

CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT

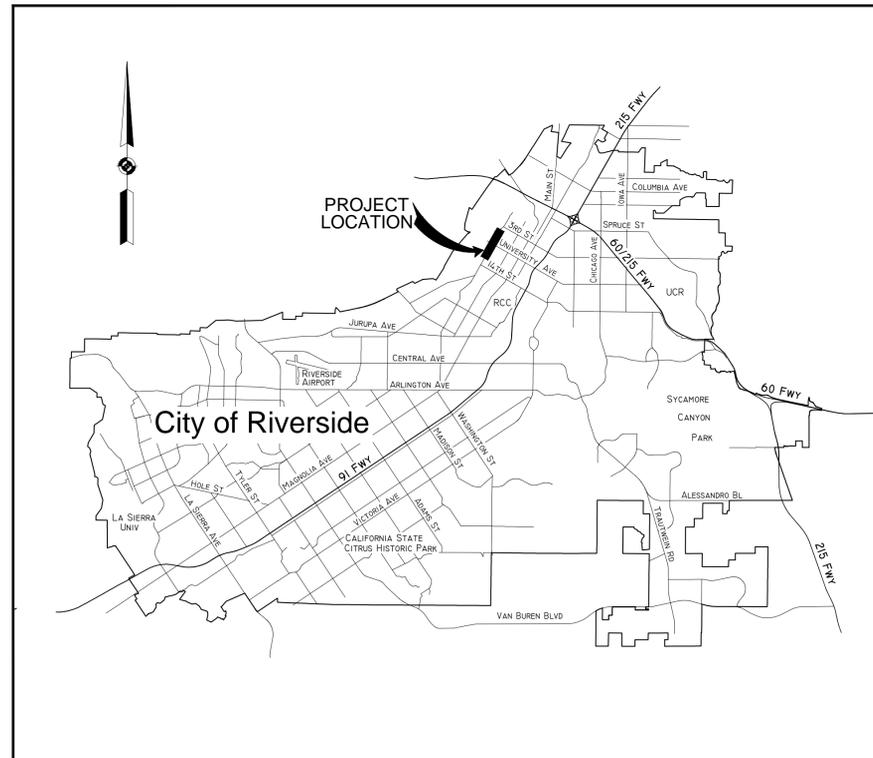
WATER DIVISION

WATER ENGINEERING SECTION

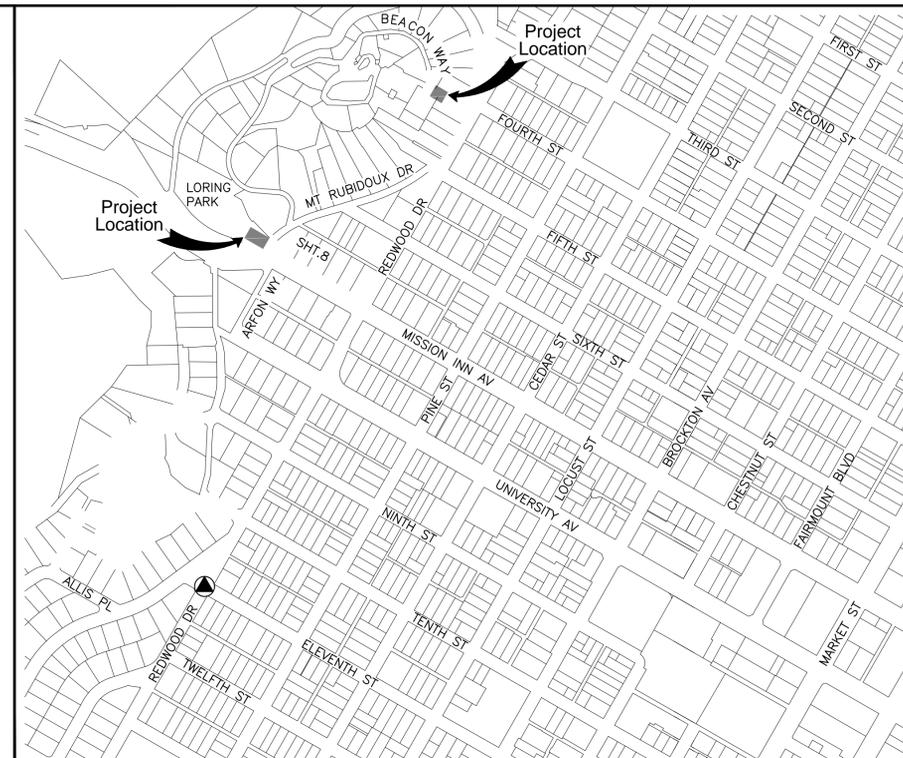
MISSION INN BOOSTER STATION REZONING PROJECT

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VICINITY MAP
NTS



LOCATION MAP
NTS

LEGEND

	PIPELINE
	GATE VALVE
	FIRE HYDRANT
	WATER SERVICE
	TO BE ABANDONED
	ELBOW
	TEE
	CROSS
	END CAP W/ BLOW OFF
	REDUCER
	CHECK VALVE
	COUPLING ADAPTER
	COMBINATION AIR VALVE (PLAN)
	BLOW OFF (PLAN)
	FLANGE INSULATION AND TEST LEAD KIT
	VALVE (PROFILE)
	BLOW-OFF ASSEMBLY (PROFILE)
	COMBINATION AIR VALVE (PROFILE)
	DETAIL DESIGNATION
	PAGE NUMBER
	INDICATES
	SAME PAGE

BENCHMARK

POINT ID: I6-F2

DESCRIPTION:

BRASS DISK STAMPED (I6-F) IN A MONUMENT WELL AT THE INTERSECTION OF ELEVENTH STREET AND REDWOOD DRIVE.

ELEVATION: 853.156

ELEVATIONS SHOWN HEREON ARE BASED ON THE NGVD 1929, RIVERSIDE COUNTY 1970 ADJUSTMENT.

BASIS OF BEARING

COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON THE NAD 83, CALIFORNIA COORDINATE SYSTEM, ZONE 6 (CCS83 ZONE 0406) AS ESTABLISHED BY THE CITY OF RIVERSIDE CADME PROJECT, 1991 ADJUSTMENT.

COUNCIL WARD: 1



APPROVED BY:
FIRE HYDRANT LOCATION ONLY:

RIVERSIDE FIRE DEPARTMENT
DIVISION OF FIRE PROTECTION

DATE

CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION

APPROVED BY:
VOID ONE YEAR FROM THIS DATE

DATE

MARK	REVISION	APPR.	DATE

MISSION INN BOOSTER STATION REZONING PROJECT			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: XXXX-2017	CHECKED: S. LEE	DRAWING NO. D5-1402756-01	
W.O. NO.: 1402756	CADME PG.: 24-5	SHEET 1 OF X	

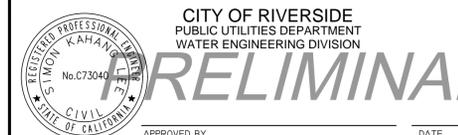
CONSTRUCTION NOTES:

BOOSTER STATION

THE CONTRACTOR SHALL:

- 1 FURNISH AND INSTALL 4" F x F RESILIENT WEDGE GATE VALVE
- 2 FURNISH AND INSTALL 8" MJ x MJ RESILIENT WEDGE GATE VALVE AND BOX PER CWD-500 AND CWD 515.
- 3 FURNISH AND INSTALL 12" MJ x MJ RESILIENT WEDGE GATE VALVE AND BOX PER CWD-500 AND CWD 515.
- 1 FURNISH AND INSTALL 6" WAFER BUTTERFLY VALVE WITH HAND LEVER, STAINLESS STEEL VALVE DISC AND BUNA-N VALVE SEAT, MODEL 149G BY FLOMATIC OR APPROVED EQUAL.
- 1 FURNISH AND INSTALL 6" WAFER CHECK VALVE WITH STAINLESS STEEL TRIM AND RESILIENT SEAT, MODEL 888STR BY FLOMATIC OR APPROVED EQUAL.
- 2 FURNISH AND INSTALL 12" WAFER CHECK VALVE, MODEL 895 BY FLOMATIC OR APPROVED EQUAL.
- R RESTRAIN ALL JOINTS AND FITTINGS.
- 1 FURNISH AND INSTALL 4" CML&C STEEL PIPE PER CWD-040-1 & 2 AND THE PLANS AND SPECIFICATIONS. THE MORTAR LINING SHALL BE 5/16" THICK, THE STEEL CYLINDER SHALL BE 0.105" THICK (MIN) AND THE MORTAR COATING SHALL BE 3/4" THICK (MIN).
- 2 FURNISH AND INSTALL 12" CML&C STEEL PIPE PER CWD-040-1 & 2 AND THE PLANS AND SPECIFICATIONS. THE MORTAR LINING SHALL BE 5/16" THICK, THE STEEL CYLINDER SHALL BE 0.105" THICK (MIN) AND THE MORTAR COATING SHALL BE 3/4" THICK (MIN).
- 3 FURNISH AND INSTALL 4" EPOXY LINED STL. PIPE
- 4 FURNISH AND INSTALL 6" EPOXY LINED STL. PIPE
- 5 FURNISH AND INSTALL 12" EPOXY LINED STL. PIPE
- 6 FURNISH AND INSTALL 8-INCH DUCTILE IRON PIPE, CL-350, PER CWD-040-1 AND 2.
- 7 FURNISH AND INSTALL 12-INCH DUCTILE IRON PIPE, CL-350, PER CWD-040-1 AND 2.
- 8 FURNISH AND INSTALL LOW PROFILE ALUMINUM ROOF HATCH BY U.S.F. FABRICATION, MODEL SRR-1, WITH CLEAR OPENING OF 48"x48" PER PLAN AND SPECIFICATIONS.
- 9 FURNISH AND INSTALL 4" EPOXY LINED-90° STL. FLANGED ELL.
- 10 FURNISH AND INSTALL EPOXY LINED-6"x5" REDUCING 90° STL. ELL.
- 11 FURNISH AND INSTALL 4"-90° CML&C STL. WELDED ELL.
- 12 FURNISH AND INSTALL 12"-90° CML&C STL. WELDED ELL.
- 13 FURNISH AND INSTALL 12"-90° SHORT RADIUS EPOXY LINED STL. FLANGED ELL.
- 14 FURNISH AND INSTALL 12" DUCTILE IRON - 45° ELL.
- 15 FURNISH AND INSTALL 12" FLG x MJ ADAPTER W/ FLANGE INSULATION KIT.
- 16 FURNISH AND INSTALL 4" FLANGED OUTLET PER CWD-300.
- 17 FURNISH 12" DISHED HEAD, THICKNESS SHALL COMPLY WITH ASME PRESSURE VESSEL CODE SECTION VIII, DIVISION 1.
- 18 FURNISH AND INSTALL 2-INCH TEMPORARY BLOW-OFF ASSEMBLY PER CWD 412. RESTRAIN ALL JOINTS.
- 19 FURNISH AND INSTALL 4-INCH TEMPORARY BLOW-OFF ASSEMBLY PER CWD 413. RESTRAIN ALL JOINTS.
- 20 FURNISH AND INSTALL 4" DISMANTLING JOINT WITH TIE RODS, MODEL DJ400 BY ROMAC OR APPROVED EQUAL.
- 21 FURNISH AND INSTALL 12" DISMANTLING JOINT WITH TIE RODS, MODEL DJ400 BY ROMAC OR APPROVED EQUAL.
- 22 FURNISH AND INSTALL 1" THREADED OUTLET PER CWD-340 AND A 1" CORP STOP (MPT), W/ END CAP.
- 23 FURNISH 2" THREADED OUTLET PER CWD-340 (COATING SHALL BE EPOXY).
- 24 FURNISH AND INSTALL ASME 158 GALLON, CARBON STEEL HYDRO-PNEUMATIC BLADDER TANK, WITH EPOXY LINED SYSTEM CONNECTION, MODEL FXA-600-WG BY WESSELS COMPANY OR APPROVED EQUAL.
- 25 FURNISH AND INSTALL 12" ELECTROMAGNETIC FLOW METER, ULTRA MAG MODEL UM06 BY McCROMETER OR APPROVED EQUAL.
- 26 FURNISH AND INSTALL 4" PRESSURE RELIEF VALVE (FLG'D) WITH VALVE STEM INDICATOR AND LIMIT SWITCH.
- 27 FURNISH AND INSTALL 2" CORP STOP (MPT), W/ 2" COUPLING.
- 28 FURNISH AND INSTALL 2" COMBINATION AIR VALVE, MODEL D-040 BY A.R.I. OR APPROVED EQUAL.
- 29 FURNISH AND INSTALL PAINTED STEEL PUMP STAND.
- 30 FURNISH AND INSTALL PRE-MANUFACTURED PIPE SUPPORT.
- 31 PROVIDE THRUST BLOCK PER CWD-030
- 32 FURNISH AND INSTALL 16' x 30' PRE-MANUFACTURED BUILDING AND 2 ROOF HATCHES, COMPLETE PER PLANS AND SPECIFICATIONS, STRUCTURE CAST EAST-SPAN PRECAST CONCRETE BUILDING, OR APPROVED EQUAL. A COMPATIBLE FOUNDATION AND SLAB DESIGN SHALL BE PROVIDED BY THE BUILDING MANUFACTURER. THE PREFABRICATED BUILDING SHALL BE DESIGNED WITH A SEISMIC OCCUPANCY IMPORTANCE FACTOR OF 1.25.
- 33 FURNISH AND INSTALL DOUBLE STEEL DOORS WITH A CLEAR OPENING OF 6' WIDE X 8' TALL.
- 34 FURNISH AND INSTALL 6" THICK CONCRETE (560-C-3250) SLAB. USE #4 REBAR @ 24" O.C. BOTH WAYS.
- 35 FURNISH AND INSTALL 6" HEAVY DUTY ROUND GRATE.
- 36 FURNISH AND INSTALL 4" SCHEDULE 80 PVC PIPE.
- 37 FURNISH AND INSTALL A MINIMUM OF 3" THICK, 3/4" CRUSHED ROCK.
- 38 FURNISH AND INSTALL NEW ANTENNA ASSEMBLY WITH NEW CONCRETE BASE PER DETAIL "E" ON SHEET 3.
- 39 FURNISH 8"x24" OPENING WITH LOCKING COVER, 18" FROM FINISHED FLOOR FOR GENERATOR CABLE ACCESS.
- 40 FURNISH AND INSTALL VENTILATION FAN, MODEL 4HZ42 BY DAYTON OR APPROVED EQUAL.
- 41 FURNISH AND INSTALL ELECTRIC PANELS/CABINETS PER PROJECT SPECIFICATIONS
- 42 FURNISH AND INSTALL VERTICAL TURBINE, 40 H.P. VARIABLE FREQUENCY DRIVE, MODEL 125SV SERIES-3500 RPM BY GOULDS WATER TECHNOLOGY OR APPROVED EQUAL.
- 43 FURNISH AND INSTALL ELECTRIC SERVICE TRANSFORMER SLAB, BOX, AND CONDUIT PER PLANS AND SPECIFICATIONS.
- 44 CUT AND PLUG END OF PIPE. CUT AND REMOVE CONFLICTING PORTION OF EXISTING PIPE (BY CITY FORCES.)
- 45 REMOVE EXISTING VALVE AND ABANDON PER SECTION 250-5.4 OF THE SPECIAL PROVISIONS.
- 46 FURNISH AND INSTALL WATER SAMPLING STATION PER CWD-433. LOCATION TO BE DETERMINED BY THE CITY INSPECTOR.
- 47 EXISTING TREE AND ROOT SYSTEM TO BE REMOVED AND DISPOSED OF.

