

CALIFORNIA WATER SERVICE

LOS ALTOS STATION 9 GENERATOR PROJECT 10900 BEECHWOOD LANE LOS ALTOS, CALIFORNIA 94024 VOLUME 1 – DRAWINGS

ENGINEERING DEPARTMENT PROJECT: 00117411

ENGINEERING



DEPARTMENT

REVISIONS:

NO.	DATE	DESCRIPTION

DISTRIBUTION MAP DATE: INT:

PLAT SHEET

SYSTEM SCHEMATIC

STATION SCHEMATIC

PLAT SHEET NO.:

SCALE: NONE

DRAWN BY: BT

DESIGNED BY:

TECH REVIEW: DATE:

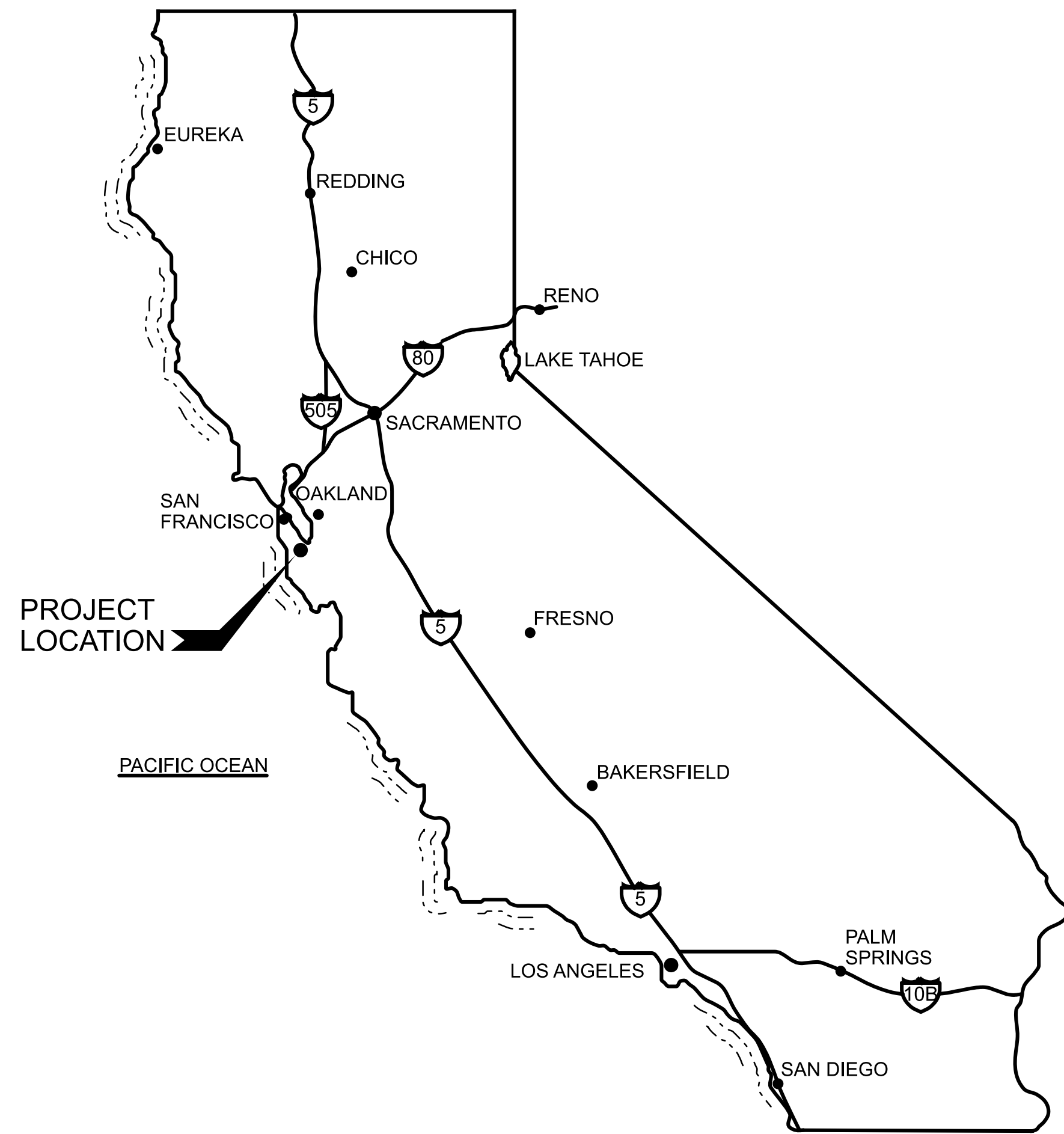
CHECKED BY: DATE:

APPROVED BY: DATE:

PLOT TIME: 10:14:35 AM

PLOT DATE: 4/15/2022

FILENAME: L:\CAD\Projects\21-030 Los Altos Station 9 Generator Variance App (S)\Deliverables\LAS9-3575_G001.dgn



VICINITY MAP
NTS

INDEX TO DRAWINGS

DRAWING NUMBER	TITLE
G-001	COVER, VICINITY MAP AND LOCATION MAP
U-001	NEIGHBORHOOD CONTEXT MAP
C-001	SITE PLAN WITH GENERATOR PROJECT OVERVIEW AND KEY MAP
C-002	GRADING AND DRAINAGE MAP
C-003	SECTIONS
C-004	ELEVATIONS
C-005	SITE PLAN WITH ALL TREES AND DEMOLITION PLAN
C-006	TREE PROTECTION PLAN

