(Preliminary)
HYDROLOGY STUDY

For

TAMARISK & HUERTA
VICTORVILLE, CA

MONK CAPITAL GROUP

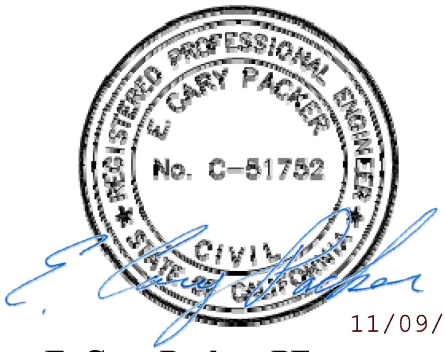
November 8, 2023

Prepared by:

Merrell-Johnson Companies

22221 US Highway 18
Apple Valley, CA 92307
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Job No. 3785.001



11/09/2023

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SECTION 1

DISCUSSION

INTRODUCTION

The purpose of this study was to determine the impact, if any, of the 100-year storm runoff flow tributary to the project site as delineated on the map contained in this study. The project site encompasses approximately 10 acres of residential property located on the west side of Tamarisk Road between Pahute Avenue and Huerta Street.in the City of Victorville, County of San Bernardino. Future development of the site will be a residential subdivision.

METHODOLOGY

The method in determining these peak runoff flows was the rational method as specified in the 1986 San Bernardino County Hydrology Manual and the 2010 San Bernardino County Hydrology Manual Addendum for Arid Regions. The existing offsite flow was examined and delineated from U.S.G.S. Map: Hesperia and an examination of the project site. As the project site is located immediately east of Endeavor School of Exploration and between two existing, improved streets, the tributary watershed area is minimal and limited to the athletic areas of the adjacent school. Runoff from the existing athletic area outlets onto the property along the base of the existing retaining wall through eight (8) 6" PVC pipes spaced at approximately 100' intervals. As the 100-year off-site runoff is approximately 12 cubic feet per second (cfs), the runoff will be approximately 1.5 cfs at each outlet pipe location.

Point rainfalls for the 100-year storm were obtained from the NOAA Atlas 14 per the 2010 Addendum to the County Hydrology Manual. The 100-year 1-hour point rainfall for the site is 1.2". Per the aforementioned addendum, AMC II was used for the project site and the soil types were determined to be Soil Type C in the watershed per the Natural Resources Conservation Service's "Web Soil Survey". Rainfall and soils maps are included as exhibits in Section 3 of this report.

The offsite (athletic area) and onsite tributary areas examined in this study are shown in Table A.

Table A

Sub-area	Elevation Difference (ft.)	Length (ft)	Area (Acres)	Avg. Slope (ft/ft)
Node 11–12 Offsite	25.0	690	3.5	0.0362
Node 21 – 22 Onsite Undeveloped	30.1	933	10.0	0.0323
Node 111–112 Onsite Developed	26.9	995	10.0	0.0271

EXISTING CONDITIONS

The site is located along the west side of Tamarisk Road and bordered by Pahute Avenue to the north, Huerta Street to the south and Endeavor School of Exploration to the west. The property is currently a vacant, 10-acre parcel. Tamarisk Road, Pahute Avenue, and Huerta Street are all improved, paved streets. From our investigation it was determined that the offsite tributary area is limited to the athletic areas of the adjacent Endeavor School of Exploration. This offsite flow enters the property as minimal 1.5 cfs flows at eight locations along the western boundary of the project.

The results of the offsite and onsite flow analysis are summarized in Table B.

Table B

Sub-Area	Q_{100} (cfs)
Node 11 – 12 Offsite	11.4
Node 21 – 22 Onsite Undeveloped	24.8
Node 221 – 222 Onsite Developed	29.6

CONCLUSIONS AND RECOMMENDATIONS

During our field investigation of the site, we observed the existing conditions as stated previously. Development of the project is being performed in conjunction with engineered improvement plans. Onsite storm runoff flows will be conveyed through the proposed project as street flows within the improved paved streets, curbs, and gutters. Runoff flows will exit the interior streets through future storm drain systems at the northeast corner of the intersection of Street A and Pah-Ute Avenue and at both street knuckles and be conveyed into a landscaped bio-swale along the north and east boundaries of the project. Intermittent check dams within the bio-swale will allow for retention and infiltration of the storm runoff flows.

The bio-swale shall be designed to capture the increased storm runoff volume due to the development of the project and to mitigate the Design Capture Volume (DCV) from the street runoff in the Water Quality Management Plan (WQMP). This increased storm runoff volume of 4,676 cubic feet was calculated using the San Bernardino Small-Area Hydrograph method as outlined in the San Bernardino County Hydrology Manual. The DCV of the bio-swale per Table 4.2-1.A is 6,634 cubic feet with a total project DCV of 17,232 cubic feet.

SECTION 2

EXHIBITS

VICINITY MAP


Monk Capital Group
Vicinity Map
Legend
Monk Project Site
PROJECT SITE
Garden Glen Rd
Sunburst Rd
Pahute Ave
Pahute Ave
Ridgecrest Rd
Tamarisk Rd
Huerta Rd
Huerta St
Huerta St
Ridgecrest Rd
Industrial Blvd
Industrial Blvd
Rudder Rd
Lindero St
Francesca Rd
Francesca Rd
Tamarisk Rd
Bear Valley Rd
Bear Valley Rd
Bear Valley Rd
N
Google Earth
1000 ft

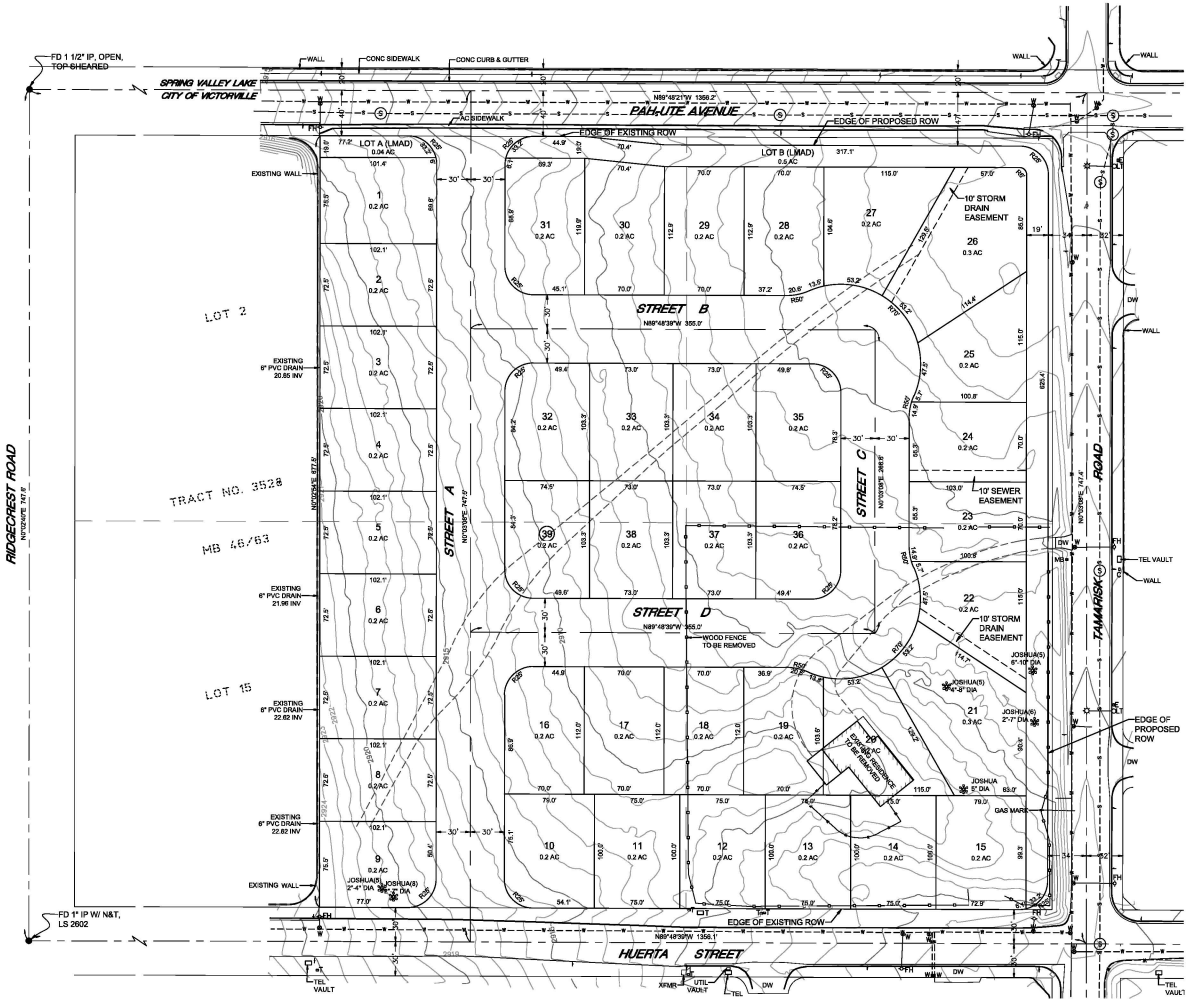
PROPOSED DEVELOPMENT PLAN

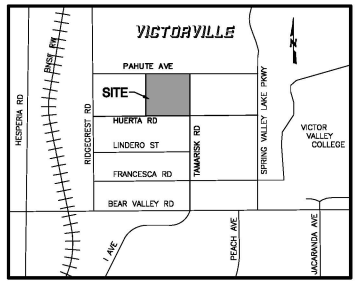
IN THE CITY OF VICTORVILLE

TENTATIVE TRACT MAP NO. 20489

BEING A SUBDIVISION OF LOTS 3, 4, 13, & 14 OF TRACT NO. 3528, MB 46/63, CITY OF VICTORVILLE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

MERRELL JOHNSON COMPANIES — SEPTEMBER 2023

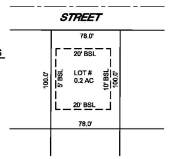




VICINITY MAP
N.T.S.

