NEILMED WAREHOUSE

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645



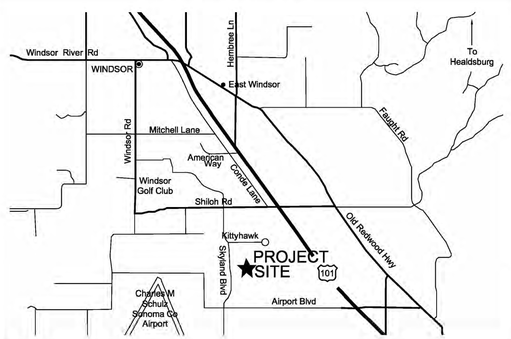
INDEX OF DRAWINGS

A0.0	PROJECT INFORMATION
A1.0	SITE PLAN
A1.1	VICINITY PLAN
A1.2	VICINITY AERIAL PLAN
A2.0	FLOOR PLANS
A3.0	ELEVATIONS
A4.0	BUILDING SECTIONS
A5.0	SITE FEATURES
A6.0	NEILMED 2 CONCEPTUAL SITE PLAN
A5.0	NEILMED 2 CONCEPTUAL ELEVATIONS
C1	EXISTING CONDITIONS
C2	PRELIMINARY SITE PLAN
C3	PRELIMINARY GRADING PLAN
C4	PRELIMINARY UTILITY PLAN
C5	PROPOSED SWLID EXHIBIT
C6	DETAILS
C7	DETAILS
T1	FIRE TRUCK TURNING TEMPLATE
T2	WB-65 TRUCK TURNING TEMPLATE
L1	LANDSCAPE PLANTING PLAN
L2	LANDSCAPE IRRIGATION PLAN
E1	SITE ELECTRICAL WITH PHOTOMETRICS

AERIAL SITE



VICINITY MAP



PROJECT TEAM

CIVIL: BRELJE AND RACE
475 AVIATION BLDG SUITE 120
SANTA ROSA, CA 95403
707-576-1322

LANDSCAPE: PARKER SMITH
1945 PINER #25
SANTA ROSA, CA 95403
707-477-7502

ELECTRICAL: LUNARDI ELECTRIC
5334 SEBASTOPOL ROAD
SANTA ROSA, CA 95407
707-545-4755

PROJECT DATA

ASSESSOR PARCEL: 059-340-056

SITE AREA : 66,437 SF 1.53 AC.±

BLDG FOOTPRINT AREA :
1ST FLOOR: 29,533 SF
2ND FLOOR: 29,533 SF
TOTAL: 59,066 SF

BUILDING	29,533 SF	44.5%
LANDSCAPE	13,353 SF	20.1%
AC PAVING	23,551 SF	35.4%

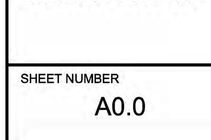
PARKING TABULATION
59,066 SF WAREHOUSE
@ 1 PER 2000 SF = 30 CARS REQUIRED

TOTAL PARKING PROVIDED = 36 CARS
29 + 7 WITHIN PARKING EASEMENT
(7 OF THE 14 ALLOCATED TO ADJACENT PROPERTY)

2 ACCESSIBLE PARKING REQUIRED
6 CLEAN AIR, VANPOOL EV REQUIRED

CONSULTANTS

SEAL



PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED
WAREHOUSE

685 AVIATION BLVD

SANTA ROSA CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A00
DRAWN BY:	KCT
SCALE:	NONE

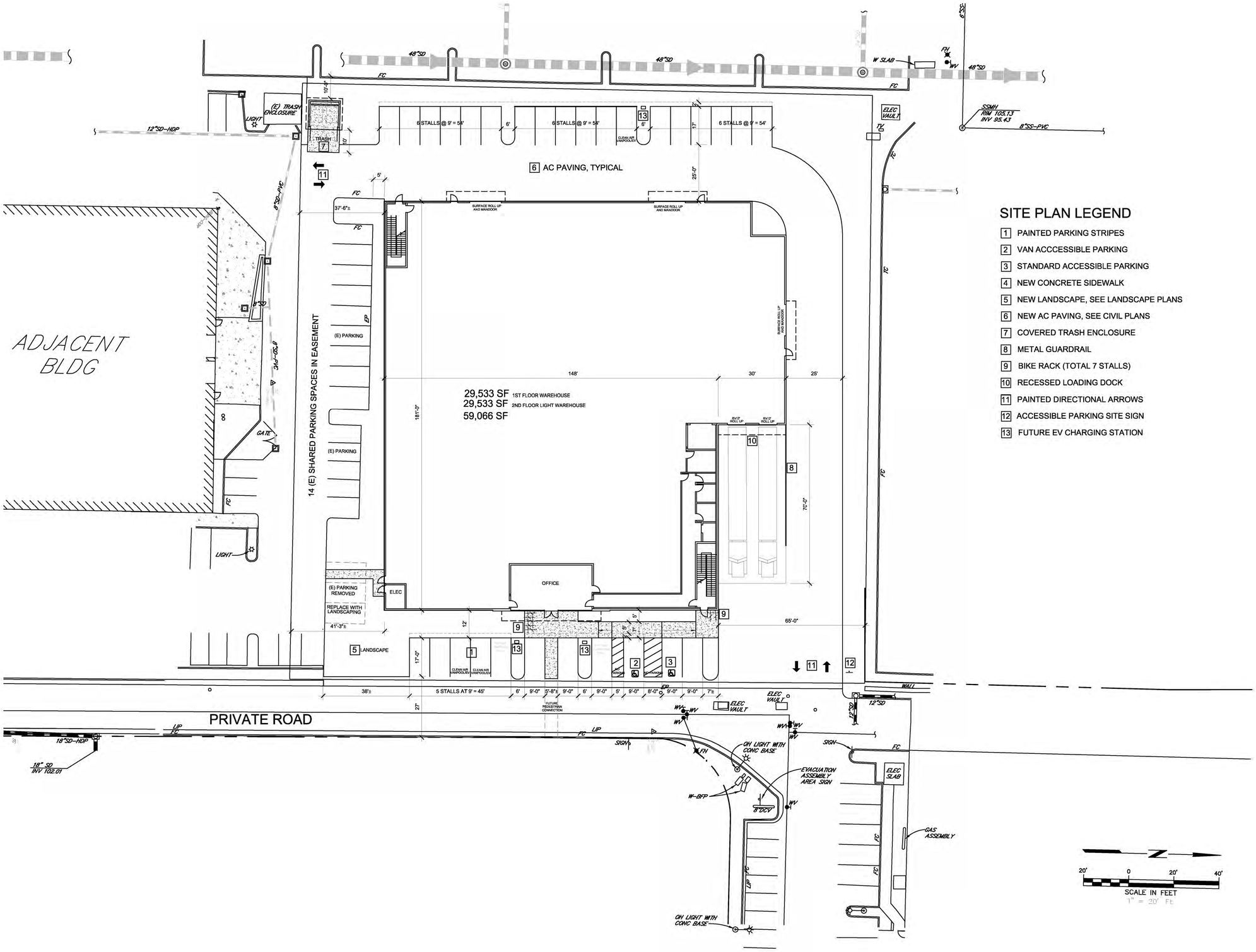
© Copyright 2020
Del Starrett Architect

SHEET TITLE

PROJECT INFORMATION

SHEET NUMBER

A0.0



SITE PLAN LEGEND

1. PAINTED PARKING STRIPES
2. VAN ACCCESSIBLE PARKING
3. STANDARD ACCESSIBLE PARKING
4. NEW CONCRETE SIDEWALK
5. NEW LANDSCAPE, SEE LANDSCAPE PLANS
6. NEW AC PAVING, SEE CIVIL PLANS
7. COVERED TRASH ENCLOSURE
8. METAL GUARDRAIL
9. BIKE RACK (TOTAL 7 STALLS)
10. RECESSED LOADING DOCK
11. PAINTED DIRECTIONAL ARROWS
12. ACCESSIBLE PARKING SITE SIGN
13. FUTURE EV CHARGING STATION

DEL STARRETT Architect

3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

PRELIMINARY DRAWING SUBJECT TO CHANGE

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A10
DRAWN BY:	KCT
SCALE:	1" = 20'

