

# SPECIFICATIONS AND CONTRACT DOCUMENTS FOR ALBERT PARK PLAY AREA IMPROVEMENTS PROJECT # 11299

## SAN RAFAEL, CALIFORNIA

DESIGNED	BY	REVISION	DATE
DRAWN			
CHECKED			
APPROVED			
100% REVIEW SET			

**ABBREVIATIONS**
**GENERAL NOTES**
**PROJECT DIRECTORY**
**PROJECT DATA**
**DRAWING LIST**

AC ADL. ADJ. AGG. ALT. APPROX. ARCH. ASPH. AUTO. BD. BLDG. BOT. BTWN. C.B. C.I. C.I.P. CJ CMU CEM. CL CLR. CLMN CONC. CONN CONST. CONT. CONTR. COORD. CTR. D.F. DBL. DEMO. DEPT. DET. DIA. DIAG. DIM. DN. DWG. (E) EXIST. EJ E.S. E.W. EA. ELEV. ENCL. ENGR. EQ. EQUIP. ETC. EXP. EXT. FDN FIN. FR. FT. FUT. GA GALV. GND. H.B. H.P. HDR. HORIZ. HT. I.D. IN. INCL. INV.	ASPHALT CONCRETE ADDITIONAL ADJUSTABLE AGGREGATE ALTERNATE APPROXIMATE ARCHITECT ASPHALT AUTOMATIC BITUMINOUS BUILDING BOTTOM BETWEEN CATCH BASIN CAST IRON CAST IN PLACE+ CONTROL JOINT CONC. MASON. UNIT CEMENT CENTER LINE CLEAR COLUMN CONCRETE CONNECTION CONSTRUCTION CONTINUOUS CONTRACTOR COORDINATE CENTER DRINKING FOUNTAIN DOUBLE DEMOLITION DEPARTMENT DETAIL DIAMETER DIAGONAL DIMENSION DOWN DRAWING EXISTING EXISTING EXPANSION JOINT EACH SIDE EACH WAY EACH ELEVATION ENCLOSURE ENGINEER EQUAL EQUIPMENT ETCETERA EXPANSION EXTERIOR FOUNDATION FINISH FROM FOOT FUTURE GAUGE GALVANIZED GROUND HOSE BIBB HIGH POINT HEADER HORIZONTAL HEIGHT INSIDE DIAMETER INCH INCLUDE INVERT	JOINT POUND MANUFACTURER MATERIAL MAXIMUM MECHANICAL MEDIUM MINIMUM MISCELLANEOUS MOUNTING MATERIAL NEW NOT IN CONTRACT NOT TO SCALE NUMBER NOMINAL ON CENTER OUTSIDE DIAMETER OPENING OPPOSITE POUNDS PER SQUARE INCH POLYVINYL CHLORIDE PENETRATION PERFORMANCE PROPERTY LINE PLYWOOD PAIR PRECAST PREFABRICATED PRESSURE TREATED WOOD QUANTITY RADIUS REINFORCED CONCRETE PIPE REDWOOD REFERENCE REINFORCING REQUIRED REVISION SQUARE FOOT SCORE JOINT SHEET METAL SQUARE YARD SCHEDULE SHEET SIMILAR SPACING SPECIFICATION SQUARE STATION STANDARD STEEL STORAGE STRUCTURAL SYMMETRICAL SYSTEM TOP OF CURB TOP OF TOP OF PAVING TOP OF WALL TEMPORARY THICK TYPICAL VERTICAL VERTICAL WITH WHERE OCCURS WATER PROOF WELDED WIRE MESH WITHOUT WEIGHT
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1. CONTRACTOR SHALL COMPLY WITH CURRENT CITY OF SAN RAFAEL STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LAYOUT AND MEASUREMENTS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEYING AND FIELD ENGINEERING NECESSARY TO ESTABLISH THE DIMENSIONS SHOWN ON PLANS.
3. BEFORE COMMENCING WORK UNDER THIS CONTRACT NOTIFY USA (Underground Service Alert) AT 1-800-227-2600. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PIPES AND STRUCTURES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE SAID UTILITIES.
4. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
5. THE CONTRACTOR SHALL EXAMINE THE SITE, COMPARE IT WITH THE DRAWINGS AND SPECIFICATIONS, CAREFULLY EXAMINE ALL OF THE CONTRACT TO BE PERFORMED BEFORE ENTERING INTO THIS CONTRACT. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE ON BEHALF OF THE CONTRACTOR ON ACCOUNT OF AN ERROR ON HIS PART OR HIS NEGLIGENCE OR FAILURE TO ACQUAINT HIMSELF WITH THE CONDITIONS OF THE SITE.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL JOB CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS. ANY VARIATIONS FROM THE DRAWINGS MUST BE REPORTED TO THE CITY ENGINEER.
7. UPON COMPLETION OF FINAL PUNCH LIST ITEMS, MYLAR AS-BUILT RECORD PLANS, PREPARED BY THE CONTRACTOR SHALL BE PROVIDED TO THE CITY. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SIGN A STATEMENT OF COMPLIANCE, VERIFYING THAT ALL MATERIALS AND EQUIPMENT ARE INSTALLED PER PLAN AND ARE IN GOOD OPERATING ORDER. REFER TO SPECIFICATIONS FOR MAINTENANCE PERIOD REQUIREMENTS.
8. THREE FULL SETS OF AS-BUILT PLANS MUST BE SUBMITTED TO CITY BEFORE PROJECT WILL BE FORMALLY ACCEPTED.
9. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY PRIOR TO CONSTRUCTION ON SITE.
10. THE CITY WILL SCHEDULE 30 DAY INSPECTIONS FOR THE DURATION OF THE ONE-YEAR MAINTENANCE PERIOD.
11. ALL MANUFACTURER AND CONTRACTOR WARRANTIES SHALL COMMENCE AFTER CITY ACCEPTANCE OF THE JOB.

12. OPERATIONS MANUALS SHALL BE SUPPLIED IN A 3-RING BINDER(S). IT SHALL INCLUDE MANUFACTURER DATA SHEETS AND MAINTENANCE AND PARTS INFORMATION ON ALL EQUIPMENT INSTALLED AND SUPPLIER FROM WHERE IT WAS OBTAINED.
13. AN INVENTORY SHALL BE SUBMITTED FOR ALL AREAS, INFORMATION SHALL INCLUDE: ALL IRRIGATION EQUIPMENT, PLANT COUNTS, AREA MEASUREMENTS.
14. A WRITTEN CONSTRUCTION SCHEDULE SHALL BE PROVIDED TO CITY BEFORE WORK COMMENCES.
15. NO PLANTING SHALL BE INSTALLED UNTIL:
  - A. THE BACKFLOW PREVENTION DEVICE IS CERTIFIED BY A CITY APPROVED BACKFLOW INSPECTOR.
  - B. A HYDROSTATIC PRESSURE TEST ON IRRIGATION MAINS AND LATERALS IS COMPLETED AND APPROVED.
  - C. IRRIGATION CONTROLLERS ARE FULLY OPERATIONAL AND CONNECTED TO FINAL ELECTRICAL SOURCE.
16. CONTRACTOR SHALL PROVIDE AT LEAST TWO (2) WORKING DAYS ADVANCE NOTICE TO THE CITY ENGINEER PRIOR TO CONNECTING TO EXISTING WATER FACILITIES. THE MANIPULATION OF EXISTING WATER VALVES SHALL BE DONE UNDER THE DIRECTION OF CITY ENGINEER.
17. PROTECT ALL EXISTING ROAD SIGNS DURING CONSTRUCTION. REMOVE AND STOCKPILE ROAD NAME SIGNS FOR REINSTALLATION.
18. LIMITS OF MEDIAN SHOWN ON PLANS IS EXISTING FACE OF CURB.
19. ALL PLANTING AREAS TO RECEIVE 3" OF SPECIFIED MULCH MATERIAL PER SPECIFICATIONS. FINISH GRADE OF MULCH TO BE 1" BELOW TOP OF CURB.
20. STAGING AREA TO BE ESTABLISHED BY CITY OF SAN RAFAEL.

**CLIENT**

**CITY OF SAN RAFAEL**  
**SAN RAFAEL PUBLIC WORKS**  
111 MORPHEW STREET  
SAN RAFAEL, CA 94901

CONTACT: SHAWN GRAF  
PHONE: 415-485-3355  
FAX: 415-485-3334

**LANDSCAPE ARCHITECT:**

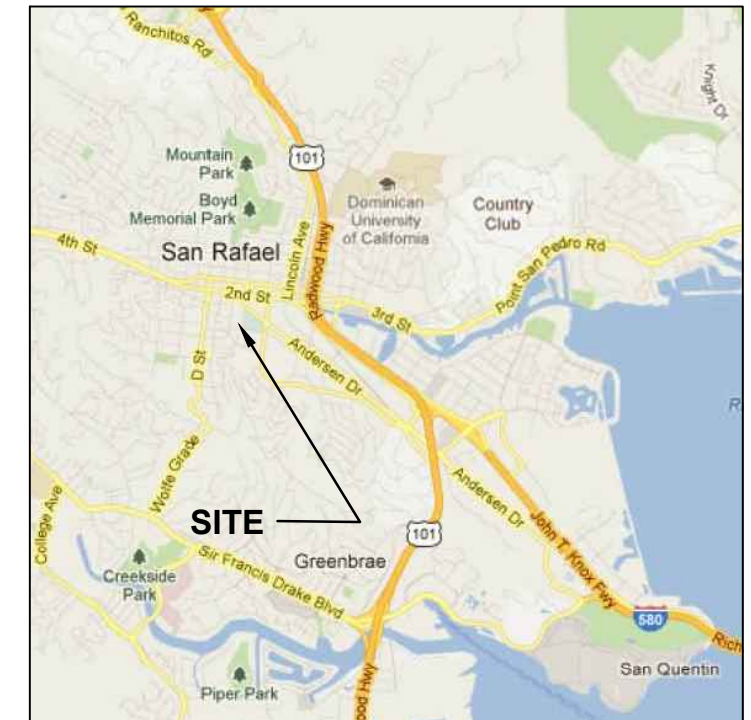
**ABEY ARNOLD ASSOCIATES**  
1005 A STREET, SUITE 305  
SAN RAFAEL, CA 94901

CONTACT: PHIL ABEY  
PHONE (415) 258-9580  
FAX (415) 258-9780

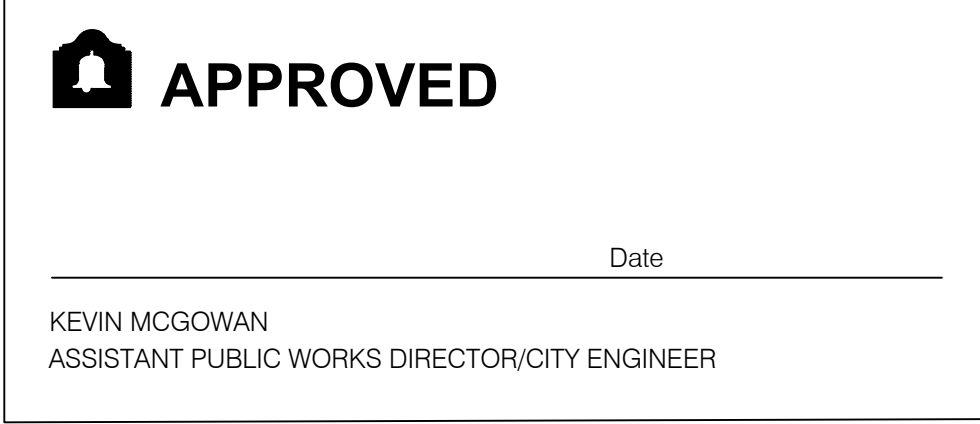
INSTALLATION OF PLAY AREA, RESTROOM, LANDSCAPE PLANTING AND IRRIGATION IMPROVEMENTS.

TS TITLE SHEET  
EX-1 EXISTING CONDITIONS AND TOPO. SURVEY  
D-1 DEMOLITION PLAN  
L-1 GRADING, DRAINAGE & SITE UTILITIES  
L-2 LAYOUT PLAN  
L-3 CONSTRUCTION DETAILS  
L-4 CONSTRUCTION DETAILS  
L-5 CONSTRUCTION DETAILS  
L-6 RESTROOM BUILDING  
I-1 IRRIGATION PLAN & LEGEND  
I-2 IRRIGATION NOTES AND DETAILS  
I-3 IRRIGATION DETAILS  
P-1 PLANTING PLAN & PLANT LIST  
E-1 ELECTRICAL LEGEND AND DETAILS  
E-2 ELECTRICAL SITE PLAN  
E-3 PHOTOMETRIC STUDY

### LOCATION MAP



North NOT TO SCALE



PROJECT NAME  
CITY OF SAN RAFAEL  
ALBERT PARK PLAY AREA  
DRAWING NAME  
**TITLE SHEET**  
SAN RAFAEL COUNTY OF MARIN CALIFORNIA

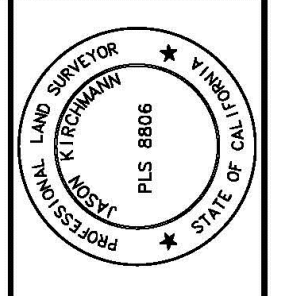
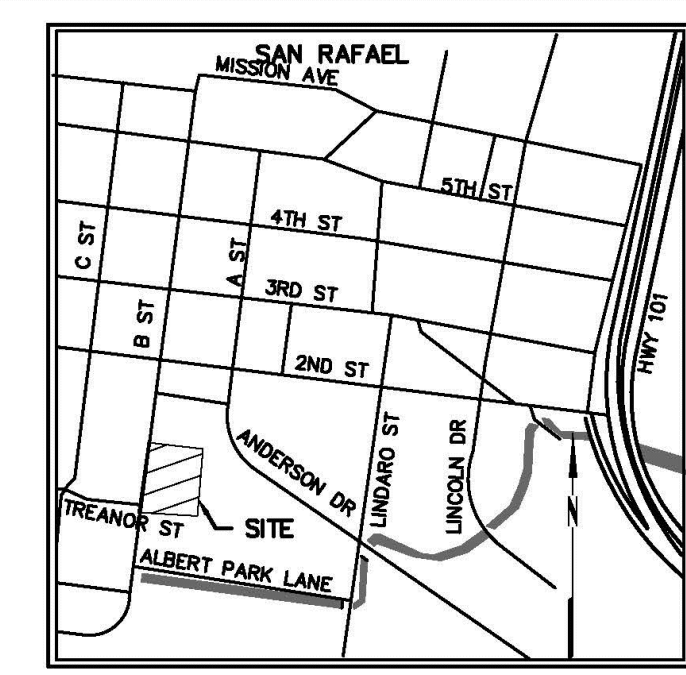
1005 A Street, Suite 305  
San Rafael, California 94901  
Phone (415) 258-9780  
CA License #2616

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE:
DATE: JULY 2, 2018
CITY PROJECT NO.: 11299
SHEET NO.: <b>TS</b>
DRAWING: 1 OF 15

LANDS OF SOUTHPORT LAND & COMMERCIAL COMPANY APN 013-061-02

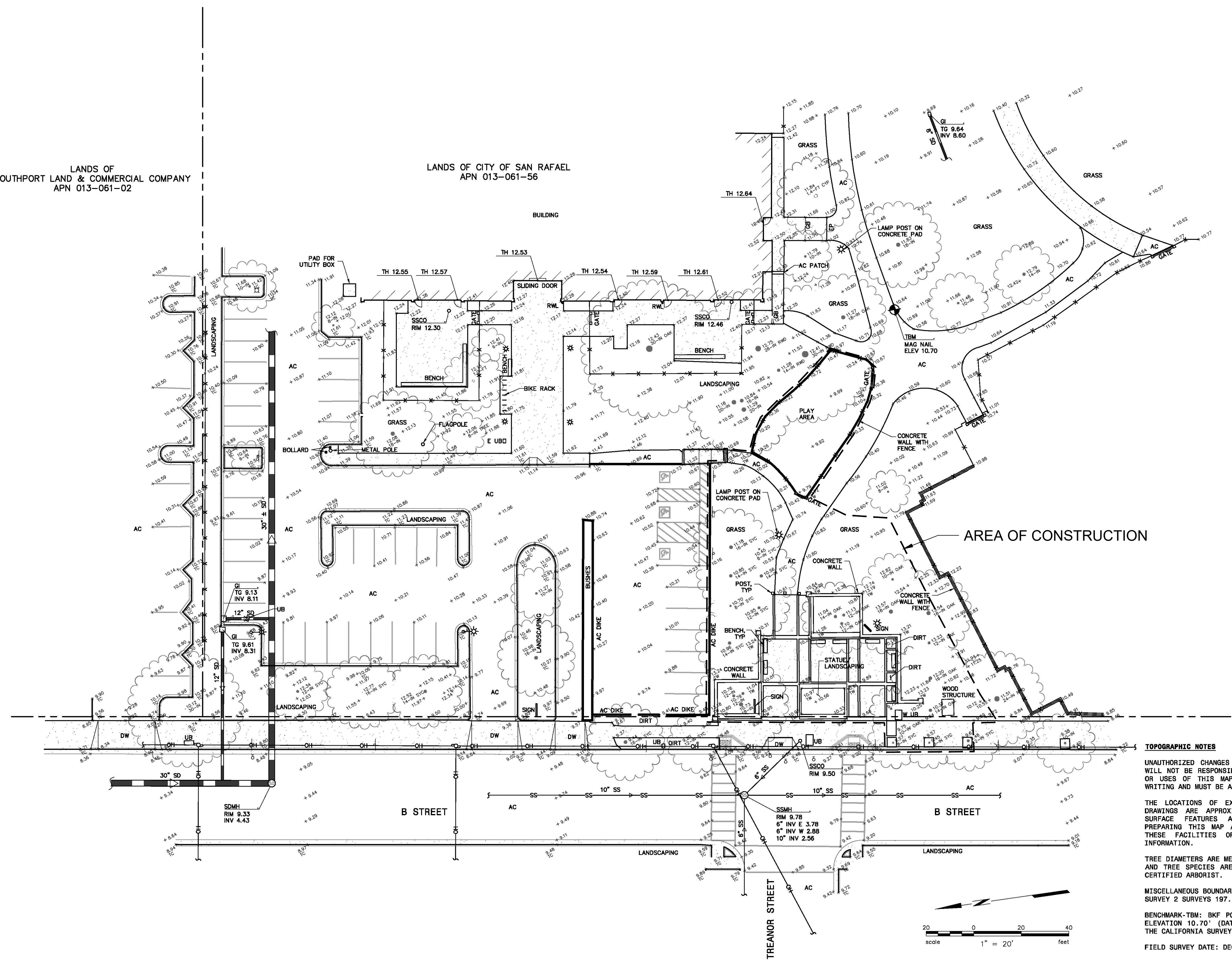
LANDS OF CITY OF SAN RAFAEL APN 013-061-56



PRELIMINARY NOT FOR CONSTRUCTION DATE: 01/06/2017 JASON KIRCHMANN PLS 8806



ALBERT PARK APN 013-061-56 SAN RAFAEL TOPOGRAPHIC MAP



- SYMBOLS & LEGEND**
- EXISTING**
- BENCHMARK
  - VALVE
  - FIRE HYDRANT
  - STREET LIGHT
  - LIGHT POLE
  - UTILITY POLE
  - TREE
  - TREE CLUSTER
  - PROPERTY LINE
  - GRADE BREAK
  - FENCE
  - STORM DRAIN
  - SANITARY SEWER
  - OVERHEAD UTILITY LINE
  - CONCRETE
  - DETECTABLE WARNING

- ABBREVIATIONS**
- AC ASPHALT CONCRETE
  - APN ASSESSOR'S PARCEL NUMBER
  - DW DRIVEWAY
  - E ELECTRIC
  - ELEV ELEVATION
  - EP EDGE OF PAVEMENT
  - GB GRADE BRAKE
  - GI GRATE INLET
  - IN INCHES
  - INV BOTTOM INSIDE OF PIPE
  - OH OVERHEAD UTILITY LINE
  - RWD REDWOOD
  - RL RAINWATER LEADER
  - SD STORM DRAIN
  - SDMH STORM DRAIN MANHOLE
  - SS SANITARY SEWER
  - SSCO SANITARY SEWER CLEANOUT
  - SSMH SANITARY SEWER MANHOLE
  - SYC SYCAMORE
  - TC TOP OF CURB
  - TG TOP OF GRATE
  - TH THRESHOLD
  - TW TOP OF WALL
  - TYP TYPICAL
  - UB UTILITY BOX
  - W WATER

**TOPOGRAPHIC NOTES**

UNAUTHORIZED CHANGES & USES: THE PROFESSIONAL PREPARING THIS MAP WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THIS MAP. CHANGES TO THIS MAP MUST BE REQUESTED IN WRITING AND MUST BE APPROVED BY THE PROFESSIONAL.

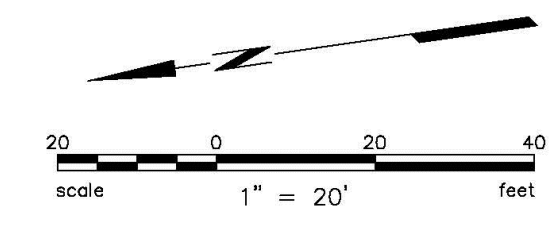
THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE BASED ON OBSERVED TOPOGRAPHIC SURFACE FEATURES AND AVAILABLE INFORMATION. THE PROFESSIONAL PREPARING THIS MAP ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THESE FACILITIES OR FOR THE INADVERTENT OMISSION OF RELATED INFORMATION.

TREE DIAMETERS ARE MEASURED AT CHEST HEIGHT (48"). DRIFLINE DIAMETERS AND TREE SPECIES ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY A CERTIFIED ARBORIST.

MISCELLANEOUS BOUNDARY INFORMATION SHOWN HEREON IS BASED ON RECORD OF SURVEY 2 SURVEYS 197.

BENCHMARK-TM: BKF POINT NUMBER 9, MAG NAIL, LOCATION SHOWN HEREON, ELEVATION 10.70' (DATUM: NAVD 88 FEET BY GPS OBSERVATIONS UTILIZING THE CALIFORNIA SURVEY & DRAFTING SUPPLY VSN).

FIELD SURVEY DATE: DECEMBER 22, 2016



Plot: Jan 06, 2017 at 4:32pm 156023-28\_TPOB.dwg

Author: JAN 2017	Scale: AS SHOWN	Design: N/A	Drawn: MKK	Approved: JAK	Sub No: 20156023
Drawing Number: 1 of 1					

DESIGNED	DRAWN	CHECKED	APPROVED	NO.	REVISION	BY	DATE
							100% REVIEW SET

PROJECT NAME: CITY OF SAN RAFAEL ALBERT PARK PLAY AREA

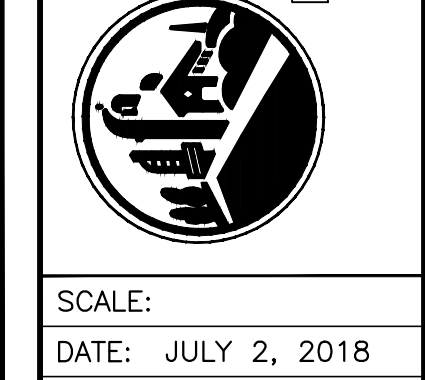
DRAWING NAME: EXISTING CONDITIONS

COUNTY OF MARIN CALIFORNIA

above arnold LANDSCAPE ARCHITECTURE

1005 A Street, Suite 305  
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Fax: (415) 955-7979  
CA License #2616

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS



SCALE: 1" = 20'

