



SANTA CLARA CIVIC RELO
1515 RICHARD AVENUE, SANTA CLARA, CA 95050
LOCATION NUMBER: 381829

VERIZON WIRELESS EQUIPMENT ENGINEER:	VERIZON WIRELESS REAL ESTATE:
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
VERIZON WIRELESS CONSTRUCTION:	VERIZON WIRELESS RF ENGINEER:
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
PROPERTY OWNER:	ON AIR, LLC- LEASING
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
ON AIR, LLC- CONSTRUCTION	ON AIR, LLC- ZONING
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

SANTA CLARA CIVIC RELO

381829
1515 RICHARD AVENUE,
SANTA CLARA, CA 95050



2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598



**PRELIMINARY:
NOT FOR
CONSTRUCTION**

KEVIN R. SORENSEN
S4469

ISSUE STATUS			
Δ	DATE	DESCRIPTION	REV
	10/22/19	CLIENT REV	C.C.
	12/13/19	CLIENT REV	D.G.
	01/21/20	CLIENT REV	D.G.
	07/24/20	PLANNING COMM	C.C.
	11/17/20	PLANNING COMM	C.C.
	12/28/20	PLANNING COMM	C.C.

DRAWN BY: P. STAROVVOYTOV

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 12/28/20

SHEET TITLE:

TITLE

SHEET NUMBER:

T-1

PROJECT DESCRIPTION

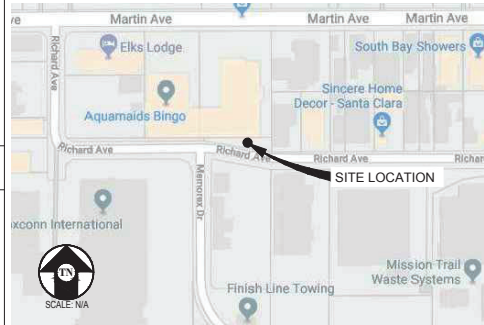
A (P) VERIZON WIRELESS UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:

- (P) VERIZON WIRELESS 70'-0" TALL MONOPINE
- (9) (P) ANTENNAS
- (9) (P) RRU UNITS
- (4) (P) SURGE SUPPRESSORS, (2) @ EQUIPMENT & (2) @ ANTENNAS
- A (P) VERIZON WIRELESS 35KW GAS GENERATOR
- A (P) VERIZON WIRELESS 30'-0"x20'-2" (605 SQFT) LEASE AREA
- (P) GPS ANTENNA

PROJECT INFORMATION

SITE NAME:	SANTA CLARA CIVIC RELO	SITE #:	381829
COUNTY:	SANTA CLARA	JURISDICTION:	CITY OF SANTA CLARA
APN:	224-06-146	POWER:	SILICON VALLEY POWER
SITE ADDRESS:	1515 RICHARD AVENUE SANTA CLARA, CA 95050	NATURAL GAS:	PG&E
		FIBER:	T.B.D.
CURRENT ZONING:	LM (LIGHT MANUFACTURING)		
CONSTRUCTION TYPE:	V-B		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
PROPERTY OWNER:	NORMAN RIVIZZA AND MARIANNE RHINE 1690 CLEVELAND AVENUE, SAN JOSE, CA 95126 (408)286-3575		
APPLICANT:	VERIZON WIRELESS 2785 MITCHELL DRIVE, BLDG 9 WALNUT CREEK, CA 94598		
SITE ACQUISITION COMPANY:	ON AIR LLC 465 FIRST STREET WEST, SUITE 101 SONOMA, CA 95476		
LEASING CONTACT:	CHRIS FOWLER (650)888-0809 CFOWLER@ONAIRLLC.COM		
ZONING CONTACT:	CHRIS FOWLER (650)888-0809 CFOWLER@ONAIRLLC.COM		
CONSTRUCTION CONTACT:	MOHAMMAD BASEER (510)414-7075 MBASEER@ONAIRLLC.COM		

VICINITY MAP



DRIVING DIRECTIONS

FROM:	2785 MITCHELL DRIVE, BLDG 9, WALNUT CREEK, CA 94598	
	1515 RICHARD AVENUE, SANTA CLARA, CA 95050	
1.	HEAD SOUTHWEST ON MITCHELL DR TOWARD N WIGET LN	0.3 MI
2.	TURN LEFT ONTO N WIGET LN	0.3 MI
3.	TURN RIGHT ONTO YONACIO VALLEY RD	2.9 MI
4.	YONACIO VALLEY RD TURNS RIGHT AND BECOMES HILLSIDE AVE	0.2 MI
5.	TURN RIGHT ONTO THE 24 W RAMP TO OAKLAND	1.2 MI
6.	CONTINUE ONTO CA-24 W/HWY 24 W	8.1 MI
7.	KEEP LEFT AT THE FORK TO CONTINUE ON CA-24 W	5.3 MI
8.	CONTINUE ONTO I-980 W	1.8 MI
9.	MERGE ONTO I-980 S	38.8 MI
10.	USE THE RIGHT LANE TO TAKE EXIT 3 FOR COLEMAN AVE TOWARD MINETA SJ INTL AIRPORT	0.3 MI
11.	TURN RIGHT ONTO COLEMAN AVE	1.4 MI
12.	USE THE LEFT LANE TO MERGE ONTO DE LA CRUZ BLVD	344 FT
13.	TURN LEFT ONTO REED ST	0.4 MI
14.	TURN RIGHT ONTO LAFAYETTE ST	0.4 MI
15.	TURN LEFT ONTO RICHARD AVE	
16.	DESTINATION WILL BE ON THE LEFT	0.3 MI
END AT:	1515 RICHARD AVENUE, SANTA CLARA, CA, 95050	
ESTIMATED TIME:	1 HOUR 12 MINUTES	ESTIMATED DISTANCE: 61.6 MILES

CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- 2016 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2016 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUME 1&2, TITLE 24 C.C.R. (2015 INTERNATIONAL BUILDING CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2014 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2015 UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2015 UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2016 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
- 2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R. ANSI/EIA-TIA-222-G

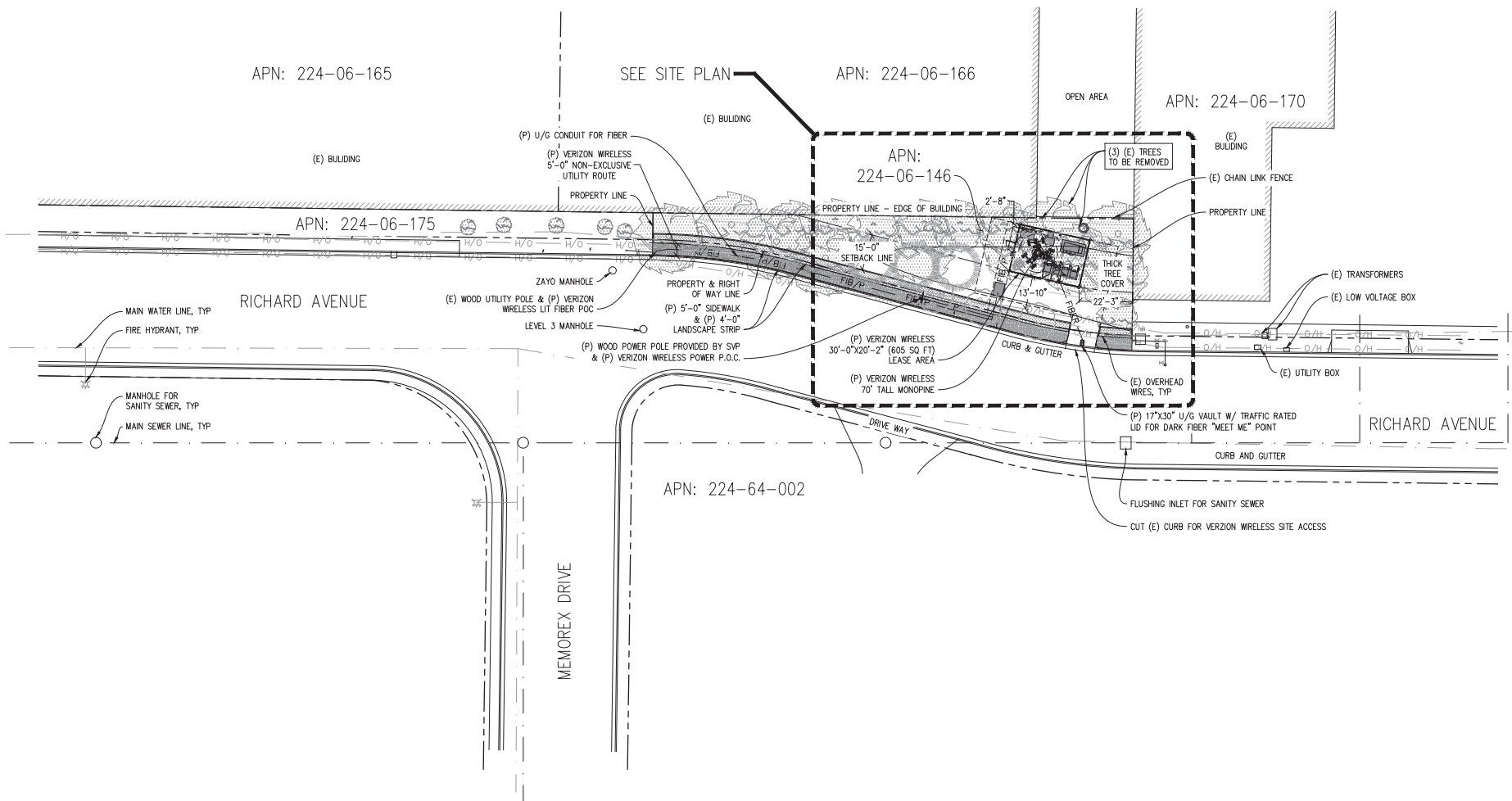
ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B-203.5