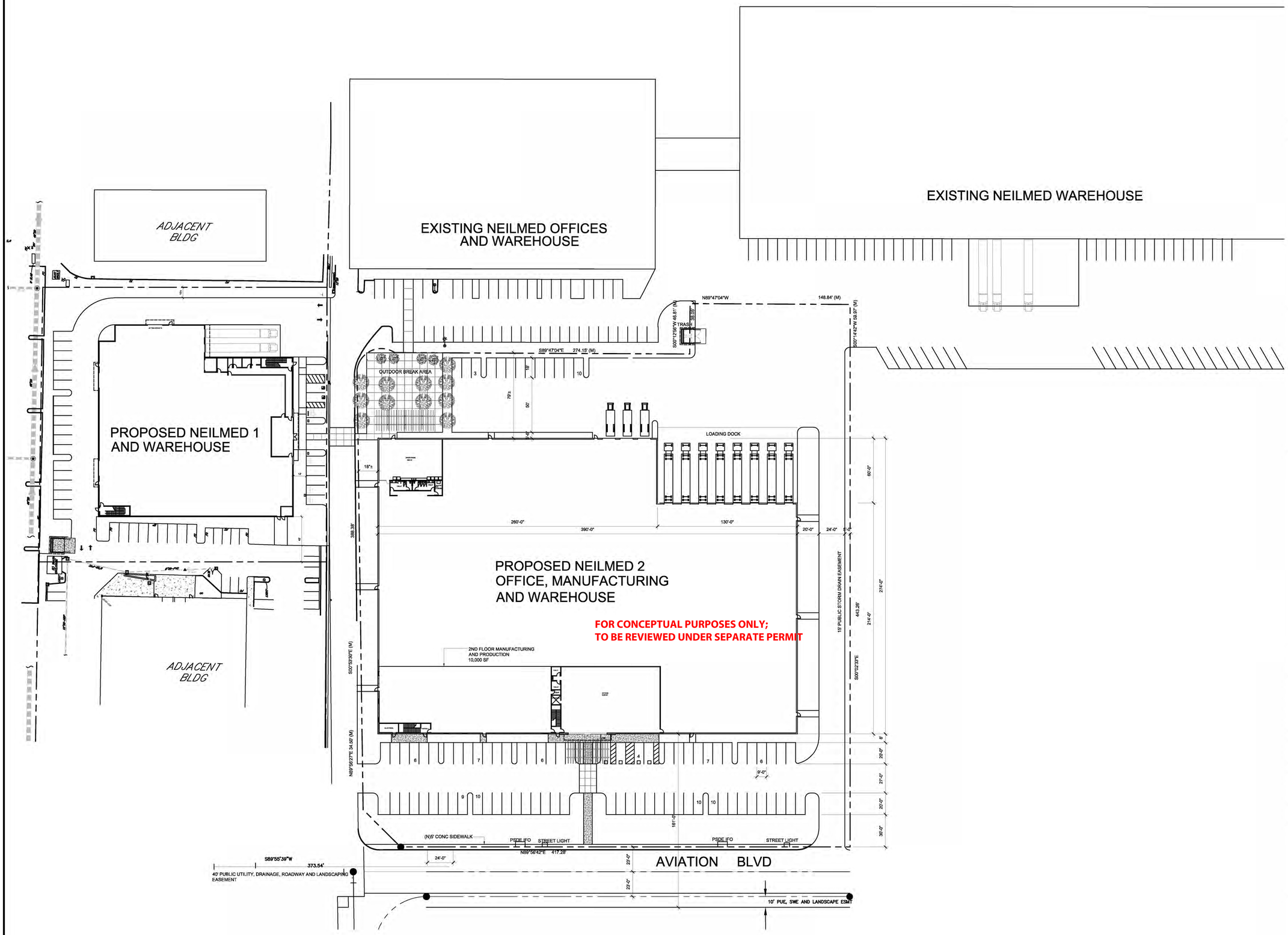
© Copyright 2020
Del Starrett Architect

SHEET TITLE

SITE PLAN

SHEET NUMBER

A1.0



DEL STARRETT Architect

3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

LICENSED ARCHITECT
ROBERT JOHN STARRETT
NO. C14023
REN. 7/31/21
STATE OF CALIFORNIA

PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A11
DRAWN BY:	KCT
SCALE:	1"=40'

© Copyright 2020
Del Starrett Architect

SHEET TITLE

VICINITY PLAN

SHEET NUMBER

A1.1



DEL STARRETT Architect

3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

LICENSED ARCHITECT
KENT JOHN STARRETT
NO. C14023
REN. 8/31/21
STATE OF CALIFORNIA

PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED WAREHOUSE

685 AVIATION BLVD

SANTA ROSA CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A12
DRAWN BY:	KCT
SCALE:	NONE

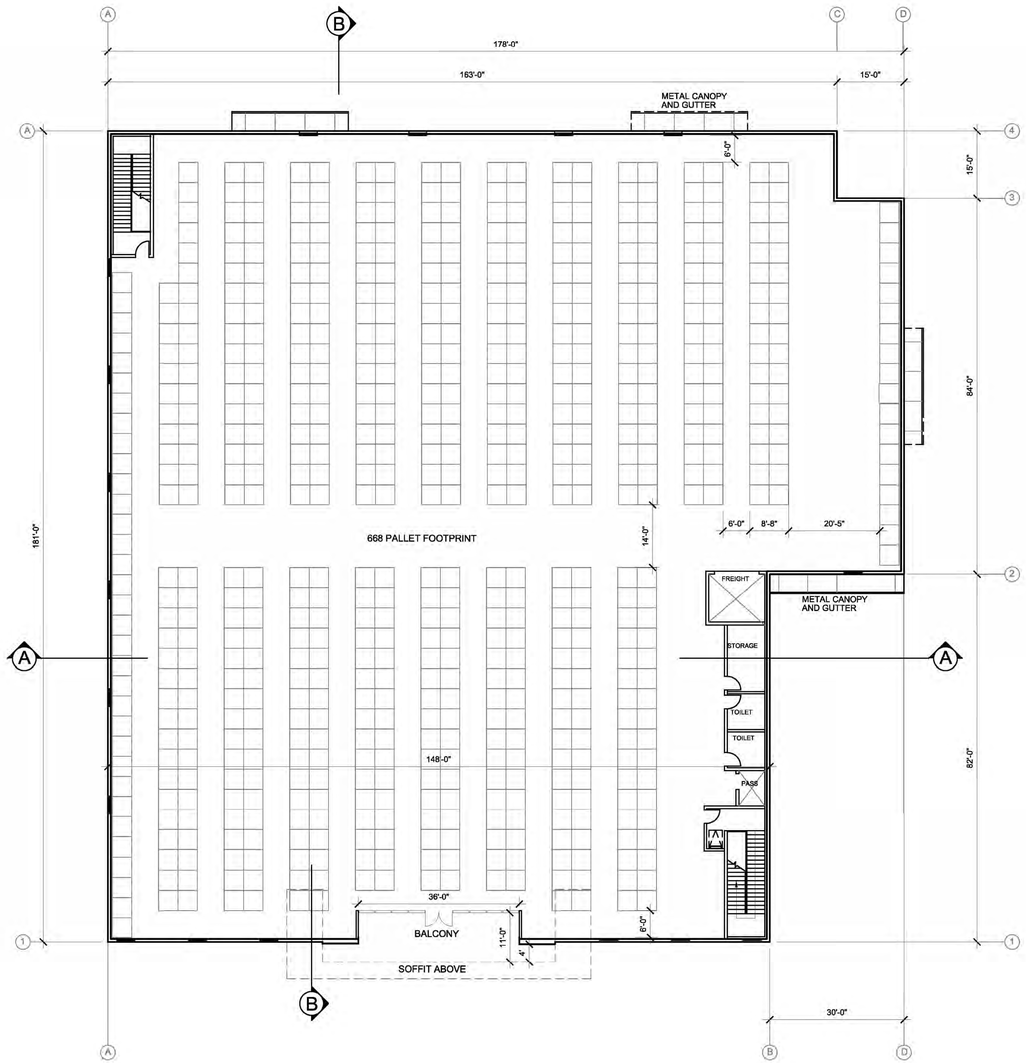
© Copyright 2020
Del Starrett Architect

SHEET TITLE

VICINITY AERIAL PLAN

SHEET NUMBER

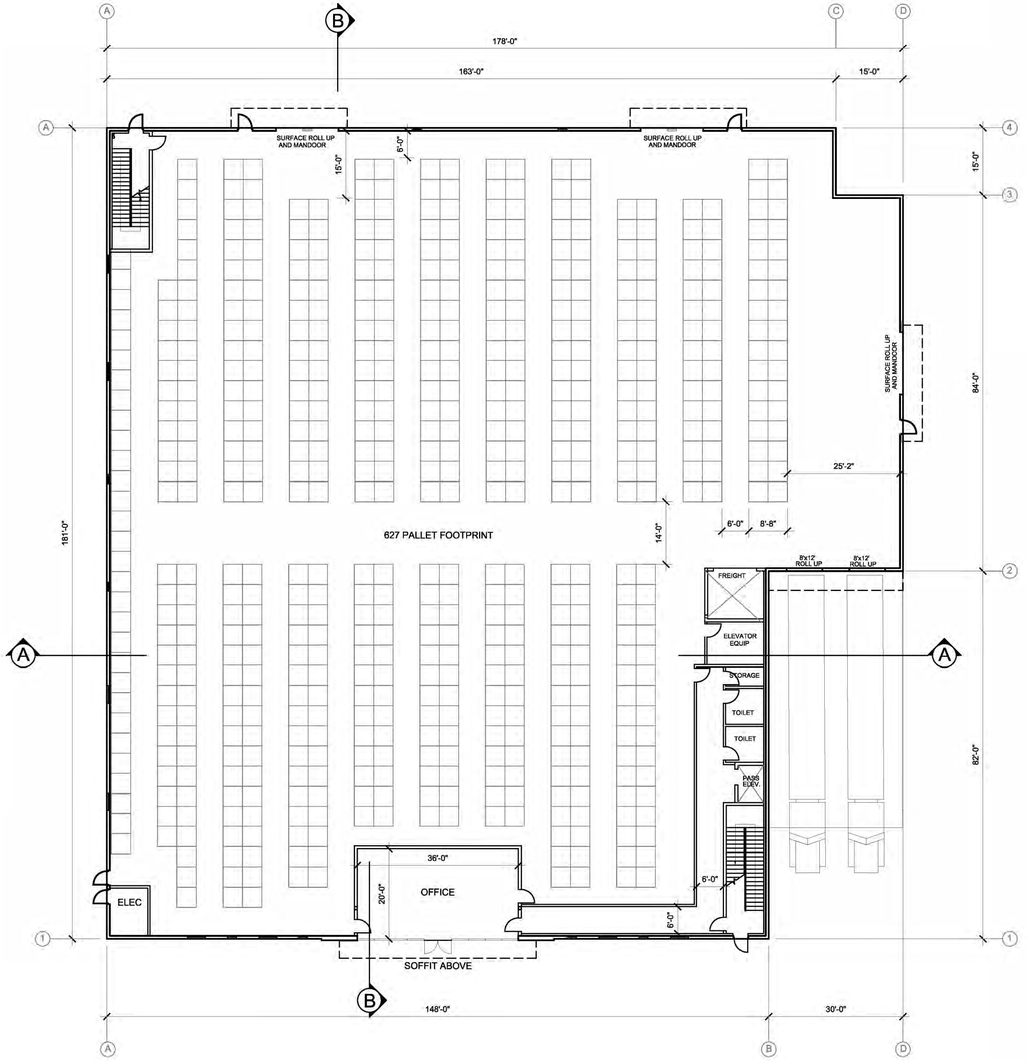
A1.2



0' 8' 16' 32'

1/16" = 1'-0"

2ND FLOOR PLAN



0' 8' 16' 32'

