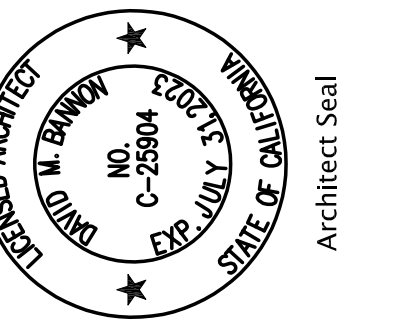


MEADOW GREEN ELEMENTARY SCHOOL SLOPED BANK RESTORATION

12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

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MEADOW GREEN ELEMENTARY SCHOOL
SLOPED BANK RESTORATION
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

TITLE SHEET

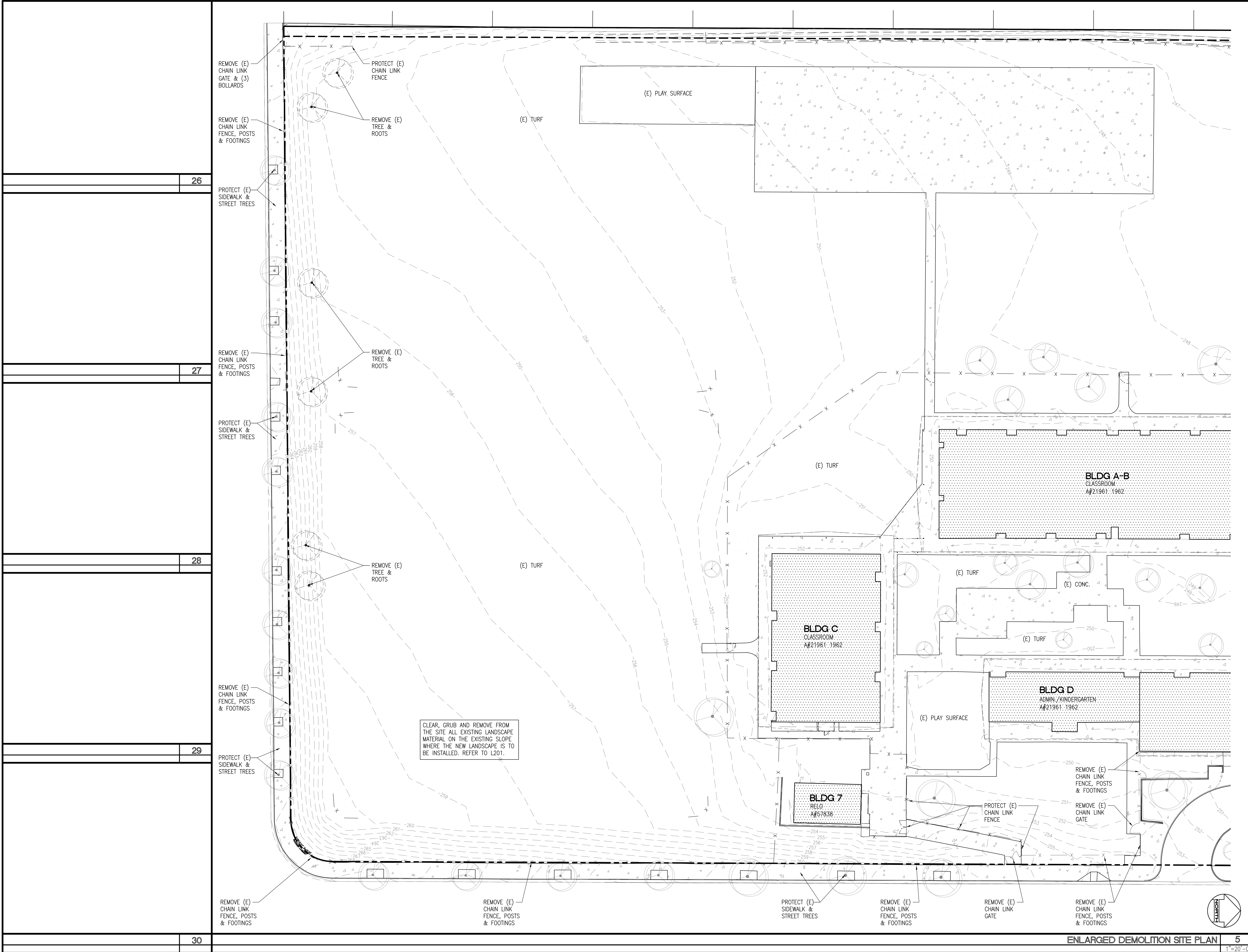
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Date: 3/14/2023
Job: #21012
Scale: N.T.S.
A#:

G001

SHEET OF XXX
XREF:

ABBREVIATIONS		RENOV/DEMO GENERAL NOTES	GENERAL NOTES	SHEET INDEX	APPLICABLE CODES	
<p>& AND ∠ ANGLE ⊕ CENTERLINE ∅ DIAMETER OR ROUND</p> <p>A.B. ANCHOR BOLT A.F.F. ABOVE FINISH FLOOR A.G. ASPHALTIC CONCRETE ADJ. ADJACENT ALUM. ALUMINUM APPROX. APPROXIMATELY ARCH. ARCHITECT</p> <p>BD. BOARD BET. BETWEEN BLDG. BUILDING BLK. BLOCK BLKG. BLOCKING BM. BEAM</p> <p>CAB. CABINET C.B. CATCH BASIN C.F. CURB FACE C.I. CAST IRON C.J. CONTROL JOINT CLG. CEILING C.O. CONCRETE OPENING C.O. COLUMN CMPO. COMPOSITION CONC. CONCRETE C.M.U. CONCRETE MASONRY</p> <p>CONT. CONTINUOUS CONTR. CONTRACTOR CORR. CORRIDOR</p> <p>DET. DETAIL D.F. DRINKING FOUNTAIN D.G. DECOMPOSED GRANITE DIA. DIAMETER DIM. DIMENSION DIS. DISPENSER DIV. DIVISION DN. DOWN DBL. DOUBLE DFTN. DRINKING FOUNTAIN DRY S. DRY STANDPIPE D.S. DOWNSPOUT DWG. DRAWING</p> <p>(E) EXISTING EA. EACH E.J. EXPANSION JOINT ELEC. ELECTRIC ELEV. ELEVATION ENT. ENTRANCE EMER. EMERGENCY ENCL. ENCLOSURE EQ. EQUAL EQUIP. EQUIPMENT EXIST. EXISTING E.G. EXISTING GRADE EXPO. EXPOSED EXP. EXPANSION EXT. EXTERIOR</p> <p>F.D. FLOOR DRAIN F.E. FIRE EXTINGUISHER F.E.C. FIRE EXTINGUISHER & CABINET F.F. FINISH FLOOR F.G. FINISH GRADE F.H. FIRE HYDRANT F.H.W.S. FLATHEAD WOOD SCREWS</p> <p>FIN. FINISH F.L. FLOW LINE FLASH. FLASHING F.F.D. FUSIBLE LINK FIRE DAMPER</p> <p>FLUOR. FLUORESCENT F.O.C. FACE OF CONCRETE F.O.F. FACE OF FINISH F.O.M. FACE OF MASONRY F.O.S. FACE OF STUD F.O.V. FACE OF VENEER F.R.A. FIRE RATED ASSEMBLY F.R.P. FIBERGLASS REINFORCED PANELS</p> <p>F.S. FLOOR SINK FT. FOOT OR FEET FURR. FURRING F.V. FIELD VERIFY</p> <p>GA. GAUGE GALV. GALVANIZE G.I. GALVANIZED IRON GL. GLASS GLU. LAM. GLUE LAMINATED GND. GROUND GR. GRADE GYP. GYPSUM</p> <p>H.B. HOSE BIBB H.M. HOLLOW METAL HORIZ. HORIZONTAL HR. HOUR HTG. HEIGHT HTG. HEATING HDWD. HARDWOOD</p> <p>I.D. INSIDE DIAMETER INSUL. INSULATION INT. INTERIOR INV. INVERT JAN. JANITOR JT. JOINT</p> <p>KIT. KITCHEN</p> <p>LAB. LABORATORY LAM. PLAS. LAMINATED PLASTIC LAV. LAVATORY LVR. LOUVER</p> <p>MAT'L MATERIAL FT. MAXIMUM M.V. MEDICINE CABINET M.V.P. METAL CORNER BEAD MECH. MECHANICAL MET. METAL MFR. MANUFACTURER MIN. MINIMUM MISC. MISCELLANEOUS M.O. MASONRY OPENING MTD. MOUNTED MUL. MULLION</p> <p>NAT. NATURAL N.G. NATURAL GRADE N.I.A. NOT IN CONTRACT NO./# NUMBER NOM. NOMINAL NOT TO SCALE</p> <p>O.A. OVERALL OBS. OBSOLETE O.C. ON CENTER O.D. OUTSIDE DIAMETER O.H. OPPOSITE HAND OPG. OPENING OSA. OUTSIDE AIR</p> <p>PART. PARTITION P.C.C. PORTLAND CEMENT CONCRETE P.H. FRAM. HARDWARE P.L. PLATE P.L. PROPERTY LINE PLAS. PLASTER PLYWD. PLYWOOD PR. PAIR P.J. PLASTIC CONTROL JOINT</p> <p>R. RISER R.B. RUBBER BASE RAD. RADIUS RDWD. REDWOOD REF. REFERENCE REF. REFERRERATOR REG. REGISTER REINF. REINFORCEMENT REQ'D. REQUIRED RESIL. RESILIENT REV. REVERSE RM. ROOM RO. ROUGH R.O. ROUGH OPENING</p> <p>S. SOUTH S.B. SPLASH BLOCK S.C. SOLID CORE S.D. STORM DRAIN SCHED. SCHEDULE SECT. SECTION SHT. SHEET SIM. SIMILAR SLDG. SLIDING SM. F. SMOOTH FACE S.M.S. SHEET-METAL SCREW SPEC. SPECIFICATIONS SP. F. SPLIT FACE SQ. SQUARE S.S. SERVICE SINK SST. STAINLESS STEEL STAT. STATIONARY STD. STANDARD STL. STEEL STO. STORAGE STRUCT. STRUCTURAL SUSP. SUSPENDED S.W.L. STEEL WINDOW WALL SYM. SYMMETRICAL</p> <p>T. TREAD T.B. TACKBOARD T. & B. TOP & BOTTOM T.B.D. TO BE DECIDED T.C. TOP OF CURB T.D. TOWEL DISPENSER T.G. TOP OF GRATE T. & G. TONGUE & GROOVE T.O.M. TOP OF MASONRY T.O.P. TOP OF PLATE AT PARAPET T.O.R. TOP OF ROOFING T.O.S. TOP OF SHEATING T.P. TOP OF PAVING T.S.G. TAPERED STEEL GIRDOR</p> <p>T.W. TOP OF WALL TEL. TELEPHONE TEMP. TEMPERATURE TERR. TERRAZZO TR. TRANSOM TRANSF. TRANSFORMER TYP. TYPICAL</p> <p>U.N.O. UNLESS NOTED OTHERWISE U.O.F. UNDERSIDE OF FRAME UR. URRAL</p> <p>V. VENT VAR. VARIES V.C.T. VINYL COMPOSITION TILE VERT. VERTICAL VEST. VESTIBULE V.F.W.C. VINYL FABRIC WALL COVERING V.G.D.F. VERTICAL GRAIN DOUGLAS FIR VENT TO ROOF</p> <p>W/ WITH W.C. WATER CLOSET WD. WOOD W.I. WROUGHT IRON W.W.M. WELDED WIRE MESH</p>	<p>1. COORDINATE ALL DEMOLITION WORK WITH REPAIR WORK. COORDINATE ARCHITECTURAL, ELECTRICAL AND MECHANICAL WORK, EACH WITH THE OTHERS, FOR LOCATIONS, EXTENT OF WORK AND SIZES.</p> <p>2. COORDINATE NEW OPENINGS IN EXISTING WALLS AND FLOORS FOR PIPES AND CONDUITS WITH MECHANICAL AND ELECTRICAL CONSTRUCTION.</p> <p>3. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED AND/OR DEMOLISHED MATERIAL, WASTE AND DEBRIS CAUSED BY THE NEW WORK. THIS MATERIAL SHALL BE REMOVED FROM THE PROPERTY AND TAKEN TO A LEGALLY OPERATED DISPOSAL SITE.</p> <p>4. REMOVAL OF ALL DEBRIS SHALL BE DONE CAREFULLY AND NOT ALLOWED TO FALL AND TO IMPACT EXISTING STRUCTURE, WORK AND/OR FINISHES. REPAIR ANY DAMAGE AFTER REPORTING AND RECEIVING INSTRUCTIONS FOR REMEDIAL WORK.</p> <p>5. BEFORE PROCEEDING WITH DEMOLITION, THE CONTRACTOR SHALL VERIFY THAT THE REMOVAL OF EXISTING BUILDING COMPONENTS DOES NOT REQUIRE SHORING AND/OR BRACING, WHERE DEMOLITION WORK NECESSITATES THE PROVISION OF SHORING AND/OR BRACING, THE CONTRACTOR SHALL PROVIDE SUCH UNLESS SPECIFICALLY SHOWN OTHERWISE.</p> <p>6. MATERIALS, EQUIPMENT OR CONSTRUCTIONS NOT NOTED IN THE CONSTRUCTION DOCUMENTS, ARE A PART OF THE WORK, AND IF DISCOVERED DURING THE COURSE OF THE WORK, SHALL BE REPORTED FOR INSTRUCTIONS PRIOR TO REMOVAL OR ABANDON IN PLACE.</p> <p>7. IN ADDITION TO DEMOLITION SHOWN, CUT, MOVE, DISMANTLE OR SALVAGE ITEMS NECESSARY TO PROVIDE ACCESS TO ALLOW REPAIR WORK TO PROCEED. INCLUDE SUCH ITEMS SUCH AS :</p> <p>A. REPAIR OR REMOVAL OF HAZARDOUS OR UNSANITARY CONDITIONS.</p> <p>B. REMOVAL OF ABANDONED ITEMS AND ITEMS SERVING NO USEFUL PURPOSE SUCH AS ALL ABANDONED PIPING, CONDUIT AND WIRING.</p> <p>C. REMOVAL OF UNSUITABLE OR EXTRANEOUS MATERIALS NOT INDICATED FOR SALVAGE, SUCH AS ABANDONED FURNISHINGS AND EQUIPMENT, AND DEBRIS SUCH AS ROTTED WOOD, RUSTED METALS AND DETERIORATED CONCRETE.</p> <p>D. CLEANING OF ALL SURFACES AND REMOVAL OF SURFACE FINISHES AS NEEDED TO INSTALL NEW WORK AND FINISHES.</p> <p>8. PATCH, REPAIR AND REFINISH EXISTING ITEMS TO REMAIN TO THE SPECIFIED CONDITION FOR EACH MATERIAL, WITH A CRAFTSMAN LIKE TRANSITION TO ADJACENT NEW ITEMS AND CONSTRUCTION.</p> <p>9. PATCH AND EXTEND REPAIR WORK TO MEET AND MATCH EXISTING WORK USING SKILLED MECHANICS WHO ARE CAPABLE OF MATCHING EXISTING QUALITY OF WORKMANSHIP. QUALITY OF PATCHED OR EXTENDED WORK SHALL NOT BE LESS THAN THAT SPECIFIED FOR THE NEW WORK.</p> <p>10. PRODUCTS FOR PATCHING, EXTENDING AND MATCHING: PROVIDE SAME PRODUCT OF TYPES OF CONSTRUCTION AS THAT IN EXISTING STRUCTURE, AS NEEDED TO PATCH, EXTEND OR MATCH EXISTING WORK. GENERALLY CONTRACT DOCUMENTS WILL NOT DEFINE PRODUCTS OF STANDARDS OR WORKMANSHIP PRESENT IN EXISTING CONSTRUCTION. CONTRACTOR SHALL DETERMINE PRODUCTS BY INSPECTION AND TESTING. WORKMANSHIP SHALL MATCH IN ALL RESPECTS THE EXISTING AS A SAMPLE OF COMPARISON.</p> <p>11. THE PRESENCE OF A PRODUCT, FINISH, OR TYPE OF CONSTRUCTION REQUIRES THAT PATCHING, EXTENDING OR MATCHING SHALL BE PERFORMED AS NECESSARY TO MAKE WORK COMPLETE AND CONSISTENT TO IDENTICAL STANDARDS OF QUALITY.</p> <p>12. PATCH OR REPLACE ANY PORTION OF AN EXISTING FINISHED SURFACE WHICH IS FOUND TO BE DAMAGED, LIFTED, DISCOLORED OR SHOWS OTHER IMPERFECTIONS WITH MATCHING MATERIAL.</p> <p>A. PROVIDE ADEQUATE SUPPORT OF SUBSTRATE PRIOR TO PATCHING THE FINISH.</p> <p>B. REFINISH PATCHED PORTIONS OF PAINTED OR COATED SURFACES IN A MANNER TO PRODUCE UNIFORM COLOR AND TEXTURE OVER THE ENTIRE SURFACE.</p> <p>C. WHEN EXISTING SURFACE FINISH CANNOT BE MATCHED, REFINISH ENTIRE SURFACE TO NEAREST INTERSECTIONS.</p> <p>13. WHEN NEW WORK ABUTTS OR FINISHES FLUSH WITH EXISTING WORK, MAKE A SMOOTH AND CRAFTSMAN LIKE TRANSITION. PATCHED WORK SHALL MATCH EXISTING AND ADJACENT WORK IN THE MATERIAL, FINISH, TEXTURE AND APPEARANCE SO THE PATCH AND TRANSITION IS INVISIBLE AT A DISTANCE OF SIX FEET WHEN VIEWED FROM ALL ANGLES BETWEEN 90 AND 45 DEGREES TO THE PLANE OF THE HATCH.</p> <p>14. ALL ADJACENT WORK AND CONSTRUCTIONS DAMAGED DUE TO DEMOLITION SHALL BE REPAIRED AS PART OF THIS CONTRACT.</p> <p>15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXPOSED EXISTING STRUCTURES AT THE WORK AREA FROM WEATHER AND OTHER INCLEMNT CONDITIONS AND FROM THE INSTALLATION OF OTHER WORK. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK, SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.</p> <p>16. CONTRACTOR SHALL INCLUDE THE REMOVAL OF ALL ITEMS WITHIN THE WALLS, OR PORTIONS OF WALLS BEING REMOVED IN HIS SCOPE OF WORK. ABANDONED CONDUIT AND PIPING EXTENDING FROM THE CONCRETE SLAB SHALL BE REMOVED AND CAPPED PROPERLY.</p>	<p>1. VERIFY ALL DIMENSIONS, LOCATIONS OF EXISTING UTILITIES, AND CONDITIONS ON THE JOB SITE PRIOR TO THE START OF WORK OR PORTIONS OF THE WORK. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS. EXISTING CONDITIONS ARE INDICATED AS A RESULT OF FIELD OBSERVATIONS, INFORMATION SHOWN ON AVAILABLE DOCUMENTS AND FIELD CONDITIONS AT THE TIME OF PREPARATION.</p> <p>2. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.</p> <p>3. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.</p> <p>4. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.</p> <p>5. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.</p> <p>6. DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY NOTED OTHERWISE.</p> <p>7. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION.</p> <p>8. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED, REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.</p> <p>9. CONTRACTOR SHALL COORDINATE BETWEEN THE REQUIREMENTS OF ALL DISCIPLINES HEREIN AND BETWEEN DRAWING AND SPECIFICATION REQUIREMENTS IN ORDER THAT ALL ITEMS RELATE TO ONE ANOTHER. NOTIFY ARCHITECT IMMEDIATELY REGARDING ANY ITEMS NOT COORDINATED.</p> <p>10. KEYNOTES DO NOT DESCRIBE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES. NO TRADE JURISDICTIONAL ALLOCATION OF THIS WORK IS INTENDED BY THE SUBMISSION OF THE KEYNOTES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO SUBDIVIDE THE WORK IN THE MANNER HE DEEMS NECESSARY.</p> <p>11. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE ISSUED BEFORE PROCEEDING WITH THE WORK.</p>	<p>12. CONTRACTOR SHALL STOP WORK AND NOTIFY ARCHITECT IMMEDIATELY IF ANY ASBESTOS CONTAINING MATERIAL (ACM) OR SUSPECTED ACM IS FOUND DAMAGED OR DISTURBED.</p> <p>13. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING, CONDUIT, ETC. AND TO PREVENT HAZARD TO PERSONNEL AND/OR TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES. THE DESIGN PROFESSIONALS ARE NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES, WHETHER OR NOT SHOWN ON AND INSTALLED BY THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DISTRICT SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.</p> <p>14. CHANGE TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD).</p> <p>15. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK.</p> <p>16. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.</p> <p>17. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.</p> <p>18. PROVIDE CONSTRUCTION AND FIRE SAFETY PER CFC CHAPTER 33.</p> <p>19. A COMPLETE AND LEGIBLE COPY OF TITLE 24, PARTS 1 THROUGH 5 & 9, CCR, MUST BE KEPT ON SITE DURING CONSTRUCTION.</p> <p>20. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATION (CCR).</p> <p>21. THE SCOPE OF WORK IS INDICATED ON THE COVER SHEET.</p> <p>22. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.</p>	<p>GENERAL G001 TITLE SHEET 1 SHEET</p> <p>ARCHITECTURAL A001 OVERALL SITE PLAN 4 SHEETS A005 ENLARGED DEMOLITION SITE PLAN A006 ENLARGED SITE PLAN A007 SITE NOTES & DETAILS</p> <p>CIVIL C1.00 GRADING PLAN 1 SHEET</p> <p>LANDSCAPE L101 IRRIGATION PLAN 7 SHEETS L102 IRRIGATION LEGEND AND NOTES L103 IRRIGATION DETAILS L104 IRRIGATION DETAILS L105 IRRIGATION CALCULATIONS</p> <p>L201 PLANTING PLAN L202 PLANTING NOTES AND DETAILS</p>	<p>PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2023</p> <p>2022 California Administrative Code (CAC), Part 1, Title 24 C.C.R. 2022 California Building Code (CBC), Part 2, Title 24 C.C.R. 2022 California Electrical Code (CEC), Part 3, Title 24 C.C.R. 2022 California Mechanical Code (CMC), Part 4, Title 24 C.C.R. 2022 California Plumbing Code (CPC), Part 5, Title 24 C.C.R. 2022 California Energy Code (CEC), Part 6, Title 24 C.C.R. 2022 California Fire Code (CFC), Part 9, Title 24 C.C.R. 2022 California Existing Building Code (CEBC), Part 10, Title 24 C.C.R. 2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 C.C.R. 2022 California Referenced Standards Code, Part 12, Title 24 C.C.R. Title 19, C.C.R., Public Safety, State Fire Marshall Regulations</p> <p>APPLICABLE STANDARDS For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.</p>	
			SYMBOLS		DIRECTORY	
			<p>DIRECTION OF SECTION CUT DRAWING NO. _____</p> <p>SHEET NO. _____</p> <p>DRAWING NO. _____ INTERIOR ELEVATION DESIGNATION SHEET NUMBER _____</p> <p>ROOM NAME _____ CLASSROOM ROOM NAME TAG ROOM NO. _____ C108</p> <p>DRAWING NO. _____ SHEET NO. _____</p> <p>DRAWING NO. _____ SHEET NO. _____</p> <p>DRAWING NO. _____ SHEET NO. _____</p> <p>DIRECTION OF SECTION CUT SHEET NO. _____</p>		<p>OWNER LOWELL JOINT SCHOOL DISTRICT 11019 VALLEY HOME AVE. WHITTIER, CA 90603 TEL: 562.902.4291 CONTACT: DAVID BENNETT</p> <p>ARCHITECT GHATAODE BANNON ARCHITECTS 700 W. 18TH STREET, UNIT B COSTA MESA, CA 92627 TEL: 714.665.8030 FAX: 714.665.8029 CONTACT: DAVID BANNON</p> <p>CIVIL ENGINEER FPL and Associates, Inc. 10 COPORATE PARK, SUITE 310 IRVINE, CA 92606 TEL: (949) 252-1688 CONTACT: RON CANEDY</p> <p>LANDSCAPE ARCHITECT NUVIS LANDSCAPE ARCHITECTURE 20250 SW ACACIA ST., SUITE 260 NEWPORT BEACH, CA 92660 TEL: (714) 754-7311 CONTACT: BOB STONE</p>	
			VICINITY MAP			



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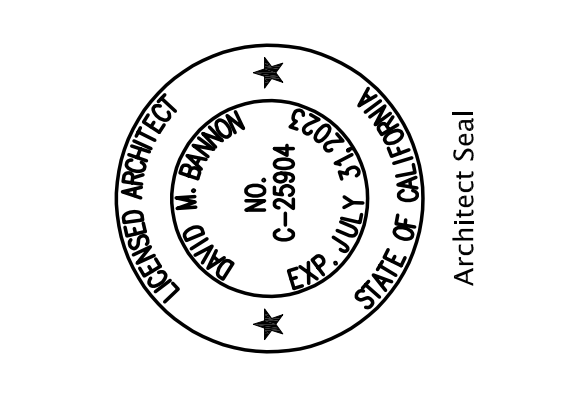
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CLEAR, GRUB AND REMOVE FROM THE SITE ALL EXISTING LANDSCAPE MATERIAL ON THE EXISTING SLOPE WHERE THE NEW LANDSCAPE IS TO BE INSTALLED. REFER TO L201.