SHEET INDEX

SHEET	DESCRIPTION	REV
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OVERALL SITE PLAN

1"=20'-0"



LOT COVERAGE:

TOTAL LOT SIZE = 5,796 SQ FT (0.133 ACRES)
VERIZON WIRELESS LOT COVERAGE = 605 SQ FT

NOTE:

1. CONTRACTOR TO PLACE ALL (P) U/G CONDUITS TO AVOID (E) TREE TRUNKS & ROOTS.
2. CONTRACTOR TO RESTORE ANY IRRIGATION LINES & LANDSCAPING AFFECTED BY THE INSTALLATION OF THE (P) VERIZON WIRELESS POWER & FIBER CONDUITS.

SANTA CLARA CIVIC RELO

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SANTA CLARA, CA 95050

verizon

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

Streamline Engineering

and Design, Inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661

Contact: Kevin Sorensen Phone: 916-660-1930

E-Mail: k.sorensen@streamline-engineering.com Fax: 916-660-1941

VERIZON WIRELESS SITE PLAN FOR THE VERIZON WIRELESS SITE AT 2785 MITCHELL DRIVE, BLDG 9, WALNUT CREEK, CA 94598. THE SITE PLAN IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. THE SITE PLAN IS THE PROPERTY OF STREAMLINE ENGINEERING AND DESIGN, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF STREAMLINE ENGINEERING AND DESIGN, INC.

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DRAWN BY: P. STAROVVOYTOV

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 12/28/20

SHEET TITLE:

OVERALL
SITE PLAN

SHEET NUMBER:

A-1

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verizon

2785 MITCHELL DRIVE, BUILD 9
WALNUT CREEK, CA 94598

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E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

VERIZON WIRELESS COMMUNICATIONS, INC. (VWC) IS A VERIZON WIRELESS COMPANY. VERIZON WIRELESS COMMUNICATIONS, INC. IS A VERIZON WIRELESS COMPANY. VERIZON WIRELESS COMMUNICATIONS, INC. IS A VERIZON WIRELESS COMPANY.