1/16" = 1'-0"

1ST FLOOR PLAN

DEL STARRETT Architect

3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

LICENSED ARCHITECT
JEFF JOHN STARRETT
No. C-15023
REN. 8/31/21
STATE OF CALIFORNIA

PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A20
DRAWN BY:	KCT
SCALE:	1/16"=1'-0"

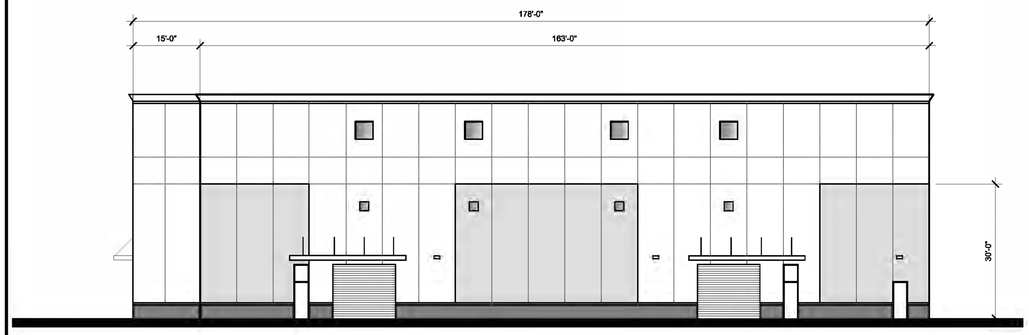
© Copyright 2020
Del Starrett Architect

SHEET TITLE

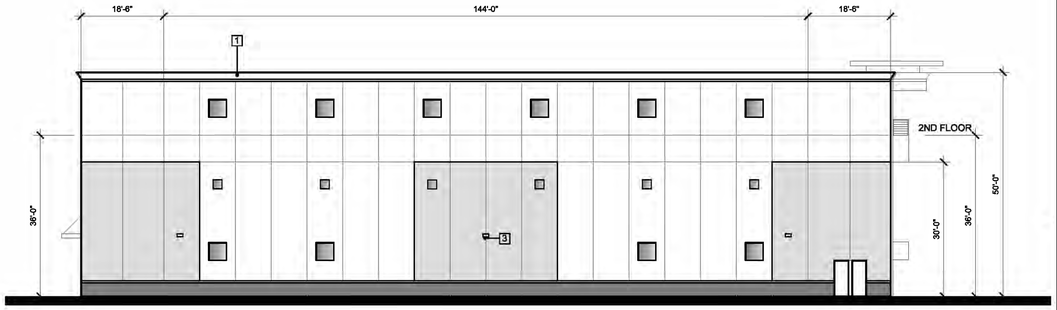
FLOOR PLANS

SHEET NUMBER

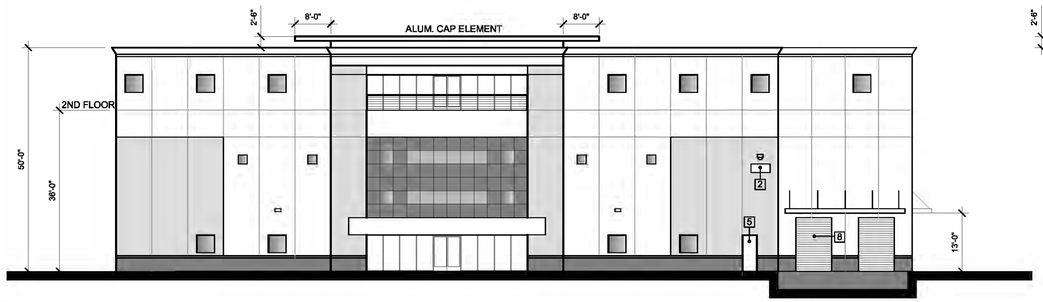
A2.0



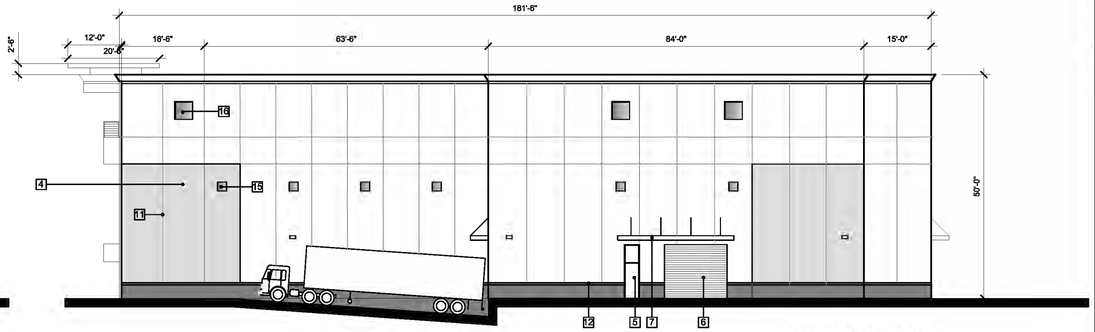
WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION



NORTH ELEVATION

LEGEND

1. CORNICE
2. 12" ADDRESS SIGN EXTERNALLY ILLUMINATED
3. WALL MOUNTED LIGHT SEE ELECTRICAL PLANS
4. 12" THICK PRECAST CONCRETE PANEL
5. METAL MANDOOR
6. METAL SURFACE OVERHEAD DOOR
7. METAL CANOPY
8. METAL OVERHEAD DOORS AT RECESSED LOADING
9. ENTRANCE STOREFRONT
10. ALUM STOREFRONT WINDOWS
11. CONCRETE PANEL VERTICAL JOINT
12. HORIZONTAL REVEALS IN CONCRETE PANEL
13. 2ND FLOOR BALCONY
14. 42" GUARDRAIL
15. 24" x 24" WINDOWS
16. 48" x 48" WINDOWS
17. SPANDRAL GLASS
18. 18" THICK PRECAST CONCRETE PANEL
19. 10' DEEP ENTRY CANOPY

0' 8' 16' 32'

1/16" = 1'-0"

DEL STARRETT Architect

3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

PRELIMINARY DRAWING
SUBJECT TO CHANGE

LICENSED ARCHITECT
DEL STARRETT JOHN STARRETT
NO. C14023
REN. 7/31/21
STATE OF CALIFORNIA

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A30
DRAWN BY:	KCT
SCALE:	1/16" = 1'-0"

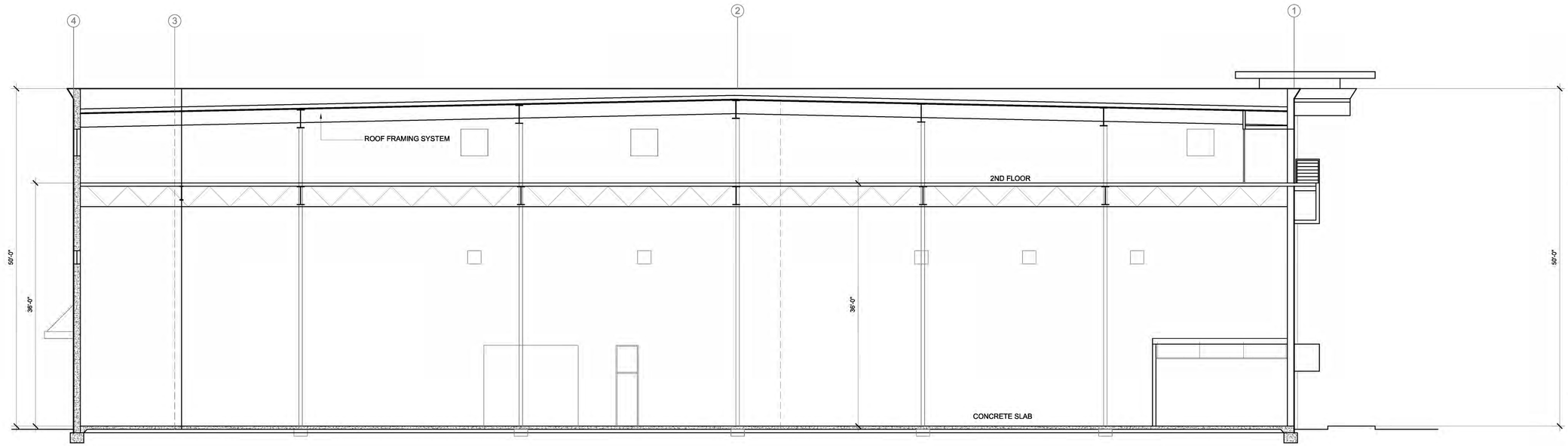
© Copyright 2020
Del Starrett Architect

SHEET TITLE

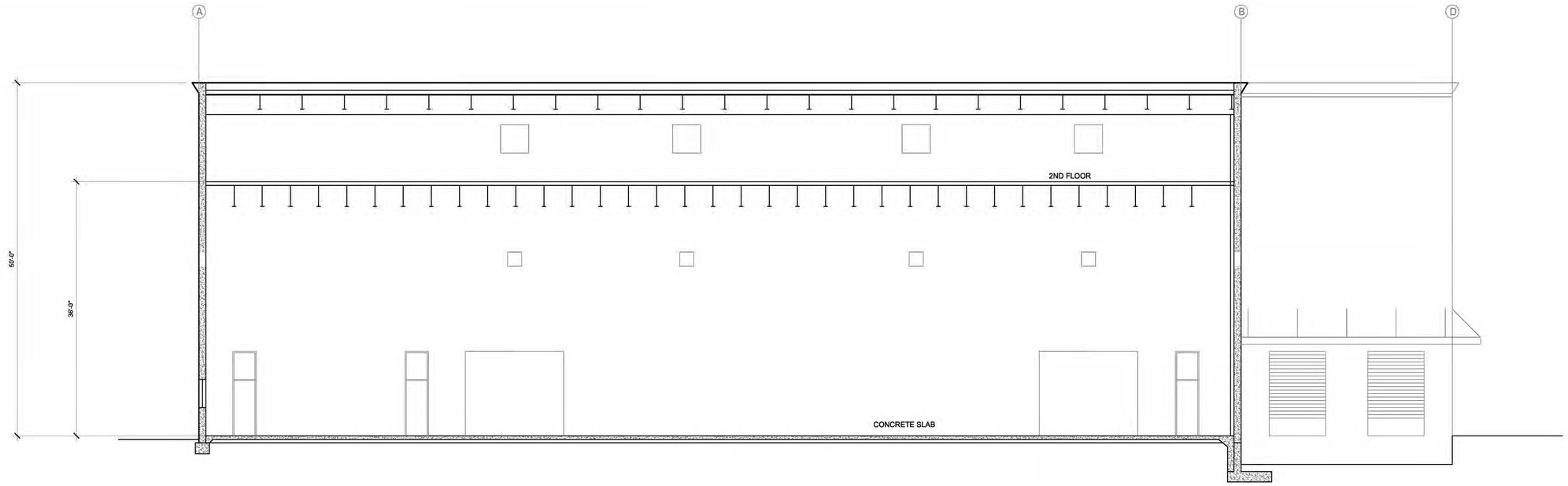
ELEVATIONS

SHEET NUMBER

A3.0



SECTION A-A



SECTION B-B

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

LICENSED ARCHITECT
JEFF JOHN STARRETT
No. C-15023
REN. 8/31/21
STATE OF CALIFORNIA

PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	1807
CAD DWG FILE:	A40
DRAWN BY:	KCT
SCALE:	1/8"= 1'-0"