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**MEADOW GREEN ELEMENTARY SCHOOL
 SLOPED BANK RESTORATION**
 12025 GROVEDALE DRIVE, WHITTIER, CA 90604
 LOWELL JOINT SCHOOL DISTRICT
ENLARGED DEMOLITION SITE PLAN

REVISIONS:

Date: 3/14/2023
 Job: #2101.2
 Scale:
 A#:

A005
 SHEET - OF XXX
 XREF:

6" WIDE C.L.
GATE PER
17/A007 W/
MOWSTRIP
THRESHOLD
PER 30/A007
FLUSH W/
GRADE

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A007

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A007

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A007

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A007

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A007

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A007

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A007

3' WIDE C.L.
GATE PER
17/A007

6" TALL C.L.
FENCE PER
16/A007

8" WIDE C.L.
GATE PER
17/A007

29
A007 SIM.

8" WIDE DBL.
C.L. GATE PER
22/A007

(E) TURF

(E) TURF

(E) TURF

(E) TURF

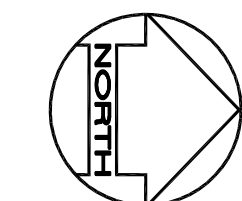
(E) PLAY SURFACE

BLDG C
CLASSROOM
A#21961-1962

BLDG A-B
CLASSROOM
A#21961-1962

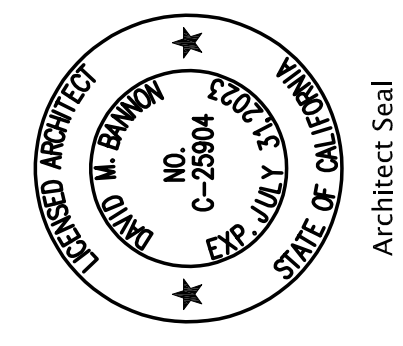
BLDG D
ADMIN./KINDERGARTEN
A#21961-1962

BLDG 7
RELO.
A#57838



ENLARGED SITE PLAN 5
1"=20'-0"

G&A CHATTAHOOCHEE BANNON ARCHITECTS
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SLOPED BANK RESTORATION**
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

ENLARGED SITE PLAN

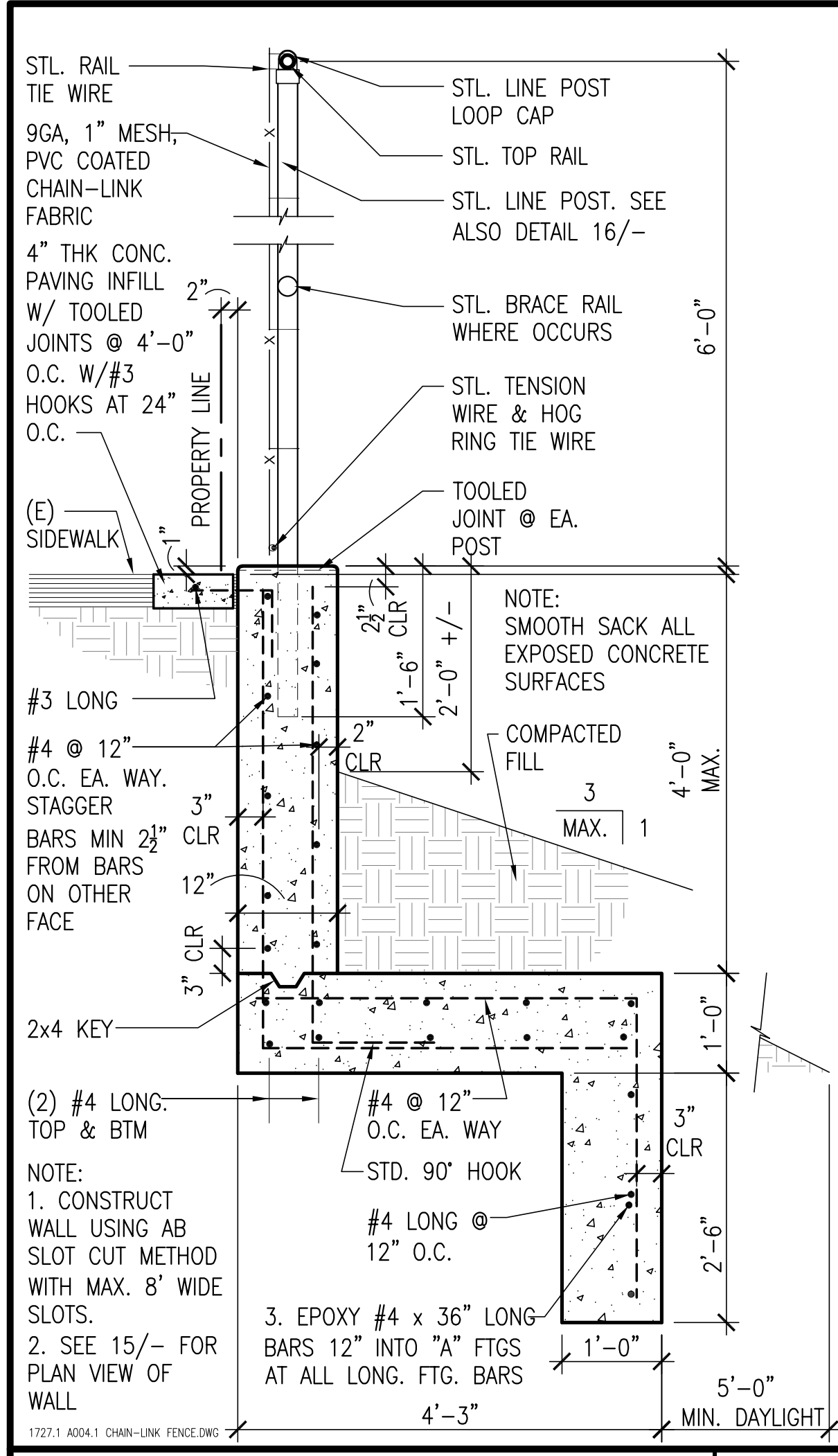
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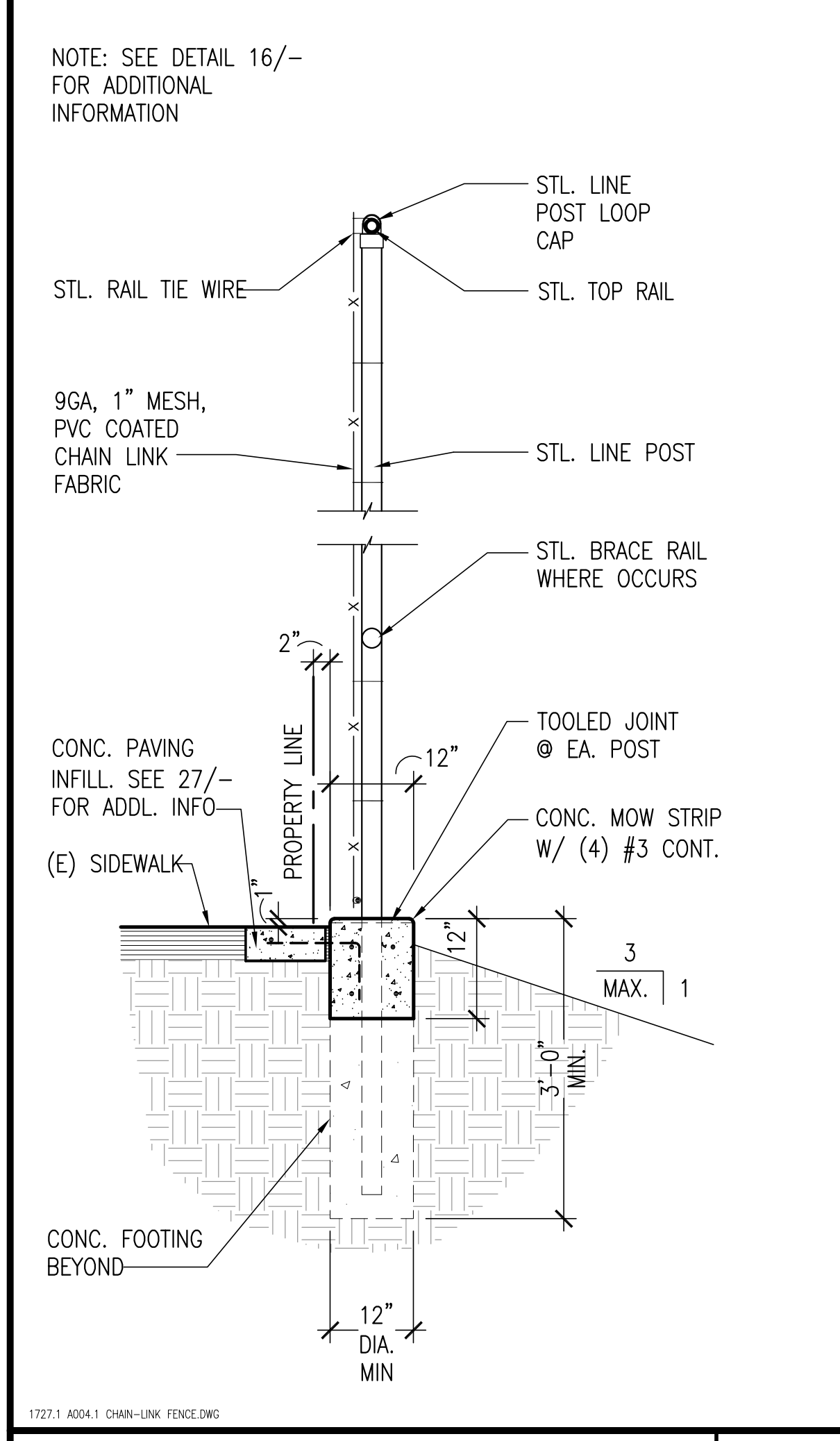
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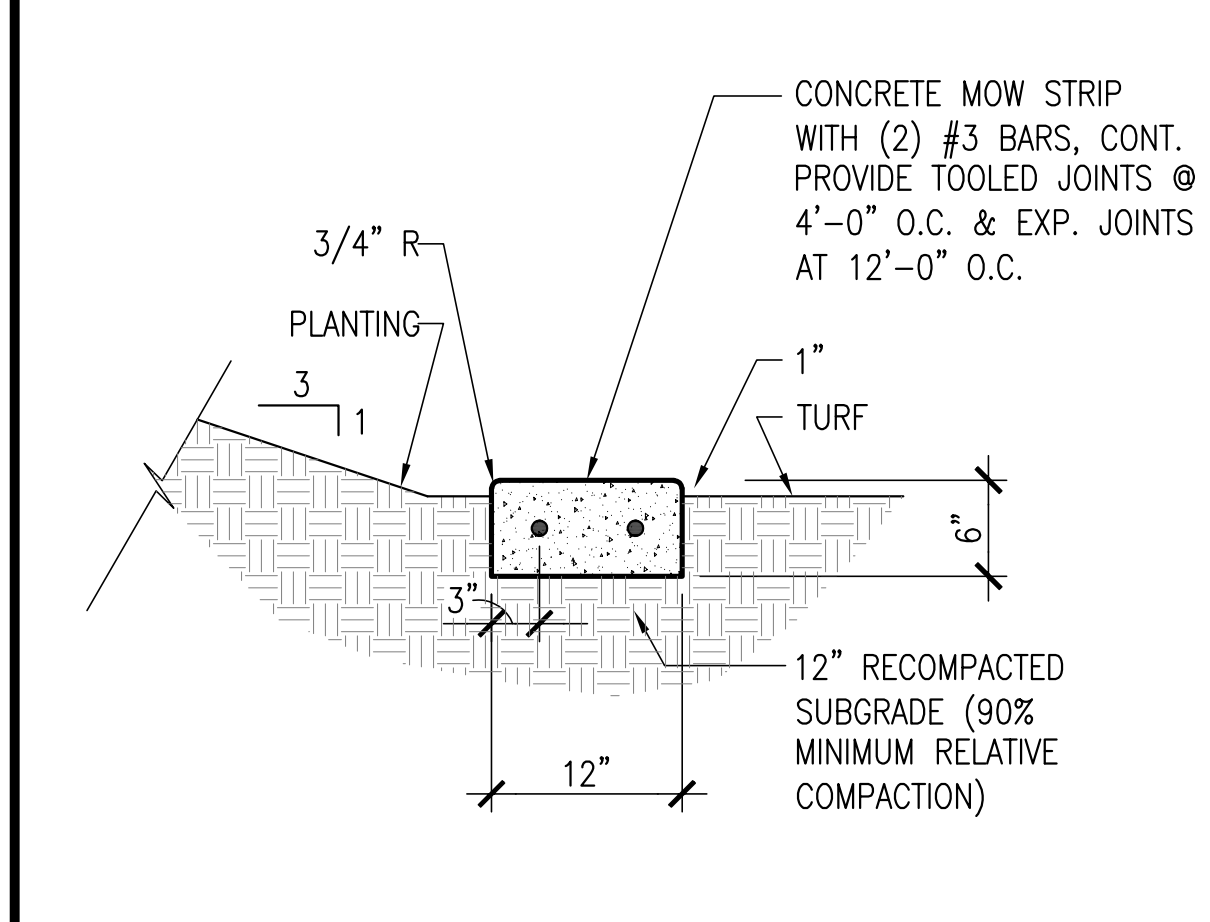
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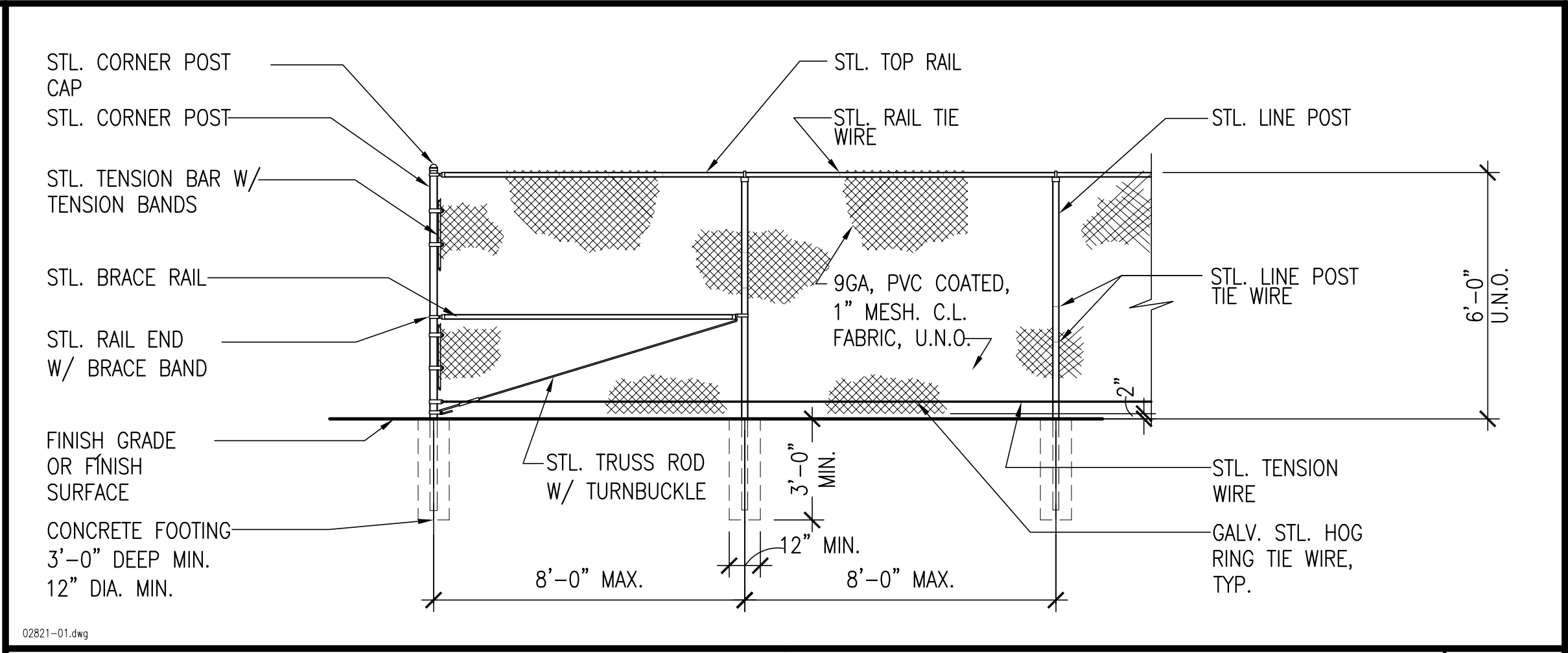
CHAIN LINK FENCE • RETAINING WALL 27
CHAIN LINK FENCE (N.L.C.), SLEEVES IN CONTRACT 3/4"x1'-0"



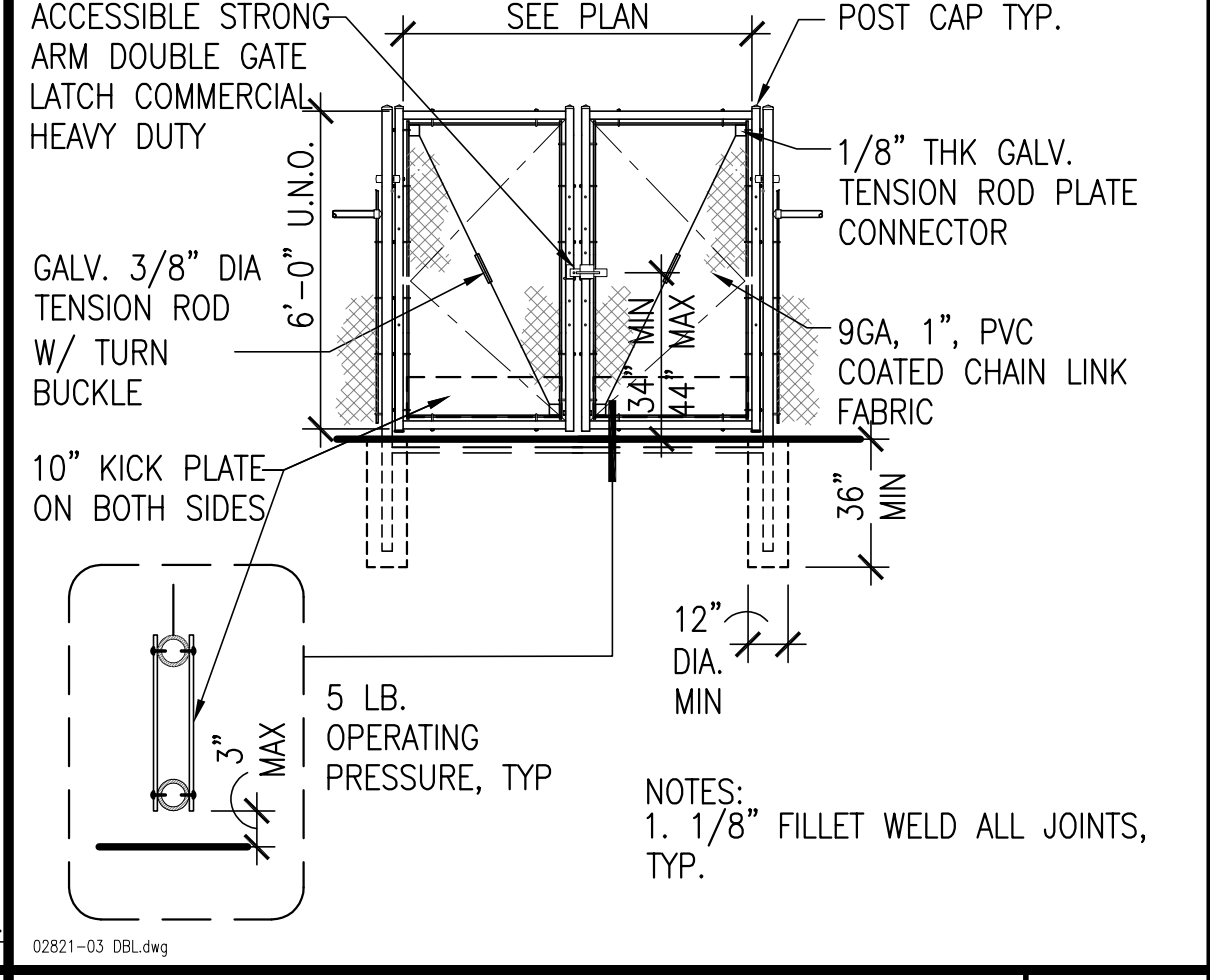
CHAIN LINK FENCE • MOW STRIP 29
CHAIN LINK FENCE AND FOOTINGS (N.L.C.) 3/4"x1'-0"



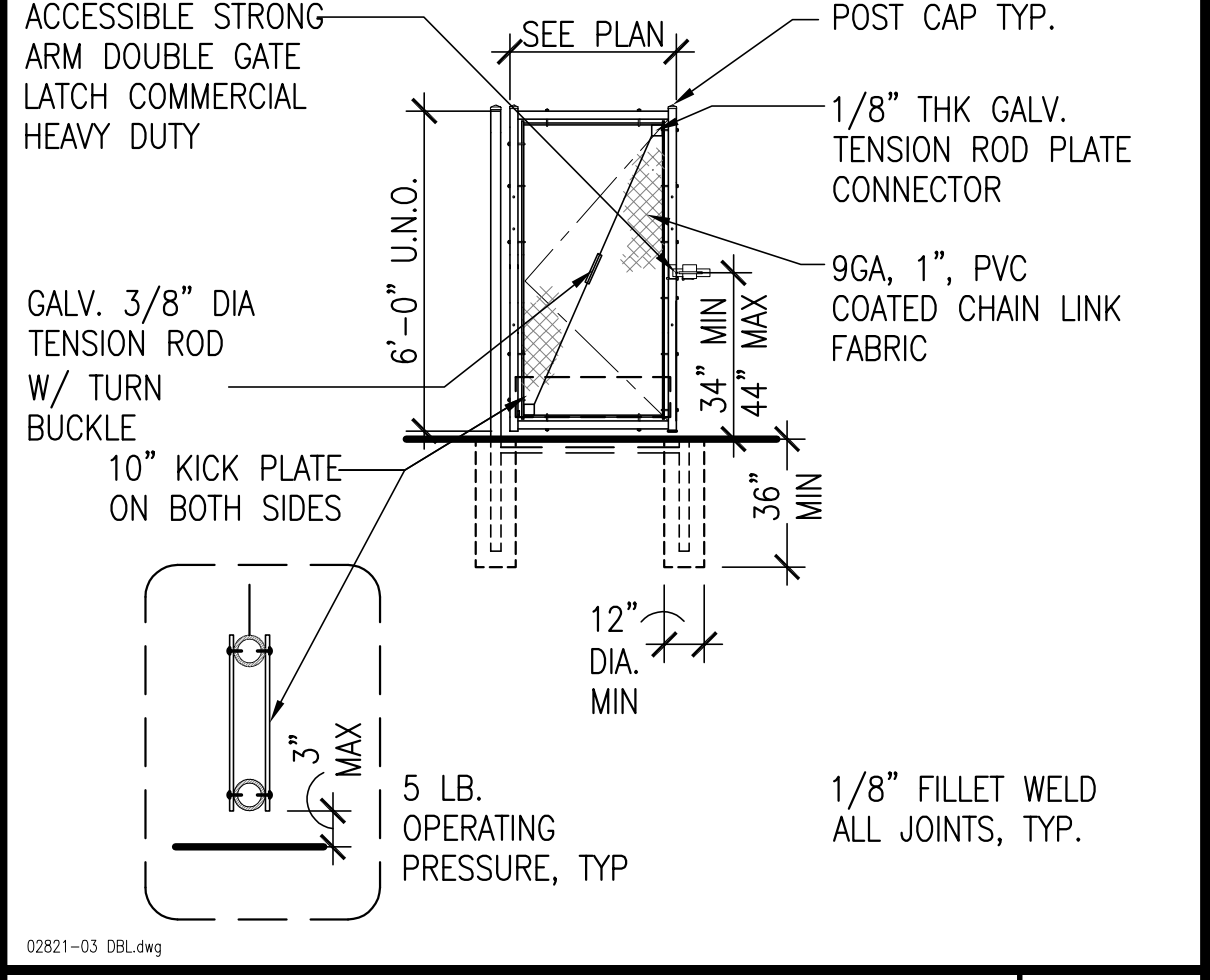
CONC MOW STRIP 30
1"x1'-0"



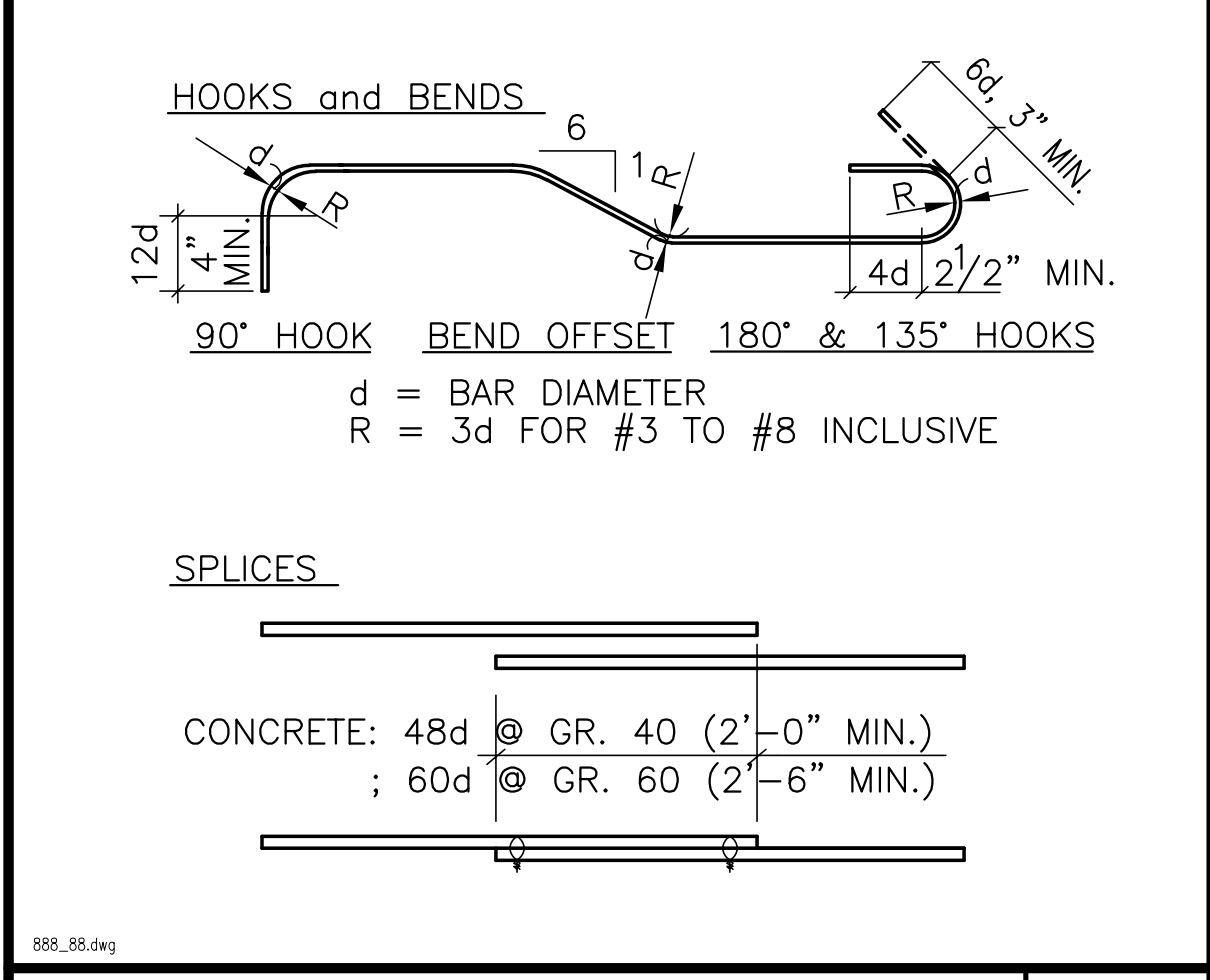
CHAIN LINK FENCE 16
CHAIN LINK FENCE AND FOOTINGS - NOT IN CONTRACT (N.L.C.) 1/4"x1'-0"



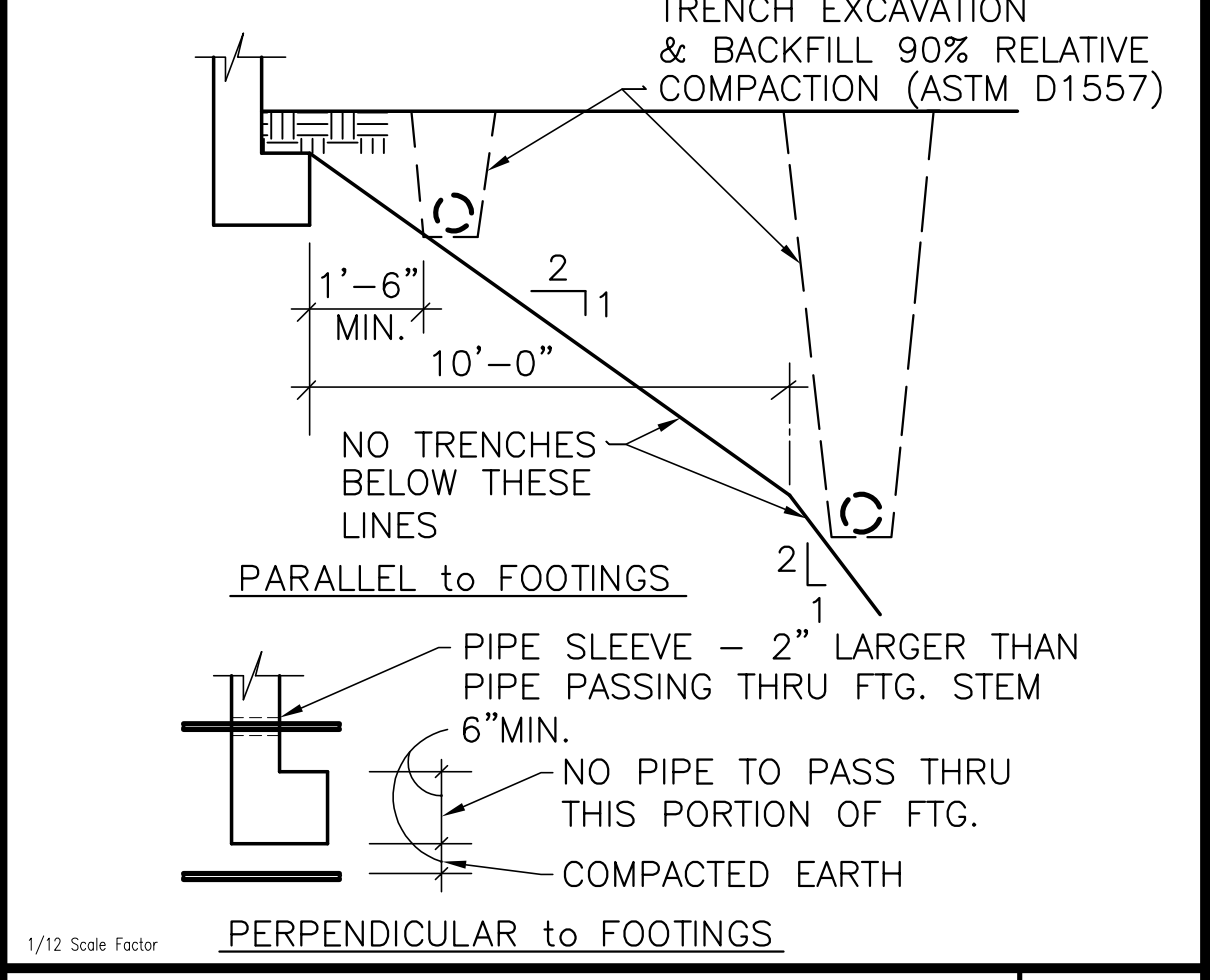
CHAIN LINK GATE - DOUBLE LEAF 22
CHAIN LINK GATE AND FOOTINGS (N.L.C.) 1/4"x1'-0"