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DRAWN BY: P. STAROVYTOV

CHECKED BY: J. GRAY

APPROVED BY: -

DATE: 12/28/20

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A-2

APN: 224-06-166

APN: 224-06-146

APN: 224-06-170

RICHARD AVENUE

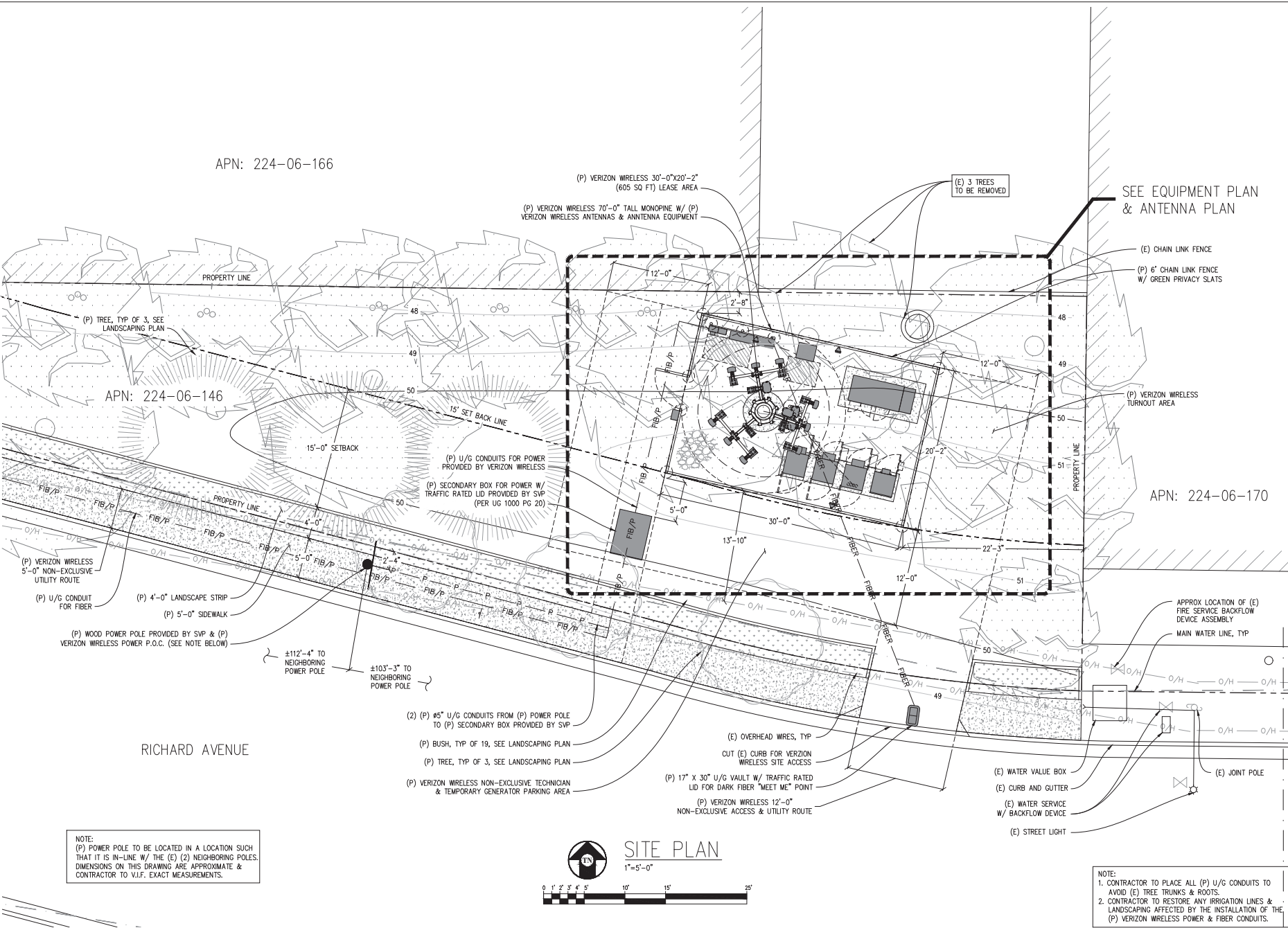
SITE PLAN

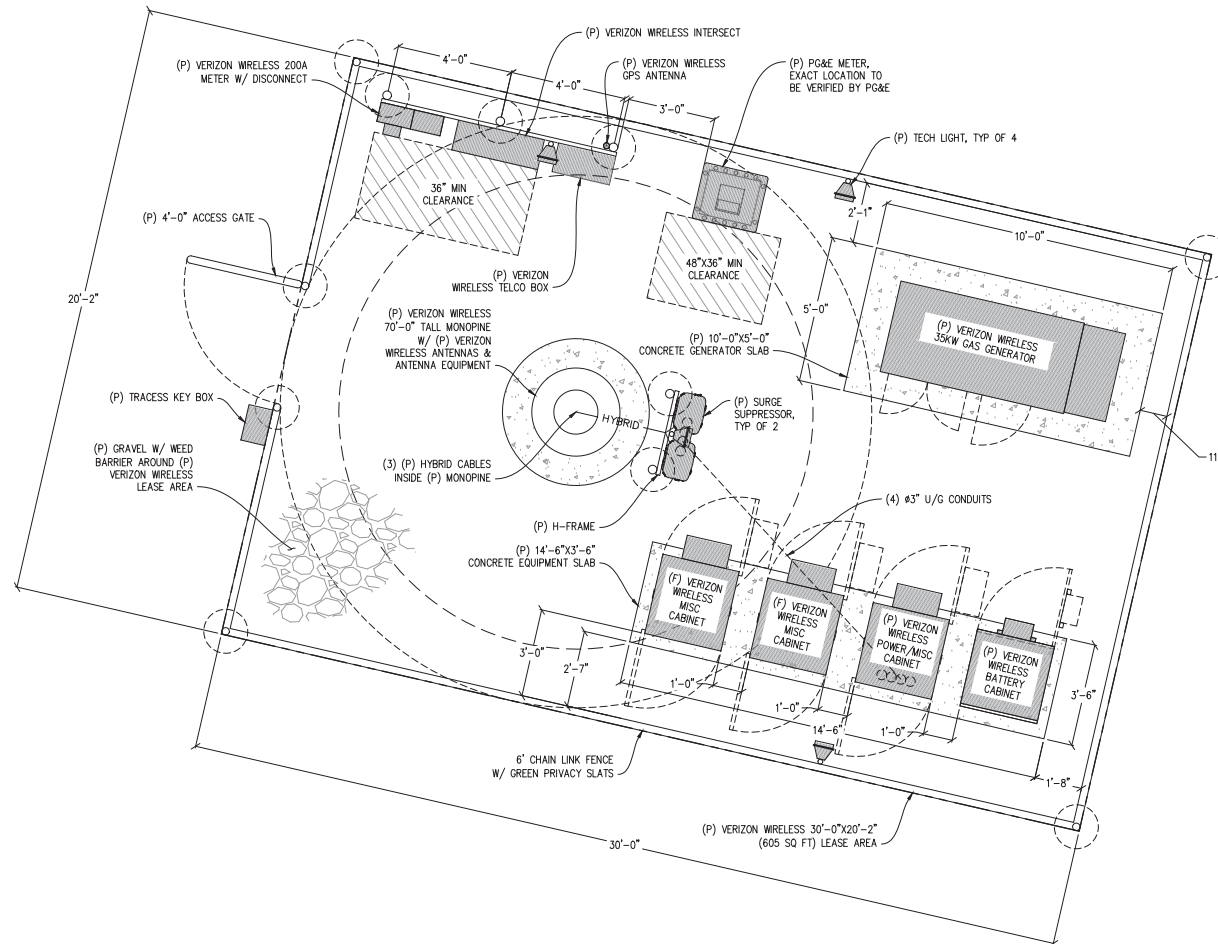
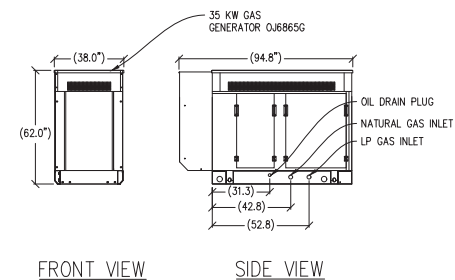
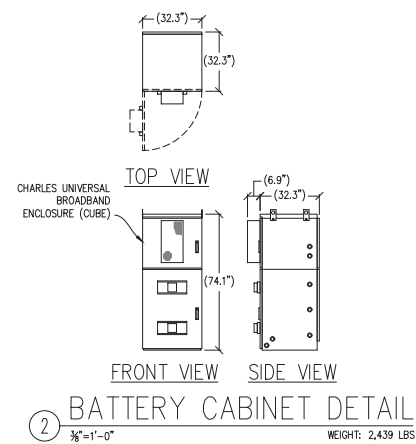
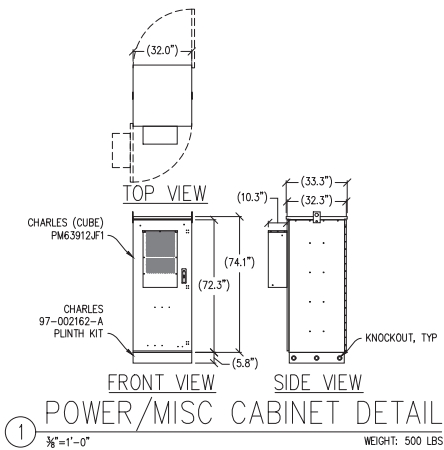
1"=5'-0"



NOTE:
(P) POWER POLE TO BE LOCATED IN A LOCATION SUCH THAT IT IS IN-LINE W/ THE (E) (2) NEIGHBORING POLES. DIMENSIONS ON THIS DRAWING ARE APPROXIMATE & CONTRACTOR TO V.L.F. EXACT MEASUREMENTS.

NOTE:
1. CONTRACTOR TO PLACE ALL (P) U/G CONDUITS TO AVOID (E) TREE TRUNKS & ROOTS.
2. CONTRACTOR TO RESTORE ANY IRRIGATION LINES & LANDSCAPING AFFECTED BY THE INSTALLATION OF THE (P) VERIZON WIRELESS POWER & FIBER CONDUITS.





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VERIZON WIRELESS ANTENNAS HAVE BEEN OMITTED FOR CLARITY. ANTENNAS ARE LOCATED AT THE VERIZON WIRELESS ANTENNA SITES. ANTENNAS ARE LOCATED AT THE VERIZON WIRELESS ANTENNA SITES. ANTENNAS ARE LOCATED AT THE VERIZON WIRELESS ANTENNA SITES.

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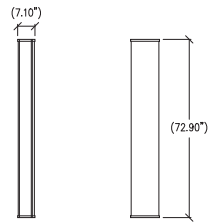
SHEET TITLE:

EQUIPMENT PLAN
& DETAILS

SHEET NUMBER:

A-3

(11.85")
TOP VIEW

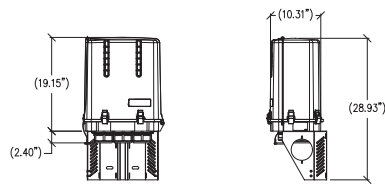


LEFT VIEW FRONT VIEW

1 ANTENNA DETAIL
1/2"=1'-0" MAX WEIGHT: 40.6 LBS



TOP VIEW

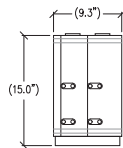


FRONT VIEW RIGHT VIEW

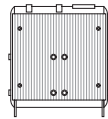
3 SURGE PROTECTION BOX
1"=1'-0" MAX WEIGHT: 32.0 LBS



TOP VIEW

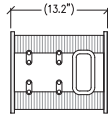


SIDE VIEW

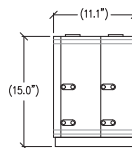


FRONT VIEW

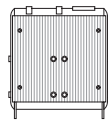
2 RRU DETAIL
1/2"=1'-0" MAX WEIGHT: 70 LBS



TOP VIEW

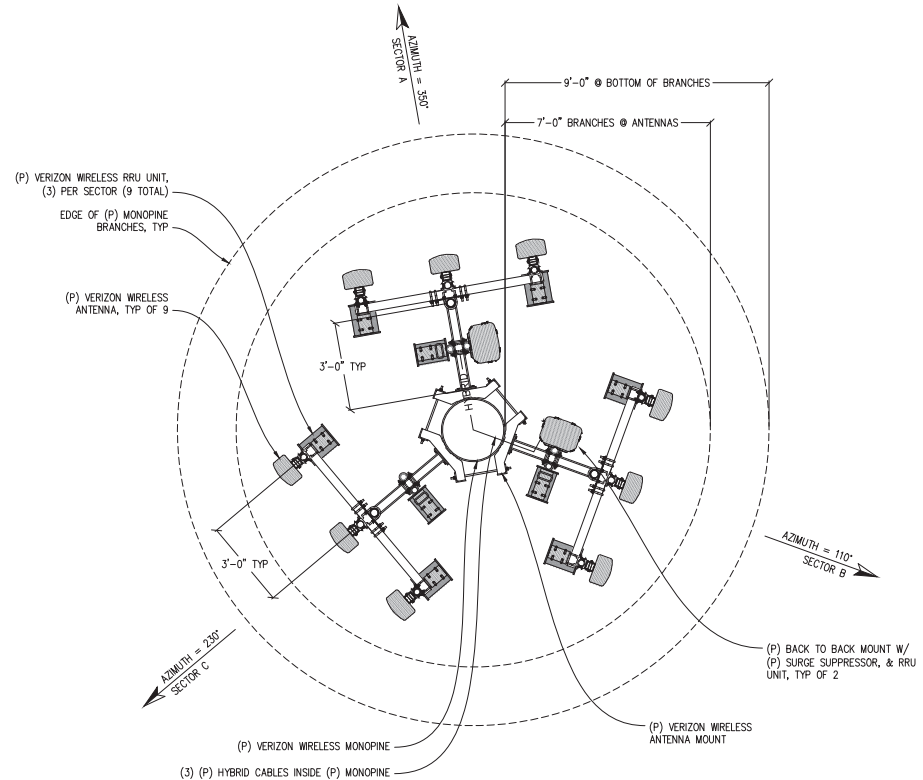


SIDE VIEW



FRONT VIEW

4 RRU DETAIL
1/2"=1'-0" MAX WEIGHT: 75 LBS



ANTENNA PLAN
1/2"=1'-0"

- NOTES:
1. ALL (P) VERIZON WIRELESS ANTENNAS, ANTENNA MOUNTS, ANTENNA EQUIPMENT, & EXPOSED CABLES TO BE PAINTED TO MATCH (P) VERIZON WIRELESS MONOPINE.
 2. ALL (P) VERIZON WIRELESS ANTENNAS TO BE COVERED IN MONOPINE "SOCKS".
 3. ALL (P) VERIZON WIRELESS ANTENNAS, & ANTENNA EQUIPMENT TO BE INSIDE (P) MONOPINE BRANCH RADIUS.

