NOTE DESCRIPTION

CONCRETE PAVING

CONCRETE PAVING

CONCRETE RAMP

CONCRETE STAIRS

CONCRETE CURB AT WALKWAY

FREESTANDING CONCRETE WALL

CONCRETE RETAINING WALL

HANDRAILS AT RAMP

HANDRAILS AT STAIRS

TUBULAR STEEL FENCE

RAISED GARDEN BEDS

FLOW THROUGH PLANTER

CONCRETE PLINTH

TRUNCATED DOMES

AREA DRAIN (PER CIVIL)

CO CLEAN OUT (PER CIVIL)

DOUBLE CHECK (PER CIVIL)

DOWN SLOPE DIRECTION OF RAMP

↓ ↓ ALIGN

SYM. DESCRIPTION

PEDESTRIAN LIGHT

EVENT POLE LIGHT

STORM DRAIN MANHOLE (PER CIVIL)

S SANITARY SEWER MANHOLE (PER CIVIL)

DETECTABLE SIDE RAIL

GUARDRAIL

19 TREE GRATE

GROUTED COBBLE

CONCRETE RETAINING WALL W/ FENCE

CONCRETE PAD @ LIGHT POLE BASE

TUBE STEEL GATE W/ PANIC HARDWARE

DECOMPOSED GRANITE W/ STABILIZER

CONCRETE MOW BAND

COLOR / FINISH

MEDIUM BROOM

MEDIUM SANDBLAST

NATURAL GREY

NATURAL GREY

NATURAL GREY/

BROOM FINISH

NATURAL GREY/

NATURAL GREY/

MED. BROOM FINISH

SIDES, SMOOTH TOP

SIDES, SMOOTH TOP

SIDES, SMOOTH TOP

SIDES, SMOOTH TOP

NATURAL GREY/

GALVANIZED

GALVANIZED

GALVANIZED

6-8" RIVER ROCK

TMT ENTERPRISES

LEGEND, LO.1

01-04/ NATURAL GREY/LT. SANDBLAST

SIDES, SMOOTH TOP

SIDES, SMOOTH TOP

CHARCOAL GRAY (A-90)

WAUSAU ADA-2

PROPERTY LINE/

TOE (BOTTOM) OF SLOPE

DET. REF/

REMARKS

PER/ ELECT.

ELECT.

RIGHT OF WAY

LIMIT OF WORK

T.O.S. TOP OF SLOPE

FOC FACE OF CURB

BOC BACK OF CURB

PA PLANTING AREA

----

GALVANIZED

CEDAR

NATURAL GREY/MED. BROOM

NATURAL GREY/LT. SANDBLAST

NATURAL GREY/LT. SANDBLAST

NATURAL GREY/LT. SANDBLAST

LYNGSO'S GARDEN MATERIALS

MAN. POWDERCOAT SYSTEM/ MATO

MAN. POWDERCOAT SYSTEM/ MATC

VALSPAR BLUE GRAY 432R1690

REFER TO SITE FURNISHINGS

NATURAL GREY/LT. SANDBLAST

VALSPAR BLUE GRAY 432R1690

\_5.1 SIM. MED. BROOM FINISH

05.

03.08.2017

LANDSCAPE NOTES AND SCHEDULES

- 1. DEEP ROOT GREEN INFRASTRUCTURE, LLC. 530 WASHINGTON STREET, SAN FRANCISCO, CA 94111. (800) 458-7668. CONTACT: PETE VOSKES
- 2. TENCATE MIRAFI. 22421 GILBERTO, SUITE F, RANCHO SANTA MARGARITA, CA 92688. (800) 423-9923. CONTACT: RICH SACK
- 3. GREENSTREAK. 3400 TREE COURT INDUSTRIAL BOULEVARD, ST. LOUIS, MO 63122. (800) 325-9504.
- 4. QUICKCRETE. PO BOX 639, 731 PARKRIDGE AVE., NORCO, CA 92860. (415)971-9669. CONTACT: MARTY MEE
- URBAN ACCESSORIES. 465 EAST 15TH STREET, TACOMA, WA 98421. (877) 487-0488.
- 6. TMT ENTERPRISES 1919 OAKLAND RD. SAN JOSE, CA 95131 (408)432-9040 CONTACT: MATT MOORE
- 1. REFER TO CIVIL ENGINEER'S DRAWINGS FOR UTILITY LOCATIONS, TREE SUBDRAINAGE STUBOUTS, (IF REQUIRED), AND FINAL GRADING. IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE LANDSCAPE ARCHITECT'S DRAWINGS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR DIRECTION AS TO HOW TO PROCEED.
- VERIFY LOCATIONS OF ALL PERTINENT EXISTING AND PROPOSED SITE IMPROVEMENTS. IF ANY PART OF THIS PLAN CANNOT BE FOLLOWED DUE TO SITE CONDITIONS, CONTACT THE LANDSCAPE ARCHITECT FOR INSTRUCTION PRIOR TO COMMENCING WORK.
- 3. EXACT LOCATIONS OF PLANT MATERIALS SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT IN THE FIELD PRIOR TO INSTALLATION. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST PLANTS TO EXACT LOCATION IN
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL PLANT COUNTS AND SQUARE FOOTAGES. QUANTITIES SHOWN ON PLANS TAKE PRECEDENCE OVER WRITTEN QUANTITIES IN "PLANTING LEGEND."
- 5. PROVIDE MATCHING FORMS AND SIZES FOR ALL PLANT MATERIALS WITHIN EACH SPECIES AND SIZE DESIGNATED ON THE DRAWINGS.
- 6. PRUNE NEWLY PLANTED TREES ONLY AS DIRECTED BY LANDSCAPE ARCHITECT.
- 7. ALIGNED AND EQUALLY SPACED, IN ALL DIRECTIONS, ALL SHRUBS TO BE AS DESIGNATED PER THESE NOTES AND DRAWINGS.
- 8. ALL TREES IN ROWS TO BE ALIGNED.
- 9. TREES SHALL BEAR SAME RELATION TO FINISH GRADE AS AT PLACE OF GROWTH.
- 10. FINISH GRADES OF ALL TURF AREAS SHALL BE (1") BELOW ADJACENT CURB OR PAVEMENT. FINISH GRADES OF ALL SHRUB AREAS SHALL BE (1-1/2") BELOW ADJACENT CURB, PAVEMENT OR HEADER.
- 11. CONTRACTOR SHALL SUBMIT FOR APPROVAL (2) COLOR PHOTOS OF ALL TREES, SHRUBS, AND GROUNDCOVER. PHOTOS SHOULD INCLUDE A PERSON AND MEASURING STICK FOR SCALE PURPOSES, PHOTOS SHALL BE OF THE ACTUAL PLANT MATERIAL TO BE USED ON THE PROJECT. ALL PLANT MATERIAL SHALL BE OF A QUALITY AS DETERMINED BY THE LANDSCAPE ARCHITECT. MATERIAL FOUND UNSUITABLE FOR THE DESIGN OR SPECIFICATION INTENT WILL BE REJECTED.
- 12. PROVIDE A (2") LAYER OF "GORILLA HAIR" MULCH AT PROPOSED TREE, SHRUB, AND GROUNDCOVER PLANTING AREAS, EXCEPT AREAS WITH JUTE MESHING.
- 13. CONTRACTOR SHALL CONDUCT AGRICULTURAL SUITABILITY AND FERTILITY SOILS TESTING PER SOIL PREPARATION SPECIFICATION. ANALYSIS SHALL INCLUDE RECOMMENDATIONS FOR SOIL PREPARATION AND BACKFILL MIX AS WELL AS RECOMMENDATIONS FOR POST MAINTENANCE FERTILIZATION. SUBMIT SOILS ANALYSES AND SAMPLES OF AMENDMENTS TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO SOIL PREPARATION.
- 14. QUANTITIES LISTED ON PLANT LEGEND ARE PER SHEET. CONTRACTOR MUST VERIFY QUANTITIES GIVEN ON THE PLANS WITH ACTUAL QUANTITIES SHOWN.
- 15. PROVIDE ROOT BARRIERS IN ADDITION TO THOSE INDICATED ON THE PLANS FOR ALL TREES WITHIN 5' OF ANY HARDSCAPE.
- 16. PLANT ALL TREES A MIN. OF 2' FROM ANY DRAIN LINES. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL DRAIN LINES PRIOR TO COMMENCING WORK.
- 17. TREES ARE TO BE A MINIMUM OF 3' AWAY FROM ANY HARDSCAPE SUCH AS CURBS, WALKS, ETC.
- 18. LANDSCAPE MAINTENANCE PERIOD IS 90 DAYS.
- 19. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

- 1. THE CONTRACTOR SHALL LAYOUT AND FIELD VERIFY ALL DIMENSIONS OF DRIVEWAY, PLANTERS, WALKS, SLOPES AND RELATED WORK PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- VERIFY LOCATIONS OF ALL PERTINENT EXISTING AND PROPOSED SITE IMPROVEMENTS. IF ANY PART OF THIS PLAN CANNOT BE FOLLOWED DUE TO SITE CONDITIONS, CONTACT THE LANDSCAPE ARCHITECT FOR INSTRUCTION PRIOR TO COMMENCING WORK.
- WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.
- 4. THIS DRAWING INCLUDES THE LOCATION OF AREA DRAINS FOR REFERENCE. REFER TO RELATED CIVIL ENGINEER'S DRAWINGS FOR CONSTRUCTION DETAILS AND UTILITY CONNECTIONS.
- 5. REFER TO ELECTRICAL ENGINEER'S DRAWINGS FOR LIGHT FIXTURE SCHEDULE AND CIRCUITRY AS NECESSARY.
- 6. WHERE DIMENSIONS ARE CALLED AS "EQUAL", ALL REFERENCED ITEMS SHALL BE SPACED EQUALLY, MEASURED TO THEIR CENTERLINES.
- 7. ALL MEASUREMENTS ARE TO FACE OF WALL, CURB OR OTHER FIXED SITE IMPROVEMENT, UNLESS OTHERWISE NOTED. DIMENSIONS TO CENTERLINES AS
- 8. INSTALL ALL INTERSECTING ELEMENTS AT 90 DEGREES TO EACH OTHER UNLESS OTHERWISE NOTED.
- 9. ALL DRAINS/ BASINS SHOULD HAVE BLACK ATRIUM TYPE GRATES WITHIN SHRUBS/GROUNDCOVER AREAS AND BLACK FLAT TYPE GRATES IN TURF AREAS.

### LANDSCAPE GRADING AND DRAINAGE

- 1. REFER TO CIVIL ENGINEER'S GRADING PLANS FOR SITE GRADING, DRAINAGE, AND UTILITY LOCATIONS. IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE LANDSCAPE ARCHITECT'S DRAWINGS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT FOR DIRECTION AS TO HOW TO PROCEED.
- 2. REFER TO CIVIL ENGINEER'S DRAWINGS FOR SUBDRAINAGE POINT OF IN CONNECTION TO STORM DRAIN.
- 3. THE CONTRACTOR SHALL REQUEST OBSERVATION AS REQUIRED 48 HOURS ADVANCE OF PERFORMING WORK.
- 4. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA 800/227-2600) 48 HOURS PRIOR TO ANY EXCAVATION.
- 5. ALL GRADING OPERATIONS SHALL CONFORM TO APPENDIX J AND SECTION 1804A.3 OF THE CALIFORNIA BUILDING CODE.
- FIELD VERIFY EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION AND ELEVATION IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
- 7. NO CHANGE IN CONTRACT PRICE WILL BE ALLOWED FOR ACTUAL OR CLAIMED DISCREPANCY BETWEEN EXISTING GRADE AND THOSE SHOWN ON PLANS AFTER CONTRACTOR HAS ACCEPTED EXISTING GRADES AND MOVED ONTO THE SITE.
- 8. ALL PROPOSED GRADES ARE TO MEET AND BLEND IN WITH EXISTING GRADING AT PROJECT LIMIT AND EXISTING SIDEWALK. PRECISE ELEVATIONS INDICATED ON PLANS TO BE VERIFIED IN FIELD TO AS-BUILT CONDITION.
- 9. THE DEBRIS CREATED BY LANDSCAPE GRADING OPERATIONS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LEGALLY DISPOSED OF OFF-SITE.
- 10. FINAL LANDSCAPE GRADING SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT IN THE FIELD PRIOR TO INSTALLATION OF PLANTING.

- 1. BASE INFORMATION INCLUDING THE LOCATION OF PROPERTY LINES, EASEMENTS, BUILDINGS, ROADS AND CURBS HAVE BEEN TAKEN FROM THE CIVIL ENGINEER'S DRAWINGS. REFER TO CIVIL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
- 2. REFER TO THE CIVIL ENGINEER'S DRAWINGS FOR PROPOSED UTILITY INFORMATION INCLUDING STORM DRAIN, SEWER, WATER, ELECTRICAL, GAS,
- 3. REFER TO CITY AND/OR COUNTY STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE.

TELEPHONE AND CABLE TV.

- 4. VERIFY SITE INFORMATION, INCLUDING PROPERTY LINES, EXISTING ABOVE GROUND AND BELOW GROUND UTILITIES AND STRUCTURES, AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE LANDSCAPE ARCHITECT'S DRAWINGS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE AND THE LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED.
- 5. EXCAVATION IN THE VICINITY OF UTILITIES AND EXISTING MATERIALS SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. ANY DAMAGE CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC., SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS.
- SUPERINTENDENT, APPROPRIATE AGENCIES AND PLANS, FOR THE LOCATIONS OF ALL UNDER-GROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.

7. CONTRACTOR SHALL BE RESPONSIBLE TO CONSULT WITH SITE

- 8. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
- 9. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS THAT ARE DAMAGED DURING CONSTRUCTION.
- 10. PRIOR TO INSTALLATION OF ANY CONSTRUCTION ITEM, FORMS WITH STEEL IN PLACE AND COMPACTED SUBGRADE COMPLETE, SHALL BE OBSERVED AND REVIEWED BY THE LANDSCAPE ARCHITECT.
- 11. ALL WALLS AND WALKS SHOULD HAVE SMOOTH, CONTINUOUS CURVES AS INDICATED ON PLANS.
- 12. ALL PROPERTY LINES, LOT LINES, AND TOP OF SLOPE LINES SHALL BE VERIFIED PRIOR TO COMMENCING WORK.
- 13. ALL ELECTRICAL JUNCTION BOXES FOR LIGHTS SHALL BE IN PLANTING AREAS AND LOCATION REVIEWED BY THE LANDSCAPE ARCHITECT. STAKE LOCATION PRIOR TO INSTALLATION.
- 14. SEE CIVIL ENGINEER'S DRAWINGS FOR CURBS AND A/C PAVING.
- 15. REFER TO CIVIL ENGINEER'S DRAWINGS FOR ELEVATIONS AND LOCATION OF DRAINAGE STRUCTURES PRIOR TO INSTALLATION OF WALKS, FOOTINGS AND OTHER STRUCTURES.
- 16. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION. IF NOTES ON THE PLANS DIFFER FROM THE GEOTECHNICAL REPORT, PROVIDE THE MOST STRINGENT REQUIREMENT.
- 17. RAISE ALL VAULTS/UTILITIES BOXES TO GRADE WITHIN LIMITS OF WORK. FIELD VERIFY PRIOR TO BID.

#### L1.1 MATERIALS PLAN L1.2 MATERIALS PLAN L2.1 LAYOUT PLAN L2.2 LAYOUT PLAN

L3.1 MATERIALS ENLARGEMENT PLAN L3.2 LAYOUT ENLARGEMENT PLAN L3.3 LAYOUT ENLARGEMENT PLAN

LO.1 LANDSCAPE NOTES AND SCHEDULES

- L4.1 SITE SECTIONS/ELEVATIONS L4.2 SITE SECTIONS/ELEVATIONS
- L5.1 CONSTRUCTION DETAILS L5.2 CONSTRUCTION DETAILS L5.3 CONSTRUCTION DETAILS

L5.4 CONSTRUCTION DETAILS

- L5.5 CONSTRUCTION DETAILS L6.1 IRRIGATION PLAN L6.2 IRRIGATION NOTES AND LEGEND
- L6.3 IRRIGATION DETAILS L6.4 IRRIGATION DETAILS L6.5 IRRIGATION DETAILS AND WATER USE CALCS.
- L7.1 PLANTING PLAN L7.2 PLANTING DETAILS

F.S.

F.O.B.

F.O.C.

F.O.W.