© Copyright 2020
Del Starrett Architect

SHEET TITLE

BLDG SECTIONS

SHEET NUMBER

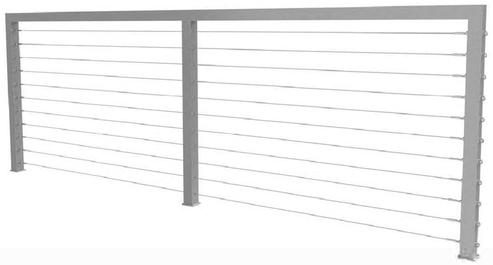
A4.0



BALCONY GUARDRAIL



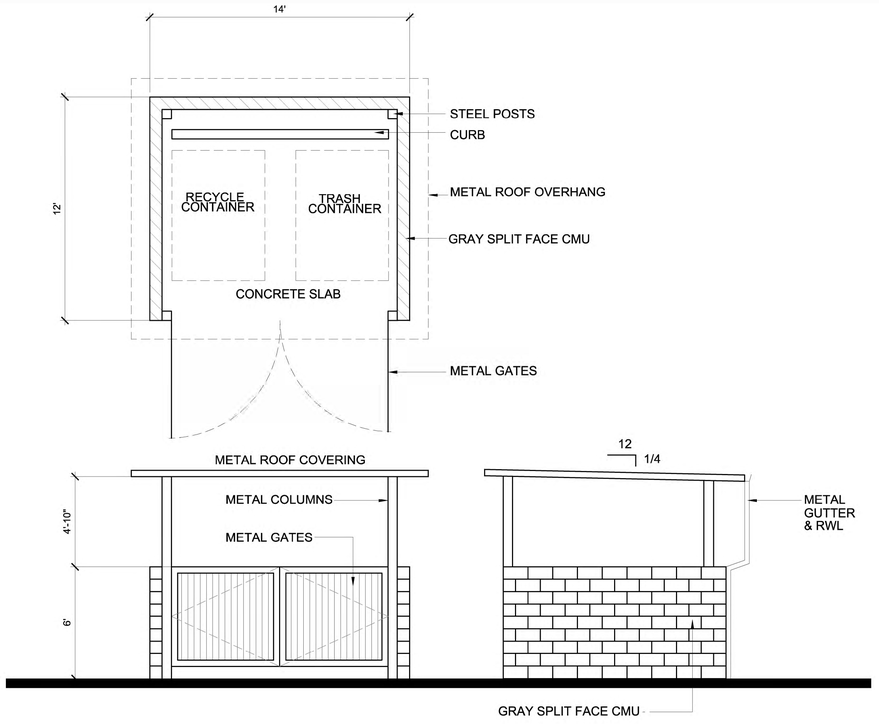
SITE POLE LIGHT FIXTURE



BALCONY GUARDRAIL DETAIL



BUILDING MOUNTED LIGHT FIXTURE

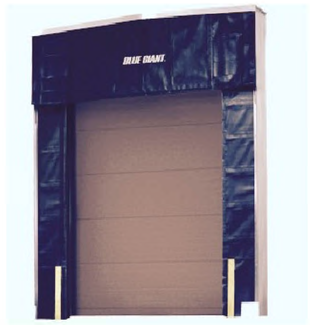


TRASH ENCLOSURE



LOADING DOCK GUARDRAIL

ADDRESS NUMERALS



LOADING DOCK DOOR SEALS



OVERHEAD DOOR METAL CANOPY



BIKE RACK

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

SEAL

LICENSED ARCHITECT ROBERT JOHN STARRETT NO. C14023 REN. 8/31/21 STATE OF CALIFORNIA

PRELIMINARY DRAWING
SUBJECT TO CHANGE

NEILMED
WAREHOUSE

685 AVIATION BLVD
SANTA ROSA , CA 95403

REV	DATE	DESCRIPTION
	3/15/20	DESIGN REVIEW SUBMITTAL 2
	8/25/19	DESIGN REVIEW SUBMITTAL 1

PROJECT NO:	
CAD DWG FILE:	A50
DRAWN BY:	KCT
SCALE:	NONE

© Copyright 2020
Del Starrett Architect

SHEET TITLE

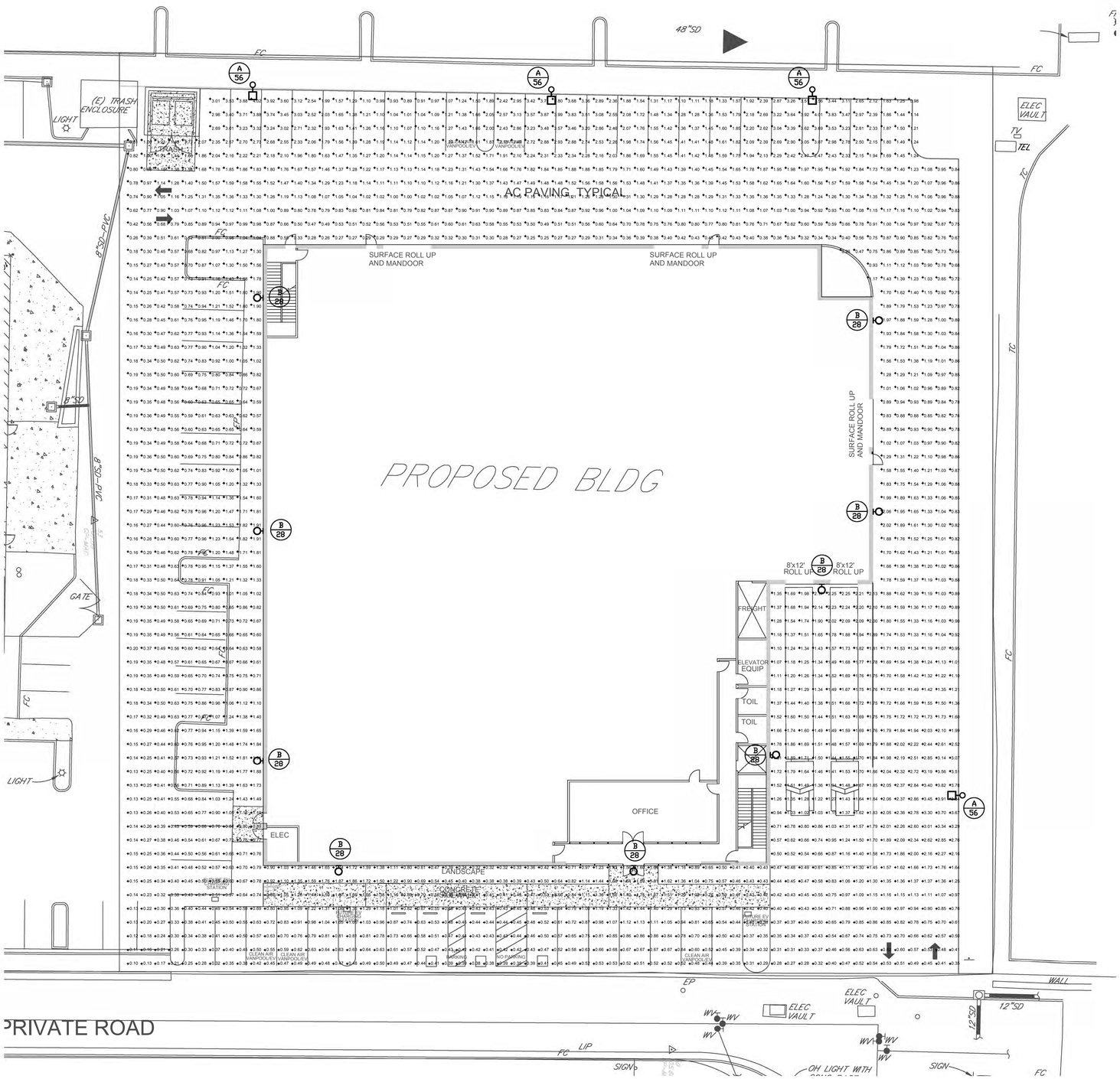
SITE FEATURES

SHEET NUMBER

A5.0

LIGHTING FIXTURE SCHEDULE

TAG	MANUFACTURER	DESCRIPTION	LAMPS	WATTS	COLOR	MOUNTING
A	GARDCO ECF-S-32L-400-AM-G2-AR-3-UNV-DD-CM50-IMR3-BZ SSS5-14'-7-D1	14' POLE LIGHT WITH MOTION SENSOR AND DIMMING SINGLE HEADED POLE	LED	56	DARK BRONZE	POLE
B	GARDCO 101L-16L-530-NW-G1-3-EBPC-UNV-DD-BZ	WALL MOUNTED SCONCE	LED	28	DARK BRONZE	WALL