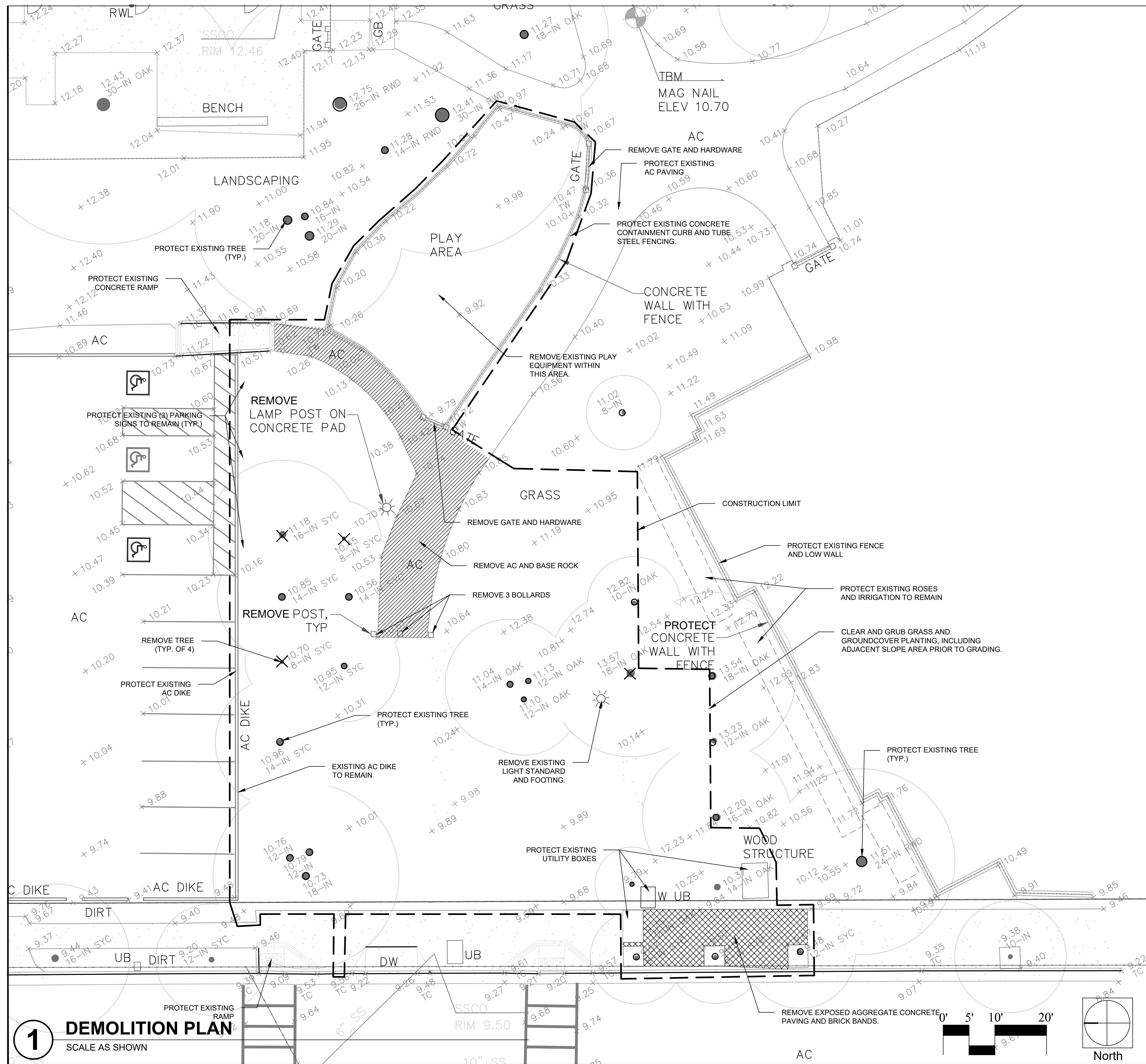
DATE: JULY 2, 2018

CITY PROJECT NO.: 11299

SHEET NO.: EX-1

DRAWING: 2 OF 15

CALL TWO WORKING DAYS BEFORE YOU DIG

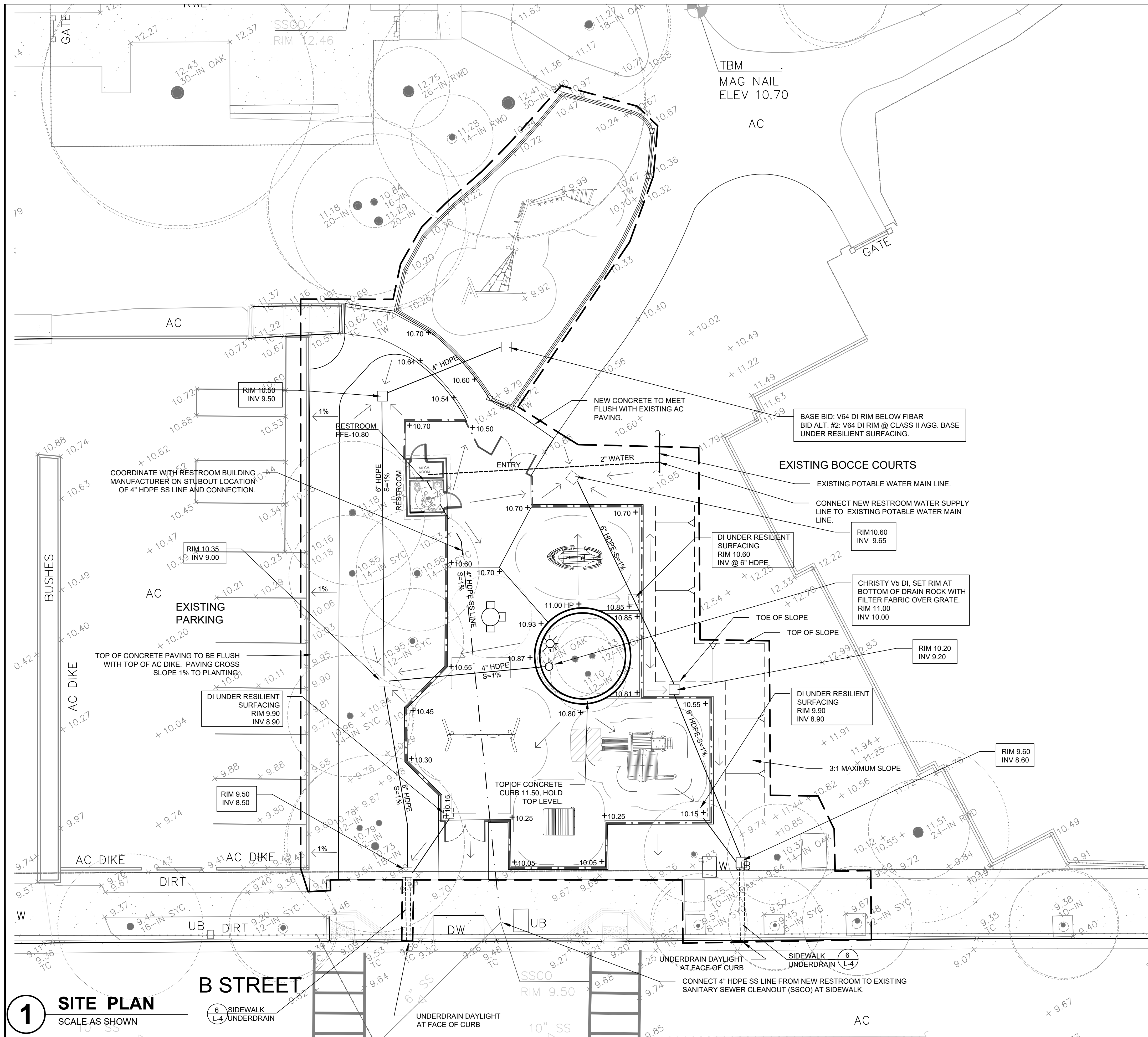


**1 DEMOLITION PLAN**  
SCALE AS SHOWN

**DEMOLITION NOTES**

1. CONTRACTOR SHALL MEET ONSITE WITH THE ENGINEER PRIOR TO DEMOLITION TO REVIEW LAYOUT.
2. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) PRIOR TO DEMOLITION.
3. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING.
4. ALL REFUSE RESULTING FROM DEMOLITION SHALL BE OFF-HAULED AND DISPOSED OF IN A LEGAL AND PROPER MANNER, FOLLOWING ALL STATE AND LOCAL ORDINANCES.
5. CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS TO REMAIN.
6. COORDINATE IRRIGATION SYSTEM DEMOLITION WITH CITY ENGINEER, SALVAGE ALL IRRIGATION AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE PARKING LOT, CITY SIDEWALK AND PARK FEATURES TO THE SATISFACTION OF THE ENGINEER.
8. ALL EXISTING UTILITY LINES SHOWN ARE DIAGRAMMATIC. CONFIRM EXACT LOCATION IN FIELD PRIOR TO START.
9. CONTRACTOR SHALL TAG AND CONFIRM WITH ENGINEER, THE TREES TO BE REMOVED.
10. PROTECT EXISTING TREES TO REMAIN.

DESIGNED	DRAWN	CHECKED	APPROVED	NO.	REVISION	BY	DATE
PROJECT NAME CITY OF SAN RAFAEL ALBERT PARK PLAY AREA				DRAWING NAME <b>DEMOLITION PLAN</b>			
1005 A Street, Suite 905 San Rafael, California 94901 Phone: 415/258-9780 Fax: 415/258-9780 CA License #2016				CITY OF SAN RAFAEL DEPARTMENT OF PUBLIC WORKS			
SCALE: DATE: JULY 2, 2018 CITY PROJECT NO.: 11299				SHEET NO.: <b>D-1</b>			
DRAWING: 3 OF 15				DATE			

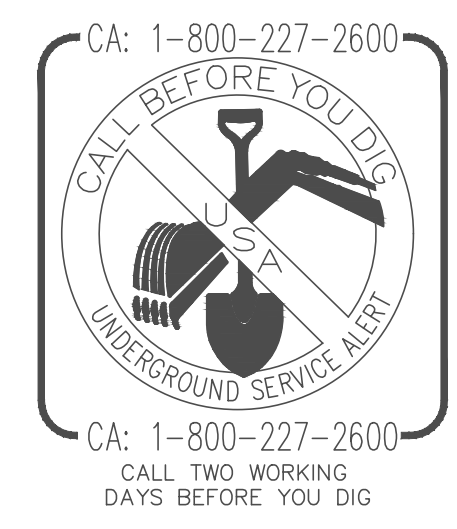
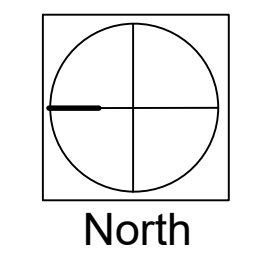
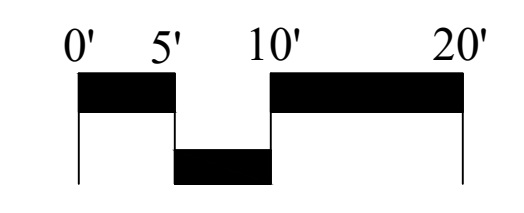


**SITE PLAN NOTES**

- CONTRACTOR SHALL MEET ONSITE WITH CITY ENGINEER PRIOR TO DEMOLITION TO REVIEW LAYOUT.
- CONTRACTOR SHALL NOTIFY USA ALERT (UNDERGROUND SERVICE ALERT) AT (800) 227-2600 PRIOR TO CONSTRUCTION.
- ALL ANGLES ARE 45, 90, OR 135 DEGREES UNLESS NOTED OTHERWISE.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING LAYOUT AND STAKING. ALL STAKING AND RE-STAKING WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- ALL CURVES AND TRANSITIONS BETWEEN CURVES SHALL BE SMOOTH AND CONTINUOUS.
- CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES WITH SUBCONTRACTORS.
- EXPANSION AND CONTROL JOINTS SHALL CONFORM TO CITY STANDARDS.
- TOP OF CLASS II AGG. BASE, BELOW RESILIENT SURFACE TO SLOPE 2% TO DRAIN. SURFACE SLOPE OF RESILIENT SURFACE PER PLAN.
- CONCRETE PAVING TO SLOPE BETWEEN 1%-2% TO DRAIN.
- ALL DRAIN INLETS (DI) TO BE CHRISTY V64 UNLESS NOTED OTHERWISE.

**LEGEND**

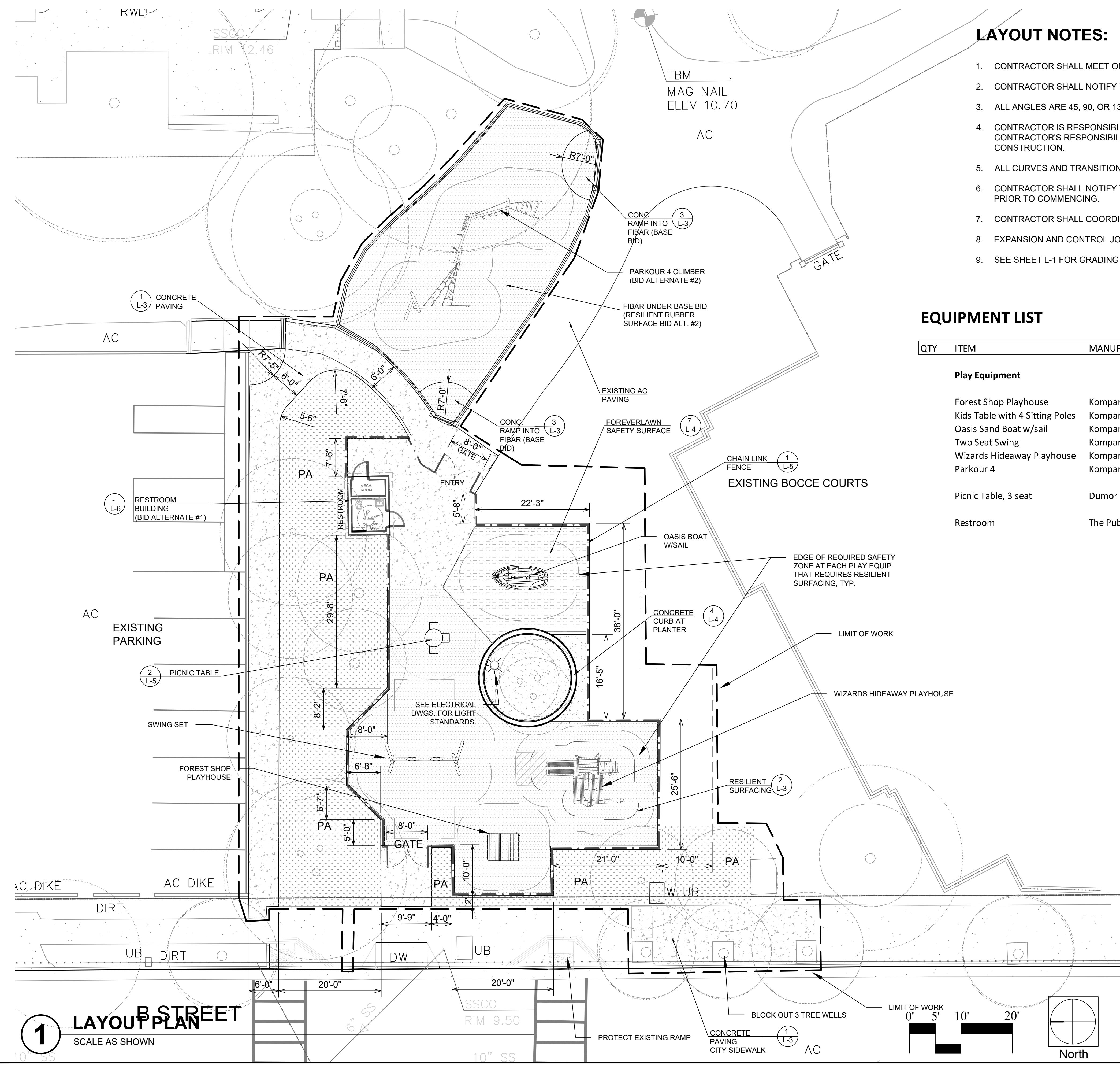
- DRAIN INLET WITH GRATE (DI)
- DRAIN INLET WITH MANHOLE
- 1" HDPE SD LINE
- 6" OR 8" HDPE SD LINE
- 4" HDPE SS LINE
- 2" POTABLE WATER LINE
- SURFACE HIGH POINT
- SURFACE FLOW DIRECTION
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION



**1 SITE PLAN**  
SCALE AS SHOWN

**B STREET**  
SIDEWALK UNDERDRAIN L-4

DESIGNED	DRAWN	CHECKED	APPROVED	NO.	REVISION	BY	DATE
PROJECT NAME CITY OF SAN RAFAEL ALBERT PARK PLAY AREA				DRAWING NAME GRADING, DRAINAGE & UTILITIES PLAN			
CITY OF SAN RAFAEL				COUNTY OF MARIN			
1005 A Street, Suite 305 San Rafael, California 94901 Phone: 415/258-9760 Fax: 415/258-9760 CA License #2616				100% REVIEW SET			
CITY OF SAN RAFAEL				DEPARTMENT OF PUBLIC WORKS			
SCALE:				DATE: JULY 2, 2018			
CITY PROJECT NO.:				11299			
SHEET NO.:				<b>L-1</b>			
DRAWING: 4 OF 15							



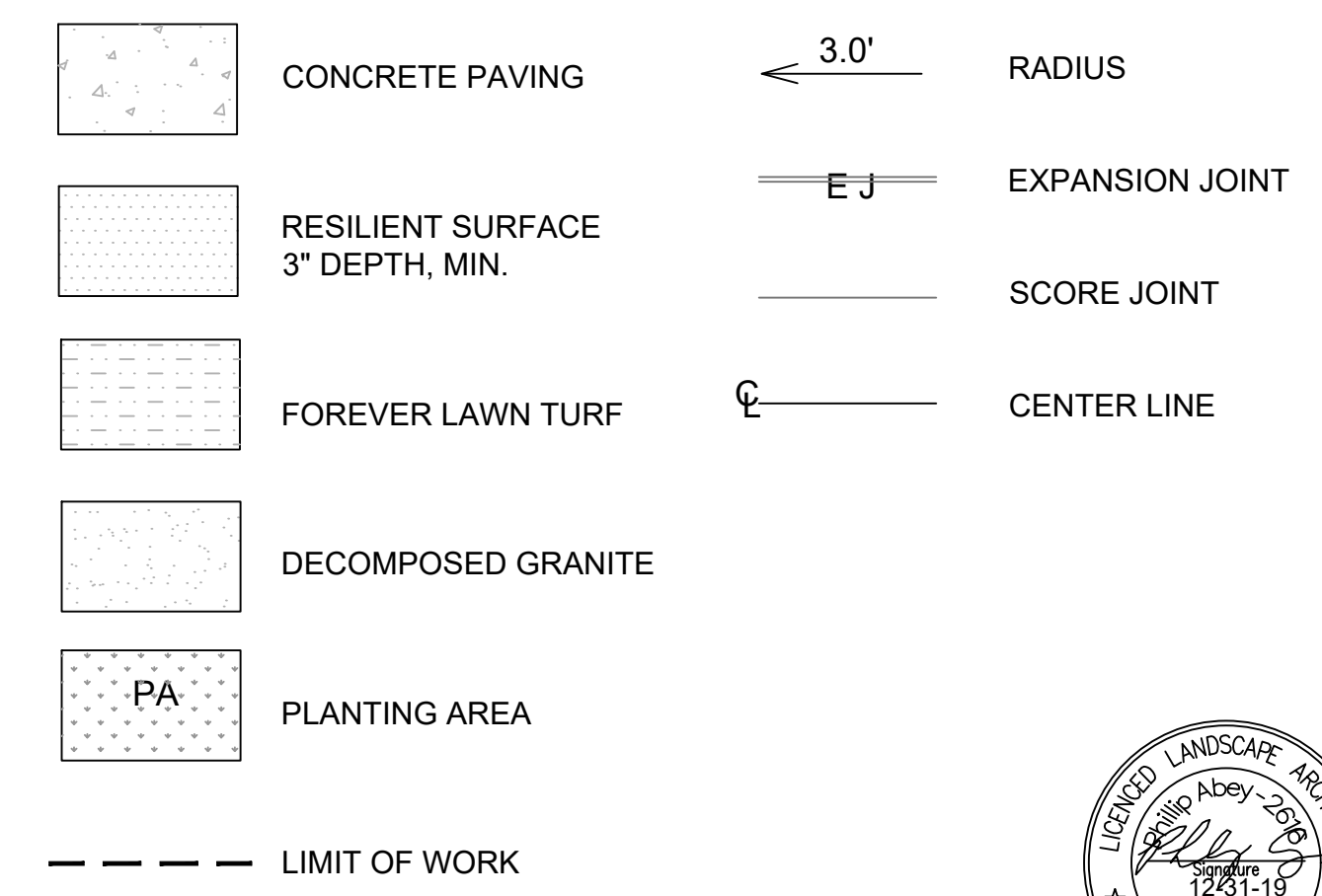
**LAYOUT NOTES:**

1. CONTRACTOR SHALL MEET ONSITE WITH CITY ENGINEER PRIOR TO DEMOLITION TO REVIEW LAYOUT.
2. CONTRACTOR SHALL NOTIFY USA ALERT (UNDERGROUND SERVICE ALERT) AT 1(800) 227-2600 PRIOR TO CONSTRUCTION.
3. ALL ANGLES ARE 45, 90, OR 135 DEGREES UNLESS NOTED OTHERWISE.
4. CONTRACTOR IS RESPONSIBLE FOR PROVIDING LAYOUT AND STAKING, ALL STAKING AND RE-STAKING WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
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6. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND SITE CONDITIONS PRIOR TO COMMENCING.
7. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES WITH SUBCONTRACTORS.
8. EXPANSION AND CONTROL JOINTS SHALL CONFORM TO CITY STANDARDS.
9. SEE SHEET L-1 FOR GRADING AND DRAINAGE.

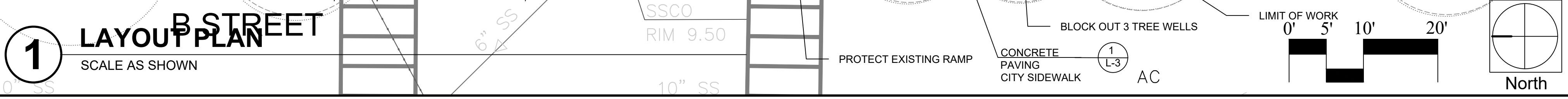
**EQUIPMENT LIST**

QTY	ITEM	MANUFACTURER	ITEM NUMBER	COLOR/FINISH	NOTES
<b>Play Equipment</b>					
	Forest Shop Playhouse	Kompan	NRO407-0621	Color roof	
	Kids Table with 4 Sitting Poles	Kompan	NRO212-0002	Natural	
	Oasis Sand Boat w/sail	Kompan	NRO529-1021	w/color at edge	
	Two Seat Swing	Kompan	NRO910-1101	Natural	2 bucket seats
	Wizards Hideaway Playhouse	Kompan	NRO409-0621	Color roof	
	Parkour 4	Kompan	NRO854	Natural	
	Picnic Table, 3 seat	Dumor	Table 101	Forest Green	
	Restroom	The Public Restroom Co.			

**LAYOUT LEGEND**



**1 LAYOUT PLAN**  
SCALE AS SHOWN



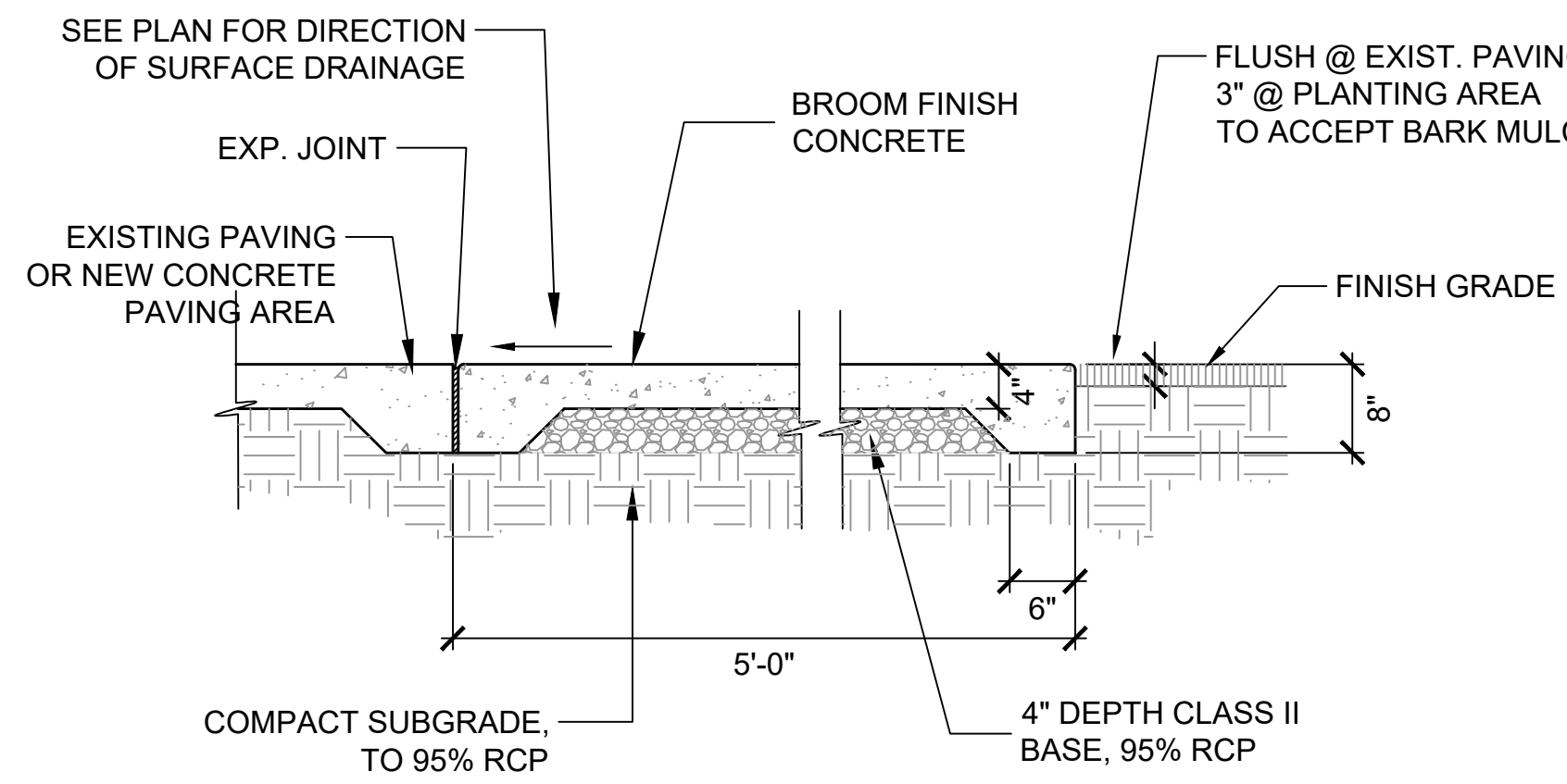
PROJECT NAME: CITY OF SAN RAFAEL ALBERT PARK PLAY AREA  
DRAWING NAME: LAYOUT PLAN  
COUNTY OF MARIN CALIFORNIA

DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
APPROVED: \_\_\_\_\_  
100% REVIEW SET

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San Rafael, California 94901  
Phone 415/258-9750  
CA License #2616

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE: 1" = 10'-0"  
DATE: JULY 2, 2018  
CITY PROJECT NO.: 11299  
SHEET NO.: L-2  
DRAWING: 5 OF 15