- 1 MATERIALS FURNISHED & INSTALLED BY CONTRACTOR.
- 2 MATERIALS FURNISHED & INSTALLED BY CITY FORCES.



GENERAL NOTES:

- 1. ANY DEVIATION FROM THESE PLANS SHALL BE APPROVED BY THE CIVIL ENGINEER, WHO IS IN RESPONSIBLE CHARGE FOR THE DESIGN OF THESE PLANS, PRIOR TO CONSTRUCTION AND DURING CONSTRUCTION.
- 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS, TECHNICAL SPECIFICATION NO. 929, THE APPLICABLE AWWA STANDARDS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, "GREENBOOK" LATEST EDITION AND REVISIONS.
- 3. THE WATER MAINS SHALL BE LAID TO THE LINE AND GRADE AS SHOWN ON THE PLANS, ALL STATIONING IS ALONG THE CENTERLINE OF THE PIPE.
- 4. THE PROFILE IS PLOTTED, AND SLOPES ARE CALCULATED USING PIPE STATIONS.
- 5. TEST PRESSURE = 200 PSI FOR 2 HOURS ON THE 8-INCH POTABLE WATER MAIN. TEST PRESSURE = 200 PSI FOR 2 HOURS ON THE 12-INCH RECYCLED WATER MAIN. LEAKAGE LIMIT IN ACCORDANCE WITH TECHNICAL SPECIFICATION NO. 929.
- 6. UNDERGROUND UTILITIES, OTHER THAN CITY OF RIVERSIDE OWNED FACILITIES, SHOWN ON THESE PLANS, ARE BASED ON DATA PROVIDED BY THE UTILITY OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AFFECTED BY THIS WORK, VERIFY ALL UTILITY INFORMATION AND COORDINATE ALL WORK WITH RESPECT TO THE UTILITY COMPANIES' POSSIBLE OBSTRUCTIONS.
- 7. THE CONTRACTOR SHALL HAVE AN "A" OR "C-34" LICENSE.
- 8. DEPTHS AND LOCATION OF UTILITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO LAYING THE POTABLE AND RECYCLED WATER MAINS.
- 9. THE CONTRACTOR SHALL PROVIDE THE CONTRACT ADMINISTRATOR A MINIMUM OF 4 WORKING DAYS WRITTEN NOTICE TO ALLOW FOR THE SCHEDULING OF SURVEY STAKING.
- 10. THE CONTRACTOR SHALL PERFORM PRESSURE TESTING ONLY AFTER ALL BEDDING AND TRENCH BACKFILL HAVE PASSED COMPACTION TESTS.
- 11. THE CONTRACTOR SHALL SUPPLY ALL SYSTEM CONNECTION MATERIALS, FOR INSTALLATION BY CITY FORCES. UNLESS NOTED OTHERWISE ON THE PLANS.
- 12. EXISTING WATER MAINS AND UTILITIES ARE SHOWN DASHED ON THE PLANS AND DETAILS.
- 13. CONSTRUCTION PERMITS SHALL BE OBTAINED BY THE CONTRACTOR FROM THE CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT.
- 14. THE WALLS AND FACES OF ALL EXCAVATIONS OVER 5 (FIVE) FEET IN DEPTH SHALL BE EFFECTIVELY GUARDED BY A SHORING SYSTEM. ALL TRENCHES SHALL BE GUARDED WHEN AN EXAMINATION INDICATES HAZARDOUS GROUND MOVEMENT OF MATERIAL MAY BE EXPECTED.
- 15. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR ALL WORK WITH EXCAVATION GREATER THAN 5- FEET IN DEPTH. SEE THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 306-1.1.6.
- 16. BACKFILL MATERIAL SHALL NOT BE PLACED WITHOUT PRIOR APPROVAL OF THE CITY OF RIVERSIDE INSPECTOR. BACKFILL MATERIAL SHALL CONFORM TO TECHNICAL SPECIFICATION NO. 929, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- 17. ALL FLANGES SHALL BE HUB TYPE CLASS 'D' AS SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION, STANDARD C207-07, SECTION 1.3 UNLESS SPECIFIED OTHERWISE.
- 18. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GASKETS, NUTS, AND BOLTS REQUIRED FOR THE PROJECT AT NO ADDITIONAL EXPENSE IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE SPECIFICATION.
- 19. THE CITY OF RIVERSIDE INSPECTOR SHALL FIELD VERIFY APPURTENANCE LOCATIONS PRIOR TO INSTALLATION.
- 20. THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES IN-PLACE UNLESS OTHERWISE NOTED.
- 21. THE CONTRACTOR SHALL REMOVE AND REPLACE, IN KIND, ANY PUBLIC OR PRIVATE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO: GRASS, CURB, GUTTER, TREES, SHRUBS, FENCE, BLOCK WALL, LANDSCAPE, IRRIGATION PIPE, APPURTENANCES, ASPHALT BERM, CONCRETE AND ASPHALT DRIVEWAY, AND SIDEWALK DAMAGED DURING CONSTRUCTION IN ACCORDANCE WITH THE PLAN AND SPECIFICATIONS AT THE DIRECTION OF THE ENGINEER.
- 22. THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS, PRIOR TO PRESSURE TESTING, TO THE CITY OF RIVERSIDE, PUBLIC UTILITIES DEPARTMENT, WATER ENGINEERING DIVISION.
- 23. THE CONTRACTOR SHALL MAINTAIN 4.0 FEET MINIMUM COVER OVER THE 12" POTABLE WATER PIPELINE, AND 3.0 FEET MINIMUM COVER OVER 8" AND SMALLER POTABLE WATER PIPELINES.
- 24. THE CONTRACTOR SHALL POTHOLE ALL UTILITIES CROSSING THE PROPOSED WATER MAINS AND SHALL POTHOLE THE EXISTING WATER MAINS AT THE SYSTEM CONNECTION POINTS AND PROVIDE THE INFORMATION TO THE WATER INSPECTOR PRIOR TO WATER MAIN TRENCHING. WHEN POSSIBLE AT THE SYSTEM CONNECTION SITES WHERE A CROSSING UTILITY IS ABOVE THE GRADE OF THE PROPOSED WATER MAIN TO 2- FEET BELOW THE GRADE OF THE PROPOSED WATER MAIN, THE CONTRACTOR SHALL, IN CONSULTATION WITH THE WATER INSPECTOR, MAINTAIN A MINIMUM OF 5-FOOT HORIZONTAL CLEARANCE BETWEEN ANY SUCH CROSSING UTILITY AND THE CONNECTION POINT TO THE EXISTING WATER MAIN.
- 25. WHERE NECESSARY TO COMPLY WITH THE REQUIREMENTS FOR BIOLOGICAL TESTING, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY WATER SAMPLERS PER CWD-432.
- 26. THE CONTRACTOR SHALL LOCATE VIA POTHOLING ALL SEWER LATERALS CROSSING THE PROPOSED WATER MAINS AND SHALL NOTIFY THE WATER INSPECTOR OF ANY GRADE CONFLICTS PRIOR TO WATER MAIN TRENCHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING WATER PIPELINE PROFILE OR REMODELING SEWER LATERALS AS NEEDED.
- 27. WHERE CONTRACTOR'S OPERATIONS REMOVE OR DAMAGE EXISTING CONCRETE IMPROVEMENTS, THE IMPROVEMENTS SHALL BE REPLACED AS FOLLOWS:
 - A. CURB OR CURB AND GUTTER - REMOVE THE CURB AND GUTTER TO THE NEAREST CONSTRUCTION JOINT, 5 LINEAR FEET MINIMUM.
 - B. SIDEWALK - REMOVE THE SIDEWALK BY SAW CUTTING TO THE NEAREST CONSTRUCTION JOINT, 25 SQUARE FEET MINIMUM.
 - C. CROSS GUTTER OR SPANDREL - REMOVE THE ENTIRE CROSS GUTTER OR SPANDREL.
 - D. DRIVEWAY APPROACH - REMOVE THE ENTIRE DRIVEWAY APPROACH.

REMOVALS SHALL BE AS DIRECTED BY THE INSPECTOR. REPLACEMENT OF CONCRETE IMPROVEMENTS SHALL BE PER THE APPROPRIATE PUBLIC WORKS STANDARD DRAWING.

- 28. THE REMOVAL OF POTENTIAL NESTING VEGETATION OF SENSITIVE BIRD SPECIES WILL BE CONDUCTED OUTSIDE OF THE NESTING SEASON (FEBRUARY 1 TO AUGUST 31) TO THE EXTENT THAT THIS IS FEASIBLE. IF VEGETATION MUST BE REMOVED DURING THE NESTING SEASON, A QUALIFIED BIOLOGIST WILL CONDUCT A NESTING BIRD SURVEY OF POTENTIALLY SUITABLE NESTING VEGETATION PRIOR TO REMOVAL. SURVEYS WILL BE CONDUCTED NO MORE THAN THREE (3) DAYS PRIOR TO SCHEDULED REMOVALS. IF ACTIVE NESTS ARE IDENTIFIED, THE BIOLOGIST WILL ESTABLISH BUFFERS AROUND THE VEGETATION CONTAINING THE ACTIVE NEST (500 FEET FOR RAPTORS AND 200 FEET FOR NON RAPTORS). THE VEGETATION CONTAINING THE ACTIVE NESTS WILL NOT BE REMOVED, AND NO GRADING WILL OCCUR WITHIN THE ESTABLISHED BUFFER, UNTIL A QUALIFIED BIOLOGIST HAS DETERMINED THAT THE NEST IS NO LONGER ACTIVE (I.E., THE JUVENILES ARE SURVIVING INDEPENDENT FROM THE NEST). IF CLEARINGS NOT CONDUCTED WITHIN THREE DAYS OF A NEGATIVE SURVEY, THE NESTING SURVEY MUST BE REPEATED TO CONFIRM THE ABSENCE OF NESTING BIRDS.

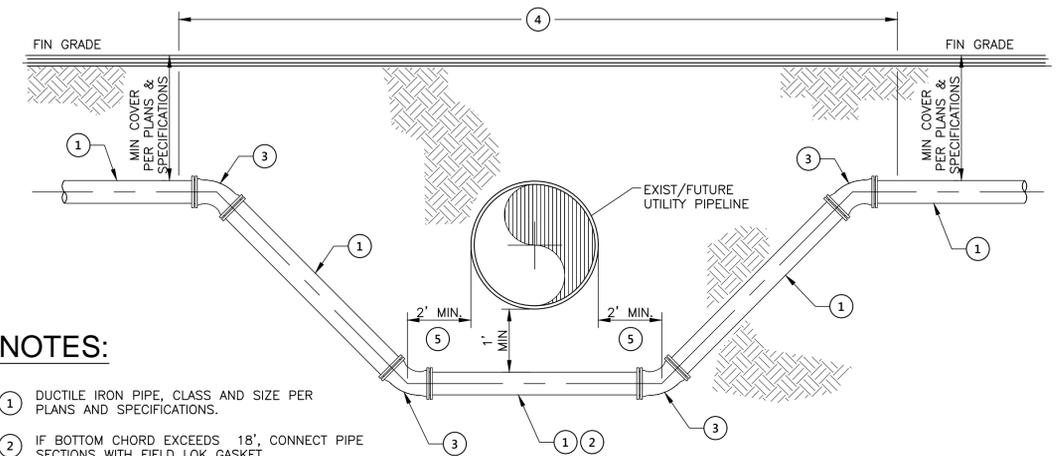
THE CITY WILL EMPLOY A BIOLOGIST TO DETERMINE THE MITIGATED DECLARATION. THE CONTRACTOR SHALL ADHERE TO THESE REQUIREMENTS.

MISSION INN BOOSTER STATION REZONING PROJECT			
CONSTRUCTION & GENERAL NOTES			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: XXXX-2017	CHECKED: S. LEE		
W.O. NO.: 1402756	CADME PG.: 24-5	W	D5-1402756- 02
MARK	REVISION	APPR. DATE	SHEET 2 OF X

PLOT DATE: 8/6/2017

ABBREVIATIONS:

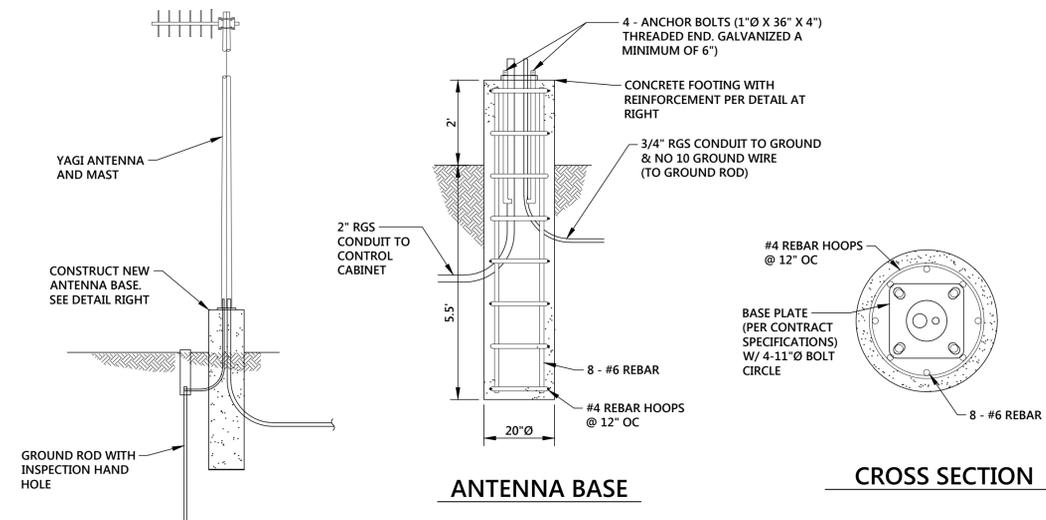
ABAND	ABANDONED	IPT	IRON PIPE THREAD
AC	ASPHALT CONCRETE	IRR	IRRIGATION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	LN	LANE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	LT	LEFT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MAX	MAXIMUM
AV	AVENUE	MH	MANHOLE
AWWA	AMERICAN WATER WORKS ASSOCIATION	ML&C	MORTAR LINED AND COATED
BA	THRUST BLOCK BEARING AREA	MPT	MALE PIPE THREAD
BC	BEGIN CURVE	MWD	METROPOLITAN WATER DISTRICT
BCR	BEGIN CURB RETURN	NGVD	NATIONAL GEODETIC VERTICAL DATUM
BFV	BUTTERFLY VALVE	NO	NUMBER
BLD	BLIND	NTS	NOT TO SCALE
BO	BLOW OFF	OC	ON CENTER
BOP	BOTTOM OF PIPE	OD	OUTSIDE DIAMETER
CL	CENTERLINE	OUT	OUTLET
C&G	CURB AND GUTTER	P/L	PROPERTY LINE
CADME	COMPUTER AIDED DESIGN, MAPPING & ENGINEERING	PG	PAGE
CB	CATCH BASIN	PP	POWER POLE
CC	CENTER TO CENTER	PSI	POUNDS PER SQUARE INCH
CCS	CALIFORNIA COORDINATE SYSTEM	PT	POINT
CNC	CEMENT MORTAR COATING	PVC	POLYVINYL CHLORIDE PLASTIC PIPE
CML	CEMENT MORTAR LINING	PW	PUBLIC WORKS
CMP	CORRUGATED METAL PIPE	PWD	PUBLIC WORKS STANDARD DRAWING
CONC	CONCRETE	PZ	PRESSURE ZONE
COR	CORNER	RCE	REGISTERED CIVIL ENGINEER
CORP	CORPORATION	RCP	REINFORCED CONCRETE PIPE
CP	CONTROL POINT	RCW	RECYCLED WATER MAIN
CTF	CUT TO FIT	RD	ROAD
CU FT	CUBIC FEET	REINF	REINFORCED
CWD	CITY WATER DIVISION	RT	RIGHT
CYL	CYLINDER	R/W	RIGHT OF WAY
DI	DUCTILE IRON	RWGV	RESILIENT WEDGE GATE VALVE
DIA	DIAMETER	S	SLOPE
DIP	DUCTILE IRON PIPE	SC	SURVEY CONTROL LINE
DR	DRIVE	SD	STORM DRAIN LINE
D/W	DRIVEWAY	SE	SECURITY ENCLOSURE
E	ELECTRIC	SIG	TRAFFIC SIGNAL CONDUIT
EC	END CURVE	SP	STAND PIPE
ELC	ELECTROLIER LIGHTING CONDUIT	SPEC	SPECIFICATION
ELL	ELBOW	SQ	SQUARE
EP	EDGE OF PAVEMENT	SS	SANITARY SEWER
EX	EXISTING	SSPWC	STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (YEAR 2009 EDITION)
FAB	FABRICATE	ST	STREET
FG	FINISHED GRADE	STA	STATION
FS	FINISHED SURFACE	STD	STANDARD
FxF	FLANGE BY FLANGE	STL	STEEL
FIN	FINISHED	S/W	SIDEWALK
FLG	FLANGE	T	THICKNESS
FLG'D	FLANGED	TEL	TELEPHONE
FT	FOOT	THD	THREADED
G	GAS LINE	TOP	TOP OF PIPE
GA	GALVE	TYP	TYPICAL
GALV	GALVANIZED	TW	TOP OF WALL
GB	GRADE BREAK	USA	UNDERGROUND SERVICE ALERT
GPS	GLOBAL POSITIONING SYSTEM	V	VERTICAL DISTANCE
GV	GATE VALVE	VERT	VERTICAL
GW	GUY WIRE	VPI	VERTICAL POINT OF INTERSECT
H	HORIZONTAL DISTANCE	W	WATER MAIN
HC	HOUSE CONNECTION	W/	WITH
HORZ	HORIZONTAL	WDM	WATER DISTRIBUTION MAIN
HPI	HORIZONTAL POINT OF INTERSECT	WMWD	WESTERN MUNICIPAL WATER DISTRICT
ID	INSIDE DIAMETER	WTM	WATER TRANSMISSION MAIN
IE	INVERT ELEVATION		



NOTES:

- ① DUCTILE IRON PIPE, CLASS AND SIZE PER PLANS AND SPECIFICATIONS.
- ② IF BOTTOM CHORD EXCEEDS 18', CONNECT PIPE SECTIONS WITH FIELD LOK GASKET.
- ③ ALL PIPE JOINTS AT 45° BENDS SHALL BE MECHANICAL JOINT TYPE WITH CITY APPROVED JOINT RESTRAINT.
- ④ RESTRAIN ALL JOINTS.
- ⑤ IF UTILITY IS A SEWER MAIN, THE BOTTOM CHORD SHALL CONSIST OF A FULL 20-FOOT LENGTH OF PIPE (NO JOINTS), CENTERED UNDER THE SEWER MAIN.

TYPICAL UTILITY CROSSING
NTS



ANTENNA AND BASE DETAIL
NTS

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4



CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION

APPROVED BY _____ DATE _____
VOID ONE YEAR FROM THIS DATE

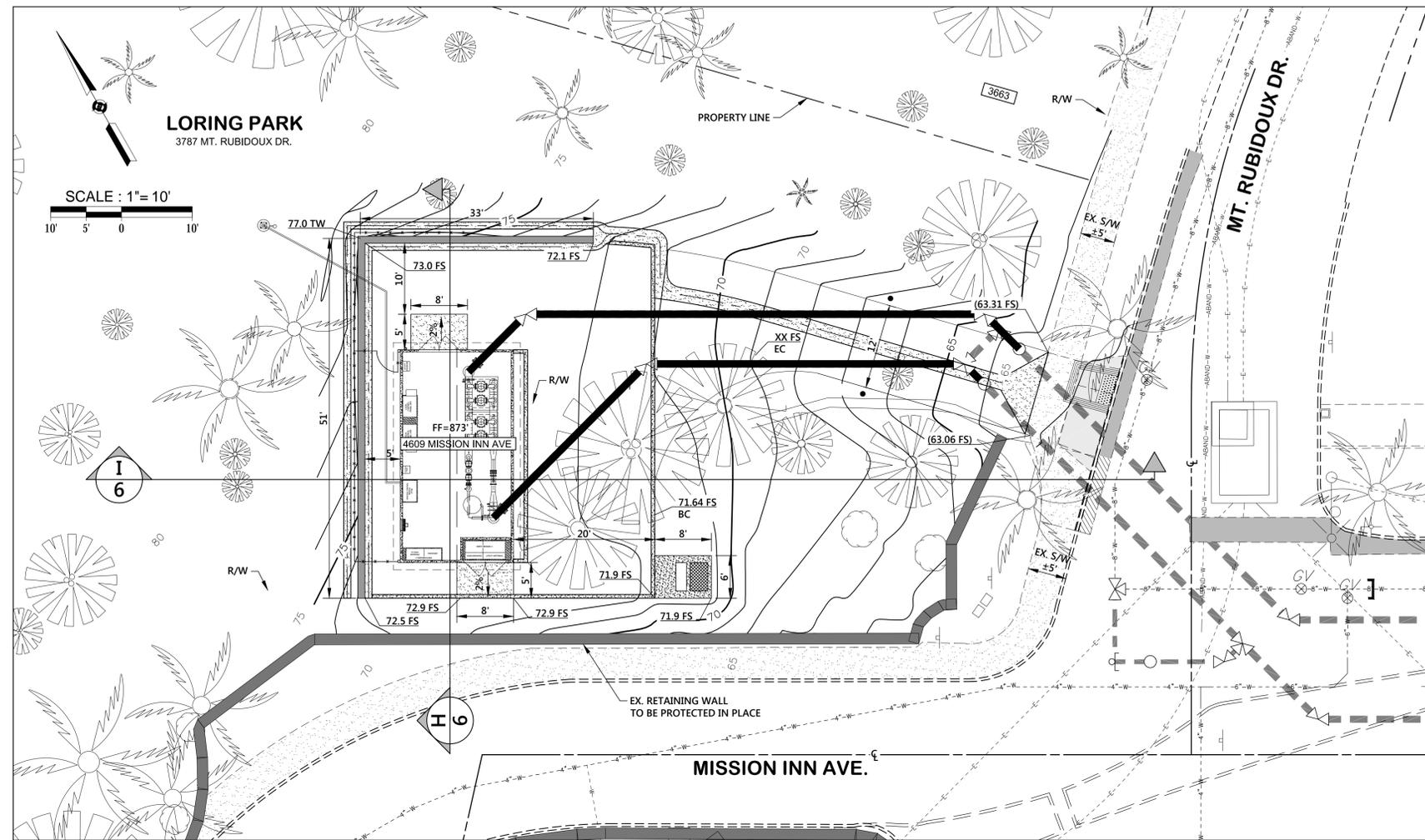
MARK	REVISION	APPR.	DATE

MISSION INN BOOSTER STATION
REZONING PROJECT

ABBREVIATIONS & CONSTRUCTION DETAILS

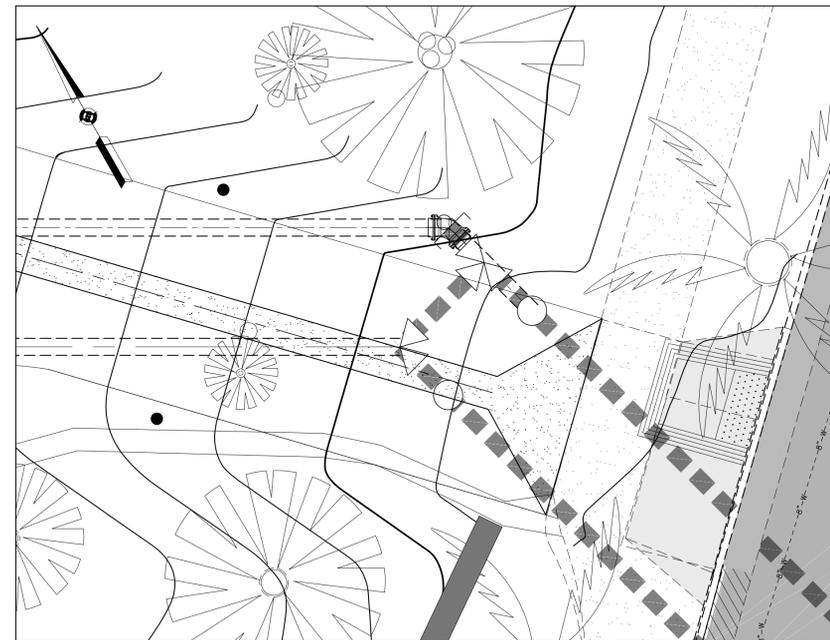
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DATE: XXXX-2017	CHECKED: S. LEE	
W.O. NO.: 1402756	CADME PG.: 24-5	DRAWING NO. D5-1402756-03
6230003310 470802xx 1402756		DIV SHEET 3 OF X

PLOT DATE: 6/4/2017



MISSION INN BOOSTER STATION SITE PLAN
4609 MISSION INN AVE

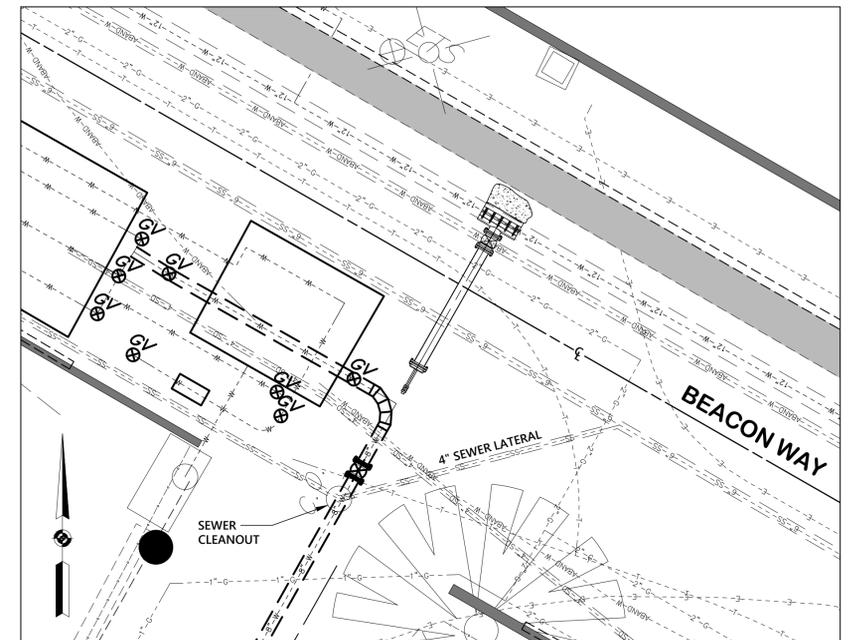
1"=10'



SYSTEM CONNECTION DETAIL

1"=5'

CONSTRUCTION NOTES



SYSTEM CONNECTION DETAIL

1"=5'

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call **CALL TOLL FREE 1-800-422-4133**
2 WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