FINISH GRADE

FINISH SURFACE

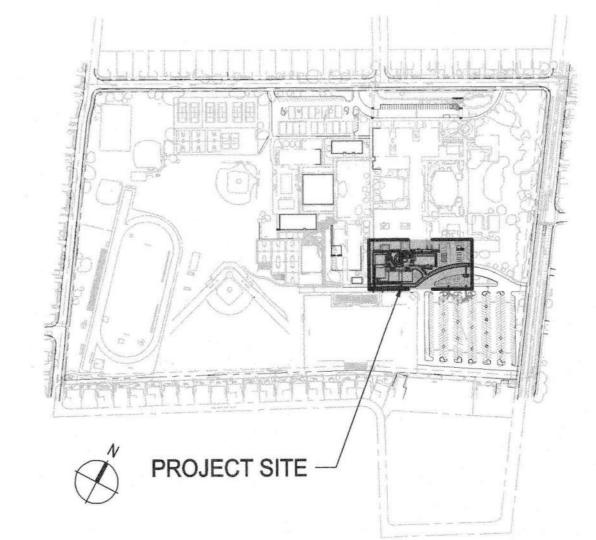
FACE OF CURB

FACE OF WALL

FACE OF BUILDING

## ABBREVIATIONS

	ADDITE	ii (Tione			REFEREN	CE KEYN	OTES
& _	AND ANGLE	GA. GALV.	GAUGE GALVANIZED	KEY NOTE	DESCRIPTION	DET REF	COLOR / FINISH
0	AT	GND. GR.	GROUND GRADE	A	(E) A.C. PAVING	PROTEC	T IN PLACE
6	CENTERLINE DIAMETER OR ROUND			В	(E) CONCRETE CURB	PROTEC	CT IN PLACE
#	POUND OR NUMBER	HDR HT.	HEADER HEIGHT	С	(E) CONCRETE PAVING	PROTEC	CT IN PLACE
ADJ. AGGR.	ADJACENT AGGREGATE	LT.	LIGHT	D	(E) BOLLARD	PROTEC	CT IN PLACE
AL.	ALUMINUM	MAX.	MAXIMUM	E	BIOFILTRATION BASIN	PER CIVIL	
APPROX.	APPROXIMATE ARCHITECTURAL	MET. MFR.	METAL MANUFACTURER	F	(E) TREE		CT IN PLACE
ACC.	ASPHALT ACCESSIBLE	MIN. MTD.	MINIMUM MOUNTED	G	STAIRS AT BUILDING	PER ARCH	
B.C.R.	BEGINNING OF CURVE RADIUS	MTL.	MATERIAL	Н	ELEVATED RAMP AT BUILDING	PER ARCH	Marine Walter Town
B.O.C. B.O.W.	BACK OF CURB BOTTOM OF WALL	N.I.C.	NOT IN CONTRACT	J	(E) STORM DRAIN MANHOLE	AND DESCRIPTION OF THE PERSON	CT IN PLACE
B.O.S. BLDG.	BOTTOM OF SLOPE BUILDING	N.T.S.	NOT TO SCALE	K	TRENCH DRAIN	PER CIVIL	
BLK.	BLOCK	O.C. O.D.	ON CENTER OUTSIDE DIAMETER (DIM.)	L	CONCRETE CURB	PER CIVIL	
C.E.	CIVIL ENGINEER CAST IN PLACE	PA	PLANTING AREA	M	AC PAVING	PER CIVIL	
C.I.P. CLKG.	CAULKING	PRCST. P.I.P.	PRECAST POURED IN PLACE	N	CONCRETE RAMP AT BUILDING	PER ARCH	
CMU.	CONCRETE MASONRY UNIT	P.O.T. P.T.S.	POINT OF TANGENCY POST TENSION SLAB	0	COLUMN AT BUILDING RAMP	PER STRUCT	ΓURAL
CONSTR.	CONSTRUCTION			P	PATH OF TRAVEL SIGNAGE	19/ A10.11	
CTR.	CENTER	QTY	QUANTITY	Q	BOLLARD	PER CIVIL	
D.A. DET.	DISABLED ACCESS DETAIL	R. RAD.	RISER RADIUS	R	CONCRETE CURB RAMP	PER CIVIL	
DIA. DIM.	DIAMETER DIMENSION	REINF. REQ.	REINFORCED REQUIRED	S	PAVEMENT STRIPING	PER CIVIL	
DN. DWGS.	DOWN DRAWINGS	SCHED.	SCHEDULE	T	DRINKING FOUNTAIN	PER ARCH	
E.J. EL.	EXPANSION JOINT ELEVATION	SHT. SPEC. S.S.	SHEET SPECIFICATION STAINLESS STEEL	Market and Control	SITE SYM	IBOLS LEG	GEND
ELEC. EQ.	ELECTRICAL EQUAL	STD. STRL.	STANDARD STRUCTURAL	SYM.	DESC.	SYM.	DESC.
EXP.	EXPANSION	T.	TREAD	8	FIRE HYDRANT (PER CIVIL)	-	SAWCUT JOINT
EXT.	EXTERIOR	T.C.	TOP OF CURB		DRAIN INLET (PER CIVIL)		- EXPANSION JOINTS



### SITE KEYMAP

T.O.S.

T.O.W.

TYP.

TBD.

VERT.

TOP OF SLOPE

TOP OF WALL

TO BE DETERMINED

**TYPICAL** 

**VERTICAL** 

WITH WITHOUT

> SITE FURNISHINGS LEGEND FINISH/PTRN. QTY. COLOR SYM. DESC. MANUF. MODEL # ACID ETCH 2 PER QUICKCRETE QR-CAL2436W TRASH LT. AIRBRUSH W/ PLAN RECEPTACLE LID-A19 STEEL LID-GRAY MATTE SEALER. INCLUDE STEEL LID. ANCHOR BOLTS ACID ETCH 2 LT. AIRBRUSH W/ RECYCLING RECEPTACLE QUICKCRETE QR-CAL2436W LID-M19 STEEL LID-GRAY MATTE SEALER. STEEL LID. W/ RECYCLE LOGO INCLUDE POWDERCOATED. ANCHOR BOLTS PEDESTRIAN URBAN VIPER 5' SQ GRATE CAST GREY IRON RAW ACCESSORIES AND FRAME

NOTE: UTILITIES SHOWN ARE FOR REFERENCE ONLY. SEE CIVIL DWGS. FOR DETAILS AND

LIGHTING LEGEND

COMMENTS

NOTE: SEE ELECTRICAL ENGINEERING PLANS FOR FIXTURES, LAMPS, AND SPECS.

SEE ELEC. PLANS FOR

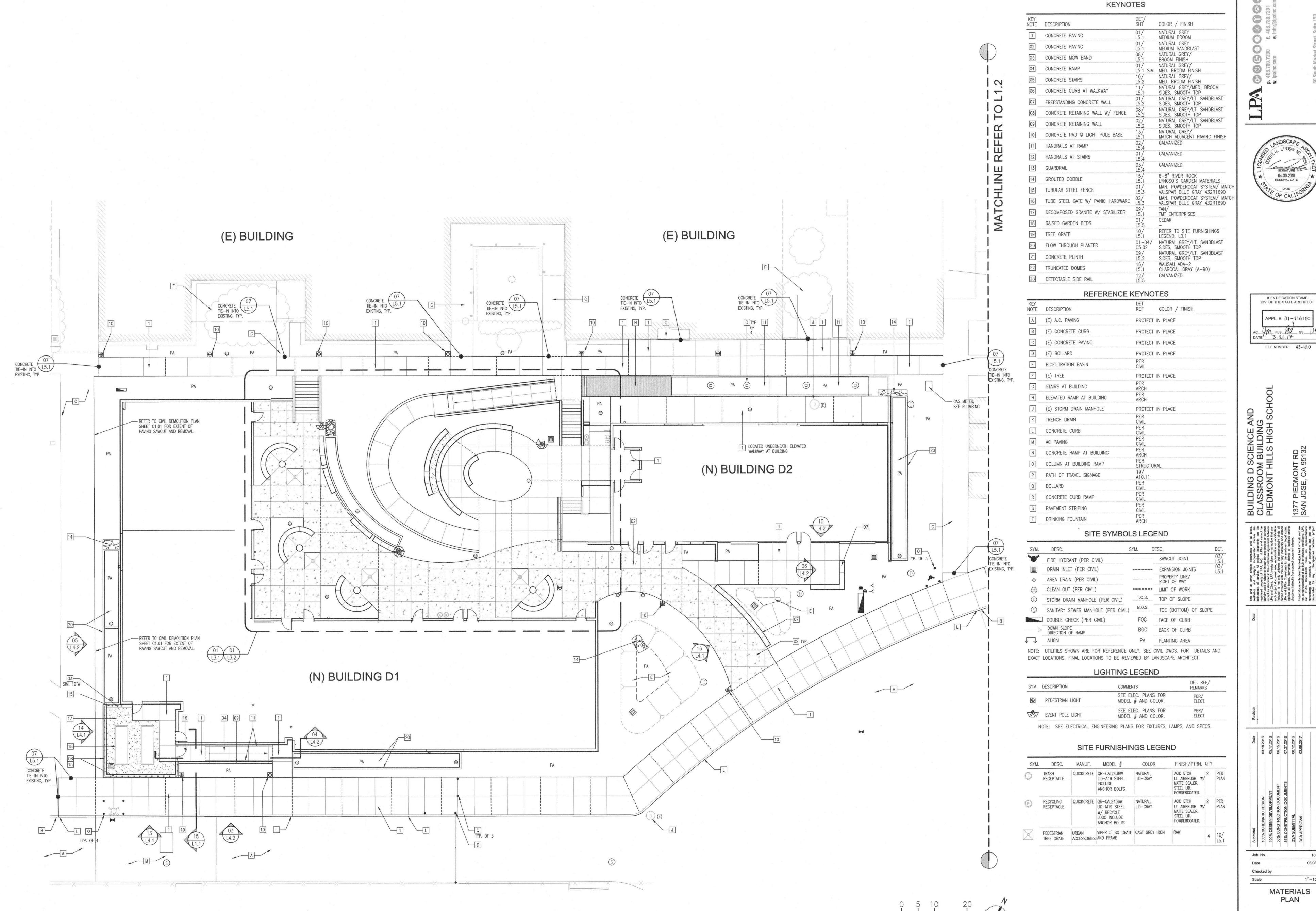
MODEL # AND COLOR.

SEE ELEC. PLANS FOR

MODEL # AND COLOR.

EXACT LOCATIONS. FINAL LOCATIONS TO BE REVIEWED BY LANDSCAPE ARCHITECT.

L0.1



MATERIALS PLAN

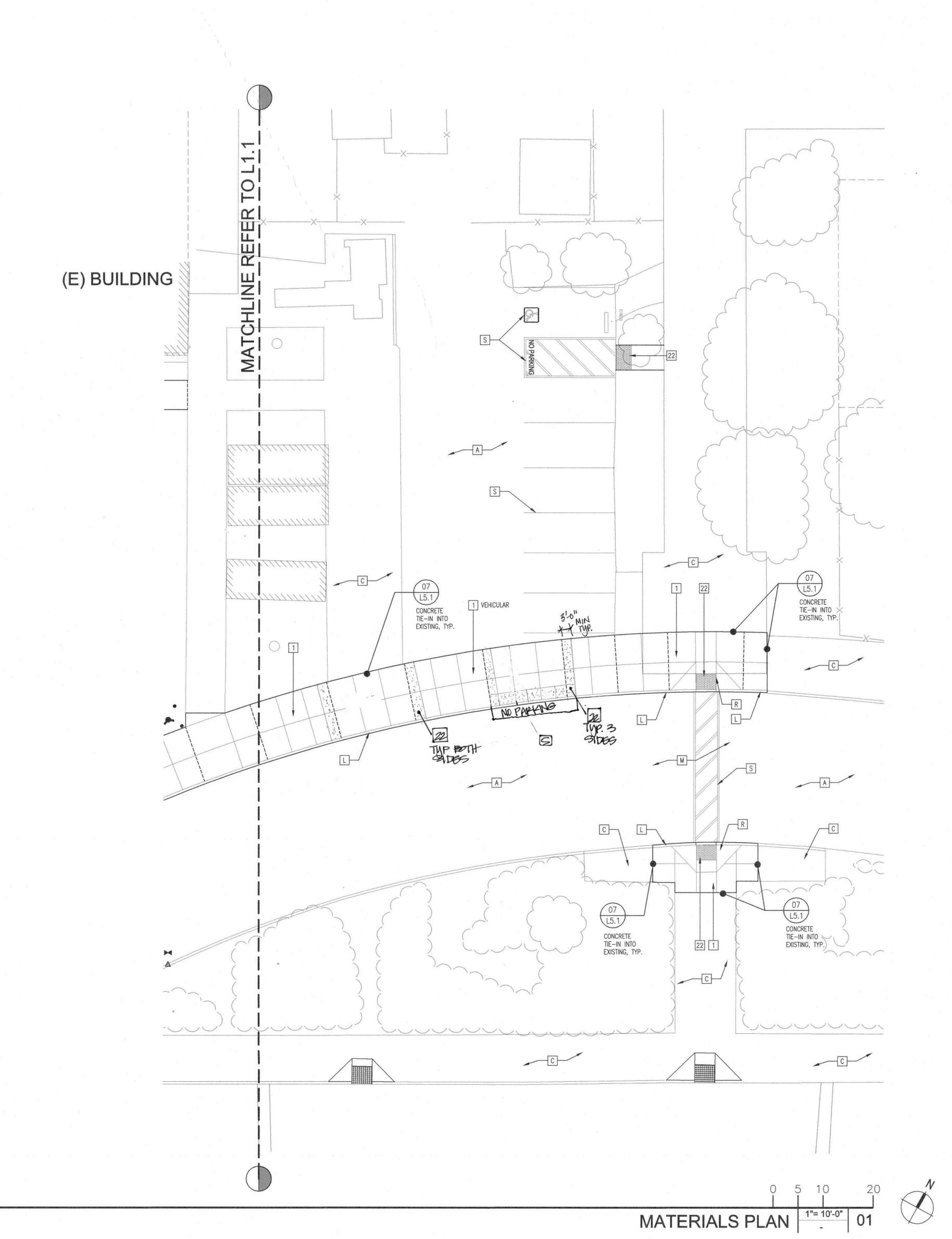




1602010

03.08.2017 1"=10'-0"

L1.1



### **KEYNOTES**

KEY NOTE	DESCRIPTION	DET/ SHT	COLOR / FINISH
1	CONCRETE PAVING	01/ L5.1	NATURAL GREY MEDIUM BROOM
02	CONCRETE PAVING	01/ L5.1	NATURAL GREY MEDIUM SANDBLAST
03	CONCRETE MOW BAND	08/ L5.1	NATURAL GREY/ BROOM FINISH
04	CONCRETE RAMP	01/ L5.1 SIM.	NATURAL GREY/
05	CONCRETE STAIRS	10/ L5.2	NATURAL GREY/ MED. BROOM FINISH
06	CONCRETE CURB AT WALKWAY	11/ L5.1	NATURAL GREY/MED. BROOM SIDES, SMOOTH TOP
07	FREESTANDING CONCRETE WALL	01/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
08	CONCRETE RETAINING WALL W/ FENCE	08/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
09	CONCRETE RETAINING WALL	02/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
10	CONCRETE PAD @ LIGHT POLE BASE	13/ L5.1	NATURAL GREY/ MATCH ADJACENT PAVING FINISH
11	HANDRAILS AT RAMP	02/ L5.4	GALVANIZED
12	HANDRAILS AT STAIRS	01/ L5.4	GALVANIZED
13	GUARDRAIL	03/ L5.4	GALVANIZED
14	GROUTED COBBLE	15/ L5.1	6-8" RIVER ROCK LYNGSO'S GARDEN MATERIALS
15	TUBULAR STEEL FENCE	01/ L5.3	MAN. POWDERCOAT SYSTEM/ MA VALSPAR BLUE GRAY 432R1690
16	TUBE STEEL GATE W/ PANIC HARDWARE	02/ L5.3	MAN. POWDERCOAT SYSTEM/ MA VALSPAR BLUE GRAY 432R1690
17	DECOMPOSED GRANITE W/ STABILIZER	09/ L5.1	TAN/ TMT ENTERPRISES
18	RAISED GARDEN BEDS	01/ L5.5	CEDAR
19	TREE GRATE	10/ L5.1	REFER TO SITE FURNISHINGS LEGEND, LO.1
20	FLOW THROUGH PLANTER	01-04/ C5.02	SIDES, SMOOTH TOP
21	CONCRETE PLINTH	09/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
22	TRUNCATED DOMES	16/ L5.1	WAUSAU ADA-2 CHARCOAL GRAY (A-90)
23	DETECTABLE SIDE RAIL	12/ L5.5	GALVANIZED

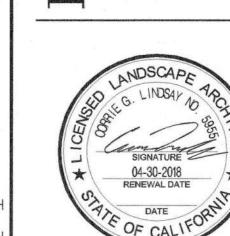
KEY NOTE	DESCRIPTION	DET REF COLOR / FINISH
А	(E) A.C. PAVING	PROTECT IN PLACE
В	(E) CONCRETE CURB	PROTECT IN PLACE
C	(E) CONCRETE PAVING	PROTECT IN PLACE
D	(E) BOLLARD	PROTECT IN PLACE
E	BIOFILTRATION BASIN	PER CIVIL
F	(E) TREE	PROTECT IN PLACE
G	STAIRS AT BUILDING	PER ARCH
Н	ELEVATED RAMP AT BUILDING	PER ARCH
J	(E) STORM DRAIN MANHOLE	PROTECT IN PLACE
K	TRENCH DRAIN	PER CIVIL
L	CONCRETE CURB .	PER CIVIL
M	AC PAVING	PER CIVIL
N	CONCRETE RAMP AT BUILDING	PER ARCH
0	COLUMN AT BUILDING RAMP	PER STRUCTURAL
P	PATH OF TRAVEL SIGNAGE	19/ A10.11
Q	BOLLARD	PER CIVIL
R	CONCRETE CURB RAMP	PER CIVIL
S	PAVEMENT STRIPING	PER CIVIL

SYM.	DESC.	SYM. D	ESC.	DET
V	FIRE HYDRANT (PER CIVIL)		SAWCUT JOINT	03/ L5.
	DRAIN INLET (PER CIVIL)		EXPANSION JOINTS	03/ L5.
0	AREA DRAIN (PER CIVIL)		PROPERTY LINE/ RIGHT OF WAY	
0	CLEAN OUT (PER CIVIL)		LIMIT OF WORK	
0	STORM DRAIN MANHOLE (PER CIVIL)	T.O.S.	TOP OF SLOPE	
(3)	SANITARY SEWER MANHOLE (PER CIVI	L)	TOE (BOTTOM) OF SLOP	E
	DOUBLE CHECK (PER CIVIL)	FOC	FACE OF CURB	
$\rightarrow$	DOWN SLOPE DIRECTION OF RAMP	BOC	BACK OF CURB	_
<b>J</b>	ALIGN	PA	PLANTING AREA	

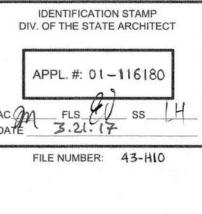
LIGHTING LEGEND				
SYM.	DESCRIPTION	COMMENTS	DET. REF/ REMARKS	
•	PEDESTRIAN LIGHT	SEE ELEC. PLANS FOR MODEL # AND COLOR.	PER/ ELECT.	
	EVENT POLE LIGHT	SEE ELEC. PLANS FOR MODEL # AND COLOR.	PER/ ELECT.	