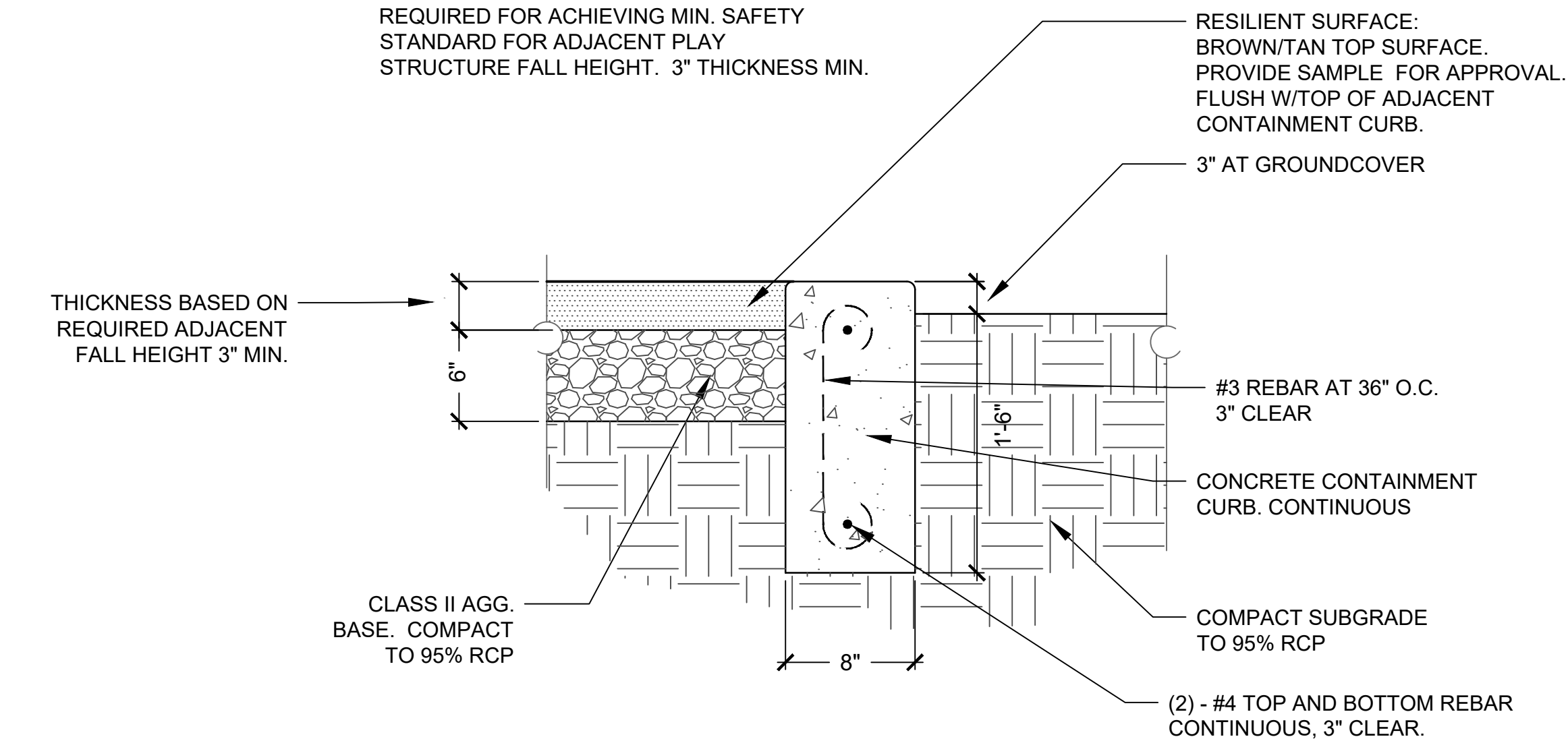


**NOTES**

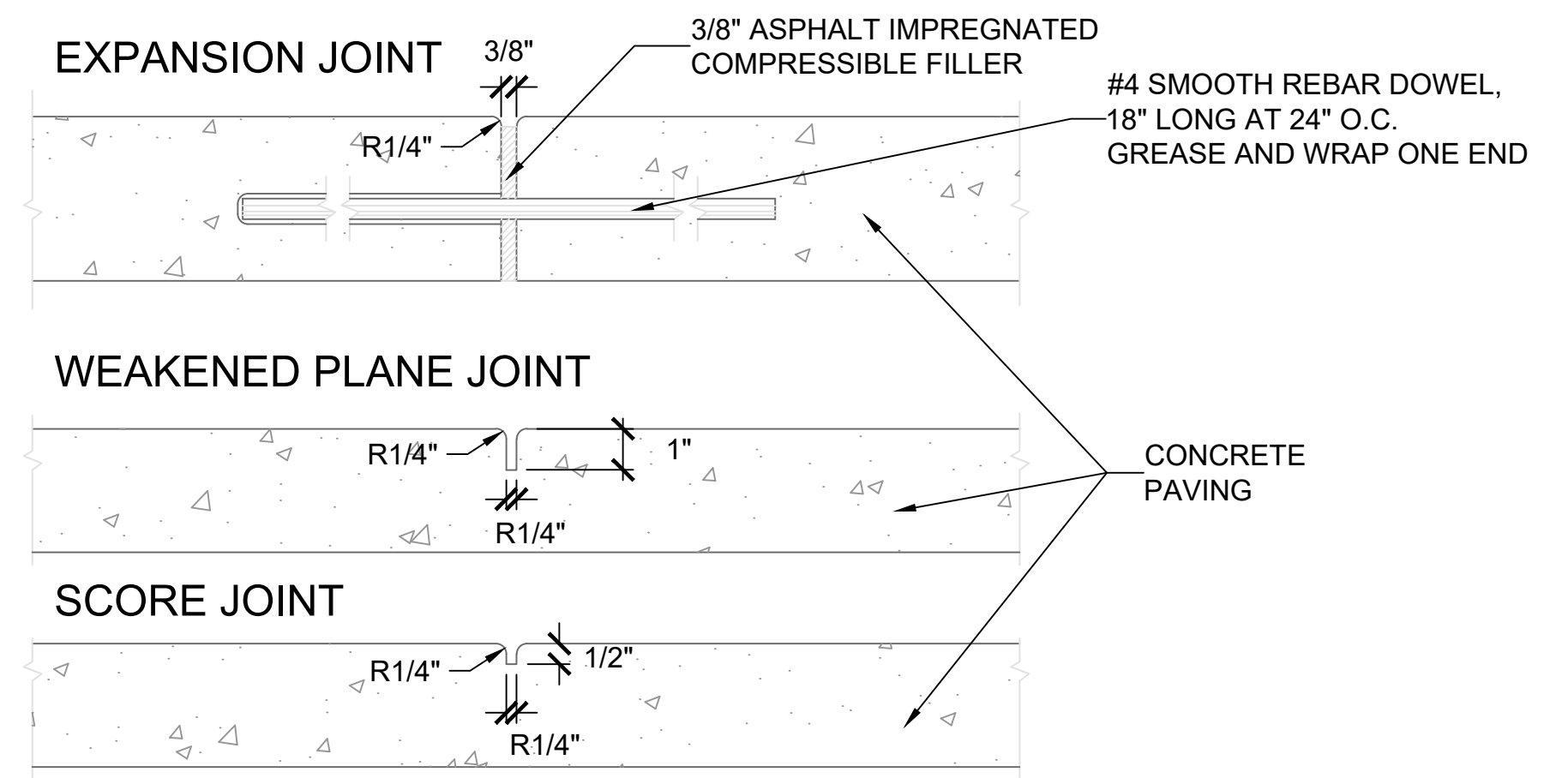
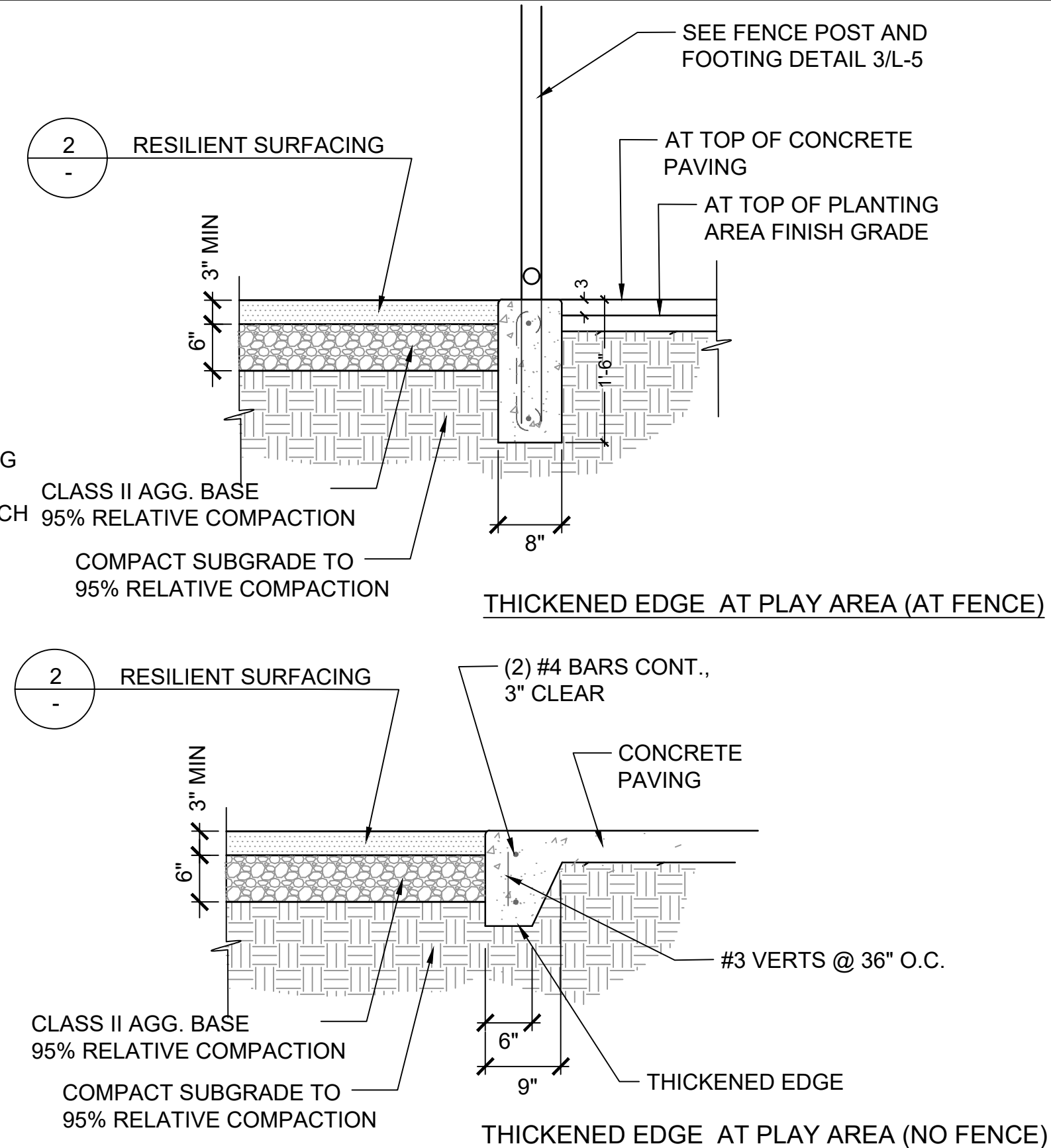
1. ALL SURFACES TO BE BROOM FINISH PERPENDICULAR TO THE FLOW OF TRAFFIC.
2. SEE GRADING PLANS FOR WALKWAY SLOPES. MINIMUM LONGITUDINAL SLOPE IS 1%; MAXIMUM IS 4.5%. SEE GRADING PLAN FOR SPOT ELEVATIONS.
3. MINIMUM CROSS SLOPE OF PAVING TO BE 1%; MAXIMUM IS 2%
4. EXPANSION JOINTS AT 20' ON CENTER MAXIMUM.
5. SCORE JOINTS @ 5' O.C. MINIMUM, SEE PLANS FOR PATTERN.
6. ALL CONCRETE SHALL BE CLASS B, 2500 P.S.I. MINIMUM WITH 1" MAXIMUM AGGREGATE. 2 POUNDS LAMP BLACK PER CUBIC YARD.
7. DO NOT USE RECYCLED CLASS II BASE ROCK.
8. USE EXPANSION JOINT WHERE WALKWAY PAVING MEETS ADJACENT CONCRETE PAVING.
9. FOR SIDEWALK PAVING, SEE CITY STANDARD.

**1 CONCRETE PAVING**  
SCALE: 3/4" = 1'-0"

NOTE:  
THICKNESS OF RESILIENT SURFACE AS REQUIRED FOR ACHIEVING MIN. SAFETY STANDARD FOR ADJACENT PLAY STRUCTURE FALL HEIGHT. 3" THICKNESS MIN.



**2 RESILIENT SAFETY SURFACE & CONC. CURB**  
SCALE: 1-1/2" = 1'-0"



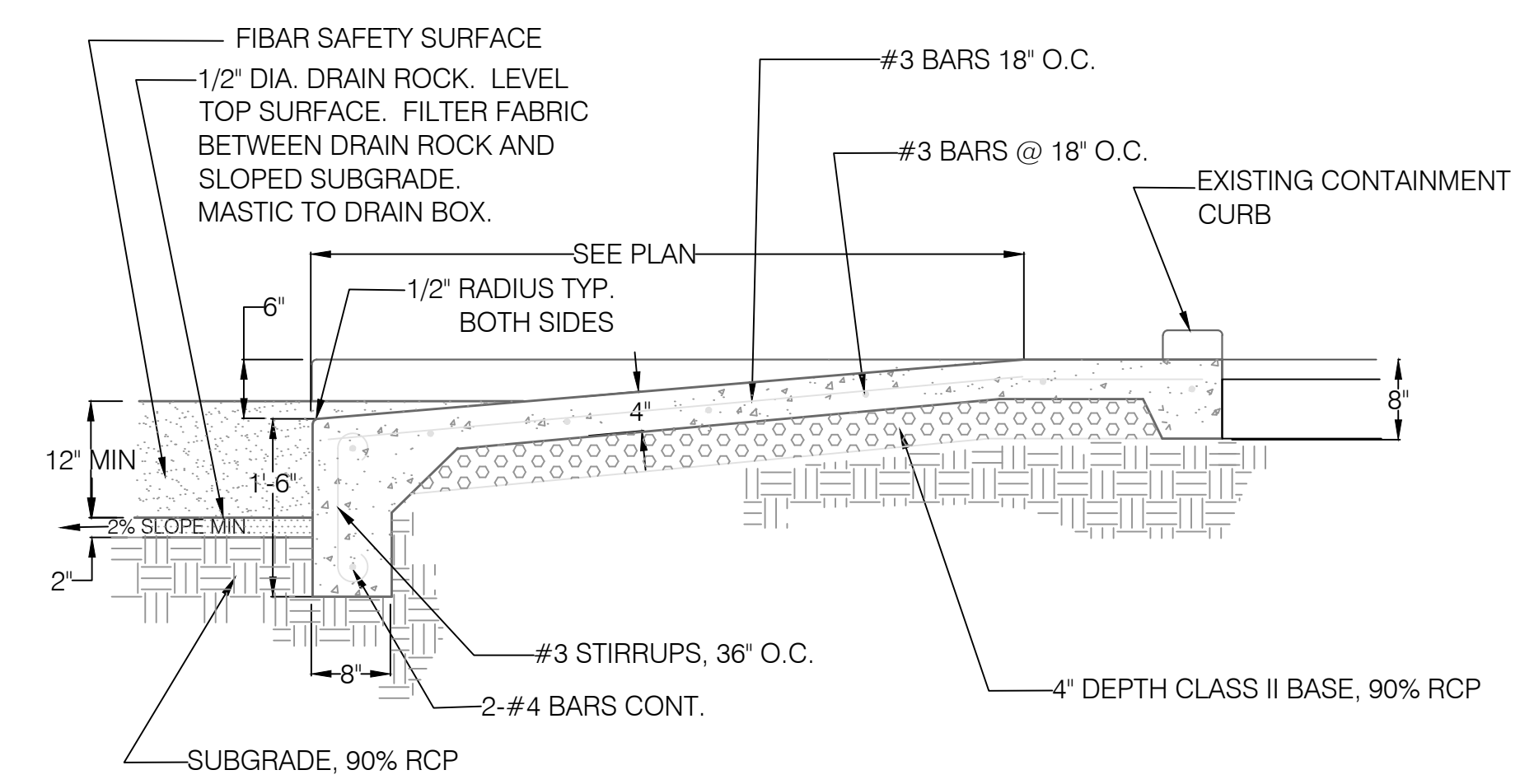
**NOTES**

1. FOR CONCRETE WALKS UNDER 5' WIDE, SPACE E.J.'S AT 20' O.C. WITH WEAKENED PLANE JOINTS AND SCORE JOINTS ALTERNATING IN BETWEEN AT 10' O.C.
2. ON LARGE AREAS OF CONCRETE PAVING, EXPANSION JOINTS SHALL BE 20' O.C. MAX.
3. WHERE POSSIBLE ALIGN JOINTS WITH EXISTING SIMILAR JOINTS.

**3 CONCRETE JOINTS**  
NOT TO SCALE

**NOTES:**

1. ALL HORIZONTAL SURFACES TO BE BROOM FINISH PERPENDICULAR TO THE FLOW OF TRAFFIC. ALL VERTICAL SURFACES TO BE SMOOTH FINISH
2. MINIMUM SLOPE TO BE 1%
3. CONCRETE COLOR AND FINISH TO MATCH EXISTING.



**3 CONCRETE RAMP AT FIBAR**  
SCALE: NOT TO SCALE

DESIGNED	DRAWN	CHECKED	APPROVED
NO.	REVISION	BY	DATE
PROJECT NAME CITY OF SAN RAFAEL ALBERT PARK PLAY AREA			
DRAWING NAME <b>CONSTRUCTION DETAILS</b>			
PROJECT NO.			
DATE			
100% REVIEW SET			
COUNTY OF MARIN SAN RAFAEL CALIFORNIA			

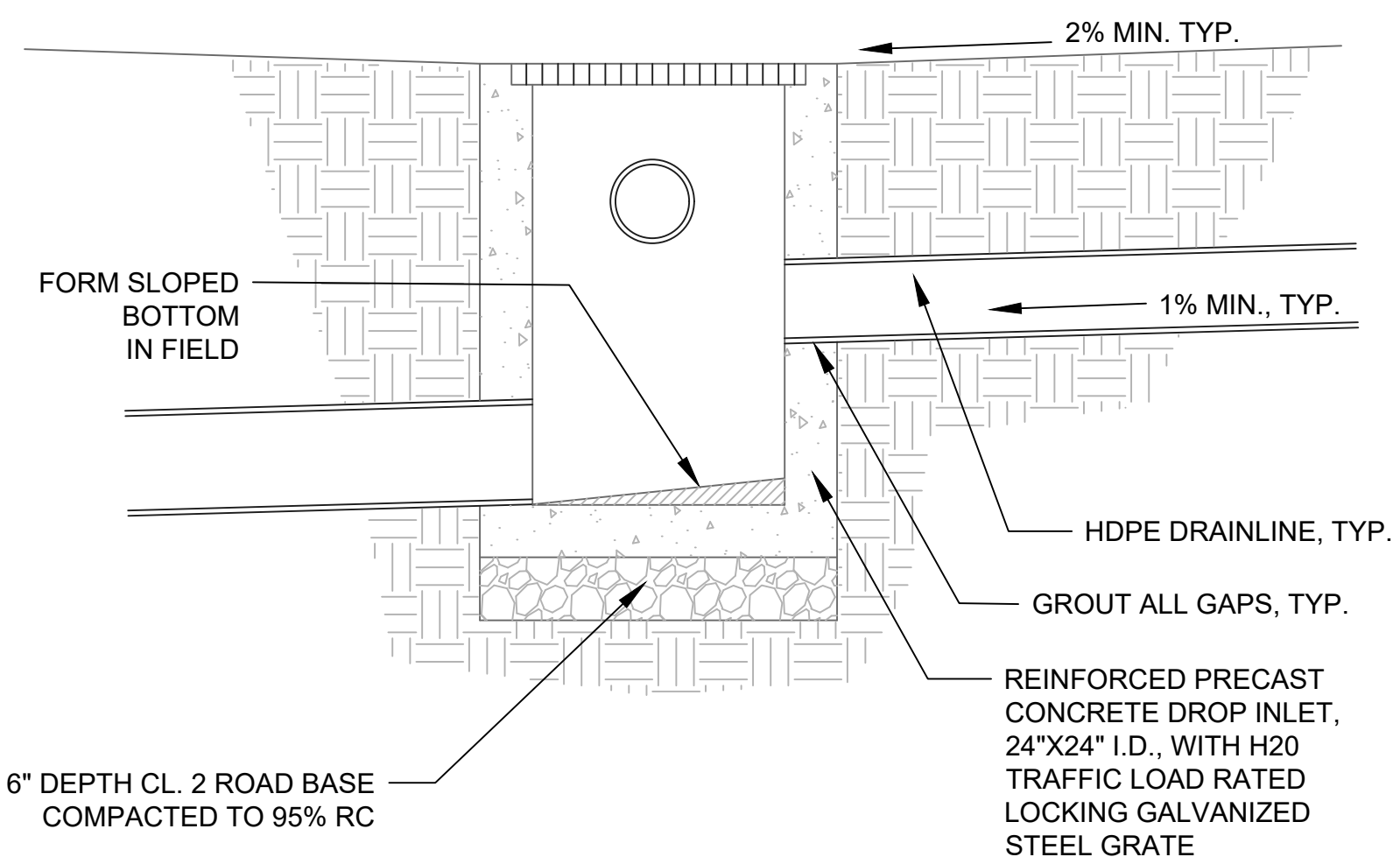
1005 A Street, Suite 305  
San Rafael, California 94901  
Phone: 415/255-9780  
Fax: 415/255-9780  
CA License #26716

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

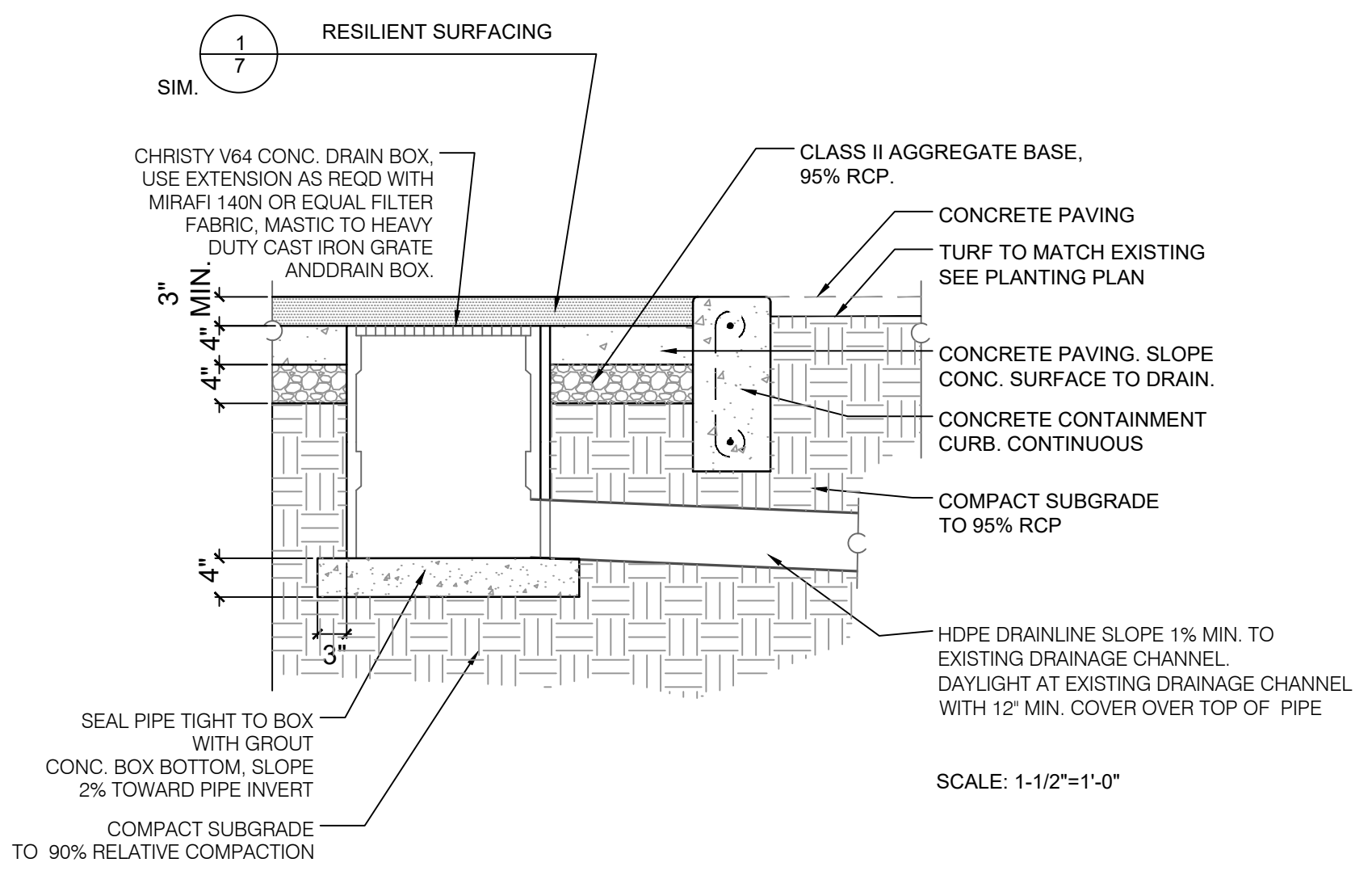
LICENCED LANDSCAPE ARCHITECT  
Abey-2018  
123114  
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123114  
STATE OF CALIFORNIA

CA: 1-800-227-2600  
CALL BEFORE YOU DIG  
UNDERGROUND SERVICE ALERT  
USA  
CALL TWO WORKING DAYS BEFORE YOU DIG

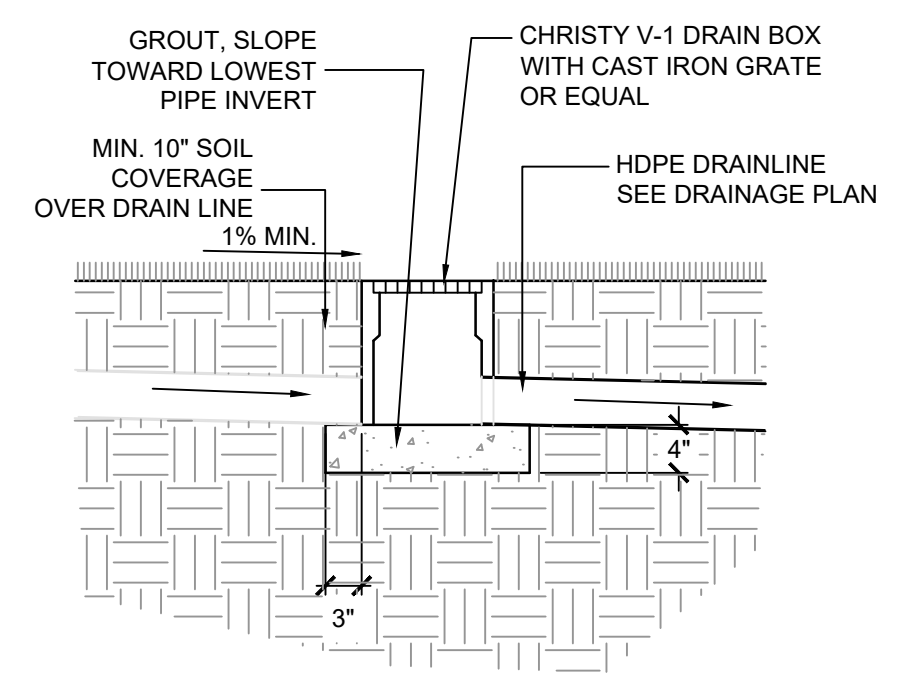
SCALE:  
DATE: JULY 2, 2018  
CITY PROJECT NO.: 11299  
SHEET NO.: **L-3**  
DRAWING: 6 OF 15