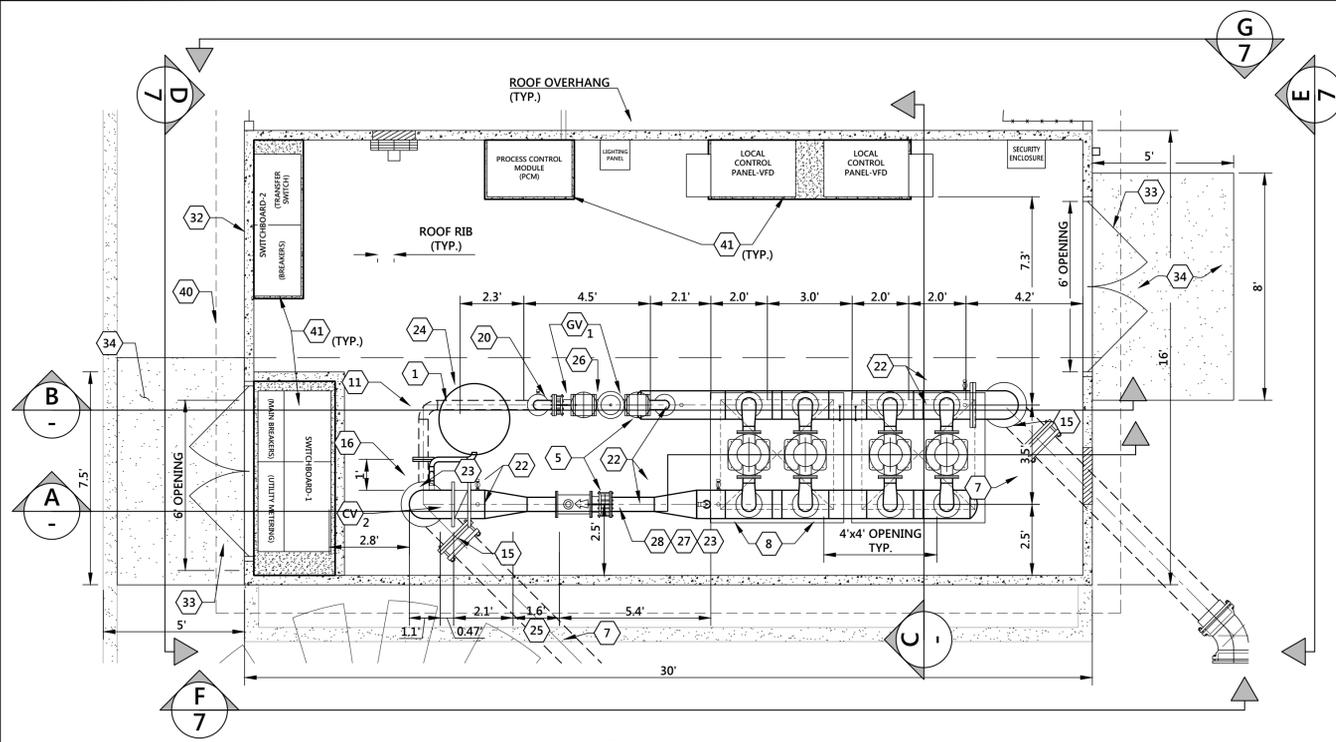


CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION

APPROVED BY _____ DATE _____
VOID ONE YEAR FROM THIS DATE

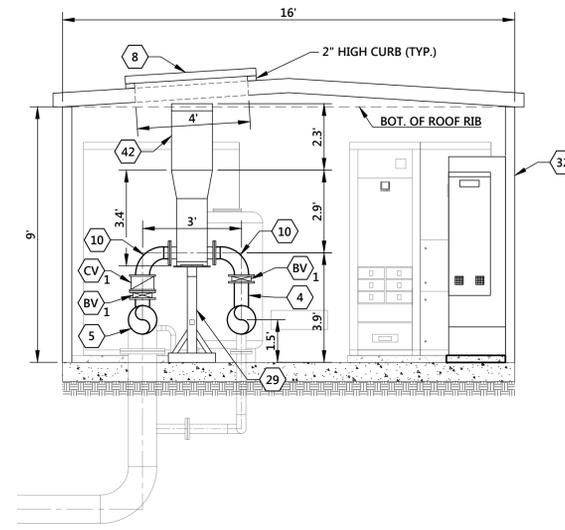
MISSION INN BOOSTER STATION REZONING PROJECT			
BOOSTER STATION SITE PLAN & SYSTEM CONNECTIONS			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE	
DATE: XXXX-2017	CHECKED: S. LEE	DEPARTMENT OF PUBLIC UTILITIES	
W.O. NO.: 1402756	CADME PG.: 24-5	W	DRAWING NO. D5-1402756-04
6230003310 470802XX 1402756		W	SHEET 4 OF X

PLOT DATE: 5/4/2017



PLAN VIEW

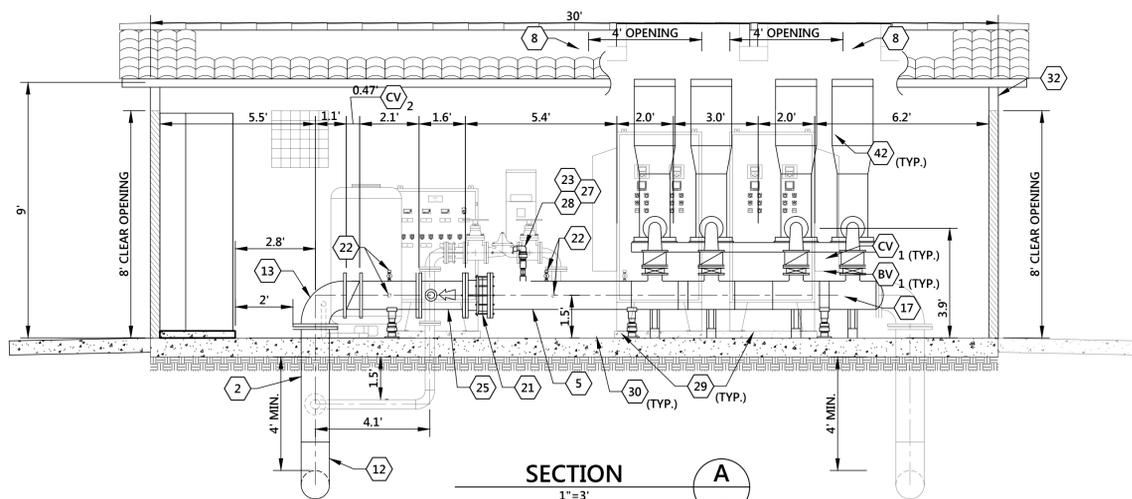
1"=3'



SECTION

1"=3'

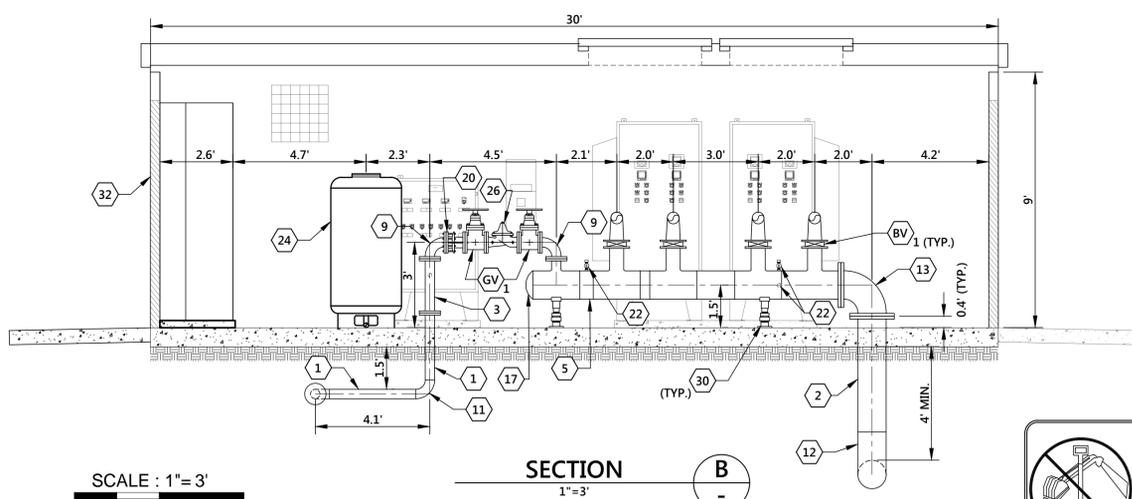
C



SECTION

1"=3'

A



SECTION

1"=3'

B

CONSTRUCTION NOTES

- (GV)₁ FURNISH AND INSTALL 4" F x F RESILIENT WEDGE GATE VALVE
- (BV)₁ FURNISH AND INSTALL 6" WAFER BUTTERFLY VALVE WITH HAND LEVER, STAINLESS STEEL VALVE DISC AND BUNA-N VALVE SEAT, MODEL 149G BY FLOMATIC OR APPROVED EQUAL.
- (CV)₁ FURNISH AND INSTALL 6" WAFER CHECK VALVE WITH STAINLESS STEEL TRIM AND RESILIENT SEAT, MODEL 888STR BY FLOMATIC OR APPROVED EQUAL.
- (CV)₂ FURNISH AND INSTALL 12" WAFER CHECK VALVE, MODEL 895 BY FLOMATIC OR APPROVED EQUAL.
- (R) RESTRAIN ALL JOINTS AND FITTINGS.
- (1) FURNISH AND INSTALL 4" CML&C STEEL PIPE PER CWD-040-1 & 2 AND THE PLANS AND SPECIFICATIONS. THE MORTAR LINING SHALL BE 5/16" THICK, THE STEEL CYLINDER SHALL BE 0.105" THICK (MIN) AND THE MORTAR COATING SHALL BE 3/4" THICK (MIN).
- (2) FURNISH AND INSTALL 12" CML&C STEEL PIPE PER CWD-040-1 & 2 AND THE PLANS AND SPECIFICATIONS. THE MORTAR LINING SHALL BE 5/16" THICK, THE STEEL CYLINDER SHALL BE 0.105" THICK (MIN) AND THE MORTAR COATING SHALL BE 3/4" THICK (MIN).
- (3) FURNISH AND INSTALL 4" EPOXY LINED STL. PIPE
- (4) FURNISH AND INSTALL 6" EPOXY LINED STL. PIPE
- (5) FURNISH AND INSTALL 12" EPOXY LINED STL. PIPE
- (7) FURNISH AND INSTALL 12-INCH DUCTILE IRON PIPE, CL-350, PER CWD-040-1 AND 2.
- (8) FURNISH AND INSTALL LOW PROFILE ALUMINUM ROOF HATCH BY U.S.F. FABRICATION, MODEL SRR-I, WITH CLEAR OPENING OF 48"x48" PER PLAN AND SPECIFICATIONS.
- (9) FURNISH AND INSTALL 4" EPOXY LINED-90° STL. FLANGED ELL.
- (10) FURNISH AND INSTALL EPOXY LINED-6"x5" REDUCING 90° STL. ELL.
- (11) FURNISH AND INSTALL 4"-90° CML&C STL. WELDED ELL.
- (12) FURNISH AND INSTALL 12"-90° CML&C STL. WELDED ELL.
- (13) FURNISH AND INSTALL 12"-90° SHORT RADIUS EPOXY LINED STL. FLANGED ELL.
- (15) FURNISH AND INSTALL 12" FLG x MJ ADAPTER W/ FLANGE INSULATION KIT.
- (16) FURNISH AND INSTALL 4" FLANGED OUTLET PER CWD-300.
- (17) FURNISH 12" DISHED HEAD, THICKNESS SHALL COMPLY WITH ASME PRESSURE VESSEL CODE SECTION VIII, DIVISION 1.
- (20) FURNISH AND INSTALL 4" DISMANTLING JOINT WITH TIE RODS, MODEL DJ400 BY ROMAC OR APPROVED EQUAL.
- (21) FURNISH AND INSTALL 12" DISMANTLING JOINT WITH TIE RODS, MODEL DJ400 BY ROMAC OR APPROVED EQUAL.
- (22) FURNISH AND INSTALL 1" THREADED OUTLET PER CWD-340 AND A 1" CORP STOP (MPT), W/ END CAP.
- (23) FURNISH 2" THREADED OUTLET PER CWD-340 (COATING SHALL BE EPOXY).
- (24) FURNISH AND INSTALL ASME 158 GALLON, CARBON STEEL HYDRO-PNEUMATIC BLADDER TANK, WITH EPOXY LINED SYSTEM CONNECTION, MODEL FXA-600-WG BY WESSELS COMPANY OR APPROVED EQUAL.
- (25) FURNISH AND INSTALL 12" ELECTROMAGNETIC FLOW METER, ULTRA MAG MODEL UM06 BY McCROMETER OR APPROVED EQUAL.
- (26) FURNISH AND INSTALL 4" PRESSURE RELIEF VALVE (FLG'D) WITH VALVE STEM INDICATOR AND LIMIT SWITCH.
- (27) FURNISH AND INSTALL 2" CORP STOP (MPT), W/ 2" COUPLING.
- (28) FURNISH AND INSTALL 2" COMBINATION AIR VALVE, MODEL D-040 BY A.R.I. OR APPROVED EQUAL.
- (29) FURNISH AND INSTALL PAINTED STEEL PUMP STAND.
- (30) FURNISH AND INSTALL PRE-MANUFACTURED PIPE SUPPORT.
- (32) FURNISH AND INSTALL 16' x 30' PRE-MANUFACTURED BUILDING AND 2 ROOF HATCHES, COMPLETE PER PLANS AND SPECIFICATIONS. STRUCTURE CAST EASI-SPAN PRECAST CONCRETE BUILDING, OR APPROVED EQUAL. A COMPATIBLE FOUNDATION AND SLAB DESIGN SHALL BE PROVIDED BY THE BUILDING MANUFACTURER. THE PREFABRICATED BUILDING SHALL BE DESIGNED WITH A SEISMIC OCCUPANCY IMPORTANCE FACTOR OF 1.25.
- (33) FURNISH AND INSTALL DOUBLE STEEL DOORS WITH A CLEAR OPENING OF 6' WIDE X 8' TALL.
- (34) FURNISH AND INSTALL 6" THICK CONCRETE (560-C-3250) SLAB. USE #4 REBAR @ 24" O.C. BOTH WAYS.
- (39) FURNISH 8"x24" OPENING WITH LOCKING COVER, 18" FROM FINISHED FLOOR FOR GENERATOR CABLE ACCESS.
- (40) FURNISH AND INSTALL VENTILATION FAN, MODEL 4HZ42 BY DAYTON OR APPROVED EQUAL.
- (41) FURNISH AND INSTALL ELECTRIC PANELS/CABINETS PER PROJECT SPECIFICATIONS
- (42) FURNISH AND INSTALL VERTICAL TURBINE, 40 H.P. VARIABLE FREQUENCY DRIVE, MODEL 125SV SERIES-3500 RPM BY GOULDS WATER TECHNOLOGY OR APPROVED EQUAL.



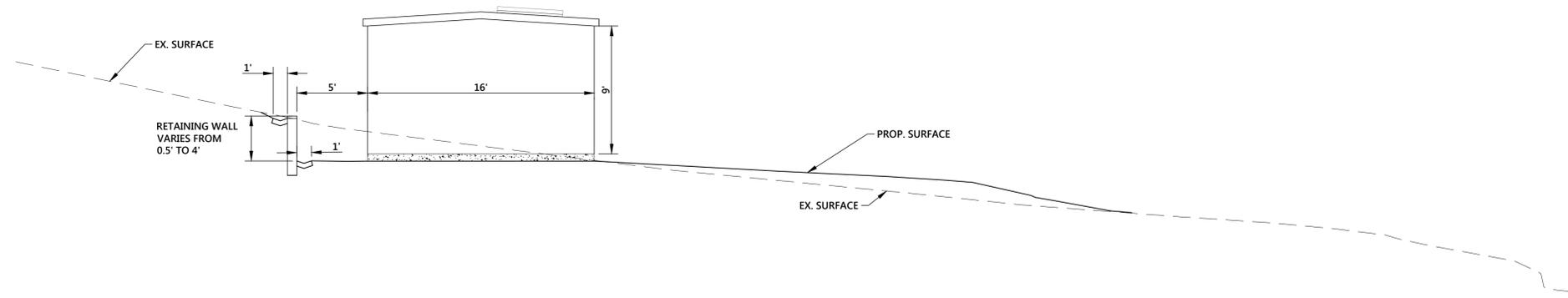
IMPORTANT NOTICE
 Section 4216.0217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 1-800-422-4133 2 WORKING DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT

CITY OF RIVERSIDE
 PUBLIC UTILITIES DEPARTMENT
 WATER ENGINEERING DIVISION

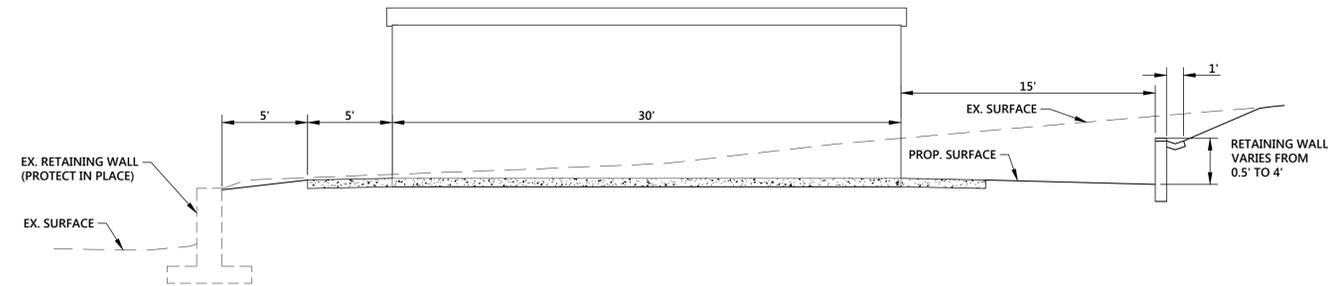
APPROVED BY: [Signature] DATE: _____
 VOID ONE YEAR FROM THIS DATE

MISSION INN BOOSTER STATION REZONING PROJECT			
BOOSTER STATION PIPING & SECTIONS			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE	
DATE: XXXX-2017	CHECKED: S. LEE	DEPARTMENT OF PUBLIC UTILITIES	
W.O. NO.: 1402756	CADME PG.: 24-5	W	D5-1402756-05
6230003310 470802xx 1402756		DIV	SHEET 5 OF X

PLOT DATE: 5/4/2017



SECTION I
1"=5' 4



SECTION H
1"=5' 4

SCALE : 1"=3'

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2 WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

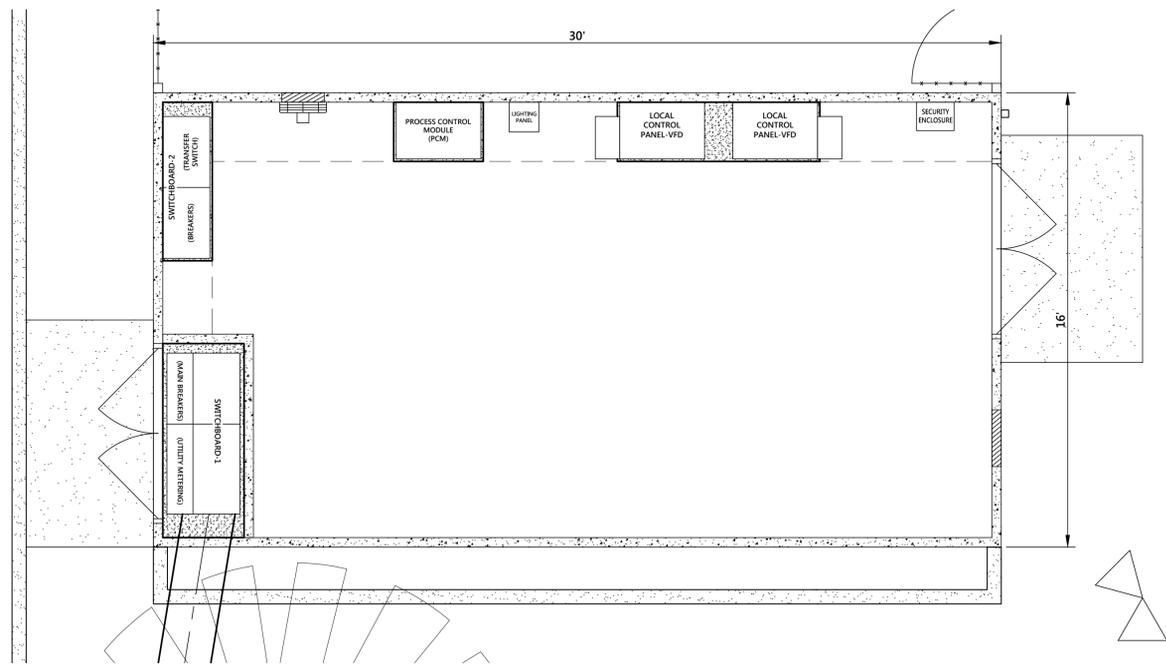
CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION
APPROVED BY _____ DATE _____
VOID ONE YEAR FROM THIS DATE

MARK	REVISION	APPR.	DATE

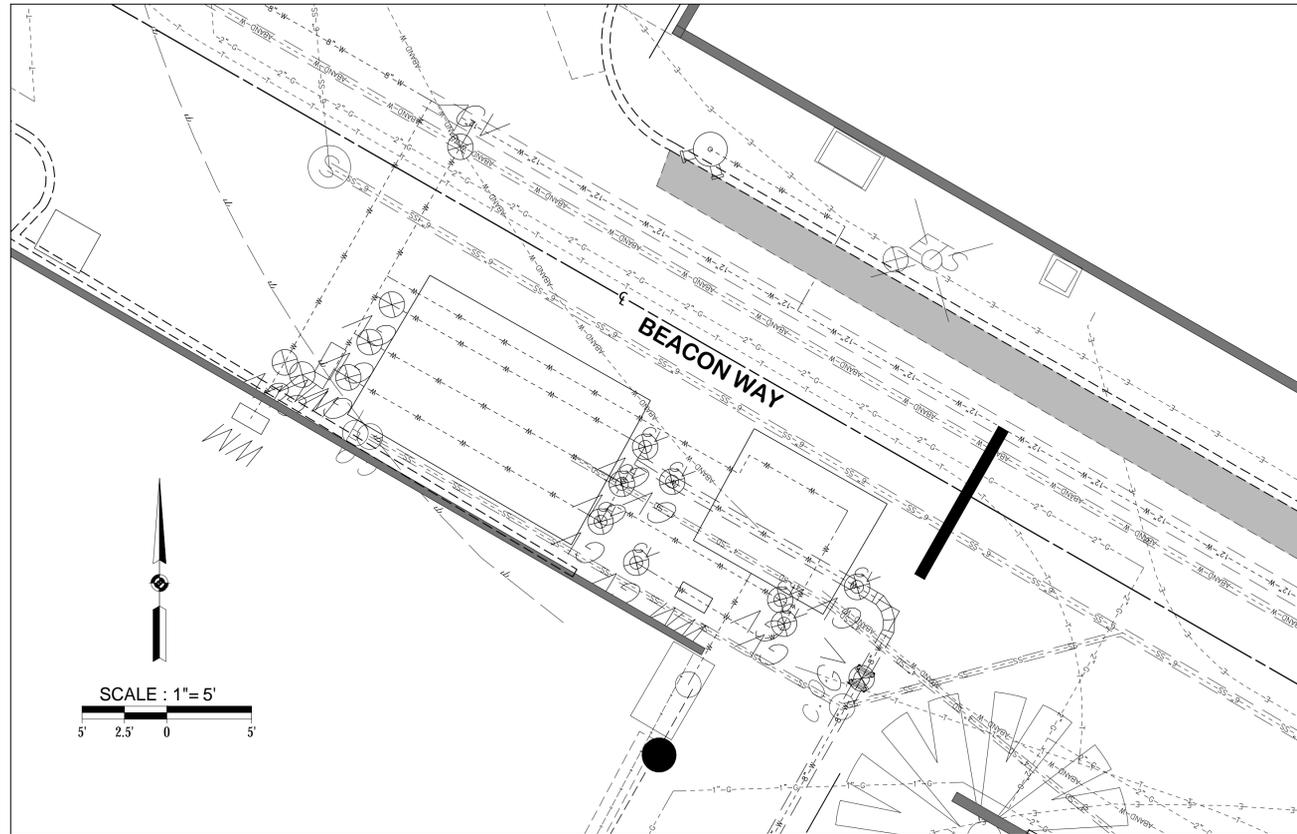
MISSION INN BOOSTER STATION REZONING PROJECT		BOOSTER STATION PIPING & SECTIONS	
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE	
DATE: XXXX-2017	CHECKED: S. LEE	DEPARTMENT OF PUBLIC UTILITIES	
W.O. NO.: 1402756	CADME PG.: 24-5	W	D5-1402756-06
6230003310 470802xx 1402756		DIV	SHEET 6 OF X

PRELIMINARY - NOT FOR CONSTRUCTION

PLOT DATE: 5/4/2017

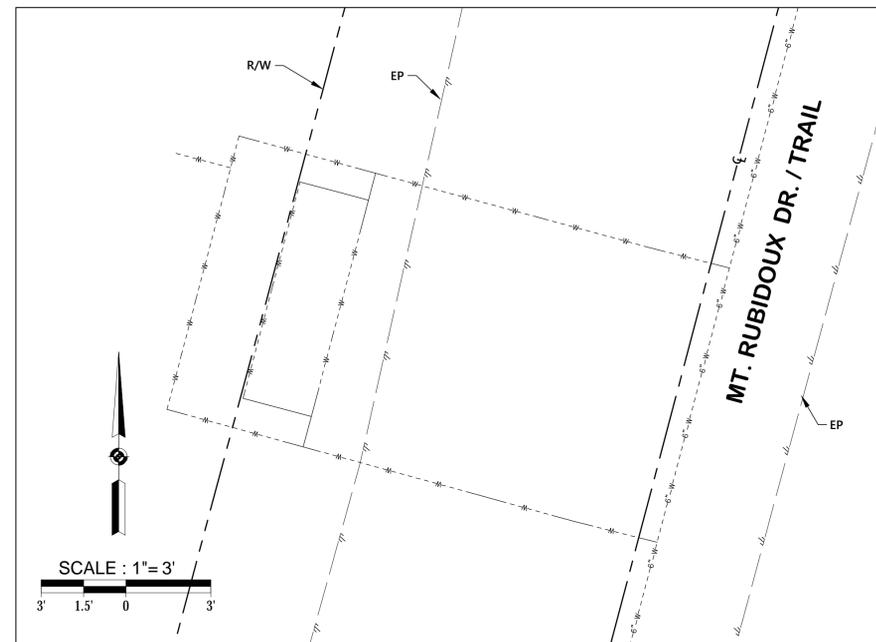


MISSION INN BOOSTER STATION FLOOR DRAIN
1"=5'



DEMOLITION OF MARY EVANS BOOSTER STATION
1"=5'

CONSTRUCTION NOTES



DEMOLITION OF RUBIDOUX BOOSTER STATION
1"=3'



CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION

APPROVED BY _____ DATE _____

VOID ONE YEAR FROM THIS DATE

MARK	REVISION	APPR.	DATE

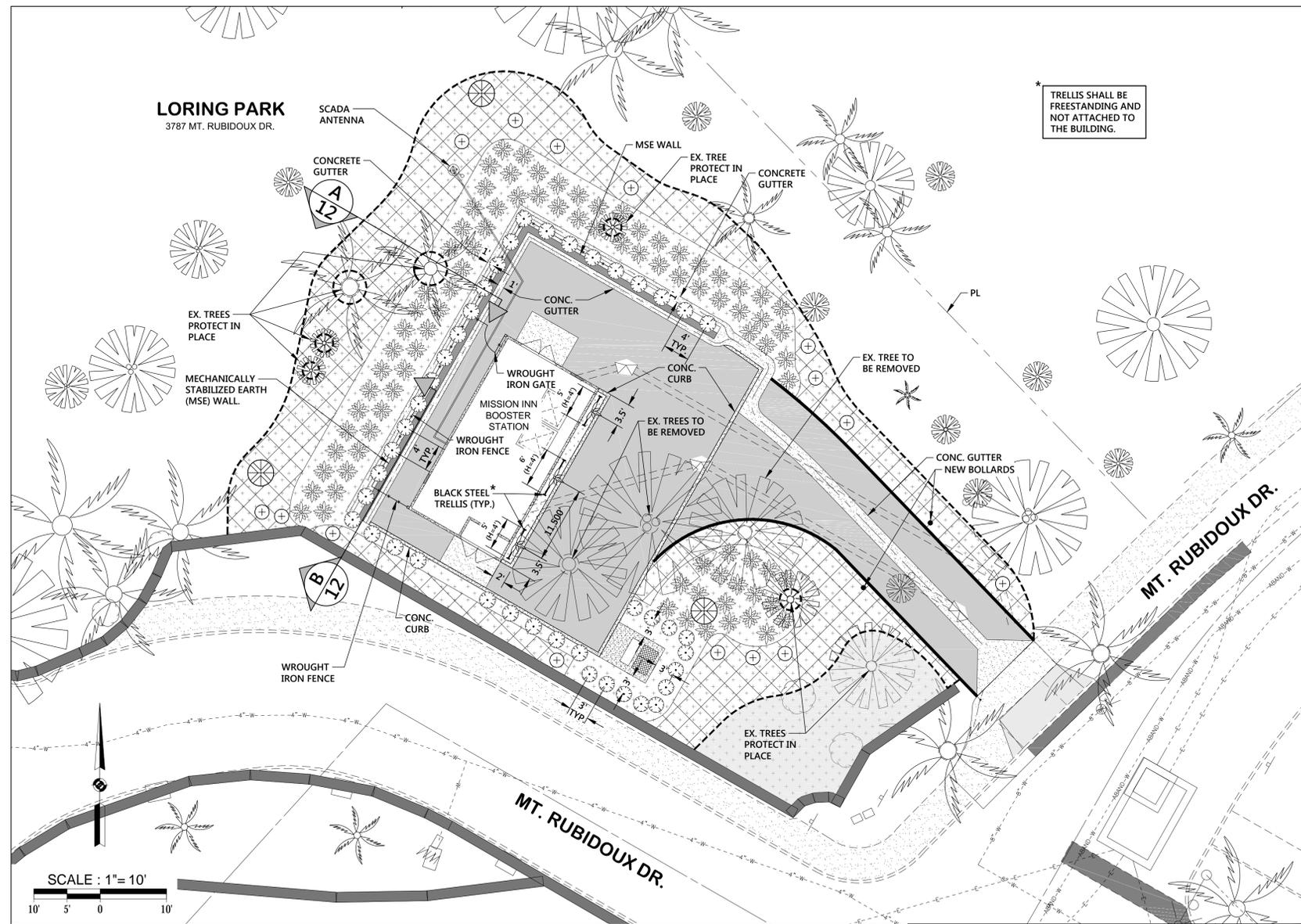
MISSION INN BOOSTER STATION
REZONING PROJECT
BOOSTER STATION FLOOR PLAN & DEMOLITION OF
EXISTING RUBIDOUX & MARY EVANS BOOSTER STATIONS

