

# THUNDERBOLT WAY LOT EXPANSION

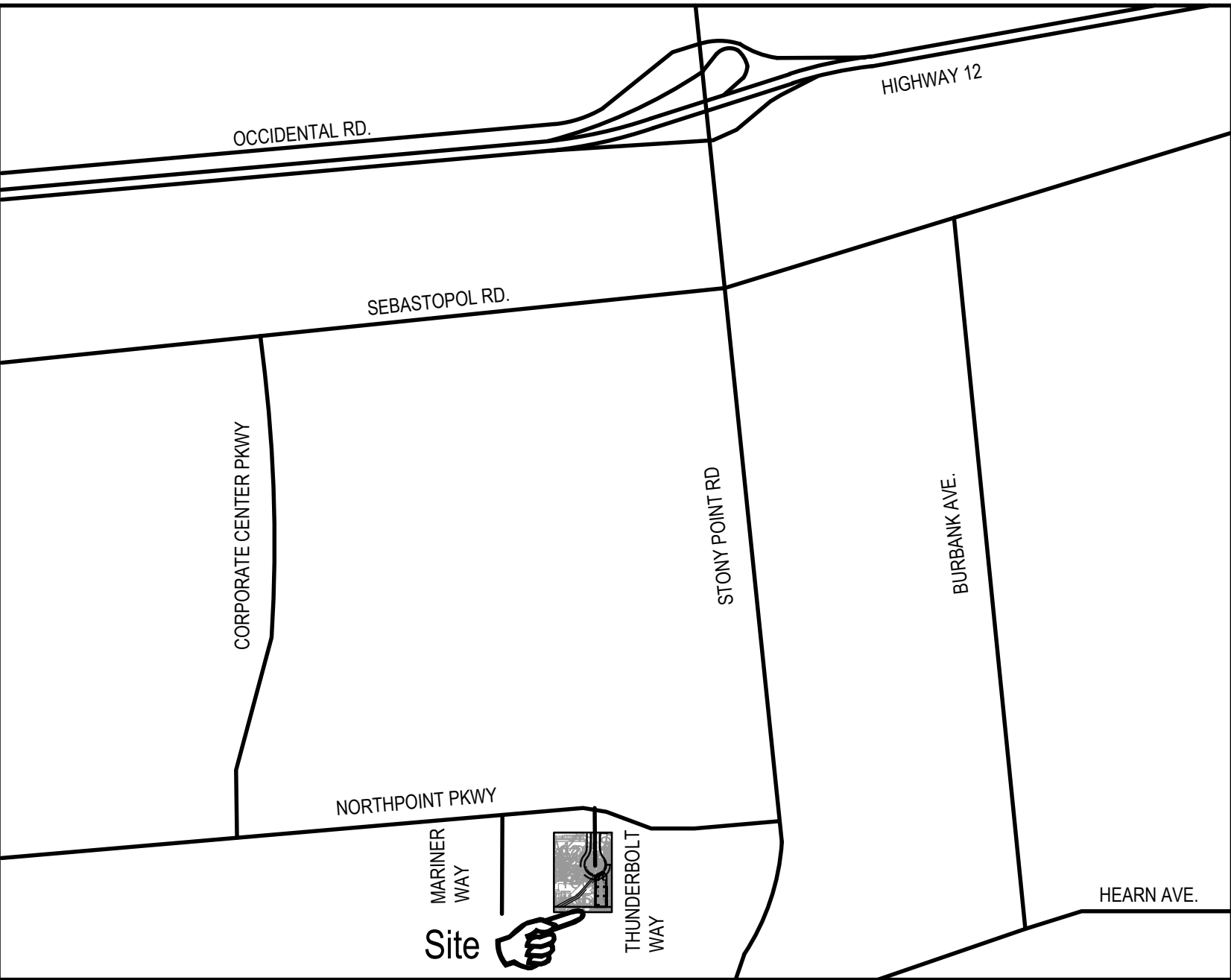
## ON-SITE IMPROVEMENT PLANS

1405 THUNDERBOLT WAY  
SANTA ROSA, CA 95407  
APN: 035-530-049

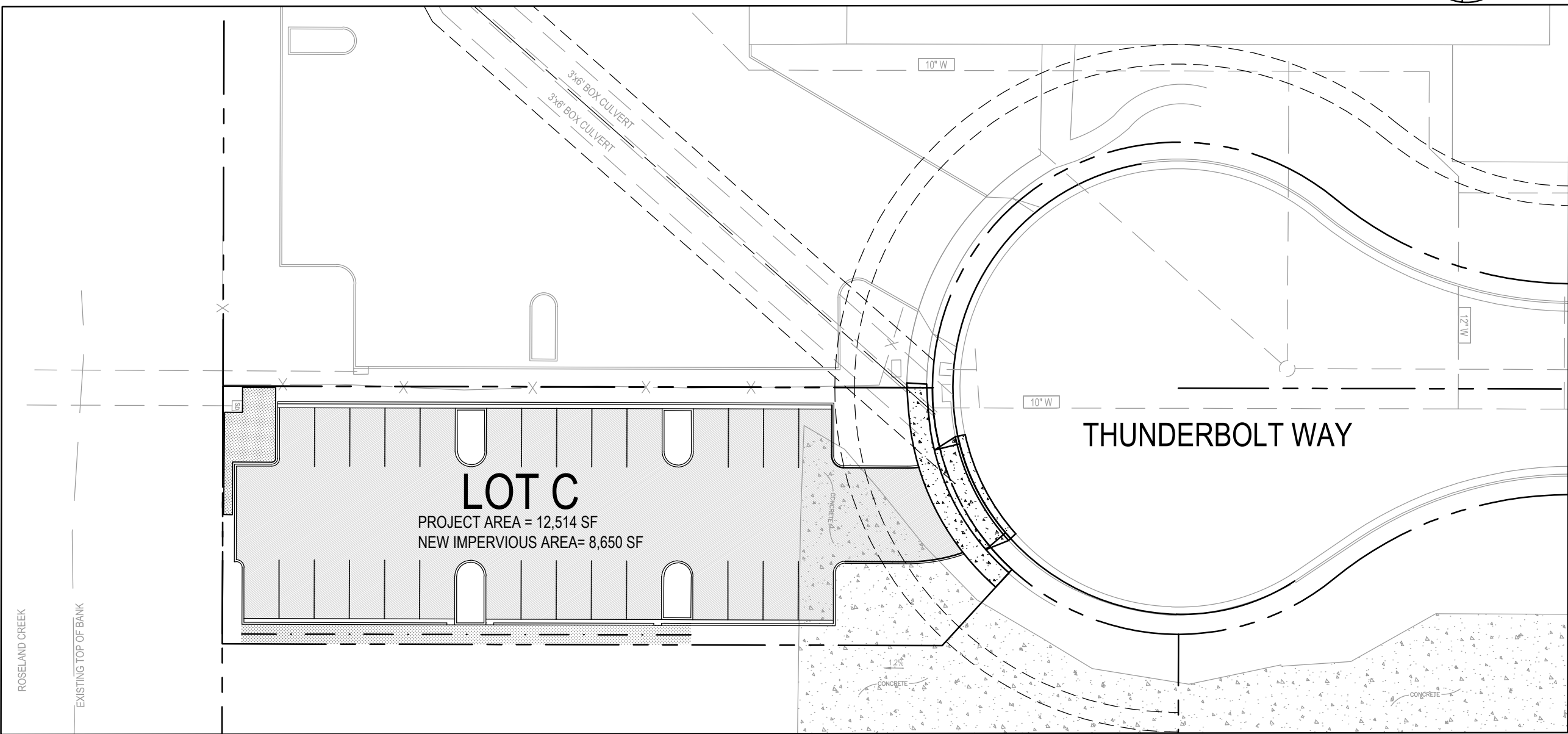


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Roseville, CA 95678  
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### VICINITY MAP - NTS