ZONING COMPLIANCE

	Existing	Proposed	Allowed/Required
LOT COVERAGE: <i>Land area covered by all structures that are over 6 feet in height</i>	6,857_square feet (.27%)	6,970_square feet (.27%)	6,390_square feet (.25%)
FLOOR AREA: <i>Measured to the outside surface of exterior walls</i>	1st Flr: 6,857_sq ft 2nd Flr: NA_sq ft Total: 6,857_sq ft (.27%)	1st Flr: 6,970_sq ft 2nd Flr: NA_sq ft Total: 6,970_sq ft (.27%)	5,305_square feet (.21%)
SETBACKS:			
TO TANK	50_feet	10_feet	30_feet
Front	25_feet	150_feet	35_feet
Right side (1st/2nd)	25_feet/25_feet	74_feet/NA_feet	20_feet/NA_feet
Left side (1st/2nd)	35_feet/35_feet	43_feet/NA_feet	20_feet/NA_feet
HEIGHT:	27_feet	8.5_feet	27_feet

SQUARE FOOTAGE BREAKDOWN

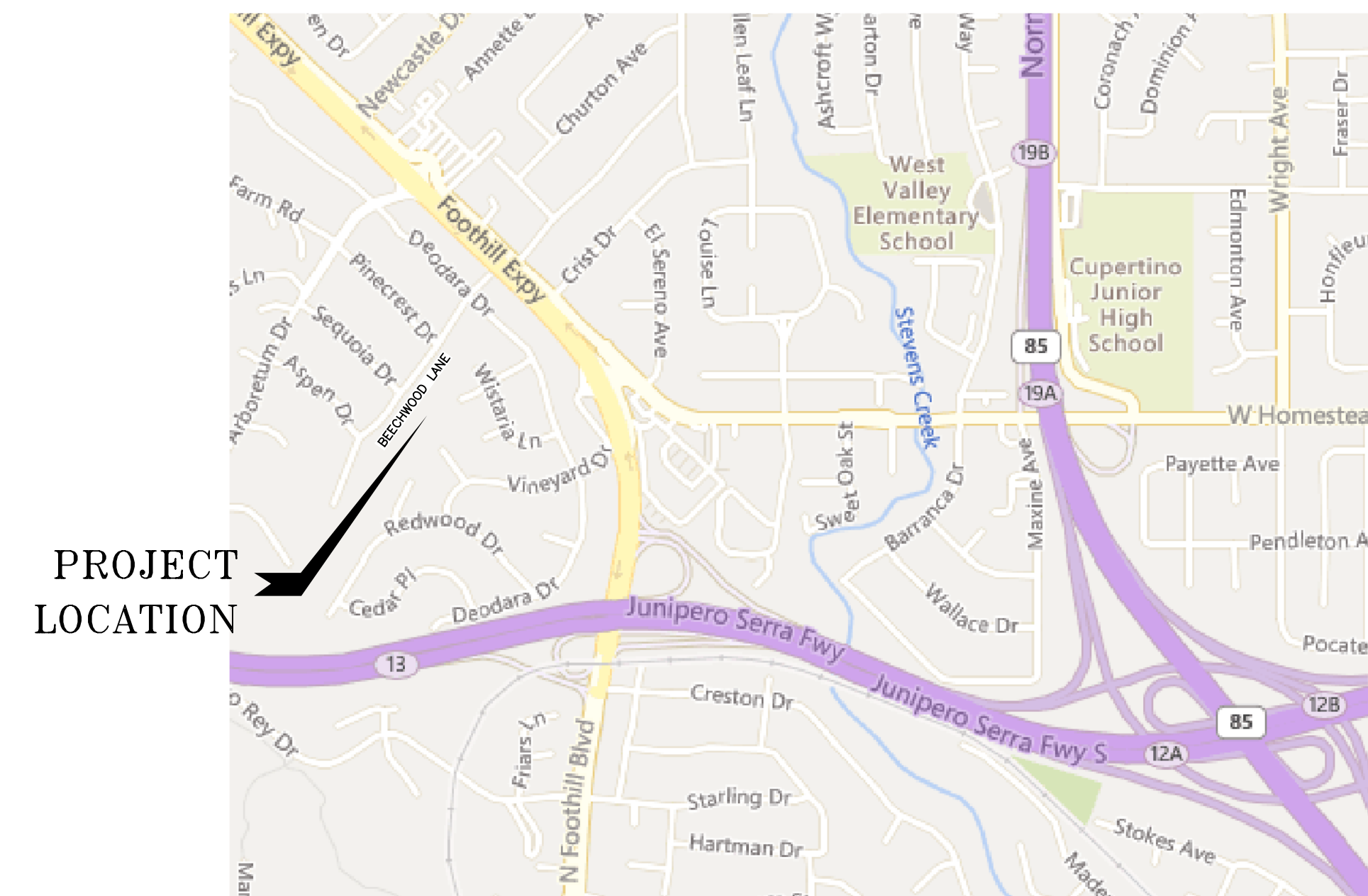
	Existing	Change in	Total Proposed
HABITABLE LIVING AREA: <i>Includes habitable basement area</i>	NA_square feet	NA_square feet	NA_square feet
NON-HABITABLE AREA: <i>Does not include covered porches or open structures</i>	6,857_square feet	113_square feet	6,970_square feet

LOT CALCULATIONS

NET LOT AREA:	25,555_square feet
FRONT YARD HARDSCAPE AREA: <i>Hardscape area in the front yard setback shall not exceed 50%</i>	808_square feet (.3%)
LANDSCAPING BREAKDOWN:	
Total hardscape area (existing and proposed):	2,148_sq ft
Existing softscape (undisturbed) area:	16,178_sq ft
New softscape (new or replaced landscaping) area:	375_sq ft
<i>Sum of all three should equal the site's net lot area</i>	

