00E+00
3292	300151.4	4021780	3.54E-04	1.56E-06	0.00E+00	0.00E+00
3293	300141.5	4021757	3.51E-04	1.55E-06	0.00E+00	0.00E+00
3294	300131.5	4021734	3.48E-04	1.53E-06	0.00E+00	0.00E+00
3295	300121.5	4021711	3.46E-04	1.53E-06	0.00E+00	0.00E+00
3296	300111.5	4021689	3.44E-04	1.52E-06	0.00E+00	0.00E+00
3297	300101.5	4021666	3.43E-04	1.51E-06	0.00E+00	0.00E+00
3298	300091.5	4021643	3.41E-04	1.50E-06	0.00E+00	0.00E+00
3299	300081.5	4021621	3.40E-04	1.50E-06	0.00E+00	0.00E+00
3300	300051.5	4021553	3.33E-04	1.47E-06	0.00E+00	0.00E+00
3301	300041.6	4021530	3.31E-04	1.46E-06	0.00E+00	0.00E+00
3302	300031.6	4021507	3.29E-04	1.45E-06	0.00E+00	0.00E+00
3303	300021.6	4021484	3.26E-04	1.44E-06	0.00E+00	0.00E+00
3304	300011.6	4021462	3.24E-04	1.43E-06	0.00E+00	0.00E+00
3305	300001.6	4021439	3.20E-04	1.41E-06	0.00E+00	0.00E+00
3306	299991.6	4021416	3.17E-04	1.39E-06	0.00E+00	0.00E+00
3307	299981.6	4021394	3.12E-04	1.38E-06	0.00E+00	0.00E+00
3308	299971.6	4021371	3.08E-04	1.36E-06	0.00E+00	0.00E+00
3309	299961.6	4021348	3.03E-04	1.34E-06	0.00E+00	0.00E+00
3310	299951.6	4021326	2.99E-04	1.32E-06	0.00E+00	0.00E+00
3311	299941.7	4021303	2.94E-04	1.30E-06	0.00E+00	0.00E+00
3312	299931.7	4021280	2.90E-04	1.28E-06	0.00E+00	0.00E+00
3313	299921.7	4021257	2.84E-04	1.25E-06	0.00E+00	0.00E+00
3314	299911.7	4021235	2.79E-04	1.23E-06	0.00E+00	0.00E+00
3315	299901.7	4021212	2.72E-04	1.20E-06	0.00E+00	0.00E+00
3316	299891.7	4021189	2.65E-04	1.17E-06	0.00E+00	0.00E+00
3317	299881.7	4021167	2.58E-04	1.14E-06	0.00E+00	0.00E+00
3318	299871.7	4021144	2.51E-04	1.10E-06	0.00E+00	0.00E+00
3319	299861.7	4021121	2.44E-04	1.07E-06	0.00E+00	0.00E+00
3320	299851.8	4021098	2.37E-04	1.05E-06	0.00E+00	0.00E+00
3321	299841.8	4021076	2.32E-04	1.02E-06	0.00E+00	0.00E+00
3322	299831.8	4021053	2.26E-04	9.96E-07	0.00E+00	0.00E+00
3323	299821.8	4021030	2.21E-04	9.74E-07	0.00E+00	0.00E+00
3324	299811.8	4021008	2.16E-04	9.52E-07	0.00E+00	0.00E+00
3325	299801.8	4020985	2.11E-04	9.30E-07	0.00E+00	0.00E+00
3326	299791.8	4020962	2.06E-04	9.07E-07	0.00E+00	0.00E+00
3327	299781.8	4020940	2.00E-04	8.82E-07	0.00E+00	0.00E+00
3328	299771.8	4020917	1.94E-04	8.55E-07	0.00E+00	0.00E+00
3329	301085.2	4022164	3.78E-04	1.66E-06	0.00E+00	0.00E+00
3330	301110.1	4022164	3.82E-04	1.68E-06	0.00E+00	0.00E+00

3331	301135.1	4022163	3.85E-04	1.70E-06	0.00E+00	0.00E+00
3332	301160.1	4022163	3.86E-04	1.70E-06	0.00E+00	0.00E+00
3333	301185.1	4022162	3.87E-04	1.70E-06	0.00E+00	0.00E+00
3334	301210	4022162	3.86E-04	1.70E-06	0.00E+00	0.00E+00
3335	301235	4022161	3.84E-04	1.69E-06	0.00E+00	0.00E+00
3336	301260	4022161	3.83E-04	1.69E-06	0.00E+00	0.00E+00
3337	301284.9	4022160	3.82E-04	1.68E-06	0.00E+00	0.00E+00
3338	301063.9	4022255	3.42E-04	1.50E-06	0.00E+00	0.00E+00
3339	301040.7	4022246	3.40E-04	1.50E-06	0.00E+00	0.00E+00
3340	301017.6	4022237	3.38E-04	1.49E-06	0.00E+00	0.00E+00
3341	300994.5	4022228	3.37E-04	1.48E-06	0.00E+00	0.00E+00
3342	300971.3	4022219	3.37E-04	1.48E-06	0.00E+00	0.00E+00
3343	300948.2	4022210	3.38E-04	1.49E-06	0.00E+00	0.00E+00
3344	300925.1	4022201	3.41E-04	1.50E-06	0.00E+00	0.00E+00
3345	300901.9	4022191	3.46E-04	1.52E-06	0.00E+00	0.00E+00
3346	300878.8	4022182	3.52E-04	1.55E-06	0.00E+00	0.00E+00
3347	300855.7	4022173	3.60E-04	1.58E-06	0.00E+00	0.00E+00
3348	300832.5	4022164	3.68E-04	1.62E-06	0.00E+00	0.00E+00
3349	300809.4	4022155	3.77E-04	1.66E-06	0.00E+00	0.00E+00
3350	300786.2	4022146	3.85E-04	1.70E-06	0.00E+00	0.00E+00
3351	300763.1	4022137	3.94E-04	1.73E-06	0.00E+00	0.00E+00
3352	300740	4022128	4.00E-04	1.76E-06	0.00E+00	0.00E+00
3353	300716.8	4022119	4.06E-04	1.79E-06	0.00E+00	0.00E+00
3354	300693.7	4022110	4.09E-04	1.80E-06	0.00E+00	0.00E+00
3355	300670.6	4022101	4.10E-04	1.81E-06	0.00E+00	0.00E+00
3356	300647.4	4022092	4.09E-04	1.80E-06	0.00E+00	0.00E+00
3357	300624.3	4022083	4.06E-04	1.79E-06	0.00E+00	0.00E+00
3358	300601.2	4022074	4.02E-04	1.77E-06	0.00E+00	0.00E+00
3359	300578	4022065	3.97E-04	1.75E-06	0.00E+00	0.00E+00
3360	300554.9	4022056	3.91E-04	1.72E-06	0.00E+00	0.00E+00
3361	300531.8	4022047	3.87E-04	1.70E-06	0.00E+00	0.00E+00
3362	300508.6	4022037	3.83E-04	1.69E-06	0.00E+00	0.00E+00
3363	300485.5	4022028	3.81E-04	1.68E-06	0.00E+00	0.00E+00
3364	300462.4	4022019	3.80E-04	1.67E-06	0.00E+00	0.00E+00
3365	300439.2	4022010	3.80E-04	1.67E-06	0.00E+00	0.00E+00
3366	300416.1	4022001	3.81E-04	1.68E-06	0.00E+00	0.00E+00
3367	300393	4021992	3.83E-04	1.69E-06	0.00E+00	0.00E+00
3368	300369.8	4021983	3.85E-04	1.70E-06	0.00E+00	0.00E+00
3369	300346.7	4021974	3.87E-04	1.70E-06	0.00E+00	0.00E+00
3370	300323.6	4021965	3.87E-04	1.71E-06	0.00E+00	0.00E+00
3371	300300.4	4021956	3.86E-04	1.70E-06	0.00E+00	0.00E+00
3372	300277.3	4021947	3.84E-04	1.69E-06	0.00E+00	0.00E+00
3373	300254.1	4021938	3.80E-04	1.67E-06	0.00E+00	0.00E+00
3374	300231	4021929	3.74E-04	1.65E-06	0.00E+00	0.00E+00
3375	300207.9	4021920	3.67E-04	1.62E-06	0.00E+00	0.00E+00
3376	300184.7	4021911	3.58E-04	1.58E-06	0.00E+00	0.00E+00
3377	300161.6	4021902	3.49E-04	1.54E-06	0.00E+00	0.00E+00

3378	300138.5	4021892	3.40E-04	1.50E-06	0.00E+00	0.00E+00
3379	300115.3	4021883	3.30E-04	1.45E-06	0.00E+00	0.00E+00
3380	300082.2	4021852	3.18E-04	1.40E-06	0.00E+00	0.00E+00
3381	300072.2	4021829	3.15E-04	1.39E-06	0.00E+00	0.00E+00
3382	300062.2	4021806	3.12E-04	1.38E-06	0.00E+00	0.00E+00
3383	300052.2	4021783	3.10E-04	1.37E-06	0.00E+00	0.00E+00
3384	300042.2	4021761	3.08E-04	1.36E-06	0.00E+00	0.00E+00
3385	300032.2	4021738	3.07E-04	1.35E-06	0.00E+00	0.00E+00
3386	300022.1	4021715	3.05E-04	1.34E-06	0.00E+00	0.00E+00
3387	300012.1	4021692	3.04E-04	1.34E-06	0.00E+00	0.00E+00
3388	300002.1	4021670	3.03E-04	1.33E-06	0.00E+00	0.00E+00
3389	299992.1	4021647	3.01E-04	1.33E-06	0.00E+00	0.00E+00
3390	299982.1	4021624	2.99E-04	1.32E-06	0.00E+00	0.00E+00
3391	299972.1	4021601	2.97E-04	1.31E-06	0.00E+00	0.00E+00
3392	299962.1	4021579	2.96E-04	1.30E-06	0.00E+00	0.00E+00
3393	299952.1	4021556	2.94E-04	1.29E-06	0.00E+00	0.00E+00
3394	299942.1	4021533	2.92E-04	1.28E-06	0.00E+00	0.00E+00
3395	299932.1	4021511	2.89E-04	1.27E-06	0.00E+00	0.00E+00
3396	299922.1	4021488	2.86E-04	1.26E-06	0.00E+00	0.00E+00
3397	299912.1	4021465	2.83E-04	1.25E-06	0.00E+00	0.00E+00
3398	299902.1	4021442	2.80E-04	1.23E-06	0.00E+00	0.00E+00
3399	299892	4021420	2.76E-04	1.21E-06	0.00E+00	0.00E+00
3400	299882	4021397	2.72E-04	1.20E-06	0.00E+00	0.00E+00
3401	299872	4021374	2.68E-04	1.18E-06	0.00E+00	0.00E+00
3402	299862	4021351	2.64E-04	1.16E-06	0.00E+00	0.00E+00
3403	299852	4021329	2.60E-04	1.15E-06	0.00E+00	0.00E+00
3404	299842	4021306	2.56E-04	1.13E-06	0.00E+00	0.00E+00
3405	299832	4021283	2.51E-04	1.11E-06	0.00E+00	0.00E+00
3406	299822	4021260	2.46E-04	1.09E-06	0.00E+00	0.00E+00
3407	299812	4021238	2.41E-04	1.06E-06	0.00E+00	0.00E+00
3408	299802	4021215	2.35E-04	1.03E-06	0.00E+00	0.00E+00
3409	299792	4021192	2.29E-04	1.01E-06	0.00E+00	0.00E+00
3410	299782	4021169	2.22E-04	9.80E-07	0.00E+00	0.00E+00
3411	299772	4021147	2.16E-04	9.54E-07	0.00E+00	0.00E+00
3412	299761.9	4021124	2.11E-04	9.29E-07	0.00E+00	0.00E+00
3413	299751.9	4021101	2.06E-04	9.07E-07	0.00E+00	0.00E+00
3414	299741.9	4021078	2.01E-04	8.86E-07	0.00E+00	0.00E+00
3415	299731.9	4021056	1.97E-04	8.67E-07	0.00E+00	0.00E+00
3416	299721.9	4021033	1.93E-04	8.49E-07	0.00E+00	0.00E+00
3417	299711.9	4021010	1.89E-04	8.31E-07	0.00E+00	0.00E+00
3418	299701.9	4020987	1.84E-04	8.12E-07	0.00E+00	0.00E+00
3419	299691.9	4020965	1.80E-04	7.92E-07	0.00E+00	0.00E+00
3420	299681.9	4020942	1.75E-04	7.71E-07	0.00E+00	0.00E+00
3421	299671.9	4020919	1.70E-04	7.49E-07	0.00E+00	0.00E+00
3422	301087	4022264	3.43E-04	1.51E-06	0.00E+00	0.00E+00
3423	301112	4022263	3.46E-04	1.53E-06	0.00E+00	0.00E+00
3424	301136.9	4022263	3.49E-04	1.54E-06	0.00E+00	0.00E+00

3425	301161.9	4022263	3.50E-04	1.54E-06	0.00E+00	0.00E+00
3426	301186.9	4022262	3.49E-04	1.54E-06	0.00E+00	0.00E+00
3427	301211.8	4022262	3.48E-04	1.53E-06	0.00E+00	0.00E+00
3428	301236.8	4022261	3.47E-04	1.53E-06	0.00E+00	0.00E+00
3429	301261.8	4022261	3.46E-04	1.52E-06	0.00E+00	0.00E+00
3430	301286.8	4022260	3.45E-04	1.52E-06	0.00E+00	0.00E+00
3431	301286.2	4020860	2.83E-02	1.25E-04	0.00E+00	0.00E+00
3432	301285.7	4020835	4.14E-02	1.82E-04	0.00E+00	0.00E+00
3433	301285.2	4020811	5.60E-02	2.47E-04	0.00E+00	0.00E+00
3434	301284.6	4020786	6.72E-02	2.96E-04	0.00E+00	0.00E+00
3435	301284.1	4020761	7.49E-02	3.30E-04	0.00E+00	0.00E+00
3436	301283.5	4020736	8.01E-02	3.53E-04	0.00E+00	0.00E+00
3437	301283	4020712	8.36E-02	3.68E-04	0.00E+00	0.00E+00
3438	301282.5	4020687	8.60E-02	3.79E-04	0.00E+00	0.00E+00
3439	301281.9	4020662	8.74E-02	3.85E-04	0.00E+00	0.00E+00
3440	301281.4	4020638	8.82E-02	3.89E-04	0.00E+00	0.00E+00
3441	301280.9	4020613	8.83E-02	3.89E-04	0.00E+00	0.00E+00
3442	301280.3	4020588	8.78E-02	3.87E-04	0.00E+00	0.00E+00
3443	301279.8	4020563	8.66E-02	3.81E-04	0.00E+00	0.00E+00
3444	301279.2	4020539	8.44E-02	3.72E-04	0.00E+00	0.00E+00
3445	301278.7	4020514	8.06E-02	3.55E-04	0.00E+00	0.00E+00
3446	301278.2	4020489	7.40E-02	3.26E-04	0.00E+00	0.00E+00
3447	301277.6	4020464	6.27E-02	2.76E-04	0.00E+00	0.00E+00
3448	301304.3	4020877	1.82E-02	8.00E-05	0.00E+00	0.00E+00
3449	301310.7	4020835	2.69E-02	1.19E-04	0.00E+00	0.00E+00
3450	301310.2	4020810	3.47E-02	1.53E-04	0.00E+00	0.00E+00
3451	301309.6	4020785	4.19E-02	1.85E-04	0.00E+00	0.00E+00
3452	301309.1	4020761	4.77E-02	2.10E-04	0.00E+00	0.00E+00
3453	301308.5	4020736	5.21E-02	2.30E-04	0.00E+00	0.00E+00
3454	301308	4020711	5.53E-02	2.44E-04	0.00E+00	0.00E+00
3455	301307.5	4020686	5.76E-02	2.54E-04	0.00E+00	0.00E+00
3456	301306.9	4020662	5.91E-02	2.60E-04	0.00E+00	0.00E+00
3457	301306.4	4020637	6.00E-02	2.64E-04	0.00E+00	0.00E+00
3458	301305.9	4020612	6.04E-02	2.66E-04	0.00E+00	0.00E+00
3459	301305.3	4020588	6.03E-02	2.66E-04	0.00E+00	0.00E+00
3460	301304.8	4020563	5.97E-02	2.63E-04	0.00E+00	0.00E+00
3461	301304.2	4020538	5.83E-02	2.57E-04	0.00E+00	0.00E+00
3462	301303.7	4020513	5.60E-02	2.47E-04	0.00E+00	0.00E+00
3463	301303.2	4020489	5.23E-02	2.30E-04	0.00E+00	0.00E+00
3464	301329.3	4020877	1.42E-02	6.25E-05	0.00E+00	0.00E+00
3465	301297.8	4020920	1.28E-02	5.65E-05	0.00E+00	0.00E+00
3466	301335.7	4020834	1.96E-02	8.62E-05	0.00E+00	0.00E+00
3467	301335.2	4020809	2.42E-02	1.07E-04	0.00E+00	0.00E+00
3468	301334.6	4020785	2.90E-02	1.28E-04	0.00E+00	0.00E+00
3469	301334.1	4020760	3.32E-02	1.46E-04	0.00E+00	0.00E+00
3470	301333.5	4020735	3.67E-02	1.61E-04	0.00E+00	0.00E+00
3471	301333	4020711	3.94E-02	1.74E-04	0.00E+00	0.00E+00

3472	301332.5	4020686	4.14E-02	1.83E-04	0.00E+00	0.00E+00
3473	301331.9	4020661	4.29E-02	1.89E-04	0.00E+00	0.00E+00
3474	301331.4	4020636	4.40E-02	1.94E-04	0.00E+00	0.00E+00
3475	301330.8	4020612	4.45E-02	1.96E-04	0.00E+00	0.00E+00
3476	301330.3	4020587	4.47E-02	1.97E-04	0.00E+00	0.00E+00
3477	301329.8	4020562	4.44E-02	1.96E-04	0.00E+00	0.00E+00
3478	301329.2	4020538	4.36E-02	1.92E-04	0.00E+00	0.00E+00
3479	301328.7	4020513	4.21E-02	1.86E-04	0.00E+00	0.00E+00
3480	301328.2	4020488	3.97E-02	1.75E-04	0.00E+00	0.00E+00
3481	301327.6	4020463	3.63E-02	1.60E-04	0.00E+00	0.00E+00
3482	301354.3	4020876	1.14E-02	5.04E-05	0.00E+00	0.00E+00
3483	301340.3	4020912	9.80E-03	4.32E-05	0.00E+00	0.00E+00
3484	301315.8	4020938	9.79E-03	4.31E-05	0.00E+00	0.00E+00
3485	301360.7	4020834	1.51E-02	6.64E-05	0.00E+00	0.00E+00
3486	301360.1	4020809	1.81E-02	7.99E-05	0.00E+00	0.00E+00
3487	301359.6	4020784	2.14E-02	9.42E-05	0.00E+00	0.00E+00
3488	301359.1	4020759	2.45E-02	1.08E-04	0.00E+00	0.00E+00
3489	301358.5	4020735	2.72E-02	1.20E-04	0.00E+00	0.00E+00
3490	301358	4020710	2.94E-02	1.30E-04	0.00E+00	0.00E+00
3491	301357.5	4020685	3.12E-02	1.38E-04	0.00E+00	0.00E+00
3492	301356.9	4020661	3.26E-02	1.44E-04	0.00E+00	0.00E+00
3493	301356.4	4020636	3.36E-02	1.48E-04	0.00E+00	0.00E+00
3494	301355.8	4020611	3.43E-02	1.51E-04	0.00E+00	0.00E+00
3495	301355.3	4020586	3.46E-02	1.52E-04	0.00E+00	0.00E+00
3496	301354.8	4020562	3.45E-02	1.52E-04	0.00E+00	0.00E+00
3497	301354.2	4020537	3.41E-02	1.50E-04	0.00E+00	0.00E+00
3498	301353.7	4020512	3.31E-02	1.46E-04	0.00E+00	0.00E+00
3499	301353.1	4020488	3.16E-02	1.39E-04	0.00E+00	0.00E+00
3500	301377.5	4020880	9.29E-03	4.09E-05	0.00E+00	0.00E+00
3501	301368.8	4020902	8.51E-03	3.75E-05	0.00E+00	0.00E+00
3502	301360.1	4020925	7.84E-03	3.45E-05	0.00E+00	0.00E+00
3503	301329.4	4020957	7.87E-03	3.47E-05	0.00E+00	0.00E+00
3504	301307.5	4020966	8.49E-03	3.74E-05	0.00E+00	0.00E+00
3505	301285.5	4020976	9.03E-03	3.98E-05	0.00E+00	0.00E+00
3506	301386.2	4020858	1.01E-02	4.47E-05	0.00E+00	0.00E+00
3507	301385.7	4020833	1.20E-02	5.31E-05	0.00E+00	0.00E+00
3508	301385.1	4020808	1.42E-02	6.26E-05	0.00E+00	0.00E+00
3509	301384.6	4020784	1.65E-02	7.28E-05	0.00E+00	0.00E+00
3510	301384.1	4020759	1.88E-02	8.29E-05	0.00E+00	0.00E+00
3511	301383.5	4020734	2.09E-02	9.22E-05	0.00E+00	0.00E+00
3512	301383	4020709	2.28E-02	1.00E-04	0.00E+00	0.00E+00
3513	301382.4	4020685	2.43E-02	1.07E-04	0.00E+00	0.00E+00
3514	301381.9	4020660	2.56E-02	1.13E-04	0.00E+00	0.00E+00
3515	301381.4	4020635	2.65E-02	1.17E-04	0.00E+00	0.00E+00
3516	301380.8	4020611	2.72E-02	1.20E-04	0.00E+00	0.00E+00
3517	301380.3	4020586	2.76E-02	1.22E-04	0.00E+00	0.00E+00
3518	301379.8	4020561	2.76E-02	1.22E-04	0.00E+00	0.00E+00

3519	301379.2	4020536	2.74E-02	1.21E-04	0.00E+00	0.00E+00
3520	301378.7	4020512	2.68E-02	1.18E-04	0.00E+00	0.00E+00
3521	301378.1	4020487	2.58E-02	1.14E-04	0.00E+00	0.00E+00
3522	301377.6	4020462	2.43E-02	1.07E-04	0.00E+00	0.00E+00
3523	301402.8	4020879	7.86E-03	3.46E-05	0.00E+00	0.00E+00
3524	301394.5	4020900	7.28E-03	3.21E-05	0.00E+00	0.00E+00
3525	301386.1	4020922	6.76E-03	2.98E-05	0.00E+00	0.00E+00
3526	301377.8	4020943	6.31E-03	2.78E-05	0.00E+00	0.00E+00
3527	301348.3	4020974	6.38E-03	2.81E-05	0.00E+00	0.00E+00
3528	301327.2	4020983	6.84E-03	3.01E-05	0.00E+00	0.00E+00
3529	301306.2	4020992	7.26E-03	3.20E-05	0.00E+00	0.00E+00
3530	301285.1	4021001	7.61E-03	3.35E-05	0.00E+00	0.00E+00
3531	301411.2	4020857	8.47E-03	3.73E-05	0.00E+00	0.00E+00
3532	301410.7	4020833	9.90E-03	4.36E-05	0.00E+00	0.00E+00
3533	301410.1	4020808	1.15E-02	5.07E-05	0.00E+00	0.00E+00
3534	301409.6	4020783	1.32E-02	5.82E-05	0.00E+00	0.00E+00
3535	301409.1	4020758	1.49E-02	6.58E-05	0.00E+00	0.00E+00
3536	301408.5	4020734	1.66E-02	7.31E-05	0.00E+00	0.00E+00
3537	301408	4020709	1.81E-02	7.97E-05	0.00E+00	0.00E+00
3538	301407.4	4020684	1.94E-02	8.55E-05	0.00E+00	0.00E+00
3539	301406.9	4020660	2.05E-02	9.04E-05	0.00E+00	0.00E+00
3540	301406.4	4020635	2.14E-02	9.42E-05	0.00E+00	0.00E+00
3541	301405.8	4020610	2.20E-02	9.71E-05	0.00E+00	0.00E+00
3542	301405.3	4020585	2.24E-02	9.88E-05	0.00E+00	0.00E+00
3543	301404.8	4020561	2.26E-02	9.96E-05	0.00E+00	0.00E+00
3544	301404.2	4020536	2.25E-02	9.92E-05	0.00E+00	0.00E+00
3545	301403.7	4020511	2.21E-02	9.76E-05	0.00E+00	0.00E+00
3546	301403.1	4020486	2.15E-02	9.46E-05	0.00E+00	0.00E+00
3547	301428.1	4020878	6.73E-03	2.97E-05	0.00E+00	0.00E+00
3548	301419.9	4020898	6.29E-03	2.77E-05	0.00E+00	0.00E+00
3549	301403.7	4020940	5.52E-03	2.43E-05	0.00E+00	0.00E+00
3550	301395.6	4020961	5.21E-03	2.29E-05	0.00E+00	0.00E+00
3551	301366.9	4020991	5.28E-03	2.32E-05	0.00E+00	0.00E+00
3552	301325.9	4021009	5.97E-03	2.63E-05	0.00E+00	0.00E+00
3553	301435.7	4020832	8.30E-03	3.66E-05	0.00E+00	0.00E+00
3554	301435.1	4020807	9.52E-03	4.20E-05	0.00E+00	0.00E+00
3555	301434.6	4020783	1.08E-02	4.77E-05	0.00E+00	0.00E+00
3556	301434.1	4020758	1.22E-02	5.36E-05	0.00E+00	0.00E+00
3557	301433.5	4020733	1.35E-02	5.94E-05	0.00E+00	0.00E+00
3558	301433	4020708	1.47E-02	6.48E-05	0.00E+00	0.00E+00
3559	301432.4	4020684	1.58E-02	6.97E-05	0.00E+00	0.00E+00
3560	301431.9	4020659	1.68E-02	7.39E-05	0.00E+00	0.00E+00
3561	301431.4	4020634	1.76E-02	7.74E-05	0.00E+00	0.00E+00
3562	301430.8	4020610	1.82E-02	8.01E-05	0.00E+00	0.00E+00
3563	301430.3	4020585	1.86E-02	8.18E-05	0.00E+00	0.00E+00
3564	301429.7	4020560	1.88E-02	8.28E-05	0.00E+00	0.00E+00
3565	301429.2	4020535	1.88E-02	8.28E-05	0.00E+00	0.00E+00

3566	301428.7	4020511	1.86E-02	8.19E-05	0.00E+00	0.00E+00
3567	301428.1	4020486	1.81E-02	7.99E-05	0.00E+00	0.00E+00
3568	301453.2	4020877	5.83E-03	2.57E-05	0.00E+00	0.00E+00
3569	301437.3	4020917	5.15E-03	2.27E-05	0.00E+00	0.00E+00
3570	301421.4	4020958	4.60E-03	2.03E-05	0.00E+00	0.00E+00
3571	301385.4	4021008	4.44E-03	1.96E-05	0.00E+00	0.00E+00
3572	301345.2	4021025	4.99E-03	2.20E-05	0.00E+00	0.00E+00
3573	301305.1	4021043	5.47E-03	2.41E-05	0.00E+00	0.00E+00
3574	301460.7	4020831	7.07E-03	3.12E-05	0.00E+00	0.00E+00
3575	301460.1	4020807	8.03E-03	3.54E-05	0.00E+00	0.00E+00
3576	301459.6	4020782	9.05E-03	3.99E-05	0.00E+00	0.00E+00
3577	301459	4020757	1.01E-02	4.46E-05	0.00E+00	0.00E+00
3578	301458.5	4020733	1.12E-02	4.92E-05	0.00E+00	0.00E+00
3579	301458	4020708	1.22E-02	5.37E-05	0.00E+00	0.00E+00
3580	301457.4	4020683	1.31E-02	5.78E-05	0.00E+00	0.00E+00
3581	301456.9	4020658	1.39E-02	6.14E-05	0.00E+00	0.00E+00
3582	301456.4	4020634	1.46E-02	6.45E-05	0.00E+00	0.00E+00
3583	301455.8	4020609	1.52E-02	6.69E-05	0.00E+00	0.00E+00
3584	301455.3	4020584	1.56E-02	6.86E-05	0.00E+00	0.00E+00
3585	301454.7	4020560	1.58E-02	6.97E-05	0.00E+00	0.00E+00
3586	301454.2	4020535	1.59E-02	7.00E-05	0.00E+00	0.00E+00
3587	301453.7	4020510	1.58E-02	6.95E-05	0.00E+00	0.00E+00
3588	301453.1	4020485	1.55E-02	6.82E-05	0.00E+00	0.00E+00
3589	301502.5	4020877	4.48E-03	1.97E-05	0.00E+00	0.00E+00
3590	301493.8	4020900	4.21E-03	1.86E-05	0.00E+00	0.00E+00
3591	301485.1	4020922	3.97E-03	1.75E-05	0.00E+00	0.00E+00
3592	301476.4	4020944	3.74E-03	1.65E-05	0.00E+00	0.00E+00
3593	301467.6	4020967	3.54E-03	1.56E-05	0.00E+00	0.00E+00
3594	301458.9	4020989	3.38E-03	1.49E-05	0.00E+00	0.00E+00
3595	301450.2	4021011	3.23E-03	1.42E-05	0.00E+00	0.00E+00
3596	301419.6	4021043	3.30E-03	1.45E-05	0.00E+00	0.00E+00
3597	301397.6	4021053	3.50E-03	1.54E-05	0.00E+00	0.00E+00
3598	301375.6	4021063	3.71E-03	1.63E-05	0.00E+00	0.00E+00
3599	301353.7	4021072	3.91E-03	1.72E-05	0.00E+00	0.00E+00
3600	301331.7	4021082	4.08E-03	1.80E-05	0.00E+00	0.00E+00
3601	301309.7	4021091	4.22E-03	1.86E-05	0.00E+00	0.00E+00
3602	301287.8	4021101	4.31E-03	1.90E-05	0.00E+00	0.00E+00
3603	301511.2	4020855	4.75E-03	2.09E-05	0.00E+00	0.00E+00
3604	301510.6	4020830	5.33E-03	2.35E-05	0.00E+00	0.00E+00
3605	301510.1	4020806	5.96E-03	2.63E-05	0.00E+00	0.00E+00
3606	301509.6	4020781	6.63E-03	2.92E-05	0.00E+00	0.00E+00
3607	301509	4020756	7.32E-03	3.22E-05	0.00E+00	0.00E+00
3608	301508.5	4020731	8.03E-03	3.54E-05	0.00E+00	0.00E+00
3609	301508	4020707	8.73E-03	3.85E-05	0.00E+00	0.00E+00
3610	301507.4	4020682	9.40E-03	4.14E-05	0.00E+00	0.00E+00
3611	301506.9	4020657	1.00E-02	4.41E-05	0.00E+00	0.00E+00
3612	301506.3	4020633	1.05E-02	4.64E-05	0.00E+00	0.00E+00

3613	301505.8	4020608	1.10E-02	4.83E-05	0.00E+00	0.00E+00
3614	301505.3	4020583	1.13E-02	4.98E-05	0.00E+00	0.00E+00
3615	301504.7	4020558	1.15E-02	5.09E-05	0.00E+00	0.00E+00
3616	301504.2	4020534	1.17E-02	5.14E-05	0.00E+00	0.00E+00
3617	301503.7	4020509	1.17E-02	5.15E-05	0.00E+00	0.00E+00
3618	301503.1	4020484	1.16E-02	5.10E-05	0.00E+00	0.00E+00
3619	301552.8	4020875	3.57E-03	1.57E-05	0.00E+00	0.00E+00
3620	301544.5	4020897	3.39E-03	1.49E-05	0.00E+00	0.00E+00
3621	301536.1	4020918	3.22E-03	1.42E-05	0.00E+00	0.00E+00
3622	301527.7	4020940	3.05E-03	1.34E-05	0.00E+00	0.00E+00
3623	301519.4	4020961	2.90E-03	1.28E-05	0.00E+00	0.00E+00
3624	301511	4020983	2.77E-03	1.22E-05	0.00E+00	0.00E+00
3625	301502.7	4021004	2.66E-03	1.17E-05	0.00E+00	0.00E+00
3626	301494.3	4021026	2.56E-03	1.13E-05	0.00E+00	0.00E+00
3627	301485.9	4021047	2.47E-03	1.09E-05	0.00E+00	0.00E+00
3628	301456.5	4021078	2.53E-03	1.11E-05	0.00E+00	0.00E+00
3629	301435.4	4021087	2.67E-03	1.17E-05	0.00E+00	0.00E+00
3630	301414.3	4021096	2.81E-03	1.24E-05	0.00E+00	0.00E+00
3631	301393.2	4021105	2.95E-03	1.30E-05	0.00E+00	0.00E+00
3632	301372.1	4021114	3.08E-03	1.36E-05	0.00E+00	0.00E+00
3633	301351.1	4021124	3.21E-03	1.41E-05	0.00E+00	0.00E+00
3634	301330	4021133	3.31E-03	1.46E-05	0.00E+00	0.00E+00
3635	301308.9	4021142	3.38E-03	1.49E-05	0.00E+00	0.00E+00
3636	301287.8	4021151	3.42E-03	1.51E-05	0.00E+00	0.00E+00
3637	301561.2	4020854	3.76E-03	1.66E-05	0.00E+00	0.00E+00
3638	301560.6	4020829	4.17E-03	1.84E-05	0.00E+00	0.00E+00
3639	301560.1	4020805	4.61E-03	2.03E-05	0.00E+00	0.00E+00
3640	301559.6	4020780	5.07E-03	2.23E-05	0.00E+00	0.00E+00
3641	301559	4020755	5.55E-03	2.45E-05	0.00E+00	0.00E+00
3642	301558.5	4020730	6.05E-03	2.66E-05	0.00E+00	0.00E+00
3643	301557.9	4020706	6.54E-03	2.88E-05	0.00E+00	0.00E+00
3644	301557.4	4020681	7.03E-03	3.10E-05	0.00E+00	0.00E+00
3645	301556.9	4020656	7.48E-03	3.30E-05	0.00E+00	0.00E+00
3646	301556.3	4020632	7.88E-03	3.47E-05	0.00E+00	0.00E+00
3647	301555.8	4020607	8.23E-03	3.63E-05	0.00E+00	0.00E+00
3648	301555.3	4020582	8.51E-03	3.75E-05	0.00E+00	0.00E+00
3649	301554.7	4020557	8.71E-03	3.84E-05	0.00E+00	0.00E+00
3650	301554.2	4020533	8.85E-03	3.90E-05	0.00E+00	0.00E+00
3651	301553.6	4020508	8.91E-03	3.93E-05	0.00E+00	0.00E+00
3652	301553.1	4020483	8.90E-03	3.92E-05	0.00E+00	0.00E+00
3653	301602.3	4020876	2.91E-03	1.28E-05	0.00E+00	0.00E+00
3654	301593.4	4020898	2.76E-03	1.22E-05	0.00E+00	0.00E+00
3655	301584.6	4020921	2.62E-03	1.16E-05	0.00E+00	0.00E+00
3656	301575.7	4020944	2.49E-03	1.10E-05	0.00E+00	0.00E+00
3657	301566.8	4020967	2.37E-03	1.04E-05	0.00E+00	0.00E+00
3658	301558	4020989	2.26E-03	9.95E-06	0.00E+00	0.00E+00
3659	301549.1	4021012	2.16E-03	9.54E-06	0.00E+00	0.00E+00

3660	301540.2	4021035	2.09E-03	9.19E-06	0.00E+00	0.00E+00
3661	301531.4	4021058	2.02E-03	8.89E-06	0.00E+00	0.00E+00
3662	301522.5	4021080	1.96E-03	8.63E-06	0.00E+00	0.00E+00
3663	301491.3	4021113	2.00E-03	8.83E-06	0.00E+00	0.00E+00
3664	301468.9	4021123	2.11E-03	9.31E-06	0.00E+00	0.00E+00
3665	301446.5	4021132	2.22E-03	9.80E-06	0.00E+00	0.00E+00
3666	301424.2	4021142	2.34E-03	1.03E-05	0.00E+00	0.00E+00
3667	301401.8	4021152	2.45E-03	1.08E-05	0.00E+00	0.00E+00
3668	301379.4	4021162	2.55E-03	1.12E-05	0.00E+00	0.00E+00
3669	301357.1	4021171	2.64E-03	1.16E-05	0.00E+00	0.00E+00
3670	301334.7	4021181	2.71E-03	1.19E-05	0.00E+00	0.00E+00
3671	301312.4	4021191	2.75E-03	1.21E-05	0.00E+00	0.00E+00
3672	301290	4021201	2.77E-03	1.22E-05	0.00E+00	0.00E+00
3673	301611.2	4020853	3.06E-03	1.35E-05	0.00E+00	0.00E+00
3674	301610.6	4020828	3.36E-03	1.48E-05	0.00E+00	0.00E+00
3675	301610.1	4020803	3.68E-03	1.62E-05	0.00E+00	0.00E+00
3676	301609.5	4020779	4.02E-03	1.77E-05	0.00E+00	0.00E+00
3677	301609	4020754	4.36E-03	1.92E-05	0.00E+00	0.00E+00
3678	301608.5	4020729	4.72E-03	2.08E-05	0.00E+00	0.00E+00
3679	301607.9	4020705	5.08E-03	2.24E-05	0.00E+00	0.00E+00
3680	301607.4	4020680	5.43E-03	2.39E-05	0.00E+00	0.00E+00
3681	301606.9	4020655	5.77E-03	2.54E-05	0.00E+00	0.00E+00
3682	301606.3	4020630	6.08E-03	2.68E-05	0.00E+00	0.00E+00
3683	301605.8	4020606	6.35E-03	2.80E-05	0.00E+00	0.00E+00
3684	301605.2	4020581	6.58E-03	2.90E-05	0.00E+00	0.00E+00
3685	301604.7	4020556	6.76E-03	2.98E-05	0.00E+00	0.00E+00
3686	301604.2	4020532	6.89E-03	3.03E-05	0.00E+00	0.00E+00
3687	301603.6	4020507	6.97E-03	3.07E-05	0.00E+00	0.00E+00
3688	301603.1	4020482	6.99E-03	3.08E-05	0.00E+00	0.00E+00
3689	301652.6	4020874	2.43E-03	1.07E-05	0.00E+00	0.00E+00
3690	301644	4020896	2.32E-03	1.02E-05	0.00E+00	0.00E+00
3691	301635.4	4020918	2.21E-03	9.76E-06	0.00E+00	0.00E+00
3692	301626.9	4020940	2.11E-03	9.31E-06	0.00E+00	0.00E+00
3693	301618.3	4020962	2.02E-03	8.89E-06	0.00E+00	0.00E+00
3694	301609.7	4020984	1.93E-03	8.49E-06	0.00E+00	0.00E+00
3695	301601.1	4021006	1.85E-03	8.14E-06	0.00E+00	0.00E+00
3696	301592.6	4021028	1.78E-03	7.84E-06	0.00E+00	0.00E+00
3697	301584	4021050	1.72E-03	7.58E-06	0.00E+00	0.00E+00
3698	301575.4	4021072	1.67E-03	7.36E-06	0.00E+00	0.00E+00
3699	301566.8	4021094	1.63E-03	7.17E-06	0.00E+00	0.00E+00
3700	301558.3	4021116	1.59E-03	6.99E-06	0.00E+00	0.00E+00
3701	301528.1	4021147	1.62E-03	7.16E-06	0.00E+00	0.00E+00
3702	301506.4	4021157	1.70E-03	7.50E-06	0.00E+00	0.00E+00
3703	301484.8	4021166	1.78E-03	7.86E-06	0.00E+00	0.00E+00
3704	301463.2	4021175	1.87E-03	8.23E-06	0.00E+00	0.00E+00
3705	301441.5	4021185	1.95E-03	8.60E-06	0.00E+00	0.00E+00
3706	301419.9	4021194	2.03E-03	8.95E-06	0.00E+00	0.00E+00

3707	301398.3	4021204	2.11E-03	9.29E-06	0.00E+00	0.00E+00
3708	301376.7	4021213	2.18E-03	9.59E-06	0.00E+00	0.00E+00
3709	301355	4021223	2.23E-03	9.83E-06	0.00E+00	0.00E+00
3710	301333.4	4021232	2.27E-03	1.00E-05	0.00E+00	0.00E+00
3711	301311.8	4021242	2.29E-03	1.01E-05	0.00E+00	0.00E+00
3712	301290.2	4021251	2.29E-03	1.01E-05	0.00E+00	0.00E+00
3713	301661.2	4020852	2.54E-03	1.12E-05	0.00E+00	0.00E+00
3714	301660.6	4020827	2.76E-03	1.22E-05	0.00E+00	0.00E+00
3715	301660.1	4020802	3.01E-03	1.32E-05	0.00E+00	0.00E+00
3716	301659.5	4020778	3.26E-03	1.44E-05	0.00E+00	0.00E+00
3717	301659	4020753	3.52E-03	1.55E-05	0.00E+00	0.00E+00
3718	301658.5	4020728	3.79E-03	1.67E-05	0.00E+00	0.00E+00
3719	301657.9	4020704	4.05E-03	1.79E-05	0.00E+00	0.00E+00
3720	301657.4	4020679	4.32E-03	1.90E-05	0.00E+00	0.00E+00
3721	301656.8	4020654	4.57E-03	2.01E-05	0.00E+00	0.00E+00
3722	301656.3	4020629	4.81E-03	2.12E-05	0.00E+00	0.00E+00
3723	301655.8	4020605	5.02E-03	2.21E-05	0.00E+00	0.00E+00
3724	301655.2	4020580	5.20E-03	2.29E-05	0.00E+00	0.00E+00
3725	301654.7	4020555	5.35E-03	2.36E-05	0.00E+00	0.00E+00
3726	301654.2	4020530	5.47E-03	2.41E-05	0.00E+00	0.00E+00
3727	301653.6	4020506	5.56E-03	2.45E-05	0.00E+00	0.00E+00
3728	301653.1	4020481	5.60E-03	2.47E-05	0.00E+00	0.00E+00
3729	301702.2	4020874	2.05E-03	9.04E-06	0.00E+00	0.00E+00
3730	301693.2	4020897	1.96E-03	8.65E-06	0.00E+00	0.00E+00
3731	301684.3	4020920	1.88E-03	8.27E-06	0.00E+00	0.00E+00
3732	301675.3	4020943	1.79E-03	7.90E-06	0.00E+00	0.00E+00
3733	301666.4	4020966	1.71E-03	7.55E-06	0.00E+00	0.00E+00
3734	301657.4	4020989	1.64E-03	7.21E-06	0.00E+00	0.00E+00
3735	301648.4	4021012	1.57E-03	6.91E-06	0.00E+00	0.00E+00
3736	301639.5	4021035	1.51E-03	6.65E-06	0.00E+00	0.00E+00
3737	301630.5	4021057	1.46E-03	6.42E-06	0.00E+00	0.00E+00
3738	301621.6	4021080	1.42E-03	6.24E-06	0.00E+00	0.00E+00
3739	301612.6	4021103	1.38E-03	6.07E-06	0.00E+00	0.00E+00
3740	301603.7	4021126	1.35E-03	5.93E-06	0.00E+00	0.00E+00
3741	301594.7	4021149	1.32E-03	5.80E-06	0.00E+00	0.00E+00
3742	301563.1	4021182	1.35E-03	5.94E-06	0.00E+00	0.00E+00
3743	301540.6	4021192	1.41E-03	6.22E-06	0.00E+00	0.00E+00
3744	301518	4021202	1.48E-03	6.51E-06	0.00E+00	0.00E+00
3745	301495.4	4021212	1.55E-03	6.81E-06	0.00E+00	0.00E+00
3746	301472.8	4021222	1.62E-03	7.12E-06	0.00E+00	0.00E+00
3747	301450.2	4021232	1.68E-03	7.41E-06	0.00E+00	0.00E+00
3748	301427.6	4021241	1.75E-03	7.70E-06	0.00E+00	0.00E+00
3749	301405	4021251	1.81E-03	7.95E-06	0.00E+00	0.00E+00
3750	301382.4	4021261	1.86E-03	8.18E-06	0.00E+00	0.00E+00
3751	301359.8	4021271	1.90E-03	8.36E-06	0.00E+00	0.00E+00
3752	301337.2	4021281	1.92E-03	8.47E-06	0.00E+00	0.00E+00
3753	301314.6	4021291	1.94E-03	8.53E-06	0.00E+00	0.00E+00

3754	301292	4021301	1.93E-03	8.51E-06	0.00E+00	0.00E+00
3755	301711.1	4020851	2.14E-03	9.45E-06	0.00E+00	0.00E+00
3756	301710.6	4020826	2.32E-03	1.02E-05	0.00E+00	0.00E+00
3757	301710.1	4020801	2.51E-03	1.11E-05	0.00E+00	0.00E+00
3758	301709.5	4020777	2.71E-03	1.19E-05	0.00E+00	0.00E+00
3759	301709	4020752	2.91E-03	1.28E-05	0.00E+00	0.00E+00
3760	301708.4	4020727	3.11E-03	1.37E-05	0.00E+00	0.00E+00
3761	301707.9	4020702	3.31E-03	1.46E-05	0.00E+00	0.00E+00
3762	301707.4	4020678	3.51E-03	1.55E-05	0.00E+00	0.00E+00
3763	301706.8	4020653	3.70E-03	1.63E-05	0.00E+00	0.00E+00
3764	301706.3	4020628	3.88E-03	1.71E-05	0.00E+00	0.00E+00
3765	301705.8	4020604	4.05E-03	1.78E-05	0.00E+00	0.00E+00
3766	301705.2	4020579	4.20E-03	1.85E-05	0.00E+00	0.00E+00
3767	301704.7	4020554	4.32E-03	1.91E-05	0.00E+00	0.00E+00
3768	301704.1	4020529	4.43E-03	1.95E-05	0.00E+00	0.00E+00
3769	301703.6	4020505	4.51E-03	1.99E-05	0.00E+00	0.00E+00
3770	301703.1	4020480	4.56E-03	2.01E-05	0.00E+00	0.00E+00
3771	301702.5	4020455	4.58E-03	2.02E-05	0.00E+00	0.00E+00
3772	301752.4	4020872	1.77E-03	7.79E-06	0.00E+00	0.00E+00
3773	301743.7	4020894	1.70E-03	7.48E-06	0.00E+00	0.00E+00
3774	301735	4020917	1.63E-03	7.18E-06	0.00E+00	0.00E+00
3775	301726.3	4020939	1.56E-03	6.88E-06	0.00E+00	0.00E+00
3776	301717.6	4020961	1.50E-03	6.60E-06	0.00E+00	0.00E+00
3777	301708.9	4020984	1.44E-03	6.33E-06	0.00E+00	0.00E+00
3778	301700.2	4021006	1.38E-03	6.07E-06	0.00E+00	0.00E+00
3779	301691.5	4021028	1.33E-03	5.84E-06	0.00E+00	0.00E+00
3780	301682.8	4021051	1.28E-03	5.64E-06	0.00E+00	0.00E+00
3781	301674	4021073	1.24E-03	5.46E-06	0.00E+00	0.00E+00
3782	301665.3	4021095	1.21E-03	5.32E-06	0.00E+00	0.00E+00
3783	301656.6	4021118	1.18E-03	5.19E-06	0.00E+00	0.00E+00
3784	301647.9	4021140	1.15E-03	5.08E-06	0.00E+00	0.00E+00
3785	301639.2	4021162	1.13E-03	4.98E-06	0.00E+00	0.00E+00
3786	301630.5	4021185	1.11E-03	4.89E-06	0.00E+00	0.00E+00
3787	301599.8	4021217	1.14E-03	5.00E-06	0.00E+00	0.00E+00
3788	301577.9	4021226	1.18E-03	5.22E-06	0.00E+00	0.00E+00
3789	301555.9	4021236	1.23E-03	5.44E-06	0.00E+00	0.00E+00
3790	301533.9	4021245	1.29E-03	5.67E-06	0.00E+00	0.00E+00
3791	301512	4021255	1.34E-03	5.91E-06	0.00E+00	0.00E+00
3792	301490	4021265	1.39E-03	6.14E-06	0.00E+00	0.00E+00
3793	301468	4021274	1.45E-03	6.37E-06	0.00E+00	0.00E+00
3794	301446.1	4021284	1.50E-03	6.59E-06	0.00E+00	0.00E+00
3795	301424.1	4021293	1.54E-03	6.79E-06	0.00E+00	0.00E+00
3796	301402.1	4021303	1.58E-03	6.98E-06	0.00E+00	0.00E+00
3797	301380.2	4021312	1.62E-03	7.12E-06	0.00E+00	0.00E+00
3798	301358.2	4021322	1.64E-03	7.23E-06	0.00E+00	0.00E+00
3799	301336.3	4021332	1.65E-03	7.29E-06	0.00E+00	0.00E+00
3800	301314.3	4021341	1.66E-03	7.30E-06	0.00E+00	0.00E+00

3801	301292.3	4021351	1.65E-03	7.27E-06	0.00E+00	0.00E+00
3802	301761.1	4020850	1.84E-03	8.11E-06	0.00E+00	0.00E+00
3803	301760.6	4020825	1.98E-03	8.74E-06	0.00E+00	0.00E+00
3804	301760.1	4020800	2.13E-03	9.40E-06	0.00E+00	0.00E+00
3805	301759.5	4020775	2.29E-03	1.01E-05	0.00E+00	0.00E+00
3806	301759	4020751	2.44E-03	1.08E-05	0.00E+00	0.00E+00
3807	301758.4	4020726	2.60E-03	1.14E-05	0.00E+00	0.00E+00
3808	301757.9	4020701	2.75E-03	1.21E-05	0.00E+00	0.00E+00
3809	301757.4	4020677	2.90E-03	1.28E-05	0.00E+00	0.00E+00
3810	301756.8	4020652	3.05E-03	1.34E-05	0.00E+00	0.00E+00
3811	301756.3	4020627	3.19E-03	1.40E-05	0.00E+00	0.00E+00
3812	301755.7	4020602	3.32E-03	1.46E-05	0.00E+00	0.00E+00
3813	301755.2	4020578	3.44E-03	1.52E-05	0.00E+00	0.00E+00
3814	301754.7	4020553	3.55E-03	1.56E-05	0.00E+00	0.00E+00
3815	301754.1	4020528	3.64E-03	1.61E-05	0.00E+00	0.00E+00
3816	301753.6	4020504	3.72E-03	1.64E-05	0.00E+00	0.00E+00
3817	301753.1	4020479	3.77E-03	1.66E-05	0.00E+00	0.00E+00
3818	301802.6	4020870	1.54E-03	6.79E-06	0.00E+00	0.00E+00
3819	301794.1	4020892	1.48E-03	6.54E-06	0.00E+00	0.00E+00
3820	301785.6	4020914	1.43E-03	6.29E-06	0.00E+00	0.00E+00
3821	301777.1	4020936	1.37E-03	6.06E-06	0.00E+00	0.00E+00
3822	301768.5	4020958	1.32E-03	5.83E-06	0.00E+00	0.00E+00
3823	301760	4020980	1.27E-03	5.60E-06	0.00E+00	0.00E+00
3824	301751.5	4021001	1.22E-03	5.38E-06	0.00E+00	0.00E+00
3825	301743	4021023	1.18E-03	5.18E-06	0.00E+00	0.00E+00
3826	301734.5	4021045	1.14E-03	5.00E-06	0.00E+00	0.00E+00
3827	301726	4021067	1.10E-03	4.84E-06	0.00E+00	0.00E+00
3828	301717.5	4021089	1.07E-03	4.71E-06	0.00E+00	0.00E+00
3829	301708.9	4021111	1.04E-03	4.59E-06	0.00E+00	0.00E+00
3830	301700.4	4021132	1.02E-03	4.48E-06	0.00E+00	0.00E+00
3831	301691.9	4021154	9.97E-04	4.39E-06	0.00E+00	0.00E+00
3832	301683.4	4021176	9.79E-04	4.31E-06	0.00E+00	0.00E+00
3833	301674.9	4021198	9.62E-04	4.24E-06	0.00E+00	0.00E+00
3834	301666.4	4021220	9.47E-04	4.17E-06	0.00E+00	0.00E+00
3835	301636.4	4021251	9.68E-04	4.26E-06	0.00E+00	0.00E+00
3836	301614.9	4021260	1.01E-03	4.44E-06	0.00E+00	0.00E+00
3837	301593.4	4021270	1.05E-03	4.62E-06	0.00E+00	0.00E+00
3838	301571.9	4021279	1.09E-03	4.80E-06	0.00E+00	0.00E+00
3839	301550.5	4021289	1.13E-03	4.99E-06	0.00E+00	0.00E+00
3840	301529	4021298	1.17E-03	5.18E-06	0.00E+00	0.00E+00
3841	301507.5	4021307	1.22E-03	5.36E-06	0.00E+00	0.00E+00
3842	301486	4021317	1.26E-03	5.55E-06	0.00E+00	0.00E+00
3843	301464.6	4021326	1.30E-03	5.72E-06	0.00E+00	0.00E+00
3844	301443.1	4021335	1.34E-03	5.88E-06	0.00E+00	0.00E+00
3845	301421.6	4021345	1.37E-03	6.03E-06	0.00E+00	0.00E+00
3846	301400.1	4021354	1.40E-03	6.15E-06	0.00E+00	0.00E+00
3847	301378.7	4021364	1.42E-03	6.25E-06	0.00E+00	0.00E+00

3848	301357.2	4021373	1.43E-03	6.30E-06	0.00E+00	0.00E+00
3849	301335.7	4021382	1.44E-03	6.33E-06	0.00E+00	0.00E+00
3850	301314.2	4021392	1.44E-03	6.33E-06	0.00E+00	0.00E+00
3851	301292.7	4021401	1.43E-03	6.30E-06	0.00E+00	0.00E+00
3852	301811.1	4020849	1.60E-03	7.05E-06	0.00E+00	0.00E+00
3853	301810.6	4020824	1.72E-03	7.56E-06	0.00E+00	0.00E+00
3854	301810	4020799	1.84E-03	8.09E-06	0.00E+00	0.00E+00
3855	301809.5	4020774	1.96E-03	8.63E-06	0.00E+00	0.00E+00
3856	301809	4020750	2.08E-03	9.17E-06	0.00E+00	0.00E+00
3857	301808.4	4020725	2.20E-03	9.70E-06	0.00E+00	0.00E+00
3858	301807.9	4020700	2.32E-03	1.02E-05	0.00E+00	0.00E+00
3859	301807.3	4020676	2.44E-03	1.07E-05	0.00E+00	0.00E+00
3860	301806.8	4020651	2.55E-03	1.12E-05	0.00E+00	0.00E+00
3861	301806.3	4020626	2.66E-03	1.17E-05	0.00E+00	0.00E+00
3862	301805.7	4020601	2.77E-03	1.22E-05	0.00E+00	0.00E+00
3863	301805.2	4020577	2.86E-03	1.26E-05	0.00E+00	0.00E+00
3864	301804.7	4020552	2.96E-03	1.30E-05	0.00E+00	0.00E+00
3865	301804.1	4020527	3.04E-03	1.34E-05	0.00E+00	0.00E+00
3866	301803.6	4020502	3.10E-03	1.37E-05	0.00E+00	0.00E+00
3867	301803	4020478	3.16E-03	1.39E-05	0.00E+00	0.00E+00
3868	301802.5	4020453	3.19E-03	1.40E-05	0.00E+00	0.00E+00
3869	301852.3	4020870	1.36E-03	5.98E-06	0.00E+00	0.00E+00
3870	301843.5	4020893	1.31E-03	5.76E-06	0.00E+00	0.00E+00
3871	301834.7	4020915	1.26E-03	5.54E-06	0.00E+00	0.00E+00
3872	301825.9	4020938	1.21E-03	5.34E-06	0.00E+00	0.00E+00
3873	301817.1	4020960	1.17E-03	5.14E-06	0.00E+00	0.00E+00
3874	301808.3	4020983	1.12E-03	4.94E-06	0.00E+00	0.00E+00
3875	301799.5	4021005	1.08E-03	4.75E-06	0.00E+00	0.00E+00
3876	301790.7	4021028	1.04E-03	4.57E-06	0.00E+00	0.00E+00
3877	301781.9	4021051	1.00E-03	4.41E-06	0.00E+00	0.00E+00
3878	301773.1	4021073	9.67E-04	4.26E-06	0.00E+00	0.00E+00
3879	301764.3	4021096	9.38E-04	4.13E-06	0.00E+00	0.00E+00
3880	301755.5	4021118	9.14E-04	4.03E-06	0.00E+00	0.00E+00
3881	301746.7	4021141	8.94E-04	3.94E-06	0.00E+00	0.00E+00
3882	301737.9	4021163	8.76E-04	3.86E-06	0.00E+00	0.00E+00
3883	301729.1	4021186	8.61E-04	3.79E-06	0.00E+00	0.00E+00
3884	301720.3	4021209	8.47E-04	3.73E-06	0.00E+00	0.00E+00
3885	301711.5	4021231	8.34E-04	3.67E-06	0.00E+00	0.00E+00
3886	301702.7	4021254	8.21E-04	3.62E-06	0.00E+00	0.00E+00
3887	301671.7	4021286	8.40E-04	3.70E-06	0.00E+00	0.00E+00
3888	301649.5	4021296	8.71E-04	3.84E-06	0.00E+00	0.00E+00
3889	301627.3	4021305	9.05E-04	3.99E-06	0.00E+00	0.00E+00
3890	301605.1	4021315	9.42E-04	4.15E-06	0.00E+00	0.00E+00
3891	301582.9	4021325	9.78E-04	4.31E-06	0.00E+00	0.00E+00
3892	301560.7	4021334	1.02E-03	4.47E-06	0.00E+00	0.00E+00
3893	301538.5	4021344	1.05E-03	4.63E-06	0.00E+00	0.00E+00
3894	301516.3	4021354	1.09E-03	4.79E-06	0.00E+00	0.00E+00

3895	301494.1	4021363	1.12E-03	4.95E-06	0.00E+00	0.00E+00
3896	301471.9	4021373	1.16E-03	5.09E-06	0.00E+00	0.00E+00
3897	301449.7	4021383	1.19E-03	5.22E-06	0.00E+00	0.00E+00
3898	301427.6	4021393	1.21E-03	5.34E-06	0.00E+00	0.00E+00
3899	301405.4	4021402	1.23E-03	5.43E-06	0.00E+00	0.00E+00
3900	301383.2	4021412	1.25E-03	5.50E-06	0.00E+00	0.00E+00
3901	301361	4021422	1.26E-03	5.55E-06	0.00E+00	0.00E+00
3902	301338.8	4021431	1.26E-03	5.56E-06	0.00E+00	0.00E+00
3903	301316.6	4021441	1.26E-03	5.55E-06	0.00E+00	0.00E+00
3904	301294.4	4021451	1.25E-03	5.51E-06	0.00E+00	0.00E+00
3905	301861.1	4020847	1.41E-03	6.20E-06	0.00E+00	0.00E+00
3906	301860.6	4020823	1.50E-03	6.62E-06	0.00E+00	0.00E+00
3907	301860	4020798	1.60E-03	7.04E-06	0.00E+00	0.00E+00
3908	301859.5	4020773	1.70E-03	7.48E-06	0.00E+00	0.00E+00
3909	301859	4020749	1.79E-03	7.91E-06	0.00E+00	0.00E+00
3910	301858.4	4020724	1.89E-03	8.33E-06	0.00E+00	0.00E+00
3911	301857.9	4020699	1.99E-03	8.75E-06	0.00E+00	0.00E+00
3912	301857.3	4020674	2.08E-03	9.15E-06	0.00E+00	0.00E+00
3913	301856.8	4020650	2.17E-03	9.55E-06	0.00E+00	0.00E+00
3914	301856.3	4020625	2.25E-03	9.93E-06	0.00E+00	0.00E+00
3915	301855.7	4020600	2.34E-03	1.03E-05	0.00E+00	0.00E+00
3916	301855.2	4020576	2.42E-03	1.06E-05	0.00E+00	0.00E+00
3917	301854.6	4020551	2.49E-03	1.10E-05	0.00E+00	0.00E+00
3918	301854.1	4020526	2.56E-03	1.13E-05	0.00E+00	0.00E+00
3919	301853.6	4020501	2.62E-03	1.16E-05	0.00E+00	0.00E+00
3920	301853	4020477	2.67E-03	1.18E-05	0.00E+00	0.00E+00
3921	301952.2	4020868	1.08E-03	4.77E-06	0.00E+00	0.00E+00
3922	301943.3	4020891	1.05E-03	4.61E-06	0.00E+00	0.00E+00
3923	301934.5	4020914	1.01E-03	4.45E-06	0.00E+00	0.00E+00
3924	301925.6	4020936	9.74E-04	4.29E-06	0.00E+00	0.00E+00
3925	301916.7	4020959	9.40E-04	4.14E-06	0.00E+00	0.00E+00
3926	301907.9	4020982	9.05E-04	3.99E-06	0.00E+00	0.00E+00
3927	301899	4021004	8.72E-04	3.84E-06	0.00E+00	0.00E+00
3928	301890.1	4021027	8.41E-04	3.70E-06	0.00E+00	0.00E+00
3929	301881.3	4021050	8.11E-04	3.57E-06	0.00E+00	0.00E+00
3930	301872.4	4021073	7.84E-04	3.46E-06	0.00E+00	0.00E+00
3931	301863.5	4021095	7.60E-04	3.35E-06	0.00E+00	0.00E+00
3932	301854.7	4021118	7.39E-04	3.26E-06	0.00E+00	0.00E+00
3933	301845.8	4021141	7.21E-04	3.18E-06	0.00E+00	0.00E+00
3934	301836.9	4021164	7.06E-04	3.11E-06	0.00E+00	0.00E+00
3935	301828.1	4021186	6.93E-04	3.05E-06	0.00E+00	0.00E+00
3936	301819.2	4021209	6.81E-04	3.00E-06	0.00E+00	0.00E+00
3937	301810.3	4021232	6.71E-04	2.96E-06	0.00E+00	0.00E+00
3938	301801.5	4021255	6.62E-04	2.92E-06	0.00E+00	0.00E+00
3939	301792.6	4021277	6.53E-04	2.88E-06	0.00E+00	0.00E+00
3940	301783.7	4021300	6.45E-04	2.84E-06	0.00E+00	0.00E+00
3941	301774.9	4021323	6.37E-04	2.81E-06	0.00E+00	0.00E+00

3942	301743.7	4021355	6.50E-04	2.86E-06	0.00E+00	0.00E+00
3943	301721.3	4021365	6.73E-04	2.96E-06	0.00E+00	0.00E+00
3944	301698.9	4021375	6.96E-04	3.07E-06	0.00E+00	0.00E+00
3945	301676.6	4021385	7.21E-04	3.18E-06	0.00E+00	0.00E+00
3946	301654.2	4021394	7.47E-04	3.29E-06	0.00E+00	0.00E+00
3947	301631.8	4021404	7.74E-04	3.41E-06	0.00E+00	0.00E+00
3948	301609.5	4021414	8.01E-04	3.53E-06	0.00E+00	0.00E+00
3949	301587.1	4021424	8.27E-04	3.64E-06	0.00E+00	0.00E+00
3950	301564.7	4021433	8.53E-04	3.76E-06	0.00E+00	0.00E+00
3951	301542.4	4021443	8.79E-04	3.87E-06	0.00E+00	0.00E+00
3952	301520	4021453	9.02E-04	3.97E-06	0.00E+00	0.00E+00
3953	301497.6	4021463	9.24E-04	4.07E-06	0.00E+00	0.00E+00
3954	301475.3	4021473	9.44E-04	4.16E-06	0.00E+00	0.00E+00
3955	301452.9	4021482	9.63E-04	4.24E-06	0.00E+00	0.00E+00
3956	301430.5	4021492	9.78E-04	4.31E-06	0.00E+00	0.00E+00
3957	301408.2	4021502	9.90E-04	4.36E-06	0.00E+00	0.00E+00
3958	301385.8	4021512	9.98E-04	4.40E-06	0.00E+00	0.00E+00
3959	301363.5	4021521	1.00E-03	4.42E-06	0.00E+00	0.00E+00
3960	301341.1	4021531	1.00E-03	4.41E-06	0.00E+00	0.00E+00
3961	301318.7	4021541	9.95E-04	4.39E-06	0.00E+00	0.00E+00
3962	301296.4	4021551	9.86E-04	4.35E-06	0.00E+00	0.00E+00
3963	301961.1	4020845	1.12E-03	4.92E-06	0.00E+00	0.00E+00
3964	301960.5	4020821	1.18E-03	5.21E-06	0.00E+00	0.00E+00
3965	301960	4020796	1.25E-03	5.50E-06	0.00E+00	0.00E+00
3966	301959.5	4020771	1.31E-03	5.78E-06	0.00E+00	0.00E+00
3967	301958.9	4020746	1.38E-03	6.07E-06	0.00E+00	0.00E+00
3968	301958.4	4020722	1.44E-03	6.34E-06	0.00E+00	0.00E+00
3969	301957.9	4020697	1.50E-03	6.61E-06	0.00E+00	0.00E+00
3970	301957.3	4020672	1.56E-03	6.87E-06	0.00E+00	0.00E+00
3971	301956.8	4020648	1.62E-03	7.12E-06	0.00E+00	0.00E+00
3972	301956.2	4020623	1.67E-03	7.37E-06	0.00E+00	0.00E+00
3973	301955.7	4020598	1.73E-03	7.61E-06	0.00E+00	0.00E+00
3974	301955.2	4020573	1.78E-03	7.86E-06	0.00E+00	0.00E+00
3975	301954.6	4020549	1.84E-03	8.09E-06	0.00E+00	0.00E+00
3976	301954.1	4020524	1.89E-03	8.32E-06	0.00E+00	0.00E+00
3977	301953.5	4020499	1.93E-03	8.52E-06	0.00E+00	0.00E+00
3978	301953	4020474	1.97E-03	8.70E-06	0.00E+00	0.00E+00
3979	302052.1	4020866	8.85E-04	3.90E-06	0.00E+00	0.00E+00
3980	302043.2	4020889	8.59E-04	3.79E-06	0.00E+00	0.00E+00
3981	302034.3	4020912	8.33E-04	3.67E-06	0.00E+00	0.00E+00
3982	302025.4	4020935	8.07E-04	3.56E-06	0.00E+00	0.00E+00
3983	302016.5	4020957	7.82E-04	3.44E-06	0.00E+00	0.00E+00
3984	302007.6	4020980	7.56E-04	3.33E-06	0.00E+00	0.00E+00
3985	301998.6	4021003	7.29E-04	3.21E-06	0.00E+00	0.00E+00
3986	301989.7	4021026	7.04E-04	3.10E-06	0.00E+00	0.00E+00
3987	301980.8	4021049	6.79E-04	2.99E-06	0.00E+00	0.00E+00
3988	301971.9	4021072	6.56E-04	2.89E-06	0.00E+00	0.00E+00

3989	301963	4021095	6.34E-04	2.80E-06	0.00E+00	0.00E+00
3990	301954	4021118	6.16E-04	2.71E-06	0.00E+00	0.00E+00
3991	301945.1	4021140	6.00E-04	2.64E-06	0.00E+00	0.00E+00
3992	301936.2	4021163	5.86E-04	2.58E-06	0.00E+00	0.00E+00
3993	301927.3	4021186	5.74E-04	2.53E-06	0.00E+00	0.00E+00
3994	301918.4	4021209	5.64E-04	2.49E-06	0.00E+00	0.00E+00
3995	301909.5	4021232	5.55E-04	2.45E-06	0.00E+00	0.00E+00
3996	301900.5	4021255	5.48E-04	2.41E-06	0.00E+00	0.00E+00
3997	301891.6	4021278	5.40E-04	2.38E-06	0.00E+00	0.00E+00
3998	301882.7	4021300	5.34E-04	2.35E-06	0.00E+00	0.00E+00
3999	301873.8	4021323	5.29E-04	2.33E-06	0.00E+00	0.00E+00
4000	301864.9	4021346	5.23E-04	2.30E-06	0.00E+00	0.00E+00
4001	301856	4021369	5.18E-04	2.28E-06	0.00E+00	0.00E+00
4002	301847	4021392	5.12E-04	2.26E-06	0.00E+00	0.00E+00
4003	301815.6	4021425	5.23E-04	2.30E-06	0.00E+00	0.00E+00
4004	301793.1	4021434	5.40E-04	2.38E-06	0.00E+00	0.00E+00
4005	301770.6	4021444	5.57E-04	2.45E-06	0.00E+00	0.00E+00
4006	301748.2	4021454	5.75E-04	2.53E-06	0.00E+00	0.00E+00
4007	301725.7	4021464	5.93E-04	2.61E-06	0.00E+00	0.00E+00
4008	301703.2	4021474	6.12E-04	2.70E-06	0.00E+00	0.00E+00
4009	301680.7	4021484	6.32E-04	2.78E-06	0.00E+00	0.00E+00
4010	301658.2	4021493	6.52E-04	2.87E-06	0.00E+00	0.00E+00
4011	301635.7	4021503	6.71E-04	2.96E-06	0.00E+00	0.00E+00
4012	301613.2	4021513	6.91E-04	3.04E-06	0.00E+00	0.00E+00
4013	301590.7	4021523	7.10E-04	3.13E-06	0.00E+00	0.00E+00
4014	301568.2	4021533	7.27E-04	3.20E-06	0.00E+00	0.00E+00
4015	301545.7	4021543	7.43E-04	3.28E-06	0.00E+00	0.00E+00
4016	301523.2	4021552	7.59E-04	3.34E-06	0.00E+00	0.00E+00
4017	301500.7	4021562	7.74E-04	3.41E-06	0.00E+00	0.00E+00
4018	301478.3	4021572	7.87E-04	3.47E-06	0.00E+00	0.00E+00
4019	301455.8	4021582	7.99E-04	3.52E-06	0.00E+00	0.00E+00
4020	301433.3	4021592	8.08E-04	3.56E-06	0.00E+00	0.00E+00
4021	301410.8	4021601	8.15E-04	3.59E-06	0.00E+00	0.00E+00
4022	301388.3	4021611	8.19E-04	3.61E-06	0.00E+00	0.00E+00
4023	301365.8	4021621	8.19E-04	3.61E-06	0.00E+00	0.00E+00
4024	301343.3	4021631	8.16E-04	3.59E-06	0.00E+00	0.00E+00
4025	301320.8	4021641	8.09E-04	3.57E-06	0.00E+00	0.00E+00
4026	301298.3	4021651	8.01E-04	3.53E-06	0.00E+00	0.00E+00
4027	302061.1	4020843	9.10E-04	4.01E-06	0.00E+00	0.00E+00
4028	302060.5	4020818	9.55E-04	4.21E-06	0.00E+00	0.00E+00
4029	302060	4020794	1.00E-03	4.41E-06	0.00E+00	0.00E+00
4030	302059.4	4020769	1.05E-03	4.61E-06	0.00E+00	0.00E+00
4031	302058.9	4020744	1.09E-03	4.80E-06	0.00E+00	0.00E+00
4032	302058.4	4020720	1.13E-03	4.98E-06	0.00E+00	0.00E+00
4033	302057.8	4020695	1.17E-03	5.16E-06	0.00E+00	0.00E+00
4034	302057.3	4020670	1.21E-03	5.33E-06	0.00E+00	0.00E+00
4035	302056.8	4020645	1.25E-03	5.51E-06	0.00E+00	0.00E+00

4036	302056.2	4020621	1.29E-03	5.68E-06	0.00E+00	0.00E+00
4037	302055.7	4020596	1.33E-03	5.86E-06	0.00E+00	0.00E+00
4038	302055.1	4020571	1.37E-03	6.03E-06	0.00E+00	0.00E+00
4039	302054.6	4020546	1.41E-03	6.20E-06	0.00E+00	0.00E+00
4040	302054.1	4020522	1.44E-03	6.36E-06	0.00E+00	0.00E+00
4041	302053.5	4020497	1.48E-03	6.51E-06	0.00E+00	0.00E+00
4042	302053	4020472	1.51E-03	6.65E-06	0.00E+00	0.00E+00
4043	302152.1	4020864	7.39E-04	3.26E-06	0.00E+00	0.00E+00
4044	302143.1	4020887	7.21E-04	3.18E-06	0.00E+00	0.00E+00
4045	302134.2	4020910	7.03E-04	3.10E-06	0.00E+00	0.00E+00
4046	302125.2	4020933	6.84E-04	3.01E-06	0.00E+00	0.00E+00
4047	302116.2	4020956	6.64E-04	2.93E-06	0.00E+00	0.00E+00
4048	302107.3	4020979	6.44E-04	2.84E-06	0.00E+00	0.00E+00
4049	302098.3	4021002	6.24E-04	2.75E-06	0.00E+00	0.00E+00
4050	302089.4	4021025	6.04E-04	2.66E-06	0.00E+00	0.00E+00
4051	302080.4	4021048	5.83E-04	2.57E-06	0.00E+00	0.00E+00
4052	302071.5	4021071	5.64E-04	2.48E-06	0.00E+00	0.00E+00
4053	302062.5	4021094	5.45E-04	2.40E-06	0.00E+00	0.00E+00
4054	302053.5	4021117	5.28E-04	2.33E-06	0.00E+00	0.00E+00
4055	302044.6	4021140	5.13E-04	2.26E-06	0.00E+00	0.00E+00
4056	302035.6	4021163	4.99E-04	2.20E-06	0.00E+00	0.00E+00
4057	302026.7	4021185	4.88E-04	2.15E-06	0.00E+00	0.00E+00
4058	302017.7	4021208	4.78E-04	2.11E-06	0.00E+00	0.00E+00
4059	302008.8	4021231	4.70E-04	2.07E-06	0.00E+00	0.00E+00
4060	301999.8	4021254	4.63E-04	2.04E-06	0.00E+00	0.00E+00
4061	301990.8	4021277	4.58E-04	2.02E-06	0.00E+00	0.00E+00
4062	301981.9	4021300	4.53E-04	1.99E-06	0.00E+00	0.00E+00
4063	301972.9	4021323	4.48E-04	1.97E-06	0.00E+00	0.00E+00
4064	301964	4021346	4.44E-04	1.96E-06	0.00E+00	0.00E+00
4065	301955	4021369	4.40E-04	1.94E-06	0.00E+00	0.00E+00
4066	301946.1	4021392	4.36E-04	1.92E-06	0.00E+00	0.00E+00
4067	301937.1	4021415	4.32E-04	1.90E-06	0.00E+00	0.00E+00
4068	301928.2	4021438	4.29E-04	1.89E-06	0.00E+00	0.00E+00
4069	301919.2	4021461	4.25E-04	1.87E-06	0.00E+00	0.00E+00
4070	301887.6	4021494	4.33E-04	1.91E-06	0.00E+00	0.00E+00
4071	301865.1	4021504	4.45E-04	1.96E-06	0.00E+00	0.00E+00
4072	301842.5	4021514	4.57E-04	2.02E-06	0.00E+00	0.00E+00
4073	301819.9	4021524	4.71E-04	2.07E-06	0.00E+00	0.00E+00
4074	301797.3	4021533	4.84E-04	2.13E-06	0.00E+00	0.00E+00
4075	301774.7	4021543	4.98E-04	2.20E-06	0.00E+00	0.00E+00
4076	301752.1	4021553	5.13E-04	2.26E-06	0.00E+00	0.00E+00
4077	301729.5	4021563	5.28E-04	2.33E-06	0.00E+00	0.00E+00
4078	301706.9	4021573	5.44E-04	2.40E-06	0.00E+00	0.00E+00
4079	301684.3	4021583	5.59E-04	2.46E-06	0.00E+00	0.00E+00
4080	301661.7	4021593	5.74E-04	2.53E-06	0.00E+00	0.00E+00
4081	301639.1	4021603	5.88E-04	2.59E-06	0.00E+00	0.00E+00
4082	301616.5	4021612	6.02E-04	2.65E-06	0.00E+00	0.00E+00

4083	301593.9	4021622	6.15E-04	2.71E-06	0.00E+00	0.00E+00
4084	301571.3	4021632	6.27E-04	2.76E-06	0.00E+00	0.00E+00
4085	301548.8	4021642	6.38E-04	2.81E-06	0.00E+00	0.00E+00
4086	301526.2	4021652	6.49E-04	2.86E-06	0.00E+00	0.00E+00
4087	301503.6	4021662	6.60E-04	2.91E-06	0.00E+00	0.00E+00
4088	301481	4021672	6.69E-04	2.95E-06	0.00E+00	0.00E+00
4089	301458.4	4021681	6.77E-04	2.98E-06	0.00E+00	0.00E+00
4090	301435.8	4021691	6.83E-04	3.01E-06	0.00E+00	0.00E+00
4091	301413.2	4021701	6.87E-04	3.03E-06	0.00E+00	0.00E+00
4092	301390.6	4021711	6.88E-04	3.03E-06	0.00E+00	0.00E+00
4093	301368	4021721	6.86E-04	3.02E-06	0.00E+00	0.00E+00
4094	301345.4	4021731	6.82E-04	3.00E-06	0.00E+00	0.00E+00
4095	301322.8	4021741	6.75E-04	2.97E-06	0.00E+00	0.00E+00
4096	301300.2	4021751	6.67E-04	2.94E-06	0.00E+00	0.00E+00
4097	302161	4020841	7.57E-04	3.34E-06	0.00E+00	0.00E+00
4098	302160.5	4020816	7.90E-04	3.48E-06	0.00E+00	0.00E+00
4099	302160	4020792	8.22E-04	3.62E-06	0.00E+00	0.00E+00
4100	302159.4	4020767	8.54E-04	3.76E-06	0.00E+00	0.00E+00
4101	302158.9	4020742	8.85E-04	3.90E-06	0.00E+00	0.00E+00
4102	302158.3	4020717	9.15E-04	4.03E-06	0.00E+00	0.00E+00
4103	302157.8	4020693	9.43E-04	4.15E-06	0.00E+00	0.00E+00
4104	302157.3	4020668	9.71E-04	4.28E-06	0.00E+00	0.00E+00
4105	302156.7	4020643	9.99E-04	4.40E-06	0.00E+00	0.00E+00
4106	302156.2	4020618	1.03E-03	4.53E-06	0.00E+00	0.00E+00
4107	302155.7	4020594	1.06E-03	4.65E-06	0.00E+00	0.00E+00
4108	302155.1	4020569	1.08E-03	4.78E-06	0.00E+00	0.00E+00
4109	302154.6	4020544	1.11E-03	4.90E-06	0.00E+00	0.00E+00
4110	302154	4020520	1.14E-03	5.02E-06	0.00E+00	0.00E+00
4111	302153.5	4020495	1.16E-03	5.13E-06	0.00E+00	0.00E+00
4112	302153	4020470	1.19E-03	5.23E-06	0.00E+00	0.00E+00
4113	302252.3	4020861	6.30E-04	2.78E-06	0.00E+00	0.00E+00
4114	302243.6	4020883	6.17E-04	2.72E-06	0.00E+00	0.00E+00
4115	302234.9	4020906	6.04E-04	2.66E-06	0.00E+00	0.00E+00
4116	302226.2	4020928	5.91E-04	2.60E-06	0.00E+00	0.00E+00
4117	302217.5	4020950	5.77E-04	2.54E-06	0.00E+00	0.00E+00
4118	302208.8	4020973	5.63E-04	2.48E-06	0.00E+00	0.00E+00
4119	302200.1	4020995	5.48E-04	2.41E-06	0.00E+00	0.00E+00
4120	302191.3	4021017	5.33E-04	2.35E-06	0.00E+00	0.00E+00
4121	302182.6	4021040	5.17E-04	2.28E-06	0.00E+00	0.00E+00
4122	302173.9	4021062	5.00E-04	2.21E-06	0.00E+00	0.00E+00
4123	302165.2	4021084	4.85E-04	2.13E-06	0.00E+00	0.00E+00
4124	302156.5	4021107	4.69E-04	2.07E-06	0.00E+00	0.00E+00
4125	302147.8	4021129	4.55E-04	2.00E-06	0.00E+00	0.00E+00
4126	302139.1	4021151	4.42E-04	1.95E-06	0.00E+00	0.00E+00
4127	302130.4	4021174	4.30E-04	1.89E-06	0.00E+00	0.00E+00
4128	302121.7	4021196	4.20E-04	1.85E-06	0.00E+00	0.00E+00
4129	302113	4021218	4.11E-04	1.81E-06	0.00E+00	0.00E+00

4130	302104.3	4021241	4.03E-04	1.78E-06	0.00E+00	0.00E+00
4131	302095.6	4021263	3.97E-04	1.75E-06	0.00E+00	0.00E+00
4132	302086.8	4021285	3.92E-04	1.73E-06	0.00E+00	0.00E+00
4133	302078.1	4021308	3.88E-04	1.71E-06	0.00E+00	0.00E+00
4134	302069.4	4021330	3.85E-04	1.69E-06	0.00E+00	0.00E+00
4135	302060.7	4021352	3.81E-04	1.68E-06	0.00E+00	0.00E+00
4136	302052	4021375	3.78E-04	1.67E-06	0.00E+00	0.00E+00
4137	302043.3	4021397	3.76E-04	1.66E-06	0.00E+00	0.00E+00
4138	302034.6	4021419	3.73E-04	1.64E-06	0.00E+00	0.00E+00
4139	302025.9	4021442	3.70E-04	1.63E-06	0.00E+00	0.00E+00
4140	302017.2	4021464	3.68E-04	1.62E-06	0.00E+00	0.00E+00
4141	302008.5	4021486	3.66E-04	1.61E-06	0.00E+00	0.00E+00
4142	301999.8	4021509	3.63E-04	1.60E-06	0.00E+00	0.00E+00
4143	301991.1	4021531	3.60E-04	1.59E-06	0.00E+00	0.00E+00
4144	301960.4	4021563	3.66E-04	1.61E-06	0.00E+00	0.00E+00
4145	301938.4	4021573	3.75E-04	1.65E-06	0.00E+00	0.00E+00
4146	301916.5	4021582	3.84E-04	1.69E-06	0.00E+00	0.00E+00
4147	301894.5	4021592	3.94E-04	1.74E-06	0.00E+00	0.00E+00
4148	301872.5	4021601	4.04E-04	1.78E-06	0.00E+00	0.00E+00
4149	301850.6	4021611	4.14E-04	1.83E-06	0.00E+00	0.00E+00
4150	301828.6	4021621	4.25E-04	1.87E-06	0.00E+00	0.00E+00
4151	301806.6	4021630	4.36E-04	1.92E-06	0.00E+00	0.00E+00
4152	301784.7	4021640	4.48E-04	1.97E-06	0.00E+00	0.00E+00
4153	301762.7	4021649	4.60E-04	2.03E-06	0.00E+00	0.00E+00
4154	301740.7	4021659	4.71E-04	2.08E-06	0.00E+00	0.00E+00
4155	301718.8	4021669	4.83E-04	2.13E-06	0.00E+00	0.00E+00
4156	301696.8	4021678	4.94E-04	2.18E-06	0.00E+00	0.00E+00
4157	301674.8	4021688	5.05E-04	2.23E-06	0.00E+00	0.00E+00
4158	301652.9	4021697	5.16E-04	2.27E-06	0.00E+00	0.00E+00
4159	301630.9	4021707	5.25E-04	2.31E-06	0.00E+00	0.00E+00
4160	301608.9	4021716	5.34E-04	2.35E-06	0.00E+00	0.00E+00
4161	301587	4021726	5.42E-04	2.39E-06	0.00E+00	0.00E+00
4162	301565	4021736	5.51E-04	2.43E-06	0.00E+00	0.00E+00
4163	301543	4021745	5.59E-04	2.46E-06	0.00E+00	0.00E+00
4164	301521.1	4021755	5.67E-04	2.50E-06	0.00E+00	0.00E+00
4165	301499.1	4021764	5.75E-04	2.53E-06	0.00E+00	0.00E+00
4166	301477.2	4021774	5.81E-04	2.56E-06	0.00E+00	0.00E+00
4167	301455.2	4021784	5.86E-04	2.58E-06	0.00E+00	0.00E+00
4168	301433.2	4021793	5.89E-04	2.59E-06	0.00E+00	0.00E+00
4169	301411.3	4021803	5.90E-04	2.60E-06	0.00E+00	0.00E+00
4170	301389.3	4021812	5.89E-04	2.59E-06	0.00E+00	0.00E+00
4171	301367.3	4021822	5.85E-04	2.58E-06	0.00E+00	0.00E+00
4172	301345.4	4021832	5.80E-04	2.56E-06	0.00E+00	0.00E+00
4173	301323.4	4021841	5.74E-04	2.53E-06	0.00E+00	0.00E+00
4174	301301.4	4021851	5.68E-04	2.50E-06	0.00E+00	0.00E+00
4175	302261	4020839	6.42E-04	2.83E-06	0.00E+00	0.00E+00
4176	302260.5	4020814	6.66E-04	2.93E-06	0.00E+00	0.00E+00

4177	302259.9	4020789	6.90E-04	3.04E-06	0.00E+00	0.00E+00
4178	302259.4	4020765	7.12E-04	3.14E-06	0.00E+00	0.00E+00
4179	302258.9	4020740	7.34E-04	3.23E-06	0.00E+00	0.00E+00
4180	302258.3	4020715	7.55E-04	3.33E-06	0.00E+00	0.00E+00
4181	302257.8	4020690	7.76E-04	3.42E-06	0.00E+00	0.00E+00
4182	302257.2	4020666	7.97E-04	3.51E-06	0.00E+00	0.00E+00
4183	302256.7	4020641	8.18E-04	3.60E-06	0.00E+00	0.00E+00
4184	302256.2	4020616	8.39E-04	3.70E-06	0.00E+00	0.00E+00
4185	302255.6	4020592	8.62E-04	3.80E-06	0.00E+00	0.00E+00
4186	302255.1	4020567	8.83E-04	3.89E-06	0.00E+00	0.00E+00
4187	302254.6	4020542	9.04E-04	3.98E-06	0.00E+00	0.00E+00
4188	302254	4020517	9.25E-04	4.07E-06	0.00E+00	0.00E+00
4189	302253.5	4020493	9.44E-04	4.16E-06	0.00E+00	0.00E+00
4190	302352.2	4020859	5.43E-04	2.39E-06	0.00E+00	0.00E+00
4191	302343.5	4020882	5.34E-04	2.35E-06	0.00E+00	0.00E+00
4192	302334.7	4020904	5.24E-04	2.31E-06	0.00E+00	0.00E+00
4193	302326	4020926	5.14E-04	2.27E-06	0.00E+00	0.00E+00
4194	302317.2	4020949	5.04E-04	2.22E-06	0.00E+00	0.00E+00
4195	302308.4	4020971	4.94E-04	2.18E-06	0.00E+00	0.00E+00
4196	302299.7	4020994	4.83E-04	2.13E-06	0.00E+00	0.00E+00
4197	302290.9	4021016	4.71E-04	2.08E-06	0.00E+00	0.00E+00
4198	302282.2	4021039	4.59E-04	2.02E-06	0.00E+00	0.00E+00
4199	302273.4	4021061	4.46E-04	1.96E-06	0.00E+00	0.00E+00
4200	302264.6	4021084	4.32E-04	1.90E-06	0.00E+00	0.00E+00
4201	302255.9	4021106	4.19E-04	1.85E-06	0.00E+00	0.00E+00
4202	302247.1	4021129	4.06E-04	1.79E-06	0.00E+00	0.00E+00
4203	302238.4	4021151	3.94E-04	1.74E-06	0.00E+00	0.00E+00
4204	302229.6	4021173	3.83E-04	1.69E-06	0.00E+00	0.00E+00
4205	302220.9	4021196	3.73E-04	1.64E-06	0.00E+00	0.00E+00
4206	302212.1	4021218	3.64E-04	1.60E-06	0.00E+00	0.00E+00
4207	302203.3	4021241	3.56E-04	1.57E-06	0.00E+00	0.00E+00
4208	302194.6	4021263	3.49E-04	1.54E-06	0.00E+00	0.00E+00
4209	302185.8	4021286	3.44E-04	1.51E-06	0.00E+00	0.00E+00
4210	302177.1	4021308	3.39E-04	1.49E-06	0.00E+00	0.00E+00
4211	302168.3	4021331	3.35E-04	1.48E-06	0.00E+00	0.00E+00
4212	302159.6	4021353	3.33E-04	1.47E-06	0.00E+00	0.00E+00
4213	302150.8	4021376	3.30E-04	1.46E-06	0.00E+00	0.00E+00
4214	302142	4021398	3.28E-04	1.45E-06	0.00E+00	0.00E+00
4215	302133.3	4021421	3.26E-04	1.44E-06	0.00E+00	0.00E+00
4216	302124.5	4021443	3.24E-04	1.43E-06	0.00E+00	0.00E+00
4217	302115.8	4021465	3.23E-04	1.42E-06	0.00E+00	0.00E+00
4218	302107	4021488	3.21E-04	1.41E-06	0.00E+00	0.00E+00
4219	302098.2	4021510	3.19E-04	1.41E-06	0.00E+00	0.00E+00
4220	302089.5	4021533	3.17E-04	1.40E-06	0.00E+00	0.00E+00
4221	302080.7	4021555	3.15E-04	1.39E-06	0.00E+00	0.00E+00
4222	302072	4021578	3.13E-04	1.38E-06	0.00E+00	0.00E+00
4223	302063.2	4021600	3.12E-04	1.37E-06	0.00E+00	0.00E+00

4224	302032.4	4021632	3.16E-04	1.39E-06	0.00E+00	0.00E+00
4225	302010.3	4021642	3.23E-04	1.42E-06	0.00E+00	0.00E+00
4226	301988.2	4021652	3.30E-04	1.45E-06	0.00E+00	0.00E+00
4227	301966.1	4021661	3.38E-04	1.49E-06	0.00E+00	0.00E+00
4228	301944	4021671	3.46E-04	1.52E-06	0.00E+00	0.00E+00
4229	301921.9	4021681	3.54E-04	1.56E-06	0.00E+00	0.00E+00
4230	301899.8	4021690	3.62E-04	1.60E-06	0.00E+00	0.00E+00
4231	301877.7	4021700	3.71E-04	1.64E-06	0.00E+00	0.00E+00
4232	301855.6	4021709	3.80E-04	1.68E-06	0.00E+00	0.00E+00
4233	301833.6	4021719	3.90E-04	1.72E-06	0.00E+00	0.00E+00
4234	301811.5	4021729	3.99E-04	1.76E-06	0.00E+00	0.00E+00
4235	301789.4	4021738	4.09E-04	1.80E-06	0.00E+00	0.00E+00
4236	301767.3	4021748	4.18E-04	1.84E-06	0.00E+00	0.00E+00
4237	301745.2	4021758	4.27E-04	1.88E-06	0.00E+00	0.00E+00
4238	301723.1	4021767	4.36E-04	1.92E-06	0.00E+00	0.00E+00
4239	301701	4021777	4.44E-04	1.96E-06	0.00E+00	0.00E+00
4240	301678.9	4021787	4.52E-04	1.99E-06	0.00E+00	0.00E+00
4241	301656.8	4021796	4.60E-04	2.02E-06	0.00E+00	0.00E+00
4242	301634.7	4021806	4.67E-04	2.06E-06	0.00E+00	0.00E+00
4243	301612.6	4021816	4.73E-04	2.09E-06	0.00E+00	0.00E+00
4244	301590.6	4021825	4.80E-04	2.11E-06	0.00E+00	0.00E+00
4245	301568.5	4021835	4.87E-04	2.14E-06	0.00E+00	0.00E+00
4246	301546.4	4021845	4.93E-04	2.17E-06	0.00E+00	0.00E+00
4247	301524.3	4021854	4.99E-04	2.20E-06	0.00E+00	0.00E+00
4248	301502.2	4021864	5.05E-04	2.22E-06	0.00E+00	0.00E+00
4249	301480.1	4021874	5.09E-04	2.24E-06	0.00E+00	0.00E+00
4250	301458	4021883	5.13E-04	2.26E-06	0.00E+00	0.00E+00
4251	301435.9	4021893	5.14E-04	2.27E-06	0.00E+00	0.00E+00
4252	301413.8	4021902	5.14E-04	2.26E-06	0.00E+00	0.00E+00
4253	301391.7	4021912	5.12E-04	2.25E-06	0.00E+00	0.00E+00
4254	301369.6	4021922	5.08E-04	2.24E-06	0.00E+00	0.00E+00
4255	301347.6	4021931	5.03E-04	2.22E-06	0.00E+00	0.00E+00
4256	301325.5	4021941	4.97E-04	2.19E-06	0.00E+00	0.00E+00
4257	301303.4	4021951	4.92E-04	2.17E-06	0.00E+00	0.00E+00
4258	302361	4020837	5.52E-04	2.43E-06	0.00E+00	0.00E+00
4259	302360.4	4020812	5.69E-04	2.51E-06	0.00E+00	0.00E+00
4260	302359.9	4020787	5.87E-04	2.59E-06	0.00E+00	0.00E+00
4261	302359.4	4020762	6.04E-04	2.66E-06	0.00E+00	0.00E+00
4262	302358.8	4020738	6.20E-04	2.73E-06	0.00E+00	0.00E+00
4263	302358.3	4020713	6.36E-04	2.80E-06	0.00E+00	0.00E+00
4264	302357.8	4020688	6.52E-04	2.87E-06	0.00E+00	0.00E+00
4265	302357.2	4020664	6.69E-04	2.95E-06	0.00E+00	0.00E+00
4266	302356.7	4020639	6.85E-04	3.02E-06	0.00E+00	0.00E+00
4267	302356.1	4020614	7.02E-04	3.09E-06	0.00E+00	0.00E+00
4268	302355.6	4020589	7.18E-04	3.16E-06	0.00E+00	0.00E+00
4269	302355.1	4020565	7.35E-04	3.24E-06	0.00E+00	0.00E+00
4270	302354.5	4020540	7.52E-04	3.31E-06	0.00E+00	0.00E+00

4271	302354	4020515	7.68E-04	3.38E-06	0.00E+00	0.00E+00
4272	302353.5	4020491	7.83E-04	3.45E-06	0.00E+00	0.00E+00
4273	302452.2	4020857	4.74E-04	2.09E-06	0.00E+00	0.00E+00
4274	302443.4	4020880	4.67E-04	2.06E-06	0.00E+00	0.00E+00
4275	302434.6	4020902	4.60E-04	2.03E-06	0.00E+00	0.00E+00
4276	302425.8	4020925	4.53E-04	1.99E-06	0.00E+00	0.00E+00
4277	302417	4020947	4.45E-04	1.96E-06	0.00E+00	0.00E+00
4278	302408.2	4020970	4.38E-04	1.93E-06	0.00E+00	0.00E+00
4279	302399.4	4020992	4.29E-04	1.89E-06	0.00E+00	0.00E+00
4280	302390.6	4021015	4.21E-04	1.85E-06	0.00E+00	0.00E+00
4281	302381.8	4021038	4.11E-04	1.81E-06	0.00E+00	0.00E+00
4282	302373	4021060	4.01E-04	1.77E-06	0.00E+00	0.00E+00
4283	302364.2	4021083	3.91E-04	1.72E-06	0.00E+00	0.00E+00
4284	302355.4	4021105	3.80E-04	1.67E-06	0.00E+00	0.00E+00
4285	302346.6	4021128	3.69E-04	1.62E-06	0.00E+00	0.00E+00
4286	302337.8	4021150	3.58E-04	1.58E-06	0.00E+00	0.00E+00
4287	302329	4021173	3.47E-04	1.53E-06	0.00E+00	0.00E+00
4288	302320.2	4021195	3.37E-04	1.48E-06	0.00E+00	0.00E+00
4289	302311.4	4021218	3.28E-04	1.45E-06	0.00E+00	0.00E+00
4290	302302.6	4021241	3.20E-04	1.41E-06	0.00E+00	0.00E+00
4291	302293.8	4021263	3.13E-04	1.38E-06	0.00E+00	0.00E+00
4292	302285	4021286	3.07E-04	1.35E-06	0.00E+00	0.00E+00
4293	302276.2	4021308	3.02E-04	1.33E-06	0.00E+00	0.00E+00
4294	302267.4	4021331	2.98E-04	1.31E-06	0.00E+00	0.00E+00
4295	302258.6	4021353	2.94E-04	1.30E-06	0.00E+00	0.00E+00
4296	302249.8	4021376	2.92E-04	1.29E-06	0.00E+00	0.00E+00
4297	302241	4021399	2.90E-04	1.28E-06	0.00E+00	0.00E+00
4298	302232.2	4021421	2.88E-04	1.27E-06	0.00E+00	0.00E+00
4299	302223.4	4021444	2.87E-04	1.26E-06	0.00E+00	0.00E+00
4300	302214.6	4021466	2.86E-04	1.26E-06	0.00E+00	0.00E+00
4301	302205.8	4021489	2.85E-04	1.25E-06	0.00E+00	0.00E+00
4302	302197	4021511	2.84E-04	1.25E-06	0.00E+00	0.00E+00
4303	302188.2	4021534	2.82E-04	1.24E-06	0.00E+00	0.00E+00
4304	302179.4	4021557	2.81E-04	1.24E-06	0.00E+00	0.00E+00
4305	302170.6	4021579	2.80E-04	1.23E-06	0.00E+00	0.00E+00
4306	302161.8	4021602	2.78E-04	1.22E-06	0.00E+00	0.00E+00
4307	302153	4021624	2.76E-04	1.22E-06	0.00E+00	0.00E+00
4308	302144.2	4021647	2.75E-04	1.21E-06	0.00E+00	0.00E+00
4309	302135.4	4021669	2.73E-04	1.21E-06	0.00E+00	0.00E+00
4310	302104.4	4021702	2.77E-04	1.22E-06	0.00E+00	0.00E+00
4311	302082.2	4021711	2.83E-04	1.25E-06	0.00E+00	0.00E+00
4312	302060	4021721	2.89E-04	1.27E-06	0.00E+00	0.00E+00
4313	302037.8	4021731	2.95E-04	1.30E-06	0.00E+00	0.00E+00
4314	302015.6	4021740	3.01E-04	1.33E-06	0.00E+00	0.00E+00
4315	301993.4	4021750	3.08E-04	1.36E-06	0.00E+00	0.00E+00
4316	301971.2	4021760	3.15E-04	1.39E-06	0.00E+00	0.00E+00
4317	301949	4021769	3.22E-04	1.42E-06	0.00E+00	0.00E+00

4318	301926.8	4021779	3.29E-04	1.45E-06	0.00E+00	0.00E+00
4319	301904.6	4021789	3.36E-04	1.48E-06	0.00E+00	0.00E+00
4320	301882.4	4021799	3.44E-04	1.52E-06	0.00E+00	0.00E+00
4321	301860.2	4021808	3.52E-04	1.55E-06	0.00E+00	0.00E+00
4322	301838	4021818	3.60E-04	1.58E-06	0.00E+00	0.00E+00
4323	301815.8	4021828	3.68E-04	1.62E-06	0.00E+00	0.00E+00
4324	301793.6	4021837	3.75E-04	1.65E-06	0.00E+00	0.00E+00
4325	301771.4	4021847	3.82E-04	1.68E-06	0.00E+00	0.00E+00
4326	301749.2	4021857	3.89E-04	1.72E-06	0.00E+00	0.00E+00
4327	301727	4021866	3.96E-04	1.75E-06	0.00E+00	0.00E+00
4328	301704.8	4021876	4.02E-04	1.77E-06	0.00E+00	0.00E+00
4329	301682.6	4021886	4.08E-04	1.80E-06	0.00E+00	0.00E+00
4330	301660.4	4021896	4.14E-04	1.82E-06	0.00E+00	0.00E+00
4331	301638.2	4021905	4.19E-04	1.85E-06	0.00E+00	0.00E+00
4332	301616.1	4021915	4.24E-04	1.87E-06	0.00E+00	0.00E+00
4333	301593.9	4021925	4.30E-04	1.89E-06	0.00E+00	0.00E+00
4334	301571.7	4021934	4.35E-04	1.92E-06	0.00E+00	0.00E+00
4335	301549.5	4021944	4.41E-04	1.94E-06	0.00E+00	0.00E+00
4336	301527.3	4021954	4.46E-04	1.96E-06	0.00E+00	0.00E+00
4337	301505.1	4021963	4.50E-04	1.98E-06	0.00E+00	0.00E+00
4338	301482.9	4021973	4.53E-04	2.00E-06	0.00E+00	0.00E+00
4339	301460.7	4021983	4.55E-04	2.00E-06	0.00E+00	0.00E+00
4340	301438.5	4021992	4.55E-04	2.01E-06	0.00E+00	0.00E+00
4341	301416.3	4022002	4.54E-04	2.00E-06	0.00E+00	0.00E+00
4342	301394.1	4022012	4.51E-04	1.99E-06	0.00E+00	0.00E+00
4343	301371.9	4022022	4.47E-04	1.97E-06	0.00E+00	0.00E+00
4344	301349.7	4022031	4.42E-04	1.95E-06	0.00E+00	0.00E+00
4345	301327.5	4022041	4.37E-04	1.93E-06	0.00E+00	0.00E+00
4346	301305.3	4022051	4.32E-04	1.91E-06	0.00E+00	0.00E+00
4347	302461	4020834	4.80E-04	2.11E-06	0.00E+00	0.00E+00
4348	302460.4	4020810	4.93E-04	2.17E-06	0.00E+00	0.00E+00
4349	302459.9	4020785	5.06E-04	2.23E-06	0.00E+00	0.00E+00
4350	302459.3	4020760	5.19E-04	2.29E-06	0.00E+00	0.00E+00
4351	302458.8	4020736	5.32E-04	2.34E-06	0.00E+00	0.00E+00
4352	302458.3	4020711	5.45E-04	2.40E-06	0.00E+00	0.00E+00
4353	302457.7	4020686	5.58E-04	2.46E-06	0.00E+00	0.00E+00
4354	302457.2	4020661	5.71E-04	2.51E-06	0.00E+00	0.00E+00
4355	302456.7	4020637	5.84E-04	2.57E-06	0.00E+00	0.00E+00
4356	302456.1	4020612	5.97E-04	2.63E-06	0.00E+00	0.00E+00
4357	302455.6	4020587	6.11E-04	2.69E-06	0.00E+00	0.00E+00
4358	302455	4020562	6.24E-04	2.75E-06	0.00E+00	0.00E+00
4359	302454.5	4020538	6.37E-04	2.81E-06	0.00E+00	0.00E+00
4360	302454	4020513	6.50E-04	2.86E-06	0.00E+00	0.00E+00
4361	302453.4	4020488	6.62E-04	2.92E-06	0.00E+00	0.00E+00
4362	302552.1	4020855	4.17E-04	1.84E-06	0.00E+00	0.00E+00
4363	302543.3	4020878	4.13E-04	1.82E-06	0.00E+00	0.00E+00
4364	302534.4	4020900	4.08E-04	1.80E-06	0.00E+00	0.00E+00

4365	302525.6	4020923	4.02E-04	1.77E-06	0.00E+00	0.00E+00
4366	302516.8	4020946	3.97E-04	1.75E-06	0.00E+00	0.00E+00
4367	302507.9	4020968	3.91E-04	1.72E-06	0.00E+00	0.00E+00
4368	302499.1	4020991	3.85E-04	1.70E-06	0.00E+00	0.00E+00
4369	302490.3	4021014	3.79E-04	1.67E-06	0.00E+00	0.00E+00
4370	302481.4	4021036	3.72E-04	1.64E-06	0.00E+00	0.00E+00
4371	302472.6	4021059	3.64E-04	1.61E-06	0.00E+00	0.00E+00
4372	302463.7	4021081	3.56E-04	1.57E-06	0.00E+00	0.00E+00
4373	302454.9	4021104	3.47E-04	1.53E-06	0.00E+00	0.00E+00
4374	302446.1	4021127	3.38E-04	1.49E-06	0.00E+00	0.00E+00
4375	302437.2	4021149	3.28E-04	1.45E-06	0.00E+00	0.00E+00
4376	302428.4	4021172	3.19E-04	1.40E-06	0.00E+00	0.00E+00
4377	302419.6	4021195	3.10E-04	1.36E-06	0.00E+00	0.00E+00
4378	302410.7	4021217	3.01E-04	1.33E-06	0.00E+00	0.00E+00
4379	302401.9	4021240	2.93E-04	1.29E-06	0.00E+00	0.00E+00
4380	302393.1	4021263	2.86E-04	1.26E-06	0.00E+00	0.00E+00
4381	302384.2	4021285	2.79E-04	1.23E-06	0.00E+00	0.00E+00
4382	302375.4	4021308	2.74E-04	1.21E-06	0.00E+00	0.00E+00
4383	302366.6	4021331	2.69E-04	1.19E-06	0.00E+00	0.00E+00
4384	302357.7	4021353	2.65E-04	1.17E-06	0.00E+00	0.00E+00
4385	302348.9	4021376	2.62E-04	1.15E-06	0.00E+00	0.00E+00
4386	302340	4021399	2.59E-04	1.14E-06	0.00E+00	0.00E+00
4387	302331.2	4021421	2.57E-04	1.13E-06	0.00E+00	0.00E+00
4388	302322.4	4021444	2.56E-04	1.13E-06	0.00E+00	0.00E+00
4389	302313.5	4021467	2.55E-04	1.12E-06	0.00E+00	0.00E+00
4390	302304.7	4021489	2.54E-04	1.12E-06	0.00E+00	0.00E+00
4391	302295.9	4021512	2.53E-04	1.12E-06	0.00E+00	0.00E+00
4392	302287	4021535	2.53E-04	1.11E-06	0.00E+00	0.00E+00
4393	302278.2	4021557	2.52E-04	1.11E-06	0.00E+00	0.00E+00
4394	302269.4	4021580	2.51E-04	1.11E-06	0.00E+00	0.00E+00
4395	302260.5	4021603	2.50E-04	1.10E-06	0.00E+00	0.00E+00
4396	302251.7	4021625	2.49E-04	1.10E-06	0.00E+00	0.00E+00
4397	302242.9	4021648	2.48E-04	1.09E-06	0.00E+00	0.00E+00
4398	302234	4021671	2.47E-04	1.09E-06	0.00E+00	0.00E+00
4399	302225.2	4021693	2.46E-04	1.08E-06	0.00E+00	0.00E+00
4400	302216.3	4021716	2.45E-04	1.08E-06	0.00E+00	0.00E+00
4401	302207.5	4021739	2.43E-04	1.07E-06	0.00E+00	0.00E+00
4402	302176.4	4021771	2.47E-04	1.09E-06	0.00E+00	0.00E+00
4403	302154.1	4021781	2.51E-04	1.11E-06	0.00E+00	0.00E+00
4404	302131.8	4021790	2.56E-04	1.13E-06	0.00E+00	0.00E+00
4405	302109.5	4021800	2.61E-04	1.15E-06	0.00E+00	0.00E+00
4406	302087.2	4021810	2.66E-04	1.17E-06	0.00E+00	0.00E+00
4407	302065	4021820	2.71E-04	1.20E-06	0.00E+00	0.00E+00
4408	302042.7	4021829	2.77E-04	1.22E-06	0.00E+00	0.00E+00
4409	302020.4	4021839	2.83E-04	1.25E-06	0.00E+00	0.00E+00
4410	301998.1	4021849	2.89E-04	1.27E-06	0.00E+00	0.00E+00
4411	301975.8	4021859	2.95E-04	1.30E-06	0.00E+00	0.00E+00

4412	301953.5	4021868	3.01E-04	1.33E-06	0.00E+00	0.00E+00
4413	301931.2	4021878	3.08E-04	1.36E-06	0.00E+00	0.00E+00
4414	301909	4021888	3.14E-04	1.38E-06	0.00E+00	0.00E+00
4415	301886.7	4021898	3.21E-04	1.41E-06	0.00E+00	0.00E+00
4416	301864.4	4021907	3.27E-04	1.44E-06	0.00E+00	0.00E+00
4417	301842.1	4021917	3.34E-04	1.47E-06	0.00E+00	0.00E+00
4418	301819.8	4021927	3.40E-04	1.50E-06	0.00E+00	0.00E+00
4419	301797.5	4021936	3.46E-04	1.53E-06	0.00E+00	0.00E+00
4420	301775.2	4021946	3.52E-04	1.55E-06	0.00E+00	0.00E+00
4421	301752.9	4021956	3.57E-04	1.57E-06	0.00E+00	0.00E+00
4422	301730.7	4021966	3.61E-04	1.59E-06	0.00E+00	0.00E+00
4423	301708.4	4021975	3.66E-04	1.61E-06	0.00E+00	0.00E+00
4424	301686.1	4021985	3.70E-04	1.63E-06	0.00E+00	0.00E+00
4425	301663.8	4021995	3.75E-04	1.65E-06	0.00E+00	0.00E+00
4426	301641.5	4022005	3.79E-04	1.67E-06	0.00E+00	0.00E+00
4427	301619.2	4022014	3.84E-04	1.69E-06	0.00E+00	0.00E+00
4428	301596.9	4022024	3.89E-04	1.72E-06	0.00E+00	0.00E+00
4429	301574.7	4022034	3.94E-04	1.74E-06	0.00E+00	0.00E+00
4430	301552.4	4022044	3.99E-04	1.76E-06	0.00E+00	0.00E+00
4431	301530.1	4022053	4.03E-04	1.77E-06	0.00E+00	0.00E+00
4432	301507.8	4022063	4.06E-04	1.79E-06	0.00E+00	0.00E+00
4433	301485.5	4022073	4.08E-04	1.80E-06	0.00E+00	0.00E+00
4434	301463.2	4022082	4.08E-04	1.80E-06	0.00E+00	0.00E+00
4435	301440.9	4022092	4.07E-04	1.79E-06	0.00E+00	0.00E+00
4436	301418.6	4022102	4.05E-04	1.78E-06	0.00E+00	0.00E+00
4437	301396.4	4022112	4.02E-04	1.77E-06	0.00E+00	0.00E+00
4438	301374.1	4022121	3.98E-04	1.75E-06	0.00E+00	0.00E+00
4439	301351.8	4022131	3.94E-04	1.73E-06	0.00E+00	0.00E+00
4440	301329.5	4022141	3.89E-04	1.72E-06	0.00E+00	0.00E+00
4441	301307.2	4022151	3.85E-04	1.70E-06	0.00E+00	0.00E+00
4442	302560.9	4020832	4.22E-04	1.86E-06	0.00E+00	0.00E+00
4443	302560.4	4020808	4.32E-04	1.90E-06	0.00E+00	0.00E+00
4444	302559.9	4020783	4.42E-04	1.95E-06	0.00E+00	0.00E+00
4445	302559.3	4020758	4.53E-04	1.99E-06	0.00E+00	0.00E+00
4446	302558.8	4020733	4.63E-04	2.04E-06	0.00E+00	0.00E+00
4447	302558.2	4020709	4.73E-04	2.09E-06	0.00E+00	0.00E+00
4448	302557.7	4020684	4.84E-04	2.13E-06	0.00E+00	0.00E+00
4449	302557.2	4020659	4.95E-04	2.18E-06	0.00E+00	0.00E+00
4450	302556.6	4020634	5.05E-04	2.23E-06	0.00E+00	0.00E+00
4451	302556.1	4020610	5.16E-04	2.27E-06	0.00E+00	0.00E+00
4452	302555.6	4020585	5.27E-04	2.32E-06	0.00E+00	0.00E+00
4453	302555	4020560	5.38E-04	2.37E-06	0.00E+00	0.00E+00
4454	302554.5	4020536	5.49E-04	2.42E-06	0.00E+00	0.00E+00
4455	302553.9	4020511	5.59E-04	2.46E-06	0.00E+00	0.00E+00
4456	302553.4	4020486	5.68E-04	2.50E-06	0.00E+00	0.00E+00
4457	302552.9	4020461	5.77E-04	2.54E-06	0.00E+00	0.00E+00
4458	302552.3	4020437	5.85E-04	2.58E-06	0.00E+00	0.00E+00

4459	302652	4020853	3.71E-04	1.64E-06	0.00E+00	0.00E+00
4460	302643.2	4020876	3.68E-04	1.62E-06	0.00E+00	0.00E+00
4461	302634.3	4020898	3.65E-04	1.61E-06	0.00E+00	0.00E+00
4462	302625.4	4020921	3.61E-04	1.59E-06	0.00E+00	0.00E+00
4463	302616.6	4020944	3.57E-04	1.57E-06	0.00E+00	0.00E+00
4464	302607.7	4020966	3.52E-04	1.55E-06	0.00E+00	0.00E+00
4465	302598.8	4020989	3.48E-04	1.53E-06	0.00E+00	0.00E+00
4466	302590	4021012	3.43E-04	1.51E-06	0.00E+00	0.00E+00
4467	302581.1	4021035	3.38E-04	1.49E-06	0.00E+00	0.00E+00
4468	302572.2	4021057	3.32E-04	1.46E-06	0.00E+00	0.00E+00
4469	302563.4	4021080	3.26E-04	1.44E-06	0.00E+00	0.00E+00
4470	302554.5	4021103	3.19E-04	1.41E-06	0.00E+00	0.00E+00
4471	302545.6	4021126	3.12E-04	1.37E-06	0.00E+00	0.00E+00
4472	302536.8	4021148	3.04E-04	1.34E-06	0.00E+00	0.00E+00
4473	302527.9	4021171	2.96E-04	1.30E-06	0.00E+00	0.00E+00
4474	302519	4021194	2.88E-04	1.27E-06	0.00E+00	0.00E+00
4475	302510.2	4021217	2.80E-04	1.23E-06	0.00E+00	0.00E+00
4476	302501.3	4021239	2.72E-04	1.20E-06	0.00E+00	0.00E+00
4477	302492.4	4021262	2.65E-04	1.17E-06	0.00E+00	0.00E+00
4478	302483.6	4021285	2.58E-04	1.14E-06	0.00E+00	0.00E+00
4479	302474.7	4021308	2.52E-04	1.11E-06	0.00E+00	0.00E+00
4480	302465.9	4021330	2.47E-04	1.09E-06	0.00E+00	0.00E+00
4481	302457	4021353	2.42E-04	1.07E-06	0.00E+00	0.00E+00
4482	302448.1	4021376	2.38E-04	1.05E-06	0.00E+00	0.00E+00
4483	302439.3	4021399	2.35E-04	1.04E-06	0.00E+00	0.00E+00
4484	302430.4	4021421	2.33E-04	1.03E-06	0.00E+00	0.00E+00
4485	302421.5	4021444	2.31E-04	1.02E-06	0.00E+00	0.00E+00
4486	302412.7	4021467	2.29E-04	1.01E-06	0.00E+00	0.00E+00
4487	302403.8	4021489	2.29E-04	1.01E-06	0.00E+00	0.00E+00
4488	302394.9	4021512	2.28E-04	1.00E-06	0.00E+00	0.00E+00
4489	302386.1	4021535	2.27E-04	1.00E-06	0.00E+00	0.00E+00
4490	302377.2	4021558	2.27E-04	1.00E-06	0.00E+00	0.00E+00
4491	302368.3	4021580	2.27E-04	9.99E-07	0.00E+00	0.00E+00
4492	302359.5	4021603	2.26E-04	9.97E-07	0.00E+00	0.00E+00
4493	302350.6	4021626	2.26E-04	9.95E-07	0.00E+00	0.00E+00
4494	302341.7	4021649	2.25E-04	9.93E-07	0.00E+00	0.00E+00
4495	302332.9	4021671	2.25E-04	9.90E-07	0.00E+00	0.00E+00
4496	302324	4021694	2.24E-04	9.86E-07	0.00E+00	0.00E+00
4497	302315.1	4021717	2.23E-04	9.82E-07	0.00E+00	0.00E+00
4498	302306.3	4021740	2.22E-04	9.78E-07	0.00E+00	0.00E+00
4499	302297.4	4021762	2.21E-04	9.73E-07	0.00E+00	0.00E+00
4500	302288.5	4021785	2.20E-04	9.69E-07	0.00E+00	0.00E+00
4501	302279.7	4021808	2.19E-04	9.66E-07	0.00E+00	0.00E+00
4502	302248.4	4021840	2.22E-04	9.78E-07	0.00E+00	0.00E+00
4503	302226.1	4021850	2.26E-04	9.95E-07	0.00E+00	0.00E+00
4504	302203.7	4021860	2.30E-04	1.01E-06	0.00E+00	0.00E+00
4505	302181.3	4021870	2.34E-04	1.03E-06	0.00E+00	0.00E+00

4506	302159	4021879	2.38E-04	1.05E-06	0.00E+00	0.00E+00
4507	302136.6	4021889	2.43E-04	1.07E-06	0.00E+00	0.00E+00
4508	302114.2	4021899	2.47E-04	1.09E-06	0.00E+00	0.00E+00
4509	302091.9	4021909	2.52E-04	1.11E-06	0.00E+00	0.00E+00
4510	302069.5	4021918	2.57E-04	1.13E-06	0.00E+00	0.00E+00
4511	302047.1	4021928	2.62E-04	1.15E-06	0.00E+00	0.00E+00
4512	302024.8	4021938	2.67E-04	1.18E-06	0.00E+00	0.00E+00
4513	302002.4	4021948	2.72E-04	1.20E-06	0.00E+00	0.00E+00
4514	301980	4021957	2.78E-04	1.22E-06	0.00E+00	0.00E+00
4515	301957.7	4021967	2.83E-04	1.25E-06	0.00E+00	0.00E+00
4516	301935.3	4021977	2.89E-04	1.27E-06	0.00E+00	0.00E+00
4517	301913	4021987	2.95E-04	1.30E-06	0.00E+00	0.00E+00
4518	301890.6	4021997	3.00E-04	1.32E-06	0.00E+00	0.00E+00
4519	301868.2	4022006	3.06E-04	1.35E-06	0.00E+00	0.00E+00
4520	301845.9	4022016	3.11E-04	1.37E-06	0.00E+00	0.00E+00
4521	301823.5	4022026	3.16E-04	1.39E-06	0.00E+00	0.00E+00
4522	301801.1	4022036	3.20E-04	1.41E-06	0.00E+00	0.00E+00
4523	301778.8	4022045	3.24E-04	1.43E-06	0.00E+00	0.00E+00
4524	301756.4	4022055	3.28E-04	1.45E-06	0.00E+00	0.00E+00
4525	301734	4022065	3.32E-04	1.46E-06	0.00E+00	0.00E+00
4526	301711.7	4022075	3.35E-04	1.48E-06	0.00E+00	0.00E+00
4527	301689.3	4022084	3.39E-04	1.49E-06	0.00E+00	0.00E+00
4528	301666.9	4022094	3.43E-04	1.51E-06	0.00E+00	0.00E+00
4529	301644.6	4022104	3.47E-04	1.53E-06	0.00E+00	0.00E+00
4530	301622.2	4022114	3.52E-04	1.55E-06	0.00E+00	0.00E+00
4531	301599.9	4022124	3.56E-04	1.57E-06	0.00E+00	0.00E+00
4532	301577.5	4022133	3.60E-04	1.59E-06	0.00E+00	0.00E+00
4533	301555.1	4022143	3.64E-04	1.60E-06	0.00E+00	0.00E+00
4534	301532.8	4022153	3.67E-04	1.62E-06	0.00E+00	0.00E+00
4535	301510.4	4022163	3.69E-04	1.63E-06	0.00E+00	0.00E+00
4536	301488	4022172	3.70E-04	1.63E-06	0.00E+00	0.00E+00
4537	301465.7	4022182	3.69E-04	1.63E-06	0.00E+00	0.00E+00
4538	301443.3	4022192	3.67E-04	1.62E-06	0.00E+00	0.00E+00
4539	301420.9	4022202	3.65E-04	1.61E-06	0.00E+00	0.00E+00
4540	301398.6	4022211	3.62E-04	1.59E-06	0.00E+00	0.00E+00
4541	301376.2	4022221	3.58E-04	1.58E-06	0.00E+00	0.00E+00
4542	301353.8	4022231	3.54E-04	1.56E-06	0.00E+00	0.00E+00
4543	301331.5	4022241	3.51E-04	1.55E-06	0.00E+00	0.00E+00
4544	301309.1	4022251	3.47E-04	1.53E-06	0.00E+00	0.00E+00
4545	302660.9	4020830	3.75E-04	1.65E-06	0.00E+00	0.00E+00
4546	302660.4	4020805	3.83E-04	1.69E-06	0.00E+00	0.00E+00
4547	302659.8	4020781	3.91E-04	1.72E-06	0.00E+00	0.00E+00
4548	302659.3	4020756	3.99E-04	1.76E-06	0.00E+00	0.00E+00
4549	302658.8	4020731	4.08E-04	1.80E-06	0.00E+00	0.00E+00
4550	302658.2	4020706	4.17E-04	1.84E-06	0.00E+00	0.00E+00
4551	302657.7	4020682	4.26E-04	1.88E-06	0.00E+00	0.00E+00
4552	302657.1	4020657	4.35E-04	1.92E-06	0.00E+00	0.00E+00

4553	302656.6	4020632	4.44E-04	1.96E-06	0.00E+00	0.00E+00
4554	302656.1	4020608	4.53E-04	2.00E-06	0.00E+00	0.00E+00
4555	302655.5	4020583	4.62E-04	2.03E-06	0.00E+00	0.00E+00
4556	302655	4020558	4.71E-04	2.07E-06	0.00E+00	0.00E+00
4557	302654.5	4020533	4.79E-04	2.11E-06	0.00E+00	0.00E+00
4558	302653.9	4020509	4.87E-04	2.15E-06	0.00E+00	0.00E+00
4559	302653.4	4020484	4.95E-04	2.18E-06	0.00E+00	0.00E+00
4560	302652.8	4020459	5.02E-04	2.21E-06	0.00E+00	0.00E+00
4561	302652.3	4020435	5.09E-04	2.24E-06	0.00E+00	0.00E+00
4562	301039.2	4020827	2.89E-02	1.27E-04	0.00E+00	0.00E+00
4563	301039.2	4020774	3.17E-02	1.40E-04	0.00E+00	0.00E+00
4564	301010.2	4020828	1.83E-02	8.06E-05	0.00E+00	0.00E+00
4565	301011.6	4020774	2.01E-02	8.86E-05	0.00E+00	0.00E+00
4566	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4567	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4568	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4569	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4570	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4571	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4572	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4573	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4574	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4575	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4576	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4577	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4578	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4579	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4580	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4581	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4582	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4583	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4584	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4585	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4586	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4587	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4588	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4589	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4590	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4591	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4592	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4593	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4594	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4595	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4596	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4597	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4598	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4599	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

			T2				290	T4f				0				0				
							1.02E-07				3.33E-10					0.00E+00				0.00E+00
					286	301263.87	4019924.11													
			Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total	Yr 1	Yr 2	Yr 3	Yr 4	Total
1	301252.09	4020440.01	9.59E-07	1.95E-06	3.07E-07	0.00E+00	3.22E-06	1.06E-09	8.60E-09	8.53E-10	0.00E+00	1.05E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	301227.12	4020440.54	1.05E-06	2.13E-06	3.35E-07	0.00E+00	3.51E-06	1.16E-09	9.40E-09	9.32E-10	0.00E+00	1.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	301202.15	4020441.08	1.06E-06	2.16E-06	3.40E-07	0.00E+00	3.57E-06	1.18E-09	9.53E-09	9.45E-10	0.00E+00	1.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4	301177.18	4020441.62	1.04E-06	2.13E-06	3.34E-07	0.00E+00	3.51E-06	1.16E-09	9.38E-09	9.30E-10	0.00E+00	1.15E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	301152.21	4020442.16	1.02E-06	2.07E-06	3.25E-07	0.00E+00	3.41E-06	1.12E-09	9.11E-09	9.04E-10	0.00E+00	1.11E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	301127.24	4020442.69	9.90E-07	2.02E-06	3.16E-07	0.00E+00	3.32E-06	1.10E-09	8.88E-09	8.81E-10	0.00E+00	1.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	301102.27	4020443.23	9.96E-07	2.03E-06	3.18E-07	0.00E+00	3.34E-06	1.10E-09	8.94E-09	8.86E-10	0.00E+00	1.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	301077.3	4020443.77	1.12E-06	2.29E-06	3.59E-07	0.00E+00	3.77E-06	1.24E-09	1.01E-08	9.98E-10	0.00E+00	1.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	301269.38	4020421.95	6.84E-07	1.39E-06	2.19E-07	0.00E+00	2.30E-06	7.57E-10	6.14E-09	6.09E-10	0.00E+00	7.50E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	301294.92	4020446.4	7.32E-07	1.49E-06	2.34E-07	0.00E+00	2.46E-06	8.11E-10	6.57E-09	6.52E-10	0.00E+00	8.04E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	301226.58	4020415.55	7.05E-07	1.44E-06	2.25E-07	0.00E+00	2.37E-06	7.80E-10	6.33E-09	6.27E-10	0.00E+00	7.73E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12	301201.61	4020416.09	7.09E-07	1.44E-06	2.27E-07	0.00E+00	2.38E-06	7.85E-10	6.36E-09	6.31E-10	0.00E+00	7.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
13	301176.64	4020416.62	6.97E-07	1.42E-06	2.23E-07	0.00E+00	2.34E-06	7.72E-10	6.26E-09	6.21E-10	0.00E+00	7.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
14	301151.67	4020417.16	6.82E-07	1.39E-06	2.18E-07	0.00E+00	2.29E-06	7.55E-10	6.13E-09	6.07E-10	0.00E+00	7.49E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
15	301126.7	4020417.7	6.80E-07	1.38E-06	2.17E-07	0.00E+00	2.28E-06	7.52E-10	6.10E-09	6.05E-10	0.00E+00	7.46E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	301101.73	4020418.24	7.18E-07	1.46E-06	2.30E-07	0.00E+00	2.41E-06	7.95E-10	6.44E-09	6.39E-10	0.00E+00	7.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	301076.76	4020418.77	8.75E-07	1.78E-06	2.80E-07	0.00E+00	2.94E-06	9.68E-10	7.85E-09	7.78E-10	0.00E+00	9.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
18	301268.84	4020396.96	5.18E-07	1.05E-06	1.66E-07	0.00E+00	1.74E-06	5.73E-10	4.65E-09	4.61E-10	0.00E+00	5.68E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
19	301312.21	4020428.34	5.54E-07	1.13E-06	1.77E-07	0.00E+00	1.86E-06	6.14E-10	4.98E-09	4.93E-10	0.00E+00	6.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
20	301226.05	4020390.55	5.14E-07	1.05E-06	1.64E-07	0.00E+00	1.72E-06	5.69E-10	4.61E-09	4.57E-10	0.00E+00	5.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
21	301201.08	4020391.09	5.14E-07	1.05E-06	1.64E-07	0.00E+00	1.72E-06	5.69E-10	4.61E-09	4.57E-10	0.00E+00	5.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	301176.11	4020391.63	5.07E-07	1.03E-06	1.62E-07	0.00E+00	1.70E-06	5.61E-10	4.55E-09	4.51E-10	0.00E+00	5.56E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	301151.14	4020392.17	5.00E-07	1.02E-06	1.60E-07	0.00E+00	1.68E-06	5.53E-10	4.49E-09	4.45E-10	0.00E+00	5.48E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	301126.17	4020392.7	5.04E-07	1.03E-06	1.61E-07	0.00E+00	1.69E-06	5.58E-10	4.53E-09	4.49E-10	0.00E+00	5.53E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	301101.2	4020393.24	5.38E-07	1.10E-06	1.72E-07	0.00E+00	1.81E-06	5.96E-10	4.83E-09	4.79E-10	0.00E+00	5.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	301076.23	4020393.78	6.30E-07	1.28E-06	2.01E-07	0.00E+00	2.11E-06	6.97E-10	5.66E-09	5.61E-10	0.00E+00	6.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	301051.26	4020394.32	7.62E-07	1.55E-06	2.44E-07	0.00E+00	2.56E-06	8.44E-10	6.84E-09	6.78E-10	0.00E+00	8.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	301268.31	4020371.96	4.04E-07	8.23E-07	1.29E-07	0.00E+00	1.36E-06	4.47E-10	3.63E-09	3.60E-10	0.00E+00	4.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	301303.96	4020385.84	4.14E-07	8.43E-07	1.32E-07	0.00E+00	1.39E-06	4.58E-10	3.71E-09	3.68E-10	0.00E+00	4.54E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	301329.5	4020410.29	4.38E-07	8.92E-07	1.40E-07	0.00E+00	1.47E-06	4.85E-10	3.93E-09	3.90E-10	0.00E+00	4.80E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	301344.9	4020445.31	4.80E-07	9.79E-07	1.54E-07	0.00E+00	1.61E-06	5.32E-10	4.31E-09	4.27E-10	0.00E+00	5.27E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	301225.51	4020365.56	3.93E-07	8.00E-07	1.26E-07	0.00E+00	1.32E-06	4.35E-10	3.53E-09	3.50E-10	0.00E+00	4.31E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	301200.54	4020366.1	3.91E-07	7.97E-07	1.25E-07	0.00E+00	1.31E-06	4.33E-10	3.51E-09	3.48E-10	0.00E+00	4.29E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	301175.57	4020366.64	3.86E-07	7.86E-07	1.23E-07	0.00E+00	1.30E-06	4.27E-10	3.46E-09	3.44E-10	0.00E+00	4.24E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	301150.6	4020367.17	3.82E-07	7.77E-07	1.22E-07	0.00E+00	1.28E-06	4.22E-10	3.42E-09	3.40E-10	0.00E+00	4.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	301125.63	4020367.71	3.83E-07	7.80E-07	1.22E-07	0.00E+00	1.29E-06	4.24E-10	3.44E-09	3.41E-10	0.00E+00	4.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	301100.66	4020368.25	3.95E-07	8.05E-07	1.26E-07	0.00E+00	1.33E-06	4.38E-10	3.55E-09	3.52E-10	0.00E+00	4.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	301075.69	4020368.79	4.15E-07	8.45E-07	1.33E-07	0.00E+00	1.39E-06	4.59E-10	3.72E-09	3.69E-10	0.00E+00	4.55E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	301050.72	4020369.32	4.12E-07	8.39E-07	1.32E-07	0.00E+00	1.38E-06	4.56E-10	3.69E-09	3.66E-10	0.00E+00	4.52E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
40	301272.23	4020348.7	3.26E-07	6.64E-07	1.04E-07	0.00E+00	1.09E-06	3.61E-10	2.93E-09	2.90E-10	0.00E+00	3.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	301294.51	4020357.37	3.37E-07	6.86E-07	1.08E-07	0.00E+00	1.13E-06	3.73E-10	3.02E-09	3.00E-10	0.00E+00	3.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	301316.8	4020366.05	3.39E-07	6.91E-07	1.08E-07	0.00E+00	1.14E-06	3.75E-10	3.04E-09	3.02E-10	0.00E+00	3.72E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
43	301348.71	4020396.61	3.63E-07	7.38E-07	1.16E-07	0.00E+00	1.22E-06	4.01E-10	3.25E-09	3.23E-10	0.00E+00	3.98E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	301358.34	4020418.5	3.86E-07	7.87E-07	1.24E-07	0.00E+00	1.30E-06	4.28E-10	3.47E-09	3.44E-10	0.00E+00	4.24E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	301367.97	4020440.39	4.00E-07	8.14E-07	1.28E-07	0.00E+00	1.34E-06	4.42E-10	3.59E-09	3.56E-10	0.00E+00	4.38E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	301249.94	4020340.03	3.08E-07	6.28E-07	9.86E-08	0.00E+00	1.04E-06	3.41E-10	2.77E-09	2.74E-10	0.00E+00	3.38E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	301224.97	4020340.57	3.10E-07	6.31E-07	9.91E-08	0.00E+00	1.04E-06	3.43E-10	2.78E-09	2.76E-10	0.00E+00	3.40E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	301200	4020341.1	3.07E-07	6.25E-07	9.81E-08	0.00E+00	1.03E-06	3.40E-10	2.75E-09	2.73E-10	0.00E+00	3.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
49	301175.03	4020341.64	3.02E-07	6.15E-07	9.65E-08	0.00E+00	1.01E-06	3.34E-10	2.71E-09	2.69E-10	0.00E+00	3.31E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	301150.06	4020342.18	2.97E-07	6.04E-07	9.48E-08	0.00E+00	9.96E-07	3.28E-10	2.66E-09	2.64E-10	0.00E+00	3.25E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	301125.09	4020342.72	2.92E-07	5.95E-07	9.35E-08	0.00E+00	9.81E-07	3.24E-10	2.62E-09	2.60E-10	0.00E+00	3.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	301100.12	4020343.25	2.88E-07	5.87E-07	9.21E-08	0.00E+00	9.67E-07	3.19E-10	2.59E-09	2.56E-10	0.00E+00	3.16E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	301075.15	4020343.79	2.78E-07	5.66E-07	8.88E-08	0.00E+00	9.33E-07	3.08E-10	2.49E-09	2.47E-10	0.00E+00	3.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	301050.18	4020344.33	2.51E-07	5.12E-07	8.04E-08	0.00E+00	8.44E-07	2.78E-10	2.26E-09	2.24E-10	0.00E+00	2.76E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	301270.8	4020323.36	2.65E-07	5.40E-07	8.48E-08	0.00E+00	8.91E-07	2.94E-10	2.38E-09	2.36E-10	0.00E+00	2.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
56	301292.19	4020331.69	2.76E-07	5.63E-07	8.84E-08	0.00E+00	9.28E-07	3.06E-10	2.48E-09	2.46E-10	0.00E+00	3.03E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
57	301313.59	4020340.01	2.83E-07	5.76E-07	9.04E-08	0.00E+00	9.49E-07	3.13E-10	2.54E-09	2.52E-10	0.00E+00	3.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
58	301334.98	4020348.34	2.83E-07	5.76E-07	9.04E-08	0.00E+00	9.49E-07	3.13E-10	2.54E-09	2.52E-10	0.00E+00	3.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
59	301365.62	4020377.68	3.01E-07	6.13E-07	9.62E-08	0.00E+00	1.01E-06	3.33E-10	2.70E-09	2.68E-10	0.00E+00	3.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
60	301374.86	4020398.69	3.20E-07	6.52E-07	1.02E-07	0.00E+00	1.07E-06	3.54E-10	2.87E-09	2.85E-10	0.00E+00	3.51E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
61	301384.11	4020419.71	3.33E-07	6.79E-07	1.07E-07	0.00E+00	1.12E-06	3.69E-10	2.99E-09	2.96E-10	0.00E+00	3.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
62	301393.35	4020440.72	3.39E-07	6.91E-07	1.08E-07	0.00E+00	1.14E-06	3.75E-10	3.04E-09	3.02E-10	0.00E+00	3.72E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
63	301249.4	4020315.03	2.50E-07	5.10E-07	8.00E-08	0.00E+00	8.40E-07	2.77E-10	2.25E-09	2.23E-10	0.00E+00	2.75E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
64	301224.43	4020315.57	2.50E-07	5.08E-07	7.98E-08	0.00E+00	8.38E-07	2.76E-10	2.24E-09	2.22E-10	0.00E+00	2.74E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
65	301199.46	4020316.11	2.46E-07	5.00E-07	7.85E-08	0.00E+00	8.25E-07	2.72E-10	2.20E-09	2.19E-10	0.00E+00	2.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
66	301174.49	4020316.65	2.40E-07	4.89E-07	7.67E-08	0.00E+00	8.06E-07	2.66E-10	2.15E-09	2.14E-10	0.00E+00	2.63E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
67	301149.52	4020317.18	2.33E-07	4.75E-07	7.46E-08	0.00E+00	7.83E-07	2.58E-10	2.09E-09	2.08E-10	0.00E+00	2.56E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68	301124.55	4020317.72	2.25E-07	4.59E-07	7.20E-08	0.00E+00	7.56E-07	2.49E-10	2.02E-09	2.00E-10	0.00E+00	2.47E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
69	301099.58	4020318.26	2.14E-07	4.35E-07	6.83E-08	0.00E+00	7.17E-07	2.37E-10	1.92E-09	1.90E-10	0.00E+00	2.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	301074.61	4020318.8	1.96E-07	4.00E-07	6.28E-08	0.00E+00	6.59E-07	2.17E-10	1.76E-09	1.75E-10	0.00E+00	2.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	301049.64	4020319.33	1.71E-07	3.49E-07	5.48E-08	0.00E+00	5.75E-07	1.90E-10	1.54E-09	1.53E-10	0.00E+00	1.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	301269.66	4020298.13	2.19E-07	4.46E-07	7.00E-08	0.00E+00	7.34E-07	2.42E-10	1.96E-09	1.95E-10	0.00E+00	2.40E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	301311.27	4020314.32	2.37E-07	4.82E-07	7.57E-08	0.00E+00	7.95E-07	2.62E-10	2.12E-09	2.11E-10	0.00E+00	2.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74	301352.87	4020330.51	2.40E-07	4.89E-07	7.68E-08	0.00E+00	8.06E-07	2.66E-10	2.16E-09	2.14E-10	0.00E+00	2.63E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75	301382.65	4020359.04	2.54E-07	5.18E-07	8.13E-08	0.00E+00	8.54E-07	2.82E-10	2.28E-09	2.26E-10	0.00E+00	2.79E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76	301400.63	4020399.9	2.81E-07	5.73E-07	9.00E-08	0.00E+00	9.45E-07	3.12E-10	2.53E-09	2.50E-10	0.00E+00	3.09E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
77	301418.6	4020440.76	2.91E-07	5.92E-07	9.29E-08	0.00E+00	9.75E-07	3.22E-10	2.61E-09	2.59E-10	0.00E+00	3.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78	301223.89	4020290.58	2.04E-07	4.16E-07	6.52E-08	0.00E+00	6.85E-07	2.26E-10	1.83E-09	1.82E-10	0.00E+00	2.24E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79	301198.92	4020291.12

125	301310.36	4020190.05	1.09E-07	2.22E-07	3.48E-08	0.00E+00	3.65E-07	1.20E-10	9.77E-10	9.69E-11	0.00E+00	1.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
126	301331.75	4020198.37	1.14E-07	2.32E-07	3.64E-08	0.00E+00	3.82E-07	1.26E-10	1.02E-09	1.01E-10	0.00E+00	1.25E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
127	301353.15	4020206.7	1.18E-07	2.41E-07	3.78E-08	0.00E+00	3.97E-07	1.31E-10	1.06E-09	1.05E-10	0.00E+00	1.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
128	301374.54	4020215.02	1.22E-07	2.48E-07	3.89E-08	0.00E+00	4.08E-07	1.35E-10	1.09E-09	1.08E-10	0.00E+00	1.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
129	301395.94	4020223.35	1.24E-07	2.52E-07	3.96E-08	0.00E+00	4.16E-07	1.37E-10	1.11E-09	1.10E-10	0.00E+00	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	301417.33	4020231.68	1.25E-07	2.54E-07	3.99E-08	0.00E+00	4.19E-07	1.38E-10	1.12E-09	1.11E-10	0.00E+00	1.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	301438.73	4020240	1.25E-07	2.54E-07	3.98E-08	0.00E+00	4.18E-07	1.38E-10	1.12E-09	1.11E-10	0.00E+00	1.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	301469.37	4020269.34	1.31E-07	2.66E-07	4.18E-08	0.00E+00	4.38E-07	1.45E-10	1.17E-09	1.16E-10	0.00E+00	1.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	301478.61	4020290.36	1.37E-07	2.80E-07	4.39E-08	0.00E+00	4.61E-07	1.52E-10	1.23E-09	1.22E-10	0.00E+00	1.51E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
134	301487.85	4020311.37	1.43E-07	2.92E-07	4.58E-08	0.00E+00	4.81E-07	1.58E-10	1.28E-09	1.27E-10	0.00E+00	1.57E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
135	301497.1	4020332.38	1.48E-07	3.01E-07	4.73E-08	0.00E+00	4.96E-07	1.64E-10	1.33E-09	1.32E-10	0.00E+00	1.62E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
136	301506.34	4020353.4	1.51E-07	3.08E-07	4.83E-08	0.00E+00	5.07E-07	1.67E-10	1.36E-09	1.35E-10	0.00E+00	1.66E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
137	301515.58	4020374.41	1.53E-07	3.12E-07	4.89E-08	0.00E+00	5.13E-07	1.69E-10	1.37E-09	1.36E-10	0.00E+00	1.68E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
138	301524.83	4020395.43	1.53E-07	3.12E-07	4.90E-08	0.00E+00	5.14E-07	1.70E-10	1.37E-09	1.36E-10	0.00E+00	1.68E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
139	301534.07	4020416.44	1.52E-07	3.09E-07	4.86E-08	0.00E+00	5.10E-07	1.68E-10	1.36E-09	1.35E-10	0.00E+00	1.67E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
140	301543.32	4020437.46	1.49E-07	3.04E-07	4.77E-08	0.00E+00	5.01E-07	1.65E-10	1.34E-09	1.33E-10	0.00E+00	1.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
141	301246.17	4020165.07	9.02E-08	1.84E-07	2.89E-08	0.00E+00	3.03E-07	9.99E-11	8.10E-10	8.03E-11	0.00E+00	9.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
142	301221.2	4020165.61	8.70E-08	1.77E-07	2.78E-08	0.00E+00	2.92E-07	9.63E-11	7.80E-10	7.74E-11	0.00E+00	9.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
143	301196.23	4020166.14	8.28E-08	1.69E-07	2.65E-08	0.00E+00	2.78E-07	9.16E-11	7.43E-10	7.37E-11	0.00E+00	9.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
144	301171.26	4020166.68	7.79E-08	1.59E-07	2.49E-08	0.00E+00	2.61E-07	8.62E-11	6.99E-10	6.93E-11	0.00E+00	8.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
145	301146.29	4020167.22	7.22E-08	1.47E-07	2.31E-08	0.00E+00	2.42E-07	7.99E-11	6.48E-10	6.43E-11	0.00E+00	7.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
146	301121.32	4020167.76	6.61E-08	1.35E-07	2.11E-08	0.00E+00	2.22E-07	7.32E-11	5.94E-10	5.89E-11	0.00E+00	7.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
147	301096.35	4020168.29	6.00E-08	1.22E-07	1.92E-08	0.00E+00	2.01E-07	6.64E-11	5.39E-10	5.34E-11	0.00E+00	6.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
148	301071.38	4020168.83	5.41E-08	1.10E-07	1.73E-08	0.00E+00	1.81E-07	5.98E-11	4.85E-10	4.81E-11	0.00E+00	5.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
149	301046.41	4020169.37	4.82E-08	9.82E-08	1.54E-08	0.00E+00	1.62E-07	5.34E-11	4.33E-10	4.29E-11	0.00E+00	5.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
150	301267.79	4020123.91	7.38E-08	1.50E-07	2.36E-08	0.00E+00	2.48E-07	8.17E-11	6.63E-10	6.57E-11	0.00E+00	8.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
151	301290.48	4020132.74	7.90E-08	1.61E-07	2.53E-08	0.00E+00	2.65E-07	8.75E-11	7.09E-10	7.03E-11	0.00E+00	8.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
152	301313.17	4020141.57	8.38E-08	1.71E-07	2.68E-08	0.00E+00	2.81E-07	9.28E-11	7.53E-10	7.46E-11	0.00E+00	9.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
153	301335.86	4020150.4	8.83E-08	1.80E-07	2.82E-08	0.00E+00	2.96E-07	9.77E-11	7.92E-10	7.86E-11	0.00E+00	9.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
154	301358.55	4020159.23	9.23E-08	1.88E-07	2.95E-08	0.00E+00	3.10E-07	1.02E-10	8.28E-10	8.21E-11	0.00E+00	1.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
155	301381.25	4020168.06	9.57E-08	1.95E-07	3.06E-08	0.00E+00	3.21E-07	1.06E-10	8.59E-10	8.52E-11	0.00E+00	1.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
156	301403.94	4020176.89	9.84E-08	2.00E-07	3.14E-08	0.00E+00	3.30E-07	1.09E-10	8.83E-10	8.75E-11	0.00E+00	1.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
157	301426.63	4020185.72	1.00E-07	2.04E-07	3.20E-08	0.00E+00	3.36E-07	1.11E-10	8.99E-10	8.91E-11	0.00E+00	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
158	301449.32	4020194.55	1.01E-07	2.05E-07	3.22E-08	0.00E+00	3.39E-07	1.12E-10	9.05E-10	8.98E-11	0.00E+00	1.11E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
159	301472.01	4020203.38	1.01E-07	2.05E-07	3.22E-08	0.00E+00	3.38E-07	1.12E-10	9.04E-10	8.96E-11	0.00E+00	1.11E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
160	301504.51	4020234.5	1.05E-07	2.15E-07	3.37E-08	0.00E+00	3.54E-07	1.17E-10	9.47E-10	9.39E-11	0.00E+00	1.16E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
161	301514.31	4020256.79	1.11E-07	2.26E-07	3.54E-08	0.00E+00	3.72E-07	1.23E-10	9.94E-10	9.86E-11	0.00E+00	1.22E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
162	301524.12	4020279.08	1.15E-07	2.35E-07	3.69E-08	0.00E+00	3.87E-07	1.28E-10	1.04E-09	1.03E-10	0.00E+00	1.27E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
163	301533.92	4020301.37	1.19E-07	2.43E-07	3.81E-08	0.00E+00	4.00E-07	1.32E-10	1.07E-09	1.06E-10	0.00E+00	1.31E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
164	301543.72	4020323.65	1.22E-07	2.48E-07	3.90E-08	0.00E+00	4.09E-07	1.35E-10	1.09E-09	1.09E-10	0.00E+00	1.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
165	301553.53	4020345.94	1.24E-07	2.52E-07	3.95E-08	0.00E+00	4.15E-07	1.37E-10	1.11E-09	1.10E-10	0.00E+00	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
166	301563.33	4020368.23	1.24E-07	2.53E-07	3.97E-08	0.00E+00	4.16E-07	1.37E-10	1.11E-09	1.10E-10	0.00E+00	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
167	301573.14	4020390.52	1.23E-07	2.51E-07	3.94E-08	0.00E+00	4.14E-07	1.36E-10	1.11E-09	1.10E-10	0.00E+00	1.35E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
168	301582.94	4020412.81	1.21E-07	2.47E-07	3.88E-08	0.00E+00	4.08E-07	1.34E-10	1.09E-09	1.08E-10	0.00E+00	1.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
169	301592.74	4020435.1	1.19E-07	2.42E-07	3.79E-08	0.00E+00	3.98E-07	1.31E-10	1.07E-09	1.06E-10	0.00E+00	1.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
170	301245.1	4020115.08	6.83E-08	1.39E-07	2.18E-08	0.00E+00	2.29E-07	7.56E-11	6.13E-10	6.08E-11	0.00E+00	7.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
171	301220.13	4020115.62	6.55E-08	1.33E-07	2.09E-08	0.00E+00	2.20E-07	7.25E-11	5.88E-10	5.83E-11	0.00E+00	7.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
172	301195.16	4020116.16	6.21E-08	1.26E-07	1.98E-08	0.00E+00	2.08E-07	6.87E-11	5.57E-10	5.52E-11	0.00E+00	6.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
173	301170.19	4020116.69	5.81E-08	1.18E-07	1.86E-08	0.00E+00	1.95E-07	6.43E-11	5.22E-10	5.17E-11	0.00E+00	6.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
174	301145.22	4020117.23	5.38E-08	1.10E-07	1.72E-08	0.00E+00	1.81E-07	5.95E-11	4.83E-10	4.79E-11	0.00E+00	5.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
175	301120.25	4020117.77	4.93E-08	1.00E-07	1.58E-08	0.00E+00	1.65E-07	5.46E-11	4.42E-10	4.39E-11	0.00E+00	5.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
176	301095.28	4020118.31	4.49E-08	9.16E-08	1.44E-08	0.00E+00	1.51E-07	4.98E-11	4.03E-10	4.00E-11	0.00E+00	4.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
177	301070.31	4020118.84	4.08E-08	8.32E-08	1.31E-08	0.00E+00	1.37E-07	4.52E-11	3.67E-10	3.64E-11	0.00E+00	4.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
178	301045.34	4020119.38	3.69E-08	7.51E-08	1.18E-08	0.00E+00	1.24E-07	4.08E-11	3.31E-10	3.28E-11	0.00E+00	4.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
179	301265.97	4020073.63	5.72E-08	1.17E-07	1.83E-08	0.00E+00	1.92E-07	6.33E-11	5.13E-10	5.09E-11	0.00E+00	6.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
180	301287.91	4020082.17	6.11E-08	1.25E-07	1.95E-08	0.00E+00	2.05E-07	6.77E-11	5.49E-10	5.44E-11	0.00E+00	6.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
181	301309.85	4020090.71	6.49E-08	1.32E-07	2.07E-08	0.00E+00	2.18E-07	7.18E-11	5.82E-10	5.77E-11	0.00E+00	7.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
182	301331.8	4020099.25	6.85E-08	1.39E-07	2.19E-08	0.00E+00	2.30E-07	7.58E-11	6.14E-10	6.09E-11	0.00E+00	7.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
183	301353.74	4020107.79	7.18E-08	1.46E-07	2.30E-08	0.00E+00	2.41E-07	7.95E-11	6.45E-10	6.39E-11	0.00E+00	7.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
184	301375.68	4020116.33	7.50E-08	1.53E-07	2.40E-08	0.00E+00	2.52E-07	8.30E-11	6.73E-10	6.67E-11	0.00E+00	8.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
185	301397.63	4020124.87	7.77E-08	1.58E-07	2.48E-08	0.00E+00	2.61E-07	8.60E-11	6.98E-10	6.92E-11	0.00E+00	8.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
186	301419.57	4020133.41	8.00E-08	1.63E-07	2.56E-08	0.00E+00	2.68E-07	8.85E-11	7.18E-10	7.12E-11	0.00E+00	8.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
187	301441.51	4020141.95	8.17E-08	1.66E-07	2.61E-08	0.00E+00	2.74E-07	9.04E-11	7.33E-10	7.27E-11	0.00E+00	8.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
188	301463.46	4020150.48	8.27E-08	1.68E-07	2.64E-08	0.00E+00	2.78E-07	9.15E-11	7.42E-10	7.36E-11	0.00E+00	9.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
189	301485.4	4020159.02	8.31E-08	1.69E-07	2.66E-08	0.00E+00	2.79E-07	9.20E-11	7.46E-10	7.40E-11	0.00E+00	9.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
190	301507.34	4020167.56	8.30E-08	1.69E-07	2.65E-08	0.00E+00	2.79E-07	9.18E-11	7.45E-10	7.38E-11	0.00E+00	9.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
191	301538.77	4020197.66	8.65E-08	1.76E-07	2.76E-08	0.00E+00	2.90E-07	9.57E-11	7.76E-10	7.69E-11	0.00E+00	9.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	301548.25	4020219.21	9.04E-08	1.84E-07