### PROJECT LAYOUT



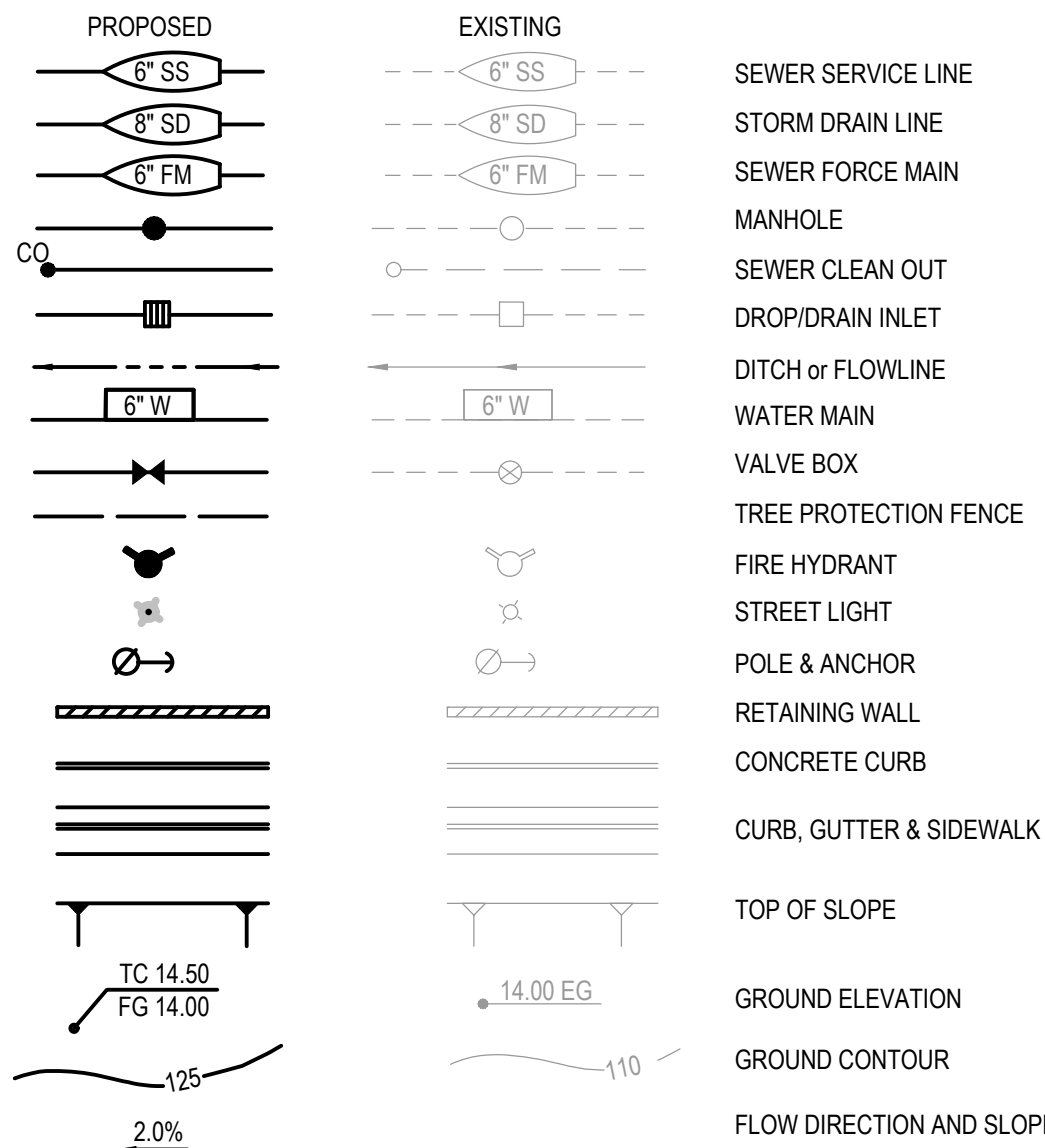
**1 PARKING LOT C**  
SCALE = 1" = 30'

### SHEET INDEX

- |    |       |  |
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| 1. | G-001 | COVER SHEET                              |
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City of Santa Rosa  
September 9/2020  
Planning & Economic  
Development Department

### SYMBOLS



### ABBREVIATIONS

#	NUMBER	FH	FIRE HYDRANT	SD	STORM DRAIN
AB	AGGREGATE BASE OR ACRE	FL	FLOWLINE	SD#	STANDARD DRAWING NUMBER
AC	ASPHALTIC CONCRETE	FP	FINISHED PAVEMENT	SDMH	STORM DRAIN MANHOLE
AHJ	AUTHORITY HAVING JURISDICTION	FS	FINISHED SURFACE	SP#	STANDARD PLAN NUMBER
APN	ASSESSORS PARCEL NUMBER	(F)	FUTURE	SS	SANITARY SEWER
ARV	AIR RELEASE VALVE	G	GAS	SSCO	SANITARY SEWER CLEAN OUT
BC	BEGIN CURVE	GB	GRADE BREAK	SSMH	SANITARY SEWER MANHOLE
BFP	BACKFLOW PREVENTER	GV	GATE VALVE	STA	STATION
BO	BLOW OFF	INTX	INTERSECTION	SUBD.	SUBDIVISION
BOW	BOTTOM OF WALL	INV	INVERT	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
BVC	BEGIN VERTICAL CURVE	JT	JOIN TRENCH	T	TELEPHONE
BW	BACK OF WALK	LF	LINEAR FEET	TBW	TOP BACK OF WALK
C/G	CURB AND GUTTER	LT	LEFT	TC	TOP OF CURB
CH	CHORD	MAX	MAXIMUM	TOW	TOP OF WALL
CHL	CHORD LENGTH	MH	MANHOLE	TW	TOP OF WALK
CL	CENTERLINE	MIN	MINIMUM	(TYP)	TYPICAL
CMP	CORRUGATED METAL PIPE	NTS	NOT TO SCALE	V	VAULT
CMU	CONCRETE MASONRY UNIT	OC	ON CENTER	VAR	VARIES
CO	CLEAN OUT	OH	OVERHEAD	VC	VERTICAL CURVE
CGSW	CURB, GUTTER & SIDEWALK	PCC	PORTLAND CEMENT CONCRETE	W	WATER
CONC	CONCRETE	PVI	POST INDICATOR VALVE	WM	WATER METER
CR	CURB RETURN	PL	PROPERTY LINE	WS	WATER SERVICE
DCV	DETECTOR CHECK VALVE	POC	POINT OF CONNECTION	WV	WATER VALVE
DI	DRAIN INLET	PP	POWER POLE		
DWY	DRIVEWAY	PRC	POINT OF REVERSE CURVE		
E	ELECTRICAL	PRVC	POINT OF REVERSE VERTICAL CURVE		
EC	END CURVE	PSE	PUBLIC SERVICE EASEMENT		
ELV	ELEVATION	PUE	PUBLIC UTILITIES EASEMENT		
EP	EDGE OF PAVEMENT	PVC	POLYVINYL CHLORIDE		
EVC	END VERTICAL CURVE	PVI	POINT VERTICAL INTERSECTION		
(E)	EXISTING	(P)	PROPOSED		
FD	FIRE DEPARTMENT	R	RADIUS		
FDC	FIRE DEPARTMENT CONNECTION	ROW	RIGHT OF WAY		
FF	FINISHED FLOOR	RC	REVERSE CURVE		
FFE	FINISHED FLOOR ELEVATION	RT	RIGHT		
FG	FINISHED GRADE	S#	SLOPE PERCENTAGE		