POINT-BY-POINT

SCALE: 1/16" = 1' - 0"

ELECTRICAL SYMBOLS LEGEND

NOTE: ALL OF THESE SYMBOLS MAY NOT NECESSARILY APPEAR ON THE DRAWINGS
DASHED LINETYPE INDICATES EXISTING DEVICE OR EQUIPMENT

A / 90	FIXTURE TAG: TYPE 'A', 90-VOLT AMPERES
	FLUORESCENT FIXTURE, RECESSED
	FLUORESCENT FIXTURE, SURFACE
	FLUORESCENT FIXTURE, WALL MOUNTED
	FLUORESCENT INDUSTRIAL OR OPEN STRIP
	POLE LIGHT
	WALL LIGHT
	RECESSED CAN LIGHT
1 / E1.1	DETAIL TAG: DETAIL #1, SHEET E1.1
	GROUNDING ELECTRODE OR CONNECTION
AFF	ABOVE FINISHED FLOOR (TO CENTER LINE)
AFG	ABOVE FINISHED GRADE (TO CENTER LINE)
CO	CONDUIT ONLY (PROVIDE PULL-LINE)
EMS	ENERGY MANAGEMENT SYSTEM
(E)	EXISTING
GRD	GROUND
GFI	GROUND FAULT INTERRUPTER
IG	ISOLATED GROUND
PBO	PROVIDED BY OTHERS
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

This drawing and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Joe Lunardi Electric, Inc. and is not to be used, in whole or in part, for any other project without written authorization of Joe Lunardi Electric, Inc.

LUNARDI ELECTRIC

50 Years of Electrical Excellence

License No. 315543

5334 Sebastopol Road
P.O. Box 120
Sebastopol, CA 95473
T: (707) 545-4755
F: (707) 579-1757

REGISTERED PROFESSIONAL ENGINEER BRIAN C. WORKMAN No. 13494 Exp. 06/30/19 ELECTRICAL STATE OF CALIFORNIA

ISSUE:	DESCRIPTION:	DATE:

NEILMED WAREHOUSE

685 AVIATION BLVD
SANTA ROSA, CA 95403

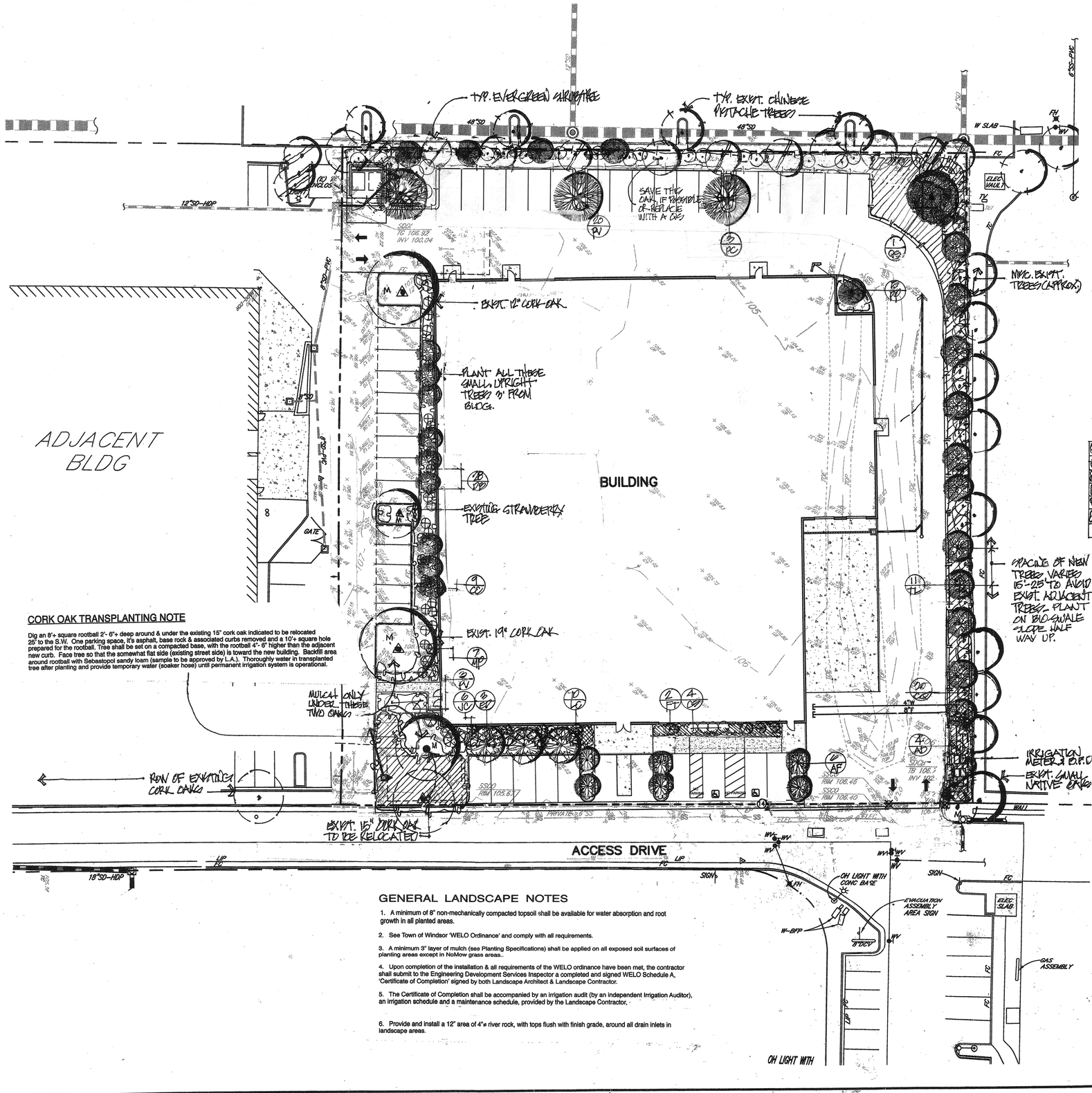
SYMBOL LEGEND, FIXTURE SCHEDULE AND POINT-BY POINT

Date: APRIL 9, 2019

Drawn: BCW | Checked by: BCW

Job #: | Scale: AS NOTED

E1.0



CORK OAK TRANSPLANTING NOTE

Dig an 8'+ square rootball 2'- 6"+ deep around & under the existing 15" cork oak indicated to be relocated 25' to the S.W. One parking space, it's asphalt, base rock & associated curbs removed and a 10'+ square hole prepared for the rootball. Tree shall be set on a compacted base, with the rootball 4"- 6" higher than the adjacent new curb. Face tree so that the somewhat flat side (existing street side) is toward the new building. Backfill area around rootball with Sebastopol sandy loam (sample to be approved by L.A.). Thoroughly water in transplanted tree after planting and provide temporary water (soaker hose) until permanent irrigation system is operational.

GENERAL LANDSCAPE NOTES

1. A minimum of 8" non-mechanically compacted topsoil shall be available for water absorption and root growth in all planted areas.
2. See Town of Windsor 'WELO Ordinance' and comply with all requirements.
3. A minimum 3" layer of mulch (see Planting Specifications) shall be applied on all exposed soil surfaces of planting areas except in NoMow grass areas..
4. Upon completion of the installation & all requirements of the WELO ordinance have been met, the contractor shall submit to the Engineering Development Services Inspector a completed and signed WELO Schedule A, 'Certificate of Completion' signed by both Landscape Architect & Landscape Contractor.
5. The Certificate of Completion shall be accompanied by an irrigation audit (by an independent Irrigation Auditor), an irrigation schedule and a maintenance schedule, provided by the Landscape Contractor,
6. Provide and install a 12" area of 4"+ river rock, with tops flush with finish grade, around all drain inlets in landscape areas.

PLANT LEGEND

ABBR.	PLANT SPECIES (Botanical & Common Names)	SIZE	QTY.	NOTES	WATER USE
	TREES				
A F	*Acer freemanii 'Armstrong'* Narrow, Upright, Armstrong Maple	15 Gal.	6	Standard	Moderate
C A	*Callistemon citrinus* Bottlebrush	15 Gal.	9	Low Standard	Low
E D	*Eriobotrya deflexa* Bronze Loquat	24" Box	3	Standard	Moderate
J C	*Juniperus chinensis 'Skyrocket'* Narrow, Upright Juniper	15 Gal.	6	Natural Form	Low
P C	*Pistacia chinensis 'Keith Davey'* Male Chinese Pistache	24" Box	2	Standard	Low
P P	*Pinus canariensis* Canary Island Pine	24" Box	5	Natural Form	Low
Q S	*Quercus suber* Cork Oak	24" Box	1	Natural Form	Low
T L	*Tristaniopsis laurina* Water Gum	15 Gal.	11	Standard	Moderate
	SHRUBS & PERENNIALS				
A D	*Arctostaphylos densiflora 'McMinn'* McMinn Manzanita	5 Gal.	4		Low
C S	*Camellia sasanqua 'Sishi Gashira'* Pink, Spreading Sasanqua Camellia	5 Gal.	4		Moderate
C Q	*Chaenomeles 'Cameo'* Pink, Compact Flowering Quince	5 Gal.	20		Low
D B	*Dietes bicolor* Yellow Fortnight Lily	5 Gal.	28		Low
F T	*Fuchsia thymifolius* Fuchsia	5 Gal.	2		Moderate
L C	*Loropetalum chinensis 'Purple Majesty'* Purpleleaf Chinese Fringe Bush	5 Gal.	10		Low
M L	*Mahonia lomariifolia* Chinese Grape Holly	15 Gal.	7	Multi-stem	Moderate
P V	*Pittosporum tobira 'Variegata'* Variegated Tobira	5 Gal.	20		Low
	GROUND COVERS				
	Carex flagellifera or C. testacea Brown or Orange Sedge	1 Gal.	2' c.c.	.	Moderate
	Coprosma kirkii ** Spreading Coprosma	1 Gal.	3' c.c.	.	Low
	Lantana montevidensis Purple Lantana	1 Gal.	2' c.c.	.	Low
	Myoporum parvifolium 'Putah Creek' ** Prostrate Myoporum	1 Gal.	4' c.c.		Low
	Trachelospermum jasminoides Star Jasmine -	1 Gal.	18" c.c.		Moderate
	Festuca rubra Blend/No-Mow Native Clumping Grasses No-Mow Red Fescue Blend	Sod	Solid		Low
M	Mulch Only				

PLANTING NOTES

1. If any landscape areas are 'lime treated', remove all soil in these areas to a depth of three (3) feet & replace with stockpiled onsite topsoil or amended sandy loam topsoil, from a source approved by the Landscape Architect.