253	301397.87	4020025.82	5.08E-08	1.03E-07	1.62E-08	0.00E+00	1.70E-07	5.62E-11	4.56E-10	4.52E-11	0.00E+00	5.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
254	301420.16	4020034.5	5.29E-08	1.08E-07	1.69E-08	0.00E+00	1.78E-07	5.85E-11	4.75E-10	4.71E-11	0.00E+00	5.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
255	301442.45	4020043.17	5.47E-08	1.11E-07	1.75E-08	0.00E+00	1.84E-07	6.05E-11	4.91E-10	4.87E-11	0.00E+00	6.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
256	301464.73	4020051.84	5.63E-08	1.15E-07	1.80E-08	0.00E+00	1.89E-07	6.23E-11	5.05E-10	5.01E-11	0.00E+00	6.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
257	301487.02	4020060.51	5.75E-08	1.17E-07	1.84E-08	0.00E+00	1.93E-07	6.37E-11	5.16E-10	5.12E-11	0.00E+00	6.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
258	301509.3	4020069.19	5.84E-08	1.19E-07	1.87E-08	0.00E+00	1.96E-07	6.47E-11	5.24E-10	5.20E-11	0.00E+00	6.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
259	301531.59	4020077.86	5.89E-08	1.20E-07	1.88E-08	0.00E+00	1.98E-07	6.53E-11	5.29E-10	5.25E-11	0.00E+00	6.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
260	301553.88	4020086.53	5.91E-08	1.20E-07	1.89E-08	0.00E+00	1.98E-07	6.55E-11	5.31E-10	5.26E-11	0.00E+00	6.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
261	301576.16	4020095.21	5.90E-08	1.20E-07	1.89E-08	0.00E+00	1.98E-07	6.53E-11	5.29E-10	5.25E-11	0.00E+00	6.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
262	301608.08	4020125.77	6.11E-08	1.25E-07	1.95E-08	0.00E+00	2.05E-07	6.77E-11	5.49E-10	5.44E-11	0.00E+00	6.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
263	301617.71	4020147.66	6.36E-08	1.30E-07	2.03E-08	0.00E+00	2.13E-07	7.04E-11	5.71E-10	5.66E-11	0.00E+00	6.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
264	301627.34	4020169.55	6.58E-08	1.34E-07	2.11E-08	0.00E+00	2.21E-07	7.29E-11	5.91E-10	5.86E-11	0.00E+00	7.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
265	301636.96	4020191.44	6.78E-08	1.38E-07	2.17E-08	0.00E+00	2.28E-07	7.51E-11	6.09E-10	6.04E-11	0.00E+00	7.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
266	301646.59	4020213.33	6.96E-08	1.42E-07	2.22E-08	0.00E+00	2.33E-07	7.70E-11	6.24E-10	6.19E-11	0.00E+00	7.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
267	301656.22	4020235.22	7.09E-08	1.44E-07	2.27E-08	0.00E+00	2.38E-07	7.85E-11	6.37E-10	6.31E-11	0.00E+00	7.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
268	301665.85	4020257.11	7.19E-08	1.47E-07	2.30E-08	0.00E+00	2.41E-07	7.96E-11	6.46E-10	6.40E-11	0.00E+00	7.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
269	301675.48	4020279	7.25E-08	1.48E-07	2.32E-08	0.00E+00	2.43E-07	8.02E-11	6.50E-10	6.45E-11	0.00E+00	7.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
270	301685.11	4020300.89	7.26E-08	1.48E-07	2.32E-08	0.00E+00	2.44E-07	8.03E-11	6.51E-10	6.46E-11	0.00E+00	7.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
271	301694.74	4020322.78	7.22E-08	1.47E-07	2.31E-08	0.00E+00	2.42E-07	7.99E-11	6.48E-10	6.43E-11	0.00E+00	7.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
272	301704.37	4020344.67	7.14E-08	1.46E-07	2.28E-08	0.00E+00	2.40E-07	7.91E-11	6.41E-10	6.36E-11	0.00E+00	7.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
273	301714	4020366.56	7.03E-08	1.43E-07	2.25E-08	0.00E+00	2.36E-07	7.78E-11	6.31E-10	6.25E-11	0.00E+00	7.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
274	301723.62	4020388.45	6.88E-08	1.40E-07	2.20E-08	0.00E+00	2.31E-07	7.62E-11	6.18E-10	6.12E-11	0.00E+00	7.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
275	301733.25	4020410.34	6.70E-08	1.37E-07	2.14E-08	0.00E+00	2.25E-07	7.42E-11	6.02E-10	5.97E-11	0.00E+00	7.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
276	301742.88	4020432.23	6.50E-08	1.32E-07	2.08E-08	0.00E+00	2.18E-07	7.20E-11	5.84E-10	5.79E-11	0.00E+00	7.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
277	301241.87	4019965.12	3.42E-08	6.97E-08	1.09E-08	0.00E+00	1.15E-07	3.79E-11	3.07E-10	3.05E-11	0.00E+00	3.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
278	301216.9	4019965.65	3.26E-08	6.64E-08	1.04E-08	0.00E+00	1.09E-07	3.61E-11	2.93E-10	2.90E-11	0.00E+00	3.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
279	301191.93	4019966.19	3.08E-08	6.27E-08	9.83E-09	0.00E+00	1.03E-07	3.40E-11	2.76E-10	2.74E-11	0.00E+00	3.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
280	301166.96	4019966.73	2.88E-08	5.86E-08	9.20E-09	0.00E+00	9.66E-08	3.19E-11	2.58E-10	2.56E-11	0.00E+00	3.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
281	301141.99	4019967.27	2.68E-08	5.45E-08	8.56E-09	0.00E+00	8.98E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
282	301117.02	4019967.8	2.48E-08	5.06E-08	7.93E-09	0.00E+00	8.33E-08	2.75E-11	2.23E-10	2.21E-11	0.00E+00	2.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
283	301092.05	4019968.34	2.30E-08	4.68E-08	7.34E-09	0.00E+00	7.71E-08	2.54E-11	2.06E-10	2.04E-11	0.00E+00	2.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
284	301067.08	4019968.88	2.12E-08	4.32E-08	6.77E-09	0.00E+00	7.11E-08	2.35E-11	1.90E-10	1.89E-11	0.00E+00	2.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
285	301042.11	4019969.42	1.95E-08	3.97E-08	6.23E-09	0.00E+00	6.54E-08	2.16E-11	1.75E-10	1.73E-11	0.00E+00	2.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
286	301263.87	4019924.11	3.04E-08	6.19E-08	9.71E-09	0.00E+00	1.02E-07	3.36E-11	2.73E-10	2.70E-11	0.00E+00	3.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
287	301286.94	4019933.08	3.24E-08	6.60E-08	1.04E-08	0.00E+00	1.09E-07	3.59E-11	2.91E-10	2.89E-11	0.00E+00	3.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
288	301310.01	4019942.06	3.44E-08	7.00E-08	1.10E-08	0.00E+00	1.15E-07	3.81E-11	3.09E-10	3.06E-11	0.00E+00	3.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
289	301333.08	4019951.04	3.63E-08	7.39E-08	1.16E-08	0.00E+00	1.22E-07	4.02E-11	3.26E-10	3.23E-11	0.00E+00	3.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
290	301356.16	4019960.02	3.82E-08	7.78E-08	1.22E-08	0.00E+00	1.28E-07	4.23E-11	3.43E-10	3.40E-11	0.00E+00	4.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
291	301379.23	4019969	4.01E-08	8.18E-08	1.28E-08	0.00E+00	1.35E-07	4.44E-11	3.60E-10	3.57E-11	0.00E+00	4.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
292	301402.3	4019977.98	4.21E-08	8.57E-08	1.35E-08	0.00E+00	1.41E-07	4.66E-11	3.78E-10	3.74E-11	0.00E+00	4.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
293	301425.38	4019986.96	4.40E-08	8.96E-08	1.41E-08	0.00E+00	1.48E-07	4.87E-11	3.95E-10	3.91E-11	0.00E+00	4.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
294	301448.45	4019995.94	4.57E-08	9.32E-08	1.46E-08	0.00E+00	1.54E-07	5.06E-11	4.10E-10	4.07E-11	0.00E+00	5.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
295	301471.52	4020004.91	4.73E-08	9.63E-08	1.51E-08	0.00E+00	1.59E-07	5.23E-11	4.24E-10	4.21E-11	0.00E+00	5.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
296	301494.59	4020013.89	4.85E-08	9.89E-08	1.55E-08	0.00E+00	1.63E-07	5.37E-11	4.36E-10	4.32E-11	0.00E+00	5.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
297	301517.67	4020022.87	4.95E-08	1.01E-07	1.58E-08	0.00E+00	1.66E-07	5.48E-11	4.45E-10	4.41E-11	0.00E+00	5.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
298	301540.74	4020031.85	5.03E-08	1.02E-07	1.61E-08	0.00E+00	1.69E-07	5.56E-11	4.51E-10	4.47E-11	0.00E+00	5.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
299	301563.81	4020040.83	5.07E-08	1.03E-07	1.62E-08	0.00E+00	1.70E-07	5.61E-11	4.55E-10	4.51E-11	0.00E+00	5.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
300	301586.89	4020049.81	5.08E-08	1.04E-07	1.62E-08	0.00E+00	1.71E-07	5.62E-11	4.56E-10	4.52E-11	0.00E+00	5.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
301	301609.96	4020058.79	5.07E-08	1.03E-07	1.62E-08	0.00E+00	1.70E-07	5.61E-11	4.55E-10	4.51E-11	0.00E+00	5.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
302	301643	4020090.43	5.24E-08	1.07E-07	1.68E-08	0.00E+00	1.76E-07	5.80E-11	4.71E-10	4.67E-11	0.00E+00	5.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
303	301652.97	4020113.09	5.45E-08	1.11E-07	1.74E-08	0.00E+00	1.83E-07	6.03E-11	4.89E-10	4.85E-11	0.00E+00	5.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
304	301662.94	4020135.75	5.64E-08	1.15E-07	1.80E-08	0.00E+00	1.89E-07	6.24E-11	5.06E-10	5.02E-11	0.00E+00	6.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
305	301672.91	4020158.42	5.80E-08	1.18E-07	1.86E-08	0.00E+00	1.95E-07	6.42E-11	5.21E-10	5.16E-11	0.00E+00	6.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
306	301682.87	4020181.08	5.95E-08	1.21E-07	1.90E-08	0.00E+00	2.00E-07	6.58E-11	5.34E-10	5.29E-11	0.00E+00	6.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
307	301692.84	4020203.74	6.07E-08	1.24E-07	1.94E-08	0.00E+00	2.04E-07	6.71E-11	5.44E-10	5.40E-11	0.00E+00	6.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
308	301702.81	4020226.4	6.15E-08	1.25E-07	1.97E-08	0.00E+00	2.07E-07	6.81E-11	5.52E-10	5.48E-11	0.00E+00	6.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
309	301712.78	4020249.07	6.21E-08	1.26E-07	1.98E-08	0.00E+00	2.08E-07	6.87E-11	5.57E-10	5.52E-11	0.00E+00	6.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
310	301722.75	4020271.73	6.23E-08	1.27E-07	1.99E-08	0.00E+00	2.09E-07	6.89E-11	5.59E-10	5.54E-11	0.00E+00	6.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
311	301732.72	4020294.39	6.21E-08	1.26E-07	1.98E-08	0.00E+00	2.08E-07	6.87E-11	5.57E-10	5.52E-11	0.00E+00	6.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
312	301742.69	4020317.05	6.15E-08	1.25E-07	1.97E-08	0.00E+00	2.06E-07	6.81E-11	5.52E-10	5.47E-11	0.00E+00	6.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
313	301752.66	4020339.72	6.06E-08	1.24E-07	1.94E-08	0.00E+00	2.04E-07	6.71E-11	5.44E-10	5.40E-11	0.00E+00	6.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	301762.62	4020362.38	5.95E-08	1.21E-07	1.90E-08	0.00E+00	2.00E-07	6.59E-11	5.34E-10	5.29E-11	0.00E+00	6.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	301772.59	4020385.04	5.81E-08	1.18E-07	1.86E-08	0.00E+00	1.95E-07	6.43E-11	5.21E-10	5.17E-11	0.00E+00	6.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	301782.56	4020407.71	5.65E-08	1.15E-07	1.81E-08	0.00E+00	1.90E-07	6.25E-11	5.07E-10	5.03E-11	0.00E+00	6.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	301792.53	4020430.37	5.47E-08	1.11E-07	1.75E-08	0.00E+00	1.84E-07	6.06E-11	4.91E-10	4.87E-11	0.00E+00	6.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	301240.79	4019915.13	2.83E-08	5.76E-08	9.03E-09	0.00E+00	9.49E-08	3.13E-11	2.54E-10	2.51E-11	0.00E+00	3.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	301215.82	4019915.66	2.69E-08	5.48E-08	8.60E-09	0.00E+00	9.03E-08	2.98E-11	2.41E-10	2.39E-11	0.00E+00	2.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	301190.85	4019916.2	2.54E-08	5.17E-08	8.11E-

381	301464.48	4019853.47	2.81E-08	5.71E-08	8.97E-09	0.00E+00	9.42E-08	3.11E-11	2.52E-10	2.50E-11	0.00E+00	3.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
382	301487.17	4019862.3	2.92E-08	5.95E-08	9.33E-09	0.00E+00	9.80E-08	3.23E-11	2.62E-10	2.60E-11	0.00E+00	3.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
383	301509.86	4019871.13	3.03E-08	6.16E-08	9.67E-09	0.00E+00	1.02E-07	3.35E-11	2.72E-10	2.69E-11	0.00E+00	3.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
384	301532.55	4019879.96	3.12E-08	6.36E-08	9.98E-09	0.00E+00	1.05E-07	3.46E-11	2.80E-10	2.78E-11	0.00E+00	3.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
385	301555.25	4019888.79	3.21E-08	6.53E-08	1.03E-08	0.00E+00	1.08E-07	3.55E-11	2.88E-10	2.85E-11	0.00E+00	3.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
386	301577.94	4019897.62	3.28E-08	6.68E-08	1.05E-08	0.00E+00	1.10E-07	3.63E-11	2.94E-10	2.92E-11	0.00E+00	3.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
387	301600.63	4019906.45	3.33E-08	6.79E-08	1.07E-08	0.00E+00	1.12E-07	3.69E-11	2.99E-10	2.97E-11	0.00E+00	3.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
388	301623.32	4019915.28	3.38E-08	6.88E-08	1.08E-08	0.00E+00	1.13E-07	3.74E-11	3.03E-10	3.00E-11	0.00E+00	3.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
389	301646.01	4019924.11	3.40E-08	6.93E-08	1.09E-08	0.00E+00	1.14E-07	3.77E-11	3.05E-10	3.03E-11	0.00E+00	3.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
390	301668.7	4019932.94	3.42E-08	6.96E-08	1.09E-08	0.00E+00	1.15E-07	3.78E-11	3.07E-10	3.04E-11	0.00E+00	3.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
391	301691.39	4019941.77	3.42E-08	6.96E-08	1.09E-08	0.00E+00	1.15E-07	3.78E-11	3.07E-10	3.04E-11	0.00E+00	3.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
392	301714.09	4019950.6	3.41E-08	6.94E-08	1.09E-08	0.00E+00	1.14E-07	3.77E-11	3.06E-10	3.03E-11	0.00E+00	3.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
393	301746.58	4019981.72	3.50E-08	7.13E-08	1.12E-08	0.00E+00	1.17E-07	3.87E-11	3.14E-10	3.11E-11	0.00E+00	3.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
394	301756.38	4020004.01	3.61E-08	7.35E-08	1.15E-08	0.00E+00	1.21E-07	3.99E-11	3.24E-10	3.21E-11	0.00E+00	3.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
395	301766.19	4020026.29	3.71E-08	7.56E-08	1.19E-08	0.00E+00	1.25E-07	4.11E-11	3.33E-10	3.30E-11	0.00E+00	4.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
396	301775.99	4020048.58	3.81E-08	7.75E-08	1.22E-08	0.00E+00	1.28E-07	4.21E-11	3.42E-10	3.39E-11	0.00E+00	4.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
397	301785.8	4020070.87	3.89E-08	7.93E-08	1.24E-08	0.00E+00	1.31E-07	4.31E-11	3.49E-10	3.46E-11	0.00E+00	4.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
398	301795.6	4020093.16	3.97E-08	8.08E-08	1.27E-08	0.00E+00	1.33E-07	4.39E-11	3.56E-10	3.53E-11	0.00E+00	4.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
399	301805.4	4020115.45	4.03E-08	8.21E-08	1.29E-08	0.00E+00	1.35E-07	4.46E-11	3.62E-10	3.59E-11	0.00E+00	4.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
400	301815.21	4020137.73	4.08E-08	8.32E-08	1.31E-08	0.00E+00	1.37E-07	4.52E-11	3.67E-10	3.63E-11	0.00E+00	4.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
401	301825.01	4020160.02	4.12E-08	8.40E-08	1.32E-08	0.00E+00	1.38E-07	4.56E-11	3.70E-10	3.67E-11	0.00E+00	4.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
402	301834.82	4020182.31	4.15E-08	8.44E-08	1.33E-08	0.00E+00	1.39E-07	4.59E-11	3.72E-10	3.69E-11	0.00E+00	4.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
403	301844.62	4020204.6	4.15E-08	8.46E-08	1.33E-08	0.00E+00	1.39E-07	4.60E-11	3.73E-10	3.70E-11	0.00E+00	4.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
404	301854.42	4020226.89	4.14E-08	8.44E-08	1.32E-08	0.00E+00	1.39E-07	4.59E-11	3.72E-10	3.69E-11	0.00E+00	4.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
405	301864.23	4020249.17	4.12E-08	8.39E-08	1.32E-08	0.00E+00	1.38E-07	4.56E-11	3.70E-10	3.66E-11	0.00E+00	4.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
406	301874.03	4020271.46	4.08E-08	8.30E-08	1.30E-08	0.00E+00	1.37E-07	4.51E-11	3.66E-10	3.63E-11	0.00E+00	4.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
407	301883.84	4020293.75	4.02E-08	8.19E-08	1.29E-08	0.00E+00	1.35E-07	4.45E-11	3.61E-10	3.58E-11	0.00E+00	4.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
408	301893.64	4020316.04	3.95E-08	8.05E-08	1.26E-08	0.00E+00	1.33E-07	4.37E-11	3.55E-10	3.52E-11	0.00E+00	4.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
409	301903.44	4020338.33	3.87E-08	7.88E-08	1.24E-08	0.00E+00	1.30E-07	4.28E-11	3.47E-10	3.44E-11	0.00E+00	4.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
410	301913.25	4020360.61	3.78E-08	7.69E-08	1.21E-08	0.00E+00	1.27E-07	4.18E-11	3.39E-10	3.36E-11	0.00E+00	4.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
411	301923.05	4020382.9	3.67E-08	7.48E-08	1.17E-08	0.00E+00	1.23E-07	4.07E-11	3.30E-10	3.27E-11	0.00E+00	4.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
412	301932.86	4020405.19	3.56E-08	7.26E-08	1.14E-08	0.00E+00	1.20E-07	3.94E-11	3.20E-10	3.17E-11	0.00E+00	3.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
413	301942.66	4020427.48	3.44E-08	7.01E-08	1.10E-08	0.00E+00	1.16E-07	3.81E-11	3.09E-10	3.06E-11	0.00E+00	3.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
414	301237.57	4019765.16	1.73E-08	3.53E-08	5.53E-09	0.00E+00	5.81E-08	1.92E-11	1.55E-10	1.54E-11	0.00E+00	1.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
415	301212.6	4019765.7	1.65E-08	3.36E-08	5.27E-09	0.00E+00	5.53E-08	1.82E-11	1.48E-10	1.47E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
416	301187.63	4019766.24	1.56E-08	3.18E-08	4.99E-09	0.00E+00	5.24E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
417	301162.66	4019766.77	1.47E-08	2.99E-08	4.70E-09	0.00E+00	4.93E-08	1.63E-11	1.32E-10	1.31E-11	0.00E+00	1.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
418	301137.69	4019767.31	1.38E-08	2.81E-08	4.41E-09	0.00E+00	4.63E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
419	301112.72	4019767.85	1.29E-08	2.63E-08	4.13E-09	0.00E+00	4.34E-08	1.43E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
420	301087.75	4019768.39	1.21E-08	2.46E-08	3.86E-09	0.00E+00	4.05E-08	1.34E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
421	301062.78	4019768.92	1.13E-08	2.29E-08	3.60E-09	0.00E+00	3.78E-08	1.25E-11	1.01E-10	1.00E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
422	301037.81	4019769.46	1.05E-08	2.14E-08	3.36E-09	0.00E+00	3.53E-08	1.16E-11	9.43E-11	9.35E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
423	301258.23	4019674.07	1.40E-08	2.86E-08	4.49E-09	0.00E+00	4.72E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
424	301281.06	4019682.95	1.48E-08	3.02E-08	4.75E-09	0.00E+00	4.98E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
425	301303.88	4019691.83	1.56E-08	3.18E-08	4.99E-09	0.00E+00	5.24E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
426	301326.7	4019700.71	1.63E-08	3.32E-08	5.22E-09	0.00E+00	5.48E-08	1.81E-11	1.46E-10	1.45E-11	0.00E+00	1.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
427	301349.52	4019709.59	1.70E-08	3.46E-08	5.43E-09	0.00E+00	5.70E-08	1.88E-11	1.52E-10	1.51E-11	0.00E+00	1.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
428	301372.34	4019718.47	1.77E-08	3.60E-08	5.64E-09	0.00E+00	5.93E-08	1.95E-11	1.58E-10	1.57E-11	0.00E+00	1.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
429	301395.16	4019727.35	1.83E-08	3.74E-08	5.86E-09	0.00E+00	6.16E-08	2.03E-11	1.65E-10	1.63E-11	0.00E+00	2.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
430	301417.98	4019736.23	1.91E-08	3.89E-08	6.10E-09	0.00E+00	6.40E-08	2.11E-11	1.71E-10	1.70E-11	0.00E+00	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
431	301440.8	4019745.11	1.99E-08	4.05E-08	6.35E-09	0.00E+00	6.67E-08	2.20E-11	1.78E-10	1.77E-11	0.00E+00	2.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
432	301463.62	4019753.99	2.07E-08	4.22E-08	6.62E-09	0.00E+00	6.95E-08	2.29E-11	1.86E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
433	301486.45	4019762.87	2.16E-08	4.39E-08	6.89E-09	0.00E+00	7.24E-08	2.39E-11	1.93E-10	1.92E-11	0.00E+00	2.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
434	301509.27	4019771.75	2.24E-08	4.57E-08	7.17E-09	0.00E+00	7.52E-08	2.48E-11	2.01E-10	1.99E-11	0.00E+00	2.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
435	301532.09	4019780.64	2.33E-08	4.74E-08	7.43E-09	0.00E+00	7.80E-08	2.57E-11	2.09E-10	2.07E-11	0.00E+00	2.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
436	301554.91	4019789.52	2.40E-08	4.90E-08	7.69E-09	0.00E+00	8.07E-08	2.66E-11	2.16E-10	2.14E-11	0.00E+00	2.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
437	301577.73	4019798.4	2.48E-08	5.05E-08	7.92E-09	0.00E+00	8.32E-08	2.74E-11	2.22E-10	2.20E-11	0.00E+00	2.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
438	301600.55	4019807.28	2.54E-08	5.18E-08	8.13E-09	0.00E+00	8.53E-08	2.81E-11	2.28E-10	2.26E-11	0.00E+00	2.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
439	301623.37	4019816.16	2.60E-08	5.29E-08	8.30E-09	0.00E+00	8.72E-08	2.87E-11	2.33E-10	2.31E-11	0.00E+00	2.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
440	301646.19	4019825.04	2.64E-08	5.38E-08	8.45E-09	0.00E+00	8.87E-08	2.92E-11	2.37E-10	2.35E-11	0.00E+00	2.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
441	301669.01	4019833.92	2.68E-08	5.45E-08	8.56E-09	0.00E+00	8.99E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
442	301691.84	4019842.8	2.70E-08	5.51E-08	8.64E-09	0.00E+00	9.07E-08	2.99E-11	2.43E-10	2.41E-11	0.00E+00	2.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
443	301714.66	4019851.68	2.72E-08	5.54E-08	8.69E-09	0.00E+00	9.13E-08	3.01E-11	2.44E-10	2.42E-11	0.00E+00	2.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
444	301737.48	4019860.56	2.73E-08	5.56E-08	8.72E-09	0.00E+00	9.15E-08	3.02E-11	2.45E-10	2.43E-11	0.00E+00	2.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
445	301760.3	4019869.44	2.73E-08	5.55E-08	8.71E-09	0.00E+00	9.15E-08	3.02E-11	2.45E-10	2.43E-11	0.00E+00	2.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
446	301783.12	4019878.32	2.72E-08	5.53E-08	8.68E-09	0.00E+00	9.12E-08	3.01E-11	2.44E-10	2.42E-11	0.00E+00	2.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
447	301815.8	4019909.62	2.78E-08	5.66E-08	8.89E-09	0.00E+00	9.33E-08	3.08E-11	2.50E-10	2.47E-11	0.00E+00	3.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
448	301825.66	4019932.04	2.86E-08	5.82E-08

509	301904.82	4019882.53	2.37E-08	4.84E-08	7.59E-09	0.00E+00	7.97E-08	2.63E-11	2.13E-10	2.11E-11	0.00E+00	2.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
510	301914.72	4019905.04	2.42E-08	4.94E-08	7.75E-09	0.00E+00	8.14E-08	2.68E-11	2.18E-10	2.16E-11	0.00E+00	2.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
511	301924.62	4019927.56	2.47E-08	5.03E-08	7.90E-09	0.00E+00	8.29E-08	2.73E-11	2.22E-10	2.20E-11	0.00E+00	2.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
512	301934.53	4019950.07	2.51E-08	5.12E-08	8.03E-09	0.00E+00	8.43E-08	2.78E-11	2.25E-10	2.24E-11	0.00E+00	2.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
513	301944.43	4019972.59	2.55E-08	5.19E-08	8.15E-09	0.00E+00	8.56E-08	2.82E-11	2.29E-10	2.27E-11	0.00E+00	2.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
514	301954.34	4019995.1	2.58E-08	5.26E-08	8.25E-09	0.00E+00	8.66E-08	2.86E-11	2.32E-10	2.30E-11	0.00E+00	2.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
515	301964.24	4020017.62	2.61E-08	5.32E-08	8.34E-09	0.00E+00	8.76E-08	2.89E-11	2.34E-10	2.32E-11	0.00E+00	2.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
516	301974.14	4020040.14	2.63E-08	5.37E-08	8.42E-09	0.00E+00	8.84E-08	2.92E-11	2.36E-10	2.34E-11	0.00E+00	2.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
517	301984.05	4020062.65	2.65E-08	5.41E-08	8.48E-09	0.00E+00	8.91E-08	2.94E-11	2.38E-10	2.36E-11	0.00E+00	2.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
518	301993.95	4020085.17	2.67E-08	5.43E-08	8.53E-09	0.00E+00	8.95E-08	2.95E-11	2.39E-10	2.37E-11	0.00E+00	2.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
519	302003.86	4020107.68	2.68E-08	5.45E-08	8.55E-09	0.00E+00	8.98E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
520	302013.76	4020130.2	2.68E-08	5.45E-08	8.56E-09	0.00E+00	8.98E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
521	302023.66	4020152.71	2.67E-08	5.44E-08	8.53E-09	0.00E+00	8.96E-08	2.95E-11	2.40E-10	2.38E-11	0.00E+00	2.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
522	302033.57	4020175.23	2.65E-08	5.41E-08	8.49E-09	0.00E+00	8.91E-08	2.94E-11	2.38E-10	2.36E-11	0.00E+00	2.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
523	302043.47	4020197.74	2.63E-08	5.36E-08	8.42E-09	0.00E+00	8.83E-08	2.91E-11	2.36E-10	2.34E-11	0.00E+00	2.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
524	302053.38	4020220.26	2.60E-08	5.30E-08	8.32E-09	0.00E+00	8.73E-08	2.88E-11	2.34E-10	2.32E-11	0.00E+00	2.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
525	302063.28	4020242.77	2.57E-08	5.23E-08	8.20E-09	0.00E+00	8.61E-08	2.84E-11	2.30E-10	2.28E-11	0.00E+00	2.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
526	302073.18	4020265.29	2.52E-08	5.14E-08	8.06E-09	0.00E+00	8.46E-08	2.79E-11	2.26E-10	2.24E-11	0.00E+00	2.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
527	302083.09	4020287.81	2.47E-08	5.03E-08	7.90E-09	0.00E+00	8.30E-08	2.74E-11	2.22E-10	2.20E-11	0.00E+00	2.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
528	302092.99	4020310.32	2.42E-08	4.92E-08	7.72E-09	0.00E+00	8.11E-08	2.67E-11	2.17E-10	2.15E-11	0.00E+00	2.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
529	302102.9	4020332.84	2.35E-08	4.80E-08	7.53E-09	0.00E+00	7.90E-08	2.61E-11	2.11E-10	2.10E-11	0.00E+00	2.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
530	302112.8	4020355.35	2.29E-08	4.66E-08	7.32E-09	0.00E+00	7.68E-08	2.53E-11	2.05E-10	2.04E-11	0.00E+00	2.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
531	302122.7	4020377.87	2.22E-08	4.52E-08	7.09E-09	0.00E+00	7.45E-08	2.46E-11	1.99E-10	1.97E-11	0.00E+00	2.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
532	302132.61	4020400.38	2.15E-08	4.37E-08	6.86E-09	0.00E+00	7.20E-08	2.37E-11	1.93E-10	1.91E-11	0.00E+00	2.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
533	302142.51	4020422.9	2.07E-08	4.22E-08	6.63E-09	0.00E+00	6.96E-08	2.29E-11	1.86E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
534	301233.26	4019565.21	1.04E-08	2.12E-08	3.33E-09	0.00E+00	3.50E-08	1.15E-11	9.36E-11	9.28E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
535	301208.29	4019565.75	9.94E-09	2.03E-08	3.18E-09	0.00E+00	3.34E-08	1.10E-11	8.92E-11	8.85E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
536	301183.32	4019566.28	9.43E-09	1.92E-08	3.02E-09	0.00E+00	3.17E-08	1.04E-11	8.47E-11	8.40E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
537	301158.35	4019566.82	8.92E-09	1.82E-08	2.85E-09	0.00E+00	2.99E-08	9.87E-12	8.01E-11	7.94E-12	0.00E+00	9.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
538	301133.38	4019567.36	8.41E-09	1.71E-08	2.69E-09	0.00E+00	2.82E-08	9.31E-12	7.55E-11	7.48E-12	0.00E+00	9.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
539	301108.41	4019567.9	7.91E-09	1.61E-08	2.53E-09	0.00E+00	2.66E-08	8.76E-12	7.10E-11	7.04E-12	0.00E+00	8.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
540	301083.44	4019568.43	7.45E-09	1.52E-08	2.38E-09	0.00E+00	2.50E-08	8.24E-12	6.68E-11	6.63E-12	0.00E+00	8.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
541	301058.47	4019568.97	7.01E-09	1.43E-08	2.24E-09	0.00E+00	2.35E-08	7.76E-12	6.29E-11	6.24E-12	0.00E+00	7.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
542	301033.5	4019569.51	6.62E-09	1.35E-08	2.12E-09	0.00E+00	2.22E-08	7.32E-12	5.94E-11	5.89E-12	0.00E+00	7.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
543	301254.11	4019474.18	8.95E-09	1.82E-08	2.86E-09	0.00E+00	3.00E-08	9.91E-12	8.03E-11	7.97E-12	0.00E+00	9.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
544	301277.12	4019483.14	9.43E-09	1.92E-08	3.01E-09	0.00E+00	3.16E-08	1.04E-11	8.46E-11	8.39E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
545	301300.12	4019492.09	9.87E-09	2.01E-08	3.16E-09	0.00E+00	3.31E-08	1.09E-11	8.86E-11	8.78E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
546	301323.13	4019501.04	1.03E-08	2.09E-08	3.28E-09	0.00E+00	3.45E-08	1.14E-11	9.22E-11	9.14E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
547	301346.13	4019509.99	1.06E-08	2.17E-08	3.40E-09	0.00E+00	3.57E-08	1.18E-11	9.54E-11	9.46E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
548	301369.14	4019518.95	1.10E-08	2.23E-08	3.51E-09	0.00E+00	3.68E-08	1.21E-11	9.84E-11	9.76E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
549	301392.15	4019527.9	1.13E-08	2.30E-08	3.61E-09	0.00E+00	3.79E-08	1.25E-11	1.01E-10	1.00E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
550	301415.15	4019536.85	1.16E-08	2.36E-08	3.71E-09	0.00E+00	3.90E-08	1.29E-11	1.04E-10	1.03E-11	0.00E+00	1.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
551	301438.16	4019545.8	1.20E-08	2.44E-08	3.82E-09	0.00E+00	4.01E-08	1.32E-11	1.07E-10	1.06E-11	0.00E+00	1.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
552	301461.16	4019554.76	1.24E-08	2.52E-08	3.95E-09	0.00E+00	4.15E-08	1.37E-11	1.11E-10	1.10E-11	0.00E+00	1.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
553	301484.17	4019563.71	1.28E-08	2.60E-08	4.09E-09	0.00E+00	4.29E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
554	301507.17	4019572.66	1.33E-08	2.70E-08	4.24E-09	0.00E+00	4.45E-08	1.47E-11	1.19E-10	1.18E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
555	301530.18	4019581.61	1.38E-08	2.80E-08	4.40E-09	0.00E+00	4.62E-08	1.52E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
556	301553.18	4019590.57	1.43E-08	2.91E-08	4.57E-09	0.00E+00	4.80E-08	1.58E-11	1.28E-10	1.27E-11	0.00E+00	1.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
557	301576.19	4019599.52	1.48E-08	3.02E-08	4.74E-09	0.00E+00	4.97E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
558	301599.19	4019608.47	1.53E-08	3.12E-08	4.90E-09	0.00E+00	5.15E-08	1.70E-11	1.38E-10	1.36E-11	0.00E+00	1.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
559	301622.2	4019617.42	1.58E-08	3.22E-08	5.06E-09	0.00E+00	5.31E-08	1.75E-11	1.42E-10	1.41E-11	0.00E+00	1.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
560	301645.2	4019626.37	1.63E-08	3.32E-08	5.21E-09	0.00E+00	5.47E-08	1.80E-11	1.46E-10	1.45E-11	0.00E+00	1.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
561	301668.21	4019635.33	1.67E-08	3.41E-08	5.35E-09	0.00E+00	5.62E-08	1.85E-11	1.50E-10	1.49E-11	0.00E+00	1.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
562	301691.21	4019644.28	1.71E-08	3.49E-08	5.48E-09	0.00E+00	5.75E-08	1.90E-11	1.54E-10	1.52E-11	0.00E+00	1.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
563	301714.22	4019653.23	1.75E-08	3.56E-08	5.59E-09	0.00E+00	5.87E-08	1.94E-11	1.57E-10	1.56E-11	0.00E+00	1.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
564	301737.22	4019662.18	1.78E-08	3.62E-08	5.69E-09	0.00E+00	5.97E-08	1.97E-11	1.60E-10	1.58E-11	0.00E+00	1.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
565	301760.23	4019671.14	1.80E-08	3.67E-08	5.77E-09	0.00E+00	6.05E-08	2.00E-11	1.62E-10	1.61E-11	0.00E+00	1.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
566	301783.23	4019680.09	1.82E-08	3.72E-08	5.83E-09	0.00E+00	6.12E-08	2.02E-11	1.64E-10	1.62E-11	0.00E+00	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
567	301806.24	4019689.04	1.84E-08	3.75E-08	5.88E-09	0.00E+00	6.17E-08	2.04E-11	1.65E-10	1.64E-11	0.00E+00	2.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
568	301829.24	4019697.99	1.85E-08	3.77E-08	5.91E-09	0.00E+00	6.21E-08	2.05E-11	1.66E-10	1.65E-11	0.00E+00	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
569	301852.25	4019706.95	1.86E-08	3.78E-08	5.93E-09	0.00E+00	6.23E-08	2.05E-11	1.67E-10	1.65E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
570	301875.25	4019715.9	1.86E-08	3.78E-08	5.94E-09	0.00E+00	6.24E-08	2.06E-11	1.67E-10	1.65E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
571	301898.26	4019724.85	1.86E-08	3.78E-08	5.93E-09	0.00E+00	6.23E-08	2.05E-11	1.67E-10	1.65E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
572	301921.26	4019733.8	1.85E-08	3.76E-08	5.91E-09	0.00E+00	6.20E-08	2.05E-11	1.66E-10	1.64E-11	0.00E+00	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
573	301954.21	4019765.35	1.88E-08	3.83E-08	6.02E-09	0.00E+00	6.32E-08	2.08E-11	1.69E-10	1.67E-11	0.00E+00	2.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
574	301964.15	4019787.95	1.92E-08	3.92E-08	6.15E-09	0.00E+00	6.46E-08	2.13E-11	1.73E-10	1.71E-11	0.00E+00	2.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
575	301974.09	4019810.54	1.96E-08	4.00E-08	6.28E-09	0.00E+00	6.60E-08	2.17E-11	1.76E-10	1.75E-11	0.00E+00	2.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
576	301984.03	4019833.14	2.00E-08	4.08E-08	6.40E-09	0.00E+00	6.72E-08	2.22E-11	1.80E-10	1.78E-11	0.00E+00	2.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
577	301993.97	4019855.74	2.04E-08	4.15E-08	6.51E-09	0.00E+00	6.83E-08	2.25E-11	1.83E-10	1.81E-11	0.00E+00	2.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
578	302003.91	4019878.33	2.07E-08	4.21E-08	6.61E-09	0.00E+00	6.94E-08	2.29E-11	1.86E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00

637	301828.85	4019598.7	1.54E-08	3.14E-08	4.92E-09	0.00E+00	5.17E-08	1.70E-11	1.38E-10	1.37E-11	0.00E+00	1.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
638	301851.92	4019607.68	1.55E-08	3.16E-08	4.97E-09	0.00E+00	5.21E-08	1.72E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
639	301875	4019616.66	1.56E-08	3.19E-08	5.00E-09	0.00E+00	5.25E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
640	301898.07	4019625.64	1.57E-08	3.20E-08	5.02E-09	0.00E+00	5.27E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
641	301921.14	4019634.62	1.57E-08	3.21E-08	5.04E-09	0.00E+00	5.29E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
642	301944.21	4019643.6	1.58E-08	3.21E-08	5.04E-09	0.00E+00	5.29E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
643	301967.29	4019652.57	1.57E-08	3.20E-08	5.03E-09	0.00E+00	5.28E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
644	301990.36	4019661.55	1.57E-08	3.19E-08	5.01E-09	0.00E+00	5.26E-08	1.73E-11	1.41E-10	1.39E-11	0.00E+00	1.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
645	302023.4	4019693.19	1.59E-08	3.24E-08	5.09E-09	0.00E+00	5.34E-08	1.76E-11	1.43E-10	1.42E-11	0.00E+00	1.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
646	302033.37	4019715.86	1.62E-08	3.31E-08	5.19E-09	0.00E+00	5.45E-08	1.80E-11	1.46E-10	1.45E-11	0.00E+00	1.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
647	302043.34	4019738.52	1.66E-08	3.37E-08	5.29E-09	0.00E+00	5.56E-08	1.83E-11	1.49E-10	1.47E-11	0.00E+00	1.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
648	302053.31	4019761.18	1.68E-08	3.43E-08	5.38E-09	0.00E+00	5.65E-08	1.86E-11	1.51E-10	1.50E-11	0.00E+00	1.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
649	302063.28	4019783.84	1.71E-08	3.48E-08	5.46E-09	0.00E+00	5.74E-08	1.89E-11	1.53E-10	1.52E-11	0.00E+00	1.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
650	302073.24	4019806.51	1.73E-08	3.53E-08	5.54E-09	0.00E+00	5.82E-08	1.92E-11	1.55E-10	1.54E-11	0.00E+00	1.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
651	302083.21	4019829.17	1.75E-08	3.57E-08	5.61E-09	0.00E+00	5.89E-08	1.94E-11	1.57E-10	1.56E-11	0.00E+00	1.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
652	302093.18	4019851.83	1.77E-08	3.61E-08	5.67E-09	0.00E+00	5.95E-08	1.96E-11	1.59E-10	1.58E-11	0.00E+00	1.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
653	302103.15	4019874.5	1.79E-08	3.65E-08	5.73E-09	0.00E+00	6.02E-08	1.98E-11	1.61E-10	1.59E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
654	302113.12	4019897.16	1.81E-08	3.69E-08	5.79E-09	0.00E+00	6.07E-08	2.00E-11	1.62E-10	1.61E-11	0.00E+00	1.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
655	302123.09	4019919.82	1.83E-08	3.72E-08	5.84E-09	0.00E+00	6.13E-08	2.02E-11	1.64E-10	1.62E-11	0.00E+00	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
656	302133.06	4019942.48	1.84E-08	3.75E-08	5.88E-09	0.00E+00	6.18E-08	2.04E-11	1.65E-10	1.64E-11	0.00E+00	2.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
657	302143.03	4019965.15	1.85E-08	3.77E-08	5.92E-09	0.00E+00	6.22E-08	2.05E-11	1.66E-10	1.65E-11	0.00E+00	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
658	302152.99	4019987.81	1.86E-08	3.79E-08	5.95E-09	0.00E+00	6.25E-08	2.06E-11	1.67E-10	1.66E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
659	302162.96	4020010.47	1.87E-08	3.81E-08	5.98E-09	0.00E+00	6.28E-08	2.07E-11	1.68E-10	1.66E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
660	302172.93	4020033.13	1.88E-08	3.82E-08	6.00E-09	0.00E+00	6.30E-08	2.08E-11	1.68E-10	1.67E-11	0.00E+00	2.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
661	302182.9	4020055.8	1.88E-08	3.82E-08	6.00E-09	0.00E+00	6.30E-08	2.08E-11	1.68E-10	1.67E-11	0.00E+00	2.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
662	302192.87	4020078.46	1.87E-08	3.82E-08	5.99E-09	0.00E+00	6.29E-08	2.07E-11	1.68E-10	1.67E-11	0.00E+00	2.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
663	302202.84	4020101.12	1.86E-08	3.80E-08	5.96E-09	0.00E+00	6.26E-08	2.06E-11	1.67E-10	1.66E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
664	302212.81	4020123.78	1.85E-08	3.77E-08	5.92E-09	0.00E+00	6.22E-08	2.05E-11	1.66E-10	1.65E-11	0.00E+00	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
665	302222.78	4020146.45	1.83E-08	3.74E-08	5.87E-09	0.00E+00	6.16E-08	2.03E-11	1.65E-10	1.63E-11	0.00E+00	2.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
666	302232.74	4020169.11	1.81E-08	3.69E-08	5.80E-09	0.00E+00	6.09E-08	2.01E-11	1.63E-10	1.61E-11	0.00E+00	1.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
667	302242.71	4020191.77	1.79E-08	3.64E-08	5.71E-09	0.00E+00	6.00E-08	1.98E-11	1.60E-10	1.59E-11	0.00E+00	1.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
668	302252.68	4020214.43	1.76E-08	3.58E-08	5.62E-09	0.00E+00	5.90E-08	1.95E-11	1.58E-10	1.56E-11	0.00E+00	1.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
669	302262.65	4020237.1	1.72E-08	3.51E-08	5.51E-09	0.00E+00	5.78E-08	1.91E-11	1.55E-10	1.53E-11	0.00E+00	1.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
670	302272.62	4020259.76	1.69E-08	3.43E-08	5.39E-09	0.00E+00	5.66E-08	1.87E-11	1.51E-10	1.50E-11	0.00E+00	1.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
671	302282.59	4020282.42	1.65E-08	3.35E-08	5.26E-09	0.00E+00	5.52E-08	1.82E-11	1.48E-10	1.46E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
672	302292.56	4020305.09	1.60E-08	3.26E-08	5.12E-09	0.00E+00	5.38E-08	1.77E-11	1.44E-10	1.43E-11	0.00E+00	1.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
673	302302.53	4020327.75	1.56E-08	3.17E-08	4.98E-09	0.00E+00	5.23E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
674	302312.49	4020350.41	1.51E-08	3.08E-08	4.84E-09	0.00E+00	5.08E-08	1.68E-11	1.36E-10	1.35E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
675	302322.46	4020373.07	1.47E-08	2.99E-08	4.70E-09	0.00E+00	4.93E-08	1.63E-11	1.32E-10	1.31E-11	0.00E+00	1.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
676	302332.43	4020395.74	1.43E-08	2.90E-08	4.56E-09	0.00E+00	4.79E-08	1.58E-11	1.28E-10	1.27E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
677	302342.4	4020418.4	1.38E-08	2.82E-08	4.42E-09	0.00E+00	4.64E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
678	301228.96	4019365.25	7.01E-09	1.43E-08	2.24E-09	0.00E+00	2.35E-08	7.75E-12	6.29E-11	6.23E-12	0.00E+00	7.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
679	301203.99	4019365.79	6.68E-09	1.36E-08	2.14E-09	0.00E+00	2.24E-08	7.40E-12	6.00E-11	5.95E-12	0.00E+00	7.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
680	301179.02	4019366.33	6.35E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.02E-12	5.70E-11	5.65E-12	0.00E+00	6.96E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
681	301154.05	4019366.87	6.01E-09	1.22E-08	1.92E-09	0.00E+00	2.02E-08	6.65E-12	5.39E-11	5.35E-12	0.00E+00	6.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
682	301129.08	4019367.4	5.68E-09	1.16E-08	1.82E-09	0.00E+00	1.91E-08	6.29E-12	5.10E-11	5.06E-12	0.00E+00	6.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
683	301104.11	4019367.94	5.37E-09	1.09E-08	1.72E-09	0.00E+00	1.80E-08	5.94E-12	4.82E-11	4.78E-12	0.00E+00	5.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
684	301079.14	4019368.48	5.08E-09	1.03E-08	1.62E-09	0.00E+00	1.70E-08	5.62E-12	4.56E-11	4.52E-12	0.00E+00	5.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
685	301054.17	4019369.02	4.82E-09	9.81E-09	1.54E-09	0.00E+00	1.62E-08	5.33E-12	4.32E-11	4.29E-12	0.00E+00	5.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
686	301029.2	4019369.55	4.58E-09	9.34E-09	1.47E-09	0.00E+00	1.54E-08	5.07E-12	4.11E-11	4.08E-12	0.00E+00	5.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
687	301249.93	4019274.28	6.24E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.91E-12	5.60E-11	5.56E-12	0.00E+00	6.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
688	301273.06	4019283.28	6.57E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.27E-12	5.90E-11	5.85E-12	0.00E+00	7.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
689	301296.19	4019292.28	6.87E-09	1.40E-08	2.20E-09	0.00E+00	2.31E-08	7.61E-12	6.17E-11	6.11E-12	0.00E+00	7.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
690	301319.32	4019301.28	7.14E-09	1.45E-08	2.28E-09	0.00E+00	2.40E-08	7.91E-12	6.41E-11	6.36E-12	0.00E+00	7.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
691	301342.45	4019310.28	7.38E-09	1.50E-08	2.36E-09	0.00E+00	2.48E-08	8.17E-12	6.62E-11	6.57E-12	0.00E+00	8.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
692	301365.58	4019319.28	7.58E-09	1.55E-08	2.43E-09	0.00E+00	2.55E-08	8.40E-12	6.81E-11	6.75E-12	0.00E+00	8.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
693	301388.71	4019328.28	7.76E-09	1.58E-08	2.48E-09	0.00E+00	2.61E-08	8.59E-12	6.97E-11	6.91E-12	0.00E+00	8.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
694	301411.84	4019337.28	7.92E-09	1.61E-08	2.53E-09	0.00E+00	2.66E-08	8.77E-12	7.11E-11	7.05E-12	0.00E+00	8.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
695	301434.97	4019346.28	8.08E-09	1.65E-08	2.58E-09	0.00E+00	2.71E-08	8.95E-12	7.25E-11	7.19E-12	0.00E+00	8.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
696	301458.1	4019355.29	8.25E-09	1.68E-08	2.64E-09	0.00E+00	2.77E-08	9.13E-12	7.41E-11	7.34E-12	0.00E+00	9.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
697	301481.23	4019364.29	8.44E-09	1.72E-08	2.70E-09	0.00E+00	2.83E-08	9.35E-12	7.58E-11	7.52E-12	0.00E+00	9.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
698	301504.36	4019373.29	8.67E-09	1.77E-08	2.77E-09	0.00E+00	2.91E-08	9.60E-12	7.78E-11	7.71E-12	0.00E+00	9.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
699	301527.49	4019382.29	8.92E-09	1.82E-08	2.85E-09	0.00E+00	2.99E-08	9.88E-12	8.01E-11	7.94E-12	0.00E+00	9.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
700	301550.62	4019391.29	9.21E-09	1.88E-08	2.94E-09	0.00E+00	3.09E-08	1.02E-11	8.26E-11	8.19E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
701	301573.75	4019400.29	9.52E-09	1.94E-08	3.04E-09	0.00E+00	3.19E-08	1.05E-11	8.54E-11	8.47E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
702	301596.88	4019409.29	9.85E-09	2.01E-08	3.15E-09	0.00E+00	3.31E-08	1.09E-11	8.84E-11	8.77E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
703	301620.01	4019418.29	1.02E-08	2.08E-08	3.26E-09	0.00E+00	3.42E-08	1.13E-11	9.15E-11	9.07E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
704	301643.14	4019427.29	1.05E-08	2.15E-08

765	301076.98	4019268.5	4.32E-09	8.79E-09	1.38E-09	0.00E+00	1.45E-08	4.78E-12	3.87E-11	3.84E-12	0.00E+00	4.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
766	301052.01	4019269.04	4.11E-09	8.36E-09	1.31E-09	0.00E+00	1.38E-08	4.54E-12	3.68E-11	3.65E-12	0.00E+00	4.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
767	301027.04	4019269.58	3.92E-09	7.98E-09	1.25E-09	0.00E+00	1.32E-08	4.34E-12	3.52E-11	3.49E-12	0.00E+00	4.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
768	301247.83	4019174.32	5.34E-09	1.09E-08	1.71E-09	0.00E+00	1.79E-08	5.92E-12	4.80E-11	4.76E-12	0.00E+00	5.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
769	301271.01	4019183.34	5.62E-09	1.14E-08	1.80E-09	0.00E+00	1.89E-08	6.22E-12	5.04E-11	5.00E-12	0.00E+00	6.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
770	301294.19	4019192.36	5.88E-09	1.20E-08	1.88E-09	0.00E+00	1.97E-08	6.51E-12	5.28E-11	5.23E-12	0.00E+00	6.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
771	301317.36	4019201.38	6.11E-09	1.25E-08	1.96E-09	0.00E+00	2.05E-08	6.77E-12	5.49E-11	5.44E-12	0.00E+00	6.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
772	301340.54	4019210.4	6.32E-09	1.29E-08	2.02E-09	0.00E+00	2.12E-08	7.00E-12	5.67E-11	5.63E-12	0.00E+00	6.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
773	301363.72	4019219.42	6.50E-09	1.32E-08	2.08E-09	0.00E+00	2.18E-08	7.19E-12	5.83E-11	5.78E-12	0.00E+00	7.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
774	301386.9	4019228.44	6.64E-09	1.35E-08	2.12E-09	0.00E+00	2.23E-08	7.35E-12	5.96E-11	5.91E-12	0.00E+00	7.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
775	301410.07	4019237.46	6.77E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.49E-12	6.07E-11	6.02E-12	0.00E+00	7.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
776	301433.25	4019246.48	6.88E-09	1.40E-08	2.20E-09	0.00E+00	2.31E-08	7.61E-12	6.17E-11	6.12E-12	0.00E+00	7.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
777	301456.43	4019255.5	6.99E-09	1.42E-08	2.24E-09	0.00E+00	2.35E-08	7.74E-12	6.27E-11	6.22E-12	0.00E+00	7.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
778	301479.61	4019264.52	7.12E-09	1.45E-08	2.28E-09	0.00E+00	2.39E-08	7.88E-12	6.39E-11	6.33E-12	0.00E+00	7.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
779	301502.78	4019273.54	7.26E-09	1.48E-08	2.32E-09	0.00E+00	2.44E-08	8.04E-12	6.52E-11	6.46E-12	0.00E+00	7.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
780	301525.96	4019282.56	7.43E-09	1.51E-08	2.38E-09	0.00E+00	2.50E-08	8.23E-12	6.67E-11	6.61E-12	0.00E+00	8.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
781	301549.14	4019291.57	7.63E-09	1.55E-08	2.44E-09	0.00E+00	2.56E-08	8.45E-12	6.85E-11	6.79E-12	0.00E+00	8.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
782	301572.32	4019300.59	7.86E-09	1.60E-08	2.51E-09	0.00E+00	2.64E-08	8.70E-12	7.05E-11	6.99E-12	0.00E+00	8.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
783	301595.5	4019309.61	8.10E-09	1.65E-08	2.59E-09	0.00E+00	2.72E-08	8.97E-12	7.27E-11	7.21E-12	0.00E+00	8.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
784	301618.67	4019318.63	8.37E-09	1.71E-08	2.68E-09	0.00E+00	2.81E-08	9.27E-12	7.51E-11	7.45E-12	0.00E+00	9.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
785	301641.85	4019327.65	8.65E-09	1.76E-08	2.77E-09	0.00E+00	2.90E-08	9.58E-12	7.77E-11	7.70E-12	0.00E+00	9.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
786	301665.03	4019336.67	8.94E-09	1.82E-08	2.86E-09	0.00E+00	3.00E-08	9.90E-12	8.03E-11	7.96E-12	0.00E+00	9.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
787	301688.21	4019345.69	9.23E-09	1.88E-08	2.95E-09	0.00E+00	3.10E-08	1.02E-11	8.29E-11	8.22E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
788	301711.38	4019354.71	9.52E-09	1.94E-08	3.04E-09	0.00E+00	3.20E-08	1.05E-11	8.55E-11	8.47E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
789	301734.56	4019363.73	9.80E-09	2.00E-08	3.13E-09	0.00E+00	3.29E-08	1.08E-11	8.79E-11	8.72E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
790	301757.74	4019372.75	1.01E-08	2.05E-08	3.22E-09	0.00E+00	3.38E-08	1.11E-11	9.03E-11	8.96E-12	0.00E+00	1.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
791	301780.92	4019381.77	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.46E-08	1.14E-11	9.25E-11	9.18E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
792	301804.09	4019390.79	1.05E-08	2.15E-08	3.37E-09	0.00E+00	3.54E-08	1.17E-11	9.46E-11	9.38E-12	0.00E+00	1.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
793	301827.27	4019399.81	1.08E-08	2.19E-08	3.44E-09	0.00E+00	3.61E-08	1.19E-11	9.66E-11	9.57E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
794	301850.45	4019408.83	1.10E-08	2.23E-08	3.50E-09	0.00E+00	3.68E-08	1.21E-11	9.83E-11	9.75E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
795	301873.63	4019417.85	1.11E-08	2.27E-08	3.56E-09	0.00E+00	3.74E-08	1.23E-11	1.00E-10	9.91E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
796	301896.81	4019426.87	1.13E-08	2.30E-08	3.61E-09	0.00E+00	3.79E-08	1.25E-11	1.01E-10	1.01E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
797	301919.98	4019435.89	1.14E-08	2.33E-08	3.66E-09	0.00E+00	3.84E-08	1.27E-11	1.03E-10	1.02E-11	0.00E+00	1.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
798	301943.16	4019444.91	1.16E-08	2.35E-08	3.70E-09	0.00E+00	3.88E-08	1.28E-11	1.04E-10	1.03E-11	0.00E+00	1.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
799	301966.34	4019453.93	1.16E-08	2.37E-08	3.72E-09	0.00E+00	3.91E-08	1.29E-11	1.05E-10	1.04E-11	0.00E+00	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
800	301989.52	4019462.95	1.17E-08	2.39E-08	3.75E-09	0.00E+00	3.93E-08	1.30E-11	1.05E-10	1.04E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
801	302012.69	4019471.97	1.18E-08	2.40E-08	3.76E-09	0.00E+00	3.95E-08	1.30E-11	1.06E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
802	302035.87	4019480.98	1.18E-08	2.40E-08	3.77E-09	0.00E+00	3.96E-08	1.31E-11	1.06E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
803	302059.05	4019490	1.18E-08	2.41E-08	3.78E-09	0.00E+00	3.96E-08	1.31E-11	1.06E-10	1.05E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
804	302082.23	4019499.02	1.18E-08	2.41E-08	3.77E-09	0.00E+00	3.96E-08	1.31E-11	1.06E-10	1.05E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
805	302105.4	4019508.04	1.18E-08	2.40E-08	3.77E-09	0.00E+00	3.96E-08	1.30E-11	1.06E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
806	302128.58	4019517.06	1.17E-08	2.39E-08	3.75E-09	0.00E+00	3.94E-08	1.30E-11	1.05E-10	1.04E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
807	302161.77	4019548.85	1.19E-08	2.42E-08	3.80E-09	0.00E+00	3.99E-08	1.32E-11	1.07E-10	1.06E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
808	302171.79	4019571.61	1.21E-08	2.46E-08	3.87E-09	0.00E+00	4.06E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
809	302181.8	4019594.38	1.23E-08	2.50E-08	3.93E-09	0.00E+00	4.12E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
810	302191.82	4019617.15	1.24E-08	2.54E-08	3.98E-09	0.00E+00	4.18E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
811	302201.83	4019639.91	1.26E-08	2.57E-08	4.03E-09	0.00E+00	4.23E-08	1.39E-11	1.13E-10	1.12E-11	0.00E+00	1.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
812	302211.84	4019662.68	1.27E-08	2.60E-08	4.07E-09	0.00E+00	4.28E-08	1.41E-11	1.14E-10	1.13E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
813	302221.86	4019685.44	1.29E-08	2.62E-08	4.11E-09	0.00E+00	4.32E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
814	302231.87	4019708.21	1.30E-08	2.64E-08	4.15E-09	0.00E+00	4.36E-08	1.44E-11	1.17E-10	1.16E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
815	302241.89	4019730.97	1.31E-08	2.67E-08	4.19E-09	0.00E+00	4.39E-08	1.45E-11	1.18E-10	1.17E-11	0.00E+00	1.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
816	302251.9	4019753.74	1.32E-08	2.69E-08	4.22E-09	0.00E+00	4.43E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
817	302261.91	4019776.5	1.33E-08	2.71E-08	4.25E-09	0.00E+00	4.47E-08	1.47E-11	1.19E-10	1.18E-11	0.00E+00	1.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
818	302271.93	4019799.27	1.34E-08	2.73E-08	4.29E-09	0.00E+00	4.50E-08	1.48E-11	1.20E-10	1.19E-11	0.00E+00	1.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
819	302281.94	4019822.04	1.35E-08	2.75E-08	4.32E-09	0.00E+00	4.54E-08	1.50E-11	1.21E-10	1.20E-11	0.00E+00	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
820	302291.96	4019844.8	1.36E-08	2.78E-08	4.36E-09	0.00E+00	4.57E-08	1.51E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
821	302301.97	4019867.57	1.37E-08	2.80E-08	4.39E-09	0.00E+00	4.61E-08	1.52E-11	1.23E-10	1.22E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
822	302311.98	4019890.33	1.38E-08	2.81E-08	4.42E-09	0.00E+00	4.64E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
823	302322	4019913.1	1.39E-08	2.83E-08	4.44E-09	0.00E+00	4.66E-08	1.54E-11	1.25E-10	1.24E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
824	302332.01	4019935.86	1.39E-08	2.84E-08	4.46E-09	0.00E+00	4.68E-08	1.54E-11	1.25E-10	1.24E-11	0.00E+00	1.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
825	302342.03	4019958.63	1.4E-08	2.85E-08	4.47E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.24E-11	0.00E+00	1.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
826	302352.04	4019981.4	1.4E-08	2.85E-08	4.48E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
827	302362.05	4020004.16	1.4E-08	2.85E-08	4.47E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
828	302372.07	4020026.93	1.39E-08	2.84E-08	4.46E-09	0.00E+00	4.68E-08	1.54E-11	1.25E-10	1.24E-11	0.00E+00	1.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
829	302382.08	4020049.69	1.39E-08	2.83E-08	4.44E-09	0.00E+00	4.66E-08	1.54E-11	1.25E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
830	302392.1	4020072.46	1.38E-08	2.80E-08	4.40E-09	0.00E+00	4.62E-08	1.52E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
831	302402.11	4020095.22	1.36E-08	2.78E-08	4.36E-09	0.00E+00	4.58E-08	1.51E-11	1.22E-10	1.21E-11	0.00E+00	1.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
832	302412.13	4020117.99	1.35E-08	2.74E-08	4

893	302128.05	4019417.72	1.04E-08	2.12E-08	3.33E-09	0.00E+00	3.49E-08	1.15E-11	9.34E-11	9.26E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
894	302151.27	4019426.75	1.04E-08	2.12E-08	3.32E-09	0.00E+00	3.49E-08	1.15E-11	9.33E-11	9.25E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
895	302174.49	4019435.79	1.04E-08	2.11E-08	3.32E-09	0.00E+00	3.48E-08	1.15E-11	9.31E-11	9.23E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
896	302197.7	4019444.82	1.03E-08	2.11E-08	3.31E-09	0.00E+00	3.47E-08	1.14E-11	9.28E-11	9.20E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
897	302230.96	4019476.66	1.05E-08	2.13E-08	3.35E-09	0.00E+00	3.51E-08	1.16E-11	9.39E-11	9.31E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
898	302240.99	4019499.47	1.06E-08	2.16E-08	3.40E-09	0.00E+00	3.57E-08	1.18E-11	9.53E-11	9.45E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
899	302251.02	4019522.28	1.08E-08	2.19E-08	3.44E-09	0.00E+00	3.62E-08	1.19E-11	9.67E-11	9.58E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
900	302261.05	4019545.08	1.09E-08	2.22E-08	3.49E-09	0.00E+00	3.66E-08	1.21E-11	9.79E-11	9.70E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
901	302271.08	4019567.89	1.1E-08	2.25E-08	3.52E-09	0.00E+00	3.70E-08	1.22E-11	9.89E-11	9.81E-12	0.00E+00	1.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
902	302281.12	4019590.7	1.11E-08	2.27E-08	3.56E-09	0.00E+00	3.74E-08	1.23E-11	9.99E-11	9.91E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
903	302291.15	4019613.5	1.12E-08	2.29E-08	3.59E-09	0.00E+00	3.77E-08	1.24E-11	1.01E-10	9.99E-12	0.00E+00	1.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
904	302301.18	4019636.31	1.13E-08	2.31E-08	3.62E-09	0.00E+00	3.80E-08	1.25E-11	1.02E-10	1.01E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
905	302311.21	4019659.12	1.14E-08	2.32E-08	3.65E-09	0.00E+00	3.83E-08	1.26E-11	1.02E-10	1.01E-11	0.00E+00	1.25E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
906	302321.24	4019681.92	1.15E-08	2.34E-08	3.67E-09	0.00E+00	3.86E-08	1.27E-11	1.03E-10	1.02E-11	0.00E+00	1.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
907	302331.28	4019704.73	1.16E-08	2.36E-08	3.70E-09	0.00E+00	3.89E-08	1.28E-11	1.04E-10	1.03E-11	0.00E+00	1.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
908	302341.31	4019727.53	1.17E-08	2.38E-08	3.73E-09	0.00E+00	3.91E-08	1.29E-11	1.05E-10	1.04E-11	0.00E+00	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
909	302351.34	4019750.34	1.18E-08	2.39E-08	3.76E-09	0.00E+00	3.94E-08	1.30E-11	1.05E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
910	302361.37	4019773.15	1.18E-08	2.41E-08	3.79E-09	0.00E+00	3.97E-08	1.31E-11	1.06E-10	1.05E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
911	302371.4	4019795.95	1.19E-08	2.43E-08	3.81E-09	0.00E+00	4.01E-08	1.32E-11	1.07E-10	1.06E-11	0.00E+00	1.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
912	302381.44	4019818.76	1.2E-08	2.45E-08	3.84E-09	0.00E+00	4.03E-08	1.33E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
913	302391.47	4019841.57	1.21E-08	2.47E-08	3.87E-09	0.00E+00	4.06E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
914	302401.5	4019864.37	1.22E-08	2.48E-08	3.89E-09	0.00E+00	4.09E-08	1.35E-11	1.09E-10	1.08E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
915	302411.53	4019887.18	1.22E-08	2.49E-08	3.91E-09	0.00E+00	4.11E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
916	302421.56	4019909.99	1.23E-08	2.50E-08	3.93E-09	0.00E+00	4.13E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
917	302431.59	4019932.79	1.23E-08	2.51E-08	3.94E-09	0.00E+00	4.14E-08	1.36E-11	1.11E-10	1.10E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
918	302441.63	4019955.6	1.23E-08	2.51E-08	3.94E-09	0.00E+00	4.14E-08	1.36E-11	1.11E-10	1.10E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
919	302451.66	4019978.4	1.23E-08	2.51E-08	3.94E-09	0.00E+00	4.13E-08	1.36E-11	1.10E-10	1.10E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
920	302461.69	4020001.21	1.23E-08	2.50E-08	3.92E-09	0.00E+00	4.12E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
921	302471.72	4020024.02	1.22E-08	2.48E-08	3.90E-09	0.00E+00	4.09E-08	1.35E-11	1.09E-10	1.08E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
922	302481.75	4020046.82	1.21E-08	2.46E-08	3.87E-09	0.00E+00	4.06E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
923	302491.79	4020069.63	1.2E-08	2.44E-08	3.83E-09	0.00E+00	4.02E-08	1.32E-11	1.07E-10	1.07E-11	0.00E+00	1.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
924	302501.82	4020092.44	1.18E-08	2.41E-08	3.78E-09	0.00E+00	3.97E-08	1.31E-11	1.06E-10	1.05E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
925	302511.85	4020115.24	1.16E-08	2.37E-08	3.72E-09	0.00E+00	3.91E-08	1.29E-11	1.05E-10	1.04E-11	0.00E+00	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
926	302521.88	4020138.05	1.14E-08	2.33E-08	3.66E-09	0.00E+00	3.84E-08	1.27E-11	1.03E-10	1.02E-11	0.00E+00	1.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
927	302531.91	4020160.86	1.12E-08	2.29E-08	3.59E-09	0.00E+00	3.77E-08	1.24E-11	1.01E-10	1.00E-11	0.00E+00	1.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
928	302541.95	4020183.66	1.1E-08	2.24E-08	3.52E-09	0.00E+00	3.69E-08	1.22E-11	9.87E-11	9.79E-12	0.00E+00	1.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
929	302551.98	4020206.47	1.07E-08	2.19E-08	3.44E-09	0.00E+00	3.61E-08	1.19E-11	9.65E-11	9.56E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
930	302562.01	4020229.28	1.05E-08	2.14E-08	3.35E-09	0.00E+00	3.52E-08	1.16E-11	9.42E-11	9.34E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
931	302572.04	4020252.08	1.02E-08	2.09E-08	3.27E-09	0.00E+00	3.44E-08	1.13E-11	9.19E-11	9.11E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
932	302582.07	4020274.89	9.99E-09	2.03E-08	3.19E-09	0.00E+00	3.35E-08	1.11E-11	8.96E-11	8.89E-12	0.00E+00	1.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
933	302592.11	4020297.69	9.74E-09	1.98E-08	3.11E-09	0.00E+00	3.27E-08	1.08E-11	8.74E-11	8.67E-12	0.00E+00	1.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
934	302602.14	4020320.5	9.5E-09	1.94E-08	3.04E-09	0.00E+00	3.19E-08	1.05E-11	8.53E-11	8.45E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
935	302612.17	4020343.31	9.27E-09	1.89E-08	2.96E-09	0.00E+00	3.11E-08	1.03E-11	8.32E-11	8.25E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
936	302622.2	4020366.11	9.05E-09	1.84E-08	2.89E-09	0.00E+00	3.04E-08	1.00E-11	8.12E-11	8.05E-12	0.00E+00	9.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
937	302632.23	4020388.92	8.84E-09	1.80E-08	2.83E-09	0.00E+00	2.97E-08	9.78E-12	7.93E-11	7.86E-12	0.00E+00	9.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
938	302642.27	4020411.73	8.63E-09	1.76E-08	2.76E-09	0.00E+00	2.90E-08	9.55E-12	7.74E-11	7.68E-12	0.00E+00	9.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
939	301222.5	4019065.32	4.39E-09	8.94E-09	1.40E-09	0.00E+00	1.47E-08	4.86E-12	3.94E-11	3.91E-12	0.00E+00	4.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
940	301197.53	4019065.86	4.18E-09	8.52E-09	1.34E-09	0.00E+00	1.40E-08	4.63E-12	3.76E-11	3.72E-12	0.00E+00	4.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
941	301172.56	4019066.4	3.98E-09	8.10E-09	1.27E-09	0.00E+00	1.34E-08	4.40E-12	3.57E-11	3.54E-12	0.00E+00	4.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
942	301147.59	4019066.94	3.78E-09	7.69E-09	1.21E-09	0.00E+00	1.27E-08	4.18E-12	3.39E-11	3.36E-12	0.00E+00	4.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
943	301122.62	4019067.47	3.59E-09	7.31E-09	1.15E-09	0.00E+00	1.20E-08	3.97E-12	3.22E-11	3.19E-12	0.00E+00	3.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
944	301097.65	4019068.01	3.41E-09	6.95E-09	1.09E-09	0.00E+00	1.15E-08	3.78E-12	3.06E-11	3.04E-12	0.00E+00	3.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
945	301072.68	4019068.55	3.25E-09	6.63E-09	1.04E-09	0.00E+00	1.09E-08	3.60E-12	2.92E-11	2.89E-12	0.00E+00	3.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
946	301047.71	4019069.09	3.11E-09	6.34E-09	9.94E-10	0.00E+00	1.04E-08	3.44E-12	2.79E-11	2.77E-12	0.00E+00	3.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
947	301022.74	4019069.62	2.98E-09	6.08E-09	9.54E-10	0.00E+00	1.00E-08	3.30E-12	2.68E-11	2.66E-12	0.00E+00	3.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
948	301402.8	4020462.4	3.39E-07	6.90E-07	1.08E-07	0.00E+00	1.14E-06	3.75E-10	3.04E-09	3.01E-10	0.00E+00	3.71E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
949	301452.79	4020461.41	2.48E-07	5.05E-07	7.93E-08	0.00E+00	8.32E-07	2.74E-10	2.23E-09	2.21E-10	0.00E+00	2.72E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
950	301452.35	4020439.11	2.38E-07	4.86E-07	7.63E-08	0.00E+00	8.01E-07	2.64E-10	2.14E-09	2.12E-10	0.00E+00	2.62E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
951	301502.78	4020460.42	1.88E-07	3.82E-07	6.00E-08	0.00E+00	6.30E-07	2.08E-10	1.68E-09	1.67E-10	0.00E+00	2.06E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
952	301501.46	4020393.51	1.7E-07	3.45E-07	5.42E-08	0.00E+00	5.69E-07	1.88E-10	1.52E-09	1.51E-10	0.00E+00	1.86E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
953	301552.77	4020459.44	1.45E-07	2.96E-07	4.65E-08	0.00E+00	4.88E-07	1.61E-10	1.31E-09	1.29E-10	0.00E+00	1.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
954	301602.76	4020458.45	1.15E-07	2.34E-07	3.68E-08	0.00E+00	3.86E-07	1.27E-10	1.03E-09	1.02E-10	0.00E+00	1.26E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
955	301601.44	4020391.54	1.1E-07	2.24E-07	3.51E-08	0.00E+00	3.69E-07	1.22E-10	9.85E-10	9.77E-11	0.00E+00	1.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
956	301652.75	4020457.47	9.26E-08	1.89E-07	2.96E-08	0.00E+00	3.11E-07	1.02E-10	8.31E-10	8.24E-11	0.00E+00	1.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
957	301752.73	4020455.49	6.27E-08	1.28E-07	2.01E-08	0.00E+00	2.11E-07	6.94E-11	5.63E-10	5.58E-11	0.00E+00	6.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
958	301852.71	4020453.52	4.47E-08	9.10E-08	1.43E-08	0.00E+00	1.50E-07	4.95E-11	4.01E-10	3.98E-11	0.00E+00	4.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
959	301851.39	4020386.61	4.53E-08	9.22E-08	1.45E-08	0.00E+00	1.52E-07	5.01E-11	4.06E-10	4.03E-11	0.00E+00	4.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
960	301952.69	4020451.55	3.31E-08	6.75E-08

1021	301015.68	4019853.21	1.24E-08	2.52E-08	3.96E-09	0.00E+00	4.16E-08	1.37E-11	1.11E-10	1.10E-11	0.00E+00	1.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1022	300976.42	4019854.37	1.12E-08	2.28E-08	3.57E-09	0.00E+00	3.75E-08	1.24E-11	1.00E-10	9.94E-12	0.00E+00	1.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1023	301051.8	4019809.53	1.22E-08	2.48E-08	3.89E-09	0.00E+00	4.09E-08	1.35E-11	1.09E-10	1.08E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1024	301087.75	4019823.3	1.41E-08	2.87E-08	4.50E-09	0.00E+00	4.73E-08	1.56E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1025	301123.7	4019837.06	1.63E-08	3.31E-08	5.20E-09	0.00E+00	5.46E-08	1.80E-11	1.46E-10	1.45E-11	0.00E+00	1.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1026	301496.27	4020038.26	5.28E-08	1.08E-07	1.69E-08	0.00E+00	1.77E-07	5.85E-11	4.74E-10	4.70E-11	0.00E+00	5.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1027	301550.58	4020161.57	7.54E-08	1.54E-07	2.41E-08	0.00E+00	2.53E-07	8.34E-11	6.77E-10	6.71E-11	0.00E+00	8.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1028	301589.37	4020249.64	8.81E-08	1.80E-07	2.82E-08	0.00E+00	2.96E-07	9.76E-11	7.91E-10	7.84E-11	0.00E+00	9.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1029	301620.4	4020320.1	9.25E-08	1.88E-07	2.96E-08	0.00E+00	3.11E-07	1.02E-10	8.30E-10	8.23E-11	0.00E+00	1.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1030	301014.2	4019803.23	1.07E-08	2.19E-08	3.44E-09	0.00E+00	3.61E-08	1.19E-11	9.65E-11	9.57E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1031	300974.95	4019804.39	9.76E-09	1.99E-08	3.12E-09	0.00E+00	3.27E-08	1.08E-11	8.76E-11	8.68E-12	0.00E+00	1.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1032	301048.85	4019709.58	9.34E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.38E-11	8.31E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1033	301084.8	4019723.34	1.06E-08	2.17E-08	3.41E-09	0.00E+00	3.57E-08	1.18E-11	9.56E-11	9.48E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1034	301120.75	4019737.1	1.22E-08	2.48E-08	3.89E-09	0.00E+00	4.08E-08	1.35E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1035	301541.94	4019912.99	3.45E-08	7.04E-08	1.10E-08	0.00E+00	1.16E-07	3.82E-11	3.10E-10	3.07E-11	0.00E+00	3.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1036	301557.46	4019948.22	3.83E-08	7.81E-08	1.23E-08	0.00E+00	1.29E-07	4.24E-11	3.44E-10	3.41E-11	0.00E+00	4.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1037	301619.52	4020089.13	5.43E-08	1.11E-07	1.74E-08	0.00E+00	1.82E-07	6.01E-11	4.87E-10	4.83E-11	0.00E+00	5.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1038	301658.31	4020177.21	6.25E-08	1.27E-07	2.00E-08	0.00E+00	2.10E-07	6.92E-11	5.61E-10	5.56E-11	0.00E+00	6.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1039	301689.35	4020247.67	6.62E-08	1.35E-07	2.12E-08	0.00E+00	2.22E-07	7.32E-11	5.94E-10	5.89E-11	0.00E+00	7.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1040	301728.14	4020335.74	6.55E-08	1.33E-07	2.09E-08	0.00E+00	2.20E-07	7.25E-11	5.88E-10	5.83E-11	0.00E+00	7.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1041	301011.25	4019703.28	8.35E-09	1.70E-08	2.67E-09	0.00E+00	2.80E-08	9.24E-12	7.49E-11	7.43E-12	0.00E+00	9.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1042	300971.99	4019704.44	7.64E-09	1.56E-08	2.44E-09	0.00E+00	2.56E-08	8.46E-12	6.86E-11	6.80E-12	0.00E+00	8.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1043	301045.9	4019609.62	7.4E-09	1.51E-08	2.37E-09	0.00E+00	2.48E-08	8.19E-12	6.64E-11	6.58E-12	0.00E+00	8.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1044	301081.85	4019623.38	8.34E-09	1.70E-08	2.67E-09	0.00E+00	2.80E-08	9.23E-12	7.49E-11	7.42E-12	0.00E+00	9.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1045	301117.8	4019637.15	9.44E-09	1.92E-08	3.02E-09	0.00E+00	3.17E-08	1.04E-11	8.47E-11	8.40E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1046	301610.89	4019840.56	2.78E-08	5.65E-08	8.87E-09	0.00E+00	9.32E-08	3.07E-11	2.49E-10	2.47E-11	0.00E+00	3.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1047	301626.41	4019875.79	3.03E-08	6.18E-08	9.70E-09	0.00E+00	1.02E-07	3.36E-11	2.72E-10	2.70E-11	0.00E+00	3.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1048	301665.2	4019963.86	3.7E-08	7.54E-08	1.18E-08	0.00E+00	1.24E-07	4.10E-11	3.32E-10	3.30E-11	0.00E+00	4.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1049	301680.71	4019999.09	3.96E-08	8.07E-08	1.27E-08	0.00E+00	1.33E-07	4.39E-11	3.56E-10	3.53E-11	0.00E+00	4.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1050	301696.23	4020034.32	4.21E-08	8.58E-08	1.35E-08	0.00E+00	1.41E-07	4.66E-11	3.78E-10	3.75E-11	0.00E+00	4.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1051	301711.75	4020069.55	4.44E-08	9.04E-08	1.42E-08	0.00E+00	1.49E-07	4.91E-11	3.98E-10	3.95E-11	0.00E+00	4.87E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1052	301727.26	4020104.78	4.64E-08	9.45E-08	1.48E-08	0.00E+00	1.56E-07	5.13E-11	4.16E-10	4.13E-11	0.00E+00	5.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1053	301742.78	4020140.01	4.8E-08	9.78E-08	1.53E-08	0.00E+00	1.61E-07	5.31E-11	4.31E-10	4.27E-11	0.00E+00	5.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1054	301758.3	4020175.24	4.92E-08	1.00E-07	1.57E-08	0.00E+00	1.65E-07	5.45E-11	4.42E-10	4.38E-11	0.00E+00	5.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1055	301773.81	4020210.46	4.99E-08	1.02E-07	1.60E-08	0.00E+00	1.68E-07	5.52E-11	4.48E-10	4.44E-11	0.00E+00	5.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1056	301789.33	4020245.69	5E-08	1.02E-07	1.60E-08	0.00E+00	1.68E-07	5.54E-11	4.49E-10	4.45E-11	0.00E+00	5.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1057	301804.84	4020280.92	4.96E-08	1.01E-07	1.58E-08	0.00E+00	1.66E-07	5.49E-11	4.45E-10	4.41E-11	0.00E+00	5.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1058	301820.36	4020316.15	4.86E-08	9.89E-08	1.55E-08	0.00E+00	1.63E-07	5.37E-11	4.36E-10	4.32E-11	0.00E+00	5.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1059	301835.88	4020351.38	4.71E-08	9.59E-08	1.51E-08	0.00E+00	1.58E-07	5.21E-11	4.23E-10	4.19E-11	0.00E+00	5.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1060	301008.29	4019603.32	6.69E-09	1.36E-08	2.14E-09	0.00E+00	2.24E-08	7.40E-12	6.00E-11	5.95E-12	0.00E+00	7.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1061	300969.04	4019604.48	6.17E-09	1.26E-08	1.97E-09	0.00E+00	2.07E-08	6.83E-12	5.54E-11	5.49E-12	0.00E+00	6.77E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1062	301042.94	4019509.66	6.02E-09	1.23E-08	1.92E-09	0.00E+00	2.02E-08	6.66E-12	5.40E-11	5.36E-12	0.00E+00	6.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1063	301078.89	4019523.43	6.72E-09	1.37E-08	2.15E-09	0.00E+00	2.26E-08	7.44E-12	6.03E-11	5.98E-12	0.00E+00	7.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1064	301114.84	4019537.19	7.55E-09	1.54E-08	2.41E-09	0.00E+00	2.53E-08	8.35E-12	6.77E-11	6.71E-12	0.00E+00	8.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1065	301679.84	4019768.13	2.28E-08	4.64E-08	7.28E-09	0.00E+00	7.65E-08	2.52E-11	2.04E-10	2.03E-11	0.00E+00	2.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1066	301695.35	4019803.36	2.46E-08	5.01E-08	7.87E-09	0.00E+00	8.26E-08	2.72E-11	2.21E-10	2.19E-11	0.00E+00	2.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1067	301734.14	4019891.43	2.93E-08	5.96E-08	9.35E-09	0.00E+00	9.82E-08	3.24E-11	2.63E-10	2.60E-11	0.00E+00	3.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1068	301749.66	4019926.66	3.11E-08	6.33E-08	9.93E-09	0.00E+00	1.04E-07	3.44E-11	2.79E-10	2.77E-11	0.00E+00	3.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1069	301765.18	4019961.89	3.28E-08	6.68E-08	1.05E-08	0.00E+00	1.10E-07	3.63E-11	2.94E-10	2.92E-11	0.00E+00	3.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1070	301780.69	4019997.12	3.43E-08	6.99E-08	1.10E-08	0.00E+00	1.15E-07	3.80E-11	3.08E-10	3.05E-11	0.00E+00	3.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1071	301796.21	4020032.35	3.57E-08	7.27E-08	1.14E-08	0.00E+00	1.20E-07	3.95E-11	3.20E-10	3.18E-11	0.00E+00	3.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1072	301811.73	4020067.58	3.69E-08	7.51E-08	1.18E-08	0.00E+00	1.24E-07	4.08E-11	3.31E-10	3.28E-11	0.00E+00	4.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1073	301827.24	4020102.8	3.78E-08	7.70E-08	1.21E-08	0.00E+00	1.27E-07	4.19E-11	3.39E-10	3.37E-11	0.00E+00	4.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1074	301842.76	4020138.03	3.85E-08	7.84E-08	1.23E-08	0.00E+00	1.29E-07	4.26E-11	3.45E-10	3.42E-11	0.00E+00	4.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1075	301858.28	4020173.26	3.88E-08	7.91E-08	1.24E-08	0.00E+00	1.30E-07	4.30E-11	3.49E-10	3.46E-11	0.00E+00	4.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1076	301873.79	4020208.49	3.88E-08	7.91E-08	1.24E-08	0.00E+00	1.30E-07	4.30E-11	3.49E-10	3.46E-11	0.00E+00	4.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1077	301889.31	4020243.72	3.85E-08	7.84E-08	1.23E-08	0.00E+00	1.29E-07	4.26E-11	3.45E-10	3.42E-11	0.00E+00	4.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1078	301904.83	4020278.95	3.78E-08	7.69E-08	1.21E-08	0.00E+00	1.27E-07	4.18E-11	3.39E-10	3.36E-11	0.00E+00	4.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1079	301920.34	4020314.18	3.68E-08	7.49E-08	1.18E-08	0.00E+00	1.23E-07	4.07E-11	3.30E-10	3.27E-11	0.00E+00	4.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1080	301935.86	4020349.41	3.55E-08	7.23E-08	1.13E-08	0.00E+00	1.19E-07	3.93E-11	3.18E-10	3.16E-11	0.00E+00	3.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1081	301005.34	4019503.36	5.49E-09	1.12E-08	1.76E-09	0.00E+00	1.84E-08	6.08E-12	4.93E-11	4.89E-12	0.00E+00	6.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1082	300966.08	4019504.52	5.1E-09	1.04E-08	1.63E-09	0.00E+00	1.71E-08	5.65E-12	4.58E-11	4.54E-12	0.00E+00	5.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1083	301039.99	4019409.71	5.01E-09	1.02E-08	1.60E-09	0.00E+00	1.68E-08	5.54E-12	4.49E-11	4.45E-12	0.00E+00	5.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1084	301075.94	4019423.47	5.54E-09	1.13E-08	1.77E-09	0.00E+00	1.86E-08	6.13E-12	4.97E-11	4.93E-12	0.00E+00	6.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1085	301111.89	4019437.23	6.17E-09	1.26E-08	1.97E-09	0.00E+00	2.07E-08	6.84E-12	5.54E-11	5.50E-12	0.00E+00	6.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1086	301748.78	4019695.7	1.9E-08	3.88E-08	6.09E-09	0.00E+00	6.39E-08	2.11E-11	1.71E-10	1.69E-11	0.00E+00	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1087	301764.3	4019730.92	2.04E-08	4.15E-08	6.51E-09	0.00E+00	6.84E-08	2.25E-11	1.83E-10	1.81E-11	0.00E+00	2.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1149	302142.7	4020132.12	2.1E-08	4.28E-08	6.72E-09	0.00E+00	7.06E-08	2.33E-11	1.89E-10	1.87E-11	0.00E+00	2.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1150	302158.22	4020167.35	2.07E-08	4.22E-08	6.63E-09	0.00E+00	6.96E-08	2.30E-11	1.86E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1151	302173.73	4020202.57	2.03E-08	4.14E-08	6.50E-09	0.00E+00	6.82E-08	2.25E-11	1.82E-10	1.81E-11	0.00E+00	2.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1152	302189.25	4020237.8	1.98E-08	4.03E-08	6.33E-09	0.00E+00	6.65E-08	2.19E-11	1.78E-10	1.76E-11	0.00E+00	2.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1153	302204.77	4020273.03	1.92E-08	3.90E-08	6.13E-09	0.00E+00	6.43E-08	2.12E-11	1.72E-10	1.71E-11	0.00E+00	2.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1154	302220.28	4020308.26	1.84E-08	3.76E-08	5.89E-09	0.00E+00	6.19E-08	2.04E-11	1.65E-10	1.64E-11	0.00E+00	2.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1155	302235.8	4020343.49	1.76E-08	3.59E-08	5.64E-09	0.00E+00	5.92E-08	1.95E-11	1.58E-10	1.57E-11	0.00E+00	1.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1156	300996.48	4019203.49	3.39E-09	6.92E-09	1.09E-09	0.00E+00	1.14E-08	3.76E-12	3.05E-11	3.02E-12	0.00E+00	3.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1157	300957.22	4019204.65	3.21E-09	6.54E-09	1.03E-09	0.00E+00	1.08E-08	3.55E-12	2.88E-11	2.86E-12	0.00E+00	3.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1158	301031.48	4019109.97	3.18E-09	6.48E-09	1.02E-09	0.00E+00	1.07E-08	3.52E-12	2.86E-11	2.83E-12	0.00E+00	3.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1159	301068.13	4019124.01	3.46E-09	7.05E-09	1.11E-09	0.00E+00	1.16E-08	3.83E-12	3.11E-11	3.08E-12	0.00E+00	3.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1160	301104.79	4019138.04	3.79E-09	7.73E-09	1.21E-09	0.00E+00	1.27E-08	4.20E-12	3.41E-11	3.38E-12	0.00E+00	4.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1161	301955.78	4019478.75	1.21E-08	2.47E-08	3.88E-09	0.00E+00	4.07E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1162	301971.6	4019514.67	1.27E-08	2.59E-08	4.07E-09	0.00E+00	4.28E-08	1.41E-11	1.14E-10	1.13E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1163	302011.15	4019604.47	1.42E-08	2.90E-08	4.55E-09	0.00E+00	4.77E-08	1.57E-11	1.28E-10	1.27E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1164	302026.97	4019640.39	1.48E-08	3.01E-08	4.73E-09	0.00E+00	4.96E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1165	302042.79	4019676.31	1.53E-08	3.12E-08	4.89E-09	0.00E+00	5.14E-08	1.69E-11	1.37E-10	1.36E-11	0.00E+00	1.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1166	302058.61	4019712.23	1.58E-08	3.21E-08	5.04E-09	0.00E+00	5.29E-08	1.75E-11	1.42E-10	1.40E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1167	302074.43	4019748.15	1.62E-08	3.30E-08	5.17E-09	0.00E+00	5.43E-08	1.79E-11	1.45E-10	1.44E-11	0.00E+00	1.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1168	302090.25	4019784.07	1.65E-08	3.37E-08	5.29E-09	0.00E+00	5.55E-08	1.83E-11	1.48E-10	1.47E-11	0.00E+00	1.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1169	302106.08	4019819.99	1.69E-08	3.43E-08	5.39E-09	0.00E+00	5.66E-08	1.87E-11	1.51E-10	1.50E-11	0.00E+00	1.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1170	302121.9	4019855.91	1.71E-08	3.49E-08	5.48E-09	0.00E+00	5.75E-08	1.90E-11	1.54E-10	1.52E-11	0.00E+00	1.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1171	302137.72	4019891.83	1.74E-08	3.54E-08	5.56E-09	0.00E+00	5.84E-08	1.92E-11	1.56E-10	1.55E-11	0.00E+00	1.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1172	302153.54	4019927.75	1.76E-08	3.59E-08	5.63E-09	0.00E+00	5.91E-08	1.95E-11	1.58E-10	1.57E-11	0.00E+00	1.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1173	302169.36	4019963.67	1.78E-08	3.63E-08	5.69E-09	0.00E+00	5.97E-08	1.97E-11	1.60E-10	1.58E-11	0.00E+00	1.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1174	302185.18	4019999.59	1.79E-08	3.65E-08	5.73E-09	0.00E+00	6.02E-08	1.98E-11	1.61E-10	1.60E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1175	302201	4020035.51	1.8E-08	3.66E-08	5.75E-09	0.00E+00	6.04E-08	1.99E-11	1.61E-10	1.60E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1176	302216.82	4020071.43	1.79E-08	3.66E-08	5.74E-09	0.00E+00	6.02E-08	1.99E-11	1.61E-10	1.60E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1177	302232.64	4020107.35	1.78E-08	3.63E-08	5.69E-09	0.00E+00	5.97E-08	1.97E-11	1.60E-10	1.58E-11	0.00E+00	1.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1178	302248.46	4020143.27	1.75E-08	3.57E-08	5.61E-09	0.00E+00	5.89E-08	1.94E-11	1.57E-10	1.56E-11	0.00E+00	1.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1179	302264.28	4020179.19	1.72E-08	3.50E-08	5.49E-09	0.00E+00	5.77E-08	1.90E-11	1.54E-10	1.53E-11	0.00E+00	1.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1180	302280.1	4020215.11	1.67E-08	3.41E-08	5.35E-09	0.00E+00	5.61E-08	1.85E-11	1.50E-10	1.49E-11	0.00E+00	1.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1181	302295.92	4020251.03	1.62E-08	3.30E-08	5.17E-09	0.00E+00	5.43E-08	1.79E-11	1.45E-10	1.44E-11	0.00E+00	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1182	302311.75	4020286.95	1.56E-08	3.17E-08	4.97E-09	0.00E+00	5.22E-08	1.72E-11	1.40E-10	1.38E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1183	302327.57	4020322.87	1.49E-08	3.04E-08	4.76E-09	0.00E+00	5.00E-08	1.65E-11	1.34E-10	1.33E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1184	300993.52	4019103.54	2.97E-09	6.06E-09	9.51E-10	0.00E+00	9.99E-09	3.29E-12	2.67E-11	2.65E-12	0.00E+00	3.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1185	300954.27	4019104.7	2.83E-09	5.75E-09	9.03E-10	0.00E+00	9.48E-09	3.13E-12	2.54E-11	2.51E-12	0.00E+00	3.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1186	301028.5	4019010.01	2.81E-09	5.72E-09	8.98E-10	0.00E+00	9.43E-09	3.11E-12	2.52E-11	2.50E-12	0.00E+00	3.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1187	301065.1	4019024.02	3.04E-09	6.19E-09	9.71E-10	0.00E+00	1.02E-08	3.36E-12	2.73E-11	2.70E-12	0.00E+00	3.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1188	301101.71	4019038.03	3.31E-09	6.75E-09	1.06E-09	0.00E+00	1.11E-08	3.67E-12	2.97E-11	2.95E-12	0.00E+00	3.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1189	302024.71	4019406.29	1.07E-08	2.18E-08	3.42E-09	0.00E+00	3.59E-08	1.18E-11	9.59E-11	9.51E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1190	302040.51	4019442.16	1.12E-08	2.27E-08	3.57E-09	0.00E+00	3.75E-08	1.24E-11	1.00E-10	9.93E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1191	302080.01	4019531.84	1.23E-08	2.51E-08	3.94E-09	0.00E+00	4.14E-08	1.37E-11	1.11E-10	1.10E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1192	302095.81	4019567.71	1.28E-08	2.60E-08	4.08E-09	0.00E+00	4.29E-08	1.41E-11	1.15E-10	1.14E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1193	302111.61	4019603.58	1.32E-08	2.68E-08	4.21E-09	0.00E+00	4.42E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1194	302127.41	4019639.45	1.35E-08	2.76E-08	4.33E-09	0.00E+00	4.55E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1195	302143.2	4019675.32	1.39E-08	2.82E-08	4.43E-09	0.00E+00	4.65E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1196	302159	4019711.19	1.41E-08	2.88E-08	4.52E-09	0.00E+00	4.75E-08	1.57E-11	1.27E-10	1.26E-11	0.00E+00	1.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1197	302174.8	4019747.06	1.44E-08	2.93E-08	4.60E-09	0.00E+00	4.83E-08	1.59E-11	1.29E-10	1.28E-11	0.00E+00	1.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1198	302190.6	4019782.92	1.46E-08	2.97E-08	4.67E-09	0.00E+00	4.90E-08	1.62E-11	1.31E-10	1.30E-11	0.00E+00	1.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1199	302206.4	4019818.79	1.48E-08	3.01E-08	4.73E-09	0.00E+00	4.97E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1200	302222.2	4019854.66	1.5E-08	3.05E-08	4.79E-09	0.00E+00	5.03E-08	1.66E-11	1.35E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1201	302238	4019890.53	1.52E-08	3.09E-08	4.85E-09	0.00E+00	5.09E-08	1.68E-11	1.36E-10	1.35E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1202	302253.79	4019926.4	1.53E-08	3.12E-08	4.90E-09	0.00E+00	5.14E-08	1.70E-11	1.38E-10	1.36E-11	0.00E+00	1.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1203	302269.59	4019962.27	1.54E-08	3.15E-08	4.94E-09	0.00E+00	5.18E-08	1.71E-11	1.39E-10	1.37E-11	0.00E+00	1.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1204	302285.39	4019998.14	1.55E-08	3.16E-08	4.95E-09	0.00E+00	5.20E-08	1.71E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1205	302301.19	4020034.01	1.55E-08	3.15E-08	4.95E-09	0.00E+00	5.19E-08	1.71E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1206	302316.99	4020069.88	1.54E-08	3.13E-08	4.91E-09	0.00E+00	5.16E-08	1.70E-11	1.38E-10	1.37E-11	0.00E+00	1.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1207	302332.79	4020105.75	1.52E-08	3.09E-08	4.85E-09	0.00E+00	5.09E-08	1.68E-11	1.36E-10	1.35E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1208	302348.59	4020141.62	1.49E-08	3.03E-08	4.76E-09	0.00E+00	4.99E-08	1.65E-11	1.34E-10	1.32E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1209	302364.39	4020177.49	1.45E-08	2.96E-08	4.64E-09	0.00E+00	4.87E-08	1.61E-11	1.30E-10	1.29E-11	0.00E+00	1.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1210	302380.18	4020213.36	1.41E-08	2.87E-08	4.50E-09	0.00E+00	4.72E-08	1.56E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1211	302395.98	4020249.23	1.36E-08	2.76E-08	4.34E-09	0.00E+00	4.56E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1212	302411.78	4020285.1	1.3E-08	2.66E-08	4.17E-09	0.00E+00	4.38E-08	1.44E-11	1.17E-10	1.16E-11	0.00E+00	1.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1213	302427.58	4020320.97	1.25E-08	2.54E-08	3.99E-09	0.00E+00	4.19E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1214	300990.57	4019003.58	2.64E-09	5.37E-09	8.43E-10	0.00E+00	8.85E-09	2.92E-12	2.37E-11	2.35E-12	0.00E+00	2.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1215	300951.32	4019004.74	2.51E-09	5.12E-09	8.03E-10	0.00E+00	8.43E-09	2.78E-12	2.25E-11	2.24E-12	0.00E+00	2.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