### DESIGN CONCEPT NARRATIVE

- THE PROJECT INCLUDES THE FOLLOWING:
- DEMOLITION OF SIDEWALK, CURB & GUTTER FOR PROPOSED DRIVEWAY.
  - DEMOLITION OF THE EXISTING CONCRETE AIRSTRIP WITHIN PROJECT LIMITS.
  - PROPOSED IMPROVEMENTS INCLUDE:
    - DRIVEWAY CUT
    - ASPHALT PAVEMENT
    - CONCRETE CURBS AND CURB & GUTTER
    - VEGETATED SWALE WITH UNDERDRAIN
  - GRADING FOR THE PROPOSED IMPROVEMENTS
  - STORM DRAINAGE INLET AND PIPING
  - LANDSCAPE PLANTING AND IRRIGATION
  - SITE LIGHTING AND ASSOCIATED ELECTRICAL EQUIPMENT



Client  
VIAVI Solutions Inc.  
6001 AMERICA CENTER DRIVE, 6TH FLOOR  
SAN JOSE, CA 95002

Project  
THUNDERBOLT WAY  
PARKING LOT  
IMPROVEMENTS


No.	Issue	Drawn	Approved	Date
Drawn	JSB / EER	Designer	JSB / EER	
Drafting Check	CSM	Design Check	CSM	
Project Manager	CSM	Date	9/3/2020	
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Project No.

Title

COVER SHEET

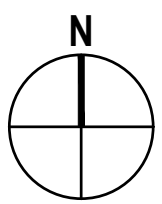
Sheet No.

G - 001

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Sheet 1 of 9





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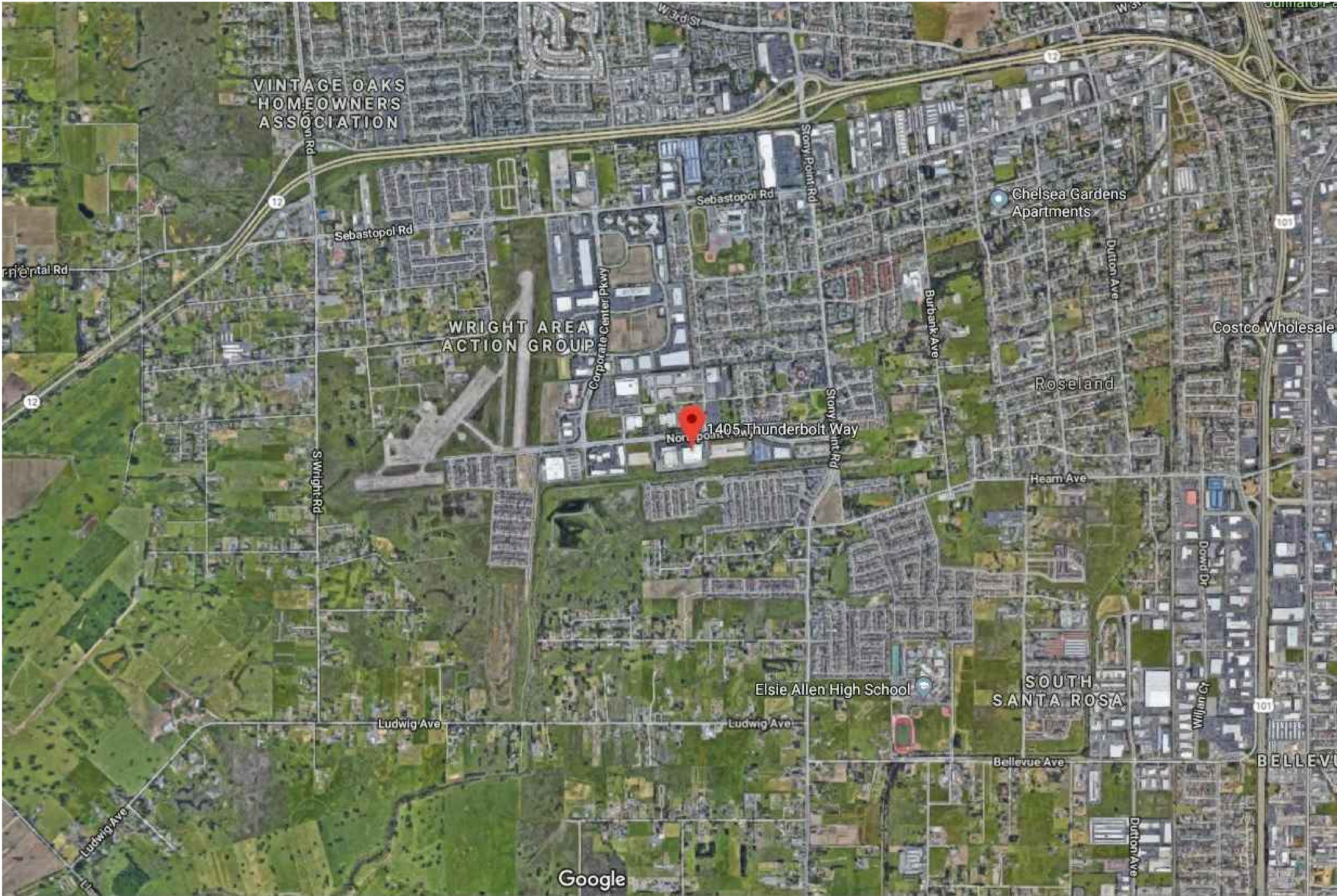
Title

# SITE LOCATION MAP

Sheet No.