BUILDING SETBACKS

FRONT:	20'
STREET-SIDE:	10'
STREET-INTERIOR:	5'/10'
REAR:	20'



NOTES:

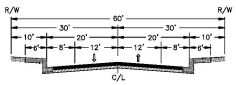
1. THERE ARE 11.8 GROSS ACRES TO THIS LAND DIVISION.
2. THERE ARE 39 NUMBERED LOTS AND 2 LETTERED LOTS TO THIS MAP. LETTERED LOTS ARE LANDSCAPE MAINTENANCE ASSESSMENT DISTRICTS (LMAD).
3. EXISTING ZONING: R-1 (7,200)
   PROPOSED ZONING: R-1 (7,200)
4. PARCELS ARE FOR PURPOSE OF LAND SALES.
5. THERE ARE +/-1578 FT OF NEW STREETS ON THIS MAP.
6. THE AVERAGE SLOPE OF ALL FEASIBLE ACCESS ROUTES AND BUILDING SITES DOES NOT EXCEED (10%.)
7. THERE ARE NO WATER COURSES TRAVERSING THE PROPERTY OTHER THAN SHOWN ON THIS MAP.
8. THERE ARE NO PROTECTED OR ENDANGERED TREES EXISTING ON THIS SITE OTHER THAN SHOWN ON THIS MAP.
9. ALL JOSHUA TREES WILL BE REMOVED PER CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REQUIREMENTS AT TIME OF DEVELOPMENT.

LEGAL DESCRIPTION

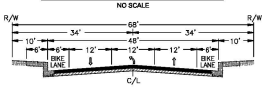
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF VICTORVILLE, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOTS 3, 4, 13 AND 14 OF TRACT NO. 3528, TAMARISK TREE SUBDIVISION, IN THE CITY OF VICTORVILLE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT THEREOF RECORDED IN BOOK 46, PAGE 63 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY.

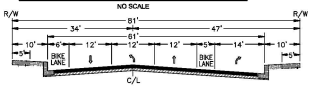
APN: 0462-031-01, 02, 07 & 08



TYPICAL SECTION - STREETS A, B, & C
NO SCALE



TYPICAL SECTION - PAHUTE RD & TAMARISK RD
NO SCALE



TYPICAL SECTION - INTX PAHUTE/TAMARISK
NO SCALE

TRACT MAP NO. 20489

APN: 0462-031-01, 02, 07 & 08

OWNER/APPLICANT:
MONK CAPITAL GROUP, LLC
FAHIM MEMON
9779 KATELLA AVE., SUITE 211
ANAHEIM, CA 92804
(818) 518-3112

PREPARED BY:
MERRELL JOHNSON COMPANIES
22221 I HIGHWAY 18
APPLE VALLEY, CA 92307
(760) 240-8000

MAP PREPARATION DATE: SEPTEMBER 15, 2023

UTILITY PURVEYORS:

ELECTRIC:	SOUTHERN CALIFORNIA EDISON COMPANY 12353 HESPERIA ROAD VICTORVILLE, CALIFORNIA 92395 (760) 951-3190	SEWER:	CITY OF VICTORVILLE 14343 CIVIC DRIVE - P.O. BOX 5001 VICTORVILLE, CALIFORNIA 92393-5001 (760) 955-5087
GAS:	SOUTHWEST GAS 13471 MARIPOSA ROAD VICTORVILLE, CALIFORNIA 92392 (760) 951-4055	TELEPHONE:	FRONTIER COMMUNICATIONS 9 SOUTH 4TH STREET REDLANDS, CALIFORNIA 92373 (909) 748-6640
WATER:	CITY OF VICTORVILLE 14343 CIVIC DRIVE - P.O. BOX 5001 VICTORVILLE, CALIFORNIA 92393-5001 (760) 955-5087	CABLE:	CHARTER SPECTRUM 12490 BUSINESS CENTER DR. VICTORVILLE, CALIFORNIA 92395 (760) 843-3000

EASEMENTS

4. AN EASEMENT FOR ELECTRIC POLE LINES OR UNDERGROUND CONDUITS FOR THE TRANSMISSION OF ELECTRIC ENERGY AND INCIDENTAL PURPOSES, RECORDED JULY 13, 1950 AS BOOK 2605, PAGE 401 OF OFFICIAL RECORDS. IN FAVOR OF: CALIFORNIA ELECTRIC POWER COMPANY. AFFECTS: AS DESCRIBED THEREIN

5. THE FACT THAT THE LAND LIES WITHIN THE BOUNDARIES OF THE VICTOR VALLEY REDEVELOPMENT PROJECT AREA, AS DISCLOSED BY THE DOCUMENT RECORDED AUGUST 22, 2005 AS INSTRUMENT NO. 2005-0618645 OF OFFICIAL RECORDS.

DOCUMENT(S) DECLARING MODIFICATIONS THEREOF RECORDED DECEMBER 29, 2006 AS INSTRUMENT NO. 2006-0890250 OF OFFICIAL RECORDS.

LEGEND

BSL	INDICATES BUILDING SETBACK LINE
CONC	INDICATES CONCRETE
DW	INDICATES DRIVEWAY
	INDICATES ELECTRIC BOX
FH	INDICATES FIRE HYDRANT
LT	INDICATES LIGHT STANDARD
	INDICATES SIGN
S	INDICATES SEWER MANHOLE
	INDICATES TELEPHONE BOX
	INDICATES WATER METER
WV	INDICATES WATER VALVE
	INDICATES JOSHUA TREE
2920	INDICATES EXISTING CONTOUR
	INDICATES PROPERTY LINE

BENCHMARK

CITY OF HESPERIA BENCHMARK "H-8", LOCATED AT THE SW CORNER, INTERSECTION JACARANDA AVE & OUTER BEAR VALLEY RD SOUTH. ELEV=2897.58

BASIS OF BEARINGS

TAKEN FROM THE CENTERLINE OF RIDGECREST ROAD AS SHOWN ON RECORD OF SURVEY 103/67 BEING: N0°32'40"E

REGISTERED PROFESSIONAL ENGINEER — E. CARY PACKER — No. C-51752 — CIVIL — STATE OF CALIFORNIA

E. CARY PACKER R.C.E. 51752

MERRELL JOHNSON

MERRELL JOHNSON ENGINEERING, INC.
22221 U.S. HIGHWAY 18, APPLE VALLEY, CA 92307
760 240 8000 | MERRELLJOHNSON.COM

TENTATIVE TRACT MAP NO. 20489

APN 0462-031-01, 02, 07 & 08 VICTORVILLE, CALIFORNIA

FOR: MONK CAPITAL GROUP

DRAWN BY: MM/LR
DATE: 9/15/23

JOB NO. 3785.001

SHEET 1 OF 1

Issue: 12:56pm, 15 September 2023 P:\3785\3785 Work Folder\Engineering\TM for APN 0462-031-01, 02, 07 and 08\Tentative TM Packet\3785 TM Sheet.dwg

SECTION 3

HYDROLOGY CALCULATIONS

RATIONAL CALCULATIONS – Q_{100}

OFFSITE RATIONAL CALCULATIONS

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2004 Version 7.0
Rational Hydrology Study Date: 10/14/21

MONK CAPITAL GROUP
OFF-SITE TRIBUTARY RUNOFF FLOW
NODES 11 - NODE 12
100-YEAR STORM EVENT - AMC II

MERRELL JOHNSON ENGINEERING
22221 HIGHWAY 18
APPLE VALLEY, CA 92397
(760) 240-8000 * FAX (760) 240-1400

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

++
Process from Point/Station 11.000 to Point/Station 12.000
**** INITIAL AREA EVALUATION ****

SCHOOL subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 1.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 69.00
Pervious ratio(Ap) = 0.6000 Max loss rate(Fm)= 0.329(In/Hr)
Initial subarea data:
Initial area flow distance = 690.000(Ft.)
Top (of initial area) elevation = 2946.000(Ft.)
Bottom (of initial area) elevation = 2921.000(Ft.)
Difference in elevation = 25.000(Ft.)
Slope = 0.03623 s(%)= 3.62
TC = k(0.412)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 10.930 min. T_c
Rainfall intensity = 3.952(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.825
Subarea runoff = 11.414(CFS) Q_{100}
Total initial stream area = 3.500(Ac.)
Pervious area fraction = 0.600
Initial area Fm value = 0.329(In/Hr)
End of computations, Total Study Area = 3.50 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.600
Area averaged SCS curve number = 69.0

ONSITE RATIONAL CALCULATIONS

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2004 Version 7.0
Rational Hydrology Study Date: 10/15/21

MONK CAPITAL GROUP
ON SITE TRIBUTARY RUNOFF FLOWS
NODE 21 - NODE 22
100-YEAR STORM EVENT - AMC II

MERRELL JOHNSON ENGINEERING
22221 HIGHWAY 18
APPLE VALLEY, CA 92307
(760) 240-8000 * FAX (760) 240-1400

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

++
Process from Point/Station 21.000 to Point/Station 22.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (poor cover) subarea
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 1.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 86.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.265(In/Hr)
Initial subarea data:
Initial area flow distance = 933.000(Ft.)
Top (of initial area) elevation = 2924.740(Ft.)
Bottom (of initial area) elevation = 2894.630(Ft.)
Difference in elevation = 30.110(Ft.)
Slope = 0.03227 s(%)= 3.23
TC = k(0.525)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 16.082 min. T_c
Rainfall intensity = 3.016(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.821
Subarea runoff = 24.759(CFS) Q_{100}
Total initial stream area = 10.000(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.265(In/Hr)
End of computations, Total Study Area = 10.00 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number = 86.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2004 Version 7.0
Rational Hydrology Study Date: 10/15/21