1277	300838.21	4020304.8	2.12E-08	4.32E-08	6.77E-09	0.00E+00	7.11E-08	2.35E-11	1.90E-10	1.89E-11	0.00E+00	2.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1278	300866.51	4020275.05	2.16E-08	4.41E-08	6.92E-09	0.00E+00	7.26E-08	2.40E-11	1.94E-10	1.93E-11	0.00E+00	2.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1279	300907.06	4020256.94	2.79E-08	5.69E-08	8.93E-09	0.00E+00	9.38E-08	3.09E-11	2.51E-10	2.49E-11	0.00E+00	3.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1280	300947.6	4020238.84	3.63E-08	7.40E-08	1.16E-08	0.00E+00	1.22E-07	4.02E-11	3.26E-10	3.23E-11	0.00E+00	3.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1281	300798.57	4020432.53	2.63E-08	5.36E-08	8.41E-09	0.00E+00	8.83E-08	2.91E-11	2.36E-10	2.34E-11	0.00E+00	2.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1282	300799.07	4020456.77	2.92E-08	5.94E-08	9.32E-09	0.00E+00	9.79E-08	3.23E-11	2.62E-10	2.59E-11	0.00E+00	3.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1283	300799.57	4020481.01	3.23E-08	6.58E-08	1.03E-08	0.00E+00	1.08E-07	3.58E-11	2.90E-10	2.88E-11	0.00E+00	3.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1284	300800.06	4020505.24	3.59E-08	7.31E-08	1.15E-08	0.00E+00	1.20E-07	3.97E-11	3.22E-10	3.19E-11	0.00E+00	3.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1285	300800.56	4020529.48	3.97E-08	8.08E-08	1.27E-08	0.00E+00	1.33E-07	4.39E-11	3.56E-10	3.53E-11	0.00E+00	4.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1286	300801.06	4020553.72	4.32E-08	8.80E-08	1.38E-08	0.00E+00	1.45E-07	4.78E-11	3.88E-10	3.84E-11	0.00E+00	4.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1287	300780.95	4020388.53	2.04E-08	4.15E-08	6.52E-09	0.00E+00	6.84E-08	2.26E-11	1.83E-10	1.81E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1288	300796.67	4020347.98	1.97E-08	4.01E-08	6.30E-09	0.00E+00	6.61E-08	2.18E-11	1.77E-10	1.75E-11	0.00E+00	2.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1289	300812.4	4020307.42	1.89E-08	3.86E-08	6.06E-09	0.00E+00	6.36E-08	2.10E-11	1.70E-10	1.69E-11	0.00E+00	2.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1290	300847.98	4020258	1.82E-08	3.70E-08	5.81E-09	0.00E+00	6.10E-08	2.01E-11	1.63E-10	1.62E-11	0.00E+00	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1291	300887.7	4020240.27	2.26E-08	4.60E-08	7.22E-09	0.00E+00	7.58E-08	2.50E-11	2.03E-10	2.01E-11	0.00E+00	2.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1292	300927.42	4020222.53	2.92E-08	5.95E-08	9.34E-09	0.00E+00	9.81E-08	3.23E-11	2.62E-10	2.60E-11	0.00E+00	3.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1293	300773.58	4020433.04	2.28E-08	4.65E-08	7.29E-09	0.00E+00	7.65E-08	2.52E-11	2.05E-10	2.03E-11	0.00E+00	2.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1294	300774.08	4020457.28	2.5E-08	5.09E-08	7.98E-09	0.00E+00	8.38E-08	2.76E-11	2.24E-10	2.22E-11	0.00E+00	2.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1295	300774.57	4020481.52	2.73E-08	5.57E-08	8.74E-09	0.00E+00	9.18E-08	3.03E-11	2.45E-10	2.43E-11	0.00E+00	3.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1296	300775.07	4020505.75	3E-08	6.12E-08	9.61E-09	0.00E+00	1.01E-07	3.33E-11	2.70E-10	2.67E-11	0.00E+00	3.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1297	300775.57	4020529.99	3.3E-08	6.72E-08	1.05E-08	0.00E+00	1.11E-07	3.65E-11	2.96E-10	2.94E-11	0.00E+00	3.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1298	300776.06	4020554.23	3.58E-08	7.28E-08	1.14E-08	0.00E+00	1.20E-07	3.96E-11	3.21E-10	3.18E-11	0.00E+00	3.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1299	300731.69	4020387.65	1.61E-08	3.28E-08	5.15E-09	0.00E+00	5.41E-08	1.78E-11	1.45E-10	1.43E-11	0.00E+00	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1300	300740.29	4020365.48	1.57E-08	3.21E-08	5.04E-09	0.00E+00	5.29E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1301	300748.89	4020343.3	1.55E-08	3.15E-08	4.95E-09	0.00E+00	5.19E-08	1.71E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1302	300757.49	4020321.12	1.53E-08	3.11E-08	4.89E-09	0.00E+00	5.13E-08	1.69E-11	1.37E-10	1.36E-11	0.00E+00	1.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1303	300766.1	4020298.94	1.51E-08	3.08E-08	4.83E-09	0.00E+00	5.07E-08	1.67E-11	1.36E-10	1.34E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1304	300774.7	4020276.77	1.47E-08	3.00E-08	4.71E-09	0.00E+00	4.94E-08	1.63E-11	1.32E-10	1.31E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1305	300783.3	4020254.59	1.4E-08	2.85E-08	4.48E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1306	300813.62	4020222.71	1.35E-08	2.76E-08	4.32E-09	0.00E+00	4.54E-08	1.50E-11	1.21E-10	1.20E-11	0.00E+00	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1307	300835.34	4020213.01	1.45E-08	2.96E-08	4.64E-09	0.00E+00	4.88E-08	1.61E-11	1.30E-10	1.29E-11	0.00E+00	1.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1308	300857.06	4020203.31	1.63E-08	3.32E-08	5.21E-09	0.00E+00	5.47E-08	1.80E-11	1.46E-10	1.45E-11	0.00E+00	1.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1309	300878.78	4020193.61	1.87E-08	3.81E-08	5.98E-09	0.00E+00	6.28E-08	2.07E-11	1.68E-10	1.66E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1310	300900.5	4020183.92	2.13E-08	4.35E-08	6.82E-09	0.00E+00	7.16E-08	2.36E-11	1.91E-10	1.90E-11	0.00E+00	2.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1311	300922.22	4020174.22	2.38E-08	4.86E-08	7.62E-09	0.00E+00	8.00E-08	2.64E-11	2.14E-10	2.12E-11	0.00E+00	2.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1312	300943.94	4020164.52	2.62E-08	5.34E-08	8.38E-09	0.00E+00	8.80E-08	2.90E-11	2.35E-10	2.33E-11	0.00E+00	2.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1313	300723.09	4020409.83	1.65E-08	3.36E-08	5.28E-09	0.00E+00	5.54E-08	1.83E-11	1.48E-10	1.47E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1314	300723.59	4020434.07	1.77E-08	3.60E-08	5.65E-09	0.00E+00	5.94E-08	1.96E-11	1.59E-10	1.57E-11	0.00E+00	1.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1315	300724.09	4020458.31	1.9E-08	3.86E-08	6.06E-09	0.00E+00	6.36E-08	2.10E-11	1.70E-10	1.69E-11	0.00E+00	2.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1316	300724.58	4020482.54	2.04E-08	4.15E-08	6.51E-09	0.00E+00	6.84E-08	2.25E-11	1.83E-10	1.81E-11	0.00E+00	2.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1317	300725.08	4020506.78	2.2E-08	4.48E-08	7.03E-09	0.00E+00	7.39E-08	2.44E-11	1.97E-10	1.96E-11	0.00E+00	2.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1318	300725.58	4020531.02	2.38E-08	4.86E-08	7.63E-09	0.00E+00	8.01E-08	2.64E-11	2.14E-10	2.12E-11	0.00E+00	2.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1319	300726.07	4020555.25	2.57E-08	5.23E-08	8.21E-09	0.00E+00	8.62E-08	2.84E-11	2.30E-10	2.29E-11	0.00E+00	2.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1320	300681.36	4020389.57	1.32E-08	2.68E-08	4.21E-09	0.00E+00	4.42E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1321	300689.62	4020368.28	1.29E-08	2.64E-08	4.14E-09	0.00E+00	4.34E-08	1.43E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1322	300697.87	4020346.98	1.27E-08	2.58E-08	4.06E-09	0.00E+00	4.26E-08	1.40E-11	1.14E-10	1.13E-11	0.00E+00	1.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1323	300706.13	4020325.69	1.25E-08	2.54E-08	3.99E-09	0.00E+00	4.19E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1324	300714.39	4020304.4	1.24E-08	2.52E-08	3.96E-09	0.00E+00	4.15E-08	1.37E-11	1.11E-10	1.10E-11	0.00E+00	1.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1325	300722.64	4020283.11	1.23E-08	2.51E-08	3.94E-09	0.00E+00	4.13E-08	1.36E-11	1.10E-10	1.10E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1326	300730.9	4020261.82	1.22E-08	2.48E-08	3.89E-09	0.00E+00	4.08E-08	1.35E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1327	300739.16	4020240.53	1.18E-08	2.40E-08	3.76E-09	0.00E+00	3.95E-08	1.30E-11	1.06E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1328	300747.41	4020219.24	1.11E-08	2.26E-08	3.55E-09	0.00E+00	3.73E-08	1.23E-11	9.97E-11	9.89E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1329	300776.52	4020188.64	1.04E-08	2.13E-08	3.34E-09	0.00E+00	3.50E-08	1.16E-11	9.37E-11	9.29E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1330	300797.37	4020179.33	1.09E-08	2.21E-08	3.47E-09	0.00E+00	3.65E-08	1.20E-11	9.75E-11	9.66E-12	0.00E+00	1.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1331	300818.22	4020170.02	1.18E-08	2.39E-08	3.76E-09	0.00E+00	3.95E-08	1.30E-11	1.05E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1332	300839.07	4020160.71	1.32E-08	2.68E-08	4.21E-09	0.00E+00	4.42E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1333	300859.92	4020151.4	1.5E-08	3.05E-08	4.79E-09	0.00E+00	5.03E-08	1.66E-11	1.34E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1334	300880.77	4020142.08	1.69E-08	3.44E-08	5.40E-09	0.00E+00	5.67E-08	1.87E-11	1.52E-10	1.50E-11	0.00E+00	1.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1335	300901.63	4020132.77	1.87E-08	3.81E-08	5.98E-09	0.00E+00	6.28E-08	2.07E-11	1.68E-10	1.67E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1336	300922.48	4020123.46	2.04E-08	4.15E-08	6.52E-09	0.00E+00	6.84E-08	2.26E-11	1.83E-10	1.81E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1337	300943.33	4020114.15	2.2E-08	4.48E-08	7.03E-09	0.00E+00	7.38E-08	2.43E-11	1.97E-10	1.96E-11	0.00E+00	2.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1338	300673.1	4020410.86	1.33E-08	2.72E-08	4.26E-09	0.00E+00	4.48E-08	1.48E-11	1.20E-10	1.19E-11	0.00E+00	1.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1339	300673.6	4020435.09	1.4E-08	2.86E-08	4.49E-09	0.00E+00	4.71E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1340	300674.1	4020459.33	1.48E-08	3.02E-08	4.74E-09	0.00E+00	4.97E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1341	300674.59	4020483.57	1.57E-08	3.20E-08	5.02E-09	0.00E+00	5.27E-08	1.74E-11	1.41E-10	1.40E-11	0.00E+00	1.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1342	300675.09	4020507.8	1.68E-08	3.42E-08	5.37E-09	0.00E+00	5.64E-08	1.86E-11	1.51E-10	1.49E-11	0.00E+00	1.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1343	300675.59	4020532.04	1.81E-08	3.68E-08	5.77E-09	0.00E+00	6.06E-08	2.00E-11	1.62E-10	1.61E-11	0.00E+00	1.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1405	300547.9	4020350.06	7.66E-09	1.56E-08	2.45E-09	0.00E+00	2.57E-08	8.47E-12	6.87E-11	6.81E-12	0.00E+00	8.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1406	300556.16	4020328.77	7.64E-09	1.56E-08	2.44E-09	0.00E+00	2.57E-08	8.46E-12	6.86E-11	6.80E-12	0.00E+00	8.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1407	300564.42	4020307.48	7.6E-09	1.55E-08	2.43E-09	0.00E+00	2.55E-08	8.41E-12	6.82E-11	6.76E-12	0.00E+00	8.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1408	300572.67	4020286.19	7.53E-09	1.53E-08	2.41E-09	0.00E+00	2.53E-08	8.34E-12	6.76E-11	6.70E-12	0.00E+00	8.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1409	300580.93	4020264.9	7.49E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.29E-12	6.72E-11	6.67E-12	0.00E+00	8.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1410	300589.19	4020243.6	7.5E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.30E-12	6.73E-11	6.67E-12	0.00E+00	8.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1411	300597.44	4020222.31	7.54E-09	1.54E-08	2.41E-09	0.00E+00	2.53E-08	8.34E-12	6.76E-11	6.71E-12	0.00E+00	8.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1412	300605.7	4020201.02	7.56E-09	1.54E-08	2.42E-09	0.00E+00	2.54E-08	8.37E-12	6.78E-11	6.73E-12	0.00E+00	8.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1413	300613.96	4020179.73	7.49E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.29E-12	6.72E-11	6.67E-12	0.00E+00	8.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1414	300622.21	4020158.44	7.28E-09	1.48E-08	2.33E-09	0.00E+00	2.44E-08	8.06E-12	6.54E-11	6.48E-12	0.00E+00	7.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1415	300630.47	4020137.15	6.92E-09	1.41E-08	2.21E-09	0.00E+00	2.32E-08	7.66E-12	6.21E-11	6.16E-12	0.00E+00	7.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1416	300638.73	4020115.86	6.44E-09	1.31E-08	2.06E-09	0.00E+00	2.16E-08	7.12E-12	5.78E-11	5.73E-12	0.00E+00	7.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1417	300667.83	4020085.26	5.73E-09	1.17E-08	1.83E-09	0.00E+00	1.92E-08	6.34E-12	5.14E-11	5.10E-12	0.00E+00	6.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1418	300688.68	4020075.95	5.65E-09	1.15E-08	1.81E-09	0.00E+00	1.90E-08	6.26E-12	5.07E-11	5.03E-12	0.00E+00	6.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1419	300709.54	4020066.64	5.74E-09	1.17E-08	1.84E-09	0.00E+00	1.93E-08	6.35E-12	5.15E-11	5.11E-12	0.00E+00	6.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1420	300730.39	4020057.33	6.03E-09	1.23E-08	1.93E-09	0.00E+00	2.03E-08	6.68E-12	5.42E-11	5.37E-12	0.00E+00	6.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1421	300751.24	4020048.02	6.57E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.27E-12	5.90E-11	5.85E-12	0.00E+00	7.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1422	300772.09	4020038.7	7.35E-09	1.50E-08	2.35E-09	0.00E+00	2.47E-08	8.13E-12	6.60E-11	6.54E-12	0.00E+00	8.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1423	300792.94	4020029.39	8.33E-09	1.70E-08	2.66E-09	0.00E+00	2.80E-08	9.22E-12	7.47E-11	7.41E-12	0.00E+00	9.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1424	300813.79	4020020.08	9.39E-09	1.91E-08	3.00E-09	0.00E+00	3.15E-08	1.04E-11	8.42E-11	8.35E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1425	300834.64	4020010.77	1.04E-08	2.12E-08	3.32E-09	0.00E+00	3.49E-08	1.15E-11	9.33E-11	9.25E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1426	300855.49	4020001.46	1.13E-08	2.29E-08	3.60E-09	0.00E+00	3.78E-08	1.25E-11	1.01E-10	1.00E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1427	300876.34	4019992.15	1.2E-08	2.45E-08	3.84E-09	0.00E+00	4.03E-08	1.33E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1428	300897.19	4019982.84	1.27E-08	2.58E-08	4.05E-09	0.00E+00	4.25E-08	1.40E-11	1.14E-10	1.13E-11	0.00E+00	1.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1429	300918.05	4019973.53	1.33E-08	2.70E-08	4.24E-09	0.00E+00	4.45E-08	1.47E-11	1.19E-10	1.18E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1430	300938.9	4019964.22	1.38E-08	2.81E-08	4.41E-09	0.00E+00	4.63E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1431	300523.13	4020413.93	7.5E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.30E-12	6.73E-11	6.67E-12	0.00E+00	8.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1432	300523.63	4020438.17	7.73E-09	1.57E-08	2.47E-09	0.00E+00	2.60E-08	8.56E-12	6.94E-11	6.88E-12	0.00E+00	8.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1433	300524.13	4020462.4	8.05E-09	1.64E-08	2.57E-09	0.00E+00	2.70E-08	8.91E-12	7.22E-11	7.16E-12	0.00E+00	8.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1434	300524.62	4020486.64	8.48E-09	1.73E-08	2.71E-09	0.00E+00	2.85E-08	9.39E-12	7.61E-11	7.55E-12	0.00E+00	9.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1435	300525.12	4020510.88	9.02E-09	1.84E-08	2.88E-09	0.00E+00	3.03E-08	9.98E-12	8.09E-11	8.03E-12	0.00E+00	9.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1436	300525.62	4020535.11	9.64E-09	1.96E-08	3.08E-09	0.00E+00	3.24E-08	1.07E-11	8.65E-11	8.58E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1437	300526.11	4020559.35	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.46E-08	1.14E-11	9.25E-11	9.17E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1438	300481.75	4020392.78	6.41E-09	1.31E-08	2.05E-09	0.00E+00	2.15E-08	7.10E-12	5.76E-11	5.71E-12	0.00E+00	7.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1439	300490.35	4020370.6	6.47E-09	1.32E-08	2.07E-09	0.00E+00	2.17E-08	7.16E-12	5.81E-11	5.76E-12	0.00E+00	7.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1440	300498.95	4020348.42	6.53E-09	1.33E-08	2.09E-09	0.00E+00	2.19E-08	7.22E-12	5.86E-11	5.81E-12	0.00E+00	7.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1441	300507.55	4020326.24	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.26E-12	5.89E-11	5.84E-12	0.00E+00	7.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1442	300516.15	4020304.07	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.26E-12	5.88E-11	5.83E-12	0.00E+00	7.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1443	300524.75	4020281.89	6.53E-09	1.33E-08	2.09E-09	0.00E+00	2.19E-08	7.23E-12	5.86E-11	5.81E-12	0.00E+00	7.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1444	300533.35	4020259.71	6.51E-09	1.33E-08	2.08E-09	0.00E+00	2.18E-08	7.20E-12	5.84E-11	5.79E-12	0.00E+00	7.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1445	300541.95	4020237.53	6.51E-09	1.33E-08	2.08E-09	0.00E+00	2.19E-08	7.21E-12	5.84E-11	5.79E-12	0.00E+00	7.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1446	300550.55	4020215.35	6.55E-09	1.33E-08	2.09E-09	0.00E+00	2.20E-08	7.25E-12	5.88E-11	5.83E-12	0.00E+00	7.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1447	300559.15	4020193.18	6.61E-09	1.35E-08	2.11E-09	0.00E+00	2.22E-08	7.32E-12	5.93E-11	5.88E-12	0.00E+00	7.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1448	300567.75	4020171	6.64E-09	1.35E-08	2.12E-09	0.00E+00	2.23E-08	7.35E-12	5.96E-11	5.91E-12	0.00E+00	7.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1449	300576.35	4020148.82	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.27E-12	5.89E-11	5.84E-12	0.00E+00	7.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1450	300584.95	4020126.64	6.36E-09	1.30E-08	2.03E-09	0.00E+00	2.13E-08	7.04E-12	5.71E-11	5.66E-12	0.00E+00	6.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1451	300593.55	4020104.47	6.01E-09	1.22E-08	1.92E-09	0.00E+00	2.02E-08	6.66E-12	5.40E-11	5.35E-12	0.00E+00	6.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1452	300602.15	4020082.29	5.56E-09	1.13E-08	1.78E-09	0.00E+00	1.87E-08	6.16E-12	4.99E-11	4.95E-12	0.00E+00	6.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1453	300632.47	4020050.41	4.88E-09	9.94E-09	1.56E-09	0.00E+00	1.64E-08	5.40E-12	4.38E-11	4.34E-12	0.00E+00	5.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1454	300654.19	4020040.71	4.76E-09	9.69E-09	1.52E-09	0.00E+00	1.60E-08	5.27E-12	4.27E-11	4.23E-12	0.00E+00	5.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1455	300675.91	4020031.01	4.77E-09	9.72E-09	1.53E-09	0.00E+00	1.60E-08	5.28E-12	4.28E-11	4.25E-12	0.00E+00	5.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1456	300697.63	4020021.32	4.96E-09	1.01E-08	1.59E-09	0.00E+00	1.66E-08	5.49E-12	4.45E-11	4.41E-12	0.00E+00	5.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1457	300719.35	4020011.62	5.35E-09	1.09E-08	1.71E-09	0.00E+00	1.80E-08	5.92E-12	4.80E-11	4.76E-12	0.00E+00	5.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1458	300741.07	4020001.92	5.95E-09	1.21E-08	1.90E-09	0.00E+00	2.00E-08	6.59E-12	5.34E-11	5.30E-12	0.00E+00	6.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1459	300762.79	4019992.22	6.76E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.48E-12	6.07E-11	6.01E-12	0.00E+00	7.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1460	300784.51	4019982.52	7.68E-09	1.57E-08	2.46E-09	0.00E+00	2.58E-08	8.51E-12	6.90E-11	6.84E-12	0.00E+00	8.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1461	300806.23	4019972.82	8.61E-09	1.75E-08	2.75E-09	0.00E+00	2.89E-08	9.53E-12	7.72E-11	7.66E-12	0.00E+00	9.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1462	300827.95	4019963.12	9.42E-09	1.92E-08	3.01E-09	0.00E+00	3.16E-08	1.04E-11	8.45E-11	8.38E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1463	300849.67	4019953.42	1.01E-08	2.06E-08	3.23E-09	0.00E+00	3.39E-08	1.12E-11	9.06E-11	8.99E-12	0.00E+00	1.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1464	300871.39	4019943.72	1.07E-08	2.17E-08	3.41E-09	0.00E+00	3.58E-08	1.18E-11	9.57E-11	9.49E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1465	300893.11	4019934.02	1.12E-08	2.27E-08	3.57E-09	0.00E+00	3.74E-08	1.23E-11	1.00E-10	9.93E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1466	300914.83	4019924.33	1.16E-08	2.36E-08	3.70E-09	0.00E+00	3.89E-08	1.28E-11	1.04E-10	1.03E-11	0.00E+00	1.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1467	300936.55	4019914.63	1.2E-08	2.43E-08	3.82E-09	0.00E+00	4.01E-08	1.32E-11	1.07E-10	1.06E-11	0.00E+00	1.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1468	300473.14	4020414.95	6.38E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.06E-12	5.73E-11	5.68E-12	0.00E+00	7.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1469	300473.64	4020439.19	6.58E-09	1.34E-08	2.10E-09	0.00E+00	2.21E-08	7.29E-12	5.91E-11	5.86E-12	0.00E+00	7.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1470	300474.14	4020463.43	6.87E-09	1.40E-08	2.20E-09	0.00E+00	2.31E-08	7.60E-12	6.16E-11	6.11E-12	0.00E+00	7.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1471	300474.63	4020487.66	7.24E-09	1.48E-08	2.32E-09	0.00E+00	2.43E-08	8.02E-12	6.50E-11	6.44E-12	0.00E+00	7.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1533	300529.61	4020013.6	4.28E-09	8.72E-09	1.37E-09	0.00E+00	1.44E-08	4.74E-12	3.84E-11	3.81E-12	0.00E+00	4.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1534	300560.25	4019981.39	3.69E-09	7.51E-09	1.18E-09	0.00E+00	1.24E-08	4.08E-12	3.31E-11	3.28E-12	0.00E+00	4.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1535	300582.19	4019971.59	3.53E-09	7.19E-09	1.13E-09	0.00E+00	1.19E-08	3.91E-12	3.17E-11	3.14E-12	0.00E+00	3.88E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1536	300604.14	4019961.79	3.46E-09	7.04E-09	1.11E-09	0.00E+00	1.16E-08	3.83E-12	3.10E-11	3.08E-12	0.00E+00	3.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1537	300626.09	4019951.99	3.49E-09	7.11E-09	1.12E-09	0.00E+00	1.17E-08	3.86E-12	3.13E-11	3.10E-12	0.00E+00	3.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1538	300648.04	4019942.19	3.64E-09	7.42E-09	1.16E-09	0.00E+00	1.22E-08	4.03E-12	3.27E-11	3.24E-12	0.00E+00	3.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1539	300669.99	4019932.38	3.93E-09	8.00E-09	1.26E-09	0.00E+00	1.32E-08	4.35E-12	3.53E-11	3.50E-12	0.00E+00	4.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1540	300691.94	4019922.58	4.37E-09	8.89E-09	1.40E-09	0.00E+00	1.47E-08	4.83E-12	3.92E-11	3.89E-12	0.00E+00	4.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1541	300713.88	4019912.78	4.95E-09	1.01E-08	1.58E-09	0.00E+00	1.66E-08	5.48E-12	4.44E-11	4.40E-12	0.00E+00	5.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1542	300735.83	4019902.98	5.63E-09	1.15E-08	1.80E-09	0.00E+00	1.89E-08	6.23E-12	5.05E-11	5.01E-12	0.00E+00	6.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1543	300757.78	4019893.18	6.34E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.02E-12	5.69E-11	5.64E-12	0.00E+00	6.96E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1544	300779.73	4019883.38	6.99E-09	1.42E-08	2.24E-09	0.00E+00	2.35E-08	7.74E-12	6.27E-11	6.22E-12	0.00E+00	7.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1545	300801.68	4019873.58	7.53E-09	1.53E-08	2.41E-09	0.00E+00	2.53E-08	8.34E-12	6.76E-11	6.70E-12	0.00E+00	8.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1546	300823.63	4019863.78	7.96E-09	1.62E-08	2.55E-09	0.00E+00	2.67E-08	8.82E-12	7.15E-11	7.09E-12	0.00E+00	8.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1547	300845.58	4019853.98	8.3E-09	1.69E-08	2.66E-09	0.00E+00	2.79E-08	9.19E-12	7.45E-11	7.39E-12	0.00E+00	9.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1548	300867.52	4019844.18	8.58E-09	1.75E-08	2.74E-09	0.00E+00	2.88E-08	9.50E-12	7.70E-11	7.64E-12	0.00E+00	9.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1549	300889.47	4019834.37	8.8E-09	1.79E-08	2.81E-09	0.00E+00	2.95E-08	9.74E-12	7.90E-11	7.83E-12	0.00E+00	9.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1550	300911.42	4019824.57	8.99E-09	1.83E-08	2.87E-09	0.00E+00	3.02E-08	9.95E-12	8.07E-11	8.00E-12	0.00E+00	9.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1551	300933.37	4019814.77	9.16E-09	1.87E-08	2.93E-09	0.00E+00	3.07E-08	1.01E-11	8.22E-11	8.15E-12	0.00E+00	1.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1552	300373.17	4020417	4.87E-09	9.92E-09	1.56E-09	0.00E+00	1.63E-08	5.39E-12	4.37E-11	4.33E-12	0.00E+00	5.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1553	300373.66	4020441.24	5.04E-09	1.03E-08	1.61E-09	0.00E+00	1.69E-08	5.58E-12	4.53E-11	4.49E-12	0.00E+00	5.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1554	300374.16	4020465.48	5.27E-09	1.07E-08	1.69E-09	0.00E+00	1.77E-08	5.84E-12	4.73E-11	4.69E-12	0.00E+00	5.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1555	300374.66	4020489.71	5.55E-09	1.13E-08	1.78E-09	0.00E+00	1.86E-08	6.15E-12	4.98E-11	4.94E-12	0.00E+00	6.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1556	300375.15	4020513.95	5.88E-09	1.20E-08	1.88E-09	0.00E+00	1.97E-08	6.51E-12	5.27E-11	5.23E-12	0.00E+00	6.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1557	300375.65	4020538.19	6.23E-09	1.27E-08	1.99E-09	0.00E+00	2.09E-08	6.89E-12	5.59E-11	5.54E-12	0.00E+00	6.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1558	300376.15	4020562.42	6.58E-09	1.34E-08	2.10E-09	0.00E+00	2.21E-08	7.28E-12	5.90E-11	5.85E-12	0.00E+00	7.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1559	300281.94	4020396.47	3.9E-09	7.94E-09	1.25E-09	0.00E+00	1.31E-08	4.32E-12	3.50E-11	3.47E-12	0.00E+00	4.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1560	300290.7	4020373.89	3.87E-09	7.89E-09	1.24E-09	0.00E+00	1.30E-08	4.29E-12	3.47E-11	3.45E-12	0.00E+00	4.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1561	300299.46	4020351.31	3.85E-09	7.85E-09	1.23E-09	0.00E+00	1.29E-08	4.26E-12	3.46E-11	3.43E-12	0.00E+00	4.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1562	300308.21	4020328.73	3.84E-09	7.82E-09	1.23E-09	0.00E+00	1.29E-08	4.25E-12	3.45E-11	3.42E-12	0.00E+00	4.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1563	300316.97	4020306.15	3.84E-09	7.82E-09	1.23E-09	0.00E+00	1.29E-08	4.25E-12	3.44E-11	3.41E-12	0.00E+00	4.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1564	300325.73	4020283.57	3.85E-09	7.84E-09	1.23E-09	0.00E+00	1.29E-08	4.26E-12	3.45E-11	3.42E-12	0.00E+00	4.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1565	300334.49	4020260.99	3.86E-09	7.87E-09	1.23E-09	0.00E+00	1.30E-08	4.27E-12	3.47E-11	3.44E-12	0.00E+00	4.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1566	300343.24	4020238.4	3.88E-09	7.91E-09	1.24E-09	0.00E+00	1.30E-08	4.30E-12	3.48E-11	3.46E-12	0.00E+00	4.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1567	300352	4020215.82	3.9E-09	7.95E-09	1.25E-09	0.00E+00	1.31E-08	4.32E-12	3.50E-11	3.48E-12	0.00E+00	4.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1568	300360.76	4020193.24	3.94E-09	8.02E-09	1.26E-09	0.00E+00	1.32E-08	4.36E-12	3.53E-11	3.50E-12	0.00E+00	4.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1569	300369.51	4020170.66	3.99E-09	8.13E-09	1.28E-09	0.00E+00	1.34E-08	4.42E-12	3.58E-11	3.55E-12	0.00E+00	4.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1570	300378.27	4020148.08	4.07E-09	8.29E-09	1.30E-09	0.00E+00	1.37E-08	4.51E-12	3.65E-11	3.62E-12	0.00E+00	4.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1571	300387.03	4020125.5	4.17E-09	8.49E-09	1.33E-09	0.00E+00	1.40E-08	4.61E-12	3.74E-11	3.71E-12	0.00E+00	4.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1572	300395.78	4020102.92	4.26E-09	8.69E-09	1.36E-09	0.00E+00	1.43E-08	4.72E-12	3.83E-11	3.80E-12	0.00E+00	4.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1573	300404.54	4020080.34	4.34E-09	8.84E-09	1.39E-09	0.00E+00	1.46E-08	4.80E-12	3.89E-11	3.86E-12	0.00E+00	4.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1574	300413.3	4020057.76	4.36E-09	8.88E-09	1.39E-09	0.00E+00	1.46E-08	4.82E-12	3.91E-11	3.88E-12	0.00E+00	4.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1575	300422.05	4020035.18	4.31E-09	8.78E-09	1.38E-09	0.00E+00	1.45E-08	4.77E-12	3.87E-11	3.84E-12	0.00E+00	4.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1576	300430.81	4020012.59	4.19E-09	8.53E-09	1.34E-09	0.00E+00	1.41E-08	4.63E-12	3.76E-11	3.73E-12	0.00E+00	4.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1577	300439.57	4019990.01	3.99E-09	8.12E-09	1.27E-09	0.00E+00	1.34E-08	4.41E-12	3.58E-11	3.55E-12	0.00E+00	4.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1578	300448.33	4019967.43	3.72E-09	7.58E-09	1.19E-09	0.00E+00	1.25E-08	4.12E-12	3.34E-11	3.31E-12	0.00E+00	4.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1579	300457.08	4019944.85	3.41E-09	6.95E-09	1.09E-09	0.00E+00	1.15E-08	3.78E-12	3.06E-11	3.04E-12	0.00E+00	3.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1580	300487.95	4019912.4	2.91E-09	5.92E-09	9.30E-10	0.00E+00	9.76E-09	3.22E-12	2.61E-11	2.59E-12	0.00E+00	3.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1581	300510.07	4019902.52	2.75E-09	5.60E-09	8.79E-10	0.00E+00	9.23E-09	3.04E-12	2.47E-11	2.45E-12	0.00E+00	3.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1582	300532.18	4019892.65	2.65E-09	5.40E-09	8.47E-10	0.00E+00	8.89E-09	2.93E-12	2.38E-11	2.36E-12	0.00E+00	2.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1583	300554.3	4019882.77	2.62E-09	5.33E-09	8.36E-10	0.00E+00	8.78E-09	2.89E-12	2.35E-11	2.33E-12	0.00E+00	2.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1584	300576.41	4019872.89	2.66E-09	5.41E-09	8.50E-10	0.00E+00	8.92E-09	2.94E-12	2.39E-11	2.37E-12	0.00E+00	2.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1585	300598.53	4019863.02	2.79E-09	5.68E-09	8.91E-10	0.00E+00	9.36E-09	3.09E-12	2.50E-11	2.48E-12	0.00E+00	3.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1586	300620.64	4019853.14	3.01E-09	6.13E-09	9.63E-10	0.00E+00	1.01E-08	3.33E-12	2.70E-11	2.68E-12	0.00E+00	3.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1587	300642.76	4019843.27	3.33E-09	6.79E-09	1.07E-09	0.00E+00	1.12E-08	3.69E-12	2.99E-11	2.97E-12	0.00E+00	3.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1588	300664.87	4019833.39	3.76E-09	7.66E-09	1.20E-09	0.00E+00	1.26E-08	4.16E-12	3.38E-11	3.35E-12	0.00E+00	4.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1589	300686.99	4019823.52	4.28E-09	8.71E-09	1.37E-09	0.00E+00	1.44E-08	4.73E-12	3.84E-11	3.81E-12	0.00E+00	4.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1590	300709.1	4019813.64	4.83E-09	9.84E-09	1.55E-09	0.00E+00	1.62E-08	5.35E-12	4.34E-11	4.30E-12	0.00E+00	5.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1591	300731.22	4019803.77	5.37E-09	1.09E-08	1.72E-09	0.00E+00	1.80E-08	5.94E-12	4.82E-11	4.78E-12	0.00E+00	5.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1592	300753.33	4019793.89	5.83E-09	1.19E-08	1.86E-09	0.00E+00	1.96E-08	6.45E-12	5.23E-11	5.19E-12	0.00E+00	6.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1593	300775.45	4019784.02	6.2E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.86E-12	5.56E-11	5.51E-12	0.00E+00	6.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1594	300797.56	4019774.14	6.47E-09	1.32E-08	2.07E-09	0.00E+00	2.17E-08	7.16E-12	5.80E-11	5.76E-12	0.00E+00	7.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1595	300819.68	4019764.27	6.67E-09	1.36E-08	2.13E-09	0.00E+00	2.24E-08	7.38E-12	5.98E-11	5.93E-12	0.00E+00	7.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1596	300841.79	4019754.39	6.81E-09	1.39E-08	2.18E-09	0.00E+00	2.29E-08	7.54E-12	6.12E-11	6.06E-12	0.00E+00	7.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1597	300863.9	4019744.52	6.92E-09	1.41E-08	2.21E-09	0.00E+00	2.32E-08	7.67E-12	6.22E-11	6.16E-12	0.00E+00	7.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1598	300886.02	4019734.64	7.01E-09	1.43E-08	2.24E-09	0.00E+00	2.35E-08	7.76E-12	6.29E-11	6.24E-12	0.00E+00	7.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1599	300908.13	4019724.77	7.1E-09	1.45E-08	2.27E-09	0.00E+00	2.38E-08	7.86E-12	6.37E-11	6.32E-12	0.00E+00	7.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1661	300174.7	4020493.81	3.64E-09	7.42E-09	1.16E-09	0.00E+00	1.22E-08	4.03E-12	3.27E-11	3.24E-12	0.00E+00	3.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1662	300175.19	4020518.05	3.8E-09	7.73E-09	1.21E-09	0.00E+00	1.27E-08	4.20E-12	3.41E-11	3.38E-12	0.00E+00	4.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1663	300175.69	4020542.28	3.97E-09	8.08E-09	1.27E-09	0.00E+00	1.33E-08	4.39E-12	3.56E-11	3.53E-12	0.00E+00	4.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1664	300176.19	4020566.52	4.15E-09	8.46E-09	1.33E-09	0.00E+00	1.39E-08	4.60E-12	3.73E-11	3.70E-12	0.00E+00	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1665	300081.77	4020401.12	2.8E-09	5.69E-09	8.94E-10	0.00E+00	9.38E-09	3.09E-12	2.51E-11	2.49E-12	0.00E+00	3.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1666	300090.31	4020379.1	2.78E-09	5.66E-09	8.88E-10	0.00E+00	9.33E-09	3.08E-12	2.49E-11	2.47E-12	0.00E+00	3.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1667	300098.85	4020357.07	2.76E-09	5.62E-09	8.82E-10	0.00E+00	9.26E-09	3.05E-12	2.48E-11	2.46E-12	0.00E+00	3.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1668	300107.39	4020335.05	2.73E-09	5.56E-09	8.73E-10	0.00E+00	9.17E-09	3.02E-12	2.45E-11	2.43E-12	0.00E+00	3.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1669	300115.94	4020313.03	2.7E-09	5.49E-09	8.62E-10	0.00E+00	9.05E-09	2.98E-12	2.42E-11	2.40E-12	0.00E+00	2.96E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1670	300124.48	4020291	2.66E-09	5.41E-09	8.49E-10	0.00E+00	8.92E-09	2.94E-12	2.38E-11	2.36E-12	0.00E+00	2.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1671	300133.02	4020268.98	2.62E-09	5.33E-09	8.37E-10	0.00E+00	8.79E-09	2.90E-12	2.35E-11	2.33E-12	0.00E+00	2.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1672	300141.56	4020246.95	2.59E-09	5.27E-09	8.28E-10	0.00E+00	8.69E-09	2.87E-12	2.32E-11	2.30E-12	0.00E+00	2.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1673	300150.1	4020224.93	2.57E-09	5.24E-09	8.22E-10	0.00E+00	8.63E-09	2.85E-12	2.31E-11	2.29E-12	0.00E+00	2.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1674	300158.64	4020202.9	2.56E-09	5.22E-09	8.19E-10	0.00E+00	8.60E-09	2.84E-12	2.30E-11	2.28E-12	0.00E+00	2.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1675	300167.18	4020180.88	2.56E-09	5.22E-09	8.19E-10	0.00E+00	8.60E-09	2.84E-12	2.30E-11	2.28E-12	0.00E+00	2.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1676	300175.72	4020158.85	2.57E-09	5.23E-09	8.21E-10	0.00E+00	8.62E-09	2.84E-12	2.31E-11	2.29E-12	0.00E+00	2.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1677	300184.27	4020136.83	2.58E-09	5.26E-09	8.26E-10	0.00E+00	8.67E-09	2.86E-12	2.32E-11	2.30E-12	0.00E+00	2.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1678	300192.81	4020114.8	2.61E-09	5.32E-09	8.36E-10	0.00E+00	8.77E-09	2.89E-12	2.35E-11	2.33E-12	0.00E+00	2.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1679	300201.35	4020092.78	2.66E-09	5.43E-09	8.52E-10	0.00E+00	8.94E-09	2.95E-12	2.39E-11	2.37E-12	0.00E+00	2.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1680	300209.89	4020070.75	2.74E-09	5.58E-09	8.75E-10	0.00E+00	9.19E-09	3.03E-12	2.46E-11	2.44E-12	0.00E+00	3.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1681	300218.43	4020048.73	2.83E-09	5.77E-09	9.06E-10	0.00E+00	9.51E-09	3.14E-12	2.54E-11	2.52E-12	0.00E+00	3.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1682	300226.97	4020026.7	2.94E-09	5.98E-09	9.39E-10	0.00E+00	9.85E-09	3.25E-12	2.63E-11	2.61E-12	0.00E+00	3.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1683	300235.51	4020004.68	3.03E-09	6.18E-09	9.70E-10	0.00E+00	1.02E-08	3.36E-12	2.72E-11	2.70E-12	0.00E+00	3.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1684	300244.05	4019982.65	3.11E-09	6.34E-09	9.95E-10	0.00E+00	1.04E-08	3.44E-12	2.79E-11	2.77E-12	0.00E+00	3.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1685	300252.59	4019960.63	3.16E-09	6.43E-09	1.01E-09	0.00E+00	1.06E-08	3.50E-12	2.84E-11	2.81E-12	0.00E+00	3.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1686	300261.14	4019938.6	3.16E-09	6.45E-09	1.01E-09	0.00E+00	1.06E-08	3.50E-12	2.84E-11	2.82E-12	0.00E+00	3.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1687	300269.68	4019916.58	3.12E-09	6.37E-09	9.99E-10	0.00E+00	1.05E-08	3.46E-12	2.80E-11	2.78E-12	0.00E+00	3.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1688	300278.22	4019894.56	3.04E-09	6.19E-09	9.72E-10	0.00E+00	1.02E-08	3.37E-12	2.73E-11	2.71E-12	0.00E+00	3.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1689	300286.76	4019872.53	2.91E-09	5.93E-09	9.31E-10	0.00E+00	9.78E-09	3.22E-12	2.61E-11	2.59E-12	0.00E+00	3.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1690	300295.3	4019850.51	2.75E-09	5.60E-09	8.79E-10	0.00E+00	9.22E-09	3.04E-12	2.47E-11	2.45E-12	0.00E+00	3.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1691	300303.84	4019828.48	2.56E-09	5.20E-09	8.17E-10	0.00E+00	8.58E-09	2.83E-12	2.29E-11	2.27E-12	0.00E+00	2.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1692	300312.38	4019806.46	2.34E-09	4.77E-09	7.49E-10	0.00E+00	7.87E-09	2.59E-12	2.10E-11	2.09E-12	0.00E+00	2.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1693	300342.49	4019774.8	1.98E-09	4.04E-09	6.34E-10	0.00E+00	6.65E-09	2.19E-12	1.78E-11	1.76E-12	0.00E+00	2.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1694	300364.06	4019765.17	1.85E-09	3.77E-09	5.92E-10	0.00E+00	6.22E-09	2.05E-12	1.66E-11	1.65E-12	0.00E+00	2.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1695	300385.63	4019755.54	1.75E-09	3.56E-09	5.59E-10	0.00E+00	5.87E-09	1.94E-12	1.57E-11	1.56E-12	0.00E+00	1.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1696	300407.21	4019745.9	1.68E-09	3.42E-09	5.37E-10	0.00E+00	5.64E-09	1.86E-12	1.51E-11	1.49E-12	0.00E+00	1.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1697	300428.78	4019736.27	1.65E-09	3.35E-09	5.26E-10	0.00E+00	5.52E-09	1.82E-12	1.48E-11	1.46E-12	0.00E+00	1.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1698	300450.35	4019726.64	1.65E-09	3.36E-09	5.27E-10	0.00E+00	5.54E-09	1.83E-12	1.48E-11	1.47E-12	0.00E+00	1.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1699	300471.92	4019717.01	1.69E-09	3.44E-09	5.41E-10	0.00E+00	5.68E-09	1.87E-12	1.52E-11	1.50E-12	0.00E+00	1.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1700	300493.49	4019707.38	1.77E-09	3.60E-09	5.66E-10	0.00E+00	5.94E-09	1.96E-12	1.59E-11	1.57E-12	0.00E+00	1.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1701	300515.06	4019697.74	1.89E-09	3.85E-09	6.04E-10	0.00E+00	6.34E-09	2.09E-12	1.70E-11	1.68E-12	0.00E+00	2.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1702	300536.63	4019688.11	2.05E-09	4.19E-09	6.57E-10	0.00E+00	6.90E-09	2.27E-12	1.84E-11	1.83E-12	0.00E+00	2.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1703	300558.2	4019678.48	2.27E-09	4.63E-09	7.26E-10	0.00E+00	7.63E-09	2.52E-12	2.04E-11	2.02E-12	0.00E+00	2.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1704	300579.77	4019668.85	2.54E-09	5.18E-09	8.13E-10	0.00E+00	8.54E-09	2.82E-12	2.28E-11	2.26E-12	0.00E+00	2.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1705	300601.34	4019659.21	2.86E-09	5.84E-09	9.16E-10	0.00E+00	9.62E-09	3.17E-12	2.57E-11	2.55E-12	0.00E+00	3.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1706	300622.91	4019649.58	3.22E-09	6.55E-09	1.03E-09	0.00E+00	1.08E-08	3.56E-12	2.89E-11	2.86E-12	0.00E+00	3.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1707	300644.48	4019639.95	3.57E-09	7.27E-09	1.14E-09	0.00E+00	1.20E-08	3.95E-12	3.21E-11	3.18E-12	0.00E+00	3.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1708	300666.05	4019630.32	3.89E-09	7.93E-09	1.24E-09	0.00E+00	1.31E-08	4.31E-12	3.49E-11	3.46E-12	0.00E+00	4.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1709	300687.62	4019620.69	4.16E-09	8.47E-09	1.33E-09	0.00E+00	1.40E-08	4.60E-12	3.73E-11	3.70E-12	0.00E+00	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1710	300709.19	4019611.05	4.35E-09	8.87E-09	1.39E-09	0.00E+00	1.46E-08	4.82E-12	3.91E-11	3.87E-12	0.00E+00	4.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1711	300730.76	4019601.42	4.48E-09	9.13E-09	1.43E-09	0.00E+00	1.51E-08	4.96E-12	4.02E-11	3.99E-12	0.00E+00	4.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1712	300752.33	4019591.79	4.56E-09	9.29E-09	1.46E-09	0.00E+00	1.53E-08	5.05E-12	4.09E-11	4.06E-12	0.00E+00	5.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1713	300773.9	4019582.16	4.6E-09	9.37E-09	1.47E-09	0.00E+00	1.54E-08	5.09E-12	4.13E-11	4.09E-12	0.00E+00	5.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1714	300795.47	4019572.53	4.62E-09	9.41E-09	1.48E-09	0.00E+00	1.55E-08	5.11E-12	4.14E-11	4.11E-12	0.00E+00	5.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1715	300817.04	4019562.89	4.62E-09	9.42E-09	1.48E-09	0.00E+00	1.55E-08	5.12E-12	4.15E-11	4.11E-12	0.00E+00	5.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1716	300838.61	4019553.26	4.63E-09	9.44E-09	1.48E-09	0.00E+00	1.55E-08	5.13E-12	4.16E-11	4.12E-12	0.00E+00	5.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1717	300860.18	4019543.63	4.65E-09	9.48E-09	1.49E-09	0.00E+00	1.56E-08	5.15E-12	4.18E-11	4.14E-12	0.00E+00	5.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1718	300881.75	4019534	4.7E-09	9.57E-09	1.50E-09	0.00E+00	1.58E-08	5.20E-12	4.22E-11	4.18E-12	0.00E+00	5.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1719	300903.32	4019524.37	4.76E-09	9.70E-09	1.52E-09	0.00E+00	1.60E-08	5.27E-12	4.27E-11	4.24E-12	0.00E+00	5.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1720	300924.89	4019514.73	4.84E-09	9.86E-09	1.55E-09	0.00E+00	1.62E-08	5.36E-12	4.34E-11	4.31E-12	0.00E+00	5.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1721	300073.23	4020423.15	2.81E-09	5.72E-09	8.98E-10	0.00E+00	9.43E-09	3.11E-12	2.52E-11	2.50E-12	0.00E+00	3.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1722	300073.73	4020447.39	2.87E-09	5.85E-09	9.19E-10	0.00E+00	9.65E-09	3.18E-12	2.58E-11	2.56E-12	0.00E+00	3.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1723	300074.22	4020471.62	2.95E-09	6.01E-09	9.44E-10	0.00E+00	9.91E-09	3.27E-12	2.65E-11	2.63E-12	0.00E+00	3.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1724	300074.72	4020495.86	3.05E-09	6.21E-09	9.75E-10	0.00E+00	1.02E-08	3.37E-12	2.74E-11	2.71E-12	0.00E+00	3.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1725	300075.22	4020520.1	3.16E-09	6.45E-09	1.01E-09	0.00E+00	1.06E-08	3.50E-12	2.84E-11	2.82E-12	0.00E+00	3.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1726	300075.71	4020544.33	3.3E-09	6.72E-09	1.05E-09	0.00E+00	1.11E-08	3.65E-12	2.96E-11	2.93E-12	0.00E+00	3.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1727	300076.21	4020568.57	3.44E-09	7.02E-09	1.10E-09	0.00E+00	1.16E-08	3.81E-12	3.09E-11	3.06E-12	0.00E+00	3.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1789	300921.78	4019414.85	4.1E-09	8.35E-09	1.31E-09	0.00E+00	1.38E-08	4.54E-12	3.68E-11	3.65E-12	0.00E+00	4.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1790	299973.25	4020425.2	2.42E-09	4.94E-09	7.75E-10	0.00E+00	8.14E-09	2.68E-12	2.18E-11	2.16E-12	0.00E+00	2.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1791	299973.75	4020449.43	2.47E-09	5.03E-09	7.89E-10	0.00E+00	8.29E-09	2.73E-12	2.22E-11	2.20E-12	0.00E+00	2.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1792	299974.24	4020473.67	2.53E-09	5.15E-09	8.08E-10	0.00E+00	8.48E-09	2.80E-12	2.27E-11	2.25E-12	0.00E+00	2.77E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1793	299974.74	4020497.91	2.6E-09	5.30E-09	8.31E-10	0.00E+00	8.73E-09	2.88E-12	2.33E-11	2.31E-12	0.00E+00	2.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1794	299975.24	4020522.14	2.69E-09	5.48E-09	8.61E-10	0.00E+00	9.04E-09	2.98E-12	2.42E-11	2.40E-12	0.00E+00	2.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1795	299975.73	4020546.38	2.8E-09	5.71E-09	8.95E-10	0.00E+00	9.40E-09	3.10E-12	2.51E-11	2.49E-12	0.00E+00	3.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1796	299976.23	4020570.62	2.92E-09	5.94E-09	9.33E-10	0.00E+00	9.79E-09	3.23E-12	2.62E-11	2.60E-12	0.00E+00	3.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1797	299881.92	4020404.94	2.12E-09	4.31E-09	6.77E-10	0.00E+00	7.10E-09	2.34E-12	1.90E-11	1.88E-12	0.00E+00	2.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1798	299890.57	4020382.64	2.12E-09	4.32E-09	6.78E-10	0.00E+00	7.12E-09	2.35E-12	1.90E-11	1.89E-12	0.00E+00	2.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1799	299899.22	4020360.33	2.12E-09	4.33E-09	6.79E-10	0.00E+00	7.13E-09	2.35E-12	1.91E-11	1.89E-12	0.00E+00	2.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1800	299907.87	4020338.03	2.12E-09	4.32E-09	6.78E-10	0.00E+00	7.12E-09	2.35E-12	1.90E-11	1.89E-12	0.00E+00	2.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1801	299916.52	4020315.72	2.11E-09	4.31E-09	6.76E-10	0.00E+00	7.10E-09	2.34E-12	1.90E-11	1.88E-12	0.00E+00	2.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1802	299925.17	4020293.42	2.09E-09	4.27E-09	6.69E-10	0.00E+00	7.03E-09	2.32E-12	1.88E-11	1.86E-12	0.00E+00	2.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1803	299933.82	4020271.12	2.06E-09	4.20E-09	6.59E-10	0.00E+00	6.92E-09	2.28E-12	1.85E-11	1.84E-12	0.00E+00	2.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1804	299942.47	4020248.81	2.02E-09	4.12E-09	6.47E-10	0.00E+00	6.79E-09	2.24E-12	1.82E-11	1.80E-12	0.00E+00	2.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1805	299951.12	4020226.51	1.98E-09	4.03E-09	6.33E-10	0.00E+00	6.65E-09	2.19E-12	1.78E-11	1.76E-12	0.00E+00	2.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1806	299959.77	4020204.2	1.94E-09	3.95E-09	6.20E-10	0.00E+00	6.51E-09	2.15E-12	1.74E-11	1.73E-12	0.00E+00	2.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1807	299968.42	4020181.9	1.91E-09	3.88E-09	6.10E-10	0.00E+00	6.40E-09	2.11E-12	1.71E-11	1.70E-12	0.00E+00	2.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1808	299977.07	4020159.59	1.88E-09	3.83E-09	6.02E-10	0.00E+00	6.32E-09	2.08E-12	1.69E-11	1.67E-12	0.00E+00	2.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1809	299985.72	4020137.29	1.86E-09	3.80E-09	5.96E-10	0.00E+00	6.25E-09	2.06E-12	1.67E-11	1.66E-12	0.00E+00	2.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1810	299994.37	4020114.98	1.85E-09	3.77E-09	5.92E-10	0.00E+00	6.21E-09	2.05E-12	1.66E-11	1.65E-12	0.00E+00	2.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1811	300003.02	4020092.68	1.84E-09	3.75E-09	5.89E-10	0.00E+00	6.19E-09	2.04E-12	1.65E-11	1.64E-12	0.00E+00	2.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1812	300011.67	4020070.38	1.84E-09	3.75E-09	5.89E-10	0.00E+00	6.19E-09	2.04E-12	1.65E-11	1.64E-12	0.00E+00	2.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1813	300020.32	4020048.07	1.85E-09	3.77E-09	5.92E-10	0.00E+00	6.22E-09	2.05E-12	1.66E-11	1.65E-12	0.00E+00	2.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1814	300028.97	4020025.77	1.88E-09	3.83E-09	6.01E-10	0.00E+00	6.31E-09	2.08E-12	1.69E-11	1.67E-12	0.00E+00	2.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1815	300037.62	4020003.46	1.93E-09	3.93E-09	6.16E-10	0.00E+00	6.47E-09	2.13E-12	1.73E-11	1.71E-12	0.00E+00	2.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1816	300046.26	4019981.16	1.99E-09	4.06E-09	6.37E-10	0.00E+00	6.68E-09	2.20E-12	1.79E-11	1.77E-12	0.00E+00	2.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1817	300054.91	4019958.85	2.07E-09	4.22E-09	6.62E-10	0.00E+00	6.95E-09	2.29E-12	1.86E-11	1.84E-12	0.00E+00	2.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1818	300063.56	4019936.55	2.16E-09	4.40E-09	6.91E-10	0.00E+00	7.26E-09	2.39E-12	1.94E-11	1.92E-12	0.00E+00	2.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1819	300072.21	4019914.24	2.25E-09	4.59E-09	7.20E-10	0.00E+00	7.56E-09	2.49E-12	2.02E-11	2.00E-12	0.00E+00	2.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1820	300080.86	4019891.94	2.33E-09	4.75E-09	7.46E-10	0.00E+00	7.83E-09	2.58E-12	2.09E-11	2.08E-12	0.00E+00	2.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1821	300089.51	4019869.64	2.4E-09	4.88E-09	7.66E-10	0.00E+00	8.04E-09	2.65E-12	2.15E-11	2.13E-12	0.00E+00	2.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1822	300098.16	4019847.33	2.43E-09	4.96E-09	7.78E-10	0.00E+00	8.17E-09	2.69E-12	2.18E-11	2.17E-12	0.00E+00	2.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1823	300106.81	4019825.03	2.44E-09	4.98E-09	7.81E-10	0.00E+00	8.20E-09	2.70E-12	2.19E-11	2.17E-12	0.00E+00	2.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1824	300115.46	4019802.72	2.42E-09	4.93E-09	7.74E-10	0.00E+00	8.12E-09	2.68E-12	2.17E-11	2.15E-12	0.00E+00	2.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1825	300124.11	4019780.42	2.37E-09	4.82E-09	7.57E-10	0.00E+00	7.95E-09	2.62E-12	2.12E-11	2.11E-12	0.00E+00	2.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1826	300132.76	4019758.11	2.29E-09	4.66E-09	7.31E-10	0.00E+00	7.68E-09	2.53E-12	2.05E-11	2.04E-12	0.00E+00	2.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1827	300141.41	4019735.81	2.18E-09	4.44E-09	6.96E-10	0.00E+00	7.31E-09	2.41E-12	1.96E-11	1.94E-12	0.00E+00	2.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1828	300150.06	4019713.5	2.05E-09	4.17E-09	6.55E-10	0.00E+00	6.87E-09	2.27E-12	1.84E-11	1.82E-12	0.00E+00	2.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1829	300158.71	4019691.2	1.9E-09	3.87E-09	6.07E-10	0.00E+00	6.37E-09	2.10E-12	1.70E-11	1.69E-12	0.00E+00	2.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1830	300167.36	4019668.9	1.74E-09	3.54E-09	5.56E-10	0.00E+00	5.84E-09	1.93E-12	1.56E-11	1.55E-12	0.00E+00	1.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1831	300197.85	4019636.84	1.46E-09	2.98E-09	4.68E-10	0.00E+00	4.91E-09	1.62E-12	1.31E-11	1.30E-12	0.00E+00	1.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1832	300219.7	4019627.08	1.36E-09	2.76E-09	4.34E-10	0.00E+00	4.56E-09	1.50E-12	1.22E-11	1.21E-12	0.00E+00	1.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1833	300241.54	4019617.33	1.27E-09	2.59E-09	4.06E-10	0.00E+00	4.26E-09	1.40E-12	1.14E-11	1.13E-12	0.00E+00	1.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1834	300263.39	4019607.57	1.2E-09	2.45E-09	3.84E-10	0.00E+00	4.03E-09	1.33E-12	1.08E-11	1.07E-12	0.00E+00	1.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1835	300285.23	4019597.82	1.16E-09	2.36E-09	3.70E-10	0.00E+00	3.89E-09	1.28E-12	1.04E-11	1.03E-12	0.00E+00	1.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1836	300307.07	4019588.07	1.14E-09	2.32E-09	3.64E-10	0.00E+00	3.82E-09	1.26E-12	1.02E-11	1.01E-12	0.00E+00	1.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1837	300328.92	4019578.31	1.14E-09	2.32E-09	3.64E-10	0.00E+00	3.82E-09	1.26E-12	1.02E-11	1.01E-12	0.00E+00	1.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1838	300350.76	4019568.56	1.16E-09	2.36E-09	3.70E-10	0.00E+00	3.89E-09	1.28E-12	1.04E-11	1.03E-12	0.00E+00	1.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1839	300372.61	4019558.8	1.2E-09	2.44E-09	3.83E-10	0.00E+00	4.02E-09	1.33E-12	1.08E-11	1.07E-12	0.00E+00	1.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1840	300394.45	4019549.05	1.25E-09	2.55E-09	4.01E-10	0.00E+00	4.21E-09	1.39E-12	1.13E-11	1.12E-12	0.00E+00	1.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1841	300416.29	4019539.29	1.33E-09	2.72E-09	4.26E-10	0.00E+00	4.47E-09	1.48E-12	1.20E-11	1.19E-12	0.00E+00	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1842	300438.14	4019529.54	1.43E-09	2.92E-09	4.59E-10	0.00E+00	4.81E-09	1.59E-12	1.29E-11	1.28E-12	0.00E+00	1.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1843	300459.98	4019519.79	1.57E-09	3.19E-09	5.01E-10	0.00E+00	5.26E-09	1.73E-12	1.41E-11	1.39E-12	0.00E+00	1.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1844	300481.83	4019510.03	1.74E-09	3.54E-09	5.55E-10	0.00E+00	5.83E-09	1.92E-12	1.56E-11	1.54E-12	0.00E+00	1.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1845	300503.67	4019500.28	1.94E-09	3.95E-09	6.20E-10	0.00E+00	6.51E-09	2.15E-12	1.74E-11	1.73E-12	0.00E+00	2.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1846	300525.51	4019490.52	2.18E-09	4.43E-09	6.96E-10	0.00E+00	7.31E-09	2.41E-12	1.95E-11	1.94E-12	0.00E+00	2.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1847	300547.36	4019480.77	2.43E-09	4.96E-09	7.78E-10	0.00E+00	8.17E-09	2.69E-12	2.18E-11	2.17E-12	0.00E+00	2.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1848	300569.2	4019471.01	2.69E-09	5.48E-09	8.59E-10	0.00E+00	9.02E-09	2.98E-12	2.41E-11	2.39E-12	0.00E+00	2.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1849	300591.05	4019461.26	2.92E-09	5.95E-09	9.34E-10	0.00E+00	9.80E-09	3.23E-12	2.62E-11	2.60E-12	0.00E+00	3.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1850	300612.89	4019451.5	3.11E-09	6.34E-09	9.94E-10	0.00E+00	1.04E-08	3.44E-12	2.79E-11	2.77E-12	0.00E+00	3.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1851	300634.73	4019441.75	3.25E-09	6.62E-09	1.04E-09	0.00E+00	1.09E-08	3.60E-12	2.92E-11	2.89E-12	0.00E+00	3.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1852	300656.58	4019432	3.33E-09	6.79E-09	1.07E-09	0.00E+00	1.12E-08	3.69E-12	2.99E-11	2.97E-12	0.00E+00	3.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1853	300678.42	4019422.24	3.37E-09	6.87E-09	1.08E-09	0.00E+00	1.13E-08	3.73E-12	3.03E-11	3.00E-12	0.00E+00	3.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1854	300700.27	4019412.49	3.38E-09	6.88E-09	1.08E-09	0.00E+00	1.13E-08	3.74E-12	3.03E-11	3.00E-12	0.00E+00	3.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1855	300722.11	4019402.73	3.36E-09	6.85E-09	1.07E-09	0.00E+00	1.13E-08	3.72E-12	3.02E-11	2.99E-12	0.00E+00	3.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1917	300301.09	4019489.46	1E-09	2.04E-09	3.20E-10	0.00E+00	3.36E-09	1.11E-12	8.98E-12	8.91E-13	0.00E+00	1.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1918	300323.04	4019479.66	1.04E-09	2.11E-09	3.31E-10	0.00E+00	3.48E-09	1.15E-12	9.30E-12	9.23E-13	0.00E+00	1.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1919	300344.99	4019469.86	1.08E-09	2.21E-09	3.46E-10	0.00E+00	3.64E-09	1.20E-12	9.72E-12	9.64E-13	0.00E+00	1.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1920	300366.93	4019460.06	1.15E-09	2.34E-09	3.67E-10	0.00E+00	3.85E-09	1.27E-12	1.03E-11	1.02E-12	0.00E+00	1.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1921	300388.88	4019450.26	1.23E-09	2.51E-09	3.93E-10	0.00E+00	4.13E-09	1.36E-12	1.10E-11	1.09E-12	0.00E+00	1.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1922	300410.83	4019440.46	1.33E-09	2.72E-09	4.27E-10	0.00E+00	4.48E-09	1.48E-12	1.20E-11	1.19E-12	0.00E+00	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1923	300432.78	4019430.66	1.47E-09	2.99E-09	4.69E-10	0.00E+00	4.93E-09	1.62E-12	1.32E-11	1.31E-12	0.00E+00	1.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1924	300454.73	4019420.86	1.63E-09	3.33E-09	5.22E-10	0.00E+00	5.48E-09	1.81E-12	1.47E-11	1.45E-12	0.00E+00	1.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1925	300476.68	4019411.05	1.83E-09	3.72E-09	5.84E-10	0.00E+00	6.14E-09	2.02E-12	1.64E-11	1.63E-12	0.00E+00	2.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1926	300498.63	4019401.25	2.05E-09	4.17E-09	6.54E-10	0.00E+00	6.87E-09	2.26E-12	1.84E-11	1.82E-12	0.00E+00	2.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1927	300520.57	4019391.45	2.27E-09	4.62E-09	7.26E-10	0.00E+00	7.62E-09	2.51E-12	2.04E-11	2.02E-12	0.00E+00	2.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1928	300542.52	4019381.65	2.48E-09	5.06E-09	7.94E-10	0.00E+00	8.34E-09	2.75E-12	2.23E-11	2.21E-12	0.00E+00	2.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1929	300564.47	4019371.85	2.67E-09	5.44E-09	8.53E-10	0.00E+00	8.96E-09	2.96E-12	2.40E-11	2.38E-12	0.00E+00	2.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1930	300586.42	4019362.05	2.81E-09	5.73E-09	8.99E-10	0.00E+00	9.44E-09	3.11E-12	2.52E-11	2.50E-12	0.00E+00	3.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1931	300608.37	4019352.25	2.91E-09	5.92E-09	9.30E-10	0.00E+00	9.76E-09	3.22E-12	2.61E-11	2.59E-12	0.00E+00	3.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1932	300630.32	4019342.45	2.96E-09	6.02E-09	9.45E-10	0.00E+00	9.92E-09	3.27E-12	2.65E-11	2.63E-12	0.00E+00	3.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1933	300652.26	4019332.65	2.97E-09	6.05E-09	9.49E-10	0.00E+00	9.97E-09	3.29E-12	2.67E-11	2.64E-12	0.00E+00	3.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1934	300674.21	4019322.85	2.95E-09	6.02E-09	9.45E-10	0.00E+00	9.92E-09	3.27E-12	2.65E-11	2.63E-12	0.00E+00	3.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1935	300696.16	4019313.04	2.93E-09	5.96E-09	9.36E-10	0.00E+00	9.82E-09	3.24E-12	2.63E-11	2.60E-12	0.00E+00	3.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1936	300718.11	4019303.24	2.9E-09	5.90E-09	9.26E-10	0.00E+00	9.72E-09	3.21E-12	2.60E-11	2.58E-12	0.00E+00	3.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1937	300740.06	4019293.44	2.87E-09	5.85E-09	9.18E-10	0.00E+00	9.64E-09	3.18E-12	2.58E-11	2.56E-12	0.00E+00	3.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1938	300762.01	4019283.64	2.86E-09	5.83E-09	9.15E-10	0.00E+00	9.60E-09	3.17E-12	2.57E-11	2.55E-12	0.00E+00	3.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1939	300783.96	4019273.84	2.86E-09	5.84E-09	9.16E-10	0.00E+00	9.62E-09	3.17E-12	2.57E-11	2.55E-12	0.00E+00	3.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1940	300805.9	4019264.04	2.88E-09	5.87E-09	9.21E-10	0.00E+00	9.67E-09	3.19E-12	2.59E-11	2.56E-12	0.00E+00	3.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1941	300827.85	4019254.24	2.91E-09	5.93E-09	9.31E-10	0.00E+00	9.77E-09	3.22E-12	2.61E-11	2.59E-12	0.00E+00	3.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1942	300849.8	4019244.44	2.95E-09	6.01E-09	9.43E-10	0.00E+00	9.90E-09	3.26E-12	2.65E-11	2.62E-12	0.00E+00	3.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1943	300871.75	4019234.64	2.99E-09	6.09E-09	9.56E-10	0.00E+00	1.00E-08	3.31E-12	2.68E-11	2.66E-12	0.00E+00	3.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1944	300893.7	4019224.84	3.03E-09	6.18E-09	9.70E-10	0.00E+00	1.02E-08	3.36E-12	2.72E-11	2.70E-12	0.00E+00	3.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1945	300915.65	4019215.03	3.08E-09	6.27E-09	9.85E-10	0.00E+00	1.03E-08	3.41E-12	2.76E-11	2.74E-12	0.00E+00	3.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1946	299773.29	4020429.3	1.87E-09	3.81E-09	5.98E-10	0.00E+00	6.27E-09	2.07E-12	1.68E-11	1.66E-12	0.00E+00	2.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1947	299773.79	4020453.53	1.9E-09	3.87E-09	6.07E-10	0.00E+00	6.37E-09	2.10E-12	1.70E-11	1.69E-12	0.00E+00	2.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1948	299774.29	4020477.77	1.94E-09	3.95E-09	6.20E-10	0.00E+00	6.51E-09	2.15E-12	1.74E-11	1.73E-12	0.00E+00	2.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1949	299774.78	4020502.01	1.99E-09	4.05E-09	6.35E-10	0.00E+00	6.67E-09	2.20E-12	1.78E-11	1.77E-12	0.00E+00	2.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1950	299775.28	4020526.24	2.05E-09	4.17E-09	6.55E-10	0.00E+00	6.87E-09	2.27E-12	1.84E-11	1.82E-12	0.00E+00	2.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1951	299775.78	4020550.48	2.12E-09	4.31E-09	6.77E-10	0.00E+00	7.10E-09	2.34E-12	1.90E-11	1.88E-12	0.00E+00	2.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1952	299776.27	4020574.72	2.19E-09	4.47E-09	7.01E-10	0.00E+00	7.36E-09	2.43E-12	1.97E-11	1.95E-12	0.00E+00	2.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1953	299682.04	4020408.84	1.67E-09	3.40E-09	5.34E-10	0.00E+00	5.61E-09	1.85E-12	1.50E-11	1.49E-12	0.00E+00	1.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1954	299690.77	4020386.34	1.67E-09	3.41E-09	5.35E-10	0.00E+00	5.62E-09	1.85E-12	1.50E-11	1.49E-12	0.00E+00	1.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1955	299699.49	4020363.84	1.68E-09	3.43E-09	5.38E-10	0.00E+00	5.64E-09	1.86E-12	1.51E-11	1.50E-12	0.00E+00	1.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1956	299708.22	4020341.34	1.69E-09	3.44E-09	5.41E-10	0.00E+00	5.68E-09	1.87E-12	1.52E-11	1.50E-12	0.00E+00	1.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1957	299716.94	4020318.83	1.7E-09	3.46E-09	5.43E-10	0.00E+00	5.70E-09	1.88E-12	1.52E-11	1.51E-12	0.00E+00	1.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1958	299725.67	4020296.33	1.7E-09	3.47E-09	5.45E-10	0.00E+00	5.72E-09	1.89E-12	1.53E-11	1.52E-12	0.00E+00	1.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1959	299734.4	4020273.83	1.7E-09	3.46E-09	5.44E-10	0.00E+00	5.71E-09	1.88E-12	1.53E-11	1.51E-12	0.00E+00	1.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1960	299743.12	4020251.33	1.69E-09	3.44E-09	5.39E-10	0.00E+00	5.66E-09	1.87E-12	1.51E-11	1.50E-12	0.00E+00	1.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1961	299751.85	4020228.82	1.66E-09	3.39E-09	5.32E-10	0.00E+00	5.58E-09	1.84E-12	1.49E-11	1.48E-12	0.00E+00	1.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1962	299760.58	4020206.32	1.63E-09	3.32E-09	5.21E-10	0.00E+00	5.47E-09	1.81E-12	1.46E-11	1.45E-12	0.00E+00	1.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1963	299769.3	4020183.82	1.59E-09	3.25E-09	5.09E-10	0.00E+00	5.35E-09	1.76E-12	1.43E-11	1.42E-12	0.00E+00	1.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1964	299778.03	4020161.32	1.56E-09	3.17E-09	4.98E-10	0.00E+00	5.23E-09	1.72E-12	1.40E-11	1.39E-12	0.00E+00	1.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1965	299786.76	4020138.82	1.52E-09	3.10E-09	4.87E-10	0.00E+00	5.12E-09	1.69E-12	1.37E-11	1.36E-12	0.00E+00	1.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1966	299795.48	4020116.31	1.49E-09	3.04E-09	4.78E-10	0.00E+00	5.02E-09	1.65E-12	1.34E-11	1.33E-12	0.00E+00	1.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1967	299804.21	4020093.81	1.47E-09	2.99E-09	4.70E-10	0.00E+00	4.93E-09	1.63E-12	1.32E-11	1.31E-12	0.00E+00	1.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1968	299812.94	4020071.31	1.45E-09	2.95E-09	4.63E-10	0.00E+00	4.86E-09	1.60E-12	1.30E-11	1.29E-12	0.00E+00	1.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1969	299821.66	4020048.81	1.43E-09	2.91E-09	4.57E-10	0.00E+00	4.80E-09	1.58E-12	1.28E-11	1.27E-12	0.00E+00	1.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1970	299830.39	4020026.3	1.41E-09	2.88E-09	4.51E-10	0.00E+00	4.74E-09	1.56E-12	1.27E-11	1.26E-12	0.00E+00	1.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1971	299839.11	4020003.8	1.4E-09	2.85E-09	4.48E-10	0.00E+00	4.70E-09	1.55E-12	1.26E-11	1.25E-12	0.00E+00	1.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1972	299847.84	4019981.3	1.4E-09	2.85E-09	4.47E-10	0.00E+00	4.69E-09	1.55E-12	1.26E-11	1.24E-12	0.00E+00	1.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1973	299856.57	4019958.8	1.41E-09	2.87E-09	4.51E-10	0.00E+00	4.73E-09	1.56E-12	1.27E-11	1.25E-12	0.00E+00	1.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1974	299865.29	4019936.29	1.43E-09	2.92E-09	4.59E-10	0.00E+00	4.81E-09	1.59E-12	1.29E-11	1.28E-12	0.00E+00	1.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1975	299874.02	4019913.79	1.47E-09	3.00E-09	4.71E-10	0.00E+00	4.95E-09	1.63E-12	1.32E-11	1.31E-12	0.00E+00	1.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1976	299882.75	4019891.29	1.52E-09	3.10E-09	4.87E-10	0.00E+00	5.12E-09	1.69E-12	1.37E-11	1.36E-12	0.00E+00	1.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1977	299891.47	4019868.79	1.59E-09	3.23E-09	5.08E-10	0.00E+00	5.33E-09	1.76E-12	1.43E-11	1.41E-12	0.00E+00	1.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1978	299900.2	4019846.29	1.66E-09	3.38E-09	5.30E-10	0.00E+00	5.57E-09	1.84E-12	1.49E-11	1.48E-12	0.00E+00	1.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1979	299908.93	4019823.78	1.73E-09	3.53E-09	5.54E-10	0.00E+00	5.81E-09	1.92E-12	1.55E-11	1.54E-12	0.00E+00	1.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1980	299917.65	4019801.28	1.8E-09	3.67E-09	5.77E-10	0.00E+00	6.05E-09	2.00E-12	1.62E-11	1.60E-12	0.00E+00	1.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1981	299926.38	4019778.78	1.87E-09	3.80E-09	5.97E-10	0.00E+00	6.27E-09	2.07E-12	1.68E-11	1.66E-12	0.00E+00	2.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1982	299935.11	4019756.28	1.92E-09	3.91E-09	6.13E-10	0.00E+00	6.44E-09	2.12E-12	1.72E-11	1.71E-12	0.00E+00	2.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1983	299943.83	4019733.77	1.95E-09	3.97E-09	6.23E-10	0.00E+00	6.54E-09	2.16E-12	1.75E-11	1.73E-12	0.00E+00	2.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2045	299625.88	4020297.91	1.54E-09	3.14E-09	4.92E-10	0.00E+00	5.17E-09	1.70E-12	1.38E-11	1.37E-12	0.00E+00	1.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2046	299634.63	4020275.33	1.54E-09	3.15E-09	4.94E-10	0.00E+00	5.19E-09	1.71E-12	1.39E-11	1.37E-12	0.00E+00	1.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2047	299643.39	4020252.75	1.54E-09	3.15E-09	4.94E-10	0.00E+00	5.19E-09	1.71E-12	1.39E-11	1.37E-12	0.00E+00	1.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2048	299652.15	4020230.16	1.53E-09	3.12E-09	4.90E-10	0.00E+00	5.15E-09	1.70E-12	1.38E-11	1.36E-12	0.00E+00	1.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2049	299660.9	4020207.58	1.51E-09	3.08E-09	4.84E-10	0.00E+00	5.08E-09	1.67E-12	1.36E-11	1.35E-12	0.00E+00	1.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2050	299669.66	4020185	1.48E-09	3.02E-09	4.75E-10	0.00E+00	4.98E-09	1.64E-12	1.33E-11	1.32E-12	0.00E+00	1.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2051	299678.42	4020162.42	1.45E-09	2.96E-09	4.64E-10	0.00E+00	4.87E-09	1.61E-12	1.30E-11	1.29E-12	0.00E+00	1.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2052	299687.17	4020139.84	1.42E-09	2.89E-09	4.54E-10	0.00E+00	4.76E-09	1.57E-12	1.27E-11	1.26E-12	0.00E+00	1.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2053	299695.93	4020117.26	1.39E-09	2.83E-09	4.44E-10	0.00E+00	4.66E-09	1.54E-12	1.25E-11	1.23E-12	0.00E+00	1.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2054	299704.69	4020094.68	1.36E-09	2.77E-09	4.35E-10	0.00E+00	4.56E-09	1.50E-12	1.22E-11	1.21E-12	0.00E+00	1.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2055	299713.44	4020072.1	1.33E-09	2.72E-09	4.27E-10	0.00E+00	4.48E-09	1.48E-12	1.20E-11	1.19E-12	0.00E+00	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2056	299722.2	4020049.52	1.31E-09	2.67E-09	4.20E-10	0.00E+00	4.40E-09	1.45E-12	1.18E-11	1.17E-12	0.00E+00	1.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2057	299730.96	4020026.94	1.29E-09	2.63E-09	4.12E-10	0.00E+00	4.33E-09	1.43E-12	1.16E-11	1.15E-12	0.00E+00	1.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2058	299739.72	4020004.36	1.27E-09	2.59E-09	4.06E-10	0.00E+00	4.26E-09	1.40E-12	1.14E-11	1.13E-12	0.00E+00	1.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2059	299748.47	4019981.77	1.25E-09	2.55E-09	4.00E-10	0.00E+00	4.20E-09	1.38E-12	1.12E-11	1.11E-12	0.00E+00	1.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2060	299757.23	4019959.19	1.24E-09	2.53E-09	3.97E-10	0.00E+00	4.17E-09	1.37E-12	1.11E-11	1.10E-12	0.00E+00	1.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2061	299765.99	4019936.61	1.24E-09	2.52E-09	3.96E-10	0.00E+00	4.16E-09	1.37E-12	1.11E-11	1.10E-12	0.00E+00	1.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2062	299774.74	4019914.03	1.25E-09	2.55E-09	4.00E-10	0.00E+00	4.20E-09	1.38E-12	1.12E-11	1.11E-12	0.00E+00	1.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2063	299783.5	4019891.45	1.27E-09	2.59E-09	4.07E-10	0.00E+00	4.27E-09	1.41E-12	1.14E-11	1.13E-12	0.00E+00	1.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2064	299792.26	4019868.87	1.31E-09	2.67E-09	4.18E-10	0.00E+00	4.39E-09	1.45E-12	1.17E-11	1.16E-12	0.00E+00	1.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2065	299801.01	4019846.29	1.36E-09	2.76E-09	4.33E-10	0.00E+00	4.55E-09	1.50E-12	1.22E-11	1.21E-12	0.00E+00	1.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2066	299809.77	4019823.71	1.41E-09	2.88E-09	4.51E-10	0.00E+00	4.74E-09	1.56E-12	1.27E-11	1.26E-12	0.00E+00	1.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2067	299818.53	4019801.13	1.47E-09	3.00E-09	4.71E-10	0.00E+00	4.95E-09	1.63E-12	1.32E-11	1.31E-12	0.00E+00	1.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2068	299827.28	4019778.55	1.54E-09	3.13E-09	4.91E-10	0.00E+00	5.16E-09	1.70E-12	1.38E-11	1.37E-12	0.00E+00	1.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2069	299836.04	4019755.97	1.6E-09	3.27E-09	5.12E-10	0.00E+00	5.38E-09	1.77E-12	1.44E-11	1.43E-12	0.00E+00	1.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2070	299844.8	4019733.38	1.66E-09	3.39E-09	5.32E-10	0.00E+00	5.59E-09	1.84E-12	1.49E-11	1.48E-12	0.00E+00	1.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2071	299853.56	4019710.8	1.72E-09	3.49E-09	5.48E-10	0.00E+00	5.76E-09	1.90E-12	1.54E-11	1.53E-12	0.00E+00	1.88E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2072	299862.31	4019688.22	1.75E-09	3.57E-09	5.60E-10	0.00E+00	5.88E-09	1.94E-12	1.57E-11	1.56E-12	0.00E+00	1.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2073	299871.07	4019665.64	1.77E-09	3.61E-09	5.66E-10	0.00E+00	5.95E-09	1.96E-12	1.59E-11	1.58E-12	0.00E+00	1.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2074	299879.83	4019643.06	1.78E-09	3.62E-09	5.68E-10	0.00E+00	5.96E-09	1.97E-12	1.59E-11	1.58E-12	0.00E+00	1.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2075	299888.58	4019620.48	1.76E-09	3.59E-09	5.63E-10	0.00E+00	5.91E-09	1.95E-12	1.58E-11	1.57E-12	0.00E+00	1.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2076	299897.34	4019597.9	1.73E-09	3.52E-09	5.53E-10	0.00E+00	5.80E-09	1.91E-12	1.55E-11	1.54E-12	0.00E+00	1.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2077	299906.1	4019575.32	1.68E-09	3.42E-09	5.37E-10	0.00E+00	5.64E-09	1.86E-12	1.51E-11	1.49E-12	0.00E+00	1.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2078	299914.85	4019552.74	1.61E-09	3.29E-09	5.16E-10	0.00E+00	5.42E-09	1.79E-12	1.45E-11	1.44E-12	0.00E+00	1.77E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2079	299923.61	4019530.16	1.53E-09	3.12E-09	4.90E-10	0.00E+00	5.15E-09	1.70E-12	1.38E-11	1.36E-12	0.00E+00	1.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2080	299932.37	4019507.57	1.44E-09	2.93E-09	4.60E-10	0.00E+00	4.83E-09	1.59E-12	1.29E-11	1.28E-12	0.00E+00	1.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2081	299941.12	4019484.99	1.33E-09	2.72E-09	4.27E-10	0.00E+00	4.48E-09	1.48E-12	1.20E-11	1.19E-12	0.00E+00	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2082	299949.88	4019462.41	1.22E-09	2.49E-09	3.91E-10	0.00E+00	4.11E-09	1.36E-12	1.10E-11	1.09E-12	0.00E+00	1.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2083	299980.75	4019429.96	1.03E-09	2.10E-09	3.29E-10	0.00E+00	3.45E-09	1.14E-12	9.24E-12	9.16E-13	0.00E+00	1.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2084	300002.87	4019420.08	9.5E-10	1.94E-09	3.04E-10	0.00E+00	3.19E-09	1.05E-12	8.53E-12	8.46E-13	0.00E+00	1.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2085	300024.98	4019410.21	8.81E-10	1.79E-09	2.82E-10	0.00E+00	2.96E-09	9.75E-13	7.91E-12	7.84E-13	0.00E+00	9.67E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2086	300047.1	4019400.33	8.27E-10	1.68E-09	2.64E-10	0.00E+00	2.78E-09	9.15E-13	7.42E-12	7.36E-13	0.00E+00	9.07E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2087	300069.21	4019390.46	7.85E-10	1.60E-09	2.51E-10	0.00E+00	2.64E-09	8.69E-13	7.05E-12	6.99E-13	0.00E+00	8.62E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2088	300091.33	4019380.58	7.57E-10	1.54E-09	2.42E-10	0.00E+00	2.54E-09	8.38E-13	6.80E-12	6.74E-13	0.00E+00	8.31E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2089	300113.44	4019370.71	7.42E-10	1.51E-09	2.37E-10	0.00E+00	2.49E-09	8.22E-13	6.66E-12	6.61E-13	0.00E+00	8.15E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2090	300135.56	4019360.83	7.39E-10	1.50E-09	2.36E-10	0.00E+00	2.48E-09	8.18E-13	6.63E-12	6.57E-13	0.00E+00	8.10E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2091	300157.67	4019350.95	7.46E-10	1.52E-09	2.39E-10	0.00E+00	2.50E-09	8.26E-13	6.70E-12	6.64E-13	0.00E+00	8.19E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2092	300179.79	4019341.08	7.59E-10	1.55E-09	2.43E-10	0.00E+00	2.55E-09	8.40E-13	6.81E-12	6.76E-13	0.00E+00	8.33E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2093	300201.9	4019331.2	7.8E-10	1.59E-09	2.49E-10	0.00E+00	2.62E-09	8.63E-13	7.00E-12	6.94E-13	0.00E+00	8.56E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2094	300224.02	4019321.33	8.06E-10	1.64E-09	2.58E-10	0.00E+00	2.71E-09	8.92E-13	7.23E-12	7.17E-13	0.00E+00	8.84E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2095	300246.13	4019311.45	8.42E-10	1.71E-09	2.69E-10	0.00E+00	2.83E-09	9.32E-13	7.55E-12	7.49E-13	0.00E+00	9.24E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2096	300268.25	4019301.58	8.85E-10	1.80E-09	2.83E-10	0.00E+00	2.97E-09	9.79E-13	7.94E-12	7.87E-13	0.00E+00	9.71E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2097	300290.36	4019291.7	9.37E-10	1.91E-09	3.00E-10	0.00E+00	3.15E-09	1.04E-12	8.41E-12	8.34E-13	0.00E+00	1.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2098	300312.47	4019281.83	1.01E-09	2.05E-09	3.22E-10	0.00E+00	3.38E-09	1.11E-12	9.04E-12	8.96E-13	0.00E+00	1.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2099	300334.59	4019271.95	1.09E-09	2.23E-09	3.50E-10	0.00E+00	3.67E-09	1.21E-12	9.83E-12	9.74E-13	0.00E+00	1.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2100	300356.7	4019262.08	1.2E-09	2.45E-09	3.85E-10	0.00E+00	4.04E-09	1.33E-12	1.08E-11	1.07E-12	0.00E+00	1.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2101	300378.82	4019252.2	1.34E-09	2.72E-09	4.27E-10	0.00E+00	4.49E-09	1.48E-12	1.20E-11	1.19E-12	0.00E+00	1.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2102	300400.93	4019242.33	1.49E-09	3.04E-09	4.76E-10	0.00E+00	5.00E-09	1.65E-12	1.34E-11	1.33E-12	0.00E+00	1.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2103	300423.05	4019232.45	1.66E-09	3.38E-09	5.31E-10	0.00E+00	5.58E-09	1.84E-12	1.49E-11	1.48E-12	0.00E+00	1.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2104	300445.16	4019222.58	1.84E-09	3.74E-09	5.87E-10	0.00E+00	6.16E-09	2.03E-12	1.65E-11	1.63E-12	0.00E+00	2.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2105	300467.28	4019212.7	2E-09	4.08E-09	6.40E-10	0.00E+00	6.72E-09	2.22E-12	1.80E-11	1.78E-12	0.00E+00	2.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2106	300489.39	4019202.83	2.15E-09	4.38E-09	6.87E-10	0.00E+00	7.21E-09	2.38E-12	1.93E-11	1.91E-12	0.00E+00	2.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2107	300511.51	4019192.95	2.26E-09	4.61E-09	7.23E-10	0.00E+00	7.59E-09	2.50E-12	2.03E-11	2.01E-12	0.00E+00	2.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2108	300533.62	4019183.08	2.34E-09	4.76E-09	7.47E-10	0.00E+00	7.84E-09	2.59E-12	2.10E-11	2.08E-12	0.00E+00	2.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2109	300555.74	4019173.2	2.37E-09	4.83E-09	7.58E-10	0.00E+00	7.96E-09	2.63E-12	2.13E-11	2.11E-12	0.00E+00	2.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2110	300577.85	4019163.32	2.38E-09	4.84E-09	7.59E-10	0.00E+00	7.97E-09	2.63E-12	2.13E-11	2.11E-12	0.00E+00	2.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2111	300599.97	4019153.45	2.35E-09	4.80E-09	7.53E-10	0.00E+00	7.90E-09	2.61E-12	2.11E-11	2.10E-12	0.00E+00	2.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2173	300814.5	4020641.87	5.7E-08	1.16E-07	1.82E-08	0.00E+00	1.91E-07	6.31E-11	5.12E-10	5.08E-11	0.00E+00	6.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2174	300799.13	4020606.82	4.82E-08	9.81E-08	1.54E-08	0.00E+00	1.62E-07	5.33E-11	4.32E-10	4.29E-11	0.00E+00	5.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2175	300999.79	4020749.67	2.9E-07	5.91E-07	9.28E-08	0.00E+00	9.74E-07	3.21E-10	2.61E-09	2.58E-10	0.00E+00	3.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2176	301038.88	4020748.85	5.37E-07	1.09E-06	1.72E-07	0.00E+00	1.80E-06	5.95E-10	4.82E-09	4.78E-10	0.00E+00	5.89E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2177	300963.46	4020793.12	1.87E-07	3.80E-07	5.97E-08	0.00E+00	6.26E-07	2.07E-10	1.67E-09	1.66E-10	0.00E+00	2.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2178	300927.79	4020779.22	1.37E-07	2.79E-07	4.37E-08	0.00E+00	4.59E-07	1.51E-10	1.23E-09	1.22E-10	0.00E+00	1.50E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2179	300892.13	4020765.31	1.04E-07	2.12E-07	3.33E-08	0.00E+00	3.49E-07	1.15E-10	9.33E-10	9.25E-11	0.00E+00	1.14E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2180	300856.46	4020751.4	8.08E-08	1.65E-07	2.58E-08	0.00E+00	2.71E-07	8.94E-11	7.25E-10	7.19E-11	0.00E+00	8.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2181	300820.79	4020737.5	6.36E-08	1.30E-07	2.03E-08	0.00E+00	2.13E-07	7.04E-11	5.71E-10	5.66E-11	0.00E+00	6.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2182	300795.27	4020713.02	5.31E-08	1.08E-07	1.70E-08	0.00E+00	1.78E-07	5.88E-11	4.77E-10	4.73E-11	0.00E+00	5.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2183	300779.89	4020677.96	4.64E-08	9.46E-08	1.48E-08	0.00E+00	1.56E-07	5.14E-11	4.17E-10	4.13E-11	0.00E+00	5.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2184	300764.51	4020642.9	3.99E-08	8.14E-08	1.28E-08	0.00E+00	1.34E-07	4.42E-11	3.59E-10	3.55E-11	0.00E+00	4.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2185	300749.14	4020607.84	3.38E-08	6.88E-08	1.08E-08	0.00E+00	1.13E-07	3.74E-11	3.03E-10	3.00E-11	0.00E+00	3.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2186	301000.84	4020799.66	2.8E-07	5.70E-07	8.94E-08	0.00E+00	9.39E-07	3.10E-10	2.51E-09	2.49E-10	0.00E+00	3.07E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2187	301039.93	4020798.84	5.13E-07	1.04E-06	1.64E-07	0.00E+00	1.72E-06	5.68E-10	4.60E-09	4.56E-10	0.00E+00	5.63E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2188	300964.52	4020843.11	1.78E-07	3.63E-07	5.69E-08	0.00E+00	5.98E-07	1.97E-10	1.60E-09	1.58E-10	0.00E+00	1.95E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2189	300928.85	4020829.2	1.33E-07	2.71E-07	4.25E-08	0.00E+00	4.47E-07	1.47E-10	1.19E-09	1.18E-10	0.00E+00	1.46E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2190	300893.18	4020815.3	1.03E-07	2.09E-07	3.28E-08	0.00E+00	3.44E-07	1.14E-10	9.20E-10	9.13E-11	0.00E+00	1.13E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2191	300857.51	4020801.39	8.05E-08	1.64E-07	2.58E-08	0.00E+00	2.70E-07	8.92E-11	7.23E-10	7.17E-11	0.00E+00	8.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2192	300821.85	4020787.49	6.43E-08	1.31E-07	2.06E-08	0.00E+00	2.16E-07	7.12E-11	5.77E-10	5.72E-11	0.00E+00	7.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2193	300786.18	4020773.58	5.18E-08	1.05E-07	1.66E-08	0.00E+00	1.74E-07	5.73E-11	4.65E-10	4.61E-11	0.00E+00	5.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2194	300760.66	4020749.1	4.4E-08	8.96E-08	1.41E-08	0.00E+00	1.48E-07	4.87E-11	3.95E-10	3.91E-11	0.00E+00	4.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2195	300745.28	4020714.04	3.9E-08	7.94E-08	1.25E-08	0.00E+00	1.31E-07	4.32E-11	3.50E-10	3.47E-11	0.00E+00	4.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2196	300729.9	4020678.98	3.41E-08	6.95E-08	1.09E-08	0.00E+00	1.15E-07	3.78E-11	3.06E-10	3.04E-11	0.00E+00	3.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2197	300714.53	4020643.92	2.94E-08	5.99E-08	9.40E-09	0.00E+00	9.87E-08	3.25E-11	2.64E-10	2.62E-11	0.00E+00	3.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2198	300699.15	4020608.86	2.5E-08	5.09E-08	7.98E-09	0.00E+00	8.38E-08	2.76E-11	2.24E-10	2.22E-11	0.00E+00	2.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2199	301001.9	4020849.65	2.6E-07	5.29E-07	8.31E-08	0.00E+00	8.72E-07	2.88E-10	2.33E-09	2.31E-10	0.00E+00	2.85E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2200	301040.99	4020848.83	4.6E-07	9.37E-07	1.47E-07	0.00E+00	1.54E-06	5.09E-10	4.13E-09	4.09E-10	0.00E+00	5.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2201	300965.57	4020893.1	1.6E-07	3.27E-07	5.13E-08	0.00E+00	5.38E-07	1.77E-10	1.44E-09	1.43E-10	0.00E+00	1.76E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2202	300929.9	4020879.19	1.25E-07	2.55E-07	4.00E-08	0.00E+00	4.20E-07	1.39E-10	1.12E-09	1.11E-10	0.00E+00	1.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2203	300894.24	4020865.29	9.93E-08	2.02E-07	3.17E-08	0.00E+00	3.33E-07	1.10E-10	8.91E-10	8.84E-11	0.00E+00	1.09E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2204	300858.57	4020851.38	7.95E-08	1.62E-07	2.54E-08	0.00E+00	2.67E-07	8.80E-11	7.13E-10	7.07E-11	0.00E+00	8.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2205	300822.9	4020837.48	6.42E-08	1.31E-07	2.05E-08	0.00E+00	2.16E-07	7.11E-11	5.77E-10	5.72E-11	0.00E+00	7.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2206	300787.23	4020823.57	5.25E-08	1.07E-07	1.68E-08	0.00E+00	1.76E-07	5.82E-11	4.72E-10	4.68E-11	0.00E+00	5.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2207	300751.57	4020809.66	4.31E-08	8.78E-08	1.38E-08	0.00E+00	1.45E-07	4.77E-11	3.87E-10	3.84E-11	0.00E+00	4.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2208	300726.04	4020785.18	3.71E-08	7.56E-08	1.19E-08	0.00E+00	1.25E-07	4.11E-11	3.33E-10	3.30E-11	0.00E+00	4.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2209	300710.67	4020750.12	3.33E-08	6.78E-08	1.06E-08	0.00E+00	1.12E-07	3.68E-11	2.99E-10	2.96E-11	0.00E+00	3.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2210	300695.29	4020715.06	2.96E-08	6.02E-08	9.46E-09	0.00E+00	9.93E-08	3.27E-11	2.65E-10	2.63E-11	0.00E+00	3.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2211	300679.91	4020680.01	2.6E-08	5.29E-08	8.30E-09	0.00E+00	8.72E-08	2.87E-11	2.33E-10	2.31E-11	0.00E+00	2.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2212	300664.54	4020644.95	2.25E-08	4.58E-08	7.19E-09	0.00E+00	7.55E-08	2.49E-11	2.02E-10	2.00E-11	0.00E+00	2.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2213	300649.16	4020609.89	1.93E-08	3.93E-08	6.17E-09	0.00E+00	6.47E-08	2.13E-11	1.73E-10	1.72E-11	0.00E+00	2.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2214	301002.95	4020899.64	2.18E-07	4.43E-07	6.96E-08	0.00E+00	7.30E-07	2.41E-10	1.95E-09	1.94E-10	0.00E+00	2.39E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2215	301042.04	4020898.81	3.25E-07	6.62E-07	1.04E-07	0.00E+00	1.09E-06	3.60E-10	2.92E-09	2.89E-10	0.00E+00	3.57E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2216	300966.63	4020943.09	1.35E-07	2.74E-07	4.30E-08	0.00E+00	4.52E-07	1.49E-10	1.21E-09	1.20E-10	0.00E+00	1.48E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2217	300930.96	4020929.18	1.12E-07	2.28E-07	3.58E-08	0.00E+00	3.76E-07	1.24E-10	1.00E-09	9.96E-11	0.00E+00	1.23E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2218	300895.29	4020915.28	9.23E-08	1.88E-07	2.95E-08	0.00E+00	3.10E-07	1.02E-10	8.29E-10	8.22E-11	0.00E+00	1.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2219	300859.62	4020901.37	7.61E-08	1.55E-07	2.43E-08	0.00E+00	2.56E-07	8.43E-11	6.83E-10	6.77E-11	0.00E+00	8.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2220	300823.96	4020887.46	6.28E-08	1.28E-07	2.01E-08	0.00E+00	2.11E-07	6.96E-11	5.64E-10	5.59E-11	0.00E+00	6.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2221	300788.29	4020873.56	5.22E-08	1.06E-07	1.67E-08	0.00E+00	1.75E-07	5.78E-11	4.69E-10	4.65E-11	0.00E+00	5.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2222	300752.62	4020859.65	4.37E-08	8.91E-08	1.40E-08	0.00E+00	1.47E-07	4.84E-11	3.92E-10	3.89E-11	0.00E+00	4.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2223	300716.95	4020845.75	3.65E-08	7.44E-08	1.17E-08	0.00E+00	1.23E-07	4.04E-11	3.28E-10	3.25E-11	0.00E+00	4.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2224	300691.43	4020821.26	3.19E-08	6.49E-08	1.02E-08	0.00E+00	1.07E-07	3.53E-11	2.86E-10	2.83E-11	0.00E+00	3.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2225	300676.05	4020786.21	2.88E-08	5.87E-08	9.21E-09	0.00E+00	9.67E-08	3.19E-11	2.59E-10	2.56E-11	0.00E+00	3.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2226	300660.68	4020751.15	2.59E-08	5.27E-08	8.28E-09	0.00E+00	8.69E-08	2.87E-11	2.32E-10	2.30E-11	0.00E+00	2.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2227	300645.3	4020716.09	2.31E-08	4.70E-08	7.37E-09	0.00E+00	7.74E-08	2.55E-11	2.07E-10	2.05E-11	0.00E+00	2.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2228	300629.92	4020681.03	2.03E-08	4.14E-08	6.50E-09	0.00E+00	6.82E-08	2.25E-11	1.82E-10	1.81E-11	0.00E+00	2.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2229	300614.55	4020645.97	1.77E-08	3.61E-08	5.67E-09	0.00E+00	5.96E-08	1.96E-11	1.59E-10	1.58E-11	0.00E+00	1.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2230	300599.17	4020610.91	1.54E-08	3.14E-08	4.93E-09	0.00E+00	5.17E-08	1.71E-11	1.38E-10	1.37E-11	0.00E+00	1.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2231	301004.01	4020949.63	1.66E-07	3.38E-07	5.31E-08	0.00E+00	5.58E-07	1.84E-10	1.49E-09	1.48E-10	0.00E+00	1.82E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2232	301043.1	4020948.8	2.12E-07	4.32E-07	6.77E-08	0.00E+00	7.11E-07	2.35E-10	1.90E-09	1.89E-10	0.00E+00	2.32E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2233	300967.68	4020993.08	1.09E-07	2.21E-07	3.47E-08	0.00E+00	3.64E-07	1.20E-10	9.74E-10	9.66E-11	0.00E+00	1.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2234	300932.01	4020979.17	9.57E-08	1.95E-07	3.06E-08	0.00E+00	3.21E-07	1.06E-10	8.59E-10	8.52E-11	0.00E+00	1.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2235	300896.35	4020965.26	8.27E-08	1.68E-07	2.64E-08	0.00E+00	2.78E-07	9.15E-11	7.42E-10	7.36E-11	0.00E+00	9.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2236	300860.68	4020951.36	7.07E-08	1.44E-07	2.26E-08	0.00E+00	2.37E-07	7.82E-11	6.34E-10	6.29E-11	0.00E+00	7.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2237	300825.01	4020937.45	5.99E-08	1.22E-07	1.91E-08	0.00E+00	2.01E-07	6.63E-11	5.37E-10	5.33E-11	0.00E+00	6.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2238	300789.34	4020923.55	5.06E-08	1.03E-07	1.62E-08	0.00E+00	1.70E-07	5.60E-11	4.54E-10	4.50E-11	0.00E+00	5.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2239	300753.68	4020909.64	4.3E-08	8.76E-08	1.38E-08	0.00E+00	1.44E-07	4.76E-11	3.86E-10	3.83E-11	0.00E+00	4.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+

2301	300792.51	4021073.51	4.11E-08	8.38E-08	1.32E-08	0.00E+00	1.38E-07	4.55E-11	3.69E-10	3.66E-11	0.00E+00	4.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2302	300756.84	4021059.61	3.69E-08	7.51E-08	1.18E-08	0.00E+00	1.24E-07	4.08E-11	3.31E-10	3.28E-11	0.00E+00	4.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2303	300721.17	4021045.7	3.29E-08	6.69E-08	1.05E-08	0.00E+00	1.10E-07	3.64E-11	2.95E-10	2.92E-11	0.00E+00	3.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2304	300685.51	4021031.8	2.93E-08	5.97E-08	9.36E-09	0.00E+00	9.83E-08	3.24E-11	2.63E-10	2.61E-11	0.00E+00	3.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2305	300649.84	4021017.89	2.61E-08	5.31E-08	8.34E-09	0.00E+00	8.76E-08	2.89E-11	2.34E-10	2.32E-11	0.00E+00	2.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2306	300614.17	4021003.98	2.31E-08	4.71E-08	7.40E-09	0.00E+00	7.77E-08	2.56E-11	2.08E-10	2.06E-11	0.00E+00	2.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2307	300578.5	4020990.08	2.04E-08	4.16E-08	6.53E-09	0.00E+00	6.86E-08	2.26E-11	1.83E-10	1.82E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2308	300552.98	4020965.6	1.87E-08	3.80E-08	5.97E-09	0.00E+00	6.27E-08	2.07E-11	1.68E-10	1.66E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2309	300537.6	4020930.54	1.77E-08	3.60E-08	5.64E-09	0.00E+00	5.93E-08	1.95E-11	1.58E-10	1.57E-11	0.00E+00	1.94E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2310	300522.23	4020895.48	1.66E-08	3.38E-08	5.31E-09	0.00E+00	5.57E-08	1.84E-11	1.49E-10	1.48E-11	0.00E+00	1.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2311	300506.85	4020860.42	1.54E-08	3.14E-08	4.93E-09	0.00E+00	5.18E-08	1.71E-11	1.38E-10	1.37E-11	0.00E+00	1.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2312	300491.47	4020825.36	1.41E-08	2.88E-08	4.52E-09	0.00E+00	4.75E-08	1.56E-11	1.27E-10	1.26E-11	0.00E+00	1.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2313	300476.1	4020790.3	1.28E-08	2.62E-08	4.11E-09	0.00E+00	4.31E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2314	300460.72	4020755.24	1.16E-08	2.37E-08	3.72E-09	0.00E+00	3.90E-08	1.29E-11	1.04E-10	1.03E-11	0.00E+00	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2315	300445.34	4020720.19	1.05E-08	2.14E-08	3.36E-09	0.00E+00	3.52E-08	1.16E-11	9.42E-11	9.34E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2316	300429.97	4020685.13	9.45E-09	1.93E-08	3.02E-09	0.00E+00	3.17E-08	1.05E-11	8.49E-11	8.41E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2317	300414.59	4020650.07	8.54E-09	1.74E-08	2.73E-09	0.00E+00	2.87E-08	9.45E-12	7.67E-11	7.60E-12	0.00E+00	9.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2318	300399.21	4020615.01	7.73E-09	1.57E-08	2.47E-09	0.00E+00	2.59E-08	8.56E-12	6.94E-11	6.88E-12	0.00E+00	8.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2319	301008.23	4021149.58	5.83E-08	1.19E-07	1.86E-08	0.00E+00	1.96E-07	6.45E-11	5.23E-10	5.18E-11	0.00E+00	6.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2320	301047.32	4021148.76	6.16E-08	1.25E-07	1.97E-08	0.00E+00	2.07E-07	6.81E-11	5.53E-10	5.48E-11	0.00E+00	6.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2321	300972.96	4021243.02	3.84E-08	7.82E-08	1.23E-08	0.00E+00	1.29E-07	4.25E-11	3.45E-10	3.42E-11	0.00E+00	4.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2322	300937.29	4021229.12	3.85E-08	7.83E-08	1.23E-08	0.00E+00	1.29E-07	4.26E-11	3.45E-10	3.42E-11	0.00E+00	4.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2323	300901.62	4021215.21	3.79E-08	7.71E-08	1.21E-08	0.00E+00	1.27E-07	4.19E-11	3.40E-10	3.37E-11	0.00E+00	4.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2324	300865.95	4021201.3	3.68E-08	7.50E-08	1.18E-08	0.00E+00	1.24E-07	4.07E-11	3.30E-10	3.28E-11	0.00E+00	4.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2325	300830.29	4021187.4	3.54E-08	7.20E-08	1.13E-08	0.00E+00	1.19E-07	3.91E-11	3.17E-10	3.15E-11	0.00E+00	3.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2326	300794.62	4021173.49	3.35E-08	6.82E-08	1.07E-08	0.00E+00	1.12E-07	3.70E-11	3.00E-10	2.98E-11	0.00E+00	3.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2327	300758.95	4021159.59	3.12E-08	6.36E-08	9.98E-09	0.00E+00	1.05E-07	3.45E-11	2.80E-10	2.78E-11	0.00E+00	3.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2328	300723.28	4021145.68	2.87E-08	5.85E-08	9.19E-09	0.00E+00	9.65E-08	3.18E-11	2.58E-10	2.56E-11	0.00E+00	3.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2329	300687.62	4021131.77	2.62E-08	5.35E-08	8.39E-09	0.00E+00	8.81E-08	2.90E-11	2.36E-10	2.34E-11	0.00E+00	2.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2330	300651.95	4021117.87	2.39E-08	4.87E-08	7.64E-09	0.00E+00	8.02E-08	2.64E-11	2.14E-10	2.13E-11	0.00E+00	2.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2331	300616.28	4021103.96	2.17E-08	4.43E-08	6.95E-09	0.00E+00	7.29E-08	2.41E-11	1.95E-10	1.93E-11	0.00E+00	2.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2332	300580.61	4021090.06	1.97E-08	4.02E-08	6.31E-09	0.00E+00	6.62E-08	2.18E-11	1.77E-10	1.76E-11	0.00E+00	2.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2333	300544.95	4021076.15	1.78E-08	3.63E-08	5.70E-09	0.00E+00	5.99E-08	1.97E-11	1.60E-10	1.59E-11	0.00E+00	1.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2334	300509.28	4021062.24	1.61E-08	3.28E-08	5.14E-09	0.00E+00	5.40E-08	1.78E-11	1.44E-10	1.43E-11	0.00E+00	1.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2335	300483.76	4021037.76	1.49E-08	3.04E-08	4.77E-09	0.00E+00	5.01E-08	1.65E-11	1.34E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2336	300468.38	4021002.7	1.42E-08	2.90E-08	4.55E-09	0.00E+00	4.77E-08	1.57E-11	1.28E-10	1.27E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2337	300453	4020967.64	1.35E-08	2.75E-08	4.32E-09	0.00E+00	4.53E-08	1.50E-11	1.21E-10	1.20E-11	0.00E+00	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2338	300437.63	4020932.59	1.28E-08	2.61E-08	4.09E-09	0.00E+00	4.30E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2339	300422.25	4020897.53	1.2E-08	2.45E-08	3.85E-09	0.00E+00	4.04E-08	1.33E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2340	300406.87	4020862.47	1.12E-08	2.28E-08	3.57E-09	0.00E+00	3.75E-08	1.24E-11	1.00E-10	9.95E-12	0.00E+00	1.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2341	300391.49	4020827.41	1.03E-08	2.09E-08	3.29E-09	0.00E+00	3.45E-08	1.14E-11	9.23E-11	9.15E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2342	300376.12	4020792.35	9.4E-09	1.92E-08	3.01E-09	0.00E+00	3.16E-08	1.04E-11	8.44E-11	8.37E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2343	300360.74	4020757.29	8.55E-09	1.74E-08	2.73E-09	0.00E+00	2.87E-08	9.47E-12	7.68E-11	7.61E-12	0.00E+00	9.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2344	300345.36	4020722.23	7.77E-09	1.58E-08	2.48E-09	0.00E+00	2.61E-08	8.60E-12	6.97E-11	6.91E-12	0.00E+00	8.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2345	300329.99	4020687.18	7.09E-09	1.44E-08	2.27E-09	0.00E+00	2.38E-08	7.84E-12	6.36E-11	6.31E-12	0.00E+00	7.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2346	300314.61	4020652.12	6.49E-09	1.32E-08	2.08E-09	0.00E+00	2.18E-08	7.18E-12	5.82E-11	5.78E-12	0.00E+00	7.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2347	300299.23	4020617.06	5.94E-09	1.21E-08	1.90E-09	0.00E+00	1.99E-08	6.58E-12	5.33E-11	5.29E-12	0.00E+00	6.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2348	301010.34	4021249.56	3.88E-08	7.91E-08	1.24E-08	0.00E+00	1.30E-07	4.30E-11	3.48E-10	3.45E-11	0.00E+00	4.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2349	301049.43	4021248.74	4E-08	8.16E-08	1.28E-08	0.00E+00	1.34E-07	4.43E-11	3.59E-10	3.56E-11	0.00E+00	4.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2350	300975.07	4021343	2.77E-08	5.64E-08	8.86E-09	0.00E+00	9.30E-08	3.07E-11	2.49E-10	2.46E-11	0.00E+00	3.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2351	300939.4	4021329.09	2.81E-08	5.73E-08	8.99E-09	0.00E+00	9.44E-08	3.11E-11	2.52E-10	2.50E-11	0.00E+00	3.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2352	300903.73	4021315.19	2.81E-08	5.73E-08	9.00E-09	0.00E+00	9.45E-08	3.11E-11	2.53E-10	2.50E-11	0.00E+00	3.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2353	300868.06	4021301.28	2.78E-08	5.67E-08	8.90E-09	0.00E+00	9.34E-08	3.08E-11	2.50E-10	2.48E-11	0.00E+00	3.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2354	300832.4	4021287.37	2.73E-08	5.57E-08	8.74E-09	0.00E+00	9.18E-08	3.03E-11	2.45E-10	2.43E-11	0.00E+00	3.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2355	300796.73	4021273.47	2.67E-08	5.43E-08	8.52E-09	0.00E+00	8.95E-08	2.95E-11	2.39E-10	2.37E-11	0.00E+00	2.92E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2356	300761.06	4021259.56	2.57E-08	5.23E-08	8.21E-09	0.00E+00	8.62E-08	2.84E-11	2.30E-10	2.29E-11	0.00E+00	2.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2357	300725.39	4021245.66	2.44E-08	4.97E-08	7.80E-09	0.00E+00	8.18E-08	2.70E-11	2.19E-10	2.17E-11	0.00E+00	2.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2358	300689.73	4021231.75	2.29E-08	4.66E-08	7.31E-09	0.00E+00	7.68E-08	2.53E-11	2.05E-10	2.04E-11	0.00E+00	2.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2359	300654.06	4021217.85	2.13E-08	4.33E-08	6.80E-09	0.00E+00	7.14E-08	2.35E-11	1.91E-10	1.89E-11	0.00E+00	2.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2360	300618.39	4021203.94	1.97E-08	4.01E-08	6.30E-09	0.00E+00	6.61E-08	2.18E-11	1.77E-10	1.75E-11	0.00E+00	2.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2361	300582.72	4021190.03	1.82E-08	3.71E-08	5.82E-09	0.00E+00	6.11E-08	2.02E-11	1.63E-10	1.62E-11	0.00E+00	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2362	300547.06	4021176.13	1.68E-08	3.42E-08	5.37E-09	0.00E+00	5.64E-08	1.86E-11	1.51E-10	1.50E-11	0.00E+00	1.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2363	300511.39	4021162.22	1.55E-08	3.15E-08	4.94E-09	0.00E+00	5.19E-08	1.71E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2364	300475.72	4021148.32	1.42E-08	2.89E-08	4.53E-09	0.00E+00	4.75E-08	1.57E-11	1.27E-10	1.26E-11	0.00E+00	1.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2365	300440.05	4021134.41	1.3E-08	2.64E-08	4.15E-09	0.00E+00	4.35E-08	1.44E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2366	300414.53	4021109.93	1.22E-08	2.49E-08	3.90E-09	0.00E+00	4.10E-08	1.35E-11	1.10E-10	1.09E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2367	300399.15	4021074.87	1.18E-08	2.40E-08	3.76E-09	0.00E+00	3.95E-08	1.30E-11	1.06E-10	1.05E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

2429	300658.28	4021417.8	1.61E-08	3.29E-08	5.16E-09	0.00E+00	5.42E-08	1.79E-11	1.45E-10	1.44E-11	0.00E+00	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2430	300622.61	4021403.89	1.55E-08	3.17E-08	4.97E-09	0.00E+00	5.22E-08	1.72E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2431	300586.94	4021389.99	1.48E-08	3.01E-08	4.73E-09	0.00E+00	4.97E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2432	300551.28	4021376.08	1.4E-08	2.85E-08	4.47E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2433	300515.61	4021362.18	1.32E-08	2.69E-08	4.22E-09	0.00E+00	4.44E-08	1.46E-11	1.19E-10	1.18E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2434	300479.94	4021348.27	1.25E-08	2.54E-08	3.98E-09	0.00E+00	4.18E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2435	300444.27	4021334.36	1.17E-08	2.39E-08	3.75E-09	0.00E+00	3.94E-08	1.30E-11	1.05E-10	1.04E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2436	300408.61	4021320.46	1.1E-08	2.24E-08	3.52E-09	0.00E+00	3.70E-08	1.22E-11	9.89E-11	9.81E-12	0.00E+00	1.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2437	300372.94	4021306.55	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.46E-08	1.14E-11	9.26E-11	9.18E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2438	300337.27	4021292.65	9.65E-09	1.97E-08	3.09E-09	0.00E+00	3.24E-08	1.07E-11	8.66E-11	8.59E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2439	300301.6	4021278.74	9.02E-09	1.84E-08	2.88E-09	0.00E+00	3.03E-08	9.99E-12	8.10E-11	8.03E-12	0.00E+00	9.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2440	300276.08	4021254.26	8.63E-09	1.76E-08	2.76E-09	0.00E+00	2.90E-08	9.56E-12	7.75E-11	7.68E-12	0.00E+00	9.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2441	300260.7	4021219.2	8.43E-09	1.72E-08	2.69E-09	0.00E+00	2.83E-08	9.33E-12	7.56E-11	7.50E-12	0.00E+00	9.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2442	300245.33	4021184.14	8.21E-09	1.67E-08	2.63E-09	0.00E+00	2.76E-08	9.09E-12	7.37E-11	7.31E-12	0.00E+00	9.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2443	300229.95	4021149.08	7.97E-09	1.62E-08	2.55E-09	0.00E+00	2.67E-08	8.82E-12	7.15E-11	7.09E-12	0.00E+00	8.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2444	300214.57	4021114.02	7.67E-09	1.56E-08	2.45E-09	0.00E+00	2.57E-08	8.49E-12	6.88E-11	6.82E-12	0.00E+00	8.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2445	300199.2	4021078.97	7.33E-09	1.49E-08	2.34E-09	0.00E+00	2.46E-08	8.11E-12	6.58E-11	6.52E-12	0.00E+00	8.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2446	300183.82	4021043.91	6.98E-09	1.42E-08	2.23E-09	0.00E+00	2.34E-08	7.72E-12	6.26E-11	6.21E-12	0.00E+00	7.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2447	300168.44	4021008.85	6.65E-09	1.35E-08	2.13E-09	0.00E+00	2.23E-08	7.36E-12	5.97E-11	5.92E-12	0.00E+00	7.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2448	300153.07	4020973.79	6.35E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.03E-12	5.70E-11	5.65E-12	0.00E+00	6.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2449	300137.69	4020938.73	6.06E-09	1.23E-08	1.94E-09	0.00E+00	2.03E-08	6.70E-12	5.44E-11	5.39E-12	0.00E+00	6.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2450	300122.31	4020903.67	5.74E-09	1.17E-08	1.84E-09	0.00E+00	1.93E-08	6.35E-12	5.15E-11	5.11E-12	0.00E+00	6.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2451	300106.93	4020868.62	5.39E-09	1.10E-08	1.72E-09	0.00E+00	1.81E-08	5.97E-12	4.84E-11	4.80E-12	0.00E+00	5.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2452	300091.56	4020833.56	5.02E-09	1.02E-08	1.60E-09	0.00E+00	1.68E-08	5.56E-12	4.50E-11	4.47E-12	0.00E+00	5.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2453	300076.18	4020798.5	4.65E-09	9.47E-09	1.49E-09	0.00E+00	1.56E-08	5.15E-12	4.17E-11	4.14E-12	0.00E+00	5.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2454	300060.8	4020763.44	4.31E-09	8.78E-09	1.38E-09	0.00E+00	1.45E-08	4.77E-12	3.87E-11	3.84E-12	0.00E+00	4.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2455	300045.43	4020728.38	4.01E-09	8.18E-09	1.28E-09	0.00E+00	1.35E-08	4.44E-12	3.60E-11	3.57E-12	0.00E+00	4.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2456	300030.05	4020693.32	3.76E-09	7.65E-09	1.20E-09	0.00E+00	1.26E-08	4.16E-12	3.37E-11	3.34E-12	0.00E+00	4.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2457	300014.67	4020658.26	3.52E-09	7.17E-09	1.13E-09	0.00E+00	1.18E-08	3.90E-12	3.16E-11	3.13E-12	0.00E+00	3.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2458	299999.3	4020623.21	3.28E-09	6.69E-09	1.05E-09	0.00E+00	1.10E-08	3.63E-12	2.95E-11	2.92E-12	0.00E+00	3.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2459	301016.67	4021549.49	1.59E-08	3.25E-08	5.10E-09	0.00E+00	5.35E-08	1.77E-11	1.43E-10	1.42E-11	0.00E+00	1.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2460	301055.76	4021548.67	1.61E-08	3.28E-08	5.15E-09	0.00E+00	5.41E-08	1.78E-11	1.45E-10	1.43E-11	0.00E+00	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2461	300981.4	4021642.93	1.3E-08	2.64E-08	4.14E-09	0.00E+00	4.35E-08	1.43E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2462	300945.73	4021629.03	1.34E-08	2.73E-08	4.29E-09	0.00E+00	4.50E-08	1.49E-11	1.20E-10	1.19E-11	0.00E+00	1.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2463	300910.06	4021615.12	1.39E-08	2.83E-08	4.44E-09	0.00E+00	4.66E-08	1.54E-11	1.25E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2464	300874.39	4021601.21	1.42E-08	2.89E-08	4.54E-09	0.00E+00	4.77E-08	1.57E-11	1.28E-10	1.26E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2465	300838.73	4021587.31	1.43E-08	2.92E-08	4.58E-09	0.00E+00	4.81E-08	1.59E-11	1.29E-10	1.27E-11	0.00E+00	1.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2466	300803.06	4021573.4	1.42E-08	2.90E-08	4.56E-09	0.00E+00	4.78E-08	1.58E-11	1.28E-10	1.27E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2467	300767.39	4021559.5	1.41E-08	2.87E-08	4.50E-09	0.00E+00	4.73E-08	1.56E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2468	300731.72	4021545.59	1.39E-08	2.84E-08	4.45E-09	0.00E+00	4.67E-08	1.54E-11	1.25E-10	1.24E-11	0.00E+00	1.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2469	300696.06	4021531.68	1.38E-08	2.82E-08	4.42E-09	0.00E+00	4.64E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2470	300660.39	4021517.78	1.37E-08	2.80E-08	4.39E-09	0.00E+00	4.61E-08	1.52E-11	1.23E-10	1.22E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2471	300624.72	4021503.87	1.35E-08	2.76E-08	4.33E-09	0.00E+00	4.55E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2472	300589.05	4021489.97	1.32E-08	2.69E-08	4.22E-09	0.00E+00	4.43E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2473	300553.39	4021476.06	1.27E-08	2.59E-08	4.06E-09	0.00E+00	4.26E-08	1.41E-11	1.14E-10	1.13E-11	0.00E+00	1.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2474	300517.72	4021462.15	1.21E-08	2.47E-08	3.87E-09	0.00E+00	4.06E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2475	300482.05	4021448.25	1.15E-08	2.34E-08	3.67E-09	0.00E+00	3.86E-08	1.27E-11	1.03E-10	1.02E-11	0.00E+00	1.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2476	300446.38	4021434.34	1.09E-08	2.22E-08	3.48E-09	0.00E+00	3.66E-08	1.21E-11	9.78E-11	9.70E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2477	300410.72	4021420.44	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.47E-08	1.14E-11	9.27E-11	9.19E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2478	300375.05	4021406.53	9.79E-09	1.99E-08	3.13E-09	0.00E+00	3.28E-08	1.08E-11	8.78E-11	8.71E-12	0.00E+00	1.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2479	300339.38	4021392.62	9.25E-09	1.88E-08	2.96E-09	0.00E+00	3.10E-08	1.02E-11	8.30E-11	8.23E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2480	300303.71	4021378.72	8.71E-09	1.78E-08	2.79E-09	0.00E+00	2.93E-08	9.65E-12	7.82E-11	7.76E-12	0.00E+00	9.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2481	300268.05	4021364.81	8.21E-09	1.67E-08	2.62E-09	0.00E+00	2.76E-08	9.09E-12	7.37E-11	7.31E-12	0.00E+00	9.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2482	300232.38	4021350.91	7.74E-09	1.58E-08	2.47E-09	0.00E+00	2.60E-08	8.57E-12	6.95E-11	6.89E-12	0.00E+00	8.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2483	300206.86	4021326.42	7.45E-09	1.52E-08	2.38E-09	0.00E+00	2.50E-08	8.25E-12	6.69E-11	6.63E-12	0.00E+00	8.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2484	300191.48	4021291.37	7.3E-09	1.49E-08	2.33E-09	0.00E+00	2.45E-08	8.08E-12	6.55E-11	6.50E-12	0.00E+00	8.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2485	300176.1	4021256.31	7.13E-09	1.45E-08	2.28E-09	0.00E+00	2.39E-08	7.90E-12	6.40E-11	6.35E-12	0.00E+00	7.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2486	300160.73	4021221.25	6.96E-09	1.42E-08	2.23E-09	0.00E+00	2.34E-08	7.71E-12	6.25E-11	6.19E-12	0.00E+00	7.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2487	300145.35	4021186.19	6.77E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.49E-12	6.07E-11	6.02E-12	0.00E+00	7.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2488	300129.97	4021151.13	6.53E-09	1.33E-08	2.09E-09	0.00E+00	2.19E-08	7.23E-12	5.86E-11	5.81E-12	0.00E+00	7.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2489	300114.59	4021116.07	6.25E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.92E-12	5.61E-11	5.57E-12	0.00E+00	6.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2490	300099.22	4021081.01	5.96E-09	1.22E-08	1.91E-09	0.00E+00	2.00E-08	6.60E-12	5.35E-11	5.31E-12	0.00E+00	6.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2491	300083.84	4021045.96	5.69E-09	1.16E-08	1.82E-09	0.00E+00	1.91E-08	6.30E-12	5.11E-11	5.07E-12	0.00E+00	6.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2492	300068.46	4021010.9	5.45E-09	1.11E-08	1.74E-09	0.00E+00	1.83E-08	6.03E-12	4.89E-11	4.85E-12	0.00E+00	5.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2493	300053.09	4020975.84	5.22E-09	1.06E-08	1.67E-09	0.00E+00	1.75E-08	5.78E-12	4.69E-11	4.65E-12	0.00E+00	5.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2494	300037.71	4020940.78	5E-09	1.02E-08	1.60E-09	0.00E+00	1.68E-08	5.53E-12	4.49E-11	4.45E-12	0.00E+00	5.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2495	300022.33	4020905.72	4.74E-09	9.67E-09	1.52E-09	0.00E+00	1.59E-08	5.25E-12	4.26E-11	4.22E-12	0.00E+00	5.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2557	300876.17	4021800.22	9.94E-09	2.02E-08	3.18E-09	0.00E+00	3.34E-08	1.10E-11	8.92E-11	8.84E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2558	300839.8	4021786.04	1.02E-08	2.09E-08	3.27E-09	0.00E+00	3.44E-08	1.13E-11	9.19E-11	9.12E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2559	300803.43	4021771.86	1.04E-08	2.12E-08	3.33E-09	0.00E+00	3.50E-08	1.15E-11	9.36E-11	9.28E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2560	300767.07	4021757.68	1.05E-08	2.13E-08	3.34E-09	0.00E+00	3.51E-08	1.16E-11	9.38E-11	9.30E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2561	300730.7	4021743.5	1.03E-08	2.11E-08	3.31E-09	0.00E+00	3.47E-08	1.15E-11	9.28E-11	9.21E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2562	300694.33	4021729.32	1.02E-08	2.07E-08	3.25E-09	0.00E+00	3.41E-08	1.13E-11	9.13E-11	9.05E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2563	300657.97	4021715.14	1E-08	2.04E-08	3.21E-09	0.00E+00	3.37E-08	1.11E-11	9.01E-11	8.93E-12	0.00E+00	1.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2564	300621.6	4021700.96	9.97E-09	2.03E-08	3.19E-09	0.00E+00	3.35E-08	1.10E-11	8.95E-11	8.87E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2565	300585.23	4021686.79	9.97E-09	2.03E-08	3.19E-09	0.00E+00	3.35E-08	1.10E-11	8.94E-11	8.87E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2566	300548.86	4021672.61	9.95E-09	2.03E-08	3.18E-09	0.00E+00	3.34E-08	1.10E-11	8.93E-11	8.86E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2567	300512.5	4021658.43	9.86E-09	2.01E-08	3.15E-09	0.00E+00	3.31E-08	1.09E-11	8.85E-11	8.78E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2568	300476.13	4021644.25	9.66E-09	1.97E-08	3.09E-09	0.00E+00	3.24E-08	1.07E-11	8.67E-11	8.60E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2569	300439.76	4021630.07	9.35E-09	1.91E-08	2.99E-09	0.00E+00	3.14E-08	1.04E-11	8.39E-11	8.32E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2570	300403.4	4021615.89	8.97E-09	1.83E-08	2.87E-09	0.00E+00	3.01E-08	9.93E-12	8.05E-11	7.98E-12	0.00E+00	9.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2571	300367.03	4021601.71	8.55E-09	1.74E-08	2.73E-09	0.00E+00	2.87E-08	9.47E-12	7.68E-11	7.61E-12	0.00E+00	9.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2572	300330.66	4021587.54	8.14E-09	1.66E-08	2.60E-09	0.00E+00	2.73E-08	9.01E-12	7.31E-11	7.24E-12	0.00E+00	8.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2573	300294.3	4021573.36	7.75E-09	1.58E-08	2.48E-09	0.00E+00	2.60E-08	8.58E-12	6.96E-11	6.90E-12	0.00E+00	8.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2574	300257.93	4021559.18	7.39E-09	1.51E-08	2.36E-09	0.00E+00	2.48E-08	8.18E-12	6.63E-11	6.58E-12	0.00E+00	8.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2575	300221.56	4021545	7.05E-09	1.44E-08	2.25E-09	0.00E+00	2.37E-08	7.80E-12	6.33E-11	6.27E-12	0.00E+00	7.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2576	300185.2	4021530.82	6.71E-09	1.37E-08	2.15E-09	0.00E+00	2.25E-08	7.43E-12	6.03E-11	5.97E-12	0.00E+00	7.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2577	300148.83	4021516.64	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.15E-08	7.07E-12	5.74E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2578	300112.46	4021502.46	6.09E-09	1.24E-08	1.95E-09	0.00E+00	2.04E-08	6.74E-12	5.46E-11	5.42E-12	0.00E+00	6.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2579	300068.26	4021470.41	5.77E-09	1.18E-08	1.85E-09	0.00E+00	1.94E-08	6.39E-12	5.18E-11	5.14E-12	0.00E+00	6.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2580	300052.58	4021434.67	5.69E-09	1.16E-08	1.82E-09	0.00E+00	1.91E-08	6.30E-12	5.11E-11	5.07E-12	0.00E+00	6.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2581	300036.9	4021398.92	5.6E-09	1.14E-08	1.79E-09	0.00E+00	1.88E-08	6.20E-12	5.02E-11	4.98E-12	0.00E+00	6.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2582	300021.22	4021363.17	5.48E-09	1.12E-08	1.75E-09	0.00E+00	1.84E-08	6.07E-12	4.92E-11	4.88E-12	0.00E+00	6.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2583	300005.54	4021327.43	5.35E-09	1.09E-08	1.71E-09	0.00E+00	1.80E-08	5.93E-12	4.81E-11	4.76E-12	0.00E+00	5.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2584	299989.86	4021291.68	5.23E-09	1.07E-08	1.67E-09	0.00E+00	1.75E-08	5.79E-12	4.69E-11	4.65E-12	0.00E+00	5.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2585	299974.18	4021255.94	5.09E-09	1.04E-08	1.63E-09	0.00E+00	1.71E-08	5.64E-12	4.57E-11	4.53E-12	0.00E+00	5.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2586	299958.51	4021220.19	4.93E-09	1.00E-08	1.58E-09	0.00E+00	1.66E-08	5.46E-12	4.43E-11	4.39E-12	0.00E+00	5.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2587	299942.83	4021184.44	4.74E-09	9.66E-09	1.52E-09	0.00E+00	1.59E-08	5.25E-12	4.26E-11	4.22E-12	0.00E+00	5.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2588	299927.15	4021148.7	4.54E-09	9.25E-09	1.45E-09	0.00E+00	1.52E-08	5.02E-12	4.07E-11	4.04E-12	0.00E+00	4.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2589	299911.47	4021112.95	4.34E-09	8.84E-09	1.39E-09	0.00E+00	1.46E-08	4.80E-12	3.90E-11	3.86E-12	0.00E+00	4.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2590	299895.79	4021077.21	4.16E-09	8.47E-09	1.33E-09	0.00E+00	1.40E-08	4.60E-12	3.73E-11	3.70E-12	0.00E+00	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2591	299880.11	4021041.46	4E-09	8.15E-09	1.28E-09	0.00E+00	1.34E-08	4.43E-12	3.59E-11	3.56E-12	0.00E+00	4.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2592	299864.43	4021005.72	3.86E-09	7.86E-09	1.23E-09	0.00E+00	1.29E-08	4.27E-12	3.46E-11	3.43E-12	0.00E+00	4.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2593	299848.76	4020969.97	3.71E-09	7.56E-09	1.19E-09	0.00E+00	1.25E-08	4.11E-12	3.33E-11	3.30E-12	0.00E+00	4.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2594	299833.08	4020934.22	3.55E-09	7.23E-09	1.14E-09	0.00E+00	1.19E-08	3.93E-12	3.19E-11	3.16E-12	0.00E+00	3.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2595	299817.4	4020898.48	3.37E-09	6.87E-09	1.08E-09	0.00E+00	1.13E-08	3.73E-12	3.03E-11	3.00E-12	0.00E+00	3.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2596	299801.72	4020862.73	3.19E-09	6.49E-09	1.02E-09	0.00E+00	1.07E-08	3.53E-12	2.86E-11	2.84E-12	0.00E+00	3.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2597	299786.04	4020826.99	3.01E-09	6.13E-09	9.62E-10	0.00E+00	1.01E-08	3.33E-12	2.70E-11	2.68E-12	0.00E+00	3.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2598	299770.36	4020791.24	2.84E-09	5.79E-09	9.09E-10	0.00E+00	9.55E-09	3.15E-12	2.55E-11	2.53E-12	0.00E+00	3.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2599	299754.69	4020755.49	2.69E-09	5.49E-09	8.61E-10	0.00E+00	9.04E-09	2.98E-12	2.42E-11	2.40E-12	0.00E+00	2.96E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2600	299739.01	4020719.75	2.55E-09	5.19E-09	8.14E-10	0.00E+00	8.55E-09	2.82E-12	2.28E-11	2.27E-12	0.00E+00	2.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2601	299723.33	4020684	2.39E-09	4.88E-09	7.65E-10	0.00E+00	8.04E-09	2.65E-12	2.15E-11	2.13E-12	0.00E+00	2.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2602	299707.65	4020648.26	2.24E-09	4.56E-09	7.16E-10	0.00E+00	7.51E-09	2.48E-12	2.01E-11	1.99E-12	0.00E+00	2.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2603	299691.97	4020612.51	2.08E-09	4.24E-09	6.66E-10	0.00E+00	6.99E-09	2.31E-12	1.87E-11	1.85E-12	0.00E+00	2.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2604	301023	4021849.43	8.98E-09	1.83E-08	2.87E-09	0.00E+00	3.02E-08	9.94E-12	8.06E-11	7.99E-12	0.00E+00	9.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2605	301062.09	4021848.6	9.15E-09	1.86E-08	2.93E-09	0.00E+00	3.07E-08	1.01E-11	8.22E-11	8.15E-12	0.00E+00	1.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2606	300987.4	4021942.74	7.76E-09	1.58E-08	2.48E-09	0.00E+00	2.61E-08	8.59E-12	6.97E-11	6.91E-12	0.00E+00	8.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2607	300951.09	4021928.58	7.91E-09	1.61E-08	2.53E-09	0.00E+00	2.66E-08	8.76E-12	7.10E-11	7.04E-12	0.00E+00	8.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2608	300914.77	4021914.42	8.16E-09	1.66E-08	2.61E-09	0.00E+00	2.74E-08	9.03E-12	7.32E-11	7.26E-12	0.00E+00	8.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2609	300878.45	4021900.26	8.46E-09	1.72E-08	2.71E-09	0.00E+00	2.84E-08	9.37E-12	7.60E-11	7.53E-12	0.00E+00	9.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2610	300842.14	4021886.1	8.77E-09	1.79E-08	2.81E-09	0.00E+00	2.95E-08	9.71E-12	7.88E-11	7.81E-12	0.00E+00	9.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2611	300805.82	4021871.94	9.03E-09	1.84E-08	2.89E-09	0.00E+00	3.03E-08	9.99E-12	8.10E-11	8.03E-12	0.00E+00	9.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2612	300769.51	4021857.79	9.16E-09	1.87E-08	2.93E-09	0.00E+00	3.08E-08	1.01E-11	8.22E-11	8.15E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2613	300733.19	4021843.63	9.17E-09	1.87E-08	2.93E-09	0.00E+00	3.08E-08	1.01E-11	8.23E-11	8.16E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2614	300696.87	4021829.47	9.06E-09	1.84E-08	2.90E-09	0.00E+00	3.04E-08	1.00E-11	8.13E-11	8.06E-12	0.00E+00	9.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2615	300660.56	4021815.31	8.89E-09	1.81E-08	2.84E-09	0.00E+00	2.99E-08	9.84E-12	7.98E-11	7.91E-12	0.00E+00	9.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2616	300624.24	4021801.15	8.76E-09	1.78E-08	2.80E-09	0.00E+00	2.94E-08	9.69E-12	7.86E-11	7.79E-12	0.00E+00	9.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2617	300587.93	4021786.99	8.69E-09	1.77E-08	2.78E-09	0.00E+00	2.92E-08	9.62E-12	7.80E-11	7.73E-12	0.00E+00	9.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2618	300551.61	4021772.83	8.68E-09	1.77E-08	2.78E-09	0.00E+00	2.92E-08	9.61E-12	7.80E-11	7.73E-12	0.00E+00	9.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2619	300515.29	4021758.67	8.71E-09	1.77E-08	2.78E-09	0.00E+00	2.92E-08	9.64E-12	7.81E-11	7.75E-12	0.00E+00	9.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2620	300478.98	4021744.52	8.69E-09	1.77E-08	2.78E-09	0.00E+00	2.92E-08	9.62E-12	7.80E-11	7.73E-12	0.00E+00	9.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2621	300442.66	4021730.36	8.59E-09	1.75E-08	2.75E-09	0.00E+00	2.89E-08	9.51E-12	7.71E-11	7.65E-12	0.00E+00	9.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2622	300406.35	4021716.2	8.41E-09	1.71E-08	2.69E-09	0.00E+00	2.82E-08	9.31E-12	7.54E-11	7.48E-12	0.00E+00	9.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2623	300370.03	4021702.04	8.13E-09	1.66E-08	2.60E-09	0.00E+00	2.73E-08	9.00E-12	7.30E-11	7.23E-12	0.00E+00	8.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2685	300507.15	4020682.6	1.23E-08	2.50E-08	3.92E-09	0.00E+00	4.11E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2686	300454.92	4020586.62	8.68E-09	1.77E-08	2.78E-09	0.00E+00	2.91E-08	9.61E-12	7.79E-11	7.72E-12	0.00E+00	9.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2687	300457.16	4020683.75	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.46E-08	1.14E-11	9.25E-11	9.17E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2688	300460.53	4020829.46	1.28E-08	2.61E-08	4.09E-09	0.00E+00	4.29E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2689	300461.09	4020853.75	1.31E-08	2.68E-08	4.20E-09	0.00E+00	4.41E-08	1.45E-11	1.18E-10	1.17E-11	0.00E+00	1.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2690	300461.65	4020878.03	1.34E-08	2.74E-08	4.30E-09	0.00E+00	4.51E-08	1.49E-11	1.21E-10	1.20E-11	0.00E+00	1.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2691	300354.95	4020588.92	6.54E-09	1.33E-08	2.09E-09	0.00E+00	2.20E-08	7.24E-12	5.87E-11	5.82E-12	0.00E+00	7.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2692	300355.51	4020613.21	6.82E-09	1.39E-08	2.18E-09	0.00E+00	2.29E-08	7.55E-12	6.12E-11	6.07E-12	0.00E+00	7.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2693	300356.07	4020637.49	7.09E-09	1.44E-08	2.27E-09	0.00E+00	2.38E-08	7.85E-12	6.36E-11	6.31E-12	0.00E+00	7.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2694	300356.63	4020661.78	7.35E-09	1.50E-08	2.35E-09	0.00E+00	2.47E-08	8.14E-12	6.60E-11	6.54E-12	0.00E+00	8.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2695	300357.19	4020686.06	7.62E-09	1.55E-08	2.44E-09	0.00E+00	2.56E-08	8.44E-12	6.84E-11	6.78E-12	0.00E+00	8.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2696	300360.56	4020831.77	9.45E-09	1.93E-08	3.02E-09	0.00E+00	3.17E-08	1.05E-11	8.49E-11	8.41E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2697	300361.12	4020856.06	9.72E-09	1.98E-08	3.11E-09	0.00E+00	3.26E-08	1.08E-11	8.73E-11	8.65E-12	0.00E+00	1.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2698	300361.68	4020880.34	9.96E-09	2.03E-08	3.18E-09	0.00E+00	3.34E-08	1.10E-11	8.94E-11	8.86E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2699	300254.97	4020591.23	5.14E-09	1.05E-08	1.64E-09	0.00E+00	1.72E-08	5.69E-12	4.61E-11	4.57E-12	0.00E+00	5.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2700	300255.53	4020615.52	5.34E-09	1.09E-08	1.71E-09	0.00E+00	1.79E-08	5.92E-12	4.80E-11	4.76E-12	0.00E+00	5.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2701	300256.1	4020639.8	5.54E-09	1.13E-08	1.77E-09	0.00E+00	1.86E-08	6.13E-12	4.97E-11	4.93E-12	0.00E+00	6.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2702	300256.66	4020664.09	5.72E-09	1.17E-08	1.83E-09	0.00E+00	1.92E-08	6.33E-12	5.13E-11	5.09E-12	0.00E+00	6.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2703	300257.22	4020688.37	5.9E-09	1.20E-08	1.89E-09	0.00E+00	1.98E-08	6.54E-12	5.30E-11	5.26E-12	0.00E+00	6.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2704	300260.58	4020834.08	7.29E-09	1.49E-08	2.33E-09	0.00E+00	2.45E-08	8.07E-12	6.54E-11	6.49E-12	0.00E+00	8.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2705	300261.14	4020858.36	7.5E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.30E-12	6.73E-11	6.68E-12	0.00E+00	8.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2706	300261.7	4020882.65	7.69E-09	1.57E-08	2.46E-09	0.00E+00	2.58E-08	8.51E-12	6.90E-11	6.84E-12	0.00E+00	8.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2707	300155	4020593.54	4.17E-09	8.49E-09	1.33E-09	0.00E+00	1.40E-08	4.62E-12	3.74E-11	3.71E-12	0.00E+00	4.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2708	300155.56	4020617.83	4.33E-09	8.82E-09	1.38E-09	0.00E+00	1.45E-08	4.79E-12	3.89E-11	3.85E-12	0.00E+00	4.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2709	300156.12	4020642.11	4.48E-09	9.12E-09	1.43E-09	0.00E+00	1.50E-08	4.96E-12	4.02E-11	3.98E-12	0.00E+00	4.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2710	300156.68	4020666.4	4.61E-09	9.40E-09	1.48E-09	0.00E+00	1.55E-08	5.11E-12	4.14E-11	4.11E-12	0.00E+00	5.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2711	300157.24	4020690.68	4.75E-09	9.67E-09	1.52E-09	0.00E+00	1.59E-08	5.26E-12	4.26E-11	4.23E-12	0.00E+00	5.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2712	300160.61	4020836.39	5.81E-09	1.18E-08	1.86E-09	0.00E+00	1.95E-08	6.43E-12	5.21E-11	5.17E-12	0.00E+00	6.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2713	300161.17	4020860.67	5.98E-09	1.22E-08	1.91E-09	0.00E+00	2.01E-08	6.62E-12	5.37E-11	5.32E-12	0.00E+00	6.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2714	300161.73	4020884.96	6.14E-09	1.25E-08	1.96E-09	0.00E+00	2.06E-08	6.79E-12	5.51E-11	5.46E-12	0.00E+00	6.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2715	300055.03	4020595.85	3.47E-09	7.07E-09	1.11E-09	0.00E+00	1.16E-08	3.84E-12	3.11E-11	3.09E-12	0.00E+00	3.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2716	300055.59	4020620.13	3.6E-09	7.34E-09	1.15E-09	0.00E+00	1.21E-08	3.99E-12	3.23E-11	3.20E-12	0.00E+00	3.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2717	300056.15	4020644.42	3.72E-09	7.58E-09	1.19E-09	0.00E+00	1.25E-08	4.12E-12	3.34E-11	3.31E-12	0.00E+00	4.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2718	300056.71	4020668.7	3.83E-09	7.80E-09	1.22E-09	0.00E+00	1.29E-08	4.24E-12	3.44E-11	3.41E-12	0.00E+00	4.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2719	300057.27	4020692.99	3.94E-09	8.02E-09	1.26E-09	0.00E+00	1.32E-08	4.36E-12	3.53E-11	3.50E-12	0.00E+00	4.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2720	300060.07	4020814.41	4.61E-09	9.38E-09	1.47E-09	0.00E+00	1.55E-08	5.10E-12	4.13E-11	4.10E-12	0.00E+00	5.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2721	300060.63	4020838.7	4.76E-09	9.69E-09	1.52E-09	0.00E+00	1.60E-08	5.26E-12	4.27E-11	4.23E-12	0.00E+00	5.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2722	300061.2	4020862.98	4.9E-09	9.97E-09	1.57E-09	0.00E+00	1.64E-08	5.42E-12	4.39E-11	4.36E-12	0.00E+00	5.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2723	300061.76	4020887.27	5.03E-09	1.02E-08	1.61E-09	0.00E+00	1.69E-08	5.56E-12	4.51E-11	4.47E-12	0.00E+00	5.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2724	299955.05	4020598.16	2.95E-09	6.00E-09	9.42E-10	0.00E+00	9.89E-09	3.26E-12	2.64E-11	2.62E-12	0.00E+00	3.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2725	299955.61	4020622.44	3.06E-09	6.22E-09	9.77E-10	0.00E+00	1.03E-08	3.38E-12	2.74E-11	2.72E-12	0.00E+00	3.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2726	299956.18	4020646.73	3.16E-09	6.43E-09	1.01E-09	0.00E+00	1.06E-08	3.49E-12	2.83E-11	2.81E-12	0.00E+00	3.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2727	299956.74	4020671.01	3.25E-09	6.62E-09	1.04E-09	0.00E+00	1.09E-08	3.60E-12	2.92E-11	2.89E-12	0.00E+00	3.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2728	299957.3	4020695.3	3.34E-09	6.81E-09	1.07E-09	0.00E+00	1.12E-08	3.70E-12	3.00E-11	2.97E-12	0.00E+00	3.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2729	299960.1	4020816.72	3.86E-09	7.87E-09	1.24E-09	0.00E+00	1.30E-08	4.28E-12	3.47E-11	3.44E-12	0.00E+00	4.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2730	299960.66	4020841	3.98E-09	8.11E-09	1.27E-09	0.00E+00	1.34E-08	4.41E-12	3.57E-11	3.54E-12	0.00E+00	4.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2731	299961.22	4020865.29	4.1E-09	8.35E-09	1.31E-09	0.00E+00	1.38E-08	4.54E-12	3.68E-11	3.65E-12	0.00E+00	4.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2732	299961.78	4020889.57	4.2E-09	8.57E-09	1.34E-09	0.00E+00	1.41E-08	4.65E-12	3.77E-11	3.74E-12	0.00E+00	4.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2733	299855.08	4020600.47	2.54E-09	5.18E-09	8.13E-10	0.00E+00	8.53E-09	2.81E-12	2.28E-11	2.26E-12	0.00E+00	2.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2734	299855.64	4020624.75	2.64E-09	5.37E-09	8.43E-10	0.00E+00	8.85E-09	2.92E-12	2.37E-11	2.35E-12	0.00E+00	2.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2735	299856.2	4020649.04	2.73E-09	5.55E-09	8.71E-10	0.00E+00	9.15E-09	3.02E-12	2.45E-11	2.43E-12	0.00E+00	2.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2736	299856.76	4020673.32	2.81E-09	5.73E-09	8.99E-10	0.00E+00	9.44E-09	3.11E-12	2.52E-11	2.50E-12	0.00E+00	3.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2737	299857.32	4020697.61	2.89E-09	5.90E-09	9.25E-10	0.00E+00	9.72E-09	3.20E-12	2.60E-11	2.58E-12	0.00E+00	3.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2738	299860.13	4020819.03	3.31E-09	6.74E-09	1.06E-09	0.00E+00	1.11E-08	3.66E-12	2.97E-11	2.95E-12	0.00E+00	3.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2739	299860.69	4020843.31	3.4E-09	6.93E-09	1.09E-09	0.00E+00	1.14E-08	3.77E-12	3.06E-11	3.03E-12	0.00E+00	3.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2740	299861.25	4020867.6	3.5E-09	7.12E-09	1.12E-09	0.00E+00	1.17E-08	3.87E-12	3.14E-11	3.11E-12	0.00E+00	3.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2741	299861.81	4020891.88	3.58E-09	7.30E-09	1.15E-09	0.00E+00	1.20E-08	3.97E-12	3.22E-11	3.19E-12	0.00E+00	3.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2742	299755.11	4020602.78	2.22E-09	4.53E-09	7.11E-10	0.00E+00	7.46E-09	2.46E-12	2.00E-11	1.98E-12	0.00E+00	2.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2743	299755.67	4020627.06	2.31E-09	4.70E-09	7.37E-10	0.00E+00	7.74E-09	2.55E-12	2.07E-11	2.05E-12	0.00E+00	2.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2744	299756.23	4020651.34	2.39E-09	4.87E-09	7.64E-10	0.00E+00	8.02E-09	2.65E-12	2.15E-11	2.13E-12	0.00E+00	2.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2745	299756.79	4020675.63	2.47E-09	5.03E-09	7.89E-10	0.00E+00	8.29E-09	2.73E-12	2.22E-11	2.20E-12	0.00E+00	2.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2746	299757.35	4020699.91	2.55E-09	5.19E-09	8.14E-10	0.00E+00	8.55E-09	2.82E-12	2.28E-11	2.27E-12	0.00E+00	2.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2747	299760.15	4020821.34	2.89E-09	5.89E-09	9.24E-10	0.00E+00	9.70E-09	3.20E-12	2.59E-11	2.57E-12	0.00E+00	3.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2748	299760.71	4020845.62	2.96E-09	6.03E-09	9.47E-10	0.00E+00	9.94E-09	3.28E-12	2.66E-11	2.64E-12	0.00E+00	3.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2749	299761.28	4020869.91	3.03E-09	6.18E-09	9.70E-10	0.00E+00	1.02E-08	3.36E-12	2.72E-11	2.70E-12	0.00E+00	3.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2750	299761.84	4020894.19	3.1E-09	6.32E-09	9.93E-10	0.00E+00	1.04E-08	3.44E-12	2.79E-11	2.76E-12	0.00E+00	3.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2751	299655.13	4020605.08	1.97E-09	4.01E-09	6.30E-10	0.00E+00	6.61E-09	2.18E-12	1.77E-11	1.75E-12	0.00E+00	2.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

2813	301239	4021010.97	1.41E-07	2.88E-07	4.51E-08	0.00E+00	4.74E-07	1.56E-10	1.27E-09	1.26E-10	0.00E+00	1.55E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2814	301263.97	4021010.52	1.3E-07	2.64E-07	4.14E-08	0.00E+00	4.35E-07	1.43E-10	1.16E-09	1.15E-10	0.00E+00	1.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2815	301023.23	4021022.92	1.16E-07	2.37E-07	3.72E-08	0.00E+00	3.90E-07	1.29E-10	1.04E-09	1.03E-10	0.00E+00	1.28E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2816	300895.5	4020888.59	9.69E-08	1.97E-07	3.10E-08	0.00E+00	3.25E-07	1.07E-10	8.70E-10	8.63E-11	0.00E+00	1.06E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2817	301089.65	4021038.7	1.24E-07	2.52E-07	3.95E-08	0.00E+00	4.15E-07	1.37E-10	1.11E-09	1.10E-10	0.00E+00	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2818	301114.62	4021038.24	1.28E-07	2.62E-07	4.11E-08	0.00E+00	4.31E-07	1.42E-10	1.15E-09	1.14E-10	0.00E+00	1.41E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2819	301139.58	4021037.79	1.31E-07	2.67E-07	4.19E-08	0.00E+00	4.40E-07	1.45E-10	1.18E-09	1.17E-10	0.00E+00	1.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2820	301164.55	4021037.33	1.32E-07	2.68E-07	4.21E-08	0.00E+00	4.42E-07	1.46E-10	1.18E-09	1.17E-10	0.00E+00	1.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2821	301189.52	4021036.88	1.29E-07	2.64E-07	4.14E-08	0.00E+00	4.35E-07	1.43E-10	1.16E-09	1.15E-10	0.00E+00	1.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2822	301214.49	4021036.42	1.25E-07	2.55E-07	4.00E-08	0.00E+00	4.20E-07	1.38E-10	1.12E-09	1.11E-10	0.00E+00	1.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2823	301239.46	4021035.97	1.18E-07	2.41E-07	3.78E-08	0.00E+00	3.97E-07	1.31E-10	1.06E-09	1.05E-10	0.00E+00	1.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2824	301264.43	4021035.51	1.1E-07	2.24E-07	3.51E-08	0.00E+00	3.69E-07	1.22E-10	9.86E-10	9.78E-11	0.00E+00	1.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2825	301065.13	4021064.15	1E-07	2.04E-07	3.20E-08	0.00E+00	3.36E-07	1.11E-10	8.99E-10	8.91E-11	0.00E+00	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2826	301090.1	4021063.69	1.05E-07	2.13E-07	3.34E-08	0.00E+00	3.51E-07	1.16E-10	9.38E-10	9.30E-11	0.00E+00	1.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2827	301115.07	4021063.24	1.08E-07	2.20E-07	3.45E-08	0.00E+00	3.62E-07	1.19E-10	9.68E-10	9.60E-11	0.00E+00	1.18E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2828	301140.04	4021062.78	1.1E-07	2.24E-07	3.51E-08	0.00E+00	3.68E-07	1.22E-10	9.85E-10	9.77E-11	0.00E+00	1.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2829	301165.01	4021062.33	1.1E-07	2.24E-07	3.52E-08	0.00E+00	3.69E-07	1.22E-10	9.88E-10	9.80E-11	0.00E+00	1.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2830	301189.98	4021061.87	1.09E-07	2.21E-07	3.47E-08	0.00E+00	3.65E-07	1.20E-10	9.75E-10	9.67E-11	0.00E+00	1.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2831	301214.95	4021061.42	1.06E-07	2.15E-07	3.37E-08	0.00E+00	3.54E-07	1.17E-10	9.47E-10	9.39E-11	0.00E+00	1.16E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2832	301239.92	4021060.96	1.01E-07	2.05E-07	3.22E-08	0.00E+00	3.38E-07	1.11E-10	9.03E-10	8.96E-11	0.00E+00	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2833	301264.88	4021060.51	9.44E-08	1.92E-07	3.02E-08	0.00E+00	3.17E-07	1.04E-10	8.47E-10	8.40E-11	0.00E+00	1.04E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2834	300955.02	4021070.66	7.31E-08	1.49E-07	2.34E-08	0.00E+00	2.46E-07	8.10E-11	6.56E-10	6.51E-11	0.00E+00	8.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2835	300830.77	4020913.61	6.36E-08	1.30E-07	2.03E-08	0.00E+00	2.13E-07	7.04E-11	5.71E-10	5.66E-11	0.00E+00	6.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2836	301066.04	4021114.14	7.51E-08	1.53E-07	2.40E-08	0.00E+00	2.52E-07	8.32E-11	6.74E-10	6.69E-11	0.00E+00	8.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2837	301091.01	4021113.68	7.75E-08	1.58E-07	2.48E-08	0.00E+00	2.60E-07	8.58E-11	6.96E-10	6.90E-11	0.00E+00	8.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2838	301115.98	4021113.23	7.92E-08	1.61E-07	2.53E-08	0.00E+00	2.66E-07	8.77E-11	7.11E-10	7.05E-11	0.00E+00	8.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2839	301140.95	4021112.77	8.03E-08	1.63E-07	2.57E-08	0.00E+00	2.69E-07	8.88E-11	7.20E-10	7.14E-11	0.00E+00	8.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2840	301165.92	4021112.32	8.05E-08	1.64E-07	2.57E-08	0.00E+00	2.70E-07	8.91E-11	7.22E-10	7.16E-11	0.00E+00	8.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2841	301190.89	4021111.86	7.99E-08	1.63E-07	2.55E-08	0.00E+00	2.68E-07	8.84E-11	7.17E-10	7.11E-11	0.00E+00	8.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2842	301215.86	4021111.41	7.82E-08	1.59E-07	2.50E-08	0.00E+00	2.63E-07	8.66E-11	7.02E-10	6.96E-11	0.00E+00	8.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2843	301240.83	4021110.95	7.55E-08	1.54E-07	2.41E-08	0.00E+00	2.53E-07	8.36E-11	6.78E-10	6.72E-11	0.00E+00	8.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2844	301265.79	4021110.5	7.19E-08	1.46E-07	2.30E-08	0.00E+00	2.41E-07	7.96E-11	6.45E-10	6.40E-11	0.00E+00	7.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2845	300960.37	4021122.39	5.98E-08	1.22E-07	1.91E-08	0.00E+00	2.01E-07	6.62E-11	5.37E-10	5.32E-11	0.00E+00	6.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2846	300770.79	4020892.06	4.73E-08	9.63E-08	1.51E-08	0.00E+00	1.59E-07	5.23E-11	4.24E-10	4.21E-11	0.00E+00	5.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2847	301066.96	4021164.13	5.84E-08	1.19E-07	1.87E-08	0.00E+00	1.96E-07	6.47E-11	5.24E-10	5.20E-11	0.00E+00	6.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2848	301091.92	4021163.68	5.98E-08	1.22E-07	1.91E-08	0.00E+00	2.01E-07	6.62E-11	5.36E-10	5.32E-11	0.00E+00	6.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2849	301116.89	4021163.22	6.07E-08	1.24E-07	1.94E-08	0.00E+00	2.04E-07	6.72E-11	5.45E-10	5.40E-11	0.00E+00	6.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2850	301141.86	4021162.77	6.13E-08	1.25E-07	1.96E-08	0.00E+00	2.06E-07	6.79E-11	5.50E-10	5.46E-11	0.00E+00	6.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2851	301166.83	4021162.31	6.15E-08	1.25E-07	1.97E-08	0.00E+00	2.07E-07	6.81E-11	5.52E-10	5.48E-11	0.00E+00	6.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2852	301191.8	4021161.86	6.13E-08	1.25E-07	1.96E-08	0.00E+00	2.06E-07	6.79E-11	5.50E-10	5.46E-11	0.00E+00	6.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2853	301216.77	4021161.4	6.04E-08	1.23E-07	1.93E-08	0.00E+00	2.03E-07	6.69E-11	5.42E-10	5.38E-11	0.00E+00	6.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2854	301241.74	4021160.95	5.88E-08	1.20E-07	1.88E-08	0.00E+00	1.97E-07	6.51E-11	5.28E-10	5.23E-11	0.00E+00	6.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2855	301266.71	4021160.49	5.66E-08	1.15E-07	1.81E-08	0.00E+00	1.90E-07	6.26E-11	5.08E-10	5.04E-11	0.00E+00	6.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2856	301045.26	4021205.27	4.76E-08	9.70E-08	1.52E-08	0.00E+00	1.60E-07	5.27E-11	4.27E-10	4.24E-11	0.00E+00	5.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2857	301022.65	4021196.41	4.84E-08	9.86E-08	1.55E-08	0.00E+00	1.62E-07	5.36E-11	4.34E-10	4.31E-11	0.00E+00	5.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2858	301000.04	4021187.56	4.9E-08	9.97E-08	1.57E-08	0.00E+00	1.64E-07	5.42E-11	4.39E-10	4.36E-11	0.00E+00	5.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2859	300977.43	4021178.71	4.92E-08	1.00E-07	1.57E-08	0.00E+00	1.65E-07	5.45E-11	4.42E-10	4.38E-11	0.00E+00	5.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2860	300954.82	4021169.85	4.9E-08	9.98E-08	1.57E-08	0.00E+00	1.64E-07	5.42E-11	4.40E-10	4.36E-11	0.00E+00	5.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2861	300932.21	4021161	4.84E-08	9.85E-08	1.55E-08	0.00E+00	1.62E-07	5.35E-11	4.34E-10	4.30E-11	0.00E+00	5.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2862	300909.6	4021152.14	4.74E-08	9.65E-08	1.51E-08	0.00E+00	1.59E-07	5.24E-11	4.25E-10	4.22E-11	0.00E+00	5.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2863	300886.99	4021143.29	4.61E-08	9.40E-08	1.48E-08	0.00E+00	1.55E-07	5.11E-11	4.14E-10	4.11E-11	0.00E+00	5.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2864	300864.38	4021134.43	4.46E-08	9.09E-08	1.43E-08	0.00E+00	1.50E-07	4.94E-11	4.01E-10	3.97E-11	0.00E+00	4.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2865	300841.78	4021125.58	4.29E-08	8.74E-08	1.37E-08	0.00E+00	1.44E-07	4.75E-11	3.85E-10	3.82E-11	0.00E+00	4.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2866	300789.83	4021050.05	4.26E-08	8.67E-08	1.36E-08	0.00E+00	1.43E-07	4.71E-11	3.82E-10	3.79E-11	0.00E+00	4.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2867	300760.48	4020983.38	4.15E-08	8.46E-08	1.33E-08	0.00E+00	1.39E-07	4.60E-11	3.73E-10	3.70E-11	0.00E+00	4.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2868	300740.92	4020938.93	3.97E-08	8.09E-08	1.27E-08	0.00E+00	1.33E-07	4.40E-11	3.57E-10	3.54E-11	0.00E+00	4.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2869	300731.14	4020916.71	3.86E-08	7.86E-08	1.23E-08	0.00E+00	1.30E-07	4.27E-11	3.46E-10	3.43E-11	0.00E+00	4.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2870	301067.87	4021214.12	4.67E-08	9.51E-08	1.49E-08	0.00E+00	1.57E-07	5.17E-11	4.19E-10	4.16E-11	0.00E+00	5.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2871	301092.84	4021213.67	4.75E-08	9.67E-08	1.52E-08	0.00E+00	1.59E-07	5.26E-11	4.26E-10	4.22E-11	0.00E+00	5.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2872	301117.8	4021213.21	4.81E-08	9.79E-08	1.54E-08	0.00E+00	1.61E-07	5.32E-11	4.31E-10	4.28E-11	0.00E+00	5.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2873	301142.77	4021212.76	4.85E-08	9.87E-08	1.55E-08	0.00E+00	1.63E-07	5.36E-11	4.35E-10	4.31E-11	0.00E+00	5.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2874	301167.74	4021212.3	4.87E-08	9.92E-08	1.56E-08	0.00E+00	1.63E-07	5.39E-11	4.37E-10	4.33E-11	0.00E+00	5.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2875	301192.71	4021211.85	4.86E-08	9.91E-08	1.56E-08	0.00E+00	1.63E-07	5.39E-11	4.37E-10	4.33E-11	0.00E+00	5.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2876	301217.68	4021211.39	4.81E-08	9.81E-08	1.54E-08	0.00E+00	1.62E-07	5.33E-11	4.32E-10	4.29E-11	0.00E+00	5.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2877	301242.65	4021210.94	4.71E-08	9.60E-08	1.51E-08	0.00E+00	1.58E-07	5.22E-11	4.23E-10	4.20E-11	0.00E+00	5.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2878	301267.62	4021210.48	4.57E-08	9.31E-08	1.46E-08	0.00E+00	1.53E-07	5.06E-11	4.10E-10	4.07E-11	0.00E+00	5.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2879	300959.46	4021221.3	4.08E-08	8.32E-08	1.31E-08	0.00E+00	1.37E-07	4.52E-11	3.66E-10	3.63E-11	0.00E+00	4.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

2941	301025.53	4021396.08	2.4E-08	4.89E-08	7.67E-09	0.00E+00	8.05E-08	2.66E-11	2.15E-10	2.13E-11	0.00E+00	2.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2942	301002.54	4021387.08	2.45E-08	4.99E-08	7.83E-09	0.00E+00	8.23E-08	2.71E-11	2.20E-10	2.18E-11	0.00E+00	2.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2943	300979.55	4021378.08	2.5E-08	5.09E-08	7.99E-09	0.00E+00	8.38E-08	2.77E-11	2.24E-10	2.22E-11	0.00E+00	2.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2944	300956.57	4021369.07	2.54E-08	5.17E-08	8.11E-09	0.00E+00	8.52E-08	2.81E-11	2.28E-10	2.26E-11	0.00E+00	2.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2945	300933.58	4021360.07	2.56E-08	5.22E-08	8.19E-09	0.00E+00	8.60E-08	2.83E-11	2.30E-10	2.28E-11	0.00E+00	2.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2946	300910.59	4021351.07	2.57E-08	5.23E-08	8.21E-09	0.00E+00	8.62E-08	2.84E-11	2.31E-10	2.29E-11	0.00E+00	2.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2947	300887.6	4021342.06	2.56E-08	5.22E-08	8.19E-09	0.00E+00	8.60E-08	2.84E-11	2.30E-10	2.28E-11	0.00E+00	2.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2948	300864.61	4021333.06	2.55E-08	5.19E-08	8.14E-09	0.00E+00	8.55E-08	2.82E-11	2.28E-10	2.27E-11	0.00E+00	2.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2949	300841.62	4021324.06	2.52E-08	5.14E-08	8.07E-09	0.00E+00	8.47E-08	2.79E-11	2.26E-10	2.25E-11	0.00E+00	2.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2950	300818.63	4021315.06	2.5E-08	5.09E-08	7.98E-09	0.00E+00	8.38E-08	2.76E-11	2.24E-10	2.22E-11	0.00E+00	2.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2951	300795.64	4021306.05	2.46E-08	5.02E-08	7.88E-09	0.00E+00	8.27E-08	2.73E-11	2.21E-10	2.19E-11	0.00E+00	2.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2952	300772.65	4021297.05	2.42E-08	4.93E-08	7.74E-09	0.00E+00	8.13E-08	2.68E-11	2.17E-10	2.16E-11	0.00E+00	2.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2953	300749.66	4021288.05	2.37E-08	4.83E-08	7.57E-09	0.00E+00	7.95E-08	2.62E-11	2.13E-10	2.11E-11	0.00E+00	2.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2954	300726.67	4021279.04	2.3E-08	4.69E-08	7.36E-09	0.00E+00	7.73E-08	2.55E-11	2.07E-10	2.05E-11	0.00E+00	2.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2955	300703.69	4021270.04	2.22E-08	4.53E-08	7.11E-09	0.00E+00	7.47E-08	2.46E-11	2.00E-10	1.98E-11	0.00E+00	2.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2956	300650.86	4021193.24	2.18E-08	4.44E-08	6.96E-09	0.00E+00	7.31E-08	2.41E-11	1.95E-10	1.94E-11	0.00E+00	2.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2957	300640.92	4021170.65	2.18E-08	4.43E-08	6.96E-09	0.00E+00	7.31E-08	2.41E-11	1.95E-10	1.94E-11	0.00E+00	2.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2958	300630.97	4021148.05	2.17E-08	4.42E-08	6.94E-09	0.00E+00	7.29E-08	2.40E-11	1.95E-10	1.93E-11	0.00E+00	2.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2959	300601.14	4021080.26	2.12E-08	4.31E-08	6.77E-09	0.00E+00	7.10E-08	2.34E-11	1.90E-10	1.88E-11	0.00E+00	2.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2960	300591.19	4021057.66	2.08E-08	4.24E-08	6.66E-09	0.00E+00	6.99E-08	2.31E-11	1.87E-10	1.85E-11	0.00E+00	2.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2961	300581.25	4021035.06	2.04E-08	4.16E-08	6.52E-09	0.00E+00	6.85E-08	2.26E-11	1.83E-10	1.82E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2962	300571.3	4021012.46	1.99E-08	4.04E-08	6.35E-09	0.00E+00	6.66E-08	2.20E-11	1.78E-10	1.77E-11	0.00E+00	2.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2963	301071.51	4021414.09	2.3E-08	4.69E-08	7.36E-09	0.00E+00	7.73E-08	2.55E-11	2.07E-10	2.05E-11	0.00E+00	2.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2964	301096.48	4021413.63	2.32E-08	4.74E-08	7.43E-09	0.00E+00	7.80E-08	2.57E-11	2.09E-10	2.07E-11	0.00E+00	2.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2965	301121.45	4021413.18	2.35E-08	4.78E-08	7.51E-09	0.00E+00	7.88E-08	2.60E-11	2.11E-10	2.09E-11	0.00E+00	2.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2966	301146.42	4021412.72	2.37E-08	4.83E-08	7.58E-09	0.00E+00	7.96E-08	2.62E-11	2.13E-10	2.11E-11	0.00E+00	2.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2967	301171.39	4021412.27	2.39E-08	4.86E-08	7.63E-09	0.00E+00	8.01E-08	2.64E-11	2.14E-10	2.12E-11	0.00E+00	2.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2968	301196.35	4021411.81	2.39E-08	4.88E-08	7.66E-09	0.00E+00	8.04E-08	2.65E-11	2.15E-10	2.13E-11	0.00E+00	2.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2969	301221.32	4021411.36	2.39E-08	4.87E-08	7.64E-09	0.00E+00	8.02E-08	2.64E-11	2.14E-10	2.13E-11	0.00E+00	2.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2970	301246.29	4021410.9	2.37E-08	4.83E-08	7.58E-09	0.00E+00	7.96E-08	2.62E-11	2.13E-10	2.11E-11	0.00E+00	2.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2971	301271.26	4021410.45	2.34E-08	4.77E-08	7.48E-09	0.00E+00	7.85E-08	2.59E-11	2.10E-10	2.08E-11	0.00E+00	2.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2972	300892.91	4021393.78	2.26E-08	4.60E-08	7.22E-09	0.00E+00	7.58E-08	2.50E-11	2.03E-10	2.01E-11	0.00E+00	2.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2973	300713.4	4021323.48	2.07E-08	4.22E-08	6.62E-09	0.00E+00	6.95E-08	2.29E-11	1.86E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2974	300636.37	4021275.06	1.89E-08	3.85E-08	6.04E-09	0.00E+00	6.34E-08	2.09E-11	1.70E-10	1.68E-11	0.00E+00	2.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2975	300626.67	4021253	1.9E-08	3.87E-08	6.07E-09	0.00E+00	6.37E-08	2.10E-11	1.70E-10	1.69E-11	0.00E+00	2.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2976	300616.96	4021230.94	1.9E-08	3.88E-08	6.08E-09	0.00E+00	6.39E-08	2.11E-11	1.71E-10	1.69E-11	0.00E+00	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2977	300587.84	4021164.77	1.89E-08	3.85E-08	6.05E-09	0.00E+00	6.35E-08	2.09E-11	1.70E-10	1.68E-11	0.00E+00	2.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2978	300578.13	4021142.72	1.88E-08	3.83E-08	6.01E-09	0.00E+00	6.31E-08	2.08E-11	1.69E-10	1.67E-11	0.00E+00	2.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2979	300568.42	4021120.66	1.86E-08	3.79E-08	5.95E-09	0.00E+00	6.25E-08	2.06E-11	1.67E-10	1.66E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2980	300558.72	4021098.6	1.84E-08	3.74E-08	5.87E-09	0.00E+00	6.16E-08	2.03E-11	1.65E-10	1.63E-11	0.00E+00	2.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2981	300529.6	4021032.43	1.72E-08	3.51E-08	5.51E-09	0.00E+00	5.78E-08	1.91E-11	1.55E-10	1.53E-11	0.00E+00	1.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2982	300519.89	4021010.37	1.67E-08	3.41E-08	5.35E-09	0.00E+00	5.61E-08	1.85E-11	1.50E-10	1.49E-11	0.00E+00	1.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2983	300510.18	4020988.32	1.62E-08	3.30E-08	5.17E-09	0.00E+00	5.43E-08	1.79E-11	1.45E-10	1.44E-11	0.00E+00	1.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2984	300500.48	4020966.26	1.57E-08	3.19E-08	5.00E-09	0.00E+00	5.25E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2985	300490.77	4020944.2	1.51E-08	3.08E-08	4.84E-09	0.00E+00	5.08E-08	1.68E-11	1.36E-10	1.35E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2986	300481.06	4020922.15	1.46E-08	2.97E-08	4.67E-09	0.00E+00	4.90E-08	1.62E-11	1.31E-10	1.30E-11	0.00E+00	1.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2987	300471.36	4020900.09	1.4E-08	2.86E-08	4.49E-09	0.00E+00	4.71E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2988	301072.42	4021464.08	2E-08	4.08E-08	6.40E-09	0.00E+00	6.72E-08	2.22E-11	1.80E-10	1.78E-11	0.00E+00	2.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2989	301097.39	4021463.63	2.02E-08	4.12E-08	6.46E-09	0.00E+00	6.79E-08	2.24E-11	1.81E-10	1.80E-11	0.00E+00	2.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2990	301122.36	4021463.17	2.04E-08	4.16E-08	6.53E-09	0.00E+00	6.86E-08	2.26E-11	1.83E-10	1.82E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2991	301147.33	4021462.72	2.06E-08	4.20E-08	6.60E-09	0.00E+00	6.92E-08	2.28E-11	1.85E-10	1.84E-11	0.00E+00	2.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2992	301172.3	4021462.26	2.08E-08	4.23E-08	6.64E-09	0.00E+00	6.97E-08	2.30E-11	1.86E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2993	301197.27	4021461.81	2.08E-08	4.25E-08	6.66E-09	0.00E+00	7.00E-08	2.31E-11	1.87E-10	1.85E-11	0.00E+00	2.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2994	301222.23	4021461.35	2.08E-08	4.24E-08	6.65E-09	0.00E+00	6.98E-08	2.30E-11	1.87E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2995	301247.2	4021460.9	2.07E-08	4.21E-08	6.61E-09	0.00E+00	6.94E-08	2.29E-11	1.86E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2996	301272.17	4021460.44	2.05E-08	4.17E-08	6.54E-09	0.00E+00	6.87E-08	2.26E-11	1.84E-10	1.82E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2997	300893.37	4021493.23	1.79E-08	3.65E-08	5.72E-09	0.00E+00	6.01E-08	1.98E-11	1.61E-10	1.59E-11	0.00E+00	1.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2998	300825.54	4021466.67	1.78E-08	3.63E-08	5.70E-09	0.00E+00	5.98E-08	1.97E-11	1.60E-10	1.59E-11	0.00E+00	1.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2999	300644.67	4021395.83	1.63E-08	3.33E-08	5.22E-09	0.00E+00	5.48E-08	1.81E-11	1.47E-10	1.45E-11	0.00E+00	1.79E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3000	300567.06	4021347.05	1.49E-08	3.03E-08	4.76E-09	0.00E+00	5.00E-08	1.65E-11	1.34E-10	1.33E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3001	300557.28	4021324.82	1.49E-08	3.04E-08	4.78E-09	0.00E+00	5.01E-08	1.65E-11	1.34E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3002	300547.5	4021302.6	1.5E-08	3.05E-08	4.78E-09	0.00E+00	5.02E-08	1.66E-11	1.34E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3003	300518.16	4021235.93	1.49E-08	3.03E-08	4.76E-09	0.00E+00	5.00E-08	1.65E-11	1.34E-10	1.32E-11	0.00E+00	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3004	300508.38	4021213.7	1.48E-08	3.02E-08	4.73E-09	0.00E+00	4.97E-08	1.64E-11	1.33E-10	1.32E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3005	300498.6	4021191.48	1.47E-08	2.99E-08	4.69E-09	0.00E+00	4.93E-08	1.62E-11	1.32E-10	1.31E-11	0.00E+00	1.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3006	300488.82	4021169.25	1.45E-08	2.96E-08	4.64E-09	0.00E+00	4.87E-08	1.61E-11	1.30E-10	1.29E-11	0.00E+00	1.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3007	300469.26	4021124.81	1.41E-08	2.86E-08	4.49E-09	0.00E+00	4.72E-08	1.56E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3069	300329.69	4021266.62	9.59E-09	1.95E-08	3.07E-09	0.00E+00	3.22E-08	1.06E-11	8.61E-11	8.54E-12	0.00E+00	1.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3070	300319.81	4021244.17	9.46E-09	1.93E-08	3.03E-09	0.00E+00	3.18E-08	1.05E-11	8.50E-11	8.42E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3071	300309.93	4021221.72	9.32E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.37E-11	8.30E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3072	300300.05	4021199.27	9.18E-09	1.87E-08	2.93E-09	0.00E+00	3.08E-08	1.02E-11	8.24E-11	8.17E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3073	300290.17	4021176.82	9.02E-09	1.84E-08	2.88E-09	0.00E+00	3.03E-08	9.99E-12	8.10E-11	8.03E-12	0.00E+00	9.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3074	300280.29	4021154.37	8.86E-09	1.80E-08	2.83E-09	0.00E+00	2.97E-08	9.80E-12	7.95E-11	7.88E-12	0.00E+00	9.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3075	300270.41	4021131.92	8.67E-09	1.77E-08	2.77E-09	0.00E+00	2.91E-08	9.60E-12	7.78E-11	7.72E-12	0.00E+00	9.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3076	300260.53	4021109.47	8.46E-09	1.72E-08	2.71E-09	0.00E+00	2.84E-08	9.37E-12	7.60E-11	7.53E-12	0.00E+00	9.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3077	300250.65	4021087.02	8.23E-09	1.68E-08	2.63E-09	0.00E+00	2.76E-08	9.11E-12	7.39E-11	7.33E-12	0.00E+00	9.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3078	300240.77	4021064.56	7.99E-09	1.63E-08	2.55E-09	0.00E+00	2.68E-08	8.84E-12	7.17E-11	7.11E-12	0.00E+00	8.77E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3079	300230.89	4021042.11	7.74E-09	1.58E-08	2.47E-09	0.00E+00	2.60E-08	8.57E-12	6.95E-11	6.89E-12	0.00E+00	8.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3080	300221.01	4021019.66	7.5E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.30E-12	6.73E-11	6.67E-12	0.00E+00	8.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3081	300211.13	4020997.21	7.27E-09	1.48E-08	2.32E-09	0.00E+00	2.44E-08	8.04E-12	6.52E-11	6.47E-12	0.00E+00	7.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3082	300201.25	4020974.76	7.04E-09	1.44E-08	2.25E-09	0.00E+00	2.36E-08	7.80E-12	6.32E-11	6.27E-12	0.00E+00	7.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3083	300191.37	4020952.31	6.83E-09	1.39E-08	2.18E-09	0.00E+00	2.29E-08	7.56E-12	6.13E-11	6.08E-12	0.00E+00	7.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3084	300181.49	4020929.86	6.61E-09	1.35E-08	2.11E-09	0.00E+00	2.22E-08	7.32E-12	5.93E-11	5.88E-12	0.00E+00	7.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3085	300171.61	4020907.41	6.38E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.06E-12	5.73E-11	5.68E-12	0.00E+00	7.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3086	301077.89	4021764.03	1.06E-08	2.15E-08	3.38E-09	0.00E+00	3.55E-08	1.17E-11	9.48E-11	9.40E-12	0.00E+00	1.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3087	301102.86	4021763.58	1.07E-08	2.18E-08	3.42E-09	0.00E+00	3.59E-08	1.18E-11	9.60E-11	9.52E-12	0.00E+00	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3088	301127.83	4021763.12	1.08E-08	2.20E-08	3.46E-09	0.00E+00	3.63E-08	1.20E-11	9.71E-11	9.63E-12	0.00E+00	1.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3089	301152.79	4021762.67	1.09E-08	2.22E-08	3.49E-09	0.00E+00	3.66E-08	1.21E-11	9.79E-11	9.70E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3090	301177.76	4021762.21	1.1E-08	2.23E-08	3.50E-09	0.00E+00	3.68E-08	1.21E-11	9.83E-11	9.75E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3091	301202.73	4021761.76	1.1E-08	2.23E-08	3.51E-09	0.00E+00	3.68E-08	1.21E-11	9.84E-11	9.76E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3092	301227.7	4021761.3	1.1E-08	2.23E-08	3.50E-09	0.00E+00	3.68E-08	1.21E-11	9.83E-11	9.75E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3093	301252.67	4021760.85	1.09E-08	2.23E-08	3.49E-09	0.00E+00	3.67E-08	1.21E-11	9.80E-11	9.72E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3094	301277.64	4021760.39	1.09E-08	2.22E-08	3.48E-09	0.00E+00	3.66E-08	1.21E-11	9.77E-11	9.69E-12	0.00E+00	1.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3095	300827.57	4021765.27	1.06E-08	2.16E-08	3.38E-09	0.00E+00	3.55E-08	1.17E-11	9.50E-11	9.42E-12	0.00E+00	1.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3096	300644.2	4021693.46	1.02E-08	2.09E-08	3.27E-09	0.00E+00	3.44E-08	1.13E-11	9.19E-11	9.11E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3097	300460.82	4021621.65	9.68E-09	1.97E-08	3.09E-09	0.00E+00	3.25E-08	1.07E-11	8.69E-11	8.61E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3098	300392.06	4021594.72	8.93E-09	1.82E-08	2.85E-09	0.00E+00	3.00E-08	9.88E-12	8.01E-11	7.94E-12	0.00E+00	9.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3099	300359.22	4021563.21	8.62E-09	1.76E-08	2.76E-09	0.00E+00	2.90E-08	9.55E-12	7.74E-11	7.68E-12	0.00E+00	9.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3100	300349.31	4021540.68	8.6E-09	1.75E-08	2.75E-09	0.00E+00	2.89E-08	9.52E-12	7.72E-11	7.65E-12	0.00E+00	9.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3101	300339.39	4021518.15	8.58E-09	1.75E-08	2.74E-09	0.00E+00	2.88E-08	9.50E-12	7.70E-11	7.64E-12	0.00E+00	9.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3102	300309.64	4021450.55	8.5E-09	1.73E-08	2.72E-09	0.00E+00	2.85E-08	9.41E-12	7.63E-11	7.57E-12	0.00E+00	9.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3103	300299.73	4021428.02	8.46E-09	1.72E-08	2.70E-09	0.00E+00	2.84E-08	9.36E-12	7.59E-11	7.53E-12	0.00E+00	9.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3104	300289.81	4021405.49	8.4E-09	1.71E-08	2.68E-09	0.00E+00	2.82E-08	9.29E-12	7.54E-11	7.47E-12	0.00E+00	9.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3105	300260.07	4021337.89	8.17E-09	1.66E-08	2.61E-09	0.00E+00	2.74E-08	9.05E-12	7.33E-11	7.27E-12	0.00E+00	8.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3106	300250.15	4021315.36	8.08E-09	1.65E-08	2.58E-09	0.00E+00	2.71E-08	8.95E-12	7.25E-11	7.19E-12	0.00E+00	8.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3107	300240.24	4021292.83	7.98E-09	1.63E-08	2.55E-09	0.00E+00	2.68E-08	8.84E-12	7.16E-11	7.10E-12	0.00E+00	8.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3108	300230.32	4021270.3	7.87E-09	1.60E-08	2.52E-09	0.00E+00	2.64E-08	8.71E-12	7.06E-11	7.01E-12	0.00E+00	8.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3109	300220.4	4021247.77	7.76E-09	1.58E-08	2.48E-09	0.00E+00	2.60E-08	8.58E-12	6.96E-11	6.90E-12	0.00E+00	8.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3110	300210.49	4021225.24	7.63E-09	1.56E-08	2.44E-09	0.00E+00	2.56E-08	8.45E-12	6.85E-11	6.79E-12	0.00E+00	8.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3111	300200.57	4021202.71	7.51E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.31E-12	6.74E-11	6.68E-12	0.00E+00	8.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3112	300190.66	4021180.17	7.37E-09	1.50E-08	2.36E-09	0.00E+00	2.47E-08	8.16E-12	6.62E-11	6.56E-12	0.00E+00	8.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3113	300180.74	4021157.64	7.22E-09	1.47E-08	2.31E-09	0.00E+00	2.42E-08	7.99E-12	6.48E-11	6.42E-12	0.00E+00	7.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3114	300170.83	4021135.11	7.05E-09	1.44E-08	2.25E-09	0.00E+00	2.37E-08	7.80E-12	6.32E-11	6.27E-12	0.00E+00	7.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3115	300160.91	4021112.58	6.85E-09	1.40E-08	2.19E-09	0.00E+00	2.30E-08	7.59E-12	6.15E-11	6.10E-12	0.00E+00	7.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3116	300151	4021090.05	6.65E-09	1.35E-08	2.13E-09	0.00E+00	2.23E-08	7.36E-12	5.97E-11	5.92E-12	0.00E+00	7.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3117	300141.08	4021067.52	6.45E-09	1.31E-08	2.06E-09	0.00E+00	2.16E-08	7.14E-12	5.79E-11	5.74E-12	0.00E+00	7.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3118	300131.17	4021044.99	6.25E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.92E-12	5.61E-11	5.56E-12	0.00E+00	6.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3119	300121.25	4021022.45	6.07E-09	1.24E-08	1.94E-09	0.00E+00	2.04E-08	6.72E-12	5.44E-11	5.40E-12	0.00E+00	6.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3120	300111.33	4020999.92	5.89E-09	1.20E-08	1.88E-09	0.00E+00	1.98E-08	6.52E-12	5.29E-11	5.25E-12	0.00E+00	6.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3121	300101.42	4020977.39	5.73E-09	1.17E-08	1.83E-09	0.00E+00	1.92E-08	6.34E-12	5.14E-11	5.10E-12	0.00E+00	6.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3122	300091.5	4020954.86	5.57E-09	1.13E-08	1.78E-09	0.00E+00	1.87E-08	6.16E-12	5.00E-11	4.95E-12	0.00E+00	6.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3123	300081.59	4020932.33	5.4E-09	1.10E-08	1.73E-09	0.00E+00	1.81E-08	5.98E-12	4.85E-11	4.80E-12	0.00E+00	5.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3124	300071.67	4020909.8	5.22E-09	1.06E-08	1.67E-09	0.00E+00	1.75E-08	5.78E-12	4.68E-11	4.64E-12	0.00E+00	5.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3125	301079.71	4021864.01	9.03E-09	1.84E-08	2.89E-09	0.00E+00	3.03E-08	9.99E-12	8.10E-11	8.03E-12	0.00E+00	9.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3126	301104.68	4021863.56	9.14E-09	1.86E-08	2.92E-09	0.00E+00	3.07E-08	1.01E-11	8.21E-11	8.14E-12	0.00E+00	1.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3127	301129.65	4021863.1	9.24E-09	1.88E-08	2.95E-09	0.00E+00	3.10E-08	1.02E-11	8.29E-11	8.22E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3128	301154.62	4021862.65	9.31E-09	1.90E-08	2.98E-09	0.00E+00	3.12E-08	1.03E-11	8.35E-11	8.28E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3129	301179.58	4021862.19	9.33E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.38E-11	8.30E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3130	301204.55	4021861.74	9.33E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.38E-11	8.31E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3131	301229.52	4021861.28	9.32E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.36E-11	8.29E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3132	301254.49	4021860.83	9.29E-09	1.89E-08	2.97E-09	0.00E+00	3.12E-08	1.03E-11	8.34E-11	8.27E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3133	301279.46	4021860.37	9.27E-09	1.89E-08	2.96E-09	0.00E+00	3.11E-08	1.03E-11	8.32E-11	8.25E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3134	300828.65	4021864.96	9.09E-09	1.85E-08	2.91E-09	0.00E+00	3.05E-08	1.01E-11	8.16E-11	8.09E-12	0.00E+00	9.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3135	300575.77	4021765.93	8.87E-09	1.81E-08	2.84E-09	0.00E+00	2.98E-08	9.82E-12	7.96E-11	7.89E-12	0.00E+00	9.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3197	300576.35	4021865.43	7.85E-09	1.60E-08	2.51E-09	0.00E+00	2.64E-08	8.69E-12	7.05E-11	6.99E-12	0.00E+00	8.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3198	300553.31	4021856.4	7.82E-09	1.59E-08	2.50E-09	0.00E+00	2.63E-08	8.66E-12	7.02E-11	6.96E-12	0.00E+00	8.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3199	300530.26	4021847.38	7.82E-09	1.59E-08	2.50E-09	0.00E+00	2.62E-08	8.65E-12	7.02E-11	6.96E-12	0.00E+00	8.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3200	300507.21	4021838.35	7.83E-09	1.60E-08	2.50E-09	0.00E+00	2.63E-08	8.67E-12	7.03E-11	6.97E-12	0.00E+00	8.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3201	300484.17	4021829.33	7.85E-09	1.60E-08	2.51E-09	0.00E+00	2.64E-08	8.69E-12	7.05E-11	6.99E-12	0.00E+00	8.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3202	300461.12	4021820.3	7.87E-09	1.60E-08	2.52E-09	0.00E+00	2.64E-08	8.71E-12	7.06E-11	7.00E-12	0.00E+00	8.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3203	300438.08	4021811.28	7.87E-09	1.60E-08	2.52E-09	0.00E+00	2.64E-08	8.71E-12	7.06E-11	7.00E-12	0.00E+00	8.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3204	300415.03	4021802.25	7.84E-09	1.60E-08	2.51E-09	0.00E+00	2.63E-08	8.68E-12	7.04E-11	6.98E-12	0.00E+00	8.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3205	300391.99	4021793.23	7.78E-09	1.59E-08	2.49E-09	0.00E+00	2.61E-08	8.61E-12	6.98E-11	6.92E-12	0.00E+00	8.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3206	300368.94	4021784.2	7.69E-09	1.57E-08	2.46E-09	0.00E+00	2.58E-08	8.51E-12	6.90E-11	6.84E-12	0.00E+00	8.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3207	300345.9	4021775.18	7.55E-09	1.54E-08	2.42E-09	0.00E+00	2.54E-08	8.36E-12	6.78E-11	6.72E-12	0.00E+00	8.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3208	300322.85	4021766.15	7.4E-09	1.51E-08	2.36E-09	0.00E+00	2.48E-08	8.19E-12	6.64E-11	6.58E-12	0.00E+00	8.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3209	300299.8	4021757.13	7.21E-09	1.47E-08	2.31E-09	0.00E+00	2.42E-08	7.99E-12	6.47E-11	6.42E-12	0.00E+00	7.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3210	300276.76	4021748.1	7.02E-09	1.43E-08	2.24E-09	0.00E+00	2.36E-08	7.77E-12	6.30E-11	6.25E-12	0.00E+00	7.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3211	300253.71	4021739.08	6.82E-09	1.39E-08	2.18E-09	0.00E+00	2.29E-08	7.55E-12	6.12E-11	6.07E-12	0.00E+00	7.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3212	300220.7	4021707.4	6.57E-09	1.34E-08	2.10E-09	0.00E+00	2.21E-08	7.27E-12	5.90E-11	5.85E-12	0.00E+00	7.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3213	300210.73	4021684.75	6.53E-09	1.33E-08	2.09E-09	0.00E+00	2.19E-08	7.23E-12	5.86E-11	5.81E-12	0.00E+00	7.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3214	300200.76	4021662.09	6.49E-09	1.32E-08	2.08E-09	0.00E+00	2.18E-08	7.19E-12	5.83E-11	5.78E-12	0.00E+00	7.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3215	300170.85	4021594.13	6.41E-09	1.31E-08	2.05E-09	0.00E+00	2.15E-08	7.09E-12	5.75E-11	5.70E-12	0.00E+00	7.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3216	300160.88	4021571.48	6.38E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.06E-12	5.72E-11	5.67E-12	0.00E+00	7.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3217	300150.91	4021548.83	6.34E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.02E-12	5.69E-11	5.64E-12	0.00E+00	6.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3218	300121.01	4021480.87	6.2E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.87E-12	5.57E-11	5.52E-12	0.00E+00	6.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3219	300111.04	4021458.21	6.16E-09	1.25E-08	1.97E-09	0.00E+00	2.07E-08	6.82E-12	5.53E-11	5.48E-12	0.00E+00	6.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3220	300101.07	4021435.56	6.11E-09	1.24E-08	1.95E-09	0.00E+00	2.05E-08	6.76E-12	5.48E-11	5.44E-12	0.00E+00	6.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3221	300091.1	4021412.91	6.05E-09	1.23E-08	1.94E-09	0.00E+00	2.03E-08	6.70E-12	5.43E-11	5.39E-12	0.00E+00	6.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3222	300081.13	4021390.25	5.99E-09	1.22E-08	1.91E-09	0.00E+00	2.01E-08	6.63E-12	5.38E-11	5.33E-12	0.00E+00	6.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3223	300071.16	4021367.6	5.91E-09	1.20E-08	1.89E-09	0.00E+00	1.99E-08	6.55E-12	5.31E-11	5.26E-12	0.00E+00	6.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3224	300061.19	4021344.95	5.83E-09	1.19E-08	1.86E-09	0.00E+00	1.96E-08	6.46E-12	5.23E-11	5.19E-12	0.00E+00	6.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3225	300051.22	4021322.29	5.75E-09	1.17E-08	1.84E-09	0.00E+00	1.93E-08	6.36E-12	5.16E-11	5.11E-12	0.00E+00	6.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3226	300041.25	4021299.64	5.66E-09	1.15E-08	1.81E-09	0.00E+00	1.90E-08	6.27E-12	5.08E-11	5.04E-12	0.00E+00	6.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3227	300031.28	4021276.99	5.58E-09	1.14E-08	1.78E-09	0.00E+00	1.87E-08	6.17E-12	5.00E-11	4.96E-12	0.00E+00	6.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3228	300021.32	4021254.33	5.49E-09	1.12E-08	1.75E-09	0.00E+00	1.84E-08	6.07E-12	4.92E-11	4.88E-12	0.00E+00	6.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3229	300011.35	4021231.68	5.39E-09	1.10E-08	1.72E-09	0.00E+00	1.81E-08	5.96E-12	4.83E-11	4.79E-12	0.00E+00	5.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3230	300001.38	4021209.03	5.27E-09	1.07E-08	1.69E-09	0.00E+00	1.77E-08	5.84E-12	4.73E-11	4.69E-12	0.00E+00	5.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3231	299991.41	4021186.37	5.15E-09	1.05E-08	1.65E-09	0.00E+00	1.73E-08	5.70E-12	4.62E-11	4.58E-12	0.00E+00	5.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3232	299981.44	4021163.72	5.01E-09	1.02E-08	1.60E-09	0.00E+00	1.68E-08	5.54E-12	4.50E-11	4.46E-12	0.00E+00	5.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3233	299971.47	4021141.07	4.87E-09	9.92E-09	1.56E-09	0.00E+00	1.63E-08	5.39E-12	4.37E-11	4.33E-12	0.00E+00	5.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3234	299961.5	4021118.41	4.73E-09	9.63E-09	1.51E-09	0.00E+00	1.59E-08	5.24E-12	4.24E-11	4.21E-12	0.00E+00	5.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3235	299951.53	4021095.76	4.59E-09	9.36E-09	1.47E-09	0.00E+00	1.54E-08	5.09E-12	4.12E-11	4.09E-12	0.00E+00	5.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3236	299941.56	4021073.11	4.47E-09	9.11E-09	1.43E-09	0.00E+00	1.50E-08	4.95E-12	4.01E-11	3.98E-12	0.00E+00	4.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3237	299931.59	4021050.45	4.36E-09	8.87E-09	1.39E-09	0.00E+00	1.46E-08	4.82E-12	3.91E-11	3.88E-12	0.00E+00	4.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3238	299921.62	4021027.8	4.25E-09	8.66E-09	1.36E-09	0.00E+00	1.43E-08	4.70E-12	3.81E-11	3.78E-12	0.00E+00	4.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3239	299911.66	4021005.15	4.15E-09	8.45E-09	1.33E-09	0.00E+00	1.39E-08	4.59E-12	3.72E-11	3.69E-12	0.00E+00	4.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3240	299901.69	4020982.5	4.05E-09	8.24E-09	1.29E-09	0.00E+00	1.36E-08	4.48E-12	3.63E-11	3.60E-12	0.00E+00	4.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3241	299891.72	4020959.84	3.94E-09	8.03E-09	1.26E-09	0.00E+00	1.32E-08	4.37E-12	3.54E-11	3.51E-12	0.00E+00	4.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3242	299881.75	4020937.19	3.83E-09	7.81E-09	1.23E-09	0.00E+00	1.29E-08	4.24E-12	3.44E-11	3.41E-12	0.00E+00	4.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3243	299871.78	4020914.54	3.71E-09	7.56E-09	1.19E-09	0.00E+00	1.25E-08	4.11E-12	3.33E-11	3.30E-12	0.00E+00	4.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3244	301083.35	4022063.98	6.96E-09	1.42E-08	2.23E-09	0.00E+00	2.34E-08	7.71E-12	6.25E-11	6.20E-12	0.00E+00	7.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3245	301108.32	4022063.53	7.05E-09	1.44E-08	2.25E-09	0.00E+00	2.37E-08	7.80E-12	6.32E-11	6.27E-12	0.00E+00	7.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3246	301133.29	4022063.07	7.11E-09	1.45E-08	2.27E-09	0.00E+00	2.39E-08	7.87E-12	6.38E-11	6.33E-12	0.00E+00	7.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3247	301158.26	4022062.62	7.14E-09	1.45E-08	2.28E-09	0.00E+00	2.40E-08	7.91E-12	6.41E-11	6.36E-12	0.00E+00	7.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3248	301183.23	4022062.16	7.15E-09	1.46E-08	2.29E-09	0.00E+00	2.40E-08	7.91E-12	6.42E-11	6.36E-12	0.00E+00	7.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3249	301208.2	4022061.71	7.14E-09	1.45E-08	2.28E-09	0.00E+00	2.40E-08	7.90E-12	6.41E-11	6.35E-12	0.00E+00	7.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3250	301233.17	4022061.25	7.12E-09	1.45E-08	2.28E-09	0.00E+00	2.39E-08	7.88E-12	6.39E-11	6.33E-12	0.00E+00	7.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3251	301258.13	4022060.8	7.1E-09	1.45E-08	2.27E-09	0.00E+00	2.38E-08	7.85E-12	6.37E-11	6.31E-12	0.00E+00	7.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3252	301283.1	4022060.34	7.08E-09	1.44E-08	2.26E-09	0.00E+00	2.38E-08	7.83E-12	6.35E-11	6.30E-12	0.00E+00	7.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3253	301062.08	4022154.92	6.23E-09	1.27E-08	1.99E-09	0.00E+00	2.09E-08	6.89E-12	5.59E-11	5.54E-12	0.00E+00	6.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3254	301038.99	4022145.88	6.2E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.86E-12	5.57E-11	5.52E-12	0.00E+00	6.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3255	301015.89	4022136.83	6.18E-09	1.26E-08	1.98E-09	0.00E+00	2.07E-08	6.84E-12	5.55E-11	5.50E-12	0.00E+00	6.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3256	300992.8	4022127.79	6.18E-09	1.26E-08	1.97E-09	0.00E+00	2.07E-08	6.84E-12	5.54E-11	5.50E-12	0.00E+00	6.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3257	300969.71	4022118.74	6.2E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.86E-12	5.56E-11	5.51E-12	0.00E+00	6.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3258	300946.61	4022109.7	6.24E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.91E-12	5.60E-11	5.56E-12	0.00E+00	6.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3259	300923.52	4022100.66	6.32E-09	1.29E-08	2.02E-09	0.00E+00	2.12E-08	7.00E-12	5.68E-11	5.63E-12	0.00E+00	6.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3260	300900.43	4022091.61	6.43E-09	1.31E-08	2.06E-09	0.00E+00	2.16E-08	7.12E-12	5.77E-11	5.73E-12	0.00E+00	7.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3261	300877.33	4022082.57	6.57E-09	1.34E-08	2.10E-09	0.00E+00	2.21E-08	7.27E-12	5.90E-11	5.85E-12	0.00E+00	7.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3262	300854.24	4022073.53	6.72E-09	1.37E-08	2.15E-09	0.00E+00	2.26E-08	7.44E-12	6.03E-11	5.98E-12	0.00E+00	7.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3263	300831.15	4022064.48	6.88E-09	1.40E-08	2.20E-09	0.00E+00	2.31E-08	7.62E-12	6.18E-11	6.13E-12	0.00E+00	7.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+