PROJECT SUMMARY TABLE

PROJECT DESCRIPTION: INSTALLING 125 kW GENERATOR FOR PUMP STATION
 ZONING: "R-1" SINGLE FAMILY RESIDENTIAL
 GENERAL PLAN LAND USE: SINGLE FAMILY LARGE LOT
 OWNER: CALIFORNIA WATER SERVICE
 ENGINEER: WATER WORKS ENGINEERS



LOCATION MAP
NTS

TITLE: LOS ALTOS STATION 9 GENERATOR PROJECT
COVER, VICINITY MAP AND LOCATION MAP

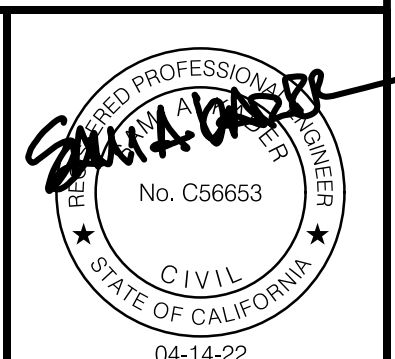
DISTRICT: LOS ALTOS



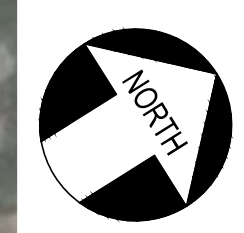
WATERWORKS ENGINEERS

DRAWN BY: BGT
DESIGNED BY: SAK/AL

CHECKED BY: DATE:
APPROVED BY: DATE:



DATE: APRIL 2022
 PROJECT ID: 00117411
 DRAWING NO.: LAS9-3575-G-001
 SHEET 1 OF 8



ENGINEERING



DEPARTMENT

REVISIONS:

NO.	DATE	DESCRIPTION

DISTRIBUTION MAP

PLAN SHEET

SYSTEM SCHEMATIC

STATION SCHEMATIC

PLAT SHEET No.:

SCALE:
1"=20'

DRAWN BY:
MDT

DESIGNED BY:
PMW

TECH REVIEW: DATE:

CHECKED BY: DATE:

APPROVED BY: DATE:
CVB

SAK

PRELIMINARY NOT FOR CONSTRUCTION

TITLE: LOS ALTOS STATION 9 GENERATOR PROJECT
CIVIL
NEIGHBORHOOD CONTEXT MAP

DISTRICT:
LOS ALTOS

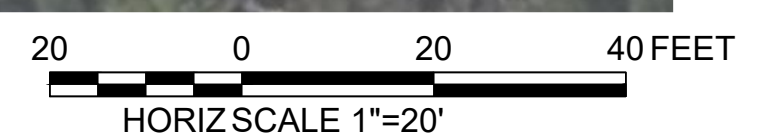
DATE:
APRIL 2022

PROJECT ID:
00117411

DRAWING No.:

LAS9-3575-U-001

SHT 2 OF 8



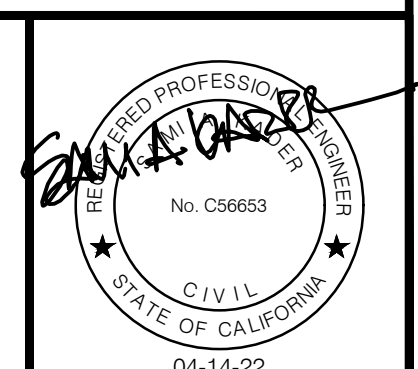
WATERWORKS ENGINEERS

DRAWN BY: MDT

DESIGNED BY: SAK/PW

CHECKED BY: DATE:

APPROVED BY: DATE:





REVISIONS:

NO.	DATE	BY

DISTRIBUTION MAP DATE: INT:
 PLAT SHEET
 SYSTEM SCHEMATIC
 STATION SCHEMATIC
 PLAT SHEET NO.:

SCALE:

1" = 10'

DRAWN BY:

MDT

DESIGNED BY:

PMW

TECH REVIEW: DATE:

CHECKED BY: DATE:

APPROVED BY: DATE:

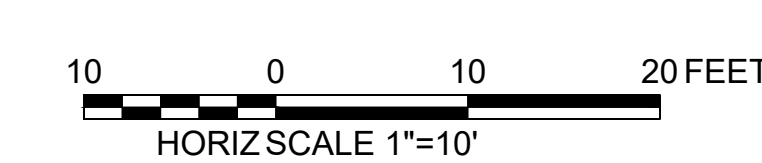
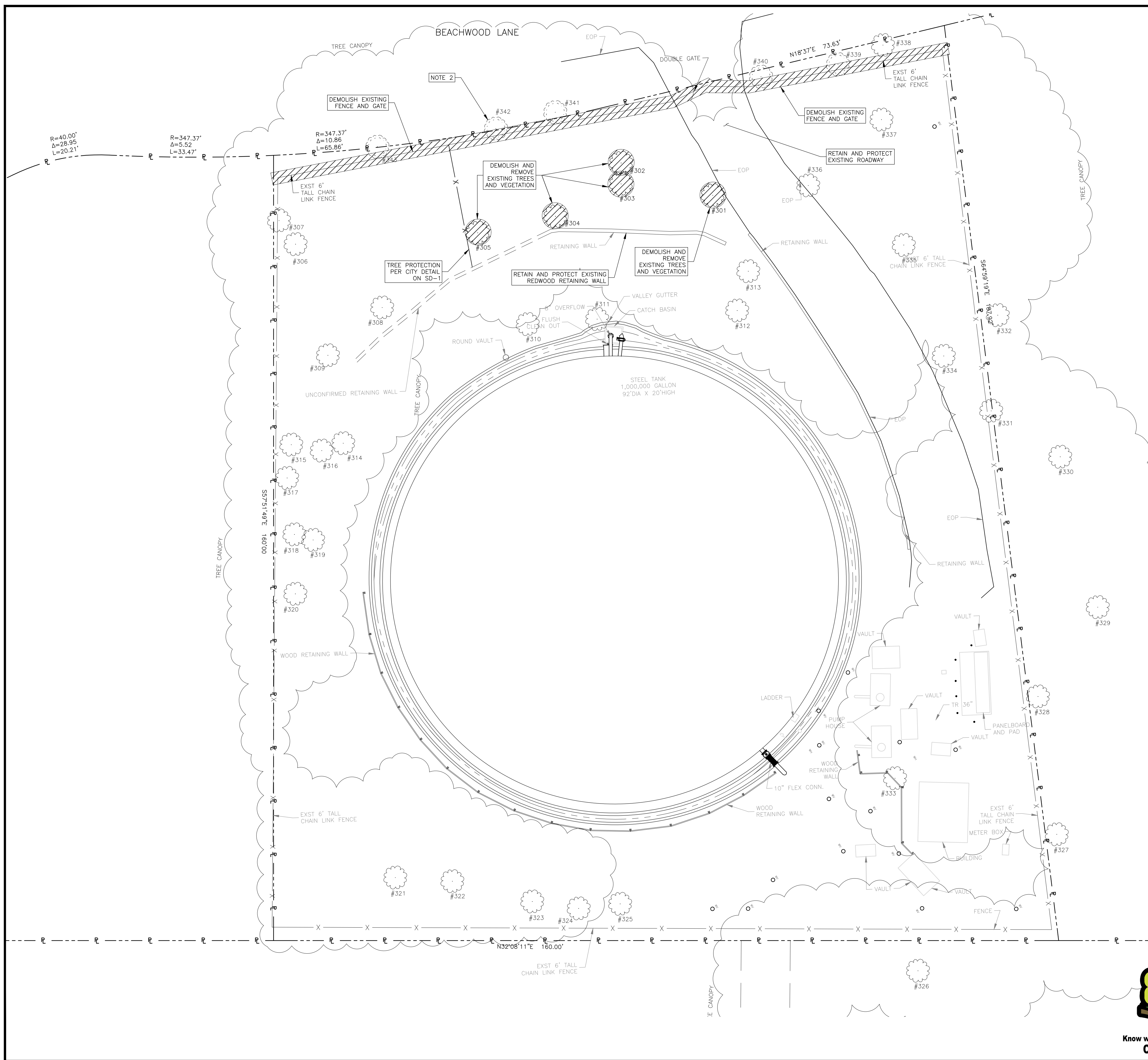
SAK

LEGEND:
 EXISTING SCREENING TREE
 EXISTING TREE

NOTE:
 1. PRIOR TO CONSTRUCTION, CONTRACTOR TO ENGAGE THE SERVICES OF AN ARBORIST TO OBTAIN TREE REMOVAL PERMIT FROM THE CITY OF LOS ALTOS FOR THE REMOVAL OF THE TREES INDICATED FOR DEMOLITION AND REMOVE THOSE TREES PER THE REQUIREMENTS OF THAT PERMIT PRIOR TO CONSTRUCTION.
 2. EXISTING SCREENING TREES 339, 340, 342, AND 343 SHALL NOT BE TRIMMED OR REMOVED.

TREE REMOVAL TABLE				
TAG NO.	SPECIES	DIAMETER (IN)	HEIGHT (FT)	RETAIN/REMOVE
301	ACACIA DEALBATA	7.2	45	REMOVE
302	EUCALYPTUS NICHOLII	20	50	REMOVE
303	EUCALYPTUS NICHOLII	17	50	REMOVE
304	ACACIA DEALBATA	5.7	35	REMOVE
305	EUCALYPTUS NICHOLII	16.5, 4.7, 2.7	50	REMOVE
306	ACACIA DEALBATA	11.1	30	RETAIN
307	ACACIA DEALBATA	10.5, 4.0, 4.0	35	RETAIN
308	ACACIA DEALBATA	18.4	50	RETAIN
309	ACACIA DEALBATA	8.2	35	RETAIN
310	ACACIA DEALBATA	8.6	30	RETAIN
311	ACACIA DEALBATA	11.8	40	RETAIN
312	ACACIA DEALBATA	15.8	40	RETAIN
313	ACACIA DEALBATA	9.6	50	RETAIN
314	ACACIA DEALBATA	14.6	45	RETAIN
315	ACACIA DEALBATA	10.5	40	RETAIN
316	ACACIA DEALBATA	7.2	30	RETAIN
317	ACACIA DEALBATA	12	40	RETAIN
318	ACACIA DEALBATA	11.7	50	RETAIN
319	ACACIA DEALBATA	14.3	40	RETAIN
320	ACACIA DEALBATA	17.6	20	RETAIN
321	ACACIA DEALBATA	13.9	35	RETAIN
322	EUCALYPTUS SIDEROXYLON	26.9	55	RETAIN
323	ACACIA DEALBATA	13.1	20	RETAIN
324	EUCALYPTUS SIDEROXYLON	28.3	60	RETAIN
325	ACACIA DEALBATA	7.5	20	RETAIN
326	QUERCUS AGRIFOLIA	5	20	RETAIN
327	OLEA EUROPAEA	7, 4, 3	25	RETAIN
328	QUERCUS AGRIFOLIA	20	40	RETAIN
329	QUERCUS AGRIFOLIA	12	40	RETAIN
330	QUERCUS AGRIFOLIA	16, 12	45	RETAIN
331	ACACIA DEALBATA	5	20	RETAIN
332	ACACIA DEALBATA	16	50	RETAIN
333	QUERCUS AGRIFOLIA	22	35	RETAIN
334	QUERCUS AGRIFOLIA	23.5	35	RETAIN
335	ACACIA DEALBATA	11.6	30	RETAIN
336	ACACIA DEALBATA	10.7	25	RETAIN
337	QUERCUS AGRIFOLIA	18.7	25	RETAIN
338	CUPRESSUS SP.	5.5, 5.0	20	RETAIN
339	QUERCUS AGRIFOLIA	6.5	20	RETAIN
340	QUERCUS AGRIFOLIA	5	15	RETAIN
341	ACACIA DEALBATA	15.5	35	RETAIN
342	ACACIA DEALBATA	9.4	35	RETAIN
343	ACACIA DEALBATA	16.2	3	RETAIN