MONK CAPITAL GROUP
ON-SITE DEVELOPED RUNOFF FLOWS
NODE 221 - NODE 222
100-YEAR STORM EVENT - AMC II

MERRELL JOHNSON ENGINEERING
22221 HIGHWAY 18
APPLE VALLEY, CA 92307
(760) 240-8000 * FAX (760) 240-1400

********* Hydrology Study Control Information **********

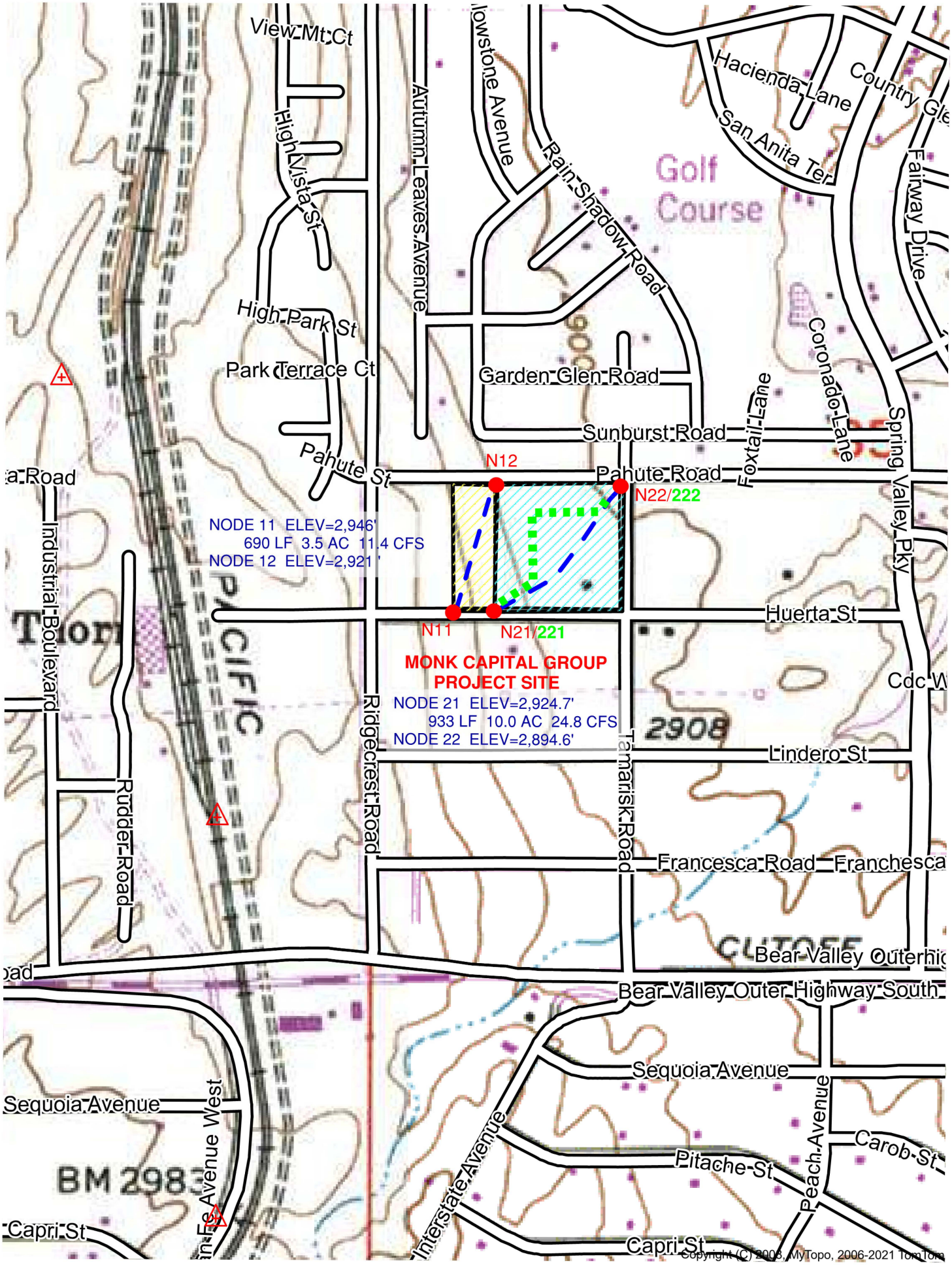
Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.200 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 2

++
Process from Point/Station 221.000 to Point/Station 222.000
**** INITIAL AREA EVALUATION ****

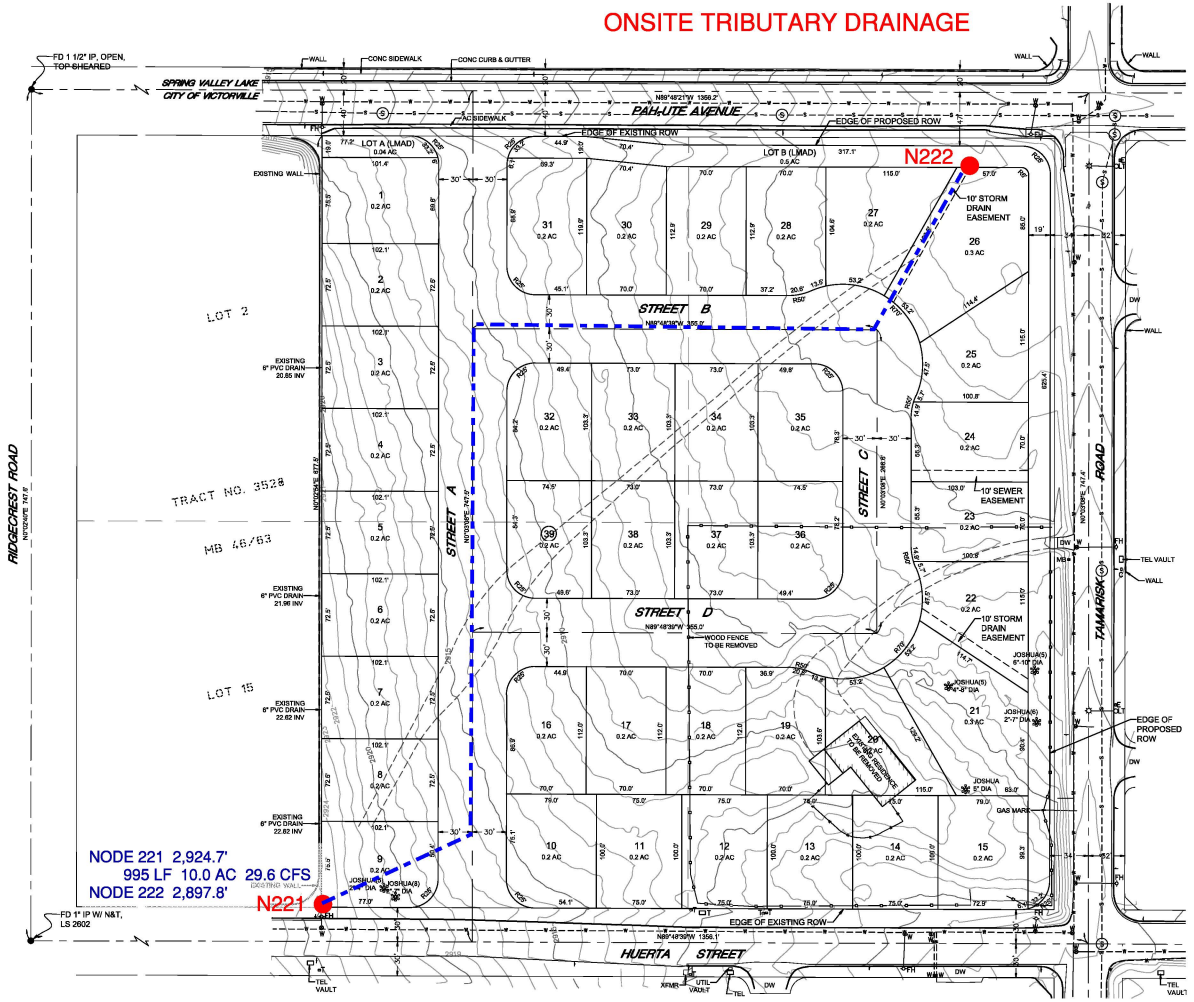
RESIDENTIAL(5 - 7 dwl/acre)
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 1.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 69.00
Pervious ratio(Ap) = 0.5000 Max loss rate(Fm)= 0.274(In/Hr)
Initial subarea data:
Initial area flow distance = 995.000(Ft.)
Top (of initial area) elevation = 2924.740(Ft.)
Bottom (of initial area) elevation = 2897.800(Ft.)
Difference in elevation = 26.940(Ft.)
Slope = 0.02708 s(%)= 2.71
TC = k(0.389)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 12.664 min. T_c
Rainfall intensity = 3.565(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.831
Subarea runoff = 29.622(CFS) Q_{100}
Total initial stream area = 10.000(Ac.)
Pervious area fraction = 0.500
Initial area Fm value = 0.274(In/Hr)
End of computations, Total Study Area = 10.00 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.500
Area averaged SCS curve number = 69.0