3325	299801.8	4020984.99	3.49E-09	7.11E-09	1.12E-09	0.00E+00	1.17E-08	3.86E-12	3.13E-11	3.10E-12	0.00E+00	3.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3326	299791.81	4020962.29	3.4E-09	6.93E-09	1.09E-09	0.00E+00	1.14E-08	3.77E-12	3.05E-11	3.03E-12	0.00E+00	3.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3327	299781.82	4020939.59	3.31E-09	6.74E-09	1.06E-09	0.00E+00	1.11E-08	3.66E-12	2.97E-11	2.94E-12	0.00E+00	3.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3328	299771.83	4020916.89	3.21E-09	6.54E-09	1.03E-09	0.00E+00	1.08E-08	3.55E-12	2.88E-11	2.86E-12	0.00E+00	3.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3329	301085.18	4022163.96	6.25E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.91E-12	5.61E-11	5.56E-12	0.00E+00	6.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3330	301110.14	4022163.51	6.32E-09	1.29E-08	2.02E-09	0.00E+00	2.12E-08	6.99E-12	5.67E-11	5.62E-12	0.00E+00	6.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3331	301135.11	4022163.05	6.37E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.05E-12	5.71E-11	5.67E-12	0.00E+00	6.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3332	301160.08	4022162.6	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.07E-12	5.73E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3333	301185.05	4022162.14	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.15E-08	7.07E-12	5.74E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3334	301210.02	4022161.69	6.38E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.06E-12	5.72E-11	5.67E-12	0.00E+00	7.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3335	301234.99	4022161.23	6.35E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.03E-12	5.70E-11	5.65E-12	0.00E+00	6.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3336	301259.96	4022160.78	6.33E-09	1.29E-08	2.02E-09	0.00E+00	2.13E-08	7.01E-12	5.68E-11	5.64E-12	0.00E+00	6.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3337	301284.93	4022160.32	6.32E-09	1.29E-08	2.02E-09	0.00E+00	2.12E-08	6.99E-12	5.67E-11	5.62E-12	0.00E+00	6.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3338	301063.86	4022254.89	5.65E-09	1.15E-08	1.81E-09	0.00E+00	1.90E-08	6.25E-12	5.07E-11	5.02E-12	0.00E+00	6.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3339	301040.73	4022245.83	5.62E-09	1.14E-08	1.80E-09	0.00E+00	1.89E-08	6.22E-12	5.04E-11	5.00E-12	0.00E+00	6.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3340	301017.59	4022236.77	5.59E-09	1.14E-08	1.79E-09	0.00E+00	1.88E-08	6.19E-12	5.02E-11	4.97E-12	0.00E+00	6.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3341	300994.46	4022227.71	5.57E-09	1.13E-08	1.78E-09	0.00E+00	1.87E-08	6.17E-12	5.00E-11	4.96E-12	0.00E+00	6.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3342	300971.32	4022218.65	5.57E-09	1.13E-08	1.78E-09	0.00E+00	1.87E-08	6.16E-12	5.00E-11	4.95E-12	0.00E+00	6.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3343	300948.19	4022209.59	5.59E-09	1.14E-08	1.79E-09	0.00E+00	1.88E-08	6.19E-12	5.02E-11	4.97E-12	0.00E+00	6.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3344	300925.05	4022200.53	5.64E-09	1.15E-08	1.80E-09	0.00E+00	1.89E-08	6.24E-12	5.06E-11	5.02E-12	0.00E+00	6.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3345	300901.92	4022191.47	5.72E-09	1.17E-08	1.83E-09	0.00E+00	1.92E-08	6.33E-12	5.13E-11	5.09E-12	0.00E+00	6.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3346	300878.78	4022182.41	5.82E-09	1.19E-08	1.86E-09	0.00E+00	1.95E-08	6.45E-12	5.23E-11	5.18E-12	0.00E+00	6.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3347	300855.65	4022173.35	5.95E-09	1.21E-08	1.90E-09	0.00E+00	2.00E-08	6.58E-12	5.34E-11	5.29E-12	0.00E+00	6.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3348	300832.51	4022164.29	6.08E-09	1.24E-08	1.94E-09	0.00E+00	2.04E-08	6.73E-12	5.46E-11	5.41E-12	0.00E+00	6.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3349	300809.38	4022155.23	6.23E-09	1.27E-08	1.99E-09	0.00E+00	2.09E-08	6.89E-12	5.59E-11	5.54E-12	0.00E+00	6.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3350	300786.24	4022146.17	6.37E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.05E-12	5.72E-11	5.67E-12	0.00E+00	6.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3351	300763.11	4022137.11	6.51E-09	1.33E-08	2.08E-09	0.00E+00	2.18E-08	7.20E-12	5.84E-11	5.79E-12	0.00E+00	7.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3352	300739.97	4022128.05	6.62E-09	1.35E-08	2.12E-09	0.00E+00	2.22E-08	7.33E-12	5.94E-11	5.89E-12	0.00E+00	7.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3353	300716.84	4022118.99	6.71E-09	1.37E-08	2.15E-09	0.00E+00	2.25E-08	7.43E-12	6.02E-11	5.97E-12	0.00E+00	7.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3354	300693.7	4022109.93	6.77E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.49E-12	6.07E-11	6.02E-12	0.00E+00	7.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3355	300670.57	4022100.87	6.79E-09	1.38E-08	2.17E-09	0.00E+00	2.28E-08	7.51E-12	6.09E-11	6.04E-12	0.00E+00	7.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3356	300647.43	4022091.81	6.77E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.49E-12	6.07E-11	6.02E-12	0.00E+00	7.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3357	300624.3	4022082.75	6.72E-09	1.37E-08	2.15E-09	0.00E+00	2.25E-08	7.44E-12	6.03E-11	5.98E-12	0.00E+00	7.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3358	300601.16	4022073.69	6.64E-09	1.35E-08	2.12E-09	0.00E+00	2.23E-08	7.35E-12	5.96E-11	5.91E-12	0.00E+00	7.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3359	300578.03	4022064.63	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.26E-12	5.88E-11	5.83E-12	0.00E+00	7.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3360	300554.89	4022055.57	6.47E-09	1.32E-08	2.07E-09	0.00E+00	2.17E-08	7.16E-12	5.80E-11	5.76E-12	0.00E+00	7.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3361	300531.76	4022046.51	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.15E-08	7.07E-12	5.74E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3362	300508.63	4022037.45	6.33E-09	1.29E-08	2.02E-09	0.00E+00	2.13E-08	7.01E-12	5.68E-11	5.63E-12	0.00E+00	6.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3363	300485.49	4022028.39	6.29E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.97E-12	5.65E-11	5.60E-12	0.00E+00	6.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3364	300462.36	4022019.32	6.28E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.95E-12	5.63E-11	5.59E-12	0.00E+00	6.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3365	300439.22	4022010.26	6.28E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.95E-12	5.64E-11	5.59E-12	0.00E+00	6.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3366	300416.09	4022001.2	6.3E-09	1.28E-08	2.02E-09	0.00E+00	2.12E-08	6.98E-12	5.66E-11	5.61E-12	0.00E+00	6.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3367	300392.95	4021992.14	6.33E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.01E-12	5.69E-11	5.64E-12	0.00E+00	6.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3368	300369.82	4021983.08	6.37E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.05E-12	5.71E-11	5.67E-12	0.00E+00	6.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3369	300346.68	4021974.02	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.15E-08	7.08E-12	5.74E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3370	300323.55	4021964.96	6.4E-09	1.30E-08	2.05E-09	0.00E+00	2.15E-08	7.09E-12	5.75E-11	5.70E-12	0.00E+00	7.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3371	300300.41	4021955.9	6.39E-09	1.30E-08	2.04E-09	0.00E+00	2.14E-08	7.07E-12	5.73E-11	5.69E-12	0.00E+00	7.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3372	300277.28	4021946.84	6.35E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.03E-12	5.70E-11	5.65E-12	0.00E+00	6.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3373	300254.14	4021937.78	6.28E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.95E-12	5.64E-11	5.59E-12	0.00E+00	6.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3374	300231.01	4021928.72	6.18E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.84E-12	5.55E-11	5.50E-12	0.00E+00	6.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3375	300207.87	4021919.66	6.06E-09	1.23E-08	1.94E-09	0.00E+00	2.03E-08	6.71E-12	5.44E-11	5.39E-12	0.00E+00	6.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3376	300184.74	4021910.6	5.92E-09	1.21E-08	1.89E-09	0.00E+00	1.99E-08	6.56E-12	5.31E-11	5.27E-12	0.00E+00	6.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3377	300161.6	4021901.54	5.77E-09	1.18E-08	1.84E-09	0.00E+00	1.94E-08	6.39E-12	5.18E-11	5.13E-12	0.00E+00	6.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3378	300138.47	4021892.48	5.61E-09	1.14E-08	1.80E-09	0.00E+00	1.88E-08	6.22E-12	5.04E-11	5.00E-12	0.00E+00	6.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3379	300115.33	4021883.42	5.46E-09	1.11E-08	1.74E-09	0.00E+00	1.83E-08	6.04E-12	4.90E-11	4.86E-12	0.00E+00	5.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3380	300082.19	4021851.62	5.25E-09	1.07E-08	1.68E-09	0.00E+00	1.76E-08	5.81E-12	4.71E-11	4.67E-12	0.00E+00	5.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3381	300072.18	4021828.88	5.2E-09	1.06E-08	1.66E-09	0.00E+00	1.75E-08	5.76E-12	4.67E-11	4.63E-12	0.00E+00	5.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3382	300062.17	4021806.14	5.16E-09	1.05E-08	1.65E-09	0.00E+00	1.73E-08	5.72E-12	4.63E-11	4.59E-12	0.00E+00	5.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3383	300052.17	4021783.4	5.13E-09	1.04E-08	1.64E-09	0.00E+00	1.72E-08	5.67E-12	4.60E-11	4.56E-12	0.00E+00	5.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3384	300042.16	4021760.66	5.1E-09	1.04E-08	1.63E-09	0.00E+00	1.71E-08	5.64E-12	4.57E-11	4.53E-12	0.00E+00	5.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3385	300032.15	4021737.92	5.07E-09	1.03E-08	1.62E-09	0.00E+00	1.70E-08	5.61E-12	4.55E-11	4.51E-12	0.00E+00	5.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3386	300022.14	4021715.18	5.05E-09	1.03E-08	1.61E-09	0.00E+00	1.69E-08	5.59E-12	4.53E-11	4.49E-12	0.00E+00	5.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3387	300012.13	4021692.44	5.03E-09	1.02E-08	1.61E-09	0.00E+00	1.69E-08	5.56E-12	4.51E-11	4.47E-12	0.00E+00	5.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3388	300002.13	4021669.69	5E-09	1.02E-08	1.60E-09	0.00E+00	1.68E-08	5.54E-12	4.49E-11	4.45E-12	0.00E+00	5.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3389	299992.12	4021646.95	4.98E-09	1.01E-08	1.59E-09	0.00E+00	1.67E-08	5.51E-12	4.47E-11	4.43E-12	0.00E+00	5.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3390	299982.11	4021624.21	4.95E-09	1.01E-08	1.58E-09	0.00E+00	1.66E-08	5.48E-12	4.44E-11	4.40E-12	0.00E+00	5.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3391	299972.1	4021601.47	4.92E-09	1.00E-08	1.57E-09	0.00E+00	1.65E-08	5.44E-12	4.41E-11	4.38E-12	0.00E+00	5.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3453	301308.54	4020735.85	8.61E-07	1.75E-06	2.75E-07	0.00E+00	2.89E-06	9.53E-10	7.73E-09	7.66E-10	0.00E+00	9.45E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3454	301308	4020711.12	9.14E-07	1.86E-06	2.92E-07	0.00E+00	3.07E-06	1.01E-09	8.20E-09	8.13E-10	0.00E+00	1.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3455	301307.46	4020686.4	9.52E-07	1.94E-06	3.04E-07	0.00E+00	3.19E-06	1.05E-09	8.54E-09	8.47E-10	0.00E+00	1.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3456	301306.92	4020661.68	9.77E-07	1.99E-06	3.12E-07	0.00E+00	3.28E-06	1.08E-09	8.77E-09	8.69E-10	0.00E+00	1.07E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3457	301306.39	4020636.96	9.92E-07	2.02E-06	3.17E-07	0.00E+00	3.33E-06	1.10E-09	8.91E-09	8.83E-10	0.00E+00	1.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3458	301305.85	4020612.24	9.99E-07	2.04E-06	3.19E-07	0.00E+00	3.35E-06	1.11E-09	8.97E-09	8.89E-10	0.00E+00	1.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3459	301305.31	4020587.52	9.97E-07	2.03E-06	3.19E-07	0.00E+00	3.35E-06	1.10E-09	8.95E-09	8.88E-10	0.00E+00	1.09E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3460	301304.77	4020562.8	9.87E-07	2.01E-06	3.15E-07	0.00E+00	3.31E-06	1.09E-09	8.86E-09	8.78E-10	0.00E+00	1.08E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3461	301304.23	4020538.08	9.65E-07	1.97E-06	3.08E-07	0.00E+00	3.24E-06	1.07E-09	8.66E-09	8.58E-10	0.00E+00	1.06E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3462	301303.69	4020513.35	9.26E-07	1.89E-06	2.96E-07	0.00E+00	3.11E-06	1.03E-09	8.32E-09	8.25E-10	0.00E+00	1.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3463	301303.16	4020488.63	8.64E-07	1.76E-06	2.76E-07	0.00E+00	2.90E-06	9.56E-10	7.75E-09	7.69E-10	0.00E+00	9.48E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3464	301329.26	4020876.77	2.35E-07	4.78E-07	7.50E-08	0.00E+00	7.88E-07	2.60E-10	2.11E-09	2.09E-10	0.00E+00	2.57E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3465	301297.75	4020920.18	2.12E-07	4.32E-07	6.78E-08	0.00E+00	7.12E-07	2.35E-10	1.90E-09	1.89E-10	0.00E+00	2.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3466	301335.68	4020834.19	3.23E-07	6.59E-07	1.03E-07	0.00E+00	1.09E-06	3.58E-10	2.90E-09	2.88E-10	0.00E+00	3.55E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3467	301335.15	4020809.47	4E-07	8.16E-07	1.28E-07	0.00E+00	1.34E-06	4.43E-10	3.59E-09	3.56E-10	0.00E+00	4.39E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3468	301334.61	4020784.74	4.79E-07	9.75E-07	1.53E-07	0.00E+00	1.61E-06	5.30E-10	4.30E-09	4.26E-10	0.00E+00	5.25E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3469	301334.07	4020760.02	5.48E-07	1.12E-06	1.75E-07	0.00E+00	1.84E-06	6.07E-10	4.92E-09	4.88E-10	0.00E+00	6.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3470	301333.53	4020735.3	6.06E-07	1.23E-06	1.94E-07	0.00E+00	2.03E-06	6.71E-10	5.44E-09	5.39E-10	0.00E+00	6.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3471	301332.99	4020710.58	6.51E-07	1.33E-06	2.08E-07	0.00E+00	2.19E-06	7.21E-10	5.84E-09	5.79E-10	0.00E+00	7.14E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3472	301332.46	4020685.86	6.85E-07	1.40E-06	2.19E-07	0.00E+00	2.30E-06	7.59E-10	6.15E-09	6.10E-10	0.00E+00	7.52E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3473	301331.92	4020661.14	7.1E-07	1.45E-06	2.27E-07	0.00E+00	2.38E-06	7.86E-10	6.37E-09	6.32E-10	0.00E+00	7.79E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3474	301331.38	4020636.42	7.27E-07	1.48E-06	2.32E-07	0.00E+00	2.44E-06	8.04E-10	6.52E-09	6.47E-10	0.00E+00	7.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3475	301330.84	4020611.7	7.36E-07	1.50E-06	2.35E-07	0.00E+00	2.47E-06	8.15E-10	6.61E-09	6.55E-10	0.00E+00	8.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3476	301330.3	4020586.97	7.39E-07	1.51E-06	2.36E-07	0.00E+00	2.48E-06	8.18E-10	6.63E-09	6.57E-10	0.00E+00	8.11E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3477	301329.76	4020562.25	7.34E-07	1.50E-06	2.35E-07	0.00E+00	2.46E-06	8.13E-10	6.59E-09	6.53E-10	0.00E+00	8.06E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3478	301329.23	4020537.53	7.21E-07	1.47E-06	2.30E-07	0.00E+00	2.42E-06	7.98E-10	6.47E-09	6.42E-10	0.00E+00	7.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3479	301328.69	4020512.81	6.97E-07	1.42E-06	2.23E-07	0.00E+00	2.34E-06	7.71E-10	6.25E-09	6.20E-10	0.00E+00	7.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3480	301328.15	4020488.09	6.57E-07	1.34E-06	2.10E-07	0.00E+00	2.20E-06	7.27E-10	5.89E-09	5.84E-10	0.00E+00	7.21E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3481	301327.61	4020463.37	6.01E-07	1.22E-06	1.92E-07	0.00E+00	2.02E-06	6.65E-10	5.39E-09	5.35E-10	0.00E+00	6.59E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3482	301354.25	4020876.23	1.89E-07	3.86E-07	6.05E-08	0.00E+00	6.35E-07	2.10E-10	1.70E-09	1.68E-10	0.00E+00	2.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3483	301340.32	4020911.96	1.62E-07	3.30E-07	5.18E-08	0.00E+00	5.44E-07	1.79E-10	1.45E-09	1.44E-10	0.00E+00	1.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3484	301315.78	4020937.5	1.62E-07	3.30E-07	5.17E-08	0.00E+00	5.43E-07	1.79E-10	1.45E-09	1.44E-10	0.00E+00	1.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3485	301360.68	4020833.64	2.49E-07	5.07E-07	7.96E-08	0.00E+00	8.36E-07	2.76E-10	2.24E-09	2.22E-10	0.00E+00	2.73E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3486	301360.14	4020808.92	3E-07	6.11E-07	9.59E-08	0.00E+00	1.01E-06	3.32E-10	2.69E-09	2.67E-10	0.00E+00	3.29E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3487	301359.6	4020784.2	3.53E-07	7.20E-07	1.13E-07	0.00E+00	1.19E-06	3.91E-10	3.17E-09	3.14E-10	0.00E+00	3.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3488	301359.06	4020759.48	4.04E-07	8.23E-07	1.29E-07	0.00E+00	1.36E-06	4.47E-10	3.63E-09	3.60E-10	0.00E+00	4.44E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3489	301358.53	4020734.76	4.49E-07	9.15E-07	1.44E-07	0.00E+00	1.51E-06	4.97E-10	4.03E-09	4.00E-10	0.00E+00	4.93E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3490	301357.99	4020710.04	4.86E-07	9.91E-07	1.56E-07	0.00E+00	1.63E-06	5.39E-10	4.37E-09	4.33E-10	0.00E+00	5.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3491	301357.45	4020685.31	5.16E-07	1.05E-06	1.65E-07	0.00E+00	1.73E-06	5.72E-10	4.64E-09	4.60E-10	0.00E+00	5.67E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3492	301356.91	4020660.59	5.39E-07	1.10E-06	1.72E-07	0.00E+00	1.81E-06	5.97E-10	4.84E-09	4.80E-10	0.00E+00	5.92E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3493	301356.37	4020635.87	5.56E-07	1.13E-06	1.78E-07	0.00E+00	1.87E-06	6.16E-10	4.99E-09	4.95E-10	0.00E+00	6.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3494	301355.84	4020611.15	5.67E-07	1.15E-06	1.81E-07	0.00E+00	1.90E-06	6.27E-10	5.09E-09	5.04E-10	0.00E+00	6.22E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3495	301355.3	4020586.43	5.72E-07	1.17E-06	1.83E-07	0.00E+00	1.92E-06	6.33E-10	5.13E-09	5.09E-10	0.00E+00	6.28E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3496	301354.76	4020561.71	5.71E-07	1.16E-06	1.83E-07	0.00E+00	1.92E-06	6.32E-10	5.13E-09	5.08E-10	0.00E+00	6.27E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3497	301354.22	4020536.99	5.63E-07	1.15E-06	1.80E-07	0.00E+00	1.89E-06	6.24E-10	5.06E-09	5.01E-10	0.00E+00	6.18E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3498	301353.68	4020512.27	5.47E-07	1.12E-06	1.75E-07	0.00E+00	1.84E-06	6.06E-10	4.91E-09	4.87E-10	0.00E+00	6.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3499	301353.14	4020487.54	5.22E-07	1.06E-06	1.67E-07	0.00E+00	1.75E-06	5.78E-10	4.68E-09	4.64E-10	0.00E+00	5.73E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3500	301377.5	4020880.15	1.54E-07	3.13E-07	4.91E-08	0.00E+00	5.16E-07	1.70E-10	1.38E-09	1.37E-10	0.00E+00	1.69E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3501	301368.79	4020902.48	1.41E-07	2.87E-07	4.50E-08	0.00E+00	4.72E-07	1.56E-10	1.26E-09	1.25E-10	0.00E+00	1.54E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3502	301360.09	4020924.81	1.3E-07	2.64E-07	4.14E-08	0.00E+00	4.35E-07	1.43E-10	1.16E-09	1.15E-10	0.00E+00	1.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3503	301329.41	4020956.74	1.3E-07	2.65E-07	4.16E-08	0.00E+00	4.37E-07	1.44E-10	1.17E-09	1.16E-10	0.00E+00	1.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3504	301307.45	4020966.33	1.4E-07	2.86E-07	4.49E-08	0.00E+00	4.71E-07	1.55E-10	1.26E-09	1.25E-10	0.00E+00	1.54E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3505	301285.48	4020975.93	1.49E-07	3.04E-07	4.77E-08	0.00E+00	5.01E-07	1.65E-10	1.34E-09	1.33E-10	0.00E+00	1.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3506	301386.21	4020857.82	1.68E-07	3.41E-07	5.36E-08	0.00E+00	5.62E-07	1.85E-10	1.50E-09	1.49E-10	0.00E+00	1.84E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3507	301385.67	4020833.1	1.99E-07	4.06E-07	6.37E-08	0.00E+00	6.69E-07	2.20E-10	1.79E-09	1.77E-10	0.00E+00	2.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3508	301385.13	4020808.38	2.35E-07	4.79E-07	7.51E-08	0.00E+00	7.89E-07	2.60E-10	2.11E-09	2.09E-10	0.00E+00	2.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3509	301384.6	4020783.66	2.73E-07	5.56E-07	8.73E-08	0.00E+00	9.17E-07	3.02E-10	2.45E-09	2.43E-10	0.00E+00	3.00E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3510	301384.06	4020758.93	3.11E-07	6.33E-07	9.94E-08	0.00E+00	1.04E-06	3.44E-10	2.79E-09	2.77E-10	0.00E+00	3.41E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3511	301383.52	4020734.21	3.46E-07	7.04E-07	1.11E-07	0.00E+00	1.16E-06	3.83E-10	3.10E-09	3.08E-10	0.00E+00	3.79E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3512	301382.98	4020709.49	3.76E-07	7.67E-07	1.20E-07	0.00E+00	1.26E-06	4.17E-10	3.38E-09	3.35E-10	0.00E+00	4.13E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3513	301382.44	4020684.77	4.02E-07	8.19E-07	1.29E-07	0.00E+00	1.35E-06	4.45E-10	3.61E-09	3.58E-10	0.00E+00	4.41E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3514	301381.91	4020660.05	4.23E-07	8.61E-07	1.35E-07	0.00E+00	1.42E-06	4.68E-10	3.79E-09	3.76E-10	0.00E+00	4.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3515	301381.37	4020635.33	4.38E-07	8.93E-07	1.40E-07	0.00E+00	1.47E-06	4.85E-10	3.94E-09	3.90E-10	0.00E+00	4.81E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3516	301380.83	4020610.61	4.5E-07	9.16E-07	1.44E-07	0.00E+00	1.51E-06	4.98E-10	4.04E-09	4.00E-10	0.00E+00	4.93E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3517	301380.29	4020585.89	4.56E-07	9.29E-07	1.46E-07	0.00E+00	1.53E-06	5.05E-10	4.09E-09	4.06E-10	0.00E+00	5.00E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3518	301379.75	4020561.16	4.57E-07	9.31E-07	1.46E-07	0.00E+00	1.53E-06	5.06E-10	4.10E-09	4.07E-10	0.00E+00	5.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3519	301379.21	4020536.44	4.53E-07	9.23E-07	1.45E-07	0.00E+00	1.52E-06	5.02E-10	4.07E-09	4.03E-10	0.00E+00	4.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.

3581	3014S6.89	402065B.42	2.3E-07	4.69E-07	7.73E-07	0.00E+00	1.08E-07	1.70E-08	9.34E-08	5.32E-08	1.79E-07	0.00E+00	2.55E-10	2.07E-09	2.05E-10	0.00E+00	2.53E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3582	3014S6.35	4020633.7	2.42E-07	4.93E-07	7.74E-08	0.00E+00	8.12E-07	1.53E-07	1.69E-07	5.05E-08	1.03E-07	1.61E-07	2.68E-07	2.17E-09	2.15E-10	0.00E+00	2.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3583	3014S5.81	4020608.97	2.51E-07	5.12E-07	8.03E-08	0.00E+00	8.43E-07	1.76E-08	9.77E-08	1.53E-08	4.8E-08	9.77E-09	2.78E-10	2.25E-09	2.24E-10	0.00E+00	2.76E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3584	3014S5.27	4020S84.25	2.57E-07	5.25E-07	8.23E-08	0.00E+00	8.64E-07	1.46E-08	9.34E-08	1.47E-08	4.2E-08	9.34E-09	2.85E-10	2.31E-09	2.29E-10	0.00E+00	2.83E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3585	3014S4.74	4020S59.53	2.61E-07	5.33E-07	8.36E-08	0.00E+00	8.78E-07	1.47E-08	9.38E-08	1.35E-08	4.36E-08	9.36E-09	2.89E-10	2.35E-09	2.33E-10	0.00E+00	2.87E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3586	3014S4.2	4020S34.81	2.63E-07	5.35E-07	8.39E-08	0.00E+00	8.81E-07	1.42E-08	9.42E-08	1.35E-08	4.38E-08	9.42E-09	2.91E-10	2.36E-09	2.34E-10	0.00E+00	2.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3587	3014S3.66	4020S10.09	2.61E-07	5.31E-07	8.34E-08	0.00E+00	8.75E-07	1.39E-08	9.38E-08	1.34E-08	4.34E-08	9.38E-09	2.86E-10	2.32E-09	2.30E-10	0.00E+00	2.84E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3588	3014S3.12	4020S85.37	2.56E-07	5.21E-07	8.18E-08	0.00E+00	8.59E-07	1.38E-08	9.34E-08	1.32E-08	4.31E-08	9.34E-09	2.83E-10	2.28E-09	2.26E-10	0.00E+00	2.81E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3589	3015O2.47	4020877.43	7.4E-08	1.51E-07	2.3E-08	0.00E+00	2.48E-07	8.19E-11	6.64E-11	6.59E-12	8.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3590	3014S9.76	4020899.76	6.97E-08	1.42E-07	2.23E-08	0.00E+00	2.34E-07	7.71E-11	6.25E-10	6.20E-11	7.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3591	3014S5.06	4020S92.09	6.56E-08	1.34E-07	2.10E-08	0.00E+00	2.20E-07	7.26E-11	5.89E-10	5.84E-11	7.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3592	3014S4.35	4020S19.42	6.18E-08	1.26E-07	1.98E-08	0.00E+00	2.08E-07	6.84E-11	5.55E-10	5.50E-11	6.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3593	3014S4.64	4020S66.75	5.86E-08	1.19E-07	1.87E-08	0.00E+00	1.97E-07	6.48E-11	5.26E-10	5.21E-11	6.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3594	3014S8.93	4020S98.09	5.58E-08	1.14E-07	1.78E-08	0.00E+00	1.87E-07	6.18E-11	5.01E-10	4.97E-11	6.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3595	3014S0.22	4021011.42	5.34E-08	1.09E-07	1.71E-08	0.00E+00	1.79E-07	5.91E-11	4.80E-10	4.75E-11	5.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3596	3014S.85	4020E3.55	1.34E-07	3.64E-08	0.00E+00	3.82E-07	1.83E-07	6.03E-11	4.89E-10	4.85E-11	5.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3597	3013S.59	4021052.94	5.79E-08	1.18E-07	1.85E-08	0.00E+00	1.94E-07	6.41E-11	5.20E-10	5.15E-11	6.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3598	3013S.62	4021062.53	6.13E-08	1.25E-07	1.96E-08	0.00E+00	2.06E-07	6.79E-11	5.50E-10	5.46E-11	6.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3599	3013S3.66	4021072.12	6.46E-08	1.32E-07	2.07E-08	0.00E+00	2.17E-07	7.15E-11	5.80E-10	5.75E-11	7.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3600	3013S1.69	4021081.72	6.75E-08	1.38E-07	2.16E-08	0.00E+00	2.27E-07	7.47E-11	6.06E-10	6.01E-11	7.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3601	3013S9.73	4021091.31	6.98E-08	1.42E-07	2.23E-08	0.00E+00	2.34E-07	7.73E-11	6.27E-10	6.21E-11	7.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3602	3012S7.76	4021100.9	7.13E-08	1.45E-07	2.28E-08	0.00E+00	2.39E-07	7.89E-11	6.40E-10	6.35E-11	7.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3603	3015I1.18	4020855.1	7.85E-08	1.60E-07	2.51E-08	0.00E+00	2.64E-07	8.69E-11	7.05E-10	6.99E-11	8.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3604	3015I0.64	4020830.38	8.81E-08	1.79E-07	2.82E-08	0.00E+00	2.96E-07	9.75E-11	7.91E-10	7.84E-11	9.67E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3605	3015I0.1	4020805.66	9.85E-08	2.01E-07	3.15E-08	0.00E+00	3.31E-07	1.09E-10	8.84E-10	8.77E-11	1.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3606	3015O9.57	4020780.94	1.1E-07	2.23E-07	3.50E-08	0.00E+00	3.68E-07	1.21E-10	9.83E-10	9.75E-11	1.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3607	3015O9.03	4020756.21	1.21E-07	2.47E-07	3.87E-08	0.00E+00	4.06E-07	1.34E-10	1.09E-09	1.08E-10	1.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3608	3015O8.49	4020731.49	1.33E-07	2.70E-07	4.24E-08	0.00E+00	4.45E-07	1.47E-10	1.19E-09	1.18E-10	1.46E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3609	3015O7.95	4020706.77	1.44E-07	2.94E-07	4.61E-08	0.00E+00	4.84E-07	1.60E-10	1.30E-09	1.28E-10	1.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3610	3015O7.41	4020682.05	1.55E-07	3.16E-07	4.97E-08	0.00E+00	5.21E-07	1.72E-10	1.39E-09	1.38E-10	1.70E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3611	3015O6.88	4020657.33	1.65E-07	3.37E-07	5.29E-08	0.00E+00	5.55E-07	1.83E-10	1.48E-09	1.47E-10	1.82E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3612	3015O6.34	4020632.61	1.74E-07	3.55E-07	5.57E-08	0.00E+00	5.85E-07	1.93E-10	1.56E-09	1.55E-10	1.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3613	3015O5.8	4020607.89	1.81E-07	3.70E-07	5.80E-08	0.00E+00	6.09E-07	2.01E-10	1.63E-09	1.61E-10	1.99E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3614	3015O5.26	4020583.17	1.87E-07	3.81E-07	5.98E-08	0.00E+00	6.28E-07	2.07E-10	1.68E-09	1.66E-10	2.05E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3615	3015O4.72	4020558.44	1.91E-07	3.89E-07	6.10E-08	0.00E+00	6.41E-07	2.11E-10	1.70E-09	1.70E-10	2.09E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3616	3015O4.19	4020533.72	1.93E-07	3.93E-07	6.17E-08	0.00E+00	6.48E-07	2.14E-10	1.73E-09	1.72E-10	2.12E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3617	3015O3.65	402050	1.93E-07	3.93E-07	6.18E-08	0.00E+00	6.48E-07	2.14E-10	1.73E-09	1.72E-10	2.12E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3618	3015O3.11	4020484.28	1.91E-07	3.90E-07	6.12E-08	0.00E+00	6.42E-07	2.12E-10	1.72E-09	1.70E-10	2.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3619	3015S2.81	4020875.45	5.91E-08	1.20E-07	1.89E-08	0.00E+00	1.98E-07	6.54E-11	5.30E-10	5.26E-11	6.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3620	3015S1.18	4020896.89	5.61E-08	1.14E-07	1.79E-08	0.00E+00	1.88E-07	6.21E-11	5.03E-10	4.99E-11	6.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3621	3015S6.09	4020918.32	5.32E-08	1.08E-07	1.70E-08	0.00E+00	1.79E-07	5.89E-11	4.77E-10	4.73E-11	5.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3622	3015S7.73	4020939.76	5.05E-08	1.03E-07	1.61E-08	0.00E+00	1.69E-07	5.59E-11	4.53E-10	4.49E-11	5.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3623	3015I9.37	4020961.2	4.8E-08	9.77E-08	1.53E-08	0.00E+00	1.61E-07	5.31E-11	4.30E-10	4.27E-11	5.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3624	3015I1.01	4020982.64	4.58E-08	9.32E-08	1.46E-08	0.00E+00	1.54E-07	5.07E-11	4.11E-10	4.07E-11	5.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3625	3015O2.65	4021004.08	4.39E-08	8.94E-08	1.40E-08	0.00E+00	1.47E-07	4.86E-11	3.94E-10	3.91E-11	4.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3626	3014S4.29	4021025.51	4.23E-08	8.62E-08	1.35E-08	0.00E+00	1.42E-07	4.68E-11	3.80E-10	3.77E-11	4.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3627	3014S5.93	4021046.95	4.09E-08	8.33E-08	1.31E-08	0.00E+00	1.37E-07	4.53E-11	3.67E-10	3.64E-11	4.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3628	3014S6.48	4021077.6	4.18E-08	8.51E-08	1.34E-08	0.00E+00	1.40E-07	4.62E-11	3.75E-10	3.72E-11	4.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3629	3014S5.4	4021086.81	4.41E-08	8.98E-08	1.41E-08	0.00E+00	1.48E-07	4.88E-11	3.96E-10	3.92E-11	4.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3630	3014S4.31	4021096.02	4.64E-08	9.46E-08	1.48E-08	0.00E+00	1.56E-07	5.14E-11	4.17E-10	4.13E-11	5.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3631	3014S3.22	4021105.23	4.88E-08	9.93E-08	1.56E-08	0.00E+00	1.64E-07	5.40E-11	4.38E-10	4.34E-11	5.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3632	3013S2.14	4021114.44	5.1E-08	1.04E-07	1.63E-08	0.00E+00	1.71E-07	5.64E-11	4.58E-10	4.54E-11	5.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3633	3013S1.05	4021123.65	5.3E-08	1.08E-07	1.69E-08	0.00E+00	1.78E-07	5.87E-11	4.76E-10	4.72E-11	5.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3634	3013Z9.97	4021132.86	5.47E-08	1.11E-07	1.75E-08	0.00E+00	1.84E-07	6.05E-11	4.91E-10	4.87E-11	6.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3635	3013O8.88	4021142.07	5.59E-08	1.14E-07	1.79E-08	0.00E+00	1.88E-07	6.18E-11	5.01E-10	4.97E-11	6.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3636	3012S7.79	4021151.28	5.65E-08	1.15E-07	1.81E-08	0.00E+00	1.90E-07	6.25E-11	5.07E-10	5.03E-11	6.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3637	3015G1.17	4020854.01	6.22E-08	1.27E-07	1.99E-08	0.00E+00	2.09E-07	6.88E-11	5.58E-10	5.53E-11	6.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3638	3015G0.63	4020829.29	6.89E-08	1.40E-07	2.20E-08	0.00E+00	2.31E-07	7.63E-11	6.19E-10	6.13E-11	7.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3639	3015G0.09	4020804.57	7.62E-08	1.55E-07	2.44E-08	0.00E+00	2.56E-07	8.44E-11	6.84E-10	6.78E-11	8.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3640	3015S9.55	4020779.85	8.39E-08	1.71E-07	2.68E-08	0.00E+00	2.82E-07	9.28E-11	7.53E-10	7.46E-11	9.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3641	3015S9.02	4020755.13	9.18E-08	1.87E-07	2.94E-08	0.00E+00	3.08E-07	1.02E-10	8.24E-10	8.17E-11	1.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3642	3015S8.48	4020730.4	1E-07	2.04E-07	3.20E-08	0.00E+00	3.36E-07	1.11E-10	8.97E-10	8.90E-11	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3643	3015S7.94	4020705.68	1.08E-07	2.20E-07	3.46E-08	0.00E+00	3.63E-07	1.20E-10	9.71E-10	9.63E-11	1.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3644	3015S7.4	4020680.96	1.16E-07	2.37E-07	3.72E-08	0.00E+00	3.90E-07	1.29E-10	1.04E-09	1.03E-10	1.28E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3645	3015S6.86	4020656.24	1.24E-07	2.52E-07	3.96E-08	0.00E+00	4.15E-07	1.37E-10	1.11E-09	1.10E-10	1.36E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3646	3015S6.33	4020631.52	1.3E-07	2.65E-07	4.17E-08	0.00E+00	4.37E-07	1.44E-10	1.17E-09	1.16E-10	1.43E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3647	3015S5.79	4020606.8	1.36E-07	2.77E-07	4.35E-08	0.00E+00	4.57E-07	1.51E-10	1.22E-09	1.21E-10	1.49E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3648	3015S5.25	4020582.08	1.41E-07	2.87E-07	4.50E-08	0.00E+00	4.72E-07	1.56E-10	1.26E-09	1.25E-10	1.54E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3649	3015S4.71	4020557.36	1.44E-07	2.93E-07	4.61E-08	0.00E+00	4.84E-07	1.59E-10	1.29E-09	1.28E-10	1.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3650	3015S4.17	4020532.63	1.46E-07	2.98E-07	4.68E-08	0.00E+00	4.91E-07	1.62E-10	1.31E-09	1.30E-10	1.61E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3651	3015S3.64	4020507.91	1.47E-07	3.00E-07	4.71E-08	0.00E+00	4.95E-07	1.63E-10	1.32E-09	1.31E-10	1.62E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3652	3015S3.1	4020483.19	1.47E-07	3.00E-07	4.70E-08	0.00E+00	4.94E-07	1.63E-10	1.32E-09	1.31E-10	1.61E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3653	3015O2.29	4020875.66	4.81E-08	9.80E-08	1.54E-08	0.00E+00	1.62E-07	5.33E-11	4.32E-10	4.28E-11	5.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3654	3015S9.42	4020898.4	4.57E-08	9.31E-08	1.46E-08	0.00E+00	1.53E-07	5.06E-11	4.10E-10	4.07E-11	5.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3655	3015S4.56	4020921.13	4.34E-08	8.84E-08	1.39E-08	0.00E+00	1.46E-07	4.80E-11	3.89E-10	3.86E-11	4.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3656	3015Z5.69	4020943.87	4.12E-08	8.39E-08	1.32E-08	0.00E+00	1.38E-07	4.56E-11	3.70E-10	3.66E-11	4.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3657	3015S6.82	4020966.61	3.91E-08	7.97E-08	1.25E-08	0.00E+00	1.31E-07	4.33E-11	3.51E-10	3.48E-11	4.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3658	3015S7.96	4020989.35	3.73E-08	7.60E-08	1.19E-08	0.00E+00	1.25E-07	4.13E-11	3.35E-10	3.32E-11	4.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3659	3015S4.93	4021012.08	3.58E-08	7.29E-08	1.14E-08	0.00E+00	1.20E-07	3.96E-11	3.21E-10	3.18E-11	3.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3660	3015S4.23	4021034.82	3.45E-08	7.02E-08	1.10E-08	0.00E+00	1.16E-07	3.82E-11	3.09E-10	3.07E-11	3.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3661	3015S1.36	4021057.56	3.34E-08	6.80E-08	1.07E-08	0.00E+00	1.12E-07	3.69E-11	2.99E-10	2.97E-11	3.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3662	3015S2.49	4021080.29	3.24E-08	6.59E-08	1.03E-08	0.00E+00	1.09E-07	3.58E-11	2.91E-10	2.88E-11	3.55E-10	0.00E+00	0.00E+00	0.00E+00

3709	301355.04	4021222.69	3.69E-08	7.51E-08	1.18E-08	0.00E+00	1.24E-07	4.08E-11	3.31E-10	3.28E-11	0.00E+00	4.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3710	301333.41	4021232.13	3.75E-08	7.64E-08	1.20E-08	0.00E+00	1.26E-07	4.15E-11	3.37E-10	3.34E-11	0.00E+00	4.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3711	301311.78	4021241.58	3.79E-08	7.72E-08	1.21E-08	0.00E+00	1.27E-07	4.19E-11	3.40E-10	3.37E-11	0.00E+00	4.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3712	301290.16	4021251.03	3.79E-08	7.73E-08	1.21E-08	0.00E+00	1.27E-07	4.20E-11	3.41E-10	3.38E-11	0.00E+00	4.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3713	301661.15	4020851.83	4.19E-08	8.54E-08	1.34E-08	0.00E+00	1.41E-07	4.64E-11	3.76E-10	3.73E-11	0.00E+00	4.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3714	301660.61	4020827.11	4.57E-08	9.31E-08	1.46E-08	0.00E+00	1.53E-07	5.06E-11	4.10E-10	4.07E-11	0.00E+00	5.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3715	301660.07	4020802.39	4.97E-08	1.01E-07	1.59E-08	0.00E+00	1.67E-07	5.50E-11	4.46E-10	4.42E-11	0.00E+00	5.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3716	301659.53	4020777.67	5.39E-08	1.10E-07	1.72E-08	0.00E+00	1.81E-07	5.97E-11	4.84E-10	4.80E-11	0.00E+00	5.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3717	301658.99	4020752.95	5.82E-08	1.19E-07	1.86E-08	0.00E+00	1.95E-07	6.44E-11	5.23E-10	5.18E-11	0.00E+00	6.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3718	301658.45	4020728.23	6.26E-08	1.28E-07	2.00E-08	0.00E+00	2.10E-07	6.93E-11	5.62E-10	5.57E-11	0.00E+00	6.87E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3719	301657.92	4020703.51	6.7E-08	1.37E-07	2.14E-08	0.00E+00	2.25E-07	7.42E-11	6.02E-10	5.96E-11	0.00E+00	7.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3720	301657.38	4020678.79	7.14E-08	1.45E-07	2.28E-08	0.00E+00	2.40E-07	7.90E-11	6.41E-10	6.35E-11	0.00E+00	7.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3721	301656.84	4020654.06	7.56E-08	1.54E-07	2.42E-08	0.00E+00	2.54E-07	8.37E-11	6.78E-10	6.73E-11	0.00E+00	8.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3722	301656.3	4020629.34	7.95E-08	1.62E-07	2.54E-08	0.00E+00	2.67E-07	8.80E-11	7.13E-10	7.07E-11	0.00E+00	8.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3723	301655.76	4020604.62	8.3E-08	1.69E-07	2.65E-08	0.00E+00	2.79E-07	9.19E-11	7.45E-10	7.39E-11	0.00E+00	9.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3724	301655.23	4020579.9	8.6E-08	1.75E-07	2.75E-08	0.00E+00	2.89E-07	9.52E-11	7.72E-10	7.65E-11	0.00E+00	9.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3725	301654.69	4020555.18	8.85E-08	1.80E-07	2.83E-08	0.00E+00	2.97E-07	9.80E-11	7.94E-10	7.88E-11	0.00E+00	9.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3726	301654.15	4020530.46	9.05E-08	1.84E-07	2.89E-08	0.00E+00	3.04E-07	1.00E-10	8.12E-10	8.05E-11	0.00E+00	9.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3727	301653.61	4020505.74	9.18E-08	1.87E-07	2.94E-08	0.00E+00	3.08E-07	1.02E-10	8.24E-10	8.17E-11	0.00E+00	1.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3728	301653.07	4020481.02	9.26E-08	1.89E-07	2.96E-08	0.00E+00	3.11E-07	1.02E-10	8.31E-10	8.24E-11	0.00E+00	1.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3729	301702.18	4020873.72	3.39E-08	6.91E-08	1.08E-08	0.00E+00	1.14E-07	3.76E-11	3.05E-10	3.02E-11	0.00E+00	3.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3730	301693.22	4020896.68	3.25E-08	6.61E-08	1.04E-08	0.00E+00	1.09E-07	3.59E-11	2.91E-10	2.89E-11	0.00E+00	3.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3731	301684.26	4020919.65	3.1E-08	6.32E-08	9.92E-09	0.00E+00	1.04E-07	3.44E-11	2.79E-10	2.76E-11	0.00E+00	3.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3732	301675.31	4020942.62	2.97E-08	6.04E-08	9.48E-09	0.00E+00	9.96E-08	3.28E-11	2.66E-10	2.64E-11	0.00E+00	3.25E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3733	301666.35	4020965.59	2.83E-08	5.77E-08	9.06E-09	0.00E+00	9.51E-08	3.14E-11	2.54E-10	2.52E-11	0.00E+00	3.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3734	301657.39	4020988.56	2.71E-08	5.51E-08	8.65E-09	0.00E+00	9.09E-08	3.00E-11	2.43E-10	2.41E-11	0.00E+00	2.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3735	301648.43	4021011.53	2.59E-08	5.28E-08	8.29E-09	0.00E+00	8.71E-08	2.87E-11	2.33E-10	2.31E-11	0.00E+00	2.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3736	301639.48	4021034.5	2.49E-08	5.08E-08	7.98E-09	0.00E+00	8.37E-08	2.76E-11	2.24E-10	2.22E-11	0.00E+00	2.74E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3737	301630.52	4021057.47	2.41E-08	4.91E-08	7.71E-09	0.00E+00	8.09E-08	2.67E-11	2.16E-10	2.15E-11	0.00E+00	2.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3738	301621.56	4021080.44	2.34E-08	4.77E-08	7.48E-09	0.00E+00	7.86E-08	2.59E-11	2.10E-10	2.08E-11	0.00E+00	2.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3739	301612.61	4021103.41	2.28E-08	4.64E-08	7.29E-09	0.00E+00	7.65E-08	2.52E-11	2.05E-10	2.03E-11	0.00E+00	2.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3740	301603.65	4021126.38	2.23E-08	4.53E-08	7.12E-09	0.00E+00	7.47E-08	2.46E-11	2.00E-10	1.98E-11	0.00E+00	2.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3741	301594.69	4021149.34	2.18E-08	4.44E-08	6.96E-09	0.00E+00	7.31E-08	2.41E-11	1.95E-10	1.94E-11	0.00E+00	2.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3742	301563.14	4021182.18	2.23E-08	4.54E-08	7.13E-09	0.00E+00	7.49E-08	2.47E-11	2.00E-10	1.98E-11	0.00E+00	2.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3743	301540.55	4021192.05	2.33E-08	4.76E-08	7.47E-09	0.00E+00	7.84E-08	2.58E-11	2.10E-10	2.08E-11	0.00E+00	2.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3744	301517.96	4021201.92	2.44E-08	4.98E-08	7.82E-09	0.00E+00	8.21E-08	2.71E-11	2.19E-10	2.18E-11	0.00E+00	2.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3745	301495.37	4021211.79	2.56E-08	5.21E-08	8.18E-09	0.00E+00	8.58E-08	2.83E-11	2.29E-10	2.28E-11	0.00E+00	2.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3746	301472.77	4021221.65	2.67E-08	5.44E-08	8.54E-09	0.00E+00	8.97E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3747	301450.18	4021231.52	2.78E-08	5.67E-08	8.90E-09	0.00E+00	9.34E-08	3.08E-11	2.50E-10	2.48E-11	0.00E+00	3.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3748	301427.59	4021241.39	2.89E-08	5.88E-08	9.23E-09	0.00E+00	9.70E-08	3.20E-11	2.59E-10	2.57E-11	0.00E+00	3.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3749	301404.99	4021251.26	2.98E-08	6.08E-08	9.54E-09	0.00E+00	1.00E-07	3.30E-11	2.68E-10	2.66E-11	0.00E+00	3.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3750	301382.4	4021261.13	3.07E-08	6.25E-08	9.82E-09	0.00E+00	1.03E-07	3.40E-11	2.76E-10	2.73E-11	0.00E+00	3.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3751	301359.81	4021270.99	3.14E-08	6.39E-08	1.00E-08	0.00E+00	1.05E-07	3.47E-11	2.82E-10	2.79E-11	0.00E+00	3.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3752	301337.22	4021280.86	3.18E-08	6.48E-08	1.02E-08	0.00E+00	1.07E-07	3.52E-11	2.85E-10	2.83E-11	0.00E+00	3.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3753	301314.62	4021290.73	3.2E-08	6.52E-08	1.02E-08	0.00E+00	1.07E-07	3.54E-11	2.87E-10	2.85E-11	0.00E+00	3.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3754	301292.03	4021300.6	3.2E-08	6.51E-08	1.02E-08	0.00E+00	1.07E-07	3.54E-11	2.87E-10	2.84E-11	0.00E+00	3.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3755	301711.13	4020850.75	3.55E-08	7.22E-08	1.13E-08	0.00E+00	1.19E-07	3.92E-11	3.18E-10	3.16E-11	0.00E+00	3.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3756	301710.6	4020826.03	3.84E-08	7.82E-08	1.23E-08	0.00E+00	1.29E-07	4.25E-11	3.45E-10	3.42E-11	0.00E+00	4.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3757	301710.06	4020801.3	4.15E-08	8.46E-08	1.33E-08	0.00E+00	1.39E-07	4.60E-11	3.73E-10	3.70E-11	0.00E+00	4.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3758	301709.52	4020776.58	4.47E-08	9.12E-08	1.43E-08	0.00E+00	1.50E-07	4.95E-11	4.02E-10	3.98E-11	0.00E+00	4.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3759	301708.98	4020751.86	4.8E-08	9.79E-08	1.54E-08	0.00E+00	1.61E-07	5.32E-11	4.31E-10	4.28E-11	0.00E+00	5.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3760	301708.44	4020727.14	5.14E-08	1.05E-07	1.64E-08	0.00E+00	1.72E-07	5.69E-11	4.61E-10	4.57E-11	0.00E+00	5.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3761	301707.9	4020702.42	5.47E-08	1.11E-07	1.75E-08	0.00E+00	1.84E-07	6.06E-11	4.91E-10	4.87E-11	0.00E+00	6.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3762	301707.37	4020677.7	5.8E-08	1.18E-07	1.85E-08	0.00E+00	1.95E-07	6.42E-11	5.21E-10	5.16E-11	0.00E+00	6.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3763	301706.83	4020652.98	6.12E-08	1.25E-07	1.96E-08	0.00E+00	2.05E-07	6.77E-11	5.49E-10	5.44E-11	0.00E+00	6.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3764	301706.29	4020628.26	6.42E-08	1.31E-07	2.05E-08	0.00E+00	2.15E-07	7.10E-11	5.76E-10	5.71E-11	0.00E+00	7.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3765	301705.75	4020603.53	6.69E-08	1.36E-07	2.14E-08	0.00E+00	2.25E-07	7.41E-11	6.00E-10	5.95E-11	0.00E+00	7.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3766	301705.21	4020578.81	6.94E-08	1.41E-07	2.22E-08	0.00E+00	2.33E-07	7.68E-11	6.23E-10	6.17E-11	0.00E+00	7.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3767	301704.68	4020554.09	7.15E-08	1.46E-07	2.29E-08	0.00E+00	2.40E-07	7.91E-11	6.42E-10	6.36E-11	0.00E+00	7.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3768	301704.14	4020529.37	7.32E-08	1.49E-07	2.34E-08	0.00E+00	2.46E-07	8.11E-11	6.57E-10	6.52E-11	0.00E+00	8.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3769	301703.6	4020504.65	7.46E-08	1.52E-07	2.38E-08	0.00E+00	2.50E-07	8.25E-11	6.69E-10	6.64E-11	0.00E+00	8.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3770	301703.06	4020479.93	7.54E-08	1.54E-07	2.41E-08	0.00E+00	2.53E-07	8.35E-11	6.77E-10	6.71E-11	0.00E+00	8.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3771	301702.52	4020455.21	7.57E-08	1.54E-07	2.42E-08	0.00E+00	2.54E-07	8.38E-11	6.80E-10	6.74E-11	0.00E+00	8.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3772	301752.41	4020871.99	2.92E-08	5.95E-08	9.34E-09	0.00E+00	9.81E-08	3.24E-11	2.62E-10	2.60E-11	0.00E+00	3.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3773	301743.71	4020894.32	2.81E-08	5.71E-08	8.97E-09	0.00E+00	9.42E-08	3.11E-11	2.52E-10	2.50E-11	0.00E+00	3.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3774	301735	4020916.65	2.69E-08	5.49E-08	8.61E-09	0.00E+00	9.04E-08	2.98E-11	2.42E-10	2.40E-11	0.00E+00	2.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3775	301726.29	4020938.98	2.58E-08	5.26E-08	8.26E-09	0.00E+00	8.67E-08	2.86E-11	2.32E-10	2.30E-11	0.00E+00	2.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3837	301593.41	4021269.74	1.73E-08	3.53E-08	5.54E-09	0.00E+00	5.82E-08	1.92E-11	1.55E-10	1.54E-11	0.00E+00	1.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3838	301571.94	4021279.12	1.8E-08	3.67E-08	5.76E-09	0.00E+00	6.04E-08	1.99E-11	1.62E-10	1.60E-11	0.00E+00	1.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3839	301550.46	4021288.5	1.87E-08	3.81E-08	5.98E-09	0.00E+00	6.28E-08	2.07E-11	1.68E-10	1.67E-11	0.00E+00	2.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3840	301528.98	4021297.88	1.94E-08	3.96E-08	6.21E-09	0.00E+00	6.52E-08	2.15E-11	1.74E-10	1.73E-11	0.00E+00	2.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3841	301507.51	4021307.26	2.01E-08	4.10E-08	6.44E-09	0.00E+00	6.76E-08	2.23E-11	1.81E-10	1.79E-11	0.00E+00	2.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3842	301486.03	4021316.64	2.08E-08	4.24E-08	6.65E-09	0.00E+00	6.99E-08	2.30E-11	1.87E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3843	301464.55	4021326.02	2.15E-08	4.37E-08	6.86E-09	0.00E+00	7.20E-08	2.38E-11	1.93E-10	1.91E-11	0.00E+00	2.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3844	301443.08	4021335.4	2.21E-08	4.50E-08	7.06E-09	0.00E+00	7.41E-08	2.44E-11	1.98E-10	1.96E-11	0.00E+00	2.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3845	301421.6	4021344.78	2.26E-08	4.61E-08	7.23E-09	0.00E+00	7.59E-08	2.50E-11	2.03E-10	2.01E-11	0.00E+00	2.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3846	301400.12	4021354.16	2.31E-08	4.70E-08	7.38E-09	0.00E+00	7.75E-08	2.55E-11	2.07E-10	2.05E-11	0.00E+00	2.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3847	301378.65	4021363.55	2.34E-08	4.77E-08	7.49E-09	0.00E+00	7.87E-08	2.59E-11	2.10E-10	2.09E-11	0.00E+00	2.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3848	301357.17	4021372.93	2.37E-08	4.82E-08	7.56E-09	0.00E+00	7.94E-08	2.62E-11	2.12E-10	2.11E-11	0.00E+00	2.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3849	301335.69	4021382.31	2.38E-08	4.84E-08	7.60E-09	0.00E+00	7.98E-08	2.63E-11	2.13E-10	2.12E-11	0.00E+00	2.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3850	301314.21	4021391.69	2.38E-08	4.84E-08	7.59E-09	0.00E+00	7.97E-08	2.63E-11	2.13E-10	2.11E-11	0.00E+00	2.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3851	301292.74	4021401.07	2.36E-08	4.81E-08	7.55E-09	0.00E+00	7.93E-08	2.61E-11	2.12E-10	2.10E-11	0.00E+00	2.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3852	301811.11	4020848.57	2.65E-08	5.39E-08	8.46E-09	0.00E+00	8.88E-08	2.93E-11	2.38E-10	2.36E-11	0.00E+00	2.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3853	301810.57	4020823.85	2.84E-08	5.78E-08	9.07E-09	0.00E+00	9.52E-08	3.14E-11	2.55E-10	2.52E-11	0.00E+00	3.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3854	301810.03	4020799.13	3.04E-08	6.18E-08	9.70E-09	0.00E+00	1.02E-07	3.36E-11	2.72E-10	2.70E-11	0.00E+00	3.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3855	301809.5	4020774.41	3.24E-08	6.59E-08	1.03E-08	0.00E+00	1.09E-07	3.58E-11	2.91E-10	2.88E-11	0.00E+00	3.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3856	301808.96	4020749.69	3.44E-08	7.01E-08	1.10E-08	0.00E+00	1.15E-07	3.81E-11	3.09E-10	3.06E-11	0.00E+00	3.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3857	301808.42	4020724.96	3.64E-08	7.42E-08	1.16E-08	0.00E+00	1.22E-07	4.03E-11	3.27E-10	3.24E-11	0.00E+00	3.99E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3858	301807.88	4020700.24	3.84E-08	7.82E-08	1.23E-08	0.00E+00	1.29E-07	4.25E-11	3.45E-10	3.42E-11	0.00E+00	4.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3859	301807.34	4020675.52	4.03E-08	8.22E-08	1.29E-08	0.00E+00	1.35E-07	4.46E-11	3.62E-10	3.59E-11	0.00E+00	4.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3860	301806.8	4020650.8	4.22E-08	8.60E-08	1.35E-08	0.00E+00	1.42E-07	4.67E-11	3.79E-10	3.76E-11	0.00E+00	4.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3861	301806.27	4020626.08	4.4E-08	8.96E-08	1.41E-08	0.00E+00	1.48E-07	4.87E-11	3.95E-10	3.92E-11	0.00E+00	4.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3862	301805.73	4020601.36	4.57E-08	9.31E-08	1.46E-08	0.00E+00	1.53E-07	5.06E-11	4.10E-10	4.07E-11	0.00E+00	5.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3863	301805.19	4020576.64	4.74E-08	9.65E-08	1.51E-08	0.00E+00	1.59E-07	5.24E-11	4.25E-10	4.21E-11	0.00E+00	5.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3864	301804.65	4020551.92	4.89E-08	9.96E-08	1.56E-08	0.00E+00	1.64E-07	5.41E-11	4.39E-10	4.35E-11	0.00E+00	5.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3865	301804.11	4020527.19	5.02E-08	1.02E-07	1.61E-08	0.00E+00	1.69E-07	5.56E-11	4.51E-10	4.47E-11	0.00E+00	5.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3866	301803.58	4020502.47	5.13E-08	1.05E-07	1.64E-08	0.00E+00	1.72E-07	5.68E-11	4.61E-10	4.57E-11	0.00E+00	5.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3867	301803.04	4020477.75	5.22E-08	1.06E-07	1.67E-08	0.00E+00	1.75E-07	5.77E-11	4.68E-10	4.64E-11	0.00E+00	5.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3868	301802.5	4020453.03	5.27E-08	1.07E-07	1.69E-08	0.00E+00	1.77E-07	5.84E-11	4.73E-10	4.69E-11	0.00E+00	5.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3869	301852.3	4020870.05	2.24E-08	4.57E-08	7.17E-09	0.00E+00	7.53E-08	2.48E-11	2.01E-10	2.00E-11	0.00E+00	2.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3870	301843.5	4020892.61	2.16E-08	4.40E-08	6.91E-09	0.00E+00	7.25E-08	2.39E-11	1.94E-10	1.92E-11	0.00E+00	2.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3871	301834.7	4020915.18	2.08E-08	4.24E-08	6.65E-09	0.00E+00	6.98E-08	2.30E-11	1.87E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3872	301825.9	4020937.75	2E-08	4.08E-08	6.40E-09	0.00E+00	6.72E-08	2.22E-11	1.80E-10	1.78E-11	0.00E+00	2.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3873	301817.1	4020960.31	1.93E-08	3.93E-08	6.16E-09	0.00E+00	6.47E-08	2.13E-11	1.73E-10	1.71E-11	0.00E+00	2.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3874	301808.3	4020982.88	1.85E-08	3.77E-08	5.92E-09	0.00E+00	6.22E-08	2.05E-11	1.66E-10	1.65E-11	0.00E+00	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3875	301799.5	4021005.44	1.78E-08	3.63E-08	5.70E-09	0.00E+00	5.98E-08	1.97E-11	1.60E-10	1.59E-11	0.00E+00	1.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3876	301790.7	4021028.01	1.71E-08	3.49E-08	5.48E-09	0.00E+00	5.76E-08	1.90E-11	1.54E-10	1.53E-11	0.00E+00	1.88E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3877	301781.9	4021050.58	1.65E-08	3.37E-08	5.29E-09	0.00E+00	5.55E-08	1.83E-11	1.48E-10	1.47E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3878	301773.1	4021073.14	1.6E-08	3.26E-08	5.11E-09	0.00E+00	5.36E-08	1.77E-11	1.43E-10	1.42E-11	0.00E+00	1.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3879	301764.3	4021095.71	1.55E-08	3.16E-08	4.96E-09	0.00E+00	5.21E-08	1.72E-11	1.39E-10	1.38E-11	0.00E+00	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3880	301755.5	4021118.28	1.51E-08	3.08E-08	4.83E-09	0.00E+00	5.07E-08	1.67E-11	1.36E-10	1.34E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3881	301746.7	4021140.84	1.48E-08	3.01E-08	4.72E-09	0.00E+00	4.96E-08	1.64E-11	1.33E-10	1.31E-11	0.00E+00	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3882	301737.9	4021163.41	1.45E-08	2.95E-08	4.63E-09	0.00E+00	4.86E-08	1.60E-11	1.30E-10	1.29E-11	0.00E+00	1.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3883	301729.1	4021185.97	1.42E-08	2.90E-08	4.55E-09	0.00E+00	4.78E-08	1.58E-11	1.28E-10	1.27E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3884	301720.3	4021208.54	1.4E-08	2.85E-08	4.48E-09	0.00E+00	4.70E-08	1.55E-11	1.26E-10	1.25E-11	0.00E+00	1.54E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3885	301711.5	4021231.11	1.38E-08	2.81E-08	4.41E-09	0.00E+00	4.63E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3886	301702.7	4021253.67	1.36E-08	2.77E-08	4.34E-09	0.00E+00	4.56E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3887	301671.7	4021285.93	1.39E-08	2.83E-08	4.44E-09	0.00E+00	4.66E-08	1.54E-11	1.25E-10	1.24E-11	0.00E+00	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3888	301649.51	4021295.63	1.44E-08	2.93E-08	4.61E-09	0.00E+00	4.84E-08	1.59E-11	1.29E-10	1.28E-11	0.00E+00	1.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3889	301627.31	4021305.32	1.5E-08	3.05E-08	4.78E-09	0.00E+00	5.02E-08	1.66E-11	1.34E-10	1.33E-11	0.00E+00	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3890	301605.12	4021315.02	1.56E-08	3.17E-08	4.98E-09	0.00E+00	5.23E-08	1.72E-11	1.40E-10	1.39E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3891	301582.92	4021324.71	1.62E-08	3.29E-08	5.17E-09	0.00E+00	5.43E-08	1.79E-11	1.45E-10	1.44E-11	0.00E+00	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3892	301560.72	4021334.41	1.68E-08	3.42E-08	5.37E-09	0.00E+00	5.63E-08	1.86E-11	1.51E-10	1.49E-11	0.00E+00	1.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3893	301538.53	4021344.1	1.74E-08	3.54E-08	5.56E-09	0.00E+00	5.84E-08	1.93E-11	1.56E-10	1.55E-11	0.00E+00	1.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3894	301516.33	4021353.8	1.8E-08	3.66E-08	5.75E-09	0.00E+00	6.04E-08	1.99E-11	1.61E-10	1.60E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3895	301494.13	4021363.49	1.86E-08	3.78E-08	5.94E-09	0.00E+00	6.23E-08	2.06E-11	1.67E-10	1.65E-11	0.00E+00	2.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3896	301471.94	4021373.19	1.91E-08	3.89E-08	6.11E-09	0.00E+00	6.41E-08	2.11E-11	1.71E-10	1.70E-11	0.00E+00	2.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3897	301449.74	4021382.88	1.96E-08	3.99E-08	6.26E-09	0.00E+00	6.58E-08	2.17E-11	1.76E-10	1.74E-11	0.00E+00	2.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3898	301427.55	4021392.58	2E-08	4.08E-08	6.40E-09	0.00E+00	6.72E-08	2.22E-11	1.80E-10	1.78E-11	0.00E+00	2.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3899	301405.35	4021402.27	2.04E-08	4.15E-08	6.52E-09	0.00E+00	6.84E-08	2.26E-11	1.83E-10	1.81E-11	0.00E+00	2.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3900	301383.15	4021411.97	2.07E-08	4.21E-08	6.60E-09	0.00E+00	6.93E-08	2.29E-11	1.85E-10	1.84E-11	0.00E+00	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3901	301360.96	4021421.66	2.08E-08	4.24E-08	6.65E-09	0.00E+00	6.99E-08	2.30E-11	1.87E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3902	301338.76	4021431.36	2.09E-08	4.25E-08	6.67E-09	0.00E+00	7.01E-08	2.31E-11	1.87E-10	1.86E-11	0.00E+00	2.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3903	301316.56	4021441.05	2.08E-08	4.24E-08	6.66E-09	0.00E+00	6.99E-08	2.31E-11	1.87E-10	1.85E-11	0.00E+00	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

3965	301960	4020795.86	2.06E-08	4.20E-08	6.59E-09	0.00E+00	6.92E-08	2.28E-11	1.85E-10	1.84E-11	0.00E+00	2.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3966	301959.46	4020771.14	2.17E-08	4.42E-08	6.94E-09	0.00E+00	7.28E-08	2.40E-11	1.95E-10	1.93E-11	0.00E+00	2.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3967	301958.92	4020746.42	2.28E-08	4.64E-08	7.28E-09	0.00E+00	7.64E-08	2.52E-11	2.04E-10	2.03E-11	0.00E+00	2.50E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3968	301958.38	4020721.7	2.38E-08	4.85E-08	7.61E-09	0.00E+00	7.99E-08	2.63E-11	2.14E-10	2.12E-11	0.00E+00	2.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3969	301957.85	4020696.98	2.48E-08	5.05E-08	7.93E-09	0.00E+00	8.32E-08	2.75E-11	2.23E-10	2.21E-11	0.00E+00	2.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3970	301957.31	4020672.26	2.58E-08	5.25E-08	8.24E-09	0.00E+00	8.65E-08	2.85E-11	2.31E-10	2.29E-11	0.00E+00	2.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3971	301956.77	4020647.54	2.67E-08	5.44E-08	8.54E-09	0.00E+00	8.97E-08	2.96E-11	2.40E-10	2.38E-11	0.00E+00	2.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3972	301956.23	4020622.81	2.76E-08	5.63E-08	8.84E-09	0.00E+00	9.28E-08	3.06E-11	2.48E-10	2.46E-11	0.00E+00	3.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3973	301955.69	4020598.09	2.86E-08	5.82E-08	9.13E-09	0.00E+00	9.59E-08	3.16E-11	2.56E-10	2.54E-11	0.00E+00	3.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3974	301955.15	4020573.37	2.95E-08	6.00E-08	9.42E-09	0.00E+00	9.90E-08	3.26E-11	2.65E-10	2.62E-11	0.00E+00	3.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3975	301954.62	4020548.65	3.04E-08	6.19E-08	9.71E-09	0.00E+00	1.02E-07	3.36E-11	2.73E-10	2.70E-11	0.00E+00	3.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3976	301954.08	4020523.93	3.12E-08	6.36E-08	9.98E-09	0.00E+00	1.05E-07	3.45E-11	2.80E-10	2.78E-11	0.00E+00	3.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3977	301953.54	4020499.21	3.2E-08	6.51E-08	1.02E-08	0.00E+00	1.07E-07	3.54E-11	2.87E-10	2.85E-11	0.00E+00	3.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3978	301953	4020474.49	3.26E-08	6.65E-08	1.04E-08	0.00E+00	1.10E-07	3.61E-11	2.93E-10	2.90E-11	0.00E+00	3.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3979	302052.13	4020866	1.46E-08	2.98E-08	4.68E-09	0.00E+00	4.91E-08	1.62E-11	1.31E-10	1.30E-11	0.00E+00	1.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3980	302043.22	4020888.86	1.42E-08	2.89E-08	4.54E-09	0.00E+00	4.77E-08	1.57E-11	1.27E-10	1.26E-11	0.00E+00	1.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3981	302034.3	4020911.73	1.38E-08	2.81E-08	4.41E-09	0.00E+00	4.63E-08	1.53E-11	1.24E-10	1.23E-11	0.00E+00	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3982	302025.38	4020934.6	1.33E-08	2.72E-08	4.27E-09	0.00E+00	4.48E-08	1.48E-11	1.20E-10	1.19E-11	0.00E+00	1.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3983	302016.46	4020957.46	1.29E-08	2.63E-08	4.13E-09	0.00E+00	4.34E-08	1.43E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3984	302007.55	4020980.33	1.25E-08	2.54E-08	3.99E-09	0.00E+00	4.19E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3985	301998.63	4021003.2	1.21E-08	2.46E-08	3.86E-09	0.00E+00	4.05E-08	1.33E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3986	301989.71	4021026.07	1.16E-08	2.37E-08	3.72E-09	0.00E+00	3.91E-08	1.29E-11	1.05E-10	1.04E-11	0.00E+00	1.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3987	301980.8	4021048.93	1.12E-08	2.29E-08	3.59E-09	0.00E+00	3.77E-08	1.24E-11	1.01E-10	9.99E-12	0.00E+00	1.23E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3988	301971.88	4021071.8	1.08E-08	2.21E-08	3.47E-09	0.00E+00	3.64E-08	1.20E-11	9.73E-11	9.65E-12	0.00E+00	1.19E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3989	301962.96	4021094.67	1.05E-08	2.14E-08	3.35E-09	0.00E+00	3.52E-08	1.16E-11	9.41E-11	9.33E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3990	301954.04	4021117.53	1.02E-08	2.07E-08	3.26E-09	0.00E+00	3.42E-08	1.13E-11	9.14E-11	9.06E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3991	301945.13	4021140.4	9.92E-09	2.02E-08	3.17E-09	0.00E+00	3.33E-08	1.10E-11	8.90E-11	8.83E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3992	301936.21	4021163.27	9.69E-09	1.97E-08	3.10E-09	0.00E+00	3.25E-08	1.07E-11	8.70E-11	8.62E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3993	301927.29	4021186.13	9.49E-09	1.93E-08	3.04E-09	0.00E+00	3.19E-08	1.05E-11	8.52E-11	8.45E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3994	301918.38	4021209	9.33E-09	1.90E-08	2.98E-09	0.00E+00	3.13E-08	1.03E-11	8.37E-11	8.30E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3995	301909.46	4021231.87	9.18E-09	1.87E-08	2.94E-09	0.00E+00	3.08E-08	1.02E-11	8.24E-11	8.17E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3996	301900.54	4021254.74	9.05E-09	1.84E-08	2.89E-09	0.00E+00	3.04E-08	1.00E-11	8.13E-11	8.06E-12	0.00E+00	9.93E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3997	301891.62	4021277.6	8.93E-09	1.82E-08	2.86E-09	0.00E+00	3.00E-08	9.89E-12	8.02E-11	7.95E-12	0.00E+00	9.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3998	301882.71	4021300.47	8.83E-09	1.80E-08	2.82E-09	0.00E+00	2.96E-08	9.78E-12	7.93E-11	7.86E-12	0.00E+00	9.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3999	301873.79	4021323.34	8.74E-09	1.78E-08	2.79E-09	0.00E+00	2.93E-08	9.67E-12	7.84E-11	7.78E-12	0.00E+00	9.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4000	301864.87	4021346.2	8.65E-09	1.76E-08	2.76E-09	0.00E+00	2.90E-08	9.57E-12	7.76E-11	7.69E-12	0.00E+00	9.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4001	301855.96	4021369.07	8.56E-09	1.74E-08	2.74E-09	0.00E+00	2.87E-08	9.47E-12	7.68E-11	7.62E-12	0.00E+00	9.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4002	301847.04	4021391.94	8.47E-09	1.73E-08	2.71E-09	0.00E+00	2.84E-08	9.38E-12	7.60E-11	7.54E-12	0.00E+00	9.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4003	301815.63	4021424.63	8.65E-09	1.76E-08	2.76E-09	0.00E+00	2.90E-08	9.57E-12	7.76E-11	7.70E-12	0.00E+00	9.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4004	301793.14	4021434.45	8.93E-09	1.82E-08	2.85E-09	0.00E+00	3.00E-08	9.88E-12	8.01E-11	7.95E-12	0.00E+00	9.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4005	301770.64	4021444.28	9.21E-09	1.88E-08	2.94E-09	0.00E+00	3.09E-08	1.02E-11	8.26E-11	8.19E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4006	301748.15	4021454.1	9.5E-09	1.93E-08	3.04E-09	0.00E+00	3.19E-08	1.05E-11	8.53E-11	8.45E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4007	301725.66	4021463.92	9.8E-09	2.00E-08	3.13E-09	0.00E+00	3.29E-08	1.09E-11	8.80E-11	8.72E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4008	301703.17	4021473.75	1.01E-08	2.06E-08	3.24E-09	0.00E+00	3.40E-08	1.12E-11	9.08E-11	9.01E-12	0.00E+00	1.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4009	301680.68	4021483.57	1.04E-08	2.13E-08	3.34E-09	0.00E+00	3.51E-08	1.16E-11	9.37E-11	9.29E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4010	301658.18	4021493.4	1.08E-08	2.19E-08	3.44E-09	0.00E+00	3.62E-08	1.19E-11	9.67E-11	9.59E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4011	301635.69	4021503.22	1.11E-08	2.26E-08	3.55E-09	0.00E+00	3.73E-08	1.23E-11	9.96E-11	9.88E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4012	301613.2	4021513.05	1.14E-08	2.33E-08	3.65E-09	0.00E+00	3.83E-08	1.26E-11	1.03E-10	1.02E-11	0.00E+00	1.25E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4013	301590.71	4021522.87	1.17E-08	2.39E-08	3.75E-09	0.00E+00	3.94E-08	1.30E-11	1.05E-10	1.04E-11	0.00E+00	1.29E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4014	301568.21	4021532.69	1.2E-08	2.45E-08	3.84E-09	0.00E+00	4.04E-08	1.33E-11	1.08E-10	1.07E-11	0.00E+00	1.32E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4015	301545.72	4021542.52	1.23E-08	2.50E-08	3.93E-09	0.00E+00	4.13E-08	1.36E-11	1.10E-10	1.09E-11	0.00E+00	1.35E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4016	301523.23	4021552.34	1.25E-08	2.56E-08	4.01E-09	0.00E+00	4.21E-08	1.39E-11	1.13E-10	1.12E-11	0.00E+00	1.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4017	301500.74	4021562.17	1.28E-08	2.61E-08	4.09E-09	0.00E+00	4.29E-08	1.42E-11	1.15E-10	1.14E-11	0.00E+00	1.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4018	301478.25	4021571.99	1.3E-08	2.65E-08	4.16E-09	0.00E+00	4.37E-08	1.44E-11	1.17E-10	1.16E-11	0.00E+00	1.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4019	301455.75	4021581.81	1.32E-08	2.69E-08	4.22E-09	0.00E+00	4.43E-08	1.46E-11	1.18E-10	1.17E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4020	301433.26	4021591.64	1.34E-08	2.72E-08	4.27E-09	0.00E+00	4.49E-08	1.48E-11	1.20E-10	1.19E-11	0.00E+00	1.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4021	301410.77	4021601.46	1.35E-08	2.75E-08	4.31E-09	0.00E+00	4.52E-08	1.49E-11	1.21E-10	1.20E-11	0.00E+00	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4022	301388.28	4021611.29	1.35E-08	2.76E-08	4.33E-09	0.00E+00	4.55E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4023	301365.78	4021621.11	1.35E-08	2.76E-08	4.33E-09	0.00E+00	4.54E-08	1.50E-11	1.21E-10	1.20E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4024	301343.29	4021630.93	1.35E-08	2.75E-08	4.31E-09	0.00E+00	4.53E-08	1.49E-11	1.21E-10	1.20E-11	0.00E+00	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4025	301320.8	4021640.76	1.34E-08	2.73E-08	4.28E-09	0.00E+00	4.49E-08	1.48E-11	1.20E-10	1.19E-11	0.00E+00	1.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4026	301298.31	4021650.58	1.32E-08	2.70E-08	4.24E-09	0.00E+00	4.45E-08	1.47E-11	1.19E-10	1.18E-11	0.00E+00	1.45E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4027	302061.05	4020843.13	1.5E-08	3.06E-08	4.81E-09	0.00E+00	5.05E-08	1.66E-11	1.35E-10	1.34E-11	0.00E+00	1.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4028	302060.51	4020818.41	1.58E-08	3.22E-08	5.05E-09	0.00E+00	5.30E-08	1.75E-11	1.42E-10	1.41E-11	0.00E+00	1.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4029	302059.97	4020793.69	1.65E-08	3.37E-08	5.29E-09	0.00E+00	5.55E-08	1.83E-11	1.48E-10	1.47E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4030	302059.44	4020768.97	1.73E-08	3.52E-08	5.52E-09	0.00E+00	5.80E-08	1.91E-11	1.55E-10	1.54E-11	0.00E+00	1.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4031	302058.9	4020744.24	1.8E-08	3.67E-08	5.76E-09	0.00E+00	6.04E-08	1.99E-11	1.62E-10	1.60E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E

4093	301368.01	4021720.92	1.13E-08	2.31E-08	3.63E-09	0.00E+00	3.81E-08	1.26E-11	1.02E-10	1.01E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4094	301345.42	4021730.79	1.13E-08	2.30E-08	3.60E-09	0.00E+00	3.78E-08	1.25E-11	1.01E-10	1.00E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4095	301322.82	4021740.65	1.12E-08	2.27E-08	3.57E-09	0.00E+00	3.75E-08	1.24E-11	1.00E-10	9.93E-12	0.00E+00	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4096	301300.23	4021750.52	1.1E-08	2.25E-08	3.53E-09	0.00E+00	3.70E-08	1.22E-11	9.90E-11	9.82E-12	0.00E+00	1.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4097	302161.03	4020840.95	1.25E-08	2.55E-08	4.00E-09	0.00E+00	4.20E-08	1.39E-11	1.12E-10	1.11E-11	0.00E+00	1.37E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4098	302160.49	4020816.23	1.31E-08	2.66E-08	4.17E-09	0.00E+00	4.38E-08	1.44E-11	1.17E-10	1.16E-11	0.00E+00	1.43E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4099	302159.95	4020791.51	1.36E-08	2.77E-08	4.34E-09	0.00E+00	4.56E-08	1.50E-11	1.22E-10	1.21E-11	0.00E+00	1.49E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4100	302159.41	4020766.79	1.41E-08	2.88E-08	4.51E-09	0.00E+00	4.74E-08	1.56E-11	1.27E-10	1.26E-11	0.00E+00	1.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4101	302158.87	4020742.07	1.46E-08	2.98E-08	4.68E-09	0.00E+00	4.91E-08	1.62E-11	1.31E-10	1.30E-11	0.00E+00	1.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4102	302158.34	4020717.35	1.51E-08	3.08E-08	4.83E-09	0.00E+00	5.08E-08	1.67E-11	1.36E-10	1.35E-11	0.00E+00	1.66E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4103	302157.8	4020692.63	1.56E-08	3.18E-08	4.98E-09	0.00E+00	5.23E-08	1.73E-11	1.40E-10	1.39E-11	0.00E+00	1.71E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4104	302157.26	4020667.9	1.61E-08	3.27E-08	5.13E-09	0.00E+00	5.39E-08	1.78E-11	1.44E-10	1.43E-11	0.00E+00	1.76E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4105	302156.72	4020643.18	1.65E-08	3.36E-08	5.28E-09	0.00E+00	5.54E-08	1.83E-11	1.48E-10	1.47E-11	0.00E+00	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4106	302156.18	4020618.46	1.7E-08	3.46E-08	5.43E-09	0.00E+00	5.70E-08	1.88E-11	1.52E-10	1.51E-11	0.00E+00	1.86E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4107	302155.65	4020593.74	1.75E-08	3.55E-08	5.58E-09	0.00E+00	5.86E-08	1.93E-11	1.57E-10	1.55E-11	0.00E+00	1.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4108	302155.11	4020569.02	1.79E-08	3.65E-08	5.73E-09	0.00E+00	6.02E-08	1.98E-11	1.61E-10	1.59E-11	0.00E+00	1.97E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4109	302154.57	4020544.3	1.84E-08	3.74E-08	5.88E-09	0.00E+00	6.17E-08	2.03E-11	1.65E-10	1.64E-11	0.00E+00	2.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4110	302154.03	4020519.58	1.88E-08	3.84E-08	6.02E-09	0.00E+00	6.32E-08	2.08E-11	1.69E-10	1.68E-11	0.00E+00	2.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4111	302153.49	4020494.86	1.92E-08	3.92E-08	6.15E-09	0.00E+00	6.46E-08	2.13E-11	1.73E-10	1.71E-11	0.00E+00	2.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4112	302152.95	4020470.13	1.96E-08	4.00E-08	6.28E-09	0.00E+00	6.59E-08	2.17E-11	1.76E-10	1.75E-11	0.00E+00	2.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4113	302252.29	4020861.11	1.04E-08	2.12E-08	3.33E-09	0.00E+00	3.50E-08	1.15E-11	9.35E-11	9.27E-12	0.00E+00	1.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4114	302243.59	4020883.44	1.02E-08	2.08E-08	3.26E-09	0.00E+00	3.42E-08	1.13E-11	9.15E-11	9.08E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4115	302234.88	4020905.77	9.99E-09	2.03E-08	3.19E-09	0.00E+00	3.35E-08	1.11E-11	8.96E-11	8.89E-12	0.00E+00	1.10E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4116	302226.17	4020928.1	9.77E-09	1.99E-08	3.12E-09	0.00E+00	3.28E-08	1.08E-11	8.77E-11	8.69E-12	0.00E+00	1.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4117	302217.46	4020950.43	9.54E-09	1.94E-08	3.05E-09	0.00E+00	3.20E-08	1.06E-11	8.56E-11	8.49E-12	0.00E+00	1.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4118	302208.75	4020972.76	9.31E-09	1.90E-08	2.98E-09	0.00E+00	3.12E-08	1.03E-11	8.35E-11	8.28E-12	0.00E+00	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4119	302200.05	4020995.09	9.06E-09	1.85E-08	2.90E-09	0.00E+00	3.04E-08	1.00E-11	8.13E-11	8.06E-12	0.00E+00	9.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4120	302191.34	4021017.43	8.8E-09	1.79E-08	2.82E-09	0.00E+00	2.96E-08	9.75E-12	7.90E-11	7.84E-12	0.00E+00	9.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4121	302182.63	4021039.76	8.54E-09	1.74E-08	2.73E-09	0.00E+00	2.87E-08	9.45E-12	7.67E-11	7.60E-12	0.00E+00	9.37E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4122	302173.92	4021062.09	8.27E-09	1.69E-08	2.65E-09	0.00E+00	2.78E-08	9.16E-12	7.43E-11	7.36E-12	0.00E+00	9.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4123	302165.21	4021084.42	8.01E-09	1.63E-08	2.56E-09	0.00E+00	2.69E-08	8.87E-12	7.19E-11	7.13E-12	0.00E+00	8.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4124	302156.5	4021106.75	7.76E-09	1.58E-08	2.48E-09	0.00E+00	2.60E-08	8.58E-12	6.96E-11	6.90E-12	0.00E+00	8.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4125	302147.8	4021129.08	7.52E-09	1.53E-08	2.40E-09	0.00E+00	2.52E-08	8.32E-12	6.75E-11	6.69E-12	0.00E+00	8.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4126	302139.09	4021151.41	7.3E-09	1.49E-08	2.33E-09	0.00E+00	2.45E-08	8.08E-12	6.55E-11	6.50E-12	0.00E+00	8.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4127	302130.38	4021173.74	7.11E-09	1.45E-08	2.27E-09	0.00E+00	2.39E-08	7.87E-12	6.38E-11	6.33E-12	0.00E+00	7.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4128	302121.67	4021196.07	6.94E-09	1.41E-08	2.22E-09	0.00E+00	2.33E-08	7.68E-12	6.23E-11	6.18E-12	0.00E+00	7.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4129	302112.96	4021218.4	6.79E-09	1.38E-08	2.17E-09	0.00E+00	2.28E-08	7.52E-12	6.10E-11	6.05E-12	0.00E+00	7.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4130	302104.26	4021240.74	6.67E-09	1.36E-08	2.13E-09	0.00E+00	2.24E-08	7.38E-12	5.99E-11	5.94E-12	0.00E+00	7.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4131	302095.55	4021263.07	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.27E-12	5.89E-11	5.84E-12	0.00E+00	7.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4132	302086.84	4021285.4	6.48E-09	1.32E-08	2.07E-09	0.00E+00	2.18E-08	7.17E-12	5.82E-11	5.77E-12	0.00E+00	7.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4133	302078.13	4021307.73	6.42E-09	1.31E-08	2.05E-09	0.00E+00	2.15E-08	7.11E-12	5.76E-11	5.71E-12	0.00E+00	7.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4134	302069.42	4021330.06	6.36E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.04E-12	5.71E-11	5.66E-12	0.00E+00	6.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4135	302060.72	4021352.39	6.3E-09	1.28E-08	2.02E-09	0.00E+00	2.12E-08	6.98E-12	5.66E-11	5.61E-12	0.00E+00	6.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4136	302052.01	4021374.72	6.26E-09	1.27E-08	2.00E-09	0.00E+00	2.10E-08	6.92E-12	5.61E-11	5.57E-12	0.00E+00	6.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4137	302043.3	4021397.05	6.21E-09	1.27E-08	1.99E-09	0.00E+00	2.09E-08	6.88E-12	5.58E-11	5.53E-12	0.00E+00	6.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4138	302034.59	4021419.38	6.17E-09	1.26E-08	1.97E-09	0.00E+00	2.07E-08	6.83E-12	5.54E-11	5.49E-12	0.00E+00	6.77E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4139	302025.88	4021441.71	6.12E-09	1.25E-08	1.96E-09	0.00E+00	2.06E-08	6.78E-12	5.50E-11	5.45E-12	0.00E+00	6.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4140	302017.17	4021464.05	6.08E-09	1.24E-08	1.94E-09	0.00E+00	2.04E-08	6.73E-12	5.46E-11	5.41E-12	0.00E+00	6.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4141	302008.47	4021486.38	6.05E-09	1.23E-08	1.93E-09	0.00E+00	2.03E-08	6.69E-12	5.43E-11	5.38E-12	0.00E+00	6.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4142	301999.76	4021508.71	6E-09	1.22E-08	1.92E-09	0.00E+00	2.01E-08	6.64E-12	5.39E-11	5.34E-12	0.00E+00	6.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4143	301991.05	4021531.04	5.96E-09	1.21E-08	1.91E-09	0.00E+00	2.00E-08	6.60E-12	5.35E-11	5.30E-12	0.00E+00	6.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4144	301960.38	4021562.96	6.06E-09	1.23E-08	1.94E-09	0.00E+00	2.03E-08	6.71E-12	5.44E-11	5.39E-12	0.00E+00	6.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4145	301938.41	4021572.56	6.2E-09	1.26E-08	1.98E-09	0.00E+00	2.08E-08	6.86E-12	5.57E-11	5.52E-12	0.00E+00	6.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4146	301916.45	4021582.15	6.35E-09	1.29E-08	2.03E-09	0.00E+00	2.13E-08	7.03E-12	5.70E-11	5.65E-12	0.00E+00	6.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4147	301894.48	4021591.75	6.51E-09	1.33E-08	2.08E-09	0.00E+00	2.19E-08	7.21E-12	5.84E-11	5.79E-12	0.00E+00	7.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4148	301872.52	4021601.34	6.68E-09	1.36E-08	2.13E-09	0.00E+00	2.24E-08	7.39E-12	5.99E-11	5.94E-12	0.00E+00	7.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4149	301850.55	4021610.93	6.85E-09	1.40E-08	2.19E-09	0.00E+00	2.30E-08	7.58E-12	6.15E-11	6.10E-12	0.00E+00	7.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4150	301828.59	4021620.53	7.03E-09	1.43E-08	2.25E-09	0.00E+00	2.36E-08	7.78E-12	6.31E-11	6.26E-12	0.00E+00	7.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4151	301806.62	4021630.12	7.22E-09	1.47E-08	2.31E-09	0.00E+00	2.42E-08	7.99E-12	6.48E-11	6.42E-12	0.00E+00	7.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4152	301784.66	4021639.71	7.41E-09	1.51E-08	2.37E-09	0.00E+00	2.49E-08	8.20E-12	6.65E-11	6.59E-12	0.00E+00	8.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4153	301762.69	4021649.31	7.6E-09	1.55E-08	2.43E-09	0.00E+00	2.55E-08	8.41E-12	6.82E-11	6.76E-12	0.00E+00	8.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4154	301740.73	4021658.9	7.79E-09	1.59E-08	2.49E-09	0.00E+00	2.62E-08	8.63E-12	6.99E-11	6.93E-12	0.00E+00	8.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4155	301718.76	4021668.5	7.98E-09	1.63E-08	2.55E-09	0.00E+00	2.68E-08	8.84E-12	7.17E-11	7.11E-12	0.00E+00	8.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4156	301696.8	4021678.09	8.17E-09	1.67E-08	2.61E-09	0.00E+00	2.74E-08	9.05E-12	7.34E-11	7.27E-12	0.00E+00	8.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4157	301674.83	4021687.68	8.35E-09	1.70E-08	2.67E-09	0.00E+00	2.80E-08	9.25E-12	7.50E-11	7.43E-12	0.00E+00	9.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4158	301652.87	4021697.28	8.52E-09	1.74E-08	2.73E-09	0.00E+00	2.86E-08	9.44E-12	7.65E-11	7.59E-12	0.00E+00	9.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4159	301630.9	4021706.87	8.68E-09	1.77E-08	2.78E-09	0.00E+00	2.91E-08	9.61E-12	7.79E-11	7.73E-12	0.00E+00	9.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

4221	302080.73	4021555.28	5.21E-09	1.06E-08	1.67E-09	0.00E+00	1.75E-08	5.77E-12	4.68E-11	4.64E-12	0.00E+00	5.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4222	302071.97	4021577.74	5.18E-09	1.06E-08	1.66E-09	0.00E+00	1.74E-08	5.73E-12	4.65E-11	4.61E-12	0.00E+00	5.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4223	302063.21	4021600.19	5.15E-09	1.05E-08	1.65E-09	0.00E+00	1.73E-08	5.70E-12	4.62E-11	4.58E-12	0.00E+00	5.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4224	302032.36	4021632.3	5.23E-09	1.07E-08	1.67E-09	0.00E+00	1.75E-08	5.79E-12	4.69E-11	4.65E-12	0.00E+00	5.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4225	302010.27	4021641.95	5.34E-09	1.09E-08	1.71E-09	0.00E+00	1.79E-08	5.91E-12	4.79E-11	4.75E-12	0.00E+00	5.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4226	301988.18	4021651.6	5.46E-09	1.11E-08	1.75E-09	0.00E+00	1.83E-08	6.04E-12	4.90E-11	4.86E-12	0.00E+00	5.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4227	301966.09	4021661.25	5.58E-09	1.14E-08	1.78E-09	0.00E+00	1.87E-08	6.18E-12	5.01E-11	4.97E-12	0.00E+00	6.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4228	301944	4021670.9	5.71E-09	1.16E-08	1.83E-09	0.00E+00	1.92E-08	6.33E-12	5.13E-11	5.08E-12	0.00E+00	6.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4229	301921.91	4021680.54	5.85E-09	1.19E-08	1.87E-09	0.00E+00	1.96E-08	6.47E-12	5.25E-11	5.21E-12	0.00E+00	6.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4230	301899.82	4021690.19	5.99E-09	1.22E-08	1.92E-09	0.00E+00	2.01E-08	6.63E-12	5.38E-11	5.33E-12	0.00E+00	6.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4231	301877.73	4021699.84	6.14E-09	1.25E-08	1.96E-09	0.00E+00	2.06E-08	6.79E-12	5.51E-11	5.46E-12	0.00E+00	6.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4232	301855.64	4021709.49	6.29E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.96E-12	5.64E-11	5.60E-12	0.00E+00	6.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4233	301833.55	4021719.14	6.44E-09	1.31E-08	2.06E-09	0.00E+00	2.16E-08	7.13E-12	5.78E-11	5.73E-12	0.00E+00	7.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4234	301811.46	4021728.79	6.6E-09	1.34E-08	2.11E-09	0.00E+00	2.22E-08	7.31E-12	5.92E-11	5.87E-12	0.00E+00	7.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4235	301789.36	4021738.44	6.76E-09	1.38E-08	2.16E-09	0.00E+00	2.27E-08	7.48E-12	6.06E-11	6.01E-12	0.00E+00	7.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4236	301767.27	4021748.09	6.91E-09	1.41E-08	2.21E-09	0.00E+00	2.32E-08	7.65E-12	6.20E-11	6.15E-12	0.00E+00	7.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4237	301745.18	4021757.73	7.07E-09	1.44E-08	2.26E-09	0.00E+00	2.37E-08	7.82E-12	6.34E-11	6.29E-12	0.00E+00	7.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4238	301723.09	4021767.38	7.21E-09	1.47E-08	2.31E-09	0.00E+00	2.42E-08	7.98E-12	6.47E-11	6.42E-12	0.00E+00	7.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4239	301701	4021777.03	7.35E-09	1.50E-08	2.35E-09	0.00E+00	2.47E-08	8.13E-12	6.60E-11	6.54E-12	0.00E+00	8.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4240	301678.91	4021786.68	7.48E-09	1.52E-08	2.39E-09	0.00E+00	2.51E-08	8.28E-12	6.71E-11	6.65E-12	0.00E+00	8.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4241	301656.82	4021796.33	7.6E-09	1.55E-08	2.43E-09	0.00E+00	2.55E-08	8.41E-12	6.82E-11	6.76E-12	0.00E+00	8.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4242	301634.73	4021805.98	7.71E-09	1.57E-08	2.47E-09	0.00E+00	2.59E-08	8.54E-12	6.92E-11	6.87E-12	0.00E+00	8.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4243	301612.64	4021815.63	7.83E-09	1.59E-08	2.50E-09	0.00E+00	2.63E-08	8.66E-12	7.02E-11	6.96E-12	0.00E+00	8.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4244	301590.55	4021825.28	7.94E-09	1.62E-08	2.54E-09	0.00E+00	2.66E-08	8.78E-12	7.12E-11	7.06E-12	0.00E+00	8.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4245	301568.46	4021834.92	8.05E-09	1.64E-08	2.57E-09	0.00E+00	2.70E-08	8.91E-12	7.22E-11	7.16E-12	0.00E+00	8.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4246	301546.37	4021844.57	8.15E-09	1.66E-08	2.61E-09	0.00E+00	2.74E-08	9.02E-12	7.32E-11	7.26E-12	0.00E+00	8.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4247	301524.28	4021854.22	8.26E-09	1.68E-08	2.64E-09	0.00E+00	2.77E-08	9.14E-12	7.41E-11	7.35E-12	0.00E+00	9.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4248	301502.19	4021863.87	8.35E-09	1.70E-08	2.67E-09	0.00E+00	2.80E-08	9.24E-12	7.49E-11	7.43E-12	0.00E+00	9.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4249	301480.1	4021873.52	8.42E-09	1.72E-08	2.69E-09	0.00E+00	2.83E-08	9.32E-12	7.56E-11	7.49E-12	0.00E+00	9.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4250	301458.01	4021883.17	8.48E-09	1.73E-08	2.71E-09	0.00E+00	2.85E-08	9.39E-12	7.61E-11	7.55E-12	0.00E+00	9.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4251	301435.92	4021892.82	8.5E-09	1.73E-08	2.72E-09	0.00E+00	2.86E-08	9.42E-12	7.63E-11	7.57E-12	0.00E+00	9.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4252	301413.83	4021902.47	8.5E-09	1.73E-08	2.72E-09	0.00E+00	2.85E-08	9.40E-12	7.62E-11	7.56E-12	0.00E+00	9.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4253	301391.73	4021912.11	8.46E-09	1.72E-08	2.70E-09	0.00E+00	2.84E-08	9.36E-12	7.59E-11	7.53E-12	0.00E+00	9.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4254	301369.64	4021921.76	8.39E-09	1.71E-08	2.68E-09	0.00E+00	2.82E-08	9.29E-12	7.53E-11	7.47E-12	0.00E+00	9.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4255	301347.55	4021931.41	8.31E-09	1.69E-08	2.66E-09	0.00E+00	2.79E-08	9.20E-12	7.46E-11	7.40E-12	0.00E+00	9.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4256	301325.46	4021941.06	8.22E-09	1.67E-08	2.63E-09	0.00E+00	2.76E-08	9.10E-12	7.38E-11	7.32E-12	0.00E+00	9.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4257	301303.37	4021950.71	8.13E-09	1.66E-08	2.60E-09	0.00E+00	2.73E-08	9.00E-12	7.30E-11	7.23E-12	0.00E+00	8.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4258	302360.98	4020836.6	9.12E-09	1.86E-08	2.92E-09	0.00E+00	3.06E-08	1.01E-11	8.19E-11	8.12E-12	0.00E+00	1.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4259	302360.44	4020811.88	9.41E-09	1.92E-08	3.01E-09	0.00E+00	3.16E-08	1.04E-11	8.45E-11	8.38E-12	0.00E+00	1.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4260	302359.9	4020787.16	9.7E-09	1.98E-08	3.10E-09	0.00E+00	3.26E-08	1.07E-11	8.71E-11	8.63E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4261	302359.37	4020762.44	9.98E-09	2.03E-08	3.19E-09	0.00E+00	3.35E-08	1.10E-11	8.96E-11	8.88E-12	0.00E+00	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4262	302358.83	4020737.72	1.02E-08	2.09E-08	3.28E-09	0.00E+00	3.44E-08	1.13E-11	9.20E-11	9.12E-12	0.00E+00	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4263	302358.29	4020712.99	1.05E-08	2.14E-08	3.36E-09	0.00E+00	3.53E-08	1.16E-11	9.44E-11	9.36E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4264	302357.75	4020688.27	1.08E-08	2.20E-08	3.45E-09	0.00E+00	3.62E-08	1.19E-11	9.68E-11	9.60E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4265	302357.21	4020663.55	1.11E-08	2.25E-08	3.53E-09	0.00E+00	3.71E-08	1.22E-11	9.92E-11	9.84E-12	0.00E+00	1.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4266	302356.67	4020638.83	1.13E-08	2.31E-08	3.62E-09	0.00E+00	3.80E-08	1.25E-11	1.02E-10	1.01E-11	0.00E+00	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4267	302356.14	4020614.11	1.16E-08	2.36E-08	3.71E-09	0.00E+00	3.89E-08	1.28E-11	1.04E-10	1.03E-11	0.00E+00	1.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4268	302355.6	4020589.39	1.19E-08	2.42E-08	3.80E-09	0.00E+00	3.99E-08	1.31E-11	1.07E-10	1.06E-11	0.00E+00	1.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4269	302355.06	4020564.67	1.21E-08	2.47E-08	3.88E-09	0.00E+00	4.08E-08	1.34E-11	1.09E-10	1.08E-11	0.00E+00	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4270	302354.52	4020539.95	1.24E-08	2.53E-08	3.97E-09	0.00E+00	4.17E-08	1.38E-11	1.12E-10	1.11E-11	0.00E+00	1.36E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4271	302353.98	4020515.22	1.27E-08	2.59E-08	4.06E-09	0.00E+00	4.26E-08	1.41E-11	1.14E-10	1.13E-11	0.00E+00	1.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4272	302353.45	4020490.5	1.29E-08	2.64E-08	4.14E-09	0.00E+00	4.34E-08	1.43E-11	1.16E-10	1.15E-11	0.00E+00	1.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4273	302452.16	4020856.99	7.83E-09	1.60E-08	2.50E-09	0.00E+00	2.63E-08	8.67E-12	7.03E-11	6.97E-12	0.00E+00	8.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4274	302443.36	4020879.56	7.72E-09	1.57E-08	2.47E-09	0.00E+00	2.59E-08	8.55E-12	6.93E-11	6.87E-12	0.00E+00	8.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4275	302434.56	4020902.12	7.61E-09	1.55E-08	2.43E-09	0.00E+00	2.55E-08	8.42E-12	6.83E-11	6.77E-12	0.00E+00	8.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4276	302425.76	4020924.69	7.49E-09	1.52E-08	2.39E-09	0.00E+00	2.51E-08	8.29E-12	6.72E-11	6.66E-12	0.00E+00	8.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4277	302416.96	4020947.26	7.36E-09	1.50E-08	2.35E-09	0.00E+00	2.47E-08	8.15E-12	6.61E-11	6.55E-12	0.00E+00	8.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4278	302408.16	4020969.82	7.23E-09	1.47E-08	2.31E-09	0.00E+00	2.43E-08	8.01E-12	6.49E-11	6.44E-12	0.00E+00	7.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4279	302399.36	4020992.39	7.1E-09	1.45E-08	2.27E-09	0.00E+00	2.38E-08	7.86E-12	6.37E-11	6.32E-12	0.00E+00	7.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4280	302390.56	4021014.95	6.95E-09	1.42E-08	2.22E-09	0.00E+00	2.33E-08	7.70E-12	6.24E-11	6.19E-12	0.00E+00	7.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4281	302381.76	4021037.52	6.8E-09	1.39E-08	2.17E-09	0.00E+00	2.28E-08	7.53E-12	6.10E-11	6.05E-12	0.00E+00	7.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4282	302372.96	4021060.09	6.63E-09	1.35E-08	2.12E-09	0.00E+00	2.23E-08	7.34E-12	5.95E-11	5.90E-12	0.00E+00	7.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4283	302364.16	4021082.65	6.46E-09	1.32E-08	2.07E-09	0.00E+00	2.17E-08	7.15E-12	5.80E-11	5.75E-12	0.00E+00	7.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4284	302355.36	4021105.22	6.28E-09	1.28E-08	2.01E-09	0.00E+00	2.11E-08	6.95E-12	5.64E-11	5.59E-12	0.00E+00	6.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4285	302346.56	4021127.78	6.09E-09	1.24E-08	1.95E-09	0.00E+00	2.05E-08	6.75E-12	5.47E-11	5.42E-12	0.00E+00	6.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4286	302337.76	4021150.35	5.91E-09	1.20E-08	1.89E-09	0.00E+00	1.98E-08	6.54E-12	5.30E-11	5.26E-12	0.00E+00	6.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4287	302328.96	4021172.92	5.74E-09	1.17E-08	1.83E-09	0.00E+00	1.93E-08	6.35E-12	5.15E-11	5.10E-12	0.00E+00	6.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

4349	302459.88	4020784.98	8.37E-09	1.71E-08	2.68E-09	0.00E+00	2.81E-08	9.27E-12	7.51E-11	7.45E-12	0.00E+00	9.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4350	302459.34	4020760.26	8.58E-09	1.75E-08	2.74E-09	0.00E+00	2.88E-08	9.50E-12	7.70E-11	7.64E-12	0.00E+00	9.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4351	302458.8	4020735.54	8.8E-09	1.79E-08	2.81E-09	0.00E+00	2.95E-08	9.74E-12	7.90E-11	7.83E-12	0.00E+00	9.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4352	302458.27	4020710.82	9.01E-09	1.84E-08	2.88E-09	0.00E+00	3.02E-08	9.98E-12	8.09E-11	8.02E-12	0.00E+00	9.89E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4353	302457.73	4020686.1	9.22E-09	1.88E-08	2.95E-09	0.00E+00	3.09E-08	1.02E-11	8.27E-11	8.20E-12	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4354	302457.19	4020661.38	9.43E-09	1.92E-08	3.02E-09	0.00E+00	3.17E-08	1.04E-11	8.47E-11	8.39E-12	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4355	302456.65	4020636.65	9.65E-09	1.97E-08	3.09E-09	0.00E+00	3.24E-08	1.07E-11	8.66E-11	8.59E-12	0.00E+00	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4356	302456.11	4020611.93	9.88E-09	2.01E-08	3.16E-09	0.00E+00	3.32E-08	1.09E-11	8.87E-11	8.79E-12	0.00E+00	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4357	302455.57	4020587.21	1.01E-08	2.06E-08	3.23E-09	0.00E+00	3.39E-08	1.12E-11	9.06E-11	8.99E-12	0.00E+00	1.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4358	302455.04	4020562.49	1.03E-08	2.10E-08	3.30E-09	0.00E+00	3.46E-08	1.14E-11	9.26E-11	9.18E-12	0.00E+00	1.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4359	302454.5	4020537.77	1.05E-08	2.14E-08	3.37E-09	0.00E+00	3.53E-08	1.17E-11	9.45E-11	9.37E-12	0.00E+00	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4360	302453.96	4020513.05	1.07E-08	2.19E-08	3.43E-09	0.00E+00	3.60E-08	1.19E-11	9.64E-11	9.56E-12	0.00E+00	1.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4361	302453.42	4020488.33	1.09E-08	2.23E-08	3.50E-09	0.00E+00	3.67E-08	1.21E-11	9.82E-11	9.74E-12	0.00E+00	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4362	302552.1	4020854.91	6.9E-09	1.41E-08	2.21E-09	0.00E+00	2.32E-08	7.64E-12	6.19E-11	6.14E-12	0.00E+00	7.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4363	302543.26	4020877.56	6.82E-09	1.39E-08	2.18E-09	0.00E+00	2.29E-08	7.55E-12	6.12E-11	6.07E-12	0.00E+00	7.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4364	302534.43	4020900.22	6.74E-09	1.37E-08	2.15E-09	0.00E+00	2.26E-08	7.46E-12	6.05E-11	6.00E-12	0.00E+00	7.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4365	302525.59	4020922.88	6.65E-09	1.35E-08	2.13E-09	0.00E+00	2.23E-08	7.36E-12	5.97E-11	5.92E-12	0.00E+00	7.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4366	302516.75	4020945.54	6.56E-09	1.34E-08	2.10E-09	0.00E+00	2.20E-08	7.26E-12	5.89E-11	5.84E-12	0.00E+00	7.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4367	302507.92	4020968.2	6.47E-09	1.32E-08	2.07E-09	0.00E+00	2.17E-08	7.16E-12	5.80E-11	5.75E-12	0.00E+00	7.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4368	302499.08	4020990.85	6.36E-09	1.30E-08	2.03E-09	0.00E+00	2.14E-08	7.05E-12	5.71E-11	5.66E-12	0.00E+00	6.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4369	302490.25	4021013.51	6.26E-09	1.28E-08	2.00E-09	0.00E+00	2.10E-08	6.93E-12	5.62E-11	5.57E-12	0.00E+00	6.87E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4370	302481.41	4021036.17	6.15E-09	1.25E-08	1.97E-09	0.00E+00	2.06E-08	6.80E-12	5.52E-11	5.47E-12	0.00E+00	6.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4371	302472.58	4021058.83	6.02E-09	1.23E-08	1.93E-09	0.00E+00	2.02E-08	6.67E-12	5.41E-11	5.36E-12	0.00E+00	6.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4372	302463.74	4021081.48	5.89E-09	1.20E-08	1.88E-09	0.00E+00	1.98E-08	6.52E-12	5.28E-11	5.24E-12	0.00E+00	6.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4373	302454.9	4021104.14	5.74E-09	1.17E-08	1.84E-09	0.00E+00	1.93E-08	6.35E-12	5.15E-11	5.11E-12	0.00E+00	6.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4374	302446.07	4021126.8	5.59E-09	1.14E-08	1.79E-09	0.00E+00	1.88E-08	6.18E-12	5.01E-11	4.97E-12	0.00E+00	6.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4375	302437.23	4021149.46	5.43E-09	1.11E-08	1.74E-09	0.00E+00	1.82E-08	6.01E-12	4.87E-11	4.83E-12	0.00E+00	5.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4376	302428.4	4021172.12	5.27E-09	1.07E-08	1.68E-09	0.00E+00	1.77E-08	5.83E-12	4.73E-11	4.69E-12	0.00E+00	5.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4377	302419.56	4021194.77	5.12E-09	1.04E-08	1.64E-09	0.00E+00	1.72E-08	5.67E-12	4.59E-11	4.55E-12	0.00E+00	5.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4378	302410.73	4021217.43	4.97E-09	1.01E-08	1.59E-09	0.00E+00	1.67E-08	5.51E-12	4.46E-11	4.43E-12	0.00E+00	5.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4379	302401.89	4021240.09	4.84E-09	9.86E-09	1.55E-09	0.00E+00	1.63E-08	5.36E-12	4.35E-11	4.31E-12	0.00E+00	5.31E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4380	302393.06	4021262.75	4.72E-09	9.62E-09	1.51E-09	0.00E+00	1.59E-08	5.23E-12	4.24E-11	4.20E-12	0.00E+00	5.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4381	302384.22	4021285.4	4.62E-09	9.41E-09	1.48E-09	0.00E+00	1.55E-08	5.11E-12	4.15E-11	4.11E-12	0.00E+00	5.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4382	302375.38	4021308.06	4.53E-09	9.22E-09	1.45E-09	0.00E+00	1.52E-08	5.01E-12	4.06E-11	4.03E-12	0.00E+00	4.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4383	302366.55	4021330.72	4.45E-09	9.06E-09	1.42E-09	0.00E+00	1.49E-08	4.92E-12	3.99E-11	3.96E-12	0.00E+00	4.88E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4384	302357.71	4021353.38	4.38E-09	8.92E-09	1.40E-09	0.00E+00	1.47E-08	4.85E-12	3.93E-11	3.90E-12	0.00E+00	4.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4385	302348.88	4021376.04	4.32E-09	8.81E-09	1.38E-09	0.00E+00	1.45E-08	4.79E-12	3.88E-11	3.85E-12	0.00E+00	4.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4386	302340.04	4021398.69	4.28E-09	8.73E-09	1.37E-09	0.00E+00	1.44E-08	4.74E-12	3.84E-11	3.81E-12	0.00E+00	4.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4387	302331.21	4021421.35	4.25E-09	8.66E-09	1.36E-09	0.00E+00	1.43E-08	4.71E-12	3.82E-11	3.79E-12	0.00E+00	4.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4388	302322.37	4021444.01	4.23E-09	8.62E-09	1.35E-09	0.00E+00	1.42E-08	4.68E-12	3.80E-11	3.76E-12	0.00E+00	4.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4389	302313.53	4021466.67	4.21E-09	8.58E-09	1.35E-09	0.00E+00	1.41E-08	4.66E-12	3.78E-11	3.75E-12	0.00E+00	4.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4390	302304.7	4021489.32	4.2E-09	8.55E-09	1.34E-09	0.00E+00	1.41E-08	4.65E-12	3.77E-11	3.74E-12	0.00E+00	4.61E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4391	302295.86	4021511.98	4.19E-09	8.53E-09	1.34E-09	0.00E+00	1.41E-08	4.64E-12	3.76E-11	3.73E-12	0.00E+00	4.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4392	302287.03	4021534.64	4.17E-09	8.50E-09	1.33E-09	0.00E+00	1.40E-08	4.62E-12	3.75E-11	3.72E-12	0.00E+00	4.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4393	302278.19	4021557.3	4.16E-09	8.48E-09	1.33E-09	0.00E+00	1.40E-08	4.61E-12	3.74E-11	3.70E-12	0.00E+00	4.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4394	302269.36	4021579.96	4.15E-09	8.46E-09	1.33E-09	0.00E+00	1.39E-08	4.60E-12	3.73E-11	3.70E-12	0.00E+00	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4395	302260.52	4021602.61	4.14E-09	8.43E-09	1.32E-09	0.00E+00	1.39E-08	4.58E-12	3.71E-11	3.68E-12	0.00E+00	4.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4396	302251.69	4021625.27	4.12E-09	8.39E-09	1.32E-09	0.00E+00	1.38E-08	4.56E-12	3.70E-11	3.67E-12	0.00E+00	4.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4397	302242.85	4021647.93	4.1E-09	8.35E-09	1.31E-09	0.00E+00	1.38E-08	4.54E-12	3.68E-11	3.65E-12	0.00E+00	4.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4398	302234.01	4021670.59	4.08E-09	8.31E-09	1.30E-09	0.00E+00	1.37E-08	4.52E-12	3.66E-11	3.63E-12	0.00E+00	4.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4399	302225.18	4021693.25	4.06E-09	8.28E-09	1.30E-09	0.00E+00	1.36E-08	4.50E-12	3.65E-11	3.62E-12	0.00E+00	4.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4400	302216.34	4021715.9	4.04E-09	8.24E-09	1.29E-09	0.00E+00	1.36E-08	4.48E-12	3.63E-11	3.60E-12	0.00E+00	4.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4401	302207.51	4021738.56	4.02E-09	8.20E-09	1.29E-09	0.00E+00	1.35E-08	4.46E-12	3.61E-11	3.58E-12	0.00E+00	4.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4402	302176.39	4021770.95	4.08E-09	8.31E-09	1.30E-09	0.00E+00	1.37E-08	4.52E-12	3.66E-11	3.63E-12	0.00E+00	4.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4403	302154.1	4021780.69	4.15E-09	8.46E-09	1.33E-09	0.00E+00	1.39E-08	4.60E-12	3.73E-11	3.70E-12	0.00E+00	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4404	302131.81	4021790.42	4.23E-09	8.62E-09	1.35E-09	0.00E+00	1.42E-08	4.69E-12	3.80E-11	3.77E-12	0.00E+00	4.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4405	302109.53	4021800.16	4.31E-09	8.79E-09	1.38E-09	0.00E+00	1.45E-08	4.77E-12	3.87E-11	3.84E-12	0.00E+00	4.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4406	302087.24	4021809.89	4.4E-09	8.96E-09	1.41E-09	0.00E+00	1.48E-08	4.87E-12	3.95E-11	3.92E-12	0.00E+00	4.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4407	302064.95	4021819.62	4.49E-09	9.14E-09	1.43E-09	0.00E+00	1.51E-08	4.97E-12	4.03E-11	3.99E-12	0.00E+00	4.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4408	302042.67	4021829.36	4.58E-09	9.33E-09	1.46E-09	0.00E+00	1.54E-08	5.07E-12	4.11E-11	4.08E-12	0.00E+00	5.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4409	302020.38	4021839.09	4.68E-09	9.53E-09	1.50E-09	0.00E+00	1.57E-08	5.18E-12	4.20E-11	4.16E-12	0.00E+00	5.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4410	301998.09	4021848.83	4.77E-09	9.73E-09	1.53E-09	0.00E+00	1.60E-08	5.29E-12	4.29E-11	4.25E-12	0.00E+00	5.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4411	301975.81	4021858.56	4.88E-09	9.93E-09	1.56E-09	0.00E+00	1.64E-08	5.40E-12	4.38E-11	4.34E-12	0.00E+00	5.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4412	301953.52	4021868.3	4.98E-09	1.01E-08	1.59E-09	0.00E+00	1.67E-08	5.51E-12	4.47E-11	4.43E-12	0.00E+00	5.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4413	301931.23	4021878.03	5.09E-09	1.04E-08	1.63E-09	0.00E+00	1.71E-08	5.63E-12	4.56E-11	4.53E-12	0.00E+00	5.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4414	301908.95	4021887.76	5.19E-09	1.06E-08	1.66E-09	0.00E+00	1.74E-08	5.75E-12	4.66E-11	4.62E-12	0.00E+00	5.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4415	301886.66	4021897.5	5.3E-09	1.08E-08	1.69E-09	0.00E+00	1.78E-08	5.87E-12	4.76E-11	4.72E-12	0.00E+00	5.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+

4477	302492.44	4021262.08	4.38E-09	8.92E-09	1.40E-09	0.00E+00	1.47E-08	4.85E-12	3.93E-11	3.90E-12	0.00E+00	4.80E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4478	302483.58	4021284.81	4.27E-09	8.70E-09	1.37E-09	0.00E+00	1.43E-08	4.73E-12	3.83E-11	3.80E-12	0.00E+00	4.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4479	302474.71	4021307.55	4.17E-09	8.50E-09	1.33E-09	0.00E+00	1.40E-08	4.62E-12	3.74E-11	3.71E-12	0.00E+00	4.58E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4480	302465.85	4021330.29	4.08E-09	8.32E-09	1.31E-09	0.00E+00	1.37E-08	4.52E-12	3.67E-11	3.64E-12	0.00E+00	4.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4481	302456.98	4021353.02	4.01E-09	8.16E-09	1.28E-09	0.00E+00	1.35E-08	4.44E-12	3.60E-11	3.57E-12	0.00E+00	4.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4482	302448.11	4021375.76	3.94E-09	8.03E-09	1.26E-09	0.00E+00	1.32E-08	4.36E-12	3.54E-11	3.51E-12	0.00E+00	4.33E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4483	302439.25	4021398.5	3.89E-09	7.92E-09	1.24E-09	0.00E+00	1.31E-08	4.31E-12	3.49E-11	3.46E-12	0.00E+00	4.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4484	302430.38	4021421.23	3.85E-09	7.84E-09	1.23E-09	0.00E+00	1.29E-08	4.26E-12	3.46E-11	3.43E-12	0.00E+00	4.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4485	302421.51	4021443.97	3.82E-09	7.77E-09	1.22E-09	0.00E+00	1.28E-08	4.23E-12	3.43E-11	3.40E-12	0.00E+00	4.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4486	302412.65	4021466.71	3.79E-09	7.73E-09	1.21E-09	0.00E+00	1.27E-08	4.20E-12	3.41E-11	3.38E-12	0.00E+00	4.16E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4487	302403.78	4021489.45	3.78E-09	7.70E-09	1.21E-09	0.00E+00	1.27E-08	4.19E-12	3.39E-11	3.36E-12	0.00E+00	4.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4488	302394.91	4021512.18	3.77E-09	7.68E-09	1.20E-09	0.00E+00	1.26E-08	4.17E-12	3.38E-11	3.35E-12	0.00E+00	4.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4489	302386.05	4021534.92	3.76E-09	7.66E-09	1.20E-09	0.00E+00	1.26E-08	4.16E-12	3.37E-11	3.34E-12	0.00E+00	4.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4490	302377.18	4021557.66	3.75E-09	7.65E-09	1.20E-09	0.00E+00	1.26E-08	4.15E-12	3.37E-11	3.34E-12	0.00E+00	4.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4491	302368.31	4021580.39	3.75E-09	7.64E-09	1.20E-09	0.00E+00	1.26E-08	4.15E-12	3.37E-11	3.34E-12	0.00E+00	4.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4492	302359.45	4021603.13	3.74E-09	7.62E-09	1.20E-09	0.00E+00	1.26E-08	4.14E-12	3.36E-11	3.33E-12	0.00E+00	4.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4493	302350.58	4021625.87	3.73E-09	7.60E-09	1.19E-09	0.00E+00	1.25E-08	4.13E-12	3.35E-11	3.32E-12	0.00E+00	4.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4494	302341.71	4021648.61	3.73E-09	7.59E-09	1.19E-09	0.00E+00	1.25E-08	4.13E-12	3.34E-11	3.32E-12	0.00E+00	4.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4495	302332.85	4021671.34	3.71E-09	7.56E-09	1.19E-09	0.00E+00	1.25E-08	4.11E-12	3.33E-11	3.30E-12	0.00E+00	4.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4496	302323.98	4021694.08	3.7E-09	7.54E-09	1.18E-09	0.00E+00	1.24E-08	4.10E-12	3.32E-11	3.29E-12	0.00E+00	4.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4497	302315.11	4021716.82	3.69E-09	7.51E-09	1.18E-09	0.00E+00	1.24E-08	4.08E-12	3.31E-11	3.28E-12	0.00E+00	4.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4498	302306.25	4021739.55	3.67E-09	7.47E-09	1.17E-09	0.00E+00	1.23E-08	4.06E-12	3.29E-11	3.26E-12	0.00E+00	4.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4499	302297.38	4021762.29	3.65E-09	7.44E-09	1.17E-09	0.00E+00	1.23E-08	4.04E-12	3.28E-11	3.25E-12	0.00E+00	4.01E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4500	302288.51	4021785.03	3.64E-09	7.41E-09	1.16E-09	0.00E+00	1.22E-08	4.03E-12	3.26E-11	3.24E-12	0.00E+00	3.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4501	302279.65	4021807.76	3.62E-09	7.38E-09	1.16E-09	0.00E+00	1.22E-08	4.01E-12	3.25E-11	3.22E-12	0.00E+00	3.98E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4502	302248.42	4021840.27	3.67E-09	7.48E-09	1.17E-09	0.00E+00	1.23E-08	4.06E-12	3.29E-11	3.27E-12	0.00E+00	4.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4503	302226.05	4021850.04	3.73E-09	7.60E-09	1.19E-09	0.00E+00	1.25E-08	4.13E-12	3.35E-11	3.32E-12	0.00E+00	4.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4504	302203.69	4021859.81	3.8E-09	7.74E-09	1.21E-09	0.00E+00	1.27E-08	4.20E-12	3.41E-11	3.38E-12	0.00E+00	4.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4505	302181.32	4021869.57	3.87E-09	7.88E-09	1.24E-09	0.00E+00	1.30E-08	4.28E-12	3.47E-11	3.44E-12	0.00E+00	4.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4506	302158.96	4021879.34	3.94E-09	8.02E-09	1.26E-09	0.00E+00	1.32E-08	4.36E-12	3.53E-11	3.51E-12	0.00E+00	4.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4507	302136.6	4021889.11	4.01E-09	8.17E-09	1.28E-09	0.00E+00	1.35E-08	4.44E-12	3.60E-11	3.57E-12	0.00E+00	4.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4508	302114.23	4021898.88	4.09E-09	8.32E-09	1.31E-09	0.00E+00	1.37E-08	4.52E-12	3.67E-11	3.64E-12	0.00E+00	4.48E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4509	302091.87	4021908.65	4.17E-09	8.49E-09	1.33E-09	0.00E+00	1.40E-08	4.61E-12	3.74E-11	3.71E-12	0.00E+00	4.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4510	302069.5	4021918.42	4.25E-09	8.65E-09	1.36E-09	0.00E+00	1.43E-08	4.70E-12	3.81E-11	3.78E-12	0.00E+00	4.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4511	302047.14	4021928.18	4.33E-09	8.82E-09	1.38E-09	0.00E+00	1.45E-08	4.79E-12	3.89E-11	3.85E-12	0.00E+00	4.75E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4512	302024.77	4021937.95	4.42E-09	9.00E-09	1.41E-09	0.00E+00	1.48E-08	4.89E-12	3.96E-11	3.93E-12	0.00E+00	4.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4513	302002.41	4021947.72	4.5E-09	9.18E-09	1.44E-09	0.00E+00	1.51E-08	4.99E-12	4.04E-11	4.01E-12	0.00E+00	4.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4514	301980.04	4021957.49	4.59E-09	9.36E-09	1.47E-09	0.00E+00	1.54E-08	5.09E-12	4.12E-11	4.09E-12	0.00E+00	5.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4515	301957.68	4021967.26	4.69E-09	9.55E-09	1.50E-09	0.00E+00	1.57E-08	5.19E-12	4.21E-11	4.17E-12	0.00E+00	5.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4516	301935.32	4021977.03	4.78E-09	9.73E-09	1.53E-09	0.00E+00	1.60E-08	5.29E-12	4.29E-11	4.25E-12	0.00E+00	5.24E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4517	301912.95	4021986.79	4.87E-09	9.93E-09	1.56E-09	0.00E+00	1.64E-08	5.40E-12	4.37E-11	4.34E-12	0.00E+00	5.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4518	301890.59	4021996.56	4.97E-09	1.01E-08	1.59E-09	0.00E+00	1.67E-08	5.50E-12	4.46E-11	4.42E-12	0.00E+00	5.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4519	301868.22	4022006.33	5.06E-09	1.03E-08	1.62E-09	0.00E+00	1.70E-08	5.60E-12	4.54E-11	4.50E-12	0.00E+00	5.55E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4520	301845.86	4022016.1	5.14E-09	1.05E-08	1.64E-09	0.00E+00	1.73E-08	5.69E-12	4.62E-11	4.58E-12	0.00E+00	5.64E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4521	301823.49	4022025.87	5.22E-09	1.06E-08	1.67E-09	0.00E+00	1.75E-08	5.78E-12	4.69E-11	4.65E-12	0.00E+00	5.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4522	301801.13	4022035.64	5.29E-09	1.08E-08	1.69E-09	0.00E+00	1.78E-08	5.86E-12	4.75E-11	4.71E-12	0.00E+00	5.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4523	301778.76	4022045.4	5.36E-09	1.09E-08	1.71E-09	0.00E+00	1.80E-08	5.94E-12	4.81E-11	4.77E-12	0.00E+00	5.88E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4524	301756.4	4022055.17	5.43E-09	1.11E-08	1.73E-09	0.00E+00	1.82E-08	6.01E-12	4.87E-11	4.83E-12	0.00E+00	5.95E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4525	301734.04	4022064.94	5.49E-09	1.12E-08	1.75E-09	0.00E+00	1.84E-08	6.07E-12	4.92E-11	4.88E-12	0.00E+00	6.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4526	301711.67	4022074.71	5.54E-09	1.13E-08	1.77E-09	0.00E+00	1.86E-08	6.14E-12	4.98E-11	4.93E-12	0.00E+00	6.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4527	301689.31	4022084.48	5.61E-09	1.14E-08	1.79E-09	0.00E+00	1.88E-08	6.20E-12	5.03E-11	4.99E-12	0.00E+00	6.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4528	301666.94	4022094.25	5.67E-09	1.15E-08	1.81E-09	0.00E+00	1.90E-08	6.28E-12	5.09E-11	5.04E-12	0.00E+00	6.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4529	301644.58	4022104.01	5.74E-09	1.17E-08	1.83E-09	0.00E+00	1.93E-08	6.35E-12	5.15E-11	5.11E-12	0.00E+00	6.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4530	301622.21	4022113.78	5.81E-09	1.18E-08	1.86E-09	0.00E+00	1.95E-08	6.43E-12	5.22E-11	5.17E-12	0.00E+00	6.38E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4531	301599.85	4022123.55	5.89E-09	1.20E-08	1.88E-09	0.00E+00	1.98E-08	6.52E-12	5.28E-11	5.24E-12	0.00E+00	6.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4532	301577.49	4022133.32	5.96E-09	1.21E-08	1.90E-09	0.00E+00	2.00E-08	6.59E-12	5.35E-11	5.30E-12	0.00E+00	6.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4533	301555.12	4022143.09	6.02E-09	1.23E-08	1.92E-09	0.00E+00	2.02E-08	6.66E-12	5.40E-11	5.36E-12	0.00E+00	6.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4534	301532.76	4022152.86	6.07E-09	1.24E-08	1.94E-09	0.00E+00	2.04E-08	6.72E-12	5.45E-11	5.40E-12	0.00E+00	6.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4535	301510.39	4022162.62	6.1E-09	1.24E-08	1.95E-09	0.00E+00	2.05E-08	6.75E-12	5.47E-11	5.43E-12	0.00E+00	6.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4536	301488.03	4022172.39	6.11E-09	1.24E-08	1.95E-09	0.00E+00	2.05E-08	6.76E-12	5.48E-11	5.44E-12	0.00E+00	6.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4537	301465.66	4022182.16	6.1E-09	1.24E-08	1.95E-09	0.00E+00	2.05E-08	6.75E-12	5.48E-11	5.43E-12	0.00E+00	6.70E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4538	301443.3	4022191.93	6.08E-09	1.24E-08	1.94E-09	0.00E+00	2.04E-08	6.73E-12	5.45E-11	5.41E-12	0.00E+00	6.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4539	301420.93	4022201.7	6.04E-09	1.23E-08	1.93E-09	0.00E+00	2.03E-08	6.68E-12	5.42E-11	5.37E-12	0.00E+00	6.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4540	301398.57	4022211.47	5.98E-09	1.22E-08	1.91E-09	0.00E+00	2.01E-08	6.62E-12	5.37E-11	5.32E-12	0.00E+00	6.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4541	301376.21	4022221.23	5.92E-09	1.21E-08	1.89E-09	0.00E+00	1.99E-08	6.56E-12	5.31E-11	5.27E-12	0.00E+00	6.50E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4542	301353.84	4022231	5.86E-09	1.19E-08	1.87E-09	0.00E+00	1.97E-08	6.49E-12	5.26E-11	5.22E-12	0.00E+00	6.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4543	301331.48	4022240.77	5.8E-09	1.18E-08	1.85E-09	0.00E+00	1.95E-08	6.42E-12	5.21E-11	5.16E-12	0.00E+00	6.36E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

HARP2 - HRACalc (dated 22118) 6/4/2024 11:42:23 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 9
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 1
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 11:41:04 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 10
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 1
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 11:39:07 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 11
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 1
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_School_Year3_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:17:37 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:15:22 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:25:22 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 2
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 1
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Sensitive_Year3_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:35:10 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:41:43 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 17
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
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Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 6/4/2024 10:44:53 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year3_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year3_CancerRiskSumByRec.csv
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Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year3_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2024\Bianca Martinez\20241731_Farmersville_Residential\HARP_CONST\hra\Const_Worker_Year3_NCAcuteRiskSumByRec.csv
HRA ran successfully

Appendix C

Biolo Biological Resource Evaluationtion

Colibri
Ecological Consulting

Biological Resource Evaluation

July 2024

Farmersville Residential Development Project
Tulare County, California

Prepared for:
Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Prepared by:
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9493 N Fort Washington Road, Suite 108
Fresno, CA 93730
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Executive Summary

The project applicant proposes to construct a residential development in Farmersville in northwestern Tulare County, California. The proposed project will involve constructing a 115-unit single-family residential development. The project site is south of the intersection of West Walnut Avenue and North June Avenue.

To evaluate whether the project may affect biological resources under California Environmental Quality Act (CEQA) purview, we (1) obtained lists of special-status species from the United States Fish and Wildlife Service, the California Department of Fish and Wildlife, and the California Native Plant Society; (2) reviewed other relevant background information such as aerial imagery and topographic maps; and (3) conducted a field reconnaissance survey at the project site.

This biological resource evaluation summarizes (1) existing biological conditions on the project site, (2) the potential for special-status species and regulated habitats to occur on or near the project site, (3) the potential impacts of the proposed project on biological resources and regulated habitats, and (4) measures to reduce those potential impacts to less-than-significant levels under CEQA.

We concluded the Project could affect nesting migratory birds. However, effects can be reduced to less-than-significant levels with mitigation.

Contents

Figures

Tables

Appendices

Abbreviations

Abbreviation	Definition
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
FE	Federally listed as Endangered
FC	Federal Candidate for listing under the FESA
FESA	Federal Endangered Species Act
FP	State Fully Protected
FPT	Federally proposed as Threatened
FT	Federally listed as Threatened
MBTA	Migratory Bird Treaty Act
NRCS	Natural Resources Conservation Service
SC	State Candidate for listing under the CESA
SE	State listed as Endangered
SSSC	State Species of Special Concern
ST	State listed as Threatened
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

1.1 Background

The applicant proposes to construct a residential development (the Project) on approximately 22.2 acres near Farmersville in northwestern Tulare County, California. The Project site currently supports a walnut orchard.

The purpose of this biological resource evaluation is to assess whether the Project will affect protected biological resources pursuant to California Environmental Quality Act (CEQA) guidelines. Such resources include species of plants or animals listed or proposed for listing under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA) as well as those covered under the Migratory Bird Treaty Act (MBTA), the California Native Plant Protection Act, and various other sections of California Fish and Game Code (CFGC). This biological resource evaluation also addresses Project-related impacts to regulated habitats, which are those under the jurisdiction of the United States Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), or California Department of Fish and Wildlife (CDFW).

1.2 Project Description

The proposed Project will involve constructing a 115-unit single-family residential development on approximately 22.2 acres. The subdivision will include new residential streets, a park, and a detention basin. An open irrigation ditch on the Project site will be undergrounded.

1.3 Project Location

The Project site is south of West Walnut Avenue and west of North Steven Avenue in Farmersville in northwestern Tulare County, California (Figures 1 and 2).

Figure 1. Project site vicinity map.

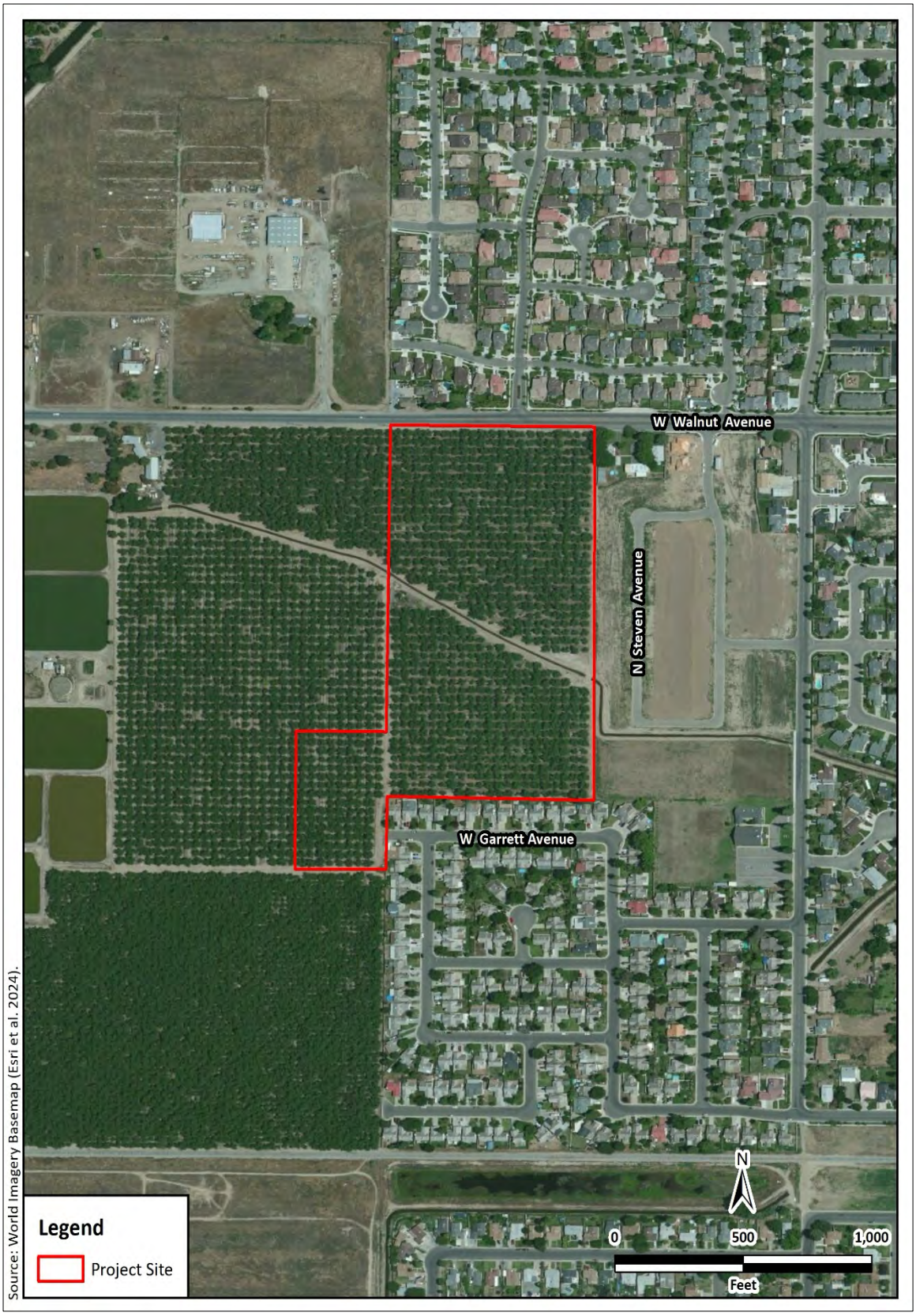

Figure 2. Project site map.

1.4 Regulatory Framework

The relevant regulatory requirements and policies that guide the impact analysis of the Project are summarized below.

1.4.1 State Requirements

California Department of Fish and Wildlife Jurisdiction. The CDFW has regulatory jurisdiction over lakes and streams in California. Activities that divert or obstruct the natural flow of a stream; substantially change its bed, channel, or bank; or use any materials (including vegetation) from the streambed may require that the project applicant enter into a Lake and Streambed Alteration Agreement with the CDFW in accordance with California Fish and Game Code [CFGC] Section 1602.

California Endangered Species Act. The CESA of 1970 (CFGC Section 2050 et seq. and California Code of Regulations (CCR) Title 14, Subsections 670.2 and 670.51) prohibits the take of species listed under CESA (14 CCR Subsections 670.2 and 670.5). Take is defined as hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill. Under CESA, state agencies are required to consult with the CDFW when preparing CEQA documents. Consultation ensures that proposed projects or actions do not adversely affect state listed species. During consultation, CDFW determines whether take would occur and identifies "reasonable and prudent alternatives" for the project and conservation of special-status species. CDFW can authorize take of state listed species under Sections 2080.1 and 2081(b) of the CFGC in those cases where it is demonstrated the impacts are minimized and mitigated. Take authorized under section 2081(b) must be minimized and fully mitigated. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Under CESA, CDFW is responsible for maintaining a list of threatened and endangered species designated under state law (CFGC Section 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to the requirements of CESA, a state or local agency reviewing a proposed project within its jurisdiction must determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation. Impacts to species of concern or fully protected species would be considered significant under certain circumstances.

California Environmental Quality Act. The CEQA of 1970 (Subsections 21000–21178) requires that CDFW be consulted during the CEQA review process regarding impacts of proposed projects on special-status species. Special-status

species are defined under CEQA Guidelines subsection 15380(b) and (d) as those listed under FESA and CESA and species that are not currently protected by statute or regulation but would be considered rare, threatened, or endangered under these criteria or by the scientific community. Therefore, species considered rare or endangered are addressed in this biological resource evaluation regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity (CNPS 2024). Plants with Rare Plant Ranks 1A, 1B, 2A, or 2B are considered special-status species under CEQA.

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the CFGC dealing with rare and endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the United States Fish and Wildlife Service (USFWS) or CDFW (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

California Native Plant Protection Act. The California Native Plant Protection Act of 1977 (CFGC Sections 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require the project proponent to notify CDFW at least 10 days in advance of any change in land use, which allows CDFW to salvage listed plants that would otherwise be destroyed.

Nesting birds. CFGC Sections 3503, 3503.5, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. CFGC Section 3511 lists birds that are “Fully Protected” as those that may not be taken or possessed except under specific permit.

Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et. sec.) was established in 1969 and entrusts the SWRCB and nine Regional Water Quality Control Boards (collectively Water Boards) with the responsibility to preserve and enhance all beneficial uses of California’s diverse waters. The Act grants the Water Boards authority to establish water quality objectives and regulate point- and nonpoint-

source pollution discharge to the state's surface and ground waters. Under the auspices of the United States Environmental Protection Agency, the Water Boards are responsible for certifying, under Section 401 of the federal Clean Water Act, that activities affecting waters of the United States comply with California water quality standards. The Porter-Cologne Water Quality Control Act addresses all "waters of the State," which are more broadly defined than waters of the Unites States. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. They include artificial as well as natural water bodies and federally jurisdictional and federally non-jurisdictional waters. The Water Boards may issue a Waste Discharge Requirement permit for projects that will affect only federally non-jurisdictional waters of the State.

1.4.2 Federal Requirements

Federal Endangered Species Act. The USFWS and the National Oceanographic and Atmospheric Administration's National Marine Fisheries Service enforce the provisions stipulated in the FESA of 1973 (FESA, 16 United States Code [USC] Section 1531 et seq.). Threatened and endangered species on the federal list (50 Code of Federal Regulations [CFR] 17.11 and 17.12) are protected from take unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Pursuant to the requirements of the FESA, an agency reviewing a proposed action within its jurisdiction must determine whether any federally listed species may be present in the proposed action area and determine whether the proposed action may affect such species. Under the FESA, habitat loss is considered an effect to a species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species that is listed or proposed for listing under the FESA (16 USC Section 1536[3], [4]). Therefore, proposed action-related effects to these species or their habitats would be considered significant and would require mitigation.

Migratory Bird Treaty Act. The federal MBTA (16 USC Section 703, Supp. I, 1989) prohibits killing, possessing, trading, or other forms of take of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. "Take" is defined as the pursuing, hunting, shooting, capturing, collecting, or killing of birds, their nests, eggs, or young (16 USC Section 703 and Section 715n). This act encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA specifically protects migratory bird nests from possession, sale, purchase, barter transport, import, and export, and take. For nests, the definition of take per

50 CFR 10.12 is to collect. The MBTA does not include a definition of an "active nest." However, the "Migratory Bird Permit Memorandum" issued by the USFWS in 2003 and updated in 2018 clarifies the MBTA in that regard and states that the removal of nests, without eggs or birds, is legal under the MBTA, provided no possession (which is interpreted as holding the nest with the intent of retaining it) occurs during the destruction (USFWS 2018).

United States Army Corps of Engineers Jurisdiction. Areas meeting the regulatory definition of "waters of the United States" (jurisdictional waters) are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, the territorial seas, all interstate waters, all impoundments of waters otherwise defined as waters of the United States, tributaries of waters otherwise defined as waters of the United States that are relatively permanent, standing, or continuously flowing bodies of water, and relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to waters of the United States (33 CFR part 328.3). Waters of the United States do not include prior converted cropland, waste treatment systems, ditches, artificially irrigated areas, artificial lakes or ponds, artificial reflecting pools or swimming pools, waterfilled depressions, and swales and erosional features. Under the 2006 Supreme Court ruling *Rapanos v. United States*, waters of the United States include non-navigable tributaries of traditional navigable waters that are relatively permanent. The 2023 Supreme Court ruling *Sackett v. Environmental Protection Agency* removed the significant nexus standard for tributaries and adjacent waters of the United States and requires tributaries and adjacent waters to have a continuous surface connection to a water of the United States. Wetlands on non-agricultural lands are identified using the *Corps of Engineers Wetlands Delineation Manual and related Regional Supplement* (USACE 1987 and 2008). Construction activities, including direct removal, filling, hydrologic disruption, or other means in jurisdictional waters are regulated by the USACE. The placement of dredged or fill material into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of state water quality certification pursuant to Section 401 of the Clean Water Act. The State Water Resources Control Board is the state agency, together with the Regional Water Quality Control Boards, charged with implementing water quality certification in California.

2.0 Methods

2.1 Desktop Review

As a framework for the evaluation and reconnaissance survey, we obtained a USFWS species list for the Project (USFWS 2024a, Appendix A). In addition, we searched the California Natural Diversity Database (CNDDB, CDFW 2024, Appendix B) and the CNPS Inventory of Rare and Endangered Plants (CNPS 2024, Appendix C) for records of special-status plant and animal species from the vicinity of the Project site. Regional lists of special-status species were compiled using CNDDB and CNPS database searches confined to the Exeter 7.5-minute United States Geological Survey (USGS) topographic quadrangle, which encompasses the Project site, and the eight surrounding quadrangles (Cairns Corner, Ivanhoe, Lindsay, Monson, Rocky Hill, Tulare, Visalia, and Woodlake). A local list of special-status species was compiled using CNDDB records from within 5 miles of the Project site. Species that lacked a CEQA-recognized special-status designation by state or federal regulatory agencies or public interest groups were omitted from the final list. Species for which the Project site does not provide habitat were eliminated from further consideration. We also reviewed aerial imagery from Google Earth (Google 2024) and other sources, USGS topographic maps, the Web Soil Survey (NRCS 2024), the National Wetlands Inventory (USFWS 2024b), and relevant literature.

2.2 Reconnaissance Survey

Colibri Senior Technical Specialist Randy Sisk conducted a field reconnaissance survey at the Project site on 8 May 2024. The Project site and a 50-foot buffer (Figure 3) surrounding the Project site were walked and thoroughly inspected to evaluate and document the potential for the area to support state or federally protected resources. All plants except those under cultivation or planted in residential areas and all vertebrate wildlife species observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes, streams, and other waters as defined by the USACE, CDFW, and under the Porter-Cologne Water Quality Control Act. An additional buffer of 0.5 miles around the Project site was inspected for potential nesting habitat for special-status raptors. The 0.5-mile buffer was surveyed by driving public roads and identifying the presence of large trees or other potentially suitable substrates for nesting raptors as well as open areas that could provide foraging habitat.