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SANTA CLARA, CA 95050

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We warrant our work to be free of design errors and omissions, and we warrant that our work will be performed in accordance with the applicable standards of the engineering profession. We warrant that our work will be performed in accordance with the applicable standards of the engineering profession. We warrant that our work will be performed in accordance with the applicable standards of the engineering profession.

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DRAWN BY: P. STAROVYTOV

CHECKED BY: J. GRAY

APPROVED BY: --

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SHEET TITLE:

ANTENNA PLAN
& DETAILS

SHEET NUMBER:

A-4

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DRAWN BY: P. STAROVVOYTOV

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DATE: 12/28/20

SHEET TITLE:

ELEVATION

SHEET NUMBER:

A-5

TOP OF (P) VERIZON WIRELESS MONOPINE BRANCHES
±70'-0" A.G.L.

TOP OF (P) VERIZON WIRELESS MONOPINE & (P) VERIZON WIRELESS ANTENNAS
±65'-0" A.G.L.

CENTER OF (P) VERIZON WIRELESS ANTENNAS
±61'-11" A.G.L.

(P) SURGE SUPPRESSOR,
TYP OF 2

(3) (P) HYBRID CABLES
INSIDE (P) MONOPINE

(P) VERIZON WIRELESS
ANTENNA, TYP OF 9

(P) VERIZON WIRELESS RRU
UNIT, TYP OF 9

(P) VERIZON WIRELESS MONOPINE

BOTTOM OF (P) VERIZON WIRELESS MONOPINE BRANCHES
20'-0" A.G.L.

(P) 6' CHAIN LINK FENCE
W/ GREEN PRIVACY SLATS

(P) VERIZON WIRELESS EQUIPMENT, TYP

(P) VERIZON WIRELESS 30'-0"X20'-2"
(605 SQ FT) LEASE AREA

(P) LANDSCAPING, SEE
LANDSCAPING PLAN

(E) BUILDING

GROUND LEVEL
0'-0"

- NOTES:
1. ALL (P) VERIZON WIRELESS ANTENNAS, ANTENNA MOUNTS, ANTENNA EQUIPMENT, & EXPOSED CABLES TO BE PAINTED TO MATCH (P) VERIZON WIRELESS MONOPINE.
 2. ALL (P) VERIZON WIRELESS ANTENNAS TO BE COVERED IN MONOPINE "SOCKS".
 3. ALL (P) VERIZON WIRELESS ANTENNAS, & ANTENNA EQUIPMENT TO BE INSIDE (P) MONOPINE BRANCH RADIUS.

EAST ELEVATION

1/8"=1'-0"

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We warrant our professional services to be performed in accordance with the standards and practices of the profession of civil engineering in the State of California. We warrant that our work will be completed in a timely manner and that we will maintain the confidentiality of all data furnished to us.

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A-6

TOP OF (P) VERIZON WIRELESS MONOPINE BRANCHES
±70'-0" A.G.L.

TOP OF (P) VERIZON WIRELESS MONOPINE & (P) VERIZON WIRELESS ANTENNAS
±65'-0" A.G.L.

CENTER OF (P) VERIZON WIRELESS ANTENNAS
±61'-11" A.G.L.

(P) VERIZON WIRELESS ANTENNA, TYP OF 9
(P) SURGE SUPPRESSOR, TYP OF 2
(P) VERIZON WIRELESS RRU UNIT, TYP OF 9
(3) (P) HYBRID CABLES INSIDE (P) MONOPINE
(P) VERIZON WIRELESS MONOPINE

BOTTOM OF (P) VERIZON WIRELESS MONOPINE BRANCHES
20'-0" A.G.L.

(P) LANDSCAPING, SEE LANDSCAPING PLAN
(P) VERIZON WIRELESS 30'-0"x20'-2" (605 SQ FT) LEASE AREA
(P) TRACESS KEY BOX
(P) LANDSCAPING, SEE LANDSCAPING PLAN
(P) VERIZON WIRELESS EQUIPMENT, TYP
(P) 6" CHAIN LINK FENCE W/ GREEN PRIVACY SLATS

GROUND LEVEL
0'-0"

SOUTH ELEVATION
1/8"=1'-0"

- NOTES:
1. ALL (P) VERIZON WIRELESS ANTENNAS, ANTENNA MOUNTS, ANTENNA EQUIPMENT, & EXPOSED CABLES TO BE PAINTED TO MATCH (P) VERIZON WIRELESS MONOPINE.
 2. ALL (P) VERIZON WIRELESS ANTENNAS TO BE COVERED IN MONOPINE "SOCKS".
 3. ALL (P) VERIZON WIRELESS ANTENNAS, & ANTENNA EQUIPMENT TO BE INSIDE (P) MONOPINE BRANCH RADIUS.

SANTA CLARA CIVIC RELO

381829
1515 RICHARD AVENUE
SANTA CLARA, CA 95050

verizon

2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

**Streamline Engineering
and Design, Inc.**

8445 Sierra College Blvd, Suite E Granite Bay, CA 95661
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ISSUE STATUS

Δ	DATE	DESCRIPTION	REV
	10/22/19	CLIENT REV	C.C.
	12/13/19	CLIENT REV	D.G.
	01/21/20	CLIENT REV	D.G.
	07/24/20	PLANNING COMM	C.C.
	11/17/20	PLANNING COMM	C.C.
	12/28/20	PLANNING COMM	C.C.

DRAWN BY: P. STAROVYOYTOV

CHECKED BY: J. GRAY

APPROVED BY: --

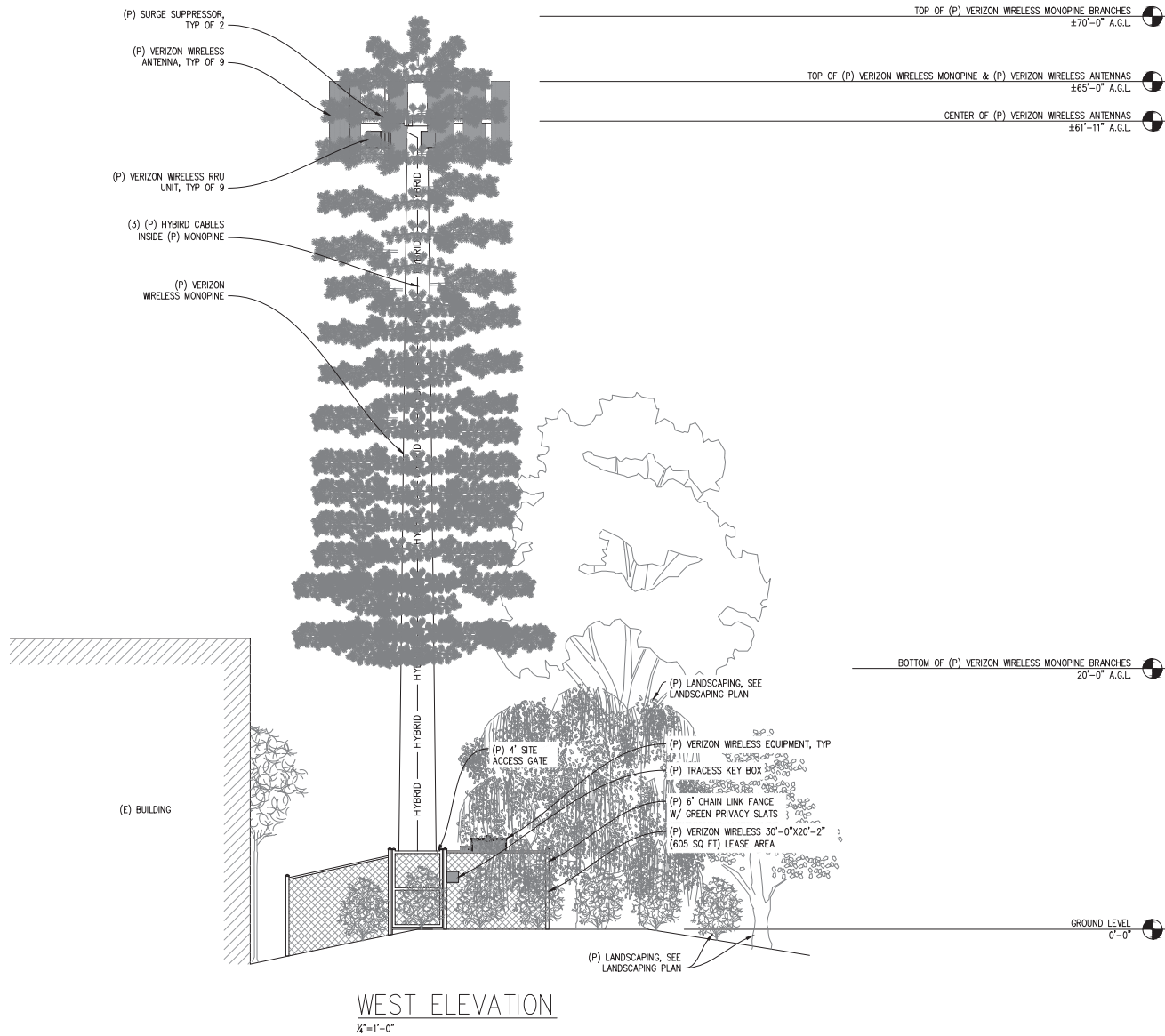
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SANTA CLARA CIVIC RELO