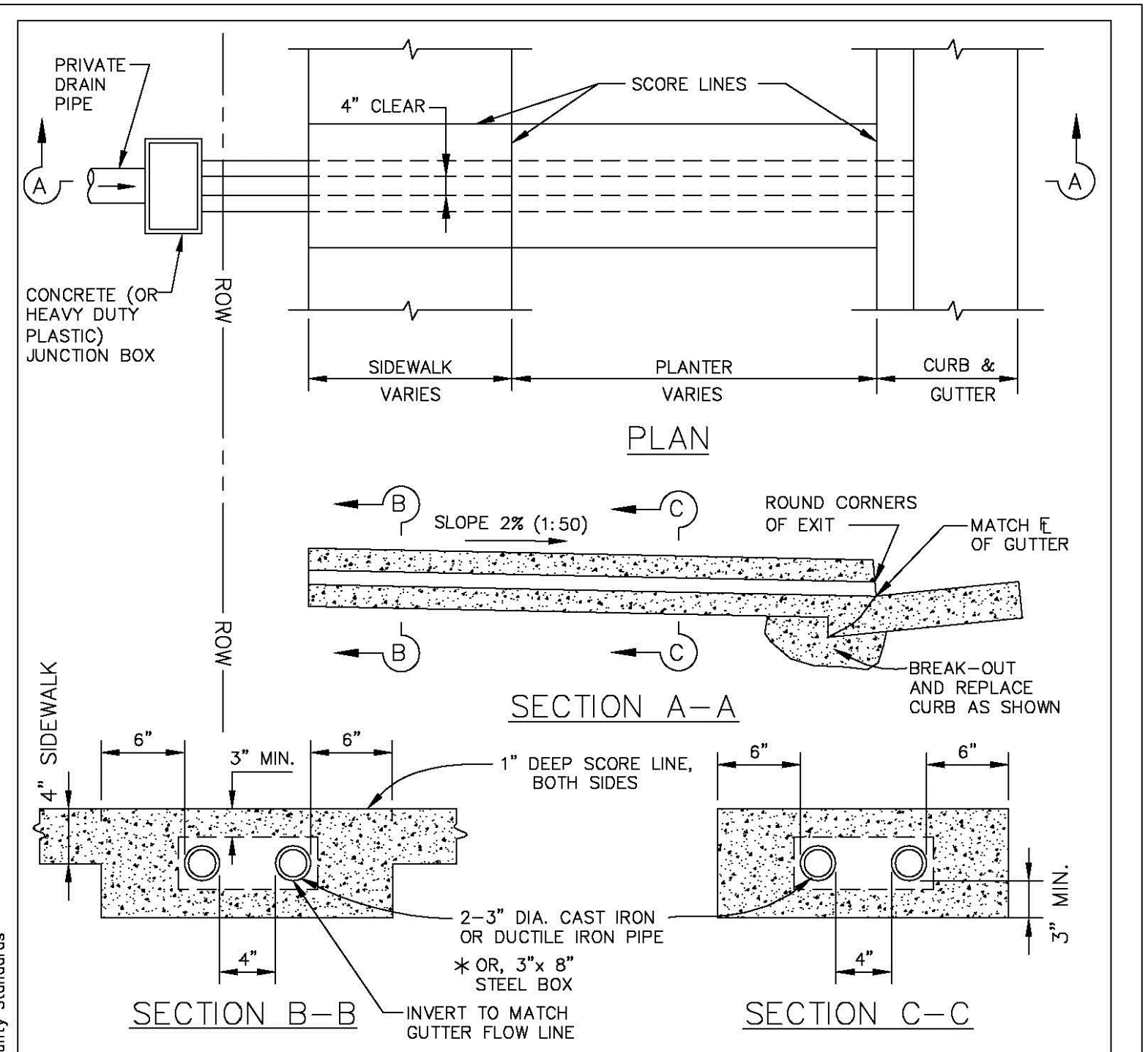
**1 DROP INLET**  
NOT TO SCALE



**2 INLET @ RUBBER SAFETY SURFACING**  
NOT TO SCALE



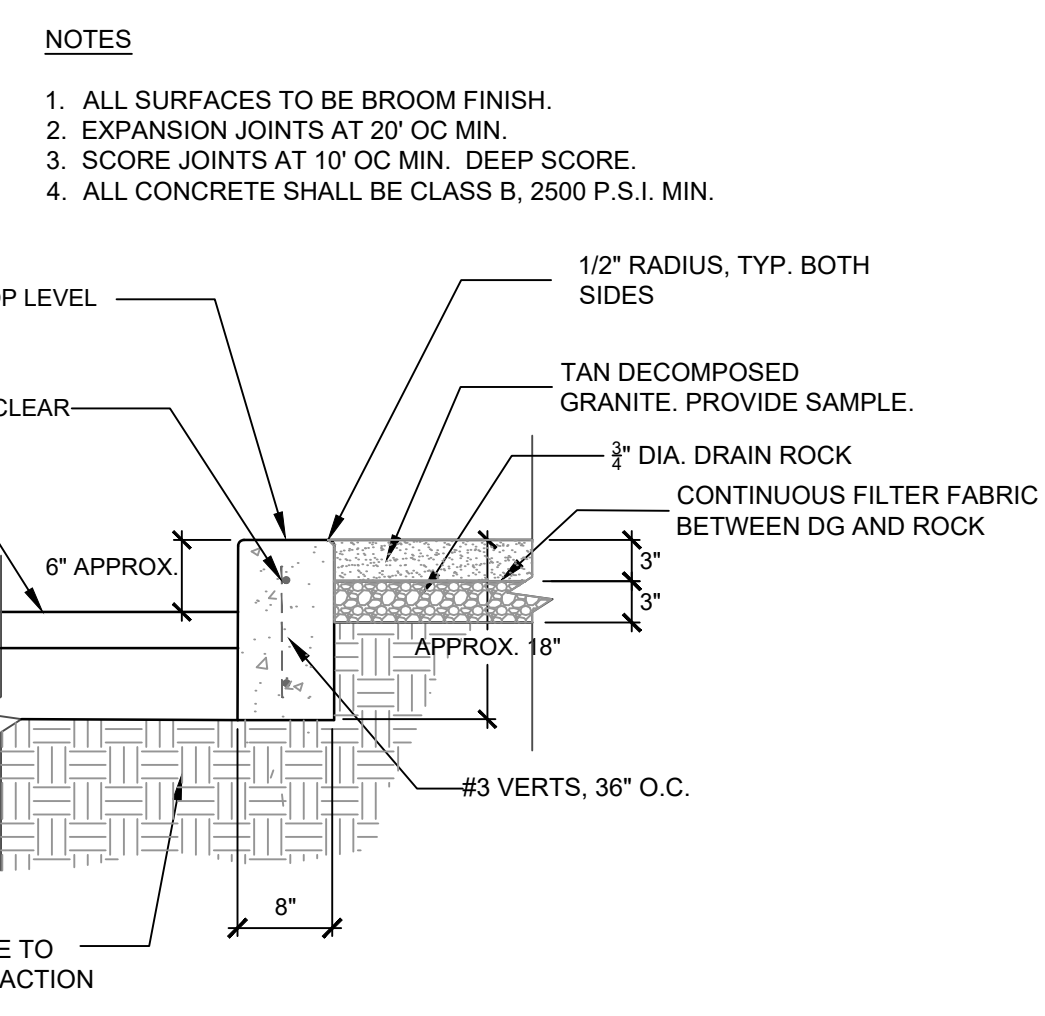
**3 V-1 DRAIN BOX**  
NOT TO SCALE



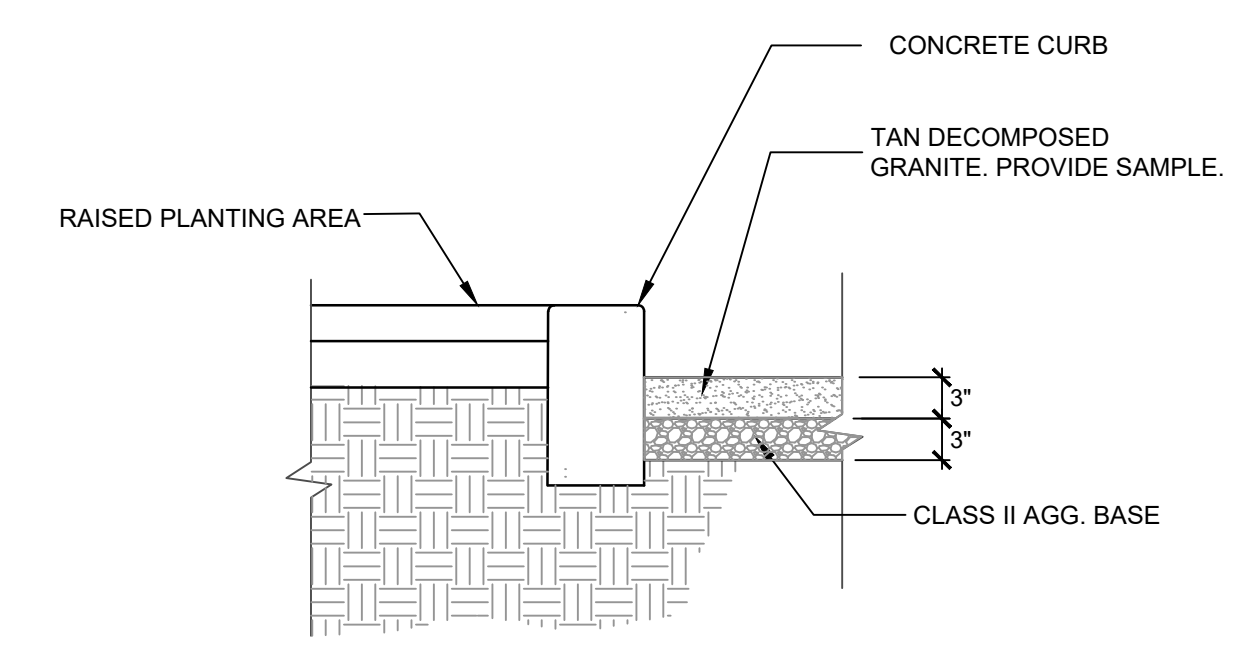
- NOTES:**
1. CONCRETE SHALL BE CLASS "B" (5 SACK MIX).
  2. PLASTIC PIPE IS NOT ALLOWED.
  3. WHERE UNDERDRAINS ARE INSTALLED AT LOCATIONS WHERE CURB, GUTTER AND SIDEWALK IS EXISTING, REMOVE 20" OF CURB AND 1 SQUARE OF SIDEWALK BETWEEN SAW-CUTS. REPLACE CURB AS SHOWN IN SECTION A-A ABOVE.
  4. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.
  5. ALL CONCRETE SHALL BE BROOM FINISHED.
  - \* 6. IF REQUIRED BY AGENCY ENGINEER FOR HEAVY FLOWS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	SIDEWALK UNDERDRAIN	REV.	DATE	BY	MAY 2008
					DWG. NO. 145

**6 SIDEWALK UNDERDRAIN**  
NOT TO SCALE



**4 CONCRETE CURB AT PLANTER**  
NOT TO SCALE



**5 DECOMPOSED GRANITE PAVING**  
NOT TO SCALE

**7 FOREVERLAWN**  
NOT TO SCALE

DESIGNED	DRAWN	CHECKED	APPROVED
NO.	REVISION	BY	DATE
PROJECT NAME CITY OF SAN RAFAEL ALBERT PARK PLAY AREA			
DRAWING NAME <b>CONSTRUCTION DETAILS</b>			
CITY OF SAN RAFAEL COUNTY OF MARIN CALIFORNIA			
100% REVIEW SET			
DATE			

abey arnold  
LANDSCAPE ARCHITECT

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CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

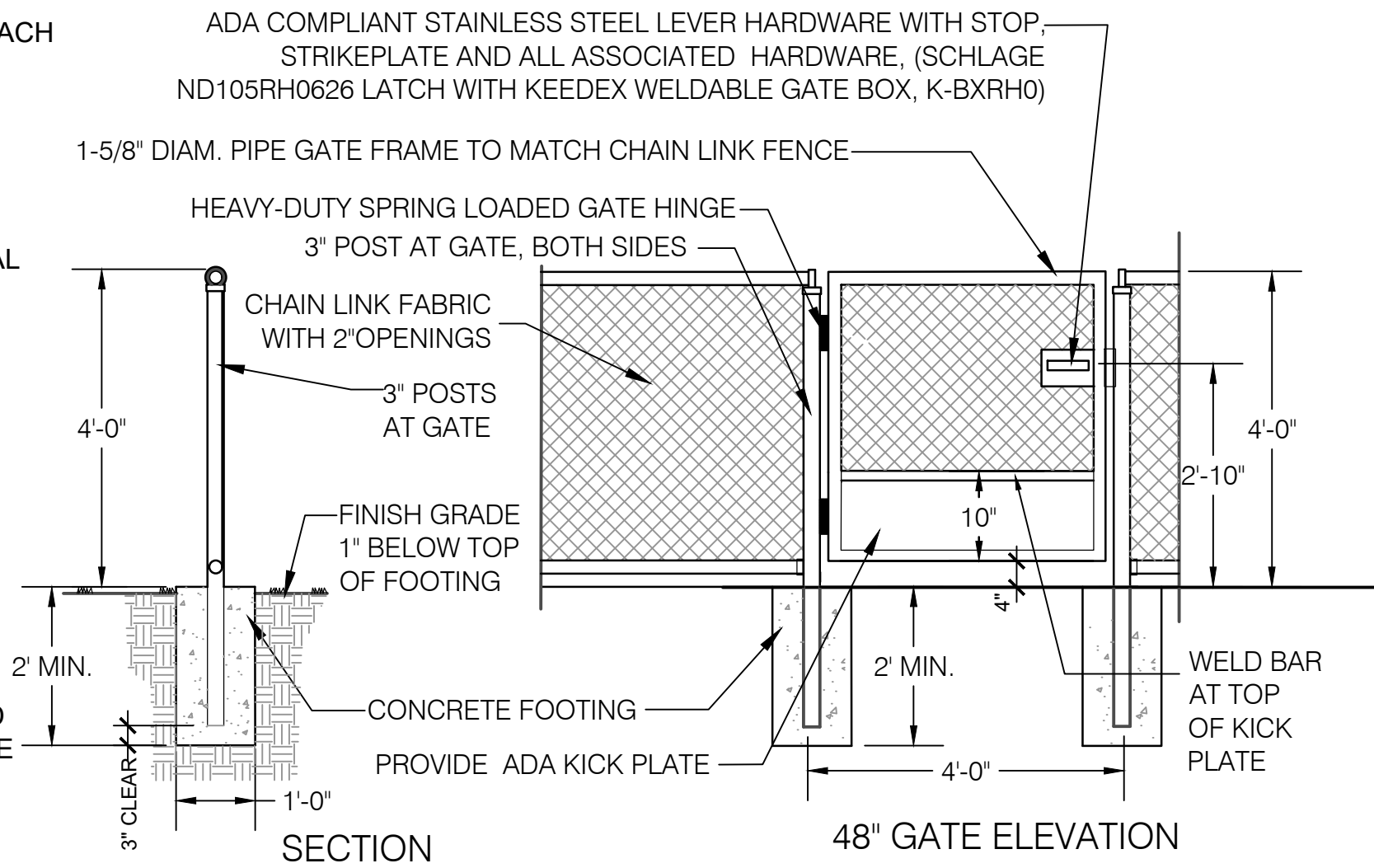
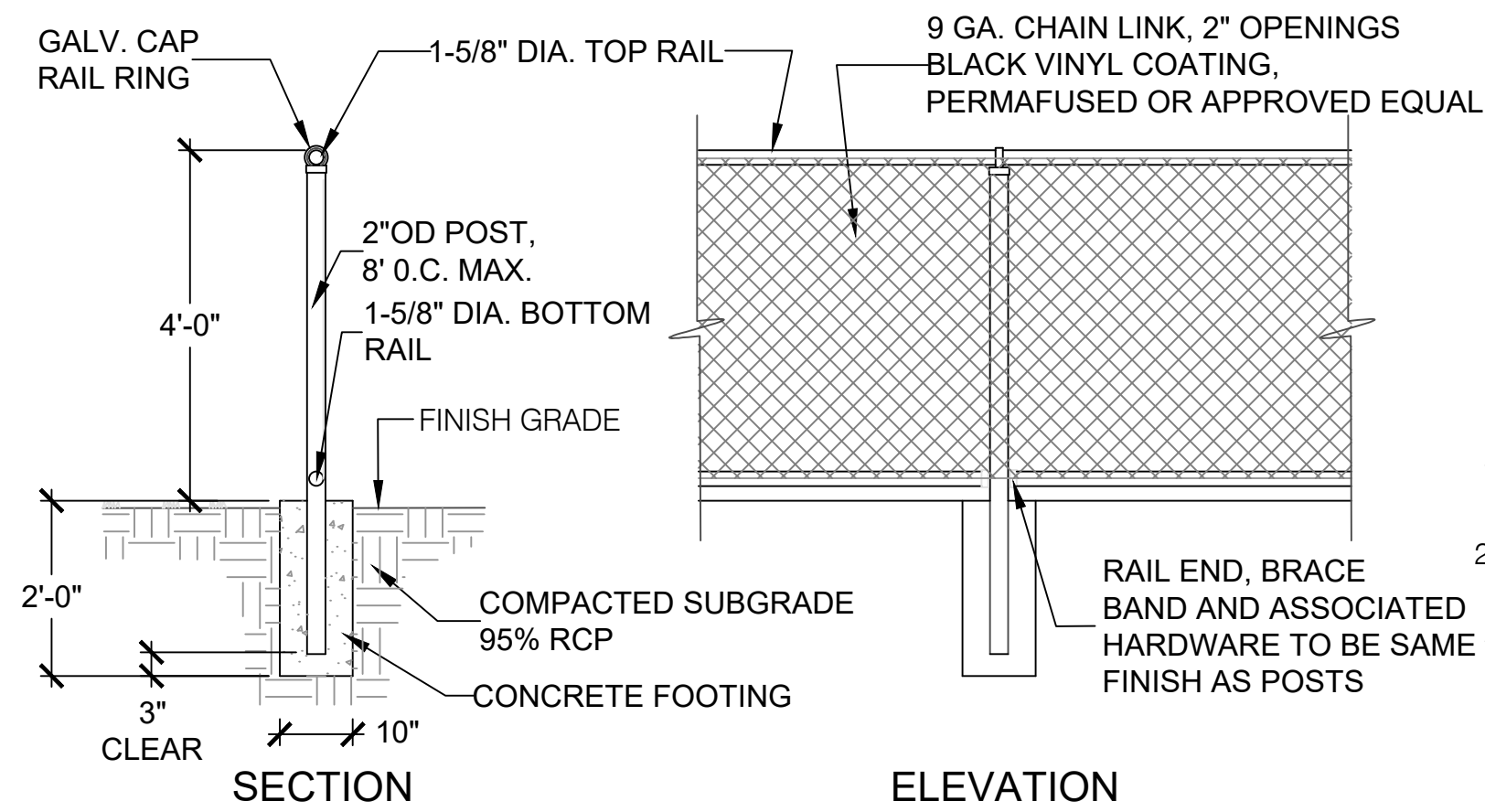
SCALE:  
DATE: JULY 2, 2018  
CITY PROJECT NO.:  
11299  
SHEET NO.:  
**L-4**  
DRAWING: 7 OF 15

CA: 1-800-227-2600  
CALL BEFORE YOU DIG  
UNDERGROUND SERVICE ALERT

CA: 1-800-227-2600  
CALL TWO WORKING  
DAYS BEFORE YOU DIG

**NOTES:**

1. PROVIDE 2 ADJUSTABLE TRUSS RODS, TURNBUCKLES AND ASSOCIATED HARDWARE AT EACH CORNER POST.
2. PROVIDE TENSION BARS AND ASSOCIATED HARDWARE AS NECESSARY.
3. ALL SHARP EDGES TO BE FILED OR GROUND SMOOTH.



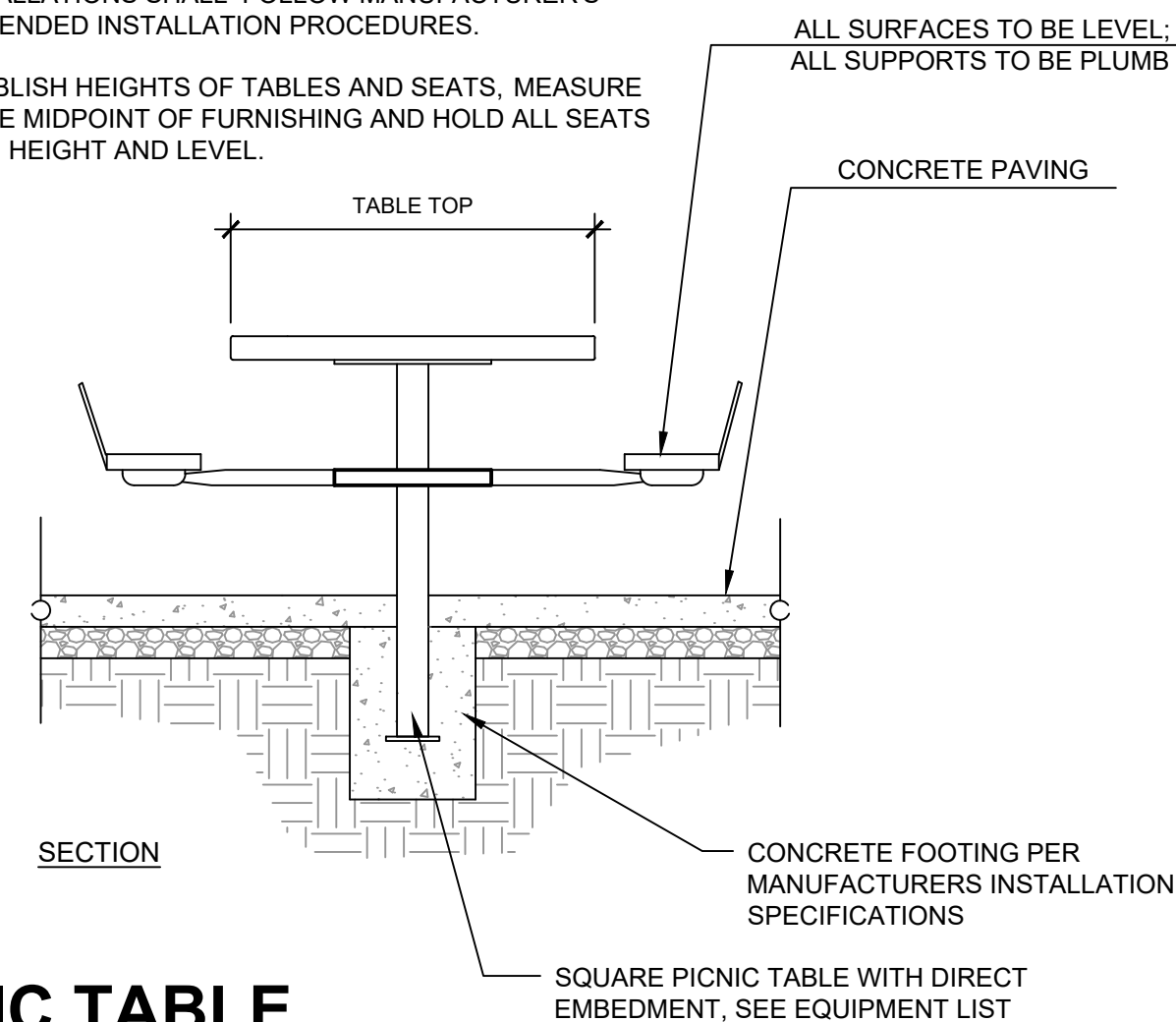
**CHAIN LINK FENCING NOTES**

1. ALL POSTS, RAILS, AND ASSOCIATED HARDWARE ARE TO BE POWDER COATED IN A MATCHING, SEMI GLOSS BLACK.
2. CHAIN LINK FABRIC IS TO BE 9 GA. CORE WITH PERMAFUSED BLACK VINYL COATING.
3. ALL CHAIN LINK FABRIC TO BE INSTALLED ON THE INSIDE OF POSTS, TYP.
4. PROVIDE ADJUSTABLE TRUSS RODS, TURNBUCKLES AND ASSOCIATED HARDWARE AT EACH CORNER POST.
5. PROVIDE TENSION BARS AND ASSOCIATED HARDWARE AS NECESSARY.
6. ALL SHARP EDGES TO BE FILED OR GROUND SMOOTH.

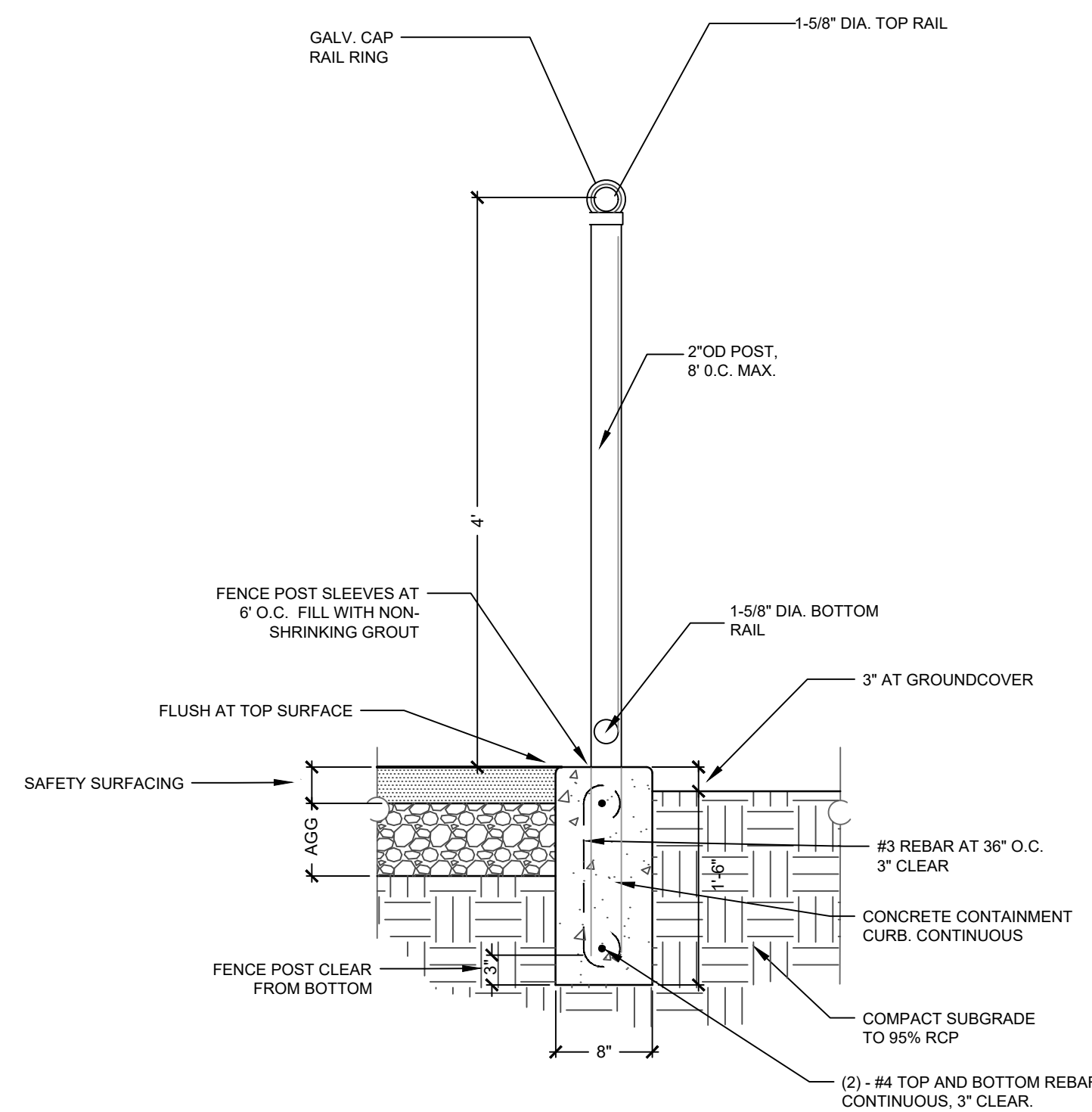
**1 CHAIN LINK FENCE AND GATE, 4' HIGH**  
NOT TO SCALE

**NOTES**

1. ADA PICNIC TABLE PER EQUIPMENT LIST OR EQUAL.
2. ALL INSTALLATIONS SHALL FOLLOW MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
3. TO ESTABLISH HEIGHTS OF TABLES AND SEATS, MEASURE FROM THE MIDPOINT OF FURNISHING AND HOLD ALL SEATS EQUAL IN HEIGHT AND LEVEL.