2.3 Significance Criteria

CEQA defines "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in the environment" (California Public Resource Code § 21068). Under CEQA Guidelines Section 15065, a Project's effects on biological resources are deemed significant where the Project would do the following:

a) Substantially reduce the habitat of a fish or wildlife species,
b) Cause a fish or wildlife population to drop below self-sustaining levels,
c) Threaten to eliminate a plant or animal community, or
d) Substantially reduce the number or restrict the range of a rare or endangered plant or animal.

In addition to the Section 15065 criteria, Appendix E within the CEQA Guidelines includes six additional impacts to consider when analyzing the effects of a project. Under Appendix E, a project's effects on biological resources are deemed significant where the project would do any of the following:

e) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
f) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
g) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
h) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
i) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
j) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These criteria were used to determine whether the potential effects of the Project on biological resources qualify as significant.

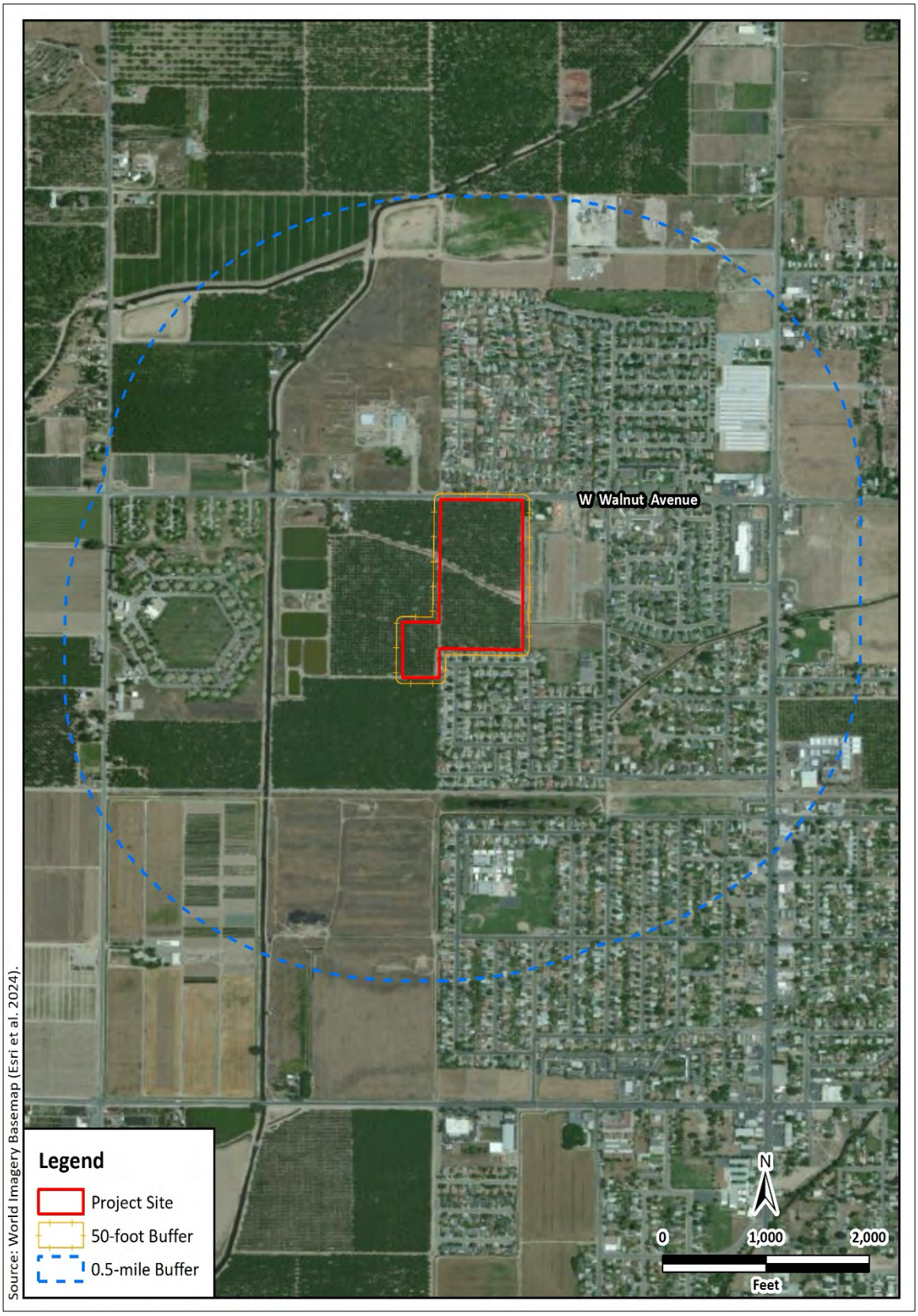

Figure 3. Reconnaissance survey area map.

3.0 Results

3.1 Desktop Review

The USFWS species list for the Project included 11 species listed as threatened, endangered, or proposed for listing under the FESA (USFWS 2024a, Table 1, Appendix A). None of those species could occur on or near the Project site due to the lack of habitat or because the Project site is outside the known range of the species (Table 1). As stated in the species list, the Project site occurs outside any proposed or designated USFWS critical habitat (USFWS 2024a, Appendix A).

Searching the CNDDB for records of special-status species from the Exeter 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles produced 214 records of 49 species (Table 1, Appendix B). Of those 49 species, nine were not considered further because they are not CEQA-recognized as special-status species by state or federal regulatory agencies or public interest groups or are considered extirpated in California (Appendix B). Of the remaining 40 species, 11 are known from within 5 miles of the Project site (Table 1, Figure 4). Of those species, none are expected to occur on or near the Project site (Table 1) due to lack of habitat.

Searching the CNPS inventory of rare and endangered plants of California yielded 27 species (CNPS 2024, Appendix C), 21 of which have a CRPR of 1 or 2 and seven of which are also state or federally listed (Table 1). Of those 21 plant species, none could occur on or near the Project site due to the lack of habitat (Table 1).

The Project site is underlain by Nord fine sandy loam, 0 to 2 percent slopes (100%) (NCRS 2024). The Project site has little topographic relief and is at an elevation of 353–361 feet above mean sea level (Google 2024).

Table 1. Special-status species, their listing status, habitats, and potential to occur on or near the Project site.

Species	Status[1]	Habitat	Potential to Occur[2]
Federally and State-Listed Endangered or Threatened Species			
California jewelflower (*Caulanthus californicus*)	FE, SE, 1B.1	Chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland at 150–3300 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard.
Greene's tuctoria (*Tuctoria greenei*)	FE, SR, 1B.1	Vernal pools below 3500 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, and vernal pools were not present.
Hoover's spurge (*Euphorbia hooveri*)	FT, 1B.2	Vernal pools below 820 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, and vernal pools were not present.
Kaweah brodiaea (*Brodiaea insignis*)	SE, 1B.2	Foothill woodlands at 650–1650 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard.
Lassics lupine (*Lupinus constancei*)	FE, SE, 1B.1	Serpentine barrens, openings in lower montane coniferous forest at 4900–6600 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, lacks serpentine soils, and is outside the known range of this species.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, SE, 1B.1	Grassland with bare dark clay soils at 300–2700 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked clay soils.
San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*)	FT, SE, 1B.1	Vernal pools below 2700 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, and vernal pools were not present.
Striped abobe-lily (*Fritillaria striata*)	ST, 1B.1	Adobe clay soils below 3280 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked adobe clay soils.

Species	Status[1]	Habitat	Potential to Occur[2]
Crotch bumble bee[3] (*Bombus crotchii*)	SC	Open grassland and scrub habitats with *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum* as food plants and rodent burrows for nesting.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked potential food plants.
Monarch California overwintering population (*Danaus plexippus*)	FC	Groves of trees within 1.5 miles of the ocean that produce suitable micro-climates for overwintering such as high humidity, dappled sunlight, access to water and nectar, and protection from wind.	**None.** Habitat lacking; the Project site is not within 1.5 miles of the ocean.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Elderberry (*Sambucus* sp.) plants having basal stem diameter greater than 1" at ground level.	**None.** No elderberry shrubs were found in the survey area, and the Project site is outside the currently recognized range of this species.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Vernal pools; some artificial depressions, ditches, stock ponds, vernal swales, ephemeral drainages, and seasonal wetlands.	**None.** Habitat lacking; the Project site was a walnut orchard, and vernal pools or other ephemeral pools were not present.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	Vernal pools, clay flats, alkaline pools, and ephemeral stock tanks.	**None.** Habitat lacking; the Project site was a walnut orchard, and vernal pools were not present.

Species	Status[1]	Habitat	Potential to Occur[2]
California tiger salamander (*Ambystoma californiense*)	FT, ST	Vernal pools or seasonal ponds for breeding; small mammal burrows for upland refugia in natural grasslands.	**None.** Habitat lacking; ponds within the 1.24-mile dispersal distance of this species included a sewage treatment pond and agricultural water storage ponds. According to historic Google Earth imagery (Google 2024), the agricultural storage ponds are usually dry during the California tiger salamander breeding and larval period.
Foothill yellow-legged frog - south Sierra DPS (*Rana boylii*)	FE, SE	Perennial streams and rivers with rocky substrates and open, sunny banks in forests, chaparral, or woodlands.	**None.** Habitat lacking; no perennial drainages with rocky substrates were present in the survey area.
Western spadefoot (*Spea hammondii*)	FPT, SSSC	Open areas with sandy or gravelly soil that allow rain pools to gather for breeding.	**None.** Habitat lacking; no rain pools or other potential breeding habitat was present in the survey area.
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, SE, FP	Upland scrub and sparsely vegetated grassland with small mammal burrows.	**None.** Habitat lacking; the Project site was a walnut orchard.
Northwestern pond turtle[3] (*Actinemys marmorata*)	FPT, SSSC	Ponds, rivers, marshes, streams, and irrigation ditches, usually with aquatic vegetation. Basking sites and suitable upland areas for egg laying.	**None.** Habitat lacking; the Project site and surrounding areas lacked the permanent or nearly permanent aquatic habitat this species requires.
California condor (*Gymnogyps californianus*)	FE, SE, FP	Mountain and foothill rangeland with cliffs for nesting and grassland and open woodland for foraging.	**None.** Habitat lacking; the Project site and surrounding areas lacked nesting and foraging habitat.

Species	Status[1]	Habitat	Potential to Occur[2]
Swainson's hawk (*Buteo swainsoni*)	ST	Large trees for nesting with adjacent grasslands, alfalfa fields, or grain fields for foraging.	**None.** Habitat lacking; the Project site was a walnut orchard, and the surrounding land cover within the 0.5-mile survey area was dominated by incompatible orchards and residential development.
Tricolored blackbird (*Agelaius tricolor*)	ST, SSSC	Freshwater emergent wetlands, some agricultural fields, grassland, and silage fields near dairies.	**None.** Habitat lacking; the survey area lacked freshwater emergent wetlands, agricultural fields, grassland, and silage fields.
Western yellow-billed cuckoo[3] (*Coccyzus americanus occidentalis*)	FT, SE	Open woodlands with dense, low vegetation along waterways.	**None.** Habitat lacking; the survey area lacked waterways with associated riparian vegetation.
Buena Vista Lake ornate shrew (*Sorex ornatus relictus*)	FE, SSSC	Moist riparian, wetlands, grasslands, and upland scrub with abundant leaf litter and dense herbaceous cover.	**None.** Habitat lacking; the Project site is outside the current known range of this species.
San Joaquin kit fox[3] (*Vulpes macrotis mutica*)	FE, ST	Grassland and upland scrub and fallowed agricultural lands adjacent to natural grasslands or upland scrub.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked burrows and adjacent natural grassland or upland scrub.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, SE	Grassland and upland scrub with sparse to moderate shrub cover and saline soils; also fallowed agricultural fields adjacent to natural grasslands or upland scrub.	**None.** Habitat lacking; the Project site was a walnut orchard.

Species	Status[1]	Habitat	Potential to Occur[2]
State Species of Special Concern			
Northern California legless lizard[3] (*Anniella pulchra*)	SSSC	Moist warm loose soil with plant cover in beach dunes, chaparral, pine-oak woodlands, sandy areas, and stream terraces.	**None.** Habitat lacking; the Project site was a walnut orchard.
Northern leopard frog (*Lithobates pipiens*)	SSSC	Wet meadows, canals, bogs, marshes, and reservoirs in grassland, forest, and woodland.	**None.** All Tulare County records of this species pertain to introduced, nonnative individuals.
Burrowing owl (*Athene cunicularia*)	SSSC	Grassland and upland scrub with friable soil; some open agricultural or other developed and disturbed areas with ground squirrel burrows.	**None.** Habitat lacking; the Project site lacked grassland or upland scrub with friable soil or suitable areas.
American badger[3] (*Taxidea taxus*)	SSSC	Variable. Vast open, dry areas with friable soils and small mammal populations in grassland, conifer forest, and desert.	**None.** Habitat lacking; the Project site lacked the vast open areas with small mammal populations this species requires.
Pallid bat[3] (*Antrozous pallidus*)	SSSC	Arid or semi-arid locations in rocky areas and sparsely vegetated grassland near water. Rock crevices, caves, mine shafts, bridges, building, and tree hollows for roosting.	**None.** Habitat lacking; no roosting habitat was observed in the survey area.
Western mastiff bat (*Eumops perotis californicus*)	SSSC	Cliff faces, high buildings, trees, and tunnels near open, arid areas.	**None.** Habitat lacking; no roosting habitat was observed in the survey area.
California Rare Plants			
Alkali sink goldfields[3] (*Lasthenia chrysantha*)	1B.1	Vernal pools and wet saline flats below 320 feet elevation.	**None.** Habitat lacking; no vernal pool or wet saline flat habitats were present in the survey area.

Species	Status[1]	Habitat	Potential to Occur[2]
Brittlescale[3] (*Atriplex depressa*)	1B.2	Alkaline or clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, and vernal pools below 1000 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard.
Calico monkeyflower (*Diplacus pictus*)	1B.2	Bare, sunny, shrubby areas around granite outcrops in the southern Sierra Nevada mountains at 442–4100 feet elevation.	**None.** Habitat lacking; the survey area lacked granite outcrops and was below the known elevational range for this species.
California alkali grass (*Puccinellia simplex*)	1B.2	Saline flats and mineral springs below 3000 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked saline flats and mineral springs.
California satintail[3] (*Imperata brevifolia*)	2B.1	Moist to wet sites in arid desert canyons or rocky slopes near seeps, springs, and streams below 1700 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked natural landcover and vegetated moist to wet sites.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	1B.1	Saltmarsh, playas, and vernal pools below 4000 feet elevation.	**None.** Habitat lacking; the survey area lacked saltmarsh, playas, and vernal pools.
Earlimart orache (*Atriplex cordulata* var. *erecticaulis*)	1B.2	Saline or alkaline soils in valley and foothill grassland below 230 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked saline or alkaline soils.
Lesser saltscale (*Atriplex minuscula*)	1B.1	Sandy, alkaline soils in chenopod scrub, playa, and grassland in the San Joaquin Valley below 328 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked sandy, alkaline soils in chenopod scrub, playa, or grassland.
Recurved larkspur (*Delphinium recurvatum*)	1B.2	Poorly drained, fine, alkaline soils in grassland and saltbush scrub at 98–1969 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard and lacked poorly drained, fine, alkaline soils in grassland.

Species	Status[1]	Habitat	Potential to Occur[2]
Sanford's arrowhead (*Sagittaria sanfordii*)	1B.2	Ponds, sloughs, and ditches below 650 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, and no freshwater marshes or other suitable aquatic features were present in the survey area.
Spiny-sepaled button-celery[3] (*Eryngium spinosepalum*)	1B.2	Vernal pools, swales, and roadside ditches in valley and foothill grassland.	**None.** Habitat lacking; the Project site lacked grassland, vernal pools, swales, or roadside ditches.
Subtle orache (*Atriplex subtilis*)	1B.2	Saline depressions below 230 feet elevation.	**None.** Habitat lacking; the Project site was a walnut orchard, lacked saline depressions, and is above the known elevational range of this species.
Vernal pool smallscale (*Atriplex persistens*)	1B.2	Alkaline vernal pools in the below 377 feet elevation.	**None.** Habitat lacking; the Project site lacked vernal pools.
Winter's sunflower (*Helianthus winteri*)	1B.2	Steep, south-facing grassy slopes, rock outcrops, and road cuts at 590–1509 feet elevation.	**None.** Habitat lacking; the Project site lacked south-facing grassy slopes, rock outcrops, or road cuts and is below the elevational range of this species

CDFW (2024), CNPS (2024), USFWS (2024a).

Status[1]	Potential to Occur[2]	
FC = Federal Candidate for listing	None:	Species or sign not observed; conditions unsuitable for occurrence.
FE = Federally listed as Endangered	Low:	Neither species nor sign observed; conditions marginal for occurrence.
FT = Federally listed as Threatened	Moderate:	Neither species nor sign observed; conditions suitable for occurrence.
FPT = Federally Proposed Threatened	High:	Neither species nor sign observed; conditions highly suitable for occurrence.
FP = State Fully Protected	Present:	Species or sign observed; conditions suitable for occurrence.
SC = State Candidate for listing		
SE = State listed as Endangered		
ST = State listed as Threatened		
SSSC = State Species of Special Concern		

CNPS California Rare Plant Rank[1]:	Threat Ranks[1]:
1B – plants rare, threatened, or endangered in California and elsewhere.	0.1 – seriously threatened in California (> 80% of occurrences).
2B – plants rare, threatened, or endangered in California but more common elsewhere.	0.2 – moderately threatened in California (20–80% of occurrences).
3 – plants about which more information is needed.	0.3 – not very threatened in California (<20% of occurrences).
4 – plants have limited distribution in California.	

[3]Record from within 5 miles of the Project site.

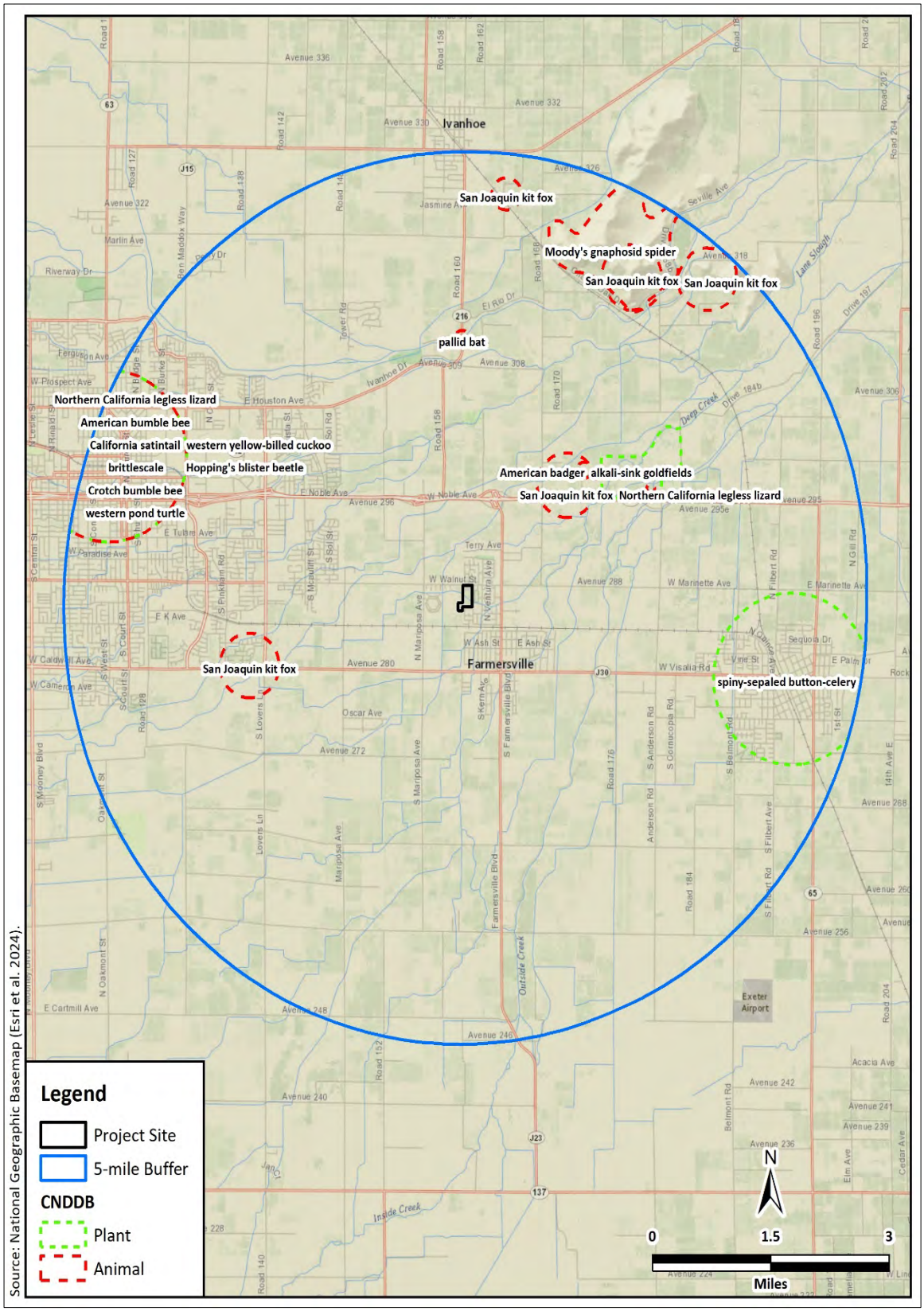

Figure 4. CNDDB occurrence map.

3.2 Reconnaissance Survey

3.2.1 Land Use and Habitats

The Project site consisted of an irrigated, maintained walnut orchard (Figures 5 and 6). Ruderal herbaceous vegetation was distributed throughout the Project site. The site was bordered by residential development to the north, south, and east and a walnut orchard to the west (Figures 7–9). Aerial imagery indicates the Project site has been used for agricultural production since at least 1994 (Google 2024).

An approximately 0.14-mile section of an irrigation ditch (a distributary of Extension Ditch) diagonally crosses the central portion of the Project site (Figure 10). The Kaweah River via Deep Creek, northeast of the Project site, appears to be the source of the water for Extension Ditch. The ditch contained flowing water at time of the 8 May 2024 reconnaissance survey. The ditch was well maintained and lacked terrestrial or aquatic vegetation. Through a series of interconnected ditches, the ditch appears to be hydrologically connected to the Tule River, which drains to Tulare Lake more than 20 miles southwest of the Project site.

Figure 5. Photograph from the northwest corner of the Project site, looking south, showing a walnut orchard.

Figure 6. Photograph from the southeast corner of the Project site, looking northwest, showing a walnut orchard.

Figure 7. Photograph from the northeast corner of the Project site, looking north, showing residential development to the north.

Figure 8. Photograph from the southeast corner of the Project site, looking south, showing residential development to the south.

Figure 9. Photograph from the southwest corner of the Project site, looking northwest, showing a walnut orchard to the west.

Figure 10. Photograph of the irrigation ditch in the central portion of the Project site.

3.2.2 Plant and Animal Species Observed

A total of 10 plant species (one native and nine nonnative), 15 bird species, one reptile species, and one mammal species were observed during the survey (Table 2).

Table 2. Plant and animal species observed during the reconnaissance survey.

Common Name	Scientific Name	Status
Plants		
Family Asteraceae		
Bull thistle	*Cirsium vulgare*	Nonnative
Spiny sowthistle	*Sonchus asper*	Nonnative
Family Brassicaceae		
Lesser swine cress	*Lepidium didymum*	Nonnative
Family Fabaceae		
California burclover	*Medicago polymorpha*	Nonnative
Family Poaceae		
Rescue grass	*Bromus catharticus*	Nonnative
Foxtail barley	*Hordeum jubatum*	Native
Foxtail brome	*Bromus madritensis*	Nonnative
Perennial false brome	*Brachypodium phoenicoides*	Nonnative
Ripgut brome	*Bromus diandrus*	Nonnative
Family Polygonaceae		
Curly dock	*Rumex crispus*	Nonnative
Birds		
Family Aegithalidae		
Bushtit	*Psaltriparus minimus*	MBTA, CFGC
Family Bombycillidae		
Cedar waxwing	*Bombycilla cedrorum*	MBTA, CFGC
Family Cardinalidae		
Black-headed grosbeak	*Pheucticus melanocephalus*	MBTA, CFGC

Common Name	Scientific Name	Status
Family Cathartidae		
Turkey vulture	*Cathartes aura*	MBTA, CFGC
Family Columbidae		
Mourning dove	*Zenaida macroura*	MBTA, CFGC
Family Corvidae		
American crow	*Corvus brachyrhynchos*	MBTA, CFGC
Common raven	*Corvus corax*	MBTA, CFGC
California scrub-jay	*Aphelocoma californica*	MBTA, CFGC
Family Fringillidae		
House finch	*Haemorhous mexicanus*	MBTA, CFGC
Lesser goldfinch	*Spinus psaltria*	MBTA, CFGC
Family Passeridae		
House sparrow	*Passer domesticus*	Nonnative
Family Picidae		
Northern flicker	*Colaptes auratus*	MBTA, CFGC
Family Sturnidae		
European starling	*Sturnus vulgaris*	Nonnative
Family Trochilidae		
Anna's hummingbird	*Calypte anna*	MBTA, CFGC
Family Tyrannidae		
Black phoebe	*Sayornis nigricans*	MBTA, CFGC
Reptiles		
Family Phrynosomatidae		
Side-blotched lizard	*Uta stansburiana*	--
Mammals		
Family Sciuridae		
California ground squirrel	*Otospermophilus beecheyi*	--

MBTA = Protected under the MBTA (16 USC § 703 et seq.); CFGC = Protected under CFGC §§ 3503 and 3513

3.2.3 Nesting Birds

Migratory birds could nest on or near the Project site. Bird species that may nest on or near the property include, but are not limited to, California scrub-jay (*Aphelocoma californica*) and house finch (*Haemorhous mexicanus*). Large trees within 0.5 miles of the Project site could provide nesting substrates for raptors.

3.2.4 Regulated Habitats

An irrigation ditch, a distributary of Extension Ditch, bisects the Project site, with flows entering the east side of the Project site and exiting on its west side (Figure 10). The ditch is listed in the National Wetlands Inventory as riverine with a classification of R5UBFx, which means unknown perennial, unconsolidated bottom, semipermanently flooded, and excavated (USFWS 2024b). The ditch contained flowing water during the 8 May 2024 reconnaissance survey (Figure 10). As the feature contains surface water, it is likely regulated by the SWRCB. Since the ditch is classified as a stream, it would be regulated by the CDFW under California Fish and Game Code Section 1600 et sec. As this ditch appears to be hydrologically connected to the Tule River and Tulare Lake, it would likely also fall under the regulatory jurisdiction of the USACE.

3.2.5 Special-Status Species

No special-status species are expected on or near the Project site based on the absence of habitat for such species.

4.0 Environmental Impacts

4.1 Significance Determinations

This Project, which will result in temporary and permanent impacts to orchard, will not: (1) substantially reduce the habitat of a fish or wildlife species (criterion a) as no such habitat is present on the Project site; (2) cause a fish or wildlife population to drop below self-sustaining levels (criterion b) as no such potentially vulnerable population is known from the area; (3) threaten to eliminate a plant or animal community (criterion c) as no such potentially vulnerable communities are known from the area; (4) substantially reduce the number or restrict the range of a rare or endangered plant or animal (criterion d) as no such potentially vulnerable species are known from the area; (5) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (significance criterion e) as no such species are expected to occur on or near the Project site; (6) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS (criterion f) as no riparian habitat or other sensitive natural community was present in the survey area; (7) have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (criterion g) as no impacts to wetlands will occur; (8) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (criterion i) as no such ordinances are pertinent to the Project; or (9) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan (criterion j) as no such plan has been adopted. Thus, these significance criteria are not analyzed further.

The remaining statutorily defined criterion provides the framework for Criterion BIO1 below. This criterion is used to assess the impacts to biological resources stemming from the Project and provide the basis for determinations of significance:

- Criterion BIO1: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (significance criterion h).

4.1.1 Direct and Indirect Effects

4.1.1.1 Potential Effect #1: Interfere Substantially with Native Wildlife Movements, Corridors, or Nursery Sites (Criterion BIO1)

The Project has the potential to impede the use of nursery sites for native birds protected under the MBTA and CFGC. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant effect. We recommend that the mitigation measure BIO2 (below) be included in the conditions of approval to reduce the potential effect to a less-than-significant level.

Mitigation Measure BIO1. Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

5.0 Literature Cited

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Appendix A. USFWS list of threatened and endangered species.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 05/07/2024 12:46:49 UTC
Project Code: 2024-0086594
Project Name: Farmersville Residential Development Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2024-0086594
Project Name: Farmersville Residential Development Project
Project Type: Residential Construction
Project Description: The proposed project will involve constructing a 115-unit single-family residential development on approximately 22.2 acres. The subdivision will include new residential streets, a park, and a detention basin. The project site is south of the intersection of West Walnut Avenue and North June Avenue near Farmersville in northwestern Tulare County, California.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.310181299999996,-119.21476997293023,14z

Counties: Tulare County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Buena Vista Lake Ornate Shrew *Sorex ornatus relictus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1610	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat *Dipodomys nitratoides nitratoides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7247	Endangered

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered

REPTILES

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Western Spadefoot *Spea hammondii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

FLOWERING PLANTS

NAME	STATUS
Lassics Lupine *Lupinus constancei* Population: There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7976	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency:	Colibri Ecological Consulting, LLC
Name:	Norman Sisk
Address:	9493 N Ft Washington Rd
Address Line 2:	Ste 108
City:	Fresno
State:	CA
Zip:	93730
Email	rsisk@colibri-ecology.com
Phone:	5596816810

Appendix B. CNDDB occurrence records.

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Cairns Corner (3611922) OR Ivanhoe (3611942) OR Lindsay (3611921) OR Monson (3611943) OR Rocky Hill (3611931) OR Tulare (3611923) OR Visalia (3611933) OR Woodlake (3611941) OR Exeter (3611932))
 AND (Federal Listing Status IS (Endangered OR Threatened OR Proposed Endangered OR Proposed Threatened OR Candidate OR All CNDDB element occurrences OR Delisted) OR State Listing Status IS (Endangered OR Threatened OR Rare OR All CNDDB element occurrences OR Delisted OR Candidate Endangered OR Candidate Threatened))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali-sink goldfields *Lasthenia chrysantha*	PDAST5L030	None	None	G2	S2	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
An andrenid bee *Andrena macswaini*	IIHYM35130	None	None	G2	S2	
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S2	SSC
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G2	S2	1B.2
California jewelflower *Caulanthus californicus*	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California satintail *Imperata brevifolia*	PMPOA3D020	None	None	G3	S3	2B.1
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
Earlimart orache *Atriplex cordulata var. erecticaulis*	PDCHE042V0	None	None	G3T1	S1	1B.2
foothill yellow-legged frog - south Sierra DPS *Rana boylii pop. 5*	AAABH01055	Endangered	Endangered	G3T2	S2	
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Great Valley Valley Oak Riparian Forest *Great Valley Valley Oak Riparian Forest*	CTT61430CA	None	None	G1	S1.1	
Greene's tuctoria *Tuctoria greenei*	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Hoover's spurge *Euphorbia hooveri*	PDEUP0D150	Threatened	None	G1	S1	1B.2
Hopping's blister beetle *Lytta hoppingi*	IICOL4C010	None	None	G1G2	S2	
Kaweah brodiaea *Brodiaea insignis*	PMLIL0C060	None	Endangered	G1	S1	1B.2
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
molestan blister beetle *Lytta molesta*	IICOL4C030	None	None	G2	S2	
Moody's gnaphosid spider *Talanites moodyae*	ILARA98020	None	None	G2G3	S2S3	
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S2S3	SSC
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
northern leopard frog *Lithobates pipiens*	AAABH01170	None	None	G5	S2	SSC
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2	1B.2
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S3	
San Joaquin Valley giant flower-loving fly *Rhaphiomidas trochilus*	IIDIP05010	None	None	G1	S1	
San Joaquin Valley Orcutt grass *Orcuttia inaequalis*	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
striped adobe-lily *Fritillaria striata*	PMLIL0V0K0	None	Threatened	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
subtle orache *Atriplex subtilis*	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	
Sycamore Alluvial Woodland *Sycamore Alluvial Woodland*	CTT62100CA	None	None	G1	S1.1	
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	AMAFD03152	Endangered	Endangered	G3T1T2	S2	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Tulare cuckoo wasp *Chrysis tularensis*	IIHYM72010	None	None	G1G2	S2	
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
Valley Sacaton Grassland *Valley Sacaton Grassland*	CTT42120CA	None	None	G1	S1.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool smallscale *Atriplex persistens*	PDCHE042P0	None	None	G2	S2	1B.2
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G3	S3	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle *Emys marmorata*	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Winter's sunflower *Helianthus winteri*	PDAST4N260	None	None	G2?	S2?	1B.2

Record Count: 54

Appendix C. CNPS plant list.

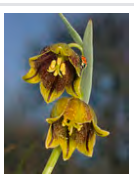
CNPS Rare Plant Inventory

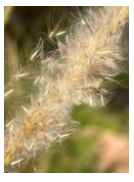
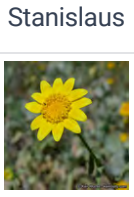
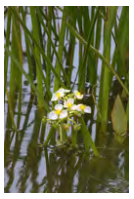
Search Results

27 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [1A:1B:2A:2B:3:4:CBR] , 9-Quad include [3611941:3611921:3611931:3611922:3611933:3611923:3611932:3611943:3611942]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Atriplex cordulata var. *erecticaulis*	Earlimart orache	Chenopodiaceae	annual herb	Aug-Sep(Nov)	None	None	G3T1	S1	1B.2	Yes	2001-01-01	 © 2009 Robert E. Preston, Ph.D.
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2009 Zoya Akulova
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	(Apr)Jun-Sep(Oct)	None	None	G1	S1	1B.2	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
Brodiaea insignis	Kaweah brodiaea	Themidaceae	perennial bulbiferous herb	Apr-Jun	None	CE	G1	S1	1B.2	Yes	1974-01-01	 © 2007 Robert E. Preston, Ph.D.

Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	Feb-May	FE	CE	G1	S1	1B.1	Yes	1984-01-01	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Delphinium hansenii ssp. *ewanianum*	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	None	None	G4T3	S3	4.2	Yes	1994-01-01	No Photo Available
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes	1988-01-01	No Photo Available
Diplacus pictus	calico monkeyflower	Phrymaceae	annual herb	Mar-May	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2020 Matt C. Berger
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual/perennial herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	1980-01-01	No Photo Available
Erythranthe sierrae	Sierra Nevada monkeyflower	Phrymaceae	annual herb	Mar-Jul	None	None	G2	S2	4.2	Yes	2013-10-02	 © 2014 Neal Kramer
Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep(Oct)	FT	None	G1	S1	1B.2	Yes	1974-01-01	No Photo Available
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
Fritillaria striata	striped adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	CT	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Aaron Schusteff
Goodmania luteola	golden goodmania	Polygonaceae	annual herb	Apr-Aug	None	None	G3	S3	4.2		1994-01-01	 © 2007 Steve Matson
Helianthus winteri	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	None	None	G2?	S2?	1B.2	Yes	2014-10-15	 © 2014 Chris Winchell

Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1		2006-12-26	 © 2020 Matt C. Berger
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	 © 2009 California State University, Stanislaus
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	FT	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	None	None	G2	S2	1B.2		2015-10-15	 © 2017 Chris Winchell
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	Yes	1974-01-01	 ©2008 F. Gauna

Showing 1 to 27 of 27 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 7 May 2024].

Appendix D

CHRIS Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford Bowen Planning, Inc.
113 N. Church Street, Suite 310
Visalia, CA 93291

Record Search 24-233

Date: June 3, 2024

Re: Fagundes residential Project

County: Tulare

Map(s): Exeter 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies completed within the project area. There have been 7 cultural resource studies completed within the one-half mile radius: TU-00121, 00134, 01144, 01171, 01718, 01944, & 01968.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there are no recorded resources within the project area, and it is not known if any exist there. There are 5 recorded resources within the one-half mile radius: P-54-003229, 004626, 004877, 005296, & 005667.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, for the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project applicant intends to develop 99 single-family residential units in the City of Farmersville. Further, we understand this project area is agricultural land, specifically active orchards. Please note that agriculture does not constitute previous development, as it does not destroy cultural resources, but merely moves them around within the plow zone. Because this project area has not been previously studied for cultural resources, it is unknown if any are present. As such, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: June 3, 2024

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Appendix E

Traffic Impact Study

Project No: 524-45

TRAFFIC STUDY

TSM 23-001

SINGLE FAMILY RESIDENTIAL

LOCATED SOUTH OF WALNUT AVENUE WEST OF VENTURA AVENUE

CITY OF FARMERSVILLE

Prepared for:

Crawford & Bowen Planning, Inc.

August 2024

Prepared by:

RUETTGERS & SCHULER CIVIL ENGINEERS

1800 30th Street, Suite 260
Bakersfield, California 93301

Ian J. Parks, RCE 58155

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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impacts of a proposed residential development located on the south side of Walnut Avenue, west of Ventura Avenue in Farmersville, California. A vicinity map is presented in Figure 1 and a location map is presented in Figure 2.

The study methodology and vehicle miles traveled analysis is consistent with the California Department of Transportation (Caltrans) "Guide for the Preparation of Traffic Impact Studies," dated December 2002, County of Tulare "SB 743 Guidelines" dated June 8, 2020, and Section 15064.3(b) of the California Environmental Quality Act (CEQA), which became effective July 1, 2020. The scope of the study includes five intersections (two signalized, three stop-controlled – one being a project entrance) and was developed in coordination the City of Farmersville.

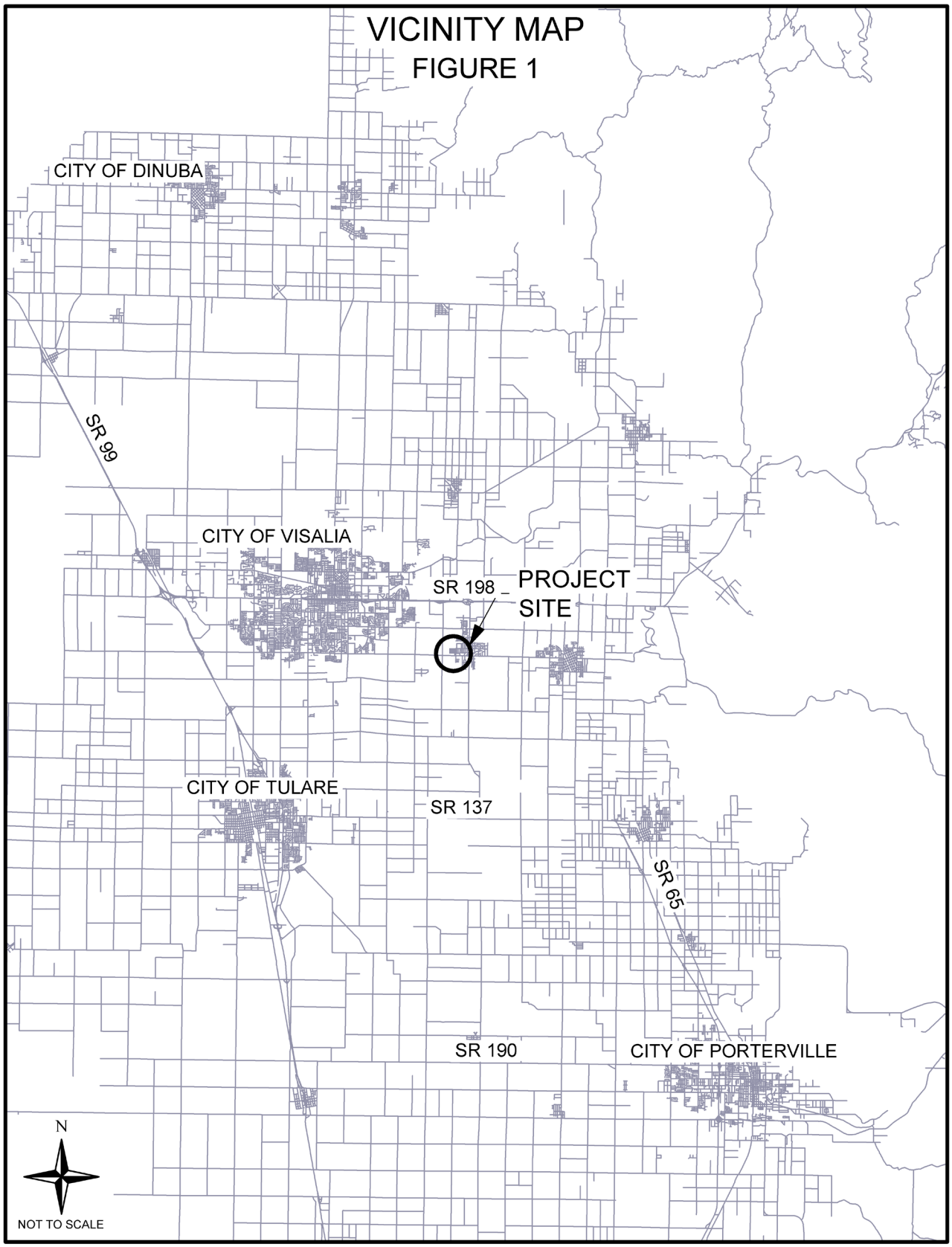
A. Project Land Use and Site Access

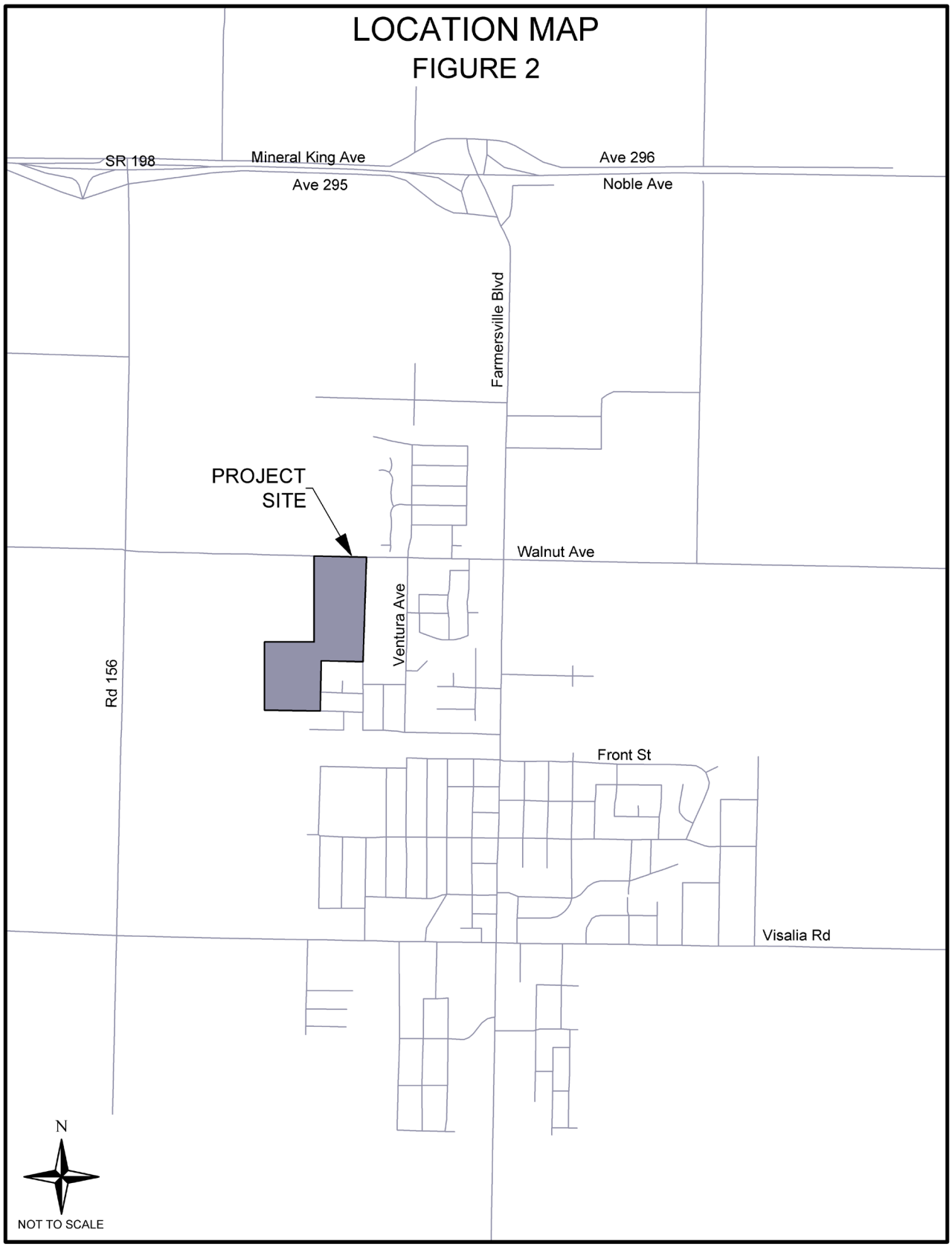
The project site is situated on approximately 19.55 gross acres of undeveloped vacant land. The property is zoned R-1 and the land use designation is medium density residential. The proposed development would include 99 dwelling units. A tentative subdivision plan is provided in Figure 3, which shows street and lot configurations.

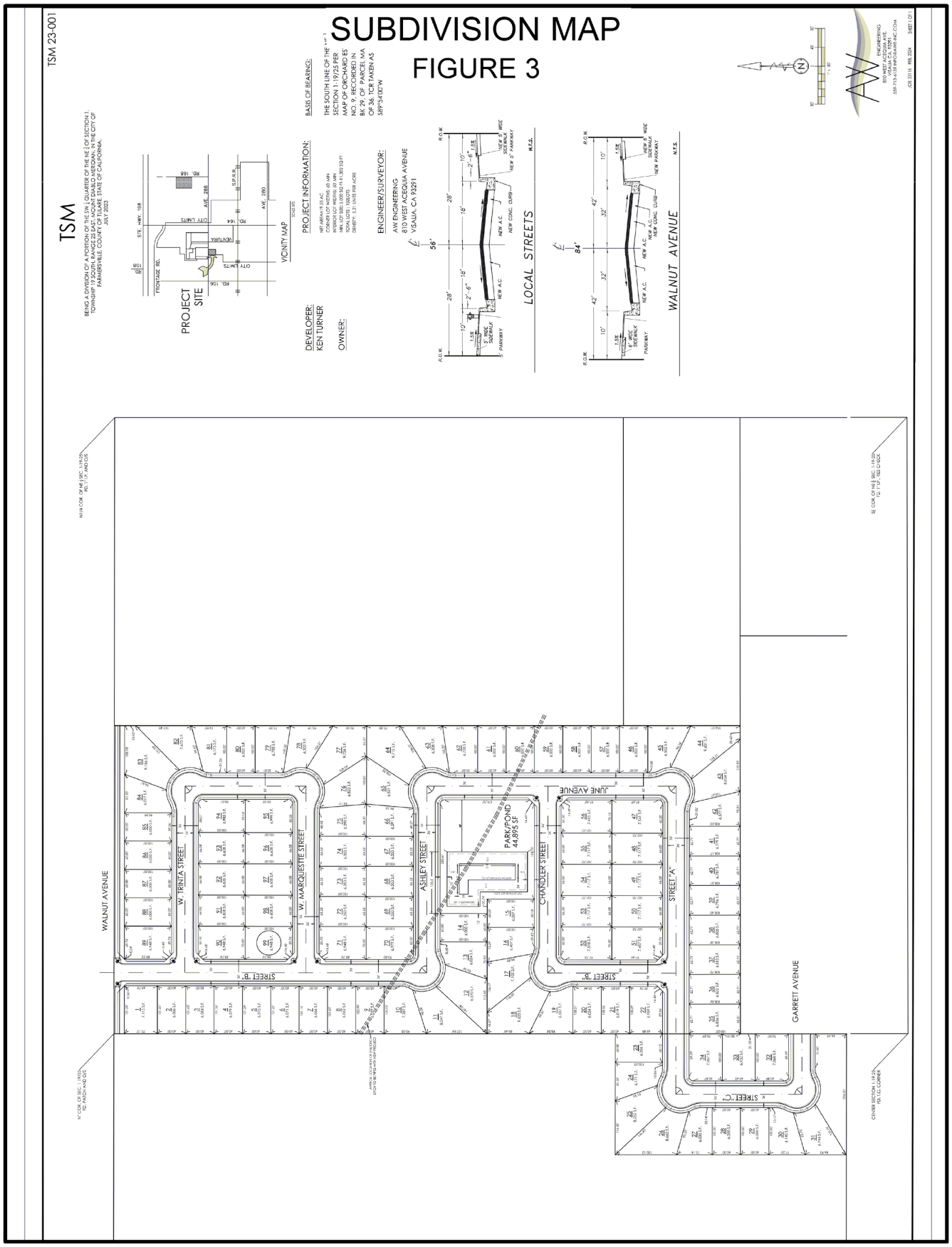
The site is bounded by Walnut Avenue to the north, residential housing to the east and south, and vacant land to the west.

B. Existing Land Uses in Project Vicinity

Land uses in the vicinity of the development include residential to the north, south and east. Agricultural land uses exist to the west.


VICINITY MAP
FIGURE 1
CITY OF DINUBA
SR 99
CITY OF VISALIA
SR 198
PROJECT SITE
CITY OF TULARE
SR 137
SR 65
SR 190
CITY OF PORTERVILLE
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
SR 198
Mineral King Ave
Ave 295
Ave 296
Noble Ave
Farmersville Blvd
PROJECT SITE
Walnut Ave
Ventura Ave
Rd 156
Front St
Visalia Rd
N
NOT TO SCALE


SUBDIVISION MAP
FIGURE 3
TSM 23-001
TSM
BEING A DIVISION OF A PORTION OF THE SW 1/4 QUARTER OF THE NE 1/4 OF SECTION 1, TOWNSHIP 19 SOUTH, RANGE 23 EAST, MOUNT DIABLO MERIDIAN; IN THE CITY OF FARMERSVILLE, COUNTY OF TULARE, STATE OF CALIFORNIA.
JULY 2023
PROJECT SITE
VICINITY MAP
PROJECT INFORMATION:
DEVELOPER:
KEN TURNER
OWNER:
ENGINEER/SURVEYOR:
AW ENGINEERING
810 WEST ACEQUIA AVENUE
VISALIA, CA 93291
BASIS OF BEARING:
LOCAL STREETS
WALNUT AVENUE
N.T.S.
PARK/POND
44,895 SF
WALNUT AVENUE
W. TRINITA STREET
W. MARQUESITTE STREET
ASHLEY STREET
CHANDLER STREET
JUNE AVENUE
STREET "A"
STREET "B"
STREET "C"
GARRETT AVENUE

C. Roadway Descriptions

Farmersville Boulevard is a four-lane, north-south arterial that extends south from Avenue 296. Farmersville Boulevard provides access to State Route 198 as well as commercial, residential, and industrial land uses.

Front Street is an east-west local roadway that extends from Virginia Avenue to Dwight Avenue. In the vicinity of the project, it exists as a two-lane roadway and provides access to commercial and residential land uses. The intersection of Front Street and Farmersville Boulevard is designated in the General Plan for a future traffic signal.

Ventura Avenue is a north-south local roadway that extends south from Visalia Road and provides access to residential and commercial land uses.

Visalia Road is an east-west arterial that extends from Exeter to Visalia. In the vicinity of the project it exists as a four-lane roadway and provides access to residential, commercial, and educational land uses.

Walnut Avenue is a two-lane, east-west collector that extends west from Road 168 in Farmersville to Visalia. Walnut Avenue provides access to residential, commercial, educational, and agricultural land uses.

PROJECT TRIP GENERATION

The project trip generation volumes shown in Table 1 were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Trip rates, equations, and directional splits for ITE Land Use Code 210 (Single Family Detached Housing) were used to estimate project trips for weekday peak hour of adjacent street traffic. The AM and PM peak hours of adjacent street traffic were determined to be between 7:00 AM and 8:00 AM, and between 4:30 PM and 5:30 PM, based on a review of two-hour AM & PM peak hour vehicle turn movement counts taken June 2024.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
210	Single-Family detached Housing	99 Dwelling Units	eq	1000	eq	25% 18	75% 56	eq	63% 62	37% 36

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project peak hour trips is shown in Table 2 and represents the movement of traffic accessing the project site by direction. The project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 2
Project Trip Distribution

Direction	Percent
North	5
East	25
South	65
West	5

Project peak hour trips were assigned to the study intersections as shown in Figure 4. Project trip assignment was developed based on trip generation, trip distribution and likely travel routes for traffic accessing the project site.

EXISTING AND FUTURE TRAFFIC

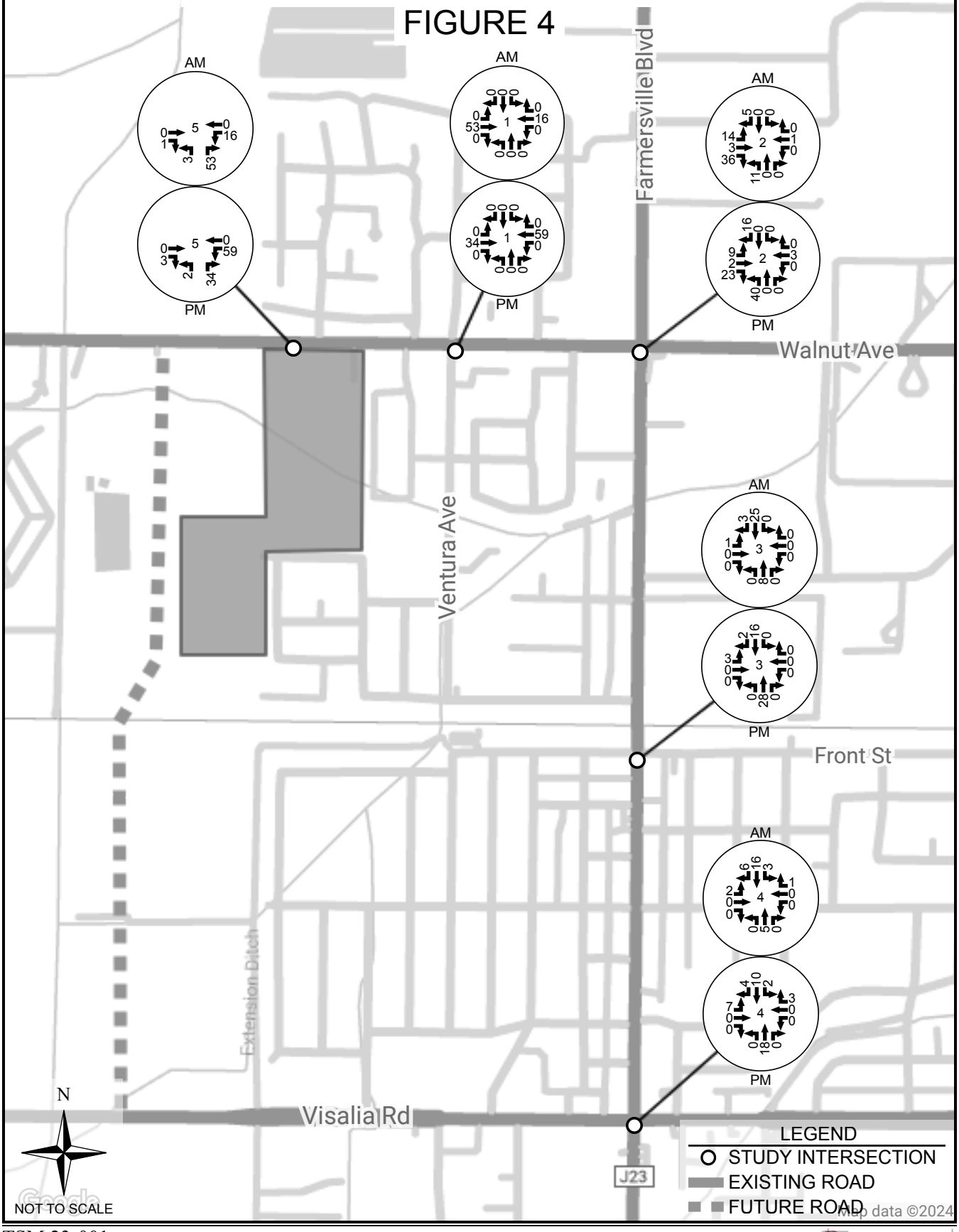
Existing peak hour turning movement counts were obtained in June 2024.

Average annual growth rates ranging between 0.5 and 2.38 percent were applied to the 2024 peak hour volumes to estimate peak hour volumes for the years 2028 and 2044. These growth rates were developed based on a review of historical count data and output from TCAG's regional travel demand model as well as a discussion with the City of Farmersville Planning Consultant. Cumulative volumes were estimated based on information provided by the City of Farmersville regarding build year, land use, size, and location for each pending development.

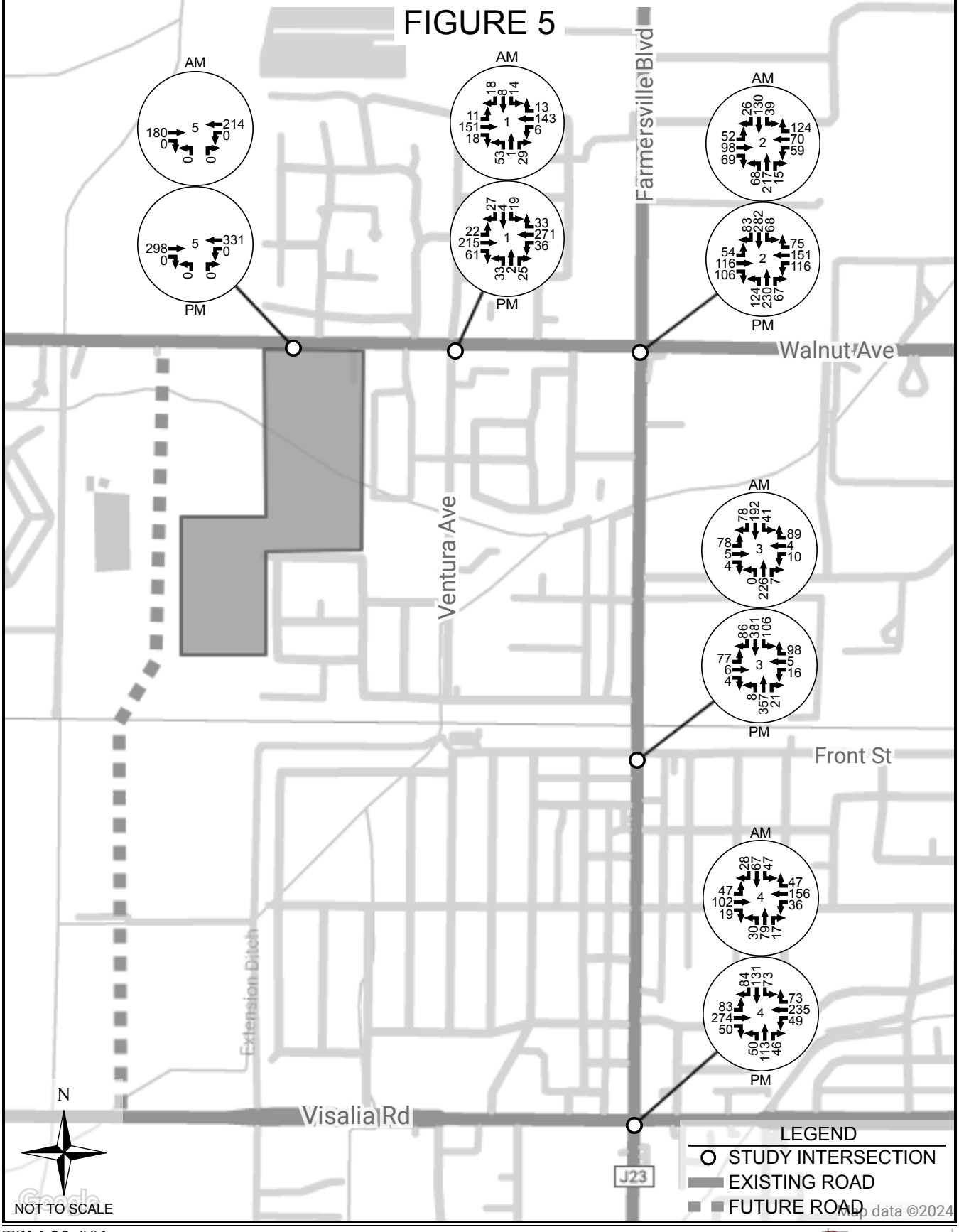
Existing (2024) peak hour volumes are shown in Figure 5, and existing plus project peak hour volumes are shown in Figure 6. Near-term (2028) peak hour volumes, both without and with project traffic, are shown in Figures 7 and 8, respectively. Future volumes for the year 2044, both without and with project traffic, are shown in Figures 9 and 10, respectively.

PROJECT PEAK HOUR TRAFFIC

FIGURE 4

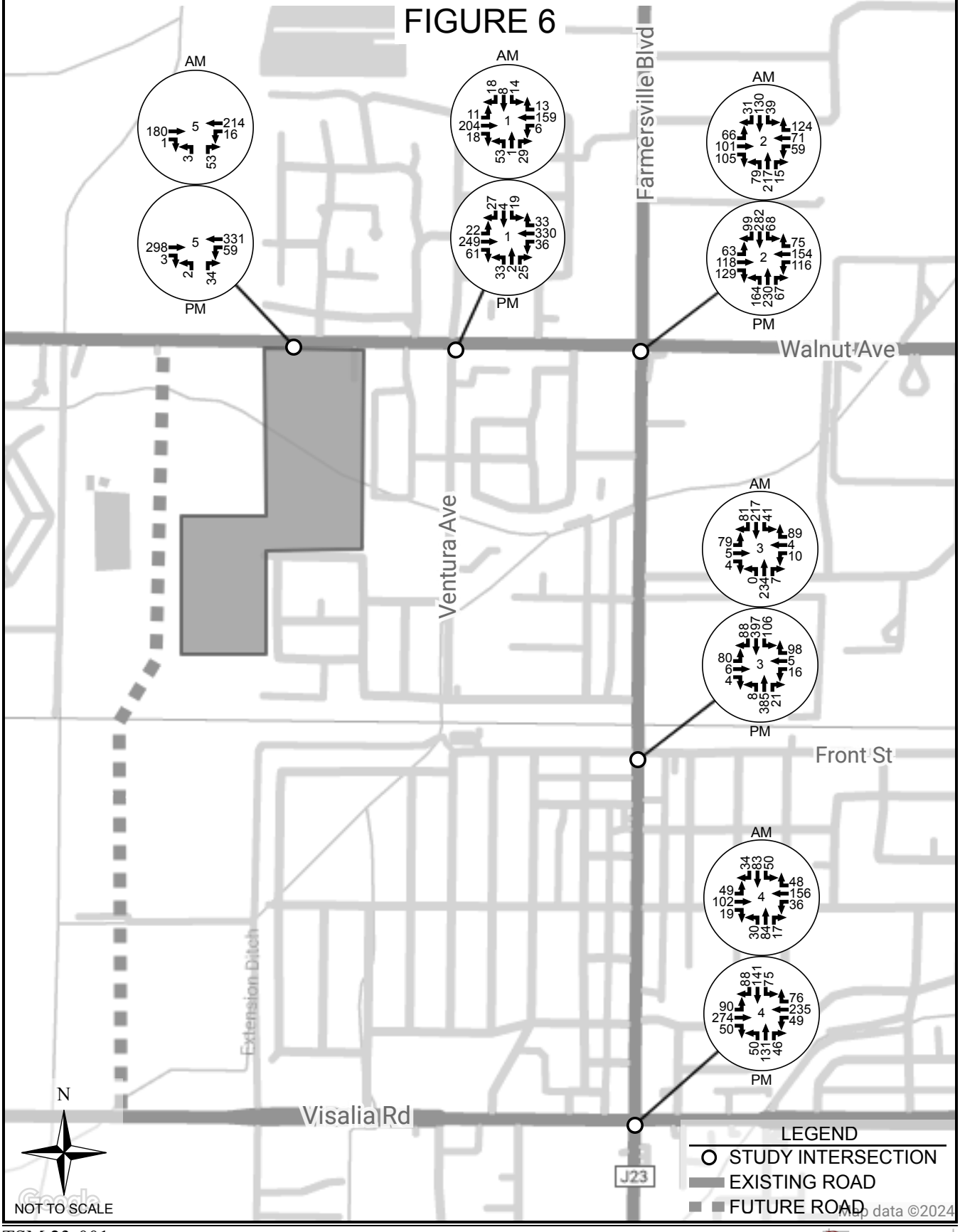


2024 PEAK HOUR TRAFFIC
FIGURE 5

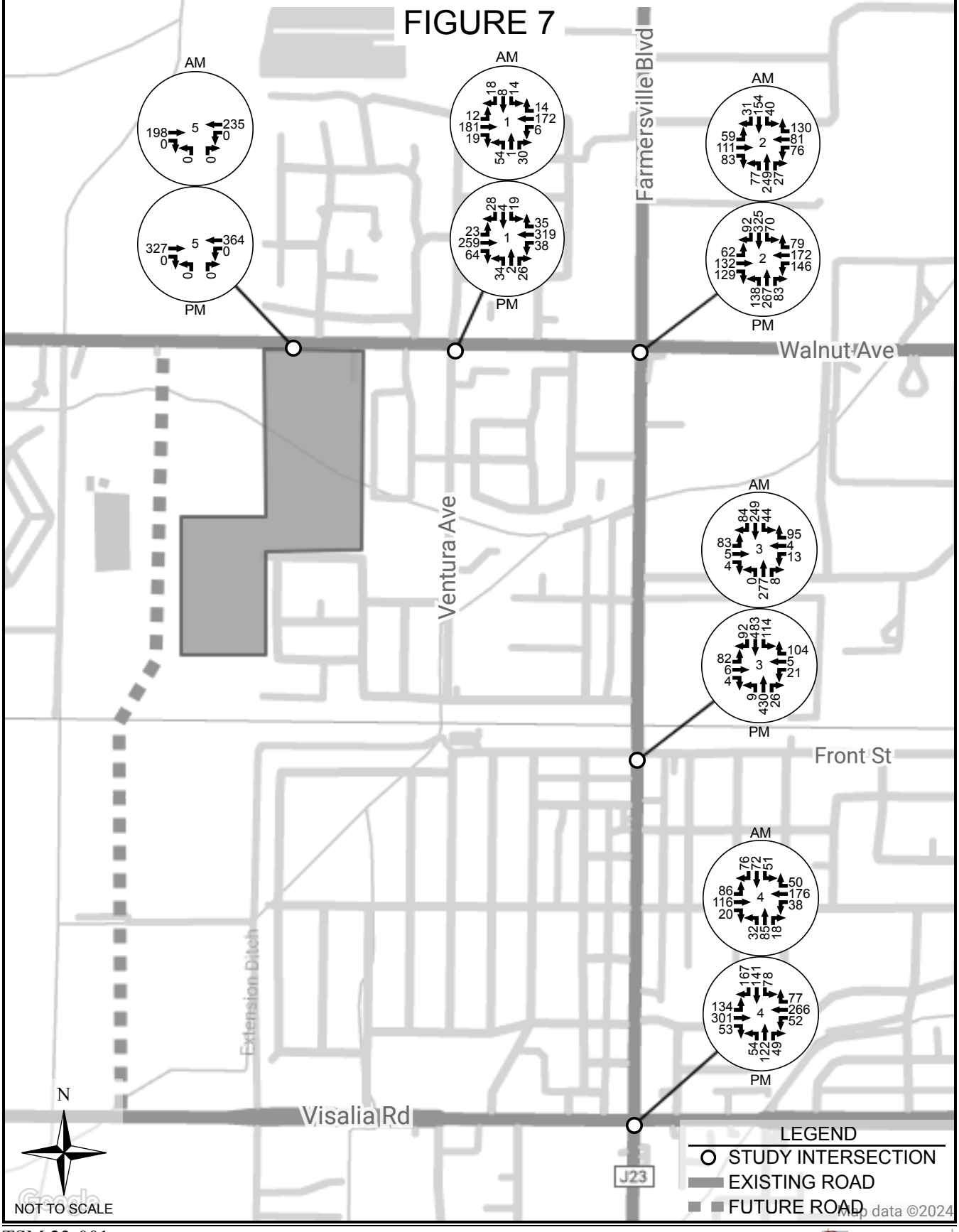


2024+PROJECT PEAK HOUR TRAFFIC

FIGURE 6

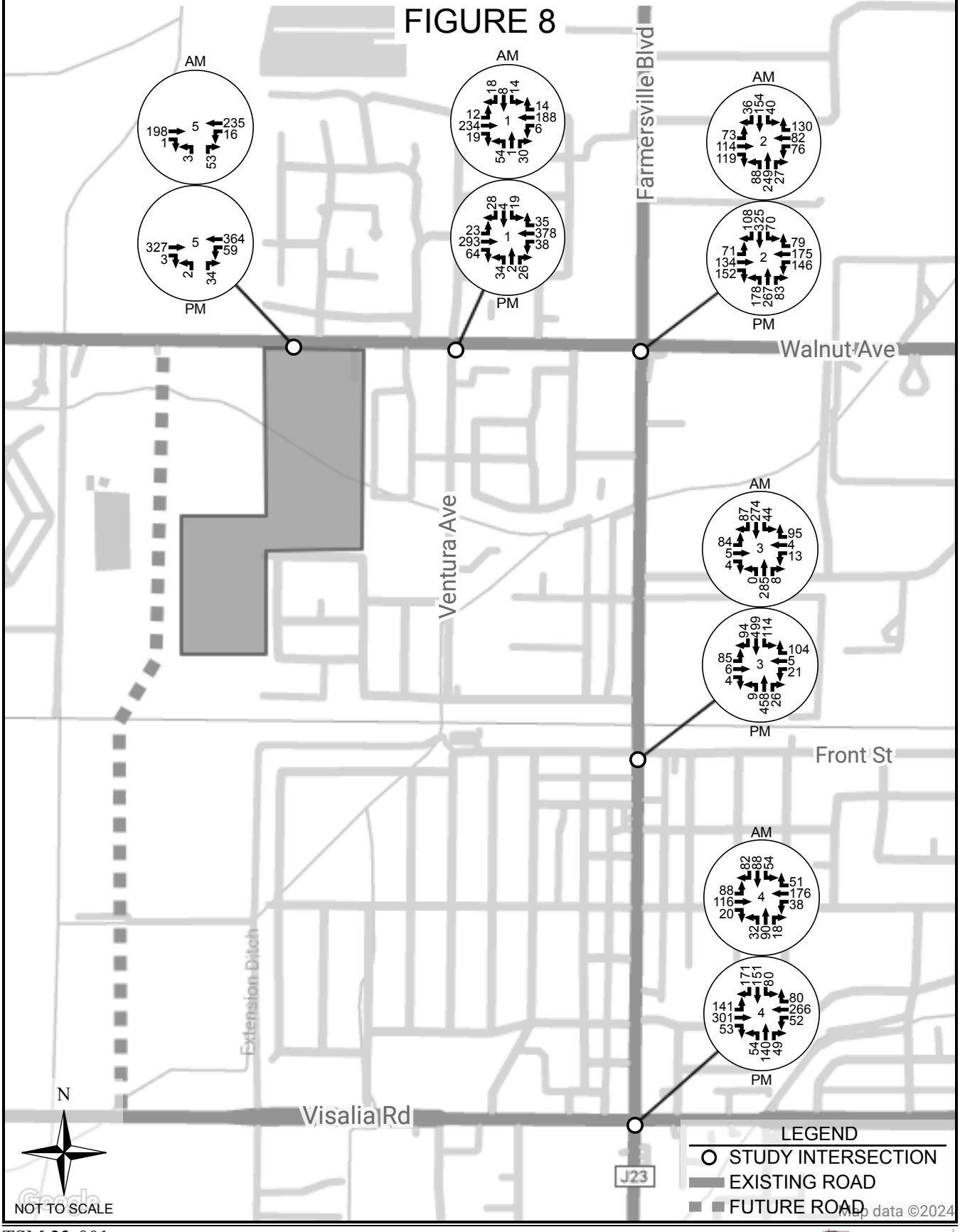


2028 PEAK HOUR TRAFFIC
FIGURE 7

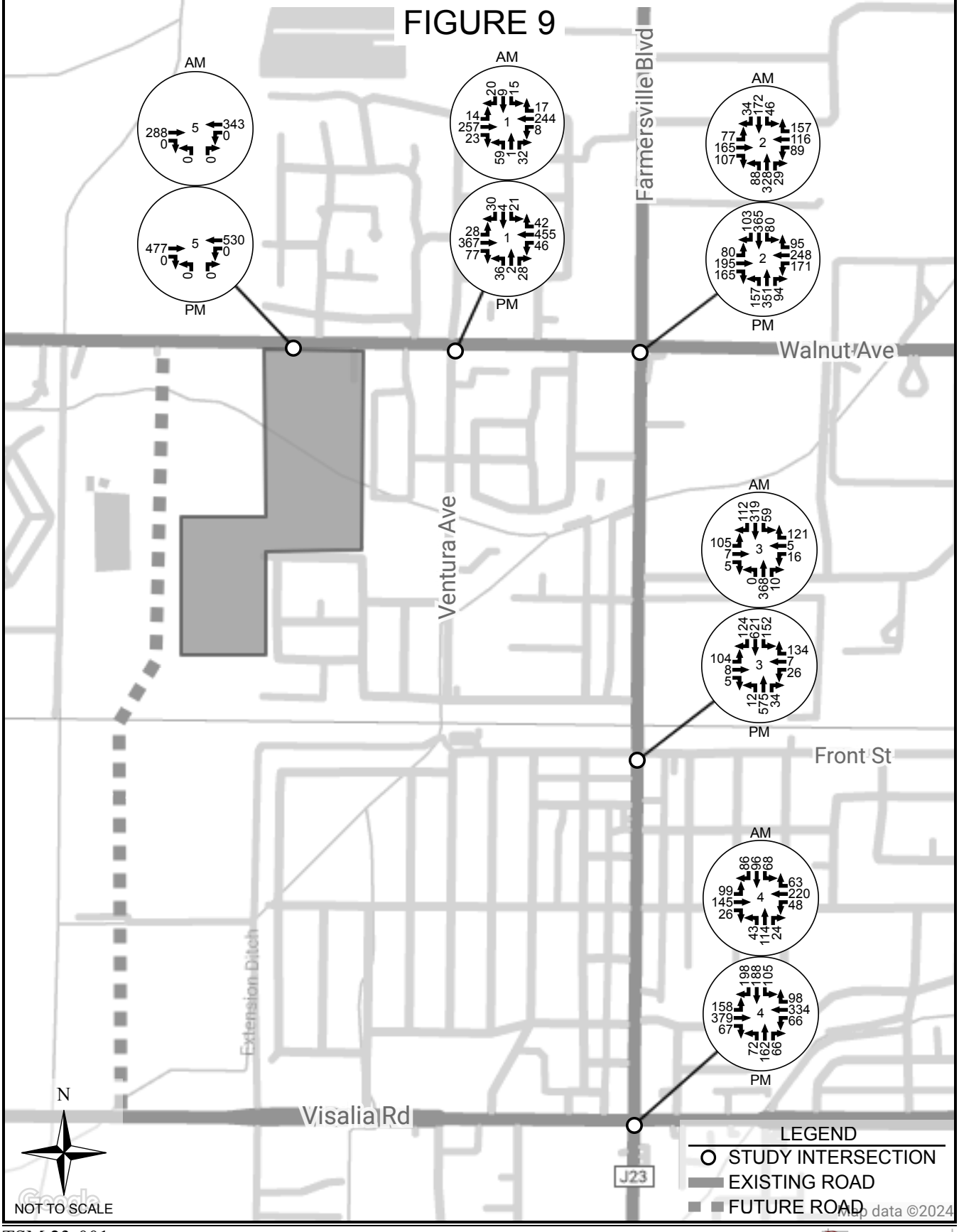


2028+PROJECT PEAK HOUR TRAFFIC

FIGURE 8

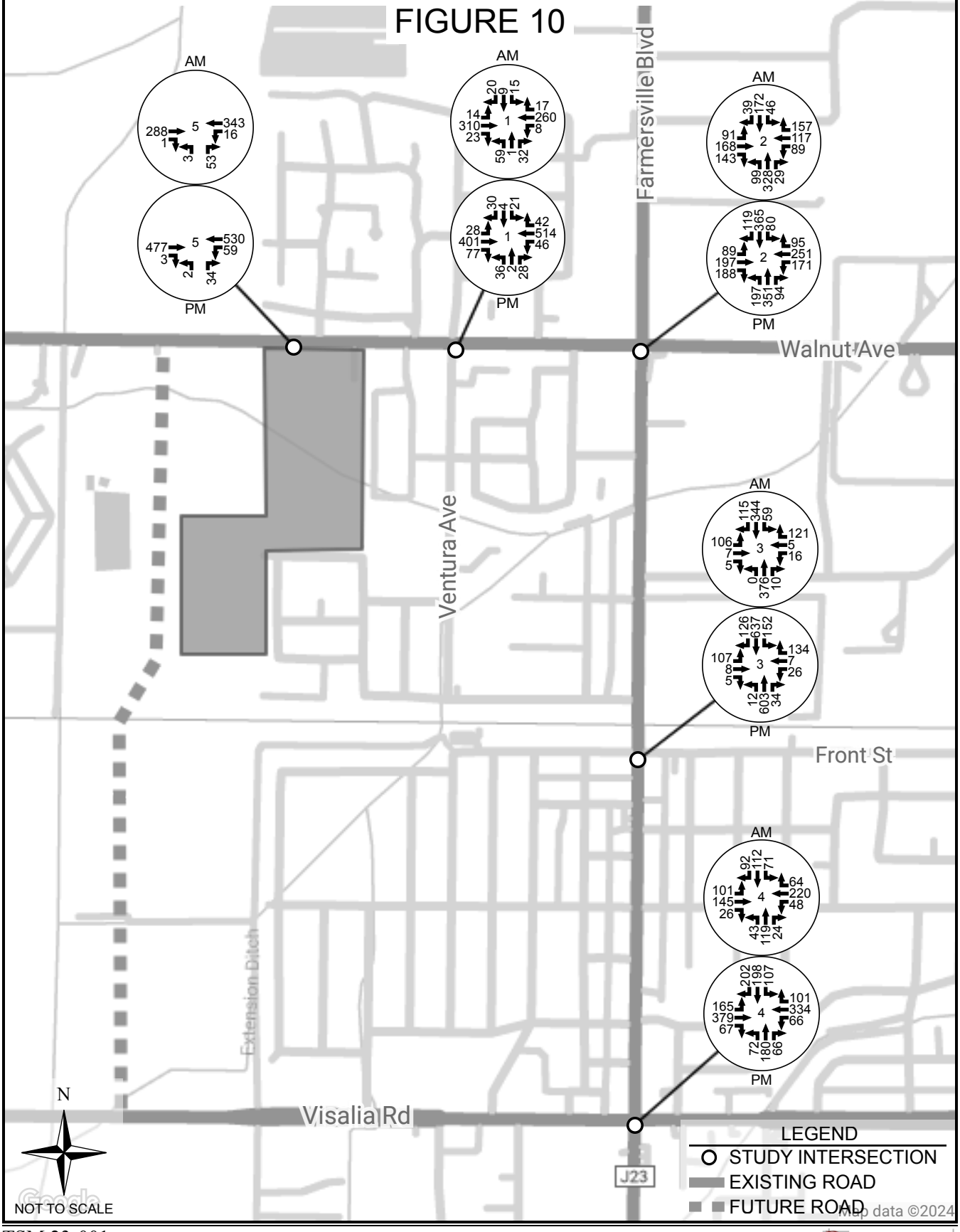


2044 PEAK HOUR TRAFFIC
FIGURE 9



2044+PROJECT PEAK HOUR TRAFFIC

FIGURE 10



INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual (HCM 7th Edition). The analysis was performed for each of the following traffic scenarios.

- Existing (2024)
- Existing (2024) + Project
- Near Term (2028)
- Near Term (2028) + Project
- Future Cumulative (2044)
- Future Cumulative (2044) + Project

Level of service (LOS) criteria for unsignalized and signalized intersections, as defined in HCM 7th Edition are presented in the tables below. The City of Farmersville's Circulation Element designates LOS C as the minimum acceptable intersection peak hour level of service.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Peak hour level of service for the study intersections is presented in Tables 3a and 3b. Intersection delay in seconds per vehicle is shown within parentheses for intersections operating below LOS C.

Table 3a
Intersection Level of Service
Weekday PM Peak Hour

#	Intersection	Control Type	2024	2024+ Project	2028	2028+ Project	2044	2044+ Project	2044+ Project w/Mitigation[1]
1	Ventura Ave & Walnut Ave	NB SB	C B	C C	C C	C C	D (27.5) C	D (33.4) D (25.7)	A
2	Farmersville Blvd & Walnut Ave	Signal	C	C	C	C	C	C	-
3	Farmersville Blvd & Front St	AWSC	B	C	C	C	F (52.0)	F (63.6)	B
4	Farmersville Blvd & Visalia Rd	Signal	C	C	C	C	C	C	-
5	Street B & Walnut Ave	NB	-	B	-	B	-	B	-

[1]See Table 6 for mitigation measures.

Table 3b
Intersection Level of Service
Weekday AM Peak Hour

#	Intersection	Control Type	2024	2024+ Project	2028	2028+ Project	2044	2044+ Project	2044+ Project w/Mitigation[1]
1	Ventura Ave & Walnut Ave	NB SB	B B	B B	B B	B B	C B	C B	A[2]
2	Farmersville Blvd & Walnut Ave	Signal	C	C	C	C	C	C	-
3	Farmersville Blvd & Front St	AWSC	B	B	B	B	B	C	A[2]
4	Farmersville Blvd & Visalia Rd	Signal	C	C	C	C	C	C	-
5	Street B & Walnut Ave	NB	-	A	-	A	-	B	-

[1]See Table 6 for mitigation measures.
[2]Mitigation required due to PM Peak Hour.

TRAFFIC SIGNAL WARRANT ANALYSIS

Peak hour signal warrants were evaluated for the unsignalized intersections within the study based on the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD). Peak hour signal warrants assess delay to traffic on minor street approaches when entering or crossing a major street. Signal warrant analysis results are shown in Tables 4a and 4b.

Table 4a
Traffic Signal Warrants
Weekday PM Peak Hour

		2024			2028			2044		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	638	60	NO	738	62	NO	1015	66	NO
3	Farmersville Blvd at Front St	959	119	YES	1154	130	YES	1518	167	YES
5	Street "B" at Walnut Ave	-	-	-	-	-	-	-	-	-

		2024+Project			2028+Project			2044+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	731	60	NO	831	62	NO	1108	66	NO
3	Farmersville Blvd at Front St	1005	119	YES	1200	130	YES	1564	167	YES
5	Street "B" at Walnut Ave	691	36	NO	753	36	NO	1069	36	NO

Table 4b
Traffic Signal Warrants
Weekday AM Peak Hour

		2024			2028			2044		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	342	83	NO	404	85	NO	563	92	NO
3	Farmersville Blvd at Front St	544	103	NO	662	112	NO	868	142	YES
5	Street "B" at Walnut Ave	-	-	-	-	-	-	-	-	-

		2024+Project			2028+Project			2044+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Ventura Ave at Walnut Ave	411	83	NO	473	85	NO	632	92	NO
3	Farmersville Blvd at Front St	580	103	NO	698	112	NO	904	142	YES
5	Street "B" at Walnut Ave	411	56	NO	450	56	NO	648	56	NO

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service or operate below an acceptable level of service and not meet signal warrant criteria.

ROADWAY ANALYSIS

A capacity analysis of the study roadways was conducted using Table 4 in the State of Florida Department of Transportation *Quality/Level of Service Handbook* dated June 2020 (see Appendix). The City of Farmersville Circulation Element states that the peak hour level of service for roadways shall be no lower than LOS "C" for urban areas. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2024)
- Existing (2024) + Project
- Near Term (2028)
- Near Term (2028) + Project
- Future Cumulative (2044)
- Future Cumulative (2044) + Project

Table 5a
PM Roadway Level of Service

Roadway Segment	2024 Two-Way LOS		2028 Two-Way LOS		2044 Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	629	C	727	C	1007	C
Walnut Ave: Ventura Ave - Farmersville Blvd	634	C	725	C	959	C
Farmersville Blvd: Walnut Ave - Front St	1105	C	1306	C	1710	C
Farmersville Blvd: Front St - Visalia Rd	787	C	973	C	1273	C

Roadway Segment	2024+Project Two-Way LOS		2028+Project Two-Way LOS		2044+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	722	C	820	C	1100	C
Walnut Ave: Ventura Ave - Farmersville Blvd	727	C	818	C	1052	C
Farmersville Blvd: Walnut Ave - Front St	1168	C	1369	C	1773	C
Farmersville Blvd: Front St - Visalia Rd	831	C	1017	C	1317	C

Table 5b
AM Roadway Level of Service

Roadway Segment	2024 Two-Way LOS		2028 Two-Way LOS		2044 Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	394	C	456	C	631	C
Walnut Ave: Ventura Ave - Farmersville Blvd	383	C	442	C	587	C
Farmersville Blvd: Walnut Ave - Front St	792	C	832	C	1084	C
Farmersville Blvd: Front St - Visalia Rd	439	C	551	C	718	C

Roadway Segment	2024+Project Two-Way LOS		2028+Project Two-Way LOS		2044+Project Two-Way LOS	
	VOL	LOS	VOL	LOS	VOL	LOS
Walnut Ave: Street B - Ventura Ave	463	C	525	C	700	C
Walnut Ave: Ventura Ave - Farmersville Blvd	453	C	512	C	657	C
Farmersville Blvd: Walnut Ave - Front St	839	C	879	C	1131	C
Farmersville Blvd: Front St - Visalia Rd	472	C	584	C	751	C

IMPROVEMENTS

Intersection improvements needed by the year 2044 to maintain or improve the operational level of service of the street system in the vicinity of the project are presented in Table 6.

Table 6
Future Intersection Improvements

#	Intersection	Total Improvements Required by 2044	Project Percent Share
1	Ventura Ave & Walnut Ave	Signal	47.45%
3	Farmersville Blvd & Front St	Signal	18.85%

Project percent share is calculated using the following formula:

$$\% \text{ Share} = \frac{\text{Project Traffic}}{(\text{Future+Project Traffic}) - \text{Existing Traffic}} \times 100\%$$

VMT ANALYSIS

An evaluation of vehicle miles traveled (VMT) for project traffic was conducted in accordance with California Environmental Quality Act (CEQA) requirements. The City of Farmersville has adopted the "County of Tulare SB 743 Guidelines", dated June 8, 2020, which contains recommendations regarding VMT assessment, significance thresholds and mitigation measures.

Analysis

Baseline VMT was determined utilizing data from the California Statewide Travel Demand Model (CSTDM). The proposed residential project is located in Traffic Analysis Zone (TAZ) 2757, which has an average VMT/capita of 11.27 miles. The proposed residential project is considered a typical project within the TAZ and therefore the project would be expected to have the same VMT per capita. There are no special considerations with the project to assume the project would produce a VMT/capita lower than the average for the TAZ. The threshold of significance for residential project VMT/capita is if the project VMT is below the average in the TAZ where the project is located. Since VMT/capita is assumed to be equal to the average for the aforementioned zone, it is anticipated that the proposed project will have a significant transportation impact prior to mitigation.

Mitigation

The Tulare County guidelines include detailed instructions for mitigation if a project has significant impacts. The guidelines state "The preferred method of VMT mitigation in Tulare County is for project applicants to provide transportation improvements that facilitate travel by walking, bicycling, or transit." In accordance with these guidelines, a survey was conducted within a half mile of the project to determine any pedestrian, bicycle or transit facilities deficiencies exist. After review, the following improvements are recommended:

- Sidewalk on the south side of Walnut Avenue from the east boundary of the tract, approximately 215 feet east and connect to existing sidewalk. Construct two ADA compliant driveways along the stretch of sidewalk.
- Two ADA accessible curb ramps at Garrett Avenue and Virginia Avenue

The total project cost is estimated at approximately $20,670 with a 20% contingency. The guidelines include a minimum cost for mitigation of $20 per daily trip generated by the project or 0.5% of the total

construction cost of the project (not including land acquisition). As shown in Table 1, the project is anticipated to generate 1,000 daily trips, which equates to a target value of improvements of $20,000.

Pursuant to the guidelines, if a project provides mitigation which meets the minimum threshold listed above, the project can presume a 1% reduction in VMT. The assumed VMT/capita reduction is 1% of 11.27 or 0.11. The resulting VMT/capita after mitigation is 11.16 which is below the average VMT/capita in the TAZ which the project is located. After mitigation, the project will have a less than significant transportation impact.

FIGURE 11
PROPOSED VMT MITIGATION

SUMMARY AND CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of a proposed residential development located on the south side of Walnut Avenue, west of Ventura Avenue in Farmersville, California.

The four existing intersections and one project intersection currently operate at or above LOS C during peak hours prior to and with the addition of project traffic and are expected to do so through the year 2028.

In 2044, the intersections of Ventura Avenue & Walnut Avenue and Farmersville Boulevard & Front Street are anticipated to operate below an acceptable level of service prior to the addition of project traffic. The three remaining intersections are expected to continue to operate at an acceptable level of service prior to, and with the addition of project traffic.

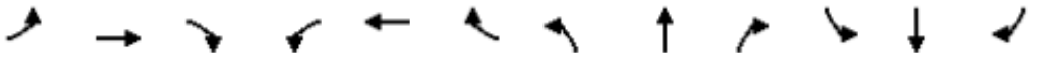
All roadway segments within the scope of the study currently operate above LOS C during peak hours prior to, and with the addition of project traffic in 2024, 2028, and 2044.

Project VMT analysis showed a VMT which was equal to the existing local VMT in the area, which indicates a transportation impact under CEQA. With implementation of the mitigation measures identified above for reduction of VMT, the project will have a less than significant transportation impact.

REFERENCES

1. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, California Department of Transportation (Caltrans)
2. City of Farmersville General Plan
3. County of Tulare SB 743 Guidelines, June 8, 2020
4. Highway Capacity Manual 7th Edition, Transportation Research Board
5. Interactive Traffic Counts Map, Tulare County Association of Governments (TCAG)
6. Trip Generation Manual, 11th Edition, Institute of Transportation Engineers (ITE)

APPENDIX



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	215	61	36	271	33	33	2	25	19	4	27
Future Volume (vph)	22	215	61	36	271	33	33	2	25	19	4	27
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.972			0.987			0.944			0.927	
Flt Protected		0.996			0.995			0.973			0.981	
Satd. Flow (prot)	0	1803	0	0	1829	0	0	1711	0	0	1694	0
Flt Permitted		0.996			0.995			0.973			0.981	
Satd. Flow (perm)	0	1803	0	0	1829	0	0	1711	0	0	1694	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		871			1276			1214			251	
Travel Time (s)		10.8			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	234	66	39	295	36	36	2	27	21	4	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	324	0	0	370	0	0	65	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

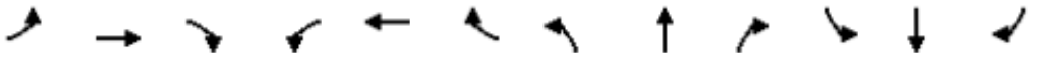
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	22	215	61	36	271	33	33	2	25	19	4	27
Future Vol, veh/h	22	215	61	36	271	33	33	2	25	19	4	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	234	66	39	295	36	36	2	27	21	4	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	330	0	0	300	0	0	690	723	267	673	739	312
Stage 1	-	-	-	-	-	-	315	315	-	391	391	-
Stage 2	-	-	-	-	-	-	375	409	-	283	348	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1229	-	-	1261	-	-	360	352	772	369	345	728
Stage 1	-	-	-	-	-	-	696	656	-	634	607	-
Stage 2	-	-	-	-	-	-	646	596	-	724	634	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1229	-	-	1261	-	-	320	331	772	332	324	728
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	331	-	332	324	-
Stage 1	-	-	-	-	-	-	680	640	-	609	584	-
Stage 2	-	-	-	-	-	-	592	573	-	680	619	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.59	0.84	15.03	13.68
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	424	127	-	-	187	-	-	469
HCM Lane V/C Ratio	0.154	0.019	-	-	0.031	-	-	0.116
HCM Control Delay (s/veh)	15	8	0	-	7.9	0	-	13.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.4

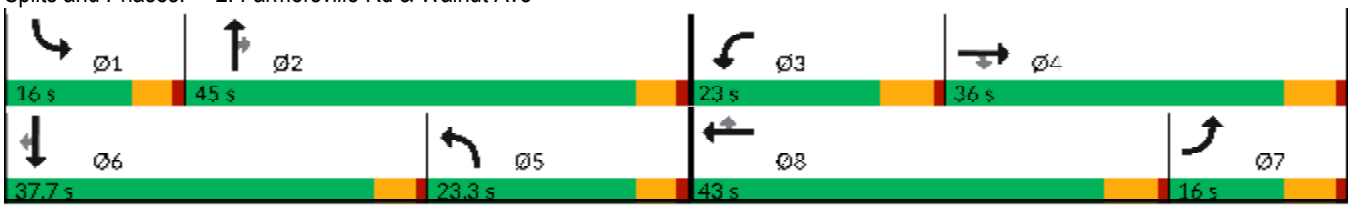


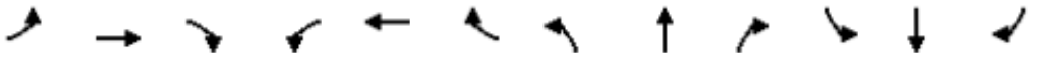
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	116	106	116	151	75	124	230	67	68	282	83
Future Volume (vph)	54	116	106	116	151	75	124	230	67	68	282	83
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1430	1630	1863	1412	1630	1863	1413	1630	1863	1412
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			170			170
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	126	115	126	164	82	135	250	73	74	307	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	126	115	126	164	82	135	250	73	74	307	90
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	16.0	36.0	36.0	23.0	43.0	43.0	23.3	45.0	45.0	16.0	37.7	37.7
Total Split (%)	13.3%	30.0%	30.0%	19.2%	35.8%	35.8%	19.4%	37.5%	37.5%	13.3%	31.4%	31.4%
Maximum Green (s)	10.3	30.3	30.3	17.3	37.3	37.3	18.7	40.4	40.4	11.4	33.1	33.1
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	10.7	13.9	13.9	12.4	18.5	18.5	15.3	42.6	42.6	9.3	33.8	33.8
Actuated g/C Ratio	0.11	0.14	0.14	0.13	0.19	0.19	0.16	0.44	0.44	0.10	0.35	0.35
v/c Ratio	0.33	0.47	0.34	0.60	0.46	0.21	0.52	0.30	0.10	0.47	0.47	0.15
Control Delay (s/veh)	47.3	44.4	5.3	54.8	41.7	1.2	47.3	22.8	0.3	55.7	30.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.3	44.4	5.3	54.8	41.7	1.2	47.3	22.8	0.3	55.7	30.7	0.5
LOS	D	D	A	D	D	A	D	C	A	E	C	A
Approach Delay (s/veh)		30.0			37.2			26.4			28.9	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96.5			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 30.3		Intersection LOS: C	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave





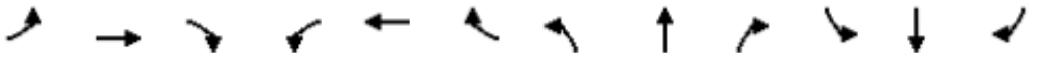
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	116	106	116	151	75	124	230	67	68	282	83
Future Volume (veh/h)	54	116	106	116	151	75	124	230	67	68	282	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	59	126	115	126	164	82	135	250	73	74	307	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	235	179	158	268	200	235	893	679	93	732	555
Arrive On Green	0.08	0.13	0.13	0.10	0.14	0.14	0.14	0.48	0.48	0.06	0.39	0.39
Sat Flow, veh/h	1641	1870	1420	1641	1870	1398	1641	1870	1421	1641	1870	1419
Grp Volume(v), veh/h	59	126	115	126	164	82	135	250	73	74	307	90
Grp Sat Flow(s),veh/h/ln	1641	1870	1420	1641	1870	1398	1641	1870	1421	1641	1870	1419
Q Serve(g_s), s	2.9	5.3	4.5	6.4	7.0	3.6	6.5	6.8	2.4	3.8	10.1	3.5
Cycle Q Clear(g_c), s	2.9	5.3	4.5	6.4	7.0	3.6	6.5	6.8	2.4	3.8	10.1	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	235	179	158	268	200	235	893	679	93	732	555
V/C Ratio(X)	0.46	0.54	0.64	0.80	0.61	0.41	0.57	0.28	0.11	0.79	0.42	0.16
Avail Cap(c_a), veh/h	200	670	509	336	825	617	363	893	679	221	732	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	34.7	17.1	37.4	34.0	20.7	33.8	13.3	12.2	39.4	18.8	16.7
Incr Delay (d2), s/veh	2.5	1.9	3.8	8.9	2.3	1.3	2.2	0.8	0.3	13.9	1.8	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.4	2.2	2.7	3.1	1.5	2.5	2.6	0.7	1.8	4.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.7	36.5	20.9	46.3	36.3	22.0	36.0	14.1	12.5	53.3	20.5	17.4
LnGrp LOS	D	D	C	D	D	C	D	B	B	D	C	B
Approach Vol, veh/h		300			372			458			471	
Approach Delay, s/veh		31.2			36.5			20.3			25.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	45.0	13.8	16.4	16.7	37.7	12.4	17.8
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	11.4	40.4	17.3	30.3	18.7	33.1	10.3	37.3
Max Q Clear Time (g_c+I1), s	5.8	8.8	8.4	7.3	8.5	12.1	4.9	9.0
Green Ext Time (p_c), s	0.1	1.1	0.2	0.8	0.3	1.3	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	27.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	6	4	16	5	98	357	0	21	0	0	0
Future Volume (vph)	77	6	4	16	5	98	357	0	21	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994				0.850		0.992				
Flt Protected		0.958			0.963			0.955				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Flt Permitted		0.958			0.963			0.955				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	7	4	17	5	107	388	0	23	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	95	0	0	22	107	0	411	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

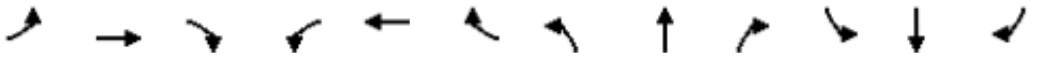
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	6	4	16	5	98	357	0	21	0	0	0
Future Vol, veh/h	77	6	4	16	5	98	357	0	21	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	7	4	17	5	107	388	0	23	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	10.3	8.9	16.3	0
HCM LOS	B	A	C	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	76%	0%	0%	0%
Vol Thru, %	0%	0%	7%	24%	0%	100%	100%
Vol Right, %	0%	100%	5%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	357	21	87	21	98	0	0
LT Vol	357	0	77	16	0	0	0
Through Vol	0	0	6	5	0	0	0
RT Vol	0	21	4	0	98	0	0
Lane Flow Rate	388	23	95	23	107	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.607	0.028	0.159	0.04	0.152	0	0
Departure Headway (Hd)	5.628	4.423	6.042	6.236	5.143	5.601	3.848
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	640	803	590	572	693	0	0
Service Time	3.389	2.184	4.112	4	2.906	3.397	1.643
HCM Lane V/C Ratio	0.606	0.029	0.161	0.04	0.154	0	0
HCM Control Delay, s/veh	16.8	7.3	10.3	9.3	8.8	8.4	6.6
HCM Lane LOS	C	A	B	A	A	N	N
HCM 95th-tile Q	4.1	0.1	0.6	0.1	0.5	0	0

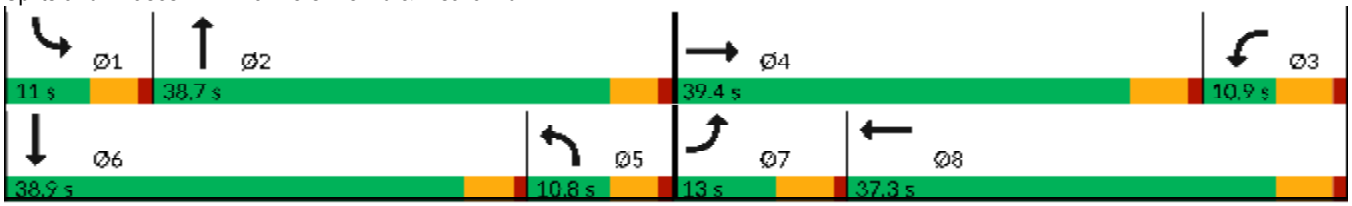


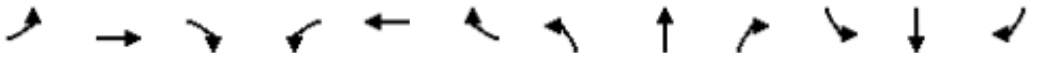
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	274	50	49	235	73	50	113	46	73	131	84
Future Volume (vph)	83	274	50	49	235	73	50	113	46	73	131	84
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.977			0.965			0.957			0.941	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3401	0	1630	3370	0	1630	3307	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3401	0	1630	3370	0	1630	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			43			50			91	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	298	54	53	255	79	54	123	50	79	142	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	90	352	0	53	334	0	54	173	0	79	233	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	39.4		10.9	37.3		10.8	38.7		11.0	38.9	
Total Split (%)	13.0%	39.4%		10.9%	37.3%		10.8%	38.7%		11.0%	38.9%	
Maximum Green (s)	7.7	34.1		5.6	32.0		6.2	34.1		6.4	34.3	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.8	15.2		7.0	14.8		6.3	35.7		6.7	35.8	
Actuated g/C Ratio	0.10	0.19		0.09	0.19		0.08	0.45		0.09	0.45	
v/c Ratio	0.56	0.51		0.37	0.50		0.42	0.11		0.57	0.15	
Control Delay (s/veh)	53.7	29.7		46.5	27.9		50.2	12.7		57.8	10.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	53.7	29.7		46.5	27.9		50.2	12.7		57.8	10.9	
LOS	D	C		D	C		D	B		E	B	
Approach Delay (s/veh)		34.6			30.4			21.6			22.8	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 78.7			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 28.6		Intersection LOS: C	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd





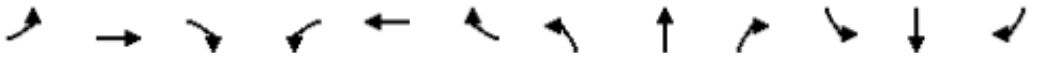
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	274	50	49	235	73	50	113	46	73	131	84
Future Volume (veh/h)	83	274	50	49	235	73	50	113	46	73	131	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	90	298	54	53	255	79	54	123	50	79	142	91
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	494	88	108	432	130	94	1119	432	99	959	574
Arrive On Green	0.07	0.16	0.16	0.07	0.16	0.16	0.06	0.45	0.45	0.06	0.45	0.45
Sat Flow, veh/h	1641	3000	536	1641	2672	807	1641	2492	963	1641	2123	1271
Grp Volume(v), veh/h	90	175	177	53	167	167	54	86	87	79	117	116
Grp Sat Flow(s),veh/h/ln	1641	1777	1759	1641	1777	1702	1641	1777	1678	1641	1777	1617
Q Serve(g_s), s	4.1	6.9	7.1	2.4	6.6	6.9	2.4	2.1	2.3	3.6	2.9	3.2
Cycle Q Clear(g_c), s	4.1	6.9	7.1	2.4	6.6	6.9	2.4	2.1	2.3	3.6	2.9	3.2
Prop In Lane	1.00		0.30	1.00		0.47	1.00		0.57	1.00		0.79
Lane Grp Cap(c), veh/h	113	292	289	108	287	275	94	798	754	99	803	730
V/C Ratio(X)	0.80	0.60	0.61	0.49	0.58	0.61	0.57	0.11	0.12	0.80	0.15	0.16
Avail Cap(c_a), veh/h	166	798	790	121	749	717	134	798	754	138	803	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	29.4	29.5	34.3	29.5	29.6	34.9	12.1	12.2	35.2	12.2	12.3
Incr Delay (d2), s/veh	15.2	2.0	2.1	3.5	1.9	2.2	5.4	0.3	0.3	19.8	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.8	2.9	1.0	2.7	2.7	1.0	0.7	0.8	1.9	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.1	31.3	31.6	37.7	31.3	31.7	40.3	12.4	12.5	55.1	12.6	12.8
LnGrp LOS	D	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		442			387			227			312	
Approach Delay, s/veh		35.2			32.4			19.1			23.4	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	38.7	10.3	17.8	9.0	38.9	10.5	17.6
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	6.4	34.1	5.6	34.1	6.2	34.3	7.7	32.0
Max Q Clear Time (g_c+I1), s	5.6	4.3	4.4	9.1	4.4	5.2	6.1	8.9
Green Ext Time (p_c), s	0.0	0.6	0.0	1.2	0.0	0.8	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	249	61	36	330	33	33	2	25	19	4	27
Future Volume (vph)	22	249	61	36	330	33	33	2	25	19	4	27
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.989			0.944			0.927	
Flt Protected		0.997			0.996			0.973			0.981	
Satd. Flow (prot)	0	1811	0	0	1835	0	0	1711	0	0	1694	0
Flt Permitted		0.997			0.996			0.973			0.981	
Satd. Flow (perm)	0	1811	0	0	1835	0	0	1711	0	0	1694	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	271	66	39	359	36	36	2	27	21	4	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	0	0	434	0	0	65	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.1%		ICU Level of Service A	
Analysis Period (min) 15			

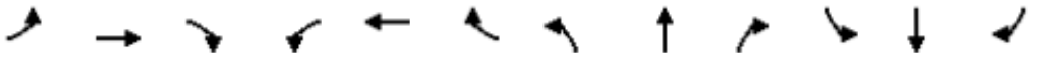
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	22	249	61	36	330	33	33	2	25	19	4	27
Future Vol, veh/h	22	249	61	36	330	33	33	2	25	19	4	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	271	66	39	359	36	36	2	27	21	4	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	395	0	0	337	0	0	791	824	304	774	840	377
Stage 1	-	-	-	-	-	-	352	352	-	455	455	-
Stage 2	-	-	-	-	-	-	439	473	-	320	385	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1164	-	-	1222	-	-	307	308	736	315	302	670
Stage 1	-	-	-	-	-	-	665	632	-	585	569	-
Stage 2	-	-	-	-	-	-	597	558	-	692	611	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1164	-	-	1222	-	-	271	288	736	282	282	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	271	288	-	282	282	-
Stage 1	-	-	-	-	-	-	648	616	-	561	545	-
Stage 2	-	-	-	-	-	-	543	535	-	647	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.54	0.73	16.86	15.12
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	369	115	-	-	160	-	-	410
HCM Lane V/C Ratio	0.177	0.021	-	-	0.032	-	-	0.133
HCM Control Delay (s/veh)	16.9	8.2	0	-	8	0	-	15.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.1	-	-	0.5

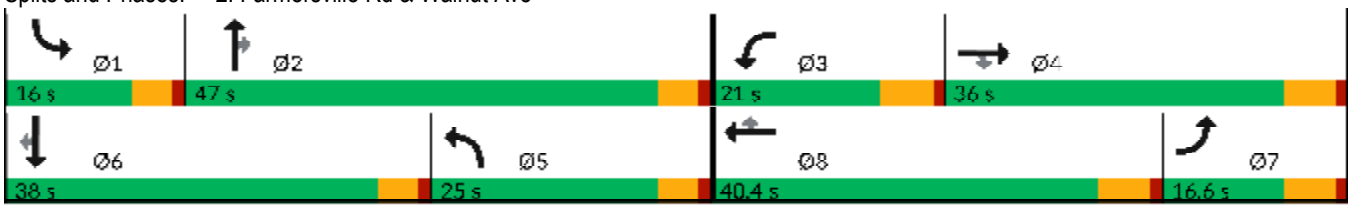


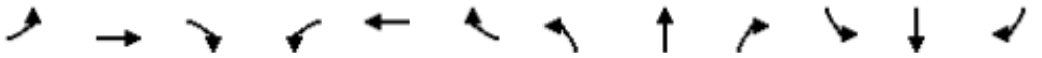
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	118	129	116	154	75	164	230	67	68	282	99
Future Volume (vph)	63	118	129	116	154	75	164	230	67	68	282	99
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1430	1630	1863	1411	1630	1863	1413	1630	1863	1412
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			170			170
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	128	140	126	167	82	178	250	73	74	307	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	128	140	126	167	82	178	250	73	74	307	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	16.6	36.0	36.0	21.0	40.4	40.4	25.0	47.0	47.0	16.0	38.0	38.0
Total Split (%)	13.8%	30.0%	30.0%	17.5%	33.7%	33.7%	20.8%	39.2%	39.2%	13.3%	31.7%	31.7%
Maximum Green (s)	10.9	30.3	30.3	15.3	34.7	34.7	20.4	42.4	42.4	11.4	33.4	33.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	10.5	14.1	14.1	12.2	18.7	18.7	17.0	44.5	44.5	9.3	34.0	34.0
Actuated g/C Ratio	0.11	0.14	0.14	0.12	0.19	0.19	0.17	0.45	0.45	0.09	0.35	0.35
v/c Ratio	0.39	0.48	0.42	0.63	0.47	0.21	0.63	0.30	0.10	0.48	0.48	0.18
Control Delay (s/veh)	50.7	45.4	9.2	57.8	42.6	1.2	50.5	22.1	0.3	56.9	31.5	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.7	45.4	9.2	57.8	42.6	1.2	50.5	22.1	0.3	56.9	31.5	1.3
LOS	D	D	A	E	D	A	D	C	A	E	C	A
Approach Delay (s/veh)		31.4			38.7			29.0			28.7	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 98.4			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 31.5		Intersection LOS: C	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

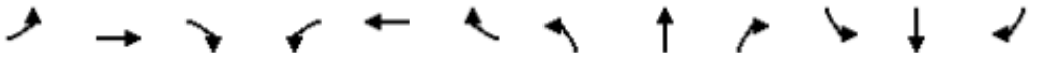




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	118	129	116	154	75	164	230	67	68	282	99
Future Volume (veh/h)	63	118	129	116	154	75	164	230	67	68	282	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	68	128	140	126	167	82	178	250	73	74	307	108
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	238	181	157	268	200	262	907	689	93	714	542
Arrive On Green	0.08	0.13	0.13	0.10	0.14	0.14	0.16	0.48	0.48	0.06	0.38	0.38
Sat Flow, veh/h	1641	1870	1421	1641	1870	1398	1641	1870	1421	1641	1870	1419
Grp Volume(v), veh/h	68	128	140	126	167	82	178	250	73	74	307	108
Grp Sat Flow(s),veh/h/ln	1641	1870	1421	1641	1870	1398	1641	1870	1421	1641	1870	1419
Q Serve(g_s), s	3.5	5.6	5.7	6.6	7.3	3.7	8.9	7.0	2.4	3.9	10.6	4.5
Cycle Q Clear(g_c), s	3.5	5.6	5.7	6.6	7.3	3.7	8.9	7.0	2.4	3.9	10.6	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	238	181	157	268	200	262	907	689	93	714	542
V/C Ratio(X)	0.52	0.54	0.77	0.80	0.62	0.41	0.68	0.28	0.11	0.79	0.43	0.20
Avail Cap(c_a), veh/h	204	648	492	287	742	555	383	907	689	214	714	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	35.7	17.2	38.8	35.2	21.6	34.6	13.4	12.2	40.7	20.0	18.1
Incr Delay (d2), s/veh	3.2	1.9	6.9	9.3	2.4	1.3	3.1	0.8	0.3	13.9	1.9	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.5	2.9	2.9	3.3	1.5	3.5	2.6	0.7	1.8	4.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.9	37.6	24.1	48.0	37.6	23.0	37.7	14.2	12.5	54.6	21.9	18.9
LnGrp LOS	D	D	C	D	D	C	D	B	B	D	C	B
Approach Vol, veh/h		336			375			501			489	
Approach Delay, s/veh		32.8			37.9			22.3			26.2	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	47.0	14.0	16.8	18.6	38.0	12.7	18.2
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	11.4	42.4	15.3	30.3	20.4	33.4	10.9	34.7
Max Q Clear Time (g_c+I1), s	5.9	9.0	8.6	7.7	10.9	12.6	5.5	9.3
Green Ext Time (p_c), s	0.1	1.1	0.2	0.9	0.4	1.4	0.1	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	6	4	16	5	98	385	0	21	0	0	0
Future Volume (vph)	80	6	4	16	5	98	385	0	21	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994				0.850		0.992				
Flt Protected		0.957			0.963			0.955				
Satd. Flow (prot)	0	1772	0	0	1794	1458	0	3353	0	0	3539	0
Flt Permitted		0.957			0.963			0.955				
Satd. Flow (perm)	0	1772	0	0	1794	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	7	4	17	5	107	418	0	23	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	98	0	0	22	107	0	441	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

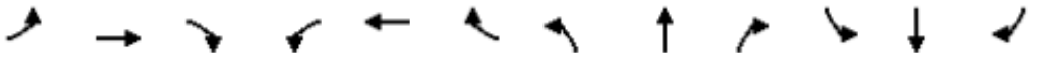
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	6	4	16	5	98	385	0	21	0	0	0
Future Vol, veh/h	80	6	4	16	5	98	385	0	21	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	7	4	17	5	107	418	0	23	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	10.5	9.1	18	0
HCM LOS	B	A	C	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	76%	0%	0%	0%
Vol Thru, %	0%	0%	7%	24%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	385	21	90	21	98	0	0
LT Vol	385	0	80	16	0	0	0
Through Vol	0	0	6	5	0	0	0
RT Vol	0	21	4	0	98	0	0
Lane Flow Rate	418	23	98	23	107	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.656	0.028	0.167	0.04	0.155	0	0
Departure Headway (Hd)	5.642	4.438	6.14	6.338	5.244	5.762	4.006
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	636	800	581	562	679	0	0
Service Time	3.409	2.204	4.215	4.108	3.014	3.462	1.706
HCM Lane V/C Ratio	0.657	0.029	0.169	0.041	0.158	0	0
HCM Control Delay, s/veh	18.6	7.3	10.5	9.4	9	8.5	6.7
HCM Lane LOS	C	A	B	A	A	N	N
HCM 95th-tile Q	4.9	0.1	0.6	0.1	0.5	0	0

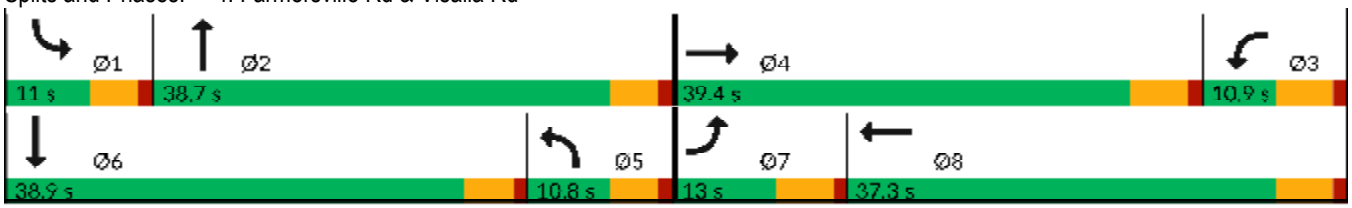


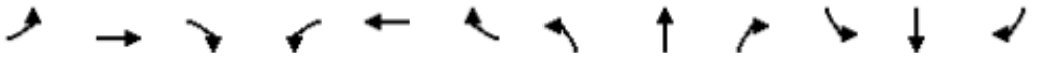
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	274	50	49	235	76	50	131	46	75	141	88
Future Volume (vph)	90	274	50	49	235	76	50	131	46	75	141	88
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.977			0.963			0.961			0.942	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3393	0	1630	3386	0	1630	3311	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3393	0	1630	3386	0	1630	3311	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			46			50			96	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	298	54	53	255	83	54	142	50	82	153	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	352	0	53	338	0	54	192	0	82	249	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	39.4		10.9	37.3		10.8	38.7		11.0	38.9	
Total Split (%)	13.0%	39.4%		10.9%	37.3%		10.8%	38.7%		11.0%	38.9%	
Maximum Green (s)	7.7	34.1		5.6	32.0		6.2	34.1		6.4	34.3	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.7	18.1		6.9	14.9		6.1	34.4		6.5	36.9	
Actuated g/C Ratio	0.09	0.22		0.08	0.18		0.07	0.41		0.08	0.44	
v/c Ratio	0.65	0.46		0.40	0.53		0.45	0.13		0.65	0.16	
Control Delay (s/veh)	60.4	28.9		47.9	29.0		52.6	12.9		65.1	10.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	60.4	28.9		47.9	29.0		52.6	12.9		65.1	10.8	
LOS	E	C		D	C		D	B		E	B	
Approach Delay (s/veh)		35.8			31.5			21.7			24.2	
Approach LOS		D			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 83.4			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 29.5		Intersection LOS: C	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	274	50	49	235	76	50	131	46	75	141	88
Future Volume (veh/h)	90	274	50	49	235	76	50	131	46	75	141	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	98	298	54	53	255	83	54	142	50	82	153	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	492	88	120	428	136	98	1151	389	102	953	561
Arrive On Green	0.07	0.16	0.16	0.07	0.16	0.16	0.06	0.44	0.44	0.06	0.45	0.45
Sat Flow, veh/h	1641	3000	536	1641	2637	835	1641	2596	876	1641	2138	1258
Grp Volume(v), veh/h	98	175	177	53	170	168	54	95	97	82	125	124
Grp Sat Flow(s),veh/h/ln	1641	1777	1759	1641	1777	1696	1641	1777	1695	1641	1777	1619
Q Serve(g_s), s	4.5	7.0	7.2	2.4	6.8	7.1	2.5	2.4	2.6	3.8	3.2	3.5
Cycle Q Clear(g_c), s	4.5	7.0	7.2	2.4	6.8	7.1	2.5	2.4	2.6	3.8	3.2	3.5
Prop In Lane	1.00		0.30	1.00		0.49	1.00		0.52	1.00		0.78
Lane Grp Cap(c), veh/h	122	291	288	120	288	275	98	788	752	102	792	722
V/C Ratio(X)	0.80	0.60	0.61	0.44	0.59	0.61	0.55	0.12	0.13	0.80	0.16	0.17
Avail Cap(c_a), veh/h	164	788	780	120	739	706	132	788	752	137	792	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	29.8	29.9	34.2	29.8	30.0	35.2	12.6	12.6	35.6	12.7	12.8
Incr Delay (d2), s/veh	18.0	2.0	2.1	2.6	1.9	2.2	4.7	0.3	0.4	21.4	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.8	2.9	1.0	2.8	2.8	1.0	0.9	0.9	2.0	1.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.1	31.8	32.0	36.7	31.7	32.2	39.9	12.9	13.0	57.0	13.1	13.3
LnGrp LOS	D	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		450			391			246			331	
Approach Delay, s/veh		36.5			32.6			18.9			24.1	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	38.7	10.9	17.9	9.2	38.9	11.0	17.8
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	6.4	34.1	5.6	34.1	6.2	34.3	7.7	32.0
Max Q Clear Time (g_c+I1), s	5.8	4.6	4.4	9.2	4.5	5.5	6.5	9.1
Green Ext Time (p_c), s	0.0	0.6	0.0	1.2	0.0	0.9	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	298	3	59	331	2	34
Future Volume (vph)	298	3	59	331	2	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.872	
Flt Protected				0.993	0.997	
Satd. Flow (prot)	1861	0	0	1850	1619	0
Flt Permitted				0.993	0.997	
Satd. Flow (perm)	1861	0	0	1850	1619	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	324	3	64	360	2	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	327	0	0	424	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.9%		ICU Level of Service A	
Analysis Period (min) 15			

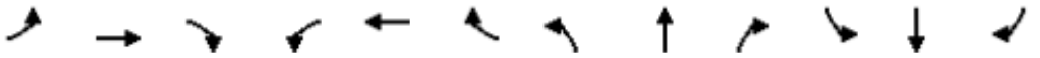
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	298	3	59	331	2	34
Future Vol, veh/h	298	3	59	331	2	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	324	3	64	360	2	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	327	0	814	326
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1232	-	348	716
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1232	-	325	716
Mov Cap-2 Maneuver	-	-	-	-	325	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	577	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.22	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	671	-	-	272	-
HCM Lane V/C Ratio	0.058	-	-	0.052	-
HCM Control Delay (s/veh)	10.7	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	259	64	38	319	35	34	2	26	19	4	28
Future Volume (vph)	23	259	64	38	319	35	34	2	26	19	4	28
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.988			0.944			0.926	
Flt Protected		0.997			0.995			0.973			0.981	
Satd. Flow (prot)	0	1811	0	0	1831	0	0	1711	0	0	1692	0
Flt Permitted		0.997			0.995			0.973			0.981	
Satd. Flow (perm)	0	1811	0	0	1831	0	0	1711	0	0	1692	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		871			1276			1214			251	
Travel Time (s)		10.8			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	282	70	41	347	38	37	2	28	21	4	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	377	0	0	426	0	0	67	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.5%		ICU Level of Service A	
Analysis Period (min) 15			

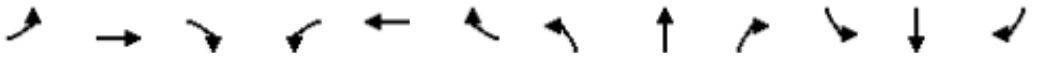
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	23	259	64	38	319	35	34	2	26	19	4	28
Future Vol, veh/h	23	259	64	38	319	35	34	2	26	19	4	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	282	70	41	347	38	37	2	28	21	4	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	385	0	0	351	0	0	798	834	316	781	849	366
Stage 1	-	-	-	-	-	-	366	366	-	448	448	-
Stage 2	-	-	-	-	-	-	432	467	-	333	401	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1174	-	-	1208	-	-	304	304	724	312	298	679
Stage 1	-	-	-	-	-	-	653	622	-	590	573	-
Stage 2	-	-	-	-	-	-	602	562	-	681	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1174	-	-	1208	-	-	266	283	724	277	277	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	266	283	-	277	277	-
Stage 1	-	-	-	-	-	-	636	606	-	564	548	-
Stage 2	-	-	-	-	-	-	546	537	-	635	585	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.54	0.78	17.15	15.13
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	363	115	-	-	171	-	-	411
HCM Lane V/C Ratio	0.185	0.021	-	-	0.034	-	-	0.135
HCM Control Delay (s/veh)	17.1	8.1	0	-	8.1	0	-	15.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	0.5

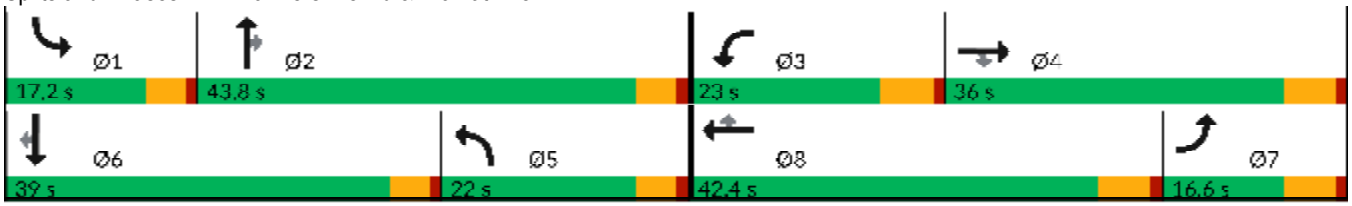


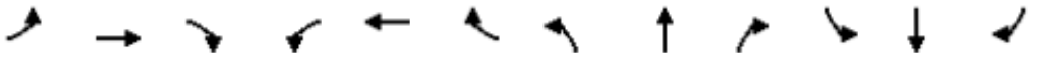
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	132	129	146	172	79	138	267	83	70	325	92
Future Volume (vph)	62	132	129	146	172	79	138	267	83	70	325	92
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1430	1630	1863	1412	1630	1863	1412	1630	1863	1412
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			170			170
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	143	140	159	187	86	150	290	90	76	353	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	143	140	159	187	86	150	290	90	76	353	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	16.6	36.0	36.0	23.0	42.4	42.4	22.0	43.8	43.8	17.2	39.0	39.0
Total Split (%)	13.8%	30.0%	30.0%	19.2%	35.3%	35.3%	18.3%	36.5%	36.5%	14.3%	32.5%	32.5%
Maximum Green (s)	10.9	30.3	30.3	17.3	36.7	36.7	17.4	39.2	39.2	12.6	34.4	34.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	11.9	14.8	14.8	14.1	19.8	19.8	14.0	42.1	42.1	9.6	35.0	35.0
Actuated g/C Ratio	0.12	0.15	0.15	0.14	0.20	0.20	0.14	0.43	0.43	0.10	0.35	0.35
v/c Ratio	0.34	0.51	0.41	0.69	0.50	0.21	0.65	0.37	0.13	0.48	0.54	0.16
Control Delay (s/veh)	47.2	45.9	8.9	58.2	42.6	1.3	56.1	25.1	0.4	56.0	32.2	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.2	45.9	8.9	58.2	42.6	1.3	56.1	25.1	0.4	56.0	32.2	0.6
LOS	D	D	A	E	D	A	E	C	A	E	C	A
Approach Delay (s/veh)		31.3			40.1			29.7			29.6	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 98.9			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 32.4		Intersection LOS: C	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

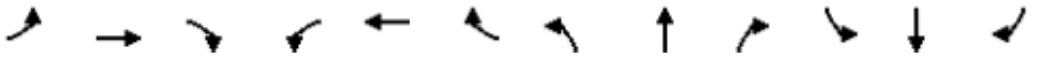




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	132	129	146	172	79	138	267	83	70	325	92
Future Volume (veh/h)	62	132	129	146	172	79	138	267	83	70	325	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	67	143	140	159	187	86	150	290	90	76	353	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	251	191	194	287	215	187	845	642	96	742	563
Arrive On Green	0.10	0.13	0.13	0.12	0.15	0.15	0.11	0.45	0.45	0.06	0.40	0.40
Sat Flow, veh/h	1641	1870	1422	1641	1870	1400	1641	1870	1420	1641	1870	1419
Grp Volume(v), veh/h	67	143	140	159	187	86	150	290	90	76	353	100
Grp Sat Flow(s),veh/h/ln	1641	1870	1422	1641	1870	1400	1641	1870	1420	1641	1870	1419
Q Serve(g_s), s	3.3	6.2	6.0	8.2	8.2	3.8	7.7	8.7	3.2	4.0	12.2	4.0
Cycle Q Clear(g_c), s	3.3	6.2	6.0	8.2	8.2	3.8	7.7	8.7	3.2	4.0	12.2	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	251	191	194	287	215	187	845	642	96	742	563
V/C Ratio(X)	0.41	0.57	0.73	0.82	0.65	0.40	0.80	0.34	0.14	0.79	0.48	0.18
Avail Cap(c_a), veh/h	206	653	497	327	791	593	329	845	642	238	742	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	35.2	19.3	37.4	34.5	20.7	37.5	15.4	13.9	40.3	19.5	17.0
Incr Delay (d2), s/veh	1.7	2.0	5.4	8.4	2.5	1.2	7.8	1.1	0.5	13.4	2.2	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	2.8	3.5	3.6	1.5	3.3	3.4	1.0	1.8	5.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	37.3	24.7	45.7	37.0	21.9	45.3	16.5	14.4	53.7	21.6	17.7
LnGrp LOS	D	D	C	D	D	C	D	B	B	D	C	B
Approach Vol, veh/h		350			432			530			529	
Approach Delay, s/veh		32.5			37.2			24.3			25.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	43.8	15.9	17.3	14.5	39.0	14.2	19.0
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	12.6	39.2	17.3	30.3	17.4	34.4	10.9	36.7
Max Q Clear Time (g_c+I1), s	6.0	10.7	10.2	8.2	9.7	14.2	5.3	10.2
Green Ext Time (p_c), s	0.1	1.3	0.3	1.0	0.2	1.6	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.2
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	6	4	21	5	104	430	0	26	0	0	0
Future Volume (vph)	82	6	4	21	5	104	430	0	26	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.992				
Flt Protected		0.957			0.961			0.955				
Satd. Flow (prot)	0	1774	0	0	1790	1458	0	3353	0	0	3539	0
Flt Permitted		0.957			0.961			0.955				
Satd. Flow (perm)	0	1774	0	0	1790	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	7	4	23	5	113	467	0	28	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	28	113	0	495	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

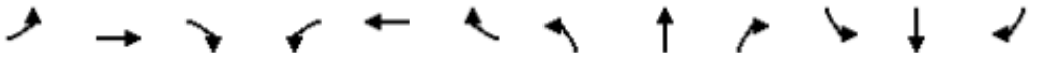
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	18.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	6	4	21	5	104	430	0	26	0	0	0
Future Vol, veh/h	82	6	4	21	5	104	430	0	26	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	89	7	4	23	5	113	467	0	28	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	10.8	9.4	22.1	0
HCM LOS	B	A	C	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	81%	0%	0%	0%
Vol Thru, %	0%	0%	7%	19%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	430	26	92	26	104	0	0
LT Vol	430	0	82	21	0	0	0
Through Vol	0	0	6	5	0	0	0
RT Vol	0	26	4	0	104	0	0
Lane Flow Rate	467	28	100	28	113	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.739	0.035	0.175	0.051	0.17	0	0
Departure Headway (Hd)	5.69	4.485	6.318	6.529	5.41	5.911	4.153
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	631	789	563	544	657	0	0
Service Time	3.468	2.263	4.414	4.318	3.199	3.611	1.853
HCM Lane V/C Ratio	0.74	0.035	0.178	0.051	0.172	0	0
HCM Control Delay, s/veh	23	7.4	10.8	9.7	9.3	8.6	6.9
HCM Lane LOS	C	A	B	A	A	N	N
HCM 95th-tile Q	6.5	0.1	0.6	0.2	0.6	0	0

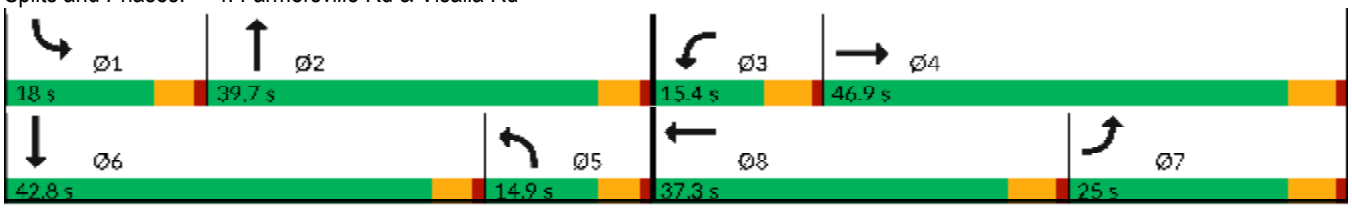


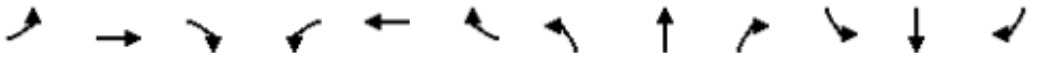
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	301	53	52	266	77	54	122	49	78	141	167
Future Volume (vph)	134	301	53	52	266	77	54	122	49	78	141	167
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.977			0.966			0.957			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3404	0	1630	3369	0	1630	3220	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3404	0	1630	3369	0	1630	3220	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			31			50			182	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	146	327	58	57	289	84	59	133	53	85	153	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	146	385	0	57	373	0	59	186	0	85	335	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	25.0	46.9		15.4	37.3		14.9	39.7		18.0	42.8	
Total Split (%)	20.8%	39.1%		12.8%	31.1%		12.4%	33.1%		15.0%	35.7%	
Maximum Green (s)	19.7	41.6		10.1	32.0		10.3	35.1		13.4	38.2	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	13.7	25.0		8.4	16.8		8.5	37.9		10.1	39.3	
Actuated g/C Ratio	0.14	0.26		0.09	0.18		0.09	0.40		0.11	0.41	
v/c Ratio	0.63	0.42		0.40	0.60		0.41	0.14		0.50	0.23	
Control Delay (s/veh)	53.9	30.8		54.9	38.1		54.9	17.6		55.0	11.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	53.9	30.8		54.9	38.1		54.9	17.6		55.0	11.0	
LOS	D	C		D	D		D	B		D	B	
Approach Delay (s/veh)		37.1			40.3			26.6			19.9	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 95.9			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 31.9		Intersection LOS: C	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

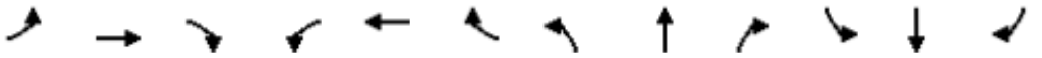




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	301	53	52	266	77	54	122	49	78	141	167
Future Volume (veh/h)	134	301	53	52	266	77	54	122	49	78	141	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	146	327	58	57	289	84	59	133	53	85	153	182
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	703	123	71	452	128	74	1068	406	108	794	697
Arrive On Green	0.11	0.23	0.23	0.04	0.17	0.17	0.04	0.43	0.43	0.07	0.45	0.45
Sat Flow, veh/h	1641	3012	528	1641	2714	772	1641	2506	951	1641	1777	1559
Grp Volume(v), veh/h	146	191	194	57	187	186	59	92	94	85	153	182
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1710	1641	1777	1680	1641	1777	1559
Q Serve(g_s), s	7.4	7.9	8.1	2.9	8.4	8.7	3.0	2.7	2.9	4.4	4.5	6.2
Cycle Q Clear(g_c), s	7.4	7.9	8.1	2.9	8.4	8.7	3.0	2.7	2.9	4.4	4.5	6.2
Prop In Lane	1.00		0.30	1.00		0.45	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	181	415	411	71	296	284	74	757	716	108	794	697
V/C Ratio(X)	0.81	0.46	0.47	0.80	0.63	0.65	0.80	0.12	0.13	0.79	0.19	0.26
Avail Cap(c_a), veh/h	378	865	858	194	665	640	198	757	716	257	794	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	28.2	28.2	40.5	33.2	33.3	40.4	14.8	14.9	39.4	14.3	14.8
Incr Delay (d2), s/veh	8.3	0.8	0.8	18.5	2.2	2.5	17.8	0.3	0.4	12.1	0.5	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	3.1	3.2	1.5	3.5	3.5	1.5	1.0	1.0	2.0	1.6	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.4	29.0	29.1	59.0	35.4	35.9	58.2	15.2	15.3	51.4	14.8	15.7
LnGrp LOS	D	C	C	E	D	D	E	B	B	D	B	B
Approach Vol, veh/h		531			430			245			420	
Approach Delay, s/veh		33.5			38.7			25.6			22.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	41.0	9.0	25.2	8.4	42.8	14.7	19.5
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	13.4	35.1	10.1	41.6	10.3	38.2	19.7	32.0
Max Q Clear Time (g_c+I1), s	6.4	4.9	4.9	10.1	5.0	8.2	9.4	10.7
Green Ext Time (p_c), s	0.1	0.6	0.0	1.3	0.0	1.2	0.3	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	293	64	38	378	35	34	2	26	19	4	28
Future Volume (vph)	23	293	64	38	378	35	34	2	26	19	4	28
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.990			0.944			0.926	
Flt Protected		0.997			0.996			0.973			0.981	
Satd. Flow (prot)	0	1814	0	0	1837	0	0	1711	0	0	1692	0
Flt Permitted		0.997			0.996			0.973			0.981	
Satd. Flow (perm)	0	1814	0	0	1837	0	0	1711	0	0	1692	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	318	70	41	411	38	37	2	28	21	4	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	413	0	0	490	0	0	67	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.2%		ICU Level of Service A	
Analysis Period (min) 15			

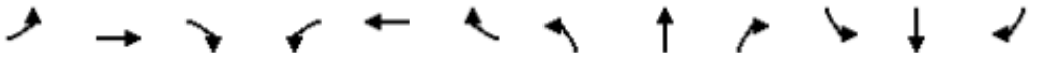
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	23	293	64	38	378	35	34	2	26	19	4	28
Future Vol, veh/h	23	293	64	38	378	35	34	2	26	19	4	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	318	70	41	411	38	37	2	28	21	4	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	449	0	0	388	0	0	899	935	353	882	951	430
Stage 1	-	-	-	-	-	-	403	403	-	513	513	-
Stage 2	-	-	-	-	-	-	496	532	-	370	438	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1111	-	-	1170	-	-	260	266	690	267	260	625
Stage 1	-	-	-	-	-	-	624	600	-	544	536	-
Stage 2	-	-	-	-	-	-	556	526	-	650	579	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1111	-	-	1170	-	-	225	246	690	235	240	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	225	246	-	235	240	-
Stage 1	-	-	-	-	-	-	606	582	-	519	511	-
Stage 2	-	-	-	-	-	-	500	501	-	604	562	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.5	0.69	19.53	16.88
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	315	105	-	-	149	-	-	358
HCM Lane V/C Ratio	0.214	0.022	-	-	0.035	-	-	0.155
HCM Control Delay (s/veh)	19.5	8.3	0	-	8.2	0	-	16.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.1	-	-	0.5

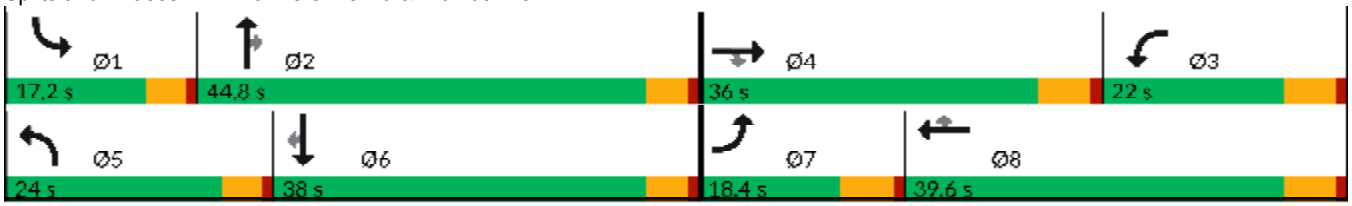


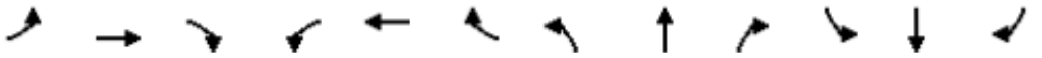
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	134	152	146	175	79	178	267	83	70	325	108
Future Volume (vph)	71	134	152	146	175	79	178	267	83	70	325	108
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1430	1630	1863	1411	1630	1863	1413	1630	1863	1412
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			170			212
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	146	165	159	190	86	193	290	90	76	353	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	77	146	165	159	190	86	193	290	90	76	353	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	18.4	36.0	36.0	22.0	39.6	39.6	24.0	44.8	44.8	17.2	38.0	38.0
Total Split (%)	15.3%	30.0%	30.0%	18.3%	33.0%	33.0%	20.0%	37.3%	37.3%	14.3%	31.7%	31.7%
Maximum Green (s)	12.7	30.3	30.3	16.3	33.9	33.9	19.4	40.2	40.2	12.6	33.4	33.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	9.7	15.0	15.0	14.0	22.2	22.2	16.2	43.2	43.2	9.7	34.1	34.1
Actuated g/C Ratio	0.10	0.15	0.15	0.14	0.22	0.22	0.16	0.43	0.43	0.10	0.34	0.34
v/c Ratio	0.49	0.53	0.48	0.70	0.46	0.20	0.73	0.36	0.13	0.48	0.56	0.19
Control Delay (s/veh)	56.8	46.6	13.0	60.2	39.6	1.1	58.8	24.6	0.4	56.7	33.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.8	46.6	13.0	60.2	39.6	1.1	58.8	24.6	0.4	56.7	33.9	0.7
LOS	E	D	B	E	D	A	E	C	A	E	C	A
Approach Delay (s/veh)		34.3			39.5			32.3			30.0	
Approach LOS		C			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 100.2			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 33.7		Intersection LOS: C	
Intersection Capacity Utilization 73.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

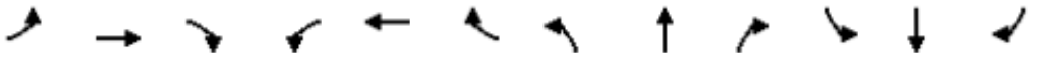




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	134	152	146	175	79	178	267	83	70	325	108
Future Volume (veh/h)	71	134	152	146	175	79	178	267	83	70	325	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	77	146	165	159	190	86	193	290	90	76	353	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	263	200	192	371	279	229	849	645	96	697	529
Arrive On Green	0.06	0.14	0.14	0.12	0.20	0.20	0.14	0.45	0.45	0.06	0.37	0.37
Sat Flow, veh/h	1641	1870	1423	1641	1870	1407	1641	1870	1420	1641	1870	1418
Grp Volume(v), veh/h	77	146	165	159	190	86	193	290	90	76	353	117
Grp Sat Flow(s),veh/h/ln	1641	1870	1423	1641	1870	1407	1641	1870	1420	1641	1870	1418
Q Serve(g_s), s	4.2	6.5	7.1	8.5	8.1	4.7	10.3	9.0	1.9	4.1	13.1	5.1
Cycle Q Clear(g_c), s	4.2	6.5	7.1	8.5	8.1	4.7	10.3	9.0	1.9	4.1	13.1	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	263	200	192	371	279	229	849	645	96	697	529
V/C Ratio(X)	0.79	0.56	0.83	0.83	0.51	0.31	0.84	0.34	0.14	0.79	0.51	0.22
Avail Cap(c_a), veh/h	233	633	481	298	708	532	355	849	645	231	697	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	35.9	18.5	38.7	32.0	30.7	37.6	15.8	4.7	41.6	21.7	19.2
Incr Delay (d2), s/veh	13.3	1.8	8.3	10.5	1.1	0.6	10.4	1.1	0.5	13.4	2.6	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.9	3.6	3.7	3.5	1.5	4.5	3.6	1.0	1.9	5.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.9	37.7	26.9	49.2	33.1	31.3	48.0	16.9	5.2	55.1	24.3	20.2
LnGrp LOS	D	D	C	D	C	C	D	B	A	E	C	C
Approach Vol, veh/h		388			435			573			546	
Approach Delay, s/veh		36.5			38.6			25.5			27.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	45.3	16.2	18.3	17.1	38.0	11.0	23.5
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	12.6	40.2	16.3	30.3	19.4	33.4	12.7	33.9
Max Q Clear Time (g_c+I1), s	6.1	11.0	10.5	9.1	12.3	15.1	6.2	10.1
Green Ext Time (p_c), s	0.1	1.4	0.2	1.1	0.3	1.6	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	6	4	21	5	104	458	0	26	0	0	0
Future Volume (vph)	85	6	4	21	5	104	458	0	26	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.992				
Flt Protected		0.957			0.961			0.955				
Satd. Flow (prot)	0	1774	0	0	1790	1458	0	3353	0	0	3539	0
Flt Permitted		0.957			0.961			0.955				
Satd. Flow (perm)	0	1774	0	0	1790	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	7	4	23	5	113	498	0	28	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	0	0	28	113	0	526	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

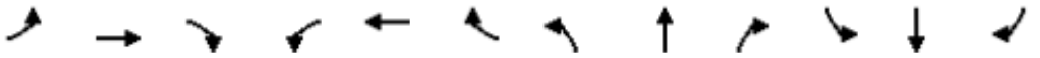
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	6	4	21	5	104	458	0	26	0	0	0
Future Vol, veh/h	85	6	4	21	5	104	458	0	26	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	7	4	23	5	113	498	0	28	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	11	9.6	25.7	0
HCM LOS	B	A	D	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	81%	0%	0%	0%
Vol Thru, %	0%	0%	6%	19%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	458	26	95	26	104	0	0
LT Vol	458	0	85	21	0	0	0
Through Vol	0	0	6	5	0	0	0
RT Vol	0	26	4	0	104	0	0
Lane Flow Rate	498	28	103	28	113	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.789	0.035	0.187	0.053	0.176	0	0
Departure Headway (Hd)	5.708	4.503	6.52	6.734	5.613	5.983	4.223
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	627	783	553	535	643	0	0
Service Time	3.504	2.298	4.524	4.434	3.313	3.7	1.939
HCM Lane V/C Ratio	0.794	0.036	0.186	0.052	0.176	0	0
HCM Control Delay, s/veh	26.7	7.5	11	9.8	9.5	8.7	6.9
HCM Lane LOS	D	A	B	A	A	N	N
HCM 95th-tile Q	7.6	0.1	0.7	0.2	0.6	0	0

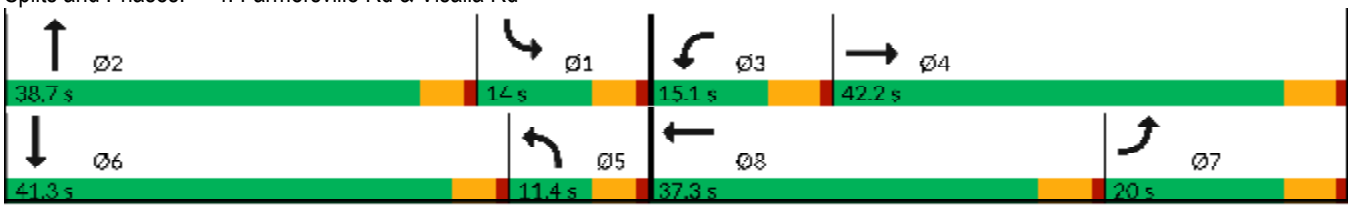


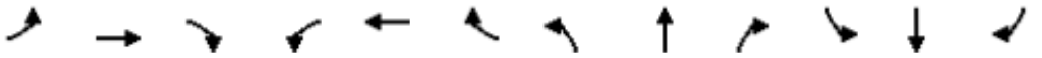
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	301	53	52	266	80	54	140	49	80	151	171
Future Volume (vph)	141	301	53	52	266	80	54	140	49	80	151	171
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.977			0.965			0.961			0.920	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3401	0	1630	3385	0	1630	3225	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3401	0	1630	3385	0	1630	3225	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			36			46			186	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	327	58	57	289	87	59	152	53	87	164	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	153	385	0	57	376	0	59	205	0	87	350	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	20.0	42.2		15.1	37.3		11.4	38.7		14.0	41.3	
Total Split (%)	18.2%	38.4%		13.7%	33.9%		10.4%	35.2%		12.7%	37.5%	
Maximum Green (s)	14.7	36.9		9.8	32.0		6.8	34.1		9.4	36.7	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	12.8	23.8		8.1	16.4		6.7	35.5		8.8	37.5	
Actuated g/C Ratio	0.14	0.26		0.09	0.18		0.07	0.39		0.10	0.41	
v/c Ratio	0.67	0.42		0.39	0.59		0.50	0.15		0.55	0.24	
Control Delay (s/veh)	54.8	29.0		50.8	34.7		59.7	17.2		56.8	10.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	54.8	29.0		50.8	34.7		59.7	17.2		56.8	10.2	
LOS	D	C		D	C		E	B		E	B	
Approach Delay (s/veh)		36.4			36.8			26.7			19.5	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 90.8			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