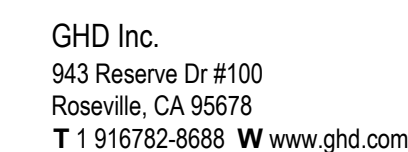
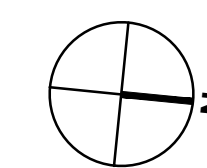
C-100

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1 SITE LOCATION MAP - LOT C  
SCALE = 1" = 10'






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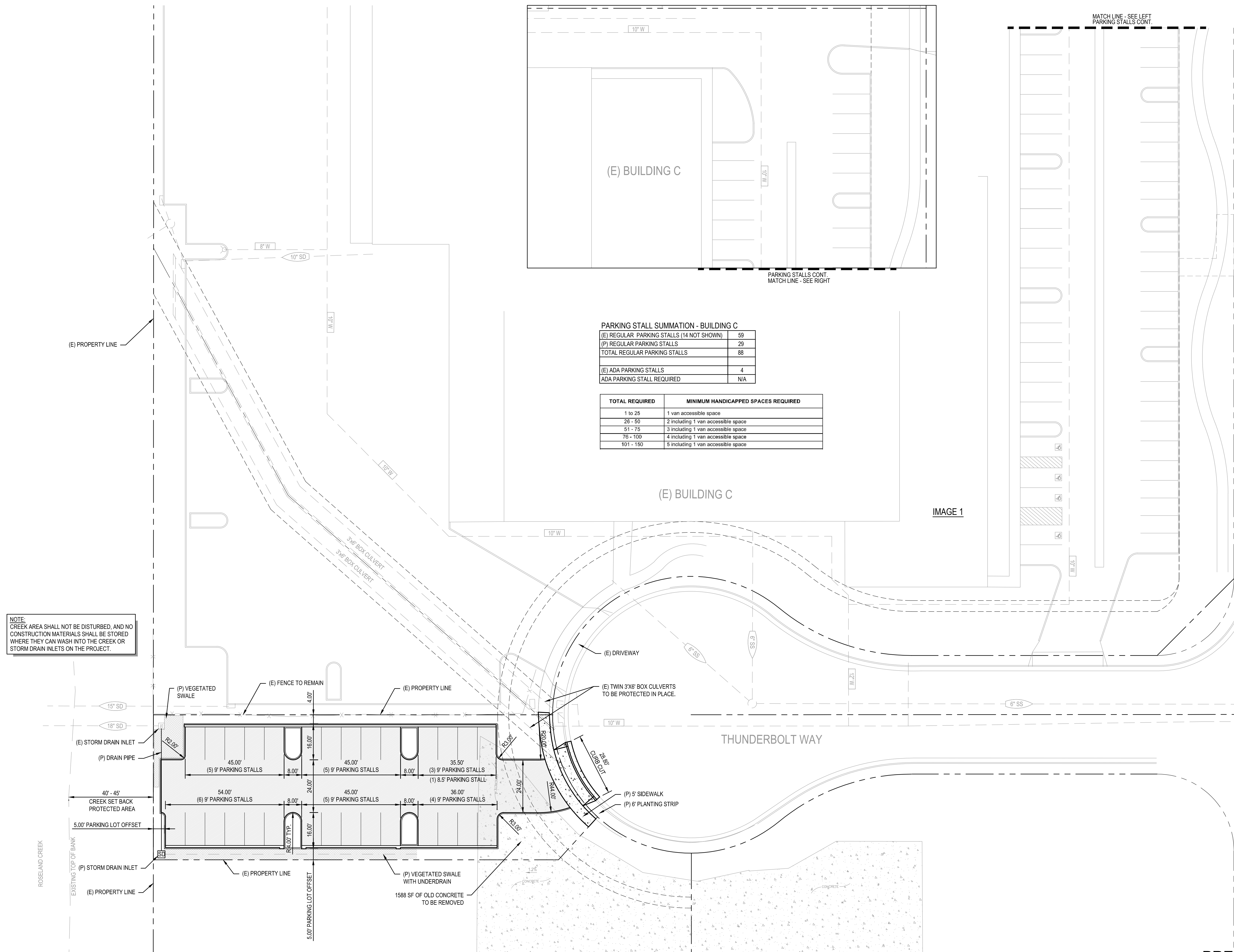
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## SITE PLAN

Sheet No. \_\_\_\_\_

C-101

Sheet 3 of 9



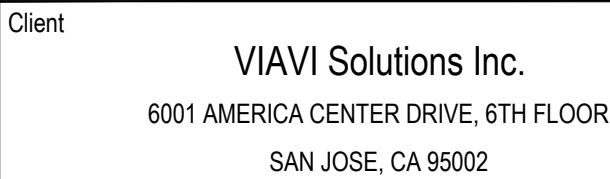
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Project

THUNDERBOLT WAY  
PARKING LOT  
IMPROVEMENTS


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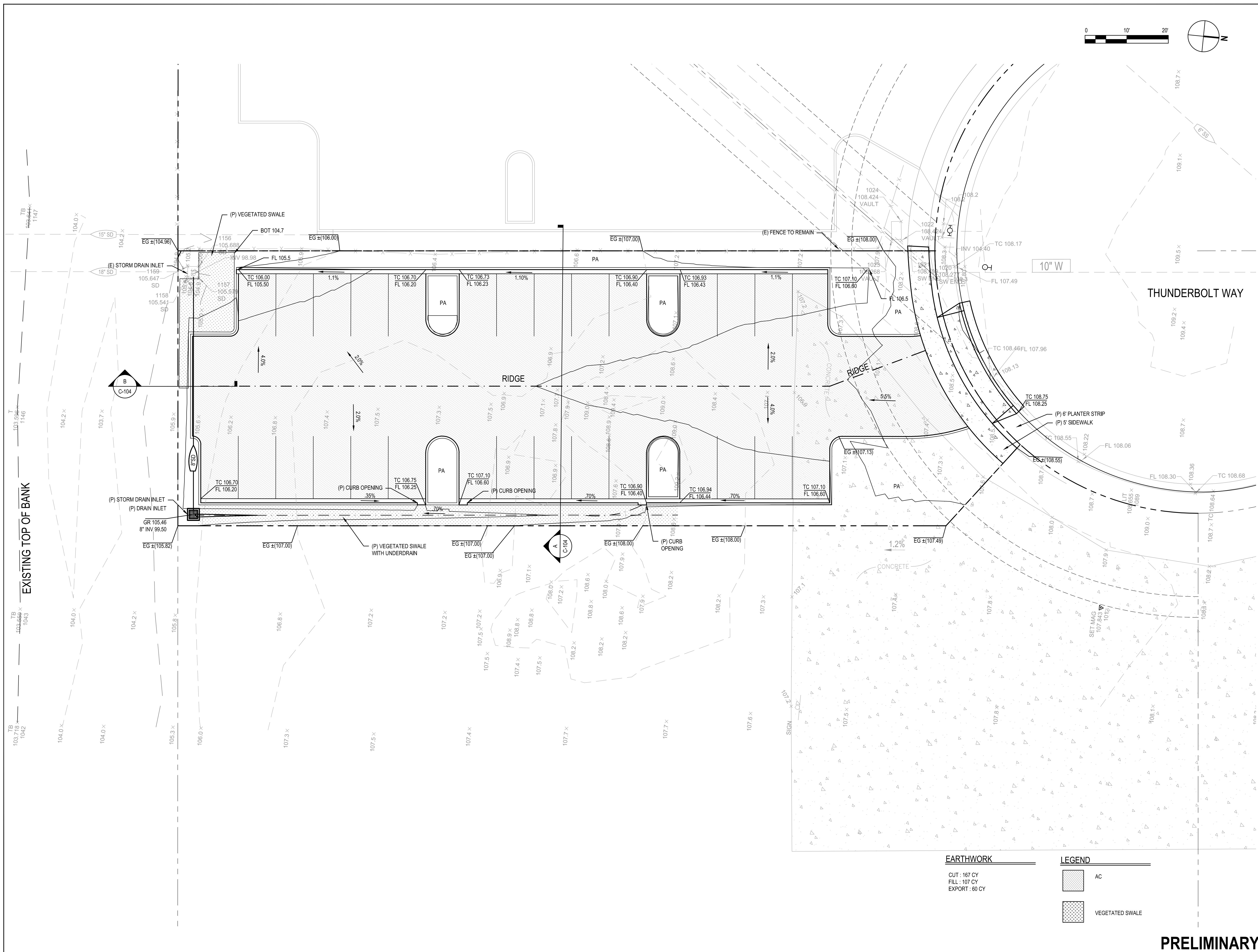
Title