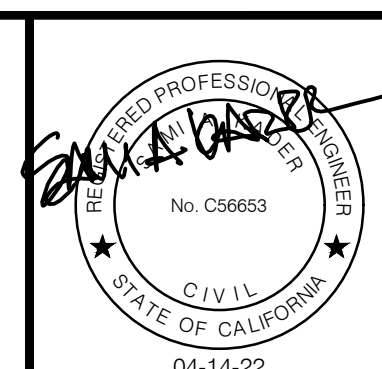
*TREE INFORMATION PER AUGUST 31, 2021 ARBORIST REPORT PREPARED BY HELIX ENVIRONMENTAL PLANNING.



WATERWORKS ENGINEERS

DRAWN BY: MDT
 DESIGNED BY: SAK/PW

CHECKED BY: DATE:
 APPROVED BY: DATE:

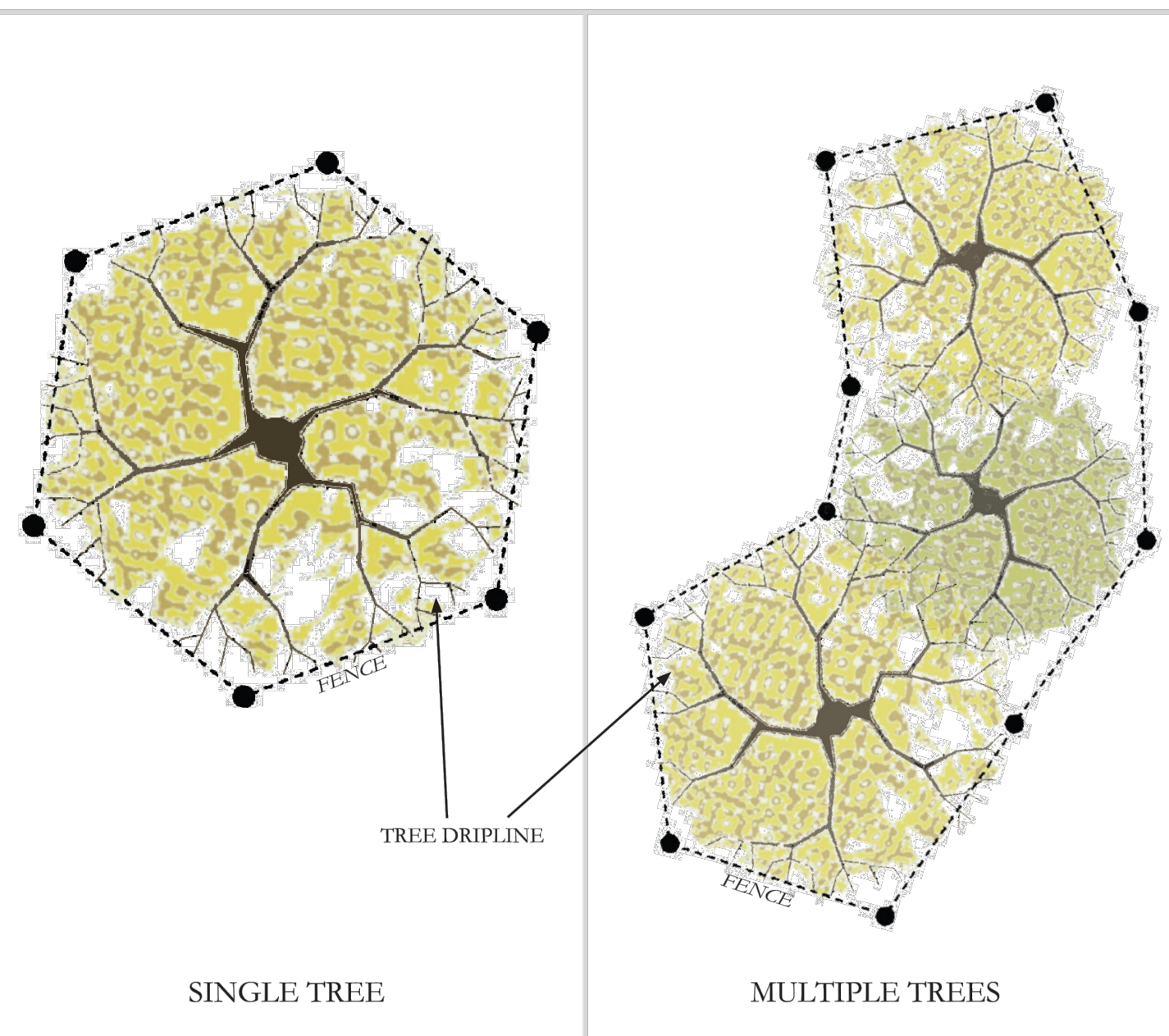


PRELIMINARY NOT FOR CONSTRUCTION