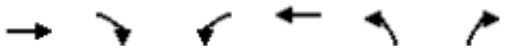




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	301	53	52	266	80	54	140	49	80	151	171
Future Volume (veh/h)	141	301	53	52	266	80	54	140	49	80	151	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	153	327	58	57	289	87	59	152	53	87	164	186
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	720	126	71	453	133	73	1057	354	124	777	682
Arrive On Green	0.11	0.24	0.24	0.04	0.17	0.17	0.04	0.41	0.41	0.08	0.44	0.44
Sat Flow, veh/h	1641	3012	528	1641	2690	792	1641	2602	871	1641	1777	1559
Grp Volume(v), veh/h	153	191	194	57	189	187	59	102	103	87	164	186
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1705	1641	1777	1696	1641	1777	1559
Q Serve(g_s), s	7.6	7.7	7.9	2.9	8.3	8.6	3.0	3.0	3.2	4.3	4.8	6.4
Cycle Q Clear(g_c), s	7.6	7.7	7.9	2.9	8.3	8.6	3.0	3.0	3.2	4.3	4.8	6.4
Prop In Lane	1.00		0.30	1.00		0.46	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	187	425	421	71	299	287	73	722	689	124	777	682
V/C Ratio(X)	0.82	0.45	0.46	0.80	0.63	0.65	0.81	0.14	0.15	0.70	0.21	0.27
Avail Cap(c_a), veh/h	287	781	775	192	678	650	133	722	689	184	777	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	27.2	27.3	39.8	32.5	32.6	39.7	15.7	15.7	37.9	14.6	15.1
Incr Delay (d2), s/veh	10.3	0.7	0.8	18.6	2.2	2.5	18.3	0.4	0.5	7.0	0.6	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.0	3.1	1.4	3.4	3.4	1.5	1.1	1.2	1.9	1.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	28.0	28.1	58.4	34.7	35.1	58.0	16.1	16.2	44.9	15.3	16.1
LnGrp LOS	D	C	C	E	C	D	E	B	B	D	B	B
Approach Vol, veh/h		538			433			264			437	
Approach Delay, s/veh		33.3			38.0			25.5			21.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	38.7	8.9	25.4	8.3	41.3	14.9	19.4
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	9.4	34.1	9.8	36.9	6.8	36.7	14.7	32.0
Max Q Clear Time (g_c+I1), s	6.3	5.2	4.9	9.9	5.0	8.4	9.6	10.6
Green Ext Time (p_c), s	0.1	0.7	0.0	1.3	0.0	1.3	0.2	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	327	3	59	364	2	34
Future Volume (vph)	327	3	59	364	2	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.872	
Flt Protected				0.993	0.997	
Satd. Flow (prot)	1861	0	0	1850	1619	0
Flt Permitted				0.993	0.997	
Satd. Flow (perm)	1861	0	0	1850	1619	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	355	3	64	396	2	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	358	0	0	460	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			

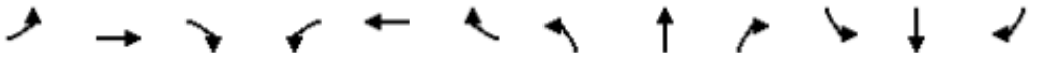
Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	327	3	59	364	2	34
Future Vol, veh/h	327	3	59	364	2	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	355	3	64	396	2	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	359	0	881	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	524	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1200	-	317	687
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1200	-	295	687
Mov Cap-2 Maneuver	-	-	-	-	295	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.14	10.99
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	640	-	-	251	-
HCM Lane V/C Ratio	0.061	-	-	0.053	-
HCM Control Delay (s/veh)	11	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	367	77	46	455	42	36	2	28	21	4	30
Future Volume (vph)	28	367	77	46	455	42	36	2	28	21	4	30
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.978			0.989			0.943			0.926	
Flt Protected		0.997			0.996			0.973			0.981	
Satd. Flow (prot)	0	1816	0	0	1835	0	0	1709	0	0	1692	0
Flt Permitted		0.997			0.996			0.973			0.981	
Satd. Flow (perm)	0	1816	0	0	1835	0	0	1709	0	0	1692	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		871			1276			1214			251	
Travel Time (s)		10.8			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	399	84	50	495	46	39	2	30	23	4	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	513	0	0	591	0	0	71	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.6%		ICU Level of Service A	
Analysis Period (min) 15			

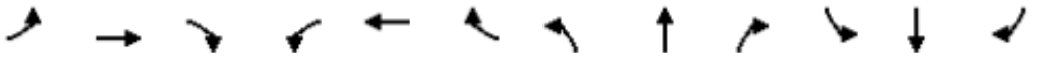
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	28	367	77	46	455	42	36	2	28	21	4	30
Future Vol, veh/h	28	367	77	46	455	42	36	2	28	21	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	399	84	50	495	46	39	2	30	23	4	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	540	0	0	483	0	0	1098	1142	441	1078	1161	517
Stage 1	-	-	-	-	-	-	502	502	-	617	617	-
Stage 2	-	-	-	-	-	-	597	640	-	461	543	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1028	-	-	1080	-	-	190	200	616	196	195	558
Stage 1	-	-	-	-	-	-	552	542	-	477	481	-
Stage 2	-	-	-	-	-	-	490	470	-	581	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1028	-	-	1080	-	-	157	179	616	165	175	558
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	179	-	165	175	-
Stage 1	-	-	-	-	-	-	529	520	-	445	449	-
Stage 2	-	-	-	-	-	-	426	439	-	527	498	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.51	0.72	27.53	22.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	230	103	-	-	150	-	-	270
HCM Lane V/C Ratio	0.311	0.03	-	-	0.046	-	-	0.222
HCM Control Delay (s/veh)	27.5	8.6	0	-	8.5	0	-	22.1
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0.1	-	-	0.1	-	-	0.8

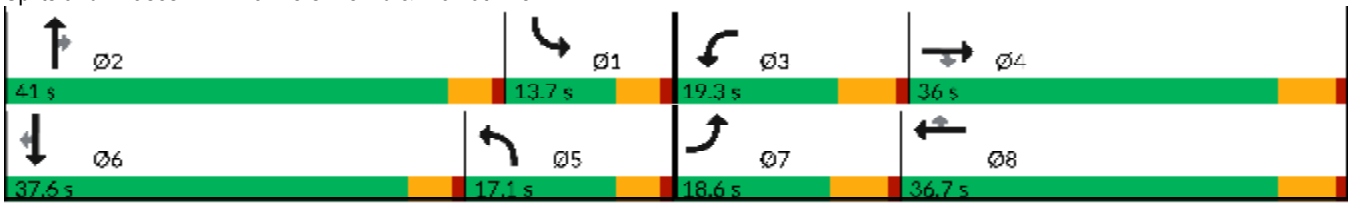


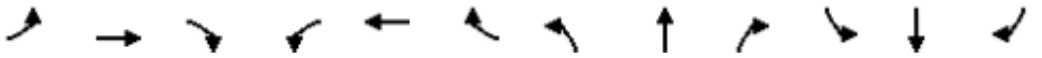
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	195	165	171	248	95	157	351	94	80	365	103
Future Volume (vph)	80	195	165	171	248	95	157	351	94	80	365	103
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1431	1630	1863	1412	1630	1863	1414	1630	1863	1413
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			122			118			129			129
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	212	179	186	270	103	171	382	102	87	397	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	212	179	186	270	103	171	382	102	87	397	112
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	18.6	36.0	36.0	19.3	36.7	36.7	17.1	41.0	41.0	13.7	37.6	37.6
Total Split (%)	16.9%	32.7%	32.7%	17.5%	33.4%	33.4%	15.5%	37.3%	37.3%	12.5%	34.2%	34.2%
Maximum Green (s)	12.9	30.3	30.3	13.6	31.0	31.0	12.5	36.4	36.4	9.1	33.0	33.0
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	10.1	17.9	17.9	13.6	24.1	24.1	12.6	39.6	39.6	8.6	33.2	33.2
Actuated g/C Ratio	0.10	0.18	0.18	0.14	0.25	0.25	0.13	0.40	0.40	0.09	0.34	0.34
v/c Ratio	0.52	0.62	0.50	0.82	0.59	0.24	0.82	0.51	0.16	0.61	0.63	0.20
Control Delay (s/veh)	54.2	44.7	17.1	71.4	39.9	5.8	73.4	27.6	3.1	63.4	34.0	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.2	44.7	17.1	71.4	39.9	5.8	73.4	27.6	3.1	63.4	34.0	4.6
LOS	D	D	B	E	D	A	E	C	A	E	C	A
Approach Delay (s/veh)		36.1			44.1			35.7			32.8	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 97.9			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 37.1		Intersection LOS: D	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

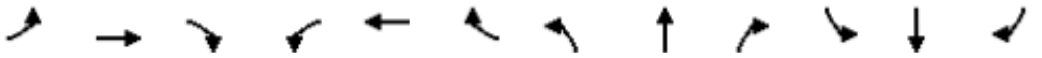




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	195	165	171	248	95	157	351	94	80	365	103
Future Volume (veh/h)	80	195	165	171	248	95	157	351	94	80	365	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	87	212	179	186	270	103	171	382	102	87	397	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	309	236	217	432	326	201	736	559	141	667	506
Arrive On Green	0.07	0.17	0.17	0.13	0.23	0.23	0.12	0.39	0.39	0.09	0.36	0.36
Sat Flow, veh/h	1641	1870	1426	1641	1870	1411	1641	1870	1419	1641	1870	1418
Grp Volume(v), veh/h	87	212	179	186	270	103	171	382	102	87	397	112
Grp Sat Flow(s),veh/h/ln	1641	1870	1426	1641	1870	1411	1641	1870	1419	1641	1870	1418
Q Serve(g_s), s	4.8	9.9	8.0	10.3	12.0	4.2	9.4	14.4	2.6	4.7	16.0	3.7
Cycle Q Clear(g_c), s	4.8	9.9	8.0	10.3	12.0	4.2	9.4	14.4	2.6	4.7	16.0	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	309	236	217	432	326	201	736	559	141	667	506
V/C Ratio(X)	0.79	0.69	0.76	0.86	0.63	0.32	0.85	0.52	0.18	0.62	0.59	0.22
Avail Cap(c_a), veh/h	229	613	467	241	627	473	222	736	559	161	667	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	36.3	19.1	39.3	32.0	16.3	39.7	21.4	6.6	40.8	24.3	10.9
Incr Delay (d2), s/veh	12.0	2.7	5.0	23.4	1.5	0.6	23.9	2.6	0.7	5.5	3.9	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	3.7	5.2	5.1	1.8	4.9	6.1	1.3	2.0	7.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.5	39.0	24.0	62.6	33.5	16.9	63.6	24.0	7.3	46.3	28.2	11.9
LnGrp LOS	D	D	C	E	C	B	E	C	A	D	C	B
Approach Vol, veh/h		478			559			655			596	
Approach Delay, s/veh		36.2			40.1			31.7			27.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	41.0	17.9	21.0	16.0	37.6	11.9	27.0
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	9.1	36.4	13.6	30.3	12.5	33.0	12.9	31.0
Max Q Clear Time (g_c+I1), s	6.7	16.4	12.3	11.9	11.4	18.0	6.8	14.0
Green Ext Time (p_c), s	0.0	1.7	0.1	1.3	0.1	1.7	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	8	5	26	7	134	575	0	34	0	0	0
Future Volume (vph)	104	8	5	26	7	134	575	0	34	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.992				
Flt Protected		0.957			0.963			0.955				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Flt Permitted		0.957			0.963			0.955				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	113	9	5	28	8	146	625	0	37	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	127	0	0	36	146	0	662	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

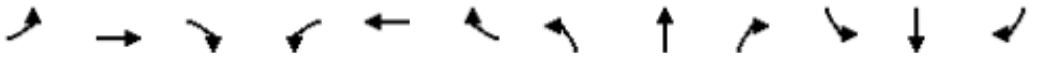
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	52
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	104	8	5	26	7	134	575	0	34	0	0	0
Future Vol, veh/h	104	8	5	26	7	134	575	0	34	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	113	9	5	28	8	146	625	0	37	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	12.4	10.8	70.9	0
HCM LOS	B	B	F	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	79%	0%	0%	0%
Vol Thru, %	0%	0%	7%	21%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	575	34	117	33	134	0	0
LT Vol	575	0	104	26	0	0	0
Through Vol	0	0	8	7	0	0	0
RT Vol	0	34	5	0	134	0	0
Lane Flow Rate	625	37	127	36	146	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	1.05	0.05	0.244	0.071	0.243	0	0
Departure Headway (Hd)	6.049	4.841	7.147	7.344	6.228	6.582	4.81
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	606	744	506	491	580	0	0
Service Time	3.749	2.541	5.147	5.044	3.928	4.282	2.51
HCM Lane V/C Ratio	1.031	0.05	0.251	0.073	0.252	0	0
HCM Control Delay, s/veh	74.6	7.8	12.4	10.6	10.9	9.3	7.5
HCM Lane LOS	F	A	B	B	B	N	N
HCM 95th-tile Q	17.3	0.2	0.9	0.2	0.9	0	0

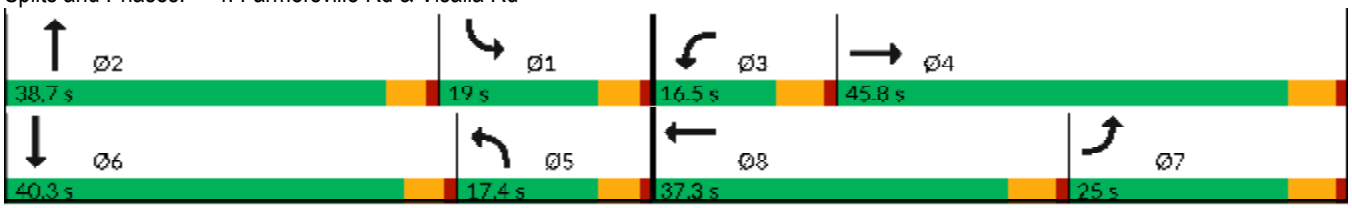


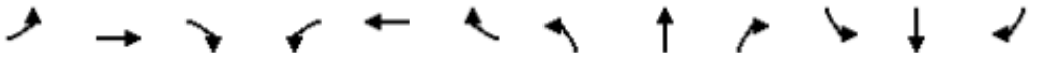
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	379	67	66	334	98	72	162	66	105	188	198
Future Volume (vph)	158	379	67	66	334	98	72	162	66	105	188	198
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.977			0.966			0.956			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3404	0	1630	3365	0	1630	3235	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3404	0	1630	3365	0	1630	3235	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			31			51			215	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	172	412	73	72	363	107	78	176	72	114	204	215
Shared Lane Traffic (%)												
Lane Group Flow (vph)	172	485	0	72	470	0	78	248	0	114	419	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	25.0	45.8		16.5	37.3		17.4	38.7		19.0	40.3	
Total Split (%)	20.8%	38.2%		13.8%	31.1%		14.5%	32.3%		15.8%	33.6%	
Maximum Green (s)	19.7	40.5		11.2	32.0		12.8	34.1		14.4	35.7	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	15.2	28.3		9.2	19.5		10.1	34.6		11.6	38.8	
Actuated g/C Ratio	0.15	0.28		0.09	0.19		0.10	0.34		0.11	0.38	
v/c Ratio	0.70	0.50		0.49	0.69		0.48	0.21		0.61	0.31	
Control Delay (s/veh)	58.5	32.1		58.5	41.2		56.2	21.5		59.5	13.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	58.5	32.1		58.5	41.2		56.2	21.5		59.5	13.3	
LOS	E	C		E	D		E	C		E	B	
Approach Delay (s/veh)		39.0			43.5			29.8			23.2	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.1			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 34.6		Intersection LOS: C	
Intersection Capacity Utilization 75.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

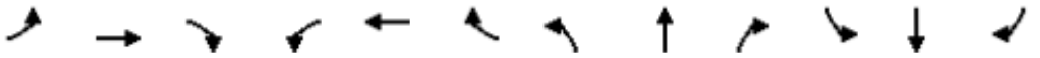




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	379	67	66	334	98	72	162	66	105	188	198
Future Volume (veh/h)	158	379	67	66	334	98	72	162	66	105	188	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	172	412	73	72	363	107	78	176	72	114	204	215
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	786	138	91	513	149	113	937	367	142	703	616
Arrive On Green	0.13	0.26	0.26	0.06	0.19	0.19	0.07	0.38	0.38	0.09	0.40	0.40
Sat Flow, veh/h	1641	3011	529	1641	2701	784	1641	2480	972	1641	1777	1558
Grp Volume(v), veh/h	172	242	243	72	237	233	78	124	124	114	204	215
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1708	1641	1777	1675	1641	1777	1558
Q Serve(g_s), s	9.2	10.5	10.7	3.9	11.2	11.6	4.2	4.2	4.5	6.2	7.1	8.7
Cycle Q Clear(g_c), s	9.2	10.5	10.7	3.9	11.2	11.6	4.2	4.2	4.5	6.2	7.1	8.7
Prop In Lane	1.00		0.30	1.00		0.46	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	207	464	460	91	337	324	113	671	633	142	703	616
V/C Ratio(X)	0.83	0.52	0.53	0.79	0.70	0.72	0.69	0.18	0.20	0.80	0.29	0.35
Avail Cap(c_a), veh/h	358	797	791	204	630	606	233	671	633	262	703	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	28.5	28.6	42.1	34.2	34.3	41.1	18.8	18.9	40.5	18.6	19.1
Incr Delay (d2), s/veh	8.3	0.9	0.9	14.3	2.7	3.0	7.3	0.6	0.7	10.0	1.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.2	4.2	1.8	4.7	4.7	1.8	1.7	1.7	2.7	2.8	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	29.4	29.5	56.4	36.8	37.3	48.3	19.4	19.6	50.4	19.7	20.7
LnGrp LOS	D	C	C	E	D	D	D	B	B	D	B	C
Approach Vol, veh/h		657			542			326			533	
Approach Delay, s/veh		34.0			39.6			26.4			26.7	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	38.7	10.3	28.9	10.8	40.3	16.7	22.4
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	14.4	34.1	11.2	40.5	12.8	35.7	19.7	32.0
Max Q Clear Time (g_c+I1), s	8.2	6.5	5.9	12.7	6.2	10.7	11.2	13.6
Green Ext Time (p_c), s	0.1	0.8	0.1	1.7	0.1	1.5	0.3	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	32.4
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	401	77	46	514	42	36	2	28	21	4	30
Future Volume (vph)	28	401	77	46	514	42	36	2	28	21	4	30
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979			0.991			0.943			0.926	
Flt Protected		0.997			0.996			0.973			0.981	
Satd. Flow (prot)	0	1818	0	0	1839	0	0	1709	0	0	1692	0
Flt Permitted		0.997			0.996			0.973			0.981	
Satd. Flow (perm)	0	1818	0	0	1839	0	0	1709	0	0	1692	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	436	84	50	559	46	39	2	30	23	4	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	550	0	0	655	0	0	71	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	28	401	77	46	514	42	36	2	28	21	4	30
Future Vol, veh/h	28	401	77	46	514	42	36	2	28	21	4	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	436	84	50	559	46	39	2	30	23	4	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	604	0	0	520	0	0	1199	1243	478	1179	1262	582
Stage 1	-	-	-	-	-	-	539	539	-	682	682	-
Stage 2	-	-	-	-	-	-	661	704	-	498	580	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	973	-	-	1047	-	-	162	174	588	167	170	513
Stage 1	-	-	-	-	-	-	527	522	-	440	450	-
Stage 2	-	-	-	-	-	-	452	439	-	554	500	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	973	-	-	1047	-	-	131	155	588	139	151	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	155	-	139	151	-
Stage 1	-	-	-	-	-	-	503	499	-	408	417	-
Stage 2	-	-	-	-	-	-	388	408	-	500	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.49	0.66	33.42	25.73
HCM LOS			D	D

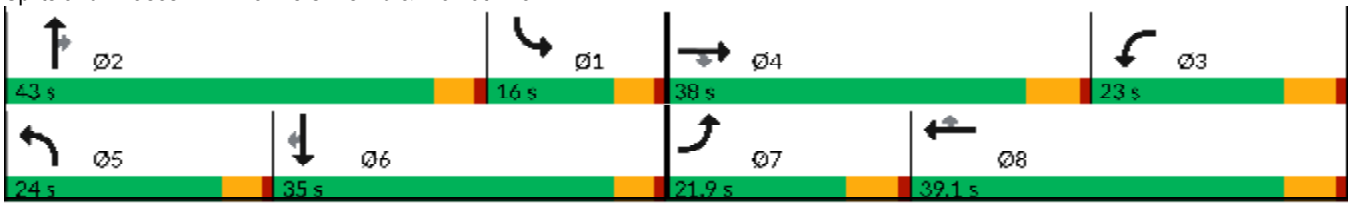
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	197	96	-	-	135	-	-	233
HCM Lane V/C Ratio	0.364	0.031	-	-	0.048	-	-	0.257
HCM Control Delay (s/veh)	33.4	8.8	0	-	8.6	0	-	25.7
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.6	0.1	-	-	0.2	-	-	1

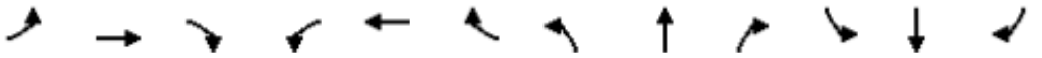
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	197	188	171	251	95	197	351	94	80	365	119
Future Volume (vph)	89	197	188	171	251	95	197	351	94	80	365	119
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1430	1630	1863	1411	1630	1863	1412	1630	1863	1412
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			150			170			170
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	214	204	186	273	103	214	382	102	87	397	129
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	214	204	186	273	103	214	382	102	87	397	129
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	21.9	38.0	38.0	23.0	39.1	39.1	24.0	43.0	43.0	16.0	35.0	35.0
Total Split (%)	18.3%	31.7%	31.7%	19.2%	32.6%	32.6%	20.0%	35.8%	35.8%	13.3%	29.2%	29.2%
Maximum Green (s)	16.2	32.3	32.3	17.3	33.4	33.4	19.4	38.4	38.4	11.4	30.4	30.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	11.4	18.2	18.2	15.6	25.5	25.5	17.5	41.4	41.4	11.1	32.4	32.4
Actuated g/C Ratio	0.11	0.17	0.17	0.15	0.24	0.24	0.17	0.40	0.40	0.11	0.31	0.31
v/c Ratio	0.55	0.66	0.55	0.77	0.60	0.23	0.79	0.52	0.15	0.50	0.69	0.23
Control Delay (s/veh)	57.8	50.7	17.8	65.3	43.4	2.7	64.1	30.7	0.7	57.0	41.3	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.8	50.7	17.8	65.3	43.4	2.7	64.1	30.7	0.7	57.0	41.3	3.0
LOS	E	D	B	E	D	A	E	C	A	E	D	A
Approach Delay (s/veh)		39.0			43.2			36.6			35.4	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 104.5			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 38.4		Intersection LOS: D	
Intersection Capacity Utilization 78.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave





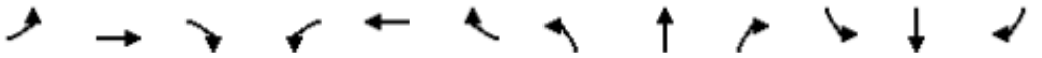
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	197	188	171	251	95	197	351	94	80	365	119
Future Volume (veh/h)	89	197	188	171	251	95	197	351	94	80	365	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	97	214	204	186	273	103	214	382	102	87	397	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	313	238	219	423	319	249	770	584	109	611	463
Arrive On Green	0.07	0.17	0.17	0.13	0.23	0.23	0.15	0.41	0.41	0.07	0.33	0.33
Sat Flow, veh/h	1641	1870	1426	1641	1870	1410	1641	1870	1419	1641	1870	1416
Grp Volume(v), veh/h	97	214	204	186	273	103	214	382	102	87	397	129
Grp Sat Flow(s),veh/h/ln	1641	1870	1426	1641	1870	1410	1641	1870	1419	1641	1870	1416
Q Serve(g_s), s	5.4	10.0	8.9	10.3	12.3	4.4	11.9	14.1	4.2	4.9	16.9	6.3
Cycle Q Clear(g_c), s	5.4	10.0	8.9	10.3	12.3	4.4	11.9	14.1	4.2	4.9	16.9	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	313	238	219	423	319	249	770	584	109	611	463
V/C Ratio(X)	0.79	0.68	0.86	0.85	0.65	0.32	0.86	0.50	0.17	0.80	0.65	0.28
Avail Cap(c_a), veh/h	285	648	494	304	670	505	341	770	584	201	611	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	36.5	17.7	39.5	32.7	17.9	38.6	20.3	17.4	42.9	26.8	23.3
Incr Delay (d2), s/veh	10.9	2.7	8.6	14.7	1.7	0.6	15.0	2.3	0.7	12.2	5.3	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	4.5	4.5	4.8	5.3	1.8	5.5	5.9	1.3	2.2	7.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.3	39.2	26.3	54.2	34.3	18.5	53.6	22.6	18.0	55.1	32.1	24.8
LnGrp LOS	D	D	C	D	C	B	D	C	B	E	C	C
Approach Vol, veh/h		515			562			698			613	
Approach Delay, s/veh		36.8			38.0			31.4			33.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	43.0	18.2	21.3	18.7	35.1	12.7	26.8
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	11.4	38.4	17.3	32.3	19.4	30.4	16.2	33.4
Max Q Clear Time (g_c+I1), s	6.9	16.1	12.3	12.0	13.9	18.9	7.4	14.3
Green Ext Time (p_c), s	0.1	1.7	0.2	1.5	0.3	1.6	0.1	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	8	5	26	7	134	603	0	34	0	0	0
Future Volume (vph)	107	8	5	26	7	134	603	0	34	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.992				
Flt Protected		0.957			0.963			0.955				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Flt Permitted		0.957			0.963			0.955				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	9	5	28	8	146	655	0	37	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	130	0	0	36	146	0	692	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

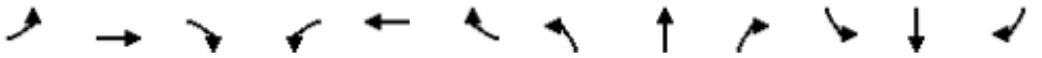
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	63.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	107	8	5	26	7	134	603	0	34	0	0	0
Future Vol, veh/h	107	8	5	26	7	134	603	0	34	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	116	9	5	28	8	146	655	0	37	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	12.6	11	87	0
HCM LOS	B	B	F	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	89%	79%	0%	0%	0%
Vol Thru, %	0%	0%	7%	21%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	603	34	120	33	134	0	0
LT Vol	603	0	107	26	0	0	0
Through Vol	0	0	8	7	0	0	0
RT Vol	0	34	5	0	134	0	0
Lane Flow Rate	655	37	130	36	146	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	1.103	0.05	0.249	0.071	0.243	0	0
Departure Headway (Hd)	6.058	4.85	7.255	7.461	6.343	6.644	4.871
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	743	498	483	569	0	0
Service Time	3.758	2.55	5.255	5.161	4.043	4.344	2.571
HCM Lane V/C Ratio	1.086	0.05	0.261	0.075	0.257	0	0
HCM Control Delay, s/veh	91.5	7.8	12.6	10.7	11.1	9.3	7.6
HCM Lane LOS	F	A	B	B	B	N	N
HCM 95th-tile Q	20	0.2	1	0.2	0.9	0	0

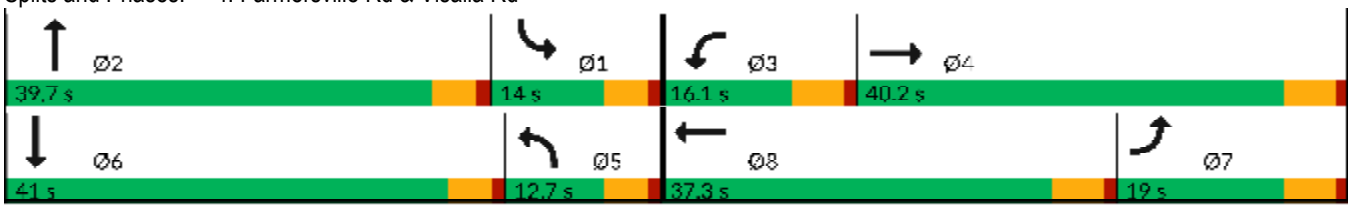


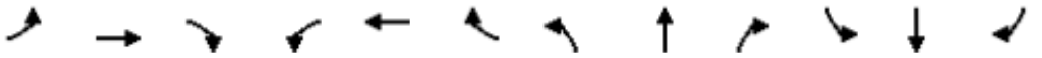
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	379	67	66	334	101	72	180	66	107	198	202
Future Volume (vph)	165	379	67	66	334	101	72	180	66	107	198	202
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.977			0.965			0.960			0.924	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3401	0	1630	3381	0	1630	3240	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3401	0	1630	3381	0	1630	3240	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			37			50			220	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	412	73	72	363	110	78	196	72	116	215	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	485	0	72	473	0	78	268	0	116	435	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	19.0	40.2		16.1	37.3		12.7	39.7		14.0	41.0	
Total Split (%)	17.3%	36.5%		14.6%	33.9%		11.5%	36.1%		12.7%	37.3%	
Maximum Green (s)	13.7	34.9		10.8	32.0		8.1	35.1		9.4	36.4	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	13.4	25.9		9.0	19.0		7.8	35.3		9.3	39.3	
Actuated g/C Ratio	0.14	0.27		0.09	0.20		0.08	0.36		0.10	0.41	
v/c Ratio	0.80	0.52		0.48	0.68		0.60	0.21		0.74	0.30	
Control Delay (s/veh)	67.6	32.0		54.2	38.1		64.6	18.8		72.2	11.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	67.6	32.0		54.2	38.1		64.6	18.8		72.2	11.5	
LOS	E	C		D	D		E	B		E	B	
Approach Delay (s/veh)		41.6			40.2			29.1			24.3	
Approach LOS		D			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 96.9			
Natural Cycle: 105			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 34.6		Intersection LOS: C	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

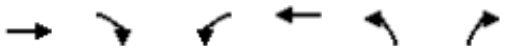




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	379	67	66	334	101	72	180	66	107	198	202
Future Volume (veh/h)	165	379	67	66	334	101	72	180	66	107	198	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	179	412	73	72	363	110	78	196	72	116	215	220
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	791	139	91	509	152	119	974	345	142	701	615
Arrive On Green	0.13	0.26	0.26	0.06	0.19	0.19	0.07	0.38	0.38	0.09	0.39	0.39
Sat Flow, veh/h	1641	3011	529	1641	2682	800	1641	2559	907	1641	1777	1558
Grp Volume(v), veh/h	179	242	243	72	239	234	78	134	134	116	215	220
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1705	1641	1777	1689	1641	1777	1558
Q Serve(g_s), s	9.8	10.7	10.9	4.0	11.6	11.9	4.3	4.7	4.9	6.4	7.7	9.2
Cycle Q Clear(g_c), s	9.8	10.7	10.9	4.0	11.6	11.9	4.3	4.7	4.9	6.4	7.7	9.2
Prop In Lane	1.00		0.30	1.00		0.47	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	210	467	463	91	337	324	119	676	643	142	701	615
V/C Ratio(X)	0.85	0.52	0.53	0.79	0.71	0.72	0.65	0.20	0.21	0.81	0.31	0.36
Avail Cap(c_a), veh/h	244	672	667	192	617	592	144	676	643	167	701	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	29.0	29.1	43.0	35.0	35.1	41.6	19.1	19.2	41.4	19.2	19.7
Incr Delay (d2), s/veh	21.6	0.9	0.9	14.3	2.7	3.1	7.6	0.7	0.7	22.7	1.1	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.3	4.3	1.9	4.9	4.8	1.9	1.8	1.9	3.3	3.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.9	29.9	30.0	57.4	37.7	38.2	49.3	19.8	20.0	64.1	20.4	21.3
LnGrp LOS	E	C	C	E	D	D	D	B	B	E	C	C
Approach Vol, veh/h		664			545			346			551	
Approach Delay, s/veh		38.3			40.5			26.5			29.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	39.7	10.4	29.5	11.3	41.0	17.1	22.8
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	9.4	35.1	10.8	34.9	8.1	36.4	13.7	32.0
Max Q Clear Time (g_c+I1), s	8.4	6.9	6.0	12.9	6.3	11.2	11.8	13.9
Green Ext Time (p_c), s	0.0	0.9	0.1	1.6	0.0	1.6	0.1	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	477	3	59	530	2	34
Future Volume (vph)	477	3	59	530	2	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.872	
Flt Protected				0.995	0.997	
Satd. Flow (prot)	1861	0	0	1853	1619	0
Flt Permitted				0.995	0.997	
Satd. Flow (perm)	1861	0	0	1853	1619	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	518	3	64	576	2	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	521	0	0	640	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

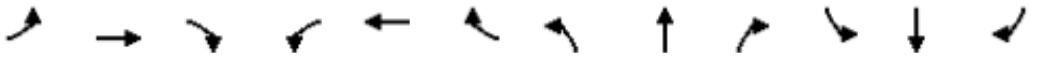
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	477	3	59	530	2	34
Future Vol, veh/h	477	3	59	530	2	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	518	3	64	576	2	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	522	0	1224	520
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	704	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1045	-	198	556
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	490	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1045	-	180	556
Mov Cap-2 Maneuver	-	-	-	-	180	-
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	446	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.87	12.84
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	498	-	-	180	-
HCM Lane V/C Ratio	0.079	-	-	0.061	-
HCM Control Delay (s/veh)	12.8	-	-	8.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

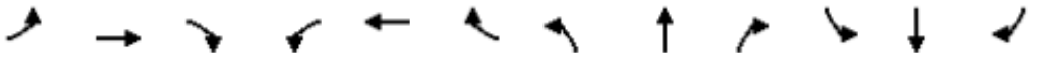


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	401	77	46	514	42	36	2	28	21	4	30
Future Volume (vph)	28	401	77	46	514	42	36	2	28	21	4	30
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979			0.991			0.943			0.926	
Flt Protected		0.997			0.996			0.973			0.981	
Satd. Flow (prot)	0	1818	0	0	1839	0	0	1709	0	0	1692	0
Flt Permitted		0.952			0.935			0.796			0.855	
Satd. Flow (perm)	0	1736	0	0	1726	0	0	1398	0	0	1475	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			9			30			33	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	436	84	50	559	46	39	2	30	23	4	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	550	0	0	655	0	0	71	0	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	64.0	64.0		64.0	64.0		26.0	26.0		26.0	26.0	
Total Split (%)	71.1%	71.1%		71.1%	71.1%		28.9%	28.9%		28.9%	28.9%	
Maximum Green (s)	59.5	59.5		59.5	59.5		21.5	21.5		21.5	21.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		18.2			18.2			7.0			7.0	
Actuated g/C Ratio		0.53			0.53			0.20			0.20	
v/c Ratio		0.60			0.72			0.23			0.18	
Control Delay (s/veh)		8.4			11.3			11.8			10.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		8.4			11.3			11.8			10.5	
LOS		A			B			B			B	
Approach Delay (s/veh)		8.4			11.3			11.8			10.5	
Approach LOS		A			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 34.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 10.1		Intersection LOS: B	
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

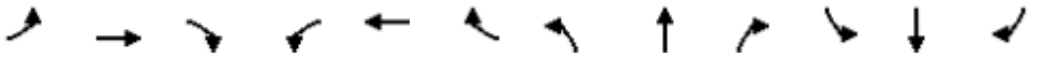
Splits and Phases: 1: Ventura Ave & Walnut Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	401	77	46	514	42	36	2	28	21	4	30
Future Volume (veh/h)	28	401	77	46	514	42	36	2	28	21	4	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	30	436	84	50	559	46	39	2	30	23	4	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	711	132	186	768	61	325	34	101	265	43	136
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	41	1462	271	68	1580	124	660	218	642	429	274	859
Grp Volume(v), veh/h	550	0	0	655	0	0	71	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	0	1772	0	0	1520	0	0	1562	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	7.3	0.0	0.0	0.9	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.05		0.15	0.08		0.07	0.55		0.42	0.38		0.55
Lane Grp Cap(c), veh/h	1013	0	0	1015	0	0	461	0	0	444	0	0
V/C Ratio(X)	0.54	0.00	0.00	0.65	0.00	0.00	0.15	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	4189	0	0	4191	0	0	1474	0	0	1490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	0.0	5.2	0.0	0.0	9.4	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.2	0.0	0.0	5.9	0.0	0.0	9.5	0.0	0.0	9.4	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h		550			655			71			60	
Approach Delay, s/veh		5.2			5.9			9.5			9.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.5		16.8		8.5		16.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		21.5		59.5		21.5		59.5				
Max Q Clear Time (g_c+I1), s		2.9		7.6		2.8		9.3				
Green Ext Time (p_c), s		0.2		2.4		0.1		3.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A

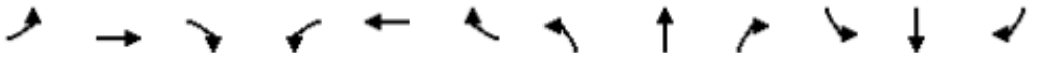


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	8	5	26	7	134	603	0	34	0	0	0
Future Volume (vph)	107	8	5	26	7	134	603	0	34	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.992				
Flt Protected		0.957			0.963			0.955				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3353	0	0	3539	0
Flt Permitted		0.723			0.801			0.732				
Satd. Flow (perm)	0	1340	0	0	1492	1458	0	2570	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				146		18				
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	116	9	5	28	8	146	655	0	37	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	130	0	0	36	146	0	692	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	32.0	32.0		32.0	32.0	32.0	58.0	58.0		58.0	58.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	35.6%	35.6%		35.6%	35.6%	35.6%	64.4%	64.4%		64.4%	64.4%	
Maximum Green (s)	27.5	27.5		27.5	27.5	27.5	53.5	53.5		53.5	53.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.5			4.5	4.5		4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	C-Min	C-Min		C-Min	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)		13.9			13.9	13.9		67.1				
Actuated g/C Ratio		0.15			0.15	0.15		0.75				
v/c Ratio		0.63			0.16	0.42		0.36				
Control Delay (s/veh)		47.6			32.3	9.4		5.0				
Queue Delay		0.0			0.0	0.0		0.0				
Total Delay (s/veh)		47.6			32.3	9.4		5.0				
LOS		D			C	A		A				
Approach Delay (s/veh)		47.6			13.9			5.0				
Approach LOS		D			B			A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.1		Intersection LOS: B	
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

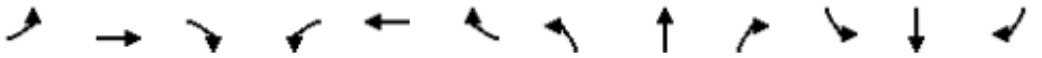
Splits and Phases: 3: Farmersville Rd & Front St



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	8	5	26	7	134	603	0	34	0	0	0
Future Volume (veh/h)	107	8	5	26	7	134	603	0	34	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	116	9	5	28	8	146	655	0	37	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	16	6	244	61	204	1158	0	1097	0	2703	0
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.76	0.00	0.76	0.00	0.00	0.00
Sat Flow, veh/h	991	111	44	1238	439	1460	1418	0	1442	0	3741	0
Grp Volume(v), veh/h	130	0	0	36	0	146	655	0	37	0	0	0
Grp Sat Flow(s),veh/h/ln	1146	0	0	1677	0	1460	1418	0	1442	0	1777	0
Q Serve(g_s), s	8.6	0.0	0.0	0.0	0.0	8.6	18.5	0.0	0.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.2	0.0	0.0	1.6	0.0	8.6	18.5	0.0	0.6	0.0	0.0	0.0
Prop In Lane	0.89		0.04	0.78		1.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	236	0	0	305	0	204	1158	0	1097	0	2703	0
V/C Ratio(X)	0.55	0.00	0.00	0.12	0.00	0.72	0.57	0.00	0.03	0.00	0.00	0.00
Avail Cap(c_a), veh/h	447	0	0	551	0	446	1158	0	1097	0	2703	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.90	0.00	0.90	0.00	0.00	0.00
Uniform Delay (d), s/veh	38.3	0.0	0.0	34.0	0.0	37.0	4.8	0.0	2.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.2	0.0	4.7	1.8	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.7	0.0	3.1	3.0	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.3	0.0	0.0	34.2	0.0	41.7	6.6	0.0	2.7	0.0	0.0	0.0
LnGrp LOS	D			C		D	A		A			
Approach Vol, veh/h		130			182			692			0	
Approach Delay, s/veh		40.3			40.2			6.4			0.0	
Approach LOS		D			D			A				

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.9		17.1		72.9		17.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		27.5		53.5		27.5				
Max Q Clear Time (g_c+I1), s		20.5		12.2		0.0		10.6				
Green Ext Time (p_c), s		2.9		0.4		0.0		0.5				

Intersection Summary												
HCM 7th Control Delay, s/veh			16.9									
HCM 7th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	151	18	6	143	13	53	1	29	14	8	18
Future Volume (vph)	11	151	18	6	143	13	53	1	29	14	8	18
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.989			0.953			0.939	
Flt Protected		0.997			0.998			0.969			0.983	
Satd. Flow (prot)	0	1831	0	0	1839	0	0	1720	0	0	1719	0
Flt Permitted		0.997			0.998			0.969			0.983	
Satd. Flow (perm)	0	1831	0	0	1839	0	0	1720	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		871			1276			1214			251	
Travel Time (s)		10.8			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	164	20	7	155	14	58	1	32	15	9	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	196	0	0	176	0	0	91	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.6%		ICU Level of Service A	
Analysis Period (min) 15			

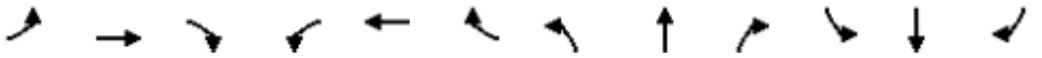
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	151	18	6	143	13	53	1	29	14	8	18
Future Vol, veh/h	11	151	18	6	143	13	53	1	29	14	8	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	164	20	7	155	14	58	1	32	15	9	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	170	0	0	184	0	0	371	380	174	364	383	163
Stage 1	-	-	-	-	-	-	198	198	-	176	176	-
Stage 2	-	-	-	-	-	-	173	183	-	189	208	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1408	-	-	1391	-	-	586	552	870	592	550	882
Stage 1	-	-	-	-	-	-	804	737	-	826	754	-
Stage 2	-	-	-	-	-	-	829	749	-	813	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1408	-	-	1391	-	-	556	544	870	561	542	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	556	544	-	561	542	-
Stage 1	-	-	-	-	-	-	796	730	-	822	750	-
Stage 2	-	-	-	-	-	-	797	745	-	775	723	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.46	0.28	11.6	10.79
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	636	108	-	-	66	-	-	665
HCM Lane V/C Ratio	0.142	0.008	-	-	0.005	-	-	0.065
HCM Control Delay (s/veh)	11.6	7.6	0	-	7.6	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.2

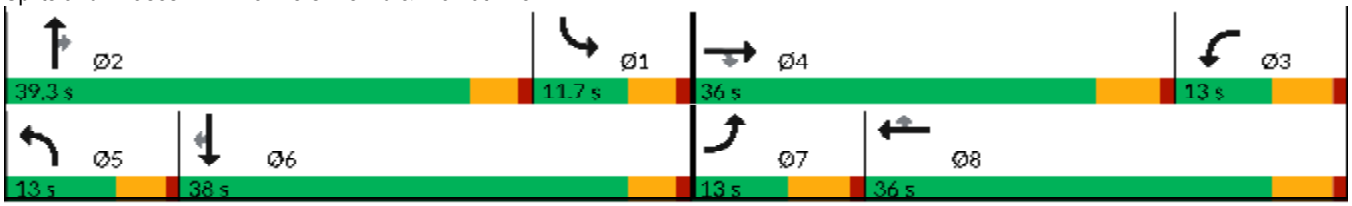


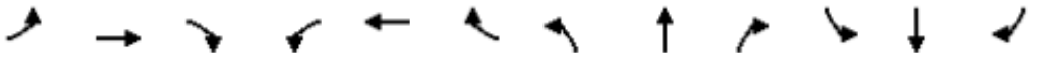
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	98	69	59	70	124	68	217	15	39	130	26
Future Volume (vph)	52	98	69	59	70	124	68	217	15	39	130	26
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1432	1630	1863	1414	1630	1863	1415	1630	1863	1415
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			180			204			204
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	57	107	75	64	76	135	74	236	16	42	141	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	107	75	64	76	135	74	236	16	42	141	28
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	13.0	36.0	36.0	13.0	36.0	36.0	13.0	39.3	39.3	11.7	38.0	38.0
Total Split (%)	13.0%	36.0%	36.0%	13.0%	36.0%	36.0%	13.0%	39.3%	39.3%	11.7%	38.0%	38.0%
Maximum Green (s)	7.3	30.3	30.3	7.3	30.3	30.3	8.4	34.7	34.7	7.1	33.4	33.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	6.9	12.4	12.4	7.0	15.1	15.1	7.8	40.7	40.7	6.7	37.5	37.5
Actuated g/C Ratio	0.09	0.15	0.15	0.09	0.19	0.19	0.10	0.51	0.51	0.08	0.47	0.47
v/c Ratio	0.41	0.37	0.20	0.45	0.22	0.33	0.47	0.25	0.02	0.31	0.16	0.04
Control Delay (s/veh)	47.6	33.9	1.2	49.5	29.7	3.8	48.3	17.0	0.1	44.9	18.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.6	33.9	1.2	49.5	29.7	3.8	48.3	17.0	0.1	44.9	18.2	0.1
LOS	D	C	A	D	C	A	D	B	A	D	B	A
Approach Delay (s/veh)		26.9			21.6			23.3			21.1	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 80.2			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

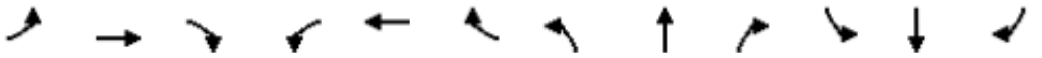




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	98	69	59	70	124	68	217	15	39	130	26
Future Volume (veh/h)	52	98	69	59	70	124	68	217	15	39	130	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	57	107	75	64	76	135	74	236	16	42	141	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	228	173	101	264	197	92	914	694	62	880	668
Arrive On Green	0.04	0.12	0.12	0.06	0.14	0.14	0.06	0.49	0.49	0.04	0.47	0.47
Sat Flow, veh/h	1641	1870	1420	1641	1870	1398	1641	1870	1421	1641	1870	1421
Grp Volume(v), veh/h	57	107	75	64	76	135	74	236	16	42	141	28
Grp Sat Flow(s),veh/h/ln	1641	1870	1420	1641	1870	1398	1641	1870	1421	1641	1870	1421
Q Serve(g_s), s	2.4	3.8	2.7	2.7	2.6	5.1	3.2	5.2	0.4	1.8	3.1	0.8
Cycle Q Clear(g_c), s	2.4	3.8	2.7	2.7	2.6	5.1	3.2	5.2	0.4	1.8	3.1	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	228	173	101	264	197	92	914	694	62	880	668
V/C Ratio(X)	0.82	0.47	0.43	0.63	0.29	0.69	0.80	0.26	0.02	0.67	0.16	0.04
Avail Cap(c_a), veh/h	169	798	606	169	798	596	194	914	694	164	880	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	29.0	17.2	32.5	27.3	18.0	33.1	10.6	9.4	33.7	10.8	10.2
Incr Delay (d2), s/veh	20.0	1.5	1.7	6.4	0.6	4.2	14.6	0.7	0.1	11.9	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	1.1	1.1	1.1	2.1	1.5	1.8	0.1	0.9	1.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	30.5	18.9	39.0	27.9	22.1	47.7	11.3	9.5	45.7	11.2	10.3
LnGrp LOS	D	C	B	D	C	C	D	B	A	D	B	B
Approach Vol, veh/h		239			275			326			211	
Approach Delay, s/veh		32.4			27.7			19.5			17.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	39.3	10.1	14.4	8.6	38.0	8.7	15.7
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	7.1	34.7	7.3	30.3	8.4	33.4	7.3	30.3
Max Q Clear Time (g_c+I1), s	3.8	7.2	4.7	5.8	5.2	5.1	4.4	7.1
Green Ext Time (p_c), s	0.0	0.8	0.0	0.6	0.0	0.5	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	24.3
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	5	4	10	4	89	226	0	7	0	0	0
Future Volume (vph)	78	5	4	10	4	89	226	0	7	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994				0.850		0.995				
Flt Protected		0.957			0.965			0.954				
Satd. Flow (prot)	0	1772	0	0	1798	1458	0	3360	0	0	3539	0
Flt Permitted		0.957			0.965			0.954				
Satd. Flow (perm)	0	1772	0	0	1798	1458	0	3360	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	85	5	4	11	4	97	246	0	8	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	94	0	0	15	97	0	254	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

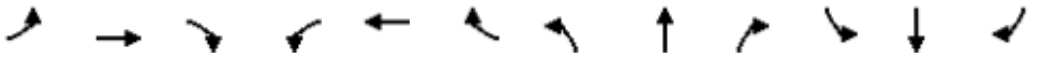
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	5	4	10	4	89	226	0	7	0	0	0
Future Vol, veh/h	78	5	4	10	4	89	226	0	7	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	85	5	4	11	4	97	246	0	8	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	9.5	8.2	11.6	0
HCM LOS	A	A	B	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	71%	0%	0%	0%
Vol Thru, %	0%	0%	6%	29%	0%	100%	100%
Vol Right, %	0%	100%	5%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	7	87	14	89	0	0
LT Vol	226	0	78	10	0	0	0
Through Vol	0	0	5	4	0	0	0
RT Vol	0	7	4	0	89	0	0
Lane Flow Rate	246	8	95	15	97	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.379	0.009	0.146	0.024	0.126	0	0
Departure Headway (Hd)	5.555	4.351	5.558	5.737	4.672	5.336	3.588
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	649	821	645	624	767	0	0
Service Time	3.291	2.087	3.593	3.469	2.404	3.087	1.339
HCM Lane V/C Ratio	0.379	0.01	0.147	0.024	0.126	0	0
HCM Control Delay, s/veh	11.7	7.1	9.5	8.6	8.1	8.1	6.3
HCM Lane LOS	B	A	A	A	A	N	N
HCM 95th-tile Q	1.8	0	0.5	0.1	0.4	0	0

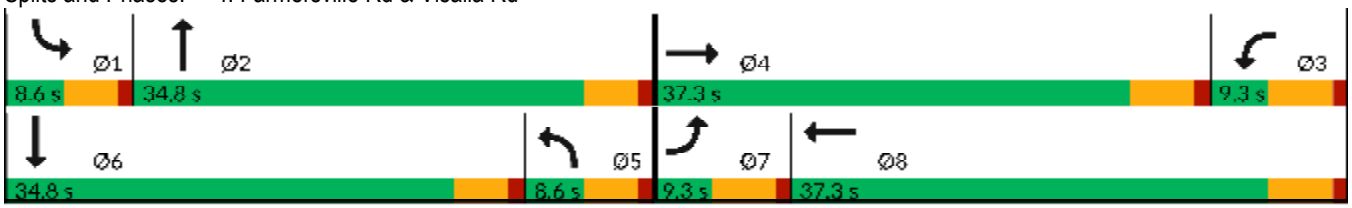


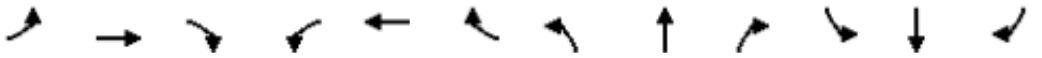
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	102	19	36	156	47	30	79	17	47	67	28
Future Volume (vph)	47	102	19	36	156	47	30	79	17	47	67	28
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.976			0.965			0.974			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3445	0	1630	3402	0	1630	3437	0	1630	3366	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3445	0	1630	3402	0	1630	3437	0	1630	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			49			18			30	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	111	21	39	170	51	33	86	18	51	73	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	132	0	39	221	0	33	104	0	51	103	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	9.3	37.3		9.3	37.3		8.6	34.8		8.6	34.8	
Total Split (%)	10.3%	41.4%		10.3%	41.4%		9.6%	38.7%		9.6%	38.7%	
Maximum Green (s)	4.0	32.0		4.0	32.0		4.0	30.2		4.0	30.2	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	4.1	13.4		4.7	12.0		4.1	36.0		4.1	39.5	
Actuated g/C Ratio	0.06	0.19		0.07	0.17		0.06	0.50		0.06	0.55	
v/c Ratio	0.55	0.20		0.37	0.36		0.35	0.06		0.55	0.06	
Control Delay (s/veh)	61.4	21.9		48.1	21.7		49.1	12.0		61.4	9.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	61.4	21.9		48.1	21.7		49.1	12.0		61.4	9.9	
LOS	E	C		D	C		D	B		E	A	
Approach Delay (s/veh)		32.9			25.7			20.9			26.9	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 71.9			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 26.8		Intersection LOS: C	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd





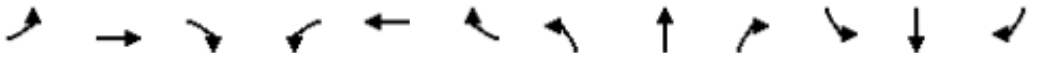
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	102	19	36	156	47	30	79	17	47	67	28
Future Volume (veh/h)	47	102	19	36	156	47	30	79	17	47	67	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	51	111	21	39	170	51	33	86	18	51	73	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	328	60	106	371	107	61	1396	283	61	1186	459
Arrive On Green	0.04	0.11	0.11	0.06	0.14	0.14	0.04	0.48	0.48	0.04	0.48	0.48
Sat Flow, veh/h	1641	2981	548	1641	2700	782	1641	2933	595	1641	2491	964
Grp Volume(v), veh/h	51	65	67	39	110	111	33	51	53	51	51	52
Grp Sat Flow(s),veh/h/ln	1641	1777	1752	1641	1777	1705	1641	1777	1752	1641	1777	1678
Q Serve(g_s), s	2.0	2.1	2.2	1.4	3.6	3.8	1.3	1.0	1.0	2.0	1.0	1.1
Cycle Q Clear(g_c), s	2.0	2.1	2.2	1.4	3.6	3.8	1.3	1.0	1.0	2.0	1.0	1.1
Prop In Lane	1.00		0.31	1.00		0.46	1.00		0.34	1.00		0.57
Lane Grp Cap(c), veh/h	61	196	193	106	244	234	61	846	834	61	846	799
V/C Ratio(X)	0.83	0.33	0.35	0.37	0.45	0.47	0.54	0.06	0.06	0.83	0.06	0.07
Avail Cap(c_a), veh/h	103	896	884	106	896	860	103	846	834	103	846	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	26.1	26.1	28.4	25.2	25.3	30.0	9.0	9.0	30.3	9.0	9.0
Incr Delay (d2), s/veh	23.8	1.0	1.1	2.1	1.3	1.5	7.1	0.1	0.1	23.8	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.8	0.9	0.6	1.4	1.4	0.6	0.3	0.3	1.1	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.2	27.1	27.2	30.6	26.5	26.8	37.1	9.1	9.1	54.2	9.1	9.2
LnGrp LOS	D	C	C	C	C	C	D	A	A	D	A	A
Approach Vol, veh/h		183			260			137			154	
Approach Delay, s/veh		34.7			27.2			15.9			24.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	34.8	9.4	12.3	7.0	34.8	7.7	14.0
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	4.0	30.2	4.0	32.0	4.0	30.2	4.0	32.0
Max Q Clear Time (g_c+I1), s	4.0	3.0	3.4	4.2	3.3	3.1	4.0	5.8
Green Ext Time (p_c), s	0.0	0.3	0.0	0.4	0.0	0.3	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	204	18	6	159	13	53	1	29	14	8	18
Future Volume (vph)	11	204	18	6	159	13	53	1	29	14	8	18
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.990			0.953			0.939	
Flt Protected		0.998			0.998			0.969			0.983	
Satd. Flow (prot)	0	1839	0	0	1840	0	0	1720	0	0	1719	0
Flt Permitted		0.998			0.998			0.969			0.983	
Satd. Flow (perm)	0	1839	0	0	1840	0	0	1720	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	222	20	7	173	14	58	1	32	15	9	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	254	0	0	194	0	0	91	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.5%		ICU Level of Service A	
Analysis Period (min) 15			

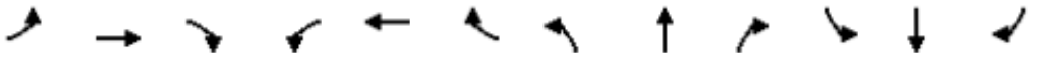
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	204	18	6	159	13	53	1	29	14	8	18
Future Vol, veh/h	11	204	18	6	159	13	53	1	29	14	8	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	222	20	7	173	14	58	1	32	15	9	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	187	0	0	241	0	0	446	455	232	439	458	180
Stage 1	-	-	-	-	-	-	255	255	-	193	193	-
Stage 2	-	-	-	-	-	-	190	200	-	246	265	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1387	-	-	1325	-	-	523	501	808	528	499	863
Stage 1	-	-	-	-	-	-	749	696	-	809	741	-
Stage 2	-	-	-	-	-	-	812	736	-	758	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1387	-	-	1325	-	-	494	493	808	499	491	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	494	493	-	499	491	-
Stage 1	-	-	-	-	-	-	742	689	-	804	737	-
Stage 2	-	-	-	-	-	-	779	732	-	720	682	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.36	0.26	12.47	11.32
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	572	84	-	-	60	-	-	613
HCM Lane V/C Ratio	0.158	0.009	-	-	0.005	-	-	0.071
HCM Control Delay (s/veh)	12.5	7.6	0	-	7.7	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.2

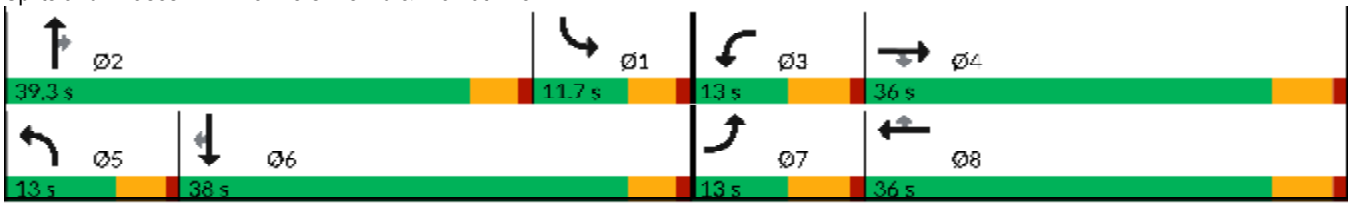


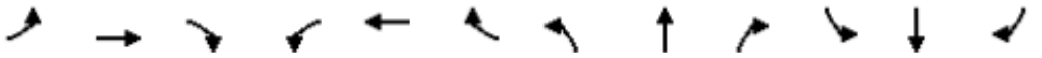
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	101	105	59	71	124	79	217	15	39	130	31
Future Volume (vph)	66	101	105	59	71	124	79	217	15	39	130	31
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1432	1630	1863	1414	1630	1863	1415	1630	1863	1415
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			180			142			142
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	110	114	64	77	135	86	236	16	42	141	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	110	114	64	77	135	86	236	16	42	141	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	13.0	36.0	36.0	13.0	36.0	36.0	13.0	39.3	39.3	11.7	38.0	38.0
Total Split (%)	13.0%	36.0%	36.0%	13.0%	36.0%	36.0%	13.0%	39.3%	39.3%	11.7%	38.0%	38.0%
Maximum Green (s)	7.3	30.3	30.3	7.3	30.3	30.3	8.4	34.7	34.7	7.1	33.4	33.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.2	12.5	12.5	7.1	12.5	12.5	8.1	39.6	39.6	6.8	36.2	36.2
Actuated g/C Ratio	0.09	0.16	0.16	0.09	0.16	0.16	0.10	0.50	0.50	0.09	0.46	0.46
v/c Ratio	0.49	0.37	0.30	0.44	0.26	0.36	0.51	0.25	0.02	0.30	0.17	0.05
Control Delay (s/veh)	51.0	34.0	2.8	49.0	31.8	4.4	50.2	17.2	0.1	44.7	18.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.0	34.0	2.8	49.0	31.8	4.4	50.2	17.2	0.1	44.7	18.5	0.1
LOS	D	C	A	D	C	A	D	B	A	D	B	A
Approach Delay (s/veh)		26.1			22.4			24.8			20.7	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 79			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 23.7		Intersection LOS: C	
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

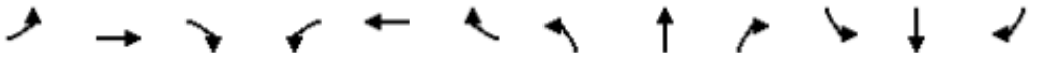




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	101	105	59	71	124	79	217	15	39	130	31
Future Volume (veh/h)	66	101	105	59	71	124	79	217	15	39	130	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	72	110	114	64	77	135	86	236	16	42	141	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	273	207	79	261	195	108	890	676	79	856	650
Arrive On Green	0.05	0.15	0.15	0.05	0.14	0.14	0.07	0.48	0.48	0.05	0.46	0.46
Sat Flow, veh/h	1641	1870	1423	1641	1870	1397	1641	1870	1421	1641	1870	1421
Grp Volume(v), veh/h	72	110	114	64	77	135	86	236	16	42	141	34
Grp Sat Flow(s),veh/h/ln	1641	1870	1423	1641	1870	1397	1641	1870	1421	1641	1870	1421
Q Serve(g_s), s	3.2	3.9	5.4	2.8	2.7	5.2	3.8	5.5	0.3	1.8	3.2	1.0
Cycle Q Clear(g_c), s	3.2	3.9	5.4	2.8	2.7	5.2	3.8	5.5	0.3	1.8	3.2	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	90	273	207	79	261	195	108	890	676	79	856	650
V/C Ratio(X)	0.80	0.40	0.55	0.81	0.30	0.69	0.80	0.27	0.02	0.53	0.16	0.05
Avail Cap(c_a), veh/h	164	777	591	164	777	580	189	890	676	160	856	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	28.3	28.9	34.4	28.2	18.2	33.6	11.5	4.1	33.9	11.6	11.0
Incr Delay (d2), s/veh	15.1	1.0	2.3	17.3	0.6	4.4	12.5	0.7	0.1	5.5	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.6	1.8	1.4	1.1	2.2	1.7	2.0	0.1	0.8	1.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	29.2	31.2	51.7	28.8	22.6	46.1	12.2	4.2	39.5	12.0	11.1
LnGrp LOS	D	C	C	D	C	C	D	B	A	D	B	B
Approach Vol, veh/h		296			276			338			217	
Approach Delay, s/veh		34.9			31.1			20.4			17.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	39.3	9.2	16.3	9.4	38.0	9.7	15.9
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	7.1	34.7	7.3	30.3	8.4	33.4	7.3	30.3
Max Q Clear Time (g_c+I1), s	3.8	7.5	4.8	7.4	5.8	5.2	5.2	7.2
Green Ext Time (p_c), s	0.0	0.8	0.0	0.7	0.0	0.6	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	5	4	10	4	89	234	0	7	0	0	0
Future Volume (vph)	79	5	4	10	4	89	234	0	7	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.994				0.850		0.995				
Flt Protected		0.957			0.965			0.954				
Satd. Flow (prot)	0	1772	0	0	1798	1458	0	3360	0	0	3539	0
Flt Permitted		0.957			0.965			0.954				
Satd. Flow (perm)	0	1772	0	0	1798	1458	0	3360	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	5	4	11	4	97	254	0	8	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	95	0	0	15	97	0	262	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

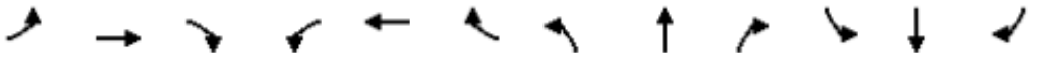
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	5	4	10	4	89	234	0	7	0	0	0
Future Vol, veh/h	79	5	4	10	4	89	234	0	7	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	86	5	4	11	4	97	254	0	8	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	9.6	8.2	11.8	0
HCM LOS	A	A	B	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	71%	0%	0%	0%
Vol Thru, %	0%	0%	6%	29%	0%	100%	100%
Vol Right, %	0%	100%	5%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	234	7	88	14	89	0	0
LT Vol	234	0	79	10	0	0	0
Through Vol	0	0	5	4	0	0	0
RT Vol	0	7	4	0	89	0	0
Lane Flow Rate	254	8	96	15	97	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.393	0.009	0.148	0.024	0.126	0	0
Departure Headway (Hd)	5.56	4.356	5.588	5.768	4.703	5.352	3.604
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	646	820	642	621	761	0	0
Service Time	3.295	2.091	3.622	3.5	2.435	3.102	1.353
HCM Lane V/C Ratio	0.393	0.01	0.15	0.024	0.127	0	0
HCM Control Delay, s/veh	11.9	7.1	9.6	8.6	8.1	8.1	6.4
HCM Lane LOS	B	A	A	A	A	N	N
HCM 95th-tile Q	1.9	0	0.5	0.1	0.4	0	0

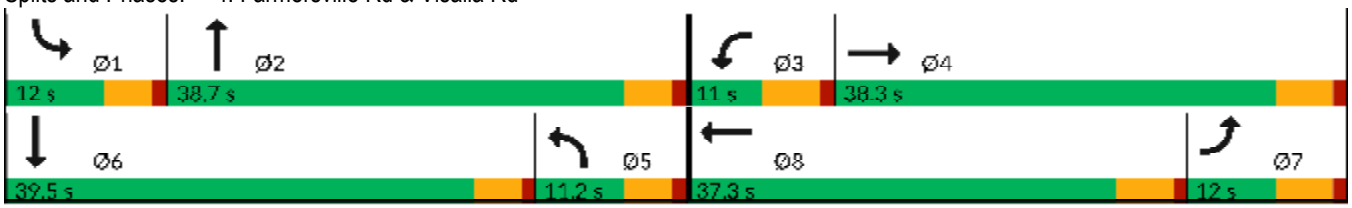


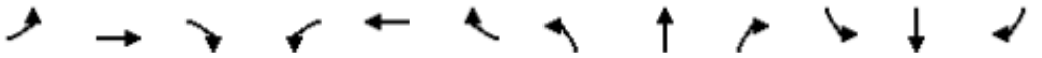
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	102	19	36	156	48	30	84	17	50	83	34
Future Volume (vph)	49	102	19	36	156	48	30	84	17	50	83	34
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.976			0.965			0.975			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3444	0	1630	3401	0	1630	3441	0	1630	3366	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3444	0	1630	3401	0	1630	3441	0	1630	3366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			42			18			37	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	111	21	39	170	52	33	91	18	54	90	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	132	0	39	222	0	33	109	0	54	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	12.0	38.3		11.0	37.3		11.2	38.7		12.0	39.5	
Total Split (%)	12.0%	38.3%		11.0%	37.3%		11.2%	38.7%		12.0%	39.5%	
Maximum Green (s)	6.7	33.0		5.7	32.0		6.6	34.1		7.4	34.9	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	6.8	12.9		6.0	12.4		6.6	37.5		7.2	40.0	
Actuated g/C Ratio	0.09	0.18		0.08	0.17		0.09	0.52		0.10	0.55	
v/c Ratio	0.35	0.21		0.29	0.36		0.23	0.06		0.34	0.07	
Control Delay (s/veh)	44.4	23.0		44.7	23.7		42.1	13.5		43.2	10.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	44.4	23.0		44.7	23.7		42.1	13.5		43.2	10.7	
LOS	D	C		D	C		D	B		D	B	
Approach Delay (s/veh)		29.1			26.8			20.2			20.4	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72.8			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay (s/veh): 24.6		Intersection LOS: C	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	102	19	36	156	48	30	84	17	50	83	34
Future Volume (veh/h)	49	102	19	36	156	48	30	84	17	50	83	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	53	111	21	39	170	52	33	91	18	54	90	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	426	78	50	361	106	46	1475	283	66	1268	492
Arrive On Green	0.04	0.14	0.14	0.03	0.13	0.13	0.03	0.50	0.50	0.04	0.51	0.51
Sat Flow, veh/h	1641	2983	549	1641	2687	793	1641	2964	570	1641	2489	966
Grp Volume(v), veh/h	53	65	67	39	110	112	33	53	56	54	63	64
Grp Sat Flow(s),veh/h/ln	1641	1777	1755	1641	1777	1703	1641	1777	1757	1641	1777	1678
Q Serve(g_s), s	2.2	2.2	2.3	1.6	3.9	4.2	1.4	1.1	1.1	2.2	1.2	1.3
Cycle Q Clear(g_c), s	2.2	2.2	2.3	1.6	3.9	4.2	1.4	1.1	1.1	2.2	1.2	1.3
Prop In Lane	1.00		0.31	1.00		0.47	1.00		0.32	1.00		0.58
Lane Grp Cap(c), veh/h	64	254	251	50	239	229	46	884	874	66	905	855
V/C Ratio(X)	0.83	0.26	0.27	0.78	0.46	0.49	0.71	0.06	0.06	0.82	0.07	0.08
Avail Cap(c_a), veh/h	160	856	845	136	830	795	158	884	874	177	905	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	26.1	26.2	33.0	27.4	27.5	33.0	8.9	8.9	32.7	8.5	8.6
Incr Delay (d2), s/veh	22.4	0.5	0.6	22.1	1.4	1.6	18.1	0.1	0.1	21.8	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.9	0.9	0.9	1.6	1.6	0.7	0.3	0.4	1.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	26.7	26.7	55.1	28.8	29.1	51.1	9.0	9.1	54.4	8.7	8.7
LnGrp LOS	E	C	C	E	C	C	D	A	A	D	A	A
Approach Vol, veh/h		185			261			142			181	
Approach Delay, s/veh		34.8			32.8			18.8			22.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	38.7	7.4	15.1	6.5	39.5	8.0	14.5
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	7.4	34.1	5.7	33.0	6.6	34.9	6.7	32.0
Max Q Clear Time (g_c+I1), s	4.2	3.1	3.6	4.3	3.4	3.3	4.2	6.2
Green Ext Time (p_c), s	0.0	0.3	0.0	0.4	0.0	0.4	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	28.3
HCM 7th LOS	C

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	180	1	16	214	3	53
Future Volume (vph)	180	1	16	214	3	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.872	
Flt Protected				0.997	0.998	
Satd. Flow (prot)	1861	0	0	1857	1621	0
Flt Permitted				0.997	0.998	
Satd. Flow (perm)	1861	0	0	1857	1621	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	1	17	233	3	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	197	0	0	250	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.5%		ICU Level of Service A	
Analysis Period (min) 15			

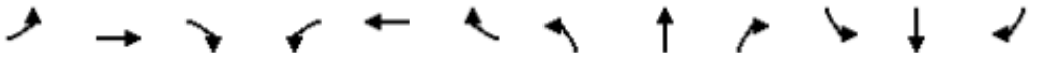
Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	180	1	16	214	3	53
Future Vol, veh/h	180	1	16	214	3	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	1	17	233	3	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	197	0	464	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	267	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1376	-	557	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	777	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1376	-	549	845
Mov Cap-2 Maneuver	-	-	-	-	549	-
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.53	9.73
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	821	-	-	125	-
HCM Lane V/C Ratio	0.074	-	-	0.013	-
HCM Control Delay (s/veh)	9.7	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	181	19	6	172	14	54	1	30	14	8	18
Future Volume (vph)	12	181	19	6	172	14	54	1	30	14	8	18
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.990			0.952			0.939	
Flt Protected		0.997			0.998			0.969			0.983	
Satd. Flow (prot)	0	1835	0	0	1840	0	0	1718	0	0	1719	0
Flt Permitted		0.997			0.998			0.969			0.983	
Satd. Flow (perm)	0	1835	0	0	1840	0	0	1718	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	197	21	7	187	15	59	1	33	15	9	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	231	0	0	209	0	0	93	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.2%		ICU Level of Service A	
Analysis Period (min) 15			

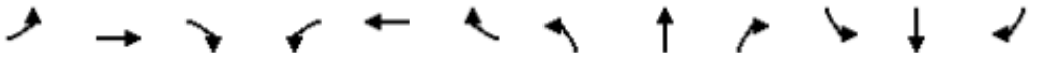
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	181	19	6	172	14	54	1	30	14	8	18
Future Vol, veh/h	12	181	19	6	172	14	54	1	30	14	8	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	197	21	7	187	15	59	1	33	15	9	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	217	0	0	438	448	207	431	451	195
Stage 1	-	-	-	-	-	-	233	233	-	208	208	-
Stage 2	-	-	-	-	-	-	204	215	-	223	243	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1370	-	-	1352	-	-	529	506	833	535	504	847
Stage 1	-	-	-	-	-	-	770	712	-	794	730	-
Stage 2	-	-	-	-	-	-	798	725	-	779	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1370	-	-	1352	-	-	500	497	833	504	496	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	500	497	-	504	496	-
Stage 1	-	-	-	-	-	-	761	704	-	790	726	-
Stage 2	-	-	-	-	-	-	766	721	-	739	697	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.43	0.24	12.35	11.31
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	582	100	-	-	55	-	-	614
HCM Lane V/C Ratio	0.159	0.01	-	-	0.005	-	-	0.071
HCM Control Delay (s/veh)	12.3	7.7	0	-	7.7	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.2

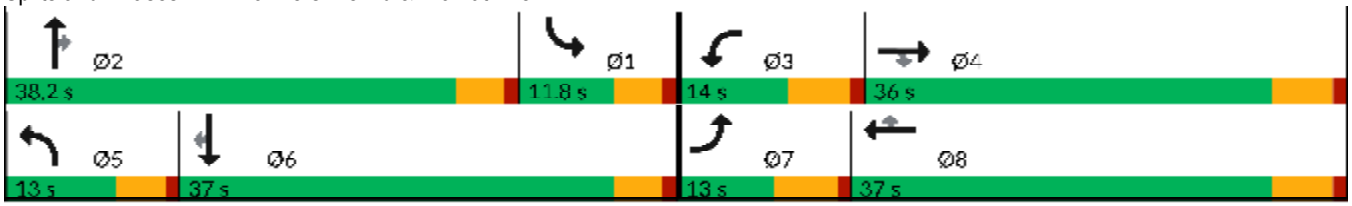


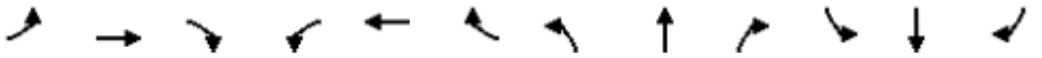
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	111	83	76	81	130	77	249	27	40	154	31
Future Volume (vph)	59	111	83	76	81	130	77	249	27	40	154	31
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1432	1630	1863	1414	1630	1863	1415	1630	1863	1415
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			180			142			142
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	64	121	90	83	88	141	84	271	29	43	167	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	121	90	83	88	141	84	271	29	43	167	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	13.0	36.0	36.0	14.0	37.0	37.0	13.0	38.2	38.2	11.8	37.0	37.0
Total Split (%)	13.0%	36.0%	36.0%	14.0%	37.0%	37.0%	13.0%	38.2%	38.2%	11.8%	37.0%	37.0%
Maximum Green (s)	7.3	30.3	30.3	8.3	31.3	31.3	8.4	33.6	33.6	7.2	32.4	32.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.1	12.8	12.8	8.0	13.6	13.6	8.1	38.3	38.3	6.9	35.1	35.1
Actuated g/C Ratio	0.09	0.16	0.16	0.10	0.17	0.17	0.10	0.49	0.49	0.09	0.45	0.45
v/c Ratio	0.44	0.40	0.23	0.50	0.28	0.36	0.50	0.30	0.04	0.30	0.20	0.05
Control Delay (s/veh)	48.9	34.4	1.4	49.9	31.1	4.6	49.8	18.4	0.1	44.7	19.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.9	34.4	1.4	49.9	31.1	4.6	49.8	18.4	0.1	44.7	19.5	0.1
LOS	D	C	A	D	C	A	D	B	A	D	B	A
Approach Delay (s/veh)		27.0			24.1			23.9			21.2	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 78.8			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay (s/veh): 24.1		Intersection LOS: C	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

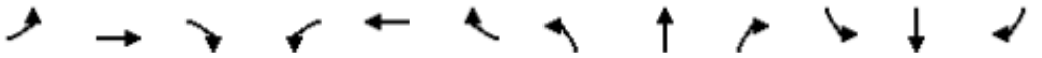




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	111	83	76	81	130	77	249	27	40	154	31
Future Volume (veh/h)	59	111	83	76	81	130	77	249	27	40	154	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	64	121	90	83	88	141	84	271	29	43	167	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	242	184	104	270	202	105	881	669	78	850	645
Arrive On Green	0.05	0.13	0.13	0.06	0.14	0.14	0.06	0.47	0.47	0.05	0.45	0.45
Sat Flow, veh/h	1641	1870	1421	1641	1870	1399	1641	1870	1421	1641	1870	1420
Grp Volume(v), veh/h	64	121	90	83	88	141	84	271	29	43	167	34
Grp Sat Flow(s),veh/h/ln	1641	1870	1421	1641	1870	1399	1641	1870	1421	1641	1870	1420
Q Serve(g_s), s	2.8	4.3	4.2	3.6	3.0	5.3	3.6	6.4	0.5	1.8	3.8	1.0
Cycle Q Clear(g_c), s	2.8	4.3	4.2	3.6	3.0	5.3	3.6	6.4	0.5	1.8	3.8	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	242	184	104	270	202	105	881	669	78	850	645
V/C Ratio(X)	0.81	0.50	0.49	0.80	0.33	0.70	0.80	0.31	0.04	0.55	0.20	0.05
Avail Cap(c_a), veh/h	168	795	604	191	821	614	193	881	669	166	850	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	28.9	28.9	33.0	27.4	17.5	32.9	11.7	3.8	33.2	11.7	10.9
Incr Delay (d2), s/veh	17.4	1.6	2.0	12.9	0.7	4.3	12.8	0.9	0.1	6.0	0.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.8	1.4	1.6	1.2	2.2	1.7	2.3	0.2	0.8	1.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.0	30.5	30.9	45.9	28.1	21.8	45.7	12.6	3.9	39.3	12.2	11.0
LnGrp LOS	D	C	C	D	C	C	D	B	A	D	B	B
Approach Vol, veh/h		275			312			384			244	
Approach Delay, s/veh		35.4			30.0			19.2			16.8	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	38.2	10.2	14.9	9.2	37.0	9.1	16.0
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	7.2	33.6	8.3	30.3	8.4	32.4	7.3	31.3
Max Q Clear Time (g_c+I1), s	3.8	8.4	5.6	6.3	5.6	5.8	4.8	7.3
Green Ext Time (p_c), s	0.0	1.0	0.0	0.7	0.0	0.6	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	5	4	13	4	95	277	0	8	0	0	0
Future Volume (vph)	83	5	4	13	4	95	277	0	8	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.996				
Flt Protected		0.957			0.963			0.954				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Flt Permitted		0.957			0.963			0.954				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	5	4	14	4	103	301	0	9	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	18	103	0	310	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

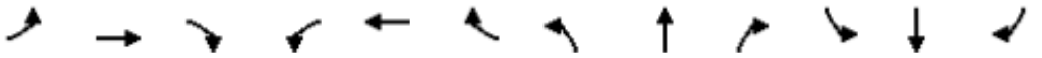
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	5	4	13	4	95	277	0	8	0	0	0
Future Vol, veh/h	83	5	4	13	4	95	277	0	8	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	5	4	14	4	103	301	0	9	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	9.9	8.5	13	0
HCM LOS	A	A	B	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	76%	0%	0%	0%
Vol Thru, %	0%	0%	5%	24%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	277	8	92	17	95	0	0
LT Vol	277	0	83	13	0	0	0
Through Vol	0	0	5	4	0	0	0
RT Vol	0	8	4	0	95	0	0
Lane Flow Rate	301	9	100	18	103	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.469	0.011	0.16	0.031	0.139	0	0
Departure Headway (Hd)	5.603	4.399	5.749	5.948	4.857	5.457	3.708
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	641	809	622	601	736	0	0
Service Time	3.352	2.148	3.8	3.696	2.603	3.23	1.479
HCM Lane V/C Ratio	0.47	0.011	0.161	0.03	0.14	0	0
HCM Control Delay, s/veh	13.2	7.2	9.9	8.9	8.4	8.2	6.5
HCM Lane LOS	B	A	A	A	A	N	N
HCM 95th-tile Q	2.5	0	0.6	0.1	0.5	0	0

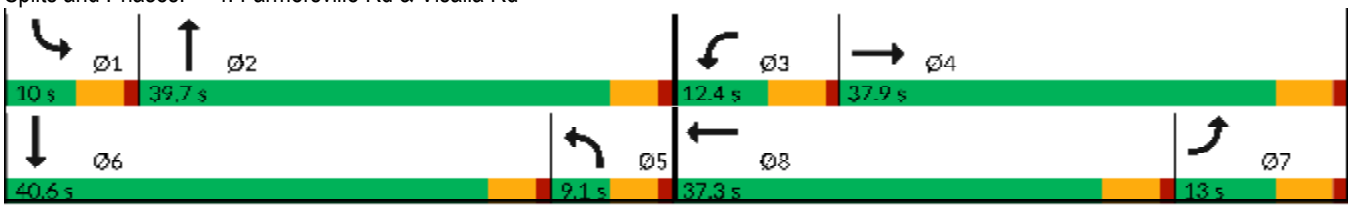


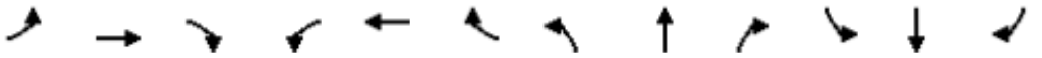
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	116	20	38	176	50	32	85	18	51	72	76
Future Volume (vph)	86	116	20	38	176	50	32	85	18	51	72	76
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.978			0.967			0.973			0.923	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3452	0	1630	3409	0	1630	3433	0	1630	3237	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3452	0	1630	3409	0	1630	3433	0	1630	3237	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			38			20			83	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	126	22	41	191	54	35	92	20	55	78	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	148	0	41	245	0	35	112	0	55	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	37.9		12.4	37.3		9.1	39.7		10.0	40.6	
Total Split (%)	13.0%	37.9%		12.4%	37.3%		9.1%	39.7%		10.0%	40.6%	
Maximum Green (s)	7.7	32.6		7.1	32.0		4.5	35.1		5.4	36.0	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.8	16.0		6.8	13.0		4.7	36.9		5.6	39.4	
Actuated g/C Ratio	0.10	0.21		0.09	0.17		0.06	0.48		0.07	0.51	
v/c Ratio	0.57	0.20		0.29	0.41		0.36	0.07		0.47	0.10	
Control Delay (s/veh)	53.3	23.3		43.7	26.4		51.3	13.7		53.9	8.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	53.3	23.3		43.7	26.4		51.3	13.7		53.9	8.5	
LOS	D	C		D	C		D	B		D	A	
Approach Delay (s/veh)		34.9			28.9			22.7			20.1	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 77.5			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 27.4		Intersection LOS: C	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

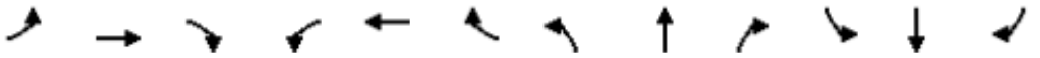




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	116	20	38	176	50	32	85	18	51	72	76
Future Volume (veh/h)	86	116	20	38	176	50	32	85	18	51	72	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	93	126	22	41	191	54	35	92	20	55	78	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	538	92	51	377	103	47	1397	294	67	874	768
Arrive On Green	0.07	0.18	0.18	0.03	0.14	0.14	0.03	0.48	0.48	0.04	0.49	0.49
Sat Flow, veh/h	1641	3025	515	1641	2738	750	1641	2912	613	1641	1777	1560
Grp Volume(v), veh/h	93	73	75	41	122	123	35	55	57	55	78	83
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1712	1641	1777	1748	1641	1777	1560
Q Serve(g_s), s	4.1	2.6	2.7	1.8	4.6	4.9	1.5	1.2	1.3	2.4	1.7	2.1
Cycle Q Clear(g_c), s	4.1	2.6	2.7	1.8	4.6	4.9	1.5	1.2	1.3	2.4	1.7	2.1
Prop In Lane	1.00		0.29	1.00		0.44	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	116	316	314	51	245	236	47	852	839	67	874	768
V/C Ratio(X)	0.80	0.23	0.24	0.81	0.50	0.52	0.75	0.06	0.07	0.82	0.09	0.11
Avail Cap(c_a), veh/h	173	792	786	159	777	749	101	852	839	121	874	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	25.8	25.8	35.2	29.2	29.3	35.3	10.2	10.2	34.8	9.9	10.0
Incr Delay (d2), s/veh	14.6	0.4	0.4	25.1	1.6	1.8	20.7	0.1	0.2	21.0	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.0	1.0	1.0	1.9	1.9	0.8	0.4	0.4	1.3	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.1	26.2	26.2	60.3	30.8	31.1	56.0	10.4	10.4	55.9	10.1	10.3
LnGrp LOS	D	C	C	E	C	C	E	B	B	E	B	B
Approach Vol, veh/h		241			286			147			216	
Approach Delay, s/veh		34.6			35.1			21.2			21.8	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	39.7	7.6	18.3	6.7	40.6	10.5	15.4
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	5.4	35.1	7.1	32.6	4.5	36.0	7.7	32.0
Max Q Clear Time (g_c+I1), s	4.4	3.3	3.8	4.7	3.5	4.1	6.1	6.9
Green Ext Time (p_c), s	0.0	0.3	0.0	0.5	0.0	0.5	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	234	19	6	188	14	54	1	30	14	8	18
Future Volume (vph)	12	234	19	6	188	14	54	1	30	14	8	18
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.991			0.952			0.939	
Flt Protected		0.998			0.998			0.969			0.983	
Satd. Flow (prot)	0	1840	0	0	1842	0	0	1718	0	0	1719	0
Flt Permitted		0.998			0.998			0.969			0.983	
Satd. Flow (perm)	0	1840	0	0	1842	0	0	1718	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	254	21	7	204	15	59	1	33	15	9	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	288	0	0	226	0	0	93	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.1%		ICU Level of Service A	
Analysis Period (min) 15			

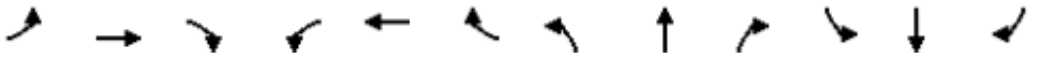
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	234	19	6	188	14	54	1	30	14	8	18
Future Vol, veh/h	12	234	19	6	188	14	54	1	30	14	8	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	254	21	7	204	15	59	1	33	15	9	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	220	0	0	275	0	0	513	523	265	506	526	212
Stage 1	-	-	-	-	-	-	291	291	-	225	225	-
Stage 2	-	-	-	-	-	-	222	233	-	281	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1350	-	-	1288	-	-	472	458	774	477	457	828
Stage 1	-	-	-	-	-	-	717	672	-	778	718	-
Stage 2	-	-	-	-	-	-	781	712	-	726	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1350	-	-	1288	-	-	444	451	774	448	449	828
Mov Cap-2 Maneuver	-	-	-	-	-	-	444	451	-	448	449	-
Stage 1	-	-	-	-	-	-	709	664	-	773	713	-
Stage 2	-	-	-	-	-	-	749	708	-	686	657	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.35	0.23	13.35	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	523	80	-	-	51	-	-	565
HCM Lane V/C Ratio	0.177	0.01	-	-	0.005	-	-	0.077
HCM Control Delay (s/veh)	13.4	7.7	0	-	7.8	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.2

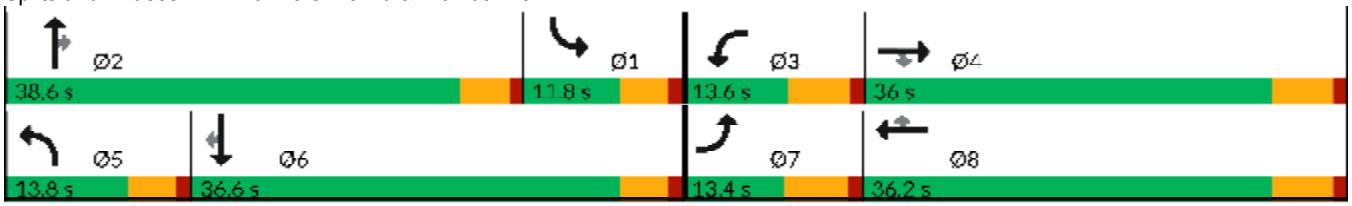


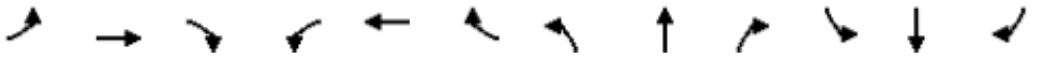
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	114	119	76	82	130	88	249	27	40	154	36
Future Volume (vph)	73	114	119	76	82	130	88	249	27	40	154	36
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1432	1630	1863	1414	1630	1863	1415	1630	1863	1415
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			180			142			142
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	124	129	83	89	141	96	271	29	43	167	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	124	129	83	89	141	96	271	29	43	167	39
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	13.4	36.0	36.0	13.6	36.2	36.2	13.8	38.6	38.6	11.8	36.6	36.6
Total Split (%)	13.4%	36.0%	36.0%	13.6%	36.2%	36.2%	13.8%	38.6%	38.6%	11.8%	36.6%	36.6%
Maximum Green (s)	7.7	30.3	30.3	7.9	30.5	30.5	9.2	34.0	34.0	7.2	32.0	32.0
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.6	12.9	12.9	7.8	13.1	13.1	8.7	38.0	38.0	6.9	34.3	34.3
Actuated g/C Ratio	0.10	0.16	0.16	0.10	0.17	0.17	0.11	0.49	0.49	0.09	0.44	0.44
v/c Ratio	0.50	0.40	0.33	0.51	0.29	0.37	0.53	0.30	0.04	0.30	0.20	0.06
Control Delay (s/veh)	50.8	34.4	3.8	51.1	31.9	4.7	49.6	18.3	0.1	44.6	19.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.8	34.4	3.8	51.1	31.9	4.7	49.6	18.3	0.1	44.6	19.9	0.1
LOS	D	C	A	D	C	A	D	B	A	D	B	A
Approach Delay (s/veh)		26.4			24.7			24.6			21.1	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 78.3			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay (s/veh): 24.4		Intersection LOS: C	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

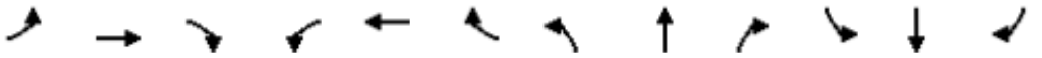




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	114	119	76	82	130	88	249	27	40	154	36
Future Volume (veh/h)	73	114	119	76	82	130	88	249	27	40	154	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	79	124	129	83	89	141	96	271	29	43	167	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	284	216	104	289	217	121	860	653	76	810	615
Arrive On Green	0.06	0.15	0.15	0.06	0.15	0.15	0.07	0.46	0.46	0.05	0.43	0.43
Sat Flow, veh/h	1641	1870	1424	1641	1870	1401	1641	1870	1421	1641	1870	1420
Grp Volume(v), veh/h	79	124	129	83	89	141	96	271	29	43	167	39
Grp Sat Flow(s),veh/h/ln	1641	1870	1424	1641	1870	1401	1641	1870	1421	1641	1870	1420
Q Serve(g_s), s	3.5	4.5	6.2	3.7	3.1	5.5	4.3	6.8	0.5	1.9	4.1	1.2
Cycle Q Clear(g_c), s	3.5	4.5	6.2	3.7	3.1	5.5	4.3	6.8	0.5	1.9	4.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	284	216	104	289	217	121	860	653	76	810	615
V/C Ratio(X)	0.80	0.44	0.60	0.80	0.31	0.65	0.80	0.32	0.04	0.56	0.21	0.06
Avail Cap(c_a), veh/h	171	767	584	175	772	578	204	860	653	160	810	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	28.5	29.3	34.2	27.7	17.9	33.7	12.6	4.3	34.5	13.1	12.2
Incr Delay (d2), s/veh	13.6	1.1	2.6	13.0	0.6	3.3	11.2	1.0	0.1	6.4	0.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	2.1	1.7	1.3	2.2	1.9	2.5	0.2	0.8	1.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.9	29.6	31.9	47.1	28.3	21.1	44.9	13.6	4.4	40.9	13.6	12.4
LnGrp LOS	D	C	C	D	C	C	D	B	A	D	B	B
Approach Vol, veh/h		332			313			396			249	
Approach Delay, s/veh		34.8			30.1			20.5			18.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	38.6	10.4	16.9	10.0	36.6	10.2	17.1
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	7.2	34.0	7.9	30.3	9.2	32.0	7.7	30.5
Max Q Clear Time (g_c+I1), s	3.9	8.8	5.7	8.2	6.3	6.1	5.5	7.5
Green Ext Time (p_c), s	0.0	1.0	0.0	0.9	0.1	0.7	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	26.1
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	5	4	13	4	95	285	0	8	0	0	0
Future Volume (vph)	84	5	4	13	4	95	285	0	8	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.996				
Flt Protected		0.956			0.963			0.954				
Satd. Flow (prot)	0	1772	0	0	1794	1458	0	3363	0	0	3539	0
Flt Permitted		0.956			0.963			0.954				
Satd. Flow (perm)	0	1772	0	0	1794	1458	0	3363	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	91	5	4	14	4	103	310	0	9	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	18	103	0	319	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

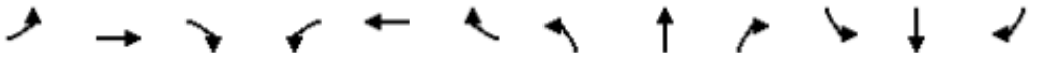
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	84	5	4	13	4	95	285	0	8	0	0	0
Future Vol, veh/h	84	5	4	13	4	95	285	0	8	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	5	4	14	4	103	310	0	9	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	10	8.5	13.3	0
HCM LOS	A	A	B	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	76%	0%	0%	0%
Vol Thru, %	0%	0%	5%	24%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	285	8	93	17	95	0	0
LT Vol	285	0	84	13	0	0	0
Through Vol	0	0	5	4	0	0	0
RT Vol	0	8	4	0	95	0	0
Lane Flow Rate	310	9	101	18	103	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.483	0.011	0.162	0.031	0.14	0	0
Departure Headway (Hd)	5.609	4.405	5.779	5.979	4.887	5.475	3.724
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	641	809	619	598	731	0	0
Service Time	3.358	2.153	3.83	3.727	2.634	3.248	1.496
HCM Lane V/C Ratio	0.484	0.011	0.163	0.03	0.141	0	0
HCM Control Delay, s/veh	13.5	7.2	10	8.9	8.4	8.2	6.5
HCM Lane LOS	B	A	A	A	A	N	N
HCM 95th-tile Q	2.6	0	0.6	0.1	0.5	0	0

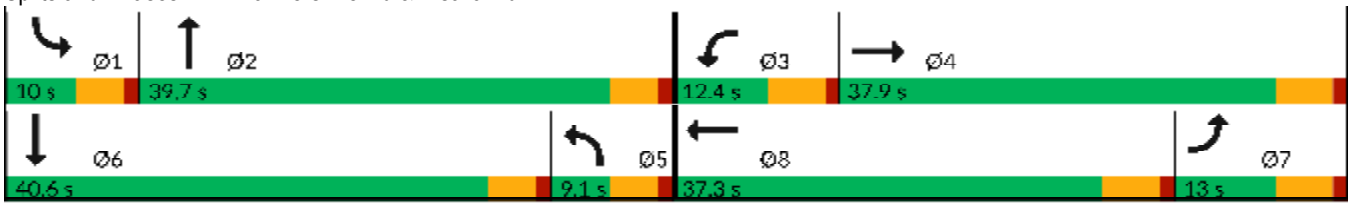


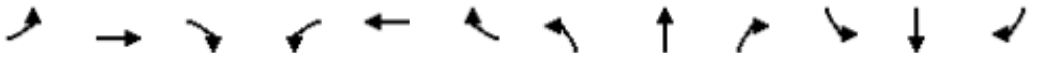
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	116	20	38	176	51	32	90	18	54	88	82
Future Volume (vph)	88	116	20	38	176	51	32	90	18	54	88	82
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.978			0.966			0.975			0.928	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3452	0	1630	3405	0	1630	3440	0	1630	3257	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3452	0	1630	3405	0	1630	3440	0	1630	3257	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			39			20			89	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	126	22	41	191	55	35	98	20	59	96	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	148	0	41	246	0	35	118	0	59	185	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	37.9		12.4	37.3		9.1	39.7		10.0	40.6	
Total Split (%)	13.0%	37.9%		12.4%	37.3%		9.1%	39.7%		10.0%	40.6%	
Maximum Green (s)	7.7	32.6		7.1	32.0		4.5	35.1		5.4	36.0	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.7	19.2		6.7	13.1		4.6	36.0		5.5	38.6	
Actuated g/C Ratio	0.10	0.24		0.08	0.16		0.06	0.45		0.07	0.48	
v/c Ratio	0.61	0.18		0.30	0.42		0.38	0.08		0.53	0.11	
Control Delay (s/veh)	56.3	23.0		44.3	26.7		52.8	13.5		58.3	8.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	56.3	23.0		44.3	26.7		52.8	13.5		58.3	8.6	
LOS	E	C		D	C		D	B		E	A	
Approach Delay (s/veh)		36.1			29.2			22.5			20.6	
Approach LOS		D			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 80			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 27.7		Intersection LOS: C	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

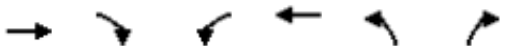




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	116	20	38	176	51	32	90	18	54	88	82
Future Volume (veh/h)	88	116	20	38	176	51	32	90	18	54	88	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	96	126	22	41	191	55	35	98	20	59	96	89
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	545	93	51	376	105	52	1403	278	72	892	742
Arrive On Green	0.07	0.18	0.18	0.03	0.14	0.14	0.03	0.48	0.48	0.04	0.49	0.49
Sat Flow, veh/h	1641	3025	515	1641	2726	760	1641	2947	584	1641	1826	1519
Grp Volume(v), veh/h	96	73	75	41	122	124	35	58	60	59	93	92
Grp Sat Flow(s),veh/h/ln	1641	1777	1764	1641	1777	1710	1641	1777	1754	1641	1777	1568
Q Serve(g_s), s	4.2	2.6	2.7	1.8	4.7	5.0	1.6	1.3	1.4	2.6	2.1	2.3
Cycle Q Clear(g_c), s	4.2	2.6	2.7	1.8	4.7	5.0	1.6	1.3	1.4	2.6	2.1	2.3
Prop In Lane	1.00		0.29	1.00		0.44	1.00		0.33	1.00		0.97
Lane Grp Cap(c), veh/h	120	320	318	51	245	236	52	846	835	72	868	766
V/C Ratio(X)	0.80	0.23	0.24	0.81	0.50	0.52	0.67	0.07	0.07	0.82	0.11	0.12
Avail Cap(c_a), veh/h	171	786	780	158	771	742	100	846	835	120	868	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	25.8	25.9	35.5	29.4	29.5	35.3	10.4	10.5	34.9	10.2	10.2
Incr Delay (d2), s/veh	15.8	0.4	0.4	25.4	1.6	1.8	13.8	0.2	0.2	19.3	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.0	1.0	1.0	1.9	1.9	0.8	0.4	0.5	1.3	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.4	26.2	26.3	60.9	31.0	31.3	49.0	10.6	10.6	54.2	10.4	10.6
LnGrp LOS	D	C	C	E	C	C	D	B	B	D	B	B
Approach Vol, veh/h		244			287			153			244	
Approach Delay, s/veh		35.3			35.4			19.4			21.1	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	39.7	7.6	18.6	7.0	40.6	10.7	15.5
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	5.4	35.1	7.1	32.6	4.5	36.0	7.7	32.0
Max Q Clear Time (g_c+I1), s	4.6	3.4	3.8	4.7	3.6	4.3	6.2	7.0
Green Ext Time (p_c), s	0.0	0.4	0.0	0.5	0.0	0.6	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	198	1	16	235	3	53
Future Volume (vph)	198	1	16	235	3	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.872	
Flt Protected				0.997	0.998	
Satd. Flow (prot)	1861	0	0	1857	1621	0
Flt Permitted				0.997	0.998	
Satd. Flow (perm)	1861	0	0	1857	1621	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	215	1	17	255	3	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	216	0	0	272	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.6%		ICU Level of Service A	
Analysis Period (min) 15			

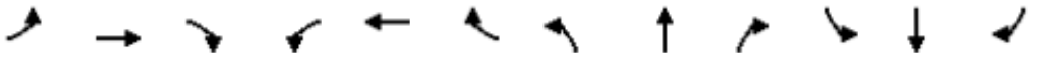
Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	198	1	16	235	3	53
Future Vol, veh/h	198	1	16	235	3	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	215	1	17	255	3	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	216	0	506	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1353	-	526	824
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1353	-	518	824
Mov Cap-2 Maneuver	-	-	-	-	518	-
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	748	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.49	9.88
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	799	-	-	115	-
HCM Lane V/C Ratio	0.076	-	-	0.013	-
HCM Control Delay (s/veh)	9.9	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	257	23	8	244	17	59	1	32	15	9	20
Future Volume (vph)	14	257	23	8	244	17	59	1	32	15	9	20
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.992			0.953			0.938	
Flt Protected		0.998			0.998			0.969			0.984	
Satd. Flow (prot)	0	1839	0	0	1844	0	0	1720	0	0	1719	0
Flt Permitted		0.998			0.998			0.969			0.984	
Satd. Flow (perm)	0	1839	0	0	1844	0	0	1720	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		871			1276			1214			251	
Travel Time (s)		10.8			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	279	25	9	265	18	64	1	35	16	10	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	319	0	0	292	0	0	100	0	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

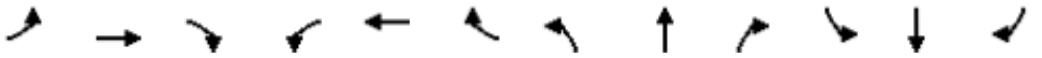
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	257	23	8	244	17	59	1	32	15	9	20
Future Vol, veh/h	14	257	23	8	244	17	59	1	32	15	9	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	279	25	9	265	18	64	1	35	16	10	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	284	0	0	304	0	0	610	623	292	602	627	274
Stage 1	-	-	-	-	-	-	322	322	-	292	292	-
Stage 2	-	-	-	-	-	-	287	301	-	310	335	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1279	-	-	1256	-	-	407	402	747	411	400	764
Stage 1	-	-	-	-	-	-	690	651	-	716	671	-
Stage 2	-	-	-	-	-	-	720	665	-	700	643	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1279	-	-	1256	-	-	377	393	747	382	391	764
Mov Cap-2 Maneuver	-	-	-	-	-	-	377	393	-	382	391	-
Stage 1	-	-	-	-	-	-	680	641	-	710	666	-
Stage 2	-	-	-	-	-	-	684	659	-	657	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.37	0.23	15.11	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	456	84	-	-	53	-	-	498
HCM Lane V/C Ratio	0.22	0.012	-	-	0.007	-	-	0.096
HCM Control Delay (s/veh)	15.1	7.8	0	-	7.9	0	-	13
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.3

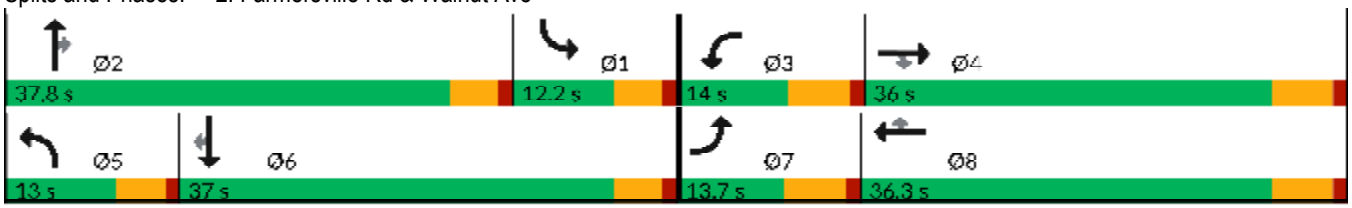


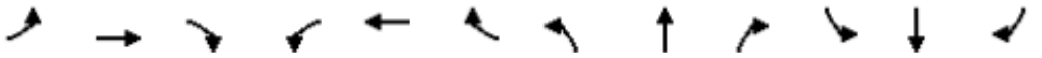
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	165	107	89	116	157	88	328	29	46	172	34
Future Volume (vph)	77	165	107	89	116	157	88	328	29	46	172	34
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1432	1630	1863	1414	1630	1863	1415	1630	1863	1415
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			180			142			142
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	179	116	97	126	171	96	357	32	50	187	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	179	116	97	126	171	96	357	32	50	187	37
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	13.7	36.0	36.0	14.0	36.3	36.3	13.0	37.8	37.8	12.2	37.0	37.0
Total Split (%)	13.7%	36.0%	36.0%	14.0%	36.3%	36.3%	13.0%	37.8%	37.8%	12.2%	37.0%	37.0%
Maximum Green (s)	8.0	30.3	30.3	8.3	30.6	30.6	8.4	33.2	33.2	7.6	32.4	32.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	7.7	15.0	15.0	8.1	18.5	18.5	8.2	36.3	36.3	7.0	33.2	33.2
Actuated g/C Ratio	0.09	0.18	0.18	0.10	0.22	0.22	0.10	0.44	0.44	0.08	0.40	0.40
v/c Ratio	0.55	0.53	0.29	0.61	0.30	0.38	0.60	0.44	0.05	0.36	0.25	0.06
Control Delay (s/veh)	54.3	36.6	2.6	56.7	31.1	6.5	55.9	21.5	0.1	47.0	20.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.3	36.6	2.6	56.7	31.1	6.5	55.9	21.5	0.1	47.0	20.7	0.2
LOS	D	D	A	E	C	A	E	C	A	D	C	A
Approach Delay (s/veh)		30.1			26.7			26.9			22.7	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 82.6			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 26.9		Intersection LOS: C	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

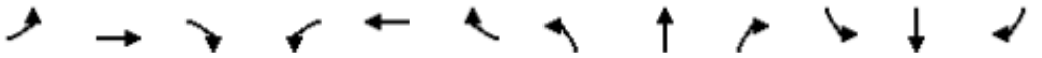




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	165	107	89	116	157	88	328	29	46	172	34
Future Volume (veh/h)	77	165	107	89	116	157	88	328	29	46	172	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	84	179	116	97	126	171	96	357	32	50	187	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	292	222	121	310	233	120	816	620	103	796	605
Arrive On Green	0.06	0.16	0.16	0.07	0.17	0.17	0.07	0.44	0.44	0.06	0.43	0.43
Sat Flow, veh/h	1641	1870	1425	1641	1870	1403	1641	1870	1420	1641	1870	1420
Grp Volume(v), veh/h	84	179	116	97	126	171	96	357	32	50	187	37
Grp Sat Flow(s),veh/h/ln	1641	1870	1425	1641	1870	1403	1641	1870	1420	1641	1870	1420
Q Serve(g_s), s	3.8	6.8	5.7	4.4	4.6	6.7	4.4	10.1	0.6	2.2	4.9	1.2
Cycle Q Clear(g_c), s	3.8	6.8	5.7	4.4	4.6	6.7	4.4	10.1	0.6	2.2	4.9	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	292	222	121	310	233	120	816	620	103	796	605
V/C Ratio(X)	0.80	0.61	0.52	0.80	0.41	0.73	0.80	0.44	0.05	0.49	0.23	0.06
Avail Cap(c_a), veh/h	173	745	567	179	752	564	181	816	620	164	796	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	30.0	29.5	34.7	28.4	17.5	34.7	14.9	4.9	34.5	13.9	12.9
Incr Delay (d2), s/veh	12.8	2.1	1.9	14.3	0.9	4.5	13.5	1.7	0.2	3.5	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.9	1.9	2.1	1.9	2.8	2.0	3.9	0.3	0.9	1.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.9	32.0	31.4	49.0	29.2	22.0	48.2	16.6	5.0	38.0	14.6	13.1
LnGrp LOS	D	C	C	D	C	C	D	B	A	D	B	B
Approach Vol, veh/h		379			394			485			274	
Approach Delay, s/veh		35.4			30.9			22.1			18.7	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	37.8	11.3	17.6	10.2	37.0	10.6	18.3
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	7.6	33.2	8.3	30.3	8.4	32.4	8.0	30.6
Max Q Clear Time (g_c+I1), s	4.2	12.1	6.4	8.8	6.4	6.9	5.8	8.7
Green Ext Time (p_c), s	0.0	1.3	0.0	1.0	0.0	0.7	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	7	5	16	5	121	368	0	10	0	0	0
Future Volume (vph)	105	7	5	16	5	121	368	0	10	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.996				
Flt Protected		0.957			0.963			0.954				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Flt Permitted		0.957			0.963			0.954				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	8	5	17	5	132	400	0	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	127	0	0	22	132	0	411	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

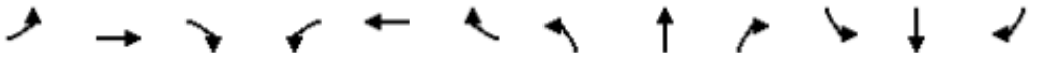
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	105	7	5	16	5	121	368	0	10	0	0	0
Future Vol, veh/h	105	7	5	16	5	121	368	0	10	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	8	5	17	5	132	400	0	11	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	10.9	9.3	18.2	0
HCM LOS	B	A	C	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	76%	0%	0%	0%
Vol Thru, %	0%	0%	6%	24%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	368	10	117	21	121	0	0
LT Vol	368	0	105	16	0	0	0
Through Vol	0	0	7	5	0	0	0
RT Vol	0	10	5	0	121	0	0
Lane Flow Rate	400	11	127	23	132	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.642	0.014	0.217	0.04	0.191	0	0
Departure Headway (Hd)	5.78	4.574	6.129	6.329	5.235	5.937	4.178
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	620	773	581	562	679	0	0
Service Time	3.563	2.357	4.218	4.115	3.02	3.637	1.878
HCM Lane V/C Ratio	0.645	0.014	0.219	0.041	0.194	0	0
HCM Control Delay, s/veh	18.5	7.4	10.9	9.4	9.3	8.6	6.9
HCM Lane LOS	C	A	B	A	A	N	N
HCM 95th-tile Q	4.6	0	0.8	0.1	0.7	0	0

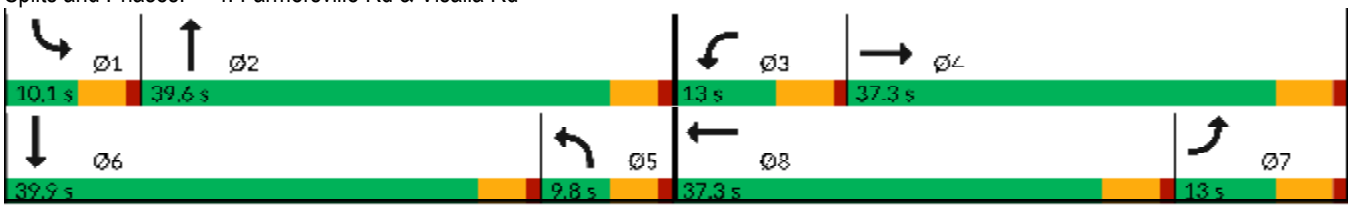


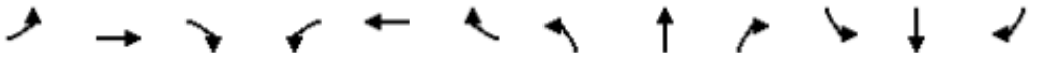
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	145	26	48	220	63	43	114	24	68	96	86
Future Volume (vph)	99	145	26	48	220	63	43	114	24	68	96	86
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.977			0.967			0.974			0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3409	0	1630	3437	0	1630	3261	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3409	0	1630	3437	0	1630	3261	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			38			26			93	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	108	158	28	52	239	68	47	124	26	74	104	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	186	0	52	307	0	47	150	0	74	197	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	37.3		13.0	37.3		9.8	39.6		10.1	39.9	
Total Split (%)	13.0%	37.3%		13.0%	37.3%		9.8%	39.6%		10.1%	39.9%	
Maximum Green (s)	7.7	32.0		7.7	32.0		5.2	35.0		5.5	35.3	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.8	20.0		7.1	14.4		5.2	35.3		5.6	39.8	
Actuated g/C Ratio	0.09	0.24		0.09	0.17		0.06	0.43		0.07	0.48	
v/c Ratio	0.71	0.22		0.37	0.49		0.46	0.10		0.69	0.12	
Control Delay (s/veh)	64.9	24.1		46.3	29.0		55.8	13.7		72.0	9.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	64.9	24.1		46.3	29.0		55.8	13.7		72.0	9.0	
LOS	E	C		D	C		E	B		E	A	
Approach Delay (s/veh)		39.1			31.5			23.7			26.2	
Approach LOS		D			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 83			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 30.8		Intersection LOS: C	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

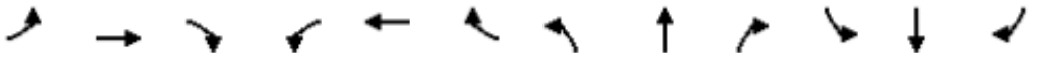




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	145	26	48	220	63	43	114	24	68	96	86
Future Volume (veh/h)	99	145	26	48	220	63	43	114	24	68	96	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	108	158	28	52	239	68	47	124	26	74	104	93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	591	102	64	417	116	86	1327	271	92	847	683
Arrive On Green	0.08	0.20	0.20	0.04	0.15	0.15	0.05	0.45	0.45	0.06	0.46	0.46
Sat Flow, veh/h	1641	3017	523	1641	2731	757	1641	2931	597	1641	1853	1496
Grp Volume(v), veh/h	108	92	94	52	153	154	47	74	76	74	99	98
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1712	1641	1777	1751	1641	1777	1572
Q Serve(g_s), s	5.0	3.4	3.5	2.4	6.2	6.5	2.2	1.8	1.9	3.4	2.5	2.8
Cycle Q Clear(g_c), s	5.0	3.4	3.5	2.4	6.2	6.5	2.2	1.8	1.9	3.4	2.5	2.8
Prop In Lane	1.00		0.30	1.00		0.44	1.00		0.34	1.00		0.95
Lane Grp Cap(c), veh/h	134	348	345	64	272	262	86	805	793	92	812	718
V/C Ratio(X)	0.80	0.26	0.27	0.82	0.56	0.59	0.55	0.09	0.10	0.80	0.12	0.14
Avail Cap(c_a), veh/h	164	736	730	164	736	709	110	805	793	117	812	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	26.3	26.4	36.9	30.3	30.5	35.7	12.1	12.1	36.0	12.1	12.2
Incr Delay (d2), s/veh	20.8	0.4	0.4	21.7	1.8	2.1	5.4	0.2	0.2	26.3	0.3	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.3	1.4	1.3	2.5	2.5	0.9	0.6	0.7	1.9	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.7	26.7	26.8	58.5	32.2	32.6	41.1	12.3	12.3	62.4	12.4	12.5
LnGrp LOS	E	C	C	E	C	C	D	B	B	E	B	B
Approach Vol, veh/h		294			359			197			271	
Approach Delay, s/veh		37.4			36.2			19.2			26.1	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	39.6	8.3	20.4	8.6	39.9	11.6	17.1
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	5.5	35.0	7.7	32.0	5.2	35.3	7.7	32.0
Max Q Clear Time (g_c+I1), s	5.4	3.9	4.4	5.5	4.2	4.8	7.0	8.5
Green Ext Time (p_c), s	0.0	0.5	0.0	0.6	0.0	0.7	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.1
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	310	23	8	260	17	59	1	32	15	9	20
Future Volume (vph)	14	310	23	8	260	17	59	1	32	15	9	20
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.992			0.953			0.938	
Flt Protected		0.998			0.999			0.969			0.984	
Satd. Flow (prot)	0	1842	0	0	1846	0	0	1720	0	0	1719	0
Flt Permitted		0.998			0.999			0.969			0.984	
Satd. Flow (perm)	0	1842	0	0	1846	0	0	1720	0	0	1719	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	337	25	9	283	18	64	1	35	16	10	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	377	0	0	310	0	0	100	0	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.2%		ICU Level of Service A	
Analysis Period (min) 15			

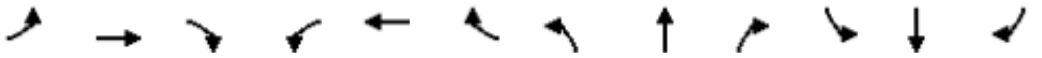
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	310	23	8	260	17	59	1	32	15	9	20
Future Vol, veh/h	14	310	23	8	260	17	59	1	32	15	9	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	337	25	9	283	18	64	1	35	16	10	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	301	0	0	362	0	0	685	698	349	677	702	292
Stage 1	-	-	-	-	-	-	380	380	-	309	309	-
Stage 2	-	-	-	-	-	-	305	318	-	368	392	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1260	-	-	1197	-	-	362	364	694	367	363	747
Stage 1	-	-	-	-	-	-	642	614	-	701	659	-
Stage 2	-	-	-	-	-	-	705	653	-	652	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1260	-	-	1197	-	-	334	356	694	339	354	747
Mov Cap-2 Maneuver	-	-	-	-	-	-	334	356	-	339	354	-
Stage 1	-	-	-	-	-	-	632	605	-	695	654	-
Stage 2	-	-	-	-	-	-	668	648	-	609	597	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.32	0.23	16.67	13.81
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	408	72	-	-	50	-	-	456
HCM Lane V/C Ratio	0.245	0.012	-	-	0.007	-	-	0.105
HCM Control Delay (s/veh)	16.7	7.9	0	-	8	0	-	13.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1	0	-	-	0	-	-	0.3

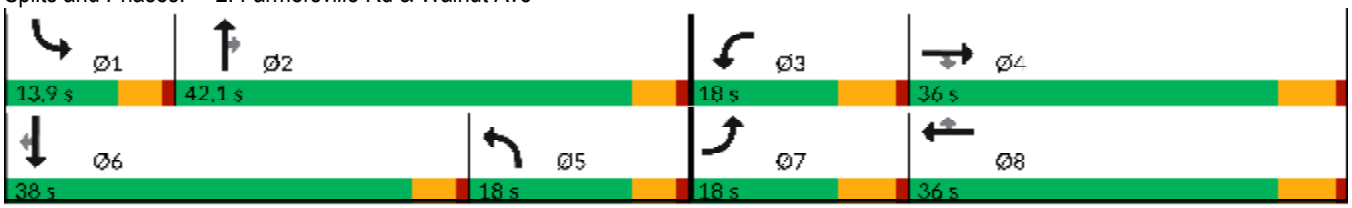


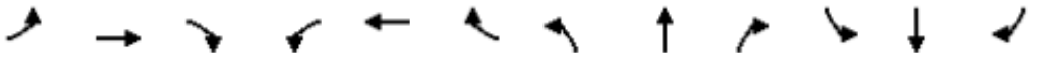
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	168	143	89	117	157	99	328	29	46	172	39
Future Volume (vph)	91	168	143	89	117	157	99	328	29	46	172	39
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	100		55	105		105	100		160	105		105
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.98			0.97			0.97			0.97
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	1863	1458	1630	1863	1458	1630	1863	1458	1630	1863	1458
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	1863	1431	1630	1863	1412	1630	1863	1414	1630	1863	1413
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			171			129			129
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1276			2733			2794			3303	
Travel Time (s)		15.8			33.9			34.6			40.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	99	183	155	97	127	171	108	357	32	50	187	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	183	155	97	127	171	108	357	32	50	187	42
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.7	36.0	36.0	9.7	36.0	36.0	8.6	36.6	36.6	8.6	36.6	36.6
Total Split (s)	18.0	36.0	36.0	18.0	36.0	36.0	18.0	42.1	42.1	13.9	38.0	38.0
Total Split (%)	16.4%	32.7%	32.7%	16.4%	32.7%	32.7%	16.4%	38.3%	38.3%	12.6%	34.5%	34.5%
Maximum Green (s)	12.3	30.3	30.3	12.3	30.3	30.3	13.4	37.5	37.5	9.3	33.4	33.4
Yellow Time (s)	4.7	4.7	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6	4.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Max	Max	None	Max	Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		23.3	23.3		23.3	23.3		25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		5	5		5	5		5	5		5	5
Act Effct Green (s)	10.2	15.6	15.6	10.2	15.6	15.6	11.0	41.6	41.6	7.9	36.5	36.5
Actuated g/C Ratio	0.12	0.18	0.18	0.12	0.18	0.18	0.13	0.47	0.47	0.09	0.42	0.42
v/c Ratio	0.52	0.55	0.40	0.51	0.38	0.44	0.53	0.40	0.04	0.34	0.24	0.06
Control Delay (s/veh)	51.8	41.0	7.9	51.5	37.2	9.0	50.5	22.3	0.1	49.7	24.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.8	41.0	7.9	51.5	37.2	9.0	50.5	22.3	0.1	49.7	24.0	0.2
LOS	D	D	A	D	D	A	D	C	A	D	C	A
Approach Delay (s/veh)		31.7			28.5			27.0			25.0	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 87.6			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 28.3		Intersection LOS: C	
Intersection Capacity Utilization 66.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Farmersville Rd & Walnut Ave

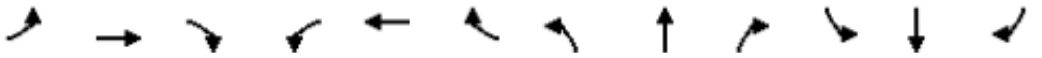




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	168	143	89	117	157	99	328	29	46	172	39
Future Volume (veh/h)	91	168	143	89	117	157	99	328	29	46	172	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	99	183	155	97	127	171	108	357	32	50	187	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	330	252	122	328	246	144	859	652	61	765	580
Arrive On Green	0.08	0.18	0.18	0.07	0.18	0.18	0.09	0.46	0.46	0.04	0.41	0.41
Sat Flow, veh/h	1641	1870	1427	1641	1870	1404	1641	1870	1421	1641	1870	1419
Grp Volume(v), veh/h	99	183	155	97	127	171	108	357	32	50	187	42
Grp Sat Flow(s),veh/h/ln	1641	1870	1427	1641	1870	1404	1641	1870	1421	1641	1870	1419
Q Serve(g_s), s	4.8	7.3	6.1	4.7	4.9	9.3	5.3	10.4	1.0	2.5	5.4	1.0
Cycle Q Clear(g_c), s	4.8	7.3	6.1	4.7	4.9	9.3	5.3	10.4	1.0	2.5	5.4	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	330	252	122	328	246	144	859	652	61	765	580
V/C Ratio(X)	0.79	0.55	0.61	0.79	0.39	0.69	0.75	0.42	0.05	0.81	0.24	0.07
Avail Cap(c_a), veh/h	247	694	529	247	694	521	269	859	652	187	765	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	30.7	17.0	37.2	29.8	31.6	36.4	14.8	12.2	39.0	15.9	6.4
Incr Delay (d2), s/veh	10.7	1.4	2.4	10.9	0.7	3.5	7.7	1.5	0.1	22.1	0.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.1	2.6	2.1	2.1	3.1	2.2	4.0	0.3	1.3	2.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	32.1	19.5	48.1	30.6	35.1	44.1	16.3	12.4	61.1	16.6	6.6
LnGrp LOS	D	C	B	D	C	D	D	B	B	E	B	A
Approach Vol, veh/h		437			395			497			279	
Approach Delay, s/veh		31.2			36.8			22.0			23.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	42.1	11.8	20.1	11.8	38.0	11.9	20.0
Change Period (Y+Rc), s	4.6	4.6	5.7	5.7	4.6	4.6	5.7	5.7
Max Green Setting (Gmax), s	9.3	37.5	12.3	30.3	13.4	33.4	12.3	30.3
Max Q Clear Time (g_c+I1), s	4.5	12.4	6.7	9.3	7.3	7.4	6.8	11.3
Green Ext Time (p_c), s	0.0	1.4	0.1	1.2	0.1	0.7	0.1	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	28.3
HCM 7th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	7	5	16	5	121	376	0	10	0	0	0
Future Volume (vph)	106	7	5	16	5	121	376	0	10	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.996				
Flt Protected		0.957			0.963			0.954				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Flt Permitted		0.957			0.963			0.954				
Satd. Flow (perm)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	8	5	17	5	132	409	0	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	0	0	22	132	0	420	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

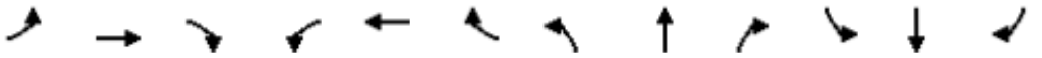
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	7	5	16	5	121	376	0	10	0	0	0
Future Vol, veh/h	106	7	5	16	5	121	376	0	10	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	115	8	5	17	5	132	409	0	11	0	0	0
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay, s/veh	11	9.3	18.8	0
HCM LOS	B	A	C	-

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	90%	76%	0%	0%	0%
Vol Thru, %	0%	0%	6%	24%	0%	100%	100%
Vol Right, %	0%	100%	4%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	376	10	118	21	121	0	0
LT Vol	376	0	106	16	0	0	0
Through Vol	0	0	7	5	0	0	0
RT Vol	0	10	5	0	121	0	0
Lane Flow Rate	409	11	128	23	132	0	0
Geometry Grp	5	5	4b	5	5	5	5
Degree of Util (X)	0.657	0.014	0.219	0.04	0.192	0	0
Departure Headway (Hd)	5.785	4.58	6.157	6.358	5.264	5.957	4.197
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	621	772	578	559	675	0	0
Service Time	3.569	2.362	4.25	4.148	3.053	3.657	1.897
HCM Lane V/C Ratio	0.659	0.014	0.221	0.041	0.196	0	0
HCM Control Delay, s/veh	19.1	7.4	11	9.4	9.3	8.7	6.9
HCM Lane LOS	C	A	B	A	A	N	N
HCM 95th-tile Q	4.9	0	0.8	0.1	0.7	0	0

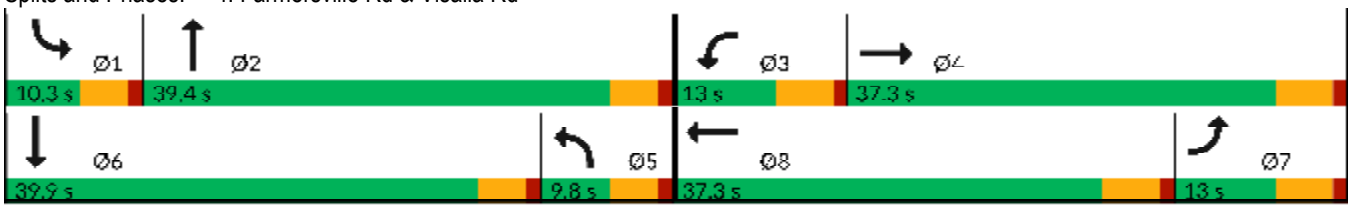


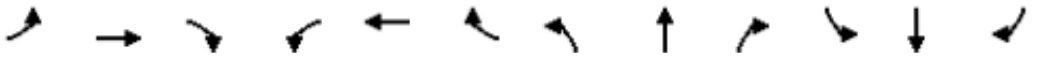
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	145	26	48	220	64	43	119	24	71	112	92
Future Volume (vph)	101	145	26	48	220	64	43	119	24	71	112	92
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	135		0	205		0	155		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			0.99	
Frt		0.977			0.966			0.975			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1630	3448	0	1630	3405	0	1630	3441	0	1630	3272	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1630	3448	0	1630	3405	0	1630	3441	0	1630	3272	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			40			26			100	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		2705			3009			1947			2495	
Travel Time (s)		33.5			37.3			24.1			30.9	
Confl. Peds. (#/hr)			5			5			5			5
Confl. Bikes (#/hr)			2			2			2			2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	158	28	52	239	70	47	129	26	77	122	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	186	0	52	309	0	47	155	0	77	222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	9.3	37.3		9.3	37.3		8.6	38.3		8.6	38.3	
Total Split (s)	13.0	37.3		13.0	37.3		9.8	39.4		10.3	39.9	
Total Split (%)	13.0%	37.3%		13.0%	37.3%		9.8%	39.4%		10.3%	39.9%	
Maximum Green (s)	7.7	32.0		7.7	32.0		5.2	34.8		5.7	35.3	
Yellow Time (s)	4.3	4.3		4.3	4.3		3.6	3.6		3.6	3.6	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.3	5.3		5.3	5.3		4.6	4.6		4.6	4.6	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		25.0			25.0			26.7			26.7	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	7.8	20.0		7.1	14.4		5.2	35.1		5.8	39.8	
Actuated g/C Ratio	0.09	0.24		0.09	0.17		0.06	0.42		0.07	0.48	
v/c Ratio	0.72	0.22		0.37	0.50		0.46	0.11		0.69	0.14	
Control Delay (s/veh)	66.3	24.1		46.3	28.8		55.8	13.9		71.4	9.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	66.3	24.1		46.3	28.8		55.8	13.9		71.4	9.1	
LOS	E	C		D	C		E	B		E	A	
Approach Delay (s/veh)		39.8			31.3			23.6			25.2	
Approach LOS		D			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 83			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: Farmersville Rd & Visalia Rd

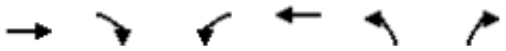




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	145	26	48	220	64	43	119	24	71	112	92
Future Volume (veh/h)	101	145	26	48	220	64	43	119	24	71	112	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	110	158	28	52	239	70	47	129	26	77	122	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	597	103	64	416	119	85	1326	260	96	875	656
Arrive On Green	0.08	0.20	0.20	0.04	0.15	0.15	0.05	0.45	0.45	0.06	0.46	0.46
Sat Flow, veh/h	1641	3017	523	1641	2712	773	1641	2952	579	1641	1920	1440
Grp Volume(v), veh/h	110	92	94	52	154	155	47	76	79	77	112	110
Grp Sat Flow(s),veh/h/ln	1641	1777	1763	1641	1777	1708	1641	1777	1755	1641	1777	1583
Q Serve(g_s), s	5.1	3.4	3.5	2.4	6.2	6.5	2.2	1.9	2.0	3.6	2.8	3.1
Cycle Q Clear(g_c), s	5.1	3.4	3.5	2.4	6.2	6.5	2.2	1.9	2.0	3.6	2.8	3.1
Prop In Lane	1.00		0.30	1.00		0.45	1.00		0.33	1.00		0.91
Lane Grp Cap(c), veh/h	137	352	349	64	273	262	85	798	788	96	810	721
V/C Ratio(X)	0.81	0.26	0.27	0.82	0.57	0.59	0.55	0.10	0.10	0.80	0.14	0.15
Avail Cap(c_a), veh/h	163	734	728	163	734	706	110	798	788	121	810	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	26.3	26.3	37.0	30.4	30.5	35.8	12.3	12.3	36.0	12.2	12.3
Incr Delay (d2), s/veh	21.4	0.4	0.4	21.7	1.8	2.1	5.5	0.2	0.3	25.7	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.3	1.4	1.3	2.5	2.6	0.9	0.7	0.7	2.0	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.3	26.7	26.7	58.6	32.2	32.6	41.3	12.5	12.6	61.7	12.6	12.8
LnGrp LOS	E	C	C	E	C	C	D	B	B	E	B	B
Approach Vol, veh/h		296			361			202			299	
Approach Delay, s/veh		37.7			36.2			19.2			25.3	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	39.4	8.3	20.6	8.6	39.9	11.8	17.2
Change Period (Y+Rc), s	4.6	4.6	5.3	5.3	4.6	4.6	5.3	5.3
Max Green Setting (Gmax), s	5.7	34.8	7.7	32.0	5.2	35.3	7.7	32.0
Max Q Clear Time (g_c+I1), s	5.6	4.0	4.4	5.5	4.2	5.1	7.1	8.5
Green Ext Time (p_c), s	0.0	0.5	0.0	0.6	0.0	0.8	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.8
HCM 7th LOS	C



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	288	1	16	343	3	53
Future Volume (vph)	288	1	16	343	3	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.872	
Flt Protected				0.998	0.998	
Satd. Flow (prot)	1863	0	0	1859	1621	0
Flt Permitted				0.998	0.998	
Satd. Flow (perm)	1863	0	0	1859	1621	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2195			1741	390	
Travel Time (s)	27.2			21.6	4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	313	1	17	373	3	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	314	0	0	390	61	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

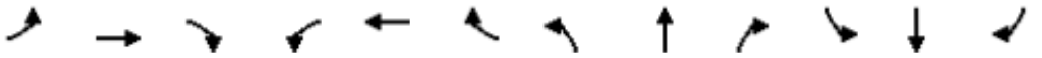
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	288	1	16	343	3	53
Future Vol, veh/h	288	1	16	343	3	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	313	1	17	373	3	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	314	0	721	314
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	408	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1246	-	394	727
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1246	-	387	727
Mov Cap-2 Maneuver	-	-	-	-	387	-
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	660	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.35	10.68
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	694	-	-	80	-
HCM Lane V/C Ratio	0.088	-	-	0.014	-
HCM Control Delay (s/veh)	10.7	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

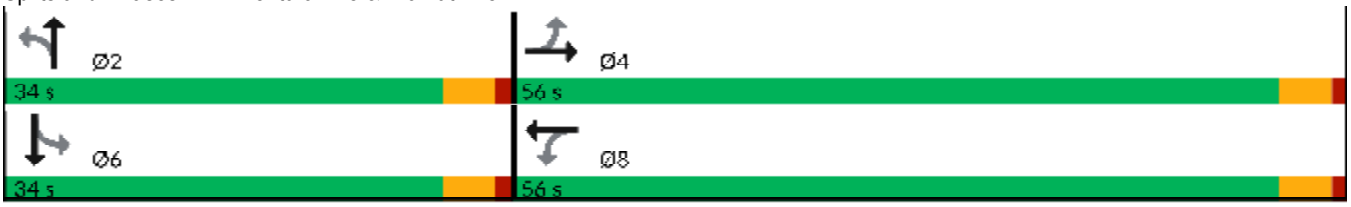


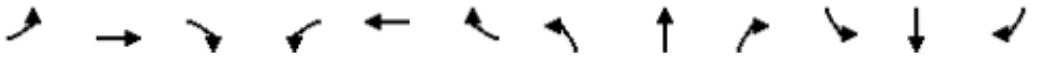
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	310	23	8	260	17	59	1	32	15	9	20
Future Volume (vph)	14	310	23	8	260	17	59	1	32	15	9	20
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.992			0.953			0.938	
Flt Protected		0.998			0.999			0.969			0.984	
Satd. Flow (prot)	0	1842	0	0	1846	0	0	1720	0	0	1719	0
Flt Permitted		0.979			0.984			0.777			0.874	
Satd. Flow (perm)	0	1807	0	0	1818	0	0	1379	0	0	1527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			6			32			22	
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1741			1276			1214			251	
Travel Time (s)		21.6			15.8			15.0			3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	337	25	9	283	18	64	1	35	16	10	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	377	0	0	310	0	0	100	0	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	56.0	56.0		56.0	56.0		34.0	34.0		34.0	34.0	
Total Split (%)	62.2%	62.2%		62.2%	62.2%		37.8%	37.8%		37.8%	37.8%	
Maximum Green (s)	51.5	51.5		51.5	51.5		29.5	29.5		29.5	29.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		10.9			10.9			7.1			7.1	
Actuated g/C Ratio		0.40			0.40			0.26			0.26	
v/c Ratio		0.52			0.42			0.26			0.12	
Control Delay (s/veh)		9.0			7.8			8.6			6.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		9.0			7.8			8.6			6.9	
LOS		A			A			A			A	
Approach Delay (s/veh)		9.0			7.8			8.6			6.9	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 27.2			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 8.4		Intersection LOS: A	
Intersection Capacity Utilization 41.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Ventura Ave & Walnut Ave

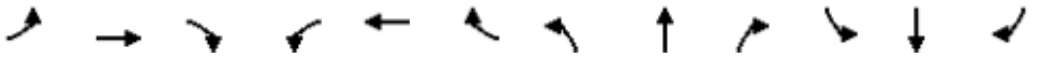




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	310	23	8	260	17	59	1	32	15	9	20
Future Volume (veh/h)	14	310	23	8	260	17	59	1	32	15	9	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	15	337	25	9	283	18	64	1	35	16	10	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	561	41	197	572	36	464	36	107	316	108	151
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	33	1670	121	22	1704	106	795	175	522	347	526	739
Grp Volume(v), veh/h	377	0	0	310	0	0	100	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1824	0	0	1833	0	0	1492	0	0	1612	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	2.6	0.0	0.0	1.0	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.04		0.07	0.03		0.06	0.64		0.35	0.33		0.46
Lane Grp Cap(c), veh/h	804	0	0	805	0	0	606	0	0	574	0	0
V/C Ratio(X)	0.47	0.00	0.00	0.39	0.00	0.00	0.16	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	4926	0	0	4953	0	0	2492	0	0	2599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	0.0	5.2	0.0	0.0	6.6	0.0	0.0	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.8	0.0	0.0	5.5	0.0	0.0	6.7	0.0	0.0	6.4	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h		377			310			100			48	
Approach Delay, s/veh		5.8			5.5			6.7			6.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	8.5	11.1	8.5	11.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	51.5	29.5	51.5
Max Q Clear Time (g_c+I1), s	3.0	5.3	2.4	4.6
Green Ext Time (p_c), s	0.3	1.4	0.1	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

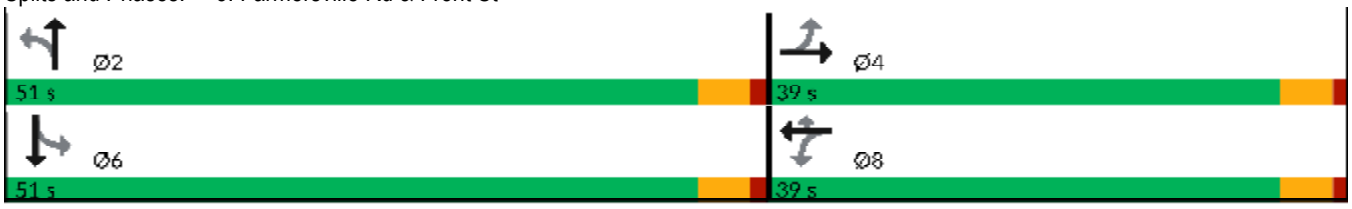


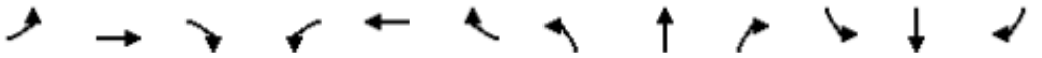
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	7	5	16	5	121	376	0	10	0	0	0
Future Volume (vph)	106	7	5	16	5	121	376	0	10	0	0	0
Ideal Flow (vphpl)	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Storage Length (ft)	0		0	0		50	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.995				0.850		0.996				
Flt Protected		0.957			0.963			0.954				
Satd. Flow (prot)	0	1774	0	0	1794	1458	0	3363	0	0	3539	0
Flt Permitted		0.732			0.731			0.745				
Satd. Flow (perm)	0	1357	0	0	1362	1458	0	2626	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				132		18				
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1267			2789			2495			2794	
Travel Time (s)		15.7			34.6			30.9			34.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	8	5	17	5	132	409	0	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	0	0	22	132	0	420	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11	1.11	1.00	1.11
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA				
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	39.0	39.0		39.0	39.0	39.0	51.0	51.0		51.0	51.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	34.5	34.5		34.5	34.5	34.5	46.5	46.5		46.5	46.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.5			4.5	4.5		4.5			4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None	None	Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0		0	0	
Act Effct Green (s)		8.3			8.1	8.1		14.8				
Actuated g/C Ratio		0.29			0.28	0.28		0.51				
v/c Ratio		0.33			0.06	0.26		0.31				
Control Delay (s/veh)		10.5			7.8	3.6		6.7				
Queue Delay		0.0			0.0	0.0		0.0				
Total Delay (s/veh)		10.5			7.8	3.6		6.7				
LOS		B			A	A		A				
Approach Delay (s/veh)		10.5			4.2			6.7				
Approach LOS		B			A			A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 28.8			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 6.8		Intersection LOS: A	
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Farmersville Rd & Front St





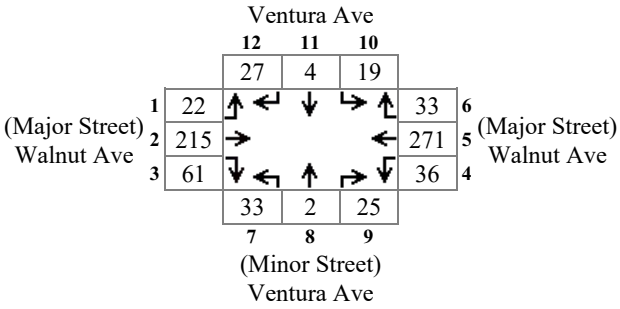
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	7	5	16	5	121	376	0	10	0	0	0
Future Volume (veh/h)	106	7	5	16	5	121	376	0	10	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1723	1870	1723	1723	1870	1723	1723	1870	1723	1723	1870	1723
Adj Flow Rate, veh/h	115	8	5	17	5	132	409	0	11	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	510	13	8	488	104	257	910	0	585	0	1441	0
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.41	0.00	0.41	0.00	0.00	0.00
Sat Flow, veh/h	1094	76	48	1086	593	1460	1418	0	1442	0	3741	0
Grp Volume(v), veh/h	128	0	0	22	0	132	409	0	11	0	0	0
Grp Sat Flow(s),veh/h/ln	1217	0	0	1678	0	1460	1418	0	1442	0	1777	0
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	1.8	5.2	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.2	0.0	1.8	5.2	0.0	0.1	0.0	0.0	0.0
Prop In Lane	0.90		0.04	0.77		1.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	532	0	0	592	0	257	910	0	585	0	1441	0
V/C Ratio(X)	0.24	0.00	0.00	0.04	0.00	0.51	0.45	0.00	0.02	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2375	0	0	2715	0	2343	3401	0	3120	0	7688	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	7.4	0.0	8.0	5.3	0.0	3.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.0	1.6	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.5	0.0	0.0	7.4	0.0	9.6	5.7	0.0	3.8	0.0	0.0	0.0
LnGrp LOS	A			A		A	A		A			
Approach Vol, veh/h		128			154			420			0	
Approach Delay, s/veh		8.5			9.3			5.6			0.0	
Approach LOS		A			A			A				

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.2		8.3		13.2		8.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		46.5		34.5		46.5		34.5				
Max Q Clear Time (g_c+I1), s		7.2		4.2		0.0		3.8				
Green Ext Time (p_c), s		1.5		0.5		0.0		0.6				

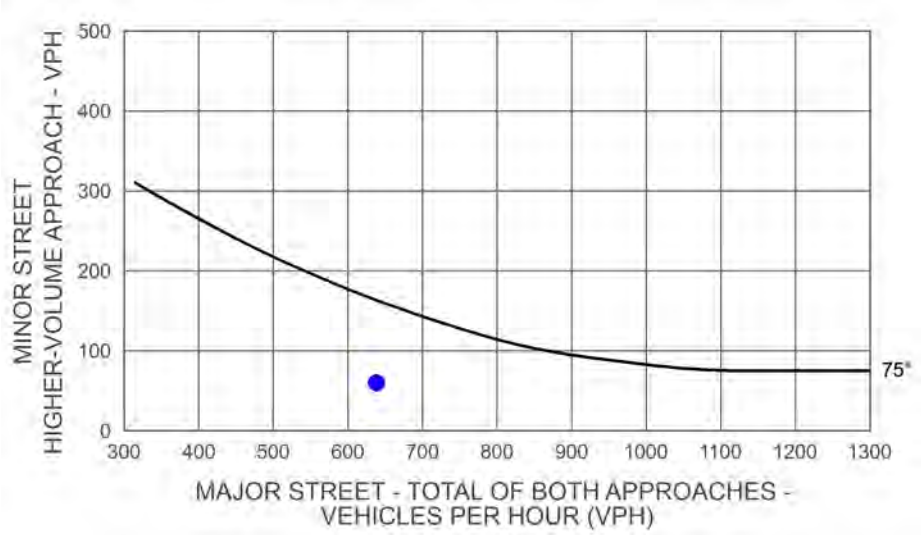
Intersection Summary												
HCM 7th Control Delay, s/veh			7.0									
HCM 7th LOS			A									