GRADING AND  
DRAINAGE  
PLAN

Sheet No.

C-102

Sheet 4 of 9



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Project  
THUNDERBOLT WAY  
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IMPROVEMENTS


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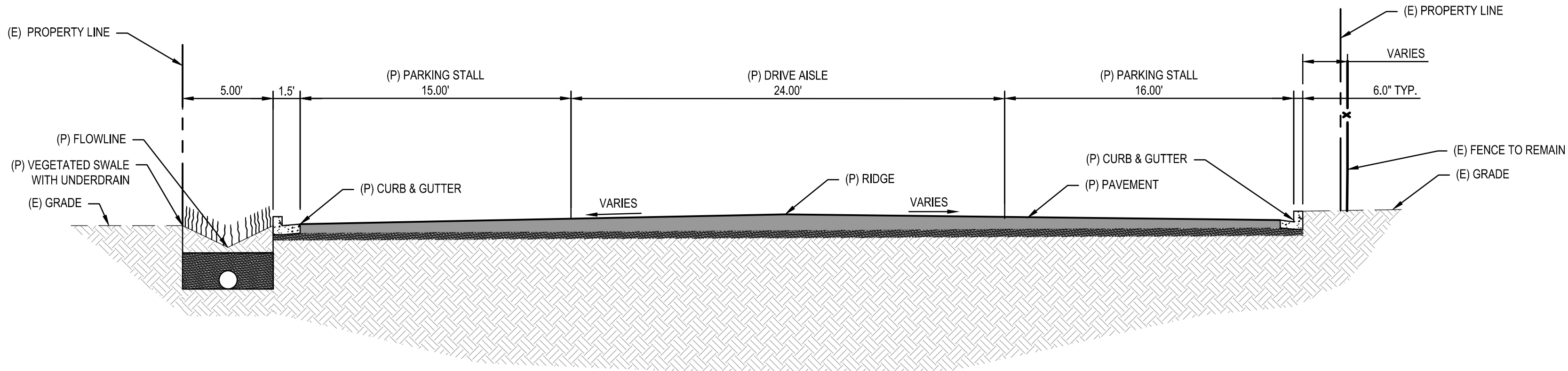
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Title

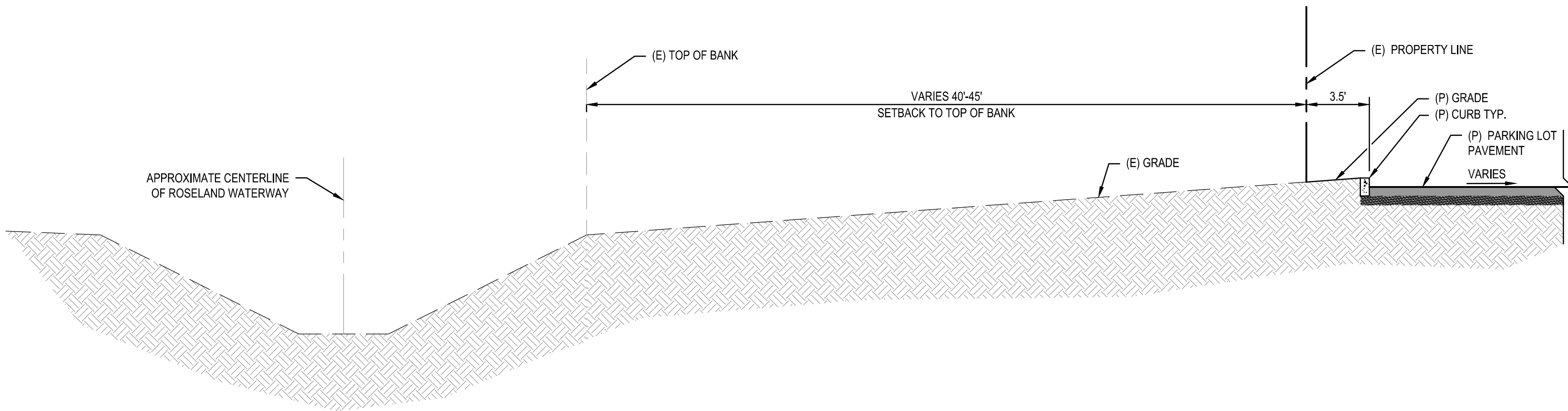
TYPICAL SECTIONS

Sheet No.