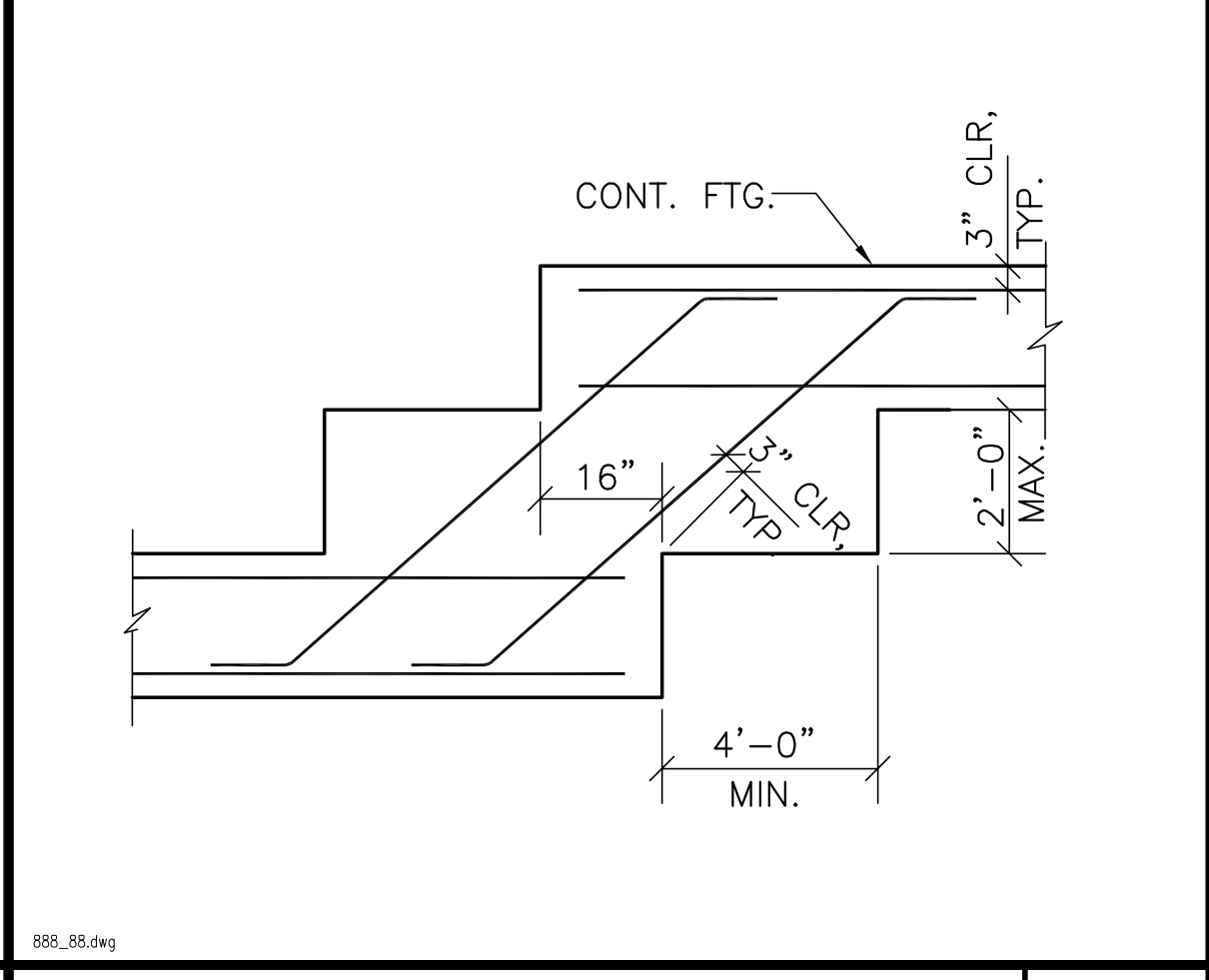
CHAIN LINK GATE 17
CHAIN LINK GATE AND FOOTINGS (N.L.C.) 1/4"x1'-0"



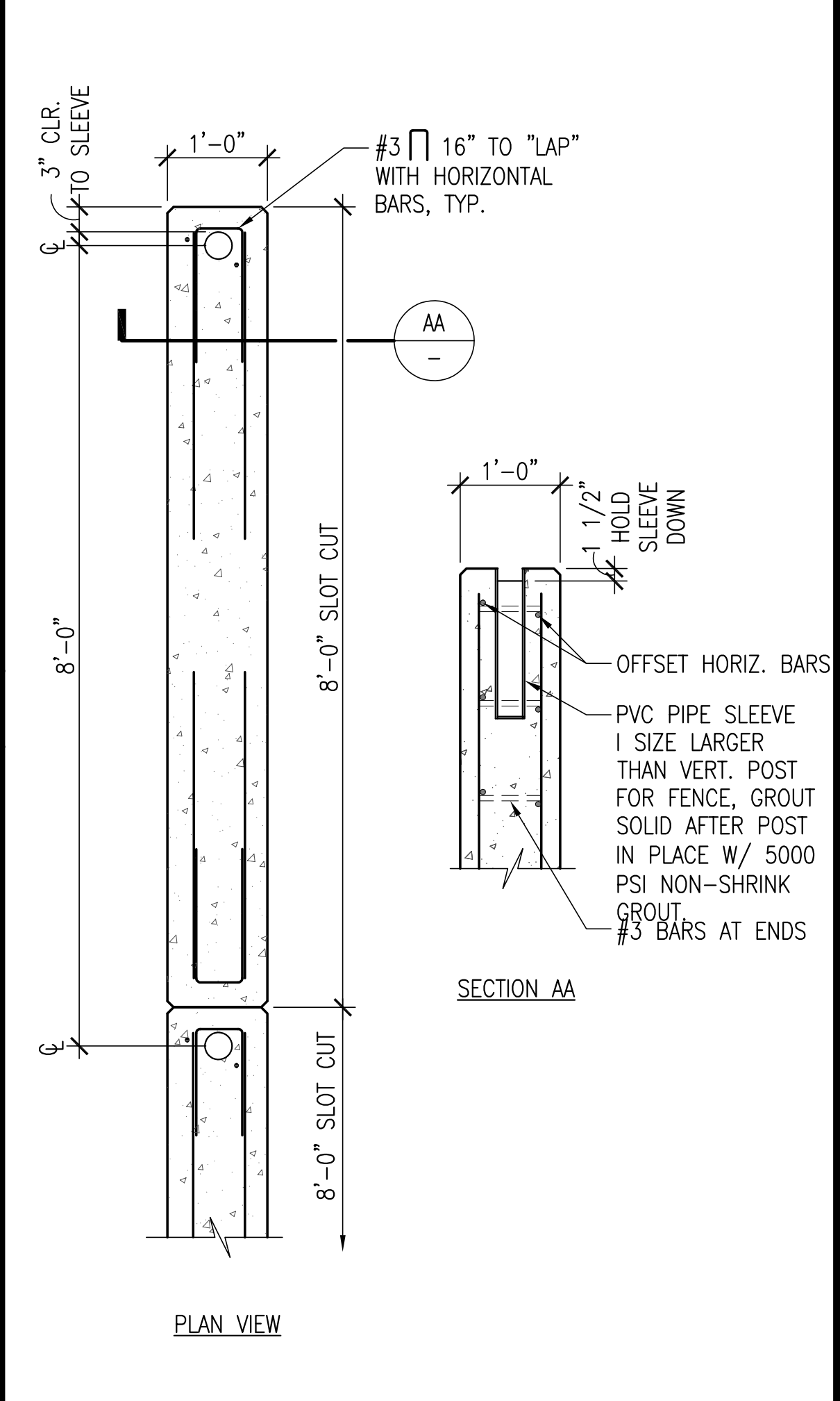
TYPICAL REINFORCING BAR DETAIL 23
N/S



TRENCH DETAIL 18
N/S



STEPPED FOOTING 24
N/S

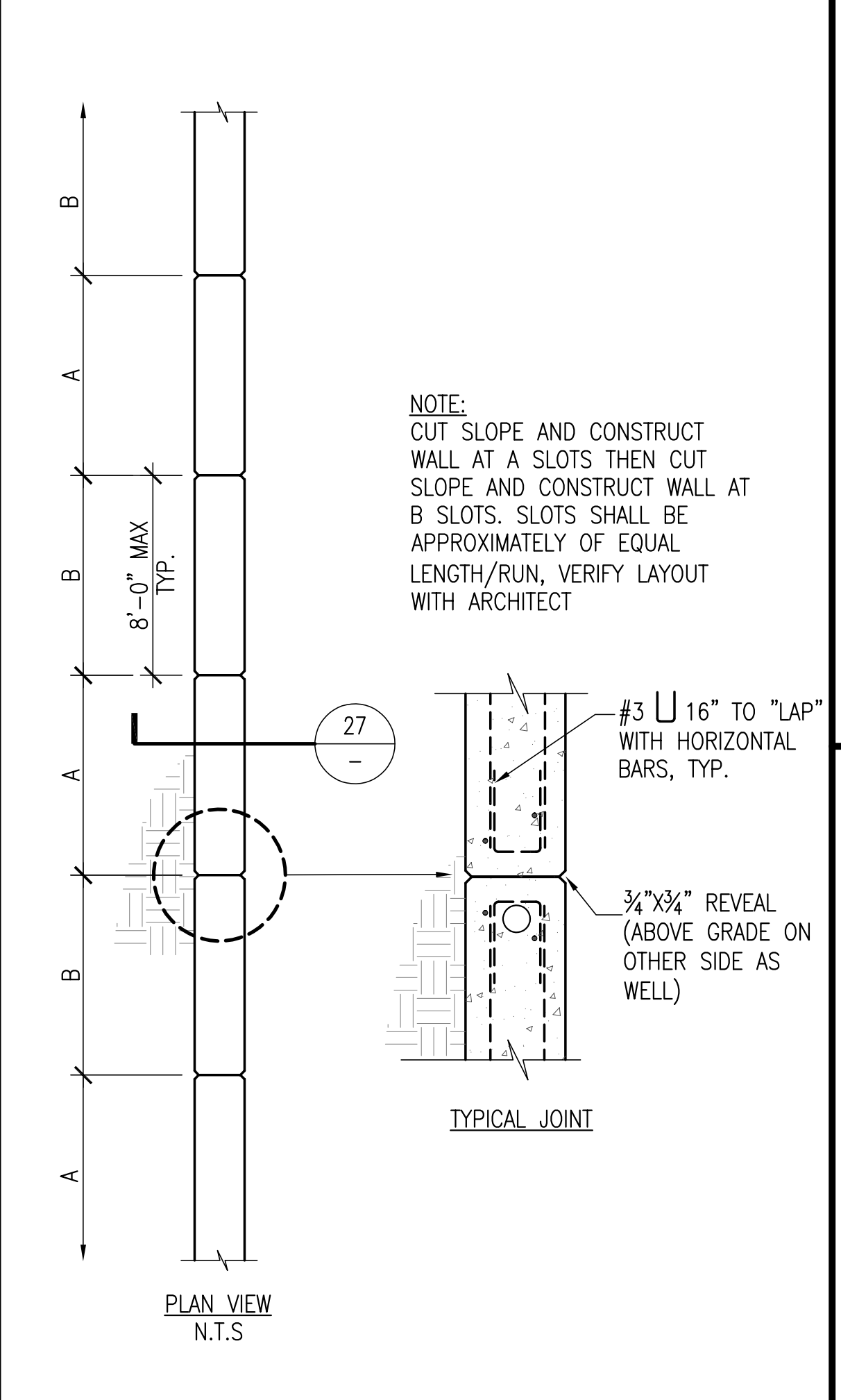


RETAINING WALL 20
3/4"x1'-0"

- CONCRETE**
- Unless noted otherwise, all concrete shall attain a minimum compressive strength of 4500 psi at 10 days. Maximum water cement ratio shall be .45.
 - Aggregates shall be natural sand and rock conforming to ASTM C33.
 - Cement shall be Portland Cement conforming to ASTM C-150, Type II/V, low alkali.
 - Water shall be potable, clean and free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances that may be deleterious to concrete or reinforcement.
 - Admixtures to be used in concrete shall be subject to prior approval by the Engineer. Use Yxpec Waterproofing admixture in all wall concrete.
 - Maximum permissible water-cement ratios for concrete shall conform to Table 19.3.2.1. of ACI 318-14. Maximum slump shall be 5 inches for walls and footings, 4 inches for slab.
 - Concrete shall be cured while in a moist condition for at least the first 7 days after placement. Methods for accelerated curing shall have prior approval of the Engineer.
 - The following minimum clear distances between reinforcing steel and face of concrete shall be maintained unless noted otherwise:
 - Slabs on grade Center of slab Concrete below grade, formed 2" Concrete below grade, unformed (poured against earth)..... 3" Concrete exposed to weather..... 1 1/2"
 - Pipes may pass through structural concrete in sleeves, but shall not be embedded therein. Pipes or ducts exceeding one-third the slab or wall thickness shall not be placed in the structural concrete unless specifically detailed.
 - Provide 3/4" chamfers at all exposed corners.
 - Refer to architectural drawings for reveals, areas of textured concrete or special finishes, items required to be cast into concrete, curbs and slab depressions.
 - All concrete shall be vibrated.

REINFORCING STEEL

- Reinforcing steel shall conform to ASTM A615, Grade 40 for size #3 and Grade 60 for sizes #4 and larger. Maximum yield shall not exceed 1.3 times that specified.
- Welding of reinforcing steel shall conform to AWS D1.4-2011 using proper low hydrogen electrodes. All bars to be welded shall conform to ASTM A706.
- All bars in concrete shall be lapped a minimum of 48 bar diameters (2'-0" min.) for Grade 40 and 60 bar diameters (2'-6" min.) for Grade 60 at all splices unless noted otherwise.
- Splices of horizontal rebar in walls and footings shall be staggered 4'-0" minimum.
- Dowels for walls and columns shall be the same size and spacing as the wall/column reinforcing unless noted otherwise.
- All bending of reinforcing steel shall conform to the latest edition of the American Concrete Institute and CRSI.
- All reinforcing steel shall be securely tied in place prior to pouring concrete or grout.



SLOT CUT DETAIL 15
3/4"x1'-0"

- SHOTCRETE CONCRETE**
- Shotcrete shall conform to 2022 California Building Code Section 1908 for shotcrete concrete and ACI 506 R-16.
 - The proportions of cement to aggregate in loose dry volumes shall not be less than 1 to 4-1/2. The quantities of aggregate and cement shall be accurately measured. All shotcrete shall attain a minimum compressive strength of 4500 psi 28 days.
 - All cement shall comply with American Concrete Institute (ACI) 318-19 Section 26.4.1.1
 - All aggregates shall comply with American Concrete Institute (ACI) 318-19 Section 26.4.1.2.
 - The proportions of water to cement shall be accurately controlled so as to produce thorough and uniform hydration of the concrete, which, when placed, will form a homogeneous mass containing neither sags nor dry sand formation. An accurately calibrated pressure gauge shall be provided in the water line. The water shall have a minimum pressure of 60 psi plus an additional 5 psi for each 10 feet of rise in elevation between the pressure gauge and the nozzle.
 - The cement and aggregate shall be mixed without added water in a batch mixer for less than one minute and shall be discharged completely before the mixer is recharged. Other types of mixing equipment may be used may be used when approved by the department. Nozzles used to place concrete for structural purposes shall have a maximum size of 1-5/8 inches.
 - Pneumatic concrete shall not be placed where the stream from the nozzle cannot directly impinge on the surface on which the concrete is to be placed. Where shooting conditions are difficult, the proper results shall be obtained by maintaining normal air pressure and water ratio and reducing supply of material.
 - Whenever possible, except when enclosing reinforcing steel, the nozzle shall be held at right angles to the surfaces and a distance of not more than 3 feet.
 - Any deposits of loose sand or rebound shall be carefully removed from the surface before applying additional concrete. When enclosing reinforcing steel, the nozzle shall be held so as to direct the material around the bars. Each bar shall shot from at least two directions. A second experienced person equipped with an air jet shall attend the operators whenever reinforcing steel is being enclosed and shall carefully precede the nozzle and blow out all rebound and sand which may be lodged behind the steel.
 - Placing of pneumatic concrete shall be started at the bottom of the section and the top surface shall be held at a minimum of 45 degrees with the horizontal to facilitate removal of rebound. Pneumatic concrete shall be applied to beams from the side to permit removal of the rebound.
 - Unfinished work shall not be allowed to stand for more than 30 minutes unless all abrupt edges are sloped to a thin edge. Before resuming work, this sloped portion shall be cleaned and where the concrete has reached its initial set, the surface shall be thoroughly wetted.
 - The air pressure at the machine end of the hose shall be not less than 45 psi for hose lengths of 100 feet or less and shall be increased 5 psi for each additional 50 feet or fraction thereof, for hose in excess of the first 100 feet. In addition, the air pressure shall be increased 5 psi for each 25 feet, or fraction thereof, of vertical rise.
 - Pneumatic concrete shall be kept constantly damp for a period of not less than 7 days after being deposited, unless other approved methods are specified on the stamped plans.
 - Rebound, pockets, sags, sloughing and other defects occurring in the work shall be cut out and replaced.
 - The application of all pneumatic concrete shall be continuously inspected by a registered deputy inspector approved by the Engineer and the Building Official.
 - The reinforcing steel shall be securely tied in place in a manner that prevents any movement during the gunite installation.
 - Lap splices in reinforcing bars shall be by the noncontact lap splice method with at least 2 1/2 inches clearance between bars. The Engineer of Record and Building Official may permit the use of contact lap splices when necessary for the support of the reinforcing provided it can be demonstrated by means of preconstruction testing that adequate encasement of the bars at the splice can be achieved and provided that the splices are placed so that a line through the center of the two spliced bars is perpendicular to the surface of the shotcrete work.
 - Concrete shall be cured in a moist condition for at least 7 days after placement.
 - Provide Yxpec Waterproofing admixture in all shotcrete.
 - Provide pre-construction test panels per CBC 1705.3.9.1.

DESIGN LOADS:

Soil:	Earthquake:
ASP 1,000 psf	Risk Category II
EFP 45 pcf	I 1.0
Friction .2 psf	Ss 1.704
Passive 150 pcf	S1 605
	Site Class D
	Sos 1.363
	S01 606
	Design Category D
	Base Shear .41 WT (USD)
	Analysis Procedure Equivalent Lateral Force

GENERAL

- All construction and workmanship shall conform to the 2022 California Building Code.
- These notes shall be used in conjunction with the plans and any discrepancies shall be brought to the attention of the Architect/Engineer.
- Contractor must check all dimensions, framing conditions, and site conditions before starting work. Architect/Engineer shall be notified immediately of any discrepancies or possible deficiencies.
- Conditions not specifically shown shall be constructed similar to the details for the respective materials.
- The drawings and specifications represent the finished structure. All bracing, temporary supports, shoring, etc. is the sole responsibility of the contractor. Observation visits to the job site by the Architect/Engineer do not include inspection of construction procedures. The contractor is solely responsible for all construction methods and conditions at the worksite. These visits will not be construed as continuous and detailed inspections.
- Design, material, equipment, and products other than those described below or indicated on the drawings may be considered for use, provided prior approval is obtained from the Owner, Architect/Engineer, and the applicable governing code authority.
- All conditions noted as existing are based on the best information currently available at the time of preparation of these drawings. The Contractor is to verify all conditions before starting work. Should conditions arise which are different from those shown on the drawings, the Architect/Engineer shall be notified immediately and additional drawings based on more accurate information will be prepared.

TESTS AND INSPECTIONS

- Continuous inspection by a registered deputy inspector is required for all concrete with a strength greater than 2500 psi, and post-installed concrete anchors. The extent of tests and inspection shall conform to Chapter 17 of the California Building Code. An affidavit shall be issued to the Architect/Engineer and the Building Department at the completion of each type of work stating whether the work was in conformance with the approved plans and specifications. Concrete inspection may be limited to slump tests, compression tests, and inspection of placed rebar, inspection of concrete placement and verification of design mix.
- The following items require inspection by a licensed Deputy Inspector:

ITEM	YES	NO
Post-Installed Anchors	X	
Concrete	X	

- Concrete tests shall conform to ACI C6.12
- Provide test specimens under guidance & inspection by Deputy Inspector.
- See also Note 21 of Shotcrete.

FORMWORK, REMOVAL OF FORMS AND SHORES

- The Contractor shall design all forms and supporting shores in conformance with ACI 347R-14. Design shall include rate and method of placing concrete and construction loads, including vertical, horizontal, and impact loads. Forms shall be substantial and sufficiently tight to prevent leakage of mortar and properly braced or tied to maintain position and shape.
- Forms shall be removed in such a manner as not to impair safety and serviceability of the structure. All concrete to be exposed by form removal shall have sufficient strength not to be damaged thereby. The ACI Committee 347 suggests the following minimum time forms and supports should remain in place under ordinary conditions:
 - Walls 12 Hours
- Restore until 28 days after placement, and for full duration where construction loads exceed specified service loads. Restore shall conform to ACI 347R-14.

GENERAL NOTES FOR GRADING:

- ALL GRADING SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUME 2 OF 2, APPENDIX J, GRADING.
- ALL GRADING AND CONSTRUCTION ACTIVITIES SHALL COMPLY WITH COUNTY OF LOS ANGELES CODE, TITLE 12, SECTION 12.12.030 THAT CONTROLS AND RESTRICTS NOISE FROM THE USE OF CONSTRUCTION AND GRADING EQUIPMENT FROM THE HOURS OF 8:00 PM TO 6:30 AM, AND ON SUNDAYS AND HOLIDAYS.
- CALIFORNIA PUBLIC RESOURCES CODE (SECTION 5097.98) AND HEALTH AND SAFETY CODE (SECTION 7050.5) ADDRESS THE DISCOVERY AND DISPOSITION OF HUMAN REMAINS. IN THE EVENT OF DISCOVERY OR RECOGNITION OF ANY HUMAN REMAINS IN ANY LOCATION OTHER THAN A DEDICATED CEMETERY, THE LAW REQUIRES THAT GRADING IMMEDIATELY STOPS AND NO FURTHER EXCAVATION OR DISTURBANCE OF THE SITE, OR ANY NEARBY AREA WHERE HUMAN REMAINS MAY BE LOCATED, OCCUR UNTIL THE FOLLOWING HAS BEEN MEASURES HAVE BEEN TAKEN:
 - THE COUNTY CORONER HAS BEEN INFORMED AND HAS DETERMINED THAT NO INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED, AND
 - IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN, THE DESCENDANTS FROM THE DECEASED NATIVE AMERICANS HAVE MADE A RECOMMENDATION FOR THE MEANS OF TREATING OR DISPOSING, WITH APPROPRIATE DIGNITY, OF THE HUMAN REMAINS AND ANY ASSOCIATED GRAVE GOOD.
- ALL EXPORT OF MATERIAL FROM THE SITE MUST GO TO A LEGAL DUMP SITE. RECEIPTS FOR ACCEPTANCE OF EXCESS MATERIAL BY A DUMP SITE ARE REQUIRED AND MUST BE PROVIDED TO THE OWNER UPON REQUEST.
- A PREVENTIVE PROGRAM TO PROTECT THE SLOPES FROM POTENTIAL DAMAGE FROM BURROWING RODENTS IS REQUIRED PER SECTION 0101.8 OF THE COUNTY OF LOS ANGELES BUILDING CODE. OWNER IS TO INSPECT SLOPES PERIODICALLY FOR EVIDENCE OF BURROWING RODENTS AND A FIRST EVIDENCE OF THEIR EXISTENCE SHALL EMPLOY AN EXTERMINATOR FOR THEIR REMOVAL.
- ALL CONSTRUCTION/DEMOLITION, GRADING, AND STORAGE OF BULK MATERIALS MUST COMPLY WITH THE LOCAL AQMD RULE 403 FOR FUGITIVE DUST. INFORMATION ON RULE 403 IS AVAILABLE AT AQMD'S WEBSITE HTTP://WWW.AQMD.COM.
- A SOILS ENGINEER SHALL PROVIDE SUFFICIENT INSPECTIONS DURING THE PREPARATION OF THE NATURAL GROUND AND THE PLACEMENT AND COMPACTION OF THE FILL TO BE SATISFIED THAT THE WORK IS BEING PERFORMED IN ACCORDANCE WITH THE PLAN AND APPLICABLE CODE REQUIREMENTS.

INSPECTION NOTES

- THE CONTRACTOR SHALL NOTIFY DSA INSPECTOR OF RECORD AT LEAST ONE WORKING DAY IN ADVANCE OF REQUIRED INSPECTIONS AT FOLLOWING STAGES OF THE WORK.
 - PRE-GRADE - BEFORE THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION.
 - INITIAL - WHEN THE SITE HAS BEEN CLEARED OF VEGETATION AND UNAPPROVED FILL HAS BEEN SCARIFIED, BENCHED OR OTHERWISE PREPARED FOR FILL. FILL SHALL NOT BE PLACED PRIOR TO THIS INSPECTION. NOTE: PRIOR TO ANY CONSTRUCTION ACTIVITIES, INCLUDING GRADING, ALL STORM WATER POLLUTION PREVENTION MEASURES INCLUDING EROSION CONTROL DEVICES WHICH CONTAIN SEDIMENTS MUST BE INSTALLED.
 - ROUGH - WHEN APPROXIMATE FINAL ELEVATIONS HAVE BEEN ESTABLISHED; DRAINAGE TERRACES, SWALES AND BERMS INSTALLED AT THE TOP OF THE SLOPE; AND THE STATEMENTS REQUIRED IN THIS SECTION HAVE BEEN RECEIVED.
 - FINAL - WHEN GRADING HAS BEEN COMPLETED. ALL DRAINAGE DEVICES INSTALLED; SLOPE PLANTING ESTABLISHED; IRRIGATION SYSTEMS INSTALLED AND THE AS-BUILT PLANS, REQUIRED STATEMENTS, AND REPORTS HAVE BEEN SUBMITTED AND APPROVED.

FILL NOTES

- ALL FILL SHALL BE COMPACTED TO THE FOLLOWING MINIMUM RELATIVE COMPACTION CRITERIA:
 - 90 PERCENT OF MAXIMUM DRY DENSITY WITHIN 40 FEET BELOW FINISH GRADE. THE RELATIVE COMPACTION SHALL BE DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D1557.
 - FIELD DENSITY SHALL BE DETERMINED BY A METHOD ACCEPTABLE TO THE DSA I.O.R. HOWEVER, NOT LESS THAN 10% OF THE REQUIRED DENSITY TEST, UNIFORMLY DISTRIBUTED, AND SHALL BE OBTAINED BY THE SAND CONE METHOD.
- SUFFICIENT TESTS OF THE FILL SOILS SHALL BE MADE TO DETERMINE THE RELATIVE COMPACTION OF THE FILL IN ACCORDANCE WITH THE FOLLOWING MINIMUM GUIDELINES:
 - ONE TEST FOR EACH TWO-FOOT VERTICAL LIFT.
 - ONE TEST FOR EACH 1,000 CUBIC YARDS OF MATERIAL PLACED.
- SUFFICIENT TESTS OF FILL SOILS SHALL BE MADE TO VERIFY THAT THE SOIL PROPERTIES COMPLY WITH THE DESIGN REQUIREMENTS, AS DETERMINED BY THE SOIL ENGINEER INCLUDING SOIL TYPES, SHEAR STRENGTHS PARAMETERS AND CORRESPONDING UNIT WEIGHTS IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:
 - PRIOR AND SUBSEQUENT TO PLACEMENT OF THE FILL, SHEAR TESTS SHALL BE TAKEN ON EACH TYPE OF SOIL OR SOIL MIXTURE TO BE USED FOR ALL FILL SLOPES STEEPER THAN THREE (3) HORIZONTAL TO ONE VERTICAL.
 - SHEAR TEST RESULTS FOR THE PROPOSED FILL MATERIAL MUST MEET OR EXCEED THE DESIGN VALUES USED IN THE GEOTECHNICAL REPORT TO DETERMINE SLOPE STABILITY REQUIREMENTS. OTHERWISE, THE SLOPE MUST BE REEVALUATED USING THE ACTUAL SHEAR TEST VALUE OF THE FILL MATERIAL THAT IS IN PLACE.
 - FILL SOILS SHALL BE FREE OF DELETERIOUS MATERIALS.
- FILL SHALL NOT BE PLACED UNTIL STOPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND INSTALLATION OF SUBDRAIN (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOIL ENGINEER. THE BUILDING OFFICIAL MAY REQUIRE A STANDARD TEST METHOD FOR MOISTURE, ASH, ORGANIC MATTER, PEAT OR OTHER ORGANIC SOILS' ASTM D-2974-87 ON ANY SUSPECT MATERIAL. DETRIMENTAL AMOUNTS OF ORGANIC MATERIAL SHALL NOT BE PERMITTED IN FILLS. SOIL CONTAINING SMALL AMOUNTS OF ROOTS MAY BE ALLOWED PROVIDED THAT THE ROOTS ARE IN A QUANTITY AND DISTRIBUTED IN A MANNER THAT WILL NOT BE DETRIMENTAL TO THE FUTURE USE OF THE SITE AND THE SOILS ENGINEER APPROVES THE USE OF SUCH MATERIAL.
- ROCK OR SIMILAR MATERIAL GREATER THAN 4 INCHES IN DIAMETER SHALL NOT BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE SOIL ENGINEER AND APPROVED IN ADVANCE BY THE BUILDING OFFICIAL.
- CONTINUOUS INSPECTION BY THE SOIL ENGINEER, OR A RESPONSIBLE REPRESENTATIVE, SHALL BE PROVIDED DURING ALL FILL PLACEMENT AND COMPACTION OPERATIONS WHERE FILLS HAVE A DEPTH GREATER THAN 30 FEET OR SLOPE SURFACE STEEPER THAN 2:1.