**2 PICNIC TABLE**  
NOT TO SCALE



**3 RESILIENT SURFACE AT CURB/FENCE SECTION**  
NOT TO SCALE



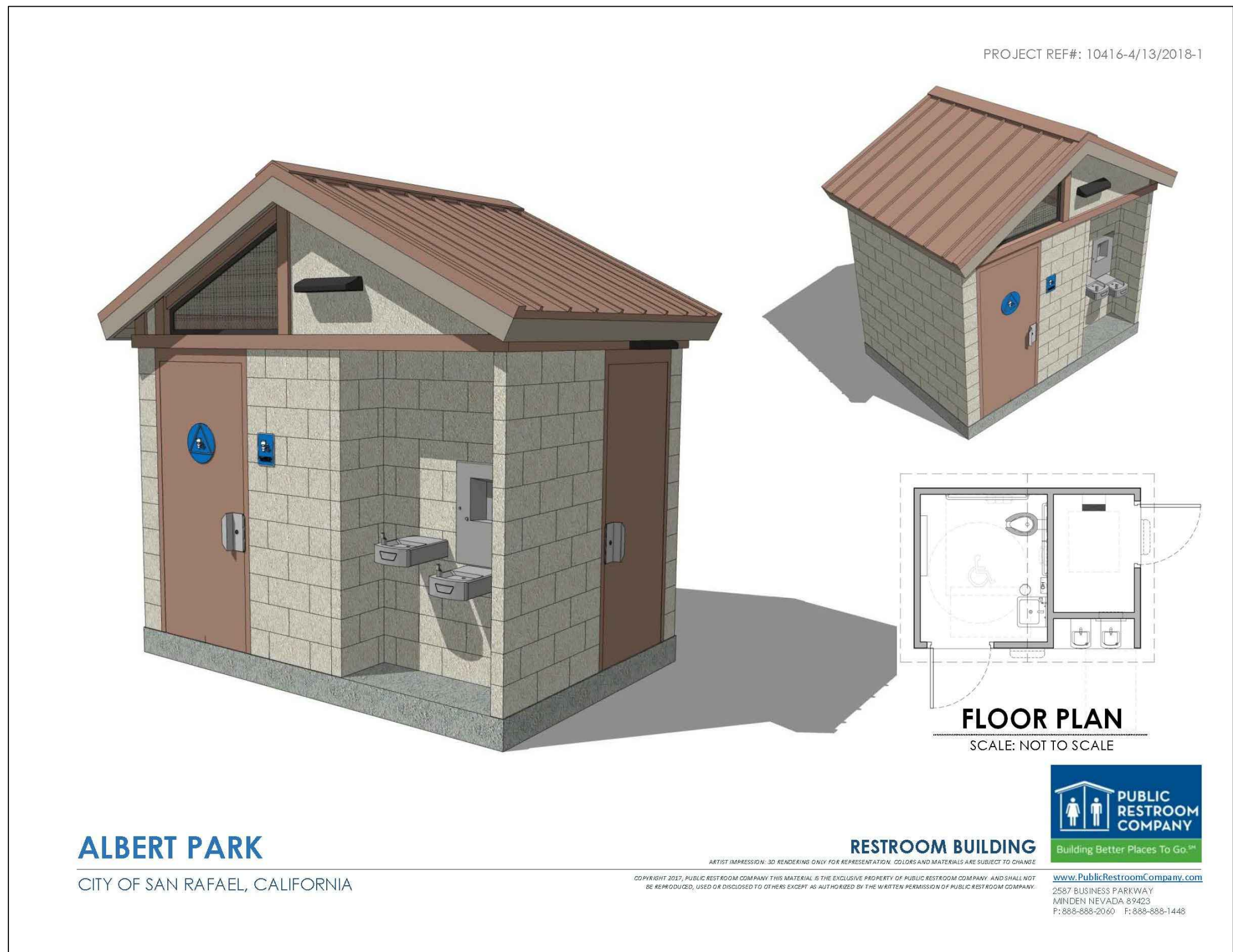
PROJECT NAME	CITY OF SAN RAFAEL ALBERT PARK PLAY AREA
DRAWING NAME	CONSTRUCTION DETAILS
COUNTY	SAN RAFAEL
STATE	CALIFORNIA
DESIGNED	
DRAWN	
CHECKED	
APPROVED	
NO.	
REVISION	
BY	
DATE	
100% REVIEW SET	


  
 1005 A Street, Suite 305  
 San Rafael, California 94901  
 Phone 415-256-9720  
 Fax 415-256-9720  
 CA License #2616

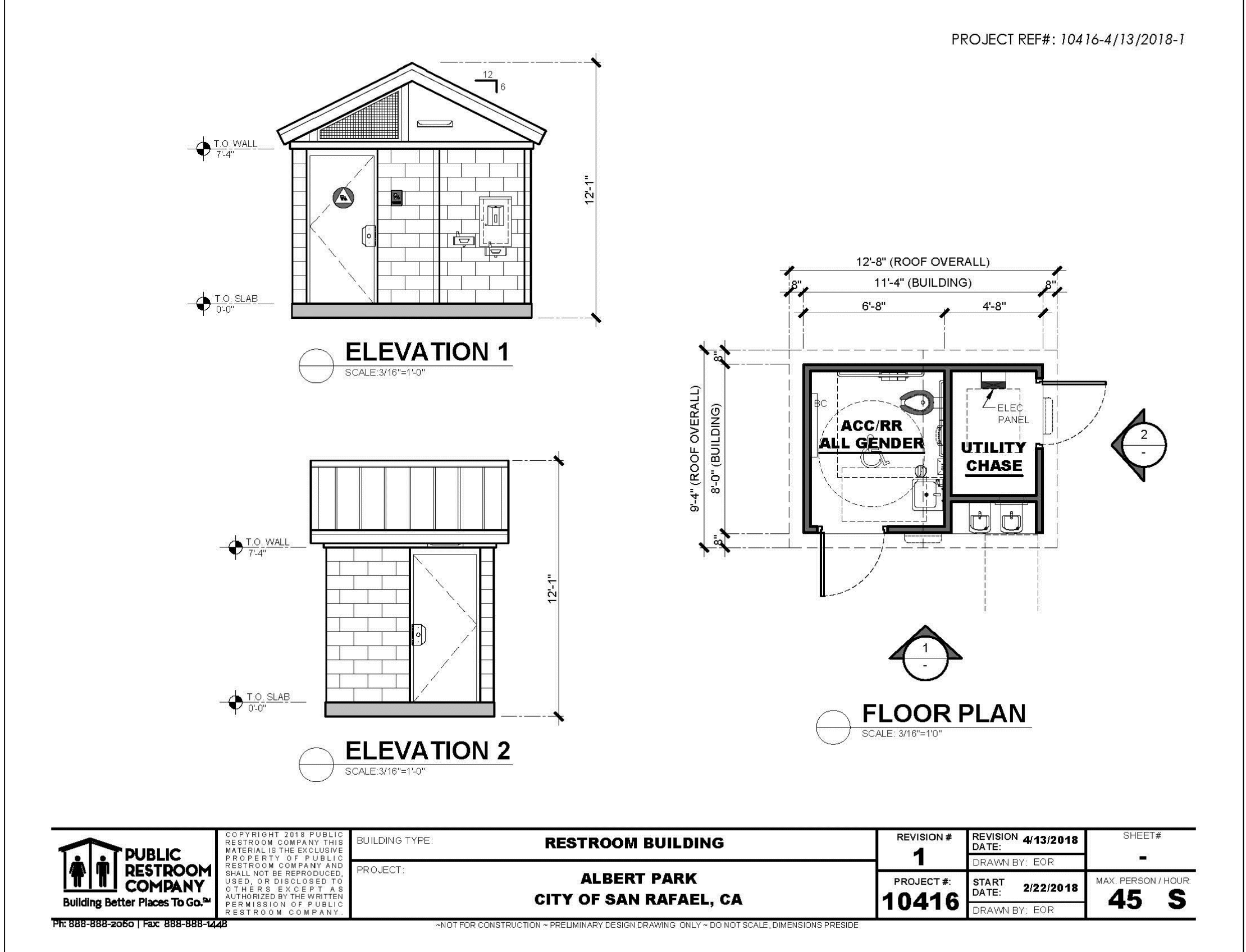
CITY OF SAN RAFAEL  
 DEPARTMENT OF PUBLIC WORKS  


SCALE:	
DATE:	JULY 2, 2018
CITY PROJECT NO.:	11299
SHEET NO.:	<b>L-5</b>
DRAWING:	8 OF 15





**1 RESTROOM BUILDING ISOMETRIC**  
SCALE: NTS



**2 RESTROOM BUILDING PLAN AND ELEVATIONS**  
SCALE: NTS

SUBMITTAL SPECIFICATION SHEET

Date: 04/17/18  
Location: San Rafael, CA  
Project: Albert Park

Size: 8' x 11'4"  
Description: Restroom building  
State Seal: HCD

**TYPE OF BUILDING**  
Walls to 7'4"  
MVR Wood

**FLOOR SYSTEM**  
Type: Light weight concrete in primed 6x6 steel angle frame  
Floor finish: Exposed concrete with light broom finish with water resistant coating  
Entire bldg: Exposed concrete with light broom finish with water resistant coating

**WALL SYSTEM (structural)**  
Framing: Exterior 4" CMU Precision, all rows, tan; Interior 4" CMU Precision, tan  
Cap beam (all walls): Steel tube, painted  
Above cap beam (all walls): Wood Framed with FRC  
Vents (exterior RR walls): Above cap beam, 1" x 1" x 3/16" S.S.  
Vents (Mech): Sunvent Industries model #157 EX w/D B Damper

**WALL FINISHES - Exterior**  
CMU: Natural tan, sealed on 4 sides, with alcove for drinking fountain bottle filler  
Gable ends: Cement board - stucco pattern - painted  
Vent trim: 2x2 wood - painted  
Exterior Paint: Pittsburg PPG Gloss

**WALL FINISHES - Interior**  
Restrooms: to cap beam Block filler & gloss paint - white; Base: None  
Mechanical: Above cap beam Regular Painted Cement Board - stucco pattern - painted white; to cap beam Gloss Paint - white; Above cap beam Regular Painted OSB - white

**ROOF SYSTEM**  
Style: Gable with 6/12 pitch and 8' overhang  
Roofing: Sigma 12" wide Standing Seam Metal Sales Image II (prefinished)  
Underlayment: Metal Sales ms-HT (high temp peel and stick)  
Framing: Wood Rafter with OSB sheathing  
Ceiling: Cement board - stucco pattern  
Fascia - eave & rake: 2 x 8 KD SPF wrapped with 16 ga formed steel

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SUBMITTAL SPECIFICATION SHEET

**DOORS & HARDWARE**

Item	Qty	Size	1.8.2	3	4	5.a	5.b	5.c	5.d	6	Notes
All Gender RR	1	3x7'	HM	Cont	B600J	yes	both sides	no	no		
Mechanical	1	3x7'	HM	Cont	B600J	no	both sides	270A	321 SSN		Check Chain

1. DOOR TYPES:  
a) HM GALVANIZED HOLLOW METAL, 14 GA DOOR w/ 14 GA FRAME.  
WELDED  
4-3/4" WIDE, TYPICAL  
4" MASONRY HEADERS

2. ALL H.M. DOOR FRAMES:  
WELDED  
4-3/4" WIDE, TYPICAL  
4" MASONRY HEADERS

3. HINGE SPECS:  
a) CONT + PEMKO KCFM-8P HD CONTINUOUS GEAR HINGE

4. LOCKS:  
a) DEADBOLT: SCHLAGE B SERIES 626 WITH FULL SIZE INTERCHANGEABLE CORE (FIC)  
1) B600J - KEY ONE SIDE, ADA TURN LEVER LOCKS AND UNLOCKS

5. HARDWARE SPECS:  
a) CLOSER: LCN 4211 (add CUSH ARM for out swing doors)  
b) PULL PLATES:  
1) PULL PLATE, ROCKWOOD WRTAC US330 x 92 CFC US330BMS (WITH BLACK GRIP HANDLE AND LATCH GUARD)  
c) THRESH: PEMKO  
1) 4024 FOR NON-TILED FLOORS  
d) SWEEP: PEMKO 321 SSN

6. OTHER: PROVIDE CHECK CHAIN (ives CS 115-25)

**RESTROOM ACCESSORIES**

ITEM	QTY	SIZE	MANUFACTURER / MODEL #	FINISH	NOTES
Grab Bars	1	42"	Bobrick	S.S.	
Grab Bars	1	48"	Bobrick	S.S.	
Signs - ADA Pictogram 12" circle/triangle "All Gender"	1	12"	Sign Elements	Aluminum Blue	
Signs - rectangular room ID ADA - "All Gender"	1	6"x8"	Sign Elements	Aluminum Blue	
Toilet Paper Holders	1	3-roll	Royce Rolle TP-3	S.S.	
Hand Dryer	1		Dyson Airblade V	Nickel	Surface mount
Utility Hook *	1		Bobrick B670	S.S.	
Baby Changing Station	1		Foundations 5410339	S.S.	

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SUBMITTAL SPECIFICATION SHEET

**PLUMBING**

**Restrooms**

Future type	Stainless Steel
Toilets	Qty: 1 Acorn #1675-W-1-HET-1.28-FVBO-ADA-PFS-316SS
Seats	standard Bemis 1955C (Black)
Flush valves	standard Zum Z6143AV-HET-BG-7L
Levs (wall hung)	Qty: 1 Acorn #1652-LRB-1-DMS-03-M-316SS
Faucets	Air control, single temp valve, deck mounted spout
Floor drains:	Qty: 1 Zum Z1460-2N1-5B without trap primer

**General**

Water heater	Yes	Stebel DHC-E 8/10
Drinking Fountain (2)	Yes	Murdock GS E64-FG-316SS
Bottle Filler	Yes	Murdock BF3-316SS
Tempering valve	Yes	Acorn S170-12
Water filter	Yes	(single) Keystone CG10
Pressure Gauge	Yes	Proflo FFXPG-100K
Check valve	Yes	1-1/2" Proflo PFX131SJ (lead free)
Pressure reducing valve	Yes	1-1/2" Watts LF25 ALB (lead free)
Expansion tank	Yes	Proflo RFXF15
Hose bib (interior)	Yes	Woodford 24-FC in mechanical room
Water	Copper	
Waste	PVC	
Vent cap	Yes	Smith 1748
Cap stop	Yes	Mueller H15015

**ELECTRICAL**

Service	100 amp	120/240 volt	single phase
Meter base	no - if required, it should be by others		
Panel	100 amp - main breaker		Square D
Breakers	Plug on		Square D QO
Raceway	Metallic (EMT in exposed areas & MC Cable where concealed)		
Receptacles	(1) Dedicated GFCI		Leviton GFNT2-W
Switches	(3) Single pole (2 BYPASS)		Leviton CS103-W
	(1) Photocell		Intermatic K4121C
	Timedlock		Intermatic T101
Lights - Exterior	(2) 15 watt LED		Luminaire YWP610-15W-120-4000K-OP-BRZ
	Controlled by photo cell		
	Controlled by BYPASS SWITCH		
Lights - RR	(1) 15 watt LED		Luminaire SWP610-15W-120-4000K-OP-BRZ-CCC
	Controlled by timedlock		
	Controlled by BYPASS SWITCH		
Lights - Mechanical	(1) 14-2 lamp-LED		Greenlighting AL-41L
	Controlled by single pole switch		
Wire for	(1) Hand dryer		Dyson Airblade V
Wire for	(1) Water heater		Stebel DHC-E 8/10

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**3 RESTROOM SCHEDULE**  
SCALE: NTS

DESIGNED	DRAWN	CHECKED	APPROVED	NO.	REVISION	BY	DATE
PROJECT NAME				CITY OF SAN RAFAEL			
DRAWING NAME				ALBERT PARK PLAY AREA			
PROJECT NAME				<b>RESTROOM BUILDING</b>			
COUNTY OF				MARIN CALIFORNIA			
DATE				100% REVIEW SET			

above ground  
underground  
utilities

1005 A Street, Suite 305  
San Rafael, California 94901  
Phone: 415.956.0780  
CA License #2616

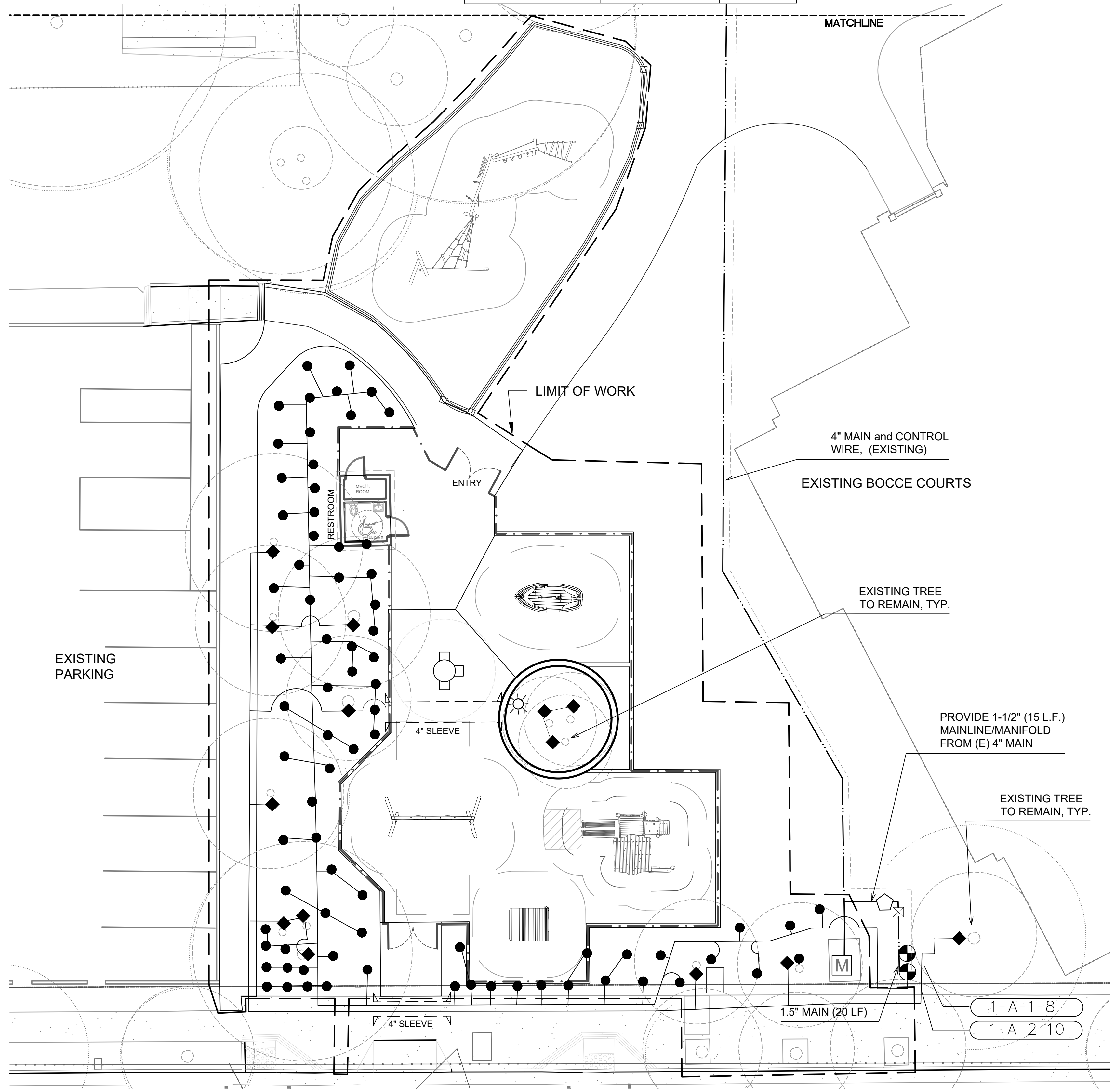
CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE:  
DATE: JULY 2, 2018  
CITY PROJECT NO.:  
11299  
SHEET NO.:  
**L-6**  
DRAWING: 9 OF 15

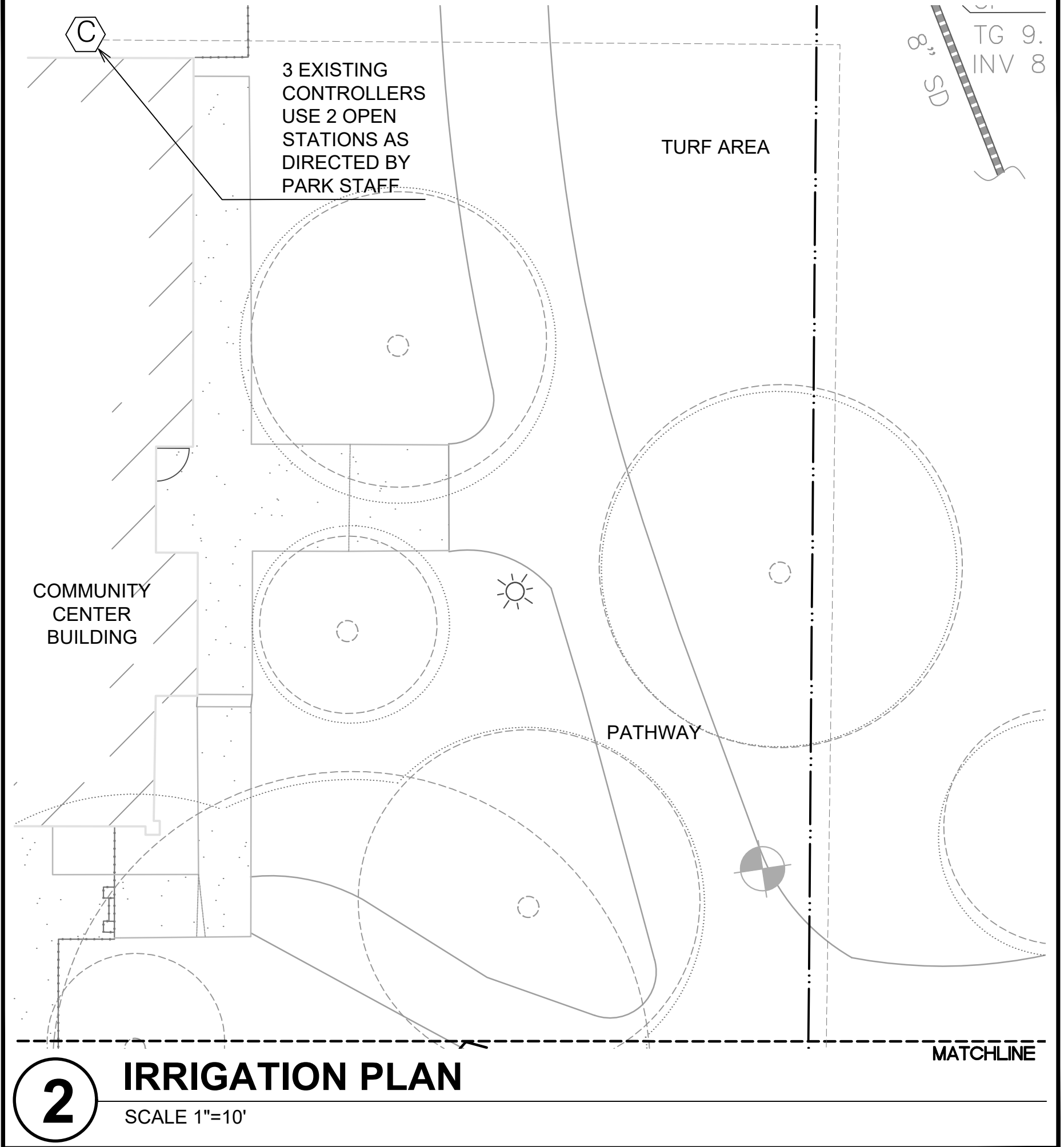


LATERAL LINE SIZING CHART

SPRINKLER TYPE	GALLONS PER MINUTE	PIPE SIZE
IN LINE DRIP	1-5	3/4"
	6-10	1"
	11-18	1 1/4"
	19-25	1 1/2"
	26-50	2"



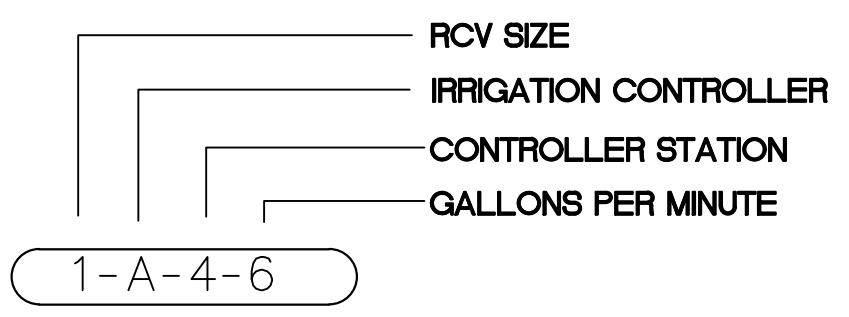
**1** IRRIGATION PLAN  
SCALE 1"=10'