C - 103



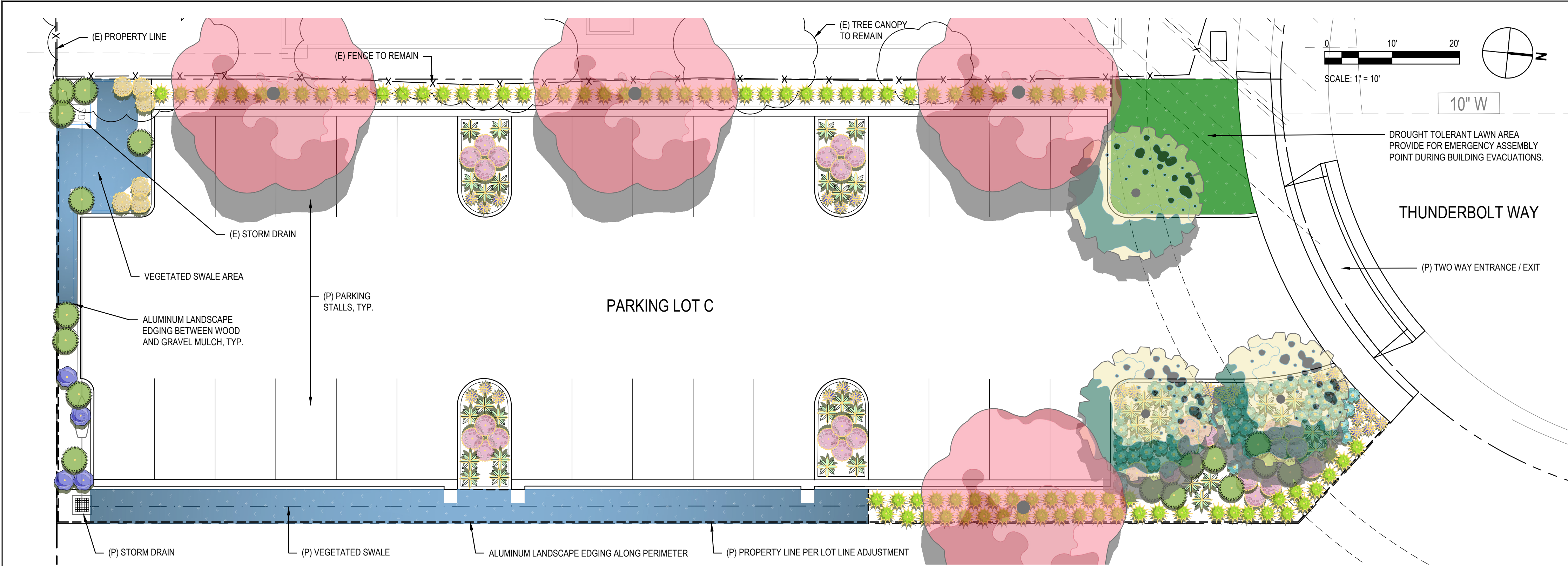
**A** PARKING LOT C - SECTION A  
SCALE = NTS



**B** PARKING LOT C - SECTION B  
SCALE = NTS

PRELIMINARY





LANDSCAPE DESIGN INTENT

- DESIGN SHALL MEET THE STATE AND LOCAL REQUIREMENTS ASSOCIATED WITH IRRIGATION WATER USE THROUGH THE EXCLUSIVE USE OF LOW OR MEDIUM WATER USE PLANT MATERIALS AND LOW VOLUME DRIP-LINE OR ROTARY SPRAY IRRIGATION SYSTEM.
- DESIGN IS INTENDED TO ENHANCE THE PROJECT THROUGH THE USE OF PLANT MATERIALS THAT PROVIDE YEAR ROUND TEXTURE, COLOR AND HARDINESS. NATIVES ARE USED WHERE APPROPRIATE.
- VEGETATED SWALE SHALL HAVE A 2" LAYER OF GRAVEL MULCH. COBBLE MULCH (3'-6" IN SIZE) SHALL BE PLACED AS A SINGLE LAYER AT ALL CURB CUT LOCATIONS AND AS A 1' RING AROUND ALL DRAIN INLETS TO DISPERSE FLOWS AND PREVENT INLET CLOGGING. ALL OTHER PLANTING AREAS, EXCLUDING LAWN AREAS, SHALL HAVE A 3" DEEP LAYER OF WOOD MULCH SPREAD EVENLY ACROSS ENTIRE PLANTING AREA.

DESIGN NOTES

- PLANT CONTAINER SIZES:
  - TREES TO BE PLANTED FROM 24" BOX SIZE CONTAINERS
  - SHRUBS TO BE PLANTED FROM 5-GALLON AND 1-GALLON CONTAINERS
  - GROUND COVERS TO BE PLANTED FROM 1-GALLON CONTAINERS
- ALUMINUM EDGING SHALL BE INSTALLED BETWEEN WOOD, GRAVEL MULCH, COBBLE MULCH, AND LAWN.
- SEE BELOW FOR PLANT LEGEND AND IMAGES OF PROPOSED PLANT MATERIAL.

CALGREEN+TIER 1 CHECKLIST

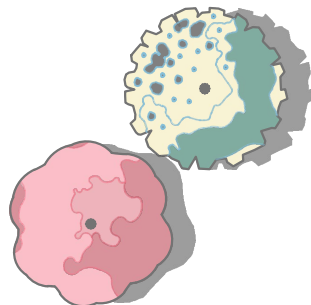
THE DESIGN OF THE LANDSCAPE / IRRIGATION SYSTEM IS INTENDED TO MEET THE CALGREEN+TIER 1 CHECKLIST ASSOCIATED WITH LANDSCAPE ELEMENTS. TOWARD THIS END THE PROJECT WILL INCLUDE THE FOLLOWING BEST PRACTICES:

- HYDROZONE IRRIGATION TECHNIQUES WILL BE INCORPORATED.
- THE PLANT PALETTE WILL UTILIZE AT LEAST 75% NATIVE CALIFORNIA OR DROUGHT TOLERANT PLANT MATERIALS APPROPRIATE TO THE CLIMATE ZONE REGION.
- THE USE OF POTABLE WATER WILL BE REDUCED TO A QUANTITY THAT DOES NOT EXCEED 65% OF ETO TIMES THE LANDSCAPE AREA.
- COMMON AREA AND PERIMETER AREA LANDSCAPE IRRIGATION WILL CONSIST OF A LOW VOLUME DRIP OR ROTARY SYSTEM.
- ALL IRRIGATION VALVES SHALL BE CONNECTED TO AN AUTOMATIC CONTROL SYSTEM.
- ALL IRRIGATION SYSTEMS SHALL BE DESIGNED TO MEET THE MOST CURRENT WATER CONSERVATION POLICIES AND AVAILABLE EQUIPMENT.

SANTA ROSA CITY MUNICIPAL CODE - Section 20-34.050(G.2.e) - Tree Requirement  
PER CITY CODE, THE DESIGN MEETS THE PARKING AREA TREE REQUIREMENTS OF ONE TREE FOR EACH FIVE PARKING SPACES (29 PARKING SPACES = 6 TREES).

PLANT SCHEDULE THUNDERBOLT WAY - LOT C

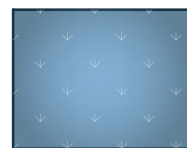
TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
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SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
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GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
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MULCH SCHEDULE THUNDERBOLT WAY - LOT C

SYMBOL	DESCRIPTION	QTY
NOT SHOWN	Gravel Mulch	5.31 cy
NOT SHOWN	Wood Mulch	18.55 cy
NOT SHOWN	Cobble Mulch	0.59 cy

TREES



CHINESE PISTACHE



NATCHEZ CRAPE MYRTLE



WOOD MULCH



GRAVEL MULCH



COBBLE MULCH

SHRUBS AND GROUND COVERS



BLUE LILY OF THE NILE



FORTNIGHT LILY



ENGLISH LAVENDER



DWARF MAT RUSH 'BREEZE'



BUSH LUPINE

SHRUBS AND GROUND COVERS CONT.



STICKY MONKEY FLOWER



DEER GRASS



PINK DANCER HAWTHORNE



SPREADING RUSH

IMAGE NOTES

THESE IMAGES (COMMON NAMES INDICATED) REFLECT THE GENERAL CHARACTER OF THE PLANT MATERIALS TENTATIVELY PROPOSED ON PLANT PALETTE.