HORIZONTAL CONTROL

AN AUTOCAD GEOMETRIC ELECTRONIC FILE SHALL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST FOR THE CONTRACTOR'S SURVEYOR TO LAYOUT THE CONSTRUCTION STAKING OF THE PROJECT. THE SURVEYOR OR CONTRACTOR WILL NEED TO SIGN A WAIVER FORM BEFORE RELEASE OF ANY CAD ELECTRONIC DRAWINGS.

BENCHMARK

COUNTY OF LOS ANGELES PUBLISHED BENCHMARK BY11484, ELEVATION OF 257.324 FEET, USED TO ESTABLISH VERTICAL CONTROL.

ABBREVIATIONS			
ABND	ABANDONED	MH	MANHOLE
AC	ASPHALT PAVEMENT	NG	NATURAL GROUND
AP	ANGLE POINT	N.I.C.	NOT IN CONTRACT
BLDG	BUILDING	P.C.C.	PORTLAND CEMENT CONCRETE
BC	BEGINNING OF CURVE	ℓ	PROPERTY LINE
BW	BACK OF WALK	P.V.	POST INDICATOR VALVE
C	CENTERLINE	PP	POWER POLE
CF	CURB FACE HEIGHT	RCE	REGISTERED CIVIL ENGINEER
CLF	CHAIN LINK FENCE	RR	RAILROAD
CONC	CONCRETE	S	SLOPE
DCV	DETECTOR CHECK VALVE	SDMH	STORM DRAIN MANHOLE
DESC	DESCRIBED	SL	STREET LIGHT
D/W	DRIVEWAY	SMH	SEWER MANHOLE
DI	DROP INLET	S.P.P.W.C.	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (2021 EDITION).
EP	EDGE OF PAVEMENT	S	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK), 2021 EDITION
EC	END OF CURVE	SW	SIDEWALK
EX	EXISTING	TC	TOP OF CURB
FG	FINISH GRADE	TELE	TELEPHONE
FH	FIRE HYDRANT	TG	TOP OF GRATE
FL	FLOWLINE	TCO	TOP OF CLEANOUT
FS	FINISH SURFACE	TS	TRAFFIC SIGN
GA	GUY ANCHOR	TW	TOP OF WALL
GB	GRADE BREAK	TYP.	TYPICAL
GP	GUARD POST	UGG	UNDERGROUND CONDUIT
GV	GAS VALVE	UTL	UTILITY
HB	HOSE BIBB	WM	WATER METER
HP	HIGH POINT	WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE	W.VLT	WATER VAULT
INV	INVERT	VF	VERIFY IN FIELD
IP	IRON PIPE	VLT	VAULT
L	LENGTH		
LIP	LIP OF GUTTER		
LP	LIGHT POLE		
L T & T	LEAD TACK AND TAG		

EARTHWORK NOTICE TO CONTRACTOR: NO EARTHWORK ANALYSIS HAS BEEN COMPLETED WITH RESPECT TO VOLUMES OF SOILS TO BE EXCAVATED, PLACED, OR IMPORTED IN ORDER TO PROVIDE THE FINISHED GRADES SHOWN ON THE PLANS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE EARTHWORK QUANTITIES NECESSARY TO COMPLETE THE PROJECT.

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

CONSTRUCTION STORM WATER NOTE:
GRADING WORK ASSOCIATED WITH THIS PROJECT WILL DISTURB LESS THAN 1 ACRE OF SOIL AND THUS SHALL NOT BE SUBJECT TO COMPLY WITH THE NPDES STORMWATER CONSTRUCTION GENERAL PERMIT 2009-0009-DWQ.

ALL RETAINING WALL FOOTING AREAS SHALL BE UNDERCUT, MOISTENED, AND COMPACTED AS NECESSARY TO PRODUCE SOILS COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION TO A DEPTH OF 2 FEET BELOW THE BOTTOM OF THE FOOTING. FOOTING AREAS SHALL BE DEFINED AS THE AREA EXTENDING FROM THE EDGE OF THE FOOTING FOR A DISTANCE OF 3 FEET INTO THE SITE. THE EXPOSED SOILS BENEATH ALL OVEREXCAVATION SHOULD BE SCARIFIED AN ADDITIONAL 12 INCHES, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION.

GENERAL NOTES FOR GRADING CONTINUED:

- A COPY OF THE DIVISION OF STATE ARCHITECT APPROVED PRECISE GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE JOB SITE AT ALL TIMES.
- THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. THE CONTRACTOR SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER AND USING DUST FENCES OR OTHER METHODS AS DIRECTED BY THE CONSTRUCTION MANAGER OR FIELD INSPECTOR THROUGHOUT THE CONSTRUCTION OPERATION AND SHALL INCORPORATE IN BASE BID.
- THE CONTRACTOR SHALL KEEP A STRICT RECORD OF ALL CHANGES THAT OCCUR DURING CONSTRUCTION PRACTICES AND SUBMIT THIS RECORD TO THE SCHOOL DISTRICT & DSA CERTIFIED AS "RECORD DRAWING" PLANS.
- ALL DAMAGE CAUSED TO PUBLIC STREETS, INCLUDING HAUL ROUTES, ALLEYS, SIDEWALKS, CURBS OR STREET FURNISHINGS, OR TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR TO THE ENGINEER'S SATISFACTION.
- THE CONTRACTOR SHALL REMOVE AND REPLACE ANY BROKEN OR DAMAGED SIDEWALK, CURB, GUTTER OR ASPHALT PAVING AND TURF (PATCH, REPAIR OR OVERLAY) CAUSED BY THEIR WORK ON THIS PROJECT AT THE DIRECTION OF THE OWNER.
- ALL DELETERIOUS MATERIAL (I.E. LUMBER, LOGS, BRUSH, RUBBISH, ETC.) SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL AND HAULED TO DUMP-SITE APPROVED BY THE ENGINEER.
- ALL TREE ROOTS, ABANDONED IRRIGATION LINES, UTILITY SERVICES AND SIMILAR MATERIALS ENCOUNTERED DURING EXCAVATION SHALL BE REMOVED FROM THE SITE AND VOIDS CREATED THEREBY SHALL BE PROPERLY FILLED AND COMPACTED AS DIRECTED BY THE SOILS ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING STORM DAMAGE PREVENTION MEASURES OR EROSION CONTROL DEVICES AND/OR TO PERFORM CERTAIN GRADING TO PREVENT SOIL OR EXCESS RUNOFF FROM FLOWING INTO PUBLIC STREETS OR ADJACENT PROPERTIES. IN THE EVENT OF SUCH AN OCCURRENCE, CLEANUP SHALL COMMENCE IMMEDIATELY. SHOULD CITY FORCES OR THE CITY CONTRACTOR PERFORM ANY CLEANUP RESULTING FROM THIS DEVELOPMENT, THE CONTRACTOR SHALL PAY THE COST INCURRED WITHIN TEN (10) WORKING DAYS UPON RECEIPT OF BILLING.
- EITHER WATER OR DUST PALLIATIVE, OR BOTH, MUST BE APPLIED FOR THE ALLEVATION OR PREVENTION OF EXCESSIVE DUST RESULTING FROM THE LOADING OR TRANSPORTATION OF EARTH FROM OR TO THE PROJECT SITE OR PRIVATE AND PUBLIC ROADWAYS.
- NO OVERSIZES OR OVERWEIGHT LOADS ARE PERMITTED WITHOUT A SEPARATE MOVING PERMIT.
- ALL EQUIPMENT USED TO HAUL EXCAVATION OR FILL MATERIAL FROM OR TO THE SITE SHALL FOLLOW A DESIGNATED ROUTE OR ROUTES IN GOING TO AND FROM THE SITE. THE CONTRACTOR SHALL BE ENTITLED TO THE DESIGNATION OF A ROUTE PROVIDING ACCESS TO A SPECIFIED PLACE OTHER THAN THE SITE, AFTER SHOWING TO THE SATISFACTION OF THE CITY BUILDING OFFICIAL THAT SUCH SPECIFIED PLACE IS A PLACE WHERE EXCAVATION MATERIAL MAY BE REASONABLY DEPOSITED OR FILL MATERIAL MAY BE OBTAINED. A SEPARATE ENCROACHMENT PERMIT IS REQUIRED WHEN IT IS NECESSARY TO FLAG TRAFFIC OR INSTALL ANY TRAFFIC CONTROL DEVICES ON CITY RIGHT-OF-WAY.
- ANY EARTH ROCK, GRAVEL, SAND, STONE OR OTHER EXCAVATED MATERIAL DEPOSITED OR CAUSED TO ROLL, FLOW OR WASH UPON ANY PUBLIC PLACE OR PRIVATE PROPERTY SHALL BE REMOVED FROM SUCH PUBLIC PLACE OR PRIVATE PROPERTY BY THE END OF THE WORKDAY BY THE CONTRACTOR RESPONSIBLE FOR THE DEPOSITION. IF AN ADVERSE CONDITION IS CAUSED BY DEPOSIT, THE CONDITION SHALL BE CORRECTED IMMEDIATELY.
- EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
- ALL TRUCKS HAULING DIRT, SAND, OIL, OR OTHER LOOSE MATERIALS ARE TO BE COVERED OR SHOULD MAINTAIN AT LEAST TWO FEET OF FREEBOARD IN ACCORDANCE WITH THE REQUIREMENTS OF CVC SECTION 23114.
- NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE OR OTHER EXCAVATED MATERIAL OR DEBRIS OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE, ALLOW SUCH MATERIAL TO BLOW OR SPILL OVER UPON SUCH STREET, ALLEY OR PUBLIC PLACE OR ADJACENT PRIVATE PROPERTY OR ANY WATER BODIES, CREEKS OR STREAMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY CONSTRUCTION OR SOILS MATERIALS DEPOSITED ON THE PUBLIC RIGHT-OF-WAY, PUBLIC WATERS OR ADJACENT PRIVATE PROPERTY.

CONSTRUCTION NOTES:

- PROTECT EXISTING IMPROVEMENT IN PLACE.
- CONSTRUCT RETAINING WALL AND FENCE PER DETAIL 27/A007. FACE OF WALL TO BE A MINIMUM OF 2' BEHIND PROPERTY LINE.
- CONSTRUCT CHAIN-LINK FENCE & CONCRETE MOW STRIP PER DETAIL 29/A007. CONCRETE TO BE MINIMUM 560-C-3250 PER S.P.S.W.C. SECTION 201-1.
- CONSTRUCT CONCRETE MOW STRIP PER DETAIL 30/A007. CONCRETE TO BE MINIMUM 520-C-2500 PER S.P.S.W.C. SECTION 201-1.
- REMOVE & DISPOSE OF EXISTING CHAIN LINK FENCE, POSTS & FOOTINGS.
- REMOVE & DISPOSE OF EXISTING TREE & ROOTS.

HATCH LEGEND:

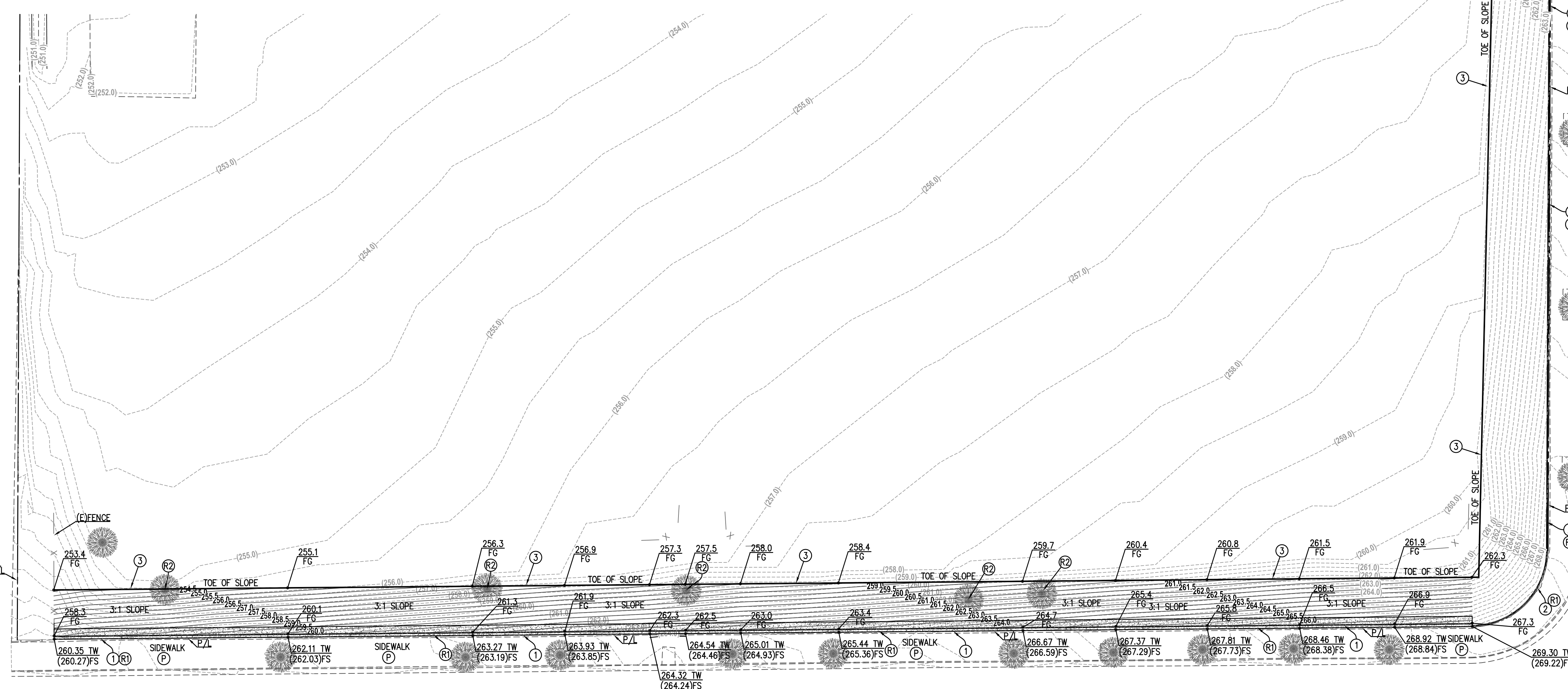
- EXISTING BUILDING
- NEW RETAINING WALL

FOR WORK WITHIN, OR NEAR, THE PUBLIC RIGHT-OF-WAY

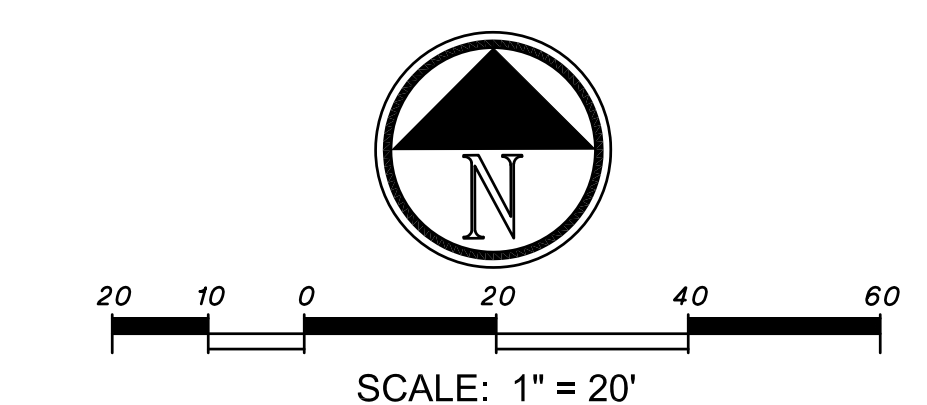


CALL: 811

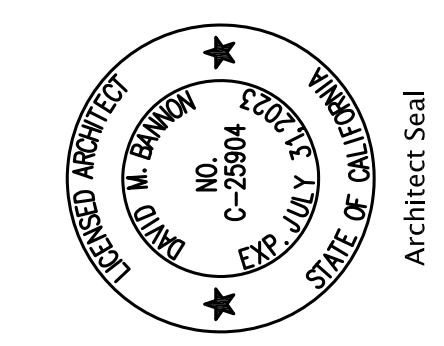
TWO WORKING DAYS BEFORE YOU DIG



NOTE TO CONTRACTOR: CLEAR, GRUB AND REMOVE FROM THE SITE ALL EXISTING LANDSCAPE MATERIAL ON THE EXISTING SLOPE WHERE THE NEW LANDSCAPE IS TO BE INSTALLED. REFER TO L201.



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MEADOW GREEN ELEMENTARY SCHOOL SLOPED BANK RESTORATION
17025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

GRADING PLAN

REVISIONS:

Date: 3/14/2023
Job: #2101.2
Scale:
A#:

C1.00

SHEET OF XXX
XREF:

SITE CONDITION IRRIGATION NOTES

PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR AND THE DISTRICTS REPRESENTATIVE SHALL PARTICIPATE IN A THOROUGH IRRIGATION SYSTEM REVIEW OF THE PROJECT SITE. ALL REMOTE CONTROL VALVES SHALL BE TURNED ON AND OBSERVED IN OPERATION BY BOTH THE CONTRACTOR AND DISTRICTS REPRESENTATIVE. ANY EXISTING DEFECTS WILL BE LISTED IN DETAIL IDENTIFYING THE SPECIFIC VALVE STATION NUMBER AND DESCRIBING THE EXACT BROKEN OR NON-FUNCTIONING IRRIGATION COMPONENT NOTED DURING THE SITE REVIEW. AT THE CONCLUSION OF THE IRRIGATION REVIEW, THE CONTRACTOR SHALL GENERATE A SUMMARY OF THE ITEMS IDENTIFIED BY BOTH PARTIES LISTING ALL REMOTE CONTROL VALVES OPERATED, IDENTIFYING IF THE VALVE PERFORMED WITHOUT ANY DEFECTS OR SPECIFICALLY IDENTIFYING ANY OBSERVED DEFECTS OR NON-FUNCTIONING COMPONENTS, SUCH AS BROKEN HEADS, CLOGGED NOZZLES, NON-OPERATING VALVE SOLENOIDS, BROKEN PIPING, OR OTHER NOTED DEFECTS. THE COMPLETED SUMMARY OF ITEMS NOTED SHALL BE LISTED ON A DOCUMENT CALLED 'EXISTING IRRIGATION SYSTEM OBSERVATIONS'. THIS DOCUMENT SHALL BE SIGNED BY THE CONTRACTOR AND SUBMITTED TO THE DISTRICTS REPRESENTATIVE FOR A CONFIRMING SIGNATURE. THE MUTUALLY SIGNED 'EXISTING IRRIGATION SYSTEM OBSERVATIONS' DOCUMENT SHALL BE SENT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR INSPECTION PURPOSES AT THE CONCLUSION OF THE CONSTRUCTION WORK. IF REQUESTED BY THE DISTRICTS REPRESENTATIVE, THE CONTRACTOR SHALL PROVIDE A LIST OF THE EXISTING DEFECTIVE IRRIGATION COMPONENTS NOTED WITH A DETAILED WRITTEN PROPOSAL TO REPAIR EACH ITEM IDENTIFIED ON THE LIST. A COPY OF THIS PROPOSAL WILL BE SENT TO THE LANDSCAPE ARCHITECT. THIS ADDITIONAL WORK PROPOSAL MUST BE REVIEWED AND APPROVED IN WRITING BY THE DISTRICT AND FORMALLY PRESENTED TO THE GENERAL CONTRACTOR BEFORE THE LANDSCAPE SUBCONTRACTOR CAN BEGIN ANY ADDITIONAL REPAIR WORK. THE MUTUALLY SIGNED 'EXISTING IRRIGATION SYSTEM OBSERVATION' DOCUMENT SHALL BE USED AS A GUIDE TO IDENTIFY ANY COLLATERAL DAMAGE CAUSED TO THE EXISTING IRRIGATION SYSTEM AS A RESULT OF NEW CONSTRUCTION PERFORMED ON SITE BY THE CONTRACTORS. ANY DAMAGE CAUSED TO THE EXISTING IRRIGATION SYSTEM NOT SPECIFICALLY IDENTIFIED ON THE 'EXISTING IRRIGATION SYSTEM OBSERVATION' DOCUMENT SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THAT THE CONTRACTOR DOES NOT PARTICIPATE OR PERFORM THE EXISTING IRRIGATION SITE REVIEW, ANY EXISTING IRRIGATION EQUIPMENT OR COMPONENTS DAMAGED ON THE PROJECT SITE NOTED BY THE LANDSCAPE ARCHITECT DURING THE FINAL IRRIGATION SYSTEM REVIEW SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE TO THE SATISFACTION OF DISTRICT.

DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS INDICATED ON THE DRAWING WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE DISTRICT ENGINEER.

NOTE

ALL IRRIGATION MAINLINE, SLEEVING, LATERAL LINE AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY AND SHALL BE INSTALLED IN LANDSCAPE AREAS.

NOTE

LOCATION OF EXISTING IRRIGATION HEADS AND VALVES ARE BASED ON INFORMATION AND PLANS PROVIDED BY THE DISTRICT. REFER TO SHEET L105 FOR IRRIGATION AS-BUILT PLAN. NUVIS IS NOT RESPONSIBLE FOR ACCURACY OF INFORMATION ON THESE REFERENCE DRAWINGS. CONTRACTOR TO REVIEW EXISTING IRRIGATION SHEETS WITH DISTRICT FACILITIES DEPARTMENT FOR DIRECTION.

NOTE

EXISTING TURF ROTOR IRRIGATION HEADS TO BE MOVED TO THE NEW TOE OF SLOPE. ADJUST AS NEEDED TO NEW GRADE. MOVE EXISTING LATERAL LINES AS NEEDED.

NOTE

EXISTING IRRIGATION NOT AFFECTED BY NEW CONSTRUCTION SHALL REMAIN AND BE PROTECTED IN PLACE. EXISTING IRRIGATION SHALL REMAIN OPERATIONAL DURING THE CONSTRUCTION PHASE. DAMAGED EQUIPMENT DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE-KIND EQUIPMENT. (TYPICAL).

NOTE:

CONTRACTOR SHALL RELOCATE OR ADJUST EXISTING ROTOR HEADS OR INSTALL NEW ROTOR HEADS AS NECESSARY TO OBTAIN FULL COVERAGE OF REMAINING AREA. RETAIN & PROTECT IN PLACE HEADS & LATERAL LINES NOT AFFECTED BY PROPOSED SITE IMPROVEMENTS (TYPICAL).

NOTE:

CONTRACTOR SHALL USE EXISTING CONTROLLER WIRES TO EXISTING AND NEW VALVES. CONTRACTOR SHALL TEST FOR CONNECTIVITY. IF CONNECTIVITY IS NOT ADEQUATE CONTRACTOR SHALL TROUBLE SHOOT, REPAIR AND OR REPLACE WIRES.

SLEEVING LEGEND

SYMBOL	SLEEVING TYPE
	MAINLINEEE SLEEVING
	LATERAL AND WIRE SLEEVING

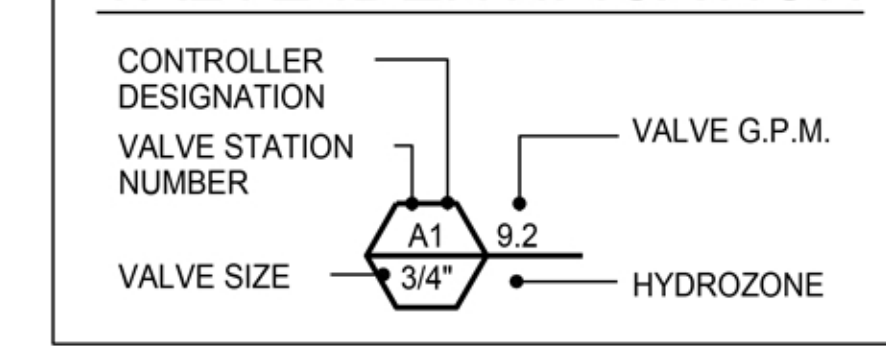
SCH 40 PVC SLEEVING CHART

SLEEVE	WIRES	PIPE
2" SLEEVE	1-20 WIRES	1" PIPE
2 1/2" SLEEVE	21-30 WIRES	1 1/4" PIPE
3" SLEEVE	31-40 WIRES	1 1/2" PIPE
4" SLEEVE	41-60 WIRES	2" PIPE
6" SLEEVE	61-99 WIRES	2 1/2"/3" PIPE
8" SLEEVE	100+ WIRES	4" PIPE
10" SLEEVE	N/A	6" PIPE

NOTE

PLANS ARE DRAWN DIAGRAMMATICALLY. INSTALL ALL IRRIGATION EQUIPMENT IN PLANTING AREAS, TYPICAL.

VALVE IDENTIFICATION



LATERAL LINE SIZING CHART

SPRINKLER TYPE	GALLONS PER MINUTE	PIPE SIZE
ROTORS	1-8	1"
	9-18	1 1/4"
	19-28 29-55	1 1/2"
SPRAYS & BUBBLERS AND SUBSURFACE	1-5	3/4"
	6-10	1"
	11-20	1 1/4"
	21-28 29-55	1 1/2"

NOTE

REFER TO SHEET L102 FOR IRRIGATION LEGEND & NOTES REFER TO SHEETS L103 to L104 FOR IRRIGATION DETAILS REFER TO SHEET L105 FOR IRRIGATION CALCULATIONS



SCALE: 1" = 20'-0"



REVISIONS:

Date: 10/01/2021
Job: #2101
Scale:
A#: 03-121823

L101

SHEET - OF XXX
XREF:

SILVERGROVE DRIVE

GROVEDALE DRIVE

POINT OF CONNECTION IS AN EXISTING VALVE, IS APPROXIMATE AND ON A DOMESTIC MAINLINE. REFER TO POINT OF CONNECTION NOTE A, RIGHT. CONTRACTOR TO REMOVE EXISTING VALVE AND CONNECT NEW VALVES IN A NEW MANIFOLD.

- X17 33.5 1-1/4" ROTARY SHRUB
- X18 16.0 1" BUBBLER TREE
- X19 32.3 1-1/4" ROTARY SHRUB

POINT OF CONNECTION IS AN EXISTING VALVE, IS APPROXIMATE AND ON A DOMESTIC MAINLINE. REFER TO POINT OF CONNECTION NOTE A, RIGHT.

- X20 33.8 1-1/4" ROTARY SHRUB
- X21 16.0 1" BUBBLER TREE
- X22 31.4 1-1/4" ROTARY SHRUB

EXISTING 3" DOMESTIC MAINLINE AND WIRE RUN, IS APPROXIMATE. REFER TO CIVIL PLANS FOR APPROXIMATE LOCATION. PROTECT IN PLACE.