**2** IRRIGATION PLAN  
SCALE 1"=10'

**IRRIGATION LEGEND**

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	SIZE
	EXISTING 2" MMWD METER AND RP BFP'S			
	CONTROLLER, (EXISTING)	RAIN MASTER		
	RAIN SENSOR	IRRITROL	RS-1000	
	BRASS BALL VALVE	WILKINS	112-850XL	1"
	QUICK COUPLING VALVE	RAINBIRD	44 NP	3/4"
	BUBBLER, (LOW FLOW)	RAINBIRD	PCT-07	
	BUBBLER, (AT TREES)	RAINBIRD	1404	
	REMOTE CONTROL VALVE	RAINBIRD	EFB-CP-PRS D	SEE PLAN
	LATERAL LINE		SCHEDULE 40	
	IRRIGATION MAIN LINE, (EXISTING)			4" TYP.
	CONTROL WIRE, EXISTING	14G		



12811-15  
REGISTERED STATE  
12/21/15  
606

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CALL BEFORE YOU DIG  
UNDERGROUND SERVICE ALERT  
CALL TWO WORKING DAYS BEFORE YOU DIG

PROJECT NAME: CITY OF SAN RAFAEL ALBERT PARK PLAY AREA  
DRAWING NAME: IRRIGATION PLAN  
COUNTY OF MARIN CALIFORNIA

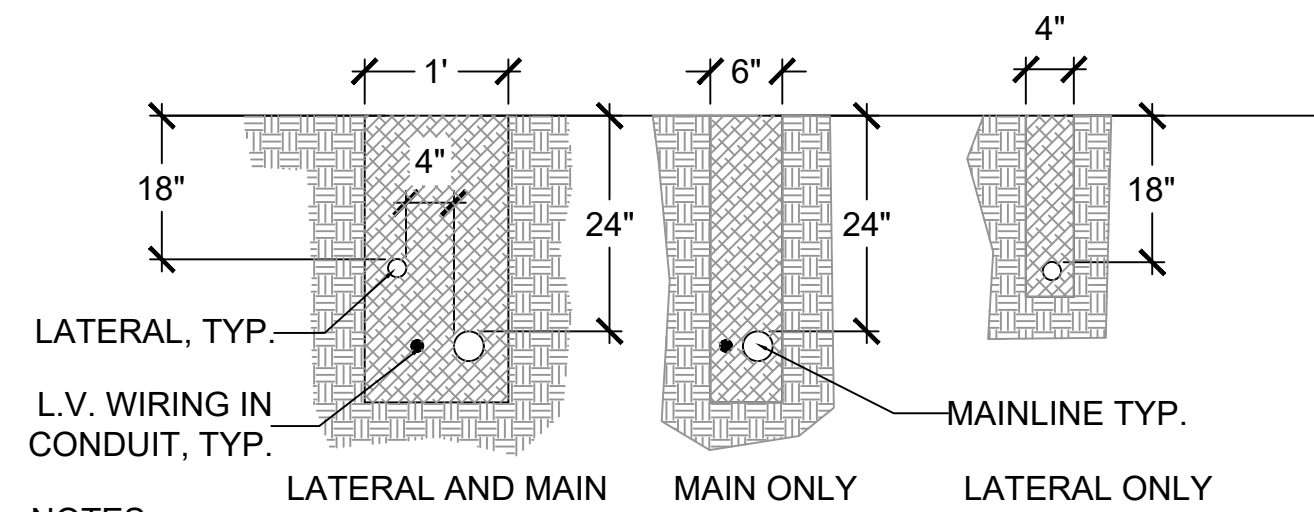
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DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
APPROVED: \_\_\_\_\_

NO. \_\_\_\_\_ REVISION BY \_\_\_\_\_ DATE: \_\_\_\_\_  
100% REVIEW SET

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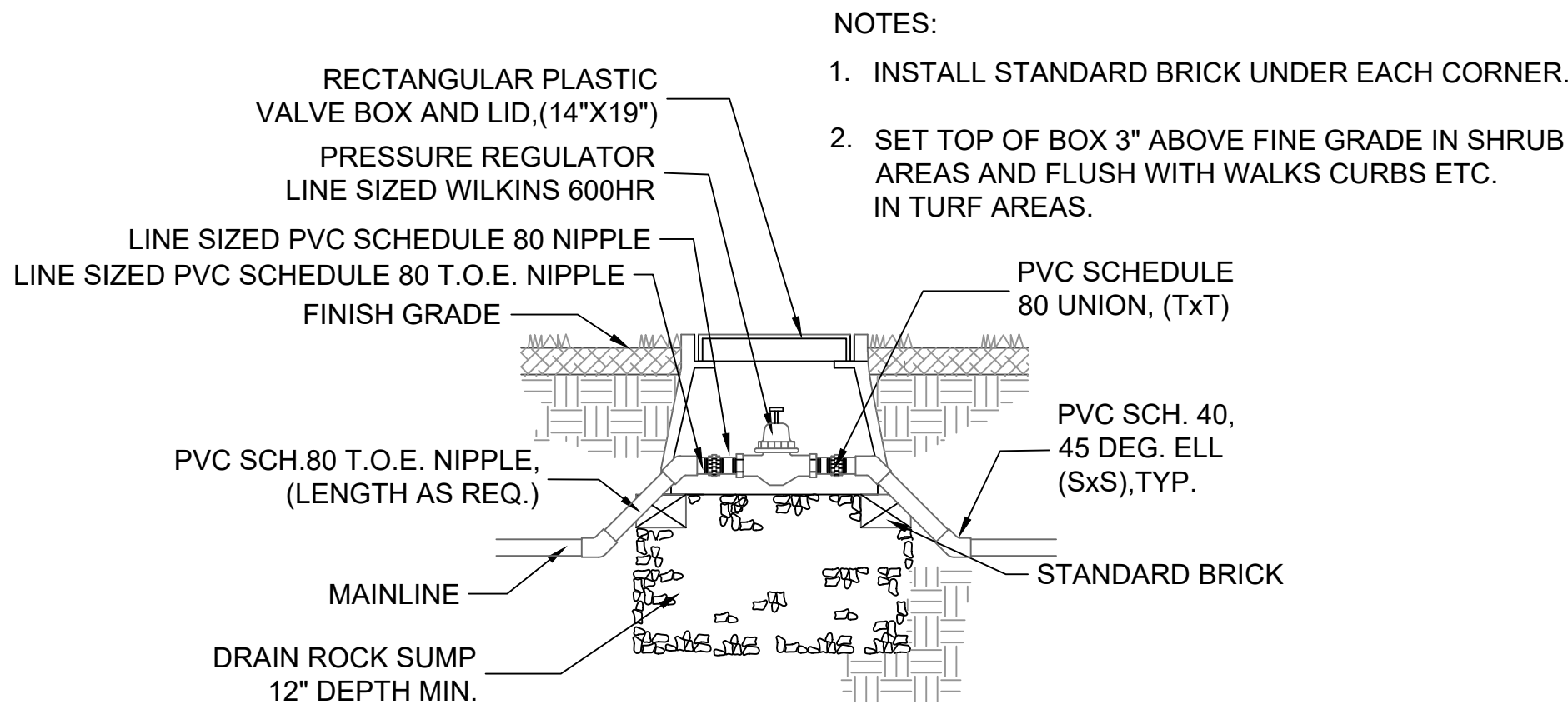
SCALE: 1" = 10'-0"  
DATE: JULY 2, 2018  
CITY PROJECT NO.: 11299  
SHEET NO.: 1-1  
DRAWING: 10 OF 15



- NOTES:
1. INSTALL 3" WIDE DETECTABLE WARNING TAPE 12" MIN. ABOVE MAINLINE.
  2. SALVAGED EXCAVATED FILL COMPACTED TO ORIGINAL DENSITY IN ALL LANDSCAPED AREA, ALL OTHER AREAS SHALL BE AT 95% COMPACTION.
  3. FOR ALL SLEEVES, 18" COVER MIN. PROVIDE 90° ELL AT BOTH ENDS AND EXTEND CAPPED, SLEEVE DIAMETER PIPE TO SURFACE.
  4. IN THE EVENT OF AN IRRIGATION LINE CONFLICTING WITH A DRAIN LINE, THE DRAIN LINE HAS PRIORITY. IF PROPER COVERAGE CANNOT BE ATTAINED ABOVE THE DRAIN LINES, THE IRRIGATION PIPES AND SLEEVES WILL BE INSTALLED BENEATH THE DRAIN LINE WITH 2" MIN. SEPARATION.

### 1 PRESSURE REGULATOR

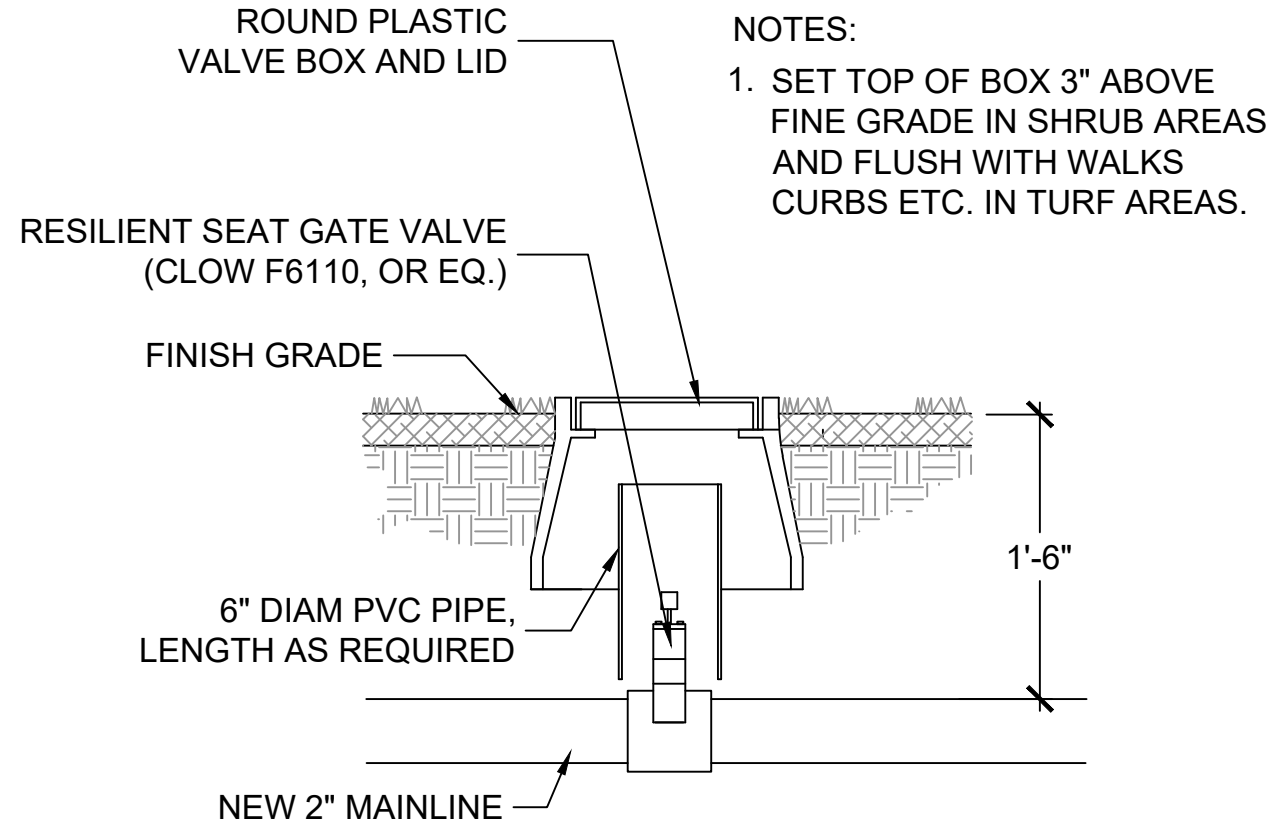
NTS



- NOTES:
1. INSTALL STANDARD BRICK UNDER EACH CORNER.
  2. SET TOP OF BOX 3" ABOVE FINE GRADE IN SHRUB AREAS AND FLUSH WITH WALKS CURBS ETC. IN TURF AREAS.

### 2 PRESSURE REGULATOR

NTS

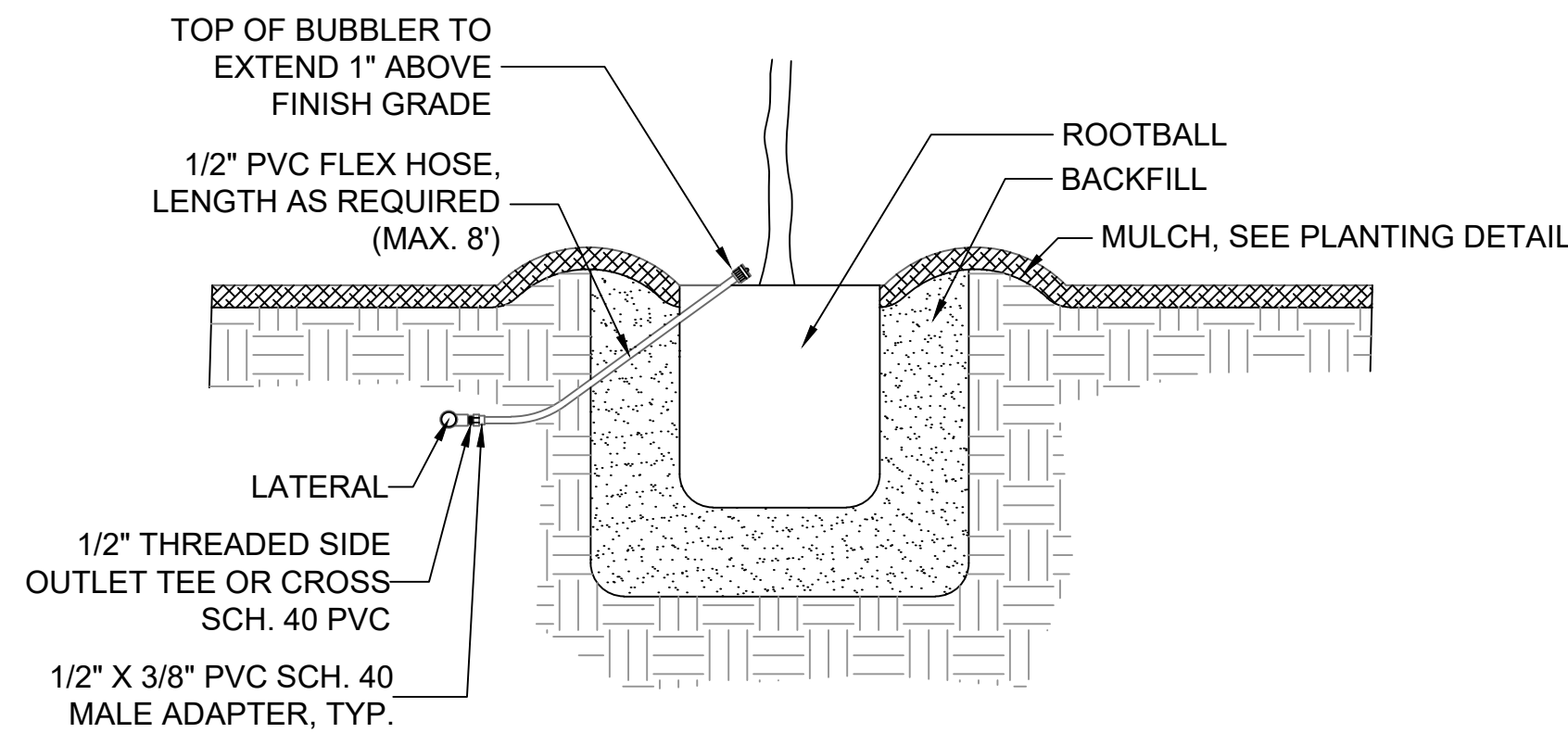


- NOTES:
1. SET TOP OF BOX 3" ABOVE FINE GRADE IN SHRUB AREAS AND FLUSH WITH WALKS CURBS ETC. IN TURF AREAS.

### 3 RESILIENT SEAT GATE VALVE

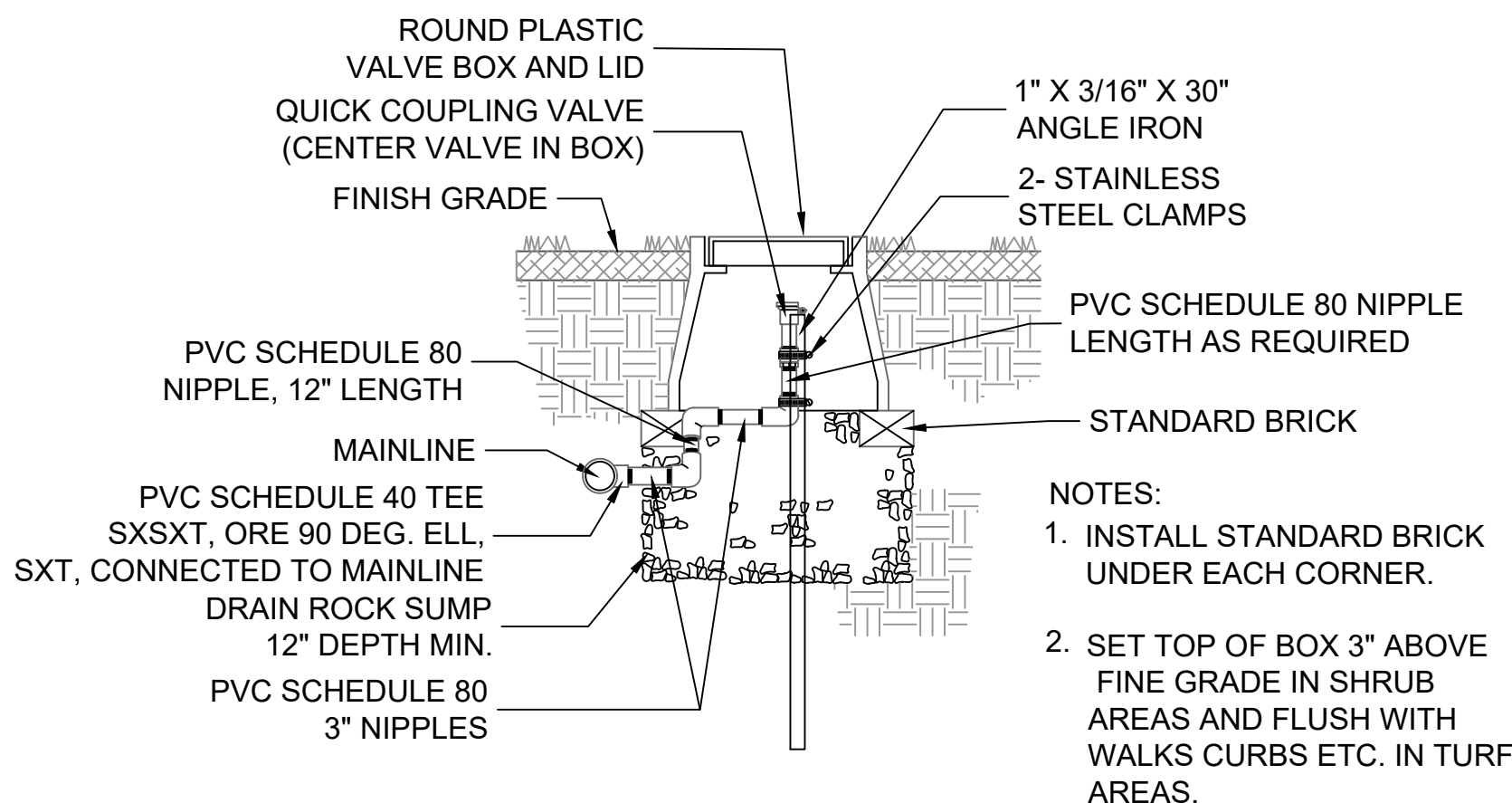
NTS

- NOTES:
1. INSTALL STANDARD BRICK UNDER EACH CORNER.
  2. SET TOP OF BOX 3" ABOVE FINE GRADE IN SHRUB AREAS AND FLUSH WITH WALKS CURBS ETC. IN TURF AREAS.



### 4 PRESSURE REGULATOR

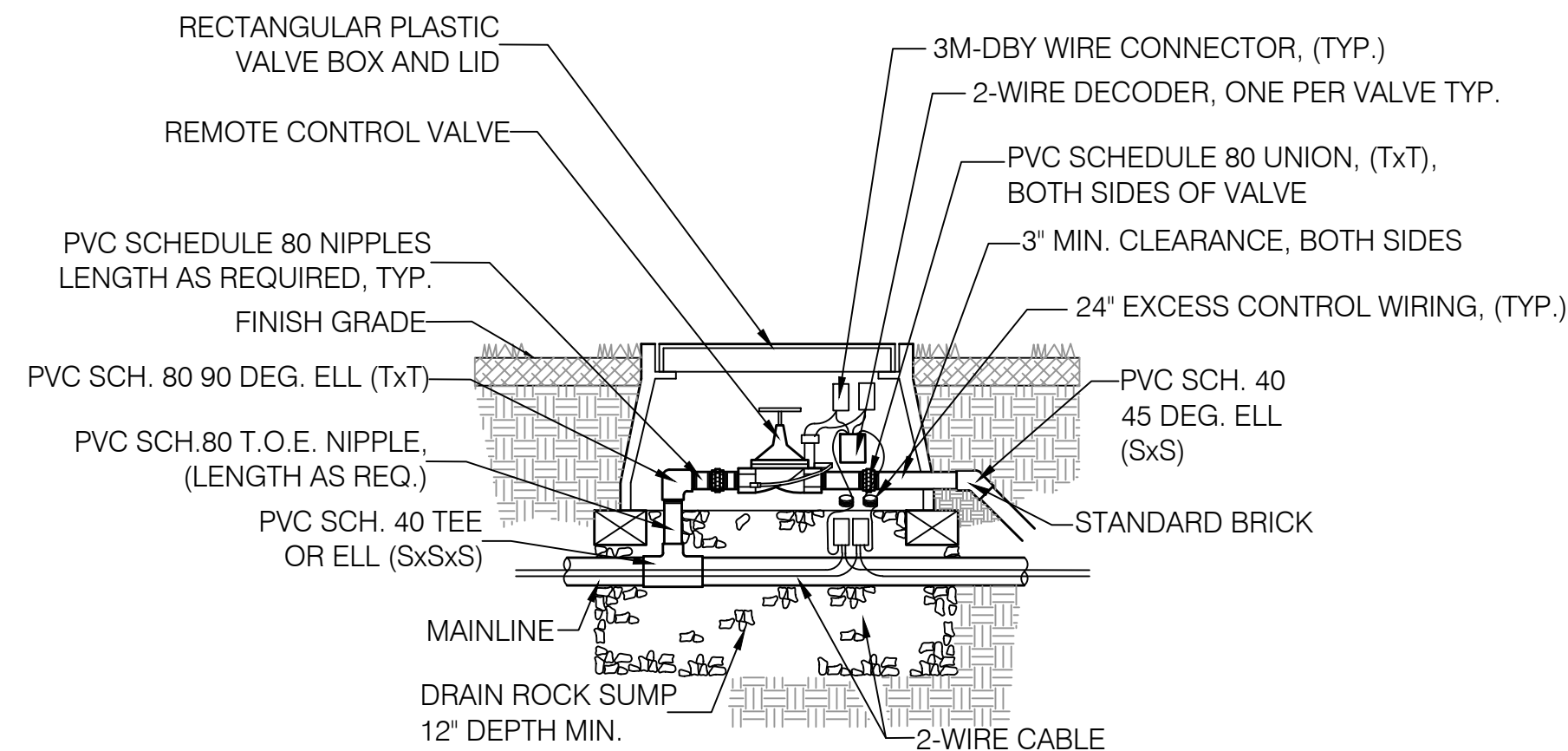
NTS



- NOTES:
1. INSTALL STANDARD BRICK UNDER EACH CORNER.
  2. SET TOP OF BOX 3" ABOVE FINE GRADE IN SHRUB AREAS AND FLUSH WITH WALKS CURBS ETC. IN TURF AREAS.

### 4 QUICK COUPLER VALVE

NTS

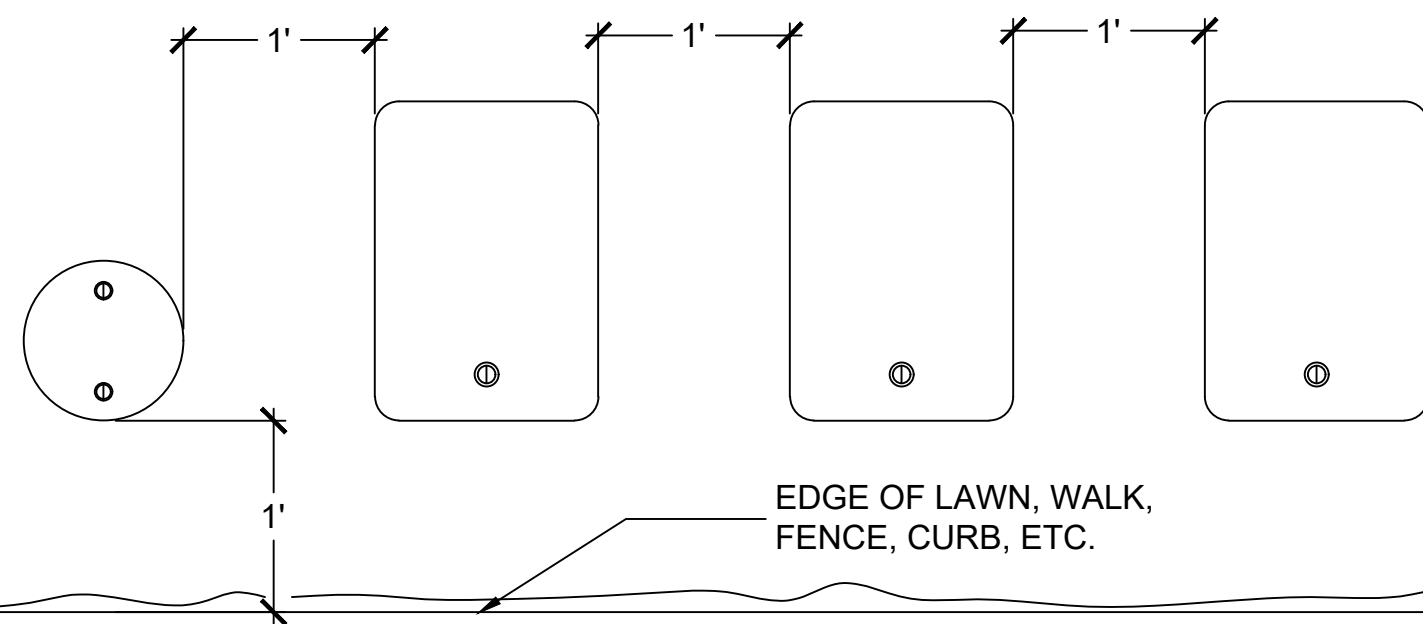


### 5 REMOTE CONTROL VALVE

NTS

NOTES:

1. ALL VALVE BOXES AND LIDS TO BE PLASTIC.
2. CENTER VALVE BOX OVER EQUIPMENT ASSEMBLY TO FACILITATE SERVICING
3. SET BOX AND ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
5. AVOID HEAVY COMPACTION OF SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOX SIDES.
6. SET ALL BOXES FLUSH WITH WALKS, CURBS, ETC.. IN ALL CASES.
7. SET BOXES WITH STANDARD BRICK UNDER EACH CORNER OR IN CASE OF ROUND BOX USE TWO BRICKS 180 DEGREES APART.
8. MAKE SURE ALL VALVE BOXES HAVE BOLTS.
9. SEAL OPENINGS TO PREVENT ENTRANCE OF SOIL INTO BOXES.