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SAN JOSE, CA 95002

Project  
THUNDERBOLT WAY  
PARKING LOT  
IMPROVEMENTS


No.	Issue	Drawn	Approved	Date
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Drawn	Designer
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Drafting Check	Design Check
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Project Manager	Date	9/3/2020
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Project No.
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Title
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PRELIMINARY  
LANDSCAPE PLAN

Sheet No.
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L - 100

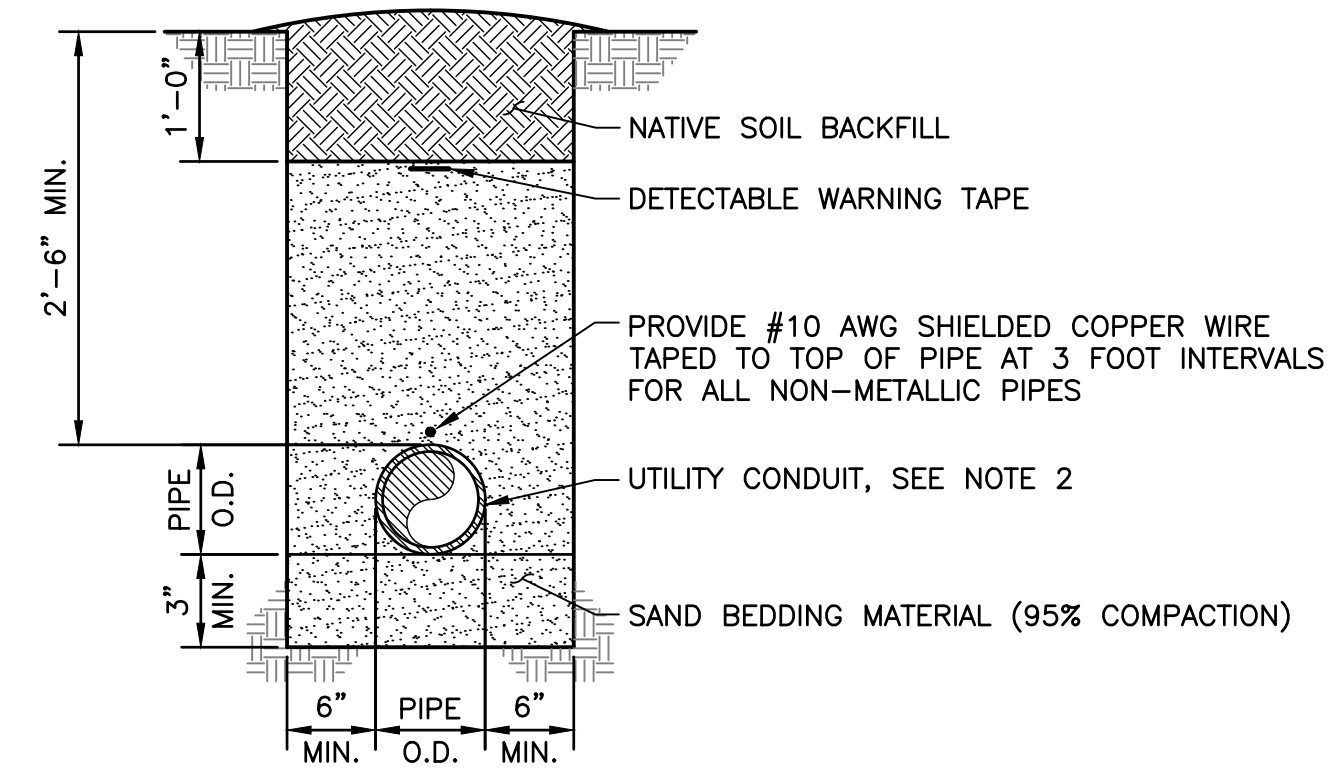
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Sheet of XX





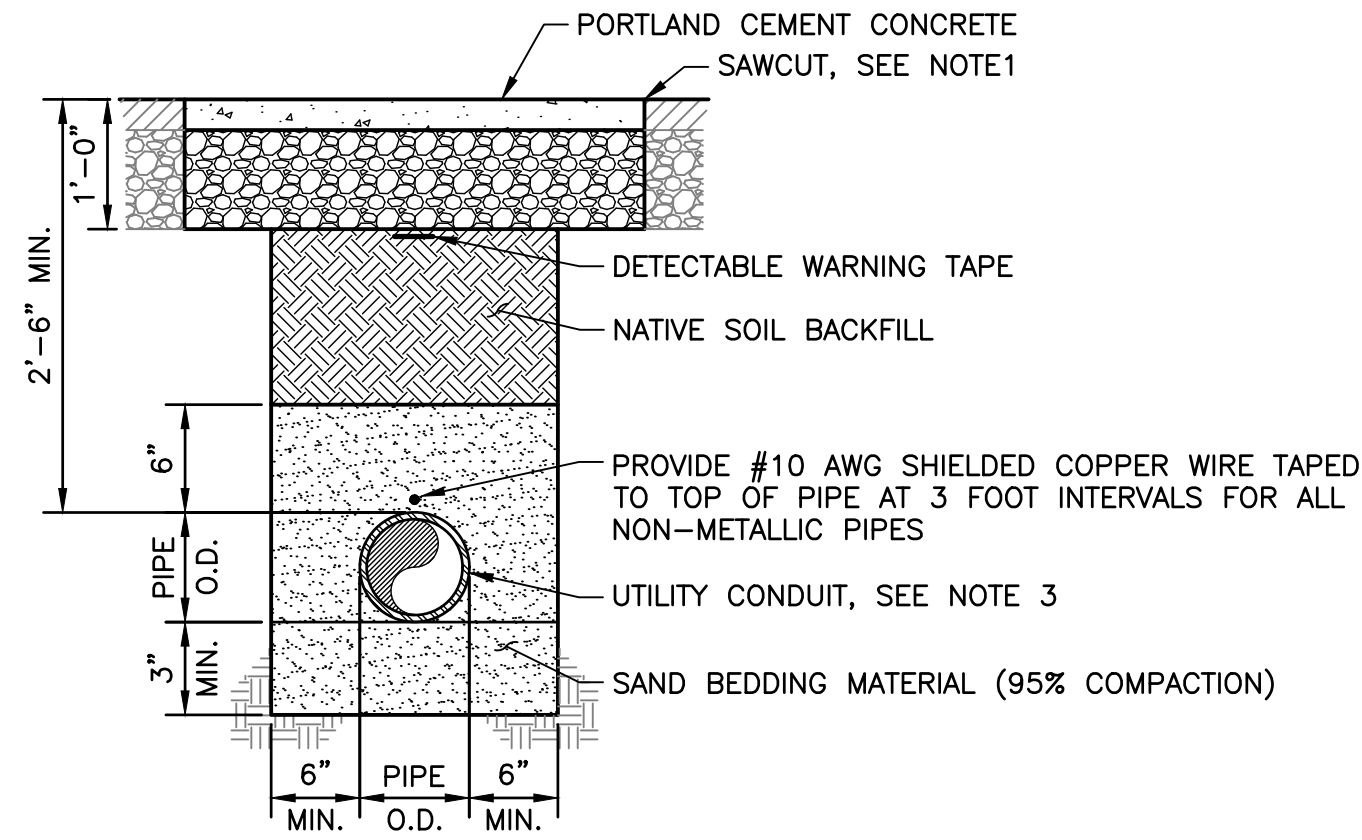




- NOTES:
- FOR TRENCH DEPTHS GREATER THAN 6.5 FEET, ONLY TOP 5-FEET OF TRENCH SHALL BE 95% COMPACTED SELECT SAND BACKFILL. THE REMAINDER SHALL BE 90% COMPACTED SAND BACKFILL.
  - SEE ELECTRICAL SHEETS FOR CONDUITS AND DUCT BANK TRENCH BEDDING DETAIL.