NOTE A:
POINT OF CONNECTION (P.O.C.) SHALL BE TO THE EXISTING DOMESTIC WATER IRRIGATION MAINLINE/VALVE. POINTS OF CONNECTION ARE AT THE APPROXIMATE LOCATION SHOWN ON THE PLAN.

STATIC WATER PRESSURE	76 PSI
DESIGN WATER PRESSURE	45 PSI
MAXIMUM SYSTEM DEMAND	40 GPM
RESIDUAL WATER PRESSURE	5 PSI

NOTE B:
EXISTING CONTROLLER "X" IS A WEATHERMATIC SMARTLINE 48 STATION CAPACITY. CONTROLLER IS LOCATED IN A LOCKED SUPPLY ROOM. WIRE ALL NEW VALVES IN LIMITS OF CONSTRUCTION WORK FOR THIS PROJECT TO CONTROLLER "X".
PROTECT IN PLACE ALL EXISTING CONTROLLER WIRES INCLUDING EXISTING PNEUMATIC LINES. REPLACE WITH LIKE KIND OF DAMAGED. PROTECT IN PLACE EXISTING PUMP AND REPLACE WITH LIKE KIND IF DAMAGED.

EXISTING CONTROLLER
SEE CONTROLLER
NOTE, RIGHT.

BLDG C
CLASSROOM
A#21961 1962

BLDG D
ADMIN./KINDERGARTEN
A#21961 1962

BLDG 7
RELO
A#57838

(E) PLAY SURFACE

(E) TURF

(E) TURF

(E) TURF

(E) CONC.

(E) TURF

(E) PLAY SURFACE

(E) TURF

IRRIGATION NOTES

- THE CONTRACTOR SHALL REVIEW RELATED DRAWINGS AND SHALL ENSURE COORDINATION WITH ALL APPLICABLE TRADES PRIOR TO SUBMITTING BID.
- OPERATE IRRIGATION CONTROLLER(S) BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.
- NOTIFY UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS, AS DESCRIBED IN THE SPECIFICATIONS, AND IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES RELATING TO THEIR WORK.
- DESIGN REFLECTS COMPLIANCE WITH CALIFORNIA STATE ASSEMBLY BILL 325 (AB 325) AND THE STATE'S MODEL ORDINANCE AND/OR THE LOCAL GOVERNING AGENCY'S ADOPTED WATER EFFICIENT LANDSCAPE ORDINANCE.
- DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS NECESSARY TO CONFORM TO ACTUAL FIELD CONDITIONS. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES. PARALLEL PIPES MAY BE INSTALLED IN COMMON TRENCH. PIPES ARE NOT TO BE INSTALLED DIRECTLY ABOVE ONE ANOTHER.
- DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, WHICH MAY BE REQUIRED. CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL WORK AND PLAN WORK ACCORDINGLY, TO FURNISH ALL REQUIRED MATERIAL. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.
- IRRIGATION SLEEVES SHOWN FOR MAJOR STREET AND DRIVEWAY CROSSINGS FOR CLARITY ONLY. ALL PIPE SLEEVES TO BE MINIMUM 2X DIAMETER OF PIPE. ALL MAINLINE SHALL BE ACCOMPANIED WITH A MINIMUM 2-INCH DIAMETER WIRE SLEEVE. SLEEVING TO EXTEND MINIMUM 12 INCHES BEYOND PAVING OR AS NECESSARY TO ACCESS. CONTRACTOR SHALL INSTALL SLEEVING BELOW ALL PAVING, HARDSCAPE, ETC. AS SHOWN AND AS DIRECTED BY ENGINEER. IN ADDITION TO THE SLEEVES AND CONDUITS SHOWN ON THE DRAWINGS, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF SLEEVES AND CONDUITS OF SUFFICIENT SIZE UNDER ALL PAVED AREAS.
- DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNERS/OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST ALL HEADS FOR OPTIMUM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS AND TO PREVENT OVERSPRAY ONTO HARDSCAPE AREAS OR STRUCTURAL ELEMENTS. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT ACTUAL SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM. ALL MAINLINES SHALL BE FLUSHED PRIOR TO THE INSTALLATION OF IRRIGATION HEADS. AT 30 DAYS AFTER INSTALLATION EACH SYSTEM SHALL BE FLUSHED TO ELIMINATE GLUE AND DIRT PARTICLES FORM THE LINES. COSTS INCURRED DUE TO ANY ADJUSTMENTS FOR 100% COVERAGE, INCLUDING THOSE REQUESTED BY THE OWNERS/OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE XX.X (P.S.I.) AND A MAXIMUM DEMAND XX.X (G.P.M.) AS SHOWN AT EACH POINT OF CONNECTION ON THE DRAWINGS. CONTRACTOR SHALL VERIFY PRESSURE AND DEMAND AT EACH POINT OF CONNECTION PRIOR TO COMMENCING INSTALLATION AND SUBMIT SUCH IN WRITING TO THE DISTRICTS/DISTRICTS AUTHORIZED REPRESENTATIVE. IF ANY DISCREPANCIES EXIST, THEY SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE DISTRICT/DISTRICT'S AUTHORIZED REPRESENTATIVE.
- EQUIPMENT SHOWN IN HARDSCAPE AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WHENEVER POSSIBLE WITHIN PLANTED AREAS A REASONABLE, REACHABLE DISTANCE FROM HARDSCAPE OR TURF AREAS.
- UNLESS OTHERWISE NOTED ON THE DRAWINGS, CONTRACTOR SHALL INSTALL WIRE AND PIPE UNDER HARDSCAPE AREAS IN P.V.C. SCHEDULE 40 SLEEVES PLACED PRIOR TO INSTALLING HARDSCAPE IN ACCORDANCE WITH APPLICABLE CODES.
- WHEREVER POSSIBLE, CONTROL WIRES SHALL OCCUPY THE SAME TRENCH AS PIPES.
- EACH CONTROLLER SHALL HAVE ITS OWN INDEPENDENT GROUND WIRE.
- SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. CONTRACTOR TO LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE AND EVERY 100' ON CENTER ALONG WIRE RUN. TAPE WIRE BUNDLES 10' ON CENTER. NO TAPING WILL BE PERMITTED INSIDE SLEEVES.
- WIRE CONNECTORS SHALL BE 3M-DBY/Y-6 DIRECT BURY OR APPROVED EQUAL.
- CONTROL VALVES SHALL BE SIZED AS DESIGNATED ON THE DRAWINGS AND SHALL BE INSTALLED IN VALVE BOXES AS INDICATED IN THE DETAILS. BOXES SHALL BE SET FLUSH WITH THE FINISH GRADE OR SURFACE AND PERMANENTLY MARKED WITH THE LETTERS R.C.V.
- CONTRACTOR SHALL INSTALL ANTI-DRAIN CHECK VALVES AS NECESSARY TO PREVENT LOW HEAD DRAINAGE. IN LOCATIONS WHERE LOW HEAD DRAINAGE WILL CAUSE EROSION AND EXCESS WATER, INSTALL KING BROS. CV SERIES CHECK VALVES IN LATERAL LINES FOR EVERY 10' OF ELEVATION CHANGE.
- BUBBLERS SHALL BE LOCATED ON THE UPHILL SIDE OF TREES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, ETC. COORDINATE WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO THE EXCAVATION OF TRENCHES. CONTRACTOR IS TO REPAIR ANY DAMAGE CAUSED BY THEIR WORK AT NO ADDITIONAL COST TO THE OWNER.
- REMOTE CONTROL VALVES SHALL BE PROGRAMMED IN SEQUENCE AS SHOWN ON PLANS UNLESS DIRECTED OTHERWISE BY OWNERS/OWNER'S AUTHORIZED REPRESENTATIVE. RUN WIRE FROM EACH RCV TO THE CONTROLLER. SPLICING WIRES TOGETHER OUTSIDE OF VALVE BOXES WILL NOT BE PERMITTED.
- INSTALL VALVE BOXES MINIMUM 12" FROM AND PERPENDICULAR TO WALK, CURB, LAWN, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, ETC. AND EACH BOX SHALL BE MINIMUM 12" APART. SHORT SIDE OF VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.
- LOCATE QUICK COUPLING VALVE 12" FROM HARDSCAPE AREA. .
- NOTIFY OWNERS/OWNER'S AUTHORIZED REPRESENTATIVE OF ANY ASPECTS OF LAYOUT THAT WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL AND DO NOT PROCEED UNTIL HIS/HER INSTRUCTIONS ARE OBTAINED.
- ALL EXCAVATIONS ARE TO BE FILLED WITH COMPACTED BACKFILL. REPAIR ALL SETTLED TRENCHES PROMPTLY. REPAIR ALL SETTLED TRENCHES PROMPTLY, FOR A PERIOD OF 1 YEAR AFTER COMPLETION OF WORK.
- INSTALL ONE (1) SPARE CONTROL WIRE FOR EVERY 6 (SIX) STATIONS ON THE CONTROLLER ALONG THE ENTIRE MAIN LINE. SPARE WIRES SHALL BE THE SAME COLOR (ONE WITH A WHITE STRIPE) AND OF A DIFFERENT COLOR THAN OTHER CONTROL WIRES. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES. SPARE WIRE(S), NOT APPLICABLE FOR TWO-WIRE SYSTEMS.
- WHEN VERTICAL OBSTRUCTIONS (STREET LIGHTS, TREES, FIRE HYDRANTS, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE HEADS SO AS TO PREVENT PROPER COVERAGE, FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER, THIRD, HALF CIRCLE OR ADJUSTABLE NOZZLE AND HEAD AT THE SIDES OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- NOTIFY ARCHITECT OF ANY ASPECTS OF LAYOUT THAT WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL AND DO NOT PROCEED UNTIL HIS/HER INSTRUCTIONS ARE OBTAINED.
- NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
- CONNECT FLOW SENSOR TO CONTROLLER WITH CONDUCTOR DIRECT BURIAL SHIELDED SENSOR CABLE (EV-CAB-SEN.) INSTALL EACH CABLE IN A SEPARATE 1-1/4" PVC SCHEDULE 40 CONDUIT WITH SWEEP-ELLS.
- CONTRACTOR SHALL WARRANT THAT THE IRRIGATION SYSTEM WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE OF WORK.
- EXISTING IRRIGATION NOT AFFECTED BY NEW CONSTRUCTION SHALL REMAIN AND BE PROTECTED IN PLACE. EXISTING IRRIGATION SHALL REMAIN OPERATIONAL DURING THE CONSTRUCTION PHASE. DAMAGED EQUIPMENT DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE-KIND EQUIPMENT.
- THE CONTRACTOR SHALL PERMANENTLY HOT STAMP ALL VALVE BOX LIDS WITH 2-INCH MINIMUM LETTER HEIGHT AS FOLLOWS:
 - 'X1' FOR REMOTE CONTROL VALVES ('X' = CONTROLLER AND '1' = STATION NUMBER)
 - 'FS' FOR FLOW SENSOR
 - 'MV' FOR MASTER CONTROL VALVE
 - 'GV' FOR GATE VALVE
 - 'QC' FOR QUICK COUPLING VALVE
 - 'SP' FOR SPLICE BOX OR PULL BOX

IRRIGATION MATERIAL LEGEND

SYMBOL	MANUFACTURER	MODEL NO. / DESCRIPTION							DETAIL
Q - H - F				GPM	PSI	RADIUS	P/R (TRI.)		
○ ●	RAIN BIRD	1800-SAM-PRS 6" POP-UP HEAD WITH 8'-14" RADIUS R-VAN14 / R-VAN14-360 MPR SPRAY NOZZLE.		32.0,63.1,27	45	8'-14"	0.72		L103, 5
● ●	RAIN BIRD	1800-SAM-PRS 6" POP-UP HEAD WITH 13'-18" RADIUS R-VAN18 / R-VAN18-360 MPR SPRAY NOZZLE.		50.1,01.1,85	45	13'-18"	0.72		L103, 5
○ ⊗ ⊕	RAIN BIRD	1800-SAM-PRS 6" POP-UP HEAD WITH 17'-24" RADIUS R-VAN24 / R-VAN24-360 MPR SPRAY NOZZLE.		84.1,68.3,48	45	17'-24"	0.72		L103, 5
▼	RAIN BIRD	RWS-B-C-1402 WITH RWS-SOCK. INSTALL 2 PER TREE. 0.50 GPM PER EACH BUBBLER, 1.0 GPM PER TREE.		1.0	30	NA	NA		L103, 4
⊗	N/A	POINT OF CONNECTION AT EXISTING 3" MAINLINE LOCATIONS PER PLANS. FOR REFERENCE ONLY. VERIFY SIZE & LOCATION IN FIELD PRIOR TO START OF WORK. SEE PLAN NOTES FOR ADDITIONAL INFORMATION.							N/A
⊗	MATCO-NORCA	MODEL 514LF BRASS GATE VALVE - LINE SIZE OR APPROVED EQUAL. INSTALL WITHIN CARSON 910 PLASTIC ROUND GREEN VALVE BOX.							L103, 6
⊕	SUPERIOR	950 SERIES BRASS REMOTE CONTROL VALVE WITH PRESSURE REGULATION. SIZE PER PLANS. INSTALL WITHIN CARSON 1419-12 PLASTIC GREEN VALVE BOX.							L103, 1
— — — —	AS APPROVED	PVC PIPE 2" - 2 1/2" CL. 315, SOLVENT WELD WITH SCH. 80 PVC FITTINGS, AS MAINLINES INSTALLED 18" BELOW FINISHED GRADE.							L103, 8,9
— — — —	AS APPROVED	PVC PIPE 3/4" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, AS LATERAL LINES INSTALLED 12" BELOW FINISHED GRADE.							L103, 8,9
— — — —	AS APPROVED	PVC PIPE SCH. 40 AS SLEEVING, 2 TIMES THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED (2" MINIMUM SIZE) INSTALL ALL PIPE AND WIRE UNDER PAVING, HARDSCAPE, ETC. (OR AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE) INSIDE SLEEVES. SLEEVES UNDER PEDESTRIAN PAVING SHALL BE INSTALLED 24" BELOW FINISHED GRADE. ALL MAINLINE SLEEVES ARE TO BE CONSIDERED EXISTING VERIFY LOCATION IN FIELD.							L103, 9
NO SYMBOL	AS APPROVED	ALL SOLVENT WELD CONNECTIONS FOR BOTH MAINLINE AND LATERAL LINE SHALL BE MADE USING THE TWO-STEP PROCESS OF PRIMER AND SOLVENT CEMENT. PRIMER SHALL BE LOW VOC "PURPLE PRIMER". MAINLINE SOLVENT CEMENT SHALL BE WELD-ON 711 PVC INDUSTRIAL GRADE CEMENT. LATERAL LINE SOLVENT CEMENT SHALL BE WELD-ON 711 PVC INDUSTRIAL GRADE CEMENT. USE DAUBERS SIZED AT LEAST ONE-HALF THE SIZE OF THE LARGEST PIPE BEING JOINED. ALL SOLVENT CEMENTED JOINTS SHALL BE MADE PER THE PIPE AND FITTING MANUFACTURER'S RECOMMENDATIONS.							L103, 1,2,4,5
NO SYMBOL	3M	DBRY-Y-6 DIRECT BURIAL (I.L. APPROVED) WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE SPLICES AND CONNECTIONS.							L103, 2
NO SYMBOL	CARSON	VALVE BOXES, SIZE PER EQUIPMENT LEGEND, WITH T-COVER LIDS AND CAPTIVE BOLT AND LOC-KIT. FOR ROUND AIR RELIEF VALVES USE MODEL 708, 10" ROUND SHALL BE MODEL 910, 12" STANDARD RECTANGULAR, SHALL BE MODEL 1419, 12" JUMBO RECT. SHALL BE MODEL 1220, SUPER JUMBO SHALL BE MODEL 1324, AND SUPER JUMBO XL SHALL BE MODEL 1730. FOR USE IN NON-VEHICULAR TRAFFIC SITUATIONS ONLY. DO NOT INSTALL IN CONCRETE OR ASPHALT.							L103, 7
NO SYMBOL	K.B.I.	KSC-(LINE SIZE)-S SWING CHECK VALVE, LINE SIZE, 1 DOWNSTREAM OF EACH RCV WHEN RCV IS LOWER THAN THE SPRINKLERS							N/A
NO SYMBOL	K.B.I.	KC-(LINE SIZE)-S SPRING CHECK VALVE, LINE SIZE, 1 DOWNSTREAM OF EACH RCV IMMEDIATELY ABOVE FIRST LATERAL LINE TEE.							N/A
NO SYMBOL	PAIGE ELECTRIC	P7079D POLYETHYLENE INSULATED, SOLID COPPER CONDUCTOR IRRIGATION CONTROL WIRE #14UF AWG DIRECT BURIAL (U.L. APPROVED). PILOT WIRES SHALL BE RED IN COLOR, COMMON GROUND WIRE SHALL BE WHITE IN COLOR, SPARE WIRES SHALL BE YELLOW IN COLOR. WHERE MULTIPLE CONTROLLERS ARE USED ON THE PROJECT, EACH CONTROLLER SHALL HAVE A DIFFERENT COLOR FOR PILOT WIRES. THE CONTRACTOR SHALL ROUTE TWO (2) SPARE CONTROL WIRES (YELLOW) FROM THE CONTROLLER ALONG THE MAINLINE IN ALL DIRECTIONS AWAY FROM THE CONTROLLER. LOOP SPARE WIRES UP AND INTO EACH VALVE BOX ALONG THE MAINLINE, PROVIDING A 3 FOOT MINIMUM LOOP.							L103, 1,2,3,8,9
— — — —	EXISTING	EXISTING PVC DOMESTIC IRRIGATION MAINLINE. VERIFY PRIOR TO START OF WORK							N/A
— — — —	AS APPROVED	PVC PIPE 3/4" - 1 1/2" SCH. 40, SOLVENT WELD WITH SCH. 40 PVC FITTINGS, AS LATERAL LINES INSTALLED 12" BELOW FINISHED GRADE.							N/A

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NEWPORT BEACH, CA
U. S. A. 9 2 6 6 0
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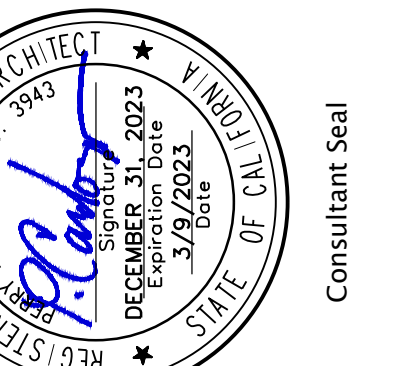
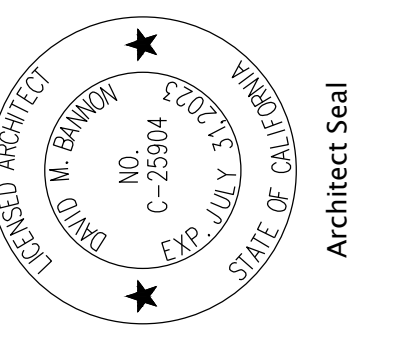
IRRIGATION PLAN NOTES

- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS, AS DESCRIBED IN THE SPECIFICATIONS, AND IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES.
- DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS NECESSARY TO CONFORM TO ACTUAL FIELD CONDITIONS.
- CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST ALL HEADS FOR OPTIMUM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATIONS AND TO PREVENT OVERSPRAY ONTO HARDSCAPE AREAS OR STRUCTURAL ELEMENTS. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT ACTUAL SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM. COSTS INCURRED DUE TO ANY ADJUSTMENTS FOR 100% COVERAGE, INCLUDING THOSE REQUESTED BY THE DISTRICTS AUTHORIZED REPRESENTATIVE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE (P.S.I.) AND A MAXIMUM DEMAND (G.P.M.) AS SHOWN AT EACH POINT OF CONNECTION ON THE DRAWINGS. CONTRACTOR SHALL VERIFY PRESSURE AND DEMAND AT EACH POINT OF CONNECTION PRIOR TO COMMENCING INSTALLATION AND SUBMIT SUCH IN WRITING TO THE DISTRICTS AUTHORIZED REPRESENTATIVE. IF ANY DISCREPANCIES EXIST, THEY SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE DISTRICTS AUTHORIZED REPRESENTATIVE.
- EQUIPMENT SHOWN IN HARDSCAPE AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WHENEVER POSSIBLE WITHIN PLANTED AREAS A REASONABLE, REACHABLE DISTANCE FROM HARDSCAPE OR TURF AREAS.
- UNLESS OTHERWISE NOTED ON THE DRAWINGS, CONTRACTOR SHALL INSTALL WIRE AND PIPE UNDER HARDSCAPE AREAS IN P.V.C. SCHEDULE 40 SLEEVES PLACED PRIOR TO INSTALLING HARDSCAPE IN ACCORDANCE WITH APPLICABLE CODES.
- WHEREVER POSSIBLE, CONTROL WIRES SHALL OCCUPY THE SAME TRENCH AS PIPES.
- EACH CONTROLLER SHALL HAVE ITS OWN INDEPENDENT GROUND WIRE.
- SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. CONTRACTOR TO LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE AND EVERY 100' ON CENTER ALONG WIRE RUN. TAPE WIRE BUNDLES 10' ON CENTER. NO TAPING WILL BE PERMITTED INSIDE SLEEVES.
- WIRE CONNECTORS SHALL BE SCOTCH DBY OR APPROVED EQUAL.
- CONTROL VALVES SHALL BE SIZED AS DESIGNATED ON THE DRAWINGS AND SHALL BE INSTALLED IN VALVE BOXES AS INDICATED IN THE DETAILS. BOXES SHALL BE SET FLUSH WITH THE FINISH GRADE OR SURFACE AND PERMANENTLY MARKED WITH THE LETTERS R.C.V.
- CONTRACTOR SHALL INSTALL ANTI-DRAIN CHECK VALVES AS NECESSARY TO PREVENT LOW HEAD DRAINAGE.
- EMITTERS SHALL BE LOCATED ON THE UPHILL SIDE OF TREES.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES RELATING TO THEIR WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, ETC. COORDINATE WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO THE EXCAVATION OF TRENCHES. CONTRACTOR IS TO REPAIR ANY DAMAGE CAUSED BY THEIR WORK AT NO ADDITIONAL COST TO THE DISTRICT.
- DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC., WHICH MAY BE REQUIRED. CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL WORK AND PLAN WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.
- REMOTE CONTROL VALVES SHALL BE PROGRAMMED IN SEQUENCE AS SHOWN ON PLANS UNLESS DIRECTED OTHERWISE BY DISTRICTS AUTHORIZED REPRESENTATIVE.
- VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE.
- INSTALL VALVE BOXES MINIMUM 12" FROM AND PERPENDICULAR TO WALK, CURB, LAWN, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, ETC. AND EACH BOX SHALL BE MINIMUM 12" APART. SHORT SIDE OF VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.
- LOCATE QUICK COUPLING VALVE 12" FROM HARDSCAPE AREA. .
- NOTIFY DISTRICTS REPRESENTATIVE OF ANY ASPECTS OF LAYOUT THAT WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL AND DO NOT PROCEED UNTIL HIS/HER INSTRUCTIONS ARE OBTAINED.
- ALL EXCAVATIONS ARE TO BE FILLED WITH COMPACTED BACKFILL. REPAIR ALL SETTLED TRENCHES PROMPTLY.
- OPERATE IRRIGATION CONTROLLER(S) BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.
- NOTIFY UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.

NOTE:
CONTRACTORS SHALL FIELD VERIFY THAT ALL IRRIGATION EQUIPMENT IS ON SITE AND IS OPERATIONAL (CONTROLLER, BACKFLOW PREVENTER, VALVES (NEW AND EXISTING) FLOW SENSOR, MASTER VALVE, MAINLINE, LATERAL LINES, ETC. ALL. CONTACT THE DISTRICT/DISTRICT'S REPRESENTATIVE IF EQUIPMENT IS MISSING OR IN POOR CONDITION. FAILURE TO OBTAIN DISTRICT'S REPRESENTATIVE APPROVAL PRIOR TO ANY / ALL INSTALLATIONS SHALL CAUSE THE CONTRACTOR TO MAKE DISTRICT'S REPRESENTATIVE DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE DISTRICT.

NOTE:
NEW DRAWINGS ARE BASED OFF OF AS-BUILTS. IF THERE ARE MISSING OR ALTERED IN FIELD DIFFERENCES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE DISTRICT/DISTRICT'S REPRESENTATIVE. FAILURE TO OBTAIN DISTRICT'S REPRESENTATIVE APPROVAL PRIOR TO ANY / ALL INSTALLATIONS SHALL CAUSE THE CONTRACTOR TO MAKE DISTRICT'S REPRESENTATIVE DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE DISTRICT.

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**MEADOW GREEN ELEMENTARY SCHOOL
HVAC & ROOF UPGRADES**
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

IRRIGATION LEGEND AND NOTES

REVISIONS:

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Date:	10/01/2021
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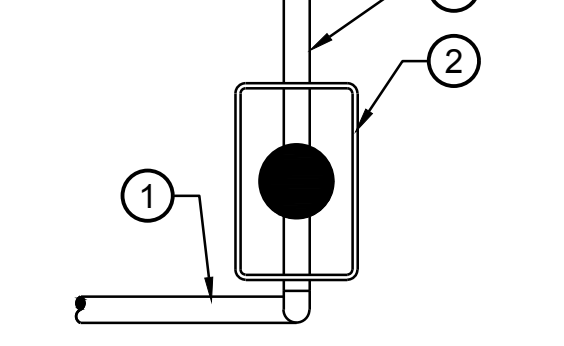
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REVISIONS:

Date: 10/01/2021
Job: #2101
Scale:
A#: 03-121823

EXISTING CURRENT CONDITIONS

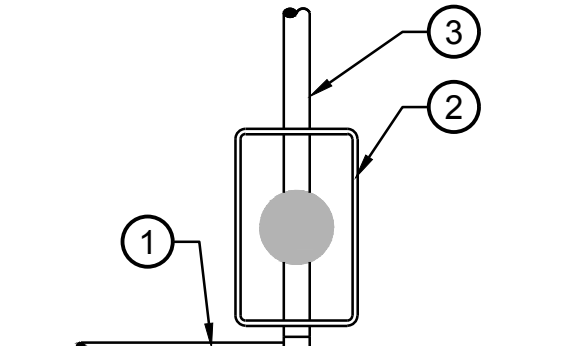
- EXISTING TRANSITE PVC MAINLINE, 3" SIZE (DO NOT DISTURB).
- EXISTING 3" REMOTE CONTROL VALVE ASSEMBLY. PROTECT IN PLACE EXISTING IRRIGATION CONTROLLER WIRES.
- PVC PIPE (LATERAL LINE) TO IRRIGATION SYSTEM, TYP.



PLAN VIEW
A

DURING CONSTRUCTION - REMOVAL

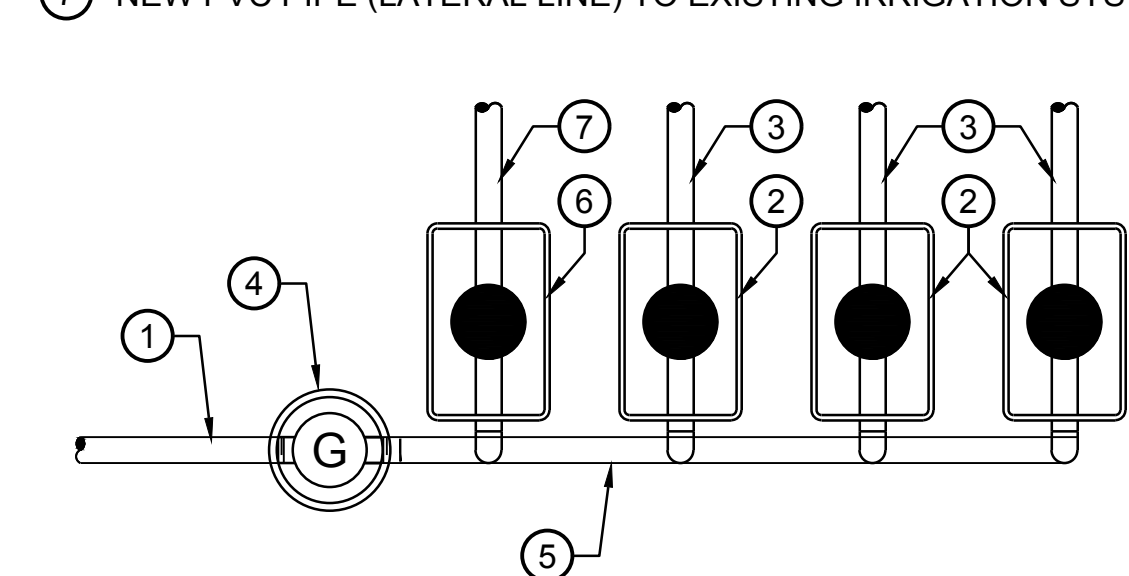
- EXISTING TRANSITE PVC MAINLINE, 3" SIZE (DO NOT DISTURB).
- REMOVE EXISTING 3" REMOTE CONTROL VALVE ASSEMBLY AT CLOSET NON-TRANSITE TREADED FITTING, REMOVE VALVE & BOX.
- PVC PIPE (LATERAL LINE) TO IRRIGATION SYSTEM, TYP.