381829
1180 RICHARD AVENUE,
SANTA CLARA, CA 95050



2785 MITCHELL DRIVE, BLDG 9
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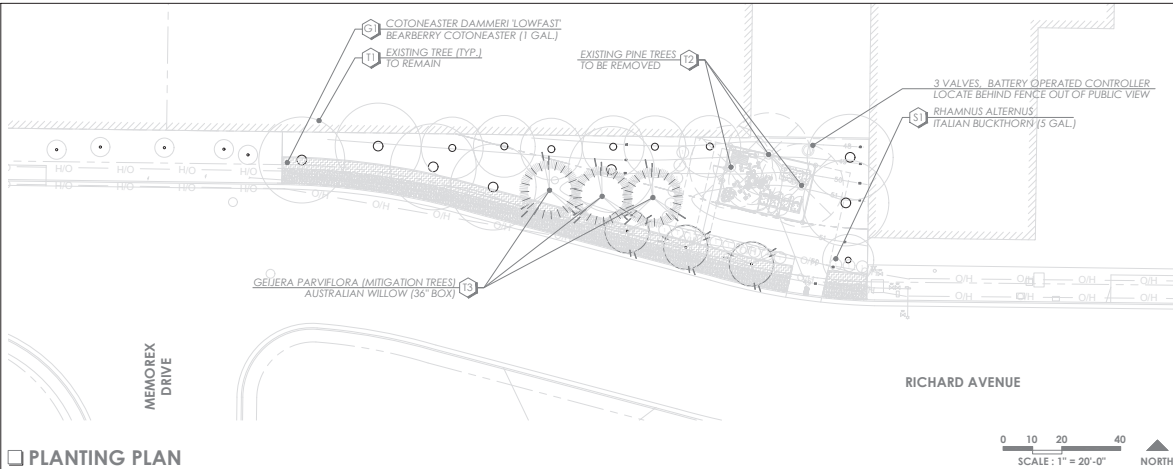
PLANTING PLAN

SHEET NUMBER:

L-1



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PLANTING PLAN

GENERAL NOTES

- MINIMUM PLANT SIZES:
STREET TREES (24" BOX), REPLACEMENT TREES (24" BOX), SHRUBS (1 GAL), GROUND COVER (PLANTS)
- TEMPORARY IRRIGATION SYSTEM TO BE INSTALLED AS A PART OF SITE CONSTRUCTION AND WILL INCLUDE A WATER TANK, 3 VALVES, & A BATTERY OPERATED CONTROLLER.
- ALL PLANTING AREAS SHALL RECEIVE A 3" LAYER OF MEDIUM BARK MULCH AFTER INSTALLATION.
- ALL PLANT MATERIAL SHALL CONFORM TO THE CITY OF SANTA CLARA OR STATE OF CALIFORNIA MODEL WATER CONSERVATION ORDINANCE.
- ALL PLANTING AND IRRIGATION SHALL BE INSTALLED PER THE CITY OF SANTA CLARA STANDARDS AND CODES.
- FOR SITE WORK, ARCHITECTURAL AND GRADING/DRAINAGE INFORMATION SEE PLANS BY OTHERS.
- ALL AREAS BEYOND THE AREA OF WORK THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RETURNED TO ORIGINAL CONDITION. DRAWINGS ARE FOR DESIGN AND REVIEW PURPOSES ONLY AND SHALL NOT BE USED AS CONSTRUCTION DOCUMENTS.
- TREES PLANTED IN AN AREA LESS THAN 8' WIDE SHALL BE INSTALLED WITH A ROOT BARRIER TO PROTECT AGAINST HARDSCAPE DAMAGE.
- STREET TREES ARE TO BE SELECTED FROM THE CITY OF SANTA CLARA APPROVED TREE LIST.

CONDITIONS OF APPROVAL

- RESPONSES TO THE PROJECT CLEARANCE COMMITTEE MINUTES DATED MARCH 3RD, 2020.
- C3/C4. THE PLANS INDICATE THAT THREE (3) TREES WILL BE REMOVED. THE TREE SURVEY PLAN INDICATES THAT ONLY TWO (2) TREES WILL BE REMOVED. INDICATE THE NUMBER OF PROPOSED TREES TO BE REMOVED.
- ALL THE REMOVED TREES SHALL BE REPLACED AT A 2:1 24" OR 1:1 36" TREE RATIO. ALLOCATE TREES FROM THE RECOMMENDED TREE LIST FOR REPLACEMENT FROM CITY ARBORIST.
- RESPONSE: THE 3 EXISTING TREE THAT ARE PROPOSED TO BE REMOVED WILL BE MITIGATED WITH 3 36" BOX TREES AND PLANTED PER THE SANTA CLARA LANDSCAPE STANDARDS.
- C5. LANDSCAPING SHALL BE PROVIDED IN THE FRONT AND SIDE YARD IN ORDER TO SCREEN THE FENCE FROM THE PUBLIC STREET.
- RESPONSE: NEW PLANTING HAS BEEN PROPOSED TO SCREEN THE FENCE FROM THE PUBLIC STREET AND IS TO BE PLANTED PER SANTA CLARA LANDSCAPE STANDARDS
- C7/E3. ALLOCATE STREET TREES FROM THE RECOMMENDED TREE LIST FROM THE CITY ARBORIST.
- RESPONSE: 3 24" BOX STREET TREES HAVE BEEN PROPOSED AND ARE TO BE PLANTED PER SANTA CLARA LANDSCAPE STANDARDS.