2.. Install 18" deep 10' long root barriers adjacent to all walkways, building foundations, curbs, etc. centered opposite all new trees installed within 6' of any pavement or structures.

3. Maintain grades, drainage swales, etc. in all landscape areas per the Civil Engineer's plans, allowing for the required three (3) inches of mulch (see Specifications), except in bottom of drainage swales where there shall be no mulch. Clean up weeds, etc. under the existing trees to be saved as well as all other areas to be landscaped

4. No substitution of plant species or varieties, or their specified sizes, shall be allowed without the written approval of the Landscape Architect. Any incorrect species or varieties shipped to the site, or any plant rejected by the L. A. for poor size or quality, shall be returned at no cost to the Owner or L. A. Landscape Contractor to provide to the L.A. photos of all boxed trees for approval prior to shipment.

5.. Mulch to be 3" deep and held away 12" from existing tree's trunks.

6. Any compacted soils encountered in landscape areas shall be transformed to a friable condition prior to planting (also see Planting Specifications).

7. Incorporate into topsoil Redwood Soil Amendment (RSA) at the rate of 6 cu. yds./1,000 sq. ft. in all planting areas, except vegetated swales, Rototill in to a depth of 8" and maintain all grades on civil engineer's grading plan. The Landscape Contractor shall collect a sample of the topsoil prior to the addition of the RSA, and have a Horticultural Soil Analysis performed by a lab once the grading, with the topsoil, is completed. The lab report, with recommendations, will be includ soil texture, infiltration rate, pH, total soluble salts, sodium & percent of organic matter (send lab a copy of Town's WELO ordinance #2015-73 section 12.3.912 Soil Analysis Report). A copy of the lab's results & recommendations shall be sent to the Landscape Architect &, upon his approval, & after approval of the additional costs by the Owner, these shall be added to the Land. Contr. responsibly to provide & install. Documentation (copies of receipts, delivery tags, etc.) verifying implementation of the soils analysis report recommendations shall be submitted to the General Contractor and the Town, along with a copy of the lab's report, to show that the work required has been completed.

8.. Quantities in Plant Legend are approximate only & Landscape Contractor is required to provide all plants shown on the plans.

9. Hydorzones are shown on the Irrigation Plan only, sheet L-2, as the scale of this plan does not allow them to be shown here also.

10. Plant three rows of sedge plants in finger islands and all other 6' to 7' areas where it is shown. Plant the same number of rows of Star Jasmine in it's areas.

11. All plant material supplied to this job shall not have been treated in any way with 'neonicotinoids' or similar chemicals. Supplying nurseries shall submit with each shipment a certification that their plant material has not been treated with these types of chemicals. Any shipments not complying with this shall be returned at no cost to the Owners or Landscape Architect.

20' 0 20' 40'
SCALE IN FEET
1" = 20' Ft.

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

PARKER SMITH
LANDSCAPE ARCHITECT
CA LIC. #1264
1945 PINER RD. #25,
SANTA ROSA, CA 95403
(707) 477-7502

SEAL

REV	DATE	DESCRIPTION

PROJECT NO: 18/13
CAD DWG FILE:
DRAWN BY:
SCALE: 1" = 20'

© Copyright 2018 Del Starrett Architect

3-23-20

SHEET TITLE

LANDSCAPE PLANTING PLAN

NEILMED WAREHOUSE

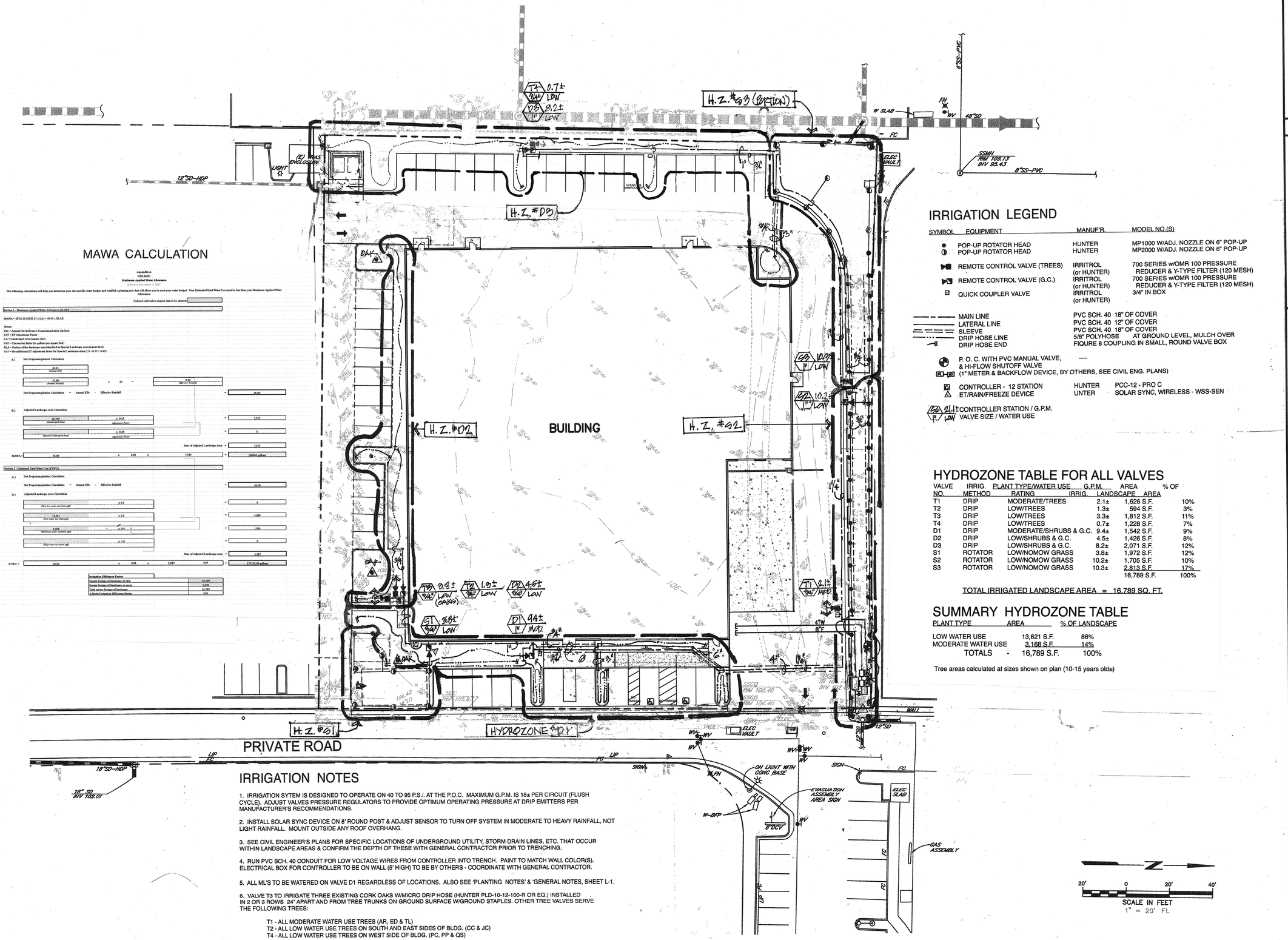
685 AVIATION BLVD

SANTA ROSA CA 95403

SHEET NUMBER

L-1

of 3



MAWA CALCULATION

Appendix A
NEILMED
Maximum Applied Water Allowance
Effective December 1, 2015

The following calculations will help you determine your site specific water budget and establish a planting mix that will allow you to meet your water budget. Your Estimated Total Water Use must be less than your Maximum Applied Water Allowance.

Colored cells below require data to be entered

1.1 Section 1 - Maximum Applied Water Allowance (MAWA)

MAWA = (ETo) (0.62)((0.55 x LA) + (0.45 x SLA))

Where:
ETo = Annual Net Reference Evapotranspiration (inches)
0.55 = ET Adjustment Factor
LA = Landscaped Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
0.45 = the additional ET adjustment factor for Special Landscape Area (1.0 - 0.55 = 0.45)

A.1 Net Evapotranspiration Calculation

46.31 (Annual ETo)				
32.86 (Effective Rainfall)	x .55 =	8.24 (Adjustment Factor)		
Net Evapotranspiration Calculation = Annual ETo - Effective Rainfall			=	36.00

B.1 Adjusted Landscape Area Calculation

16,789 (Landscaped Area)	x 0.45 (Adjustment Factor)	=	7,555
0 (Special Landscaped Area)	x 0.45 (Adjustment Factor)	=	0
	Sum of Adjusted Landscape Area	=	7,555
MAWA = 36.00	x 0.62 x 7,555	=	168604 gallons

1.2 Section 2 - Estimated Total Water Use (ETWU)

A.2 Net Evapotranspiration Calculation

Net Evapotranspiration Calculation = Annual ETo - Effective Rainfall		=	36.00

B.2 Adjusted Landscape Area Calculation

0 (Very low water use plant sqft)	x 0.1	=	0
13,621 (Low water use plant sqft)	x 0.3	=	4,086
3,168 (Medium water use plant sqft)	x 0.6	=	1,901
0 (High water use plant sqft)	x 1.0	=	0
	Sum of Adjusted Landscape Area	=	5,987
ETWU = 36.00	x 0.62 x 5,987 x 0.81	=	133,781.09 gallons

Irrigation Efficiency Factor	
Square footage of landscape on drip	10,259
Square footage of landscape on spray	6,530
Total square footage of landscape	16,789
Calculated Irrigation Efficiency Factor	0.81