PLAN VIEW
B

DURING CONSTRUCTION - INSTALLATION

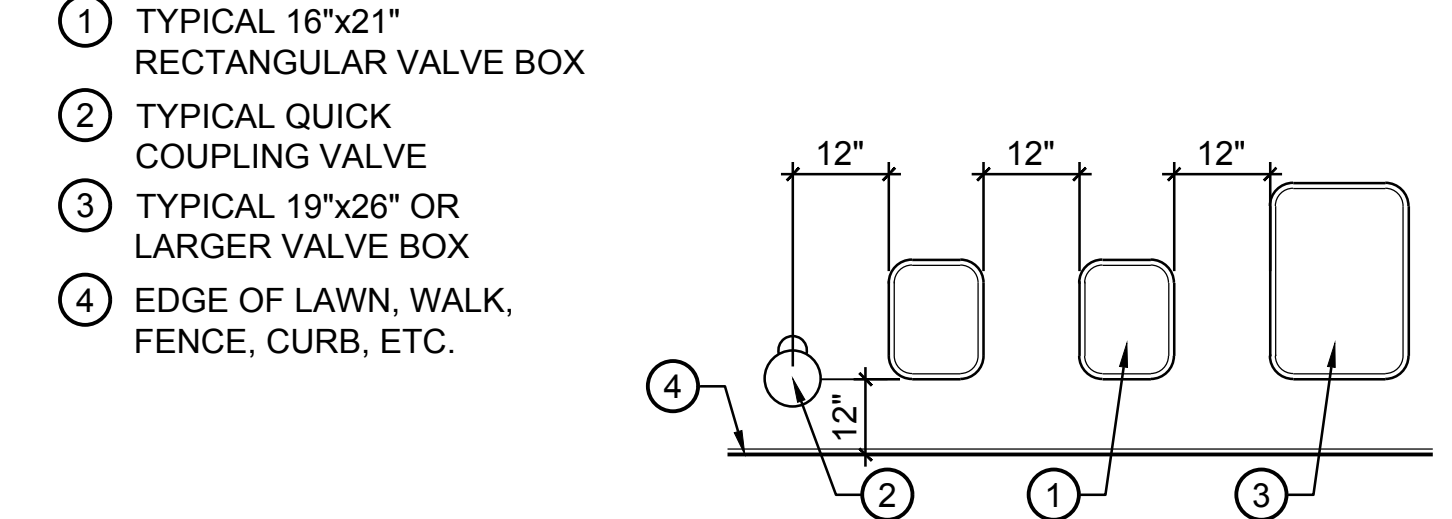
- EXISTING TRANSITE MAINLINE, 3" SIZE (DO NOT DISTURB).
- NEW REMOTE CONTROL VALVE ASSEMBLY. INSTALL NEW IRRIGATION CONTROLLER WIRES, FROM NEW VALVES TO EXISTING CONTROLLER. SEE PLANS FOR LOCATION.
- PVC PIPE (LATERAL LINE) TO IRRIGATION SYSTEM, TYP.
- NEW GATE VALVE, 3" SIZE. CONNECT TO EXISTING THREADED TRANSITE PIPE FITTING.
- NEW PVC SCH. 40 MAINLINE, 3" SIZE. LENGTH AS NEEDED.
- EXISTING REMOTE CONTROL VALVE ASSEMBLY, TO BE REINSTALLED. IF DAMAGED REPLACE WITH LIKE KIND.
- NEW PVC PIPE (LATERAL LINE) TO EXISTING IRRIGATION SYSTEM, TYP.



PLAN VIEW
C

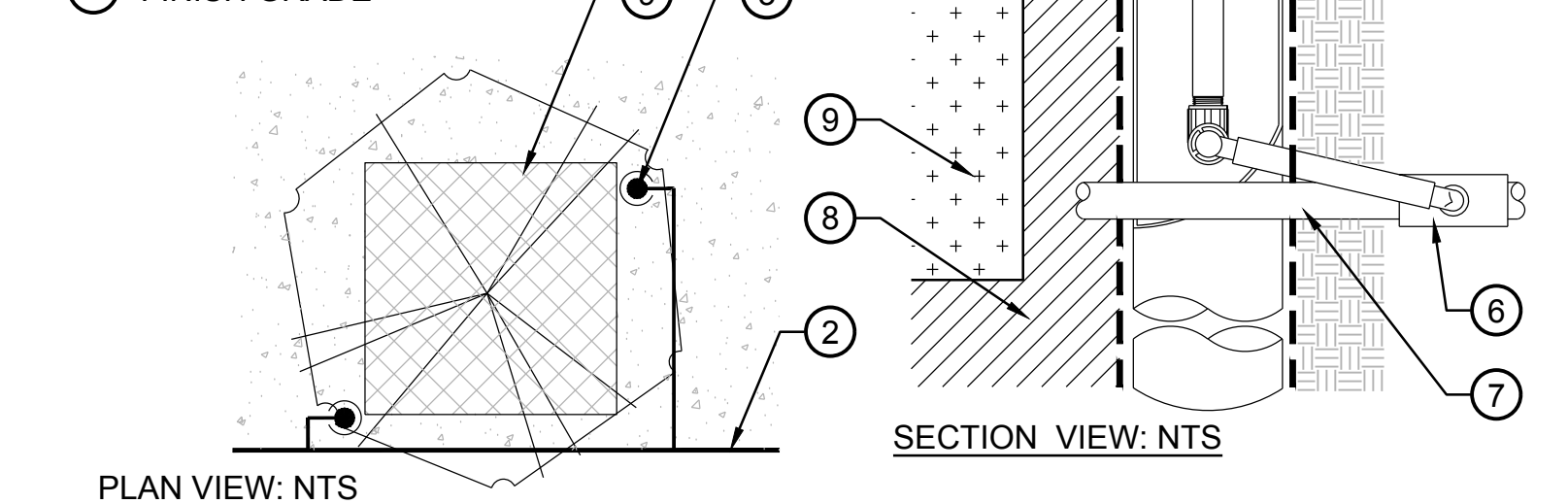
10 REPLACEMENT MANIFOLD LAYOUT
SCALE: NTS

- NOTES:
- CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
 - SET BOXES 2" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND 1" ABOVE FINISH GRADE IN TURF AREA.
 - SET RVC AND VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
 - SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
 - AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
 - BRAND VALVE BOX WITH CONTROLLER LETTER AND VALVE NUMBER USING 1 1/2" LETTERING



7 VALVE BOX INSTALLATION
SCALE: NTS

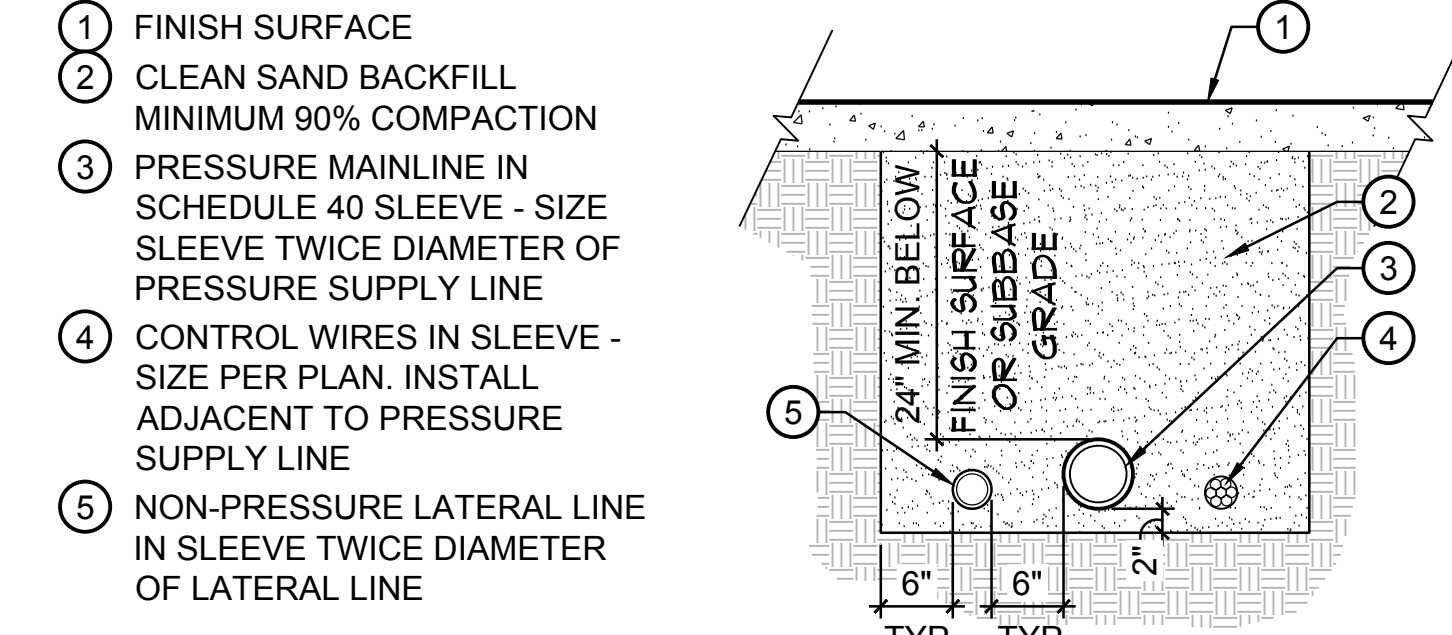
- ROOT WATERING SYSTEM ASSEMBLY: RAINBIRD RWS-B-C-1402 4" DIA. X 36" LENGTH (INCLUDES 1402 0.50GPM BUBBLER W/ RISER, CHECK VALVE, GRATE, SWING ASSEMBLY, 1/2" MALE NPT INLET AND BASKET CANISTER)
- PVC LATERAL LINE PIPE. SEE SPECIFICATIONS FOR TYPE AND DEPTH REQUIREMENTS
- ROOT WATERING SYSTEM PER LEGEND
- ROOT BALL OF TREE
- RWS SAND SOCK (RWS-SOCK)
- PVC SCH. 40 TEE OR ELL
- PVC LATERAL LINE
- AMMENDED BACKFILL
- ROOT BALL OF TREE
- NATIVE SOIL
- FINISH GRADE



4 TREE BUBBLER
SCALE: NTS

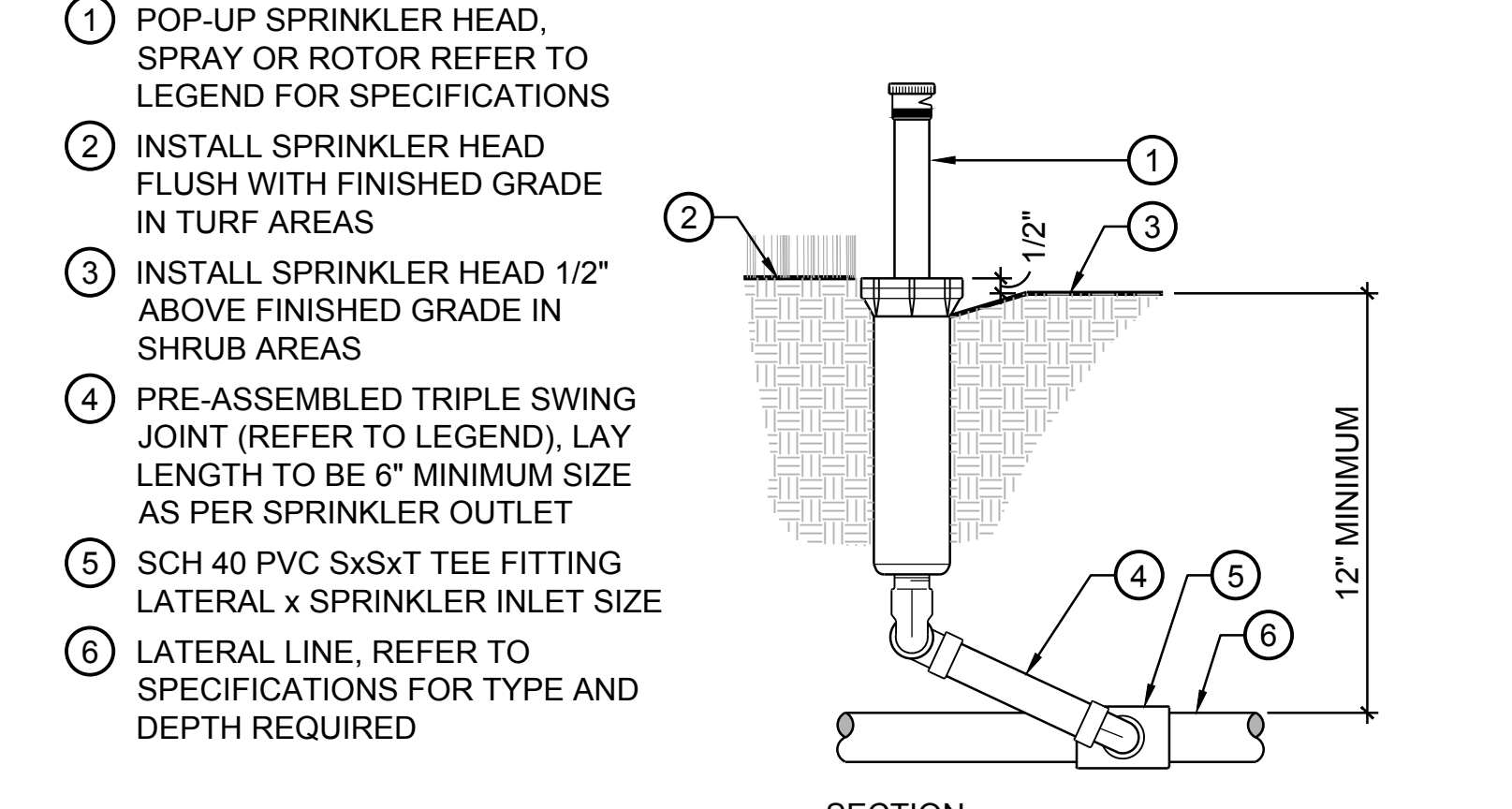
- NOTES:
- 2 BUBBLERS MIN. PER TREE

- NOTES:
- PVC SLEEVES TO BE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED.
 - DETAIL ALSO FOR PIPE INSTALLED IN ROCK SOIL.
 - ALL SLEEVES TO BE SCHEDULE 40 PVC.
 - EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS.
 - 24" MINIMUM COVER ON MAINLINE 3" AND LARGER.



8 TYPICAL SLEEVING
SCALE: NTS

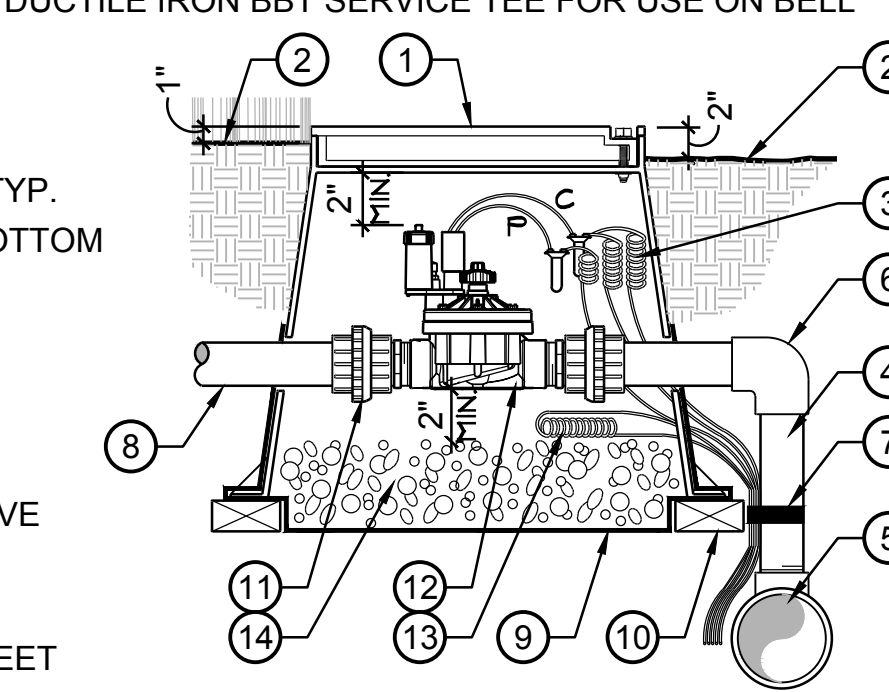
- NOTES:
- LOCATE SPRINKLER HEADS 24" FROM WALKS, CURBS, MOWSTRIP AND HEADER BOARDS EDGE IN TURF AND GROUND COVER AREAS.
 - INSTALL SPRINKLER HEADS PLUMB. ADJUST SPRAYS OR NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.



5 POP-UP SPRAY HEAD
SCALE: NTS

- NOTES:
- TOP OF BOX: 1" ABOVE FINISH SURFACE IN TURF AND 2" ABOVE IN NON-TURF AREAS.

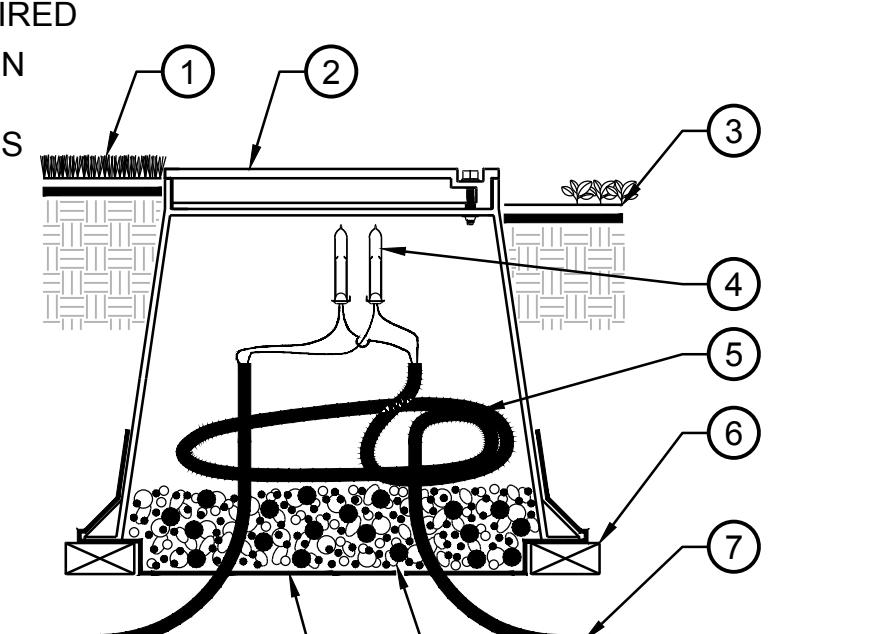
- PLASTIC RECTANGULAR VALVE BOX WITH T-COVER AND CAPTIVE STAINLESS STEEL BOLT AND LOC-KIT. INSTALL BOX AT RIGHT ANGLE TO ADJACENT HARDSCAPE EDGE. LABEL "RCV" AND CONTROL STATION NUMBER ONTO LID
- FINISH SURFACE - 2"
- 24" WIRE LOOPS WITH WATERPROOF WIRE CONNECTORS
- SCH.40 PVC PIPE OR SCH.80 T.O.E. NIPPLE WITH D.I. SERVICE TEE
- SCH.80 PVC SLIP TEE OR LEEMCO DUCTILE IRON BBT SERVICE TEE FOR USE ON BELL AND GASKET MAINLINE PIPER
- SCH.80 PVC SLIP 90° ELL
- TAPE WIRES TO PIPE
- SCH.40 PVC PIPE, SIZE PER RCV, TYP.
- LANDSCAPE FABRIC TO COVER BOTTOM AND ALL SIDES OF VALVE BOX
- BRICK SUPPORTS (4 TOTAL)
- LASCO #896 PVC UNION SLIP X MIPT, SIZE PER RCV, TWO (2) REQUIRED FOR ASSEMBLY
- ELECTRIC REMOTE CONTROL VALVE
- SPARE CONTROL WIRE LOOP 48" LENGTH INTO EACH RCV BOX
- 3/4" CRUSHED GRAVEL, 2 CUBIC FEET



1 REMOTE CONTROL VALVE ASSEMBLY
SCALE: NTS

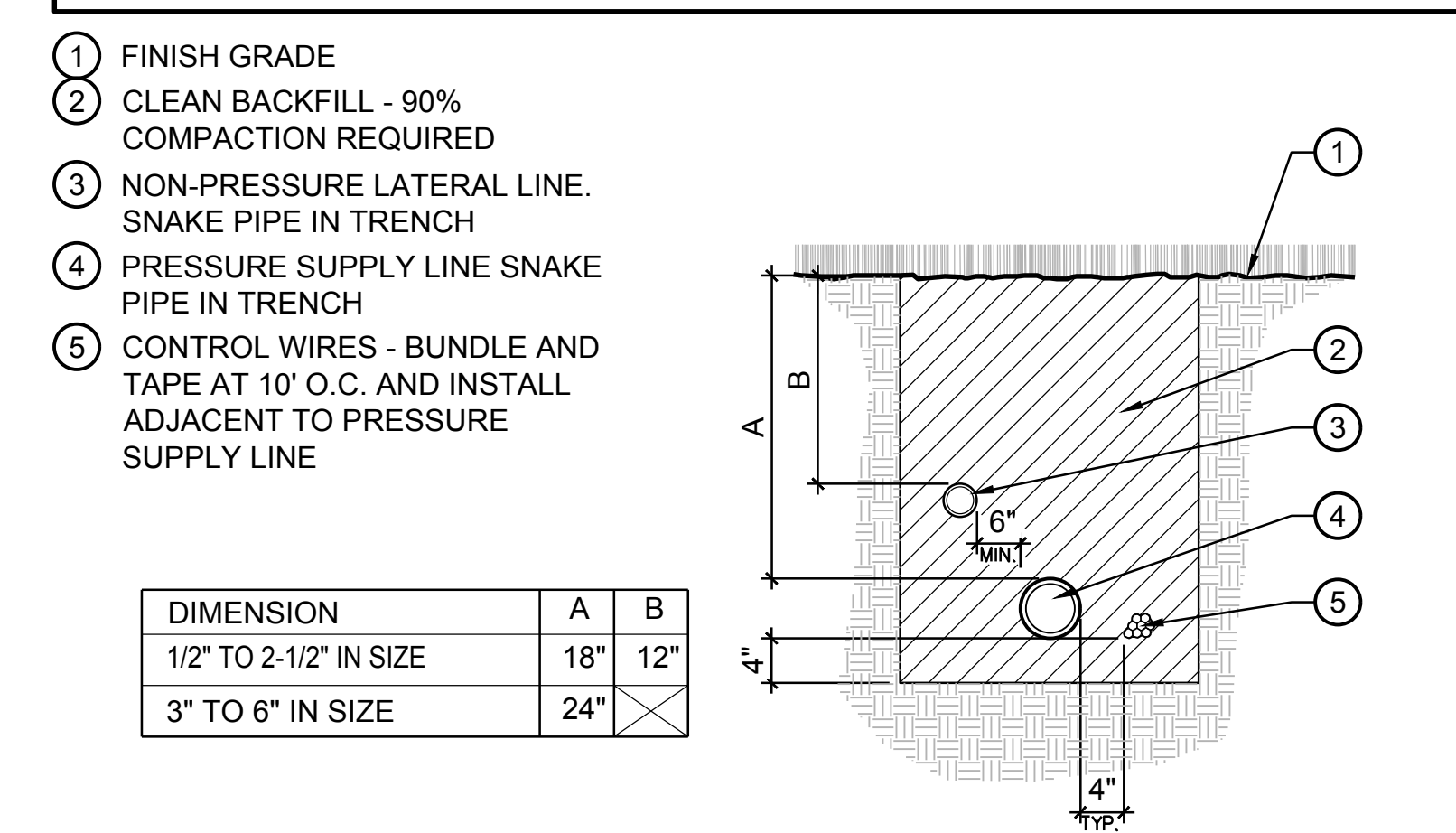
- NOTES:
- TWO-WIRE PATH IN CONDUIT ONLY IF SPECIFIED ON LEGEND, SEE LEGEND.

- FINISHED GRADE IN TURF AREA
- PLASTIC RECTANGULAR VALVE BOX WITH A TAN COLORED LID AND LOCK KIT. INSTALL BOX AT RIGHT ANGLE TO THE ADJACENT HARDSCAPE EDGE. HEAT BRAND "PB" ONTO LID
- FINISHED GRADE IN SHRUB AREA
- 3M DBR/Y-6 WATERPROOF WIRE CONNECTORS
- PROVIDE A 48" LONG COIL OF THE TWO WIRE PATH (FOR CONTROL VALVES, MASTER VALVE/FLOW SENSOR OR COMMUNICATION CABLE) IN EACH PULL BOX USED. PULL BOXES FOR SLEEVE CROSSING DO NOT REQUIRE WATERPROOF CONNECTORS UNLESS SPLICES ARE REQUIRE
- BRICK SUPPORTS, FOUR (4) REQUIRED
- TWO-WIRE PATH (CABLE) BETWEEN THE CONTROLLER AND ALL FIELD EQUIPMENT AND CONTROL VALVES
- 3/4" CRUSHED GRAVEL, 4" MINIMUM DEPTH
- LANDSCAPE FABRIC TO COVER BOTTOM AND ALL SIDES OF VALVE BOX



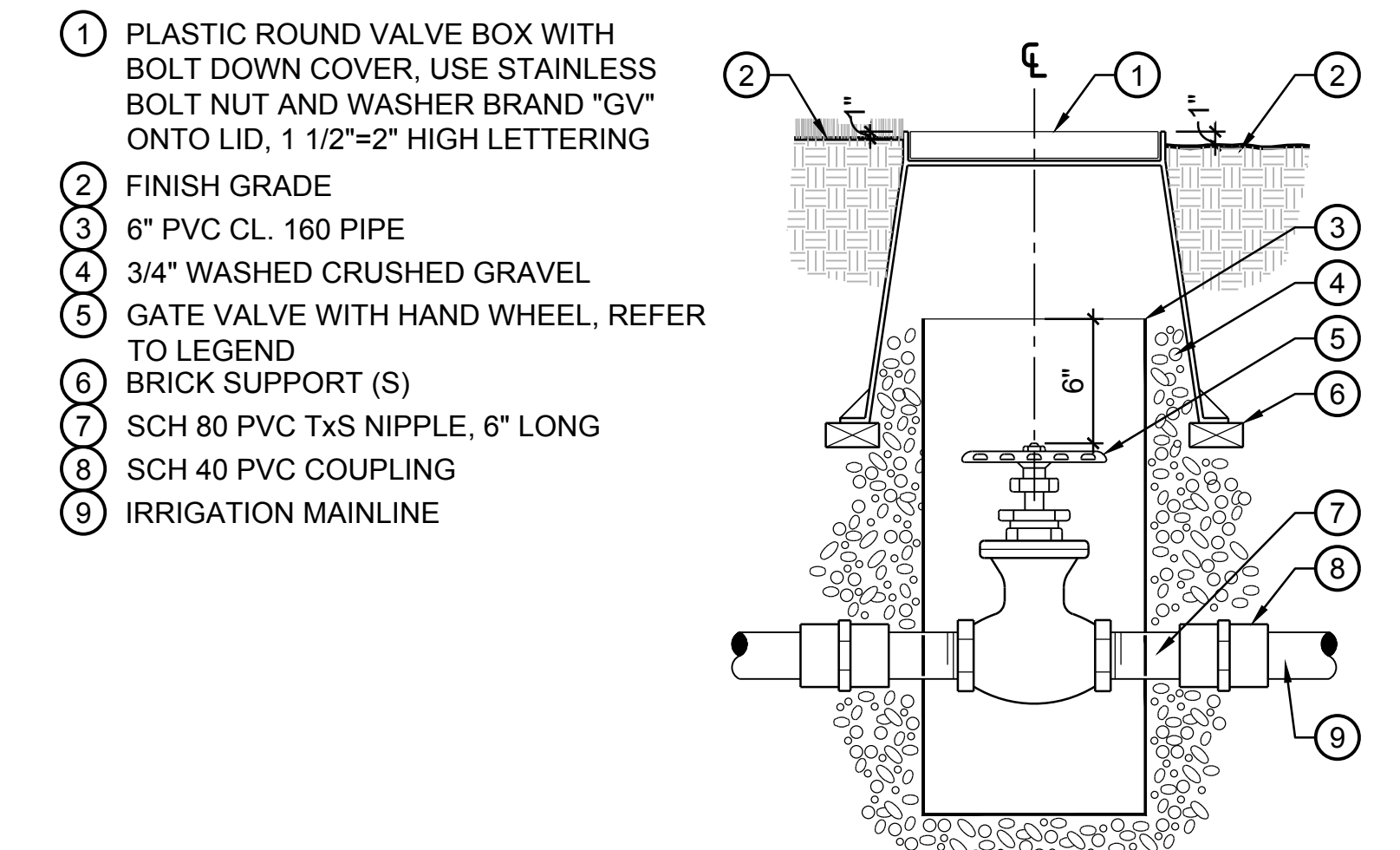
2 PULL BOX
SCALE: NTS

- NOTES:
- PIGTAIL AND LOOP CONTROL WIRE AT ALL 90° CHANGES IN DIRECTION.
 - PROVIDE A MINIMUM 10 FEET SEPARATION BETWEEN POTABLE AND RECLAIMED MAINLINE PIPING.
 - 24" MINIMUM COVER ON 3" MAINLINE AND LARGER.