TREE PROTECTION NOTES

- PRIOR TO PRE-CONSTRUCTION MEETING, BEGINNING OF GRADING, AND DURING ALL GROUND DISTURBANCE AND CONSTRUCTION ACTIVITIES, TEMPORARY ORANGE PLASTIC FENCING SHALL BE INSTALLED AT THE DRIP LINE OF ALL TREES IN ORDER TO CONTROL ACCESS AND DELINEATE AREAS OF NON-DISTURBANCE. FINAL LOCATION OF FENCING TO BE DETERMINED IN FIELD BY LANDSCAPE ARBORIST.
- ANY NECESSARY PRUNING SHALL BE IN ACCORDANCE TO THE MOST CURRENT INTERNATIONAL SOCIETY OF ARBORICULTURE PRUNING STANDARDS UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.
- PRIOR TO BEGINNING WORK OR ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT AT (800) 442-4133.
- REMOVAL OF WEEDS WITHIN THE DRIP LINE OF THE TREES SHALL BE DONE BY HAND OR BY LIMITED USE OF AN APPROVED CONTACT HERBICIDE ONLY.
- NO CONSTRUCTION, STORAGE OF MATERIALS, AND/OR PARKING OF VEHICLES SHALL BE PERMITTED WITHIN THE DRIP LINE OF EXISTING TREES.
- NO GRADING SHALL OCCUR WITHIN THE DRIP LINE OF EXISTING TREES EXCEPT AS REQUIRED WITHIN DESIGNATED AREA OF ENCROACHMENT AND UNDER THE SUPERVISION OF THE PROJECT ARBORIST. THIS INCLUDES DEMOLITION WORK ALL EXCAVATION OF 6" DEEP
- IF EXCAVATION OR UTILITY INSTALLATION MUST OCCUR WITHIN THE DRIP LINE OF ANY OF EXISTING TREES, THEN THE FOLLOWING PRECAUTIONS MUST BE OBSERVE AND PERFORMED UNDER THE SUPERVISION OF THE PROJECT ARBORIST.
 - WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND TREE ROOTS.
 - EXCAVATION IN THESE AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR SHALL BE DONE BY HAND.
 - ALL ROOTS LESS THAN TWO (2) INCHES IN DIAMETER, DIRECTLY IN THE PATH OF THE PIPE OR CONDUIT, SHALL BE CLEANLY CUT UNDER THE DIRECTION OF AN APPROVED ARBORIST.
 - ALL ROOTS TWO (2) INCHES AND LARGER IN DIAMETER, EXCEPT DIRECTLY IN THE PATH OF PIPE OR CONDUIT, SHALL BE TUNNELED UNDER AND SHALL BE HEAVILY WRAPPED WITH BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING.
 - ROOTS ONE (1) INCH AND LARGER IN DIAMETER REQUIRING CUTTING SHALL BE PAINTED WITH TWO COATS OF TREE SEAL OR EQUAL.
 - WHERE A DITCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAN TWO (2) INCHES IN DIAMETER, THE WALL OF THE TRENCH ADJACENT TO TREES SHALL BE HAND TRIMMED, MAKING CLEAN CUTS THROUGH.
 - TRENCHES ADJACENT TO TREES SHOULD BE CLOSED WITHIN TWENTY FOUR (24) HOURS AND WHERE NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREES SHALL BE KEPT SHADED WITH BURLAP OR CANVAS.
- ORIGINAL GRADE AND FLOW LINES AROUND PROTECTED TREES SHALL BE MAINTAINED FOR A MINIMUM OF 6' AWAY. SOIL LINE CANNOT BE RAISED AT THE BASE OF ANY TRUNK.
- ANY DISCREPANCIES AND/OR QUESTIONS THAT MAY ARISE ON SITE REGARDING EXISTING TREES SHALL BE REFERRED TO THE PROJECT ARBORIST.
- ALL DOWNED WOOD AND UPROOTED STUMPS SHALL BE REMOVED AS PART OF THE SITE CLEAN UP. CONTRACTOR SHALL LEAVE EXISTING LEAF MULCH IN PLACE AS MUCH AS POSSIBLE.

This certificate is filled out by the project applicant upon completion of the landscape project.

Project Address and Location:		
Street Address		Parcel, tract or lot number, if available.
City		
State	Zip Code	
		Latitude/Longitude (optional)

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

"We certify that we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

1. Date the Landscape Documentation Package was submitted to the local agency _____
2. Date the Landscape Documentation Package was approved by the local agency _____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor _____

"We certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE
 Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.5.

ALL STREET TREES ARE TO BE PLANTED PER DETAIL A/L-3.
ALL SHRUBS & GROUNDCOVERS ARE TO BE PLANTED PER B,C/L-3.
CONTRACTOR IS TO PROVIDE AN AUTOMATIC IRRIGATION SYSTEM WITH 100% COVERAGE AND SEPARATE SUN/SHADE
AND TURF GRASS COVER TEMPLATES. REFER TO IRRIGATION PLANS FOR SPECIFICS OF INSTALLATIONS.
CONTRACTOR SHALL NOT DETOUR FROM ANY OF THE PLANT MATERIAL ON THE LIST UNLESS CONSULTING WITH THE
LANDSCAPE ARCHITECT FIRST.
CONTRACTOR SHALL INSTALL HEADER AT THE EDGE OF ALL TURF TO SHRUB AREAS. SEE DETAILS FOR MATERIAL.
ALL SHRUB AREAS SHALL RECEIVE A 3" LAYER OF MEDIUM SIZED FINE MICH 1/2" TO 1" IN DIAMETER. TOP SURFACE OF
MULCH SHALL BE A MINIMUM OF 1" BELOW ANY ADJACENT HARDCAPE. "GORILLA HAIR" OR POST CONSTRUCTION
WASTE WILL NOT BE ACCEPTED.
ALL SLOPE AREAS 3:1 OR GREATER SHALL HAVE JUTE NETTING OR EQUIVALENT SOLE STABILIZATION MATERIAL APPLIED
ON TOP OF ANY APPLIED MULCH.
ALL PLANT MATERIAL, COLOR, SIZE AND QUANTITIES ARE TO BE VERIFIED WITH OWNER.
ALL CITY STREET TREES TO BE 24" BOX, HAVE A CALIPER AT SOIL LEVEL OF 1.5 INCHES, AND BE ABOUT 8 FEET TALL ONCE
PLANTED.

1. REMOVE ALL DEBRIS, WEEDS, EXCESS MATERIAL AND ROCKS LARGER THAN 3" IN DIAMETER FROM PLANTING AREAS.
2. CROSS CUT ALL EXISTING PLANTING AREAS TO A DEPTH OF 12" AND BLEND THE FOLLOWING AMENDMENT INTO THE TILLED SOIL TO A DEPTH OF 6":
 - 2.1. PER 1000 SQUARE FEET:
 - 2.1.1. 6 CUBIC YARDS NITROGEN AND IRON FORTIFIED ORGANIC SOIL AMENDMENT
 - 2.1.2. 14 POUNDS 12-12-12 FERTILIZER
 - 2.1.3. 15 POUNDS SOIL SULFUR
3. EXCAVATE THE PLANTING PITS FOR TREES AND SHRUBS TWICE THE DIAMETER AND TWICE THE DEPTH OF THE ROOT BALL SCARIFY THE SIDES AND BOTTOM OF THE PIT. THE BACKFILL MIX FOR THE AREAS AROUND THE ROOT BALL SHALL CONSIST OF THE FOLLOWING:
 - 3.1. PER CUBIC YARD OF SOIL:
 - 3.1.1. 1/3 CUBIC YARD NITROGEN STABILIZED FERT BARK
 - 3.1.2. 1 POUND 12-12-12 FERTILIZER
 - 3.1.3. 1 1/2 POUNDS IRON SULFATE (20% IRON)
 - 3.1.4. 2/3 CUBIC YARD TOPSOIL
4. PLANT TABS SHALL BE AGRIFORM OR APPROVED EQUIVALENT AS MANUFACTURER'S RECOMMENDED RATE FOR EACH PLANT SIZE.
5. SOIL AMENDMENT AND BACKFILL MIX ARE PROVIDED FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING FOR SOIL AGRIFORM REPORT BY AN APPROVED SOIL AGRIFORMONIT UPON COMPLETION OF THE ROUGH GRADING. ACTUAL SOIL AMENDMENTS AND BACKFILL MIX SHALL BE AS PER SOIL AGRIFORMONITS REPORT AND RECOMMENDATIONS.
6. FIVE PINE 1" CAL SPECIMEN TREES AFTER PLANTING UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT.
7. ALL SPECIMEN TREES SHALL BE SELECTED AT THE SOURCE BY THE LANDSCAPE ARCHITECT.
8. UPON COMPLETION, REMOVE ALL EXTRANEOUS MATERIAL AND DEBRIS, BROOM AND WASH CLEAN AREA.
9. ACTUAL SYMBOLS SHALL HAVE PRIORITY OVER WRITTEN QUANTITIES. CONTRACTOR SHALL VERIFY QUANTITIES AND NOTIFY LANDSCAPE ARCHITECT OF DISCREPANCIES.
10. ALL PLANT MATERIAL, COLOR, SIZE AND QUANTITIES ARE TO BE VERIFIED WITH OWNER.
11. ALL SUBSTITUTIONS SHALL BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER, PRIOR TO INSTALLATION.
12. ALL FLOW LINES ESTABLISHED BY GRADING PLAN SHALL BE MAINTAINED BY FINISH GRADING. MAINTAIN 1.5% MINIMUM FLOW IN ALL PLANTER AREAS.