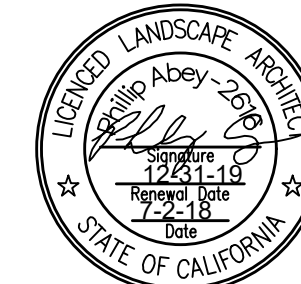


### 6 PRESSURE REGULATOR

NTS

### IRRIGATION NOTES

1. THE IRRIGATION SYSTEMS INDICATED IN THESE DRAWINGS REQUIRES THE INSTALLATION OF ALL NEW CONTROLLERS, MAIN, LATERAL LINES, AND BUBBLER IRRIGATION.
2. THE CONTRACTOR IS REQUIRED TO LOCATE BUBBLER TO WATER EACH PLANT INSTALLED AS A PART OF THIS CONTRACT.
3. PROVIDE INSTALLATION BY PERSONS FAMILIAR WITH IRRIGATION WORK AND UNDER THE SUPERVISION OF A QUALIFIED SUPERVISOR.
4. OBTAIN THE PERMITS REQUIRED AND PROVIDE LABOR AND MATERIALS NECESSARY TO FULLY COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.
5. LOCATE AND PROTECT NEW AND EXISTING UTILITIES PRIOR TO EXCAVATION.
6. DO NOT DAMAGE EXISTING UTILITIES PAVING OR STRUCTURES, CONTRACTOR TO PROVIDE THE NECESSARY REPAIRS AT NO ADDITIONAL COST TO THE CITY.
7. REMOVE DEBRIS AND ACCUMULATION OF DEBRIS AS A RESULT OF IRRIGATION CONSTRUCTION FROM THE SITE AND LEAVE AREA IN A CLEAN CONDITION ACCEPTABLE TO TOWN'S REPRESENTATIVE
8. THESE DRAWINGS ARE DIAGRAMMATIC. EQUIPMENT SHOWN IN PAVING IS FOR CLARITY ONLY, INSTALL ALL SPECIFIED EQUIPMENT IN PLANTING AREAS.
9. PROVIDE 2 ADDITIONAL 14G WIRES OF A DIFFERENT COLOR THE ENTIRE LENGTH OF WIRE INSTALLATION. LEAVE A 36" LONG 1" DIAMETER COIL OF EXCESS WIRE AT EACH SPLICE AND A 36" LONG EXPANSION LOOP EVERY 100 FEET ALONG WIRE RUN.
10. PLASTIC VALVE BOXES ARE TO BE GREEN IN COLOR WITH BOLT DOWN, NON-HINGED COVER MARKED PER SPECIFICATION. BOX BODY SHALL HAVE KNOCK OUTS. MANUFACTURER: CARSON, RAINBIRD, NDS OR APPROVED EQUAL.
11. FLUSH ALL PIPE OF ALL DELETERIOUS MATERIAL.
12. CONTRACTOR TO PROVIDE PRESSURE TESTS FOR MAINLINE, (200 PSI, 2 HOURS) AFTER INSTALLATION OF VALVES.
13. THIS CONTRACT WORK INCLUDES, BUT NOT NECESSARILY LIMITED TO, PROVIDING MATERIALS AND INSTALLATION OF MAINLINE, CONTROL WIRE, RCV'S, LATERALS, SPRAY HEADS, BUBBLERS.
14. THIS IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 25 PSI. MAXIMUM FLOW RATE IS 20.0 GPM.
15. ALL EXISTING and PROPOSED UTILITY IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, PG&E, TELEPHONE, LIGHTING, MMWD AND/OR, DRAINAGE SHALL BE LOCATED AND VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION EQUIPMENT. UTILITIES DAMAGED DURING THE EXECUTION OF THIS CONTRACT ARE TO BE REPAIRED AND OR REPLACED TO THEIR ORIGINAL CONDITION.



NO.	REVISION	BY	DATE
DESIGNED	DRAWN	CHECKED	APPROVED

PROJECT NAME  
CITY OF SAN RAFAEL  
ALBERT PARK PLAY AREA

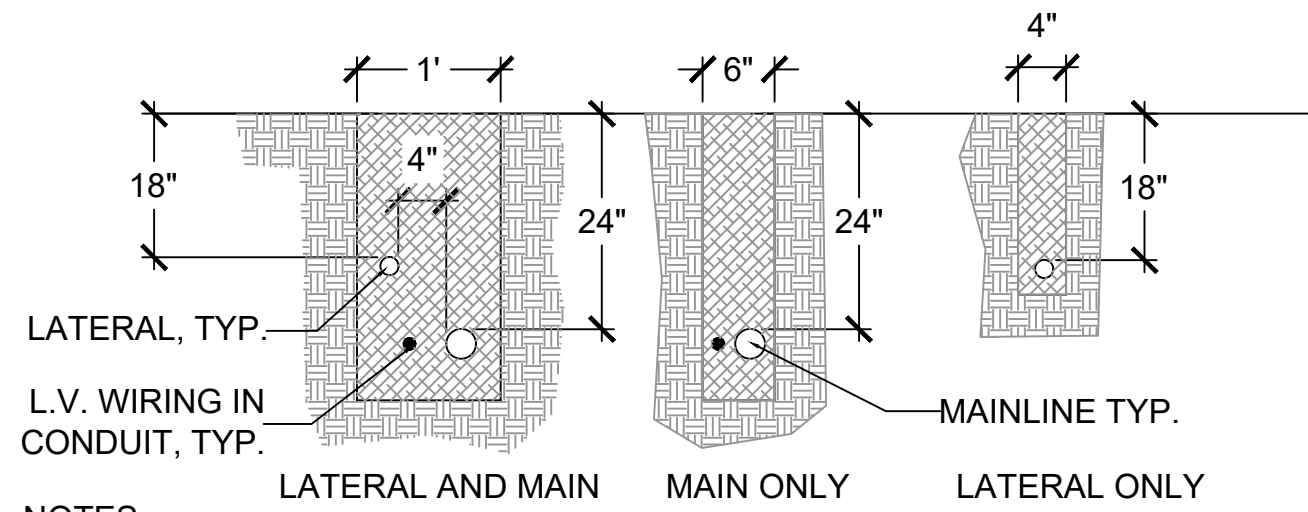
DRAWING NAME  
**IRRIGATION DETAILS**

COUNTY OF MARIN  
SAN RAFAEL  
CALIFORNIA

1005 A Street, Suite 305  
San Rafael, California 94901  
Phone 415-259-9780  
Fax 415-259-9780  
CA License #2616

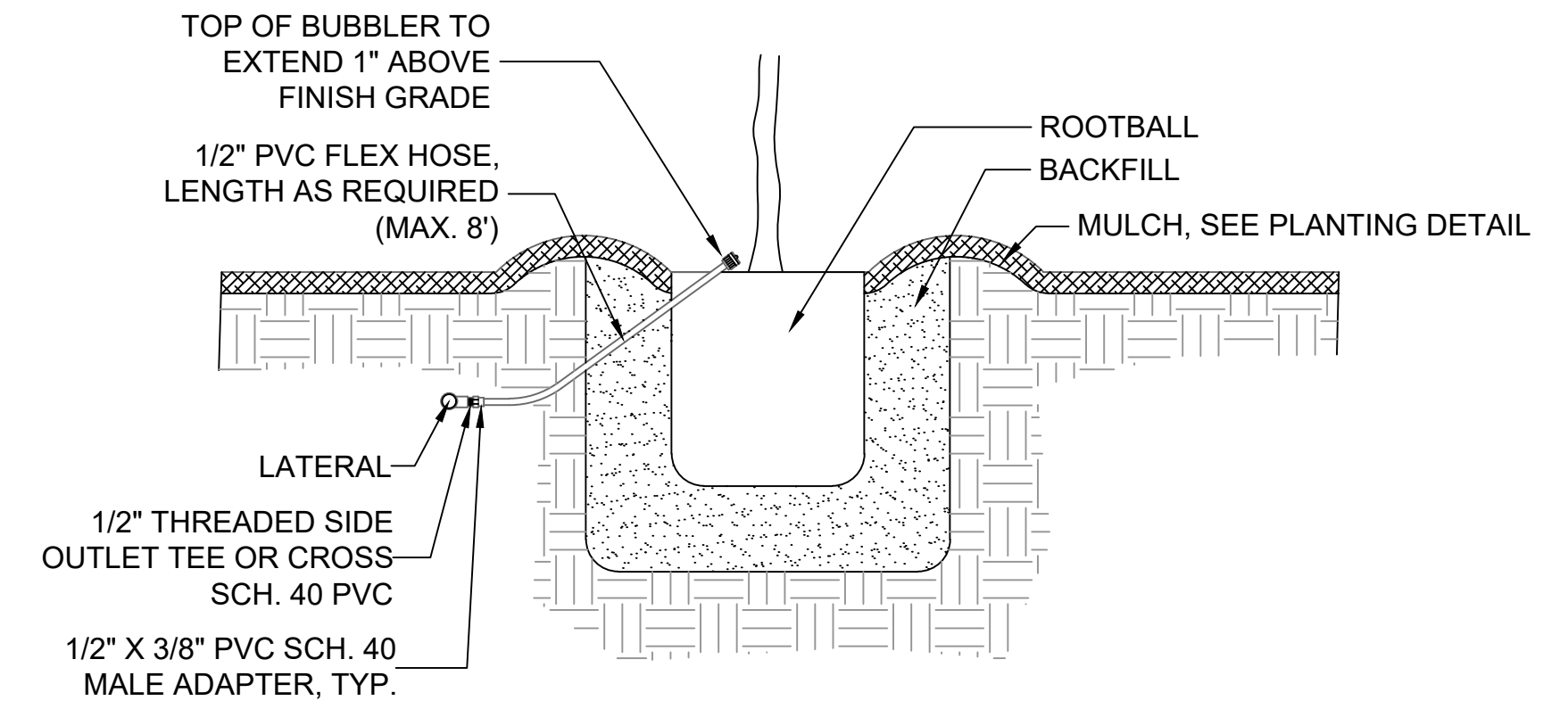
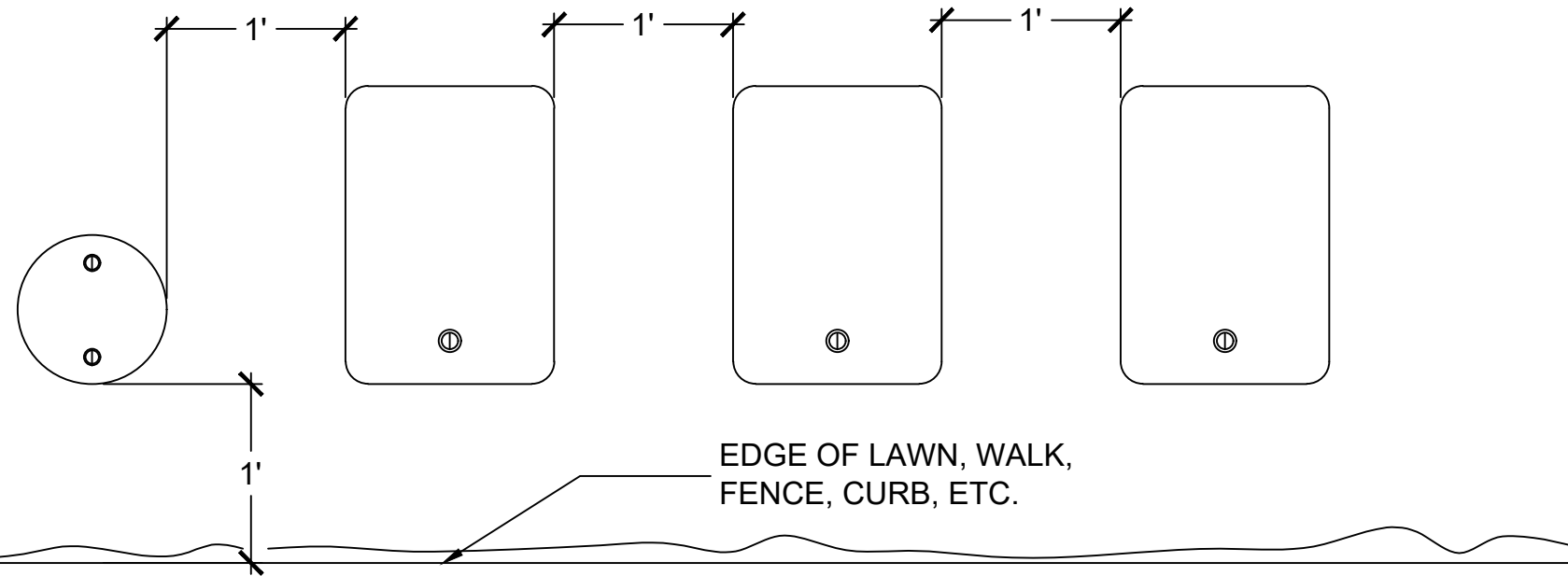
CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE: 1" = 10'-0"  
DATE: JULY 2, 2018  
CITY PROJECT NO.: 11299  
SHEET NO.: **1-2**  
DRAWING: 11 OF 15



- NOTES:
1. INSTALL 3" WIDE DETECTABLE WARNING TAPE 12" MIN. ABOVE MAINLINE.
  2. SALVAGED EXCAVATED FILL COMPACTED TO ORIGINAL DENSITY IN ALL LANDSCAPED AREA, ALL OTHER AREAS SHALL BE AT 95% COMPACTION.
  3. FOR ALL SLEEVES, 18" COVER MIN. PROVIDE 90DEG. AT BOTH ENDS AND EXTEND CAPPED, SLEEVE DIAMETER PIPE TO SURFACE.
  4. IN THE EVENT OF AN IRRIGATION LINE CONFLICTING WITH A DRAIN LINE, THE DRAIN LINE HAS PRIORITY. IF PROPER COVERAGE CANNOT BE ATTAINED ABOVE THE DRAIN LINES, THE IRRIGATION PIPES AND SLEEVES WILL BE INSTALLED BENEATH THE DRAIN LINE WITH 2" MIN. SEPARATION.

- NOTES:
1. ALL VALVE BOXES AND LIDS TO BE PLASTIC.
  2. CENTER VALVE BOX OVER EQUIPMENT ASSEMBLY TO FACILITATE SERVICING
  3. SET BOX AND ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
  4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
  5. AVOID HEAVY COMPACTION OF SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOX SIDES.
  6. SET ALL BOXES FLUSH WITH WALKS, CURBS, ETC.. IN ALL CASES.
  7. SET BOXES WITH STANDARD BRICK UNDER EACH CORNER OR IN CASE OF ROUND BOX USE TWO BRICKS 180 DEGREES APART.
  8. MAKE SURE ALL VALVE BOXES HAVE BOLTS.
  9. SEAL OPENINGS TO PREVENT ENTRANCE OF SOIL INTO BOXES.



# 1 TRENCHING

SCALE AS SHOWN

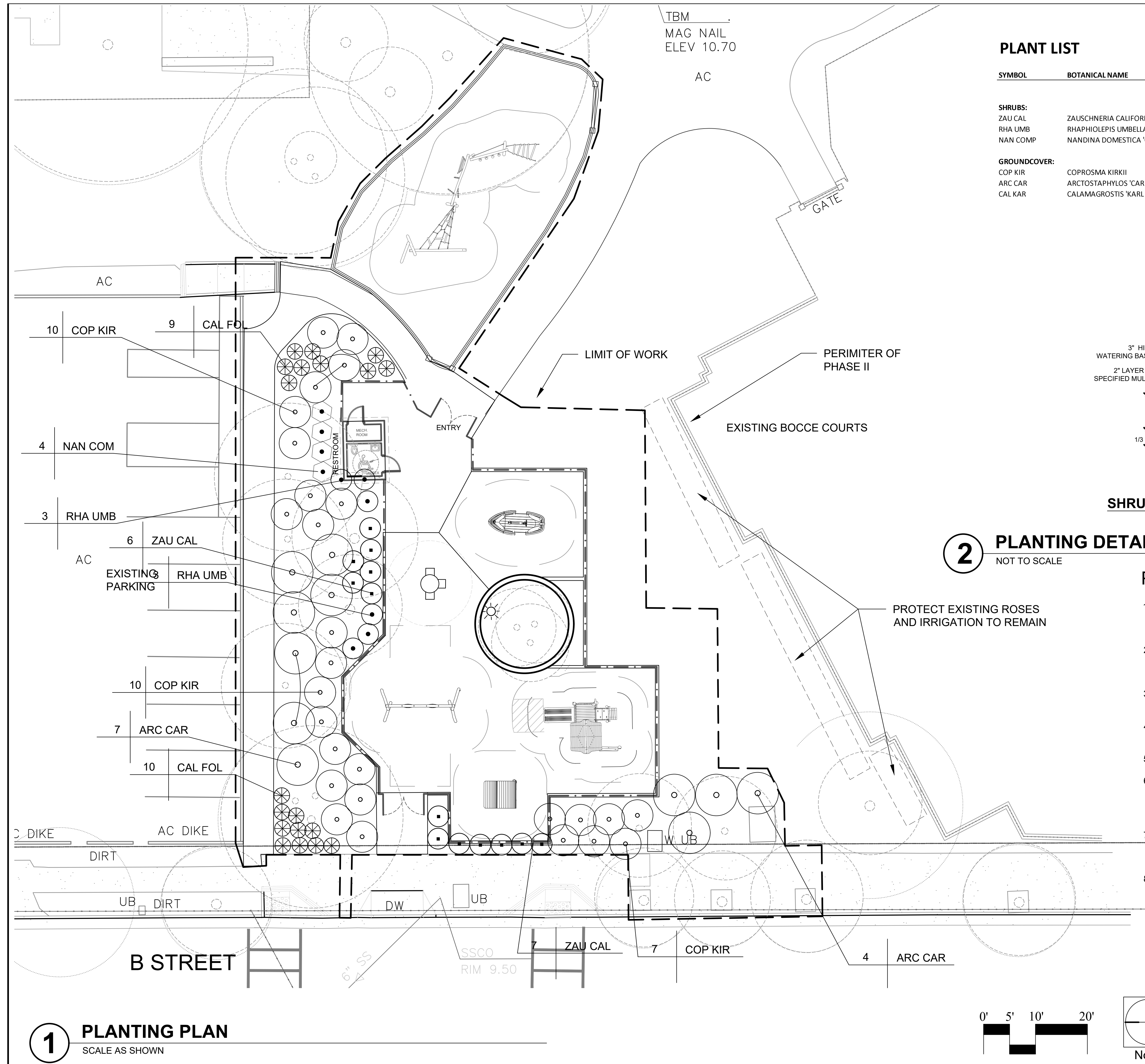
# 2 IRRIGATION BOX INSTALLATION

SCALE AS SHOWN

# 3 SHRUB BUBBLER

SCALE AS SHOWN

DESIGNED	DRAWN	CHECKED	APPROVED	NO.	REVISION	BY	DATE
PROJECT NAME				CITY OF SAN RAFAEL ALBERT PARK PLAY AREA			
DRAWING NAME				IRRIGATION DETAILS			
PROJECT NUMBER				SAN RAFAEL COUNTY OF MARIN CALIFORNIA			
 1005 A Street, Suite 305 San Rafael, California 94901 Phone 415/259-2780 Fax 415/259-2616				CITY OF SAN RAFAEL DEPARTMENT OF PUBLIC WORKS			
SCALE: 1" = 10'-0"				DATE: JULY 2, 2018			
CITY PROJECT NO.: 11299				SHEET NO.: 1-3			
DRAWING: 12				OF 15			

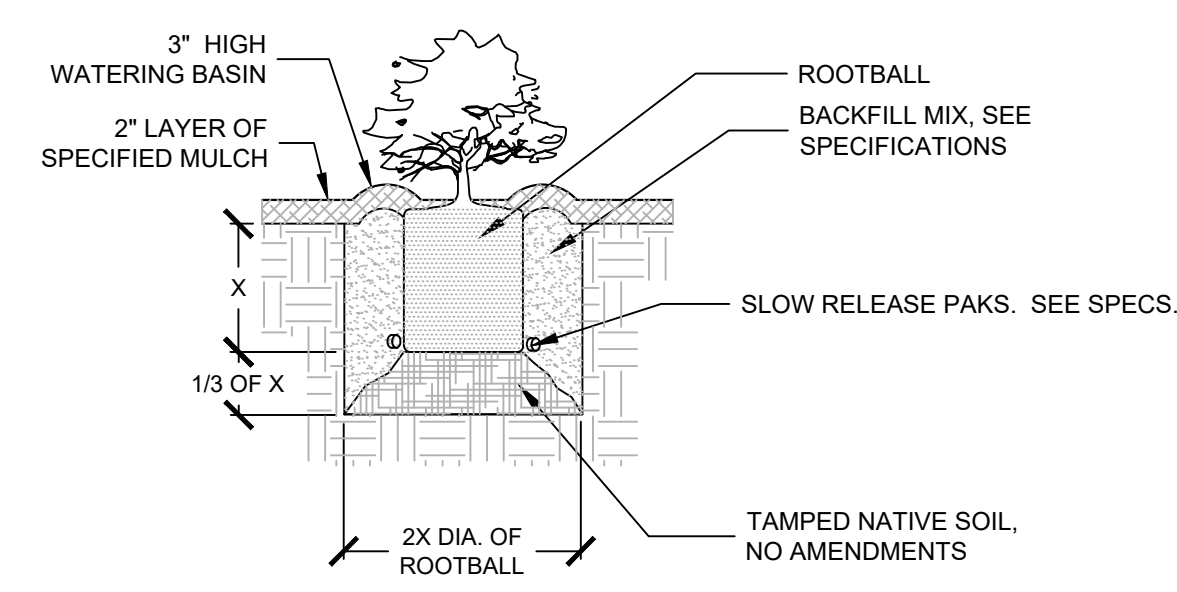


### PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>SHRUBS:</b>				
ZAU CAL	ZAUSCHNERIA CALIFORNICA	COMMON CALIFORNIA FUSCHIA	5 GAL	
RHA UMB	RHAPHIOLEPIS UMBELLATA	HAWTHORN	5 GAL	
NAN COMP	NANDINA DOMESTICA 'COMPACTA'	HEAVENLY BAMBOO	5 GAL	
<b>GROUNDCOVER:</b>				
COP KIR	COPROSMA KIRKII	CREEPING COPROSMA	1 GAL	
ARC CAR	ARCTOSTAPHYLOS 'CARMEL SUR'	MANZANITA	1 GAL	
CAL KAR	CALAMAGROSTIS 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	

#### NOTES

1. SCARIFY WALLS OF PLANTING PIT
2. SET ROOT CROWN 2" ABOVE SOIL LEVEL
3. REMOVE ALL NURSERY STAKES



### 2 PLANTING DETAILS

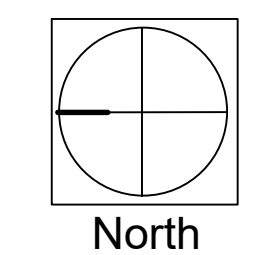
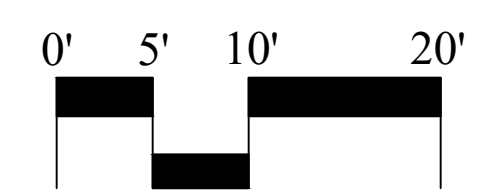
NOT TO SCALE

#### PLANTING NOTES

1. CONTRACTOR SHALL MEET ONSITE WITH THE CITY ENGINEER PRIOR TO ANY PLANTING OR SOIL PREPARATION TO REVIEW LAYOUT AND PLANT LOCATIONS.
2. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IN THE EVENT OF PLANT UNAVAILABILITY IMMEDIATELY AFTER BID AWARD. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
3. ALL PLANTS IN A GROUP PLANTING MUST MATCH IN HEIGHT, CALIPER AND VIGOR TO ASSURE EVEN GROWTH RATES.
4. AUTOMATIC IRRIGATION SYSTEM MUST BE FULLY OPERATIONAL PRIOR TO PLANTING.
5. COMPLETE SOIL PREPARATION PRIOR TO PLANTING.
6. ALL PLANTS SHALL BE INSPECTED BY THE CITY ENGINEER EITHER PRIOR TO DELIVERY OR IMMEDIATELY AFTER DELIVERY TO THE JOBSITE. THE CITY ENGINEER RESERVES THE RIGHT TO REJECT ANY PLANT MATERIALS DEEMED UNSUITABLE.
7. INSTALL A 3" DEPTH LAYER OF SPECIFIED WOOD MULCH AT ALL PLANTING AREAS AND AREAS IDENTIFIED ON THE PLAN. SUBMIT SAMPLE FOR APPROVAL.
8. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ALL SITE IMPROVEMENTS DAMAGED AS A RESULT OF THE COMPLETION OF THIS CONTRACT.