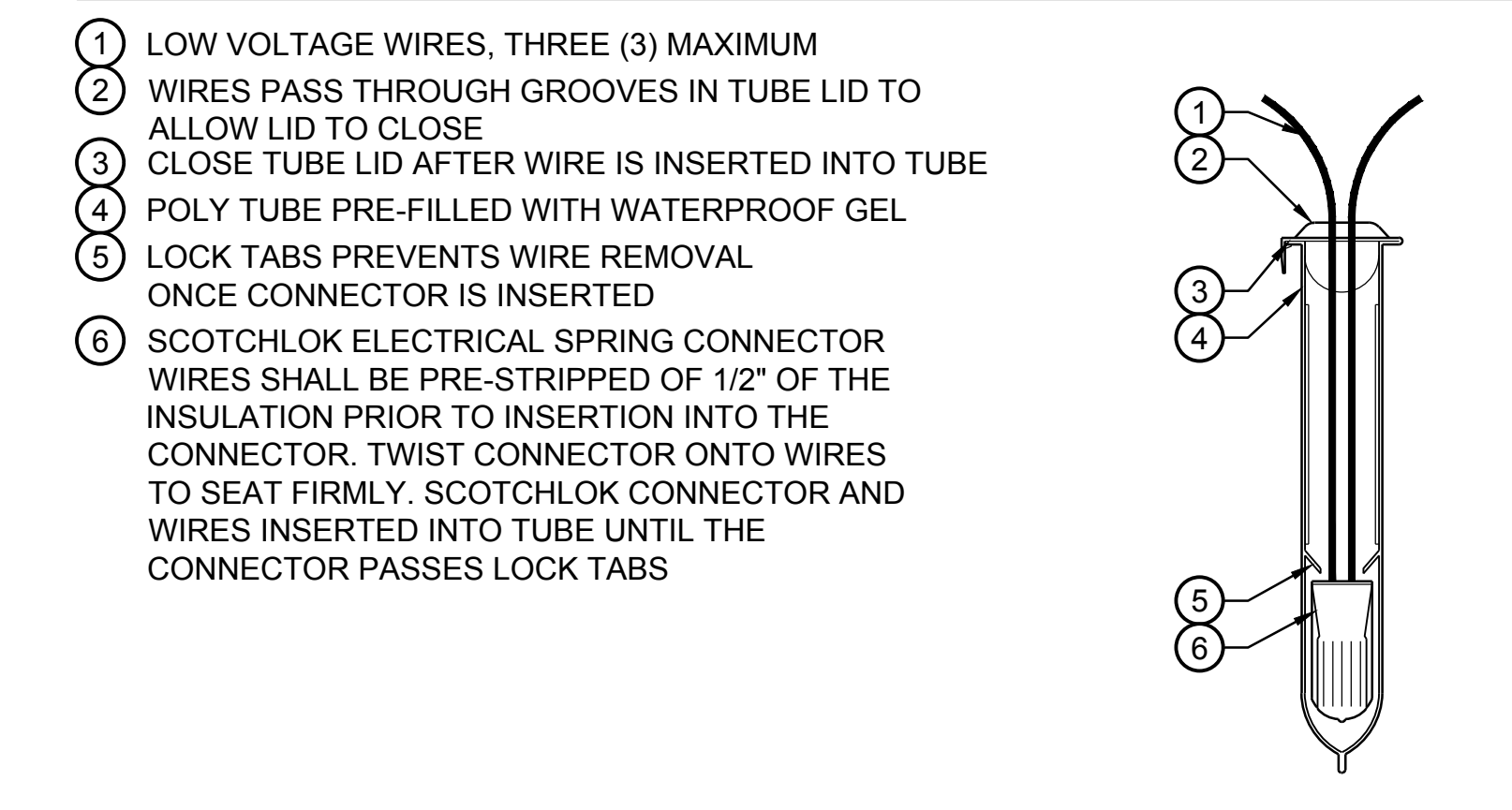
9 TYPICAL TRENCHING
SCALE: NTS

- NOTES:
- FINISH GRADE: 1" BELOW FINISH SURFACE ADJACENT TO TURF AND 2" BELOW ADJACENT TO NON-TURF AREAS.



6 GATE VALVE
SCALE: NTS

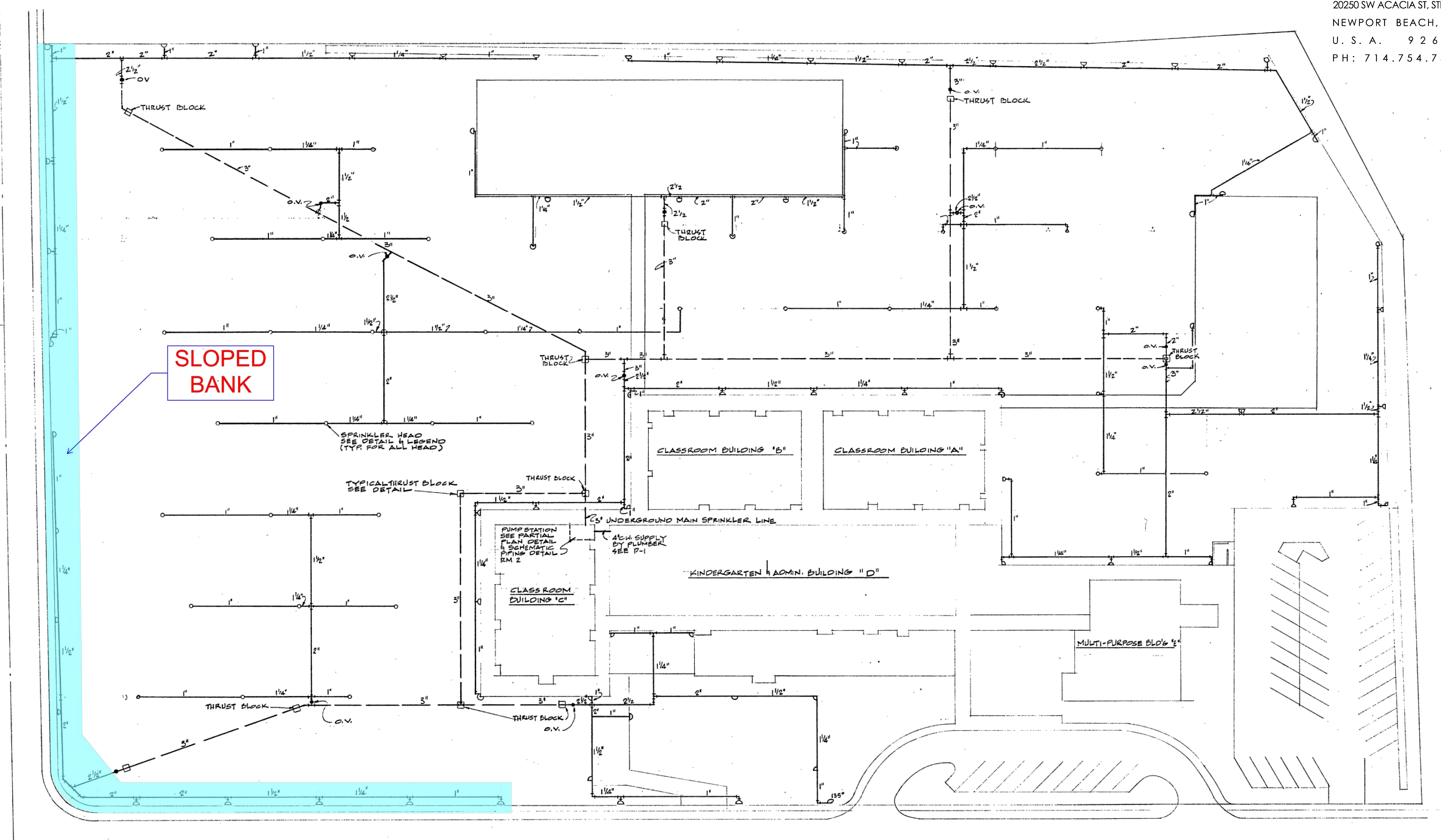
- NOTES:
- KIT SHALL INCLUDE A SCOTCHLOK Y SPRING CONNECTOR, A POLYPROPYLENE TUBE AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PRE-FILLED WITH GEL.
 - DIRECT BURY SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2-3 #14 OR TWO (2) #12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.



3 TYP. WIRE CONNECTION
SCALE: NTS

NOTE:
NEW DRAWINGS ARE BASED OFF OF AS-BUILTS FROM THE DISTRICT IF THERE ARE MISSING OR ALTERED IN FIELD DIFFERENCES IT IS THE CONTRACTORS OBLIGATION TO CONTACT THE OWNER / OWNERS REPRESENTATIVE. FAILURE TO OBTAIN OWNER'S REPRESENTATIVE APPROVAL PRIOR TO ANY / ALL INSTALLATIONS SHALL CAUSE THE CONTRACTOR TO MAKE OWNER'S REPRESENTATIVE DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.

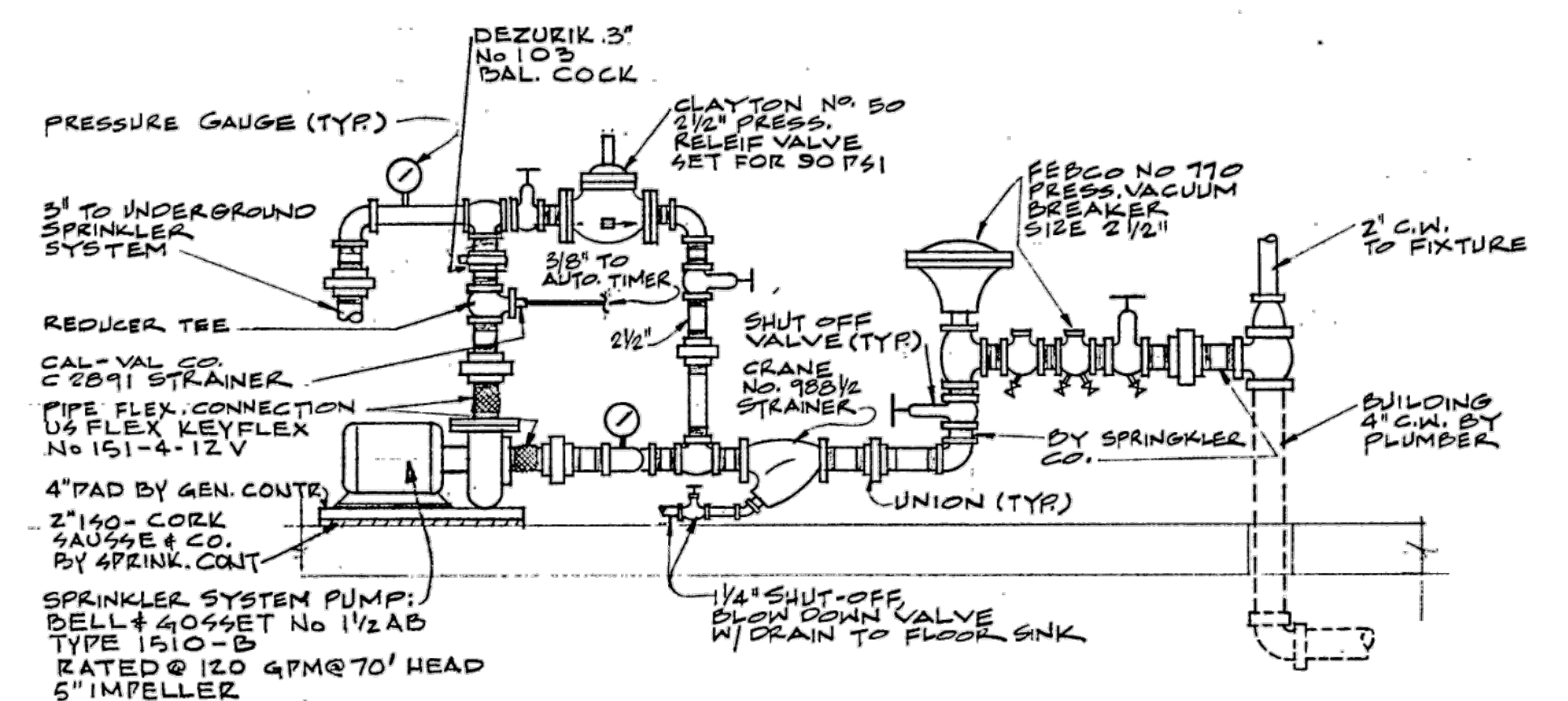
NOTE
EXISTING IRRIGATION PLANS ARE FOR REFERENCE ONLY AND ARE NOT TO SCALE.



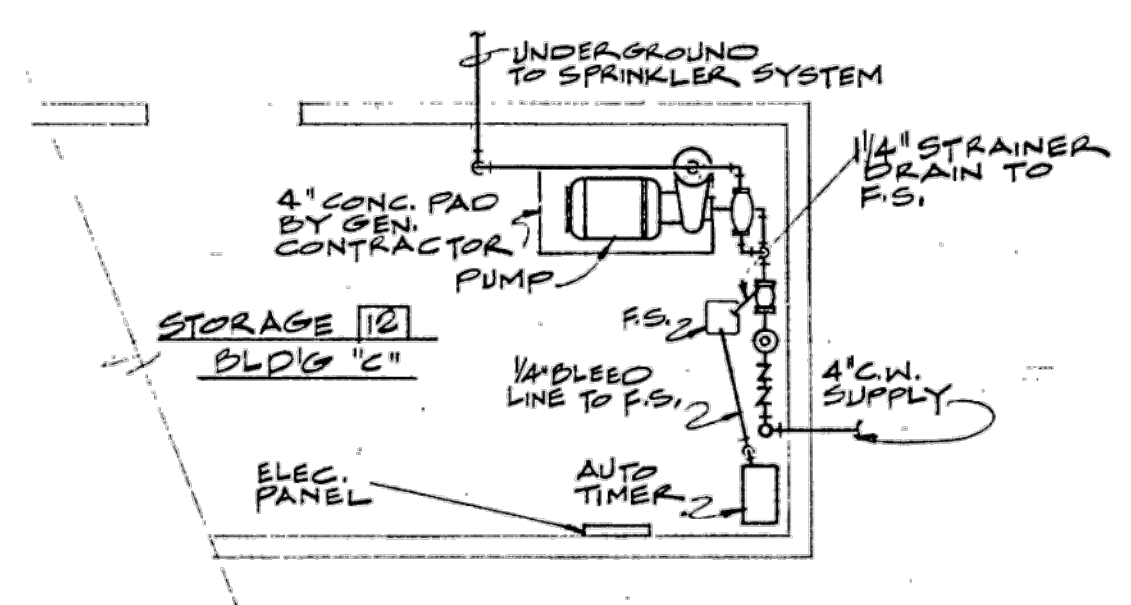
- SPRINKLER SYSTEM LEGEND**
- UNDERGROUND SUPPLY LINE (MAIN LINE)
 - UNDERGROUND SUPPLY LINE (BRANCH LINE)
 - OPERATING VALVE (ABBREVIATED O.V.)
 - 360° SPRINKLER HEAD 22-7/32" NOZZLE
 - 270° SPRINKLER HEAD 17/64" NOZZLE
 - 180° SPRINKLER HEAD " "
 - 90° SPRINKLER HEAD " "

NOTE:
CONTRACTOR SHALL SUBMIT MANUFACTURER'S SPRINKLER HEAD DETAILS PRIOR TO CONSTRUCTION.

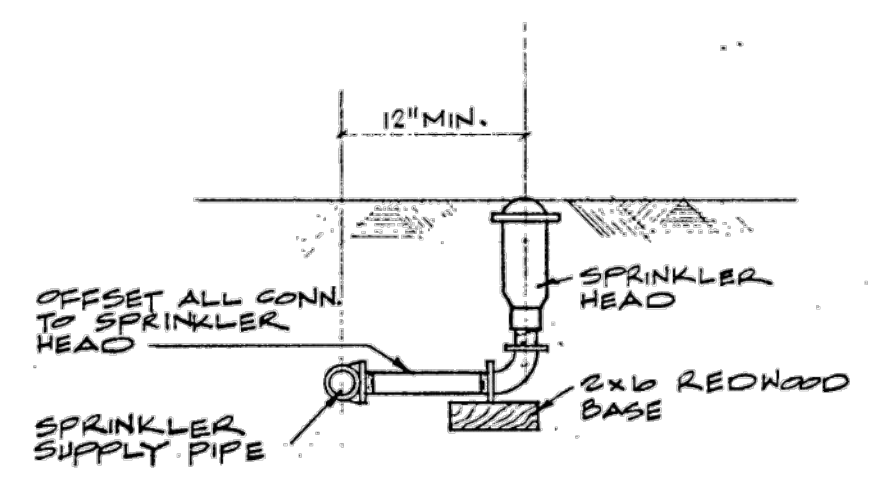
TURF SPRINKLER SYSTEM SITE PLAN
SCALE 1" = 30'-0"



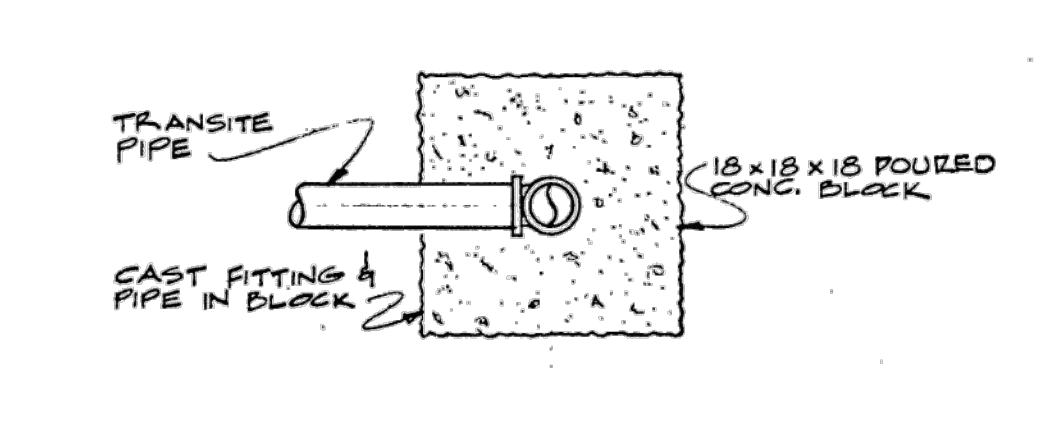
PUMP STATION DETAIL
NO SCALE



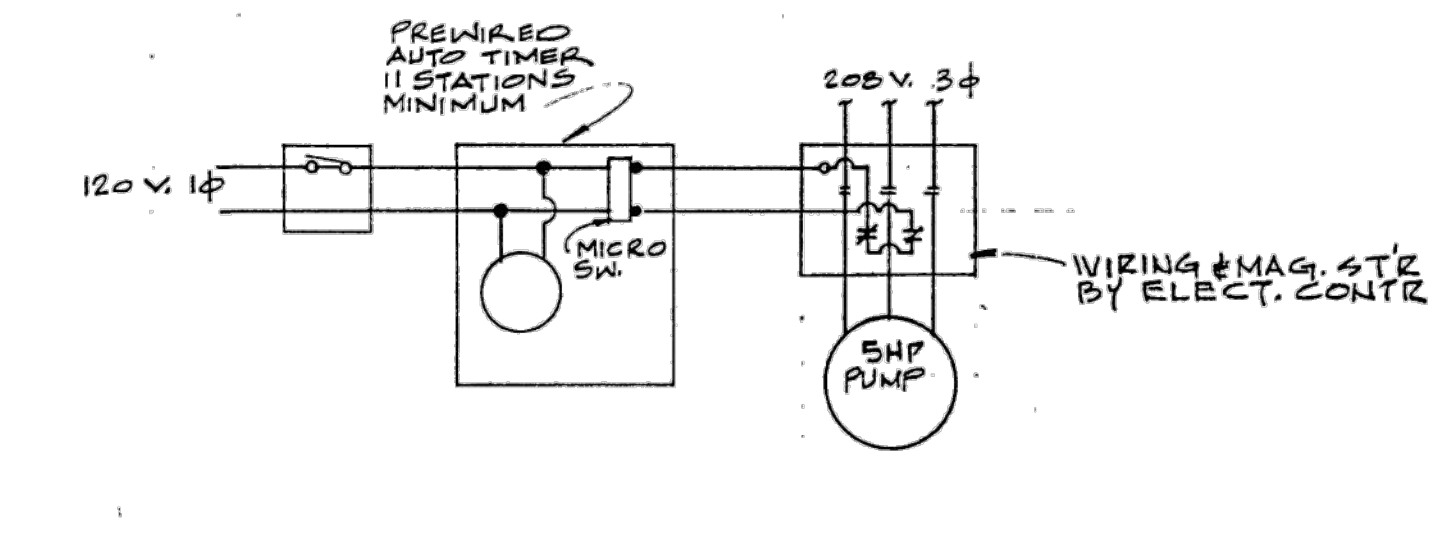
PARTIAL PLAN PUMP STATION
SCALE 1/4" = 1'-0"



SPRINKLER HEAD DETAIL
NO SCALE

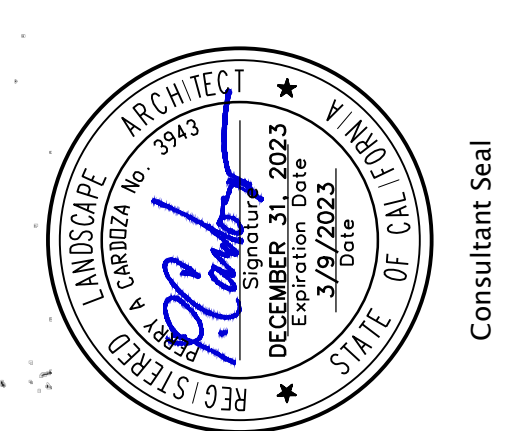
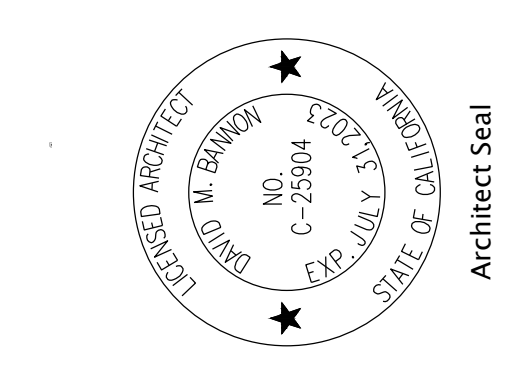


THRUST BLOCK DETAIL
NO SCALE



CONTROL DIAGRAM
NO SCALE

CHARTRODE BANNON ARCHITECTS
Architecture • Planning • Interior Design
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**MEADOW GREEN ELEMENTARY SCHOOL
HVAC & ROOF UPGRADES**
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

REVISIONS:

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Job: #2101
Scale:
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REVISIONS	ENGINEER F. T. ANDREWS & CO. CONSULTING MECHANICAL ENGINEERS 330 W. VALENCIA DR. FULLERTON, CALIFORNIA LAMBERT 51133 <i>Richard Allen</i>	APPROVALS	MEADOW GREEN SCHOOL 12025 S. GROVEDALE DRIVE LA HABRA, CALIF. LOWELL JOINT SCHOOL DISTRICT OF LOS ANGELES & ORANGE COUNTIES CALIF.	T. V. ANTHONY II C-1260 V. WALLACE LANGFORD C-2601	ANTHONY & LANGFORD ARCHITECTS 704 WEST WHITTIER BLVD. WHITTIER CALIFORNIA AIA	SITE SPRINKLER PLAN & DETAILS	DRAWN CHECKED DATE 1/22/22	FILE NO. 6117 SHEET NO. 10-4
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Maximum Applied Water Allowance Calculations for New and Rehabilitated Non-Residential Landscapes

Enter value in Pale Blue Cells

Tan Cells Show Results

Messages and Warnings

Los Angeles	
Click on the blue cell on right to Pick City Name	Los Angeles
ET _c of City from Appendix A	50.10 ET _c (inches/year)
	13812 Overhead Landscape Area (ft ²)
	560 Drip Landscape Area (ft ²)
	0 SLA (ft ²)
Total Landscape Area	14,372
Results:	
(ET _c) x (0.62) x [(0.45 x LA) + (1.0 - 0.45) x SLA]	200,877 Gallons
	26,853 Cubic Feet
	269 HCF
	1 Acre-foot
	0 Millions of Gallons
MAWA calculation incorporating Effective Precipitation (Optional)	
ET _c of City from Appendix A	50 ET _c (inches/year)
Total Landscape Area	14,372 LA (ft ²)
Special Landscape Area	0 SLA (ft ²)
	Total annual precipitation (inches/year)
Enter Effective Precipitation	0.00 Eppt (in/yr)(25% of total annual precipitation)
Results:	
MAWA = [(ET _c - Eppt) x (0.62)] x [(0.45 x LA) + (1.0 - 0.45) x SLA]	Gallons
	Cubic Feet
	HCF
	Acre-foot
	Millions of Gallons

MAXIMUM APPLIED WATER ALLOWANCE

Estimated Total Water Use

Equation: $ETWU = ET_c \times 0.62 \times [(PF \times HA)/IE] + SLA$; Considering precipitation $ETWA = (ET_c - Eppt) \times 0.62 \times [(PF \times HA)/IE] + SLA$

Enter values in Pale Blue Cells

Tan Cells Show Results

Messages and Warnings

Irrigation Efficiency Default Value for overhead 0.75 and drip 0.81.	
Plant Water Use Type	Plant Factor
Very Low	0 - 0.1
Low	0.2 - 0.3
Medium	0.4 - 0.6
High	0.7 - 1.0
SLA	1.0

Hydrozone	Select System From the Dropdown List click on cell below	Plant Water Use Type (s) (low, medium, high)	Plant Factor (PF)	Hydrozone Area (HA) (ft ²) Without SLA	Irrigation Efficiency (IE)	(PF x HA (ft ²))/IE
Zone 1	Overhead Spray	Low	0.30	3,295	0.75	1,318
Zone 2	Drip	Low	0.30	256	0.81	95
Zone 3	Overhead Spray	Low	0.30	3,295	0.75	1,318
Zone 4	Overhead Spray	Low	0.30	3,611	0.75	1,444
Zone 5	Drip	Low	0.30	304	0.81	113
Zone 6	Overhead Spray	Low	0.30	3,612	0.75	1,445
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Zone 8						
Zone 9						
Zone 10						
Zone 11						
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Zone 32						
Zone 33						
Zone 34						
Zone 35						
SLA				0		5,733
Sum				14,373		0

Results	MAWA =	200,891
Total Landscape Area including Special Landscape		
ETWU =	178,055 Gallons	ETWU complies with MAWA
	23,803 Cubic Feet	
	236.03 HCF	
	0.55 Acre-foot	
	0.18 Millions of Gallons	

ESTIMATED TOTAL WATER USE

PRESSURE LOSS CALCULATIONS PRESSURE WITH PUMP NOT ON.