TITLE: LOS ALTOS STATION 9 GENERATOR PROJECT
 CIVIL
 SITE PLAN WITH ALL TREES AND DEMOLITION PLAN

DISTRICT: LOS ALTOS

DATE: APRIL 2022
 PROJECT ID: 00117411
 DRAWING NO.: LAS9-3575-C-005
 SHEET 7 OF 8



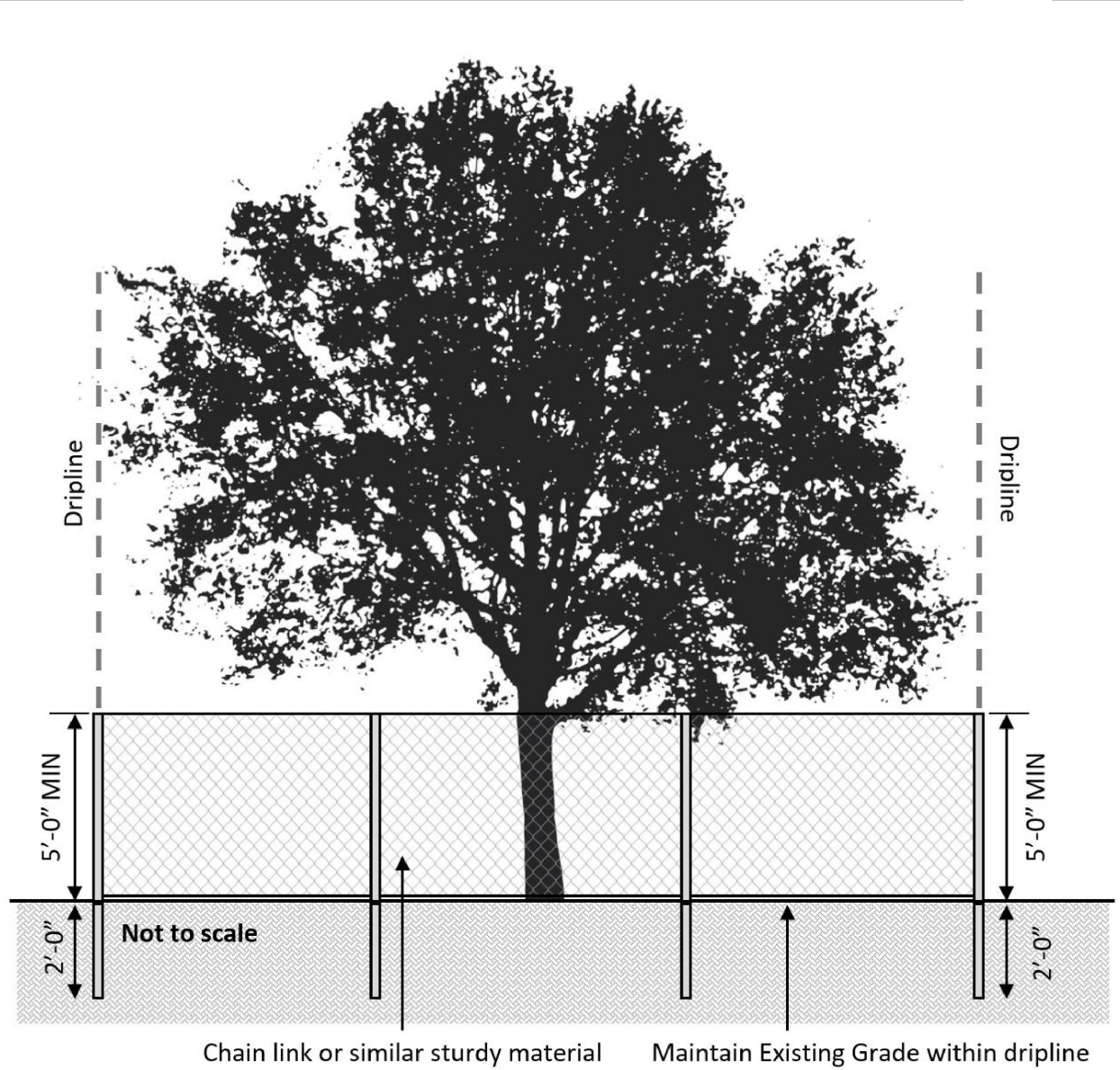
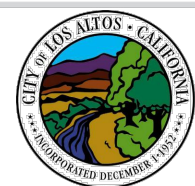
SINGLE TREE