SCALE: AS SHOWN DRAWN: F. ROMERO
DATE: XXXX-2017 CHECKED: S. LEE

W.O. NO.: 1402756 CADME PG.: 24-5
6230003310 470802xx 1402756

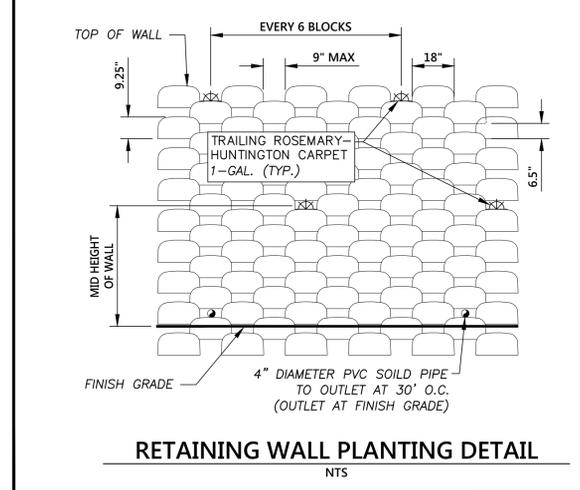
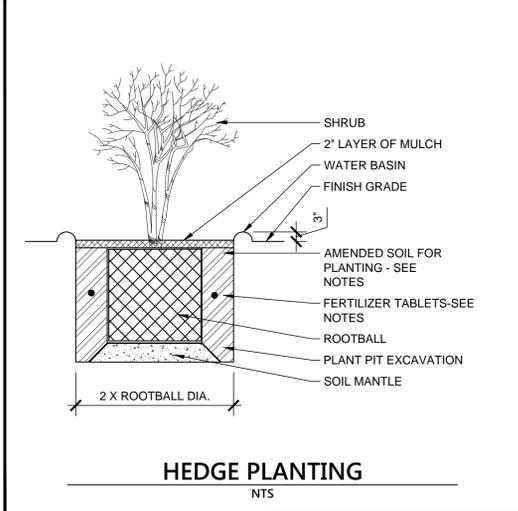
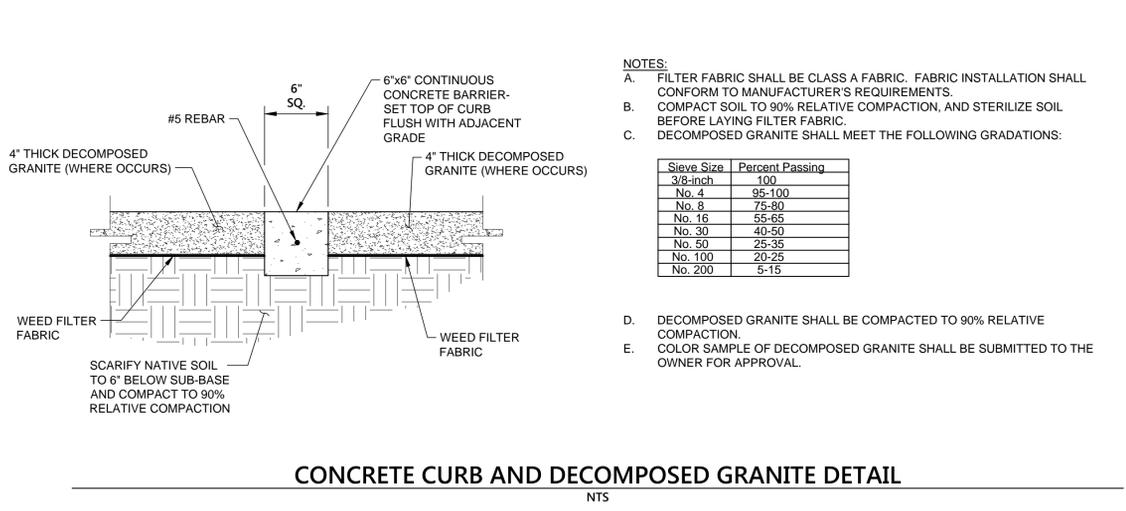
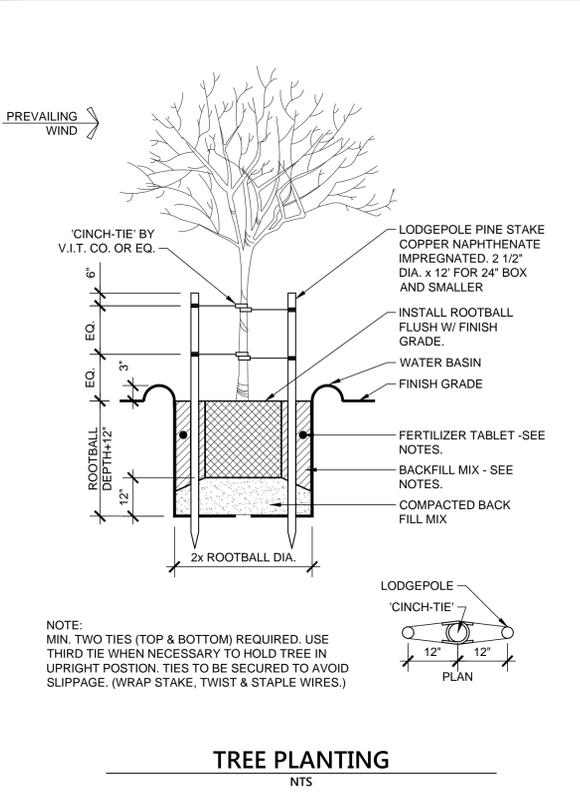
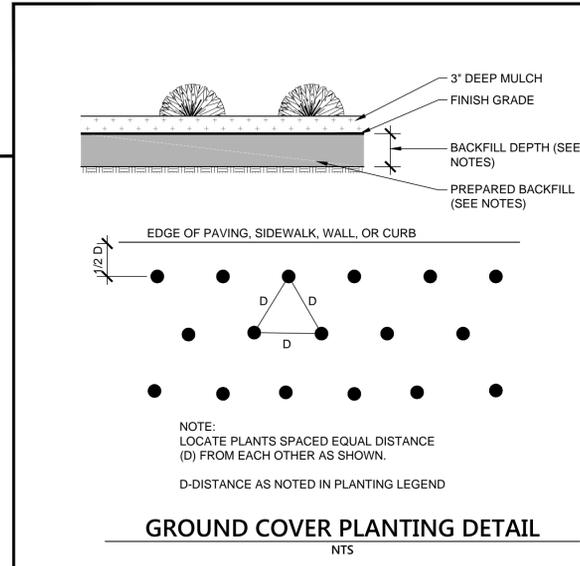
CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
DRAWING NO. **D5-1402756-08**
DIV SHEET 8 OF X

PLOT DATE: 5/4/2017

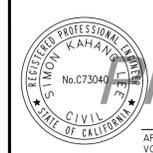


PLANTING LEGEND				
PLANT LIST				
SYM.	BOTANICAL NAME / COMMON NAME	SIZE/ SPACING	DETAIL	QTY.
	HETEROMELES ARBUTIFOLIA / TOYON	5 GAL. / SEE PLAN FOR SPACING	SHEET 12	42 EA.
	MYOPORUM / MYOPORUM	FLAT SIZE/ D=2' OC, STAGGERED (REFER TO GROUND COVER PLANTING DETAIL)	SHEET 12	10 FLATS (≈60 PLANTS PER FLAT)
	MUHLENBERGIA / DEER GRASS	1 GAL./ D=3.5' OC, STAGGERED (REFER TO GROUND COVER PLANTING DETAIL)	SHEET 12	86 EA.
	AGAVE NEOMEXICANA / NEW MEXICO CENTURY PLANT	5 GAL./ REFER TO PLANTING PLAN FOR PLACEMENT	SHEET 12	15 EA.
	ROSMARINUS OFFICINALIS / TRAILING ROSEMARY - HUNTINGTON CARPET	1 GAL./ REFER TO RETAINING WALL PLANTING DETAIL (THIS SHEET).	SHEET 12	25 EA.
	SENECIO CONFUSUS / MEXICAN FLAME VINE	5 GAL./ SEE PLAN FOR SPACING	SHEET 12	3 EA.
	QUERCUS AGRIFOLIA / COAST LIVE OAK	24" BOX	SHEET 12	3 EA.

MISCELLANEOUS SYMBOLS			
	REDWOOD HEADER	120 FT.	
	BENDER BOARD	325 FT.	
	DECOMPOSED GRANITE (COLOR - BRIMSTONE BY SOUTHWEST BOULDERS & STONE)	2,050 SQ. FT.	
	4" THICK MULCH (COLOR - NATURAL BROWN)	500 SQ. FT.	
	3" THICK MULCH (COLOR - NATURAL BROWN)	3,600 SQ. FT.	



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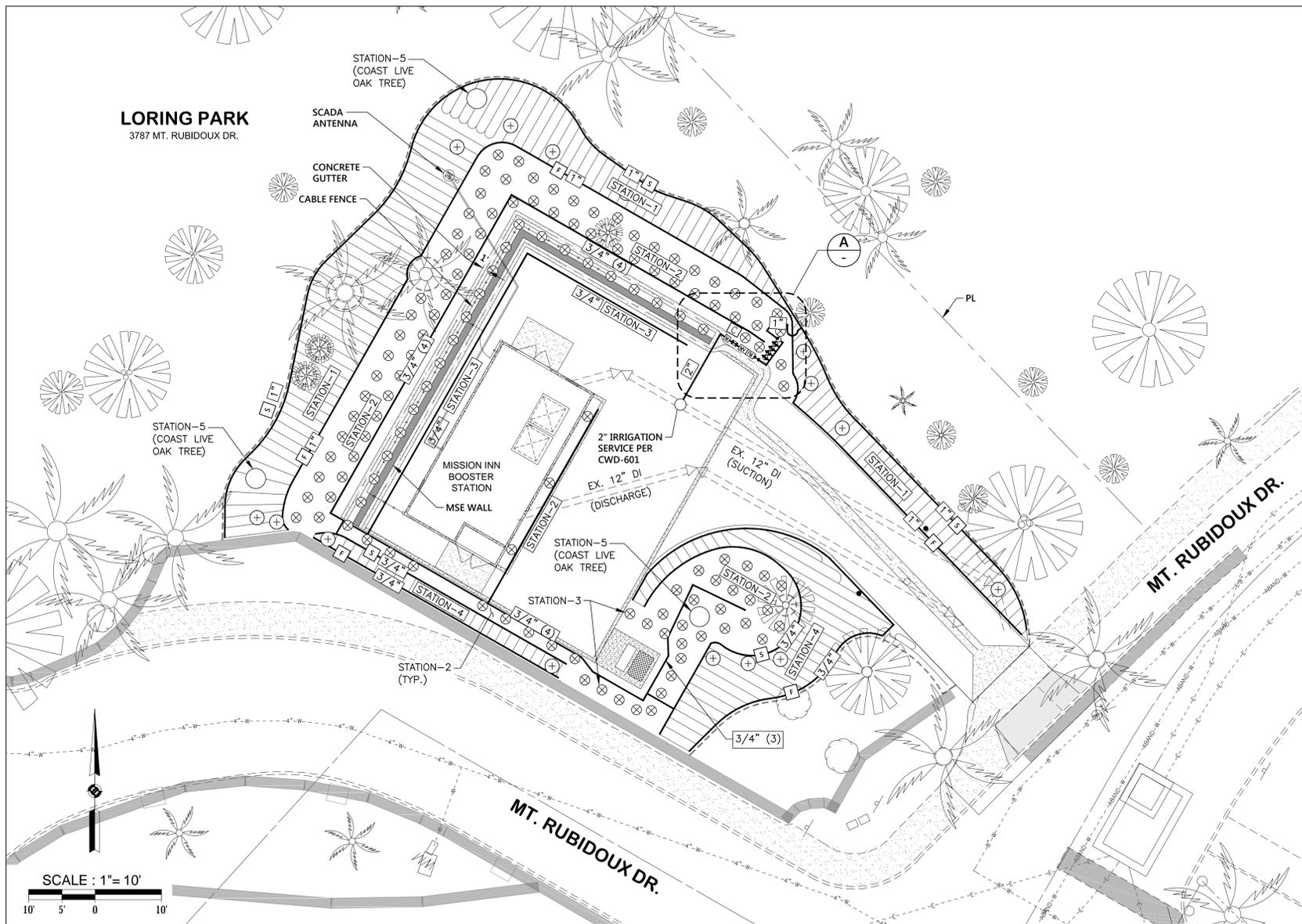
CITY OF RIVERSIDE
 PUBLIC UTILITIES DEPARTMENT
 WATER ENGINEERING DIVISION
 APPROVED BY: [Signature] DATE: [Blank] VOID ONE YEAR FROM THIS DATE

MARK	REVISION	APPR.	DATE

MISSION INN BOOSTER STATION REZONING PROJECT LANDSCAPE AND IRRIGATION PLANTING PLAN			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: XXXX-2017	CHECKED: S. LEE	DRAWING NO. D5-1402756-27	
W.O. NO.: 1402756	CADME PG.: 24-5	W	DIV
6230003310 470802xx 1402756			SHEET 27 OF X

PLOT DATE: 5/4/2017

LORING PARK
3787 MT. RUBIDOUX DR.



EQUIPMENT LEGEND				DETAIL
SYMBOL	MANUFACTURER / MODEL NUMBER	SIZE	QTY.	
[C]	CALSENSE ET-2000e-6-RRE-SSE-R AUTOMATIC CONTROLLER CONTACT BOB MOXLEY AT CALSENSE FOR FURTHER DETAILS.	6 STA	1	REFER TO IRRIGATION DETAILS ON SHT 10 & 11
[M]	WATER METER - SEE POINT OF CONNECTION NOTE ON PLANS	1"	1	
[B]	FEBCO 825Y REDUCED PRESSURE BACKFLOW PREVENTER PER CWD-616-1	1"	1	
[MV]	RAIN BIRD 100-EFB-CP BRASS MASTER CONTROL VALVE	1"	1	
[FM]	CALSENSE FM-1B FLOW METER	-	1	
[B]	NIBCO T-580-70 BRONZE BALL VALVE	LINE SIZE	1	
[B]	RAIN BIRD CONTROL ZONE KIT - MODEL XCZ-075-PRF (STATIONS 2, 3, 4 & 5)	3/4"	4	
[B]	RAIN BIRD CONTROL ZONE KIT - MODEL XCZ-100-PRF (STATION 1)	1"	1	
[—]	CLASS 315 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER	3/4"	810 LF	
[—]	CLASS 315 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER	1"	400 LF	
[—]	UVR (ULTRA VIOLET RATED) PVC SCHEDULE 40 - STATION 3	3/4"	12 LF	
[—]	NETAFIM PE060-070 UVR POLYETHYLENE TUBING OR EQUAL - STATION 3	1/2"	140 LF	
[—]	NETAFIM TECHLINE-CV DRIPLINE (0.9 GPH EMITTER/18") - STATIONS 1 & 4	-	1,150 LF	
[X]	NETAFIM TECHLINE-CV (0.9 GPH EMITTER/18") SHRUB DRIP RING - STATIONS 2 & 3	-	134 EA	
[O]	NETAFIM TECHLINE-CV (0.9 GPH EMITTER/18") TREE DRIP RING - STATION 5	-	3 EA	
NOT SHOWN	UF DIRECT BURIAL CONTROL WIRE WITH WATERPROOF CONNECTIONS	N/A		

POINT OF CONNECTION

MAKE IRRIGATION POINT OF CONNECTION INTO NEW SITE WATER METER. VERIFY EXACT LOCATION IN THE FIELD AND ADJUST AS NECESSARY. INSTALL BALL VALVE AT POC FOR IRRIGATION SYSTEM ISOLATION. INSTALL BACKFLOW PREVENTER IMMEDIATELY DOWNSTREAM OF BALL VALVE PER ALL LOCAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. INSTALL MASTER VALVE DOWNSTREAM OF BACKFLOW DEVICE AND WIRE TO CONTROLLER PER MANUFACTURER'S DIRECTIONS. CONTRACTOR SHALL VERIFY PRESSURE PRIOR TO START OF INSTALLATION. IF A PRESSURE RELATED ISSUE IS IDENTIFIED, NOTIFY INSPECTOR IMMEDIATELY.