IRRIGATION LEGEND

SYMBOL	EQUIPMENT	MANUF'R.	MODEL NO.(S)
●	POP-UP ROTATOR HEAD	HUNTER	MP1000 W/ADJ. NOZZLE ON 6" POP-UP
◐	POP-UP ROTATOR HEAD	HUNTER	MP2000 W/ADJ. NOZZLE ON 6" POP-UP
▬●	REMOTE CONTROL VALVE (TREES)	IRRITROL (or HUNTER)	700 SERIES w/OMR 100 PRESSURE REDUCER & Y-TYPE FILTER (120 MESH)
▬◐	REMOTE CONTROL VALVE (G.C.)	IRRITROL (or HUNTER)	700 SERIES w/OMR 100 PRESSURE REDUCER & Y-TYPE FILTER (120 MESH)
⊡	QUICK COUPLER VALVE	IRRITROL (or HUNTER)	3/4" IN BOX
———	MAIN LINE		PVC SCH. 40 18" OF COVER
———	LATERAL LINE		PVC SCH. 40 12" OF COVER
= = = =	SLEEVE		PVC SCH. 40 18" OF COVER
·····	DRIP HOSE LINE		5/8" POLYHOSE AT GROUND LEVEL, MULCH OVER
⊣	DRIP HOSE END		FIQURE 8 COUPLING IN SMALL, ROUND VALVE BOX
⊕	P. O. C. WITH PVC MANUAL VALVE, & HI-FLOW SHUTOFF VALVE (1" METER & BACKFLOW DEVICE, BY OTHERS, SEE CIVIL ENG. PLANS)		----
C ET	CONTROLLER - 12 STATION ET/RAIN/FREEZE DEVICE	HUNTER UNTER	PCC-12 - PRO C SOLAR SYNC, WIRELESS - WSS-SEN
D3 8.2± 1" LOW	CONTROLLER STATION / G.P.M. VALVE SIZE / WATER USE		

HYDROZONE TABLE FOR ALL VALVES

VALVE NO.	IRRIG. METHOD	PLANT TYPE/WATER USE RATING	G.P.M. IRRIG.	AREA LANDSCAPE AREA	% OF AREA
T1	DRIP	MODERATE/TREES	2.1±	1,626 S.F.	10%
T2	DRIP	LOW/TREES	1.3±	594 S.F.	3%
T3	DRIP	LOW/TREES	3.3±	1,812 S.F.	11%
T4	DRIP	LOW/TREES	0.7±	1,228 S.F.	7%
D1	DRIP	MODERATE/SHRUBS & G.C.	9.4±	1,542 S.F.	9%
D2	DRIP	LOW/SHRUBS & G.C.	4.5±	1,426 S.F.	8%
D3	DRIP	LOW/SHRUBS & G.C.	8.2±	2,071 S.F.	12%
S1	ROTATOR	LOW/NOMOW GRASS	3.8±	1,972 S.F.	12%
S2	ROTATOR	LOW/NOMOW GRASS	10.2±	1,705 S.F.	10%
S3	ROTATOR	LOW/NOMOW GRASS	10.3±	2,813 S.F.	17%
				16,789 S.F.	100%

TOTAL IRRIGATED LANDSCAPE AREA = 16,789 SQ. FT.

SUMMARY HYDROZONE TABLE

PLANT TYPE	AREA	% OF LANDSCAPE
LOW WATER USE	13,621 S.F.	86%
MODERATE WATER USE	3,168 S.F.	14%
TOTALS -	16,789 S.F.	100%

Tree areas calculated at sizes shown on plan (10-15 years old±)

IRRIGATION NOTES

1. IRRIGATION SYTEM IS DESIGNED TO OPERATE ON 40 TO 95 P.S.I. AT THE P.O.C. MAXIMUM G.P.M. IS 18± PER CIRCUIT (FLUSH CYCLE). ADJUST VALVES PRESSURE REGULATORS TO PROVIDE OPTIMUM OPERATING PRESSURE AT DRIP EMITTERS PER MANUFACTURER'S RECOMMENDATIONS.

2. INSTALL SOLAR SYNC DEVICE ON 8' ROUND POST & ADJUST SENSOR TO TURN OFF SYSTEM IN MODERATE TO HEAVY RAINFALL, NOT LIGHT RAINFALL. MOUNT OUTSIDE ANY ROOF OVERHANG.

3. SEE CIVIL ENGINEER'S PLANS FOR SPECIFIC LOCATIONS OF UNDERGROUND UTILITY, STORM DRAIN LINES, ETC. THAT OCCUR WITHIN LANDSCAPE AREAS & CONFIRM THE DEPTH OF THESE WITH GENERAL CONTRACTOR PRIOR TO TRENCHING.

4. RUN PVC SCH. 40 CONDUIT FOR LOW VOLTAGE WIRES FROM CONTROLLER INTO TRENCH. PAINT TO MATCH WALL COLOR(S). ELECTRICAL BOX FOR CONTROLLER TO BE ON WALL (5' HIGH) TO BE BY OTHERS - COORDINATE WITH GENERAL CONTRACTOR.

5. ALL ML'S TO BE WATERED ON VALVE D1 REGARDLESS OF LOCATIONS. ALSO SEE 'PLANTING NOTES' & 'GENERAL NOTES, SHEET L-1.

6. VALVE T3 TO IRRIGATE THREE EXISTING CORK OAKS W/MICRO DRIP HOSE (HUNTER PLD-10-12-100-R OR EQ.) INSTALLED IN 2 OR 3 ROWS 24" APART AND FROM TREE TRUNKS ON GROUND SURFACE W/GROUND STAPLES. OTHER TREE VALVES SERVE THE FOLLOWING TREES:

T1 - ALL MODERATE WATER USE TREES (AR, ED & TL)
T2 - ALL LOW WATER USE TREES ON SOUTH AND EAST SIDES OF BLDG. (CC & JC)
T4 - ALL LOW WATER USE TREES ON WEST SIDE OF BLDG. (PC, PP & QS)

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

PARKER SMITH
LANDSCAPE ARCHITECT
CA LIC. #1264
1945 PINER RD. #25,
SANTA ROSA, CA 95403
(707) 477-7502

SEAL

REGISTERED LANDSCAPE ARCHITECT PARKER SMITH SIGNATURE DATE 3/23/20 STATE OF CALIFORNIA

NEILMED WAREHOUSE

685 AVIATION BLVD

SANTA ROSA CA 95403

REV	DATE	DESCRIPTION

PROJECT NO: 18/13
CAD DWG FILE: —
DRAWN BY: EKH
SCALE: 1" = 20'

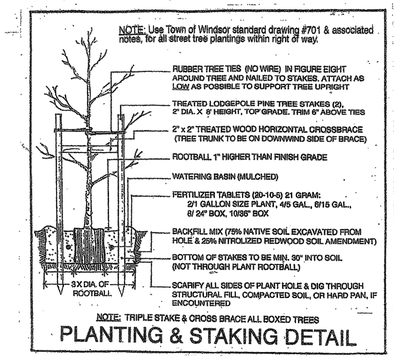
© Copyright 2018 Del Starrett Architect 3-23-20

SHEET TITLE

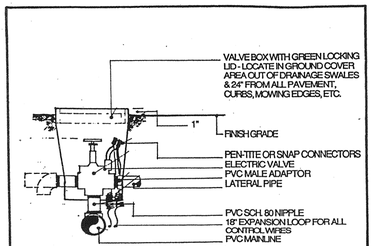
LANDSCAPE IRRIGATION PLAN

SHEET NUMBER

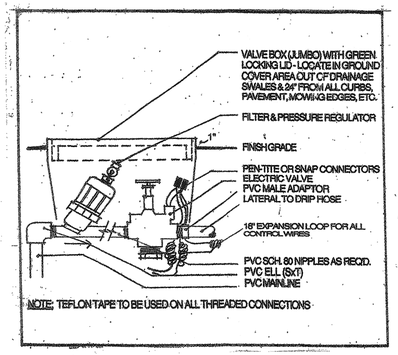
L-2 of 3



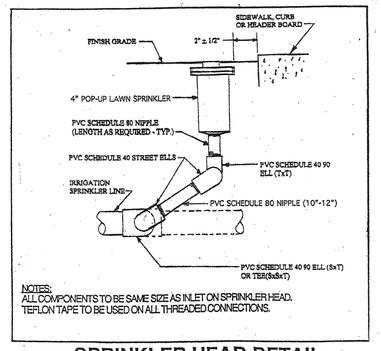
PLANTING & STAKING DETAIL



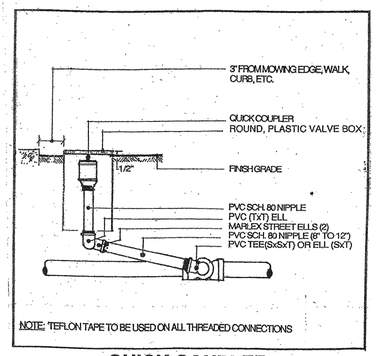
SPRINKLER VALVE DETAIL



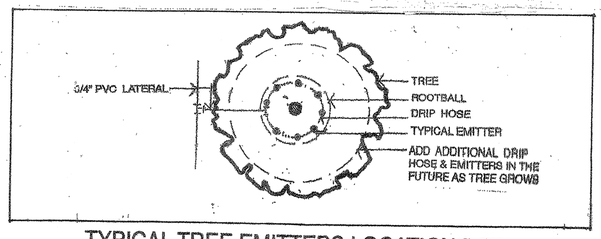
DRIP VALVE DETAIL



SPRINKLER HEAD DETAIL



QUICK COUPLER



TYPICAL TREE EMITTERS LOCATION DETAIL

PLANTING SPECIFICATIONS

All installations shall conform to the appropriate City, County and/or State Agricultural codes, ordinances, laws, rules and/or regulations. In cases of damage due to carelessness, the Contractor shall forfeit an amount in proportion to the extent of damage determined by the Landscape Architect.