MULTIPLE TREES

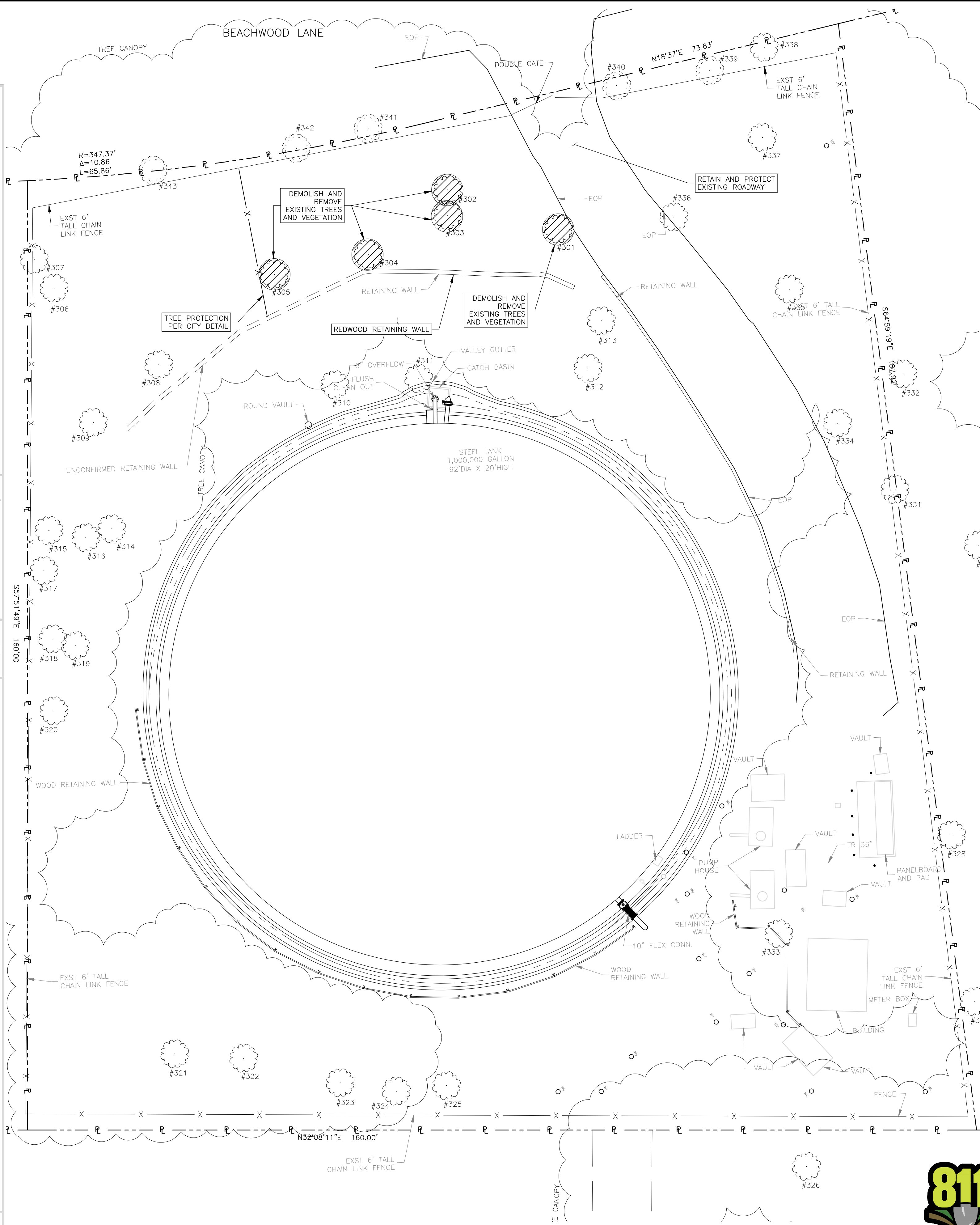
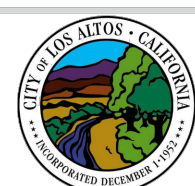
Notes per Section 11.08.120 of the Municipal Code:

1. Protective fencing shall be installed no closer to the trunk than the dripline, and far enough from the trunk to protect the integrity of the tree.
2. The fence shall be chain link and a minimum of five feet in height. Fence shall be supported by vertical posts driven 2 feet (min) into the ground.
3. The existing grade level around a tree shall normally be maintained out to the dripline of the tree. No signs, wires, or any other object shall be attached to the tree.
4. Trees that have been damaged by construction shall be repaired in accordance with accepted arboriculture methods.

TREE PROTECTION FENCE DETAIL
PLAN VIEW



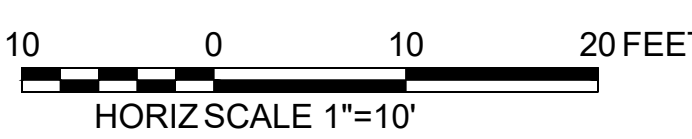
TREE PROTECTION FENCE DETAIL
ELEVATION VIEW



TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY GRADING, MOVEMENT OF HEAVY EQUIPMENT, OR OTHER CONSTRUCTION ACTIVITIES, TREE PROTECTION FENCING (TPF), CONSISTING OF A MINIMUM FOUR-FOOT TALL HIGH-VISIBILITY FENCE (ORANGE PLASTIC SNOW FENCE OR SIMILAR), SHOULD BE INSTALLED AT THE EDGE OF EXISTING PLANTING AREA AROUND TREES TO BE PRESERVED. IF PERMANENT IMPROVEMENTS (E.G., PAVING, STRUCTURES) WILL BE CONSTRUCTED WITHIN THE EXISTING PLANTING AREA, THEN PLACE TPF ONE-FOOT OUTSIDE OF LIMIT OF WORK. FENCING SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
2. WHENEVER POSSIBLE, FENCE MULTIPLE TREES TOGETHER IN A SINGLE TPF ZONE.
3. NO PARKING, PORTABLE TOILETS, DUMPING OR STORAGE OF ANY CONSTRUCTION MATERIALS, INCLUDING OIL, GAS, OR OTHER CHEMICALS, OR OTHER INFRINGEMENT BY WORKERS OR DOMESTICATED ANIMALS IS ALLOWED IN THE TPF.
4. DO NOT PLACE OR STORE ANY EQUIPMENT OR CONSTRUCTION MATERIALS INTO OR ALLOW FLOW OF ANY OIL, FUEL, CONCRETE MIX, OR OTHER DELETERIOUS SUBSTANCE WITHIN THE TPF.
5. ALL PRESERVED TREES LOCATED WITHIN 25-FOET OF STRUCTURES SHOULD BE PROTECTED FROM STUCCO AND/OR PAINT DURING CONSTRUCTION.
6. GRADING SHOULD BE DESIGNED TO AVOID PONDING AND ENSURE PROPER DRAINAGE WITHIN DRIPLINES OF ALL PRESERVED TREES.
7. MINIMIZE DISTURBANCE TO THE EXISTING GROUND SURFACE UNDER PRESERVED TREES TO THE GREATEST EXTENT FEASIBLE.
8. AVOID TRENCHING, GRADING, PAVING, OR OTHERWISE DAMAGING OR DISTURBING ANY ROOTS WITHIN THE TPF TO THE GREATEST EXTENT FEASIBLE.
9. IF UNDERGROUND UTILITIES AND/OR IRRIGATION TRENCHING IS REQUIRED THAT WILL ENCROACH WITHIN THE TPF, THEY SHOULD BE BORED OR DRILLED UNDER THE ROOT SYSTEM TO THE EXTENT FEASIBLE. IF BORING OR DRILLING IS NOT FEASIBLE, REQUIRED TRENCHING SHOULD BE COMPLETED BY HAND TOOLS, AIR SPADES, OR OTHER ACCEPTABLE MEASURES UNDER THE SUPERVISION OF AN ISA-CERTIFIED ARBORIST. BORING MACHINERY, BORING PITS, AND SPOILS SHOULD BE SET OUTSIDE OF THE TPF.
10. ALL REQUIRED TREE WORK SHOULD CONFORM TO THE MOST CURRENT AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) TREE CARE STANDARDS.
11. ALL TREE PRUNING SHOULD BE PERFORMED BY A LANDSCAPE CONTRACTOR THAT IS CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE AS A CERTIFIED TREE TRIMMER OR CERTIFIED ARBORIST OR OTHER QUALIFIED TREE EXPERT. TREE PRUNING IS LIMITED TO THE FOLLOWING: REMOVE DEAD WOOD AND DISEASED, CROWDED, AND WEAKLY ATTACHED TRUNKS AND BRANCHES WHICH CREATE A HAZARD TO PRIVATE PROPERTY AND CITIZENS.
12. PROVIDE ADEQUATE CLEARANCE AND VISIBILITY FOR SAFE USE OF PARKING STALLS, TRAVEL WAYS, AND WALKWAYS FOR THE PASSAGE OF PERSONS AND VEHICLES.
13. REMOVE VISIBILITY OBSTRUCTION OF TRAFFIC SIGNS.
14. PROVIDE ADEQUATE VISIBILITY FOR SECURITY PATROLS.
15. REPAIR SPLIT TREES AND LIMBS IN ORDER TO SAVE THE TREE AND ITS APPEARANCE.
16. REMOVE OR SEVER ROOTS OF TREES WHICH ARE CAUSING DAMAGE TO PUBLIC OR PRIVATE PROPERTY SUCH AS CURBS, GUTTERS, SIDEWALK, DRAINAGE LINES, AND PARKING LOT SURFACES.
17. PROVIDE VISIBILITY FOR MERCHANT SIGNAGE AND INCREASE PARKING LOT LIGHTING ONLY WHEN THE AESTHETICS OF THE TREE AND THE PARKING LOT SHADING REQUIREMENTS WILL NOT BE REDUCED.
18. AVOID CUTTING MAJOR ROOTS (ONE-INCH OR GREATER IN DIAMETER) TO THE GREATEST EXTENT FEASIBLE. CUT ALL ROOTS, REGARDLESS OF SIZE, CLEANLY AT THE EDGE OF GROUND DISTURBANCE WITH PRUNING INSTRUMENTS AND KEEP ROOTS MOIST UNTIL COVERED WITH SOIL.
19. PRUNING OF LIVING LIMBS OR ROOTS SHOULD BE DONE UNDER THE SUPERVISION OF AN ISA-CERTIFIED ARBORIST. ALL PRUNING SHOULD BE DONE BY HAND, IN ACCORDANCE WITH ISA STANDARDS USING TREE MAINTENANCE BEST PRACTICES. CLIMBING SPIKES SHOULD NOT BE USED ON LIVING TREES. LIMBS SHOULD BE REMOVED WITH CLEAN CUTS JUST OUTSIDE THE BRANCH COLLAR.
20. ALL EXPOSED ROOTS SHOULD BE COVERED WITH PROTECTIVE MATERIAL (E.G., DAMP BURLAP) DURING CONSTRUCTION TO PREVENT DRYING OUT.
21. NO SIGNS, ROPES, CABLES, OR ANY OTHER ITEM SHOULD BE ATTACHED TO A TREE.
22. NO BURNING OR USE OF EQUIPMENT WITH AN OPEN FLAME SHOULD OCCUR NEAR OR WITHIN THE TPF. APPROPRIATE FIRE PREVENTION TECHNIQUES SHOULD BE EMPLOYED AROUND ALL TREES TO BE PRESERVED. THIS INCLUDES CUTTING TALL GRASS, REMOVING FLAMMABLE DEBRIS WITHIN THE TPF, AND PROHIBITING THE USE OF TOOLS THAT MAY CAUSE SPARKS, SUCH AS METAL BLADE TRIMMERS OR MOWERS.

PRELIMINARY NOT FOR CONSTRUCTION



WATERWORKS ENGINEERS

DRAWN BY: MDT CHECKED BY: _____ DATE: _____

DESIGNED BY: SAK/PW APPROVED BY: _____ DATE: _____

STATE OF CALIFORNIA
CIVIL ENGINEER
No. C56653
DATE: 04-14-22

ENGINEERING

DEPARTMENT

REVISIONS:

NO.	DATE	BY

DISTRIBUTION: DATE: _____

MAP SHEET: DATE: _____

SYSTEM SCHEMATIC: DATE: _____

STATION SCHEMATIC: DATE: _____

PLAT SHEET NO.:

SCALE: **1"=10'**

DRAWN BY: **MDT**

DESIGNED BY: **PMW**

TECH REVIEW: _____ DATE: _____

CHECKED BY: _____ DATE: _____

APPROVED BY: **CVB** DATE: _____

SAK

LOS ALTOS STATION 9 GENERATOR PROJECT
CIVIL TREE PROTECTION PLAN

TITLE: _____ DISTRICT: **LOS ALTOS**

DATE: **APRIL 2022**

PROJECT ID: **00117411**

DRAWING NO.: **LAS9-3575-C-006**

SHT **8** OF **8**