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 1

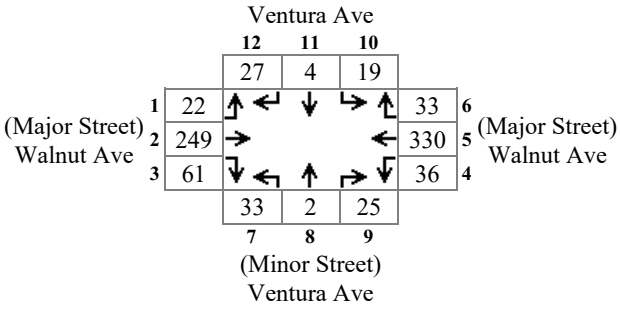


Major Total: 638
Minor High Volume: 60

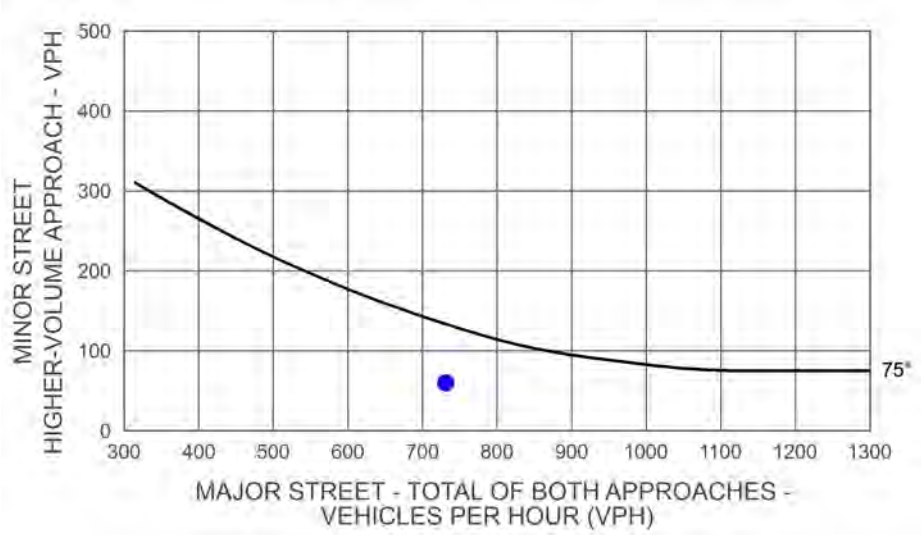


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 1

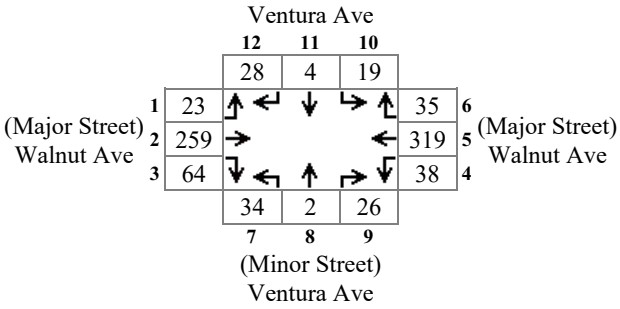


Major Total: 731
Minor High Volume: 60

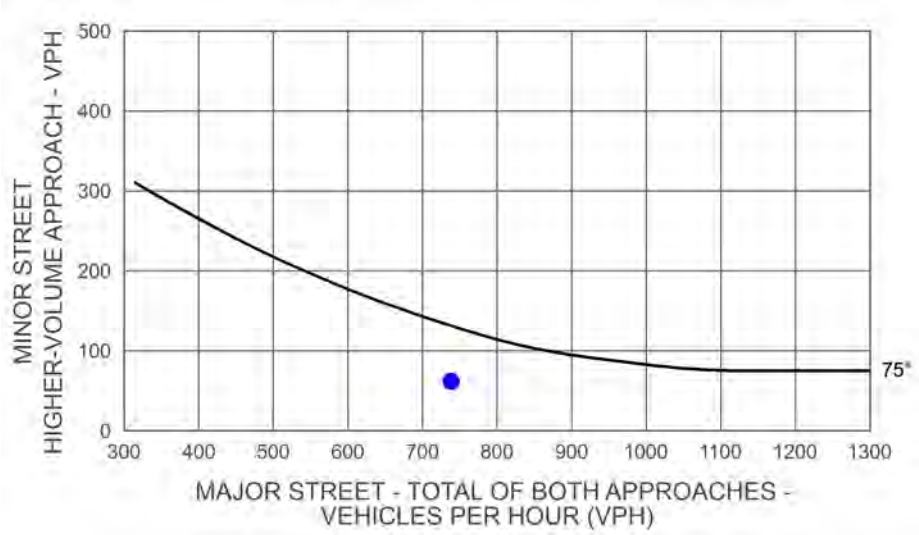


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 1

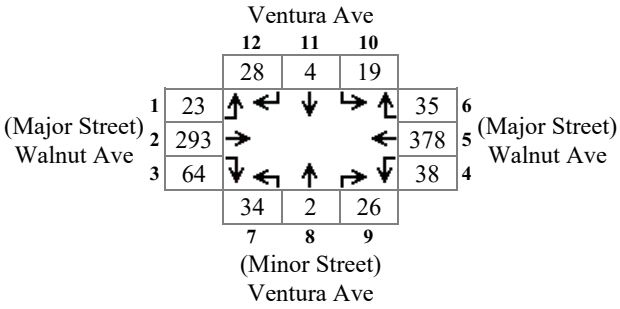


Major Total: 738
Minor High Volume: 62

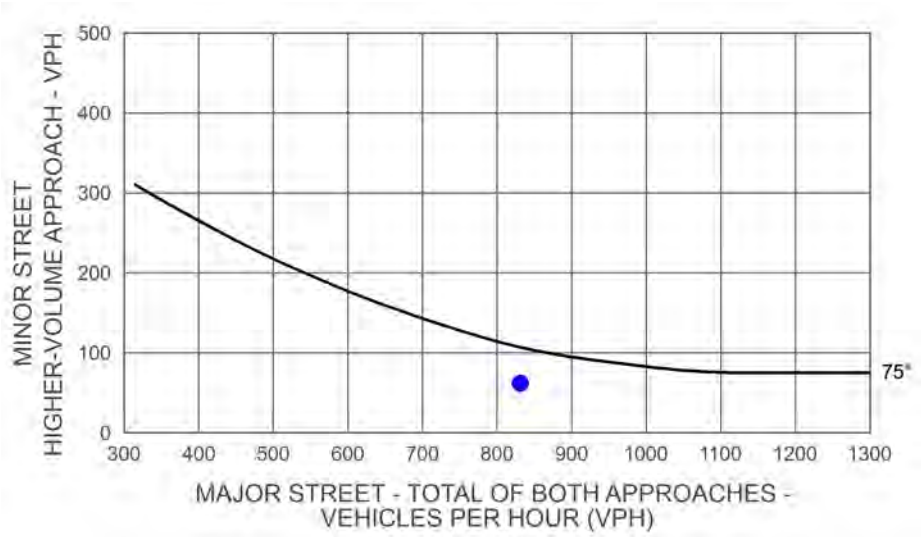


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 1

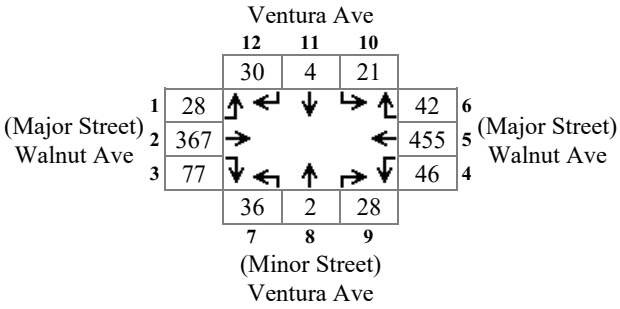


Major Total: 831
Minor High Volume: 62

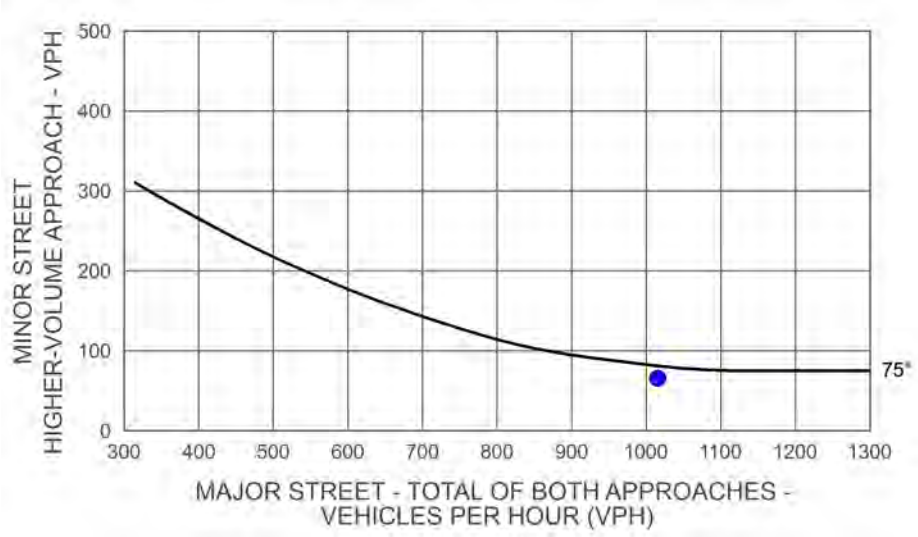


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 1

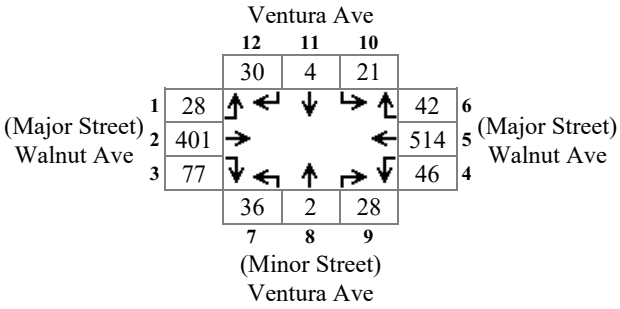


Major Total: 1015
Minor High Volume: 66

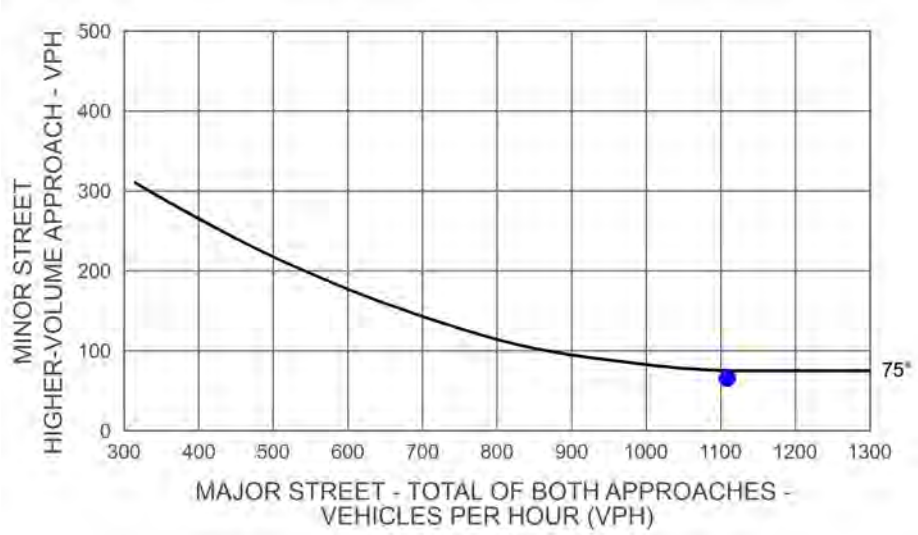


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 1

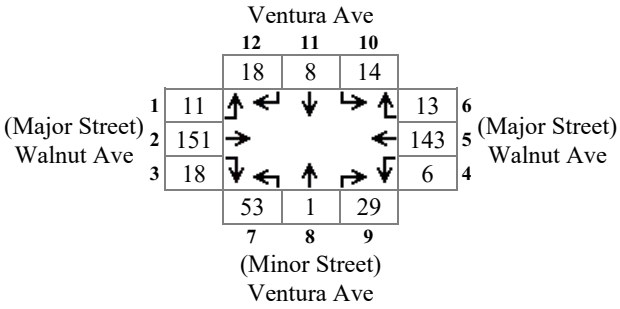


Major Total: 1108
Minor High Volume: 66

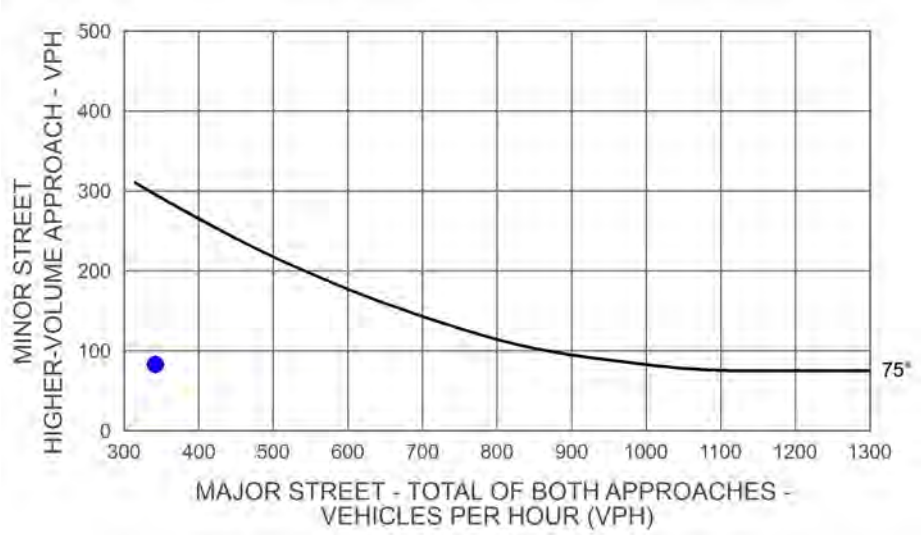


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 1

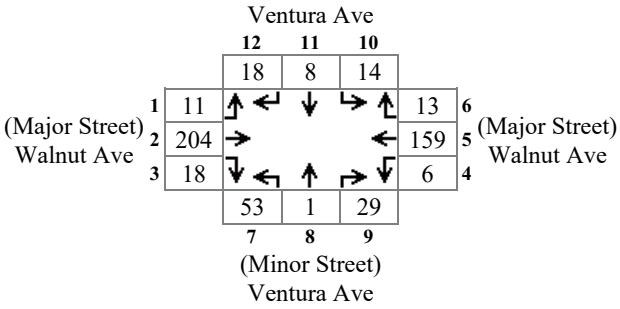


Major Total: 342
Minor High Volume: 83

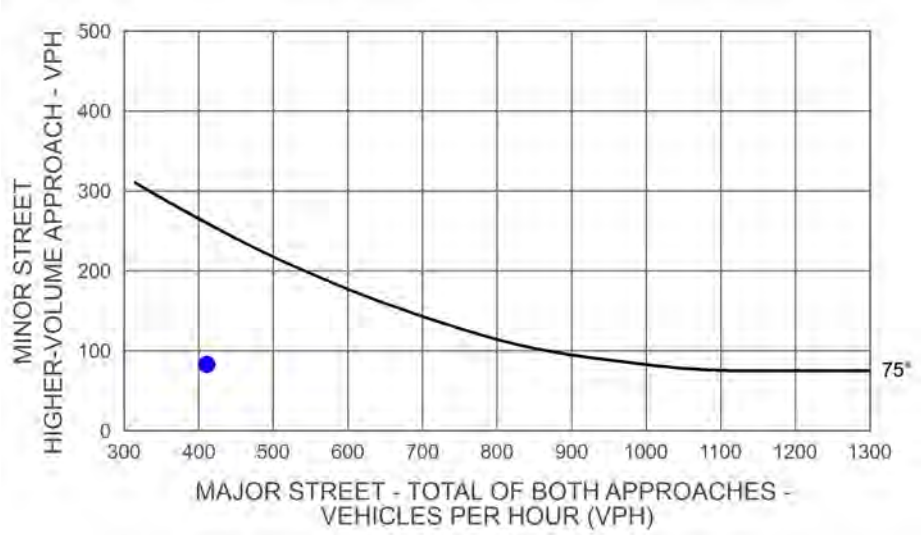


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 1

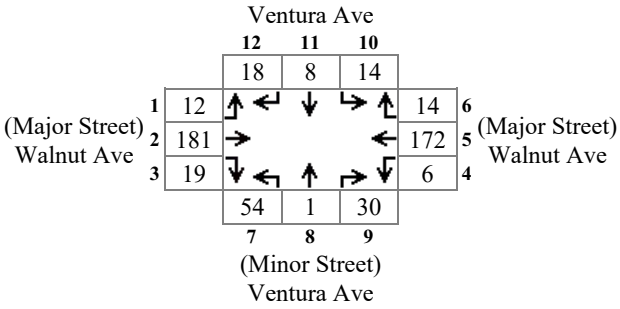


Major Total: 411
Minor High Volume: 83

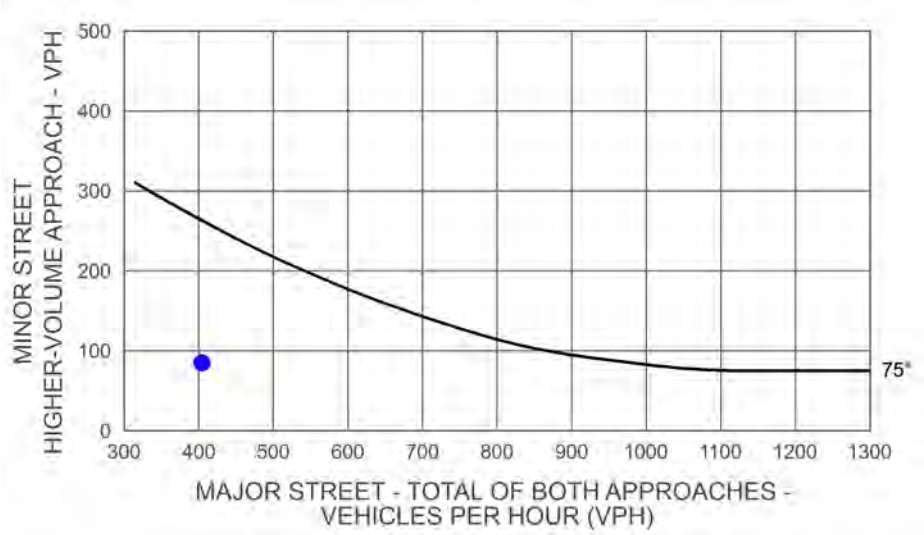


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 1

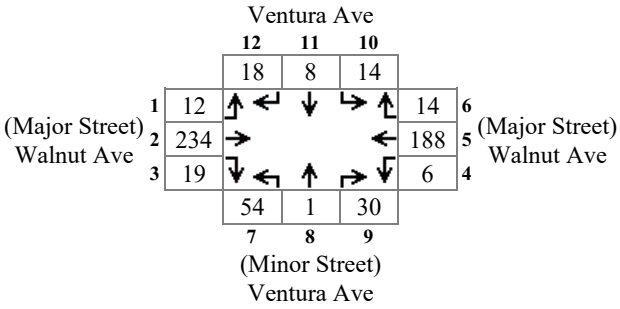


Major Total: 404
Minor High Volume: 85

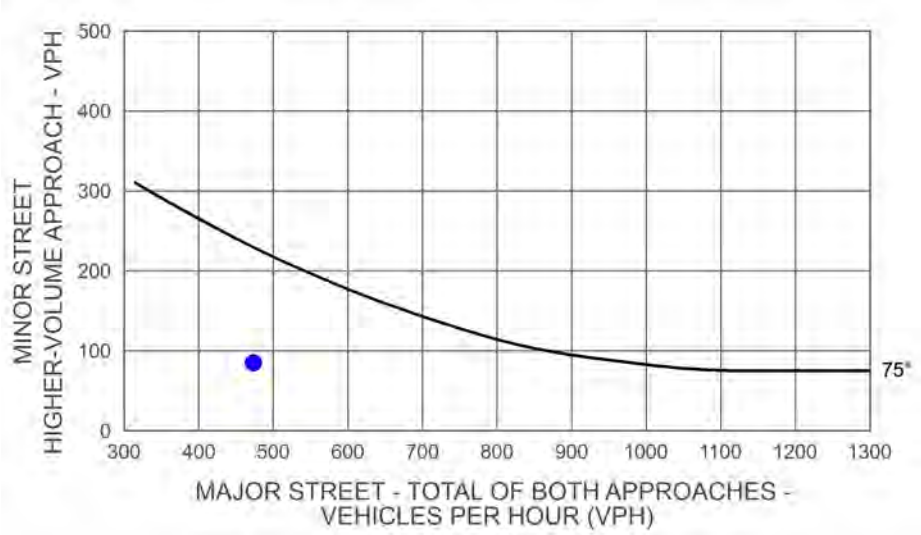


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 1

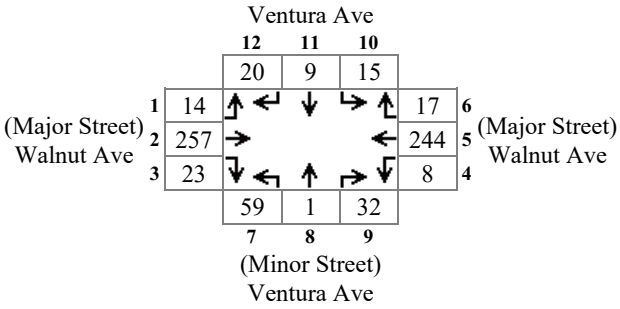


Major Total: 473
Minor High Volume: 85

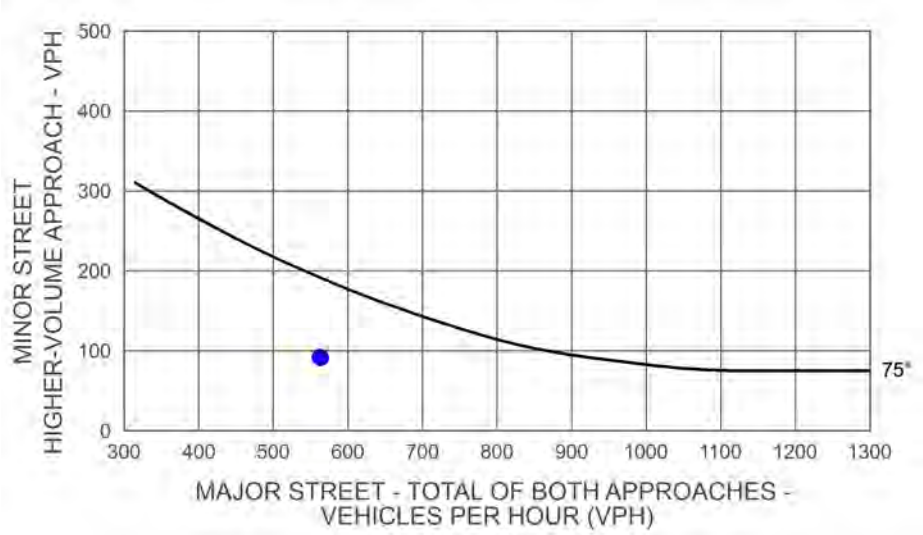


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 1

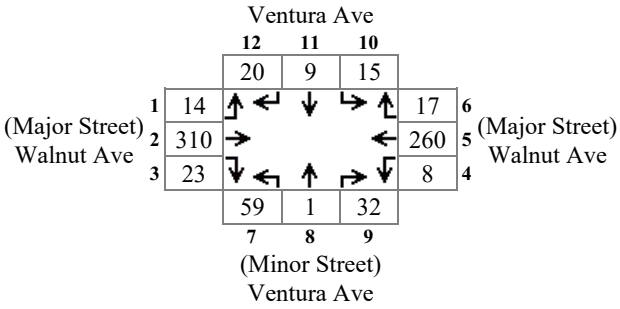


Major Total: 563
Minor High Volume: 92

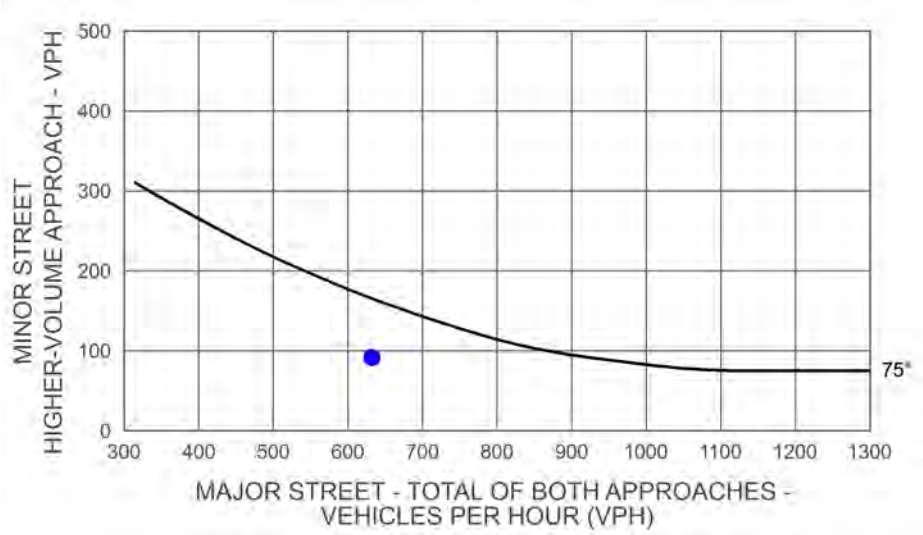


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 1

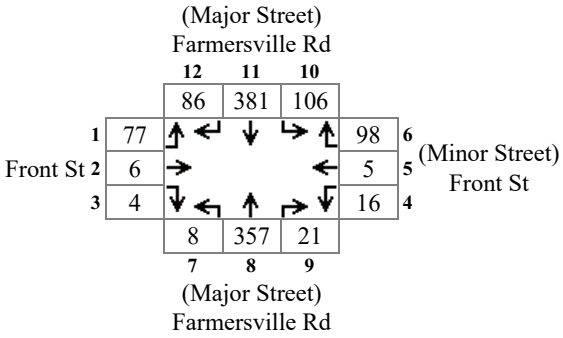


Major Total: 632
Minor High Volume: 92



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

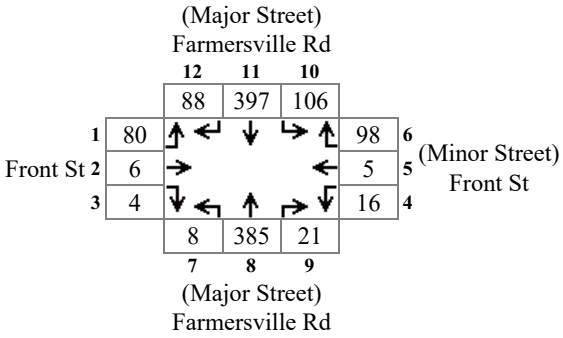
Scenario: PM Existing
Intersection #: 3



Major Total: 959
Minor High Volume: 119

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

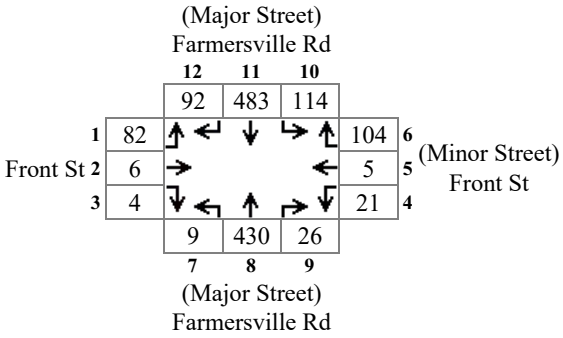
Scenario: PM Existing+Project
Intersection #: 3



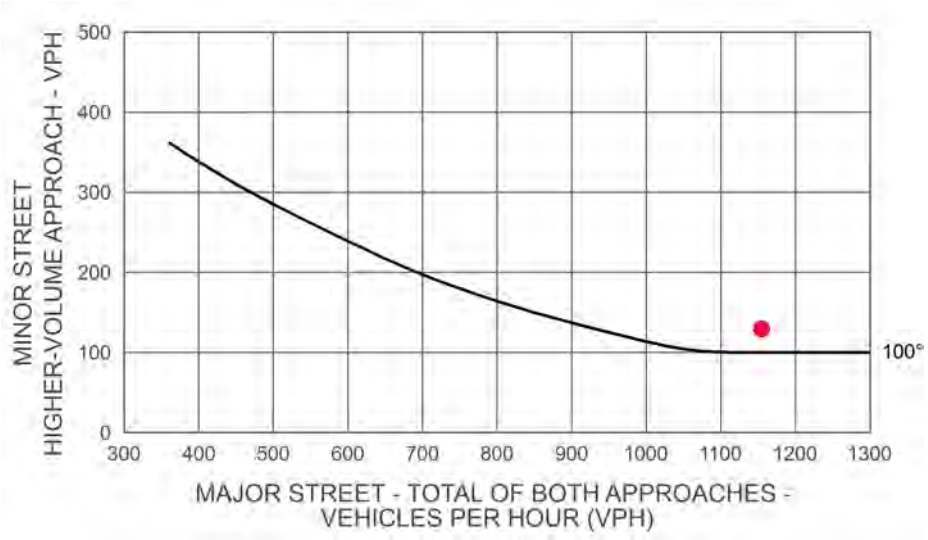
Major Total: 1005
Minor High Volume: 119

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 3

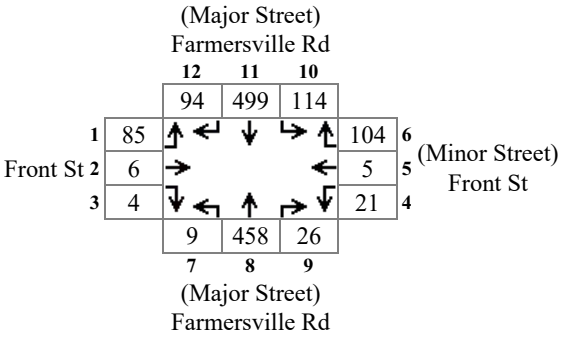


Major Total: 1154
Minor High Volume: 130

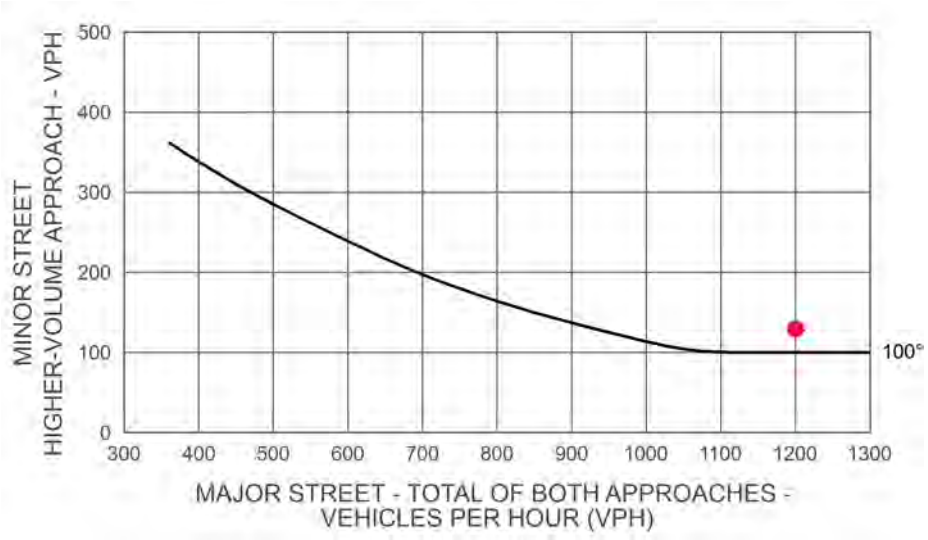


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 3

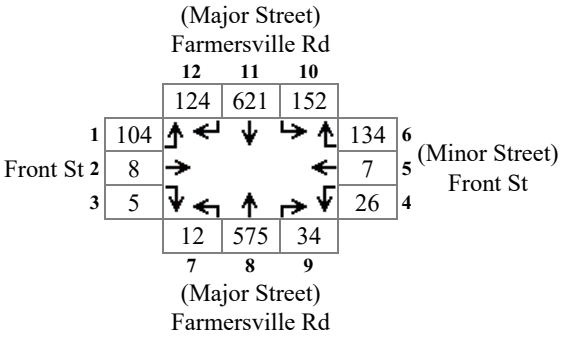


Major Total: 1200
Minor High Volume: 130

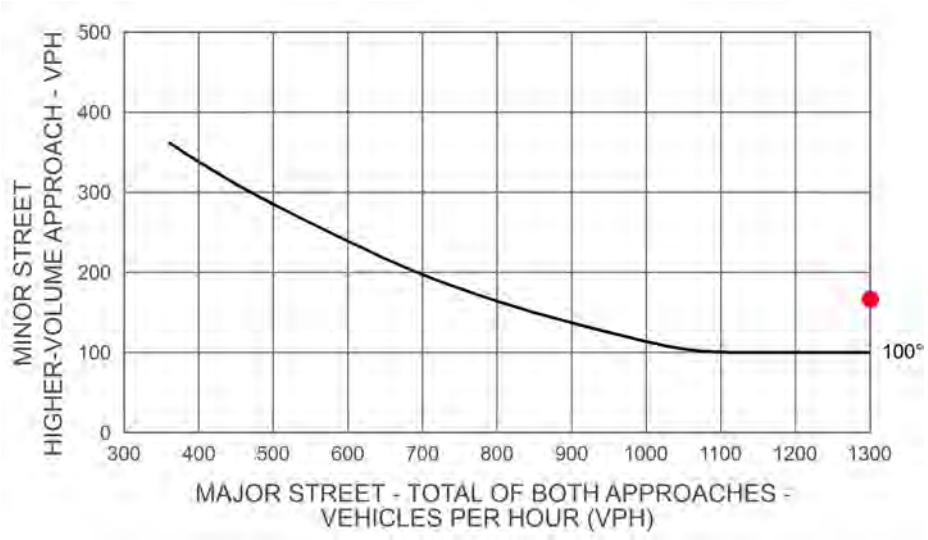


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 3

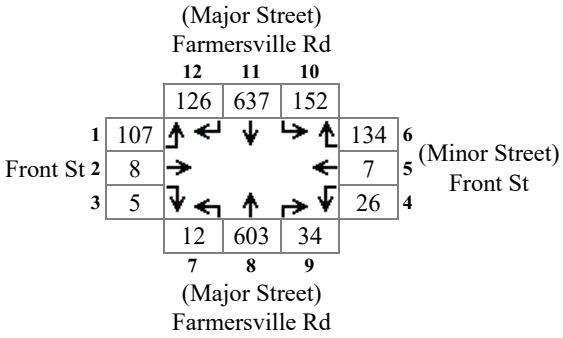


Major Total: 1518
Minor High Volume: 167

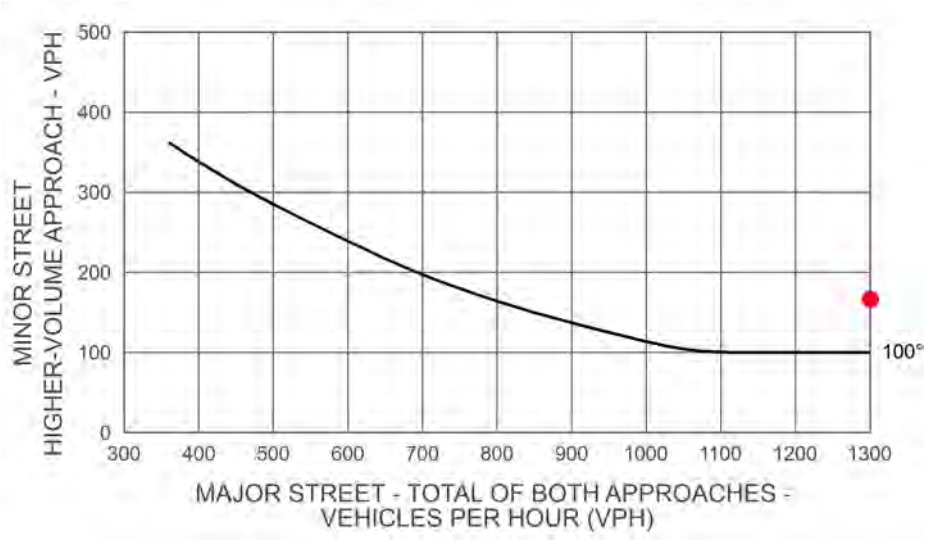


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 3

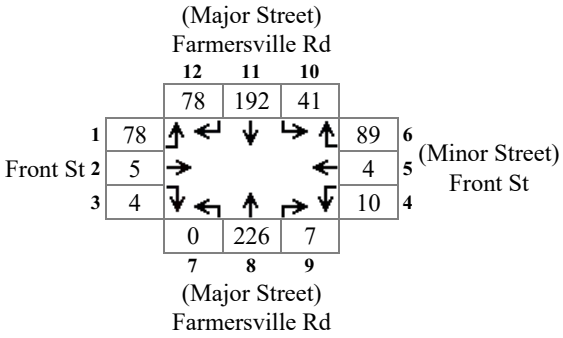


Major Total: 1564
Minor High Volume: 167

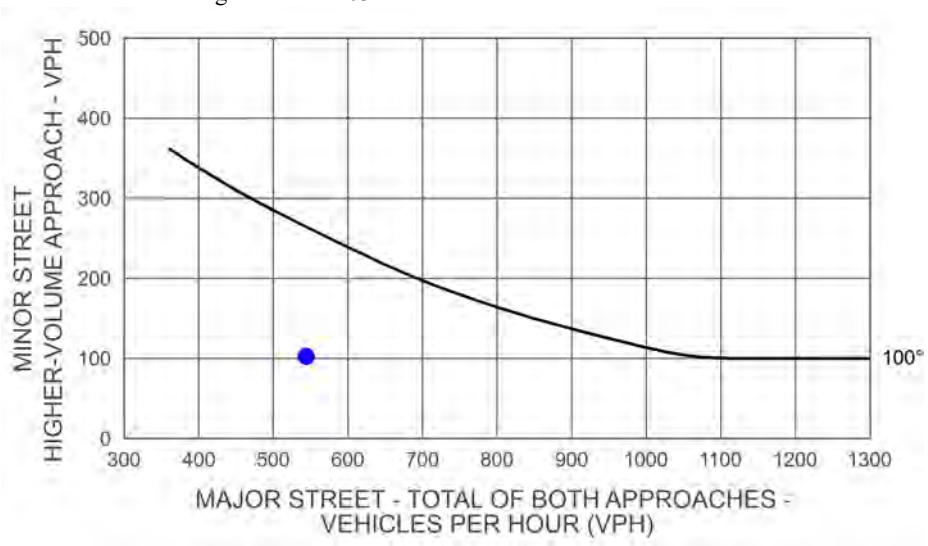


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 3

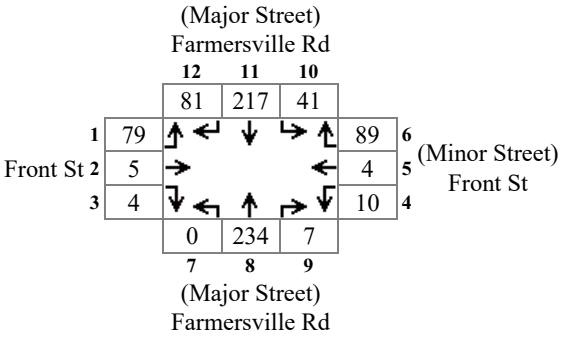


Major Total: 544
Minor High Volume: 103

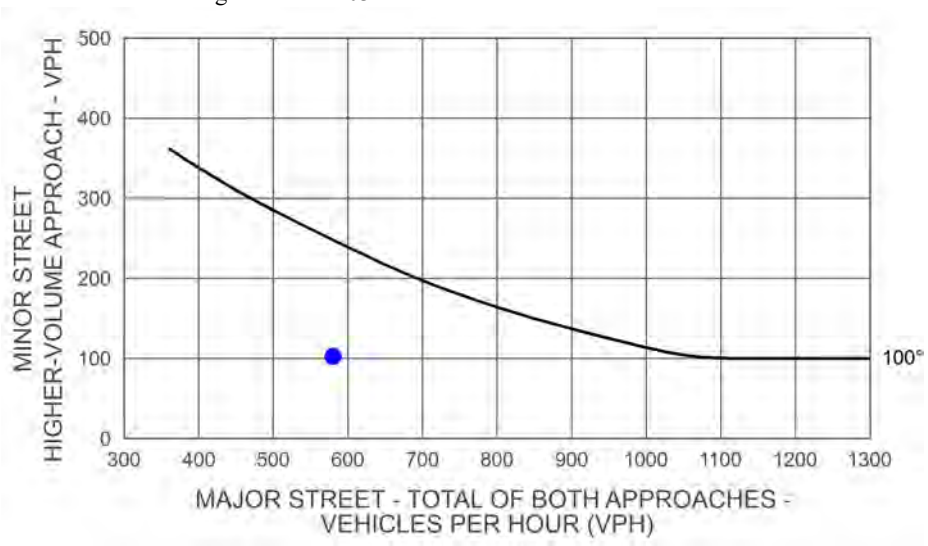


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 3

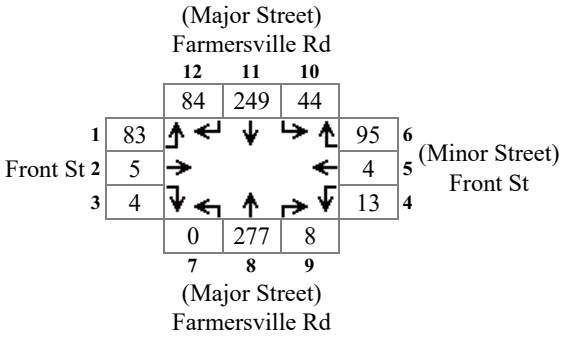


Major Total: 580
Minor High Volume: 103



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

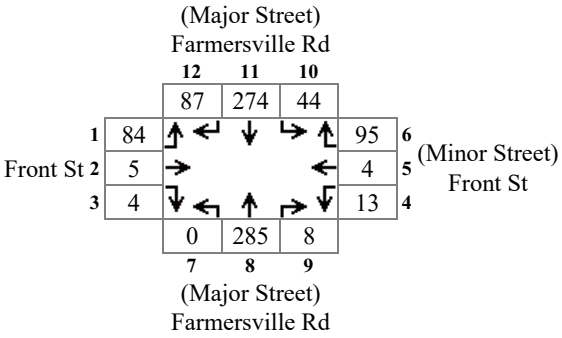
Scenario: AM Future
Intersection #: 3



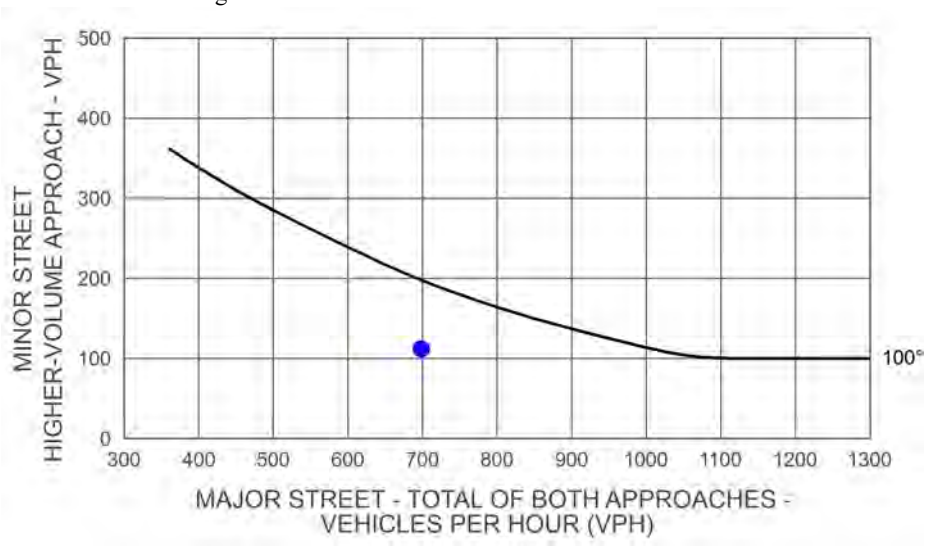
Major Total: 662
Minor High Volume: 112

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 3

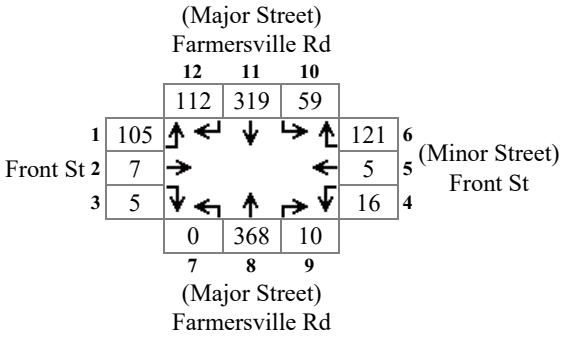


Major Total: 698
Minor High Volume: 112



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

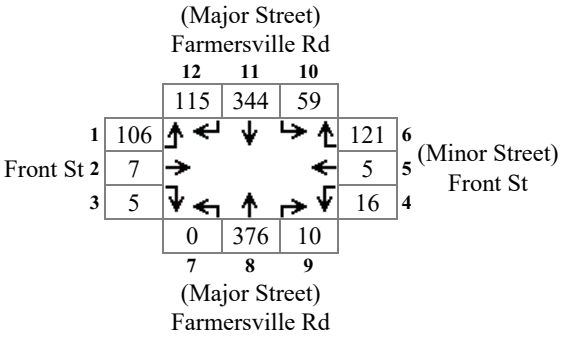
Scenario: AM Future
Intersection #: 3



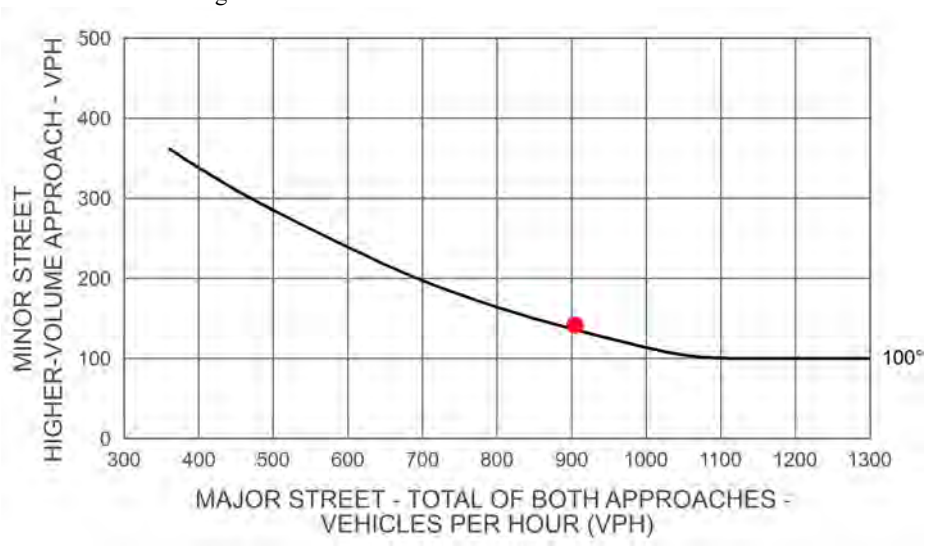
Major Total: 868
Minor High Volume: 142

Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 3

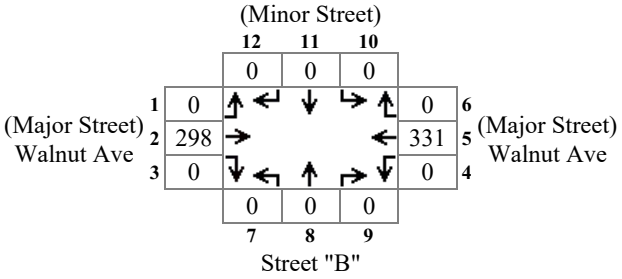


Major Total: 904
Minor High Volume: 142

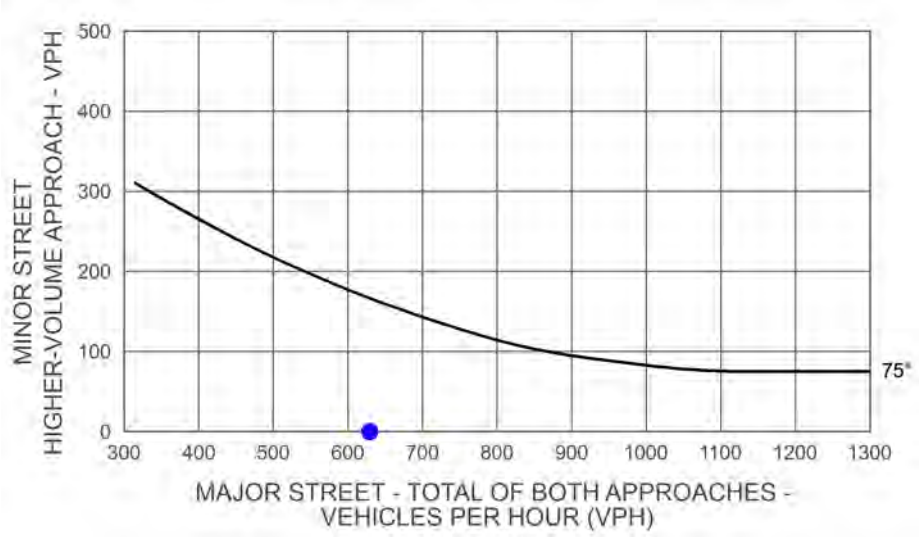


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 5

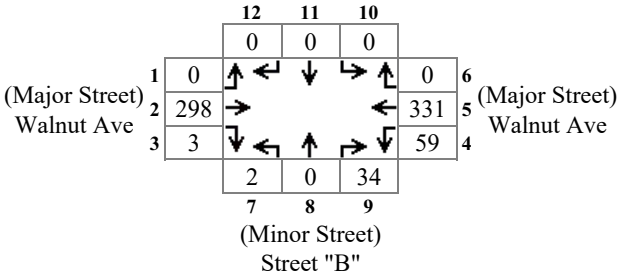


Major Total: 629
Minor High Volume: 0

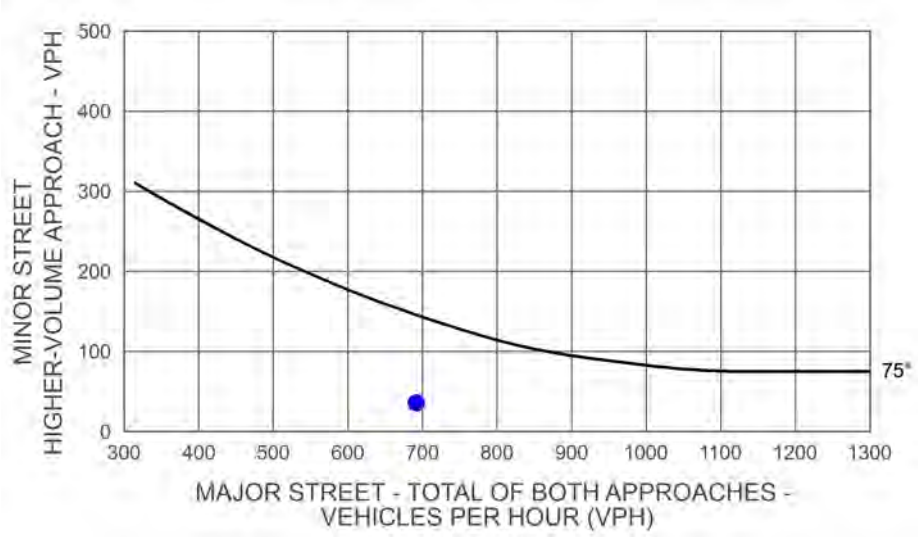


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 5

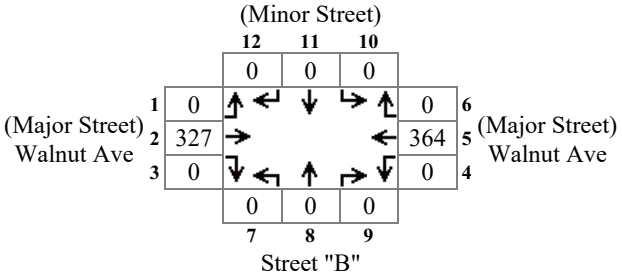


Major Total: 691
Minor High Volume: 36

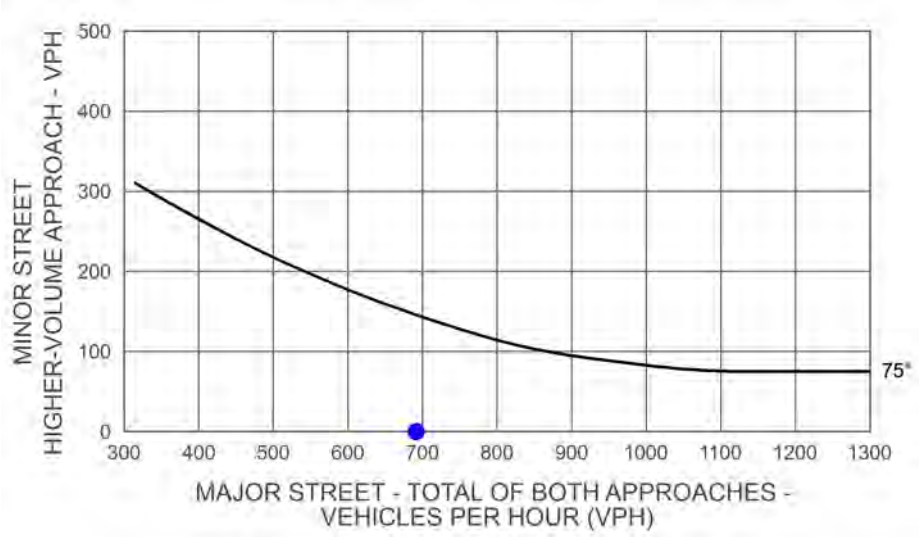


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 5

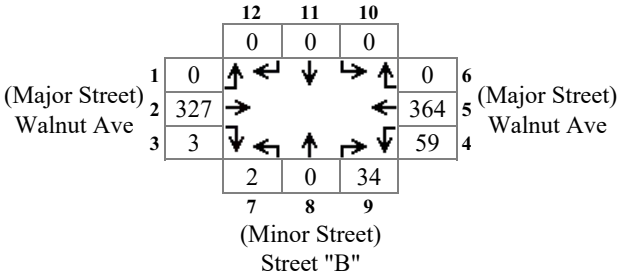


Major Total: 691
Minor High Volume: 0

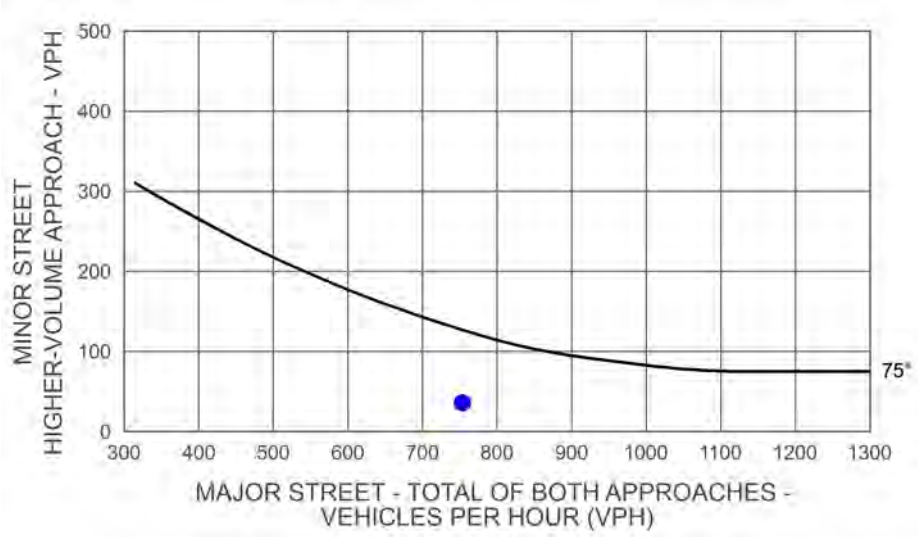


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 5

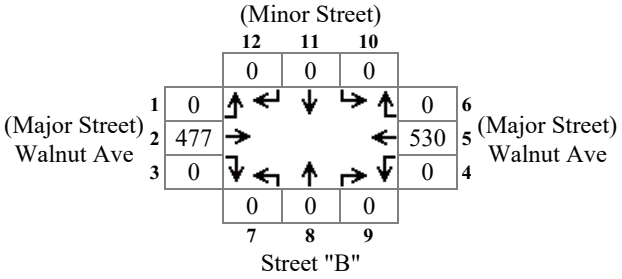


Major Total: 753
Minor High Volume: 36

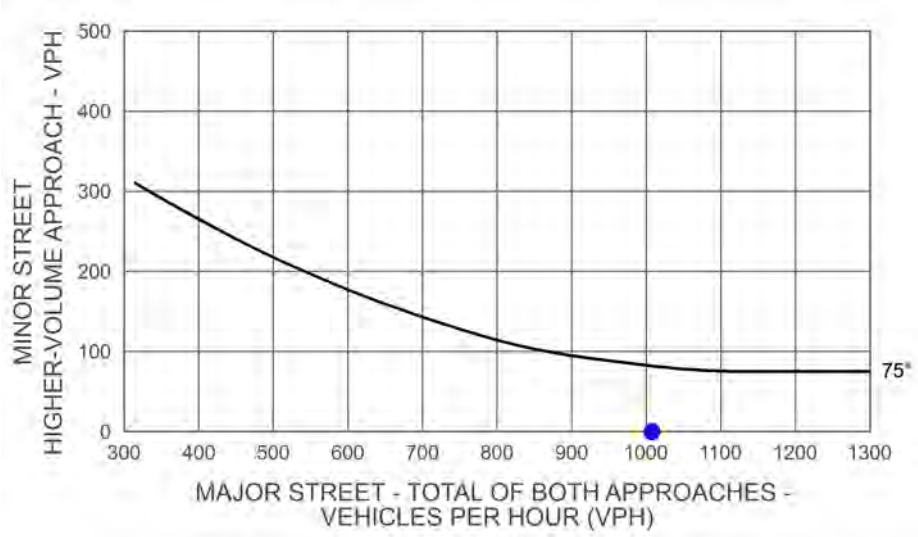


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 5

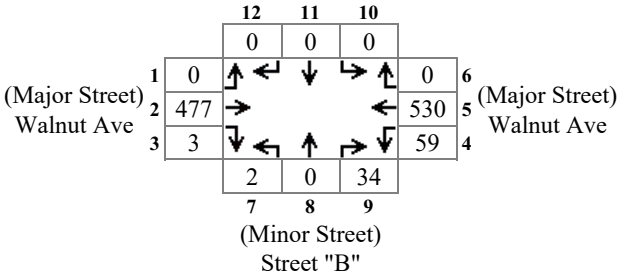


Major Total: 1007
Minor High Volume: 0

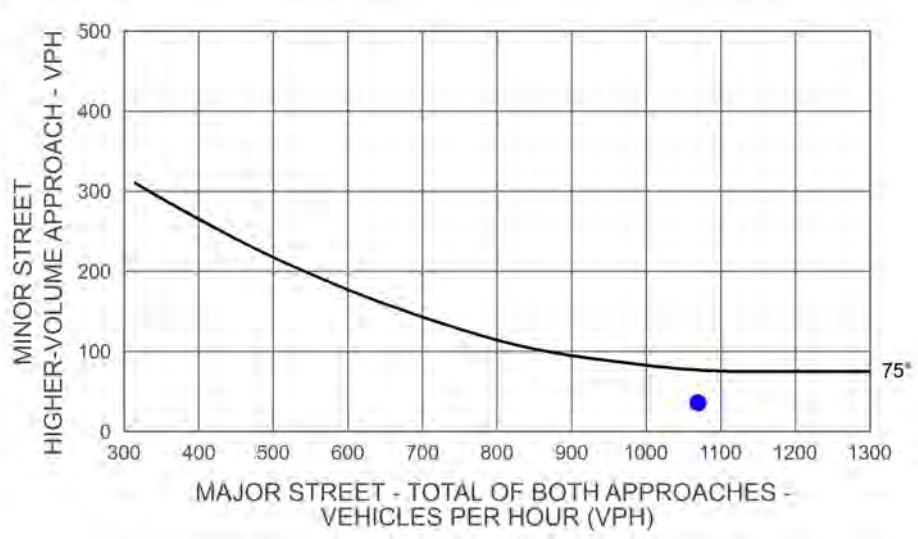


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 5

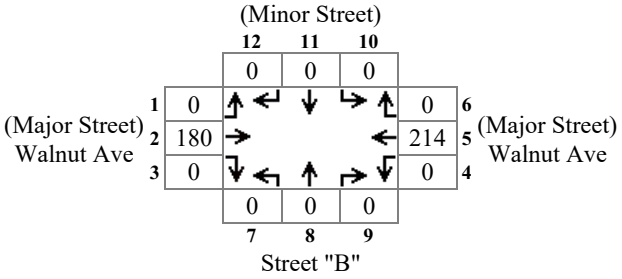


Major Total: 1069
Minor High Volume: 36

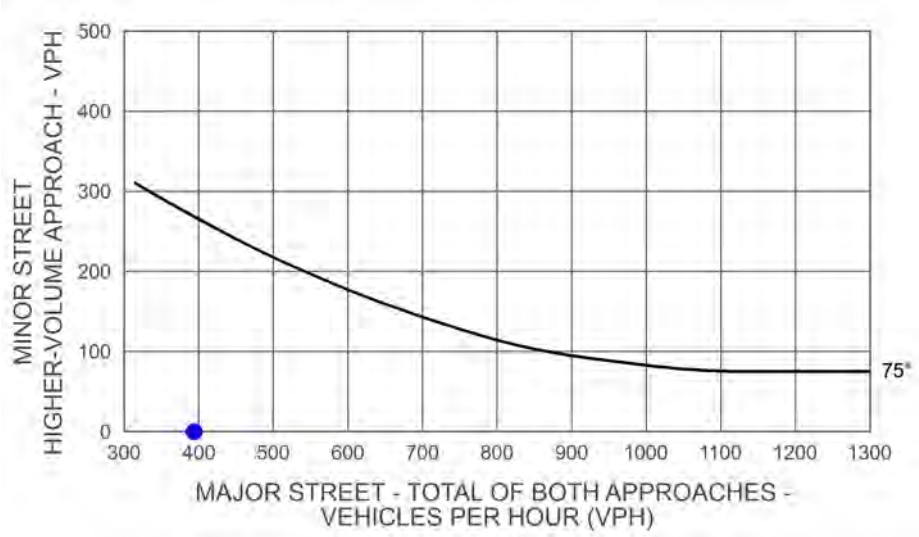


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 5

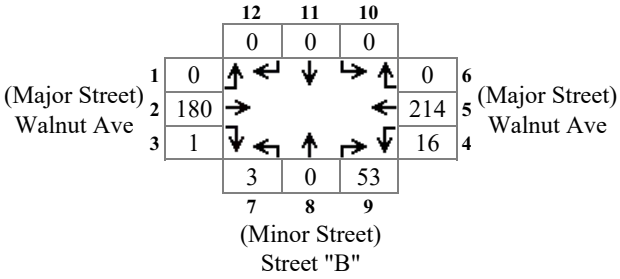


Major Total: 394
Minor High Volume: 0

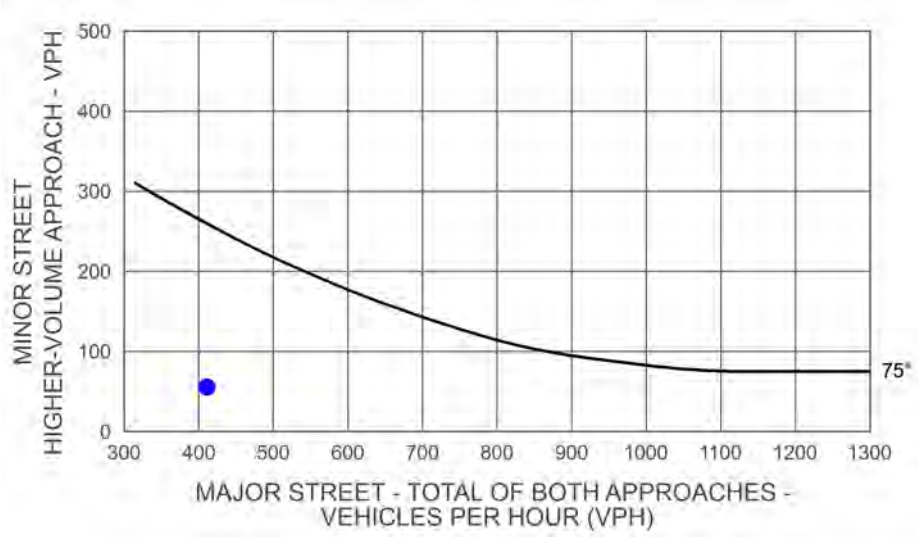


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 5

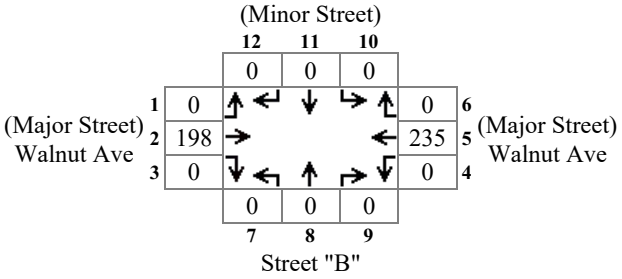


Major Total: 411
Minor High Volume: 56

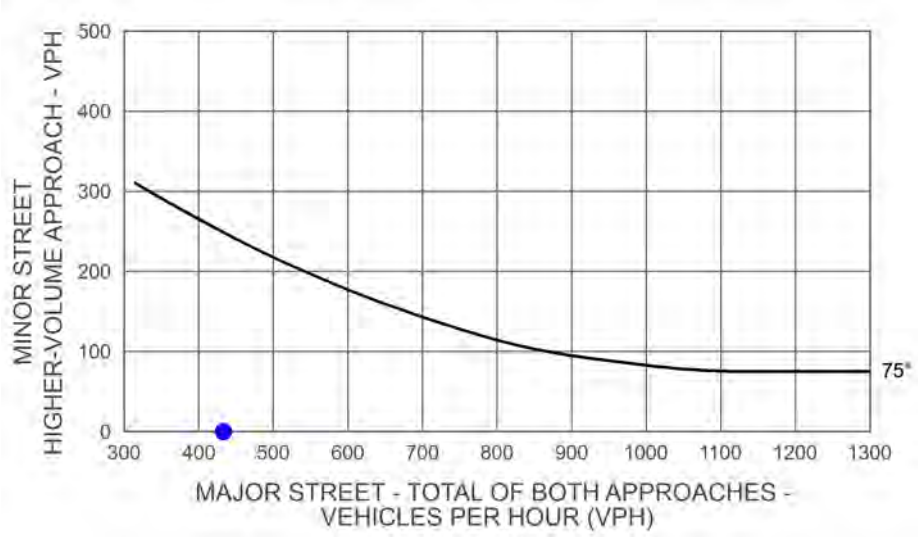


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 5

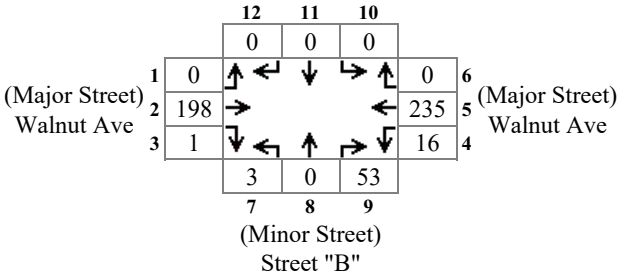


Major Total: 433
Minor High Volume: 0

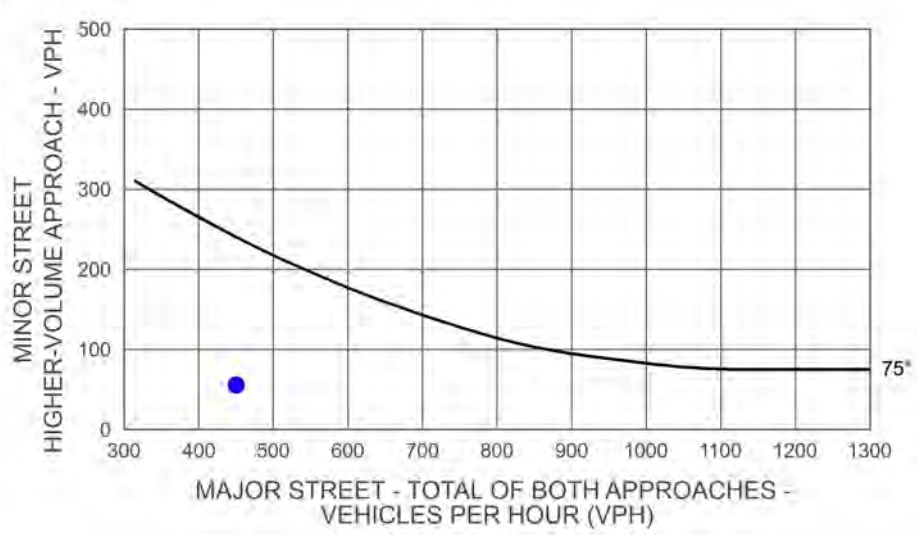


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 5

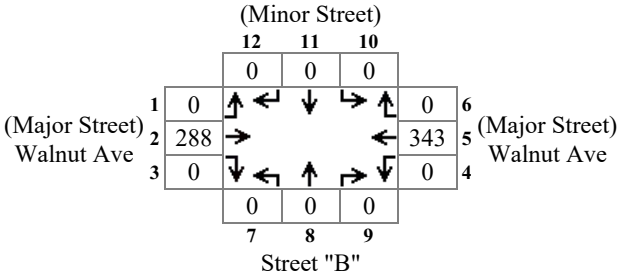


Major Total: 450
Minor High Volume: 56

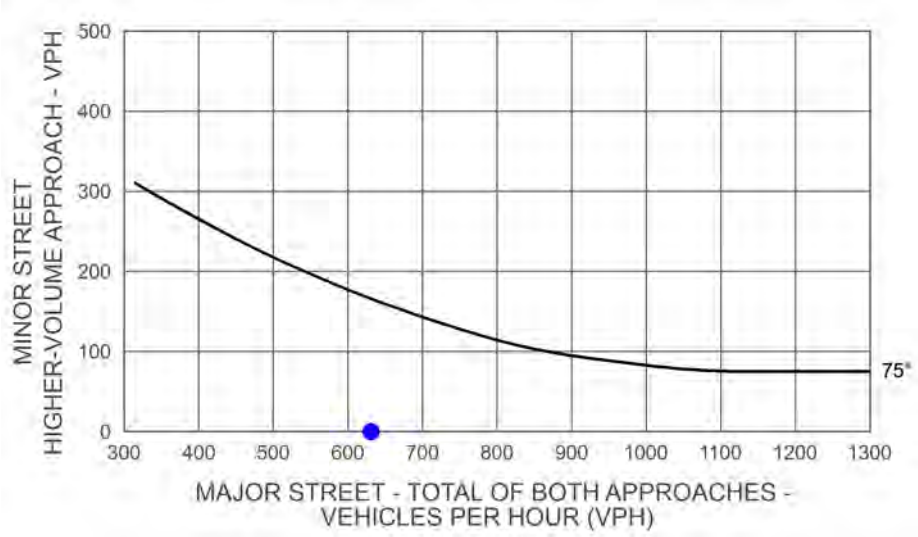


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 5

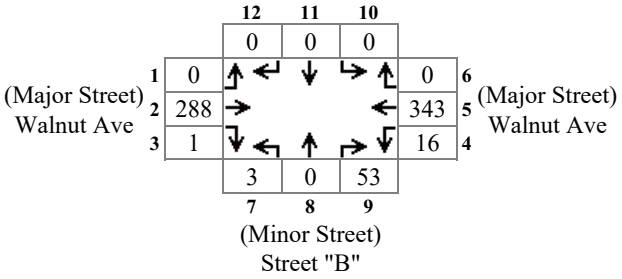


Major Total: 631
Minor High Volume: 0

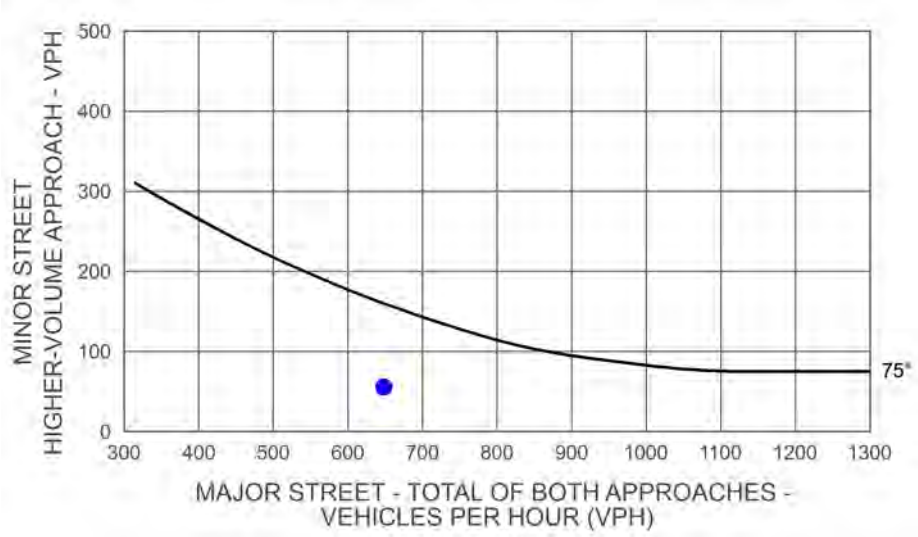


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 5



Major Total: 648
Minor High Volume: 56



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Farmersville
N/S: N Ventura Avenue
E/W: W Walnut Avenue
Weather: Clear

File Name : 01_FMV_Ven_Wal AM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 1

Groups Printed- Total Volume

	N Ventura Avenue Southbound				W Walnut Avenue Westbound				N Ventura Avenue Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	2	2	4	8	1	9	0	10	7	2	3	12	0	19	2	21	51
06:15 AM	6	1	6	13	1	24	0	25	12	1	1	14	1	24	4	29	81
06:30 AM	3	1	6	10	0	15	1	16	14	1	2	17	0	35	3	38	81
06:45 AM	2	1	3	6	1	26	2	29	8	0	4	12	0	20	2	22	69
Total	13	5	19	37	3	74	3	80	41	4	10	55	1	98	11	110	282
07:00 AM	2	1	3	6	1	25	3	29	7	1	5	13	6	33	6	45	93
07:15 AM	3	1	5	9	2	38	1	41	12	0	6	18	2	24	5	31	99
07:30 AM	4	1	8	13	1	38	1	40	17	0	8	25	1	41	5	47	125
07:45 AM	5	5	2	12	2	42	8	52	17	0	10	27	2	53	2	57	148
Total	14	8	18	40	6	143	13	162	53	1	29	83	11	151	18	180	465
Grand Total	27	13	37	77	9	217	16	242	94	5	39	138	12	249	29	290	747
Apprch %	35.1	16.9	48.1		3.7	89.7	6.6		68.1	3.6	28.3		4.1	85.9	10		
Total %	3.6	1.7	5	10.3	1.2	29	2.1	32.4	12.6	0.7	5.2	18.5	1.6	33.3	3.9	38.8	

	N Ventura Avenue Southbound				W Walnut Avenue Westbound				N Ventura Avenue Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	1	3	6	1	25	3	29	7	**1**	5	13	**6**	33	**6**	45	93
07:15 AM	3	1	5	9	**2**	38	1	41	12	0	6	18	2	24	5	31	99
07:30 AM	4	1	**8**	**13**	1	38	1	40	**17**	0	8	25	1	41	5	47	125
07:45 AM	**5**	**5**	2	12	2	**42**	**8**	**52**	17	0	**10**	**27**	2	**53**	2	**57**	**148**
Total Volume	14	8	18	40	6	143	13	162	53	1	29	83	11	151	18	180	465
% App. Total	35	20	45		3.7	88.3	8		63.9	1.2	34.9		6.1	83.9	10		
PHF	.700	.400	.563	.769	.750	.851	.406	.779	.779	.250	.725	.769	.458	.712	.750	.789	.785

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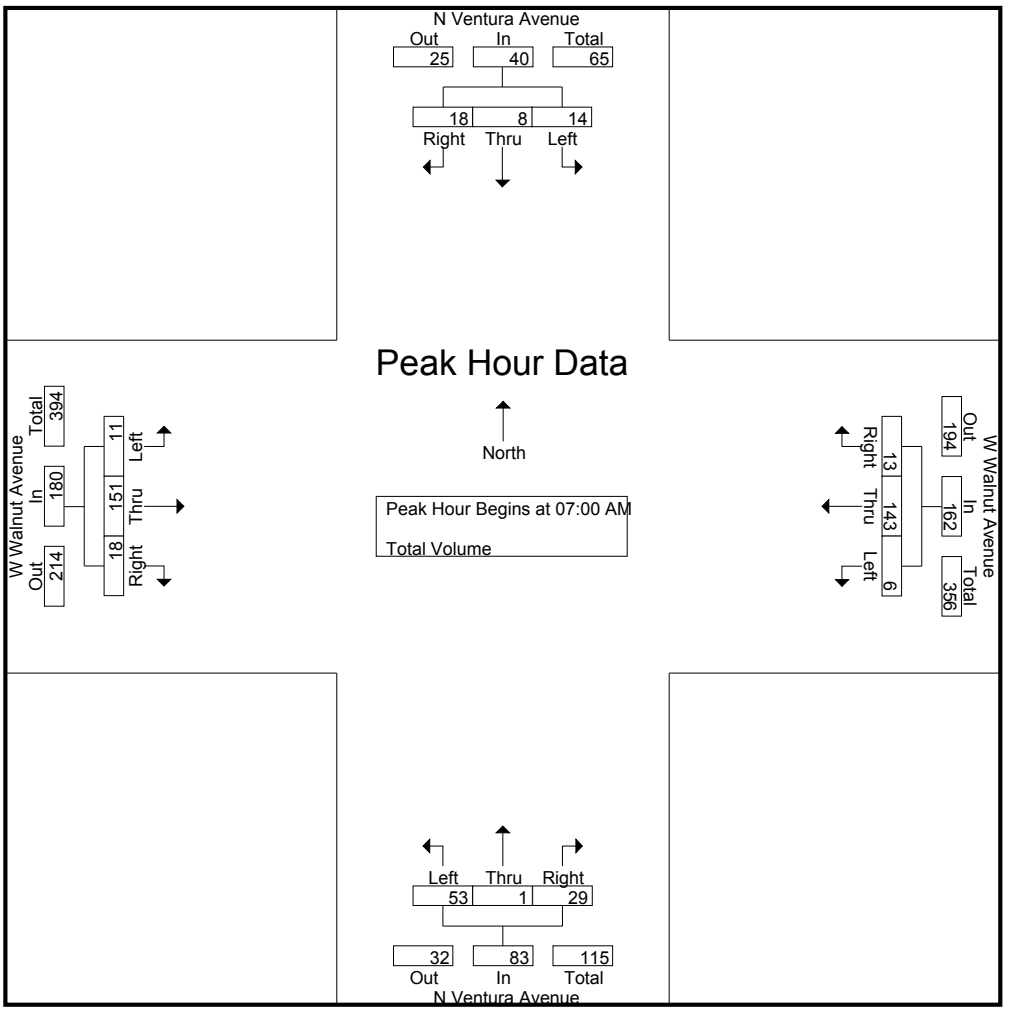
City of Farmersville
N/S: N Ventura Avenue
E/W: W Walnut Avenue
Weather: Clear

File Name : 01_FMV_Ven_Wal AM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	1	3	6	1	25	3	29	7	**1**	5	13	**6**	33	**6**	45
+15 mins.	3	1	5	9	**2**	38	1	41	12	0	6	18	2	24	5	31
+30 mins.	4	1	**8**	**13**	1	38	1	40	**17**	0	8	25	1	41	5	47
+45 mins.	**5**	**5**	2	12	2	**42**	**8**	**52**	17	0	**10**	**27**	2	**53**	2	**57**
Total Volume	14	8	18	40	6	143	13	162	53	1	29	83	11	151	18	180
% App. Total	35	20	45		3.7	88.3	8		63.9	1.2	34.9		6.1	83.9	10	
PHF	.700	.400	.563	.769	.750	.851	.406	.779	.779	.250	.725	.769	.458	.712	.750	.789

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City of Farmersville
N/S: N Ventura Avenue
E/W: W Walnut Avenue
Weather: Clear

File Name : 01_FMV_Ven_Wal PM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 1

Groups Printed- Total Volume

	N Ventura Avenue Southbound				W Walnut Avenue Westbound				N Ventura Avenue Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	2	5	3	56	10	69	13	0	3	16	5	60	15	80	170
04:15 PM	5	2	9	16	4	47	9	60	7	1	4	12	10	59	16	85	173
04:30 PM	1	1	6	8	9	51	6	66	7	1	1	9	5	53	19	77	160
04:45 PM	5	1	9	15	6	61	8	75	10	1	12	23	3	73	11	87	200
Total	11	7	26	44	22	215	33	270	37	3	20	60	23	245	61	329	703
05:00 PM	10	1	2	13	13	74	6	93	4	0	6	10	7	40	10	57	173
05:15 PM	3	1	10	14	8	85	13	106	12	0	6	18	7	49	21	77	215
05:30 PM	4	7	5	16	7	54	6	67	9	1	6	16	11	53	12	76	175
05:45 PM	7	3	1	11	8	48	13	69	10	0	9	19	7	65	14	86	185
Total	24	12	18	54	36	261	38	335	35	1	27	63	32	207	57	296	748
Grand Total	35	19	44	98	58	476	71	605	72	4	47	123	55	452	118	625	1451
Apprch %	35.7	19.4	44.9		9.6	78.7	11.7		58.5	3.3	38.2		8.8	72.3	18.9		
Total %	2.4	1.3	3	6.8	4	32.8	4.9	41.7	5	0.3	3.2	8.5	3.8	31.2	8.1	43.1	

	N Ventura Avenue Southbound				W Walnut Avenue Westbound				N Ventura Avenue Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	5	1	9	15	6	61	8	75	10	**1**	**12**	**23**	3	**73**	11	**87**	200
05:00 PM	**10**	1	2	13	**13**	74	6	93	4	0	6	10	7	40	10	57	173
05:15 PM	3	1	**10**	14	8	**85**	**13**	**106**	**12**	0	6	18	7	49	**21**	77	**215**
05:30 PM	4	**7**	5	**16**	7	54	6	67	9	1	6	16	**11**	53	12	76	175
Total Volume	22	10	26	58	34	274	33	341	35	2	30	67	28	215	54	297	763
% App. Total	37.9	17.2	44.8		10	80.4	9.7		52.2	3	44.8		9.4	72.4	18.2		
PHF	.550	.357	.650	.906	.654	.806	.635	.804	.729	.500	.625	.728	.636	.736	.643	.853	.887

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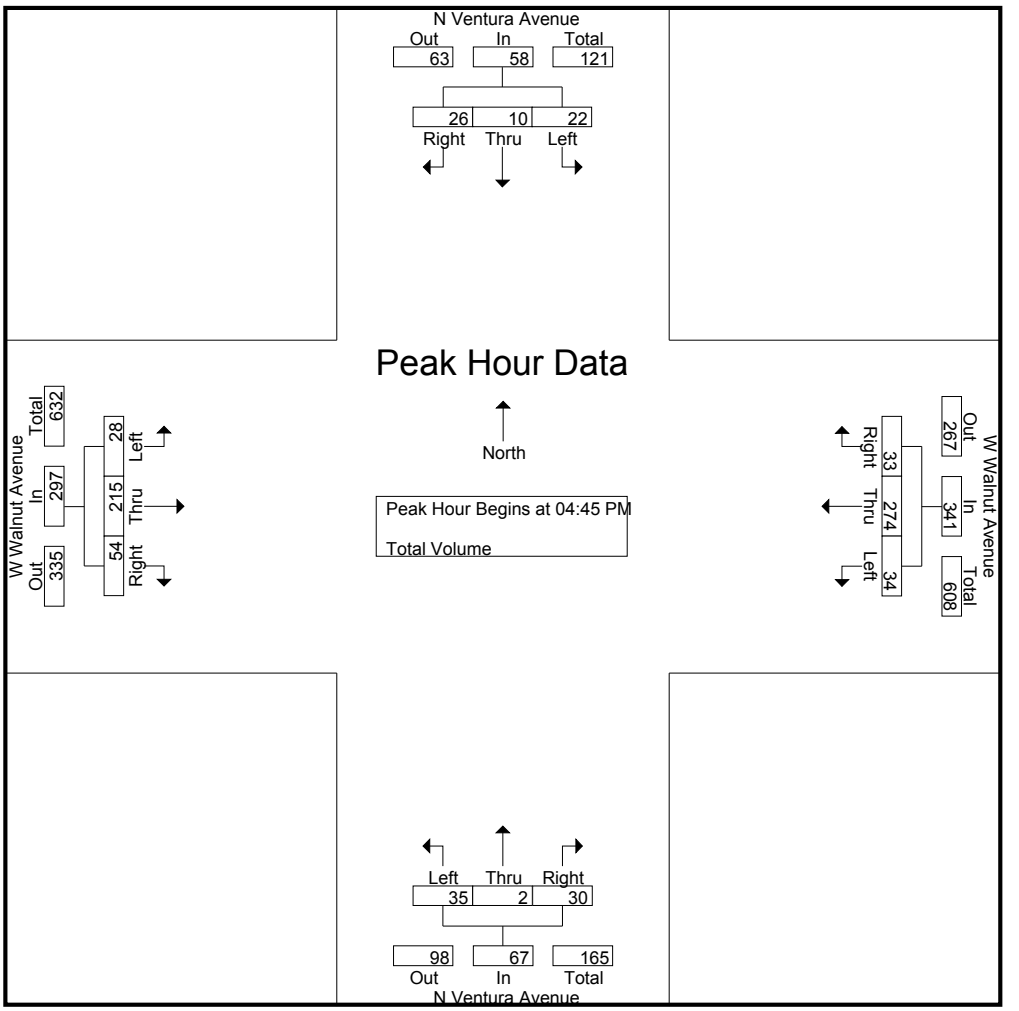
City of Farmersville
N/S: N Ventura Avenue
E/W: W Walnut Avenue
Weather: Clear

File Name : 01_FMV_Ven_Wal PM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:00 PM			
+0 mins.	5	1	9	15	6	61	8	75	10	**1**	**12**	**23**	5	60	15	80
+15 mins.	**10**	1	2	13	**13**	74	6	93	4	0	6	10	**10**	59	16	85
+30 mins.	3	1	**10**	14	8	**85**	**13**	**106**	**12**	0	6	18	5	53	**19**	77
+45 mins.	4	**7**	5	**16**	7	54	6	67	9	1	6	16	3	**73**	11	**87**
Total Volume	22	10	26	58	34	274	33	341	35	2	30	67	23	245	61	329
% App. Total	37.9	17.2	44.8		10	80.4	9.7		52.2	3	44.8		7	74.5	18.5	
PHF	.550	.357	.650	.906	.654	.806	.635	.804	.729	.500	.625	.728	.575	.839	.803	.945

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City of Farmersville
N/S: Farmersville Road
E/W: Walnut Avenue
Weather: Clear

File Name : 02_FMV_Far_Wal AM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 1

Groups Printed- Total Volume

	Farmersville Road Southbound				E Walnut Avenue Westbound				Farmersville Road Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	6	15	3	24	1	5	16	22	5	29	3	37	13	6	10	29	112
06:15 AM	7	27	5	39	0	6	20	26	10	45	7	62	11	22	7	40	167
06:30 AM	3	24	4	31	3	9	19	31	5	52	8	65	16	15	15	46	173
06:45 AM	4	25	6	35	2	8	26	36	17	53	7	77	13	10	10	33	181
Total	20	91	18	129	6	28	81	115	37	179	25	241	53	53	42	148	633
07:00 AM	6	27	5	38	3	11	27	41	17	46	3	66	18	16	11	45	190
07:15 AM	11	35	7	53	4	16	27	47	20	57	4	81	8	13	14	35	216
07:30 AM	8	32	9	49	22	16	35	73	11	49	4	64	12	32	22	66	252
07:45 AM	14	36	5	55	30	27	35	92	20	65	4	89	14	37	22	73	309
Total	39	130	26	195	59	70	124	253	68	217	15	300	52	98	69	219	967
Grand Total	59	221	44	324	65	98	205	368	105	396	40	541	105	151	111	367	1600
Apprch %	18.2	68.2	13.6		17.7	26.6	55.7		19.4	73.2	7.4		28.6	41.1	30.2		
Total %	3.7	13.8	2.8	20.2	4.1	6.1	12.8	23	6.6	24.8	2.5	33.8	6.6	9.4	6.9	22.9	

	Farmersville Road Southbound				E Walnut Avenue Westbound				Farmersville Road Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	6	27	5	38	3	11	27	41	17	46	3	66	**18**	16	11	45	190
07:15 AM	11	35	7	53	4	16	27	47	**20**	57	**4**	81	8	13	14	35	216
07:30 AM	8	32	**9**	49	22	16	**35**	73	11	49	4	64	12	32	**22**	66	252
07:45 AM	**14**	**36**	5	**55**	**30**	**27**	35	**92**	20	**65**	4	**89**	14	**37**	22	**73**	**309**
Total Volume	39	130	26	195	59	70	124	253	68	217	15	300	52	98	69	219	967
% App. Total	20	66.7	13.3		23.3	27.7	49		22.7	72.3	5		23.7	44.7	31.5		
PHF	.696	.903	.722	.886	.492	.648	.886	.688	.850	.835	.938	.843	.722	.662	.784	.750	.782

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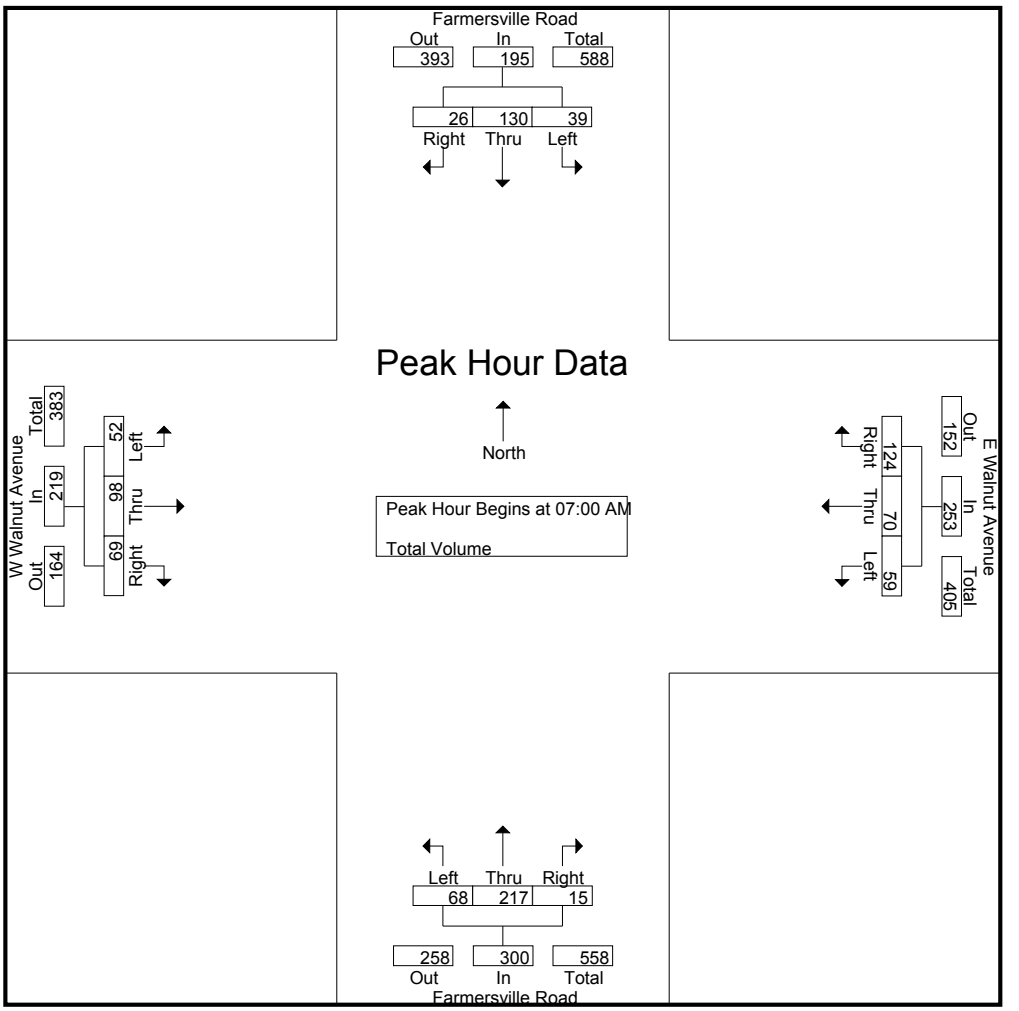
City of Farmersville
N/S: Farmersville Road
E/W: Walnut Avenue
Weather: Clear

File Name : 02_FMV_Far_Wal AM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	6	27	5	38	3	11	27	41	17	46	3	66	**18**	16	11	45
+15 mins.	11	35	7	53	4	16	27	47	**20**	57	**4**	81	8	13	14	35
+30 mins.	8	32	**9**	49	22	16	**35**	73	11	49	4	64	12	32	**22**	66
+45 mins.	**14**	**36**	5	**55**	**30**	**27**	35	**92**	20	**65**	4	**89**	14	**37**	22	**73**
Total Volume	39	130	26	195	59	70	124	253	68	217	15	300	52	98	69	219
% App. Total	20	66.7	13.3		23.3	27.7	49		22.7	72.3	5		23.7	44.7	31.5	
PHF	.696	.903	.722	.886	.492	.648	.886	.688	.850	.835	.938	.843	.722	.662	.784	.750

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City of Farmersville
N/S: Farmersville Road
E/W: Walnut Avenue
Weather: Clear

File Name : 02_FMV_Far_Wal PM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 1

Groups Printed- Total Volume

	Farmersville Road Southbound				E Walnut Avenue Westbound				Farmersville Road Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	56	22	84	17	20	15	52	32	69	6	107	9	29	23	61	304
04:15 PM	11	88	26	125	11	19	20	50	22	50	13	85	11	20	29	60	320
04:30 PM	18	86	21	125	30	32	20	82	25	57	21	103	13	18	30	61	371
04:45 PM	20	63	20	103	25	34	21	80	25	57	14	96	15	50	30	95	374
Total	55	293	89	437	83	105	76	264	104	233	54	391	48	117	112	277	1369
05:00 PM	17	60	21	98	46	44	20	110	38	68	21	127	16	23	25	64	399
05:15 PM	13	73	21	107	15	41	14	70	36	48	11	95	10	25	21	56	328
05:30 PM	18	72	18	108	15	22	21	58	33	46	18	97	14	33	20	67	330
05:45 PM	23	68	25	116	17	24	20	61	21	52	12	85	11	46	32	89	351
Total	71	273	85	429	93	131	75	299	128	214	62	404	51	127	98	276	1408
Grand Total	126	566	174	866	176	236	151	563	232	447	116	795	99	244	210	553	2777
Apprch %	14.5	65.4	20.1		31.3	41.9	26.8		29.2	56.2	14.6		17.9	44.1	38		
Total %	4.5	20.4	6.3	31.2	6.3	8.5	5.4	20.3	8.4	16.1	4.2	28.6	3.6	8.8	7.6	19.9	

	Farmersville Road Southbound				E Walnut Avenue Westbound				Farmersville Road Northbound				W Walnut Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	18	**86**	**21**	**125**	30	32	20	82	25	57	**21**	103	13	18	**30**	61	371
04:45 PM	**20**	63	20	103	25	34	**21**	80	25	57	14	96	15	**50**	30	**95**	374
05:00 PM	17	60	21	98	**46**	**44**	20	**110**	**38**	**68**	21	**127**	**16**	23	25	64	**399**
05:15 PM	13	73	21	107	15	41	14	70	36	48	11	95	10	25	21	56	328
Total Volume	68	282	83	433	116	151	75	342	124	230	67	421	54	116	106	276	1472
% App. Total	15.7	65.1	19.2		33.9	44.2	21.9		29.5	54.6	15.9		19.6	42	38.4		
PHF	.850	.820	.988	.866	.630	.858	.893	.777	.816	.846	.798	.829	.844	.580	.883	.726	.922

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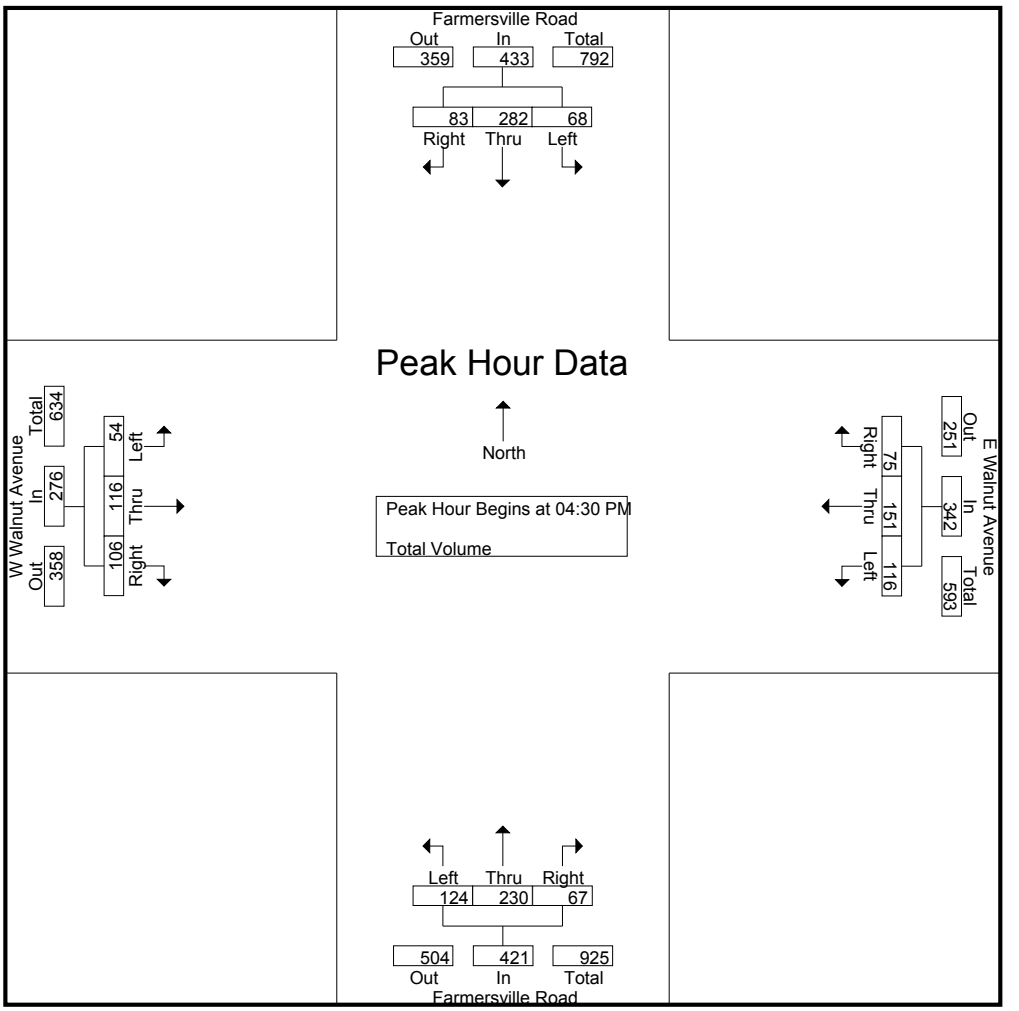
City of Farmersville
N/S: Farmersville Road
E/W: Walnut Avenue
Weather: Clear

File Name : 02_FMV_Far_Wal PM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:30 PM				04:45 PM			
+0 mins.	11	**88**	**26**	**125**	30	32	20	82	25	57	**21**	103	15	**50**	**30**	**95**
+15 mins.	18	86	21	125	25	34	**21**	80	25	57	14	96	**16**	23	25	64
+30 mins.	**20**	63	20	103	**46**	**44**	20	**110**	**38**	**68**	21	**127**	10	25	21	56
+45 mins.	17	60	21	98	15	41	14	70	36	48	11	95	14	33	20	67
Total Volume	66	297	88	451	116	151	75	342	124	230	67	421	55	131	96	282
% App. Total	14.6	65.9	19.5		33.9	44.2	21.9		29.5	54.6	15.9		19.5	46.5	34	
PHF	.825	.844	.846	.902	.630	.858	.893	.777	.816	.846	.798	.829	.859	.655	.800	.742

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Farmersville
N/S: Farmersville Road
E/W: Front Street
Weather: Clear

File Name : 03_FMV_Far_Fro AM
Site Code : 99924587
Start Date : 6/18/2024
Page No : 1

Groups Printed- Total Volume

	Farmersville Road Southbound				E Front Street Westbound				Farmersville Road Northbound				W Front Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	8	18	6	32	2	0	6	8	0	25	4	29	8	0	0	8	77
06:15 AM	6	34	8	48	2	0	10	12	0	37	2	39	12	0	0	12	111
06:30 AM	5	29	4	38	1	0	19	20	0	43	6	49	13	0	1	14	121
06:45 AM	4	36	3	43	2	1	18	21	0	37	3	40	16	0	2	18	122
Total	23	117	21	161	7	1	53	61	0	142	15	157	49	0	3	52	431
07:00 AM	10	35	5	50	1	0	21	22	0	38	1	39	6	1	0	7	118
07:15 AM	5	45	9	59	2	0	20	22	0	59	1	60	14	0	0	14	155
07:30 AM	9	55	24	88	5	2	15	22	0	58	3	61	23	0	1	24	195
07:45 AM	17	57	40	114	2	2	33	37	0	71	2	73	35	4	3	42	266
Total	41	192	78	311	10	4	89	103	0	226	7	233	78	5	4	87	734
Grand Total	64	309	99	472	17	5	142	164	0	368	22	390	127	5	7	139	1165
Apprch %	13.6	65.5	21		10.4	3	86.6		0	94.4	5.6		91.4	3.6	5		
Total %	5.5	26.5	8.5	40.5	1.5	0.4	12.2	14.1	0	31.6	1.9	33.5	10.9	0.4	0.6	11.9	

	Farmersville Road Southbound				E Front Street Westbound				Farmersville Road Northbound				W Front Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	10	35	5	50	1	0	21	22	0	38	1	39	6	1	0	7	118
07:15 AM	5	45	9	59	2	0	20	22	0	59	1	60	14	0	0	14	155
07:30 AM	9	55	24	88	**5**	**2**	15	22	0	58	**3**	61	23	0	1	24	195
07:45 AM	**17**	**57**	**40**	**114**	2	2	**33**	**37**	0	**71**	2	**73**	**35**	**4**	**3**	**42**	**266**
Total Volume	41	192	78	311	10	4	89	103	0	226	7	233	78	5	4	87	734
% App. Total	13.2	61.7	25.1		9.7	3.9	86.4		0	97	3		89.7	5.7	4.6		
PHF	.603	.842	.488	.682	.500	.500	.674	.696	.000	.796	.583	.798	.557	.313	.333	.518	.690

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Weather: Clear

File Name : 03_FMV_Far_Fro AM
Site Code : 99924587
Start Date : 6/18/2024
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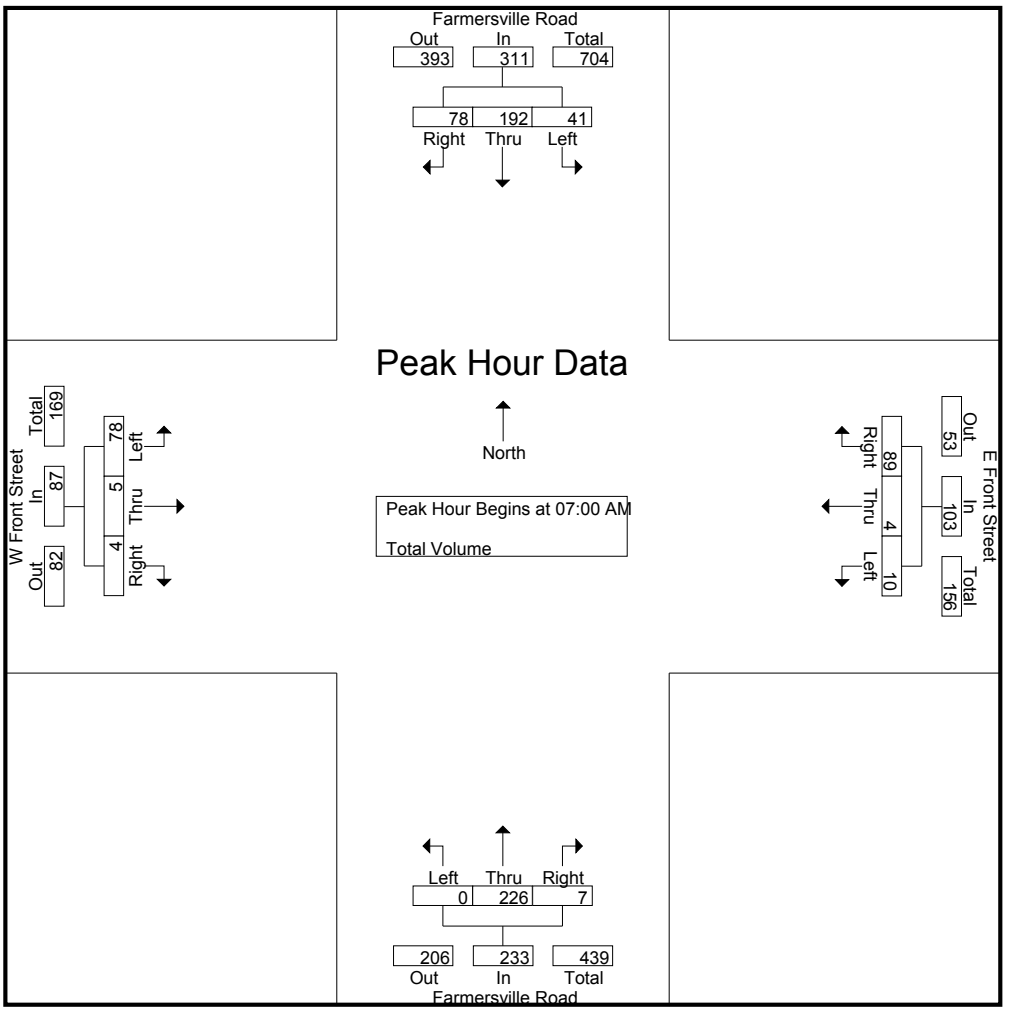

Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	10	35	5	50	1	0	21	22	0	38	1	39	6	1	0	7
+15 mins.	5	45	9	59	2	0	20	22	0	59	1	60	14	0	0	14
+30 mins.	9	55	24	88	**5**	**2**	15	22	0	58	**3**	61	23	0	1	24
+45 mins.	**17**	**57**	**40**	**114**	2	2	**33**	**37**	0	**71**	2	**73**	**35**	**4**	**3**	**42**
Total Volume	41	192	78	311	10	4	89	103	0	226	7	233	78	5	4	87
% App. Total	13.2	61.7	25.1		9.7	3.9	86.4		0	97	3		89.7	5.7	4.6	
PHF	.603	.842	.488	.682	.500	.500	.674	.696	.000	.796	.583	.798	.557	.313	.333	.518

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Groups Printed- Total Volume

	Farmersville Road Southbound				E Front Street Westbound				Farmersville Road Northbound				W Front Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	17	76	23	116	5	1	23	29	0	77	7	84	30	5	0	35	264
04:15 PM	26	94	21	141	3	0	20	23	1	61	2	64	13	2	0	15	243
04:30 PM	35	112	23	170	1	1	18	20	1	93	9	103	22	0	2	24	317
04:45 PM	24	87	19	130	6	0	20	26	2	90	4	96	22	1	1	24	276
Total	102	369	86	557	15	2	81	98	4	321	22	347	87	8	3	98	1100
05:00 PM	26	99	28	153	6	2	41	49	1	102	4	107	16	3	0	19	328
05:15 PM	21	83	16	120	3	2	19	24	4	72	4	80	17	2	1	20	244
05:30 PM	21	90	19	130	3	1	16	20	1	79	8	88	27	0	2	29	267
05:45 PM	39	81	24	144	3	0	24	27	2	91	6	99	18	3	6	27	297
Total	107	353	87	547	15	5	100	120	8	344	22	374	78	8	9	95	1136
Grand Total	209	722	173	1104	30	7	181	218	12	665	44	721	165	16	12	193	2236
Apprch %	18.9	65.4	15.7		13.8	3.2	83		1.7	92.2	6.1		85.5	8.3	6.2		
Total %	9.3	32.3	7.7	49.4	1.3	0.3	8.1	9.7	0.5	29.7	2	32.2	7.4	0.7	0.5	8.6	

	Farmersville Road Southbound				E Front Street Westbound				Farmersville Road Northbound				W Front Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**35**	**112**	23	**170**	1	1	18	20	1	93	**9**	103	**22**	0	**2**	**24**	317
04:45 PM	24	87	19	130	**6**	0	20	26	2	90	4	96	22	1	1	24	276
05:00 PM	26	99	**28**	153	6	**2**	**41**	**49**	1	**102**	4	**107**	16	**3**	0	19	**328**
05:15 PM	21	83	16	120	3	2	19	24	**4**	72	4	80	17	2	1	20	244
Total Volume	106	381	86	573	16	5	98	119	8	357	21	386	77	6	4	87	1165
% App. Total	18.5	66.5	15		13.4	4.2	82.4		2.1	92.5	5.4		88.5	6.9	4.6		
PHF	.757	.850	.768	.843	.667	.625	.598	.607	.500	.875	.583	.902	.875	.500	.500	.906	.888

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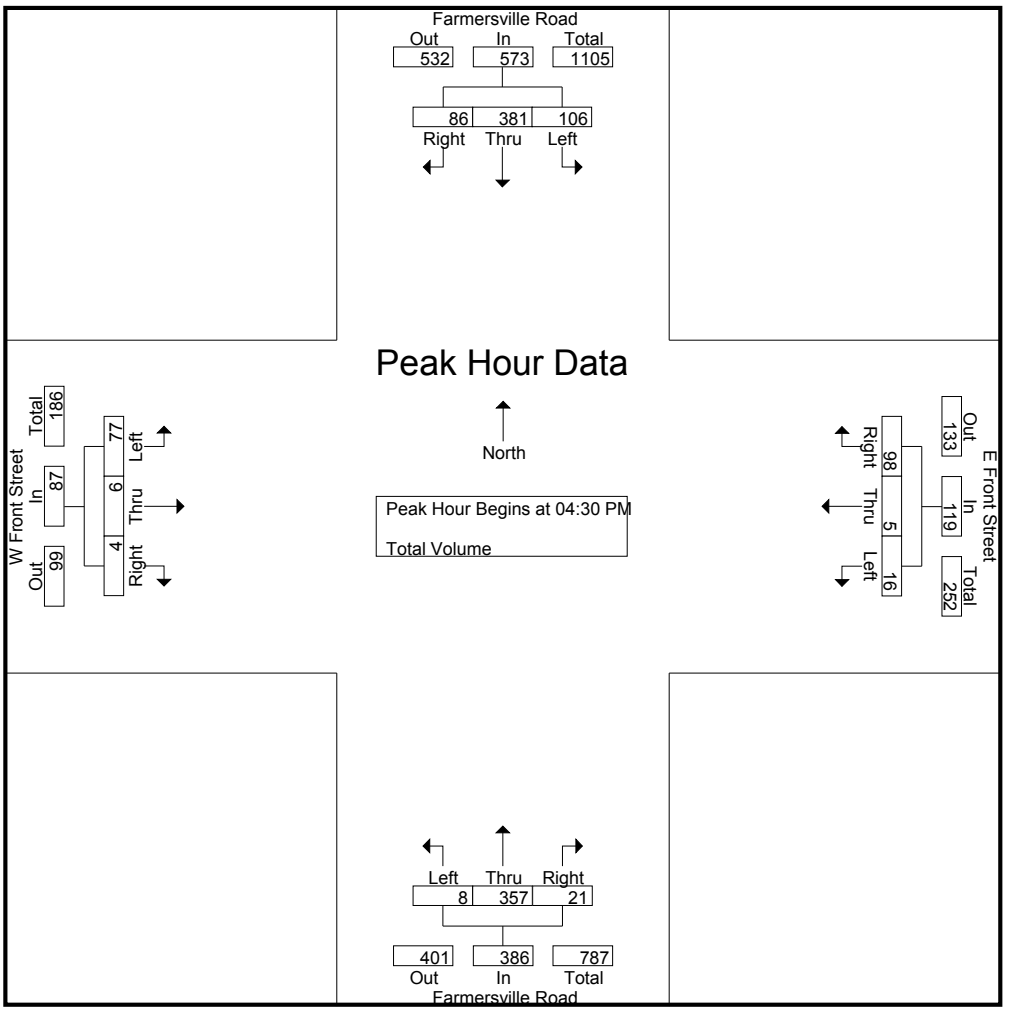

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:30 PM				04:00 PM			
+0 mins.	26	94	21	141	**6**	**2**	**41**	**49**	1	93	**9**	103	**30**	**5**	0	**35**
+15 mins.	**35**	**112**	23	**170**	3	2	19	24	2	90	4	96	13	2	0	15
+30 mins.	24	87	19	130	3	1	16	20	1	**102**	4	**107**	22	0	**2**	24
+45 mins.	26	99	**28**	153	3	0	24	27	**4**	72	4	80	22	1	1	24
Total Volume	111	392	91	594	15	5	100	120	8	357	21	386	87	8	3	98
% App. Total	18.7	66	15.3		12.5	4.2	83.3		2.1	92.5	5.4		88.8	8.2	3.1	
PHF	.793	.875	.813	.874	.625	.625	.610	.612	.500	.875	.583	.902	.725	.400	.375	.700

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Start Date : 6/18/2024
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Groups Printed- Total Volume

	Farmersville Road Southbound				E Visalia Road Westbound				Farmersville Road Northbound				W Visalia Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	8	10	3	21	5	18	6	29	4	9	3	16	7	15	8	30	96
06:15 AM	10	23	3	36	3	18	8	29	4	14	3	21	7	15	1	23	109
06:30 AM	11	27	3	41	7	31	5	43	7	19	2	28	12	22	6	40	152
06:45 AM	5	10	8	23	6	30	9	45	3	17	4	24	11	24	6	41	133
Total	34	70	17	121	21	97	28	146	18	59	12	89	37	76	21	134	490
07:00 AM	8	10	7	25	14	39	9	62	6	11	3	20	10	12	8	30	137
07:15 AM	10	15	6	31	9	27	11	47	7	20	5	32	11	26	4	41	151
07:30 AM	13	21	9	43	5	52	13	70	11	23	2	36	10	32	2	44	193
07:45 AM	16	21	6	43	8	38	14	60	6	25	7	38	16	32	5	53	194
Total	47	67	28	142	36	156	47	239	30	79	17	126	47	102	19	168	675
Grand Total	81	137	45	263	57	253	75	385	48	138	29	215	84	178	40	302	1165
Apprch %	30.8	52.1	17.1		14.8	65.7	19.5		22.3	64.2	13.5		27.8	58.9	13.2		
Total %	7	11.8	3.9	22.6	4.9	21.7	6.4	33	4.1	11.8	2.5	18.5	7.2	15.3	3.4	25.9	

	Farmersville Road Southbound				E Visalia Road Westbound				Farmersville Road Northbound				W Visalia Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	8	10	7	25	**14**	39	9	62	6	11	3	20	10	12	**8**	30	137
07:15 AM	10	15	6	31	9	27	11	47	7	20	5	32	11	26	4	41	151
07:30 AM	13	**21**	**9**	**43**	5	**52**	13	**70**	**11**	23	2	36	10	**32**	2	44	193
07:45 AM	**16**	21	6	43	8	38	**14**	60	6	**25**	**7**	**38**	**16**	32	5	**53**	**194**
Total Volume	47	67	28	142	36	156	47	239	30	79	17	126	47	102	19	168	675
% App. Total	33.1	47.2	19.7		15.1	65.3	19.7		23.8	62.7	13.5		28	60.7	11.3		
PHF	.734	.798	.778	.826	.643	.750	.839	.854	.682	.790	.607	.829	.734	.797	.594	.792	.870

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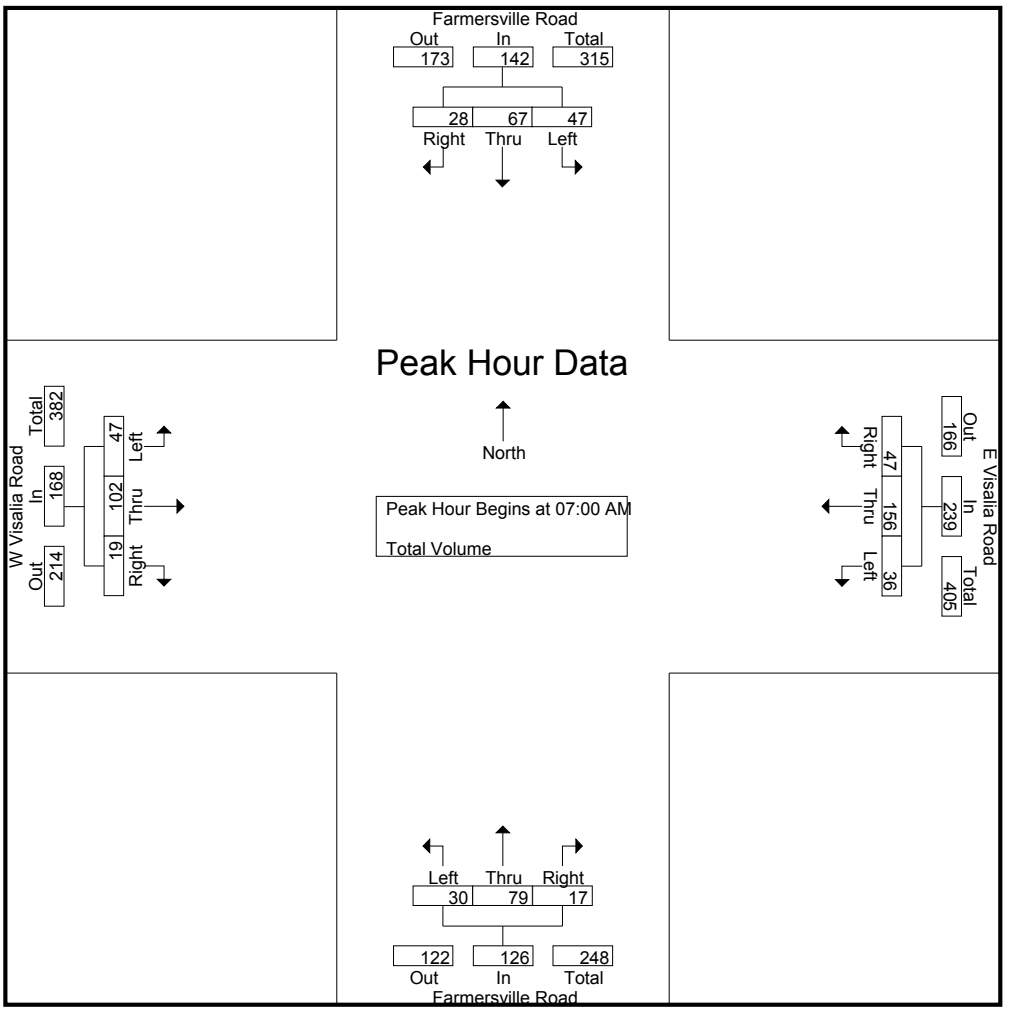

Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	8	10	7	25	**14**	39	9	62	6	11	3	20	10	12	**8**	30
+15 mins.	10	15	6	31	9	27	11	47	7	20	5	32	11	26	4	41
+30 mins.	13	**21**	**9**	**43**	5	**52**	13	**70**	**11**	23	2	36	10	**32**	2	44
+45 mins.	**16**	21	6	43	8	38	**14**	60	6	**25**	**7**	**38**	**16**	32	5	**53**
Total Volume	47	67	28	142	36	156	47	239	30	79	17	126	47	102	19	168
% App. Total	33.1	47.2	19.7		15.1	65.3	19.7		23.8	62.7	13.5		28	60.7	11.3	
PHF	.734	.798	.778	.826	.643	.750	.839	.854	.682	.790	.607	.829	.734	.797	.594	.792

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Groups Printed- Total Volume

	Farmersville Road Southbound				E Visalia Road Westbound				Farmersville Road Northbound				W Visalia Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	24	23	59	13	66	26	105	6	31	9	46	16	65	10	91	301
04:15 PM	25	32	15	72	14	59	17	90	10	21	15	46	18	89	10	117	325
04:30 PM	23	46	20	89	14	59	23	96	12	30	15	57	20	78	16	114	356
04:45 PM	22	31	19	72	15	60	22	97	12	29	8	49	19	65	10	94	312
Total	82	133	77	292	56	244	88	388	40	111	47	198	73	297	46	416	1294
05:00 PM	13	29	26	68	13	64	14	91	9	28	13	50	24	57	9	90	299
05:15 PM	15	25	19	59	7	52	14	73	17	26	10	53	20	74	15	109	294
05:30 PM	37	36	13	86	10	72	22	104	22	34	6	62	21	81	18	120	372
05:45 PM	17	24	20	61	5	53	21	79	10	24	9	43	26	70	10	106	289
Total	82	114	78	274	35	241	71	347	58	112	38	208	91	282	52	425	1254
Grand Total	164	247	155	566	91	485	159	735	98	223	85	406	164	579	98	841	2548
Apprch %	29	43.6	27.4		12.4	66	21.6		24.1	54.9	20.9		19.5	68.8	11.7		
Total %	6.4	9.7	6.1	22.2	3.6	19	6.2	28.8	3.8	8.8	3.3	15.9	6.4	22.7	3.8	33	

	Farmersville Road Southbound				E Visalia Road Westbound				Farmersville Road Northbound				W Visalia Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	12	24	**23**	59	13	**66**	**26**	**105**	6	**31**	9	46	16	65	10	91	301
04:15 PM	**25**	32	15	72	14	59	17	90	10	21	**15**	46	18	**89**	10	**117**	325
04:30 PM	23	**46**	20	**89**	14	59	23	96	**12**	30	15	**57**	**20**	78	**16**	114	**356**
04:45 PM	22	31	19	72	**15**	60	22	97	12	29	8	49	19	65	10	94	312
Total Volume	82	133	77	292	56	244	88	388	40	111	47	198	73	297	46	416	1294
% App. Total	28.1	45.5	26.4		14.4	62.9	22.7		20.2	56.1	23.7		17.5	71.4	11.1		
PHF	.820	.723	.837	.820	.933	.924	.846	.924	.833	.895	.783	.868	.913	.834	.719	.889	.909

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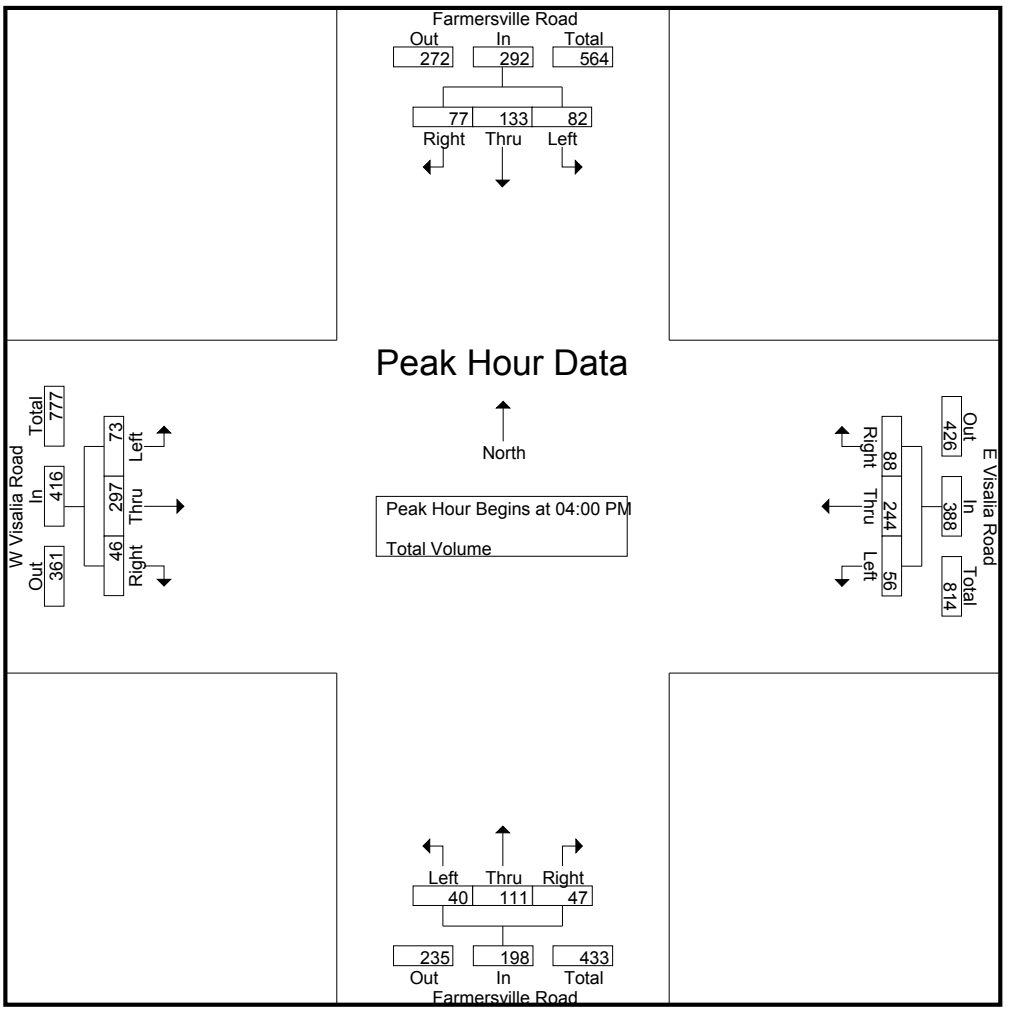


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

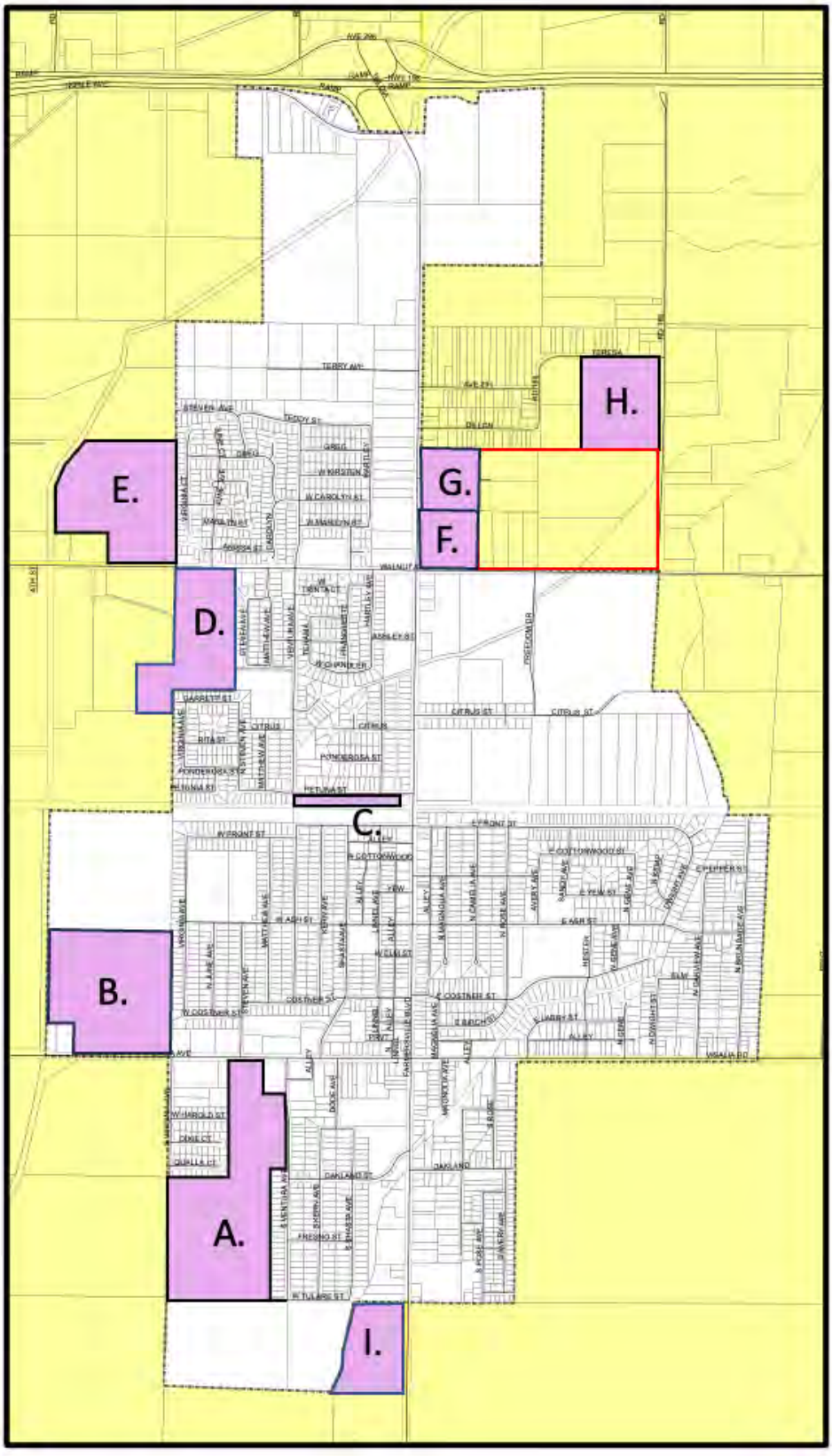
	04:15 PM				04:00 PM				04:45 PM				05:00 PM			
+0 mins.	**25**	32	15	72	13	**66**	**26**	**105**	12	29	8	49	24	57	9	90
+15 mins.	23	**46**	20	**89**	14	59	17	90	9	28	**13**	50	20	74	15	109
+30 mins.	22	31	19	72	14	59	23	96	17	26	10	53	21	**81**	**18**	**120**
+45 mins.	13	29	**26**	68	**15**	60	22	97	**22**	**34**	6	**62**	**26**	70	10	106
Total Volume	83	138	80	301	56	244	88	388	60	117	37	214	91	282	52	425
% App. Total	27.6	45.8	26.6		14.4	62.9	22.7		28	54.7	17.3		21.4	66.4	12.2	
PHF	.830	.750	.769	.846	.933	.924	.846	.924	.682	.860	.712	.863	.875	.870	.722	.885

City of Farmersville
Development Project List • July 2024

Map #	Project Name	Project Type	# of lots or square footage	Notes
A	Eagle Meadows	Tentative Subdivision Map application submitted	222 lots and 2 acres of park/pond and open space	Project is in the process of being redesigned, however the number of lots and park space will likely be similar
B	Kaweah Pointe	Approved Tentative Subdivision Map	151 lots and 3.7 acres of park/pond and open space plus 1.4 acres for future multi-family residential development.	Applicant has indicated they may request an amendment to redesign the map.
C	Petunia Estates	Approved Final Subdivision Map	18 single family residential lots	Approved project
D	Fagundes annexation and subdivision	Application submitted for annexation and Tentative Subdivision Map	99 single family residential lots and 1-acre park/pond	Currently undergoing environmental analysis
E	Sierra Woods North	Preliminary annexation and tentative subdivision map	98 single family residential lots	This project has not yet been submitted to the City.
F	Castaneda Project	Approved commercial and residential project	• 26,090 square feet of general commercial • Pad for spec fast food restaurant • Pad for gas station/convenience store with 12 fueling positions • 24 multi-family (duplex) units	Approved project

Map #	**Project Name**	**Project Type**	**# of lots or square footage**	**Notes**
G	AMG multi-family residential project	Approved multi-family project with land reserved for future commercial development	42 senior apartments and 40 family apartments plus 2.7 acres of future commercial development	Approved project
H	Shannon/Turner project	Application submitted for annexation and Tentative Subdivision Map	85 single family residential lots and 0.9-acre park/pond	Application in review
I	Hester annexation	Annexation of 14.3 acres	City plans 3-acre expansion of Public Works yard. Remaining 11±acres zoned for future multi-family residential development	Approved at city level. Application being submitted to LAFCo for annexation approval.

Attachment "A": Current Major Projects
July 2024



2020
Quality/ Level of Service Handbook

FDOT

June 2020

State of Florida
Department of Transportation
Systems Implementation Office
605 Suwannee St. MS 19
Tallahassee, FL 32399

www.fdot.gov/planning

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1 Executive Summary

This Quality Level of Service (Q/LOS) Handbook is intended to be used by engineers, planners, and decision-makers in the development and review of roadway capacity and roadway users' Q/LOS at generalized planning levels. This Q/LOS Handbook provides tools to quantify multimodal transportation service inside the roadway environment (essentially inside the right of way).

This edition of the Q/LOS Handbook is updated and reorganized, still providing a foundation for high-quality, consistent capacity, and level of service (LOS) analyses and review in the State of Florida. It includes new analytical techniques from the Transportation Research Board's Highway Capacity Manual (HCM), Sixth Edition, and updated Generalized Service Volume Tables. With these professionally accepted techniques, analysts can easily evaluate roadways from a multimodal perspective, which results in better multimodal decisions for projects in generalized planning phases.

The focus of generalized planning is the extensive use of default values and is intended for broad applications such as regional analyses, initial problem identification, and future year analyses. Florida's Generalized Service Volume Tables at the end of this Q/LOS Handbook are the primary tools for conducting this type of planning analysis. At this time, only Freeways and Uninterrupted Flow Highways Generalized Service Volume Tables have been updated to be consistent with the HCM methodology. The State Signalized Arterials Generalized Service Volume Tables remained the same as the 2013 Q/LOS Handbook. There are future plans to update the State Signalized Arterials Generalized Service Volume Tables to be consistent with the HCM methodology.

Florida Department of Transportation (FDOT) welcomes questions and comments on the content and concepts of this Q/LOS Handbook. FDOT will provide technical assistance and training as needed for usage of the Q/LOS process. For additional resources, see the FDOT's Systems Implementation Office (SIO) website at https://www.fdot.gov/planning/systems/. **Initial contacts should be made with FDOT District and Florida's Turnpike Enterprise personnel**.

2 Q/LOS Handbook Purpose and Scope

This Q/LOS Handbook is a tool that can be utilized to analyze and review a roadway's capacity at a generalized planning level.

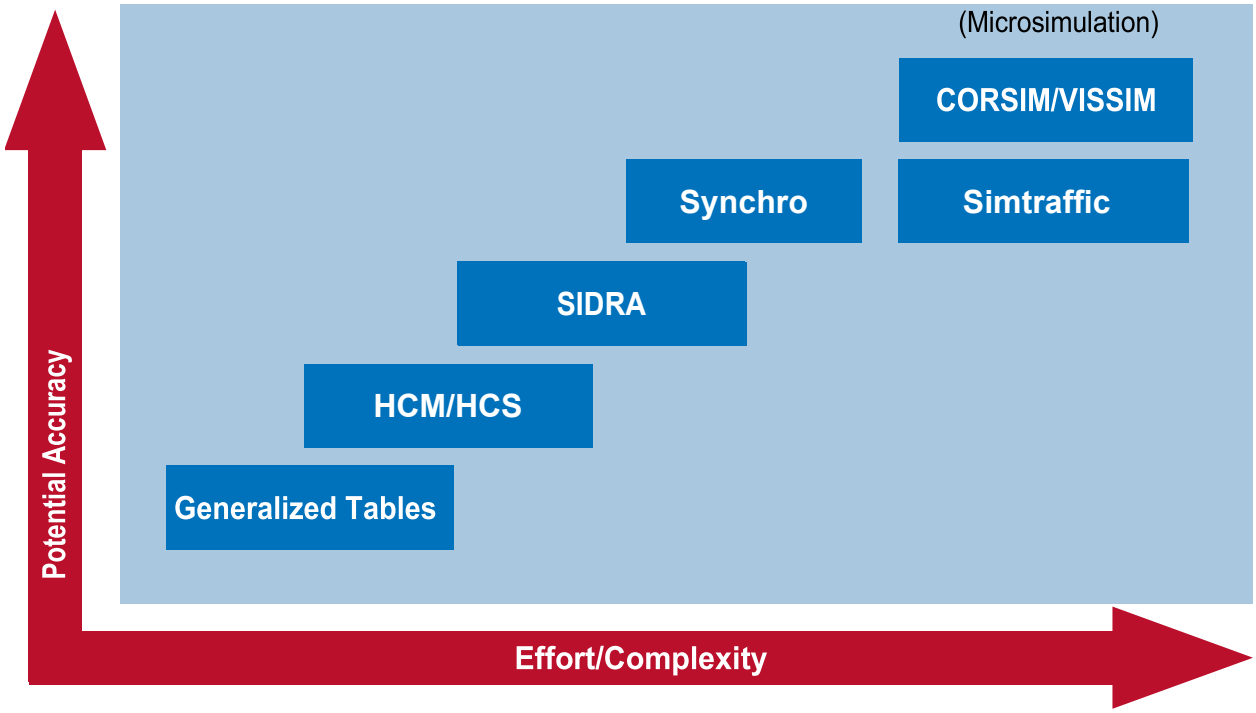
The quality of service (QOS) is a traveler-based perception of how well a transportation service or facility operates. The LOS is a quantitative stratification of the QOS into six letter grades. The LOS provides a measure that assesses multimodal service inside the roadway environment (essentially inside the right of way). **Capacity conceptually relates to the maximum number of vehicles that can pass a point on a roadway in a given amount of time under normal conditions.** The Q/LOS Handbook provides Generalized Service Volume Tables and background regarding statewide default values used in their development. The Generalized Service Volume Tables, found at the end of the Q/LOS Handbook, present maximum service volumes, or the highest numbers of vehicles for a given LOS.

Directions found within the Q/LOS Handbook provide assistance in selecting the most appropriate tools for Q/LOS analysis. This handbook offers specific instructions on how to use the Generalized Service Volume Tables.

2.1. Levels of Analysis

There are many methods for computing capacity and the LOS, which form a hierarchy ranging from Generalized Service Volume Tables (the simplest to use but potentially least accurate) to complex operational analysis tools (very precise, but time-intensive and costly). **Figure 2-1** provides a list of some traffic analysis tools measured by accuracy and complexity. In selecting the appropriate tools, tradeoffs among study purposes (e.g., generalized planning application, signal timing application), accuracy and precision of results (e.g., variability in data for current year analyses, variability in future year analyses), and data preparation effort (e.g., use of existing statewide traffic data, use of direct field measurements) should be considered. Please refer to the FDOT Traffic Analysis Handbook for additional tools and guidance in selecting the appropriate analysis tool.

Figure 2-1: Traffic Analysis Tools



2.1.1. Generalized Planning

Generalized planning covered in this handbook makes extensive use of default values and is intended for broad applications, such as initial problem identification (e.g., deficiency and needs analyses, geographic influence areas), statewide analyses (e.g., statewide calculation of delay), and future year analyses (e.g., 10-year planning horizon).

Florida's Generalized Service Volume Tables provided at the end of this handbook are the primary tools for conducting Generalized planning analysis. The updated tables have been developed using guidance provided in the HCM.

2.2 Travel Modes

The HCM defines four major travel modes: automobile, pedestrian, bicycle, and transit. Each mode includes a unique set of characteristics that define a traveler's experience during a trip, and it is important to consider each perspective when analyzing a multimodal facility.

2.2.1 Automobile

The three major elements that affect the operation of a vehicle are: roadway characteristics, traffic characteristics, and control characteristics.

Vehicles include passenger cars, trucks, vans, buses, recreational vehicles, and motorcycles. Each vehicle type has a unique set of operational characteristics, and the percentage makeup of each vehicle type within a traffic stream affects the capacity of a facility because of these differences. For example, trucks, buses, and recreational

vehicles have lower acceleration and deceleration rates than standard passenger cars. Factors, such as pavement type and condition, time of day, and weather, affect the operational characteristics of vehicles as well as driver behavior. Other factors, such as fatigue, health, and driving under the influence of drugs and alcohol, also affect driver behavior. **This handbook assumes base conditions that include typical drivers on dry pavement during daylight hours**.

2.2.2 Pedestrian

Many trips include at least one part where the traveler is a pedestrian. This is particularly important for transit trips, where the pedestrian section of the trip may have an impact on future mode choice.

Analyzing the pedestrian experience can be summarized by two primary types of analysis: individual delay and facility attributes. Delay at intersections can be easily quantified and analyzed. The factors that describe a facility and, therefore, contribute to the overall walking experience are less easily quantified, including safety, security, lighting, grades, surface conditions, and even street activity levels. Automobile and heavy vehicle traffic volume, and the extent to which pedestrians are separated from vehicular traffic, also influence pedestrians' perception of QOS while using a sidewalk. **This handbook accounts for the user's perception and facility attributes when determining Pedestrian LOS (PLOS).**

2.2.3 Bicycle

Bicycles are used to make a variety of trips, including trips for recreation, commuting, and errands. Bicycles can help extend the market area of transit service as bicycle travel is typically five times faster than travel on foot.

Similar to the pedestrian experience, Bicycle LOS (BLOS) can be summarized by delays encountered at intersections as well as the attributes of the facility itself. As with the pedestrian analysis, the Q/LOS Handbook focuses on facility attributes when determining BLOS. These attributes include the volume and speed of adjacent vehicles, heavy vehicle presence, the presence of on-street parking and pavement conditions. Because of the severe deterioration of perceived QOS at flow levels well below the theoretical capacity of a bike path, the concept of capacity has little utility in the design and analysis of bicycle paths.

2.2.4 Transit

Transit riders can be grouped into two primary categories: choice and captive riders. Choice transit riders typically have other means of transportation readily available, but choose transit to avoid congestion, save money on fuel and parking, use their travel time productively for other activities, and/or reduce their impact on the environment. Captive riders, however, are unable to drive because of age, physical, mental, or financial reasons, and depend on transit or other modes for their daily transportation needs.

Unlike other modes, transit is primarily focused on service levels rather than facility characteristics. Infrastructure for driving, biking, or walking is available at all times, once constructed; transit service is only available during certain times along designated routes. Additionally, transit passengers are not in direct control of their travel time, service frequency and reliability, therefore, these are important factors that affect the quality and utility of transit service.

When bus service frequencies reach a high enough level of demand (headway of approximately 10 minutes or less),

bus passengers do not feel the need to consult bus schedules. This allows transit users the freedom to treat the system as they would treat other modes. Service frequencies that require passengers to plan their trips around a limited transit schedule offer much less utility, and deter choice riders.

Because transit passengers typically must walk to and from transit stops on either end of their trip, the quality of the walking experience at the beginning or end of a trip may be just as important to the transit passenger as the actual transit experience.

2.3 What's New in This Version of the Q/LOS Handbook?

This edition of the Q/LOS Handbook primarily reflects an update to the 2013 edition and incorporates updates included in the sixth edition of the HCM. The Q/LOS Handbook has been revised to focus on generalized planning for freeways and highways. No changes have been made in this version of the handbook to the arterial methodology and arterial Generalized Service Volume Tables from the 2013 Q/LOS Handbook.

The Generalized Service Volume Tables are the primary tools supported by FDOT for generalized planning. The freeway and highway automobile mode portions of the tables have been updated using the Highway Capacity Software 7 (HCS7), which incorporates the latest procedures provided in the HCM, Sixth Edition. The updated tables also include revised inputs and parameters that coincide with the current methodology in the HCM and default values. The updated tables can be found at the end of this handbook. A summary of the methodology changes is provided below:

- The Generalized Service Volume Tables
    - The 2020 freeway and highway Generalized Service Volume Tables were developed using HCS7, which is based on the HCM, Sixth Edition.
    - There are **no changes** for arterial service volumes between the 2012 and 2020 Generalized Service Volume Tables.
- The freeway service volumes are now based on freeway facilities procedures, incorporating basic segments and interchanges rather than just basic segments.
- The inputs are generally consistent between the 2012 and 2020 versions of the tables, but there have been some updates to maintain internal consistency in the 2020 set of tables.
- New inputs such as Speed Adjustment Factor (SAF) and Capacity Adjustment Factor (CAF) have been introduced into the development of the tables because the input requirements for HCS7 are more extensive than those for Level of Service Planning (LOSPLAN).
- FDOT **no longer** supports the LOSPLAN program and it has not been included in this version of the handbook.

3 Q/LOS Principles

Providing safety and mobility for people and goods remains transportation's most essential function and part of FDOT's mission. There are four dimensions of mobility:

- Quality of travel: traveler satisfaction with a facility or service.
- Quantity of travel: magnitude of use of a facility or service.
- Accessibility: ease in which travelers can engage in desired activities.
- Capacity utilization: quantity of operations relative to capacity.

This Q/LOS Handbook focuses primarily on quality, followed by capacity utilization. The quantity of travel and accessibility dimensions are not addressed in this Q/LOS Handbook.

The QOS is based on a user's perception of how well a transportation service or facility operates. In other words, it's how travelers perceive the overall QOS.

The LOS is a quantitative stratification of the QOS.The HCM divides highways QOS into six letter grades, A through F, with A being the best and F being the worst. With this scheme, traffic engineers more easily explained operating and proposed design concepts to the general public and elected officials.

Despite its widespread use as an independent measurement, it is important to note that the LOS is simply a quantitative breakdown from transportation users' perspectives of transportation QOS. The LOS reflects the QOS, as measured by a scale of user satisfaction, and is applicable to each of the following modes that use roadways: automobiles, trucks, bicycles, pedestrians, and buses.

Because this handbook deals with the overall quality of user satisfaction and its quantitative breakdown, it is labeled as the Q/LOS Handbook. The measurement techniques, however, are simply referred to as LOS analysis. This Q/LOS Handbook deals with the QOS and the LOS that roadways provide to users (i.e., motorists, bicyclists, pedestrians, and transit passengers) and provides planning tools to assist transportation planners and engineers. The overall quality of the entire trip experience, which depends on a variety of factors, including aesthetics, safety, and other social measures are not covered in this handbook.

3.1 Common Q/LOS Misconceptions

Common misconceptions about Q/LOS that often arise:

- The QOS is directly related to all other dimensions of mobility.

This misconception is related to the relationship between quality and other dimensions of mobility. *The QOS is frequently related to the other dimensions of mobility, but not in all cases.* Q/LOS for automobile drivers is usually closely linked to how many other vehicles are on the road. However, the relationship is not always perfect.

For example, arterial speeds are more closely tied to signalization conditions than the number of other vehicles on the roadway. A higher Q/LOS grade may exist on a four-lane arterial with twice the volume of another arterial due to efficient signal progression. For transit users, pedestrians, and bicyclists, there is often an even weaker relationship between total demand and Q/LOS. **In most situations in Florida, the total number of bicyclists and pedestrians on a facility has very little, if any, impact on Q/LOS.Similarly, in most of Florida, bus**

frequency is typically much more important to transit users than how many people are actually on a bus.

In some cases, particularly for the non-automobile modes, an analysis of total potential demand is a more important component of the decision-making process than the QOS. This handbook only addresses Q/LOS, not the methods of determining overall demand or mode splits. Other tools, such as logit models, are more appropriate for these types of analyses.

- The LOS is applicable only to automobile analysis, while the QOS is related to the non-automobile modes.

This misconception is that LOS applies only to automobiles, and QOS applies to the non-automobile modes. It is often assumed that while automobile analyses are highly quantitative, the bicycle, pedestrian, and transit analyses are more qualitative. *However, the bicycle, pedestrian, and transit techniques are as quantitative and rigorously developed and tested as those for automobiles.* An example of LOS by mode for arterials is illustrated in **Figure 3-1**.

Figure 3-1: Examples of LOS by Mode for Arterials

- The LOS A–F grades are comparable to American school letter grades.

The most common misconception about LOS A–F grades is that they are comparable to school letter grades. Although they share some basic similarities, there are some important distinctions to make at a planning level. *Unlike school grades, LOS A is not necessarily a desirable goal, and the meaning of A–F is not entirely consistent across modes.* **Although it is true that LOS A is best and LOS F is worst, this is strictly from a traveler experience and perspective. LOS A is not necessarily a desirable goal to achieve from an overall transportation or societal perspective.** LOS A in a peak travel hour could be an indicator of an inefficient use of limited funding. It is simply not cost-effective to design the state's roadways to operate at LOS A during the peak hour. FDOT's LOS targets in **Chapter 10** should be considered a desirable condition during the peak hour, with significant variance from those targets in either direction an undesirable condition. The LOS targets are an FDOT Policy (000-525-006) and discussed in **Chapter 10**.

Although LOS F represents a failing condition, there are more factors to consider when the LOS reaches F. Essentially, LOS F either means travel demand exceeds capacity and the roadway is operating in oversaturated conditions, or another undesirable condition exists.

Although each of the methodologies for automobiles, bicycles, pedestrians, and buses make use of the LOS A–F

scales, **the meaning of A–F is not entirely consistent across the modes.**

Transportation professionals widely consider LOS D for the automobile mode an acceptable condition, and this threshold is often used as a design condition in urbanized areas. The bus and automobile LOS scales were developed by transportation professionals, with the objective of classifying various levels of congestion in undersaturated conditions. Members of the general public, however, determined the derivation of the bicycle and PLOS thresholds, thus incorporating a general perception of LOS D as a largely undesirable condition. Because of this, LOS D likely represents a worse condition from the user perspective for the bicycle and pedestrian modes than the automobile and bus modes. FDOT and its research team evaluated and considered various methods to make the LOS thresholds more consistent across modes, but found no scientific basis to adjust the scales. Users should therefore simply be cautious about comparing the same LOS letter grade across modes.