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1180 RICHARD AVENUE,
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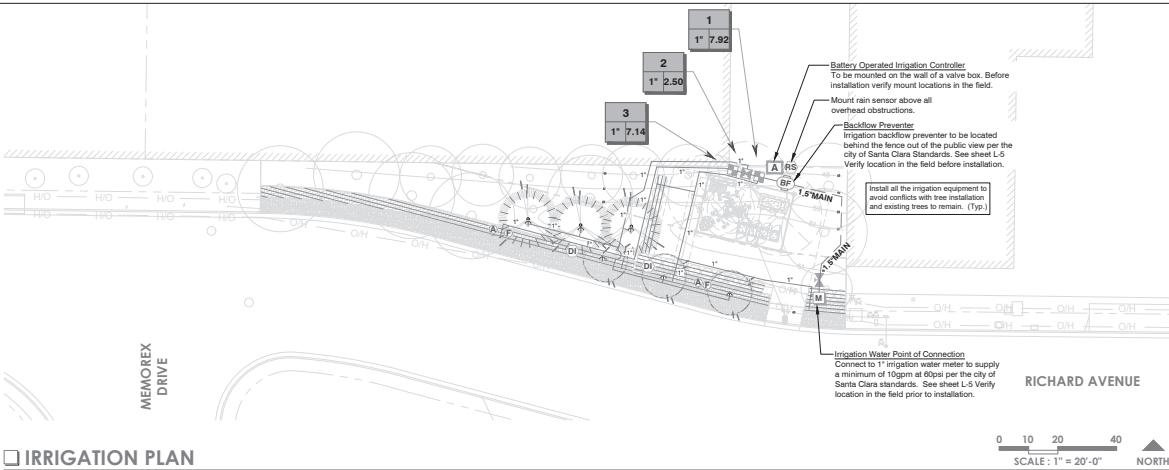
DATE:

SHEET TITLE:
PLANTING
NOTES & DETAILS
SHEET NUMBER:



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L-2



IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	Rain Bird 1800-1400 Flood 1401 Fixed flow rate (0.25-2.0GPM), full circle bubbler, 1/2" FPT.	6	30
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	Rain Bird XCZ-100-PRF Medium Flow Drip Control Kit, 1" DV valve, 1" pressure regulating filter, 40psi pressure regulator, .3gpm - 15gpm.	2	
	Rain Bird XCZ-LF-100-PRF Low Flow Drip Control Kit, 1" Low Flow Valve, 3/4" Pressure Regulating RBY Filter, and 30psi Pressure Regulator. 0.2gpm-5gpm.	1	
	Rain Bird MDCFCAP Dripline Flush Valve cap in compression fitting coupler.	2	
	Rain Bird ARV050 1/2" Air Relief Valve, made of quality rust-proof materials, with a 6.0" drip valve box (SEB 7X8 emitter box). Use with installation below soil. The valve will allow air to escape the pipeline, thus preventing water hammer or blockage.	2	
	Rain Bird OPERIND Drip System Operation Indicator, stem rises 6" for clear visibility when drip system is charged to a minimum of 30psi. Includes 16' of 1/4" distribution tubing with connection fitting pre-installed.	2	
	Area to Receive Dripline Rain Bird XFD-09-12 XFD On-Surface Pressure Compensating Landscape Dripline. 0.9 GPH emitters at 12" O.C. Dripline laterals spaced at 12" apart, with emitters offset for triangular pattern. UV Resistant. Specify XF insert fittings.	1,009 L.F.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	Landscape Products Inc. CW Slip Socket 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" Slip Socket Plastic Ball Valve. Quarter-turn shutoff designed for irrigation, spas, pools and other general cold water applications. 125 psi rating. Same size as mainline.	1	
	Watts LP259 3/4" See sheet L-5 for City installation requirements Used Free Reduced Pressure Backflow Preventer.	1	
	Rain Bird TBO52-CA4 and TBO52-FTUS Battery-Operated Controller available in 4 models: 1, 2, 4, and 6, 4 stations, with TBO52-FTUS field transmitter.	1	
	Rain Bird RSD-8EX Rain Sensor, with metal latching bracket, extension wire.	1	
	Water Meter 1" See sheet L-5 for City installation requirements	1	
	Irrigation Lateral Line: PVC Class 200 SDR 21	399.3 L.F.	
	Irrigation Mainline: PVC Class 200 SDR 21	75.5 L.F.	
	Valve Detail Valve Number Valve Flow Valve Box		

*The quantities shown in the legend sheets shall not be used for bidding purposes. The contractor will be responsible for conducting a comprehensive materials takeoff to determine the actual quantities of material necessary to execute the work described in the documents.

VALVE_SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PRECIP
1	Rain Bird XCZ-100-PRF	1"	Area for Dripline	7.92	13.6	37.14	1.43 in/h
2	Rain Bird XCZ-LF-100-PRF	1"	Bubbler	2.50	18.2	37.78	1.70 in/h
3	Rain Bird XCZ-100-PRF	1"	Area for Dripline	7.14	22.9	36.56	1.44 in/h
	Common Wire				75.5		

IRRIGATION_NOTES

- The plans and drawings are diagrammatic of the work to be performed. Some components may be shown outside the work area for clarity. The work shall be executed in a manner to avoid conflicts with utilities and other elements of construction, including landscape materials. All deviations from the plans shall be approved by the owner's representative before being installed.
- The irrigation system shall be installed in accordance with the plans, irrigation system specifications and all contract documents. The contractor shall comply with all current local codes, ordinances, and regulations.
- All irrigation mainline and lateral lines are to not exceed a velocity of 5 FPS.
- The contractor shall not willfully install any aspect of the irrigation system as shown on the plans and drawings, when it is obvious in the field that obstructions, grade differences, or discrepancies exist that might not have been known during the design of the irrigation system. In the event that notification of the conflict is not approved by the owner's representative, the contractor will assume full responsibility for all revisions.
- Refer to the landscape plans when trenching to avoid tree root balls when installing irrigation equipment. Call 811 and refer to utility plans prior to trenching.
- Irrigation contractor shall verify all site conditions, including utility locations before installation of the irrigation system. The contractor is responsible for coordinating installation with all other construction on site, especially landscape installation. The irrigation system shall be relocated at no additional cost for any conflict with landscape installation or any other site construction or existing conditions.
- 5.0 psi minimum static water pressure is required for the efficient operation of the irrigation system as designed. Verify the minimum static water pressure is available at the project site prior to beginning the irrigation installation. Notify the irrigation design consultant and landscape architect in writing if the minimum static water pressure or water volume is not available.
- Where existing or new trees, light fixtures, signs, electronic controllers and/or other objects are an obstruction to an irrigation sprinkler's pattern, the component and piping shall be relocated as necessary to obtain proper coverage of an irrigation sprinkler's pattern. The component and piping shall be relocated as necessary to obtain the proper coverage without damaging the obstruction.
- 100% head to head coverage is required. Assume that any modified spacing does not exceed the spacing shown in the plans.
- Irrigation contractor shall adjust all sprinklers to avoid over spray onto impervious areas.
- All materials and equipment shown shall be new and installed as shown on the plans. If the drawings do not thoroughly describe the techniques to be used, the installer shall follow the installation methods and instructions recommended by the product manufacturer.
- The location of the irrigation mainline shall be identified in the field and approved by the owner's representative before installation.
- Contractor is to submit product specification sheets for all irrigation equipment to be used for approval by the landscape architect prior to installation.
- The quantities shown in the legend sheets shall not be used for bidding purposes. The contractor will be responsible for conducting a comprehensive materials takeoff to determine the actual quantities of material necessary to execute the work described in the documents.
- All trenches shall be backfilled with clean debris-free materials.
- Irrigation contractor is to install Christy zone tags with the corresponding controller zone number at each control valve.
- As built documents are to be provided to the owner upon completion of the project. The mainline, control valves, isolation valves, ground rods and splice boxes shall be located with a measurement from two fixed points.
- Irrigation contractor shall secure any and all necessary permits for the work prior to commencement of on-site operations.
- A mainline pressure test is to be conducted before backfilling. All findings are to be reported to the landscape architect within twenty-four hours post test.
- These plans comply with the criteria of the Water Efficient Landscape Ordinance and applied them for the efficient use of water in the landscape design plan.

Appendix B - Water Efficient Landscape Work sheet

Project: Santa Clara Civic Relocation		Reference Evapotranspiration (ET ₀): 45.3						
Hydrozone # / Planting Description a	Plant Factor (PF)	Irrigation Method b	Irrigation Efficiency (E _c)	ET ₀ (ET ₀ x E _c)	Landscape Area (sq. ft.)	ET ₀ x Area	Estimated Water Use (ETW) e	Total
Regular Landscape Areas								
Very Low	0.1	drip	0.81	0.12	-	-	-	-
Low	0.2	drip	0.81	0.25	1,136.00	280.49	7,877.95	-
Medium	0.3	drip	0.81	0.42	77.00	47.53	1,394.95	-
High	0.4	drip	0.81	0.59	-	-	-	-
Non-irrigated	0.0	n/a	100	0.00	-	-	-	-
Totals					1,213.00	328.02	9,212.90	-
Special Landscape Areas								
Turf	-	-	-	-	1	-	-	-
Totals					-	-	9,212.90	-
ETW Total							9,212.90	-
Maximum Allowed Water Allowance (MAWA):							15,190.74	-

a Hydrozone #/Planting Description
1) front lawn
2) medium water use planting

b Irrigation Method
overhead spray or drip

c Irrigation Efficiency
0.75 for spray head
0.81 for drip

d ETW Annual Gallons Required
= E₀ x 0.62 x ET₀ x Area
where 0.62 is a conversion factor that converts acre inches per acre per year to gallons per square foot per year.

e MAWA (Annual Gallons Allowed)
= (E₀ x 0.62) [ET₀ x A₁ + (1-ET₀) x A₂]
where 0.62 is a conversion factor that converts acre inches per acre per year to gallons per square foot per year. A₁ is the total landscape area in square feet, and ET₀ is 0.5 for residential areas and 0.45 for non-residential areas.