# NOTE: SEE ELECTRICAL ENGINEERING PLANS FOR FIXTURES, LAMPS, AND SPECS.

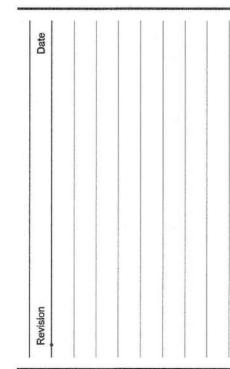
SYM.	DESC.	MANUF.	MODEL #	COLOR	FINISH/PTRN.	QTY.	
0	TRASH RECEPTACLE	QUICKCRETE	QR-CAL2436W LID-A19 STEEL INCLUDE ANCHOR BOLTS	NATURAL, LID-GRAY	ACID ETCH LT. AIRBRUSH W/ MATTE SEALER. STEEL LID. POWDERCOATED.	2	PER
	RECYCLING RECEPTACLE	QUICKCRETE	QR-CAL2436W LID-M19 STEEL W/ RECYCLE LOGO INCLUDE ANCHOR BOLTS	NATURAL, LID-GRAY	ACID ETCH LT. AIRBRUSH W/ MATTE SEALER. STEEL LID. POWDERCOATED.	2	PER PLAN
	PEDESTRIAN TREE GRATE	URBAN ACCESSORIES	ANCHOR BOLTS  VIPER 5' SQ GRATE	CAST GREY IRON		4	

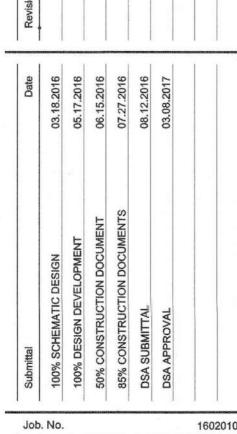




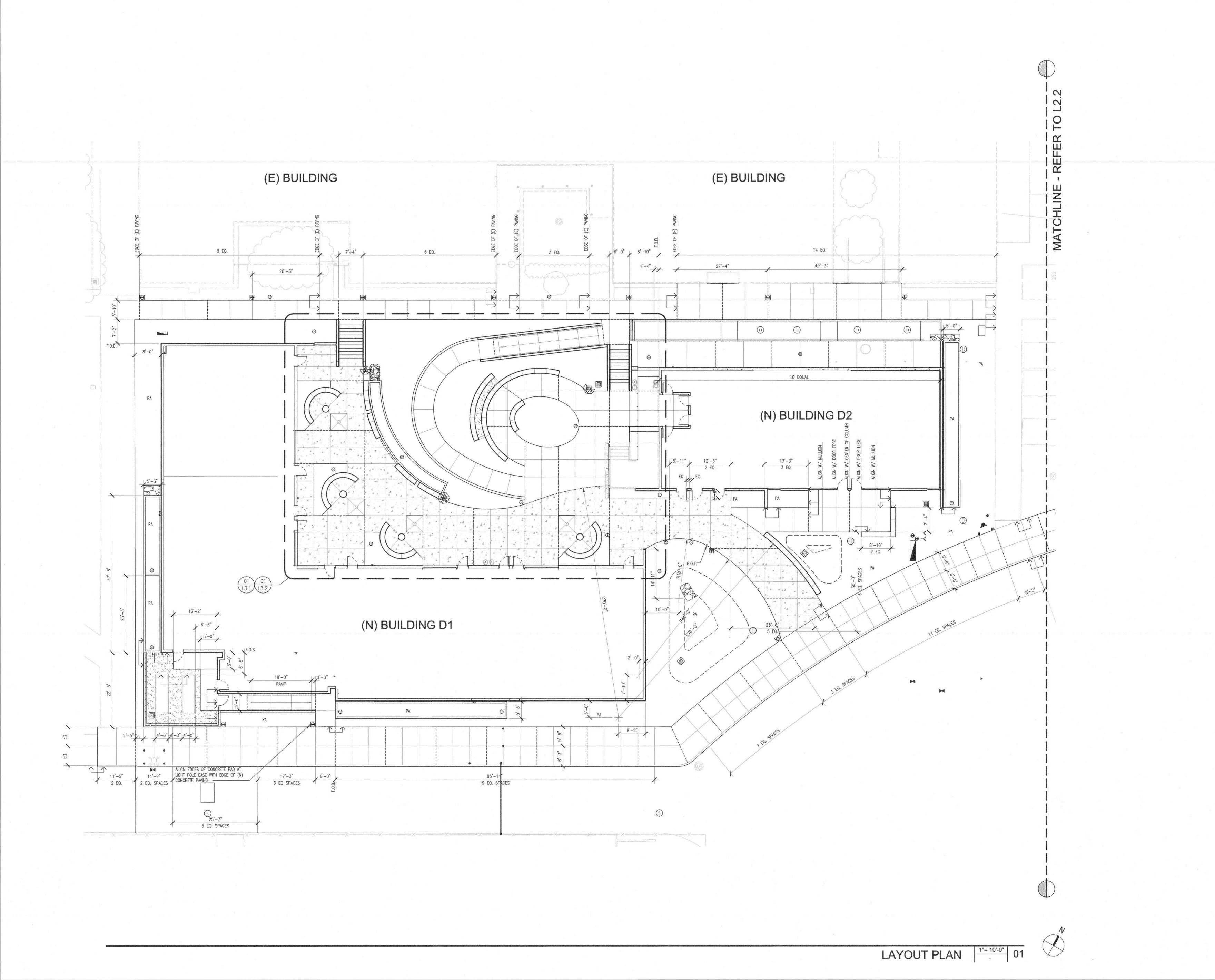


BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SCH





1"=10'-0" MATERIALS PLAN



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT FILE NUMBER: 43-H10 BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SCI Date
03.18.2016
05.17.2016
06.15.2016
07.27.2016
08.12.2016 03.08.2017 Scale LAYOUT PLAN

L2.1

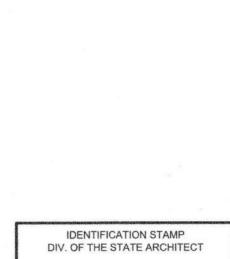
p. 408.789.7299 f. 408.780.729 w. spainc.com e. info@spainc.

SIGNATURE

O4-30-2018

RENEWAL DATE

OF CALIFORNIA



FILE NUMBER: 43-H

BUILDING D SCIENCE AND
CLASSROOM BUILDING
PIEDMONT HILLS HIGH SCHOO

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Kevision	Date

Date	03.18.2016	05.17.2016	ENT 06.15.2016	ENTS 07.27.2016	08.12.2016	
	CHEMATIC DESIGN	ESIGN DEVELOPMENT	NISTRUCTION DOCUMENT	NSTRUCTION DOCUMENTS	BMITTAL	

apper DSA APPROVAL

Submittal

100% SCHEMATIC DESIGN

100% DESIGN DEVELOPMENT

50% CONSTRUCTION DOCUMENT

85% CONSTRUCTION DOCUMENT

DSA APPROVAL

DSA APPROVAL

Job. No.

Date

Checked by

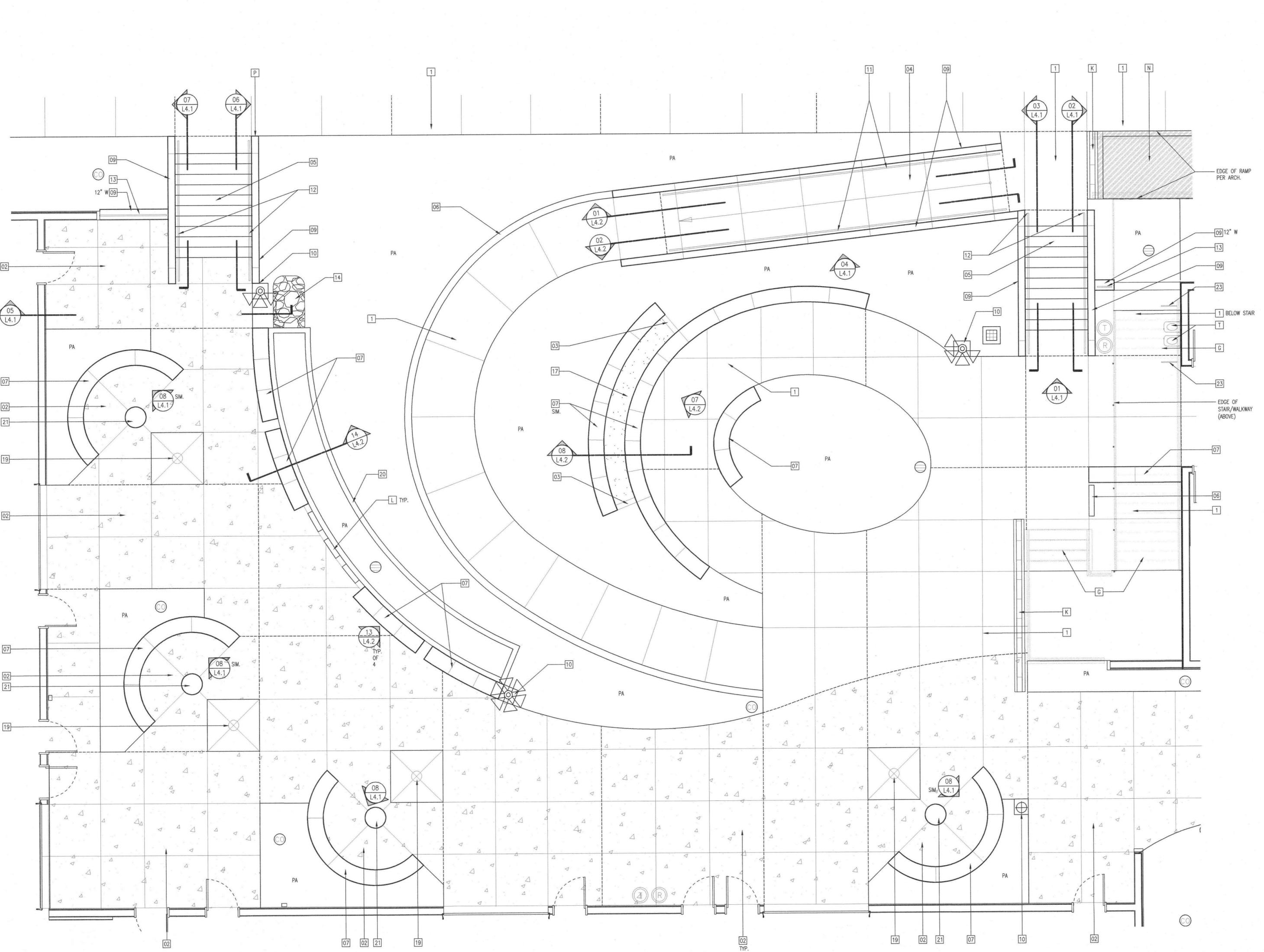
Scale

LAYOUT PLAN

1"=10"-0"

L2.2

LAYOUT PLAN 1"= 10'-0" 01



### **KEYNOTES**

KEY NOTE	DESCRIPTION	DET/ SHT	COLOR / FINISH
1	CONCRETE PAVING	01/ L5.1	NATURAL GREY MEDIUM BROOM
02	CONCRETE PAVING	01/ L5.1	NATURAL GREY MEDIUM SANDBLAST
03	CONCRETE MOW BAND	08/ L5.1	NATURAL GREY/ BROOM FINISH
04	CONCRETE RAMP	01/	NATURAL GREY/ MED. BROOM FINISH
05	CONCRETE STAIRS	10/ L5.2	NATURAL GREY/ MED. BROOM FINISH
06	CONCRETE CURB AT WALKWAY	11/ L5.1	NATURAL GREY/MED. BROOM SIDES, SMOOTH TOP
07	FREESTANDING CONCRETE WALL	01/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
08	CONCRETE RETAINING WALL W/ FENCE	08/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
09	CONCRETE RETAINING WALL	02/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
10	CONCRETE PAD @ LIGHT POLE BASE	13/ L5.1	NATURAL GREY/ MATCH ADJACENT PAVING FINISH
11	HANDRAILS AT RAMP	02/ L5.4	GALVANIZED
12	HANDRAILS AT STAIRS	01/ L5.4	GALVANIZED
13	GUARDRAIL	03/ L5.4	GALVANIZED
14	GROUTED COBBLE	15/ L5.1	6-8" RIVER ROCK LYNGSO'S GARDEN MATERIALS
15	TUBULAR STEEL FENCE	01/ L5.3	MAN. POWDERCOAT SYSTEM/ MATO VALSPAR BLUE GRAY 432R1690
16	TUBE STEEL GATE W/ PANIC HARDWARE	02/ L5.3	MAN. POWDERCOAT SYSTEM/ MATO VALSPAR BLUE GRAY 432R1690
17	DECOMPOSED GRANITE W/ STABILIZER	09/ L5.1	TAN/ TMT ENTERPRISES
18	RAISED GARDEN BEDS	01/ L5.5	CEDAR -
19	TREE GRATE	10/ L5.1	REFER TO SITE FURNISHINGS LEGEND, LO.1
20	FLOW THROUGH PLANTER	01-04/ C5.02	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
21	CONCRETE PLINTH	09/ L5.2	NATURAL GREY/LT. SANDBLAST SIDES, SMOOTH TOP
22	TRUNCATED DOMES	16/ L5.1	WAUSAU ADA-2 CHARCOAL GRAY (A-90)
23	DETECTABLE SIDE RAIL	12/ L5.5	GALVANIZED
	REFERENCE H		TES

REFERENCE KEY		R	E	FE	EF	RΕ	N	CE	KE	Y	
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KEY NOTE	DESCRIPTION	DET REF COLOR / FINISH
Α	(E) A.C. PAVING	PROTECT IN PLACE
В	(E) CONCRETE CURB	PROTECT IN PLACE
C	(E) CONCRETE PAVING	PROTECT IN PLACE
D	(E) BOLLARD	PROTECT IN PLACE
E	BIOFILTRATION BASIN	PER CIVIL
F	(E) TREE	PROTECT IN PLACE
G	STAIRS AT BUILDING	PER ARCH
Н	ELEVATED RAMP AT BUILDING	PER ARCH
J	(E) STORM DRAIN MANHOLE	PROTECT IN PLACE
K	TRENCH DRAIN	PER CIVIL
L	CONCRETE CURB	PER CIVIL
М	AC PAVING	PER CIVIL
N	CONCRETE RAMP AT BUILDING	PER ARCH
0	COLUMN AT BUILDING RAMP	PER STRUCTURAL
P	PATH OF TRAVEL SIGNAGE	19/ A10.11
Q	BOLLARD	PER CIVIL
R	CONCRETE CURB RAMP	PER CIVIL
S	PAVEMENT STRIPING	PER CIVIL
T	DRINKING FOUNTAIN	PER ARCH

# SITE SYMBOLS LEGEND

SYM.	DESC.	SYM.	DESC.	DET.
8	FIRE HYDRANT (PER CIVIL)		SAWCUT JOINT	03/ L5.1
	DRAIN INLET (PER CIVIL)		EXPANSION JOINTS	03/ L5.1
0	AREA DRAIN (PER CIVIL)		PROPERTY LINE/ RIGHT OF WAY	
(i)	CLEAN OUT (PER CIVIL)		LIMIT OF WORK	
0	STORM DRAIN MANHOLE (PER CIVIL)	T.O.S.	TOP OF SLOPE	
(3)	SANITARY SEWER MANHOLE (PER CIVIL)	B.O.S.	TOE (BOTTOM) OF SLOPE	E
	DOUBLE CHECK (PER CIVIL)	FOC	FACE OF CURB	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
$\longrightarrow$	DOWN SLOPE DIRECTION OF RAMP	BOC	BACK OF CURB	
$\neg$	ALIGN	PA	PLANTING AREA	

# LIGHTING LEGEND

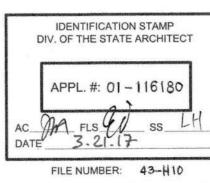
SYM.	DESCRIPTION	COMMENTS	DET. REF/ REMARKS
•	PEDESTRIAN LIGHT	SEE ELEC. PLANS FOR MODEL # AND COLOR.	PER/ ELECT.
	EVENT POLE LIGHT	SEE ELEC. PLANS FOR MODEL # AND COLOR.	PER/ ELECT.
N	OTE: SEE ELECTRICAL ENGIN	NEERING PLANS FOR FIXTURES, LAM	PS, AND SPECS.