## 1 UN-PAVED FINISH UTILITY TRENCH

NOT TO SCALE



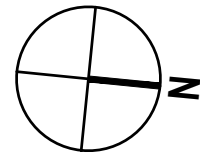
- NOTES:
- WHERE EXISTING PAVEMENT IS PORTLAND CEMENT CONCRETE, TRENCH SAWCUT WILL BE WITHIN 30" OF EXISTING CONCRETE JOINT, REMOVE AND REPLACE CONCRETE TO JOINT. MATCH EXISTING FINISH, REINFORCEMENT, AND THICKNESS (MINIMUM THICKNESS 4"). SEE DETAIL 4/C5.1.
  - FOR TRENCH DEPTHS GREATER THAN 6.5 FEET, ONLY TOP 5-FEET OF TRENCH SHALL BE 95% COMPACTED SELECT SAND BACKFILL. THE REMAINDER SHALL BE 90% COMPACTED SAND BACKFILL.
  - SEE ELECTRICAL SHEETS FOR CONDUITS AND DUCT BANK TRENCH BEDDING DETAIL.

## 2 CONCRETE FINISH UTILITY TRENCH

NOT TO SCALE

### SHEET KEYNOTES

- PROVIDE PULLBOX, CHRISTY B1017 WITH BASE AND COVER OR EQUAL. INTERCEPT (E) LIGHTING POWER CONDUIT.
- PROVIDE AREA LIGHT FIXTURE COMPLETE WITH POLE, CONCRETE POLE BASE, AND MOUNTING ACCESSORIES AS REQUIRED.
- PROVIDE LIGHTING FEEDER AS INDICATED AND EXTEND LIGHTING POWER CIRCUIT TO AREA LIGHTING.



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THUNDERBOLT WAY  
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No.	Issue	Drawn	Approved	Date
Drawn	LOL	Designer	CAR	
Drafting Check	CAR	Design Check	CAR	
Project Manager	CSM	Date	9/3/2020	
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SITE PLAN  
LOT-C

Sheet No.

E-101

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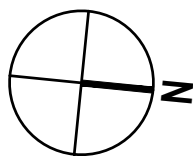
Project No.

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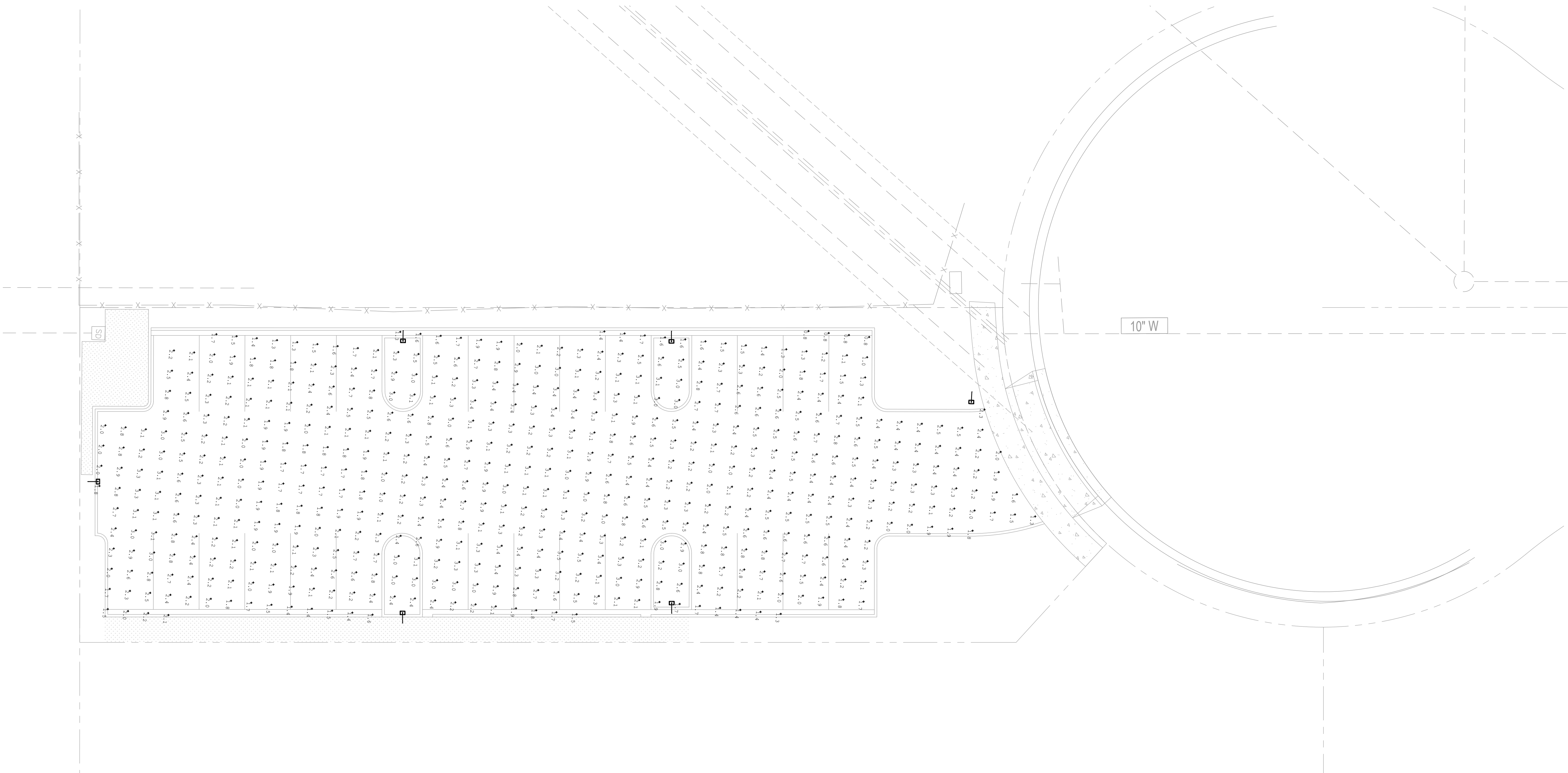
## PHOTOMETRICS LOT-C

Sheet No.

E-701



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Thunderbolt Lot-C	Illuminance	Fc	2.41	3.5	0.8	3.01	4.38



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