WATER PRESSURE CALCULATIONS			
POC NUMBER	Greenfield Com 1	POC SIZE	2"
HYDRAULIC GRADE LINE	-	POC ELEVATION	-
ELEVATION DIFFERENCE	-	MINIMUM STATIC WATER PRESSURE	68
REMOTE CONTROL VALVE #	10	REMOTE CONTROL VALVE SIZE	1"
R.O.V. DEMAND (GPM)	30	TOTAL DEMAND (GPM)	40
HIGHEST HEAD ELEVATION	-	STATIC PRESSURE AT ROTARY	40
SIZE	DESCRIPTION	PSI LOSS	
2"	50 FEET SERVICE LINE, TYPE K COPPER	1	0.5 PSI
2"	WATER METER	2	1.9 PSI
2"	BACKFLOW PREVENTER	3	0.0 PSI
2"	GATE VALVES	4	0.5 PSI
2"	MASTER CONTROL VALVE	5	0.8 PSI
2-1/2"	2000 FEET OF MAINLINE, TYPE CL 315	6	7.7 PSI
1"	REMOTE CONTROL VALVE	8	2.9 PSI
10%	LATERAL LINE LOSS	9	1.4 PSI
10%	FITTING LOSS	10	1.6 PSI
0	FT. OF ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD)	11	PSI
TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #11)		12	17.3 PSI
PRESSURE REQUIRED AT RCV		13	40.0 PSI
TOTAL PRESSURE REQUIRED (SUM OF #12 AND #13)		14	57.3 PSI
STATIC WATER PRESSURE (FROM ABOVE)		15	68.0 PSI
RESIDUAL PRESSURE (SUBTRACT #14 FROM #15)		16	10.7 PSI
SET PRV OR MOV AT (#14 PLUS 10 PSI)		17	83.5 PSI
PRESSURE BOOST, IF REQUIRED (#14-#15 + 20 PSI)		18	43.5 PSI

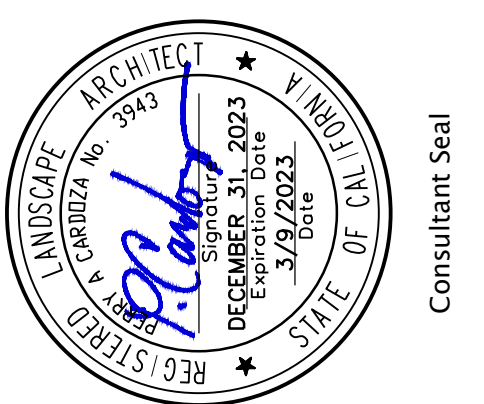
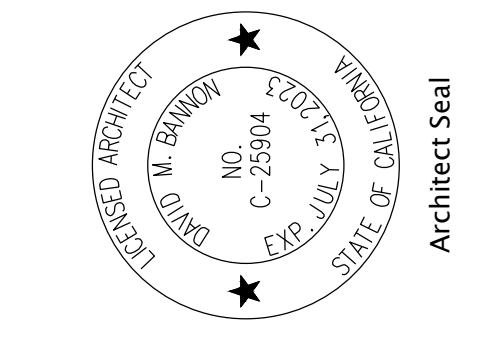
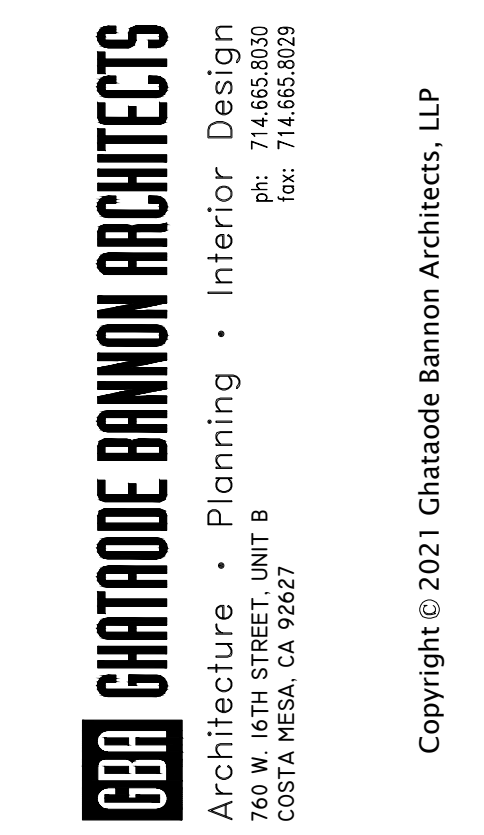
CONTROLLER SCHEDULE

IRRIGATION CONTROLLER SCHEDULE- ESTABLISHMENT PERIOD															
DATE: 8/12/2019				CITY: Anaheim				REVISION HISTORY:							
PROJECT: Maxwell Dog Park				WUCOLS ZONE: Long Beach				REVISED BY:							
CLIENT: City of Anaheim															
PREPARED BY NUVIS															
CONTROLLER 'A'															
E.T. DATA															
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	%of ET	Efficiency Rate	Days Per Week
MONTHLY	2.70	2.70	3.30	4.60	5.30	5.60	5.60	6.00	5.90	3.40	2.60	2.00			
WEEKLY	0.63	0.63	0.77	1.07	1.23	1.30	1.30	1.40	1.37	0.79	0.60	0.47	1.25	0.81	6
DAILY	0.09	0.10	0.11	0.15	0.17	0.19	0.18	0.19	0.20	0.11	0.09	0.06			
IRRIGATION SCHEDULE- MINUTES PER DAY															
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	STATION	PRECIP. RATE	CROP COEF.
SHRUBS	16	16	20	28	32	34	34	36	36	21	16	12	1.7,11	0.48	0.2
TREES	5	5	6	9	10	11	11	11	11	6	5	4	2.6,8	1.55	0.5
TURF	24	24	29	41	47	49	49	53	52	30	23	18	3.4,5.6,9,10	0.33	0.8
IRRIGATION CONTROLLER SCHEDULE- ESTABLISHED															
DATE: 8/12/2019				CITY: Anaheim				REVISION HISTORY:							
PROJECT: Maxwell Dog Park				WUCOLS ZONE: Long Beach				REVISED BY:							
CLIENT: City of Anaheim															
PREPARED BY NUVIS															
CONTROLLER 'A'															
E.T. DATA															
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	%of ET	Efficiency Rate	Days Per Week
MONTHLY	2.70	2.70	3.30	4.60	5.30	5.60	5.60	6.00	5.90	3.40	2.60	2.00			
WEEKLY	0.63	0.63	0.77	1.07	1.23	1.30	1.30	1.40	1.37	0.79	0.60	0.47	1	0.81	3
DAILY	0.09	0.10	0.11	0.15	0.17	0.19	0.18	0.19	0.20	0.11	0.09	0.06			
IRRIGATION SCHEDULE- MINUTES PER DAY															
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	STATION	PRECIP. RATE	CROP COEF.
SHRUBS	28	28	32	45	51	54	58	57	57	33	25	19	1.7,11	0.48	0.3
TREES	8	8	10	14	16	17	17	18	18	10	8	6	2.6,8	1.55	0.5
TURF	38	38	47	65	75	79	79	85	83	48	37	28	3.4,5.6,9,10	0.33	0.8

THE IRRIGATION SCHEDULE IS A GUIDELINE ONLY. THIS WILL NOT REPLACE THE REQUIREMENT FOR ONGOING IRRIGATION ADJUSTMENTS AND MAINTENANCE MANAGEMENT BY THE CONTRACTOR. SITE AND CLIMATIC CONDITIONS WILL REQUIRE FURTHER ADJUSTMENTS NOT SHOWN IN THIS SCHEDULE.



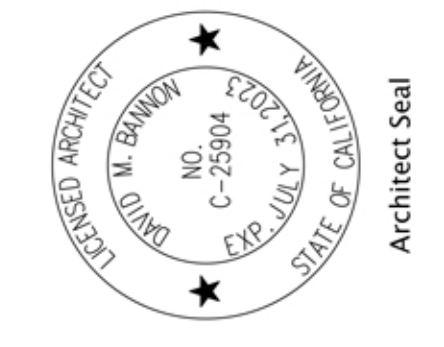
20250 SW ACACIA ST, STE 260
NEWPORT BEACH, CA
U. S. A. 92660
PH: 714.754.7311



MEADOW GREEN ELEMENTARY SCHOOL
HVAC & ROOF UPGRADES
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT
IRRIGATION CALCULATIONS

REVISIONS:
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Date: 10/01/2021
Job: #2101
Scale:
A#: 03-121823



SILVERGROVE DRIVE

GROVEDALE DRIVE

CONTRACTOR TO REHABILITATE AND RESEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND IRRIGATION SYSTEM REVISIONS.

CONTRACTOR TO REHABILITATE AND RESEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND IRRIGATION SYSTEM REVISIONS.

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QUANTITY
TREES					
○	CERCIDIUM 'DESERT MUSEUM'	PALO VERDE	24" BOX LOW BRANCHING	LOW	9
*	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY REDBUD	24" BOX LOW BRANCHING	LOW	13
⊙	HETEROMELES ARBUTIFOLIA	TOYON	24" BOX LOW BRANCHING	LOW	7
⊙	QUERCUS AGRIFOLIA	CALIFORNIA LIVE OAK	24" BOX STD.	LOW	6
SHRUBS					
A	ACACIA REDOLENS 'LOW BOY'	PROSTRATE ACACIA	1 GAL.	LOW	26
⊙	CEANOTHUS 'YANKEE POINTE'	YANKEE POINT CEANOTHUS	5 GAL.	LOW	50
C	COTONEASTER DAMMERI 'LOWFAST'	BARBERRY COTONEASTER	5 GAL.	LOW	35
L	LANTANA 'NEW GOLD'	TRAILING YELLOW LANTANA	1 GAL.	LOW	52
M	MYOPORUM PARVIFOLIUM	CREeping MYOPORUM	1 GAL.	LOW	30
R	RHAMNUS CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GAL.	LOW	54
⊕	SALVIA CLEVELANDII 'ALLEN CHICKERING'	SAGE	5 GAL.	LOW	42
T	TECOMA STANS 'GOLD STAR'	YELLOW BELLS	5 GAL.	LOW	8

MULCH NOTE
SHRUB AREAS SHALL RECEIVE A 3" LAYER OF FOREST FLOOR COMPOSTED WOOD MULCH 1/2" - 1 1/2" SIZE. OR APPROVED EQUAL. MULCH SHALL HAVE A MINIMUM 80% RECYCLED CONTENT.

NOTE
REFER TO SHEET L202 FOR PLANTING NOTES & DETAILS

SCALE: 1" = 20'-0"
0' 10' 20' 40' 80'

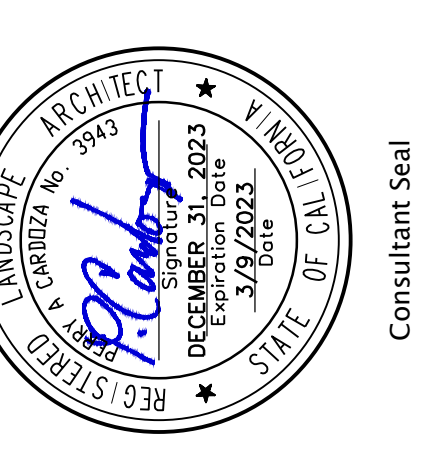
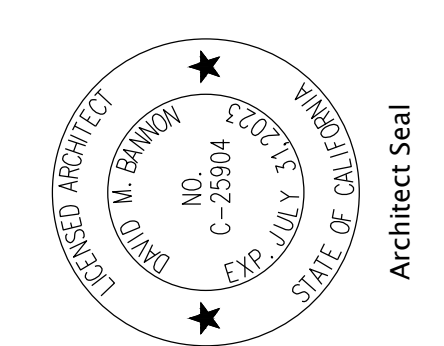
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Date: 10/01/2021
Job: #2101
Scale:
A#: 03-121823

L201

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XREF:

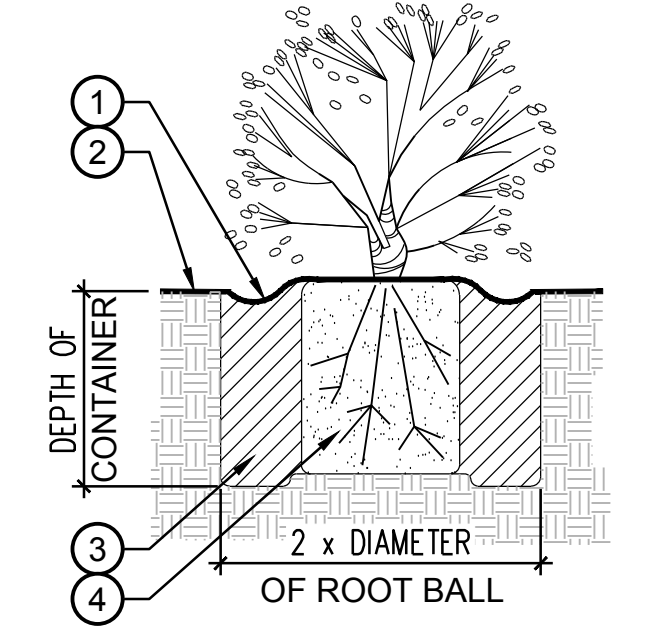


PLANTING PLAN NOTES

- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO FURNISH AND INSTALL PLANT MATERIAL AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.
- UNLESS DESIGNATED ON THE DRAWINGS OTHERWISE, STRUCTURAL IMPROVEMENTS AND HARDSCAPE SHALL BE INSTALLED PRIOR TO PLANTING OPERATIONS.
- ALL WORK ON THE IRRIGATION SYSTEM, INCLUDING HYDROSTATIC, COVERAGE, AND OPERATIONAL TESTS AND THE BACKFILLING AND COMPACTION OF TRENCHES SHALL BE PERFORMED PRIOR TO PLANTING OPERATIONS.
- PLANT LIST ON THE DRAWINGS SHALL BE USED AS A GUIDE ONLY. CONTRACTOR SHALL TAKEOFF AND VERIFY SIZES AND QUANTITIES BY PLAN CHECK.
- SAMPLES OF FERTILIZERS, ORGANIC AMENDMENT, SOIL CONDITIONERS, AND SEED SHALL BE SUBMITTED PRIOR TO INCORPORATION. CONTRACTOR SHALL FURNISH TO THE CITY/OWNER'S AUTHORIZED REPRESENTATIVE A CERTIFICATE OF COMPLIANCE FOR SUCH FURNISHED MATERIALS.
- LOCATIONS OF PLANT MATERIAL SHALL BE REVIEWED ON SITE BY THE CITY/OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
- AMENDMENTS, AS INDICATED IN THE SOILS REPORT SHOWN ON THE DRAWINGS, ARE BASED ON AGRICULTURAL SUITABILITY SOILS TESTS PERFORMED PRIOR TO GRADING AND WERE PRESENTED FOR BIDDING PURPOSES. IF NO SOILS REPORT EXISTS, CONTRACTOR SHALL PROPOSE ON AMENDMENTS AS STATED IN THE SPECIFICATIONS. CLIENT OR CONTRACTOR SHALL OBTAIN AGRICULTURAL SOILS TESTING AND RECOMMENDATIONS AFTER GRADING OPERATIONS AND PRIOR TO PLANT INSTALLATION.
- TREES SHALL BE PLANTED NO CLOSER THAN TEN FEET (10') FROM UTILITIES.
- TREES PLANTED WITHIN FIVE FEET (5') OF HARDSCAPE OR STRUCTURES SHALL BE INSTALLED WITH A ROOT BARRIER AS APPROVED BY THE CITY/OWNER'S AUTHORIZED REPRESENTATIVE.
- IF, DURING PLANTING OPERATIONS THERE SEEMS TO BE MINIMAL OR NO PERCOLATION IN PLANTING PITS, CONTRACTOR SHALL CEASE PLANTING OPERATIONS AND IMMEDIATELY NOTIFY THE CITY/OWNER'S AUTHORIZED REPRESENTATIVE TO DISCUSS ALTERNATIVE TO MAINTAINING POSITIVE ROOTBALL DRAINAGE MEASURES.
- SHRUB AREAS SHALL RECEIVE A 3" LAYER OF FOREST FLOOR COMPOSTED WOOD MULCH 3/8"-1 3/8" SIZE, OR EQUAL. MULCH SHALL HAVE A MINIMUM 80% RECYCLED CONTENT.

NOTES:
1. CROWN OF ROOTBALL TO BE 1/2" - 1" ABOVE FINISH GRADE.
2. FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.

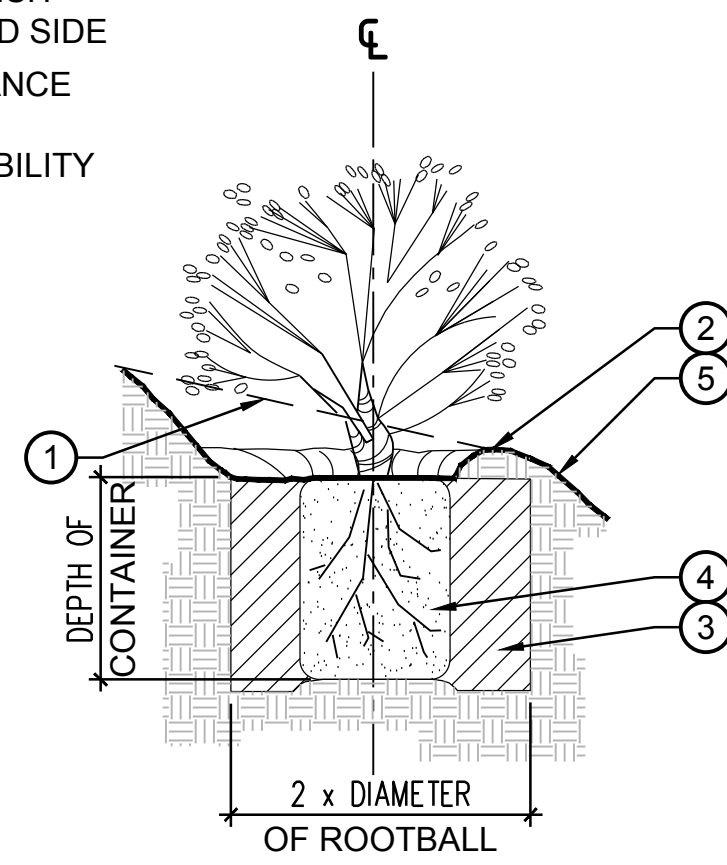
- A SHALLOW BASIN 2" DEEP SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE
- FINISH GRADE
- BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- ROOTBALL



3 SHRUB PLANTING
SCALE: NTS

NOTES:
1. CROWN OF ROOTBALL TO BE 1/2"-1" ABOVE FINISH GRADE.
2. FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.

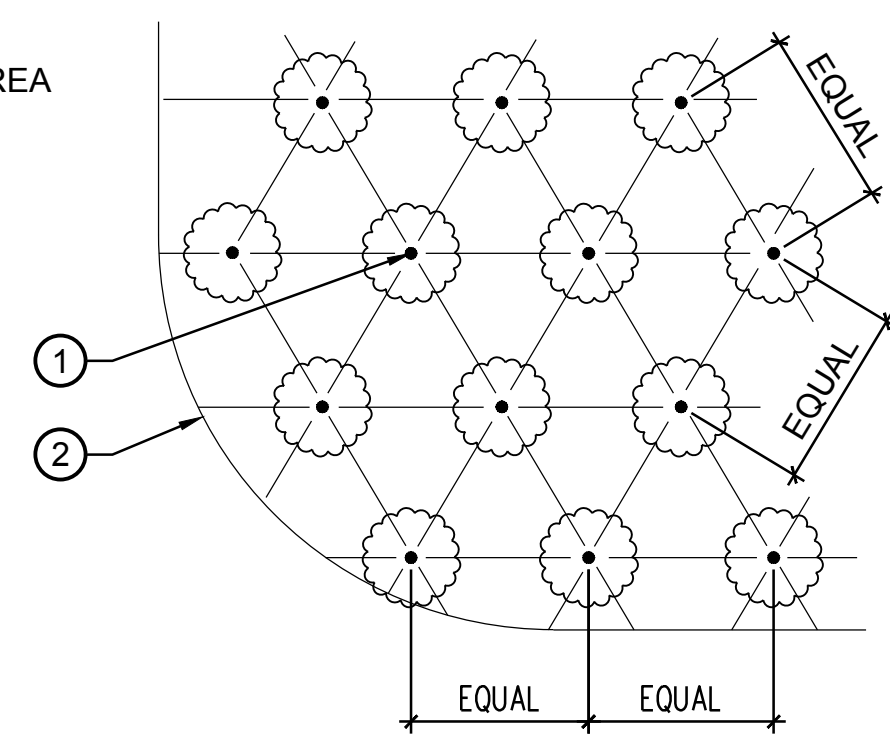
- EDGE OF SLOPE BEYOND A SHALLOW BASIN 2" DEEP SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE ON DOWNWARD SIDE
- BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- ROOTBALL
- FINISH GRADE



4 SHRUB PLANTING - SLOPE
SCALE: NTS

NOTES:
1. ALL PLANTS SHALL BE PLANTED AT EQUAL SPACING (TRIANGULAR UNLESS OTHERWISE INDICATED ON PLANS.
2. AS APPROPRIATE, CENTERLINE OF PLANTS SHALL BE 1/2 OF EQUAL SPACING MINIMUM FROM EDGE OF PLANTING AREA.
3. INFILL PLANTS AS REQUIRED TO MAINTAIN SPACING AT IRREGULAR EDGES.
4. FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.

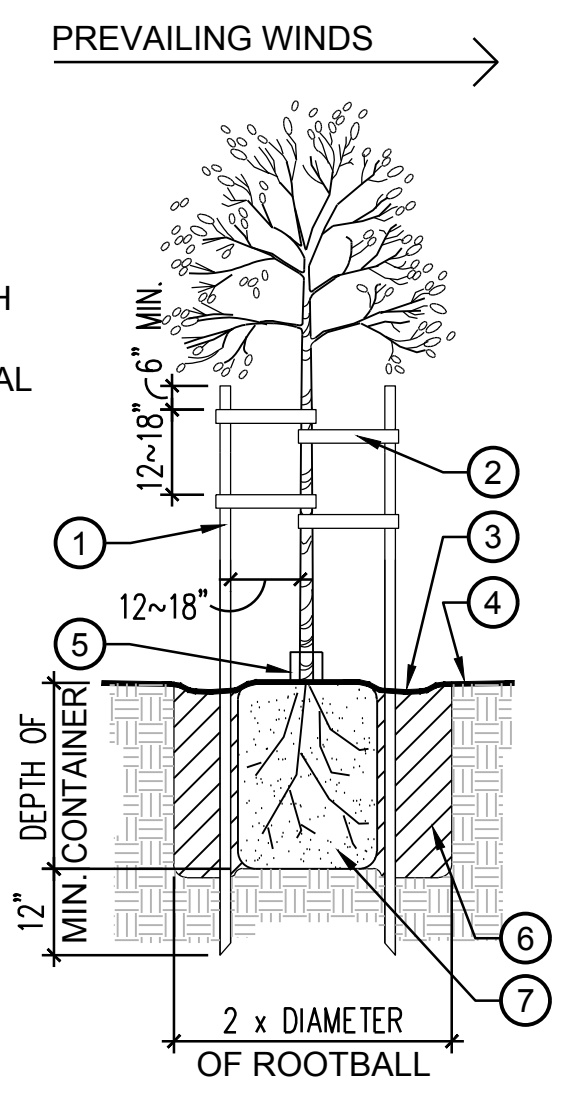
- TYPICAL PLANT SPACING VARIES - SEE PLANT LEGEND AND/OR PLANS
- EDGE OF PLANTING AREA



5 GROUNDCOVER SPACING
SCALE: NTS

NOTES:
1. CROWN OF ROOTBALL TO BE 1" ABOVE FINISH GRADE.
2. FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.

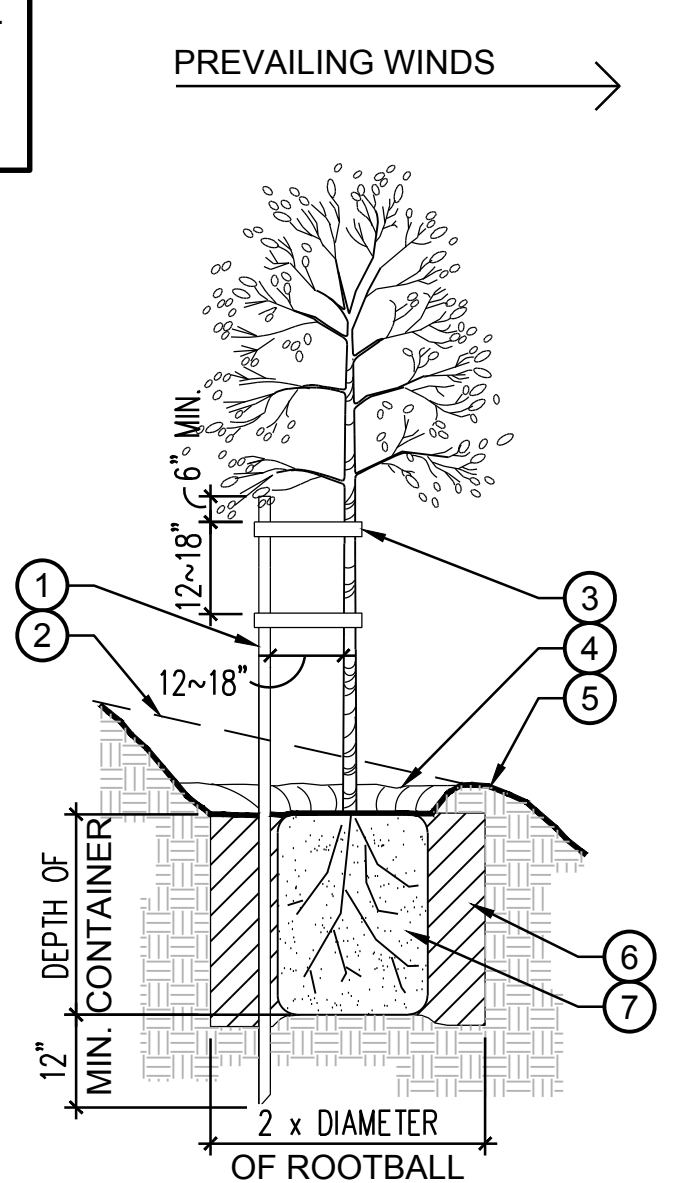
- 2"Ø MINIMUM X 10' LODGE POLE STAKE BOTH SIDES, OR 'TOMAHAWK TREE STABILIZER SYSTEM' (800) 845-3343, OR APPROVED EQUAL
- CINCH TIE, ARBOR TIE, OR APPROVED EQUAL
- A SHALLOW BASIN 2" DEEP SHALL BE FORMED AROUND BALL BELOW FINISH GRADE. TREES PLANTED IN TURF AREAS SHALL NOT HAVE BASINS.
- FINISH GRADE
- TREES INSTALLED WITHIN TURF AREAS SHALL BE INSTALLED WITH 'ARBOR-GARD' OR APPROVED EQUAL AT BASE OF TRUNK.
- BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- ROOTBALL



1 TREE PLANTING
SCALE: NTS

NOTES:
1. USE NURSERY STAKE FOR 1 GALLON.
2. FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.

- REMOVE NURSERY STAKE AND REPLACE WITH ONE (1) 2" DIA. MINIMUM, X 10' LODGE POLE STAKE, OR 'TOMAHAWK TREE STABILIZER SYSTEM' (800) 845-3343, OR APPROVED EQUAL (FOR 5 GALLON, 15 GALLON & 24" BOX SIZES). PLACE ON WINDWARD SIDE OF TREE
- EDGE OF SLOPE BEYOND
- CINCH TIE, ARBOR TIE, OR APPROVED EQUAL
- A SHALLOW BASIN 2" DEEP SHALL BE FORMED AROUND BALL BELOW FINISH GRADE ON DOWNWARD SIDE
- FINISH GRADE
- BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- ROOTBALL



2 TREE PLANTING - SLOPE
SCALE: NTS

**MEADOW GREEN ELEMENTARY SCHOOL
HVAC & ROOF UPGRADES**
12025 GROVEDALE DRIVE, WHITTIER, CA 90604
LOWELL JOINT SCHOOL DISTRICT

PLANTING NOTES AND DETAILS

REVISIONS:

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Date: 10/01/2021
Job: #2101
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