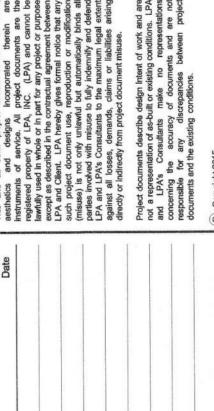
### SITE FURNISHINGS LEGEND

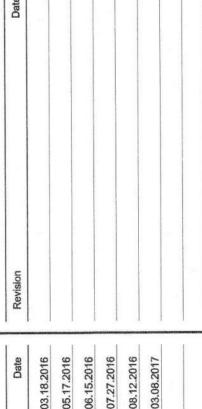
SYM.	DESC.	MANUF.	MODEL #	COLOR	FINISH/PTRN.	QTY.	
1	TRASH RECEPTACLE	QUICKCRETE	QR-CAL2436W LID-A19 STEEL INCLUDE ANCHOR BOLTS	NATURAL, LID-GRAY	ACID ETCH LT. AIRBRUSH W/ MATTE SEALER. STEEL LID. POWDERCOATED.	2	PER PLAN
R	RECYCLING RECEPTACLE	QUICKCRETE	QR-CAL2436W LID-M19 STEEL W/ RECYCLE LOGO INCLUDE ANCHOR BOLTS	NATURAL, LID-GRAY	ACID ETCH LT. AIRBRUSH W/ MATTE SEALER. STEEL LID. POWDERCOATED.	2	PER PLAN
X .	PEDESTRIAN TREE GRATE	URBAN ACCESSORIES	VIPER 5' SQ GRATE AND FRAME	CAST GREY IRON	RAW	4	10/ L5.1











Submittal	Date
100% SCHEMATIC DESIGN	03.18.2016
100% DESIGN DEVELOPMENT	05.17.2016
50% CONSTRUCTION DOCUMENT	06.15.2016
85% CONSTRUCTION DOCUMENTS	07.27.2016
DSA SUBMITTAL	08.12.2016
DSA APPROVAL	03.08.2017

1/4"=1'-0"

MATERIALS ENLARGEMENT PLAN

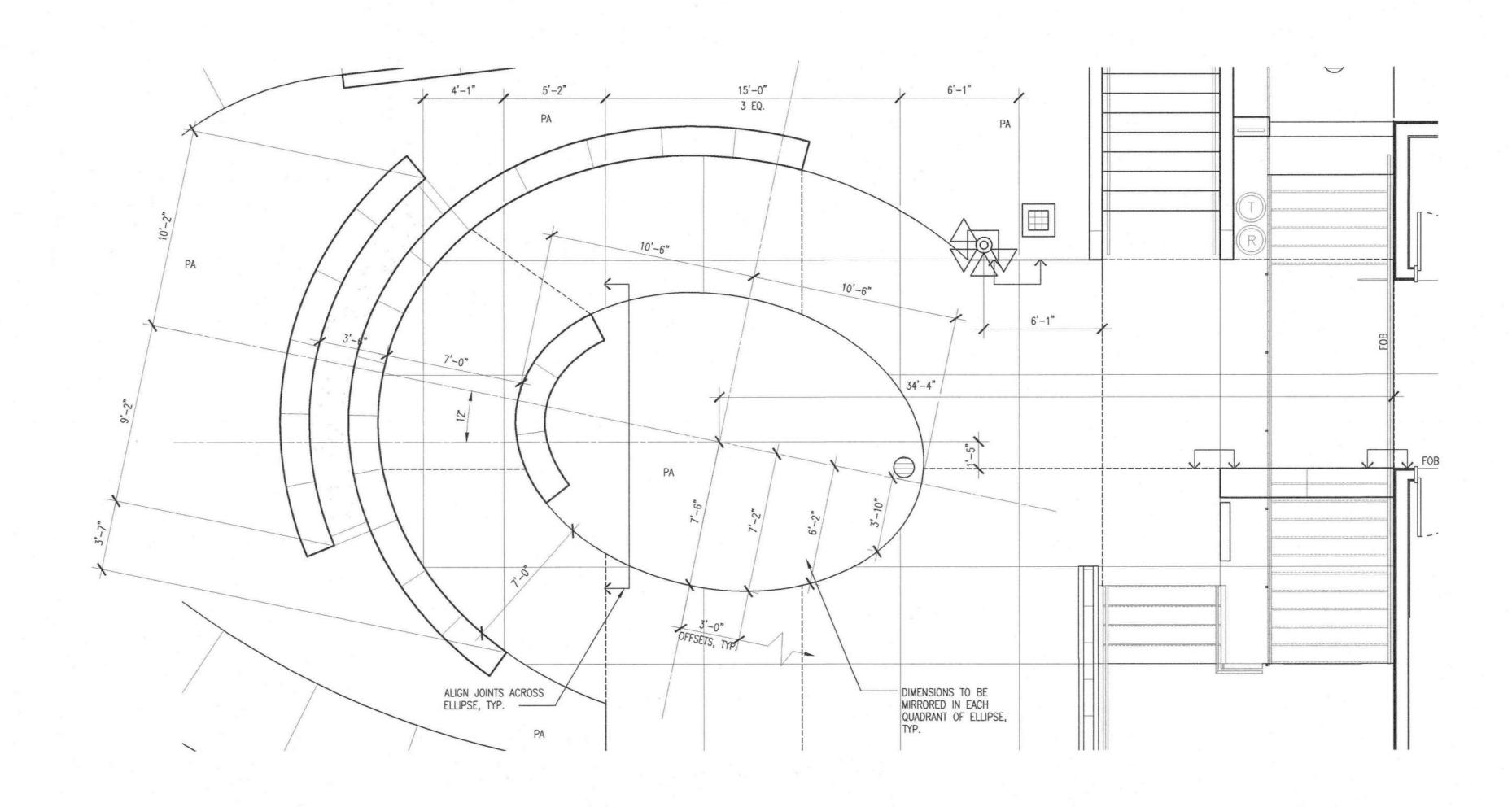
L3.1

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

L3.2

1602010 03.08.2017

1/4"=1'-0"



BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SCI

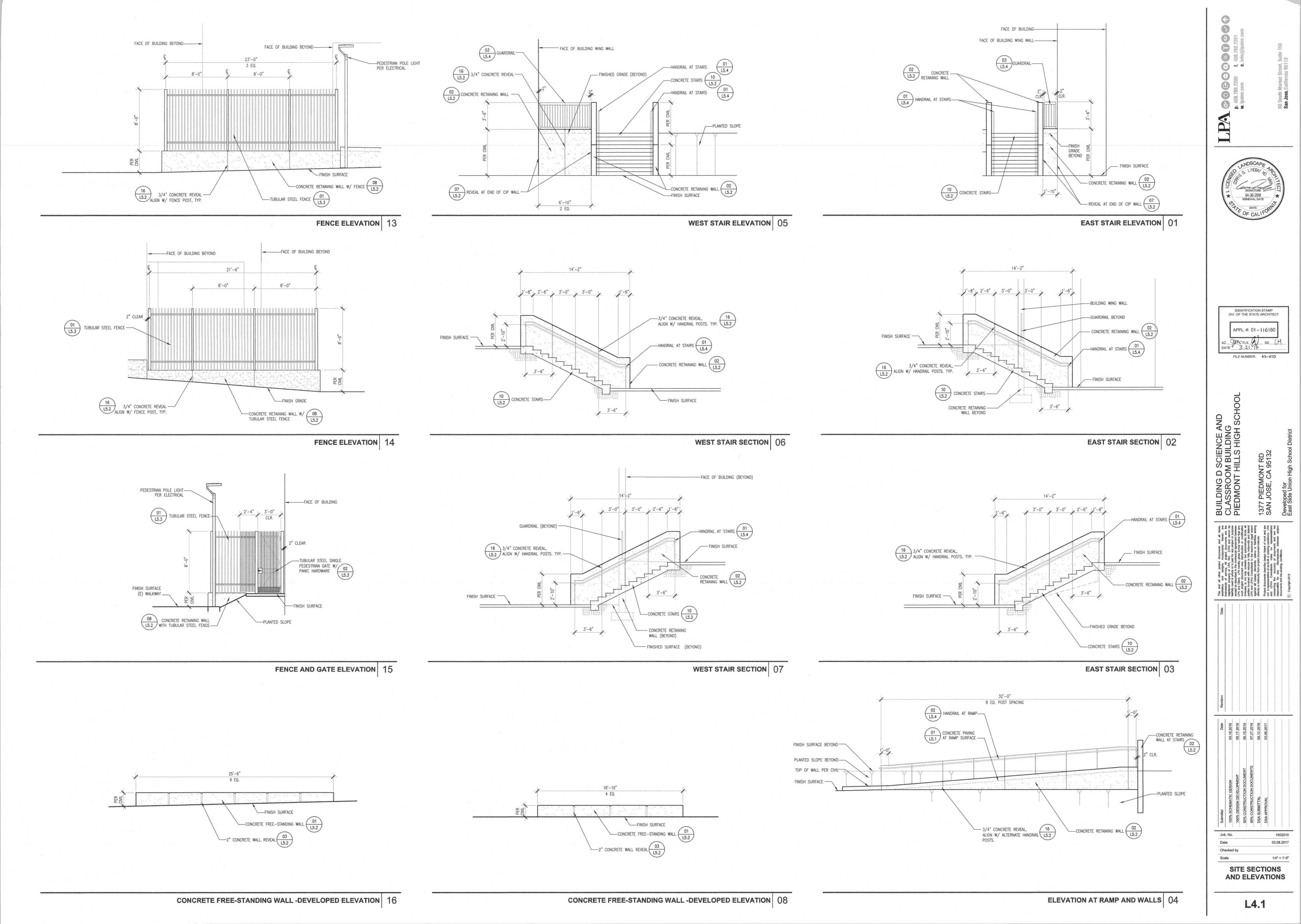
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

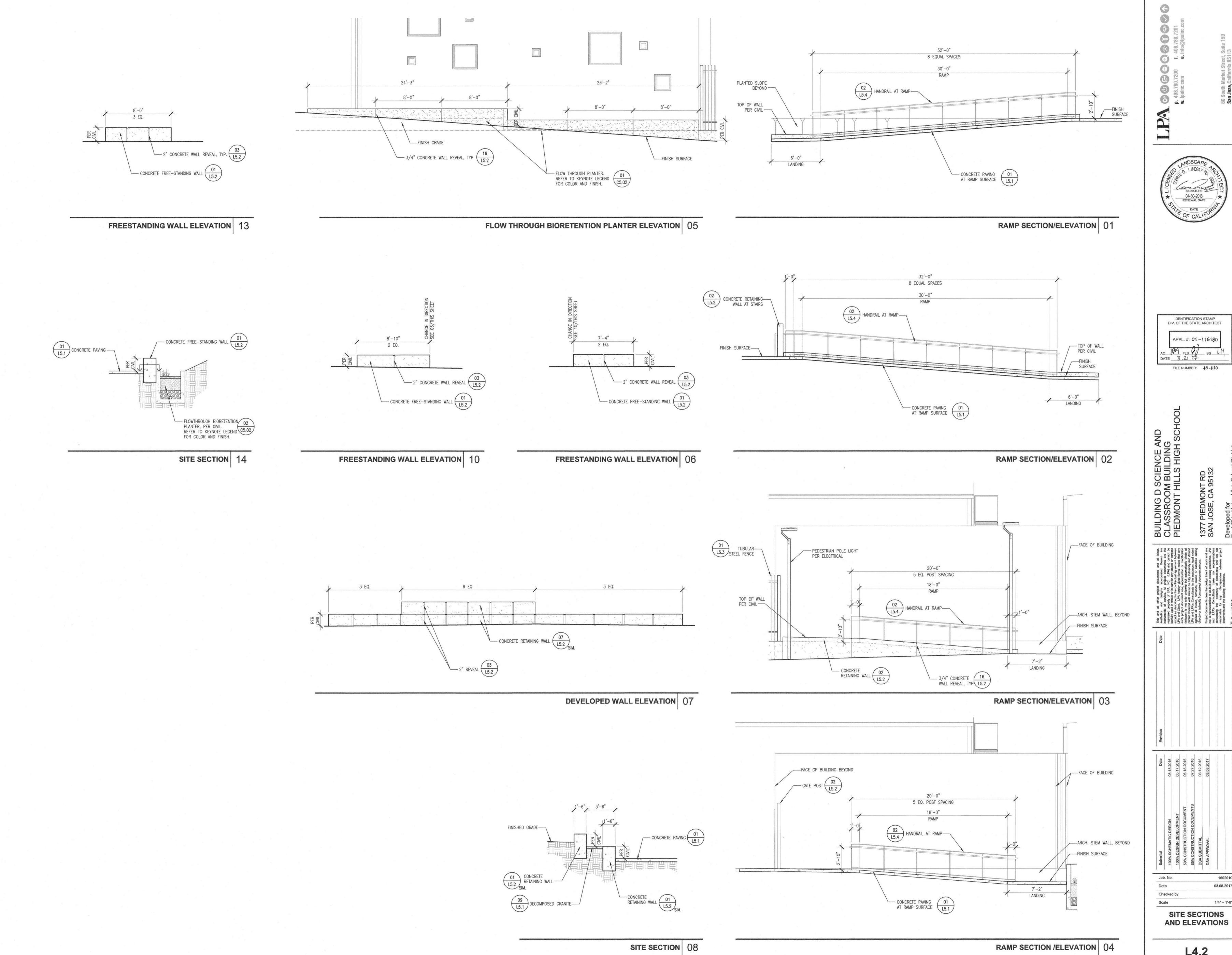
1602010 03.08.2017 Date Checked by

1/4"=1'-0" Scale LAYOUT ENLARGEMENT PLAN

L3.3

LAYOUT ENLARGEMENT PLAN 1/4"= 1'-0" 01











IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

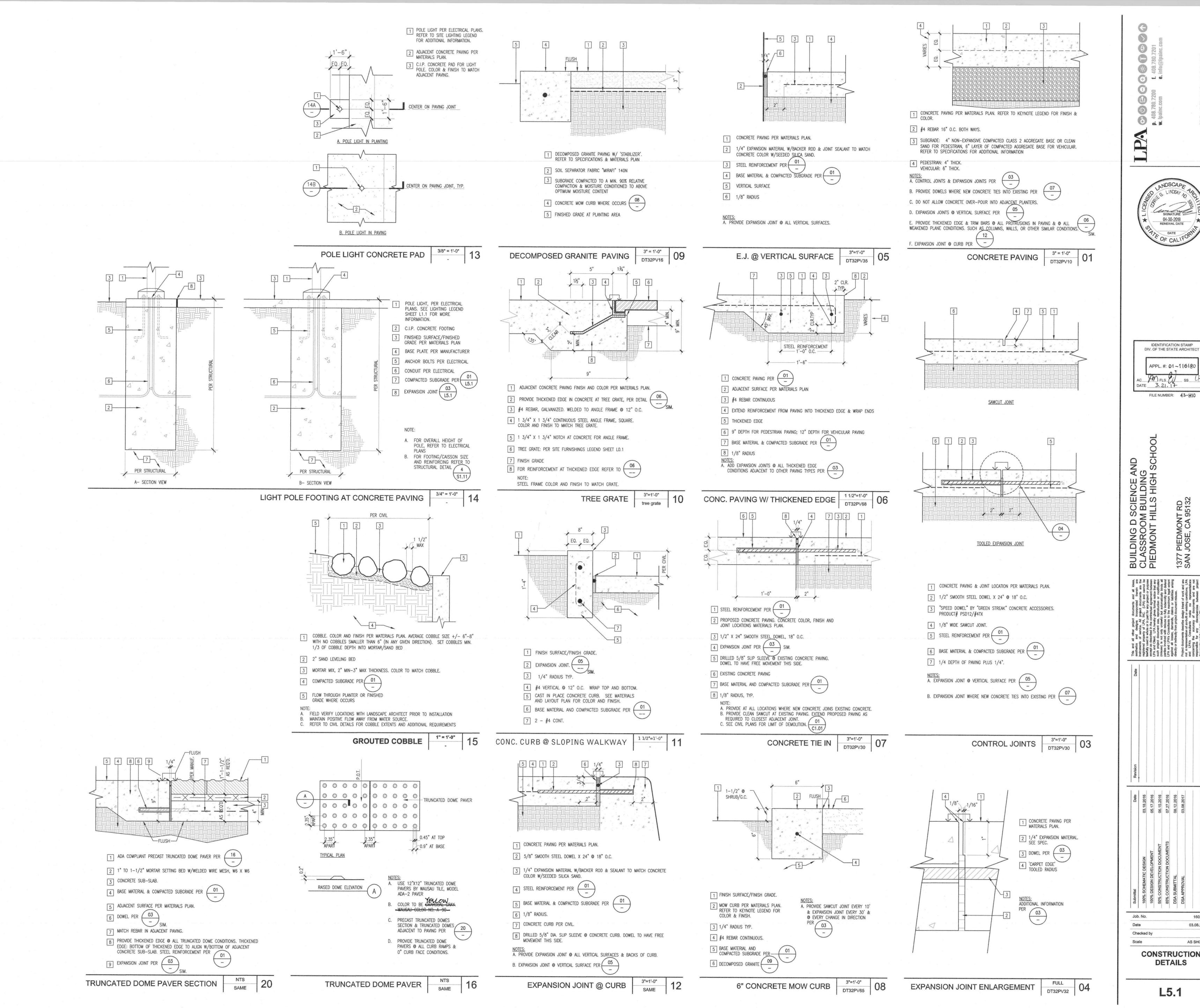
APPL. #: 01-116180

FILE NUMBER: 43-H10

03.08.2017

1/4" = 1'-0"