### 1 PLANTING PLAN

SCALE AS SHOWN



DESIGNED	BY	DATE
DRAWN	BY	DATE
CHECKED	BY	DATE
APPROVED	BY	DATE
PROJECT NAME		NO.
CITY OF SAN RAFAEL		100% REVIEW SET
ALBERT PARK PLAY AREA		DATE
DRAWING NAME		DATE
<b>PLANTING PLAN</b>		
SAN RAFAEL		
COUNTY OF MARIN		
CALIFORNIA		

abbey arnold  
 LANDSCAPE ARCHITECT  
 1006 A Street, Suite 305  
 San Rafael, California 94901  
 Phone 415/256-9780  
 Fax 415/256-9780  
 CA License #2616

CITY OF SAN RAFAEL  
 DEPARTMENT OF PUBLIC WORKS

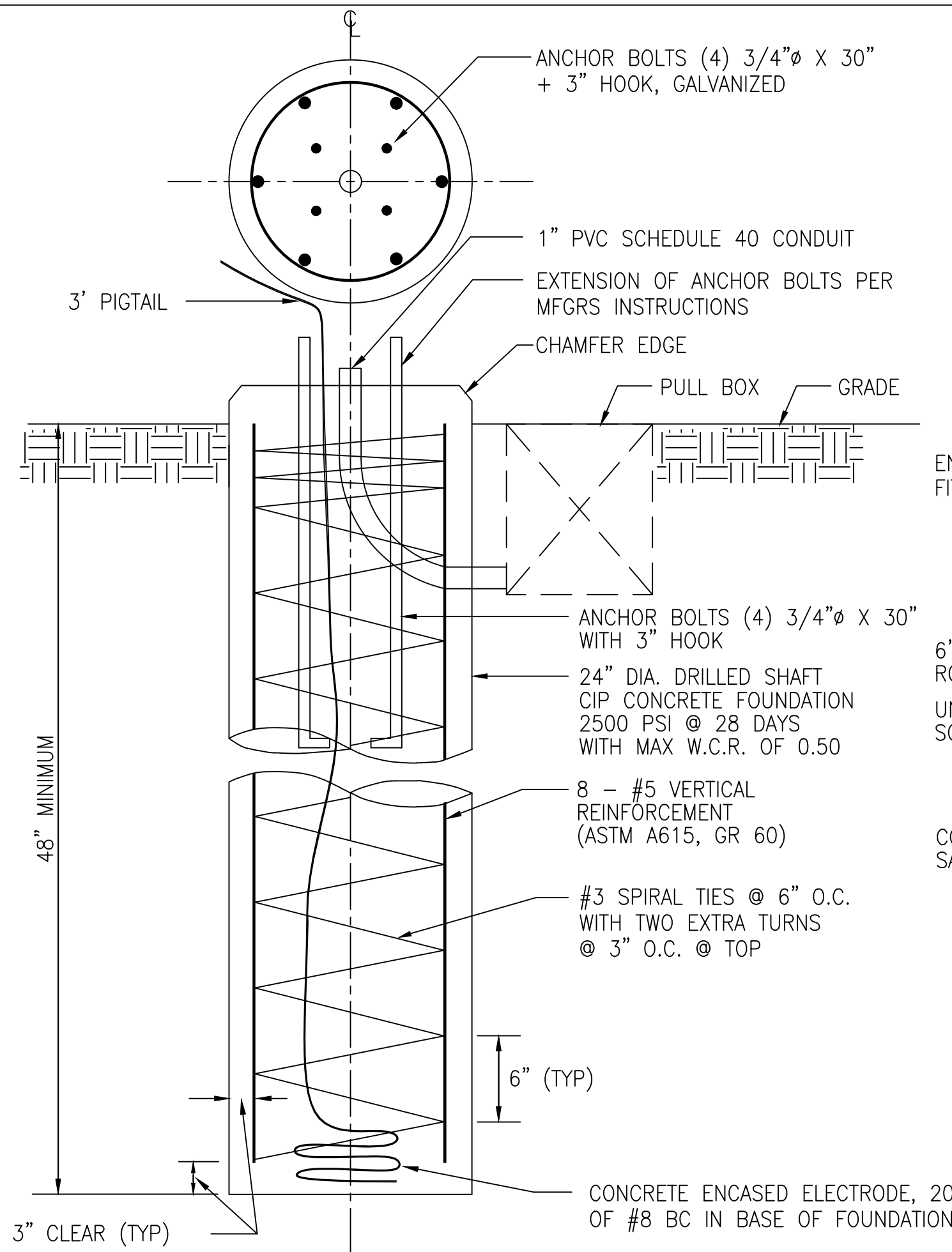
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 DATE: JULY 2, 2018  
 CITY PROJECT NO.: 11299  
 SHEET NO.: **P-1**  
 DRAWING: 13 OF 15

**LEGEND**

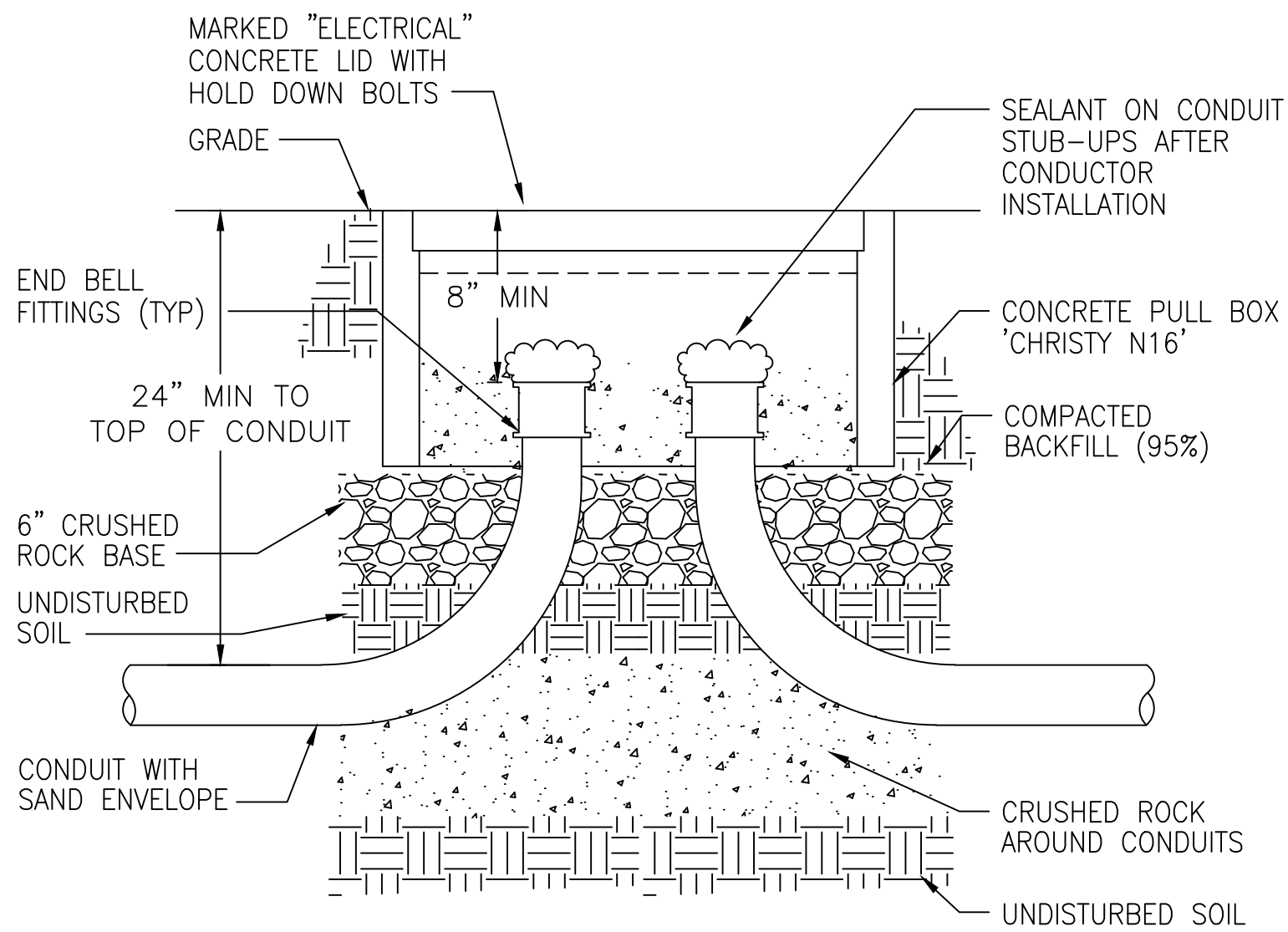
- CONDUIT UP
- - - - - CIRCUIT UNDERGROUND
- PB □ ELECTRICAL PULL BOX
- □ □ LIGHT FIXTURE
- ① 1  
E1
- ① SHEET NOTE TAG, NOTE 1

**ABBREVIATIONS**

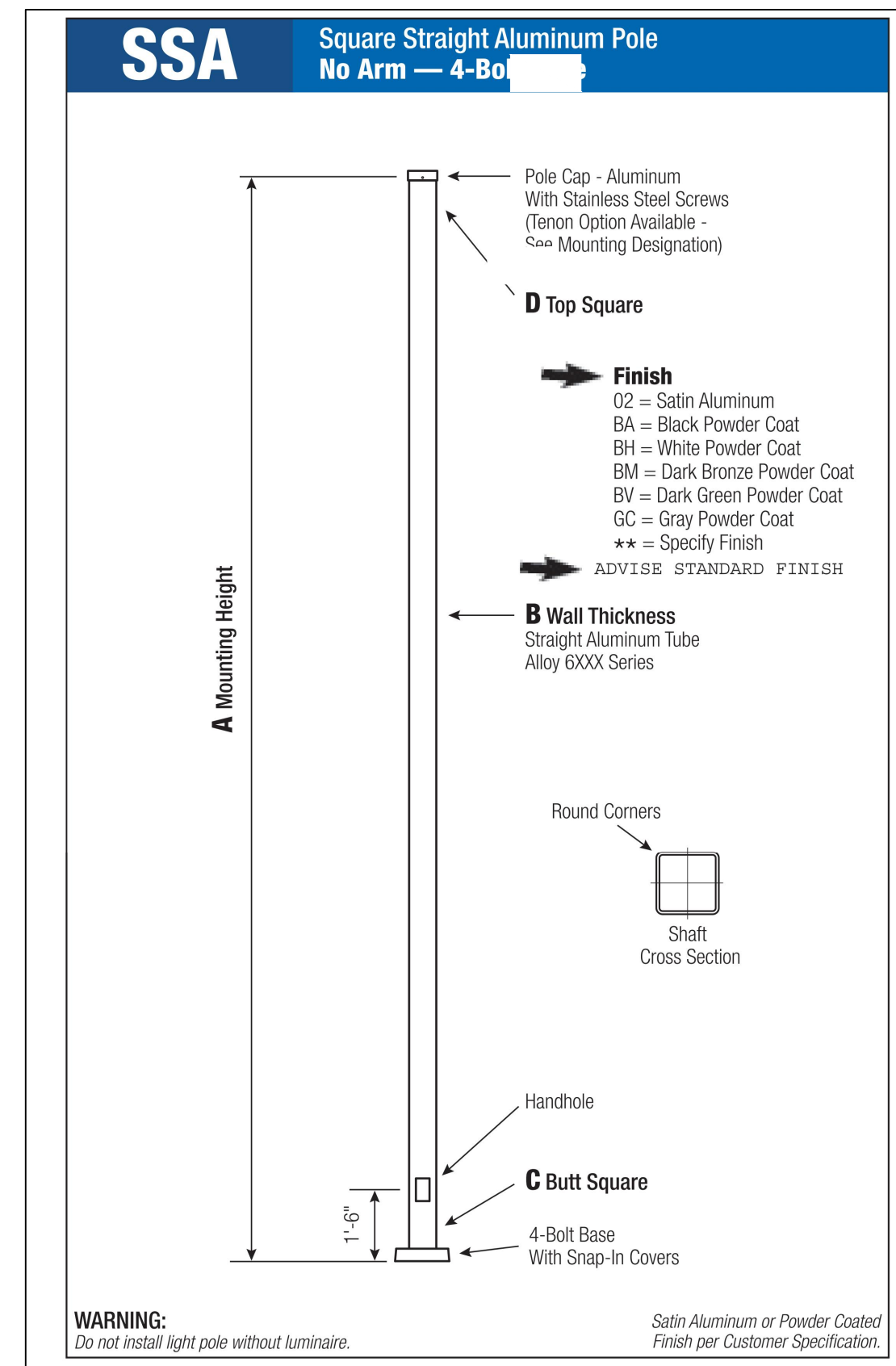
- A, AMP AMPERE
- APPROX APPROXIMATE
- AFG ABOVE FINISHED GRADE
- BP BY-PASS TEST SWITCH
- C CONDUIT
- CB CIRCUIT BREAKER
- CO CONDUIT ONLY
- CWP COPPER
- CU COLD WATER PIPE
- DIA DIAMETER
- EC ELECTRICAL CONTRACTOR
- EV ELECTRICAL VEHICLE
- (E) EXISTING TO REMAIN
- GALV GALVANIZED
- GEC GROUNDING EQUIPMENT CONDUCTOR
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- G, GND GROUND
- HDPE HIGH DENSITY POLYETHYLENE
- HP HORSEPOWER
- HV HIGH VOLTAGE
- LT LIGHT
- LTG LIGHTING
- MFCR MANUFACTURED
- MTD MOUNTED
- N NEUTRAL
- (N) NEW
- PC PHOTOCONTROL
- POC POINT OF CONNECTION
- PVC POLYVINYLCHLORIDE
- (R) EXISTING TO BE REMOVED
- RECEPT RECEPTACLE
- RR RESTROOM
- RSC RIGID STEEL CONDUIT
- SCH SCHEDULE
- SAD SEE ARCHITECTURAL DRAWINGS
- SLD SEE LANDSCAPE DRAWINGS
- SMUD SACRAMENTO MUNICIPAL UTILITY DISTRICT
- TEL TELEPHONE
- TCP TENNIS CONTROL PEDESTAL
- TS TIME SWITCH
- TYP TYPICAL
- UON UNLESS OTHERWISE NOTED
- V VOLT
- VFD VARIABLE FREQUENCY DRIVE
- W WATT
- WP WEATHERPROOF
- XFMR TRANSFORMER



**4 POLE 'F2' FOUNDATION DETAIL**  
SCALE: NONE

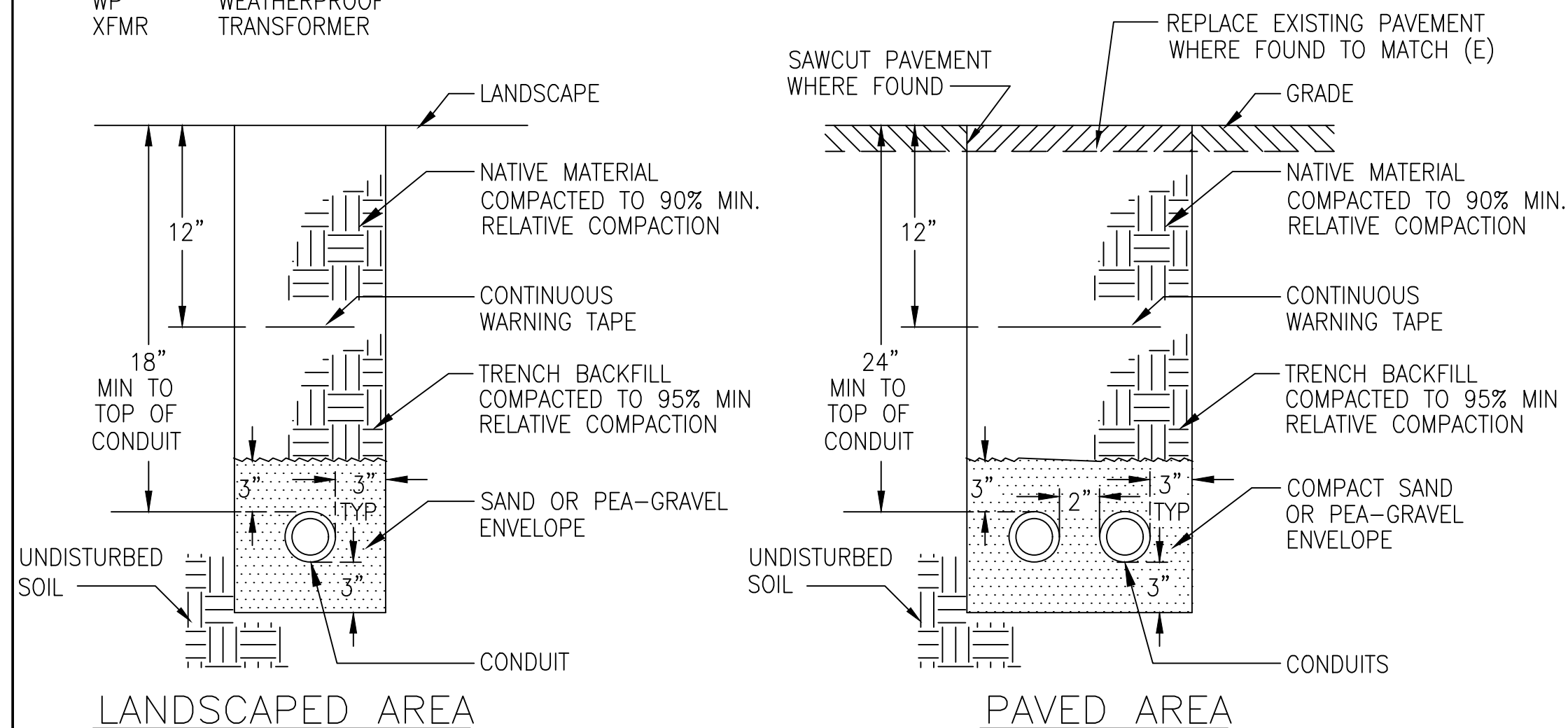


**3 PULL BOX DETAIL**  
SCALE: NONE



**1 LIGHT POLE 'F2' DETAIL**  
SCALE:

FIXTURE SCHEDULE							
SYMBOL	TYPE	DESCRIPTION	MANUFACTURER'S CATALOG NO.	MOUNTING	VOLT.	LAMPS	REMARKS
□	F1	WALL LED LIGHT, POLYCARBONATE HOUSING SUPPORTED BY A MARINE GRADE, DIE CAST ALUMINUM BASE PLATE, BRONZE FINISH	LUMINAIRE LED #YWP610-15W-120-4000K-OP-BRZ	WALL	120	15W LED 4000K	EXTERIOR LIGHT RESTROOM
○	F2	LED LUMINAIRE, LOW PROFILE HOUSING 12\"/>					
○	F3	CEILING LED LIGHT, POLYCARBONATE HOUSING SUPPORTED BY A MARINE GRADE, DIE CAST ALUMINUM BASE PLATE, BRONZE FINISH	LUMINAIRE LED #SWP610-15W-120-4000K-OP-BRZ-OCC	CEILING	120	15W LED 4000K	INTERIOR LIGHT RESTROOM
□	F4	4', 2 LAMP LED LIGHT FIXTURE	GREENLIGHTING #AL-42L	CEILING	120	36W LED 55000K	INTERIOR LIGHT MECHANICAL



**2 TRENCH DETAILS**  
SCALE:

LOAD CENTER SCHEDULE:		PANEL 'R'		120/240 VOLTS, 1 PHASE, 3 WIRE		KAIC RATING:		
MAIN BREAKER REQ'D: 50		MAIN LUGS ONLY:		BUS RATING: 50 AMPS		PANEL TYPE: PLUG-IN		
				LOCATION: RESTROOM				
DESCRIPTION	PHASE A	PHASE B	AMPS	POLE	CKT	DESCRIPTION	PHASE A	PHASE B
RECEPT	600		20	1	1	HAND DRYER	500	500
RR LIGHTS		45	20	1	3			
POLE LIGHTS	158		20	1	5	WATER HEATER		
			20	1	7			
			20	1	9			
			20	1	11			
			20	1	13			
			20	1	15			
			20	1	17			
			20	1	19			
			20	1	21			
			20	1	23			
TOTALS	758	45					4100	4100

TOTAL CONNECTED LOAD: 9003 VA  
LONG TIME CONTINUOUS LOAD: 203 X 0.25 = 50 VA  
CALCULATED FEEDER LOAD: 9053 VA (37A)

**Pole**  
The pole shaft will be constructed of seamless extruded tube of 6XXX Series Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld.

**Base Style**  
4-Bolt Cast Aluminum Base Flange of Alloy 356-T6 with Aluminum Snap-In Bolt Covers.

**Handhole**  
3" x 5" Handhole with square Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC Grounding Provision is provided opposite the Handhole.

**Anchorage**  
Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55, Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain four (4) Hex Nuts, four (4) Lock Washers, and four (4) Flat Washers (all components Galvanized Steel). A bolt circle template will be provided.

**Vibration Damper**  
When determined necessary by Hapco, a Vibration Damper will be factory-installed inside the pole shaft. Customer specification of the damper is available.

**Mounting Designation**  
**Side Drill Mount** - For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.  
**Tenon Mount** - For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.).

**EPA Notes:** Effective Projected Area (EPA) in square feet. EPA's calculated using wind velocity (mph) indicated in accordance with 2009 AASHTO L15-3 using a 25 year design life. Maximum EPA is based on the luminaire weight shown. Increased luminaire weight may reduce the maximum EPA. If weight is exceeded, or if other design life or code is required, please consult the factory.

**hapco**  
26252 Hillman Highway  
Abingdon, VA 24210  
800.388.1171  
www.hapco.com

**ZEIGER ENGINEERS INC**  
ZEIGER ENGINEERS, INC  
ELECTRICAL CONSULTANTS  
478 3RD STREET  
OAKLAND, CA 94607  
TEL (510) 452-9391  
FAX (510) 452-0661

REGISTERED PROFESSIONAL ENGINEER  
Civil  
No. E9642  
Exp. 9/30/18  
STATE OF CALIFORNIA

CALL BEFORE YOU DIG  
UNDERGROUND SERVICE ALERT  
CA: 1-800-227-2600  
CALL TWO WORKING DAYS BEFORE YOU DIG

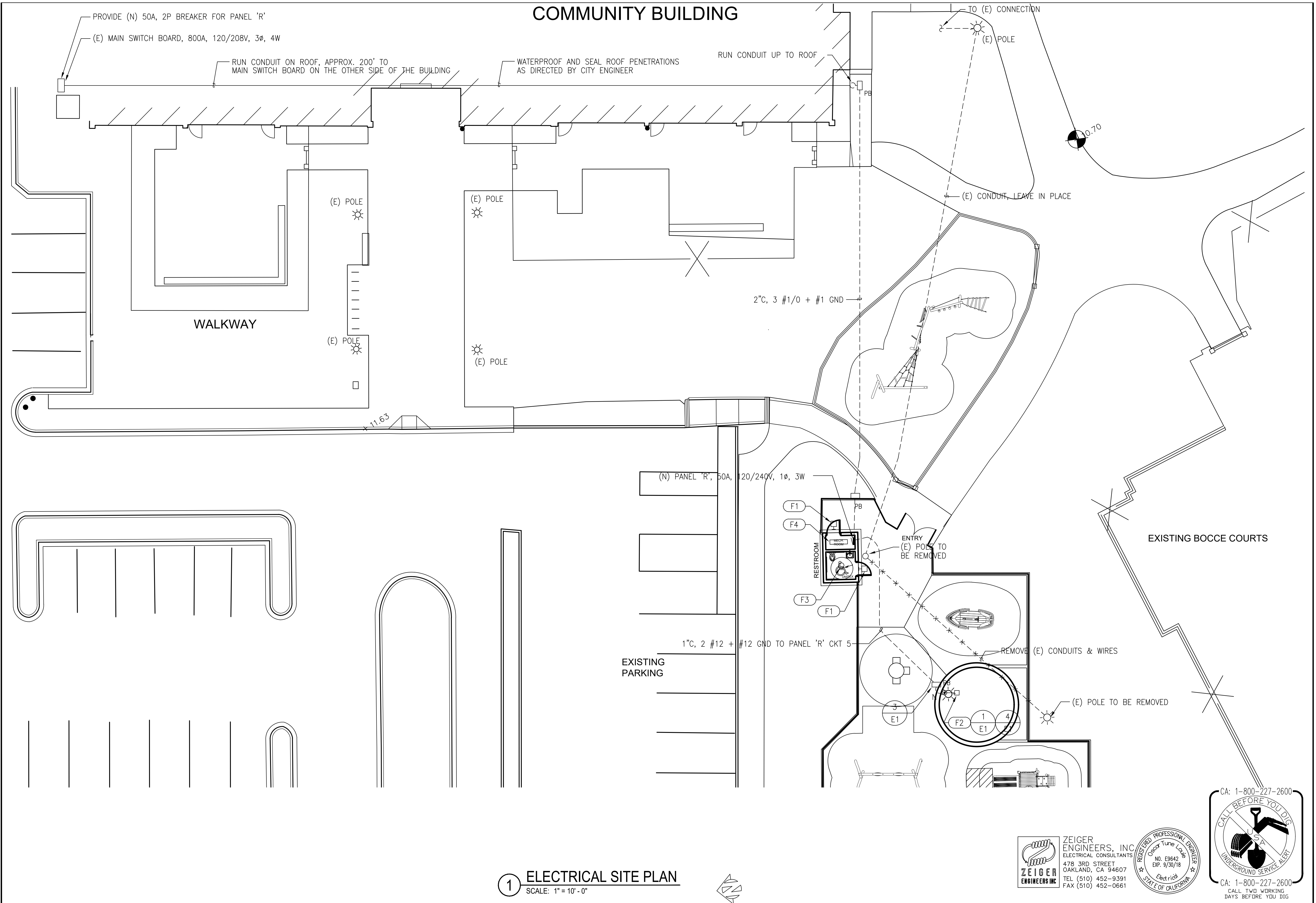
PROJECT NAME: CITY OF SAN RAFAEL ALBERT PARK PLAY AREA  
DRAWING NAME: LEGEND & DETAILS  
COUNTY OF: SAN RAFAEL CALIFORNIA

DESIGNED: [ ]  
DRAWN: [ ]  
CHECKED: [ ]  
APPROVED: [ ]

DATE: [ ]  
REVISION: [ ]  
NO.: [ ]  
100% REVIEW SET

CITY OF SAN RAFAEL  
DEPARTMENT OF PUBLIC WORKS

SCALE: [ ]  
DATE: JULY 2, 2018  
CITY PROJECT NO.: 11299  
SHEET NO.: E-1  
DRAWING: 14 OF 15



1 ELECTRICAL SITE PLAN  
SCALE: 1" = 10' - 0"



**ZEIGER ENGINEERS INC**  
ZEIGER ENGINEERS, INC  
ELECTRICAL CONSULTANTS  
478 3RD STREET  
OAKLAND, CA 94607  
TEL (510) 452-9391  
FAX (510) 452-0661



DESIGNED		NO.		REVISION		BY		DATE	
DESIGNED	DATE	NO.	DATE	REVISION	BY	NO.	DATE	REVISION	DATE
DRAWN								100%	REVIEW SET
CHECKED									
APPROVED									

PROJECT NAME		CITY OF SAN RAFAEL		COUNTY OF MARIN		CALIFORNIA	
CITY OF SAN RAFAEL		ALBERT PARK PLAY AREA		DRAWING NAME		<b>ELECTRICAL SITE PLAN</b>	
1005 A Street, Suite 305		San Rafael, California 94901		Phone 415/258-9760		CA License #2516	
CITY OF SAN RAFAEL		DEPARTMENT OF PUBLIC WORKS		SCALE:		DATE: JULY 2, 2018	
SHEET NO.:		<b>E-2</b>		CITY PROJECT NO.:		11299	
DRAWING:		15 OF 15		SHEET NO.:			