METER SIZE : 1" (PROVIDED BY CITY)
BACKFLOW PREVENTER SIZE: 1"
FLOW METER: MODEL FM-1B
MASTER VALVE: 1"
NUMBER OF STATIONS: 4
CONTROLLER SIZE: 6 STATION

CONTROLLER

FINAL CONTROLLER LOCATION TO BE APPROVED IN THE FIELD BY THE INSPECTOR. THE CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS PER LOCAL CODES. MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANUFACTURER'S DIRECTIONS, THESE PLANS, AND PER ALL LOCAL CODES.

DRIP IRRIGATION NOTES

THE DRIP IRRIGATION SYMBOLS ARE SHOWN FOR CLARITY ONLY. REFER TO THE LEGEND AND NOTES FOR ACTUAL NUMBER OF EMITTERS PER PLANT/PLANT SIZE. REFER TO THE PLANTING PLAN FOR THE ACTUAL QUANTITY, TYPE, AND SIZE OF THE PLANT MATERIALS. ALL PLANT MATERIAL SHALL RECEIVE THE CORRECT QUANTITY AND SIZE OF EMITTER TO MAINTAIN OPTIMUM PLANT HEALTH.

REFER TO THE EQUIPMENT LEGEND FOR APPROPRIATE QUANTITY AND EMITTER FLOW FOR EACH PLANT TO BE IRRIGATED WITH DRIP IRRIGATION. LOCATE EMITTERS ON OPPOSING SIDES OF THE PLANT AT EDGE OF ROOT BALL.

CONTRACTOR SHALL FLUSH ENTIRE ZONE PRIOR TO INSTALLATION OF ANY EMITTER.

CONTRACTOR SHALL NOT REPAIR OR ATTEMPT TO CLEAN ANY EMITTER ORIFICE, RATHER CONTRACTOR SHALL REPLACE THE ENTIRE EMITTER.

INSTALL A FLUSH VALVE AT THE TERMINAL END OF ALL LATERAL TRUNK LINES RUNS IN MULTIPLE DIRECTIONS. INSTALL A FLUSH VALVE AT THE END OF EACH AND EVERY "TRUNK".

SINGLE LATERAL DRIPLINES SHALL NOT EXCEED MANUFACTURERS MAXIMUM LENGTHS.

[S] SUPPLY HEADER
[F] FLUSH HEADER

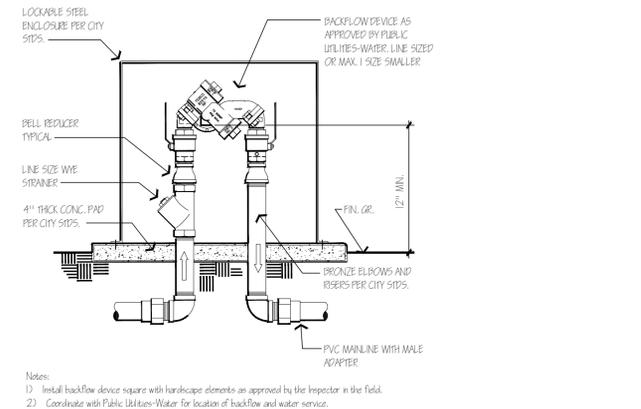
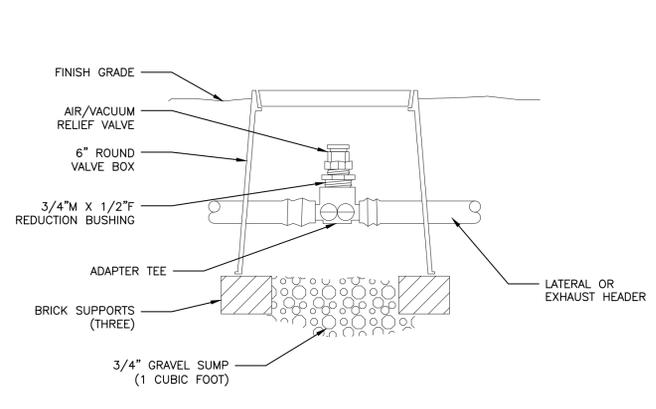
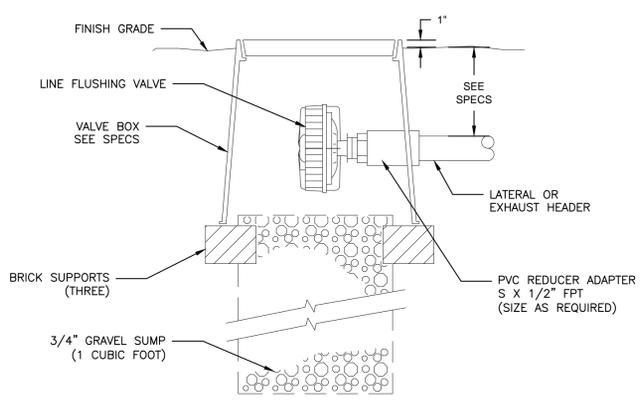
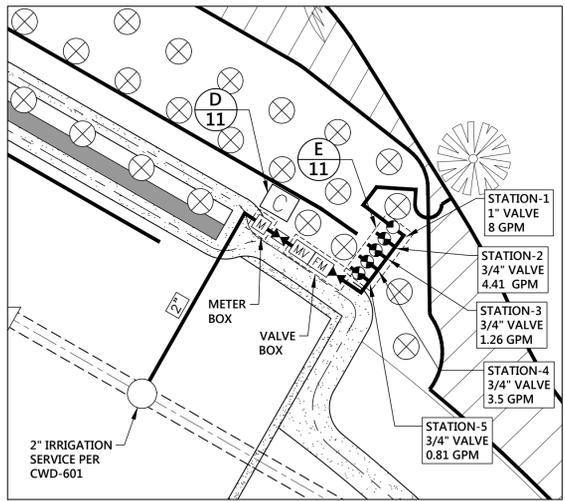
PRESSURE CALCULATION

HGL=985'
ELEVATION=872'

(985'-872')/2.31=49 PSI

LOSSES BASED ON ALL STATIONS RUNNING (17.1 GPM)

	PSI LOSSES
WATER METER	1
BALL VALVE	1
BACKFLOW PREVENTER	12
MASTER VALVE	1.2
FLOW METER	1
CONTROL VALVE (STATION-4 @ 3.5 GPM)	9
STATION-4 MAIN LINE (230', 3/4" @ 3.5 GPM)	4
MISC. LOSSES	2
TOTAL SYSTEM LOSSES	31.2



POINT OF CONNECTION DETAIL (A)

LINE FLUSHING VALVE (LF)

AIR/VACUUM RELIEF VALVE (AR)

REDUCED PRESSURE BACKFLOW DEVICE (RB)

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CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION
APPROVED BY: [Signature] DATE: [Blank]

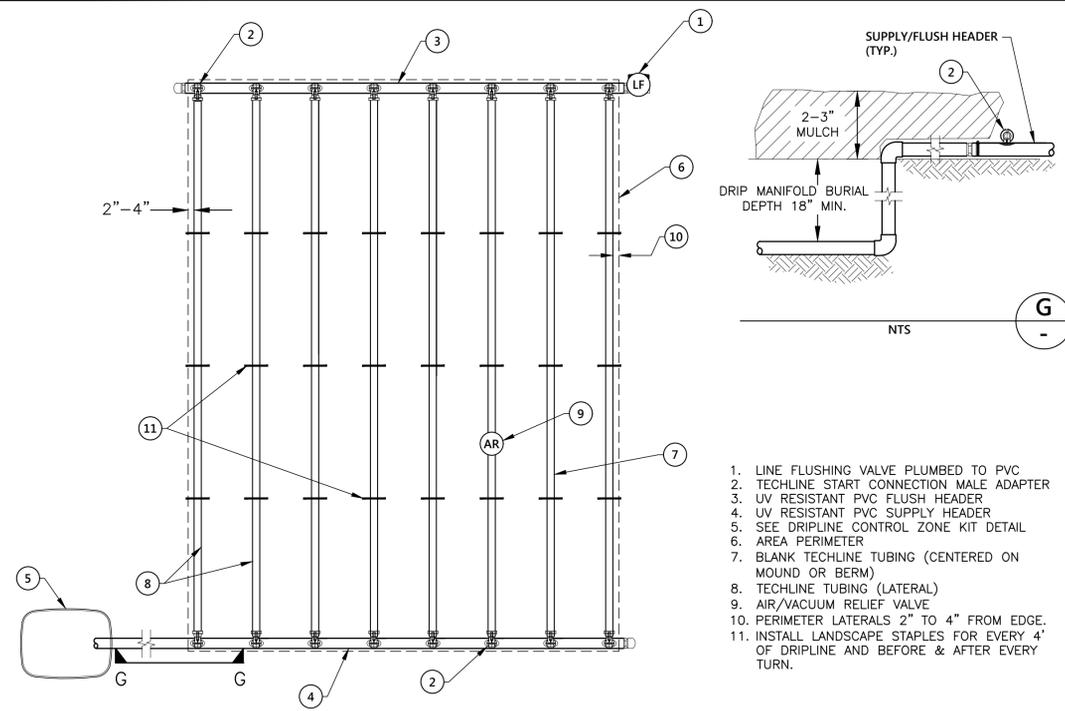
MISSION INN BOOSTER STATION
REZONING PROJECT
LANDSCAPE AND IRRIGATION
IRRIGATION PLAN

SCALE: AS SHOWN
DATE: XXXX-2017
W.O. NO.: 1402756

DRAWN: F. ROMERO
CHECKED: S. LEE
CADME PG.: 24-5

CITY OF RIVERSIDE
DEPARTMENT OF PUBLIC UTILITIES
DRAWING NO. **D5-1402756-28**
SHEET 28 OF X

PLOT DATE: 5/4/2017

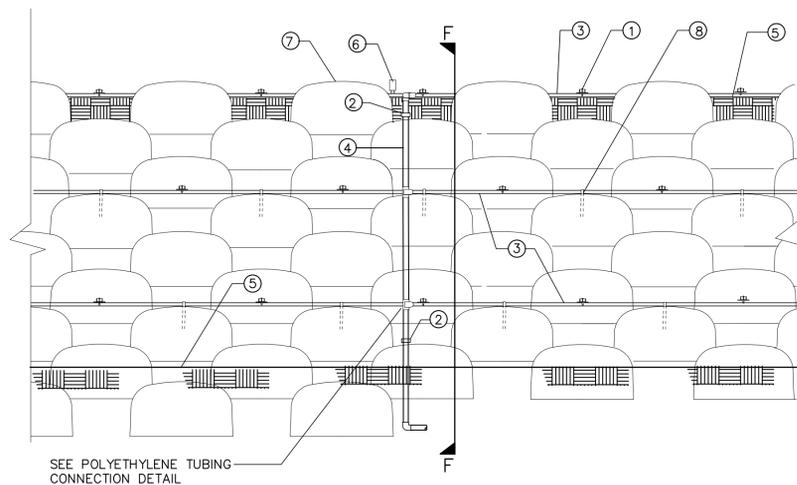


TECHLINE END FEED LAYOUT

NTS

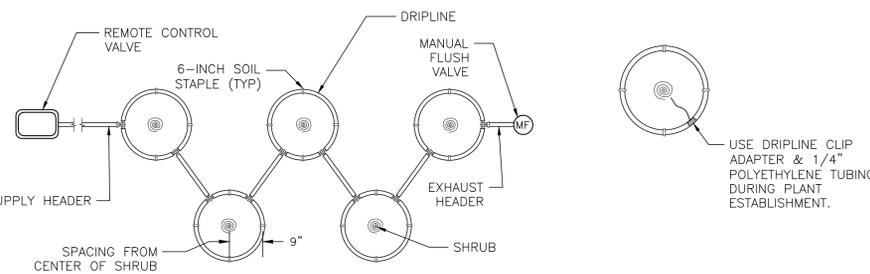
1. LINE FLUSHING VALVE PLUMBED TO PVC
2. TECHLINE START CONNECTION MALE ADAPTER
3. UV RESISTANT PVC FLUSH HEADER
4. UV RESISTANT PVC SUPPLY HEADER
5. SEE DRIPLINE CONTROL ZONE KIT DETAIL
6. AREA PERIMETER
7. BLANK TECHLINE TUBING (CENTERED ON MOUND OR BERM)
8. TECHLINE TUBING (LATERAL)
9. AIR/VACUUM RELIEF VALVE
10. PERIMETER LATERALS 2" TO 4" FROM EDGE.
11. INSTALL LANDSCAPE STAPLES FOR EVERY 4' OF DRIPLINE AND BEFORE & AFTER EVERY TURN.