L4.2



L5.1

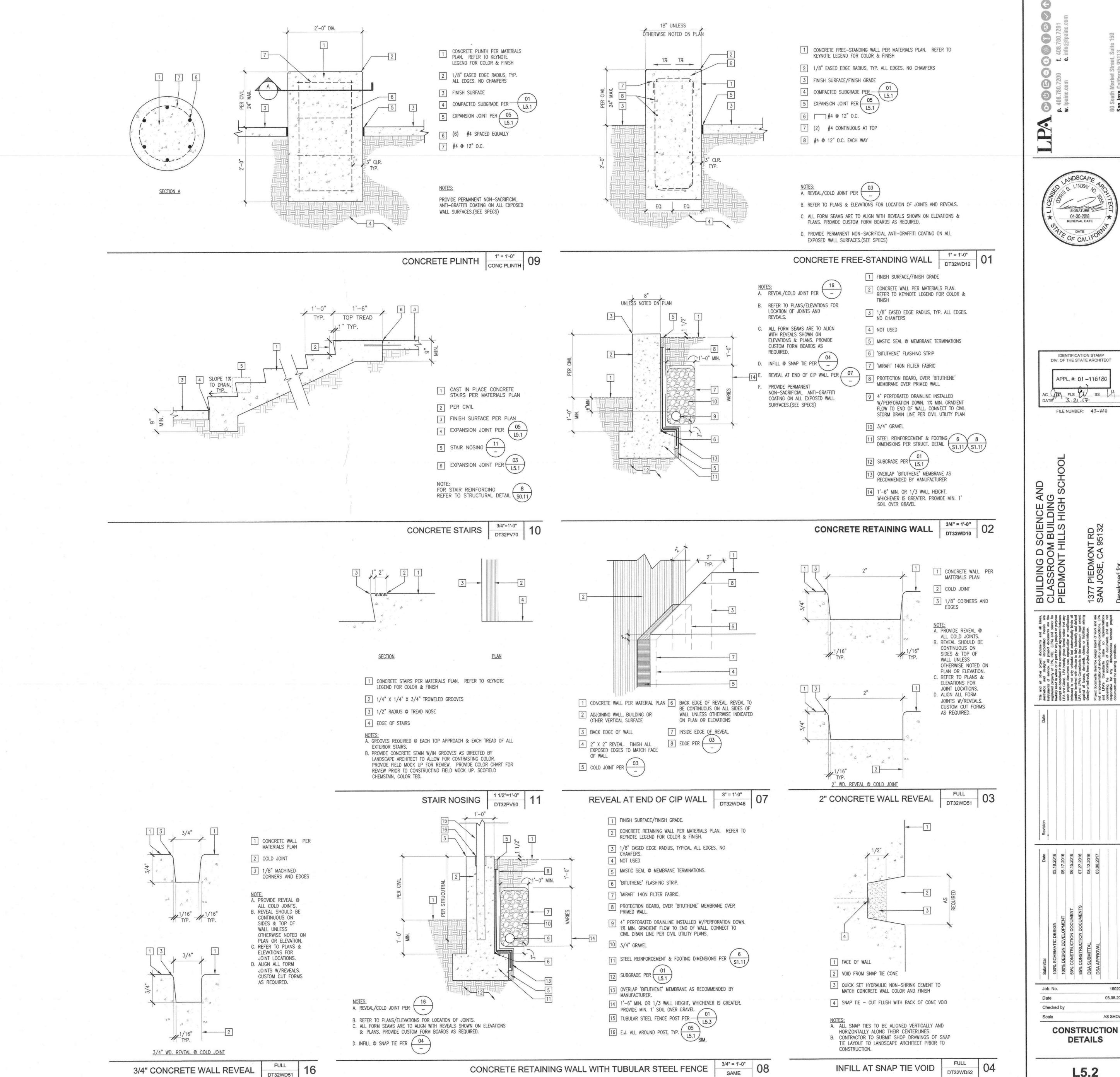
**DETAILS** 

04-30-2018 RENEWAL DATE

**IDENTIFICATION STAMP** 

AS SHOWN CONSTRUCTION

03.08.2017



() 4 3 4 5 SIGNATURE
04-30-2018
RENEWAL DATE

**IDENTIFICATION STAMP** 

APPL. #: 01-116180

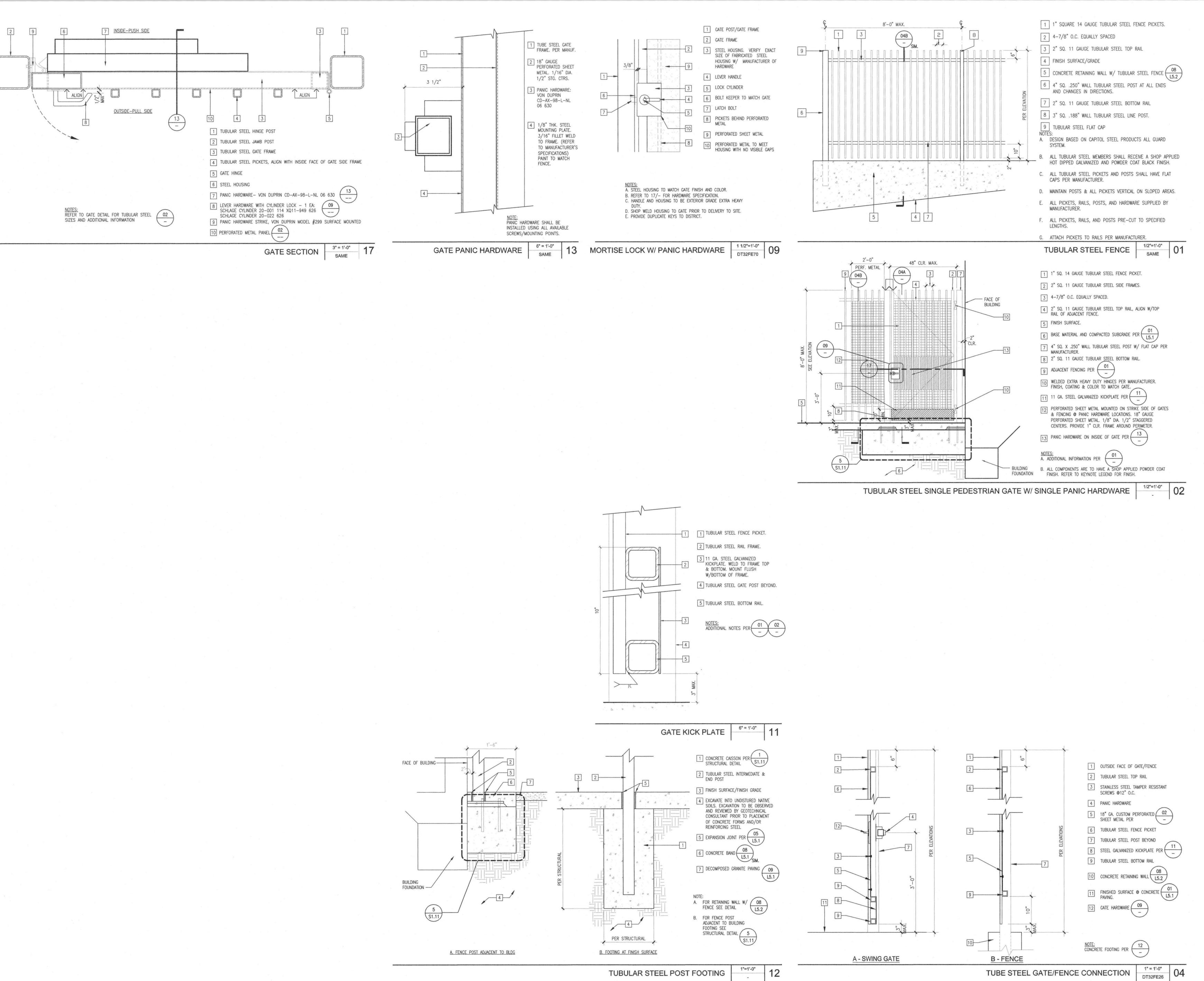
FILE NUMBER: 43-H10

03.08.2017

AS SHOWN

**DETAILS** 

L5.2



( i i 04-30-2018 RENEWAL DATE IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APPL. #: 01-116180 FILE NUMBER: 43-H10 BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SCI 3.2016 3.2016 3.2016 3.2016 3.2016 03.18 05.17 06.15 07.27 03.08

Job. No.

Checked by

03.08.2017

AS SHOWN

CONSTRUCTION

**DETAILS** 

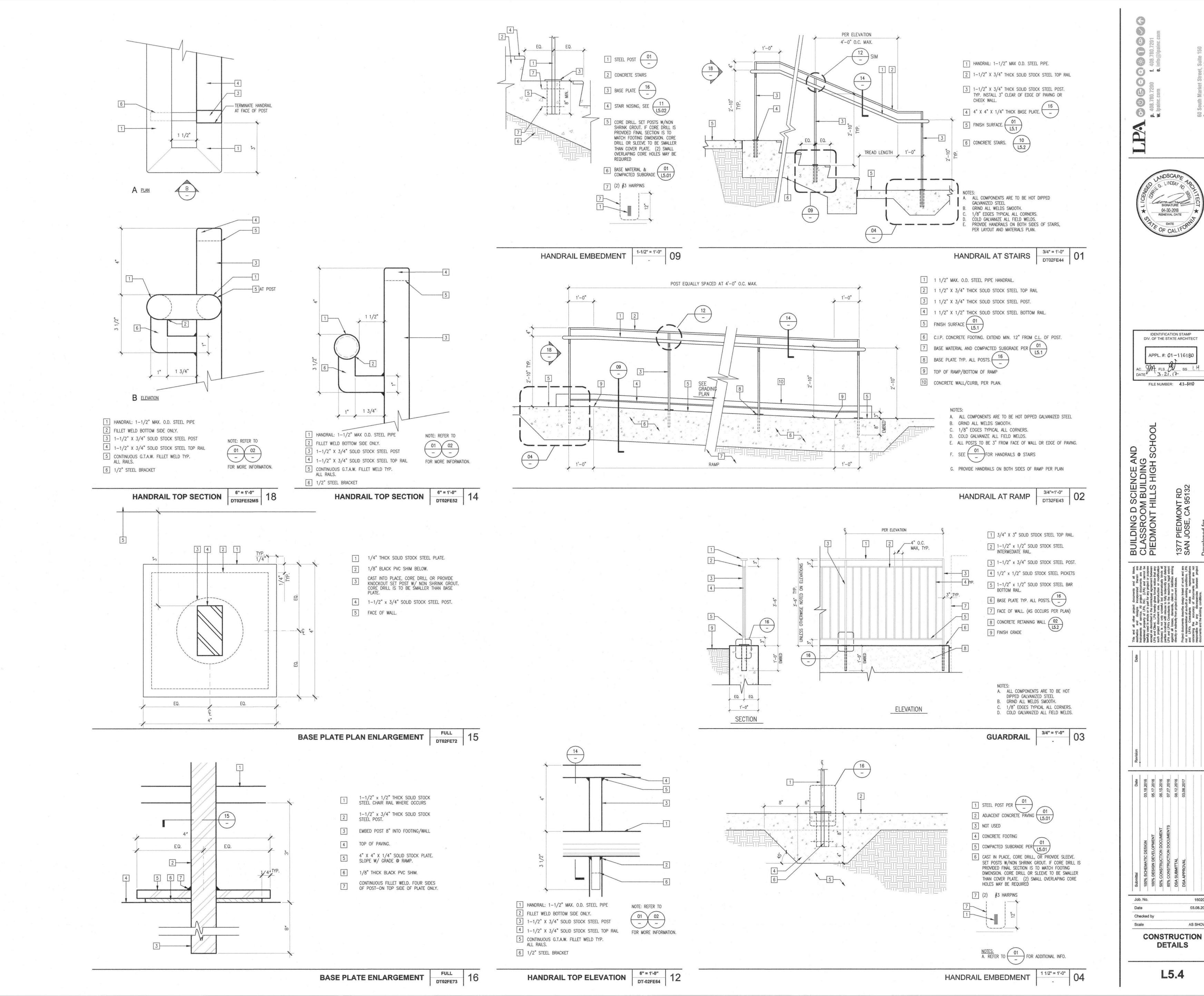
L5.3

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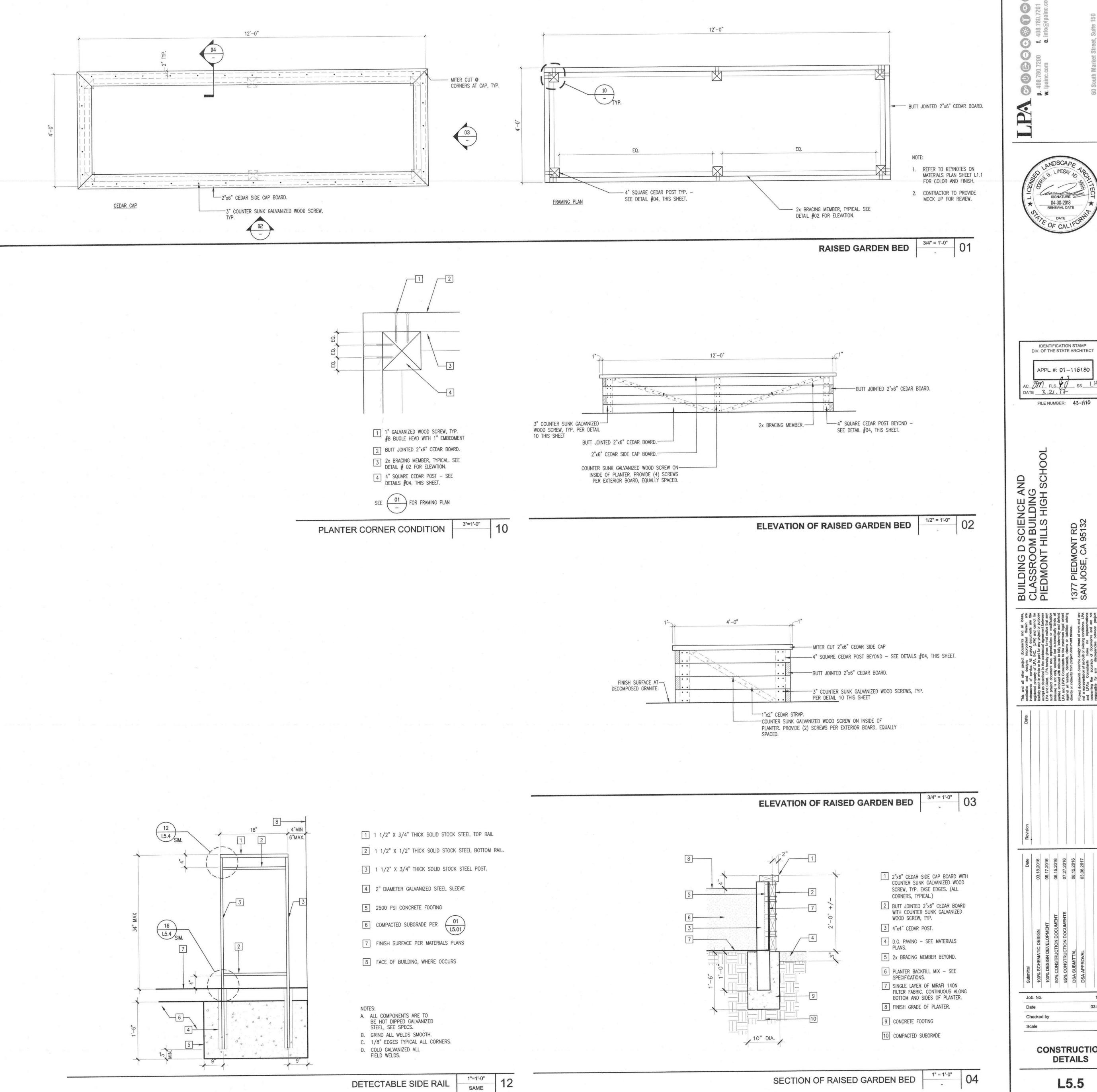
1602010

03.08.2017

AS SHOWN

L5.4

**DETAILS** 







DIV. OF THE STATE ARCHITECT

APPL. #: 01-116180

FILE NUMBER: 43-H10



03.18.7 05.17.7 06.15.0 07.27.7 03.08.

Checked by

CONSTRUCTION **DETAILS** 

L5.5

Scale

1602010

03.08.2017

PLANTING LEGEND

REF.	QTY.	SYM.	BOTANICAL NAME/ COMMON NAME	SIZE/ SPACING	COMMENTS, DETAIL
T1	8	•	ACER GRISUEM PAPERBARK MAPLE	36" BOX/ PER PLAN	STANDARD/ 10,20/L7.2
T2	4		ARBUTUS 'MARINA' MARINA STRAWBERRY TREE	36" BOX/ PER PLAN	STANDARD/ 10,20/L7.2
Т3	4	0	PISTACIA CHINENSIS CHINESE PISTACHE	36" BOX/ PER PLAN	STANDARD/ 17/L7.2
T4	9		RHUS LANCEA AFRICAN SUMAC	36" BOX/ PER PLAN	MULTI/ 10,20/L7.2
T5	1	$\oplus$	TIPUANA TIPU TIPUANA	48" BOX/ PER PLAN	STANDARD/ 10/L7.2

QUANTITIES LISTED ARE PER SHEET

S1	AS REQ'D	BACCHARIS PILULARIS 'TWIN PEAKS' COYOTE BRUSH	1 GAL/ 24" OC	/ 03/L7.2
S2	AS REQ'D	BERBERIS THUNBERGII 'ATROPURPUREA' RED LEAF BARBERYY	5 GAL/ 36" OC	/ 03/L7.2
S3	AS REQ'D	DIETES BICOLOR FORTNIGHT LILY	5 GAL/ 36" OC	/ 03/L7.2
S4	AS REQ'D	NANDINA DOMESTICA 'GULF STREAM' HEAVENLY BAMBOO	5 GAL/ 24" OC	/ 03/L7.2
S5	AS REQ'D	PHORMIUM TENAX 'JESTER'  NEW ZEALAND FLAX	5 GAL/ 24" OC	/ 03/L7.2
S6	AS REQ'D	RHAMNUS CALIFORNICA 'MOUND SAN BRUNO' SAN BRUNO COFFEEBERRY	5 GAL/ 48" OC	/ 03/L7.2
S7	AS REQ'D	PRUNUS CAROLIANA 'COMPACTA' CAROLINA LAUREL CHERRY	5 GAL/ 48" OC	/ 03/L7.2

GS1	AS REQ'D	CALAMAGROSTIS X. 'KARL FOERSTER' FEATHER REED GRASS	1 GAL/ 24" OC	/ 03/L7.2
GS2	AS REQ'D	CHONDROPETALUM TECTORUM CAPE RUSH	1 GAL/ 24" OC	/ 03/L7.2
GS3	AS REQ'D	HELICTOTRICHON SEMPERVIRENS BLUE OAT GRASS	1 GAL/ 24" OC	/ 03/L7.2
GS4	AS REQ'D	JUNCUS PATENS CALIFORNIA GRAY RUSH	1 GAL/ 12" OC	/ 03/L7.2

GC1	AS REQ'D	ARCTOSTAPHYLOS 'PACIFIC MIST'/ PACIFIC MIST MANZANITA	5 GAL/ 36" OC	/ 03/L7.2
GC2	AS REQ'D	CEANOTHUS G.H. 'CARMEL CREEPER' CARMEL CREEPER CEANOTHUS	5 GAL/ 36" OC	/ 03/L7.2

MISCEL	LANEOU	S SYMBOL	5

-	PHARITAN 12000		Williams Street	5 5 1 MBOL5	
			27000		
40000 mm2	-CHILDRESS	LINEAR	ROOT	BARRIER	

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

FILE NUMBER: 43-H10

Revision	
	Date

ittal	Date
SCHEMATIC DESIGN	03.18.2016
DESIGN DEVELOPMENT	05.17.2016
CONSTRUCTION DOCUMENT	06.15.2016
CONSTRUCTION DOCUMENTS	07.27.2016
SUBMITTAL	08.12.2016
APPROVAL	03.08.2017

1602010 03.08.2017

PLANTING PLAN

L7.1

PLANTING PLAN 1"= 10'-0" 01

1) CONCRETE CURB, GUTTER, OR SIDEWALK.

2 LINEAR ROOT BARRIER BY 'DEEP ROOT'. SEE PLANTING PLAN. MODEL # UB24-2

4 ADJACENT ROOTBALL. VERIFY THE EXACT LOCATION AND PROTECT AT ALL TIMES.

(3) FINISH GRADE.

4 5

1 (3) MODEL 88-DB1 DUCKBILL

4 1 X 4 TIMBER TRIANGLE NAILED

7 TREE GRATE PER MATERIALS

1. USE ONLY ON FIRM ROOT BALLS.

2. VERIFY TREE IS SECURE AFTER

DR-3 DRIVE ROD REQUIRED TO

INSTALL ANCHORS. 4. VERIFY WOOD IS NOT EXPOSED

NOT FOR USE ON TREES GROWN IN

SAWDUST MIX OR VERY LOOSE DIRT.

FINAL INSTALLATION OF ANCHOR

2 3/16 GALVANIZED STEEL

TENSIONING CABLE

3 RATCHET TENSIONER

EACH CORNER

6 SAND SETTING BED

5 TREE TRUNK

SYSTEM.

BELOW.

TREE PLANTING AT GRATE

1 LOCATE PLANTS WITH EQUAL SPACING AS INDICATED ON PLAN (TRIANGULAR SPACING).

(3) PAVING, BUILDING, OR HEADER SHOWING PLANTING AREA LIMIT.

TRIANGULAR SPACING

1) 32" BLACK VIT "CINCH TIES". ATTACH W/ TWO ROOFING NAILS.

DIRECTED BY LANDSCAPE ARCHITECT.

(6) SCARIFY SIDES AND BOTTOM OF PLANTING PIT.

(4) CUT SLOPE TO MEET PLANT PIT.

(12) 2" MULCH, MAINTAIN CONSTANTLY.

(3) EXISTING SLOPE.

(7) EXISTING SOIL.

(8) PLANT TABLET.

PREVAILING WIND

15 GAL.

TO 24"

BOX

2 X ROOTBALL MIN.

2 2" DIA. X 8' AND 10' LODGE POLE PINE STAKES. CUT STAKE AS

(5) AMENDED BACKFILL. SEE SPECIFICATIONS FOR MIX AND PIT SIZE.

9 SET TOP OF ROOTBALL 2" ABOVE SURROUNDING GRADE AND SLOPE

REMOVE BASIN IN LAWN AREAS AND AS DIRECTED BY LANDSCAPE

(11) COMPACTED BACKFILL - PUDDLE AND SETTLE PRIOR TO SETTING

3) UNDISTURBED EXISTING SOIL TO FORM PEDESTAL, REPLACE W/

PROVIDE (2) 3" DIA. x 6' DEEP AUGER HOLES IF EXCAVATED HOLE

DOES NOT DRAIN FASTER THAN 1" PER HOUR AS DETERMINED BY SOILS REPORT AND FIELD CONDITIONS. PROVIDE TEST PIT FOR REVIEW.

COMPACTED NATURAL SOIL IF HARDPAN EXISTS

(10) WATER BASIN. 4" MIN. FOR 5 GAL. & LARGER. SEE SPECS.

FOR DRAINAGE. PROVIDE 2' DIA. MULCH RING AT TREES WITHIN TURF. ADJUST HEIGHT OF TREE PLANTING BASED ON SETTLING DUE TO SOIL

(2) 1/2 ON CENTER SPACING.

ROOTBALL

(5) BASE MATERIAL FROM ADJACENT HARDSCAPE.

(6) COMPACTED SUBGRADE FROM ADJACENT HARDSCAPE.

(1) BASE OF PEDESTAL FOR TREE.

(4) BLACK PLASTIC TIES.

(6) PLANT TABLETS.

(15) EXISTING SOIL.

(18) TREE CANOPY

PLAN VIEW A

36" BOX, 48"

BOX, AND MULTI'S.(UNLESS

IN TURF)

2 X ROOTBALL MIN. MIN.

SECTION B

(3) DUCKBILL EARTH ANCHORING SYSTEM.

(5) GUY WIRE W/TURN BUCKLE AS REQUIRED TO

SUPPORT TREE (3-REQUIRED). PART OF DUCKBILL

EARTH ANCHORING SYSTEM. WHITE VINYL COATED.

(7) AMENDED BACKFILL. SEE SPECIFICATIONS FOR MIX.

(9) COMPACTED BACKFILL, PUDDLE & SETTLE PRIOR TO SETTLING TREE.

(11) SET TOP OF ROOTBALL 2" ABOVE SURROUNDING GRADE AND SLOPE

FOR DRAINAGE. PROVIDE 4' CIRCULAR. MULCH RING EQUIVALENT TO

TREE BOX SIZE AT TREES WITHIN TURF. ADJUST HEIGHT OF TREE

(10) 12" WIDE TRENCH ALONG ONE SIDE FILL W/ 3/4" DRAIN GRAVEL.

PLANTING TO ACCOMODATE SETTLING DUE TO SOIL TYP.

(13) 4" PERFORATED DRAIN PIPE. PLACED HORIZONTAL.

GRAVEL, OVERLAPPING SEPERATE PIECES @ 6".

(16) WATER BASIN. 6" MIN. DEPTH. REMOVE BASIN IN LAWN

AREAS AND AS DIRECTED BY LANDSCAPE ARCHITECT.

(17) UNDISTURBED EXISTING SOIL TO FORM PEDESTAL & PREVENT

SETTLING OF TREE. REPLACE WITH COMPACTED NATURAL

1. TREES WITH SUFFICIENT SPACE SHALL BE GUYED. TREES W/ UNSUFFICIENT SPACE AND UNABLE TO BE GUYED, SHALL BE

STAKED WITH CUSTOM CINCH TIES.. SEE 02

SECTION C

TREE GUYING AND PLANTING DETAIL

(14) "MIRAFI" 140N FILTER FABRIC WRAPPING DRAIN

(8) SCARIFY SIDES AND BOTTOM OF PLANT PIT.

(12) 2" MULCH, MAINTAIN CONSTANTLY.

SOIL IF HARDPAN EXISTS.

(19) ROOTBALL/ TOP OF PEDESTAL.

2) 4" PVC STANDPIPE W/ 'NDS' WHITE PVC ADAPTER, 4" ABS 'NIBCO' BLACK MALE PLUG AND FEMALE RECEIVER. PLUG TO BE 2" ABOVE FINISH GRADE.

Job. No. 1602010 Date 03.08.2017 Checked by Scale AS SHOWN **PLANTING** 

**DETAILS** 

UNDISTURBED EXISTING SOIL TO FORM PEDESTAL. REPLACE WITH COMPACTED NATURAL SOIL IF HARDPAN IS ENCOUNTERED.

SAME

3 2" DEEP WATER BASIN FOR 1 GALLON SHRUBS AND 4" DEEP FOR 5 GALLON AND LARGER SHRUBS.

SCARIFY SIDES AND BOTTOM OF PLANTING PIT — DUST LIBERALLY WITH FINE GROUND AGRICULTURAL GYPSUM.

COMPACTED AMENDED BACKFILL - PUDDLE AND SETTLE PRIOR TO SETTING SHRUB.

B. SEE PLANTING SPECIFICATION FOR ADDITIONAL INFORMATION.

A. SEE DETAIL FOR SPACING DIAGRAM.

SET CROWN OF ROOTBALL 1" ABOVE FINISH GRADE AND SLOPE SOIL AWAY FROM ROOTBALL. ADJUST HEIGHT OF PLANTING TO ACCOMMODATE SETTLING DUE TO SOIL TYPES.

(4) FINISH GRADE OF SLOPE.

(8) NATIVE, UNDISTURBED SOIL.

11) EXISTING SLOPE BEYOND.

NOTES:

9 WOOD MULCH - KEEP 2" CLEAR OF TRUNK.

5 AMENDED BACKFILL.

1) SHRUB - CENTER IN PLANTING PIT.

C. SEE DETAIL (18) FOR SHRUB SPACING DIAGRAM.

SHRUB PLANTING

B. SEE DETAIL (04) FOR SHRUB PLANTING ON SLOPE.

A. SEE PLANTING SPECIFICATION FOR ADDITIONAL INFORMATION

(10) COMPACTED AMENDED BACKFILL - PUDDLE AND SETTLE PRIOR TO SETTING SHRUB

(9) WOOD MULCH - KEEP 2" CLEAR OF TRUNK

7) SCARIFY SIDES AND BOTTOM OF PLANTING PIT - DUST LIBERALLY WITH FINE GROUND AGRICULTURAL GYPSUM (8) NATIVE, UNDISTURBED SOIL

(5) AMENDED BACKFILL 6 UNDISTURBED EXISTING SOIL TO FORM PEDESTAL. REPLACE WITH COMPACTED NATURAL SOIL IF HARDPAN IS ENCOUNTERED

AND LARGER SHRUBS - REMOVE WHEN DIRECTED BY LANDSCAPE ARCHITECT 4 FINISH GRADE

SETTLING DUE TO SOIL TYPES (3) 2" DEEP INTERIM WATER BASIN FOR 1 GALLON SHRUBS AND 4" DEEP FOR 5 GALLON

2 SET CROWN OF ROOTBALL 1" ABOVE FINISH GRADE AND SLOPE SOIL AWAY FROM ROOTBALL, ADJUST HEIGHT OF PLANTING TO ACCOMMODATE

1) SHRUB - CENTER IN PLANTING PIT

TREE STAKING AND PLANTING DETAIL

SECTION C

1. SEE DETAIL - FOR TREES 36" BOX SIZE AND LARGER. 2. SEE DETAIL (17) FOR TREE PLANTING AT GRATE.

(18) ROOTBALL/ TOP OF PEDESTAL. (19) BASE OF PEDESTAL FOR TREE.

WITH COMPACTED NATURAL SOIL IF HARDPAN EXISTS. (17) TREE CANOPY

(13) 4" PERFORATED DRAIN PIPE PLACED HORIZONTAL.

HIGH WIND COND.

NORMAL WIND COND.

PLAN VIEW A

PREVAILING /

4

15 GAL.

2 X ROOTBALL MIN.

DIAMETER

SECTION B

FINISH GRADE.

(15) 4" PVC STANDPIPE W/ 'NDS' WHITE PVC ADAPTER, 4" ABS 'NIBCO' BLACK MALE PLUG AND FEMALE RECEIVER. PLUG TO BE 2" ABOVE

(14) "MIRAFI" 140N FILTER FABRIC WRAPPING DRAIN GRAVEL, OVERLAPPING

(16) UNDISTURBED EXISTING SOIL TO FORM PEDESTAL AND PREVENT SETTLING. REPLACE

(1) 32" BLACK VIT "CINCH TIES". ATTACH W/ TWO ROOFING NAILS. SEE

(2) 2" DIA. X 10' LODGE POLE PINE STAKES. CUT STAKE AS DIRECTED BY

(4) WATER BASIN. 4" MIN. DEPTH. REMOVE BASIN IN LAWN AREAS AND AS

(9) SET TOP OF ROOTBALL 2" ABOVE SURROUNDING GRADE AND SLOPE FOR DRAINAGE.

PROVIDE 2' DIA. MULCH RING AT TREES WITHIN TURF. ADJUST HEIGHT OF TREE

PLAN VIEW.

(3) FINISH GRADE

7) EXISTING SOIL.

(8) PLANT TABLET.

LANDSCAPE ARCHITECT.

DIRECTED BY LANDSCAPE ARCHITECT.

(6) SCARIFY SIDES AND BOTTOM OF PLANTING PIT.

(10) 2" MULCH, MAINTAIN CONSTANTLY.

SEPERATE PIECES @ 6".

(5) AMENDED BACKFILL. SEE SPECIFICATIONS FOR MIX.

PLANTING TO ACCOMMODATE SETTLING DUE TO SOIL TYPE.

(11) COMPACTED BACKFILL. PUDDLE AND SETTLE PRIOR TO SETTING TREE.

(12) 12" WIDE TRENCH ALONG ONE SIDE. FILL WITH 3/4" DRAIN GRAVEL.

**IDENTIFICATION STAMP** 

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DIV. OF THE STATE ARCHITECT APPL. #: 01-116180

04-30-2018 RENEWAL DATE

BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SC

L7.2

Russell D. Mitchell Associates, Inc.

**IDENTIFICATION STAMP** DIV. OF THE STATE ARCHITECT

APPL. #: 01-116180

FILE NUMBER: 43-H10

2760 Camino Diablo Walnut Creek, CA 94597 www.rmairrigation.com

(+) -- es

Checked by 1"=10'-0" **IRRIGATION** PLAN

03.08.2017

- IRRIGATION NOTES 1. THESE IRRIGATION DRAWINGS ARE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS MAY BE SHOWN WITHIN PAVED AREAS FOR GRAPHIC CLARITY ONLY AND ARE TO BE INSTALLED WITHIN PLANTING AREAS. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, CONDUIT, AND OTHER ITEMS WHICH MAY BE REQUIRED. INVESTIGATE THE STRUCTURAL AND FINISHED CONDITION AFFECTING THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONAL DIFFERENCES. IN THE EVENT OF FIELD DISCREPANCY WITH CONTRACT DOCUMENTS, PLAN THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND ACCORDING TO THE CONTRACT SPECIFICATIONS. NOTIFY AND COORDINATE IRRIGATION CONTRACT WORK WITH APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS, ROADWAYS, PAVING AND STRUCTURES BEFORE CONSTRUCTION. IN THE EVENT THESE NOTIFICATIONS ARE NOT PERFORMED, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR REQUIRED REVISIONS.
- 2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL ELECTRIC CODE; THE UNIFORM PLUMBING CODE, PUBLISHED BY THE WESTERN PLUMBING OFFICIALS ASSOCIATION: AND OTHER STATE OR LOCAL LAWS OR REGULATIONS. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR REGULATIONS. THE CONTRACTOR SHALL FURNISH WITHOUT ANY EXTRA CHARGE, ANY ADDITIONAL MATERIAL AND LABOR WHEN REQUIRED BY THE COMPLIANCE WITH THESE CODES AND REGULATIONS.
- 3. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH LAYOUT AND INSTALLATION OF THE PLANT MATERIALS TO INSURE THAT THERE WILL BE COMPLETE AND UNIFORM IRRIGATION COVERAGE OF PLANTING IN ACCORDANCE WITH THESE DRAWINGS, AND CONTRACT DOCUMENTS. THE IRRIGATION LAYOUT SHALL BE CHECKED BY THE CONTRACTOR AND OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO CONSTRUCTION TO DETERMINE IF ANY CHANGES, DELETIONS, OR ADDITIONS ARE REQUIRED. IRRIGATION SYSTEM SHALL BE INSTALLED AND TESTED PRIOR TO INSTALLATION OF PLANT MATERIAL.
- 4. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH
- 5. IT IS THE RESPONSIBILITY OF THE MAINTENANCE CONTRACTOR AND/OR OWNER TO PROGRAM THE IRRIGATION CONTROLLER(S) TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. THIS INCLUDES MAKING ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS, SLOPES, SUN, SHADE AND WIND EXPOSURE.
- 6. IT IS THE RESPONSIBILITY OF A LICENSED ELECTRICAL CONTRACTOR TO PROVIDE 120 VOLT A.C. (2.5 AMP DEMAND PER CONTROLLER) ELECTRICAL SERVICE TO THE CONTROLLER LOCATION(S). IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE THE ELECTRICAL SERVICE STUB-OUT TO THE CONTROLLER(S). PROVIDE PROPER GROUNDING PER CONTROLLER MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH LOCAL CODES.
- 7. PROVIDE EACH CONTROLLER WITH ITS OWN GROUND ROD. SEPARATE THE GROUND RODS BY A MINIMUM OF EIGHT FEET. THE GROUND ROD SHALL BE AN EIGHT FOOT LONG BY 5/8" DIAMETER U.L. APPROVED COPPER CLAD ROD. INSTALL NO MORE THAN 6" OF THE GROUND ROD ABOVE FINISH GRADE. CONNECT #6 GAUGE WIRE WITH A U.L. APPROVED GROUND ROD CLAMP TO ROD AND BACK TO GROUND SCREW AT BASE OF CONTROLLER WITH APPROPRIATE CONNECTOR. MAKE THIS WIRE AS SHORT AS POSSIBLE, AVOIDING KINKS OR BENDING.
- 8. PROVIDE EACH IRRIGATION CONTROLLER WITH ITS OWN INDEPENDENT LOW VOLTAGE COMMON GROUND WIRE.
- 9. SCHEDULE A MEETING WHICH INCLUDES REPRESENTATIVES OF THE IRRIGATION CONTROLLER MANUFACTURER, THE MAINTENANCE CONTRACTOR, THE OWNER AND THE IRRIGATION CONTRACTOR AT THE SITE FOR INSTRUCTION ON THE PROPER PROGRAMMING AND OPERATION OF THE IRRIGATION CONTROLLER.
- 10. IRRIGATION CONTROL WIRES: SOLID COPPER WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND. COMMON GROUND WIRE: SIZE #12-1 WIRE WITH A WHITE INSULATING JACKET. CONTROL WIRE SERVICING REMOTE CONTROL VALVES: SIZE #14-1 WIRE WITH INSULATING JACKET OF COLOR OTHER THAN WHITE. SPLICES SHALL BE MADE WITH 3M-DBY SEAL PACKS OR APPROVED EQUAL.
- 11. INSTALL TWO SPARE CONTROL WIRES OF A DIFFERENT COLOR ALONG THE ENTIRE MAIN LINE. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES.
- 12. SPLICING OF LOW VOLTAGE WIRES IS PERMITTED IN VALVE BOXES ONLY. LEAVE A 36" LONG, 1" DIAMETER COIL OF EXCESS WIRE AT EACH SPLICE AND A 36" LONG EXPANSION LOOP EVERY 100 FEET ALONG WIRE RUN. TAPE. WIRES TOGETHER EVERY TEN FEET. DO NOT TAPE WIRES TOGETHER WHERE CONTAINED WITHIN SLEEVING OR CONDUIT.
- 13. WITHIN TURF AND GROUND COVERS: INSTALL GREEN PLASTIC VALVE BOXES WITH BOLT DOWN, NON HINGED COVER MARKED "IRRIGATION". BOX BODY SHALL HAVE KNOCK OUTS. ACCEPTABLE VALVE BOX MANUFACTURER'S INCLUDE NDS, CARSON OR APPROVED EQUAL.
- 15. WITHIN TURF AND GROUND COVERS: INSTALL GREEN PLASTIC VALVE BOXES WITH BOLT DOWN, NON HINGED COVER MARKED "IRRIGATION". BOX BODY SHALL HAVE KNOCK OUTS. ACCEPTABLE VALVE BOX

- MANUFACTURER'S INCLUDE NDS, CARSON OR APPROVED
- 15. WITHIN MULCHED AREAS: INSTALL BLACK PLASTIC VALVE BOXES WITH BOLT DOWN, NON HINGED COVER MARKED "IRRIGATION". BOX BODY SHALL HAVE KNOCK OUTS. ACCEPTABLE VALVE BOX MANUFACTURER'S INCLUDE NDS, CARSON OR APPROVED EQUAL.
- 16. WITHIN HARDSCAPE INSTALL REMOTE CONTROL VALVES IN A RECTANGULAR CONCRETE VALVE BOX. CHRISTY MODEL BO9BOX WITH A CHRISTY NO9R LID OR APPROVED EQUAL. GATE VALVES AND QUICK COUPLING VALVES SHALL BE IN A 10" ROUND CONCRETE BOX BY CHRISTY, MODEL NO. FO8.
- 17. INSTALL REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB, LAWN, HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, INSTALL EACH BOX AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE, AND PROVIDE 12" FROM THE WALK, CURB, HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE AND INSTALL EACH BOX 12" APART.
- 18. VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS (AVOID LAWN AREAS WHERE POSSIBLE).
- 19. THE CONTRACTOR SHALL LABEL CONTROL LINE WIRE AT EACH REMOTE CONTROL VALVE WITH A 2 1/4" X 2 3/4" POLYURETHANE I.D. TAG, INDICATING IDENTIFICATION NUMBER OF VALVE (CONTROLLER AND STATION NUMBER). ATTACH LABEL TO CONTROL WIRE THE CONTRACTOR SHALL PERMANENTLY STAMP ALL VALVE BOX LIDS WITH APPROPRIATE IDENTIFICATION AS NOTED IN CONSTRUCTION DETAILS.
- 20. THE REMOTE CONTROL VALVES SPECIFIED ON THE DRAWINGS IS A PRESSURE REDUCING TYPE. SET THE DISCHARGE PRESSURE AS FOLLOWS:
- SPRAY HEADS=40 PSI
- MP ROTATORS=40 PSI DRIP EMITTERS=35 PSI
- D. BUBBLERS= 30 PSI
- 21. INSTALL A GATE VALVE TO ISOLATE EACH REMOTE CONTROL VALVE OR GROUP OF RCV'S LOCATED TOGETHER. GATE VALVE SIZE SHALL BE SAME AS THE LARGEST REMOTE CONTROL VALVE IN MANIFOLD
- 22. FOR 2 1/2" AND LARGER MAIN LINE PIPING INSIDE SLEEVES USE 1120-315 PSI PVC PLASTIC PIPE WITH SCHEDULE 40 PVC COUPLINGS. DO NOT INSTALL GASKETED COUPLINGS INSIDE SLEEVES
- 23. FLUSH AND ADJUST IRRIGATION OUTLETS AND NOZZLES FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS. SELECT THE BEST DEGREE OF THE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS AND THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH CONTROL
- 24. SET SPRINKLER HEADS PERPENDICULAR TO FINISH
- 25. LOCATE EMITTER OUTLETS ON UPHILL SIDE OF PLANT OR TREE.
- 26. LOCATE BUBBLERS ON UPHILL SIDE OF PLANT OR
- 27. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, USE CAUTION TO AVOID INJURY TO TREES AND TREE ROOTS. EXCAVATE BY HAND IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR. BACK FILL TRENCHES ADJACENT TO TREE WITHIN TWENTY-FOUR (24) HOURS. WHERE THIS IS NOT POSSIBLE, SHADE THE SIDE OF THE TRENCH ADJACENT TO THE TREE WITH WET BURLAP OR CANVAS.
- 28. NOTIFY LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
- 29. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
- 30. IRRIGATION DEMAND: REFER TO PLANS.
- 31. THE EXISTING MAIN LINE SHOWN ON THE DRAWINGS IS DIAGRAMMATIC. VERIFY AND LOCATE EXISTING MAIN LINE IN FIELD. REPORT TO ARCHITECT IN WRITING ANY DEVIATION OF EXISTING MAIN LINE LOCATION FROM THAT SHOWN ON THE DRAWINGS.
- 32. AT POINT OF CONNECTION AT EXISTING MAIN LINE FOR NEW REMOTE CONTROL VALVES OR QUICK COUPLING VALVES, INSTALL A SERVICE SADDLE WITH REQUIRED TAPPED OUTLET SIZE. SMITH-BLAIR MODEL 317, ROMAC 202N, OR APPROVED EQUAL.
- 33. AT POINTS OF CONNECTION BETWEEN NEW MAIN LINE AND EXISTING CAPPED GASKETED MAIN LINE USE THE FOLLOWING PROCEDURE:
- A. REMOVE CAP AT END OF EXISTING MAIN LINE. REAM FIELD CUT END TO FULL PIPE DIAMETER WITH ROUGH EDGES AND BURRS REMOVED.
- B. ASSEMBLE NEW MAIN LINE TO EXISTING MAIN LINE WITH A DUCTILE IRON GASKETED REPAIR COUPLING, SIZE AS REQUIRED (HARCO, OR APPROVED EQUAL). THRUST BLOCK AT CHANGE OF PIPE DIRECTION IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
- 34. AT POINTS OF CONNECTION BETWEEN EXISTING MAIN LINE AND A NEW MAIN LINE BRANCH, USE THE FOLLOWING PROCEDURE:
- A. REMOVE A PORTION OF EXISTING MAINLINE

- FABRICATE A TEE AND NIPPLE ASSEMBLY REQUIRED FOR CONNECTION OF NEW MAIN LINE BETWEEN REMOVED PORTION OF EXISTING MAIN LINE. REFER TO SPECIFICATIONS FOR TYPE OF FITTINGS AND PIPE REQUIRED.
- 35. PIPE SIZING SHOWN ON THE DRAWINGS IS TYPICAL. AS CHANGES IN LAYOUT OCCUR DURING STAKING AND CONSTRUCTION THE SIZE MAY NEED TO BE ADJUSTED ACCORDINGLY.
- 36. PIPE THREAD SEALANT COMPOUND SHALL BE RECTOR SEAL #5.
- 37. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES IN THE IRRIGATION LAYOUT DUE TO OBSTRUCTIONS NOT SHOWN ON THE IRRIGATION DRAWINGS SUCH AS LIGHTS, FIRE HYDRANTS, SIGNS, ELECTRICAL ENCLOSURES, ETC.
- 38. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES IN THE IRRIGATION LAYOUT AND VALVE ZONING DUE TO VARIATIONS IN THE EXISTING SITE CONDITIONS SUCH AS EXPOSURE FROM BUILDINGS, TRELLISES, TREES, ETC., AS WELL AS SLOPE AND SOIL CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT OF THE PROPOSED CHANGES PRIOR TO INSTALLATION FOR APPROVAL.
- 39. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE IRRIGATION SYSTEM DESIGN IF THE PLANTING DESIGN CHANGES FROM THE ORIGINAL PLAN AND NEEDS TO ADAPT TO THE NEW PLANTING DESIGN. THE LANDSCAPE CONTRACTOR NEEDS TO NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT OF PROPOSED CHANGES PRIOR TO INSTALLATION FOR APPROVAL.
- 40. WHEN WORK OF THIS SECTION HAS BEEN COMPLETED AND SUCH OTHER TIMES AS MAY BE DIRECTED. REMOVE ALL TRASH, DEBRIS, SURPLUS MATERIALS AND EQUIPMENT FROM SITE.
- 41. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLEMENTAL HAND WATERING OF ALL PLANT MATERIAL WITHIN DRIPLINE AREAS UNTIL THE PLANTS ARE SUFFICIENTLY ESTABLISHED.
- 42. VERIFY LOCATIONS OF ALL IRRIGATION COMPONENTS INSTALLED WITHIN A VALVE BOX WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. DO NOT INSTALL UNTIL LANDSCAPE ARCHITECT PROVIDES ACCEPTABLE LOCATIONS.

### WATER CALCULATION

#### Piedmont High School - HYDROZONE CHART

1. Hydrozone Table 2. Maximum Applied Water Use 3. Estimated Total Water Use

#### 1.HYDROZONE CALCULATION TABLE ETO= 41.8

HYDROZONE	WATER USE TYPE	PLANT FACTOR (PF)	IRRIGATION METHOD	EFFICIENCY (IE)	ETAF (PF/IE)	LANDSCAPE AREA (SQ. FT)	ETAF x AREA	ETWU	PERCENTAGE OF LANDSCAPE
degular Landscape Area	s								
SHURBS	LOW	0.2	DRIP	0.81	0.25	6071	1499	38848	69%
SHRUBS	MOD	0.4	DRIP	0.81	0.49	619	306	7922	7%
TREES	LOW	0.2	BUBBLER	0.81	0.25	600	148	3839	7%
SHURBS	MOD	0.4	ROTORS	0.75	0.53	816	435	11279	9%
GRASS	HIGH	0.7	SPRAY	0.75	0.93	731	682	17682	8%
					Totals	8837	3070		
pecial Landscape Area	S								
					1		0	1	0%
					1		0		0%
					1		0		0%
					Totals	0	0		0%
						***************************************		ETWU Total	79,570
						Maximum Allo	wed Water Allow	vance (MAWA)	125,961

2. Maximum Applied Water Allowance (MAWA) Gallons Per Year MAWA = (ETo)(0.62)[(LA \* 0.45) + (0.55 \* SLA)]

ETo = Reference evapotranspiration 0.45= ET adjustment factor (Non residential, 0.55 residential) LA=Landscaped Area (square feet) 0.62 = Conversion factor (gallons per square foot per year)

3. ESTIMATED TOTAL WATER USE (ETWU) Gallons per year  $ETWU = ((ETO)(.62)\{[ETAF(LA/IE)]$ 

ETo = Reference evapotranspiration PF = Plant factor for hydrozones HA = Hydrozone area (square feet) 0.62 = Conversion factor (gallons per square foot per year) IE = Irrigation efficiency (0.81) bubbler/drip IE = Irrigation efficiency (0.75) spray

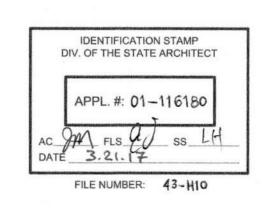
### IPPICATION I FOEND

SYMBOL	MODEL NUMBER	DESCRIPTION	N	NOZZLE GPM	OPERATING PSI	OPERATING RADIU (FEET)		
	1812-SAM/ MP2000-ADJ.210-90	RAIN BIRD POP- SPRAY BODY WIT HUNTER MP ROT STREAM NOZZLE	TH TATOR	0.86-0.40	40	15-20		
$\bigcirc$	1812-SAM/ MP1000-360	RAIN BIRD POP- SPRAY BODY WIT HUNTER MP ROT STREAM NOZZLE	TH TATOR	0.75	40	12-14		
<b>V</b>	1812-SAM/ MP1000-ADJ.210-90	RAIN BIRD POP- SPRAY BODY WIT HUNTER MP ROT STREAM NOZZLE	-UP TH TATOR	0.75	40	12-14		
•	1812-SAM/ MP8000SR-360	RAIN BIRD POP- SPRAY BODY WIT HUNTER MP ROT STREAM NOZZLE	-UP TH TATOR	0.78	40	8-10		
* *	1812-SAM/ MP8000SR-ADJ.210-90	RAIN BIRD POP- SPRAY BODY WIT HUNTER MP ROT STREAM NOZZLE	-UP TH TATOR	0.43-0.23	40	8-10		
$\nabla$ $\nabla$	1812-SAM-PRS-5 H,Q	RAIN BIRD POP- SPRAY SPRINKLE (SHRUB)	-UP	0.2,0.1	30	4-5		
•	1812-SAM-PRS-15 SST	RAIN BIRD POP- SIDE STRIP SPRA SPRINKLER (SHR	AY	1.2	30	4 X 30		
•	1812-SAM-PRS-15 EST	RAIN BIRD POP- SIDE STRIP SPRA SPRINKLER (SHR	AY	0.5	30	4 X 15		
⊗	1401 SERIES/ RWS-B-1402	RAIN BIRD BUBB ON-GRADE AND A DEEP ROOT WATERING TUBE, SEE DETAIL 5, SHEET L6.04	IN	0.5	30	TRICKLE		
	1402 SERIES	RAIN BIRD BUBB (TREE) 2 PER T	COLUMN TO A STATE OF THE STATE	0.5	30	TRICKLE		
•	ARV050	RAIN BIRD AIR F		ALVE				
•	MDCFCAP	RAIN BIRD FLUSH VALVE						
0	OPERIND	RAIN BIRD DRIP	RAIN BIRD DRIP ZONE INDICATOR					
59	XCZ-PCB-100-COM	RAIN BIRD REMO	TE CON	TROL VALVE	DRIP ZON	E KIT		
•	PSEB-PRS-D SERIES	(3-20GPM) RAIN BIRD REMO	TE CON	TROL VALVE				
0+	B402LK	BUCKNER KEYED						
•	33 DNP	RAIN BIRD QUICH	N BIRD QUICK COUPLING VALVE					
H	2500 SERIES	AMERICAN FLOW CONTROL GATE VALVE (LINE SIZE)-3" AND LARGER.						
M	T113-K	NIBCO GATE VAL		,		ALLER.		
<b>⊕</b> <a>○</a>	LHM3FG0205PREHB ICA6-RB3-32/IQ-CLOUD3.0/ FAN/RMPMUA/FSMV0-150N/ RFSE/SP/MP16	NETAFIM NORMALLY OPEN HYDROMETER  ITS CONTROLLER ASSEMBLY WITH A RAIN BIRD 32 STATION ESP-LXMEF CONTROLLER WITHIN A VIT STRONGBOX STAINLESS STEEL TOP ENTRY PEDESTAL ENCLOSURE. PART NUMBER INCLUDE A FLOW SENSOR BOARD, RAIN BIRD REMOTE CONTROL KIT, GFCI, CELL BOARD FOR COMMUNICATION TO THE CLOUD.						
R	WR2-RFC	RAIN BIRD WIREL	ESS RA	IN + FREEZ	ZE SENSOR			
		CONTROLLER AND STATION NUMBER						
		FLOW (GPM)						
		REMOTE CONTROL VALVE SIZE (IN INCHES)						
		CONTROLLER AND STATION NUMBER						
		AREA (SQ. FT.) FLOW (GPM)						
		REMOTE CONTROL VALVE SIZE (IN INCHES)						
CHARLESTANGENERS MADE II MODE	ANTHRANCO CONTROLOGICO COME II BASI. BERNINGIA (CONTROLOGICO CONTROLOGICO CONTROLOG	1 V E	120-20 VITH DU	CTILE IRON	-TITE PVC FITTINGS A	PLASTIC PIPE ND THRUST DIRECTION. 24"		
engineeniininka san 5 dag i	erekstureskommenistus van 1 mag demonstratus schwarz	1	120-SC	E 40 PVC	PVC PLAS	STIC PIPE WITH YELD FITTINGS.		
		9	120-SC	CHEDULE 40 E 40 PVC		STIC PIPE WITH ELD FITTINGS.		
		E	EEVING: 1120-CL. 200 PVC PLASTIC PIPE. COVER TO BE AS INDICATED IN SPECIFICATIONS OR AS INDICATED ABOVE FOR PIPE DEPTH OF COVER.					
NAMES OF THE PARTY OF T		L E	NTEGRAT XFCV—06 AS DETA LATERAL EXTEND	ED CHECK 5-12. INSTA ILED. MINIM LINE WITHIR	VALVES-MO ALL WITHIN UM PIPE SI N DRIP ARE RS TO THE	SHALLOW TRENCH IZE OF PVC IAS TO BE 1". ENDS OF ALL		

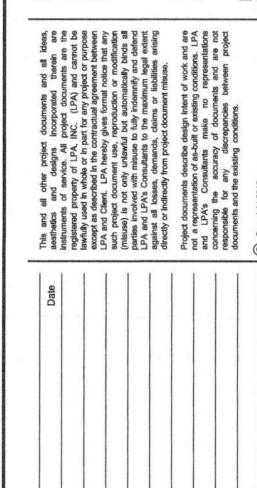
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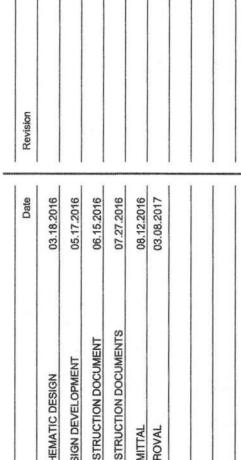


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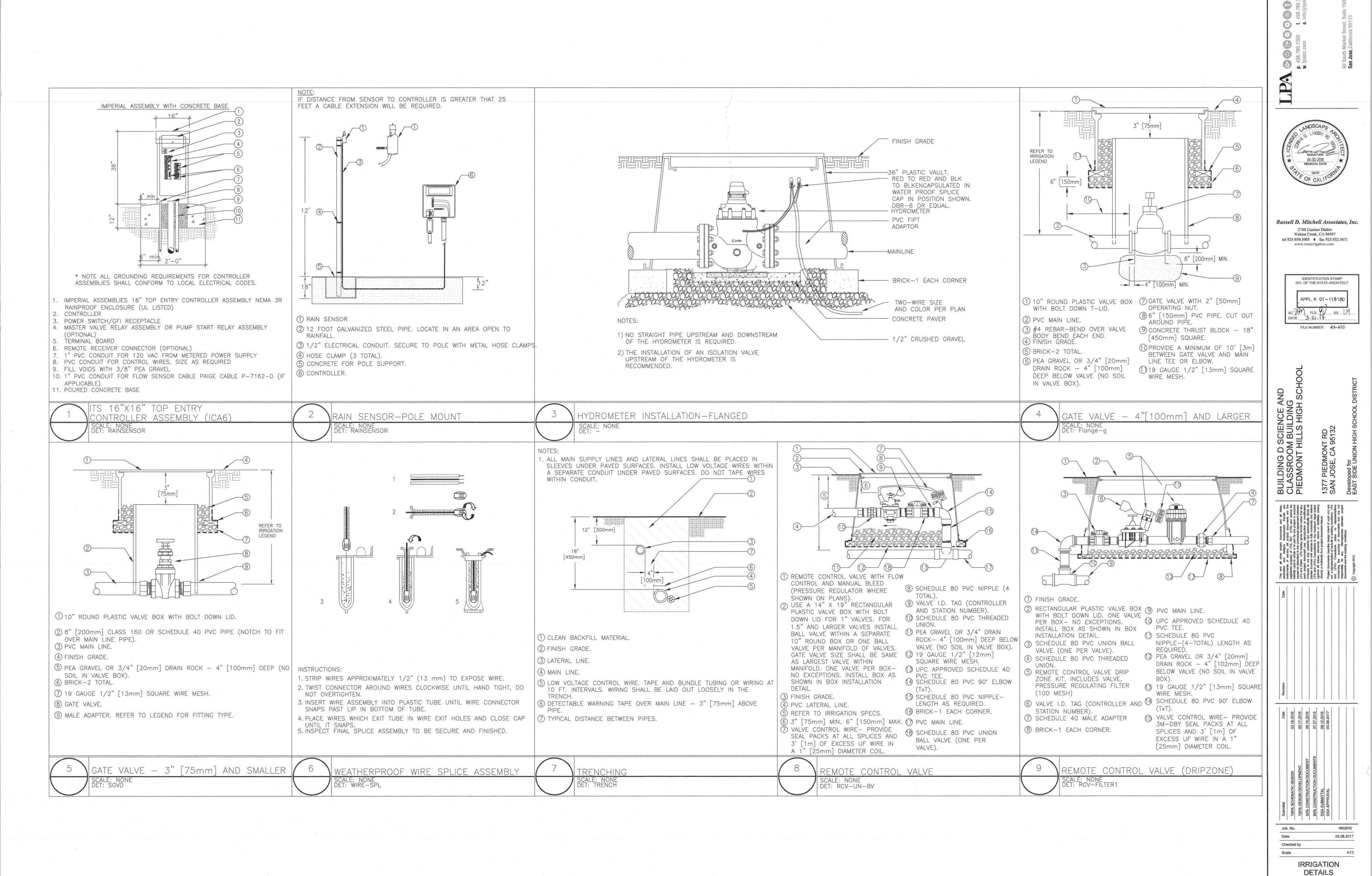


03.08.2017 IRRIGATION

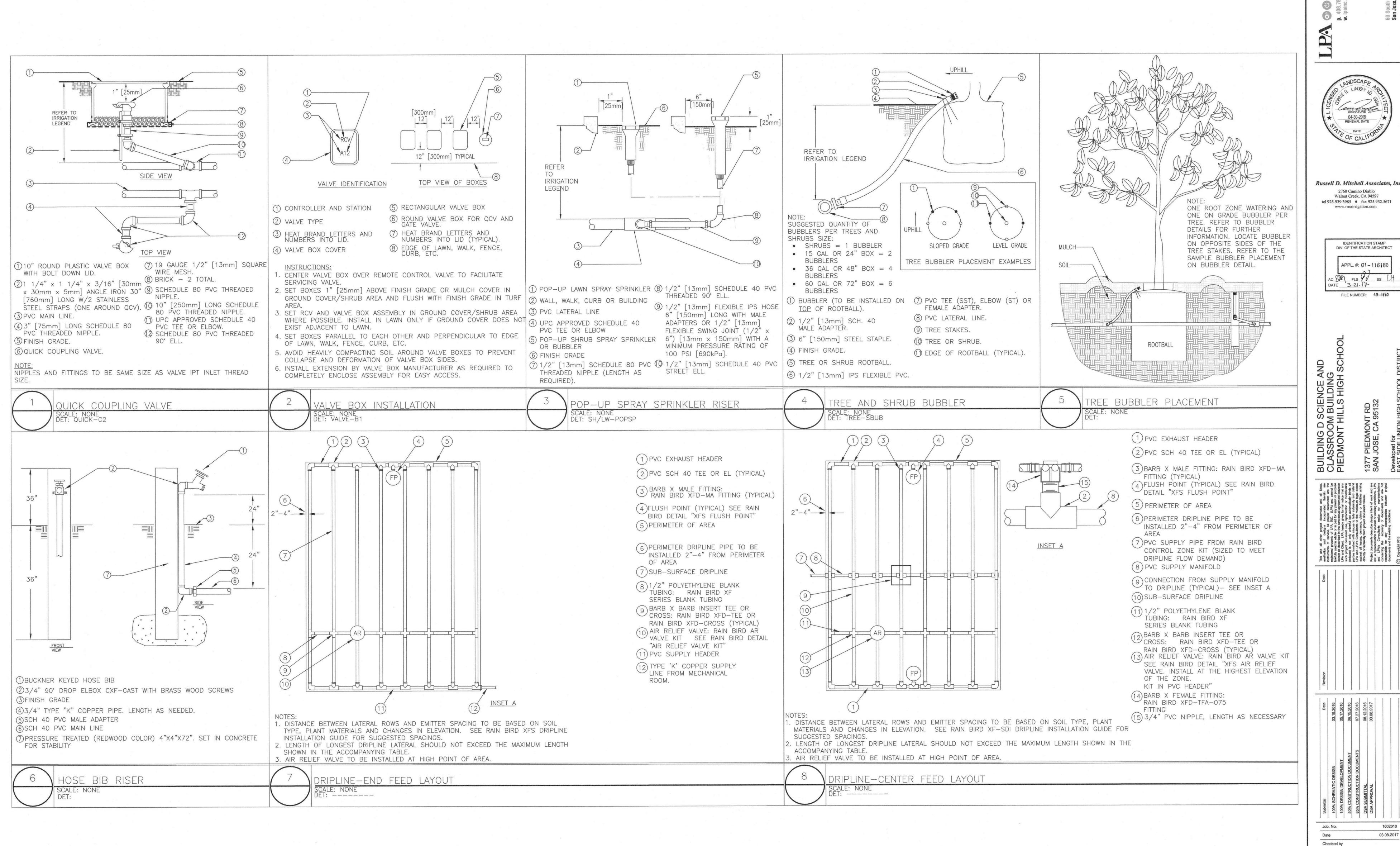
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**NOTES & LEGEND** 



6.02





Russell D. Mitchell Associates, Inc.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

**IRRIGATION DETAILS** 

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APPL. #: 01 -116180

AC FLS SS SS DATE 3.21.17

BUILDING D SCIENCE AND CLASSROOM BUILDING PIEDMONT HILLS HIGH SCHOOI

lawfully used in whole or in part for any project or purpose except as described in the contractual agreement between LPA and Client. LPA hereby gives formal notice that any accordance to use the contractual agreement between (misuse) is not only unlawful but automatically binds all parties involved with misuse to fully indemnify and defend LPA and LPA's Consultants to the maximum legal extent against all losses, demands, claims or liabilities arising directly from project documents describe design intent of work and are not a representation of as-built or existing conditions. LPA and LPA's Consultants make no representations concerning the accuracy of documents and are not responsible for any discrepancies between project documents and the aviation continue.

 wittel
 Date

 % SCHEMATIC DESIGN
 03.18.2016

 % DESIGN DEVELOPMENT
 05.17.2016

 CONSTRUCTION DOCUMENTS
 06.15.2016

 CONSTRUCTION DOCUMENTS
 07.27.2016

 SUBMITTAL
 08.12.2016

 APPROVAL
 03.08.2017

Job. No.

Date

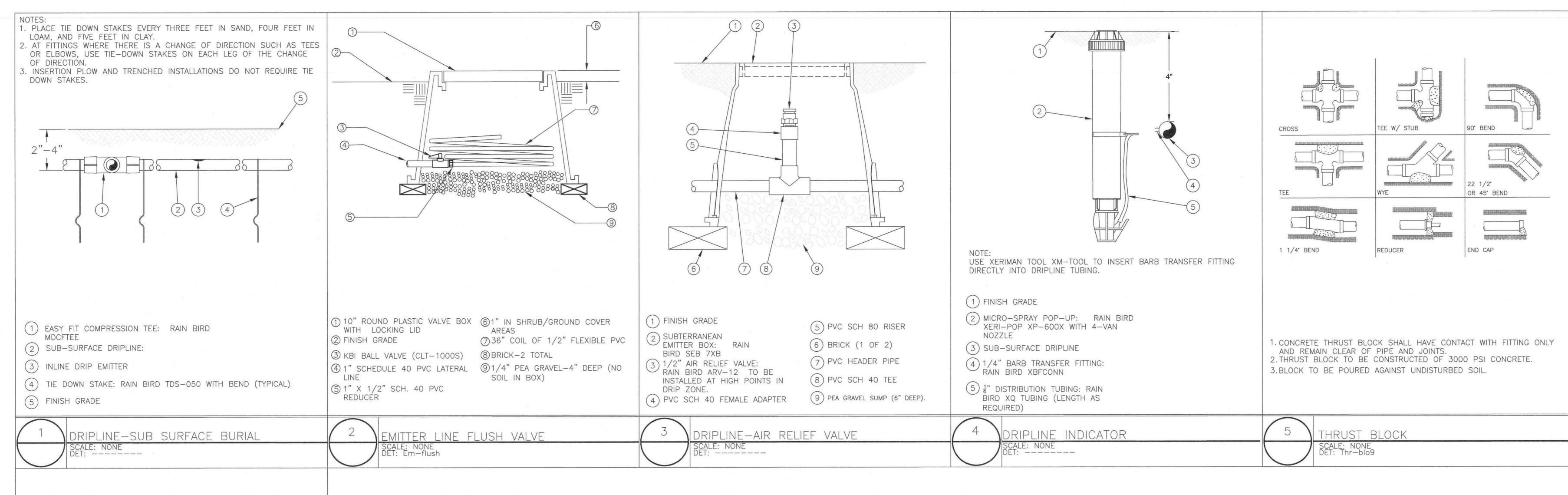
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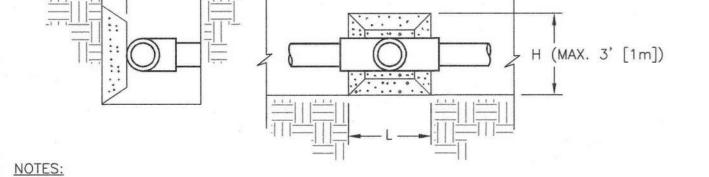
Scale

IRRIGATION DETAILS
& WATER USE
CALCULATIONS

03.08.2017

L6.05





- 1. DISTANCE "A" TO BE 18" [450mm] MINIMUM FROM FITTING TO UNDISTURBED SOIL. THRUST BLOCKS SHALL BE POURED ONLY AGAINST UNDISTURBED EARTH.
- 2. REFER TO THRUST BLOCK CHART FOR DISTANCE "L" AND "H".
- 3. CONCRETE TO BE SHAPED INTO A WEDGE WITH THE WIDE END AGAINST THE SOLID WALL OF THE TRENCH.
- 4. THRUST BLOCKING APPLIES TO 3" [75mm] AND LARGER PIPE ONLY.
- 5. CONCRETE SHALL BE KEPT BEHIND THE BELL OF THE FITTING WITH THE CONCRETE NOT PERMITTED TO RUN OVER AGAINST THE PIPE OR ONTO THE JOINT.

PIPE SIZE	90° BEND		45° BEND		TEES,DEADENDS &VALVES	
	BEARING AREA(SQUARE	L×H	BEARING AREA (SQUARE FT.)	L×H	BEARING AREA (SQUARE FT.)	LxH
3" [75mm]	FT.) <sub>1.0</sub>	13"x13" [325mm x325mm]	.57	10"x10" [250mm x250mm]	.74	11"x11" [280mm x280mm]
4" [100mm]	1.7	16"x16" [400mm x400mm]	.93	12"x12" [300mm x300mm]	1.2	14"x14" [355mm x355mm]
6" [150mm]	3.7	23"x23" [585mm x585mm]	2.0	17"x17" [430mm x430mm]	2.6	20"X20" [510mm x510mm

THE FIGURES IN THIS CHART ARE BASED ON A WORKING PRESSURE OF 150 PSI.

THRUST BLOCK INSTALLATION

SCALE: NONE
DET: Blo-inf