TRIBUTARY DRAINAGE MAP


View Mt Ct
High Vista St
Autumn Leaves Avenue
lowstone Avenue
Hacienda Lane
Country Gle
San Anita Ter
Golf Course
Rain Shadow Road
Fairway Drive
High Park St
Park Terrace Ct
Garden Glen Road
Coronado Lane
Foxtail Lane
Spring Valley Pky
Sunburst Road
Pahute St
Pahute Road
N12
N22/222
NODE 11 ELEV=2,946'
690 LF 3.5 AC 11.4 CFS
NODE 12 ELEV=2,921'
Industrial Boulevard
Huerta St
N11
N21/221
MONK CAPITAL GROUP
PROJECT SITE
NODE 21 ELEV=2,924.7'
933 LF 10.0 AC 24.8 CFS
NODE 22 ELEV=2,894.6'
Ridgecrest Road
Tamarisk Road
2908
Lindero St
Rudder Road
Francesca Road
Franchesca
Bear Valley Outer Highway South
Sequoia Avenue
Sequoia Avenue
BM 2983
Interstate Avenue
Peach Avenue
Carob St
Pitache St
Capri St
Capri St
Copyright (C) 2008 MyTopo, 2006-2021 TomTom

ONSITE TRIBUTARY DRAINAGE



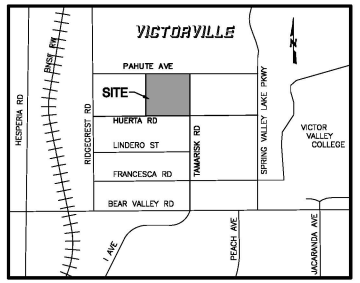
IN THE CITY OF VICTORVILLE

TENTATIVE TRACT MAP NO. 20489

BEING A SUBDIVISION OF LOTS 3, 4, 13, & 14 OF TRACT NO. 3528, MB 46/63, CITY OF VICTORVILLE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

MERRELL JOHNSON COMPANIES — SEPTEMBER 2023

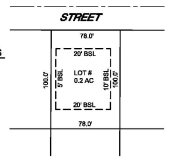
50' 25' 0' 50' 100'
SCALE: 1" = 50'



VICINITY MAP
N.T.S.

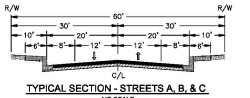
BUILDING SETBACKS

FRONT:	20'
STREET-SIDE:	10'
STREET-INTERIOR:	5'/10'
REAR:	20'

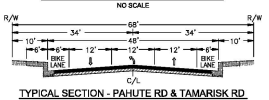


NOTES:

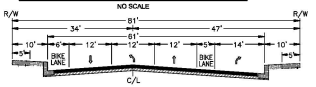
1. THERE ARE 11.8 GROSS ACRES TO THIS LAND DIVISION.
2. THERE ARE 39 NUMBERED LOTS AND 2 LETTERED LOTS TO THIS MAP. LETTERED LOTS ARE LANDSCAPE MAINTENANCE ASSESSMENT DISTRICTS (LMAD).
3. EXISTING ZONING: R-1 (7,200)
   PROPOSED ZONING: R-1 (7,200)
4. PARCELS ARE FOR PURPOSE OF LAND SALES.
5. THERE ARE +/-1578 FT OF NEW STREETS ON THIS MAP.
6. THE AVERAGE SLOPE OF ALL FEASIBLE ACCESS ROUTES AND BUILDING SITES DOES NOT EXCEED (10%.)
7. THERE ARE NO WATER COURSES TRAVERSING THE PROPERTY OTHER THAN SHOWN ON THIS MAP.
8. THERE ARE NO PROTECTED OR ENDANGERED TREES EXISTING ON THIS SITE OTHER THAN SHOWN ON THIS MAP.
9. ALL JOSHUA TREES WILL BE REMOVED PER CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REQUIREMENTS AT TIME OF DEVELOPMENT.



TYPICAL SECTION - STREETS A, B, & C
NO SCALE



TYPICAL SECTION - PAHUTE RD & TAMARISK RD
NO SCALE



TYPICAL SECTION - INTX PAHUTE/TAMARISK
NO SCALE

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF VICTORVILLE, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOTS 3, 4, 13 AND 14 OF TRACT NO. 3528, TAMARISK TREE SUBDIVISION, IN THE CITY OF VICTORVILLE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT THEREOF RECORDED IN BOOK 46, PAGE 63 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY.

APN: 0482-031-01, 02, 07 & 08

TRACT MAP NO. 20489

APN: 0482-031-01, 02, 07 & 08

OWNER/APPLICANT:
MONK CAPITAL GROUP, LLC
FAHIM MEMON
9779 KATELLA AVE., SUITE 211
ANAHEIM, CA 92804
(818) 518-3112

PREPARED BY:
MERRELL JOHNSON COMPANIES
22221 I HIGHWAY 18
APPLE VALLEY, CA 92307
(760) 240-8000

MAP PREPARATION DATE: SEPTEMBER 15, 2023

UTILITY PURVEYORS:

ELECTRIC:	SOUTHERN CALIFORNIA EDISON COMPANY 12353 HESPERIA ROAD VICTORVILLE, CALIFORNIA 92395 (760) 951-3190	SEWER:	CITY OF VICTORVILLE 14343 CIVIC DRIVE - P.O. BOX 5001 VICTORVILLE, CALIFORNIA 92393-5001 (760) 955-5087
GAS:	SOUTHWEST GAS 13471 MARIPOSA ROAD VICTORVILLE, CALIFORNIA 92392 (760) 951-4055	TELEPHONE:	FRONTIER COMMUNICATIONS 9 SOUTH 4TH STREET REDLANDS, CALIFORNIA 92373 (909) 748-6640
WATER:	CITY OF VICTORVILLE 14343 CIVIC DRIVE - P.O. BOX 5001 VICTORVILLE, CALIFORNIA 92393-5001 (760) 955-5087	CABLE:	CHARTER SPECTRUM 12490 BUSINESS CENTER DR. VICTORVILLE, CALIFORNIA 92395 (760) 843-3000

EASEMENTS

(4) AN EASEMENT FOR ELECTRIC POLE LINES OR UNDERGROUND CONDUITS FOR THE TRANSMISSION OF ELECTRIC ENERGY AND INCIDENTAL PURPOSES, RECORDED JULY 13, 1950 AS BOOK 2605, PAGE 401 OF OFFICIAL RECORDS. IN FAVOR OF: CALIFORNIA ELECTRIC POWER COMPANY. AFFECTS: AS DESCRIBED THEREIN

(5) THE FACT THAT THE LAND LIES WITHIN THE BOUNDARIES OF THE VICTOR VALLEY REDEVELOPMENT PROJECT AREA, AS DISCLOSED BY THE DOCUMENT RECORDED AUGUST 22, 2005 AS INSTRUMENT NO. 2005-0618645 OF OFFICIAL RECORDS.

DOCUMENT(S) DECLARING MODIFICATIONS THEREOF RECORDED DECEMBER 29, 2006 AS INSTRUMENT NO. 2006-0890250 OF OFFICIAL RECORDS.

LEGEND

BSL	INDICATES BUILDING SETBACK LINE
CONC	INDICATES CONCRETE
DW	INDICATES DRIVEWAY
	INDICATES ELECTRIC BOX
FH	INDICATES FIRE HYDRANT
LT	INDICATES LIGHT STANDARD
	INDICATES SIGN
S	INDICATES SEWER MANHOLE
	INDICATES TELEPHONE BOX
	INDICATES WATER METER
W	INDICATES WATER VALVE
	INDICATES JOSHUA TREE
2920	INDICATES EXISTING CONTOUR
	INDICATES PROPERTY LINE

BENCHMARK

CITY OF HESPERIA BENCHMARK "H-8", LOCATED AT THE SW CORNER, INTERSECTION JACARANDA AVE & OUTER BEAR VALLEY RD SOUTH. ELEV=2897.58

BASIS OF BEARINGS

TAKEN FROM THE CENTERLINE OF RIDGECREST ROAD AS SHOWN ON RECORD OF SURVEY 103/67 BEING: N0°32'40"E

REGISTERED PROFESSIONAL ENGINEER — E. CARY PACKER — No. C-51752 — CIVIL — STATE OF CALIFORNIA

E. CARY PACKER R.C.E. 51752

MERRELL JOHNSON

MERRELL JOHNSON ENGINEERING, INC.
22221 U.S. HIGHWAY 18, APPLE VALLEY, CA 92307
760.240.8000 | MERRELLJOHNSON.COM

TENTATIVE TRACT MAP NO. 20489

APN 0482-031-01, 02, 07 & 08
VICTORVILLE, CALIFORNIA

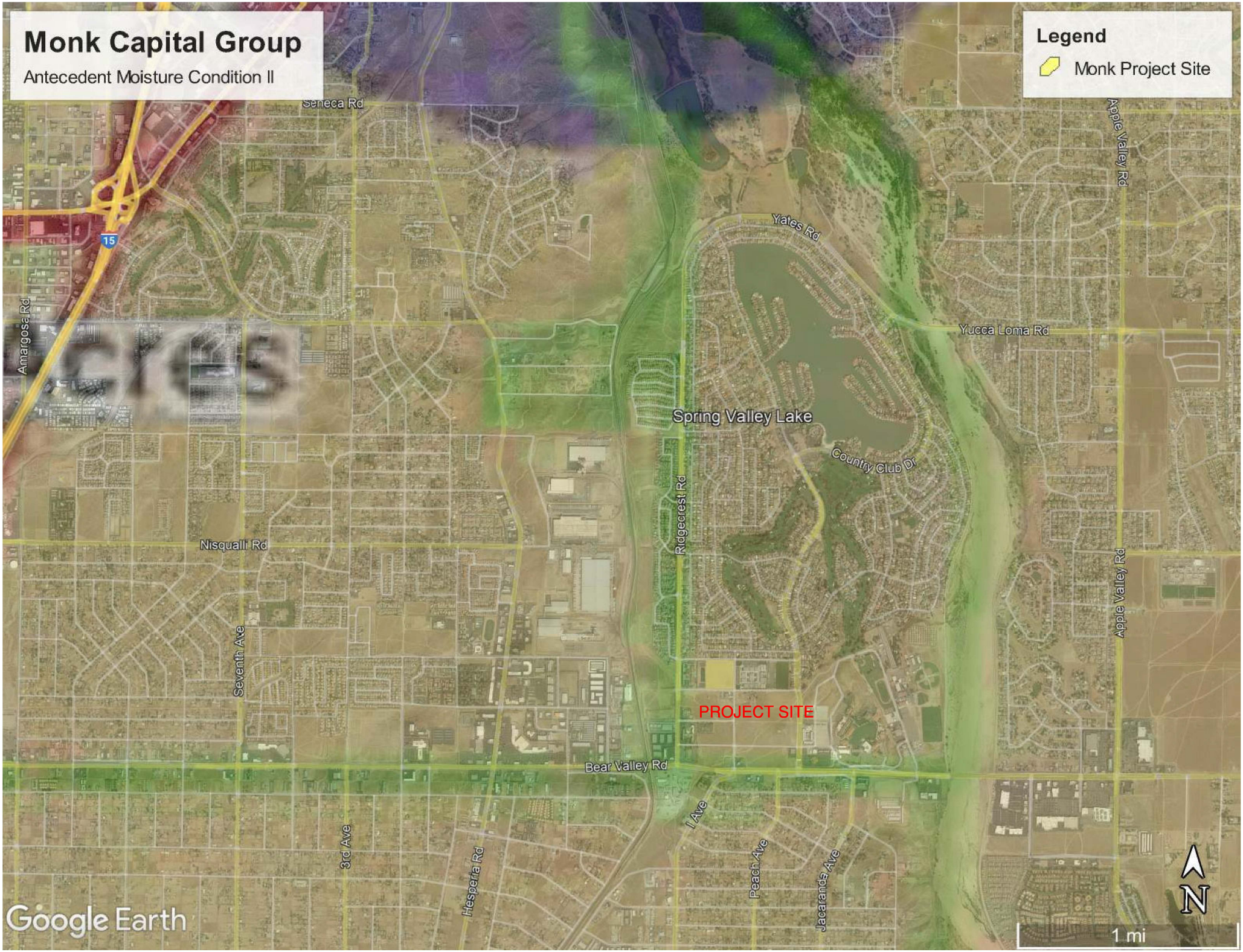
FOR:
MONK CAPITAL GROUP

DRAWN BY: MM/LR DATE: 9/15/23	
JOB NO. 3785.001	
SHEET	1 OF 1

Issue: 12:56pm, 19 September 2023 P:\3785.001 MONK Capital Group (VM for APN 0482-031-01, 02, 07 and 08)\Civil\VM Packet\3785001VM.dwg - TM 20489 - Merrell Johnson Companies

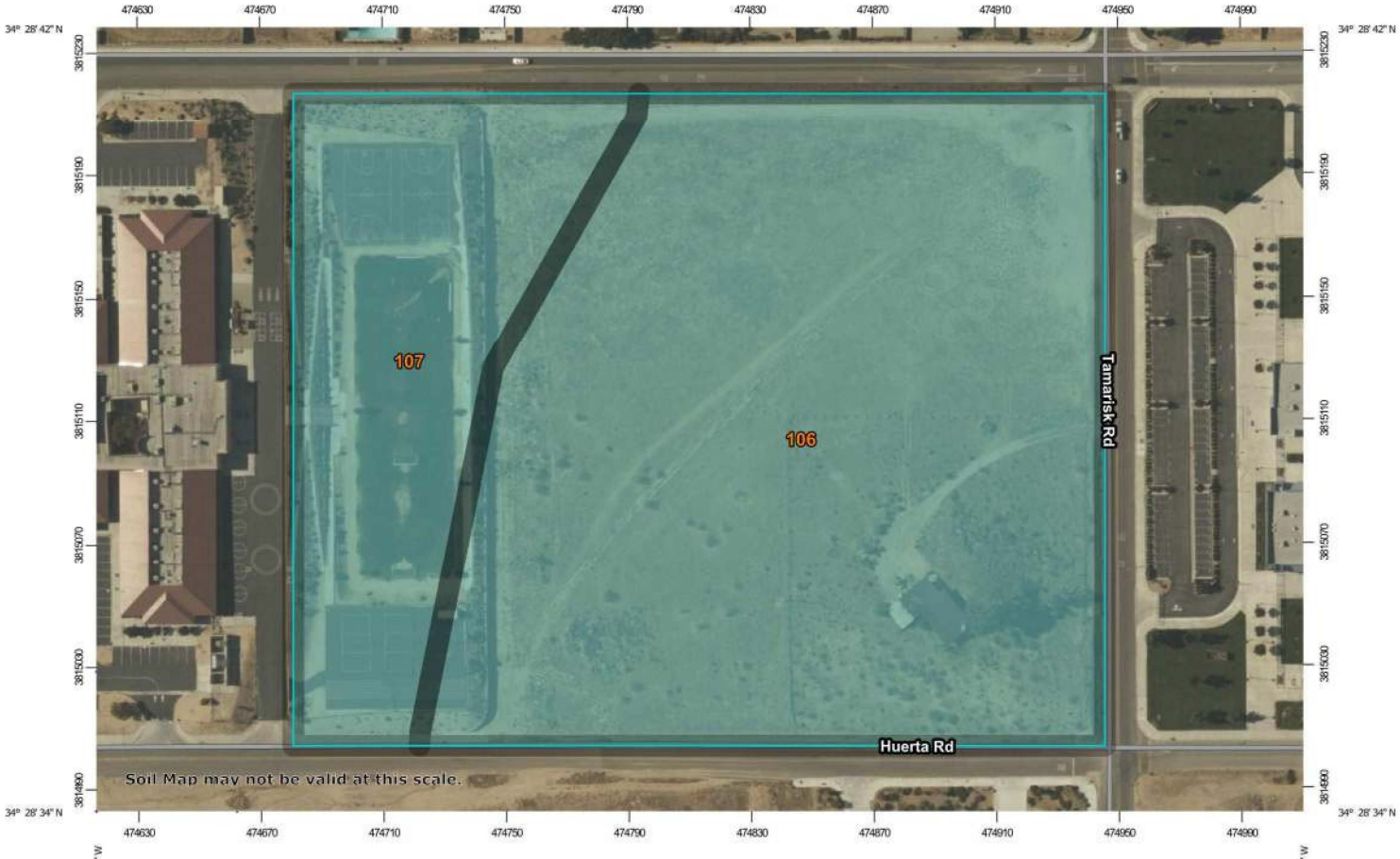
2010 ANTECEDENT MOISTURE CONDITION (AMC) MAP


Figure ADD-1
Antecedent Moisture Condition (AMC)
5-day Rainfall - NOAA Atlas 14
(50% of Total Rainfall Prior to Peak)*
*1/2 (11-day - 1-day) =
1/2 ([10-day] + (1/10 ([20-day] - [10-day])) - [1-day])
5 0 5 10 15
Miles
Growing Season
AMC I
AMC II
AMC III
STATE HWY 32
US HWY 169
STATE HWY 62


Monk Capital Group
Antecedent Moisture Condition II
Legend
Monk Project Site
Seneca Rd
Apple Valley Rd
Yates Rd
Amargosa Rd
Yucca Loma Rd
Spring Valley Lake
Country Club Dr
Ridgecrest Rd
Nisqualli Rd
Seventh Ave
Apple Valley Rd
PROJECT SITE
Bear Valley Rd
I Ave
3rd Ave
Hesperia Rd
Peach Ave
Jacaranda Ave
Google Earth
N
1 mi

SOILS MAP

Hydrologic Soil Group—San Bernardino County, California, Mojave River Area



Map Scale: 1:1,800 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 26, 2019—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
106	BRYMAN LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	C	10.3	74.0%
107	BRYMAN LOAMY FINE SAND, 5 TO 9 PERCENT SLOPES	C	3.6	26.0%
Totals for Area of Interest			**14.0**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