- LEGEND**
- ① SINGLE OUTLET PRESSURE COMPENSATING EMITTER
 - ② #3 "J" HOOK REBAR PIPE STABILIZER, EMBEDDED IN OPEN CELL
 - ③ 1/2" DIA. POLYETHYLENE TUBING
 - ④ 3/4" UV RESISTANT PVC SCH 40 LATERAL
 - ⑤ FINISH GRADE
 - ⑥ AIR RELEASE VALVE
 - ⑦ VERDURA WALL PER MFG. SPECIFICATIONS
 - ⑧ PIN TUBING IN PLANTING W/ LANDSCAPE STAPLE



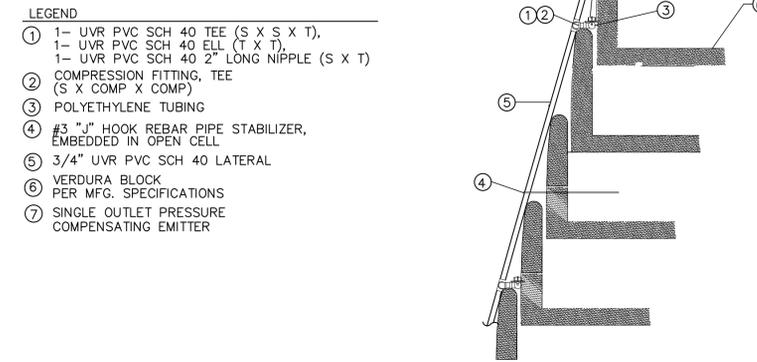
MSE WALL DRIP IRRIGATION DETAIL

NTS



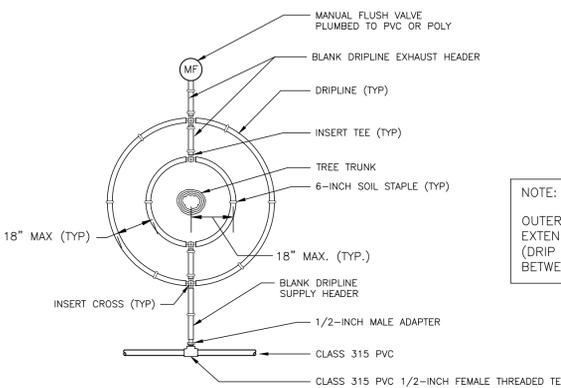
MULTIPLE SHRUB DRIP RING LAYOUT

NTS



POLYETHYLENE TUBING CONNECTION DETAIL

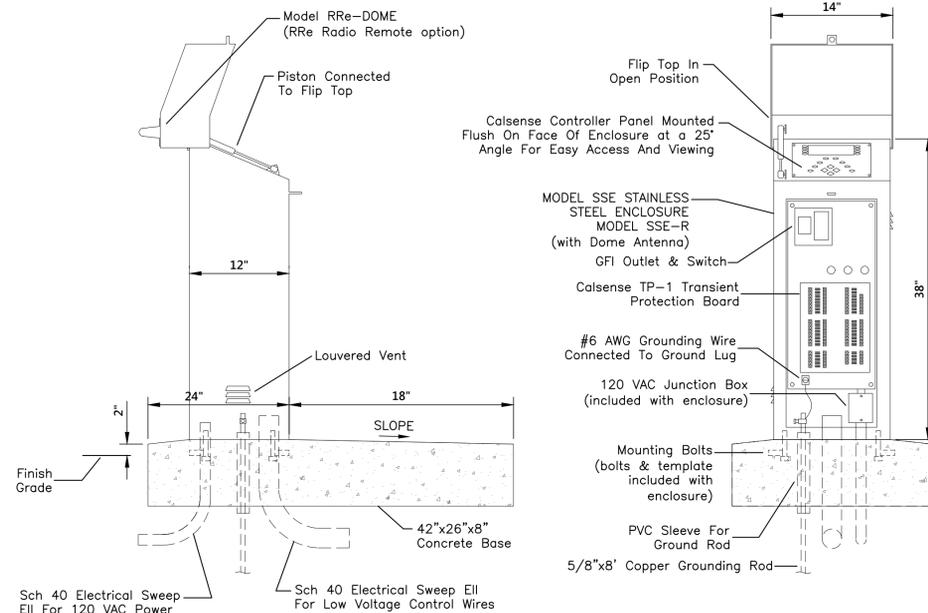
NTS



TREE DRIP RING LAYOUT

NTS

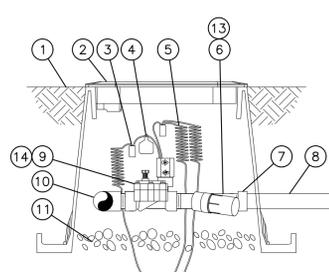
NOTE:
OUTERMOST DRIP RING SHALL EXTEND TO THE TREE'S CANOPY (DRIPLINE). 18" MAX SPACING BETWEEN DRIPLINE RINGS.



CALSENSE STAINLESS STEEL ENCLOSURE (SSE)

NTS

D
10

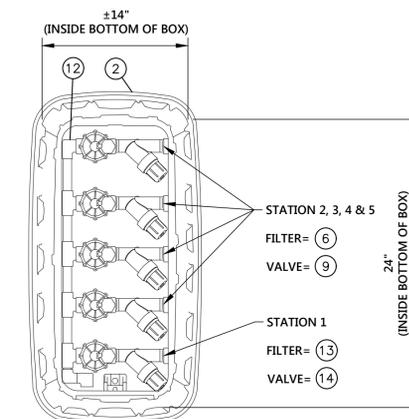


SIDE VIEW

- ① FINISH GRADE
- ② POLYMER CONCRETE VALVE BOX WITH COVER, MODEL P-W5 1 SPECIAL SERIES 15" HIGH BY J&R CONCRETE PRODUCTS.
- ③ WATERPROOF CONNECTIONS
- ④ VALVE ID TAG
- ⑤ 30-INCH LINEAR LENGTH OF WIRE, COILED
- ⑥ PRESSURE REGULATING FILTER: RAIN BIRD PRF-075-RBY (INCLUDED IN XCZ-075-PRF KIT)
- ⑦ PVC SCH 40 FEMALE ADAPTOR
- ⑧ LATERAL PIPE
- ⑨ REMOTE CONTROL VALVE: RAIN BIRD LVF-075 (INCLUDED IN XCZ-075-PRF KIT)
- ⑩ PVC SCH 40 TEE OR ELL TO MANIFOLD
- ⑪ 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- ⑫ MANIFOLD PIPE AND FITTINGS
- ⑬ PRESSURE REGULATING FILTER: RAIN BIRD PRF-100-RBY (INCLUDED IN XCZ-100-PRF KIT)
- ⑭ REMOTE CONTROL VALVE: RAIN BIRD 100-DV (INCLUDED IN XCZ-100-PRF KIT)

DRIPLINE CONTROL ZONE KIT

NTS



TOP VIEW

E
10



CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT
WATER ENGINEERING DIVISION

PRELIMINARY - NOT FOR CONSTRUCTION

APPROVED BY: _____ DATE: _____
VOID ONE YEAR FROM THIS DATE

MISSION INN BOOSTER STATION REZONING PROJECT LANDSCAPE AND IRRIGATION IRRIGATION DETAILS		SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES
DATE: XXXX-2017	CHECKED: S. LEE	W.O. NO.: 1402756	CADME PG.: 24-5	DRAWING NO.: D5-1402756-29
MARK	REVISION	APPR. DATE	DIV	SHEET 29 OF X

PLOT DATE: 5/4/2017



VERDURA 30 (COLOR - BUFF/TAN)
BY SOIL RETENTION PRODUCTS, INC.

MECHANICALLY STABILIZED EARTH (MSE) WALL



BOOSTER STATION BUILDING FAÇADE
HILL COUNTRY FLAGSTONE IN BAKED CLAY BY DAYTON SUPERIOR CORP.



FREESTANDING TRELLIS



SENECIO CONFUSUS /
MEXICAN FLAME VINE



CONCRETE CURB



DECOMPOSED GRANITE (DG)
COLOR - BRIMSTONE



MULCH
COLOR - NATURAL BROWN



MYOPORUM / MYOPORUM



MUHLENBERGIA / DEER GRASS



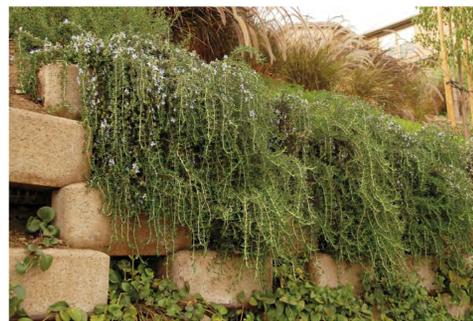
QUERCUS AGRIFOLIA / COAST LIVE OAK



WROUGHT IRON PANEL/GATE



TOP OF RETAINING WALL
WROUGHT IRON FENCE



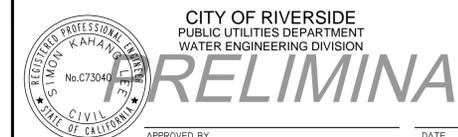
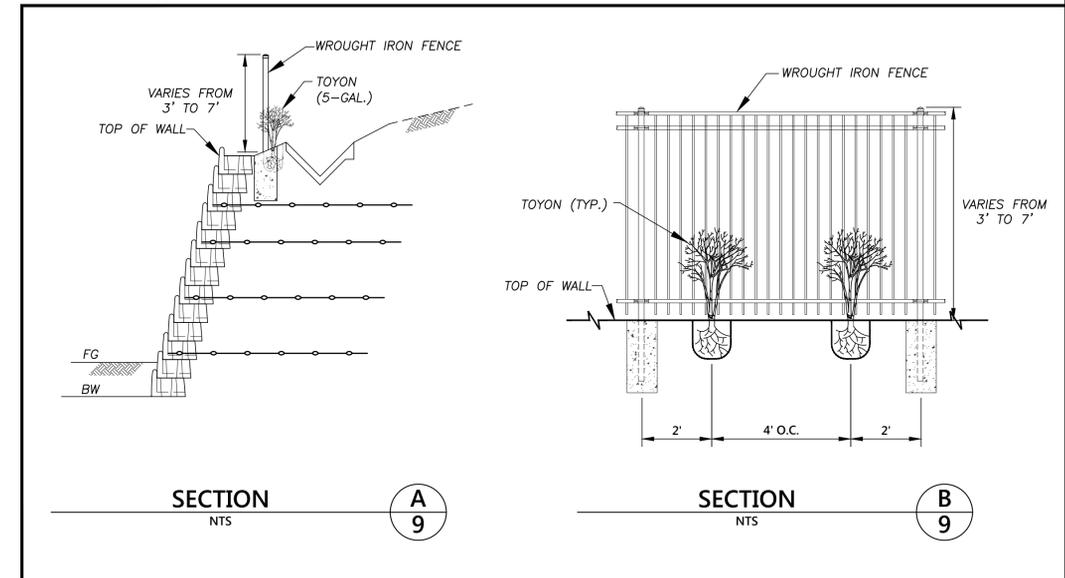
ROSMARINUS OFFICINALIS /
TRAILING ROSEMARY -
HUNTINGTON CARPET



HETEROMELES ARBUTIFOLIA / TOYON



AGAVE NEOMEXICANA /
NEW MEXICO CENTURY PLANT



PRELIMINARY - NOT FOR CONSTRUCTION

MISSION INN BOOSTER STATION REZONING PROJECT			
MATERIALS TO BE USED			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: XXXX-2017	CHECKED: S. LEE	DRAWING NO. D5-1402756-30	
W.O. NO.: 1402756	CADME PG.: 24-5	W	SHEET 30 OF X
6230003310 470802XX 1402756			

PLOT DATE: 8/4/2017



NO STOPPING
ENTIRE BLOCK



MT. RUBENOVIC PARK
OPEN TO PEDESTRIAN USE
PARK HOURS
OPEN 1/2 HOUR BEFORE SUNSET
UNTIL 1/2 HOUR AFTER SUNSET
CAUTION: MINIMUM CLEARANCE 8 FT

STOP

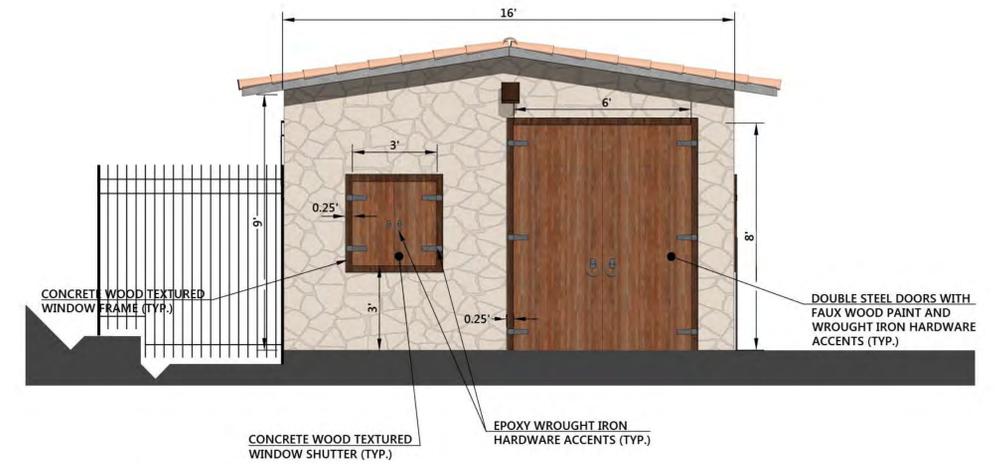
NO PARKING
IN FRONT OF
THIS BUILDING
EXCEPT FOR
EMERGENCY
VEHICLES



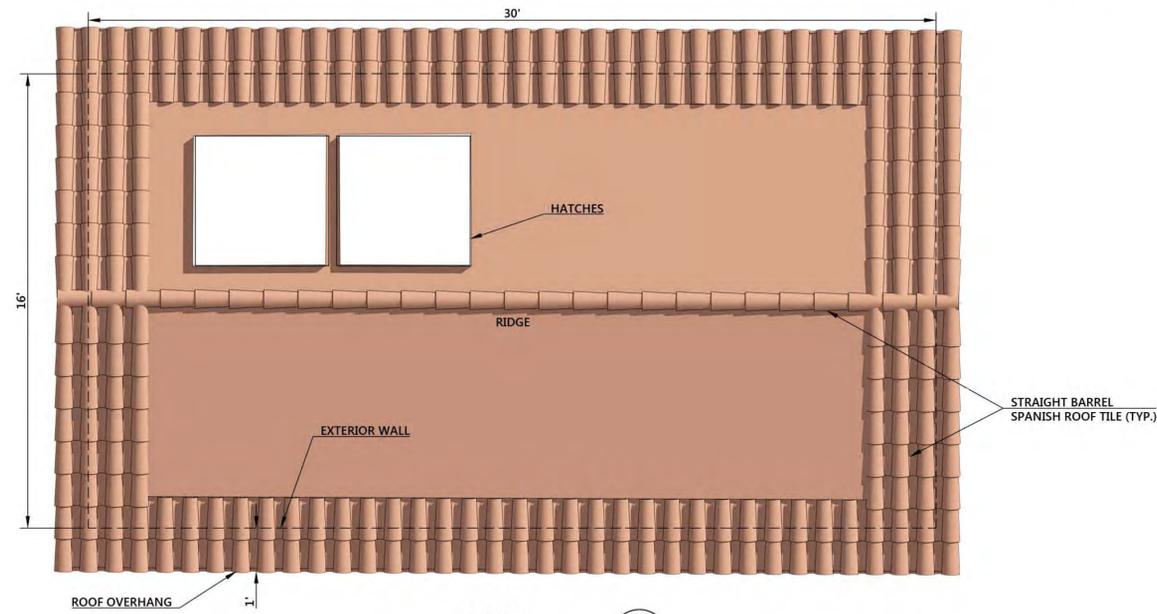




SECTION F
1"=3' 5



SECTION D
1"=3' 5



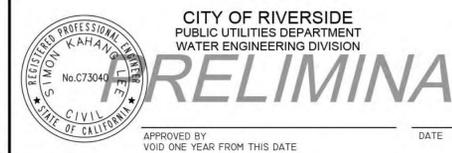
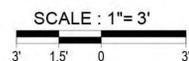
ROOF
1"=3' 5



SECTION G
1"=3' 5



SECTION E
1"=3' 5



MARK	REVISION	APPR.	DATE

MISSION INN BOOSTER STATION REZONING PROJECT			
SCALE: AS SHOWN	DRAWN: F. ROMERO	CITY OF RIVERSIDE DEPARTMENT OF PUBLIC UTILITIES	
DATE: XXXX-2017	CHECKED: S. LEE	DRAWING NO. D5-1402756-07	
W.O. NO.: 1402756	CADME PG.: 24-5	W	SHEET 7 OF X
6230003310 470802xx 1402756			

PLOT DATE: 6/19/2017