ETAF Calculations:
Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas	
Total ETAF x Area (B+C)	328.68
Total Area (A+C)	1,213.00
ETAF (B+C) ÷ (A+C)	0.27

Regular	
Total ETAF x Area (B)	328.68
Total Area (A)	1,213.00
Average ETAF (B ÷ A)	0.27

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APPROVED BY:

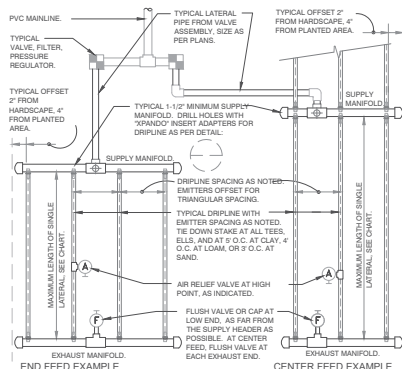
DATE:

SHEET TITLE:
IRRIGATION PLAN
LEGEND & NOTES
SHEET NUMBER:

L-3



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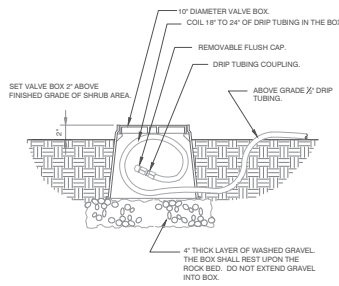
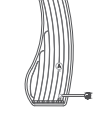
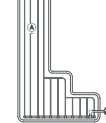
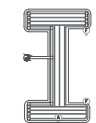
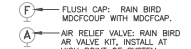
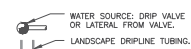


PSI	MAXIMUM LATERAL LENGTH (FEET)					
	12" SPACING	18" SPACING	24" SPACING	30" SPACING	36" SPACING	42" SPACING
10	125	96	175	135	218	171
20	249	196	350	271	442	340
30	377	296	434	333	550	422
40	505	396	578	444	727	555
50	633	496	722	555	884	688
60	761	596	866	666	1041	801

EMITTER SPACING	GRID PRECIPITATION RATES (IN/HR)	
	0.6	0.9
12	12	18
18	18	27
24	24	36

EMITTER FLOW	LATERAL FLOW PER 100 FT (GPM)			
	1/2" SPACING	18" SPACING	24" SPACING	30" SPACING
0.6 GPM	1.0 GPM	0.67 GPM	0.50 GPM	0.42 GPM
0.9 GPM	1.5 GPM	1.0 GPM	0.75 GPM	0.63 GPM

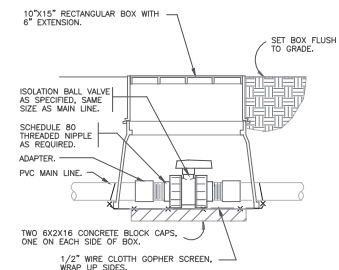
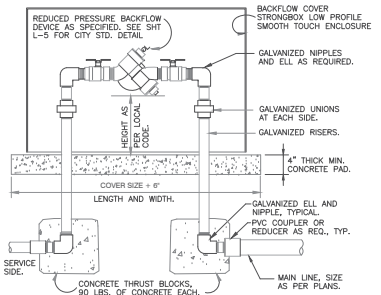
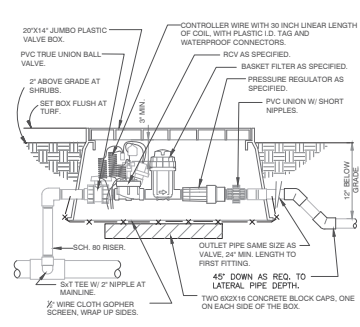
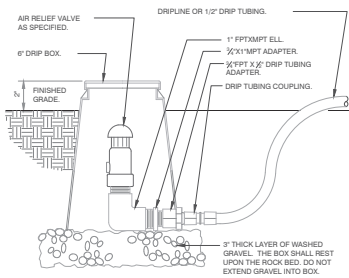
- SLOPED CONDITION NOTE:**
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE WHENEVER POSSIBLE.
 2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
 3. NORMAL SPACING WITHIN THE TOP 25% OF SLOPE.
 4. INSTALL DRIPLINE AT 25% GREATER SPACING AT BOTTOM 15% OF THE SLOPE.
 5. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE THE BOTTOM 15% ON A SEPARATE VALVE.



1. LOCATE FLUSH CAP ASSEMBLY AT THE END OF EACH DRIP LINE.
2. ENSURE THAT THE COILED DRIP TUBING IS OF SUFFICIENT LENGTH TO COMPLETELY EXTEND OUT OF THE VALVE BOX WHEN FLUSHING.

1 RAIN BIRD DRIPLINE W/ XPANDO INSERT ADAPTER
N.T.S.

2 DRIP FLUSH CAP ASSEMBLY
1 1/2" = 1'-0"

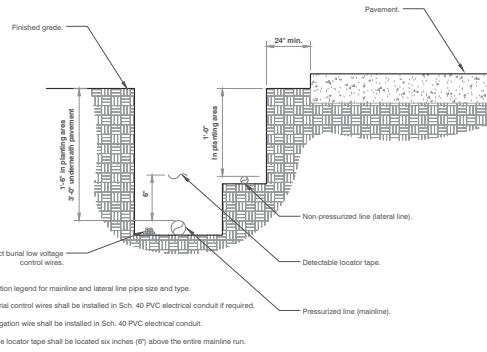
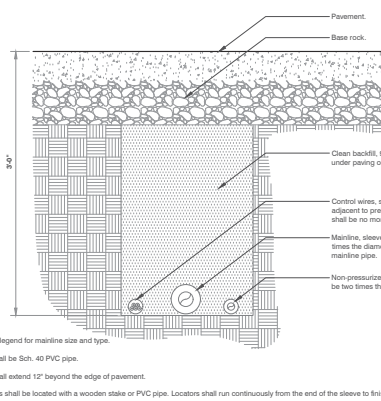


3 DRIP AIR RELIEF VALVE IN BOX
3" = 1'-0"

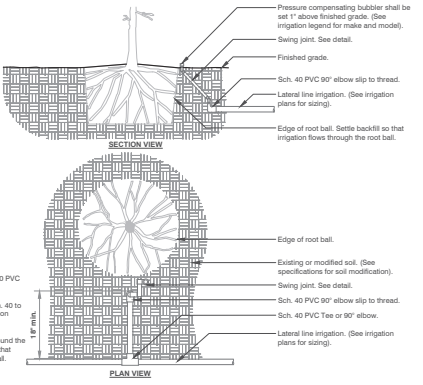
4 DRIP VALVE W/BASKET FILTER
1 1/2" = 1'-0"

5 RP BACKFLOW W/ENCLOSURE
1" = 1'-0"

6 TRUE UNION BALL ISOLATION VALVE
1 1/2" = 1'-0"



- Notes:**
1. All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.
 2. All threaded connections from Sch. 40 to Sch. 80 PVC shall be made using teflon tape.
 3. Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.



7 PIPE BENEATH PAVEMENT
1 1/2" = 1'-0"

8 IRRIGATION TRENCHING
1 1/2" = 1'-0"

9 IRRIGATION BUBBLER W/ LAYOUT
3/4" = 1'-0"

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PRELIMINARY: NOT FOR CONSTRUCTION
KEVIN R. SORENSON
54469

ISSUE STATUS			
DATE	DESCRIPTION	REV.	
03/17/18	CSR RED LINES	C.C.	
04/24/18	CLIENT REV	C.C.	
05/10/18	2D 100%	D.L.	
10/22/18	CLIENT REV	C.C.	
12/13/19	CLIENT REV	D.G.	
01/21/20	CLIENT REV	D.G.	

DRAWN BY:
CHECKED BY:
APPROVED BY:
DATE:

SHEET TITLE:

IRRIGATION DETAILS
SHEET NUMBER:

L-4