All materials shall be new and as indicated on this drawing, details and/or as specified herein. All plants shall be healthy, shapely, well-rooted (not root-bound or with kinked or circling roots), free from insects, pests or plant diseases and properly hardened off. All plants shall be labeled as to species and nursery in which they were purchased or originated. All plants shall be exactly as designated in the Plant Legend as to species, size, form, etc. No plant substitutions will be acceptable without the written approval of the Landscape Architect. No bareroot ground covers will be accepted. Trees shall be nursery grown container stock of first quality. Trees will not be accepted which have had their leaders cut or which have leaders damaged so that pruning is necessary. No trees shall be accepted that will not stand on their own trunks after the nursery stake has been removed. Pruning shall not be done except as directed by the Landscape Architect. Tree stakes shall be treated lodgepole pine stakes, top grade, and of the diameter and length indicated on the detail. Cross braces shall be fir or pine.

All areas of existing soil that are to be planted on this site, as shown on sheet L-1 of the plans, including tree holes, islands, etc. in paved areas (if any), that are in areas that have been lime treated for compaction, shall have all such treated soils excavated from the planting areas and removed from the site. The depth of excavation shall be equal to, or greater than, the depth of the lime treatment (8" minimum). These areas shall then be backfilled with topsoil either from stockpiled onsite material or imported topsoil from a source approved by the Landscape Architect. Contractor shall submit to the Landscape Architect for approval and prior to installing any landscape improvements, copies of all delivery tags for imported topsoil that is delivered to the site to replace the lime treated soils, Contractor shall coordinate with the Landscape Architect and Soil Engineer to determine how close to the building lime treated soils can be removed and if this edge should be cut at an angle away from the building, etc. prior to beginning this work.

All areas to be planted shall have a minimum of 12" of non-compacted, well draining topsoil. If topsoil is needed in any area, it shall be 'Amended Topsoil' as available from United Forest Products, Santa Rosa, CA. Insure that finish grades shall be 2" below surface of paved areas, curbs, etc. in ground cover areas. Eliminate any existing erosion or construction scars. Slope drainage pattern away from buildings, to catch basins, etc. as per the intention of the basic grading of the site. No low areas or depressions in the planting will be allowed. No rocks one inch (1") in diameter or larger shall be visible on the finished surface. All container plants shall be planted so their crown is 1" to 2" higher than the surrounding grade (after settlement). Any plant which has settled shall be raised back to the required level, or replaced at the option of the Landscape Architect. Groundcovers adjacent to pavement or structures shall be planted no closer to these than their center-to-center spacing, except where shown otherwise. Planting areas that have been compacted for any reason, either before or after planting, shall be recultivated by the Contractor. See 'Planting & Tree Staking Detail' for specifics on plant hole size, fertilizer, etc.

Any existing weeds shall be removed and a pre-emergent weed killer shall be applied to all newly planted areas. All plants, and the areas between them, shall be mulched with redwood chips called 'Golden Nuggets' as distributed by United Forest Products, Santa Rosa, or Sunup Products, Sacramento, CA. The mulch shall be evenly and uniformly spread to a three (3) inch depth.

All bioswales & grass areas shall be 'No Mow' fescue blend as grown by Pacific Sod (800-892-6660), or approved source, well matured and insect, weed and disease free. It shall be cut to uniform size and thickness to insure adequate roots. Sod shall be delivered to the job site within 12 hours of harvesting and no more shall be delivered than can be installed the same day. Proper moisture content shall be maintained from harvest through installation and maintenance. Fertilizer shall be broadcast on the amended topsoil bed per the supplier's recommendation. Sod shall be laid with the joints staggered, in a brick-like pattern, in even rows. Lightly roll the sod immediately after installation to insure contact with the soil. Contractor shall follow supplier's specifications for all other placement and installation procedures. Protect sod areas with fences, barriers, signs and similar protection as necessary to prevent trampling and damage to newly sodded areas.

Preliminary acceptance of the project, to begin Maintenance Period, will not be considered until after the first mowing of the lawn sod and after the filter swale sod is rooted into the topsoil bed (10-14 days minimum). Sod shall be fertilized and weeds controlled as necessary to maintain a dense, even stand of grass throughout the maintenance period.

Upon completion of the landscape installation, the Contractor shall request the Landscape Architect to review the installation and grant Preliminary Acceptance. If the Landscape Architect finds deficiencies, the Contractor shall have five (5) days to correct these. Upon acceptance by the Landscape Architect and the Owner, the Contractor shall start his sixty (60) calendar day Establishment Maintenance Period. During this period he shall maintain all plantings in a healthy growing condition, shall keep all areas weed-free and clean; shall make any adjustments to the irrigation system as necessary to have it function correctly; and shall replace immediately any plants that die, are damaged, or appear weak and are not thriving in their new environment. At the completion of this period, if all improvements are acceptable, Final Acceptance will be granted by the Landscape Architect and/or Owner and the Owner will assume responsibility for ongoing maintenance. If unacceptable, the Contractor shall have five (5) working days to correct any and all deficiencies and request another review.

The irrigation system, materials and installation work and all plant material shall be guaranteed for a one year period following Final Acceptance of the project. Improper watering and/or maintenance procedures during this period that result in the death or damage to plant material will relieve the Contractor of his responsibilities under this guarantee.

IRRIGATION SPECIFICATIONS

All materials shall be new and as indicated on the drawing, legend, details and/or as specified herein. Control wire shall be UF #14-1 (white for ground and color for control wires). Wire connectors shall be 'Penlite', or approved equal. All changes in pipe size shall be by a manufactured PVC Schedule 40 fitting. Connections between main lines and all valves shall be PVC Schedule 80 nipples and fittings. Substitutions for the irrigation materials must be approved by the Landscape Architect. Written submittals (2 copies) must be submitted to the Landscape Architect, and only after a written approval is given to the Contractor may the Contractor proceed with the substitution. System layout is diagrammatic. The Contractor shall change or adjust the system to meet the actual field conditions and to comply with the intent of the drawings and specifications.

All trenches shall be open vertical construction sufficiently wide to provide ample working space and depths as specified. PVC pipe may be made up on the surface and then laid in the trench. Lateral pipe trenches for all lateral pipe shall be a minimum depth of 12" unless lesser depth is approved by the Landscape Architect. Main line pipe trenches shall have a minimum of 18" cover. All rubbish and large rocks shall be removed from the trenches. Pipe shall have a firm, uniform bearing for the entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe will not be permitted. The trenches shall be padded with dirt or sand if the soil is extremely rocky. PVC pipe shall never be laid when there is water in the trench. PVC pipe shall be snaked from side to side of trench bottom to allow for expansion and contraction. All foreign matter or dirt shall be removed from inside the pipe before welding, and piping shall be kept clean during and after laying of pipe. All threaded connections shall be made with Teflon tape. No field threading of plastic pipe or fittings is permitted. The trenches shall be carefully backfilled with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand or other approved materials, free from large clods of earth or stones. Trenches for piping in landscaped areas shall be compacted to equal the compaction of the existing adjacent undisturbed soil and shall be left in a firm unyielding condition; flush with the surrounding grade. Settling the backfill with water will be permitted.

The Contractor shall pressure test (100 P.S.I. for one hour) the main line and operate each valve prior to planting to insure correct functioning of the system. Cleanup shall be made as each portion of work progresses. Refuse and excess dirt shall be removed from the site. All walks and paving shall be broomed or washed down and any damage sustained on the work of others shall be repaired to original condition.

Pipes, sprinkler heads, emitters and equipment shall be located as shown on the drawing except where existing conditions prohibit, or slight changes are approved by the Landscape Architect to better suit field conditions and to achieve as good, or better coverage under the same conditions.

Remote control valves shall be installed where shown on drawings and per details. When grouped together, allow at least 12" between valves. Install each remote control valve in a separate valve box. Remote control valves shall not be placed in drainage swales, low areas, or areas where they may be damaged or may create a hazard. Control wires shall be installed in common trenches with the piping whenever possible. Install at least 18" deep. Bundle wires together and tape at 10' intervals. Provide 18" expansion loop at remote control valves and snake wires in trench to allow for contraction. All wire splices shall be made in the valve boxes only. The automatic controller shall be installed as per manufacturer's instructions. Remote control valves shall be connected to controller in numerical sequence as shown on the drawings. Confirm location of controller with Owner and connect to the electricol (120 volt) supply source (by others).

All trees, shrubs, vines and ground covers shall be watered with self-flushing, pressure compensating, drip emitters, Salco, Agrifim or Olson, per the following schedule:

8-1 GPH or 4-2 GPH emitters per 24" box tree
6-1 GPH or 3-2 GPH emitters per 15 gallon tree
4-1 GPH emitters per 5 gallon plant
2-1 GPH emitters per 2 & 1 gallon
1-1 GPH emitters per 4"± pots

Emitters shall be installed on opposite sides of the rootball at ground level, not on the crown of the plant. All outlets shall have bug caps installed and be held in place with drip tube stakes. Drip tubing shall be used between transfer barb in the drip hose and the emitter at the plant or from the emitter in the drip hose and the drip tube stake at the plant's rootball. All components of the system shall be covered with soil and/or mulch. Ends of the drip hose shall have a figure eight coupling for flushing and be in a small, round valve box.

1" = 20' ft.

DEL STARRETT Architect
3663 NORTH LAUGHLIN ROAD, SUITE 207
SANTA ROSA, CALIFORNIA 95403
PHONE: (707) 526-9645

CONSULTANTS

PARKER SMITH
LANDSCAPE ARCHITECT
CA LIC. #1264
1945 PINER RD. #25,
SANTA ROSA, CA 95403
(707) 477-7502

SEAL



NEILMED
WAREHOUSE

685 AVIATION BLVD

SANTA ROSA CA 95403

REV	DATE	DESCRIPTION

PROJECT NO:	18/13
CAD DWG FILE:	—
DRAWN BY:	BS
SCALE:	—

© Copyright 2018 Del Starrett Architect 3-23-20

SHEET TITLE

SPECIFICATIONS & DETAILS

SHEET NUMBER

L-3 of 3