NOAA ATLAS 14 POINT RAINFALLS

NOAA Atlas 14, Volume 6, Version 2
Location name: Victorville, California, USA*
Latitude: 34.4773°, Longitude: -117.2745°
Elevation: 2919.95 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.086 (0.071-0.105)	0.121 (0.100-0.148)	0.168 (0.139-0.207)	0.209 (0.171-0.259)	0.268 (0.212-0.343)	0.315 (0.244-0.412)	0.366 (0.276-0.490)	0.421 (0.309-0.579)	0.498 (0.351-0.715)	0.562 (0.383-0.834)
10-min	0.123 (0.102-0.151)	0.173 (0.143-0.212)	0.241 (0.199-0.296)	0.300 (0.245-0.371)	0.384 (0.303-0.491)	0.452 (0.350-0.591)	0.525 (0.396-0.702)	0.603 (0.443-0.830)	0.715 (0.503-1.02)	0.806 (0.548-1.20)
15-min	0.149 (0.123-0.182)	0.209 (0.173-0.256)	0.292 (0.240-0.358)	0.363 (0.296-0.449)	0.464 (0.367-0.594)	0.547 (0.423-0.714)	0.635 (0.479-0.849)	0.729 (0.535-1.00)	0.864 (0.609-1.24)	0.974 (0.663-1.45)
30-min	0.205 (0.169-0.251)	0.287 (0.237-0.351)	0.401 (0.330-0.492)	0.498 (0.407-0.617)	0.638 (0.504-0.816)	0.751 (0.581-0.981)	0.872 (0.658-1.17)	1.00 (0.735-1.38)	1.19 (0.836-1.70)	1.34 (0.911-1.99)
60-min	0.253 (0.209-0.310)	0.355 (0.293-0.434)	0.496 (0.408-0.608)	0.616 (0.502-0.762)	0.788 (0.622-1.01)	0.928 (0.718-1.21)	1.08 (0.813-1.44)	1.24 (0.908-1.70)	1.47 (1.03-2.10)	1.65 (1.13-2.45)
2-hr	0.359 (0.297-0.439)	0.484 (0.399-0.593)	0.656 (0.540-0.806)	0.803 (0.656-0.994)	1.01 (0.800-1.30)	1.18 (0.915-1.55)	1.36 (1.03-1.82)	1.55 (1.14-2.14)	1.83 (1.29-2.62)	2.05 (1.39-3.04)
3-hr	0.437 (0.361-0.534)	0.581 (0.480-0.712)	0.780 (0.642-0.957)	0.949 (0.774-1.17)	1.19 (0.939-1.52)	1.38 (1.07-1.81)	1.59 (1.20-2.13)	1.81 (1.33-2.49)	2.11 (1.49-3.03)	2.36 (1.61-3.51)
6-hr	0.599 (0.495-0.732)	0.789 (0.651-0.966)	1.05 (0.863-1.29)	1.27 (1.04-1.57)	1.58 (1.25-2.02)	1.83 (1.41-2.39)	2.09 (1.58-2.80)	2.37 (1.74-3.26)	2.76 (1.94-3.96)	3.07 (2.09-4.56)
12-hr	0.771 (0.637-0.942)	1.03 (0.848-1.26)	1.38 (1.13-1.69)	1.67 (1.36-2.06)	2.07 (1.64-2.65)	2.39 (1.85-3.13)	2.73 (2.06-3.65)	3.08 (2.26-4.24)	3.58 (2.52-5.13)	3.97 (2.70-5.89)
24-hr	1.02 (0.901-1.17)	1.38 (1.22-1.59)	1.87 (1.65-2.16)	2.27 (1.99-2.65)	2.84 (2.40-3.41)	3.28 (2.72-4.03)	3.73 (3.03-4.70)	4.21 (3.32-5.46)	4.88 (3.69-6.59)	5.41 (3.95-7.55)
2-day	1.18 (1.05-1.36)	1.63 (1.44-1.87)	2.22 (1.96-2.57)	2.72 (2.38-3.17)	3.41 (2.89-4.10)	3.94 (3.27-4.85)	4.50 (3.65-5.67)	5.09 (4.01-6.59)	5.90 (4.46-7.96)	6.54 (4.78-9.14)
3-day	1.28 (1.14-1.47)	1.78 (1.58-2.05)	2.45 (2.16-2.83)	3.00 (2.63-3.50)	3.77 (3.19-4.54)	4.37 (3.63-5.37)	4.99 (4.05-6.29)	5.65 (4.45-7.32)	6.56 (4.96-8.86)	7.29 (5.32-10.2)
4-day	1.36 (1.21-1.57)	1.90 (1.68-2.19)	2.62 (2.31-3.02)	3.21 (2.81-3.74)	4.03 (3.42-4.85)	4.68 (3.88-5.75)	5.34 (4.33-6.73)	6.05 (4.76-7.83)	7.02 (5.31-9.47)	7.79 (5.69-10.9)
7-day	1.48 (1.31-1.70)	2.05 (1.81-2.36)	2.81 (2.48-3.25)	3.45 (3.02-4.01)	4.33 (3.67-5.21)	5.01 (4.16-6.16)	5.73 (4.64-7.21)	6.47 (5.10-8.38)	7.51 (5.68-10.1)	8.33 (6.08-11.6)
10-day	1.56 (1.39-1.80)	2.16 (1.91-2.49)	2.96 (2.61-3.42)	3.63 (3.18-4.22)	4.55 (3.86-5.48)	5.28 (4.38-6.49)	6.03 (4.89-7.60)	6.82 (5.37-8.83)	7.92 (5.99-10.7)	8.78 (6.42-12.3)
20-day	1.80 (1.59-2.07)	2.49 (2.21-2.87)	3.44 (3.04-3.98)	4.24 (3.71-4.93)	5.35 (4.54-6.45)	6.24 (5.18-7.67)	7.16 (5.80-9.01)	8.12 (6.40-10.5)	9.46 (7.15-12.8)	10.5 (7.68-14.7)
30-day	2.04 (1.81-2.34)	2.84 (2.51-3.27)	3.94 (3.48-4.55)	4.87 (4.27-5.67)	6.19 (5.25-7.46)	7.25 (6.02-8.91)	8.35 (6.76-10.5)	9.51 (7.49-12.3)	11.1 (8.41-15.0)	12.4 (9.06-17.3)
45-day	2.40 (2.13-2.76)	3.34 (2.96-3.85)	4.66 (4.12-5.38)	5.79 (5.07-6.74)	7.42 (6.28-8.93)	8.73 (7.25-10.7)	10.1 (8.19-12.7)	11.6 (9.12-15.0)	13.6 (10.3-18.4)	15.3 (11.2-21.4)
60-day	2.63 (2.33-3.02)	3.65 (3.23-4.21)	5.10 (4.50-5.89)	6.35 (5.57-7.40)	8.18 (6.93-9.85)	9.67 (8.03-11.9)	11.3 (9.12-14.2)	13.0 (10.2-16.8)	15.4 (11.6-20.8)	17.3 (12.7-24.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

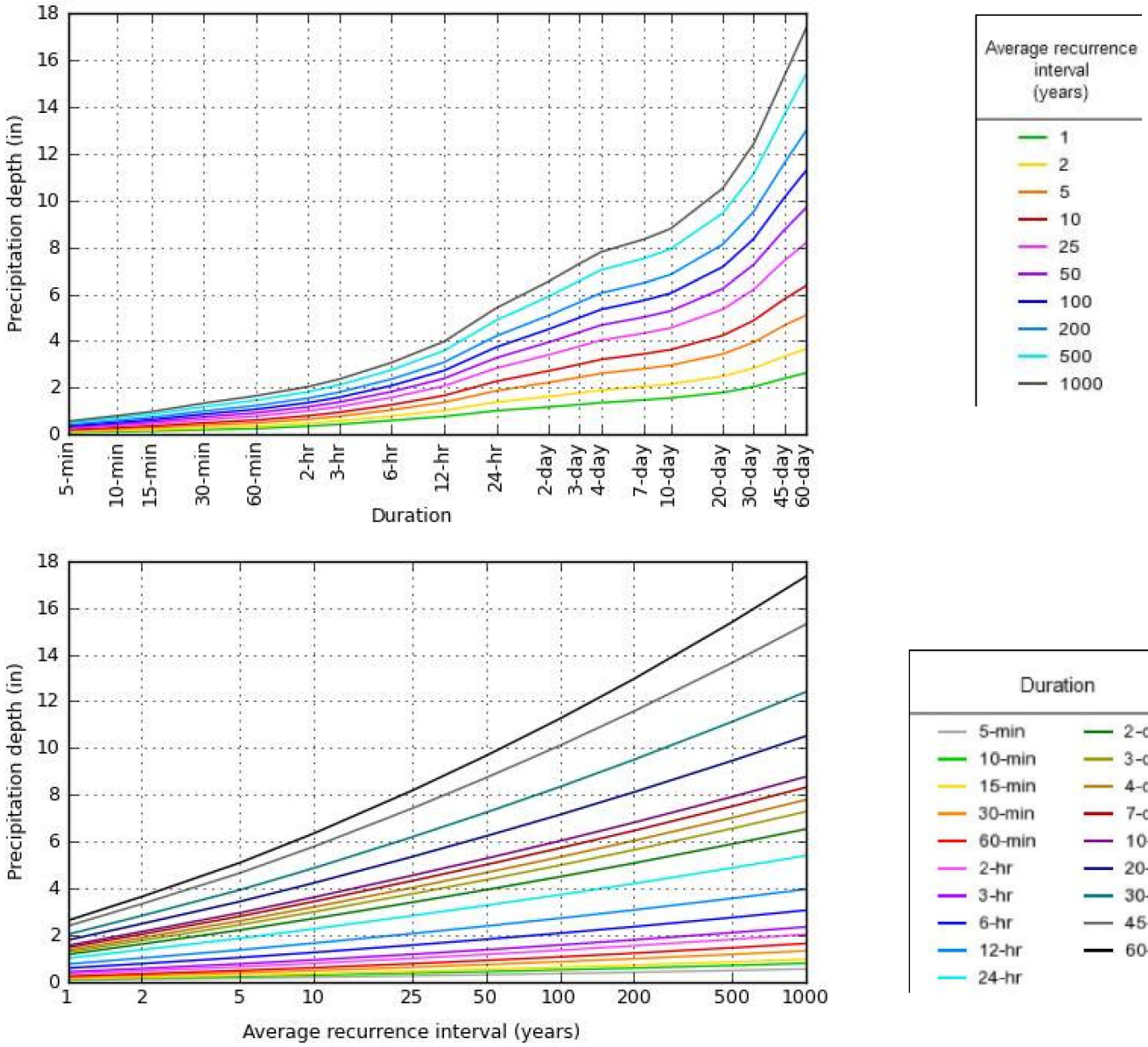
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 34.4773°, Longitude: -117.2745°



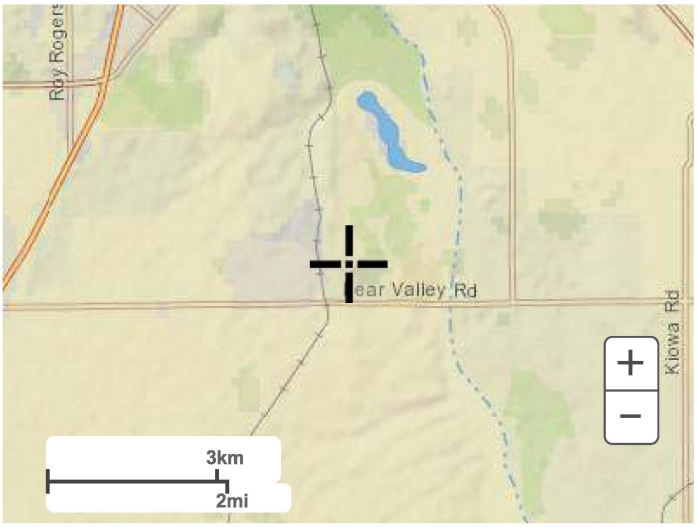
NOAA Atlas 14, Volume 6, Version 2

Created (GMT): Fri Dec 3 01:34:07 2021

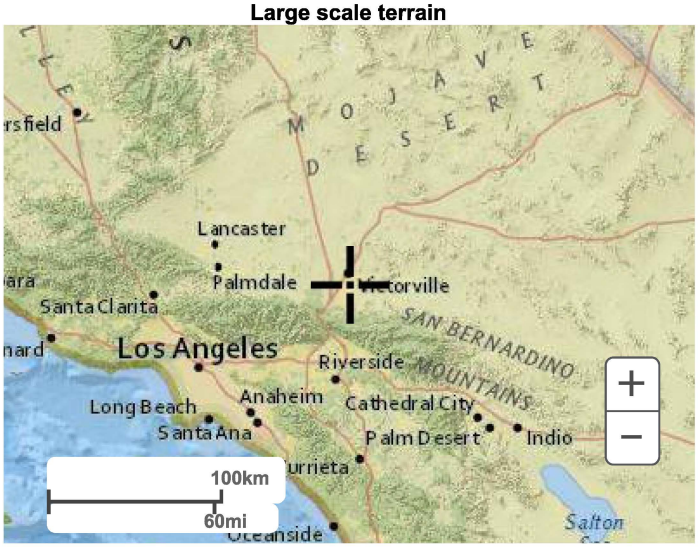
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Maps & aerials

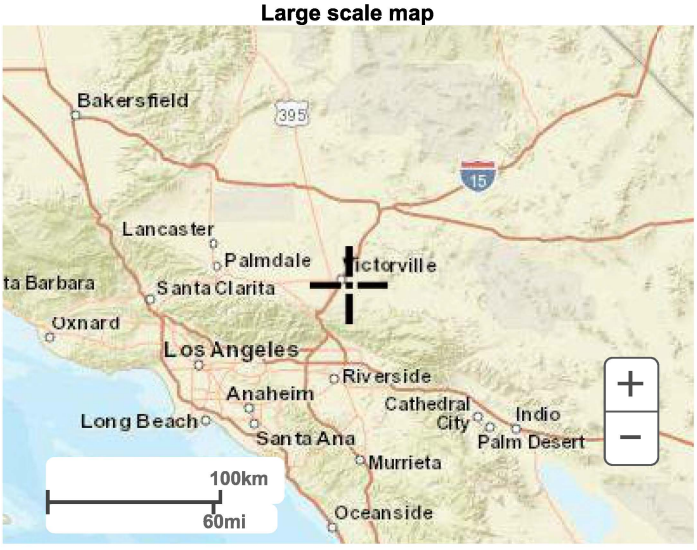
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

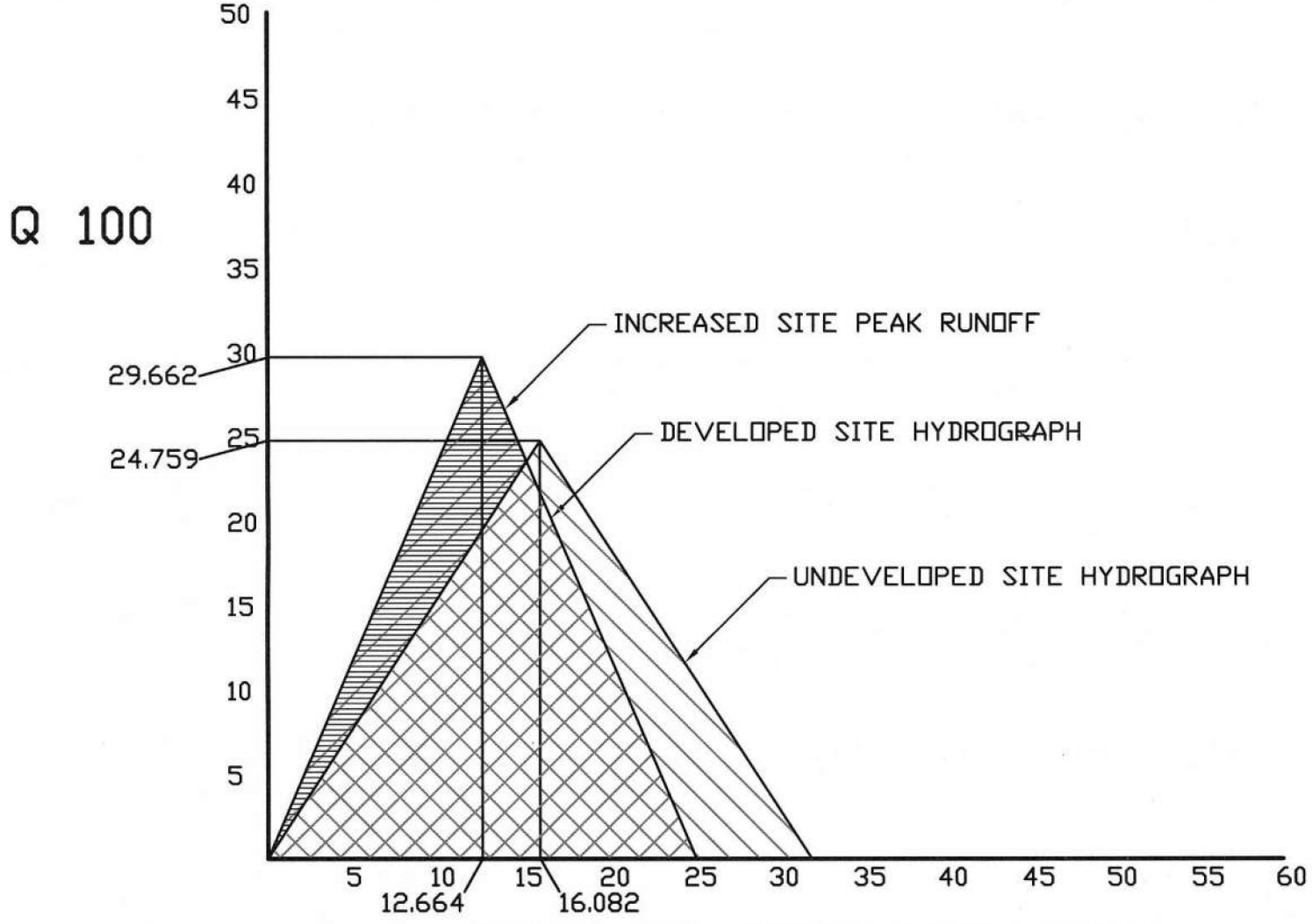


Back to Top

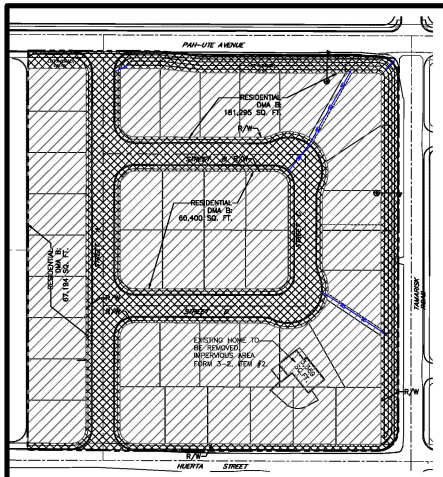
US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

RETENTION VOLUMES



SITE RUNOFF PARAMETERS
UNDEVELOPED SITE RUNOFF = 23,870 CF
DEVELOPED SITE RUNOFF = 22,546 CF
INCREASED STORM PEAK RUNOFF = 4,676 CF



WQMP DEDICATED AREAS MAP

NOT TO SCALE

WQMP DEDICATED AREAS LEGEND:

PROJECT WQMP AREA = 452,952 SQ.FT. (10.4 ACRES)

WQMP DRAINAGE AREAS DIVIDED PER PROPOSED OWNER

POST IMPROVEMENTS TO BE DEDICATED TO CITY = 144,063 SQ.FT. (3.31 ACRES) (LMAD, INTERIOR STREETS AND IMPROVEMENTS TO EXISTING)

SINGLE FAMILY RESIDENTIAL LOTS (39 TOTAL) = +308,889 SQ.FT. (7.09 ACRES)

TOTAL PRELIMINARY WQMP PROJECT AREA = 452,952 SQ.FT. (10.4 ACRES)

WQMP EXHIBIT LEGEND:

R/W RIGHT-OF-WAY

CL CENTER LINE

STORM DISCHARGE

A/2 DETAIL A / SHEET PAGE

DMA A: PROPOSED LANDSCAPE (DROUGHT TOLERANT) GIVEN THE SAME ON AS NATIVE SOILS ALTHOUGH EXPECTED TO HAVE SHALLOW DEPTH OF AMENDED SOILS.

DMA D: RESIDENTIAL LANDSCAPED BIO-RETENTION WITH MIN. 1 FT. DEPTH AMENDED SOILS. TOTAL AREA = 15,600 SQ. FT.

DMA D: LANDSCAPED BIORETENTION BOTTOM (MOST SATURATED) AS SHOWN IN FORM 4.3-3, ITEM #8 (ONLY THIS AREA WAS INCLUDED IN INFILTRATION CALCULATION ALTHOUGH ENTIRE SWALE WILL BE INFILTRATING).



WQMP EXHIBIT

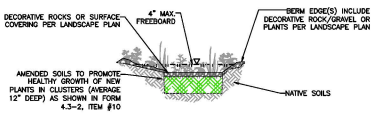
RESIDENTIAL FRONT YARD DMA D-LANDSCAPED BIORETENTION (RAIN GARDENS) PROVIDE ON-LOT INFILTRATION PER FORM 4.3-2 AND DETAILS SHOWN ON THIS SHEET. CLUSTERED LANDSCAPED AND/OR TREE WELLS SHALL EQUAL 400 SQ.FT. PER LOT (400 SQ.FT. X 39LOTS = 15,600 SQ.FT. SEE FORM 4.3-2 #7 & #8). SHAPE(S) AND LOCATION(S) TO BE DESIGNED IN LANDSCAPE PLANS AFTER HOME SIZE AND FOOTPRINT IS DETERMINED. SET RAIN GARDENS WHERE RUNOFF MAY ENTER TO PROMOTE ON-SITE INFILTRATION.

50' 25' 0' 50' 100'

SCALE: 1" = 50'

DMAs DIVIDED by NEW-PROPOSED CONDITIONS

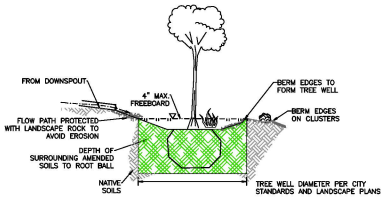
DMA A:	**Native -Self-Treating**		
1. RESIDENTIAL DEVELOPMENT TO ROW	77,067	1.77	acre(s)
2. CITY OF VICTORVILLE ROW (STREETS & SIDEWALKS)	29,312	0.67	acre(s)
TOTAL NATIVE SOILS (DESERT LANDSCAPE, GRAVEL OR GRADED)	106,379	2.44	acre(s)
DMA B:	**Residential Impervious @ 70%**		
1. RESIDENTIAL DEVELOPMENT TO ROW	216,222	4.96	acre(s)
TOTAL IMPERVIOUS AREA GIVEN RESIDENTIAL LOTS UPTO 70%	216,222	4.96	acre(s)
DMA C:	**Pavement (Sidewalks Asphalt)**		
2. CITY OF VICTORVILLE ROW (STREETS & SIDEWALKS)	107,110	2.46	acre(s)
TOTAL IMPERVIOUS AREA DEDICATED TO CITY	107,110	2.46	acre(s)
DMA D:	**Landscaped Bio-retention**		
1. RESIDENTIAL DEVELOPMENT TO ROW	15,600	0.36	acre(s)
2. CITY OF VICTORVILLE ROW (STREETS & SIDEWALKS)	7,641	0.18	acre(s)
TOTAL AREA FOR AMENDED SOILS IN SHALLOW DEPRESSION FOR	23,241	0.53	acre(s)
Post Impervious			
1. RESIDENTIAL DEVELOPMENT TO ROW	216,222	4.96	acre(s) 70%
2. CITY OF VICTORVILLE ROW (STREETS & SIDEWALKS)	107,110	2.46	acre(s) 74%
	323,332	7.42	acre(s) 71%
Post Pervious			
1. RESIDENTIAL DEVELOPMENT TO ROW	92,667	2.13	acre(s) 30%
2. CITY OF VICTORVILLE ROW (STREETS & SIDEWALKS)	36,953	0.85	acre(s) 26%
	129,620	2.98	acre(s) 29%



CLUSTER LANDSCAPE

NOT TO SCALE

CROSS SECTION EXAMPLE OF SHALLOW DEPRESSION AND AMENDED SOILS WITHIN CLUSTERED LANDSCAPING. SEE ADDITIONAL DETAIL BELOW.



TREE WELLS

NOT TO SCALE

DEPTH AND DIAMETER OF AMENDED SOILS INCREASES RETENTION VOLUME SHOWN IN FORM 4.3-2

LOCALIZED ON-LOT INFILTRATION (RAIN GARDENS) EACH SFR LOT PER FORM 4.3-2

EACH LOT IS ESTIMATED 30% PERVIOUS (INCLUDING FRONT, BACK AND SIDE YARDS). FRONT YARD LANDSCAPING PER CITY REQUIREMENTS WILL INCREASE TOTAL RETENTION POSSIBLE IF FLOWS ARE DIRECTED TO SHALLOW DEPRESSIONS, CLUSTERED VEGETATION, AND/OR TREE WELLS WITH AMENDED SOILS RETROFITTED BY FINAL LANDSCAPE DESIGN ACCORDING TO FINAL FOOTPRINT, ELEVATIONS, DRIVEWAY AND WALKWAY LOCATIONS. FINAL ELEVATIONS, INCREASED IMPERVIOUS AREAS, AND GROUND COVER MATERIALS WILL ALTER ESTIMATION AND SHALL BE DETERMINED IN FINAL LOT DESIGN.

811 Know what's below. Call before you dig.

SURVEY MONUMENTATION:

ALL SURVEY MONUMENTS AND MARKERS SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE UNTIL SURVEYOR HAS TIED OUT LOCATIONS FOR REPLACEMENT PURSUANT TO BUSINESS AND PROFESSIONS CODE SECTION 8700 TO 8805 (LAND SURVEYOR'S ACT).

UNDERGROUND UTILITIES:

THE LOCATIONS AND EXISTENCE OF UNDERGROUND UTILITIES ARE NOT GUARANTEED. THESE DRAWINGS WERE PREPARED BASED ON SURFACE DATA AND AVAILABLE RECORD INFORMATION AND IT IS POSSIBLE THAT ADDITIONAL UNDERGROUND UTILITIES COULD BE PRESENT THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITIES AND SHALL PERFORM POTHOLING AS NECESSARY AT ALL CROSSINGS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL PRECAUTIONS NECESSARY TO PROTECT ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE DURING THE COURSE OF THE WORK, AND SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY UTILITIES OR STRUCTURES DAMAGED DURING THE COURSE OF THE WORK.

BENCHMARK

DESCRIPTION: CITY OF HESPERIA BENCHMARK "H-6"

LOCATION: SOUTHWEST CORNER OF INTERSECTION OF JACARANDA AVE AND OUTER BEAR VALLEY ROAD SOUTH.

ELEVATION: 2867.68

BASIS OF BEARINGS

TAKEN FROM THE CENTERLINE OF RIDGECREST ROAD AS SHOWN ON RECORD OF SURVEY 103/87, BEING N00°02'40"E.

DATE	DELTA	REVISION DESCRIPTION	APPROVAL DATE	APPROVAL BY

REGISTERED PROFESSIONAL ENGINEER E. CARY PACKER No. C-51752 CIVIL STATE OF CALIFORNIA

E. CARY PACKER R.C.E. 51752

MERRELL JOHNSON

MERRELL JOHNSON ENGINEERING, INC.
22221 U.S. HIGHWAY 18, APPLE VALLEY, CA 92307
760.240.8000 | MERRELLJOHNSON.COM

PRELIMINARY WQMP EXHIBIT FOR TENTATIVE TRACT MAP NO. 20489

APN 0482-031-01, 02, 07, & 08

VICTORVILLE, CA

FOR:

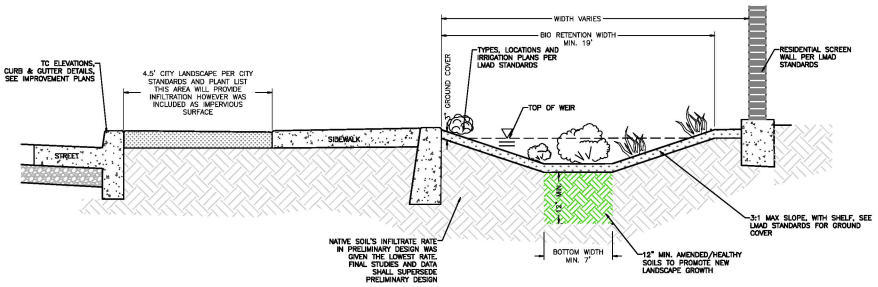
MONK CAPITAL GROUP

DRAWN BY: JMC
DATE: 10/27/23

JOB NO. 3785.001

SHEET 1 OF 2

PLOT BY: Benjamin Hooper 10/27/2023 PROFESSIONAL Monk Capital Group FILE: P:\AVN\3785001\01_02_07_08\PRELIMINARY WQMP\3785001 WQMP EXHIBIT (1) Merrell Johnson Companies



PAHUTE AVENUE & TAMARISK ROAD: LMAD & RIGHT OF WAY

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BENCHMARK

DESCRIPTION: CITY OF HESPERIA BENCHMARK "H-6"

LOCATION: SOUTHWEST CORNER OF INTERSECTION OF JACARANDA AVE. AND OUTER BEAR VALLEY ROAD SOUTH.

ELEVATION: 2857.68

BASIS OF BEARINGS

TAKEN FROM THE CENTERLINE OF RIDGECREST ROAD AS SHOWN ON RECORD OF SURVEY 103/87, BEING N00°02'40"E.

DATE	DELTA	REVISION DESCRIPTION	APPROVAL DATE	APPROVAL BY

REGISTERED PROFESSIONAL ENGINEER E. CARY PACKER No. C-51752 CIVIL STATE OF CALIFORNIA

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PRELIMINARY WQMP
EXHIBIT FOR TENTATIVE
TRACT MAP NO. 20489

APN 0482-031-01, 02, 07, & 08
VICTORVILLE, CA
FOR:
MONK CAPITAL GROUP

DRAWN BY: JMC
DATE: 10/27/23

JOB NO. 3785.001

SHEET 2 OF 2

PLOT BY: Eason Ja 10/26/23 2:22pm PROGRAM: Monk Capital Group (TM) File: P:\3785\001\Civil\WQMP\Exhibit\3785001_WQMP_EXHIBIT.dwg - WQMP EXHIBIT (2) - Merrell Johnson Companies