3.2. Highway Capacity Manual

For capacity and automobile, pedestrian, and bicycle Q/LOS analysis, the HCM is the foremost recognized and accepted analysis tool. HCM defines capacity as the maximum sustainable flow rate, which persons or vehicles can reasonably be expected to traverse a point or a uniform segment of a lane or a roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

3.2.1 Traffic Flow and Capacity Concepts

The HCM defines two primary facility types: uninterrupted and interrupted flow facilities. The terms refer to the type of facility and, therefore, the analysis type, not the quality of traffic flow at any given time.

Uninterrupted flow facilities have no fixed causes of delay or interruption external to the traffic stream, such as signals or stop signs. Non-tolled freeways represent the purest form of uninterrupted flow, because there are no fixed interruptions to traffic flow, and access to the facilities are limited to ramp locations. Multilane and two-lane highways operate under uninterrupted flow in long segments between points of fixed interruption (e.g., traffic signals), but it is often necessary to examine the points of fixed interruption using interrupted flow methodologies.

Interrupted flow facilities have fixed causes of periodic delay or interruption to the traffic stream, such as traffic signals or stop signs, with average spacing less than or equal to 2 miles. Traffic flow patterns on interrupted flow facilities are the result not only of vehicle interactions and the facility's geometric characteristics, but also of the traffic control used at intersections and the frequency of access points to the facility. Traffic signals, for example, allow designated movements to occur only during portions of the signal cycle, and therefore affect flow and capacity, because the facility is not available for continuous use. Traffic signals also create platoons of vehicles that travel along the facility as a group. By contrast, intersections controlled by all-way stops and roundabouts discharge vehicles more randomly, creating periodic but sometimes small gaps in traffic at downstream locations.

Capacity on uninterrupted and interrupted flow facilities can be defined in terms of, passenger cars per hour (pcph), or vehicles per hour (vph), depending on the type of analysis or system element.

Reasonable expectancy is the basis for defining capacity. Capacity is, therefore, not the absolute maximum flow rate observed at a facility, but rather a flow rate that can be achieved repeatedly for peak periods of sufficient

demand.

Prevailing roadway, traffic, and control conditions define capacity. These conditions should be relatively uniform for any segment of a facility that is analyzed. Base conditions, by comparison, assume optimum conditions, including good weather, dry pavement conditions, users who are familiar with the system, and no impediments to traffic flow. In most cases, prevailing conditions differ from base conditions (e.g., there are trucks in the traffic stream, rolling terrain). As a result, the computations of capacity, service flow rate, and LOS include an adjustment to capacity under base conditions.

3.2.2. Bicycle LOS (BLOS)

BLOS is based on bicyclists' perceptions of the roadway environment. BLOS is based on five variables, with relative importance ordered in the following list:

- Average effective width of the outside through lane
- Vehicle volumes
- Vehicle speeds
- Heavy vehicle (truck) volumes
- Pavement condition

Average effective width is largely determined by the width of the outside travel lane and striping for bicyclists but includes other factors, such as the effects of street parking and drainage grates. Each of the variables is weighted by coefficients derived by stepwise regression modeling importance. A numerical LOS score, generally ranging from 0.5 to 6.5, is determined and stratified to an LOS letter grade. Thus, unlike the determination of automobile LOS, in which there is typically only one service measure (e.g., average travel speed), BLOS is determined by multiple factors.

3.2.3. Pedestrian LOS (PLOS)

Like BLOS, **PLOS is based on the pedestrians' perceptions of the roadway or nearby roadside environment.** PLOS is based on four variables with relative importance ordered in the following list:

- Existence of a sidewalk
- Lateral separation of pedestrians from vehicles
- Vehicle volumes
- Vehicle speeds

The PLOS model applies to the roadway facilities within the right of way. Therefore, estimating PLOS for facilities outside the right of way at significantly greater distance, may exceed the validated range of the model and is not recommended.

3.3. Transit Capacity and QOS

The Transportation Research Board (TRB) Transit Capacity and Quality of Service Manual (TCQSM) is the nation's leading document for transit and Q/LOS analysis. As used in this Q/LOS Handbook, transit or bus is limited to scheduled, fixed-route bus transit.

One significant exhibit in the TCQSM is a table for urban scheduled transit service based on service frequency. **Table 3-1** replicates this TCQSM table, but includes Florida-specific modifications to the adjusted service frequency.

Table 3-1: Service Frequency LOS Thresholds

Level of Service	Adjusted Service Frequency (Vehicles/hour)	Headway (minutes)	Comments
A	>6	<10	Passengers don't need schedules
B	>4	<15	Frequent service, passengers consult schedules
C	≥3	≤20	Maximum desirable time to wait if transit vehicle missed
D	≥2	≤30	Service unattractive to choice riders
E	≥1	≤60	Service available during hour
F	<1	>60	Service unattractive to all riders

3.4. Simplifying Assumptions

Planning-level analyses make extensive use of default values and simplifying assumptions to the operational models on which they are based. As such, there are multiple simplifying assumptions used in this Q/LOS Handbook.

3.4.1. Averages

This Q/LOS Handbook makes extensive use of averages. **For generalized planning (Generalized Service Volume Tables), most of the default input variables represent statewide averages. Similarly, for generalized planning, simple averages are recommended.** For example, if an arterial facility has daily volumes of 20,000, 25,000, and 24,000, it would be reasonable to use the average (23,000) of the three. However, users should be cautious of outlying values and use some judgment when applying simple averages. In the above example, if the first value were 10,000, the user may want to disregard that value or use the median value (i.e., 24,000).

3.4.2. Turning Movements

One of the most significant planning assumptions is that the mainline turning movements are adequately accommodated. Within this Q/LOS Handbook, the through movement is defined as the traffic stream with the greatest number of vehicles passing directly through a point. While this movement is typically the Straight Ahead movement, occasionally the right or left turn could qualify as the through movement. When the turning movement has the greatest number of vehicles (more than the Straight Ahead), it is recommended to consider the turning movement as the controlling movement. See **Section 5.9** for additional details.

Most analyses of through movements in the HCM are relatively straightforward. Complications arise with the treatment of turning or merging movements, especially for signalized intersections and arterials. By handling turning arterial movements (i.e., turns from the arterial, side-street movements) in a general way, Q/LOS and capacity analyses are greatly simplified. This is also true for some two-lane uninterrupted flow highways in which

mid-block turning movements may affect capacity. Off- and on-ramp movements along freeways are also handled in a general way and are assumed to be adequately accommodated. Most importantly, it is assumed that movements at off-ramps do not back up into the through lanes of the freeway.

When turning movements are not adequately accommodated in the available storage, the techniques to determine the LOS for an arterial found in this handbook are not appropriate. Although, the arterial analysis in this handbook includes all vehicles on the arterial, the focus is on the vehicles making through movements rather than turning movements. For example, only the green time for the through movement is included, and penalties are assigned if there are no left-turn lanes at signalized intersections and no medians exist mid-block.

3.4.3. Queue Spillback

Another major assumption is that turning movements do not back up into adjacent through lanes. Essentially, adequate storage is assumed to be available for turning vehicles on arterials and for vehicles exiting freeways. Therefore, where mainline turning movements are not adequately accommodated, the planning techniques found in the Q/LOS Handbook are not appropriate. If this is the case, higher level analysis is recommended.

3.4.4. Capacity

For the HCM analyses of uninterrupted flow facilities, capacity is set in terms of passenger cars per hour per lane (pcphpl). **Free-flow speed is estimated based on other variables, such as percent heavy vehicles, CAFs and SAFs, median type, and lateral clearance.**

For the HCM analyses of interrupted flow facilities, capacity represents the maximum number of vehicles that can pass a point during a specified time period under prevailing roadway, traffic, and control conditions.

The Q/LOS Handbook primarily relies on and reports capacity values based on the interrupted flow concept of capacity, with free-flow speed considered a roadway variable input. **For planning purposes, the assumed free-flow speed is 5 mph over the posted speed limit.**

3.4.5. Bus Frequency

For transit analysis purposes, the most significant assumption is that bus frequency is the single most important factor in determining the Q/LOS to transit users along a transit route segment or roadway facility. FDOT, in cooperation with the TCQSM authors and others, has incorporated that concept. Certainly, the LOS varies for individual transit users along a facility, but **in the determination of bus LOS along a transit route segment or roadway facility, the availability of buses is usually the more relevant performance measure.**

3.5. Arterial Analyses

ADJUSTED SATURATION FLOW RATE

Variables such as area type, speed limit, number of lanes, percent right turn lanes, percent heavy vehicles, median type, left turn lanes and population size have effects on adjusted saturation flow rates. Furthermore, as traffic queues get longer, traffic pressure affects capacity.These effects are included in FDOT's Generalized Service Volume Tables.

ADD-ON/DROP-OFF LANES

The add-on/drop-off lane (or expanded intersection) will contribute to intersection capacity, but not likely to the extent of a full through lane. The add-on/drop-off lane contains up to half the capacity of a full through lane. For any capacity benefit to be considered, two conditions should be met:

- the add lane and drop lane each must be at least 800 feet in length
- the add-on/drop-off pair combined must be at least 1,760 feet in length

For additional discussion, see **Section 4.3.1**.

ONE-WAY STREETS

The Generalized Service Volume Tables include a factor that has been approved for the evaluation of one-way streets. Essentially, one-way pairs are assumed to have a 20 percent higher service volumes than corresponding two-way roadways with the same number of lanes.

LOS CRITERIA

The maximum control delay at a signalized intersection for LOS D is 55 seconds. While that value may be reasonable based on user perception in an urbanized area, in a small town or at an isolated intersection on a rural highway, that delay would be considered LOS F. To overcome this difference in user perception, FDOT has adopted different control delay criteria in rural undeveloped and rural developed areas. The criteria are one-half, rounded up, of the urbanized area criteria. For arterials in rural developed areas, arterial Class I LOS thresholds apply. These LOS criteria are embedded in FDOT's rural undeveloped and rural developed Generalized Service Volume Tables. The LOS criteria appear on the back of each table.

3.5.1 Pedestrian and Bus Analyses

PEDESTRIAN LOS

PLOS is determined by the methodology contained in this handbook. **The methodology is consistent and unchanged from the 2013 Q/LOS Handbook.** The pedestrian LOS adjustment factors as they relate to bus LOS are shown in **Table 3-2**.

Table 3-2: PLOS Adjustment Factors on Bus LOS

Pedestrian Level of Service	Adjustment Factor
Pedestrian LOS A	1.15
Pedestrian LOS B	1.10
Pedestrian LOS C	1.05
Pedestrian LOS D	1.00
Pedestrian LOS E	0.80
Pedestrian LOS F	0.55

ROADWAY CROSSING DIFFICULTY

When catching a bus, transit users frequently have to cross a road. **Crossing difficulty is typically influenced by three broad factors: traffic signal density, crossing length, and vehicle volume.** It is more difficult to cross roadways with low signal densities than roadways with closely spaced, signalized intersections. Mid-block crossing difficulty increases with road width and lack of pedestrian refuges (i.e. restrictive or raised medians). Mid-block crossing difficulty also increases as the number of vehicles increase, which results in fewer gaps. These three broad factors and other major factors, such as vehicle speed, are interrelated. To account for crossing difficulty in a general way, FDOT's approach includes a set of roadway crossing adjustment factors which capture the crossing difficulty. **Roadway crossing adjustment factors are used to determine the adjusted bus frequency by applying a factor that captures crossing difficulty.**

PASSENGER LOAD FACTOR

Bus crowding plays a role in the user's perception of QOS, particularly on overcrowded buses when no seating is available. FDOT's approach includes a set of passenger load factors, which are applied to help determine the adjusted bus frequency value. **Passenger load factors are used to determine the adjusted bus frequency value by applying a factor commensurate to the level of passenger crowding.** These factors can be found in **Chapter 7** of this Q/LOS Handbook.

BUS STOP AMENITIES

Passenger comfort and safety within the passenger waiting areas play a role in user perception of the QOS and desirability of a transit system. FDOT's approach includes a set of bus stop amenity factors, which are used to help determine the adjusted bus frequency value. The factors can also be found in **Chapter 7** of this Q/LOS Handbook.

BUS STOP TYPE

Delay time at bus stops plays a role in travel times along routes, and thus impacts overall average travel speed. **FDOT includes a bus stop type adjustment factor, which is used to add 15 to 35 seconds of delay per route for typical and major bus stops, respectively.**

BUS FACILITY ANALYSIS

The TCQSM structure for Q/LOS analysis consists of points (e.g., bus stops), route segments, and systems. It does not include a facility analysis. Nevertheless, to maintain consistency, a method of aggregating segment-level bus frequency to facility-level was needed. At the generalized level, a simple average is acceptable. For example, if on a 3-mile facility, four buses serve the first 2 miles and two buses serve the last mile, then using a value of three buses [(4 + 2)/2] is acceptable for a generalized level analysis.

4 Roadway Variables

Florida's Generalized Service Volume Tables are based on the HCM, TCQSM, and Florida roadway, traffic, control (signalization), and multimodal data. **The resulting tables are valid in Florida, and FDOT encourages the use of the generalized planning level approach.** Recognizing varying characteristics with the state and differing roadway, traffic, control, and multimodal characteristics, the Generalized Service Volume Tables are not adequate for all analysis needs. **Chapters 4 through 7** provide a description of input variables used in the development of the Generalized Service Volume Tables. Roadway variables describe the geometric and functional characteristics of a facility.

4.1. Roadway Type

Compatible with the terminology of the HCM, this Q/LOS Handbook is based on three major roadway types:

- Freeways
- Uninterrupted flow highways
- Interrupted flow roadways

Note: when using the Generalized Service Volume Tables, the number of lanes for arterials and other interrupted flow facilities should be determined at major intersections, rather than mid-block.

4.1.1. Freeways

Freeways are multilane, divided highways with at least two lanes for exclusive use of traffic in each direction and full control of ingress and egress.

4.1.2. Highways

Uninterrupted flow highways are roadways with a combination of roadway segments, which have average signalized intersection spacing greater than 2 miles and are not freeways. Because of the significantly different operating characteristics, these types of roadways are frequently also distinguished as two-lane highways and multilane highways.

4.1.3. Arterials

Interrupted flow roadways or arterials are characterized by signals with average signalized intersection spacing less than or equal to 2 miles. In this Q/LOS Handbook, signalized arterials are the predominant type of interrupted flow roadway. They primarily are operated by the state and serve through traffic. Also included in this category are signalized Non-State roadways, but not local streets. As used here, signalized intersections refer to all fixed causes of interruption to the traffic stream and may occasionally include stop signs or other control types.

Arterials are further classified based on posted speed. There are two arterial classes:

- Class I: Arterials with a posted speed of 40 mph or greater
- Class II: Arterials with a posted speed of 35 mph or less

4.2. Area Type

Four broad area type groupings are used in this Q/LOS Handbook, as shown in **Figure 4-1**:

- Core Urbanized areas (areas with a population of 1,000,000+) and Urbanized areas (other urbanized areas with a population of 50,000+)
- Transitioning areas (transitioning into urbanized areas)
- Urban areas (areas with a population of more than 5,000 not in urbanized areas)
- Rural areas (rural undeveloped areas or developed areas with less than 5,000 population)

Figure 4-1: Area Types

The area types in the Generalized Service Volume Tables correspond well with FDOT's LOS targets; however, there are a few special cases**. FDOT District LOS Coordinators should be consulted for applicable boundaries within their districts.**

There may be small lengths of roadways (e.g., approximately 6 miles for freeways, 3 miles for nonfreeways) between area types or adjacent to an area type that, from a logical and analytical sense, should be combined into one area type or another.

These situations typically occur with adjacent interchanges or in transitioning areas, but may also occur elsewhere. FDOT districts have the flexibility to adjust the area type boundaries or designate a roadway with a certain area

type under these circumstances.

As Florida's population grows, area types may change for a specific location or roadway in future years. FDOT's district offices (contact information available at http://www.fdot.gov/info/moreDOT/districts/district.shtm) should be consulted if analysts believe different area types are appropriate for a future study period.

4.2.1. Core Urbanized and Urbanized Areas

Core urbanized and urbanized areas are defined as approved boundary, which encompasses the entire Census Urbanized Area, as well as the surrounding geographic area likely to become urbanized within the next 20 years, as agreed on by FDOT, Federal Highway Administration (FHWA), and the Metropolitan/Transportation Planning Organization (MPO/TPO). **Core urbanized area types are distinguished by whether the area's population is more or less than 1 million.** Currently, the grouping of more than 1 million applies to the MPO areas that include central cities: Fort Lauderdale, Jacksonville, Miami, Orlando, St. Petersburg, Tampa, and West Palm Beach. These are referred to as "core urbanized." **The minimum population for an urbanized area is 50,000.**

Previously, core urbanized thresholds were developed by applying a different K factor to the urbanized design hourly volume (DHV) thresholds, but after careful consideration, it was noted that additional factors could be applied in the analysis process for a core urbanized area, such as speed and ramp density, and these should be considered. As a result, new DHV, directional design hourly volume (DDHV), and annual average daily traffic (AADT) thresholds were developed for core urbanized areas based on separate analysis from the urbanized thresholds. **The urbanized areas with less than 1 million population are referred to as "other urbanized."**

4.2.2. Transitioning Areas

Transitioning areas are fringe areas that exhibit characteristics between rural and urbanized/urban. Transitioning areas are intended to include areas that, based on their growth characteristics, are anticipated to become urbanized or urban in the next 20 years.

Frequently, the Metropolitan Planning Area is used for the transitioning area adjacent to an FHWA Urbanized Area (Adjusted Census Urbanized Area Boundary). The definition of Metropolitan Planning Area mentions the "contiguous area expected to become urbanized with the 20-year forecast period." It is the contiguous area that should be considered the transitioning area. However, in practice, most MPOs have not delineated those contiguous or transitioning areas, and many of the Metropolitan Planning Areas extend to remote rural areas of counties. When the MPO does not identify these transitioning areas, or areas adjacent to urban (but not urbanized) areas, FDOT districts, in cooperation with local governments, may delineate transitioning areas for LOS purposes.

Keeping the boundaries relatively consistent over time is desirable to achieve understanding by all potential parties. The transitioning boundary should be reviewed and adjusted as a part of the census cycle update, consistent with the setting of the FHWA Urbanized Area boundaries. It is appropriate to review the transitioning boundary in conjunction with a Long-Range Transportation Plan update. The FDOT District LOS Coordinators should be consulted for transitioning boundaries within their districts. It is recommended that boundaries for transitioning areas be based on the location of major roadways or at interchanges. This avoids portions of a freeway changing from transitioning to urbanized or rural between interchanges. It is desirable for an urban street to have the same designation between major roadways and not change mid-block when aligning the boundary with major roads is impractical.

4.2.3. Urban Areas

An urban area has a population between 5,000 and 50,000 and is not within an urbanized area. The boundaries for cities with populations over 5,000 and not within urbanized areas are primarily set by existing city limits and must be agreed upon by FDOT, the local government, and FHWA. However, the 5,000 population threshold is primarily a surrogate for areas that exhibit urban traffic characteristics. When a city has a population of less than 5,000 but the surrounding area has a population of more than 5,000 and the city has an urban character, then it is reasonable to classify it with a population of more than 5,000 in the Generalized Service Volume corresponding to a population of over 5,000. These are Generalized Service Threshold Volume Tables 2, 5 and 8 at the end of this handbook following the Glossary.

Other situations exist in which an area has a population of over 5,000 and yet, the area is more characteristic of a rural developed area. In this situation, it is reasonable to use the "developed areas less than 5,000 population" sections of Generalized Service Threshold Volume Tables 3, 6, and 9 included at the end of this handbook following the Glossary. In both of these situations, FDOT District Planning Offices, after consultation with the Central Office Systems Implementation Office, should determine the appropriate designation to use.

4.2.4. Rural Areas

Rural areas consist of two types:

- Rural undeveloped: areas in which there is no or minimal population or development
- Rural developed: areas consisting of cities and other populated areas with populations of less than 5,000 or along coastal roadways

Generally, the portion for cities or developed areas in Generalized Service Threshold Volume Tables 3, 6, and 9 should be applied to areas with a population between 500 and 5,000 and not immediately adjacent to urbanized, urban, or transitioning areas. This portion of the tables also should be generally applied to coastal roads not in urbanized, urban, or transitioning areas.

4.3. Number of Through Lanes

The number of through lanes is one of the most important variables to analyze a roadway's capacity and LOS. Emphasis is placed on through lanes, or lanes that directly accommodate through traffic. The number includes shared lanes (e.g., through/right), but does not include exclusive turn lanes or two-way left-turn lanes on arterials, auxiliary lanes on freeways, or passing lanes on two-lane highways. Arterials are often described as having an odd number of lanes when two-way left-turn lanes are present. However, for highway capacity and LOS analyses, that is not appropriate. The two-way left-turn lane does not accommodate through vehicles, and the facility is more appropriately characterized as having an even number of lanes with a non-restrictive median.

Usually the total number of through lanes in both directions is used to describe roadways. However, this Q/LOS Handbook bases analyses upon a single peak direction. As an example, an LOS analysis for a six-lane freeway is based on three lanes, using the higher directional traffic volume. Similarly, an LOS analysis for a four-lane urban street would be based on two directional lanes.

A common question when using the Generalized Service Volume Tables is how do we handle odd number lanes along the facility. The Generalized Service Volume Tables contain adjustment factors based on certain

characteristics of the facility (i.e., turn lanes, medians, etc.). Any applicable adjustment factors are first applied and then the average service volumes are averaged.

For example, a rural undivided 5-lane arterial facility with exclusive left-turn lanes and without exclusive right-turn lanes will have an adjusted LOS C threshold of 35,388. This is calculated using the Generalized Service Volume Table 3. The LOS C thresholds for an undivided 4 and 6-lane arterial in a rural area is 29,300 and 45,200, respectively. To calculate the 5-lane LOS C threshold, first account for any applicable adjustment factors. For this example, the LOS thresholds must be adjusted by -5% for multilane arterials that have exclusive left-turn lanes and no exclusive right-turn lanes. After this adjustment is applied, the new 4 and 6-lane LOS C thresholds are 27,835 and 42,940, respectively. To obtain the final 5-lane LOS C threshold, the newly adjusted 4 and 6-lane LOS C thresholds, 27,835 and 42,940, are averaged to obtain the 5-lane LOS C threshold of 35,388 to be used in the analysis.

4.3.1. Arterials

An important aspect of this Q/LOS Handbook is the methodology for determining an arterial's number of through lanes. The ultimate result of the LOS analysis is a facility estimation of the LOS, and **it is widely recognized that signalized intersections are the arterial's primary capacity constraint; therefore, it is appropriate to place more emphasis on the intersections' characteristics than the mid-block characteristics.** Generally, mid-block segments have capacities far exceeding those of major intersections, and it is rare for significant delays to occur mid-block. By weighting the effects of intersections more heavily, a more accurate aggregate estimation is possible.

Site-specific characteristics (e.g., intensity and type of land use, driver behavior, speed, etc.) can dramatically affect the viability of add-on/drop-off pairs as through lanes; therefore, each approach should be examined on a case-by-case basis. Analysts are strongly cautioned to review all pertinent characteristics prior to adjusting the number of through lanes used. The reviews should be conducted during peak travel conditions. Analysts are encouraged to consult with their FDOT District LOS Coordinators prior to applying this concept. The following guidelines are offered as a capacity estimating tool only. This process should never be used for the design or redesign of an expanded intersection.

For any capacity estimation to be considered, two conditions should be met:

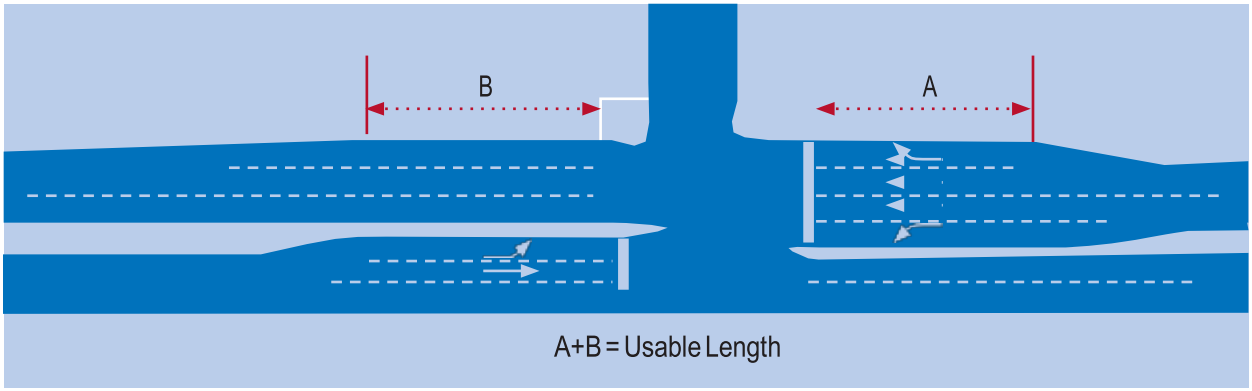
- The add and drop lanes must each be at least 800 feet in length
- The add-on/drop-off pair combined must be at least 1,760 feet in length

If either of these conditions is not met, then no additional capacity is assumed.

If the add-on/drop-off pair is at least one-third of a mile in length (roughly divided equally between approach and departure and exclusive of tapers and cross-street width, as represented by A+B in **Figure 4-2**), it may be reasonable to consider an additional one-half lane for capacity purposes. For example, in the accompanying diagram, if A = 1,000 feet and B = 1,000 feet, then it would be reasonable to consider that the intersection approach has 2.5 effective through lanes.

With a length of at least one-half mile (roughly divided equally between the add and drop lanes), it may be reasonable to consider the add-on/drop-off pair as adding up to one full through lane.

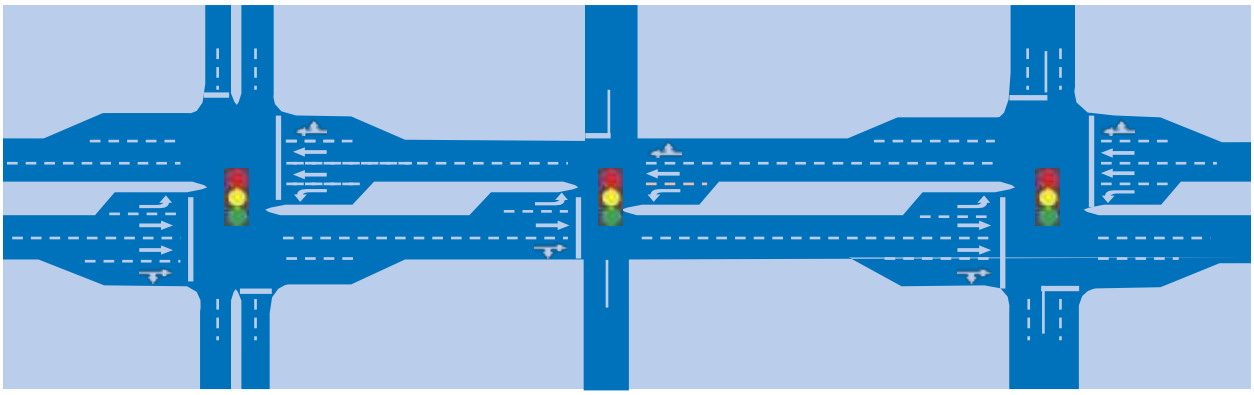
Figure 4-2: Usable Length



When using the Generalized Service Volume Tables, the number of through lanes on a facility is typically determined by the through and shared through/right lanes at major intersections rather than mid-block. **Figure 4-3** shows the mid-block segments with four lanes, with two lanes in each direction. The major intersections each have six lanes, with two through and one shared through/right add-on/drop-off lane with tapers adequate for safe merging.

In this illustration, as in many cases, minor signalized intersections have green times so heavily weighted to the major urban street that they do not cause significant delays to through traffic. When this is the case, it is sometimes acceptable to disregard the number of lanes at these minor intersections; instead, the determination should be based on the lanes at major intersections. So in terms of the LOS, this particular facility has six lanes.

Figure 4-3: Example of Six-Lane Roadway



4.3.2. Highways

For uninterrupted flow highway facilities, the number of lanes is the basic segment or mid-block laneage. For example, a two-lane highway, which is widened to four lanes at major intersections, should be considered a two-lane highway.

4.4. Speed

4.4.1. Posted Speed

The maximum speed at which vehicles are legally allowed to travel over a roadway segment.

4.4.2. Free-Flow Speed

Free-flow speed is the average speed of vehicles not operating under the influence of speed reduction conditions. In general, free-flow is the average speed under low-flow conditions and not influenced by control conditions, such as signalized intersections. The assumption used in this handbook is that the free-flow speed is 5 mph above the posted speed. As an example, if an arterial has a posted speed of 40 mph, the default free-flow speed used is 45 mph; however, if a more accurate free-flow speed is available, it should be used.

4.5. Median Type

4.5.1. Arterials

As used in this document, medians may be classified in one of three ways:

- restrictive median (r)
- non-restrictive median (nr)
- no median (n)

A restrictive median is a raised or grassed area normally at least 10 feet in width separating opposing mid-block traffic lanes and includes left-turn lanes.

A non-restrictive median is a painted at-grade area normally at least 10 feet in width separating opposing mid-block traffic lanes, and for arterials, accommodates mid-block left-turning vehicles to exit from through lanes. Continuous two-way left-turn lanes are considered a non-restrictive median under this definition. Situations in which restrictive or non-restrictive medians are less than 10 feet wide are considered as having no median.

FDOT included the median factor to account for lowering mid-block average travel speeds when no median is present. From the aspect of getting left-turning vehicles out of the traffic stream, the difference between a restrictive and a non-restrictive median is relatively inconsequential. Thus, in determining automobile LOS, restrictive and non-restrictive medians are treated the same.

From a pedestrian point of view, there is a significant difference between non-restrictive medians and restrictive medians. Restrictive medians give pedestrians a much safer mid-block crossing. Thus, this type of median is a consideration in determining the pedestrian crossing factor that enters the bus LOS analysis. **A non-restrictive median provides no pedestrian refuge.**

A pedestrian refuge is an area at least 5 feet but less than 10 feet in width (not a full, raised median) separating opposing mid-block traffic lanes and allowing pedestrians to cross the roadway more safely and comfortably. From a pedestrian point of view, a pedestrian refuge has nearly the same benefit as a restrictive

median. In terms of pedestrian crossing difficulty, the difference between a restrictive median and pedestrian refuge is relatively small; therefore, in determining pedestrian crossing difficulty, the two may be treated the same.

Pedestrian refuges are not included as a distinct category. If an analyst needs to evaluate the effects of a pedestrian refuge, it should be treated as a restricted median for transit analysis, but as no median for automobile analysis.

4.6. Exclusive Turn Lanes

4.6.1. Arterials

EXCLUSIVE LEFT-TURN LANES

The exclusive left-turn lanes are reserved for the exclusive use of left-turning vehicles. The length of these lanes must accommodate turning demand such that left-turn traffic (1) is able to enter the turn lanes behind through queues or (2) can be stored in the turn lane to ensure the through lane traffic is not blocked. When left-turn lanes are not present, a shared lane exists which is included in the number of through lanes.

When analyzing arterials without left-turn lanes, the use of the Generalized Service Volume Tables is discouraged in all but the most basic analyses. If used, the Generalized Service Volume Tables include adjustment factors for the absence of left turn-lanes. To account for the absence of left-turn lanes, adjustment factors provided in the Generalized Service Volume Tables must be manually applied to the service volumes. However, the user is cautioned that research indicates that the true value of the reduction is highly dependent on the distribution of traffic volumes among all the various movements, and a constant reduction factor, as used in the tables is not accurate.

Storage length refers to the total amount of storage available for left-turning vehicles, measured in feet. The default value is 235 feet. For new turn lanes, FDOT Design Standards must be consulted (found at https://www.fdot.gov/design/standardplans/DS.shtm).

EXCLUSIVE RIGHT-TURN LANES

Exclusive right-turn lanes are storage areas designated to exclusively accommodate right-turning vehicles.

The length of these lanes must be able to accommodate turning demand to allow for the free flow of the through movement. The number of pedestrians crossing at these locations should also be considered and accommodated.

4.7. Roadway Lengths

To properly apply the Generalized Service Volume Tables, it is necessary to partition roadways into appropriate lengths for analysis. Setting lengths too short may not adequately capture traffic flow characteristics. Vehicles will not achieve the same average running speed on a segment as over a longer facility length. Short lengths would also be subject to bias caused by signal control delay.

Furthermore, analysis results would not conform to the concept of LOS that is based on the driver perception of the operation of roadways and may not show where the most significant impact of proposed development traffic will occur. Conversely, setting lengths too long may dilute the impact of hot spots by averaging them into other portions that operate better.

FDOT District LOS Coordinators have primary responsibility for the segmentation of the State Highway System (SHS) for LOS purposes. FDOT Central Office may combine smaller segmentation lengths of a facility for statewide reporting and other purposes.

In general, the partitioning of roadways for facility analyses should be based on the following considerations, ranked in order:

- Highway system structure (including facility type, number of lanes, etc.)
- Area type boundaries
- Lengths
- AADTs

At the local level, government agencies frequently make highway capacity and LOS termini at their own jurisdictional boundaries, regardless of the appropriate facility length and termini considerations described above. Jurisdictional boundaries by themselves are usually not appropriate termini for capacity and LOS analyses. Local governments are encouraged to consult with FDOT District LOS Coordinators for applicable segmentation within their jurisdictional boundaries.

4.7.1. Arterials

For an arterial facility analysis, the general recommendation is that the facility be at least two (2) miles in length to use the service measure of average travel speed. Major intersecting arterials frequently serve as logical breaks in segmenting the arterial facility. In downtown areas, the general recommended length is at least one (1) mile.

When evaluating arterial section or facility LOS for planning, the roadway should begin and end at a signalized intersection. The following guidance is provided for some special cases:

(1) Interchanges along an arterial: At a generalized planning level, it is typically appropriate to make a break at an interchange (highway system structure criterion) that does not include a signalized intersection.

(2) Boundaries, especially urbanized area boundaries: When a signalized intersection lies just outside the boundary, it is proper to extend an analysis to the next signalized intersection if within 2 miles of a boundary for a conceptual planning analysis. For example, if a signalized intersection lies 1 mile beyond the existing urbanized boundary in a transitioning area, it is appropriate to include that signalized intersection and the 1 mile of transitioning area as part of an urbanized area analysis.

5 Traffic Variables

This chapter provides an overview of key traffic variables used in the development and use of the Generalized Service Volume Tables.

5.1. Volume and Demand

Traffic volume is the most basic of all traffic parameters and is generally defined as the number of vehicles passing a point on a transportation facility during a specified time period. Traffic volumes typically are developed separately from capacity/LOS analyses and provide input to those analyses. Various sources that determine traffic data include:

- FDOT's Florida Traffic Online (FTO) Web Application
- Extrapolation of historical growth trends
- FDOT's travel demand forecasting models
- Institute of Transportation Engineers (ITE) Trip Generation Manual

The sources listed below provide guidance on traffic forecasting and analysis:

- FDOT's Project Traffic Forecasting (PTF) Handbook
- HCM, Sixth Edition
- FDOT's Traffic Analysis Handbook

Volume is the parameter most often used to quantify traffic demand. **Traffic demand is the number of vehicles with drivers who desire to traverse a particular highway during a specified time period. While traffic demand expresses a desire, volume typically represents actual measurement.**

Misuse of measured volumes often occurs in capacity/LOS analysescausing traffic studies to report the observation and measurement of conditions as they presently exist. Current observations do not reflect constraints in the existing highway system that may prevent vehicles from accessing a desired segment of the system at any given point in time. Observed volumes on congested facilities are more a reflection of capacity constraints than of true demand.

Measured traffic volume cannot theoretically exceed roadway capacity, but traffic demand volume can exceed capacity. An example of a common misinterpretation of these two distinct terms typically occurs while collecting traffic data at an oversaturated intersection. The traffic volume that can physically be processed through a traffic signal is a measure of the capacity (or supply). When traffic volumes approach roadway capacity, the transportation system may experience abnormally long vehicle queues and excess vehicular delay. The length of the vehicle queue upstream of a traffic signal is a more accurate measure of the traffic demand that cannot be processed in the one-hour analysis period.

The impact of bottlenecks, alternative routes, latent demand, and future growth further complicates the relationship between measured traffic volume and traffic demand. **If questions arise as to the appropriateness of using measured volumes or demand volumes for capacity and LOS analyses, it is clear demand volumes should be used.**

5.2. Annual Average Daily Traffic (AADT)

AADT is the total volume of vehicle traffic on a highway or roadway segment for one year divided by the number of days in the year. Most planning applications require AADT volumes. Determining AADT values is a separate process and distinct from capacity/LOS analyses. FDOT routinely provides AADT values for state roads.

AADT values are easy to confuse with two other traffic count numbers that are used to estimate AADT. **The average daily traffic (ADT) is the total traffic volume during a given time period, more than a day and less than a year, divided by the number of days in that time period.** ADT is generated from a short-term traffic count and can be used to estimate AADT. Ensuring ADT counts are reflective of the normal average traffic is an important consideration when using them to estimate AADT on the roadways. Traffic taken during a four-day holiday, long weekend, or Saturday night when 50,000 or more football fans gather is not a normal occurrence.

Peak season weekday average daily traffic (PSWADT) is the average weekday traffic during the peak season. PSWADT numbers are normally generated by travel demand forecasting planning models, such as Florida Standard Urban Transportation Model Structure (FSUTMS). Like ADT, they can be converted to AADT by an adjustment factor.

FDOT operates two types of traffic monitoring programs: 1) continuous monitoring at selected locations using permanently installed equipment and 2) coverage counts at many temporary or short term sites using portable equipment. Further information about the traffic monitoring programs can be found in the FDOT PTF Handbook.

There are two count adjustment factors used to calculate AADT. The first, **axle correction factors are used to compensate for an axle counter's tendency to count more vehicles than are actually present.** For example, an axle counter would show a count of two when a four-axle truck runs over the sensor, even though only one vehicle is present. The second, **seasonal adjustment factors have been developed to adjust for the variation in traffic over the course of a year.** The peak season is the 13 consecutive weeks with the highest volumes. The weekly seasonal factors for those weeks will be the lowest, and the factors will be the highest for the weeks with the lowest volumes. The seasonal factor is used as follows:

AADT = (short-term traffic count) x (seasonal factor) x (axle correction factor)

Although, for planning purposes AADT is usually used, actual capacity and LOS analyses are conducted on an hourly or sub-hourly directional basis. All of FDOT's Generalized Service Volume Tables are based on peak hour directional roadway, traffic, control, and multimodal characteristics. FDOT's hourly directional tables may be viewed as the most fundamental of the tables, because the daily tables are created by dividing the peak hour directional values by the directional distribution factor (D) and the planning analysis hour factor (K). Although the determination of AADT is outside the capacity/LOS analyses, the determination of K and D is a fundamental part of capacity/LOS analyses in planning stages because of the need to convert AADT to peak hour directional volumes.

5.3. Planning Analysis Hour Factor (K)

The K factor is the ratio of the traffic volume in the study hour to AADT. Historically, FDOT has used a variety of study hours and K factors depending on the application. Frequently used K factors included the 30th highest volume hour of the year (K30), 100th highest volume hour of the year (K100), highest hourly volume to daily volume (Kp/d), 5–6 p.m. weekday volume to AADT (K5-6pm), average p.m. weekday peak volume to AADT (Kpm), average a.m. peak weekday volume to AADT (Kam), and noon weekday volume to AADT (Knoon). In general, K factors

are used for peak hour traffic analyses, but analyses can also be based on low-volume conditions, such as the analysis of truck travel in early morning hours. Roadway, traffic, and control conditions vary considerably during the day, potentially affecting capacity values and service volume thresholds.

Standard K is the primary planning analysis hour factor used in Florida, and the value is set based on the area type and facility type. The use of Standard K represents a design approach in which the K factor for a roadway is established from the planning phase through the design phase of the project development process. Rather than being a variable, Standard K values are a fixed, cost-effective parameter, much like the use of 12-foot through lanes on major, high-speed roadways. Unless otherwise noted, all references in this Q/LOS Handbook that refer to a study hour or K factor refer to Standard K.

The Standard K factor is used to convert a peak hour volume to an AADT and vice versa. The Standard K factors used in the Generalized Service Volume Tables were obtained through a methodical process to obtain representative Standard K factors. On the freeways in the seven largest urbanized areas in Florida (Fort Lauderdale, Jacksonville, Miami, Orlando, St. Petersburg, Tampa, and West Palm Beach), Standard K represents a peak study period. For all other facilities, Standard K represents a peak hour not within the peak season. Standard K Factors for planning and design analysis are not directly applicable to the Turnpike, other toll roads, and managed lanes. For more information on the K Factors, refer to FDOT's PTF Handbook.

The K factor generally drops as an area becomes more urbanized and high traffic volumes are spread out over longer time periods. If adequate documentation is provided, FDOT would consider deviations from the Standard K table for special facility types.

The recommended Standard K factors can be found in the FDOT PTF Handbook and the analyst must refer to the PTF Handbook for use of appropriate K factors in projects. The K values used in development of the Generalized Service Volume Tables included in this handbook are consistent with the PTF Handbook. They are listed below:

- Urbanized (Core urbanized/Core freeways)
  - Freeways: 0.09 (0.085)
  - Highways: 0.090
  - Arterials: 0.090
- Transitioning
  - Freeways: 0.098 (average of Transitioning to Urbanized Areas and Urban)
  - Highways and arterials: 0.090
- Rural developed and rural undeveloped
  - Freeways: 0.105
  - Highways and arterials: 0.095

Standard K values on freeways in large urbanized areas range from 8.0 to 9.0 percent, while Standard K values on these "core freeways" in large urbanized areas are typically lower in this range. The lower K values signify a peak period, as opposed to a peak hour. The urban core freeway K values in large urbanized areas are available on FDOT FTO Web Application managed by FDOT's Transportation Data and Analytics (TDA) Office.

5.3.1 Multimodal Transportation Districts (MMTD)

The purpose of MMTDs is to encourage desirable transportation environments for all users, including transit passengers, pedestrians, cyclists, and motorists. The designation of such districts recognizes the inherent, integral relationship between transportation, land use, and urban design and the degree to which each of these elements affect the others. Local governments opting to designate an MMTD assign secondary priority to vehicle mobility and primary priority to assuring a safe, comfortable, and attractive pedestrian environment, with convenient connections to transit. FDOT supports local governments that are committed to such efforts. Implementing MMTDs should help foster the use of multiple modes of transportation, leading to a reduction in automobile use while maintaining high mobility characteristics in the area.

The primary way FDOT supports these designated areas is through its LOS targets. FDOT promotes lower acceptable automobile travel speeds for longer durations in the planning, design, and operations of its facilities.

5.4. Directional Distribution Factor (D)

The peak hour D factor is the proportion of an hour's total volume occurring in the higher volume direction.

The preferred approach to obtain D factor data is from the FTO Web Application, which provides a D factor for all state roads. The FTO Web Application reports the average of measured D values around the 200th highest hour from nearby and comparable roadway sites. The statewide minimum acceptable D factor is 0.51 (this is not the default valueand should only be used in an LOS analysis if adequate justification is provided for the specific roadway). The D factor of 0.55 was used in the Generalized Service Volume Tables for all facility and area types. Using such an approach provides statewide consistency and reasonable accuracy in the values indicated and at a minimum cost. Additional guidance and the recommended range of D factors can be found in the FDOT PTF Handbook.

5.5. Peak Hour Factor (PHF)

The peak hour factor (PHF) is the hourly volume divided by the peak 15-minute rate of flow within the peak hour, specifically:

$$PHF = \frac{(Hourly\ Volume)}{4(Peak\ 15-minute)}$$

The planning-level approach for addressing volume variations within the study hour has been adopted within this handbook. PHF based on area type were used to develop the vehicular service volumes in this Q/LOS Handbook. The PHF associated with each area type is:

- Urbanized areas**:** 0.95
- Transitioning/urban areas**:** 0.92
- Rural areas**:** 0.88

The PHF associated with the area type is consistent with the sixth edition of the HCM. For more information on the PHF, refer to FDOT's PTF Handbook.

5.6. Base Saturation Flow Rate

The HCM uses the term "base saturation flow rate" for interrupted flow roadways and capacity, or base capacity, for uninterrupted flow roadways to describe the maximum steady flow. **Base saturation flow rate is the maximum steady flow rate, expressed in pcphpl, at which passenger cars can cross a point on interrupted flow roadways.** These are not the same as capacity, as normally used to define how many vehicles a roadway can reasonably accommodate. The base saturation flow rates/capacities for Florida's roadway facilities are:

- Arterials and other interrupted flow facilities: 1,950 pcphpl (assuming 100 percent green time)
- Basic freeway segment (70 mph free flow speed): 2,400 pcphpl
- Uninterrupted flow multilane highway segments (60 mph free flow speed): 2,200 pcphpl
- Uninterrupted flow two-lane highway segments: 1,700 pcphpl

5.7. Heavy Vehicle Percent

The FHWA has a vehicle classification scheme in which vehicles larger than a pickup truck are considered heavy vehicles. This includes vehicles with more than four wheels or a classification group of four or higher. **The percentage of these heavy vehicles in a given hour is frequently referred to as a truck factor (T).** However, to be more consistent with HCM terminology and to overcome some definitional problems with the common understanding of the meaning of a truck, this Q/LOS Handbook uses the term "heavy vehicle" and makes use of the percent of heavy vehicles in a given hour.

The heavy vehicle percentage varies dramatically by the time of day, day of week, roadway type, and adjacent land uses. Operational characteristics of heavy vehicles also vary dramatically by type of heavy vehicle (e.g., a relatively small delivery truck compared to a fully loaded 18-wheel semi-truck) and whether they are operating on an uncongested freeway or on signalized roadways. The blast effect of heavy vehicles on bicyclists also varies significantly based on the type and speed of heavy vehicles.

5.8. Speed and Capacity Adjustment Factors

The HCM 6th Edition has replaced the local adjustment factor (LAF) with the SAF and CAF. The LAF previously provided an adjustment to capacity to account for driver aggression, hurriedness, and familiarity with the facility.

The SAF is used to adjust the speed of a facility based on a combination of sources, including weather and construction work zone effects. The SAF may also be used to calibrate the estimated free-flow speed for local conditions or other effects that contribute to a reduction in free-flow speed.

The CAF is used to adjust the capacity of a facility for reduced-capacity situations or to match field measurements. The capacity can be reduced to represent situations such as construction and maintenance activities, adverse weather, traffic incidents, and vehicle breakdowns.

The SAF and CAF can be used to adjust for driver familiarity (or unfamiliarity) with the facility. Additionally, these adjustment factors are used to calibrate a roadway to existing conditions. For the Generalized Service Volume Tables analysis, an SAF of 0.975 and a CAF of 0.968 was assumed for all analyses and area types. These values are derived from the HCM 6th Edition.

5.9. Percent Turns from Exclusive Turn Lanes

Percent turns from exclusive turn lanes is the percent of vehicles approaching an intersection served by an exclusive turn lane or lanes. More specifically, the percent left turns is the percentage of vehicles performing a left-turning movement at a signalized intersection, and the percent right turns is the percentage of vehicles performing a right-turning movement at a signalized intersection. Typically, the percent turns from an exclusive lane is the percent of traffic using an exclusive left-turn lane, with traffic predominantly moving straight ahead.

Some of the most complicated calculations within the HCM chapter on signalized intersections deal with accommodating left-turn movements. **The Generalized Service Volume Tables assume that left-turn lanes adequately serve left-turning vehicles.** In other words, the base condition assumes there is no queue spillback from the left-turn lane into the adjacent through lanes. If this assumption cannot be made, results obtained from the planning analysis tools are possibly inaccurate. For these reasons and more, the tables should not be used for intersection design or detailed traffic operations analysis.

The automobile LOS methodology described in this Q/LOS Handbook applies the HCM procedures to through traffic at each signalized intersection. Turning movement adjustments are made internally, based on the user-specified value of percent turns from exclusive lanes. Turning volumes are added to the through volumes to determine the overall service volumes shown in the Generalized Service Volume Tables.

The accuracy of LOS calculations is highly dependent on the percent turns from exclusive turn lanes. Although it is typically of moderate importance, at some key intersections, it may be one of the most significant variables. While FDOT does not routinely suggest acquiring percent turns from exclusive turn lanes, data collection should be considered at key intersections. Furthermore, some FDOT districts may require specific counts. If the percent turns at key intersections are obtained in the field, a value of 10 percent may be assumed for the other intersections, assuming an exclusive left-turn lane and no exclusive right-turn lane. If the percentage of turns from exclusive turn lanes is acquired, the turning movement count should be conducted during the peak hour, as illustrated in **Table 5-1**.

Table 5-1: Calculation of Percent Turns from Exclusive Turn Lanes

Measured Day	Peak Hour	Signalized Intersection	Total Peak Hour Predominant Approach Volume	Exclusive Lane Volume	% Turns from Exclusive Turn Lanes	
					A	B
22-Jan	4-5 PM	A	884	130	14.7%	16.7%
		B	900	150		
23-Jan	5-6 PM	A	1,152	150	13.0%	13.0%
		B	1,150	150		
24-Jan	5-6 PM	A	1,102	150	13.6%	14.7%
		B	1,090	160		
Totals	–	A	3,138	430	13.7%	14.6%
		B	3,140	460		

SPECIAL TURNING MOVEMENT CASES

There are two special cases when dealing with turns from exclusive lanes. The first is when the predominant movement is a turn movement instead of the straight-ahead movement. The second involves T intersections.

In **Figure 5-1**, the predominant movement is the left-turning movement, and the 550 vehicles turning left should be considered the through movement.The 200 vehicles going straight ahead should be treated as left-turning vehicles with 20 percent left turns [(200/(550 + 200 + 250)] from an exclusive left-turn lane. The 250 vehicles turning right should be treated normally, with 25 percent right turns [(250/(550 + 200 + 250)] from an exclusive right-turn lane.

In **Figure 5-2**, all vehicles are turning from exclusive turn lanes at a T intersection. The 600 vehicles turning right is the predominant movement and should be considered through vehicles. The 400 vehicles turning left should be treated normally, which is to say there are 40 percent left-turns [400/(400 + 600)] from an exclusive left-turn lane.

In **Figure 5-3**, another T intersection is shown, featuring a shared left/through lane in addition to the predominant movement served by the exclusive right lane. Normally, a shared left/through lane does not have the same capacity as a through lane because of the effect of opposing vehicles blocking permitted left turns for the main movement. However, in this case, there is no opposing movement, and the capacity of this shared lane is virtually the same as a typical through lane. In this situation, an analyst should assume one through lane and one shared through lane with 20 percent left turns [(200/(200 + 200 + 600].

Figure 5-1: Predominant Turning Movement

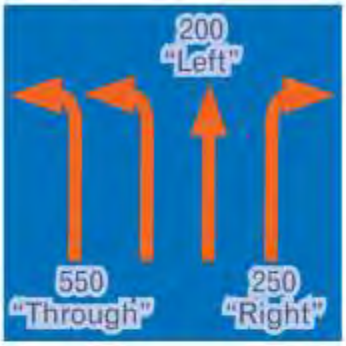


Figure 5-2: Through Movement at a T Intersection with Exclusive Lanes

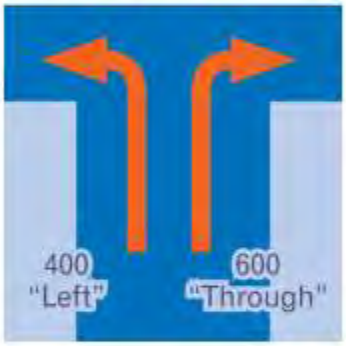
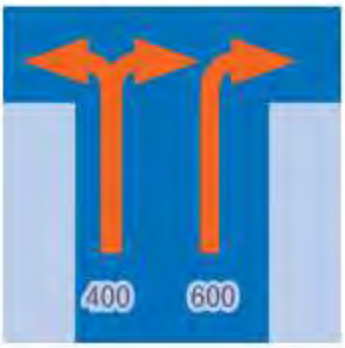


Figure 5-3: Through Movement at a T Intersection with Shared Lanes



6 Control Variables

This chapter provides an overview of each control variable used to generate the Generalized Service Volume Tables.

Control variables refer to roadway or area traffic controls and regulations in effect for a roadway point or segment, including the type, phasing, and timing of traffic signals, stop signs, lane use and turn controls, and other similar measures. In this Q/LOS Handbook, control variables refer to those regularly occurring at signalized intersections, unless otherwise noted. For uninterrupted flow facilities, such as freeways and highways, the LOS can readily be derived from the volume of vehicles and roadway capacity, and control variables are not applicable. For signalized roadways (interrupted flow), however, v/c is not sufficient to determine the LOS, and control variables must be considered. These include:

- Number of signals
- Arrival type
- Cycle length
- Effective green ratio (g/C)

The Generalized Service Volume Tables use default control variables that are representative of typical conditions on Florida roadways. The default control variables (or characteristics) — along with the roadway, traffic, and multimodal variables assumed in the creation of each table — are provided on the back of the Generalized Service Volume Tables.

Table 6-1 provides an overview of the control variable input requirements within the Generalized Service Volume Tables.

Table 6-1: Control Variable Input Requirements

	Input Variable	Generalized Service Volume Tables
CONTROL	Number of Signals	D
	Arrival Type	D
	Signal Type	D
	Cycle Length (C)	D
	Through Effective Green Ratio (g/C)	D
	Exclusive Left Effective Green Ratio	D

Legend: D Default variables that cannot be altered

The effects that individual variables have on the computational process vary. **Table 6-2** indicates the sensitivity of the control variables on capacity and LOS.

Table 6-2: Sensitivity of Control Variables on Service Volumes

Control Variable	Sensitivity on Service Volumes
Number of Signals	high
Arrival Type	medium
Signal Type	low
Cycle Length (C)	medium
Through Effective Green Ratio (g/C)	high
Exclusive Left Effective Green Ratio	medium

Traffic variables, including AADT, Standard K, and D data, should be obtained from FDOT's FTO, PTF Handbook and field counts. Although turning movement counts at key intersections may be necessary, as discussed previously, FDOT does not recommend the use of travel time studies for LOS planning applications.

Field visits should be conducted to collect traffic and other items needed for analyses. Up-to-date aerial or satellite imagery may be sufficient for most of the data entry items. Signalization information is often available from the applicable traffic operations agency's signal timing plans. The applicable transit agency should be contacted for transit data.

6.1. Number of Signals

The cumulative effect of numerous traffic signals, lack of green time, and lack of effective signal progression often have a detrimental effect on the LOS of arterials. An important feature of FDOT's Generalized Service Volume Tables is the inclusion of the number of signals on the determination of the LOS.

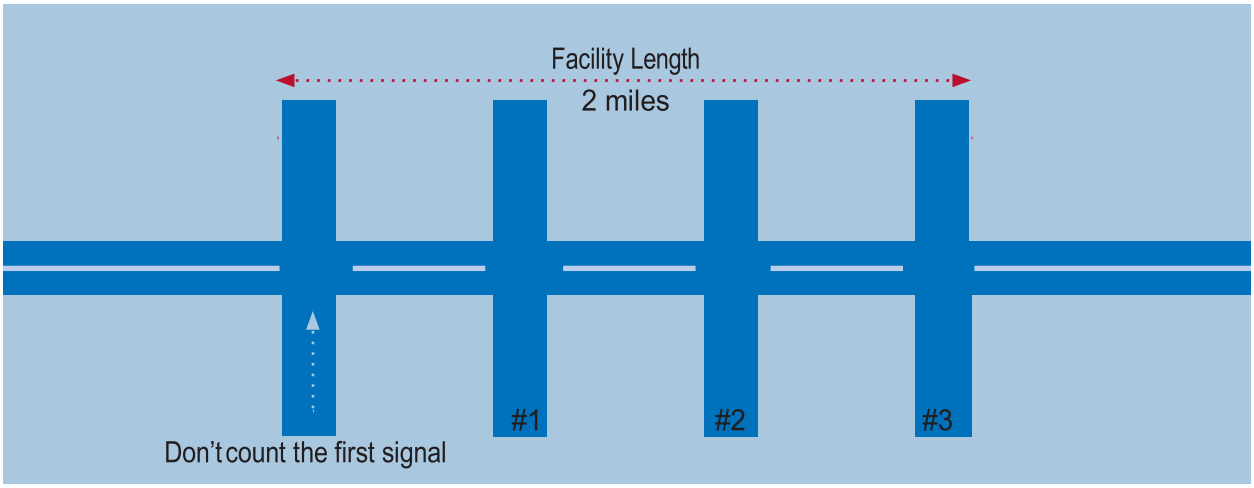
The distance between signalized intersections is required to determine specific service volumes for a roadway. FDOT's Generalized Service Volume Tables use signalized intersections per mile as an input and assume uniform spacing. While this approach may be acceptable for an areawide analysis, precise distances between signalized intersections should be determined when an individual roadway is analyzed at the conceptual planning level.

For analysis purposes, 100 feet between signalized intersections is considered the minimum distance. When the actual distance is less than 100 feet (e.g., side streets with wide medians), it is reasonable to consider these together as one signalized intersection.

Roadway and traffic characteristics often change over time. The number of signals per mile is frequently the most significant change. As development takes place and an area becomes more urbanized, the number of signals per mile is likely to increase. The LOS analysis of future conditions should, therefore, take into account changes in roadway and signalization characteristics.

To avoid double counting when determining the number of signals, only one intersection at the ends of the facility should be counted, as shown in **Figure 6-1**. In general, FDOT recommends including the last intersection within the analysis and ignoring the first, or entry, intersection. This allows the analysis to include the effects of delay, backup, and the LOS from the last intersection for the facility under study.

Figure 6-1: Total Number of Signals



For example, in southeast Florida, principal arterials are often spaced 1 mile apart, with other signalized intersections in between. In this situation, only one of the signalized intersections at the ends of the roadway, plus the signals in between, should be counted when determining the number of signals per mile. In general, the last signalized intersection in the peak flow direction would be counted, ignoring the first signalized intersection.

As discussed previously, the arterial should begin and end at a signalized intersection. In unusual situations when this assumption is not applicable (e.g., lane drops, ramp junctions, etc.), the following guidance is provided:

- For the Generalized Service Volume Tables, do not count the unsignalized terminus as a signalized intersection.

In general, only fixed, periodic interruptions should be considered in determining the number of signals. Only one intersection at the ends of the facility should be counted. Draw bridges, at-grade railroad crossings, school zones, pedestrian crossings, and median openings should not be counted. Depending on the site-specific conditions or analysis desired, there may be exceptions to this general guidance.

When using the Generalized Service Volume Tables, an intersection with a stop sign for the through movement is considered a signalized intersection for a state-signalized arterial. When analyzing a Non-State signalized roadway, the roadway must have at least one signalized intersection.

6.2. Arrival Type

Arrival type is a general categorization of the quality of signal progression. The HCM defines six arrival types, with Type 1 representing the worst progression quality and Type 6 representing the best. Uncoordinated operation, or random arrivals, is represented by Type 3 and is appropriate for actuated signals. Arrival Type 4 is FDOT's default for coordinated signal systems. A more favorable progression (Types 5 or 6) may be appropriate when progression design strongly favors the peak direction of travel, and all signals are coordinated for the length of the facility. One-way facilities tend to have better quality progression than two-way facilities. A higher level of progression may also be appropriate around freeway interchanges, where signals are typically highly coordinated. The arrival type may vary significantly from one signal to the next, even in coordinated signal systems. Actuated-coordinated signals have varying green times, with breaks between groups of coordinated signals.

The assumption of very good progression in one direction does not imply efficient progression in the other direction. Even with less traffic volume, off-peak direction speeds could be lower, if favorable progression has been established for the peak direction only.

6.3. Signal Type

The signal type indicates the degree to which a traffic signal's cycle length, phase plan, and phase times are preset or actuated. The three main types are:

- Actuated
- Actuated-coordinated
- Pretimed

It should be noted that modern traffic signals can handle multiple settings and can vary by time of day. Consequently, a traffic signal's operation (actuated, coordinated-actuated, or pretimed) can change by the time of day to best meet traffic demands.

6.3.1. Actuated

Actuated, or fully actuated signals, use vehicle detection for all signal phases on the main and side street approaches. Each phase is subject to a minimum and maximum green time, and some phases may be skipped if there is no demand for the phase. The length of the green time observed in the field generally depends on the amount of vehicular demand for the phase. If there is little demand, then a relatively short green time will be allocated to the phase. If there is significant demand, a relatively long green time will be allocated, subject to the maximum green time for that phase. The minimum and maximum green times for each phase can be easily changed by entering new values into the traffic signal controller.

Because phases can be skipped, and the amount of green time for each phase generally depends on demand, the cycle length will often vary substantially from cycle to cycle. The exception occurs during periods of heavy vehicular demand, when all phases consistently reach their maximum values, making it seem as if the cycle length is fixed. Actuated signal operations are most frequently used when the signalized intersection is isolated, or when there is a desire to minimize delay without concern for progression.

6.3.2. Actuated-Coordinated

A subset of actuated control is referred to as actuated-coordinated control. **In this type of signal operation, the cycle length is typically fixed, while the amount of green time for the main street through phase varies.** It consists of a minimum amount of green time plus any unused time from the minor phases. Holding the main street green in this manner at all of the signals along a facility allows platoons of vehicles to move relatively unimpeded along the main street with decent progression. Actuated-coordinated signal operations are typically used in Florida's developed areas, especially during peak travel times. This type of operation typically offers the best balance of capacity and progression for the main street through movement.

6.3.3. Pretimed

Pretimed signals use a preset sequence of phase times in a repetitive order and make no use of vehicle detection. Each phase is green for a fixed period of time, irrespective of vehicular demand, and none of

the phases can be skipped. Thus, the cycle length is fixed. This type of signal operation is most frequently used in downtown areas with high signal density, or when the desire is to maximize progression without extensive concern about maximizing capacity for the through movement.

6.4. Cycle Length (C)

Cycle length (C) is the total time for a signal to complete a sequence of signal indications for all traffic movements. The cycle lengths used in the development of the arterial service volume tables were based on representative cycle lengths for different functional classifications of arterials and for different area types. Cycle lengths are typically highest on principal arterials in urbanized areas, where the primary purpose of the facility is to provide a high level of mobility to through movements on the mainline and where roadways are typically at or near capacity during peak periods. Lower cycle lengths are typically used for the less saturated conditions typical of rural areas to provide better access and service to all directions. The cycle lengths used to develop the Generalized Service Volume Tables are provided on the back of each table.

6.5. Effective Green Ratio (g/C)

One of the most significant variables used in calculating the highway capacity and LOS on a signalized roadway is the through movement's effective green time (g) to signal cycle length ratio (g/C). It is the amount of time allocated for the through movement (typically calculated as the green plus yellow plus all-red indication times less the lost time) divided by C. Along with the number of through lanes, it is usually one of the two most important factors for determining the capacity of a roadway's through movement at any given intersection and for the roadway as a whole. Despite this, for generalized analyses, g/C is often ignored, because:

- g/C ratio typically varies from intersection to intersection along an arterial
- g/C ratio typically varies by time of day

Ignoring g/C undermines any arterial LOS analysis at a generalized planning level. This Handbook includes guidance to provide default g/Cs for generalized planning arterial analyses.

A major simplifying assumption that is essential to the development of the Generalized Service Volume Tables is the selection of one g/C for all intersections on an arterial. The g/C ratio of 0.44 was used for arterial analysis for all area types. FDOT has determined that for generalized planning analyses, the weighted average g/C ratio yields the closest results to actual conditions. **The weighted g/C ratio of an arterial is the average of the critical intersection through movement g/C ratio and the average of all the other intersections through movement g/C ratios for urban streets.** For example, if there are four signals with a through g/C ratio of 0.50 and one signal with a through g/C ratio of 0.40, then the weighted average g/C ratio for urban street is 0.45 (Refer to HCM for additional information). Essentially, the worst intersection is given equal weight to all the other intersections combined.

As an example, for the through movement phase, G is the green displayed time, Y the yellow displayed time (typically 3 or 4 seconds), R the all-red indication (typically 1 or 2 seconds), and C the cycle length. The most representative situation in Florida is for cycles to consist of four phases and 12 indications: one phase each to accommodate the main road through movement, the side road left movement, the side road through movement, and the main road left movement, with G, Y, and R indications for each of the four phases. The effective green time, which includes the effects of vehicular startup and clearance lost times is g.

FDOT's preferred approach for g/C determination for current year analyses is to use the actual signal timing plan from the traffic operations agency for the p.m. peak hour (typically 5–6 p.m.) for each signalized intersection. This is a consistent and cost-effective approach that provides reasonable accuracy. If the signal is actuated, (G + 4)/C should be used for the through movement. This assumes the typical Y + R time of 4 seconds as additional time allocated to the through movement as a result of unused time from the other movements. If the signal is pretimed, the g/C for the through movement should be used.

For consistency and ease of review, FDOT recommends using signal timing plans from the applicable traffic operations agency.

Analysts should be aware that signal timing plans come in a variety of forms, use many notations, and are not designed to directly address the determination of g/C. It may be necessary to coordinate with the operating agency directly to interpret the output values.

Analysts should calculate and input g/C for the through movement at all intersections. The g/C for left turning movements need only be collected at major intersections. A 10 percent value can be assumed as the left g/C for other intersections.

In previous FDOT guidance, FDOT offered two other methods for determining g/C:

- actual signal timings from the traffic operations agency
- field studies

Both approaches have some merit; however, after FDOT analyzed and tested both approaches, the preferred approach of using signal timing plans in general offers the best combination of consistency, accuracy, and cost-effectiveness. The use of field studies for g/C is discouraged, unless an early agreement by the affected parties is reached. The maximum acceptable facility through movement g/C ratios during the peak hour typically should not exceed:

- State principal arterials
  - Current year: 0.50
  - Long term (≥ 10 years out): 0.47
- Other roadways: 0.44

Under most circumstances, arterial facilities are 1.5–5.0 miles in length and include principal arterials as terminus points. The g/C value of 0.50 approximates FDOT's maximum allowable arterial capacity volumes of 1,000 vehicles per hour per lane (vphpl) and 950 vphpl in large urbanized areas and other urbanized areas, respectively.

7 Multimodal Variables

This chapter provides an overview of each multimodal variable used within Generalized Service Volume Tables to allow the user to recognize these variations and analyze multimodal LOS on specific roadways. Where applicable, generally acceptable ranges are provided. Multimodal variables describe the various geometric and demand characteristics that are needed to determine pedestrian, bicycle, and bus LOS. As with the control variables, multimodal variables are only applicable for arterial analyses:

- Paved shoulder/bicycle lane
- Outside lane width
- Pavement condition
- Sidewalk
- Sidewalk/roadway separation
- Sidewalk protective barrier
- Bus frequency
- Bus stop amenities
- Bus stop type
- Passenger loads

Table 7-1 provides an overview of the multimodal variable input requirements within the Generalized Service Volume Tables.

Table 7-1: Multimodal Variable Input Requirements

Input Variable	Generalized Service Volume Tables
Paved Shoulder/Bicycle Lane	R
Outside Lane Width	D
Pavement Condition	D
Sidewalk	R
Sidewalk/Roadway Separation	D
Sidewalk/Roadway Protective Barrier	D
Bus Frequency	R
Bus Stop Amenities	D
Bus Stop Type	D
Passenger Loads	D

Legend: R Required table input
D Default cannot be altered

The effects that individual variables have on the computational process vary. **Table 7-2** indicates the sensitivity of the multimodal variables on the capacity and LOS.

Table 7-2: Sensitivity of Multimodal Variables on Service Volumes

Control Variable	Sensitivity on Service Volumes
Paved Shoulder/Bicycle Lane	high
Outside Lane Width	low
Pavement Condition	low
Sidewalk	high
Sidewalk/Roadway Separation	medium
Sidewalk/Roadway Protective Barrier	medium
Bus Frequency	high
Bus Stop Amenities	low
Bus Stop Type	low
Passenger Loads	low

7.1. Paved Shoulder/Bicycle Lane

Within this Q/LOS Handbook, a bicycle lane is a designated or undesignated (paved shoulder) portion of a roadway for bicycles adjacent to vehicle lanes. Painted lines separate paved shoulders/bicycle lanes from vehicle lanes.

For planning purposes, a designated bicycle lane is usually 4 to 5 feet in width and has a bicycle logo. An undesignated bicycle lane is usually 4 feet in width and does not have a bicycle logo. To be considered a paved shoulder/bicycle lane, at least 3 feet of paved shoulder must exist outside the painted line. Facilities with striped shoulders between 1 and 3 feet should be considered as having wide outside lane widths.

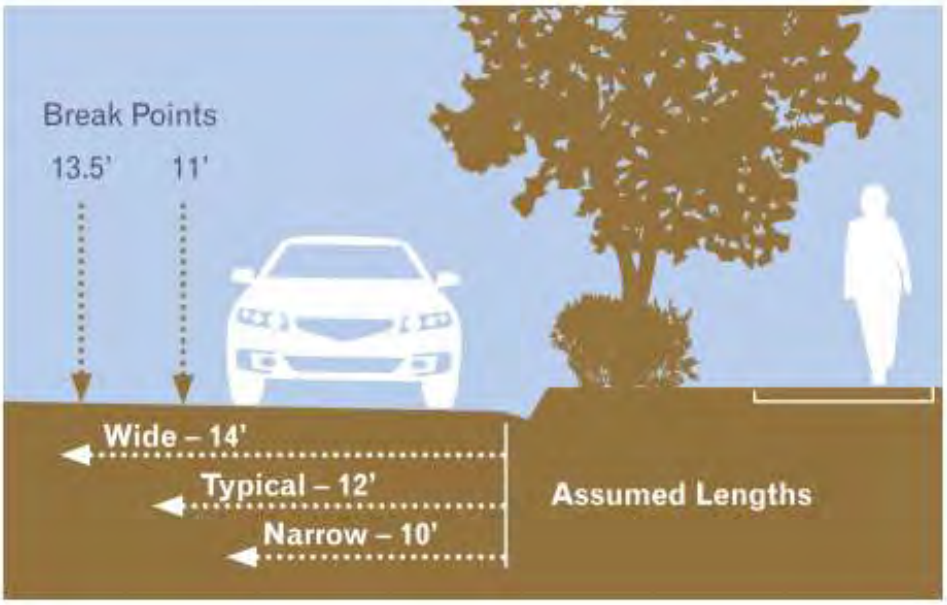
7.2. Outside Lane Width

Within this Q/LOS Handbook, **the outside lane width is the width, in feet, of a roadway's outside vehicle through lane, not including the gutter.** This factor is usually important in the determination of a roadway's BLOS. The majority of the SHS lane widths are 12 feet. Many local roads and some state highways have 14-foot outside lanes; these are sometimes referred to as wide curb lanes. Many other local roads and some state facilities have outside lane widths less than 12 feet.

These dimensions as shown in **Figure 7-1,** are for planning analyses only:

- Wide: greater than or equal to 13.5 feet.
- Typical: greater than or equal to 11 feet and less than 13.5 feet.
- Narrow: less than 11 feet.

Figure 7-1: Outside Lane Width



7.3. Pavement Condition

Pavement condition for BLOS analysis is a general classification of the roadway surface where bicycling usually occurs, not necessarily that drivers of vehicles experience. Three general classifications are used: desirable, typical, and undesirable. These general classifications are used in lieu of detailed pavement surface grades found in the operational model on which this planning technique is based.

- Desirable pavement condition is new or recently resurfaced pavement. The pavement still maintains a dark black color, is free of cracks, and rides smoothly.
- Typical pavement condition is the most common type of pavement condition of Florida's roadways and is used in the Generalized Service Volume Tables. Generally, the pavement has a light gray color, the surface appears worn, and may have some cracks; however, the ride for the bicyclist is smooth.
- Undesirable pavement condition consists of pavement with noticeable cracks, broken pavement, or ruts. There may be existing or partially filled potholes, or drainage grates hazardous to bicycles. When the bicycle riding surface contains loose dirt, gravel, or debris, even if the roadway surface is typical or desirable, then it would be considered undesirable.

In general, FDOT recommends the use of a typical pavement condition for most analyses, especially those involving future years.

For analysts familiar with FHWA's PAVECON factors, "desirable" would equate to a 4.5 or 5.0 rating, "typical" would equate to a 3.0 to 4.0 rating, and "undesirable" would equate to 2.5 or less.

7.4. Sidewalk

Within this Q/LOS Handbook, a sidewalk is a paved walkway for pedestrians at the side of a roadway, typically 5 feet in width. Paved roadway shoulders are not considered sidewalks. Because LOS analyses are directional, the existence of a sidewalk is based on the directional side of the arterial being analyzed.

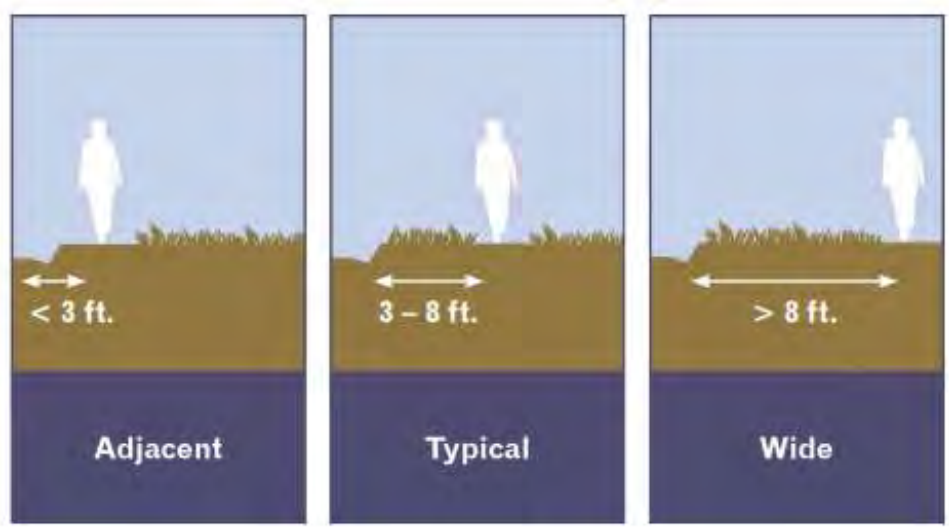
SIDEWALK/ROADWAY SEPARATION

Sidewalk/roadway separation is the lateral distance in feet from the outside edge of pavement to the inside edge of the sidewalk. Within this Q/LOS Handbook, sidewalk/roadway separation is classified in three ways, as shown in **Figure 7-2**:

- Adjacent: less than or equal to 3.0 feet
- Typical: greater than 3.0 feet and less than or equal to 8.0 feet
- Wide: greater than 8.0 feet

In general, pedestrians tend to walk toward the outer half of sidewalks, away from traffic.

Figure 7-2: Sidewalk/Roadway Separation



In downtown environments, sidewalks frequently extend at least 10-12 feet from the curb. When there are no tree plantings or other sidewalk/roadway protective barriers, sidewalks should be classified as adjacent. When there are tree plantings or some other barrier between where people walk and the outside edge of the travel lane, sidewalks are assumed to have typical separation.

When on-street parking and sidewalks both exist, the sidewalk/roadway separation should be considered wide, regardless of how close the sidewalk is to the edge of the pavement. Essentially, on-street parking adds approximately 8 additional feet between pedestrians and vehicles.

7.5. Sidewalk Protective Barrier

In addition to sidewalk width, this Q/LOS Handbook adds an overall sidewalk protective barrier factor to include the added benefits of trees, on-street parking, or other barriers.

7.6. Bus Frequency

Bus frequency, also known as headway, refers to the number of scheduled, fixed-route buses that have a potential to stop on a given roadway segment in one direction of flow in a one-hour time period. Express buses with no potential of stopping along a roadway are not included.

7.7. Bus Stop Amenities

The bus stop is often the first component of any transit system a passenger will encounter, and available amenities for comfort or safety can greatly influence the perceived QOS along a route. Rather than quantify all potential bus stop components, this Q/LOS Handbook creates four categories of bus stop amenities: excellent, good, fair, and poor. Having shelter from the weather and a place to sit is the most desirable condition at any bus stop, regardless of type, and is considered an excellent condition. A shelter without a bench represents a good condition, because rain, wind, and sun could otherwise deter choice riders. A stop with only a bench is less desirable than a stop with only a shelter and is considered a fair condition. A stop with no bench and no shelter is considered a poor condition. Because excellent bus stops may improve a user's perception of the system, the bus stop amenity factor is used to increase the adjusted bus frequency value. Bus stops with no amenities are uninviting and discourage use, and the variable is, therefore, used to decrease the adjusted bus frequency value, as shown in **Table 7-3**.

Table 7-3: Bus Stop Amenity Factors

Bus Stop Amenities	Adjustment Factor
Excellent	1.1
Good	1.0
Fair	1.0
Poor	0.9

7.8. Bus Stop Type

Bus travel speed depends not only on distances and congestion along the route, but also the number of stops and the dwell time at each stop. Typical bus stops delay a bus for around 15 seconds, while major stations with numerous boardings and alightings can add around 35 seconds of delay.

7.9. Passenger Loads

Just as traffic congestion contributes to the degradation of the LOS, crowding on buses can affect the QOS. Because overcrowded buses may reduce the overall desirability of a route, a passenger load factor is used to modify the adjusted bus frequency value, as shown in **Table 7-4**.

Table 7-4: Passenger Load Factor

Passenger Load Factor	Adjustment Factor
< 30%	1.05
< 70%	1.00
≤ 100%	0.95
> 100%	0.85

8 Future Year Analyses

Traffic and development conditions change on roadways over time. This raises questions about what input values, analysis tools, and LOS targets should be used for capacity and LOS analyses in future years. Analysis years and planning horizons vary appreciably in transportation planning. To help with understanding and for simplification in this text, **"long term" means 10 or more years from the current year, and "short term" means less than 10 years from the current year.** However, for a specific application, FDOT district LOS coordinators should be consulted for more detailed guidance.

For future year analyses, it is important to consider changes in the appropriate roadway, traffic volumes, land use, signal control, and multimodal characteristics. For example, under existing conditions in a transitioning area, signalization may be very infrequent; however, as development occurs, more signalized intersections can be anticipated and should be accounted for in future year capacity and LOS analyses. The traffic and control variables relevant to this handbook are discussed in the following sections. Refer to the FDOT PTF Handbook and the Traffic Analysis Handbook for further guidance on future year traffic development and analyses.

8.1. Change in Traffic Variables

8.1.1. AADT

Historical growth trends and the state's travel demand forecasting models are typically used for long-term traffic projections. Analysts and reviewers of capacity and LOS analyses need to agree on what future AADT values to use. Additional information can be found in the PTF Handbook.

For site impact analyses, volumes are frequently presented in terms of trips generated by the site rather than roadway-specific AADT, K, and D values. Institute of Transportation Engineer's (ITE's) Trip Generation Handbook is typically used for trip generation for site impact analyses; however, FDOT should be consulted about supplemental material. In all cases, care should be given to ensure final values are compatible with statewide Standard K and D factors.

8.1.2. Planning Analysis Hour Factor (K)

As areas become more developed, measured K values often drop, primarily for two reasons. The first is that more urban situations typically are not subject to highly volatile volumes, such as holiday traffic in rural areas. Generally, more developed areas are subject to frequent recurring volumes, such as weekday commuter traffic. The second is that as congestion develops, the spreading of the peak travel hour traffic also occurs. Refer to FDOT PTF Handbook for Standard K values used by facility type.

For future year generalized planning analyses, the Standard K values for the assumed area and facility types on the backs of FDOT's Generalized Service Volume Tables are appropriate. In the longer term, it may be necessary to determine if the area is projected to transition into a different area type over the analysis period.

8.1.3. Directional Distribution Factor (D)

For future year generalized planning analyses performed in this handbook, the D factor value for all area

and facility types is 0.55. If a site-specific analysis is conducted in the short term, FDOT's preferred approach is to use the FDOT's 200th Highest Hour Traffic Count Report from the FTO Web Application. In the longer term, some lowering of the factor may be appropriate. The analyst should refer to the D factors and their acceptable range in FDOT PTF Handbook.

8.2. Change in Control Variables

Making traffic and roadway projections into the future is a well-accepted practice for generalized planning analysis. For reasonable generalized planning analysis of signalized roadways, control variables must be addressed in the short and long terms. **Typically, the two most important control variables are the through movement g/C and signal density.**

8.2.1 g/C

Determining current and future g/Cs for a roadway is complicated, and judgments must be made. In the short and long terms:

- For Class II arterials, using the existing g/Cs is appropriate
- For Class I arterials not subject to significant development pressure, using the existing g/Cs is appropriate
- For Class I arterials incurring significant new development pressure, it is appropriate to lower through movement g/Cs
- For new individual signals, through movement g/Cs will vary greatly; however, for planning purposes, none should be assumed to be higher than 0.55

Within the HCS, an acceptable method to estimate future g/C ratios is by conducting intersection capacity analyses. The HCS will determine the required g/C ratios to progress through traffic movements on the major street, while simultaneously minimizing the delay to the minor street approaches.

8.2.2 Signal Density

As areas grow in population, additional traffic signals are frequently installed. Usually, these new signals do not significantly affect the capacity of roadways, unless they are in a previously undeveloped area or are so closely spaced that queue spillback occurs. They can play a major role in the determination of the LOS if stops occur more frequently and average travel speeds drop.

In short- and long-term analyses, it is appropriate to consider the probability of new traffic signals, especially based on proposed new developments. In the absence of specific development plans or intersecting traffic volume cross-product signalization criteria, general guidance should be used in developed areas.

In the short term:

- For Class II arterials, using the existing signalized intersection locations is appropriate
- For Class I arterials not subject to significant development pressure, using the existing signalized intersection locations is appropriate
- For Class I arterials incurring significant new development pressure, one additional signalized intersection per mile may be assumed

In the long term:

- For Class II arterials, one additional signalized intersection per mile may be assumed
- For Class I in small towns, one additional signalized intersection per mile may be assumed

Because of the wide variety of circumstances along generally uninterrupted flow highways in rural areas, no specific guidance can be given on future signal locations. However, for capacity and LOS purposes, the possibility of new signalized intersections should be considered. Because of the importance of signal density on the LOS on state roadways, for site impact applications, the number of new signals should be reviewed and approved by the FDOT district prior to use in an analysis.

Typically, other roadway, traffic, control, and multimodal variables do not have as large of an effect on the capacity and LOS as the ones addressed above. If some of these other inputs (e.g., turning movement percentages) were determined in a current year analysis, they can usually be applied to future year analysis. If these other variables were not determined for a current year analysis, the statewide default values on the backs of the Generalized Service Volume Tables may be assumed.

9 Maximum Capacity Volumes

The use of highway capacity and LOS analysis, whether applied appropriately or not, has resulted in projected traffic volumes beyond normal capacity ranges found on Florida facilities. There are multiple reasons for this, but to aid analysts and reviewers on what capacity values will normally be acceptable, FDOT has adopted a set of general guidelines. The values provided below are based on site-specific freeway studies and counts, as well as arterial maximum acceptable g/C ratios.

9.1. Arterials

For arterials, the maximum generally acceptable per-lane approach volumes are:

- Large urbanized: 1,000 vehicles per hour per lane (vphpl)
- Other urbanized: 950 vphpl
- Transitioning: 920 vphpl
- Urban: 920 vphpl
- Rural: 850 vphpl

The Maximum volumes may vary due to widely varying g/C, turning movements at intersections, and the segmentation of roadways. The maximum volumes represent a weighted g/C of approximately 0.50, which is the average of the critical g/C and the average of all other g/Cs along an urban street facility. Typically, there will be at least one principal arterial intersecting an urban street being analyzed. Such intersections are usually the critical intersections (hot spots) for an arterial analysis, and g/C ratios for the through movements are in the range of about 0.40. Although these intersections are frequently flared out to achieve greater capacity, the through movement g/C ratios cannot increase appreciably if all intersection movements are included. Therefore, the use of a 0.50 g/C ratio for determining the capacity of an urban street should represent the upper bounds of what can be reasonably expected.

Arterial facility analyses typically involve intersecting principal arterials, but section analyses may not have intersecting principal arterials. Under these circumstances, urban street through movements during peak travel hours may feature g/C ratios in the 0.50 to 0.60 range. Such values may be appropriate for segment or section analyses; however, the use of such high g/C ratios is not normally acceptable for a facility analysis and may represent an inappropriate segmentation of roadways.

Another situation in which g/C ratios may be above 0.50 is in the outlying parts of urbanized areas or in transitioning areas for both arterials and generally uninterrupted flow highways. In these areas, signals have typically been recently installed, and side traffic has not yet reached the high levels that it will in future years. Therefore, although current maximum volumes per lane may be higher than those shown above, in the future, such values will likely not be sustained and should be avoided in the arterial analysis.

9.2. Freeways

For freeway facilities and sections, the maximum volumes at 70 mph free flow speed are 2,400 pcphpl as per HCM.

Freeway operational measures such as ramp metering may result in higher volumes.

In general, the implementation of ramp metering could have a 5 percent or less improvement on capacity.

9.3. Highways

For highway segments (generally uninterrupted flow highways), the maximum per-lane approach volumes as per HCM are:

- Two-lane
  - Developed: 1,700 pcphpl
  - Undeveloped: 1,700 pcphpl
- Multilane
  - Developed (55 mph free flow speed): 2,100 pcphpl
  - Undeveloped (60 mph free flow speed): 2,200 pcphpl

10 Florida's LOS Policy

REQUIREMENTS FOR LOS TARGETS FOR THE STATE HIGHWAY SYSTEM

It is FDOT's intent to plan, design, and operate the SHS at an acceptable LOS for the traveling public. The LOS targets are consistent with FDOT's Policy on Level of Service Targets for the SHS, Topic No. 000-525-006. The policy outlines the automobile mode LOS target for urbanized areas and outside urbanized areas. The automobile mode LOS targets for the SHS during peak travel hours are D in urbanized areas and C outside urbanized areas. FDOT shall work with local governments to establish appropriate LOS targets for multimodal mobility and system design. The targets shall be responsive to all users, for context, roadway function, network design, and user safety.

11 Generalized Planning Analysis

11.1. Introduction

FDOT's Generalized Service Volume Tables found at the end of this Q/LOS Handbook are the primary analysis tool in conducting this type of planning analysis. **Although considered a good generalized planning tool, the Generalized Service Volume Tables are not detailed enough for project development and environment (PD&E) traffic analysis, final design, or operational analysis work, and should not be used for those purposes.** In addition, the Generalized Service Volume Tables cannot be relied upon when approaching LOS E and LOS F thresholds, because of operational fluctuations at the thresholds. More detailed analysis should be performed in these situations.

Specific applications of the Generalized Service Volume Tables include:

- Generalized comprehensive plan amendment analyses
- Statewide highway system deficiencies and needs
- Statewide mobility performance measure reporting
- Areawide baseline capacity (e.g., MPO boundaries) and service volume values for travel demand forecasting models
- Areawide influence areas (e.g., impact areas) for major developments
- Future year analyses (e.g., SIS Needs Plans, MPO LRTPs which have a 10 to 25-year planning horizon)
- Baseline capacity and service volumes for concurrency management systems

Generalized Service Volume Tables must be appropriately applied using the right area type and facility type designations and interpreted selecting the right values from the tables. The adjustment factors must be applied, as applicable.

It is quite possible that no single roadway has the exact values for all the roadway, traffic volumes, land use, signal control, and multimodal variables used in the Generalized Service Volume Tables. The tables must be applied with care to roadway facilities and in the determination of the LOS grade.

The automobile, bicycle, and pedestrian parts of the Generalized Service Volume Tables were developed based on the definitions and methodology of the HCM. Nationally the TCQSM is the comparable document to the HCM for bus analyses.

FDOT's Generalized Service Volume Tables consist of five area types grouped into three tables:

- Urbanized areas
- Areas transitioning into urbanized/urban areas, or cities with population of more than 5,000 not in urbanized areas
- Rural undeveloped areas, or cities and developed areas with population of less than 5,000

Most planning applications begin with AADT volumes given as an input, or end with AADT as a calculated output. Therefore, the generalized daily service volumes shown in Tables 1 through 3 depict the AADT based on a standard peak hour. Some local and regional entities have adopted two-direction peak hour standards.

Tables 4 through 6 provide generalized peak hour two-way service volumes. Generalized peak hour directional volumes (Tables 7 through 9) are provided, because traffic engineering analyses are conducted on an hourly directional basis. These hourly directional tables may be viewed as the most fundamental of the tables, because the two-way tables are simply the peak hour directional values divided by D, and the daily tables are simply the peak hour directional values divided by the D and K factors.

All three sets of tables are internally consistent. All of the volumes within the tables are based on the Standard K factors. The urban/transitioning freeways are based on the average of urbanized and rural Standard K factors. The PHFs of 0.95, 0.92, and 0.88 were used in the creation of the urbanized, transitioning/urban, and rural tables, respectively. The 200th highest hour for the directional distribution variable is approximately equivalent to the typical peak hour of a day during a peak season in a developed area. Again, it is stressed that the daily, peak hour two-way, and peak hour directional tables are internally consistent and based on the same time period and directional flow of traffic.

The input values used to generate the Generalized Service Volume Tables can be found on the backs of Tables 1 through 9 and yield the results on the fronts of the Tables.

The Generalized Service Volume Tables present maximum service volumes, or the highest numbers of vehicles, for a given LOS. Any number greater than the value shown for a roadway with a given number of lanes would drop the LOS to the next letter grade.

The Generalized Service Volume Tables should not be referred to as capacity tables. In general, the values shown are the maximum service volumes for a given LOS based on roadway, traffic, control, and multimodal conditions during the peak hour in the peak travel direction. Whereas the maximum service volume deals with the highest number of vehicles for a given LOS, capacity deals with the maximum number of vehicles or persons that can pass a point during a specified time period under prevailing roadway, traffic, and control conditions. Many of the LOS E service volumes in the hourly directional tables also represent the capacity of the roadway, but in general, most of the values do not reflect a roadway's capacity.

A clear case of not representing capacity values is the daily tables. Roadway capacities for the day far exceed the volumes shown in the daily tables. All roadways are underutilized in the early morning hours and many heavily congested roads will have volumes higher than the highest volumes shown in the daily tables, because traffic is backed up for more than a one-hour time period.

Another case of not representing capacity is the arterial LOS E service volumes. **The primary criterion for the LOS on arterials is the average travel speed, not the capacity of the roadway.** The average travel speed along arterials is made of many control variables (e.g., progression, cycle length), not just the capacity (i.e., v/c ratios) of signalized intersections. Only in the special case of when the capacity of signalized intersections controls how many vehicles can pass through the intersections does capacity essentially dictate the lowest acceptable average travel speeds along arterials.

FDOT's Generalized Service Volume Tables are:

- Annual Average Daily Service Volume Tables
  - Table 1: urbanized areas
  - Table 2: transitioning into urbanized areas or urban areas

  - Table 3: rural undeveloped or rural developed areas
- Peak hour two-way service volume
  - Table 4: urbanized areas
  - Table 5: transitioning into urbanized areas or urban areas
  - Table 6: rural undeveloped or rural developed areas
- Peak hour directional service volume tables
  - Table 7: urbanized areas
  - Table 8: transitioning into urbanized areas or urban areas
  - Table 9: rural undeveloped or rural developed areas

11.2. Special Cases

The volumes in the Generalized Service Volume Tables should be considered as average volumes over the facility under analysis.

For example: If a 4-mile facility has AADT counts of:

- Segment 1 - 23,000
- Segment 2 - 22,000
- Segment 3 - 25,000
- Segment 4 - 23,000 and
- Segment 5 - 27,000

FDOT recommends the use of the average value 24,000 for comparison to the tables to determine the LOS.

The use of the average volume works reasonably well, unless there is one segment that has a widely disparate value, in which case a median value may be more appropriate.

11.2.1. Mid-Block Considerations

In general, Q/LOS analyses for interrupted flow facilities primarily focus on signalized intersections. The majority of motorist aggravation is generally attributable to delay, which primarily occurs at signalized intersections on arterials. Therefore, when using the Generalized Service Volume Tables, the number of lanes for arterials and other interrupted flow facilities should be determined at major intersections rather than mid-block.

Travelers place a greater emphasis on mid-block considerations while traveling on uninterrupted flow facilities and non-automobile modes. **For example, on two-lane highways in rural undeveloped areas, the LOS is largely determined by the ability to pass other vehicles.** For freeways, most travelers are concerned about the operation of the whole facility and not the operation of particular interchanges. For bicycle and pedestrian movements, the BLOS and PLOS models are calibrated for mid-block conditions. For bus LOS, the emphasis is on the ability to travel by bus over the length of facility, with less importance placed on individual intersections. Therefore, in general, the number of lanes for these situations reflect mid-block considerations.

11.2.2. Non-State Signalized Roadways Adjustment

The primary purpose of this Q/LOS Handbook is to compute the LOS for state facilities. However, the Generalized Service Volume Tables are structured and are reasonably well-suited to local governments that desire to use them to evaluate roads under local jurisdiction. A feature of the urbanized and transitioning/urban Generalized Service Volume Tables is that Non-State roadways are addressed. The only types of roadways not addressed in the tables are unsignalized local streets and unpaved roads.

The mere fact that roadways are operated and maintained by different governmental entities has no effect on the capacity or LOS of the roadways. **However, in general, Non-State roadways have lower capacities and service volumes than state facilities, because they have lower green times at signalized intersections.** The Generalized Service Volume Tables contain a 10 percent adjustment factor for Non-State roadways.

The HCM LOS criteria address arterials rather than collectors or local streets. FDOT considers it appropriate for local governments to decide how to analyze collectors.

Uninterrupted flow facilities are analyzed the same, regardless of whether they are state facilities or not.

11.2.3. Variations in Levels of Service

Higher Q/LOS for the automobile, bicycle, and pedestrian modes may not be achieved, even with extremely low traffic volumes, given the default values used in the Generalized Service Volume Tables. In the case of automobiles, the higher Q/LOS cannot be achieved primarily because the control characteristics simply will not allow vehicles to attain relatively high average travel speeds. In the case of bicycles and pedestrians, it is primarily caused by the lack of facilities serving those modes. The tables have adequate footnotes to reflect this unachievable concept.

Lower Q/LOS for the automobile, bicycle, and pedestrian modes may not be applicable, even with extremely high traffic volumes, given the default values used in the Generalized Service Volume Tables. In the case of automobiles, the lower Q/LOS are not applicable, primarily because the control characteristics do not allow enough vehicles to pass through an intersection in an hour. If vehicles could get through the intersection, they could obtain the applicable LOS speed threshold, but there is not enough capacity at the intersection to let them pass through.

In the case of bicycles and pedestrians, it is primarily caused by the existence of facilities adequately serving those modes. For example, if a sidewalk exists, it is very difficult to establish a set of conditions in which the LOS to the pedestrian is F.

Essentially, once the maximum service volume is reached, the next LOS grade is F. For example, in Service Volume Table 1 for multilane Class I arterials, if demand volumes are greater than the LOS D threshold, then the LOS is F, and if the volume is at the LOS D threshold, the LOS is D; essentially, LOS E does not exist.

11.2.4. Median and Turn Lane Adjustment (Divided/Undivided Roadways)

For simplicity, the Generalized Service Volume Tables have factors to adjust for the effects of mid-block medians and exclusive turn lanes at intersections. The cumulative effects of medians and exclusive turn lanes from common

occurrences are shown in the Generalized Service Volume Tables.

A median has the effect of changing the adjusted saturation flow rate or service volume by 5 percent. In Florida, most two-lane roadways do not have a median (e.g., a two-way left turn lane), so the tables assume no median for those facilities. However, if there is a median, appropriate service volumes should be increased 5 percent. Most multilane arterials and highways in Florida have medians, so the tables are set up to assume medians for those facilities. However, if there is no median, appropriate service volumes should be decreased 5 percent.

Most major roadways in Florida have exclusive left-turn lanes at intersections, except those with very low volumes. **If a roadway does not have left-turn lanes at major intersections, its service volume drops 20 to 25 percent, depending on the number of lanes, as indicated in the table.** The common design practice in Florida is to use shared through/right-turn lanes to accommodate right-turning vehicles. However, exclusive right-turn lanes have large capacity and service volume impacts for vehicles at major intersections.

11.2.5. One-Way Facility Adjustments

For simplicity, the urbanized and transitioning/urban area Generalized Service Volume Tables have an intuitive factor for the effects of one-way streets on vehicles. **Essentially, one-way pairs are assumed to have a 20 percent higher service volumes than corresponding two-way roadways with the same number of lanes.**

However, the Generalized Service Volume Tables treat each facility of a one-way pair separately. To account for that, the volumes in the daily and hourly two-way Tables 1 through 6 should be multiplied by 0.6, while the volumes in the hourly directional Tables 7 through 9 should be multiplied by 1.2, to obtain the correct volume and LOS.

For example, the AADT LOS D threshold for a 2-lane Class I arterial one-way facility in a transitioning area would be 9,720. This example is calculated using the Generalized Service Volume Table 2. The AADT LOS D threshold for a 2-lane Class I arterial in a transitioning area is 16,200. To calculate the LOS D threshold for a one-way facility, multiply 16,200 by the one-way facility adjustment, 0.6, to calculate the one-way facility LOS D threshold of 9,720.

11.2.6. Auxiliary Lane Adjustment

Freeway auxiliary lanes (lanes connecting on- and off-ramps) usually have significant capacity and LOS benefits. The values contained in the tables indicate their importance in a general way. To apply the values, simply add the volume shown in the freeway adjustment to the maximum service volume shown in the table.

11.2.7. Ramp Metering Adjustment

Freeway ramp metering has the benefit of smoothing out traffic demand entering a freeway during peak travel times. This benefit is reflected by increasing the service volumes shown on the tables by 5 percent.

11.2.8. Bicycle LOS (BLOS)

The bicycle portions of the Generalized Service Volume Tables make primary use of the two most important factors in determining the LOS for bicyclists: the existence of paved shoulders/bicycle lanes and vehicle volumes. **It is important to note that the volumes shown in the tables are not the number of bicyclists; rather, they are the number of vehicles in the outside lane.** Unlike automobile LOS, which is highly dependent on the number

of other vehicles on the roadway, **BLOS is not determined by how many other bicyclists are on road; rather, it is primarily determined by the bicycle accommodations on the roadway and volume of vehicles.**

The other factor used in the Generalized Service Volume Tables is the volume of vehicles in the outside lane. For analysis purposes, vehicle volumes are assumed to be equally spread across the number of directional roadway lanes. Unlike the automobile entries in the table, in which the number of lanes is an entry into the tables, a step of multiplying the volume by the number of lanes is needed to use the volume (hourly directional, hourly two-way, or daily) of vehicles. For example, in Table 7, the LOS C threshold for zero percent bicycle lane coverage is 150 vehicles for the outside lane. If the roadway has four lanes, then the 150 vehicles would be multiplied by 2 (number of directional lanes) to determine the maximum volume of vehicles for BLOS C in one direction of flow. The additional step was included to simplify the appearance of the tables and save space.

11.2.9. Pedestrian LOS (PLOS)

The pedestrian portions of the Generalized Service Volume Tables make primary use of the two most important factors in determining the LOS for pedestrians: the existence of a sidewalk and vehicle volumes. It is important to note that the volumes shown in the tables are not the number of pedestrians; rather, they are the number of vehicles in the outside lane. Unlike automobile LOS, which is highly dependent on the number of other vehicles on the roadway, PLOS is not determined by how many other pedestrians use the facility; rather, it is primarily determined by the presence of sidewalks and the volume of vehicles.

The other factor used in these tables is the volume of vehicles in the outside lane. For analysis purposes, vehicle volumes are assumed to be equally spread across the number of directional roadway lanes. Unlike the automobile entries in the table, in which the number of lanes is an entry into the tables, a step of multiplying the vehicle volume by the number of lanes is needed to use the volume (hourly directional, hourly nondirectional, or daily) of vehicles. For example, in Table 7, the LOS C threshold for 100 percent sidewalk coverage is 540 vehicles for the outside lane. If the roadway has four lanes, then the 540 vehicles would be multiplied by 2 (number of directional lanes) to determine the maximum volume of vehicles for PLOS C in one direction of flow. The additional step was included to simplify the appearance of the tables and save space.

All techniques in this Q/LOS Handbook are based on a directional analysis. For example, in the case of evaluating the automobile LOS on arterials, the LOS is for the peak directional flow, and the LOS for the off-peak direction could be higher, lower, or the same. This directional technique results in some unique perspectives when evaluating PLOS. Sidewalks, whether on one or both sides of a road, serve pedestrians in both directions, unlike facilities for the other modes. Furthermore, analysts should be especially careful when using the Generalized Service Volume Tables for determining PLOS when there is a sidewalk only on one side of the roadway. Because all the Generalized Service Volume Tables are based on peak hour directional analyses, PLOS based on the tables should be considered applicable only to the direction of the peak flow of traffic. When using the tables, there is typically a difference of two LOS grades if the sidewalk is, or is not, on the same side of roadway as the peak flow of traffic. Generally, having sidewalks on both sides of arterials in developed areas is considered desirable; yet, the Generalized Service Volume Tables do not adequately reflect that concept.

11.2.10. Bus LOS

The bus portions of the Generalized Service Volume Tables are primarily dependent on bus frequency,

which is the number of scheduled fixed-route buses that have a potential to stop in a given segment in the peak direction of flow in a one-hour time period. That measure is supplemented by pedestrian accessibility. In the Generalized Service Volume Tables, pedestrian accessibility is represented by two broad ranges of sidewalk coverage.

There are two unique aspects of bus mode entries of the Generalized Service Volume Tables. First, it is important to note that the volumes shown in the tables are the number of buses per hour. Unlike automobile, bicycle, and PLOS thresholds, the bus mode LOS thresholds are not related to the number of vehicles on the roadway. Second, regardless of the table used, all numbers are shown in terms of buses per hour for the peak hour in the peak direction. Thus, even in the daily urbanized table (Table 1), the threshold values shown are still in terms of peak hour directional buses.

11.3. Service Volume Calculation Process

All service volumes and resulting tables are first calculated for the peak hour in the peak direction. The peak hour two-way values are obtained by dividing the peak hour peak direction service volumes by D. The daily volumes are obtained by dividing the peak hour two-way service volumes by K.

Peak hour directional and peak hour two-way service volumes are rounded to the nearest 10 vehicles. Daily service volumes are rounded to the nearest 100 vehicles.

11.3.1. Arterial LOS

For the automobile mode, arterial analyses starts with a volume of 10 vph and then calculates the v/c ratio at each intersection. Then, the speed on each segment is calculated, which also accounts for the signal delay and the overall average speed for the facility. The average speed is checked against the average speed criterion for LOS A. If the speed is below the LOS A threshold, the volume is incremented by either 50 vph (if the difference in the actual speed and LOS threshold speed is large) or 10 vph (if the difference in actual speed and LOS threshold speed is small). This process is repeated until the average facility speed is approximately equal to the LOS A threshold. The volume level at which this occurs is the service volume for LOS A. The volume (i.e., LOS A service volume) is then incremented by 10 vph and incrementally increased until the average facility speed is approximately equal to the LOS B threshold speed. This process repeats for LOS C, D, and E. If at any point during this process the v/c ratio exceeds 1.0 for the full hour, the calculation is stopped. If that condition is met, this volume becomes the service volume for whichever LOS letter grade was being evaluated at the time, as well as for the lower Q/LOS grades.

For the bicycle and pedestrian modes, again the analyses is started with a volume of 10 vph and then BLOS and PLOS scores are calculated based on the BLOS and PLOS models. Then, that score is checked against the LOS A criterion. If the score is below the LOS A threshold value, the volume is incremented by 10 vph. This process is repeated until the facility score is approximately equal to the LOS A threshold. The volume level at which this occurs is then the service volume for LOS A. The volume (i.e., LOS A service volume) is then incremented by 10 vph and incrementally increased until the average facility score is approximately equal to the LOS B threshold volume. This process repeats for LOS C, D, and E. If at any point during this process the vehicle v/c ratio exceeds 1.0 for the full hour, the calculation is stopped. If that condition is met, this volume becomes the service volume for whichever LOS letter grade was being evaluated at the time as well as for the lower Q/LOS grades.

For the bus mode, the LOS service frequency criteria that appear in the TCQSM is used, modified by PLOS, relative auto speed, bus stop amenities, and passenger load factors.

11.3.2. Freeway Facilities LOS

For freeways, the HCS7 freeway facilities module was used to obtain the service volume thresholds. The automobile volume is incrementally increased until the demand flow rate to the mean speed of the traffic stream produces an average facility density that is approximately equal to the LOS A threshold. The volume level at which this occurs is the service volume for LOS A. The volume (i.e., LOS A service volume) is then incrementally increased by 10 vph and until the average facility density is approximately equal to the LOS B threshold speed. This process repeats for LOS C, D, and E. If at any point during this process the v/c ratio exceeds 1.0 for the full hour, the calculation stops. If that condition is met, this volume becomes the service volume for whichever LOS letter grade was being evaluated at the time, as well as for the lower Q/LOS grades. The traffic factors and other inputs such as CAF and SAF used in the analyses are discussed in the previous sections of this handbook and listed at the back of the Generalized Service Volume Tables.

11.3.3. Highways LOS

For multilane uninterrupted flow highways, HCS7's multilane highways procedure starts with a volume of 10 vph and then calculates density. If the density is below the LOS A threshold density, the volume is incremented by 10 vph. This process is repeated until the average density is approximately equal to the LOS A threshold. The volume level at which this occurs is then the service volume for LOS A. The volume (i.e., LOS A service volume) is then increased by 10 vph until the average facility density is approximately equal to the LOS B threshold density. This process repeats for LOS C, D, and E. If at any point during this process the v/c ratio exceeds 1.0 for the full hour, the calculation stops. If that condition is met, this volume becomes the service volume for whichever LOS letter grade was being evaluated at the time, as well as for the lower Q/LOS grades. The traffic factors and other inputs such as CAF and SAF used in the analyses are discussed in the previous sections of this handbook and listed at the back of the Generalized Service Volume Tables. A different free flow speed is used in the analyses for multilane uninterrupted flow highways passing through undeveloped areas and developed areas.

For two-lane uninterrupted flow highways, the computational process is similar to the process followed for multilane uninterrupted flow highways. The HCS7's two-lane highways module is dependent on the highway class (I, II, or III). The traffic factors and other inputs used in the analyses are discussed in the previous sections of this handbook and listed at the back of the Generalized Service Volume Tables. A different free flow speed is used in the analyses for two-lane uninterrupted flow highways passing through undeveloped areas and developed areas.

Glossary

Acceleration lane	A freeway lane extending from the on-ramp gore to where its taper ends.
Accessibility	The dimension of mobility that addresses the ease in which travelers can engage in desired activities.
Actuated control	All approaches to the signalized intersection have vehicle detectors, with each phase subject to a minimum and maximum green time, and some phases may be skipped if no vehicle is detected. Same as *actuated* and *fully actuated control*.
Actuated-Coordinated control	The fixed-cycle signal control of an intersection in which the through movement on the designated main roadway gets the unused green time from side movements because of limited or no vehicle activation from side movements. Same as *coordinated-actuated*.
Add-on/drop-off lanes	The roadway lanes added before an intersection and dropped after the intersection. Same as *expanded intersections*.
Adjusted saturation flow rate	In this Q/LOS Handbook, the base saturation flow rate times the effect of many roadway variables and traffic variables.
Adjustment factor	In the Generalized Service Volume Tables: additive or multiplicative factors to adjust service volumes.
All-way stop control	An intersection with a stop sign at all approaches.
Annual average daily traffic	The volume passing a point or segment of a roadway in both directions for one year, divided by the number of days in the year.
Areawide analysis	An evaluation within a geographic boundary.
Arrival type	A general categorization of the quality of signal progression.
Arterial	A signalized roadway that primarily serves through traffic with average signalized intersection spacing of 2 miles or less; a type of roadway based on FDOT's functional classification.
Auxiliary lane	An additional lane on a freeway connecting an on-ramp of one interchange to the off-ramp of the downstream interchange.
Average daily traffic	The total traffic volume during a given time period (more than a day and less than a year) divided by the number of days in that time period.
Average travel speed	The facility length divided by the average travel time of all vehicles traversing the facility, including all stopped delay times.
Axle correction factors	The adjustment factors used to calculate the annual average daily traffic by compensating for an axle counter's tendency to count more vehicles than are present.
Base conditions	The best possible characteristic in terms of capacity for a given type of facility.

Base saturation flow rate	The maximum steady flow rate, expressed in passenger cars per hour per lane, at which passenger cars can cross a point on interrupted flow roadways.
Basic segment	In this Q/LOS Handbook, the length of a freeway in which operations are unaffected by interchanges. Same as *basic freeway segment*.
Basic two-lane highway Segments	A highway segment upstream of the intersection influence area and downstream of the affected downstream highway segment, and thus not affected by signalized intersections.
Bicycle lane	In this Q/LOS Handbook, a designated or undesignated portion of roadway for bicycles adjacent to vehicle lanes.
Bicycle level of service score	A numerical value calculated by the BLOS Model that corresponds to a BLOS.
Bus frequency	The number of buses per hour serving one direction of a roadway facility.
Bus stop	An area where bus passengers wait for, board, alight, and transfer.
Bus stop amenities	Enhancements for comfort or safety that can greatly influence the perceived QOS along a route. Four categories of bus stop amenities exist: excellent, good, fair, and poor.
Bus stop amenity factors	Factors used to determine the adjusted bus frequency value by applying a factor commensurate to the quality of bus stop amenities.
Bus stop type adjustment factors	Factors that adjust travel times along bus routes by adding 15 to 35 seconds of delay per route for typical and major bus stops, respectively.
Capacity	The maximum sustainable flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of roadway during a given time period under prevailing conditions. As typically used in this Q/LOS Handbook, the maximum number of vehicles that can pass a point in one hour under prevailing roadway, traffic and control conditions.
Capacity adjustment factor	An adjustment factor used in the HCS7 freeways and multilane highways module to adjust the capacity of a facility for reduced capacity situations or to match field measurements. The capacity can be reduced to represent incident situations, such as construction and maintenance activities, adverse weather, traffic incidents, and vehicle breakdowns.
Capacity constrained	A condition in which traffic *demand* exceeds the capacity of a roadway.
Capacity utilization	The dimension of mobility that addresses the quantity of operations relative to capacity.
Captive rider	A transit rider who is limited by circumstances to use transit as a primary source of transportation.
Choice rider	A transit rider who chooses to take transit over other readily available transportation options.
Class I arterial	A roadway that has posted speeds of 40 mph or higher.

Class II arterial	A roadway that has posted speeds of 35 mph or less.
Collector	A roadway providing land access and traffic circulation with residential, commercial and industrial areas.
Concurrency	A systematic process utilized by local governments to ensure new development does not occur unless adequate infrastructure is in place to support growth.
Context classification	A classification assigned to a roadway that broadly identifies the various built environments in Florida, based on existing or future land use characteristics, development patterns, and the roadway connectivity of an area.
Control delay	The component of delay that results when a signal causes traffic to reduce speed or stop.
Control variables	The parameters associated with roadway controls.
Core freeways	The major, non-toll freeways going through the urbanized core areas of the largest metropolitan areas, such as Interstate 4 in Orlando. FDOT has adopted lower K values for these freeways to represent a peak period, as opposed to a peak hour analysis. The lower K values affect daily service volumes only in the Generalized Service Volume Tables.
Critical signalized intersection	The signalized intersection with the lowest volume-to-capacity ratio (v/c), typically the one with the lowest effective green ratio (g/C) for the through movement. Same as *critical signalized intersection*.
Cycle length	The time it takes a traffic signal to go through one complete sequence of signal indications.
Deceleration lane	A freeway lane extending from the taper to the off-ramp gore.
Delay	The additional travel time experienced by a traveler.
Demand	The number of persons or vehicles desiring service on a roadway. Same as *demand traffic*.
Density	The number of vehicles, averaged over time, occupying a given length of lane or roadway; usually expressed as vehicles per mile or vehicles per mile per lane.
Developed areas	All areas not rural undeveloped. Same as rural developed areas.
Directional distribution factor	The proportion of an hour's total volume occurring in the higher volume direction.
Effective green ratio	Typically in this Q/LOS Handbook, the ratio of the effective green time (g) for the through movement at a signal intersection to its cycle length (C).
Effective green time	The time allocated for the through movement to proceed; calculated as the through movement green plus yellow plus all-red indication times less the lost time.
Exclusive left-turn storage length	The total amount of storage length, in feet, for exclusive left-turn lanes.
Exclusive right-turn lanes	A storage area designated to only accommodate right-turning vehicles.

Exclusive turn lane	A storage area designated to only accommodate left- or right-turning vehicles; in this Q/LOS Handbook, the turn lane must be long enough to accommodate enough turning vehicles to allow the free flow of the through movement.
Five-lane section	A roadway with four through lanes, two in each direction, separated by a two-way left turn lane; in the Generalized Service Volume Tables, a five-lane section is treated as a roadway with four lanes and a median.
Flow rate	In this Q/LOS Handbook, the equivalent hourly rate at which vehicles pass a point on a roadway for a 15-minute period.
Free flow speed	In this Q/LOS Handbook, the average speed of vehicles under low-flow traffic conditions and not under the influence of signals, stop signs, or other fixed causes of interruption, generally assumed to be 5 mph over the posted speed limit.
Freeway	A multilane, divided highway with at least two lanes for the exclusive use of traffic in each direction and full control of ingress and egress.
Freeway segment	In this Q/LOS Handbook, a basic segment, interchange or toll plaza.
FSUTMS	Florida Standard Urban Transportation Model Structure; Florida's software that forecasts travel demand.
Functional classification	The assignment of roads into systems according to the character of service they provide in relation to the total road network.
Generalized Service Volume Tables	Maximum service volumes based on areawide roadway, traffic, and control variables and presented in tabular form.
Generalized planning	A broad type of planning application that includes statewide analyses, initial problem identification, and future year analyses. In this Q/LOS Handbook, typically performed by using the Generalized Service Volume Tables.
Gore	The point located immediately between the left edge of a ramp pavement and the right edge of the roadway pavement at a merge or diverge area.
Headway	The time, in seconds, between two successive vehicles as they pass a point on a roadway.
Heavy vehicle	An FHWA vehicle classification of 4 or higher; essentially, vehicles with more than 4 wheels touching the pavement during normal operation.
Heavy vehicle factor	The adjustment factor for heavy vehicles.
Heavy vehicle percent	The percentage of heavy vehicles in the traffic stream.
Highway capacity analysis	An examination of the maximum of vehicles or persons that can reasonably be expected to pass a point on a roadway during a specified time period under prevailing roadway, traffic, and control conditions. Same as *capacity analysis*.
Highway Capacity Manual	The Transportation Research Board's document on highway capacity and QOS.
Highway Capacity Software 7	Software that replicates the HCM, Sixth Edition.

Interchange	In this Q/LOS Handbook, the influence area associated with the off-ramp influence area, overpass/underpass, and on-ramp influence area of a connection to a freeway. Same as *freeway interchange influence area*.
Interrupted flow	A category of roadways characterized by signals, stop signs, or other fixed causes of periodic delay or interruption to the traffic stream, with average spacing less than or equal to 2.0 miles.
Intersection influence area	In this Q/LOS Handbook, a segment of an uninterrupted flow highway influenced by an isolated intersection.
Interval	A period of time in which all traffic signal indications remain constant.
Isolated intersection	An intersection occurring along an uninterrupted flow highway.
Large urbanized area	A Metropolitan Planning Organization urbanized area greater than 1 million in population; in Florida, these seven areas consist of the following central cities: Fort Lauderdale, Jacksonville, Miami, Orlando, St. Petersburg, Tampa, and West Palm Beach.
Lateral clearance	Clearance distance from edges of outside lanes to fixed obstructions.
Level of service	A quantitative stratification of the QOS to a typical traveler of a service or facility into six letter-grade levels, with A describing the highest quality and F describing the lowest quality; a discrete stratification of a QOS continuum.
Level of service targets	The same as the statewide minimum LOS targets for the State Highway System.
Load factor	The ratio of passengers actually carried to the total passenger capacity of a bus.
Local adjustment factor	In the 2013 Q/LOS Handbook, an adjustment factor FDOT used to adjust base saturation flow rates or base capacities to better match actual Florida traffic volumes; mostly consisted of a driver population factor and an area type factor.
Maximum service volume	The highest number of vehicles for a given LOS.
Median	In this Q/LOS Handbook, areas at least 10 feet wide that are restrictive or non-restrictive, which separate opposing-direction mid-block traffic lanes and, on arterials, contain turn lanes that allow left-turning vehicles to exit from the through traffic lanes.
Median type	A classification of roadway medians as restrictive, non-restrictive, or no median.
Mid-block	In this Q/LOS Handbook, the part of a roadway between two signalized intersections.
Mobility	The movement of people and goods.
Mode	A method of travel; in this Q/LOS Handbook, either automobile, bus, bicycle, or pedestrian.
Motorized mode	A method of travel by automobile or bus.

MPO/TPO	Metropolitan/Transportation Planning Organization.
Multilane highway	A nonfreeway roadway with two or more lanes in each direction and, although occasional interruptions to flow at signalized intersections may exist, is generally uninterrupted flow.
Multimodal	In this Q/LOS Handbook, more than one mode.
Multimodal Transportation District	An area in which secondary priority is given to vehicle mobility, and primary priority is given to ensuring a safe, comfortable, and attractive pedestrian environment, with convenient interconnection to transit (F.S. 163.3180[15]).
No passing zone	In this Q/LOS Handbook, a segment of a two-lane highway along which passing is prohibited in the analysis direction.
Non-restrictive median	A painted, at-grade area separating opposing mid-block traffic lanes.
Non-State signalized roadway	A signalized roadway not on the State Highway System.
Number of effective lanes	In terms of capacity, the equivalent number of through lanes. Typically, the number is expressed as a fraction (e.g., 2.7) to reflect the partial beneficial effects of freeway auxiliary lanes or arterial add-on/drop-off lanes.
Number of through lanes	The number of lanes relevant to an analysis of a roadway's LOS. FOR ARTERIALS ■ Usually at the signalized intersection, not mid-block ■ Usually through and shared right-turn lanes ■ Maybe a fractional number reflecting add-on/drop-off lanes or other special lane utilization considerations ■ Using the Generalized Service Volume Tables, the number at major signalized intersections FOR FREEWAYS AND UNINTERRUPTED FLOW HIGHWAYS ■ Does not include auxiliary lanes between two points ■ Usually the predominant number of through lanes between two points
Off-ramp influence area	The geographic limits affecting the capacity of a freeway associated with traffic exiting a freeway. Same as *diverge area*.
On-ramp influence area	The geographic limits affecting the capacity of a freeway associated with traffic entering a freeway. Same as *merge area*.
One-way	A type of roadway in which vehicles are allowed to move in only one direction.
Operational analysis	A detailed analysis of a roadway's present or future LOS, as opposed to a generalized planning.
Other urbanized area	A Metropolitan Planning Organization urbanized area with less than 1 million in population.
Oversaturated	A traffic condition in which demand exceeds capacity.
Passenger load factors	Factors used to determine the adjusted bus frequency value by applying a factor commensurate to the level of passenger crowding.

Passing lane	A lane added to provide passing opportunities in one direction of travel on a two-lane highway. Two-way left-turn lanes are not considered passing lanes.
Paved shoulder/bicycle lane	In this Q/LOS Handbook, pavement at least 3 feet in width separated by a solid pavement marking from the outside vehicle through lane to the edge of the pavement.
Peak direction	The course of the higher flow of traffic.
Peak hour	In this Q/LOS Handbook, a one-hour time period with high volume.
Peak hour factor	The ratio of the hourly volume to the peak 15-minute flow rate for that hour; specifically, hourly volume/(4 x peak 15-minute volume).
Peak period	A multi-hour analysis period with high volume; peak periods rather than peak hours are typically used for the analysis of core freeways or roadways within a Multimodal Transportation District.
Peak season	The 13 consecutive weeks with the highest daily volumes for an area.
Peak season weekday average daily traffic	The average daily traffic for Monday through Friday during the peak season.
Pedestrian	An individual traveling on foot and other non-motorized modes such as skateboards, scooters and both motorized and non-motorized wheelchairs.
Pedestrian accessibility	In this Q/LOS Handbook, the ease in which a pedestrian can reach a bus stop.
Pedestrian LOS Model	The operational methodology from which this Q/LOS Handbook's pedestrian Q/LOS analyses are based.
Pedestrian level of service score	A numerical value calculated by the PLOS Model that corresponds to a PLOS.
Pedestrian/sidewalk/roadway separation	The lateral distance, in feet, from the outer edge of the pavement to where a pedestrian walks on a sidewalk.
Percent time spent following	The average percent of total travel time that vehicles must travel in platoons behind slower vehicles because of the inability to pass on a two-lane highway.
Performance measure	A qualitative or quantitative factor used to evaluate a particular aspect of travel quality.
Person flow	The capacity on uninterrupted and interrupted flow facilities, defined in terms of persons per hour.
Phase	The part of a traffic signal's cycle allocated to any combination of traffic movements receiving the right of way simultaneously during one or more intervals.
Planning analysis hour factor	The ratio of the traffic volume in the study hour to the annual average daily traffic.
Planning horizon	A time period, typically 20 years, applicable to the analysis of a project, roadway or service.
Platoon	A group of vehicles traveling together as a group, either voluntarily or

	involuntarily because of signal control, geometrics, or other factors.
Point	A boundary between links. In this Q/LOS Handbook, usually a signalized intersection, but maybe other places where modal users enter, leave, or cross a facility, or roadway characteristics change.
Posted speed	The maximum speed at which vehicles are legally allowed to travel over a roadway segment.
Pretimed control	Traffic signal control in which the cycle length, phase plan, and phase times are preset and repeated continuously, according to a preset plan.
Prevailing conditions	Existing circumstances that primarily include roadway, traffic, and control conditions, but may also include weather, construction, incidents, lighting, and area type.
Principal arterial	A signalized roadway that primarily serves through traffic between centers of metropolitan areas and provides a high degree of mobility. In this Q/LOS Handbook, principal arterials have approximately one signal every half mile and a posted speed limit of 50 mph.
Quality of service	A traveler-based perception of how well a service or facility is operating.
Quality/level of service	A combination of the broad QOS and more detailed LOS concepts.
Queue spillback	When a link's queue of vehicles extends to upstream links.
Ramp overlap segment	The length for which the upstream on-ramp influence area and the downstream off-ramp influence area overlap.
Restrictive median	A raised or grassed area that restricts crossing movements.
Roadway	A general categorization of an open way for persons and vehicles to traverse; in this Q/LOS Handbook, it encompasses streets, arterials, freeways, highways, and other facilities.
Roadway class	The categories of two-lane highways; two-lane highways are primarily grouped by area type. Same as *class*.
Roadway variables	The parameters associated with roadways. Also known as *roadway characteristics*.
Rolling terrain	A combination of horizontal and vertical alignments causing heavy vehicles to reduce their running speeds substantially below that of passenger cars, but not to operate at crawl speeds for a significant amount of time.
Route	As used in the TCQSM, a designated, specified path to which a bus is assigned.
Route segment	As used in the TCQSM, a portion of a bus route ranging from two stops to the entire length of the route.
Running speed	The distance a vehicle travels divided by the travel time the vehicle is in motion.
Rural area	In the Generalized Service Volume Tables, areas that are not

	urbanized areas, transitioning areas, or urban areas.
Rural developed areas	The portions of rural areas that are along coastal roadways or in generally populated areas with a population of less than 5,000.
Rural undeveloped areas	Portions of rural areas with no or minimal population or development.
Scheduled fixed route	In this Q/LOS Handbook, bus service provided on a repetitive, fixed-schedule basis along a specific route, with buses stopping to pick up and deliver passengers to specific locations.
Seasonal adjustment factor	A factor used to adjust for the variation in traffic over the course of a year.
Section	A group of consecutive segments that have similar roadway characteristics, traffic characteristics and, as appropriate, control characteristics for a mode of travel. A characteristic describing laneage (e.g., three-lane section, five-lane section, seven-lane section).
Segment	A portion of a facility defined by two boundary points; usually the length of roadway from one signalized intersection to the next signalized intersection.
Service measure	A specific performance measure used to assign a LOS to a set of operating conditions for a transportation facility or service.
Service volume table	Maximum service volumes based on roadway, traffic and control variables and presented in tabular form.
Seven-lane section	A roadway with six through lanes, three in each direction separated by a two-way left-turn lane; in the Generalized Service Volume Tables, a seven-lane section is treated as a roadway with six lanes and a median.
Shared lane	A roadway lane shared by two or three traffic movements; in Florida, a shared lane usually serves through and right-turning traffic movements.
Sidewalk	A paved walkway for pedestrians at the side of a roadway.
Sidewalk/roadway protective barrier	Physical barriers separating pedestrians on sidewalks and vehicles.
Sidewalk/roadway separation	The lateral distance in feet from the outside edge of the pavement to the inside edge of the sidewalk.
Signal	In this Q/LOS Handbook, a traffic control device regulating the flow of traffic with green, yellow, and red indications. A traffic control device that routinely stops vehicles during the study period; excluded from this definition are flashing yellow lights, railroad crossings, draw bridges, yield signs, and other control devices.
Signal density	The number of signals intersections per mile.
Signal type	The kind of traffic signal (actuated, pretimed or coordinated-actuated) with respect to the way its cycle length, phase plan, and phase times are operated.

Signalized intersection	A place where two roadways cross and have a signal controlling traffic movements.
Signalized intersection spacing	The distance between signalized intersections.
Simple average	An average that gives equal weight to each component.
Speed	In this Q/LOS Handbook, the same as average travel speed, unless specifically noted.
Speed adjustment factor	An adjustment factor in HCS 7's freeways and multilane highways module, used to adjust the speed of a facility to account for the effects of adverse weather and construction work zones. The SAF also may be used to calibrate estimates of free-flow speed for local conditions or other effects that contribute to a reduction in free-flow speed.
Standard K	FDOT's standard peak hour to annual average daily traffic ratio (K), based on a roadway's characteristics (facility type) and location (area type). Values of less than 9 percent essentially represent a multi-hour peak period rather than a peak hour.
State Highway System	All roadways that FDOT operates and maintains; the State Highway System consists of the Florida Intrastate Highway System and other state roads.
Stochastic	A description of a type of model that incorporates variability and uncertainty into analysis.
Strategic Intermodal System	Florida's system of transportation facilities and services of statewide and interregional significance.
Termini	In this Q/LOS Handbook, the beginning and endpoints of a facility.
Three-lane section	A roadway with two through lanes separated by a two-way left-turn lane. In the Generalized Service Volume Tables, a three-lane section is treated as a roadway with two lanes and a median. An exclusive passing lane on a two-lane highway is not considered a three-lane section.
Threshold	The breakpoints between LOS differentiations.
Threshold delay	The additional travel time represented by the difference between the time associated with a roadway's generally accepted speed (LOS D threshold in urbanized areas and LOS C threshold in nonurbanized areas) and average travel speed. Same as LOS threshold delay.
Through movement	In this Q/LOS Handbook, the traffic stream with the greatest number of vehicles passing directly through a point. Typically, this is the straight-ahead movement, but occasionally it may be a turning movement.
Traffic demand	The number of vehicles with drivers who desire to traverse a particular highway during a specified time period.
Traffic volume	The number of vehicles passing a point on a highway during a specified time period.
Transit	In this Q/LOS Handbook, the same as *bus*.

Transit Capacity and Quality of Service Manual (TCQSM)	The document and operational methodology from which this Q/LOS Handbook's bus Q/LOS analyses are based.
Transitioning area	An area adjacent to an urbanized area that exhibits characteristics between rural and urbanized/urban, and will be urbanized in the next 20 years.
Transportation planning boundaries	Precisely defined lines that delineate geographic areas. These boundaries are used throughout transportation planning in Florida. Their mapping is described in Urban Boundaries and Functional Classification of Roadways FDOT's Procedure Topic No. 525-020-311.
Travel time	The average time spent by vehicles traversing a roadway.
Two-lane highway	A roadway with one lane in each direction on which passing maneuvers must be made in the opposing lane and, although occasional interruptions to flow at signalized intersections may exist, is generally uninterrupted flow.
Two-way	Movement allowed in either direction.
Two-way left-turn lane	A lane that simultaneously serves left-turning vehicles traveling in opposite directions. Same as continuous left-turn lane.
Two-way stop control	The type of traffic control at an intersection where drivers on the minor street, or a driver turning left from the major street, wait for a gap in major-street traffic to complete a maneuver.
Undesignated bicycle lane	A lane, usually 4 feet in width, that does not contain a bicycle logo.
Undivided	As used in the Generalized Service Volume Tables, a roadway with no median.
Uninterrupted flow	A category of roadway not characterized by signals, stop signs, or other fixed causes of periodic delay or interruption to traffic stream.
Uninterrupted flow highway	A nonfreeway roadway that generally has uninterrupted flow, with average signalized intersection spacing of greater than 2.0 miles; a two-lane highway or a multilane highway.
Urban area	A place with a population between 5,000 and 50,000 and not in an urbanized area. The applicable boundary includes the census' urban area and the surrounding geographical area agreed on by the FDOT, the local government, and the FHWA. The boundaries are commonly called FHWA Urban Area Boundaries and include areas expected to develop medium density before the next decennial census.

Urbanized area	An area within a Metropolitan Planning Organization's (MPO) designated urbanized area boundary. The minimum population for an urbanized area is 50,000 people. Based on the census, any area the U.S. Bureau of Census designates as urbanized, together with any surrounding geographical area agreed on by the FDOT, the relevant MPO, and the FHWA, commonly called the FHWA Urbanized Area Boundary.
Volume-to-capacity ratio	The ratio of demand flow rate to capacity of a signalized intersection, segment or facility.
Weaving distance	A length of freeway over which traffic streams across paths through lane-changing maneuvers. Same as *weaving segment*.
Weighted effective green ratio	In this Q/LOS Handbook, the average of the critical intersection's through effective green ratio and the average of all the other signalized intersections' through effective green ratios along the arterial facility.

TABLE 1

Generalized **Annual Average Daily** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	16,800	17,700	**
4	Divided	*	37,900	39,800	**
6	Divided	*	58,400	59,900	**
8	Divided	*	78,800	80,100	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	7,300	14,800	15,600
4	Divided	*	14,500	32,400	33,800
6	Divided	*	23,300	50,000	50,900
8	Divided	*	32,000	67,300	68,100

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,900	7,600	19,700
50-84%	2,100	6,700	19,700	>19,700
85-100%	9,300	19,700	>19,700	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,800	9,500
50-84%	*	1,600	8,700	15,800
85-100%	3,800	10,700	17,400	>19,700

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
4	47,600	66,400	83,200	87,300
6	70,100	97,800	123,600	131,200
8	92,200	128,900	164,200	174,700
10	115,300	158,900	203,600	218,600
12	136,500	192,400	246,200	272,900

Urbanized

Lanes	B	C	D	E
4	45,900	62,700	75,600	85,400
6	68,900	93,900	113,600	128,100
8	91,900	125,200	151,300	170,900
10	115,000	156,800	189,300	213,600

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	11,700	18,000	24,200	32,600
4	Divided	36,300	52,600	66,200	75,300
6	Divided	54,600	78,800	99,400	113,100

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 1
(continued)

Generalized **Annual Average Daily** Volumes for Florida's Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
					State Arterials				Class I	
	Freeways	Core Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 2

Generalized **Annual Average Daily** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	14,400	16,200	**
4	Divided	*	34,000	35,500	**
6	Divided	*	52,100	53,500	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	6,500	13,300	14,200
4	Divided	*	9,900	28,800	31,600
6	Divided	*	16,000	44,900	47,600

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,600	6,100	19,500
50-84%	1,900	5,500	18,400	>19,500
85-100%	7,500	19,500	>19,500	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,800	9,400
50-84%	*	1,600	8,600	15,600
85-100%	3,800	10,500	17,100	>19,500

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	45,100	59,000	70,300	72,600
6	65,300	86,600	104,100	108,900
8	85,900	114,500	138,100	145,300
10	101,600	135,600	161,900	181,800

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	11,300	17,300	23,400	31,600
4	Divided	34,600	49,900	63,000	71,700
6	Divided	51,700	74,800	94,600	107,400

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable le for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 2
(continued)

Generalized **Annual Average Daily** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials				Class I	
	Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS									
Area type (urban, rural)	urban								
Number of through lanes (both dir.)	4-10	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (d, n, nr, r)			d	n	y	n	y	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		60							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	6	5	5	1.8	2	2	2	2	2
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.098	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.550	0.570	0.570	0.565	0.570	0.570
Peak hour factor (PHF)	0.92	0.92	0.92	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	9.0	4.0	4.0	2.0	3.0	2.0	3.0	3.0	3.0
Speed Adjustment Factor (SAF)	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968		0.968						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				5	4	10	10	4	6
Arrival type (1-6)				4	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	150	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.45	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 3

Generalized **Annual Average Daily** Volumes for Florida's Rural Undeveloped Areas **and** Developed Areas Less Than 5,000 Population[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Lanes	Median	B	C	D	E
2	Undivided	*	12,900	14,200	**
4	Divided	*	29,300	30,400	**
6	Divided	*	45,200	45,800	**

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Rural Undeveloped

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	1,300	2,000	3,200
50-84%	1,000	2,100	3,200	10,600
85-100%	2,600	3,900	18,500	>18,500

Developed Areas

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,300	4,900	15,600
50-84%	1,700	4,500	13,300	18,500
85-100%	5,900	18,500	>18,500	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,700	9,200
50-84%	*	1,500	8,400	14,900
85-100%	3,600	10,200	16,700	>19,200

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	34,800	48,000	56,700	63,200
6	48,900	69,000	82,600	94,800
8	62,900	90,400	108,400	126,400

Freeway Adjustments

Auxiliary Lanes Present in Both Directions + 20,000

UNINTERRUPTED FLOW HIGHWAYS

Rural Undeveloped

Lanes	Median	B	C	D	E
2	Undivided	4,600	8,600	14,000	28,500
4	Divided	31,200	44,900	55,700	62,700
6	Divided	46,800	67,600	83,500	94,200

Developed Areas

Lanes	Median	B	C	D	E
2	Undivided	10,300	15,700	21,300	28,500
4	Divided	29,300	42,300	54,000	61,600
6	Divided	44,000	63,600	81,200	92,400

Passing Lane Adjustments

Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 3
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Rural Undeveloped Areas **and**
Developed Areas Less Than 5,000 Population

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials		Bicycle		Pedestrian
		Undeveloped		Developed						
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
CONTROL CHARACTERISTICS										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways				
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd
	Density	%tsf	ats	%ffs	Density	Density
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34

Level of Service	Arterials	Bicycle	Pedestrian
	Major City/Co.(ats)	Score	Score
B	> 31 mph	≤ 2.75	≤ 2.75
C	> 23 mph	≤ 3.50	≤ 3.50
D	> 18 mph	≤ 4.25	≤ 4.25
E	> 15 mph	≤ 5.00	≤ 5.00

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's Urbanized Areas[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,510	1,600	**
4	Divided	*	3,420	3,580	**
6	Divided	*	5,250	5,390	**
8	Divided	*	7,090	7,210	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	660	1,330	1,410
4	Divided	*	1,310	2,920	3,040
6	Divided	*	2,090	4,500	4,590
8	Divided	*	2,880	6,060	6,130

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	260	680	1,770
50-84%	190	600	1,770	>1,770
85-100%	830	1,700	>1,770	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,420
85-100%	340	960	1,560	>1,770

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
4	4,050	5,640	6,800	7,420
6	5,960	8,310	10,220	11,150
8	7,840	10,960	13,620	14,850
10	9,800	13,510	17,040	18,580
12	11,600	16,350	20,930	23,200

Urbanized

Lanes	B	C	D	E
4	4,130	5,640	7,070	7,690
6	6,200	8,450	10,510	11,530
8	8,270	11,270	13,960	15,380
10	10,350	14,110	17,310	19,220

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	1,050	1,620	2,180	2,930
4	Divided	3,270	4,730	5,960	6,780
6	Divided	4,910	7,090	8,950	10,180

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 4
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
					State Arterials				Class I	
	Freeways	Core Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 5

Generalized **Peak Hour Two-Way** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,300	1,460	**
4	Divided	*	3,060	3,200	**
6	Divided	*	4,690	4,820	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	580	1,200	1,280
4	Divided	*	890	2,590	2,850
6	Divided	*	1,440	4,040	4,280

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	140	550	1,760
50-84%	170	500	1,650	>1,760
85-100%	670	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,410
85-100%	340	950	1,540	>1,760

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	4,420	5,780	6,890	7,110
6	6,400	8,490	10,200	10,670
8	8,420	11,220	13,530	14,240
10	9,960	13,290	15,870	17,820

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	1,020	1,560	2,110	2,840
4	Divided	3,110	4,490	5,670	6,450
6	Divided	4,650	6,730	8,510	9,670

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 5
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials				Class I	
	Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS									
Area type (urban, rural)	urban								
Number of through lanes (both dir.)	4-10	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (d, n, nr, r)			d	n	y	n	y	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		60							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	6	5	5	1.8	2	2	2	2	2
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.098	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.550	0.570	0.570	0.565	0.570	0.570
Peak hour factor (PHF)	0.92	0.92	0.92	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	9.0	4.0	4.0	2.0	3.0	2.0	3.0	3.0	3.0
Speed Adjustment Factor (SAF)	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968		0.968						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				5	4	10	10	4	6
Arrival type (1-6)				4	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	150	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.45	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 6

Generalized **Peak Hour Two-Way** Volumes for Florida's Rural Undeveloped Areas **and** Developed Areas Less Than 5,000 Population[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Lanes	Median	B	C	D	E
2	Undivided	*	1,220	1,350	**
4	Divided	*	2,790	2,890	**
6	Divided	*	4,300	4,350	**

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Rural Undeveloped

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	120	190	300
50-84%	100	200	310	1,010
85-100%	250	370	1,760	>1,760

Developed Areas

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	220	460	1,480
50-84%	170	430	1,270	>1,760
85-100%	560	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	220	840
50-84%	*	120	780	1,390
85-100%	320	940	1,560	>1,820

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	3,650	5,040	5,950	6,640
6	5,130	7,250	8,670	9,950
8	6,600	9,490	11,380	13,270

Freeway Adjustments

Auxiliary Lanes Present in Both Directions + 1,800

UNINTERRUPTED FLOW HIGHWAYS

Rural Undeveloped

Lanes	Median	B	C	D	E
2	Undivided	440	820	1,330	2,710
4	Divided	2,960	4,270	5,290	5,960
6	Divided	4,450	6,420	7,930	8,950

Developed Areas

Lanes	Median	B	C	D	E
2	Undivided	980	1,490	2,020	2,710
4	Divided	2,780	4,020	5,130	5,850
6	Divided	4,180	6,040	7,710	8,780

Passing Lane Adjustments

Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 6
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's Rural Undeveloped Areas **and** Developed Areas Less Than 5,000 Population

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials		Bicycle		Pedestrian
		Undeveloped		Developed						
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
CONTROL CHARACTERISTICS										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways				
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd
	Density	%tsf	ats	%ffs	Density	Density
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34

Level of Service	Arterials	Bicycle	Pedestrian
	Major City/Co.(ats)	Score	Score
B	> 31 mph	≤ 2.75	≤ 2.75
C	> 23 mph	≤ 3.50	≤ 3.50
D	> 18 mph	≤ 4.25	≤ 4.25
E	> 15 mph	≤ 5.00	≤ 5.00

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

TABLE 7 Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
2	2,230	3,100	3,740	4,080
3	3,280	4,570	5,620	6,130
4	4,310	6,030	7,490	8,170
5	5,390	7,430	9,370	10,220
6	6,380	8,990	11,510	12,760

Urbanized

Lanes	B	C	D	E
2	2,270	3,100	3,890	4,230
3	3,410	4,650	5,780	6,340
4	4,550	6,200	7,680	8,460
5	5,690	7,760	9,520	10,570

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	580	890	1,200	1,610
2	Divided	1,800	2,600	3,280	3,730
3	Divided	2,700	3,900	4,920	5,600

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 7
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities				Interrupted Flow Facilities					
					State Arterials				Class I	
	Freeways	Core Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	urban	urban								
Number of through lanes (both dir.)	4-10	4-12	2	4-6	2	4-8	2	4-8	4	4
Posted speed (mph)	70	65	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	70	55	55	50	55	35	35	50	50
Auxiliary Lanes (n,y)	n	n								
Median (d, twlt, n, nr, r)				d	n	r	n	r	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone			80							
Exclusive left turn lane impact (n, y)			[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)					n	n	n	n	n	n
Facility length (mi)	3	3	5	5	2	2	1.9	1.8	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.090	0.085	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.550	0.560	0.565	0.560	0.565	0.565
Peak hour factor (PHF)	0.95	0.95	0.95	0.95	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	4.0	4.0	2.0	2.0	1.0	1.0	1.0	1.0	2.5	2.0
Speed Adjustment Factor (SAF)	0.975	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968	0.968		0.968						
% left turns					12	12	12	12	12	12
% right turns					12	12	12	12	12	12
CONTROL CHARACTERISTICS										
Number of signals					4	4	10	10	4	6
Arrival type (1-6)					3	3	4	4	4	4
Signal type (a, c, p)					c	c	c	c	c	c
Cycle length (C)					120	150	120	120	120	120
Effective green ratio (g/C)					0.44	0.45	0.44	0.44	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)									n, 50%, y	n
Outside lane width (n, t, w)									t	t
Pavement condition (d, t, u)									t	
On-street parking (n, y)										
Sidewalk (n, y)										n, 50%, y
Sidewalk/roadway separation(a, t, w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 8

Generalized **Peak Hour Directional** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	710	800	**
2	Divided	*	1,740	1,820	**
3	Divided	*	2,670	2,740	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	330	680	720
2	Divided	*	500	1,460	1,600
3	Divided	*	810	2,280	2,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	140	320	1,000
50-84%	100	280	940	>1,000
85-100%	380	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,430	3,180	3,790	3,910
3	3,520	4,670	5,610	5,870
4	4,630	6,170	7,440	7,830
5	5,480	7,310	8,730	9,800

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	560	860	1,160	1,560
2	Divided	1,710	2,470	3,120	3,550
3	Divided	2,560	3,700	4,680	5,320

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 8
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's Transitioning Areas **and** Areas Over 5,000 Not In Urbanized Areas

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities			Interrupted Flow Facilities					
				State Arterials				Class I	
	Freeways	Highways		Class I		Class II		Bicycle	Pedestrian
ROADWAY CHARACTERISTICS									
Area type (urban, rural)	urban								
Number of through lanes (both dir.)	4-10	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	30	30	45	45
Free flow speed (mph)	75	55	55	50	55	35	35	50	50
Auxiliary lanes (n,y)	n								
Median (d, n, nr, r)			d	n	y	n	y	r	r
Terrain (l,r)	l	l	l	l	l	l	l	l	l
% no passing zone		60							
Exclusive left turn lane impact (n, y)		[n]	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n
Facility length (mi)	6	5	5	1.8	2	2	2	2	2
TRAFFIC CHARACTERISTICS									
Planning analysis hour factor (K)	0.098	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Directional distribution factor (D)	0.55	0.55	0.55	0.550	0.570	0.570	0.565	0.570	0.570
Peak hour factor (PHF)	0.92	0.92	0.92	1.000	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,950	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	9.0	4.0	4.0	2.0	3.0	2.0	3.0	3.0	3.0
Speed Adjustment Factor (SAF)	0.975		0.975						
Capacity Adjustment Factor (CAF)	0.968		0.968						
% left turns				12	12	12	12	12	12
% right turns				12	12	12	12	12	12
CONTROL CHARACTERISTICS									
Number of signals				5	4	10	10	4	6
Arrival type (1-6)				4	3	4	4	4	4
Signal type (a, c, p)				c	c	c	c	c	c
Cycle length (C)				120	150	120	150	120	120
Effective green ratio (g/C)				0.44	0.45	0.44	0.45	0.44	0.44
MULTIMODAL CHARACTERISTICS									
Paved shoulder/bicycle lane (n, y)								n, 50%, y	n
Outside lane width (n, t, w)								t	t
Pavement condition (d, t, u)								t	
On-street parking (n, y)								n	n
Sidewalk (n, y)									n, 50%, y
Sidewalk/roadway separation (a, t, w)									t
Sidewalk protective barrier (n, y)									n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways		Arterials		Bicycle	Ped	Bus
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Score	Score	Buses/hr.
B	≤ 17	> 83.3	≤ 17	> 31 mph	> 22 mph	≤ 2.75	≤ 2.75	≤ 6
C	≤ 24	> 75.0	≤ 24	> 23 mph	> 17 mph	≤ 3.50	≤ 3.50	≤ 4
D	≤ 31	> 66.7	≤ 31	> 18 mph	> 13 mph	≤ 4.25	≤ 4.25	< 3
E	≤ 39	> 58.3	≤ 35	> 15 mph	> 10 mph	≤ 5.00	≤ 5.00	< 2

% ffs = Percent free flow speed ats = Average travel speed

TABLE 9

Generalized **Peak Hour Directional** Volumes for Florida's Rural Undeveloped Areas **and** Developed Areas Less Than 5,000 Population[1]

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Lanes	Median	B	C	D	E
1	Undivided	*	670	740	**
2	Divided	*	1,530	1,580	**
3	Divided	*	2,360	2,400	**

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Rural Undeveloped

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	70	110	170
50-84%	60	120	180	580
85-100%	140	210	1,000	>1,000

Developed Areas

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	120	260	840
50-84%	100	240	720	1,000
85-100%	320	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	120	460
50-84%	*	80	430	770
85-100%	180	520	860	>1,000

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,010	2,770	3,270	3,650
3	2,820	3,990	4,770	5,470
4	3,630	5,220	6,260	7,300

Freeway Adjustments

Auxiliary Lane
+ 1,000

UNINTERRUPTED FLOW HIGHWAYS

Rural Undeveloped

Lanes	Median	B	C	D	E
1	Undivided	240	450	730	1,490
2	Divided	1,630	2,350	2,910	3,280
3	Divided	2,450	3,530	4,360	4,920

Developed Areas

Lanes	Median	B	C	D	E
1	Undivided	540	820	1,110	1,490
2	Divided	1,530	2,210	2,820	3,220
3	Divided	2,300	3,320	4,240	4,830

Passing Lane Adjustments

Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

TABLE 9
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's Rural Undeveloped Areas **and** Developed Areas Less Than 5,000 Population

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials		Bicycle		Pedestrian
		Undeveloped		Developed						
ROADWAY CHARACTERISTICS										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
TRAFFIC CHARACTERISTICS										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
CONTROL CHARACTERISTICS										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
MULTIMODAL CHARACTERISTICS										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n

LEVEL OF SERVICE THRESHOLDS

Level of Service	Freeways	Highways				
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd
	Density	%tsf	ats	%ffs	Density	Density
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34

Level of Service	Arterials	Bicycle	Pedestrian
	Major City/Co.(ats)	Score	Score
B	> 31 mph	≤ 2.75	≤ 2.75
C	> 23 mph	≤ 3.50	≤ 3.50
D	> 18 mph	≤ 4.25	≤ 4.25
E	> 15 mph	≤ 5.00	≤ 5.00

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed