TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE & PARKING LOT UPGRADE PROJECT

SOUTHERN KERN UNIFIED SCHOOL DISTRICT
3180 MOJAVE TROPICO ROAD, ROSAMOND CA 93560

GENERAL NOTES

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING AND PROPOSED CONSTRUCTION, PIPING, CONDUITS, CLEAN-OUTS, PULL BOXES, ETC. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DISTRICT AND ARCHITECT PRIOR TO COMMENCING WORK.
2. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL GRADES ELEVATIONS, DIMENSIONS, AND CONDITIONS OF INSTALLATION PRIOR TO PROVIDING BID. ANY DISCREPANCIES DISCOVERED BY THE CONTRACTOR DURING THE ABOVE INVESTIGATIONS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. THE CONTRACTOR BY MEANS OF OFFERING A BID SHALL THEREBY CERTIFY THAT THE ABOVE STATED REQUIREMENTS HAVE BEEN MET.
3. GENERAL CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND TRANSPORTATION NECESSARY FOR THE COMPLETE AND PROPER EXECUTION OF THE WORK.
4. THE ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE ARCHITECT AND / OR STRUCTURAL ENGINEER.
5. ALL WORK SHALL CONFORM TO THE "APPLICABLE CODES" AS LISTED HEREON.
6. CONTRACTOR SHALL REMOVE FROM SITE AND DISPOSE OF IN A LEGAL MANNER ALL EXCESS DIRT / SOIL AND DEBRIS RESULTANT OF THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
7. CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR ALL WORK THAT OCCURS IN ANY PUBLIC RIGHT-OF-WAY AND / OR EASEMENT. FEES FOR REQUIRED PERMITS SHALL BE PAID FOR DIRECTLY BY CONTRACTOR AND SHALL BE REIMBURSED BY THE DISTRICT 1:1.
8. PROPERLY REMOVE ALL DEMOLISHED ITEMS AND MATERIALS FROM THE SITE AND DISPOSE OF ALL IN A LEGAL MANNER.
9. REPAIR OR REPLACE EXISTING WALKS, UTILITY LINES, LANDSCAPING, ETC. THAT ARE DAMAGED DURING CONSTRUCTION. PROTECT ALL EXISTING CONSTRUCTION DESIGNATED TO REMAIN.
10. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338 PART 1, TITLE 24, CCR.
11. A DSA CERTIFIED CLASS 2 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN THE SECTION 4-342 PART 1, TITLE 24, CCR.
12. D.S.A. ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED AND PAID FOR BY THE DISTRICT SHALL CONDUCT ALL REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
13. CONTRACTOR SHALL NOTIFY DISTRICT AND ARCHITECT IN WRITING UPON COMPLETION OF SITE PREPARATION.
14. ASSUMED SOIL BEARING CAPACITY PER SOILS REPORT.
15. PATCH AND REPAIR ALL SURFACES AFFECTED BY CONTRACT WORK AND BY SELECTIVE DEMOLITION TO A "LIKE NEW" CONDITION OR TO MATCH EXISTING ADJACENT FINISHES.
16. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN ACCORDANCE WITH 2022 CFC CHAPTER 7, 11 AND 33.
17. ALL CONTRACTORS ARE ADVISED THAT CERTAIN PORTIONS OF THE WORK MAY NOT BE EASY AND MAY EXCEED THE ASSUMED STANDARD OF THE INDUSTRY, INCLUDING MEANS AND METHOD, OPERATIONAL STAGING, SCHEDULING AND COORDINATION OF WORK, AS WELL AS TIME AND DURATION OF ACTIVITIES NECESSARY TO SATISFACTORILY COMPLETE THE PROJECT IN ACCORDANCE WITH THIS CONTRACT. CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS AND OPERATIONAL SUPPORT NECESSARY TO COMPLETE THE PROJECT AS REQUIRED UNDER THIS CONTRACT.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER NECESSARY FOR CONSTRUCTION. WATER CAN BE MADE AVAILABLE ON-SITE VIA EXISTING HYDRANT, AND SHALL BE PROPERLY METERED THROUGH LOCAL WATER AGENCY.
19. CONTRACTOR MAY ONLY STAGE AND PERFORM WORK IN AREAS SPECIFICALLY IDENTIFIED FOR THIS CONTRACT. ALL WORK REQUIRED TO BE PERFORMED OUTSIDE OF THE DESIGNATED AREAS SHALL REQUIRE MONITORING BY ASSIGNED DISTRICT STAFF OR SHALL BE PERFORMED DURING NON-SCHOOL HOURS. ALL REQUESTS FOR MONITORED WORK SHALL BE MADE IN WRITING 48 HOURS IN ADVANCE BY GENERAL CONTRACTOR AND SCHEDULING SHALL BE SUBJECT TO APPROVAL BY DISTRICT.
20. CONSTRUCTION AREA OVERLAPS ACTIVE SERVICE AREAS NECESSARY FOR THE NORMAL DAILY OPERATION OF THE SCHOOL. CONTRACTOR SHALL AT ALL TIMES MAINTAIN AND ALLOW ACCESS ON SITE FOR EMERGENCY VEHICLES, TRASH COLLECTION, LANDSCAPE, GENERAL SCHOOL MAINTENANCE AND FOOD SERVICE DELIVERY. CONTRACTOR SHALL COORDINATE CLOSELY WITH DISTRICT FOR ALL NECESSARY ACCESS.
21. CONTRACTOR SHALL PROVIDE AND MAINTAIN FOR THE DURATION OF THE CONTRACT OPAQUE VINYL SCREENS (TARP OR SIMILAR) PROPERLY SECURED TO ALL TEMPORARY CONSTRUCTION FENCING AND GATES AS WELL AS ALL EXISTING FENCING THAT DEFINES A PERIMETER OF ANY DESIGNATED CONSTRUCTION AREA. SCREENING SHALL BE MINIMUM 6'-0" HIGH AND SHALL BE BLACK, GREEN OR TAN IN COLOR.
22. DUE TO THE ON-GOING OPERATION OF THE ACTIVE SCHOOL SITE DURING CONSTRUCTION, AS WELL AS THE UNIQUE CONSTRAINTS OF THE CONSTRUCTION AREA, CONTRACTOR SHALL BE AWARE THAT THE VEHICULAR DRIVES, ACCESS LANES AND PARKING SHALL BE SHARED AND SHALL NOT SCHEDULE ANY DELIVERIES AS WELL AS SUSPEND CONSTRUCTION TRAFFIC ENTERING AND EXISTING PREMISES DURING THE PERIODS REQUIRED FOR STUDENT DROP-OFF AND PICK-UP. CONTRACTOR SHALL COORDINATE WITH DISTRICT FOR ALL TIME OFF OPERATION FOR THE SITE.
23. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRICT COMPLIANCE WITH LOCAL AGENCY HAVING JURISDICTION FOR ALL, FUGITIVE DUST AND SHALL BE RESPONSIBLE FOR ALL PENALTIES, FINES, ETC. IF THE PROJECT SHOULD BE CITED FOR VIOLATIONS.
24. DUE TO THE SITE CONSTRAINTS OF THE ACTIVE SCHOOL SITE, THE CONTRACTOR MAY BE REQUIRED TO STAGE IN VARIOUS AVAILABLE AREAS ON SITE AND MAY BE REQUIRED TO MOVE OR RELOCATE STAGING DURING THE COURSE OF CONSTRUCTION IN ORDER TO ACCOMMODATE CONSTRUCTION AND SCHEDULE. CONTRACTOR SHALL FACTOR IN ALL NECESSARY MEASURES TO ACCOMMODATE THE TIMELY COMPLETION OF THIS CONTRACT.
25. CONTRACTOR SHALL NOT INTERRUPT ANY UTILITY SERVICE TO ACTIVE SCHOOL SITE WITHOUT EXPRESSED PERMISSION AND PRIOR SCHEDULING WITH DISTRICT.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CONTRACTOR SUBMITTALS OF DOCUMENTS TO THE DSA BOX.
27. CONTRACTOR MAY UTILIZE EXISTING ELECTRICAL SERVICE IN YARD FOR TEMPORARY POWER. ALL TEMPORARY POWER INSTALLATION SHALL ADHERE TO APPLICABLE CODES.
28. ALL WORK SHALL COMPLY WITH TITLE24, PARTS 1 THROUGH 6, AND 8 THROUGH 11.
29. ALL COPIES OF TITLE 24, PARTS 1 THROUGH 5 SHALL BE KEPT ON SITE DURING CONSTRUCTION.
30. ALL ADDENDA MUST BE SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE AND APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24.
31. ALL SUBSTITUTION AFFECTING DSA REGULATED ITEMS SHALL BE CONSIDERED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA.
32. ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
33. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
34. SUBSTITUTIONS AFFECTING ITEMS REGULATED BY THE DIVISION OF THE STATE ARCHITECT (DSA) REQUIRE DSA APPROVAL AS AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD). DSA APPROVAL SHALL BE OBTAINED PRIOR TO FABRICATION AND / OR INSTALLATION PER SECTION 4-338, PART 1, TITLE 24, CCR.

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, CALIFORNIA CODE OF REGULATIONS. 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, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIEYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK. REFERENCE: SECTION 4-317 (C), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)

SCOPE OF WORK

SITE IMPROVEMENTS TO THE EXISTING MAIN QUAD AREA TO INCLUDE THE FOLLOWING SCOPE OF WORK:

1. REMOVE ALL EXISTING TURF AND IRRIGATION SYSTEM .
2. NEW STORM DRAIN SYSTEM FROM MAIN QUAD AREA TO EXISTING RETENTION BASIN.
3. NEW LANDSCAPING AND IRRIGATION AT MAIN QUAD AREA.
4. MINOR SITE IMPROVEMENTS AT MAIN QUAD AREA.
5. REMOVE AND REPLACE AC PAVING AT MAIN PARKING LOT (BID ALTERNATE).

APPLICABLE CODES

2022 California Administrative Code (CAC), Part 1, Title 24 CCR

2022 California Building Code (CBC), Part 2, Title 24 CCR
(2021 International Building Code and 2019 California Amendments)

2022 California Electrical Code (CEC), Part 3, Title 24 CCR
(2020 National Electrical Code of the National Fire Protection Association)

2022 California Mechanical Code (CMC), Part 4, Title 24 CCR
(2021 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials)

2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
(2021 Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials)

2022 California Energy Code (CEC), Part 6, Title 24 CCR

2022 California Fire Code (CFC), Part 9, Title 24 CCR
(2021 International Fire Code of the International Code Council)

2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR
(2021 International Existing Building Code of the International Code Council and 2019 California Amendments)

2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR

2022 California Referenced Standards Code, Part 12, Title 24 CCR

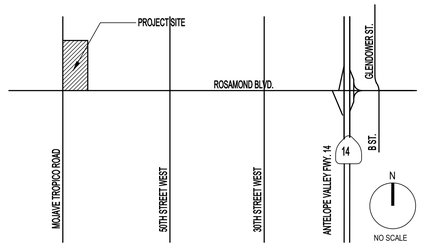
2022 Public Safety, State Fire Marshal Regulations, Title 19 CCR

PARTIAL LIST OF APPLICABLE STANDARDS :

NFPA 13	Standard for the Installation of Sprinkler Systems (CA Amended)	2022 Edition
NFPA 14	Standard for the Installation of Standpipe and Hose Systems (CA Amended)	2019 Edition
NFPA 17	Standard for Dry Chemical Extinguishing Systems	2021 Edition
NFPA 17A	Standard for Wet Chemical Extinguishing Systems	2021 Edition
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection	2022 Edition
NFPA 22	Standard for Water Tanks for Private Fire Protection	2013 Edition
NFPA 24	Standard for the Installation of Private Fire Service Mains and Their Appurtenances (CA Amended)	2022 Edition
NFPA 72	National Fire Alarm and Signaling Code (CA Amended)	2022 Edition
NFPA 80	Standard for Fire Doors and Other Opening Protectives	2022 Edition
NFPA 253	Critical Radiant Flux of Floor Covering Systems	2022 Edition
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems (CA Amended)	2022 Edition

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

VICINITY MAP



BIDDING NOTES

PRE-BID JOB WALK :

MANDATORY PRE-BID JOB WALK WILL BE HELD ON DATE AND TIME STATED IN "NOTICE TO CONTRACTOR" AT THE PROJECT SITE. ALL PROSPECTIVE BIDDERS ARE ADMONISH TO ATTEND.

FINGERPRINTING :

FINGERPRINTING AND BACKGROUND CHECKS IN ACCORDANCE WITH CURRENT LAWS AND REGULATIONS SHALL BE REQUIRED FOR ALL WORKERS WHO WILL BE PERFORMING WORK OUTSIDE OF THE ESTABLISHED CONSTRUCTION BARRICADES (MINIMUM 6' HIGH FENCE) DURING HOURS THAT THE ADJACENT CAMPUSES ARE OCCUPIED SIMULTANEOUSLY BY THE STUDENTS. ANY WORKER FOUND TO BE IN VIOLATION OF THESE REQUIREMENTS WILL BE ASKED TO LEAVE THE PROJECT SITE UNTIL THE APPROPRIATE DOCUMENTATION IS PROVIDED.

QUESTIONS DURING BID :

ALL QUESTIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT USING THE ATTACHED "BID R.F.I." FORM. ALL "BIDDING R.F.I.'S" SHALL BE SUBMITTED NO LATER THAN FIVE (5) CONSECUTIVE CALENDAR DAYS PRIOR TO SCHEDULED BID OPENING.

SHEET INDEX

(TOTAL NUMBER OF SHEETS = 27)

ARCHITECTURAL

A0.01	TITLE SHEET
A1.01	SITE DEMOLITION PLAN
A1.02	PARTIAL ENLARGED SITE PLAN AND DETAILS

CIVIL

C1.01	COVER SHEET
C1.02	GENERAL NOTES
C2.01	EROSION CONTROL PLAN
C2.02	EROSION CONTROL PLAN
C3.01	GRADING, DRAINAGE AND PAVING PLAN
C3.02	GRADING, DRAINAGE AND PAVING PLAN
C3.03	GRADING, DRAINAGE AND PAVING PLAN
C3.04	GRADING, DRAINAGE AND PAVING PLAN
C4.01	DETAILS
C4.02	DETAILS

LANDSCAPE AND IRRIGATION

L1.01	NEW LANDSCAPE LAYOUT PLAN
L1.02	LANDSCAPE DETAILS
L1.03	AUGURING PLAN
L1.04	SOIL TESTING ANALYSIS AND RECOMMENDATIONS
L2.01	IRRIGATION PLAN
L2.02	IRRIGATION LEGENDS & NOTES PLAN
L2.03	IRRIGATION GENERAL NOTES PLAN
L2.04	IRRIGATION DETAILS PLAN
L2.05	IRRIGATION DETAILS PLAN
L3.01	PLANTING PLAN
L3.02	PLANT LEGEND, DETAILS, AND NOTES

STRUCTURAL

S0.01	GENERAL NOTES
S1.00	WALKWAY FOUNDATION PLAN

ELECTRICAL

E1.03	SITE LIGHTING PLAN

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RGSE, INC. STRUCTURAL ENGINEERS
Jeff Lubberts
2720 Cochran St., Suite 8B
Simi Valley, CA 93065
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info@rgseinc.com

IRRIGATION CONSULTANT
ROQUE IRRIGATION CONSULTANTS, LLC
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LANDSCAPE ARCHITECT
MARK BEALL & ASSOCIATES
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West Hollywood, CA 90069
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info@mbeall.com

CIVIL ENGINEER
ECG
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TEL: (661) 600-9367
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C-26053
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No.	Date	Description

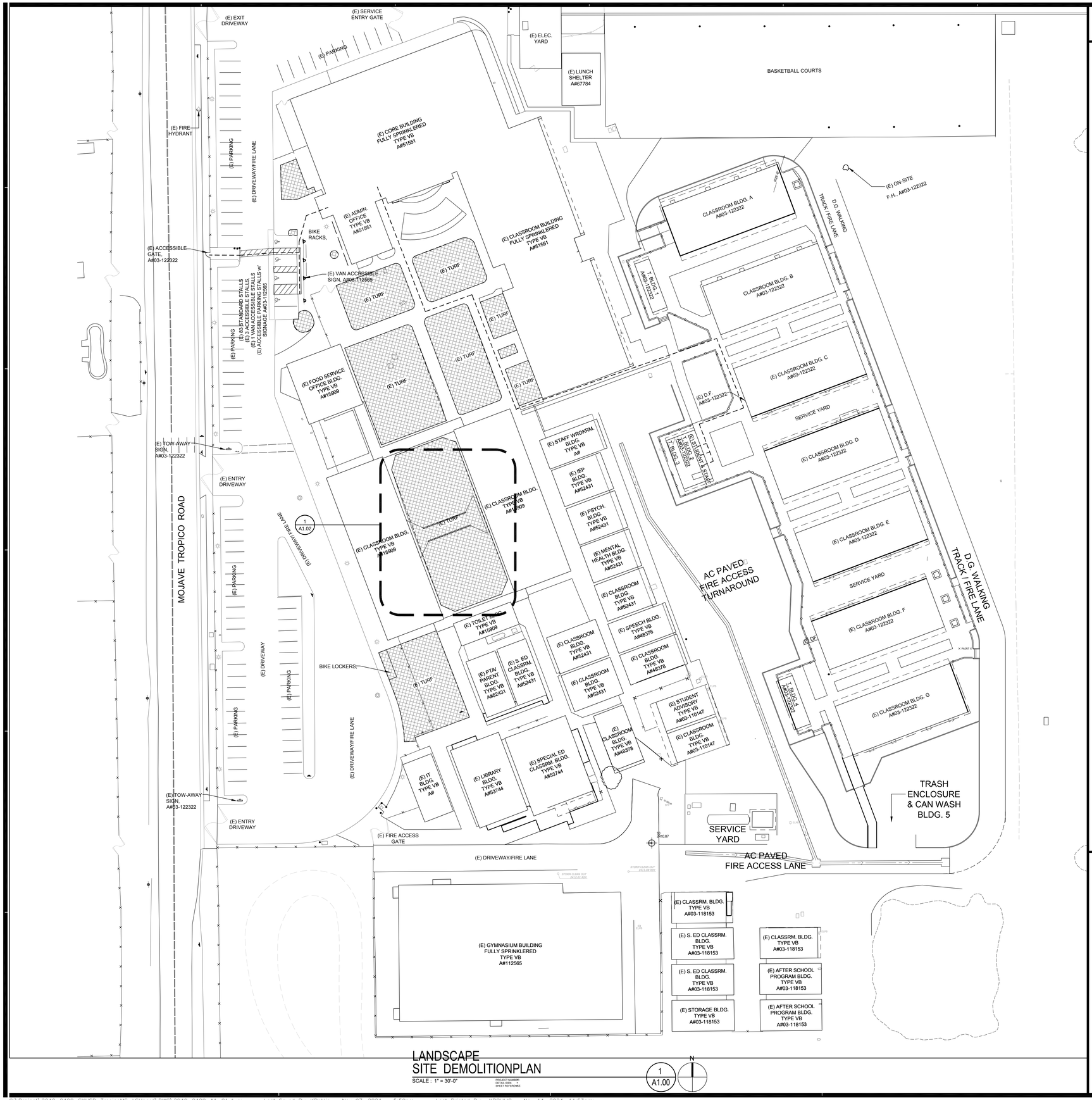
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TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

TITLE SHEET

Job No. 2940.400
Date 11-21-24

A0.01



LANDSCAPE SITE DEMOLITIONPLAN

SCALE : 1" = 30'-0"

1 A1.00

SITE PLAN LEGEND

1. DEMO EXISTING TURF AND IRRIGATION IN ITS ENTIRETY. DISCONNECT IRRIGATION MAIN LINE FOR NEW WORK. PROTECT IN PLACE EXISTING RCSD WATER AND SEWER MAIN LINES. CONTRACTOR SHALL REMOVE ALL DEBRIS AND DISPOSE OF IN A LEGAL MANNER. CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES DURING CONSTRUCTION AND PROTECT / RE-ROUTE AS NECESSARY FOR NEW WORK.
2. FOR NEW SCOPE OF WORK, CONTRACTOR SHALL REFER TO THE FOLLOWING SHEETS:
   - 2.1 CIVIL IMPROVEMENTS FOR DRAINAGE - SEE SHEETS C1.01, C1.02, C2.01, C2.02, C3.01, C3.02, C3.03, C3.04, C4.01 & C4.02
   - 2.2 LANDSCAPE AND IRRIGATION WORK - SEE SHEETS L1.01, L1.02, L1.03, L1.04, L2.01, L2.02, L2.03, L2.04, L2.05, L3.01 & L3.02
   - 2.3 ELECTRICAL WORK - SEE SHEET E1.03

ACCESSIBLE "PATH OF TRAVEL (P.O.T.) AS INDICATED ON PLAN IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" IN WIDTH. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. (POT) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2) ABOVE THE FINISH FLOOR. ARCHITECT TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-301.

"DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT."

APPLICATION STATUS

APPLICATION NO.	BUILDINGS	CERTIFICATION STATUS
15909	FOOD SERVICE BLDG., CLASSROOM BLDGS, AND TOILET BLDG	CERTIFIED, 01/14/1959
48378	SPEECH BLDG., AND CLASSROOM BLDGS.	#3, 03/26/2010
51551	MAIN BUILDING	#3, 02/28/1994
52431	PSYCH BLDG, MENTAL HEALTH BLDG., CLASSROOM BLDGS., SPECIAL ED. CR BLDG., AND PTA BLDG.	
53744	LIBRARY, SPECIAL ED. CR BLDG.	#3, 03/25/2010
03-110147	STUDENT ADVISORY BLDG, CLASSROOM BLDG.	#1, 02/05/2007
03-112565	GYMNASIUM AND PARKING LOT	#1, 05/11/2011
03-118153	CLASSROOM BLDG., AFTER SCHOOL PROGRAM CR. BLDG.	#1, 01/05/2018
03-122322	7 CR. BLDGS., 4 TOILET BLDGS. CAMPUS EXPANSION	

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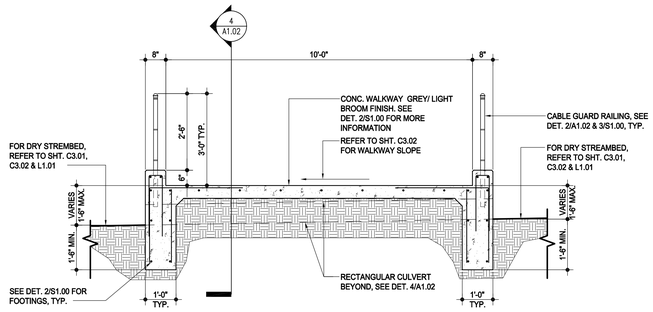
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ROSAMOND, CA 93560

RECONSTRUCTION SITE PLAN

Job No.
2940.400

Date
06 - 10 - 2024

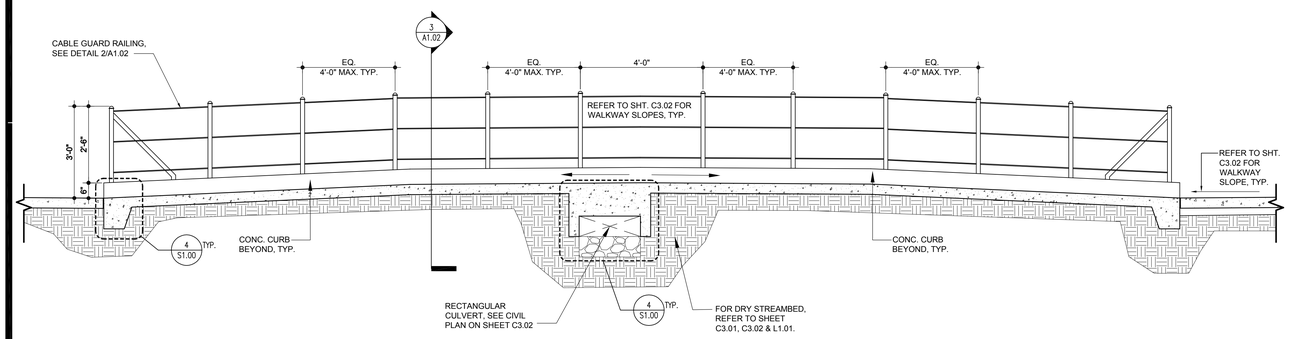
A1.01



WALKWAY CROSS SECTION

SCALE : 1/2"=1'-0"

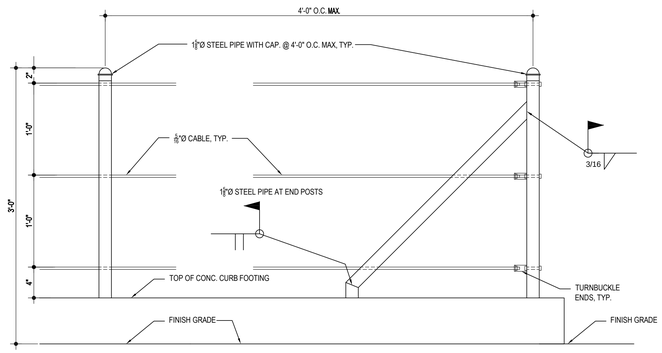
3 A1.02



CONCRETE WALKWAY LONGITUDINAL SECTION

SCALE : 1/4" = 1'-0"

4 A1.02

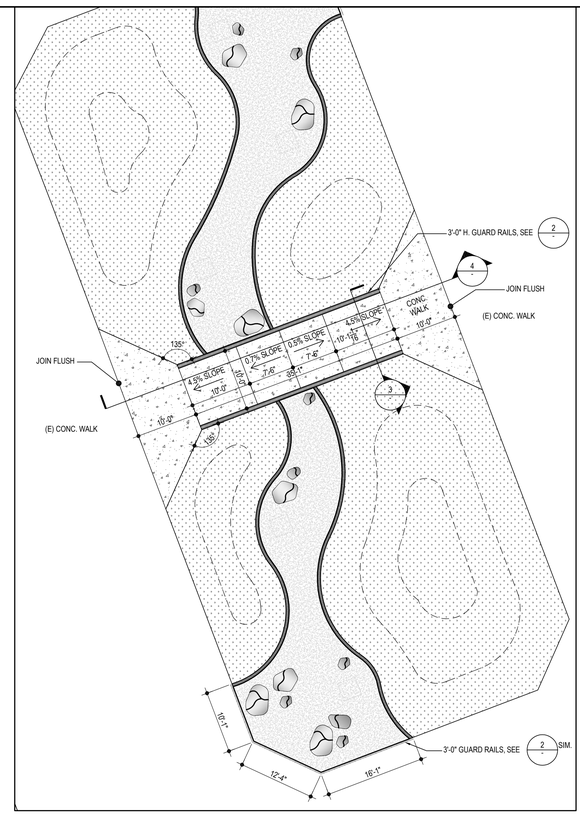


NOTE:
1. SEE DETAIL 2 & 4/S1.00 FOR FOOTING INFORMATION.

CABLE GUARD RAILING

SCALE : 1" = 1 1/2"

2 A1.02



PARTIAL ENLARGED SITE RECONSTRUCTION PLAN

SCALE : 1" = 20'-0"

1 A1.02

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SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

PARTIAL ENLARGED SITE PLANS AND DETAILS

Job No. 2940.400

Date 11-21-24

A1.02

CIVIL IMPROVEMENTS FOR TROPICO MIDDLE SCHOOL LANDSCAPE & DRAINAGE PROJECT IN THE CITY OF ROSAMOND, CA

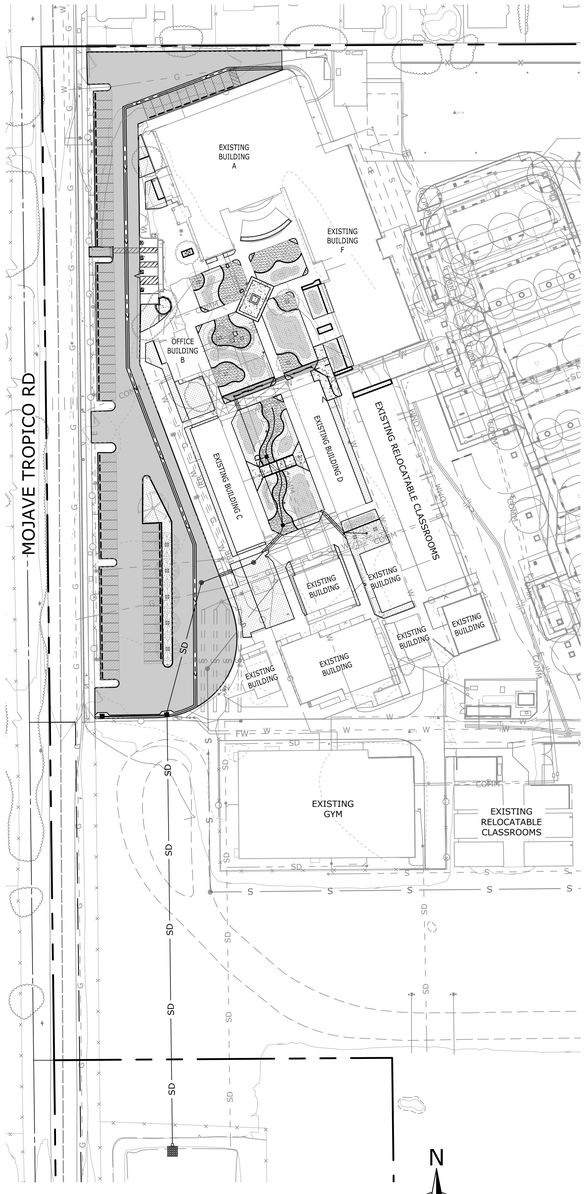
SURVEY NOTE

THE BASIS OF BEARINGS, COORDINATES, AND ELEVATIONS ARE ARE BASED ON THE TROPICO MIDDLE SCHOOL EXPANSION PROJECT SHEET C1.01 DATED 08-03-22.

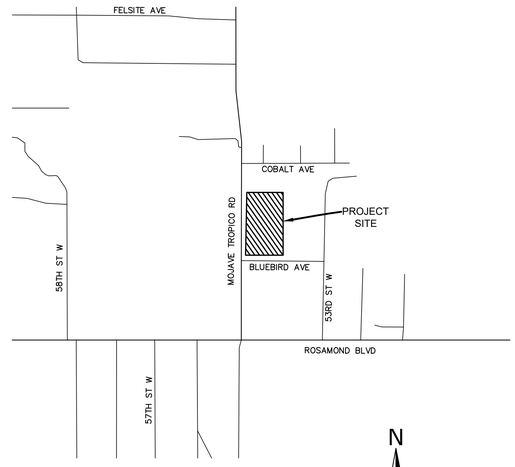
LEGEND

	SAWCUT LINE
2410	PROPOSED MAJOR CONTOURS
2409	PROPOSED MINOR CONTOURS
SD	PROPOSED STORM DRAIN LINE
GB	PROPOSED GRADE BREAK
	EXISTING RIGHT OF WAY/PROPERTY LINE
	EXISTING CENTERLINE
	EXISTING FENCE
	EXISTING WALL
2410	EXISTING INTERMEDIATE CONTOURS
2409	EXISTING INDEX CONTOURS
	EXISTING EDGE OF ASPHALT PAVEMENT
OHW	EXISTING OVER HEAD WIRE
E	EXISTING ELECTRICAL LINE
G	EXISTING GAS LINE
W	EXISTING WATER LINE
SD	EXISTING STORM DRAIN LINE
FW	EXISTING FIREWATER LINE
S	EXISTING SEWER LINE
COMM	EXISTING COMMUNICATION LINE
2410.00 FS	PROPOSED ELEVATION
(2410.00) EG	EXISTING ELEVATION
1.5%	PROPOSED GRADE
	STORM DRAIN INLET
	PROPOSED DRIVE AISLE AC PAVING
	PROPOSED PARKING STALL AC PAVING
	PROPOSED CONCRETE PAVING
	PROPOSED LANDSCAPE AREA
	PROPOSED DECOMPOSED GRANITE
	PROPOSED MORTARED COBBLE
	PROPOSED LANDSCAPE MOUND

811 Know what's **below.** **Call** before you dig.



INDEX MAP
SCALE: 1"=60'



VICINITY MAP
N.T.S.

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ABBREVIATIONS

ABBR	ABBREVIATION
A.C.	ASPHALT CONCRETE
A.C.P.	ASBESTOS CONCRETE PIPE
AP	ANGLE POINT
ARCH.	ARCHITECT
ASSOC.	ASSOCIATION
AVE	AVENUE
BC	BEGIN CURVE
BCR	BEGIN CURB RETURN
BDY.	BOUNDARY
BEG	BEGIN
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BOT	BOTTOM OF PIPE
BS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
BW	BACK OF WALK OR BOTTOM OF WALL
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
C-C	CENTER TO CENTER
CF	CURB FACE
CFS	CUBIC FEET PER SECOND
CL	CENTERLINE OR CLASS
CLF	CHAIN LINK FENCE
CLR	CLEAR
CMB	CRUSHED MISCELLANEOUS BASE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTROL
CPS	CONNECTOR PIPE SCREEN
CT	COURT
DBL	DOUBLE
DES	DESIGN
DG	DECOMPOSED GRANITE
DI	DROP INLET
D.I.	DUCTILE IRON
DIA	DIAMETER
DR	DRIVE
DWG	DRAWING
EASE	EASEMENT
EBAA	EBAA IRON, INC.
EC	END CURVE
ECR	END CURB RETURN
EG	EXISTING GROUND
ELEC	ELECTRIC
ELEV	ELEVATION
E'LY	EASTERLY
ELLIP	ELLIPTICAL
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EQ	EQUIVALENT
FED.	FEDERAL
FF	FINISHED FLOOR
FG	FINISH GRADE
FL	FLOWLINE
FS	FINISHED SURFACE
FT/S	FEET PER SECOND
FUT	FUTURE
GB	GRADE BREAK
GF	GARAGE FLOOR
GM	GAS METER
G.P.	GRADING PERMIT
GV	GAS VALVE
HGL	HYDRAULIC GRADE LINE
HOA	HOME OWNERS ASSOCIATION
HORZ.	HORIZONTAL
HP	HIGH POINT
HPS	HIGH PRESSURE SODIUM
HW	HEADWALL
ICP	INTERLOCKING CONCRETE PAVERS
ICV	IRRIGATION CONTROL VALVE
INT.	INTERSECTION
INV	INVERT
IRR	IRRIGATION
LAT	LATERAL
LDM	LAND DEVELOPMENT MANUAL
LDSP	LANDSCAPE
LF	LINEAR FEET
LN	LANE
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MOC	MIDDLE OF CURVE
N'LY	NORTHERLY
NO.	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CURB OR ON CURVE OR ON CENTER
OHW	OVERHEAD WIRE
PB	PULL BOX
P.C.C.	PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND CURVE
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
PMB	PROCESSED MISC. BASE
POC	POINT OF CONNECTION
PRC	POINT OF REVERSE CURVE
PT	POINT
PTDF	PRESSURE TREATED DOUGLAS FIR
PUB	PUBLIC
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PVT	PRIVATE
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RET	RETAINING
RWGV	RESILIENT WEDGE GATE VALVE
R.O.W.	RIGHT OF WAY
RPD	RESIDENTIAL PLANNED DEVELOPMENT
RT	RIGHT
RW	RECLAIMED WATER
R/W	RIGHT OF WAY
SCE	SOUTHERN CALIFORNIA EDISON
SCO	SEWER CLEAN OUT
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIMENSION RATIO
S.E.	SAND EQUIVALENT
SF	SQUARE FOOT/FEET
SHT	SHEET
SHTS	SHEETS
S.L.	SEWER LATERAL
SLDS	STANDARD LAND DEVELOPMENT SPECIFICATIONS
S'LY	SOUTHERLY
SMH	SEWER MANHOLE
S.N.S.	STREET NAME SIGN
SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
SS	SANITARY SEWER
SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
ST	STREET
STD	STANDARD
SW	SIDEWALK
SWCT	SAWCUT
TC	TOP OF CURB
TEL	TELEPHONE
TG	TOP OF GRATE
TF	TOP OF FOOTING
TI	TRAFFIC INDEX
TMH	TELEPHONE MANHOLE
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE OR PIPE
TPL	TRIPLE
TR	TRACT
TS	TOP OF STEP
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
VAR	VARIES
V.C.	VERTICAL CURVE
VERT.	VERTICAL
VLT	VAULT
VLV	VALVE
W	WATER
W'LY	WESTERLY
WM	WATER METER
WSEL	WATER SURFACE ELEVATION
WV	WATER VALVE
W.W.M.	WELDED WIRE MESH
YR	YEAR

ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND ANY DISCREPANCY BETWEEN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

JOSIAH D. JENISON — 77454 — R.C.E. — 10/16/2024 — DATE

AGENCY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

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An Employee Owned Corporation

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Drawn by

Checked by

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL LANDSCAPE & DRAINAGE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

COVER SHEET

Job No. 2940.400

Date 10-16-2024

C1.01

GENERAL NOTES

1. CONTRACTOR SHALL REVIEW GRADING AND DRAINAGE AND UTILITY PLANS; AND PROTECT ALL EXISTING FACILITIES TO REMAIN. ADJUST ALL UTILITY SURFACE FEATURES TO FINAL GRADES.
2. CONTRACTOR SHALL REMOVE ALL TREES AND EXISTING ROOTS SYSTEMS WITHIN THE PROJECT AREA TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
3. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO EXISTING BUILDINGS AND HYDRANTS THROUGHOUT CONSTRUCTION AND COORDINATE ANY SHUT DOWNS WITH THE OWNER'S REPRESENTATIVE.
4. CONTRACTOR SHALL THOROUGHLY REVIEW CONSTRUCTION DOCUMENTS IN THEIR ENTIRETY FOR PROJECT DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING FACILITIES AND FEATURES WITHIN THE PROJECT LIMIT WHICH ARE REQUIRED FOR THE PROJECT CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES THAT ARE TO REMAIN IN PLACE AND PROMPTLY REPAIR ANY DAMAGES CAUSED BY DEMOLITION AND CONSTRUCTION AT ITS OWN EXPENSE. ALL EXISTING UTILITIES WITHIN THE BUILDING FOOTPRINT SHALL BE CAPPED AT THE NEAREST TEE, VALVE, OR MANHOLE. CONTRACTOR SHALL REMOVE ALL DEMOLITION/WASTE MATERIALS FROM THE PROJECT SITE AND LEGALLY DISPOSE OF THEM AT A DUMP SITE OFF-CAMPUS.
6. REVIEW LANDSCAPE PLANS FOR IRRIGATION DESIGN TO REMOVE EXISTING IRRIGATION SYSTEM IN CONFLICT WITH CONSTRUCTION, AND CONSTRUCT NEW FACILITIES.
7. CONTRACTOR SHALL CONSTRUCT EROSION CONTROL DEVICES PER PROJECT EROSION CONTROL PLANS AND AS REQUIRED FOR SITE CONDITIONS. NO SILT AND DEBRIS SHALL BE ALLOWED TO DEPART FROM THE CONSTRUCTION LIMITS OR ENTER THE STORM DRAIN SYSTEM.
8. CONTRACTOR SHALL PREPARE AND PROVIDE ALL CONSTRUCTION STAKING FOR THE CONSTRUCTION OF THIS PROJECT.
9. CONTRACTOR SHALL USE PROVIDED COORDINATES TO INITIALLY LOCATE THE BUILDINGS AND CONSTRUCT THE BUILDINGS PER THE ARCHITECTURAL PLANS. THE AUTOCAD DRAWING FILES MAY BE PROVIDED TO THE CONTRACTOR FOR STAKING PURPOSES DURING CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE A SUITABLE STABILIZED CONSTRUCTION ENTRANCE/EXIT AT ALL ACCESS POINTS FROM THE JOB SITE TO PREVENT TRACKING OF MUD ONTO CAMPUS AND PUBLIC ROADS. ADDITIONALLY PROVIDE SWEEPER SERVICE ON THE FREQUENCY NECESSARY TO MITIGATE UNDESIRABLE CONDITIONS, AS APPROVED BY THE OWNER'S REPRESENTATIVE.
11. CONTRACTOR SHALL SUBMIT A DRAWING OF THE PROPOSED STAGING AREA AND CONSTRUCTION FENCING TO THE OWNER'S REPRESENTATIVE FOR APPROVAL. CONSTRUCTION STAGING SHALL NOT BLOCK FIRE ENGINE ACCESS OR EXISTING FIRE HYDRANTS.

GENERAL DEMOLITION NOTES

1. DEMOLITION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO REMOVE EXISTING STRUCTURES, UTILITIES, AND ALL OTHER MATERIAL FROM THE PROJECT SITE.
2. DISPOSAL OF MATERIALS SHALL BE DONE IN A SAFE AND LEGAL MANNER AND SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
3. THE CONTRACTOR SHALL CONTINUOUSLY CLEAN AND REMOVE DEMOLISHED MATERIALS FROM THE SITE EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. DO NOT ALLOW MATERIALS TO ACCUMULATE ON SITE.
4. EXISTING UNDERGROUND UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPLACE IN-KIND ANY ITEMS DAMAGED DURING THE DEMOLITION PROCESS THAT ARE INTENDED TO REMAIN.
6. ALL EXISTING LANDSCAPE INSIDE THE LIMITS OF WORK SHALL BE REMOVED, UNLESS OTHERWISE NOTED ON THE PLANS.
7. ALL SURFACE FEATURES FOR EXISTING UNDERGROUND UTILITIES SHALL REMAIN AND BE ADJUSTED TO MATCH NEW FINISH GRADE - UNLESS OTHERWISE NOTED.
8. SAWCUT EXISTING PAVEMENT FULL DEPTH TO A CLEAN STRAIGHT EDGE.
9. ALL TREE ROOTS, ABANDONED IRRIGATION LINES, UTILITY SERVICES, SEPTIC TANKS (AS NOTED) AND SIMILAR MATERIALS SHALL BE REMOVED FROM THE SITE AND VOIDS CREATED THEREBY SHALL BE PROPERLY FILLED AND COMPACTED AS DIRECTED BY THE ENGINEER.
10. CONTRACTOR TO COORDINATE WITH DISTRICT STAFF FOR LOCATION OF EXISTING COMMUNICATION AND ELECTRICAL STUBS.
11. EXCAVATIONS AND DEPRESSIONS RESULTING FROM FOUNDATION AND BELOW-GRADE STRUCTURE REMOVAL SHALL NOT BE FILLED IN PRIOR TO OBSERVATION BY THE GEOTECHNICAL REPRESENTATIVE.
12. CONTRACTOR SHALL PROVIDE LATERAL SUPPORT OF EXCAVATIONS, AS NEEDED, TO PREVENT LATERAL AND VERTICAL MOVEMENT OF ADJACENT EXISTING FACILITIES.

GRADING NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS (GREEN BOOK) LATEST EDITION AND AMENDMENTS WHENEVER SPECIAL REQUIREMENTS CONFLICT ON ANY SUBJECT MATTER. THE ENGINEER OF RECORD AND/OR HIS REPRESENTATIVE WILL DETERMINE WHICH SPECIAL REQUIREMENT AND/OR CODE WILL GOVERN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND DISPOSAL OF THE PROPOSED WORK AREA.
3. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS IN ACCORDANCE WITH CITY, COUNTY, AND STATE ORDINANCES AND STATUTES.
4. NO FILL SHALL BE PLACED ON THE EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL, DELETERIOUS MATERIAL AND SCARFIED PER THE PROJECT SPECIFICATIONS.
5. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL.
6. FILLS SHALL BE COMPACTED THROUGHOUT TO THE MAXIMUM DENSITY AS DETERMINED THE GEOTECHNICAL ENGINEER.
7. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE GEOTECHNICAL ENGINEER AND/OR HIS REPRESENTATIVE PRIOR TO PLACING OF FILL.
8. FILL SLOPES SHALL BE KEYED AND BENCHED WITH APPROVED MATERIAL AND PER THE RECOMMENDATIONS OF THE PROJECT SOILS REPORT.
9. ALL EXISTING FILLS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND OR HIS REPRESENTATIVE BEFORE ANY ADDITIONAL FILLS ARE ADDED.
10. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED OR CRUSHED IN PLACE AND BACKFILLED AND APPROVED BY THE GRADING INSPECTOR AND GEOTECHNICAL ENGINEER, UNLESS OTHERWISE NOTED ON THE PLANS.
11. SLOPES EXCEEDING FIVE FEET IN HEIGHT MUST BE PLANTED AND AN APPROVED IRRIGATION SYSTEM SHALL BE INSTALLED.
12. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER PER THE GRADING AND EXCAVATION CODE.
13. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEM EXISTS SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS. THE ENGINEERING GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE CONSTRUCTION MANAGER FOR APPROVAL.

GRADING NOTES (CONTINUED)

14. THE FINAL COMPACTION REPORT AND APPROVAL FROM THE GEOTECHNICAL ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED. THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, NUCLEAR GAGE, OR DRIVE RING SHALL BE NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
15. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF AND PROTECT ALL EXISTING UTILITIES AND TO ENSURE SERVICE IS NOT DISRUPTED TO EXISTING FACILITIES.
17. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS AND APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT. IN ALL CASES, THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO CONSTRUCTING NATURAL OR EXISTING DRAINAGE PATTERNS.
18. WHENEVER THERE IS AN EXISTING CATCH BASIN ALONG OR ADJACENT TO THE CONSTRUCTION SITE FRONTAGE, AN ON-SITE STORM DRAIN OR SWALE SHALL BE CONSTRUCTED TO CONVEY WATER DIRECTLY TO THE BASIN. EXCEPTIONS SHALL REQUIRE APPROVAL BY THE CIVIL ENGINEER.
19. ALL PLANTERS ADJACENT TO THE FOUNDATIONS SHALL BE SEALED ALONG SIDE OF THE FOUNDATION FOOTING AND EXTENDED UNDER THE PLANTER AREA TO A MINIMUM OF 12 INCHES TO PREVENT MOISTURE FROM REACHING THE FOUNDATION SUBGRADE SOLES.
20. EXPORT SOILS MUST GO TO A LEGAL DUMP SITE OR TO A PERMITTED SITE APPROVED BY THE LOCAL AGENCY HAVING JURISDICTION.
21. ANY DIRT, ROCK OR CONSTRUCTION MATERIAL THAT MAY BE TRACKED OR DROPPED WITHIN THE PUBLIC RIGHT-OF-WAY DURING THE TRANSPORTATION OF SAID MATERIAL OR EQUIPMENT ASSOCIATED WITH THE PROJECT SHALL BE CLEANED OR REMOVED DAILY AND AS DEEMED NECESSARY BY THE CONSTRUCTION MANAGER.
22. DIRT ACCESS RAMPS OVER CURB AND GUTTER TO CONSTRUCTION SITE ARE NOT ALLOWED. WHEN NECESSARY FOR ENTRANCE TO SUCH CONSTRUCTION SITES, ASPHALT RAMPS WITH A MINIMUM 3" DIAMETER PIPE WILL BE CONSTRUCTED TO CONVEY GUTTER DRAINAGE. ALL BASE, GRAVEL, SOIL OR OTHER MATERIAL CARRIED INTO THE ROADWAY BY CONTRACTORS PERSONNEL OR EQUIPMENT WILL BE CLEANED AS NECESSARY AND NO LESS THAN ONCE A DAY. TRUCKS HAULING BASE, GRAVEL, FILL OR EXPORT MATERIALS WILL BE TARPED AS NECESSARY TO PREVENT MATERIAL FROM SPILLING INTO THE ROADWAY.
23. PRIOR TO ANY CONSTRUCTION WHICH INVOLVES HAZARDOUS CONDITIONS, THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (OSHA).
24. PROPOSED REVISIONS TO THE GRADING PLAN SHALL BE DRAWN IN RED PENCIL ON BOND COPIES OF THE APPROVED PLAN. THESE REDLINES ARE THEN TO BE SUBMITTED TO THE OWNERS REPRESENTATIVES FOR REVIEW AND APPROVAL. ONLY AFTER THE BOND COPIES APPROVAL IS GIVEN SHOULD THE ORIGINALS BE AS-BUILT BY THE ENGINEER/ARCHITECT.
25. RULE 403, AIR QUALITY CONTROL MANAGEMENT DISTRICT, MUST BE IMPLEMENTED DURING CONSTRUCTION.
    a. A PERSON SHALL NOT CAUSE OR ALLOW THE EMISSIONS OF FUGITIVE DUST FROM ANY TRANSPORT, HANDLING, CONSTRUCTION OR STORAGE ACTIVITY SO THAT THE PRESENCE OF SUCH DUST REMAINS VISIBLE IN THE ATMOSPHERE BEYOND THE PROPERTY LINE OF THE EMISSION SOURCE. (DOES NOT APPLY TO EMISSION EMANATING FROM UNPAVED ROADWAYS OPEN TO PUBLIC TRAVEL OR FARM ROADS. THIS EXCLUSION SHALL NOT APPLY TO INDUSTRIAL OR COMMERCIAL FACILITIES).
    b. A PERSON SHALL TAKE EVERY REASONABLE PRECAUTION TO MINIMIZE FUGITIVE DUST EMISSIONS FROM WRECKING EXCAVATION GRADING, CLEARING OF LAND AND SOLID WASTE DISPOSAL OPERATIONS.
    c. A PERSON SHALL NOT CAUSE OR ALLOW PARTICULATE WATER TO EXCEED 100 MICROGRAMS PER CUBIC METER WHEN DETERMINED AS THE DIFFERENCE BETWEEN UPWIND AND DOWN WIND SAMPLES COLLECTED ON HIGH VOLUME SAMPLERS AT THE PROPERTY LINE FOR A MINIMUM OF FIVE HOURS.
    d. A PERSON SHALL TAKE EVERY REASONABLE PRECAUTION TO PREVENT VISIBLE PARTICULATE WATER FROM BEING DEPOSITED UPON PUBLIC ROADWAYS. PRECAUTIONS SHALL INCLUDE BUT ARE NOT LIMITED TO, THE REMOVAL OF PARTICULATE MATTER FROM EQUIPMENT PRIOR TO MOVEMENT ON PAVED STREETS ONTO WHICH SUCH MATERIAL HAS BEEN DEPOSITED.
    e. SUBSECTIONS (A) AND (B) SHALL NOT BE APPLICABLE WHEN THE WIND SPEED INSTANTANEOUSLY EXCEEDS 40 KILOMETERS (25 MILES) PER HOUR, OR WHEN THE AVERAGE WIND SPEED IS GREATER THAN 24 KILOMETERS (15 MILES) PER HOUR. THE AVERAGE WIND SPEED DERMINATIONS SHALL BE ON A 15 MINUTE AVERAGE AT THE NEAREST OFFICIAL AIR-MONITORING STATION OR BY WIND INSTRUMENT LOCATED AT THE SITE BEING CHECKED.
26. CONTRACTORS SHALL USE LOW EMISSION MOBILE CONSTRUCTION EQUIPMENT DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES, WHERE FEASIBLE.
27. CONTRACTORS SHALL MAINTAIN ALL CONSTRUCTION ENGINES TUNED CONSISTENT WITH MANUFACTURER'S SPECIFICATIONS DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.
28. CONTRACTORS SHALL USE LOW SULFUR FUEL FOR STATIONARY CONSTRUCTION EQUIPMENT AS REQUIRED BY AQMD RULES 431.1 AND 431.2 AND SHALL USE EXISTING POWER SOURCES AND CLEAN FUEL GENERATORS AS FEASIBLE, DURING ALL SITE PREPARATION, GRADING AND CONSTRUCTION ACTIVITIES.
29. CONSTRUCTION PARKING SHALL BE ONSITE. TRAFFIC CONTROL AND ACCESS SHALL BE IN ACCORDANCE WITH COUNTY CONSTRUCTION REQUIREMENTS
30. THE SPEED OF TRUCKS ONSITE SHALL BE LIMITED TO 15 MPH.
31. TRUCKS AND LARGE CONSTRUCTION VEHICLES WILL OBTAIN APPROVED TRUCK ROUTES FROM THE AGENCIES HAVING JURISDICTION OVER PROPOSED ROUTES.
32. THE CONTRACTOR SHALL CONTROL DUST IN AREAS USED FOR OFF-ROAD PARKING MATERIALS LAYDOWN OR THOSE AWAITING FUTURE CONSTRUCTION. FREQUENTLY ACCESSED AREAS SHALL BE PAVED AS EARLY AS POSSIBLE TO MINIMIZE DIRT TRACKOUT TO THE PUBLIC RIGHT OF WAY.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING MEASURES:
    a. CESSATION OF ACTIVITIES DURING A STAGE-2 SMOG EPISODE. CALL 1-800-242-4022 FOR THE DAILY SMOG FORECAST.
    b. TRUCK ROUTES AND SCHEDULES FOR THE RECEIPT OF MATERIALS SHALL BE COORDINATED WITH THE MANAGER OF BUILDING AND SAFETY.
    c. WHERE FEASIBLE, ON-ROAD VEHICLES AND OFF-ROAD EQUIPMENT SHALL BE TURNED OFF AND SUBSEQUENTLY RESTARTED IF THE ANTICIPATED DURATION OF IDLING IS EXPECTED TO EXCEED FIVE (5) MINUTES.
34. THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING HIGH WIND DUST CONTROL WHEN WIND GUSTS EXCEED 25 MPH:
    a. TERMINATION/MODIFICATION OF OPERATION OF SCRAPERS, GRADERS OR DOZERS ON UNPAVED SURFACES UNTIL WINDS SUBSIDE.
    b. APPLICATION OF WATER AS NEEDED TO ANY UNPAVED SURFACE WITH VEHICLE OR EQUIPMENT OPERATIONS.
    c. APPLICATION OF WATER OR OTHER DUST CONTROL MATERIAL TO ANY PREVIOUSLY GRADED SURFACE IF DUST EMANATION IS VISIBLE FROM SUCH A SURFACE.
35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EQUIPMENT TO PREVENT VISIBLE SOOT FROM REDUCING LIGHT TRANSMISSION THROUGH THE EXHAUST STACK BY MORE THAN 20 PERCENT FOR MORE THAN THREE MINUTES PER HOUR AND USE LOW-SULFER FUEL AS REQUIRED BY SCAQMD REGULATIONS.
36. TRUCKS USED IN HAULING DIRT TO OR FROM THE SITE ON PUBLIC ROADS WILL BE COVERED OR WILL MAINTAIN A SIX INCH DIFFERENTIAL BETWEEN THE MAXIMUM HEIGHT OF ANY HAULED MATERIAL AND THE TOP OF THE TRAILER. HAUL TRUCK DRIVERS WILL LOAD PRIOR TO LEAVING THE SITE TO PREVENT SOIL LOSS DURING TRANSPORTATION.
37. PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE, EXISTING SURVEY MONUMENTS SHALL BE NOTED AND DOCUMENTED BEFORE CONSTRUCTION. IF MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL PAY A LICENSED LAND SURVEYOR OR REGISTERED ENGINEER TO RESET SUCH MONUMENTS.

EXISTING UTILITY NOTES

1. THE GENERAL CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT AND NOTIFY APPROPRIATE UTILITY AGENCIES TO VERIFY AND LOCATE ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING ANY EXCAVATION.
2. THE GENERAL CONTRACTOR SHALL POTHOLE TO LOCATE AND VERIFY ALL EXISTING UTILITIES, POINT OF CONNECTIONS, AND CROSSINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNERS REPRESENTATIVE.
3. THE LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY; ALL UTILITIES MAY NOT BE SHOWN.
4. SOME IRRIGATION PIPING AND ELECTRICAL CONDUIT LOCATIONS AND SIZES ARE UNKNOWN AND NOT IDENTIFIED HEREON.
5. SUBSURFACE UTILITIES SHOWN HEREON HAVE BEEN COMPILED FROM RECORD INFORMATION GATHERED FROM VARIOUS SOURCES. THE SUBSURFACE INFORMATION, INCLUDING LOCATION, SIZES, AND CAPACITIES IS AN ESTIMATION BASED ON AVAILABLE DATA AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. ECG DOES NOT WARRANT THE ACCURACY OF COMPLETENESS OF SAID RECORD INFORMATION.
6. THE CONTRACTOR, BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO, UNDERSTANDS THAT THEY AGREE TO ASSUME LIABILITY, AND AGREE TO HOLD THE UNDERSIGNED HARMLESS FOR ANY LIABILITY FOR DAMAGE RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED, NOT INDICATED ON THE RECORDS PROVIDED, LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING TO WORK.
7. THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICES TO BUILDINGS OR OTHER STRUCTURES INTENDED TO REMAIN IN OPERATIONAL SERVICE DURING THE COURSE OF CONSTRUCTION.

STORMWATER POLLUTION PLAN NOTES

1. IN CASE OF EMERGENCY CALL: TO BE DETERMINED
2. A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
3. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.
4. GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.
5. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
6. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.
7. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE FIELD ENGINEER. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.
8. DESILTING BASIN MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN NOVEMBER 1 AND APRIL 15 OF THE FOLLOWING YEAR WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL. STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE FIELD ENGINEER.
9. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE BUILDING OFFICIAL.
10. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON STORM WATER FROM THE PROJECT SITES AT ALL TIMES.
11. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
12. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
13. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND AREA NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
14. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
15. CONTRACTORS ARE RESPONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES BMPs ARE INSTALLED AND FUNCTIONING PROPERLY IF THERE IS A 40% CHANCE OF 0.25 INCHES OR GREATER OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL. (COPIES OF THE SELF INSPECTION CHECK LIST AND INSPECTION LOGS ARE AVAILABLE UPON REQUEST).
16. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OR RAINWATER AND DISPERSAL BY WIND.
17. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
18. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
19. THE FOLLOWING BMPs FROM THE "CALIFORNIA STORM WATER BMP CONSTRUCTION HANDBOOK" - LATEST EDITION, MUST BE IMPLEMENTED FOR ALL CONSTRUCTION ACTIVITIES AS APPLICABLE.

EROSION CONTROL:

EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-3	HYDRAULIC MULCH
EC-4	HYDROSEEDING
EC-5	SOIL BINDERS
EC-6	STRAW MULCH
EC-7	GEOTEXTILES & MATS
EC-8	WOOD MULCHING
EC-9	EARTH DIKES AND DRAINAGE SWALES
EC-10	VELOCITY DISSIPATION DEVICES
EC-11	SLOPE DRAINS
EC-12	STREAMBANK STABILIZATION
EC-13	RESERVED
EC-14	COMPOST BLANKETS
EC-15	SOIL PREPARATION/ROUGHENING
EC-16	NON-VEGETATIVE STABILIZATION

TEMPORARY SEDIMENT CONTROL:

SE-1	SILT FENCE
SE-2	SEDIMENT BASIN
SE-3	SEDIMENT TRAP
SE-4	CHECK DAM
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-7	STREET SWEEPING AND VACUUMING
SE-8	SANDBAG BARRIER
SE-9	STRAW BALE BARRIER
SE-10	STORM DRAIN INLET PROTECTION
SE-11	ACTIVE TREATMENT SYSTEMS
SE-12	TEMPORARY SILT DIKE
SE-13	COMPOST SOCKS AND BERMS
SE-14	BIOFILTER BAGS

EQUIPMENT TRACKING CONTROL:

TC-1	STABILIZED CONSTRUCTION ENTRANCE/EXIT
TC-2	STABILIZED CONSTRUCTION ROADWAY
TC-3	ENTRANCE/OUTLET TIRE WASH

WIND EROSION CONTROL:

WE-1	WIND EROSION CONTROL

NON-STORMWATER MANAGEMENT:

NS-1	WATER CONSERVATION PRACTICES
NS-2	DEWATERING OPERATIONS
NS-3	PAVING AND GRINDING OPERATIONS
NS-4	TEMPORARY STREAM CROSSING
NS-5	CLEAR WATER DIVERSION
NS-6	ILLICIT CONNECTION/DISCHARGE
NS-7	POTABLE WATER/IRRIGATION
NS-8	VEHICLE AND EQUIPMENT CLEANING
NS-9	VEHICLE AND EQUIPMENT FUELING
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE
NS-11	PILE DRIVING OPERATIONS
NS-12	CONCRETE CURING
NS-13	CONCRETE FINISHING
NS-14	MATERIAL OVER WATER
NS-15	DEMOLITION ADJACENT TO WATER
NS-16	TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL:

WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PREVENTION AND CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT
WM-7	CONTAMINATED SOIL MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY/SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

NOTE:
SITE INSPECTIONS ARE REQUIRED BEFORE AND AFTER STORMS TO ENSURE THAT ALL BMP'S ARE FUNCTIONAL AND TO DETERMINE MAINTENANCE.

811 Know what's below. Call before you dig.

AGENCY

IDENTIFICATION STAMP
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DATE: 12/04/2024

FLEWELLING & MOODY
architecture planning interiors

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CONSULTANT

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Drawn by

Checked by

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE & DRAINAGE PROJECT

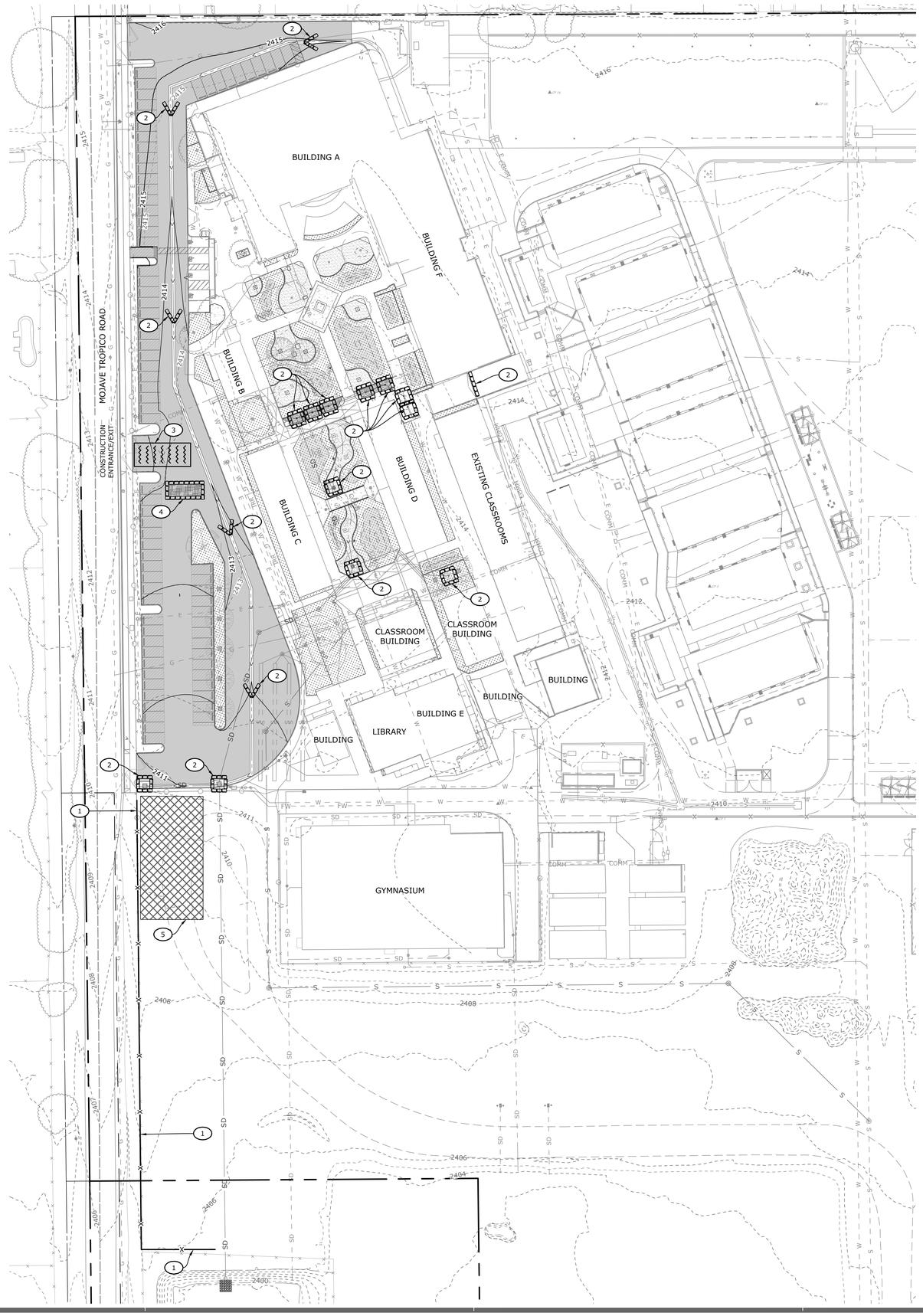
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

GENERAL NOTES

Job No.
2940.400

Date
10-16-2024

C1.02



EROSION CONTROL CONSTRUCTION NOTES

1. CONSTRUCT SILT FENCE PER STD. PLATE BMP-10 IN CURRENT KERN COUNTY DEVELOPMENT STANDARDS (DETAIL ON SHEET C2.02) PRIOR TO AND DURING GRADING.
2. CONSTRUCT TEMPORARY GRAVEL BAG CHECK DAM OR CATCH BASIN SEDIMENT BARRIER PER STD. PLATE BMP-1 IN CURRENT KERN COUNTY DEVELOPMENT STANDARDS (DETAIL ON SHEET C2.02). ALL GRAVEL BAGS MUST BE IN PLACE DURING PROJECT CONSTRUCTION.
3. CONSTRUCT "RUMBLE RACKS" AT ALL CONSTRUCTION SITE ENTRANCES AND EXITS (MINIMUM 30-FEET BY 12-FEET WIDE) PER STD. PLATE BMP-3 THROUGH BMP-5 IN CURRENT KERN COUNTY DEVELOPMENT STANDARDS (DETAILS ON SHEET C2.02). RECOMMENDED LOCATIONS SHOWN. CONTRACTOR TO SUBMIT FINAL LOCATION TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
4. PROPOSED CONCRETE WASH-OFF AREA PER STD. PLATE BMP-8 IN CURRENT KERN COUNTY DEVELOPMENT STANDARDS (DETAIL ON SHEET C2.02). WASH-OFF AREA SHALL BE IN PLACE AT ALL TIMES DURING GRADING AND PAVING OPERATIONS. CONTRACTOR SHALL NOT TRACK SOLIDS OR CONCRETE WASH OUT OR DEBRIS ON PUBLIC ROADWAYS. RECOMMENDED LOCATION SHOWN. CONTRACTOR SHALL SUBMIT FINAL LOCATION TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
5. PROPOSED STOCKPILE AND MATERIAL STORAGE AREA PER STD. PLATE BMP-7 IN CURRENT KERN COUNTY DEVELOPMENT STANDARDS (DETAIL ON SHEET C2.02).

N
W E
S

SCALE: 1"=40'
0 40 80 120

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Revisions

No.	Date	Description

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SOUTHERN KERN UNIFED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE & DRAINAGE PROJECT

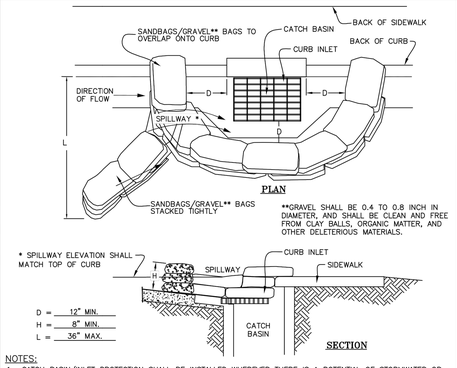
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

EROSION CONTROL PLAN

Job No.
2940.400

Date
10-16-2024

C2.01



NOTES:

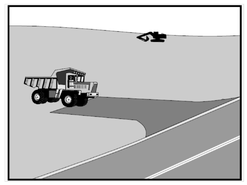
1. CATCH BASIN/INLET PROTECTION SHALL BE INSTALLED WHEREVER THERE IS A POTENTIAL OF STORMWATER OR NON-STORMWATER BEING DISCHARGED INTO IT.
2. INLET PROTECTION IS REQUIRED ALONG WITH OTHER POLLUTION PREVENTION MEASURES SUCH AS; EROSION CONTROL, SOIL STABILIZATION, AND MEASURES TO PREVENT TRACKING ONTO PAVED SURFACES.
3. MODIFY INLET PROTECTION AS NEEDED TO AVOID CREATING TRAFFIC HAZARDS.
4. INCLUDE INLET PROTECTION MEASURES AT HILLSIDE V-DITCHES AND MISC. DRAINAGE SWALES.
5. INLET PROTECTION SHALL BE INSPECTED AND ACCUMULATED SEDIMENTS REMOVED. SEDIMENT SHALL BE DISPOSED OF PROPERLY AND IN A MANNER THAT ASSURES THAT THE SEDIMENT DOES NOT ENTER THE STORM DRAIN SYSTEM.
6. DAMAGED BAGS SHALL BE REPLACED IMMEDIATELY.
7. ADDITIONAL SANDBAG SEDIMENT TRAPS SHALL BE PLACED AT INTERVALS AS INDICATED ON SITE PLAN.

CATCH BASIN/INLET PROTECTION

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-1
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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NOTES:

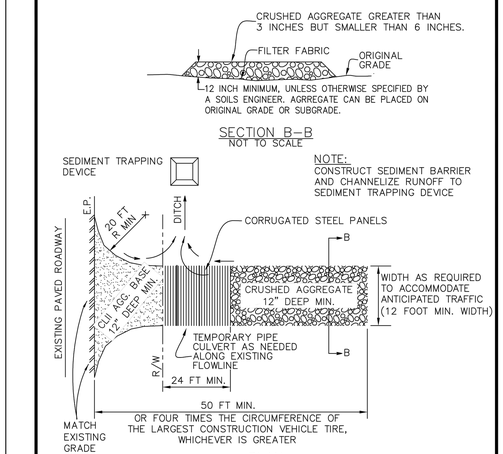
1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. SEDIMENT DEPOSITED ON THE ROADWAY MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM. SEE TYPE 1 AND TYPE 2 DETAILS.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
   A. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
   B. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN >3" TO <6" CRUSHED AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES. ALL STEEL PLATES WITH "RUMBLE STRIPS" SHALL BE PLACED OUTSIDE THE PUBLIC RIGHT-OF-WAY.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.
   A. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
   B. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
   C. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

STABILIZED CONSTRUCTION ENTRANCE/EXIT

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-3
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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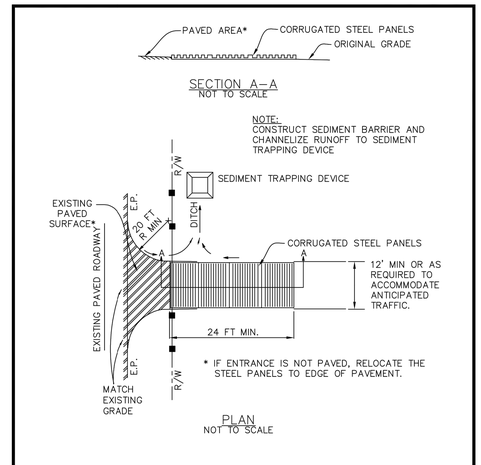
TYPE 1 GRAVEL ENTRANCE/EXIT

STABILIZED CONSTRUCTION ENTRANCE/EXIT

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-4
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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TYPE 2 ALTERNATIVE ENTRANCE/EXIT

USE OF CORRUGATED STEEL PLATES, SHAKER PLATES, RUMBLE PLATES, ETC.

STABILIZED CONSTRUCTION ENTRANCE/EXIT

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-5
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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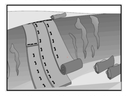


STRAW MULCH

HYDROSEEDING



HYDRAULIC MULCH



GEOTEXTILES, MATS, PLASTIC COVERS AND EROSION CONTROL BLANKETS

NOTES:

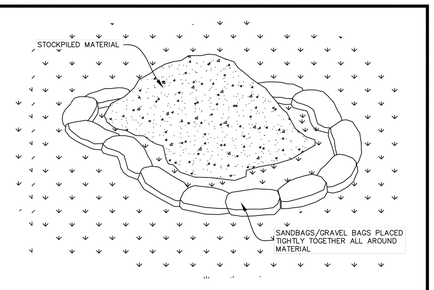
1. SOIL/SLOPE STABILIZATION PRACTICES SHALL BE DESIGNED TO PRESERVE EXISTING VEGETATION WHERE FEASIBLE AND TO REVEGETATE OPEN AREAS AS SOON AS FEASIBLE AFTER GRADING. THESE CONTROL PRACTICES SHALL INCLUDE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, OR OTHER SOIL STABILIZATION PRACTICES.
2. SOIL STABILIZATION SHALL BE IMPLEMENTED ON ALL INACTIVE DISTURBED AREAS FROM OCTOBER 1 THRU MAY 30 AND ON ALL DISTURBED AREAS DURING A RAIN EVENT OR POTENTIAL RAIN.
3. STABILIZATION PRACTICES SHALL CONTROL/PREVENT EROSION FROM THE FORCES OF WIND AND WATER.
4. STABILIZATION PRACTICES SHALL BE IMPLEMENTED IN CONJUNCTION WITH SEDIMENT TRAPPING/FILTERING PRACTICES AND PRACTICES TO REDUCE THE TRACKING OF SEDIMENT ONTO PAVED ROADS.
5. WHEN USING STRAW MULCHING, THE MINIMUM APPLICATION SHALL BE 2 TONS/ACRE. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
6. WHEN USING HYDROSEEDING/MULCHING, THE MINIMUM, APPLICATION OF WOOD FIBER SHALL BE 1,500 LBS/ACRE, THAT DOES NOT CONTAIN MORE THAN 50 PERCENT NEWSPRINT.
7. FOR SEEDING RECOMMENDATIONS, CONTACT: USDA, NATURAL RESOURCES CONSERVATION SERVICE AT 5000 CALIFORNIA AVENUE, BAKERSFIELD, CA 93309-0725. PHONE: (661) 336-0967.
8. WHEN USING HYDRAULIC MULCH, THE APPLICATION SHALL BE BETWEEN 1 TO 2 TONS PER ACRE.
9. GEOTEXTILES, MATS, PLASTIC COVERS AND EROSION CONTROL BLANKETS SHOULD BE CONSIDERED WHEN DISTURBED SOILS MAY BE PARTICULARLY DIFFICULT TO STABILIZE.
10. FOR GEOTEXTILES, MATS, AND EROSION CONTROL BLANKETS, INSTALLATION SHOULD BE IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS. TYPICALLY OVERLAP OF GEOTEXTILES/MATS EDGES IS 2 TO 3 IN. AND STAPLED EVERY 6 IN. WHEN BLANKETS ARE TO BE SPLICED, PLACE BLANKETS END-OVER-END (SHINGLE STYLE) WITH 6 IN. OVERLAP AND STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12 IN. APART.

EROSION CONTROL

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-6
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

DWG FILE: K:\BUILDINGDEV\DEVELOPMENT REVIEW\DEV_STD\2023\2023 REVISED DRAWINGS\[BMP]BMP-6

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NOTES:
STOCKPILE MANAGEMENT PROCEDURES AND PRACTICES ARE DESIGNED TO REDUCE OR ELIMINATE AIR AND STORM WATER POLLUTION FROM STOCKPILES OF SOIL, AND PAVING MATERIALS SUCH AS PORTLAND CEMENT CONCRETE (PCC) RUBBLE, ASPHALT CONCRETE (AC), ASPHALT CONCRETE RUBBLE, AGGREGATE BASE, AGGREGATE SUBBASE OR PRE-MIXED AGGREGATE, ASPHALT BINDER (I.E. COLD MIX) AND PRESSURE TREATED WOOD.

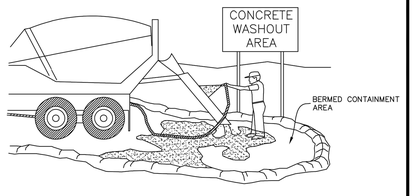
1. PROTECTION OF STOCKPILES IS A YEAR-ROUND REQUIREMENT.
2. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORM WATER, DRAINAGE COURSES, AND DRAIN INLETS.
3. IMPLEMENT WIND EROSION/TRANSPORT CONTROL PRACTICES AS APPROPRIATE.
4. ALL STOCKPILES SHALL BE COVERED, STABILIZED, OR PROTECTED WITH A TEMPORARY LINEAR BARRIER (I.E. SANDBAGS, ETC.) PRIOR TO THE ONSET OF PRECIPITATION.

MATERIAL STORAGE

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-7
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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323



NOTES:

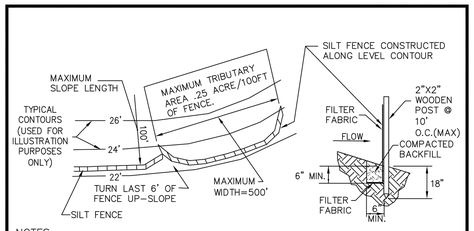
1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE AND DISPOSED OF PROPERLY OFF SITE.
3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.

CONCRETE WASTE MANAGEMENT

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-8
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NOTES:

1. CONSTRUCT THE SILT FENCE ALONG A LEVEL CONTOUR.
2. SILT FENCES SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. PROVIDE SUFFICIENT ROOM FOR RUNOFF TO POND BEHIND THE FENCE AND ALLOW SEDIMENT REMOVAL EQUIPMENT TO PASS BETWEEN THE SILT FENCE AND TOE OF SLOPE OR OTHER OBSTRUCTIONS. ABOUT 1200 SQ. FT. OF PONDING AREA SHALL BE PROVIDED FOR EVERY ACRE DRAINING TO THE FENCE.
4. TURN THE ENDS OF THE FILTER FENCE UPHILL TO PREVENT STORMWATER FROM FLOWING AROUND THE FENCE.
5. LEAVE AN UNDISTURBED OR STABILIZED AREA IMMEDIATELY DOWNSLOPE FROM THE FENCE.
6. DO NOT PLACE IN LIVE STREAM OR INTERMITTENTLY FLOWING CHANNELS.
7. WHEN STANDARD FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY (0.6 INCH) WIRE STAPLES AT LEAST 1.75 INCHES LONG, TIE WIRES OR HOG RINGS.
8. FILTER FABRIC SHALL BE WOVEN POLYPROPYLENE GEOTEXTILE WITH A MINIMUM WIDTH OF 36 INCHES AND A MINIMUM TENSILE STRENGTH OF 100 LB FORCE.
9. WOOD STAKES SHALL BE COMMERCIAL QUALITY LUMBER NO LESS THAN 2 INCH BY 2 INCH. WOOD STAKES SHALL BE DRIVEN TO A DEPTH OF NO LESS THAN 18 INCHES FROM SURFACE.

SILT FENCE

KERN COUNTY PUBLIC WORKS	NPDES BMP SEDIMENT AND EROSION CONTROL	REVISIONS DATE	DESC	DRAFTED BY: R.R.P.	PLATE NO.
		–	–	DESIGNED BY: J.R.C.	BMP-10
	COUNTY OF KERN STATE OF CALIFORNIA DEVELOPMENT STANDARD	–	–	DATE DRAFTED: 09/30/23	
		–	–	APPROVED BY: J.R.C.	

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architecture planning interiors

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ANTELOPE VALLEY OFFICE:
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ARCHITECT

LICENSED ARCHITECT MATTHEW BUCHANAN C-26053 Exp 08/31/2025 STATE OF CALIFORNIA

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER JOSIAH D. JENSEN NO 77454 CIVIL STATE OF CALIFORNIA

ECG Encompass Consultant Group
25115 AVE STANFORD, SUITE A320, SANTA CLARITA, CA 91355
PHONE: 661.600.9367 WEBSITE: WWW.ECGCIVIL.COM

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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL LANDSCAPE & DRAINAGE PROJECT

3180 MOJAVE TROPICO ROAD ROSAMOND, CA 93560

EROSION CONTROL DETAILS

Job No.
2940.400

Date
10-16-2024

C2.02

GRADING AND DRAINAGE CONSTRUCTION NOTES

1. SAWCUT PCC OR AC PAVEMENT TO LIMITS SHOWN.
2. CONSTRUCT DRIVE AISLE AC PAVEMENT (4" AC OVER 4.5" CAB) PER DETAIL "A" ON SHEET C4.01.
3. CONSTRUCT PCC WALKWAY (4" THICK) PER DETAIL "B" ON SHEET C4.01. COLOR, PATTERN AND FINISH PER LANDSCAPE ARCHITECT'S PLAN.
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5. CONSTRUCT DECOMPOSED GRANITE PER ARCHITECT'S PLAN.
6. CONSTRUCT 0" MOW CURB PER LANDSCAPE ARCHITECT'S PLAN.
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22. CONSTRUCT EARTHEN FLOWLINE AT 1.0% MINIMUM SLOPE PER PLAN.
23. CONSTRUCT 2' WIDE, 8" TALL RECTANGULAR CULVERT UNDER WALKWAY PER ARCHITECT'S PLAN.
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32. CONSTRUCT TRUNCATED DOMES PER CALTRANS STD PLAN A88A.
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35. CONSTRUCT 36"X36" BROOKS PRECAST CATCH BASIN OR APPROVED EQUAL WITH TRAFFIC RATED GRATE. CONSTRUCT GUTTER FLARE AROUND CATCH BASIN PER GUTTER FLARE DETAIL ON SHEET C3.03.
36. CONSTRUCT 18" HDPE (N-12 WT) PIPE PER GRAVITY PIPE TRENCH DETAIL "F" ON SHEET C4.01 AND DETAIL "K" ON SHEET C4.02. INSTALL ALL FITTINGS, ELBOWS, WYES AND TEES NECESSARY TO CONSTRUCT STORM DRAIN SYSTEM AS SHOWN.

GENERAL NOTE

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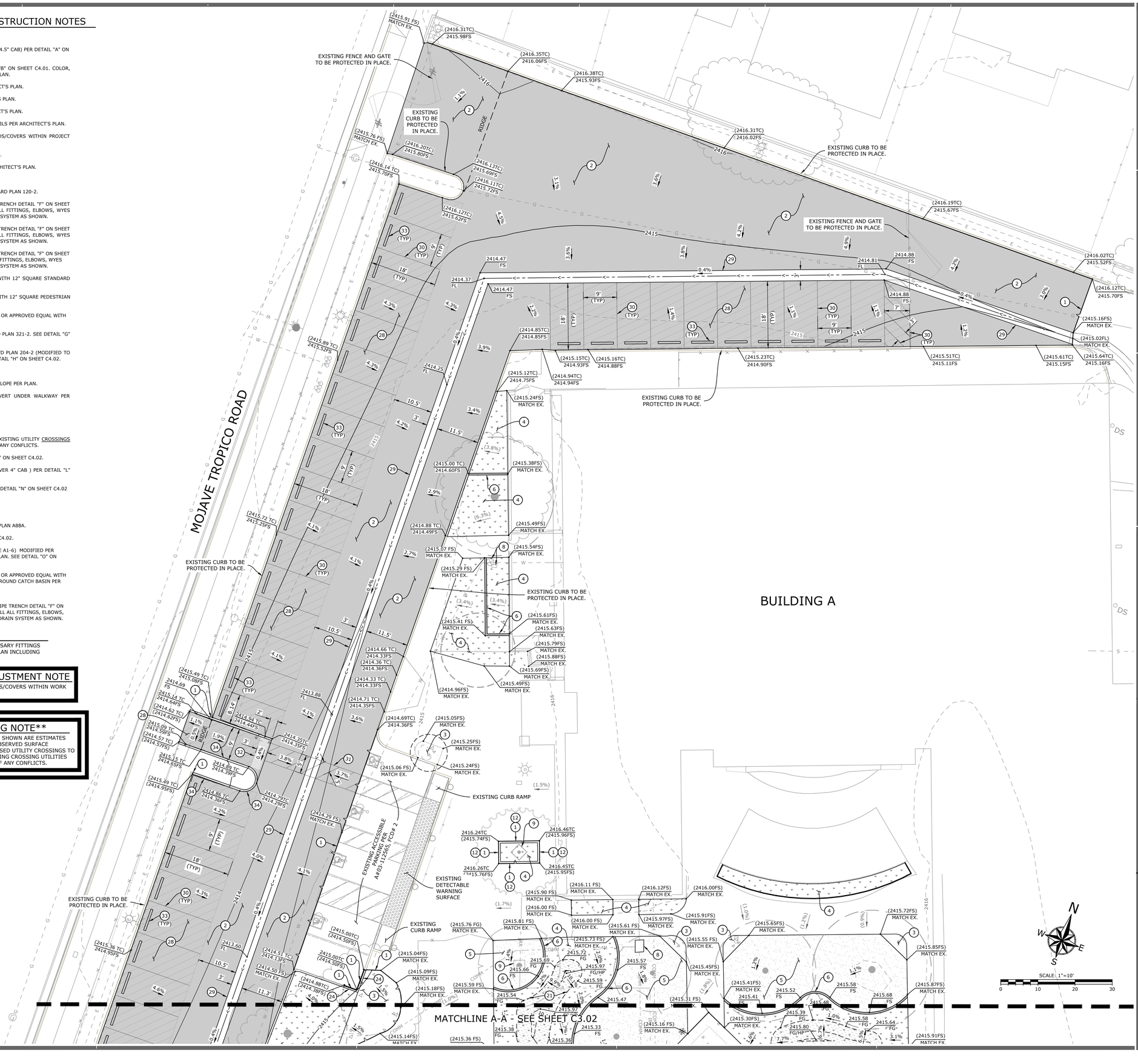
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ANTELOPE VALLEY OFFICE:
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661.949.0771
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Re-Sign 08/31/2025

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER JOSTAN D. JENSON NO 77454 CIVIL STATE OF CALIFORNIA

ECG
Encompass Consultant Group
25115 AVE STANFORD, SUITE #320, SANTA CLARITA, CA 91355
PHONE: 661.600.9367 WEBSITE: WWW.ECGCIVIL.COM

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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE & DRAINAGE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

GRADING, DRAINAGE AND PAVING PLAN

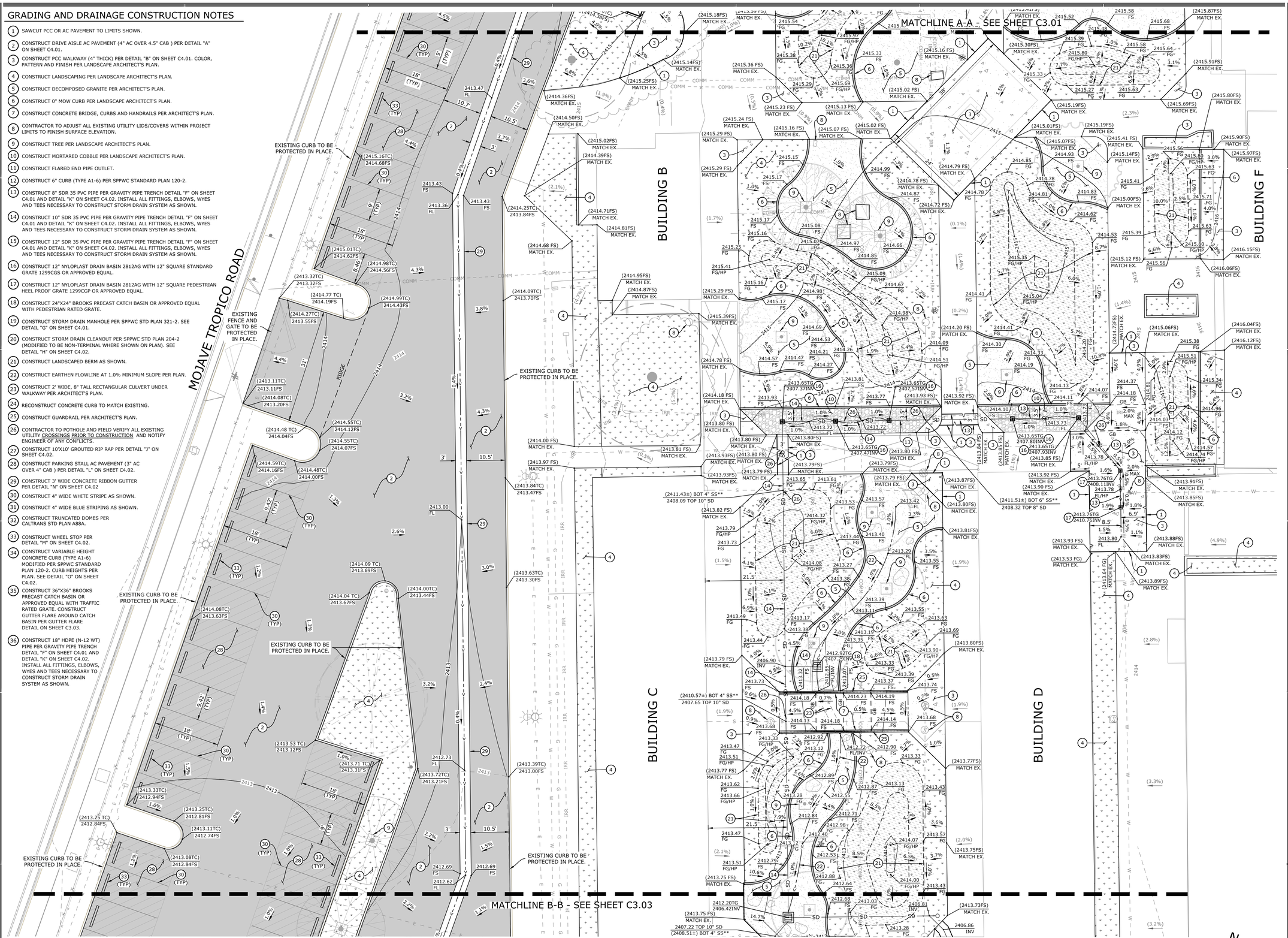
Job No. 2940.400

Date 10-16-2024

C3.01

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N W E S

SCALE: 1"=10'
0 10 20 30

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TROPICO MIDDLE SCHOOL
LANDSCAPE & DRAINAGE PROJECT

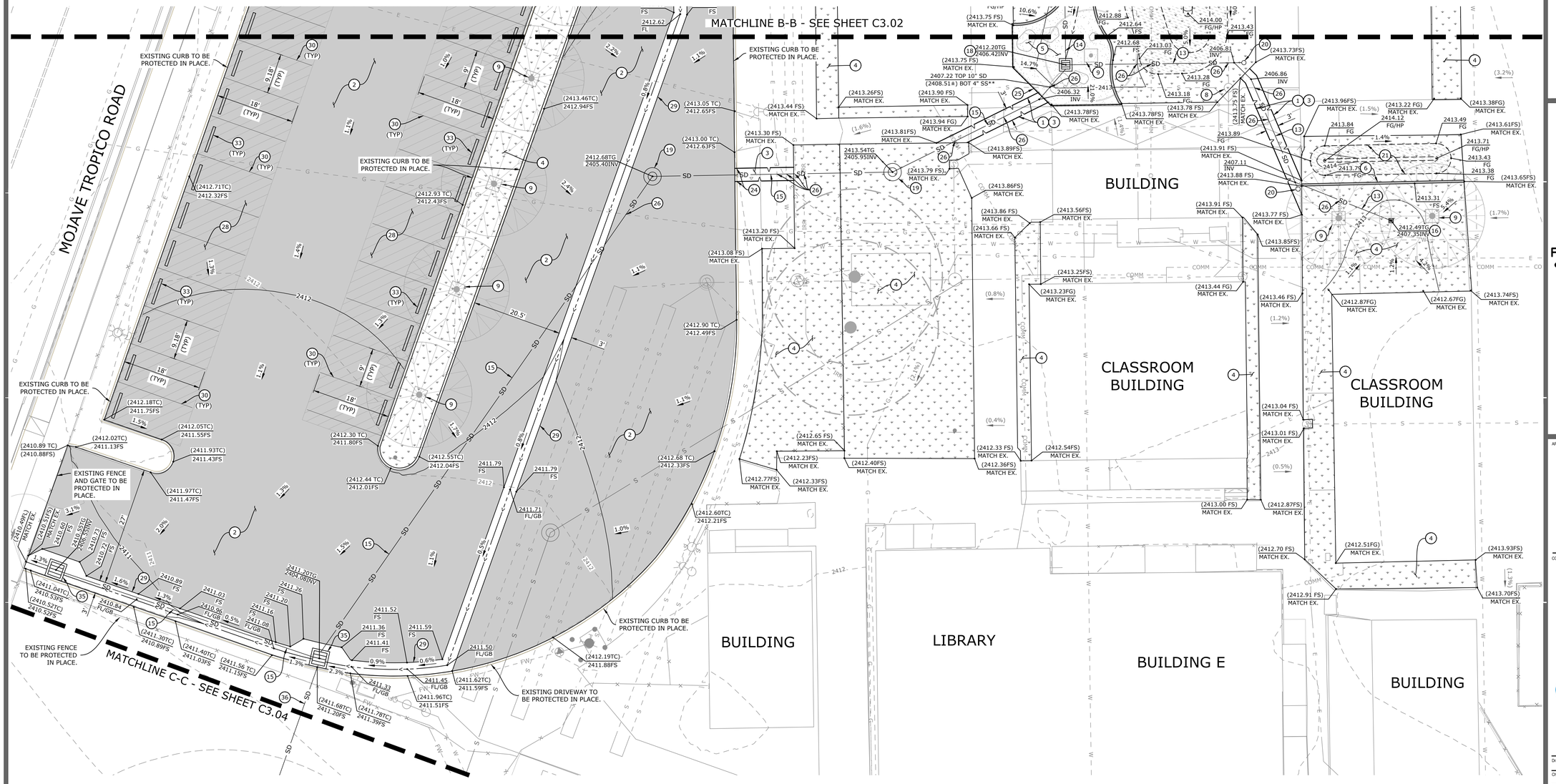
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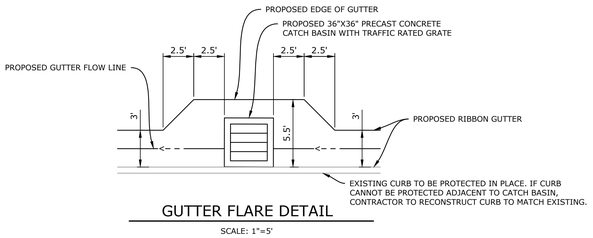
GRADING, DRAINAGE AND PAVING PLAN

Job No. 2940.400

Date 10-16-2024

C3.02





GUTTER FLARE DETAIL

SCALE: 1"=5'

GENERAL NOTE

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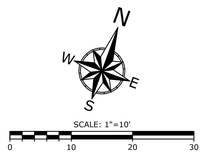
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3. CONSTRUCT PCC WALKWAY (4" THICK) PER DETAIL "B" ON SHEET C4.01. COLOR, PATTERN AND FINISH PER LANDSCAPE ARCHITECT'S PLAN.
4. CONSTRUCT LANDSCAPING PER LANDSCAPE ARCHITECT'S PLAN.
5. CONSTRUCT DECOMPOSED GRANITE PER ARCHITECT'S PLAN.
6. CONSTRUCT 0" MOW CURB PER LANDSCAPE ARCHITECT'S PLAN.
7. CONSTRUCT CONCRETE BRIDGE, CURBS AND HANDRAILS PER ARCHITECT'S PLAN.
8. CONTRACTOR TO ADJUST ALL EXISTING UTILITY LIDS/COVERS WITHIN PROJECT LIMITS TO FINISH SURFACE ELEVATION.
9. CONSTRUCT TREE PER LANDSCAPE ARCHITECT'S PLAN.
10. CONSTRUCT MORTARED COBBLE PER LANDSCAPE ARCHITECT'S PLAN.
11. CONSTRUCT FLARED END PIPE OUTLET.
12. CONSTRUCT 6" CURB (TYPE A1-6) PER SPPWC STANDARD PLAN 120-2.
13. CONSTRUCT 8" SDR 35 PVC PIPE PER GRAVITY PIPE TRENCH DETAIL "F" ON SHEET C4.01 AND DETAIL "K" ON SHEET C4.02. INSTALL ALL FITTINGS, ELBOWS, WYES AND TEES NECESSARY TO CONSTRUCT STORM DRAIN SYSTEM AS SHOWN.
14. CONSTRUCT 10" SDR 35 PVC PIPE PER GRAVITY PIPE TRENCH DETAIL "F" ON SHEET C4.01 AND DETAIL "K" ON SHEET C4.02. INSTALL ALL FITTINGS, ELBOWS, WYES AND TEES NECESSARY TO CONSTRUCT STORM DRAIN SYSTEM AS SHOWN.
15. CONSTRUCT 12" SDR 35 PVC PIPE PER GRAVITY PIPE TRENCH DETAIL "F" ON SHEET C4.01 AND DETAIL "K" ON SHEET C4.02. INSTALL ALL FITTINGS, ELBOWS, WYES AND TEES NECESSARY TO CONSTRUCT STORM DRAIN SYSTEM AS SHOWN.
16. CONSTRUCT 12" NYLOPLAST DRAIN BASIN 2812AG WITH 12" SQUARE STANDARD GRATE 1299CGS OR APPROVED EQUAL.
17. CONSTRUCT 12" NYLOPLAST DRAIN BASIN 2812AG WITH 12" SQUARE PEDESTRIAN HEEL PROOF GRATE 1299CGP OR APPROVED EQUAL.
18. CONSTRUCT 24"X24" BROOKS PRECAST CATCH BASIN OR APPROVED EQUAL WITH PEDESTRIAN RATED GRATE.
19. CONSTRUCT STORM DRAIN MANHOLE PER SPPWC STD PLAN 321-2. SEE DETAIL "G" ON SHEET C4.01.
20. CONSTRUCT STORM DRAIN CLEANOUT PER SPPWC STD PLAN 204-2 (MODIFIED TO BE NON-TERMINAL WHERE SHOWN ON PLAN). SEE DETAIL "H" ON SHEET C4.02.
21. CONSTRUCT LANDSCAPED BERM AS SHOWN.
22. CONSTRUCT EARTHEN FLOWLINE AT 1.0% MINIMUM SLOPE PER PLAN.
23. CONSTRUCT 2' WIDE, 8" TALL RECTANGULAR CULVERT UNDER WALKWAY PER ARCHITECT'S PLAN.
24. RECONSTRUCT CONCRETE CURB TO MATCH EXISTING.
25. CONSTRUCT GUARDRAIL PER ARCHITECT'S PLAN.
26. CONTRACTOR TO POTHOLE AND FIELD VERIFY ALL EXISTING UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
27. CONSTRUCT 10'X10' GROUTED RIP RAP PER DETAIL "J" ON SHEET C4.02.
28. CONSTRUCT PARKING STALL AC VEHICULAR PAVEMENT (3" AC OVER 4" CAB) PER DETAIL "L" ON SHEET C4.02.
29. CONSTRUCT 3' WIDE CONCRETE RIBBON GUTTER PER DETAIL "N" ON SHEET C4.02.
30. CONSTRUCT 4" WIDE WHITE STRIPE AS SHOWN.
31. CONSTRUCT 4" WIDE BLUE STRIPING AS SHOWN.
32. CONSTRUCT TRUNCATED DOMES PER CALTRANS STD PLAN A88A.
33. CONSTRUCT WHEEL STOP PER DETAIL "M" ON SHEET C4.02.
34. CONSTRUCT VARIABLE HEIGHT CONCRETE CURB (TYPE A1-6) MODIFIED PER SPPWC STANDARD PLAN 120-2. CURB HEIGHTS PER PLAN. SEE DETAIL "O" ON SHEET C4.02.
35. CONSTRUCT 36"X36" BROOKS PRECAST CATCH BASIN OR APPROVED EQUAL WITH TRAFFIC RATED GRATE. CONSTRUCT GUTTER FLARE AROUND CATCH BASIN PER GUTTER FLARE DETAIL ON SHEET C3.03.
36. CONSTRUCT 18" HDPE (N-12 WT) PIPE PER GRAVITY PIPE TRENCH DETAIL "F" ON SHEET C4.01 AND DETAIL "K" ON SHEET C4.02. INSTALL ALL FITTINGS, ELBOWS, WYES AND TEES NECESSARY TO CONSTRUCT STORM DRAIN SYSTEM AS SHOWN.

AGENCY

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DATE: 12/04/2024

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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL LANDSCAPE & DRAINAGE PROJECT

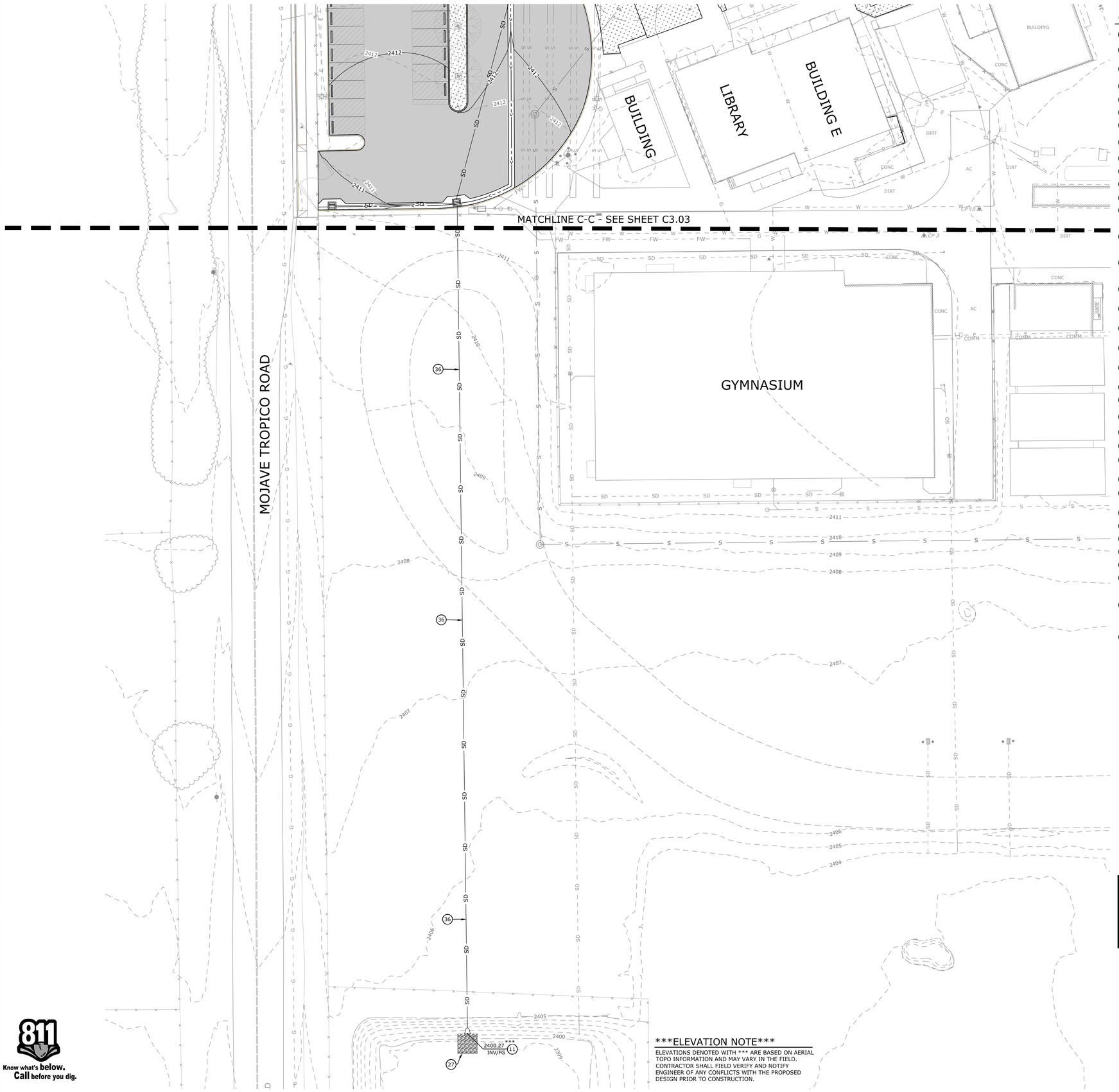
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

GRADING, DRAINAGE AND PAVING PLAN

Job No.
2940.400

Date
10-16-2024

C3.03



GRADING AND DRAINAGE CONSTRUCTION NOTES

1. SAWCUT PCC OR AC PAVEMENT TO LIMITS SHOWN.
2. CONSTRUCT DRIVE AISLE AC PAVEMENT (4" AC OVER 4.5" CAB) PER DETAIL "A" ON SHEET C4.01.
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GENERAL NOTE

CONTRACTOR TO FURNISH AND INSTALL ALL NECESSARY FITTINGS TO CONSTRUCT UTILITY SYSTEMS AS SHOWN ON PLAN INCLUDING ECCENTRIC TEES/WYES WHERE NEEDED.

EXISTING UTILITY COVER ADJUSTMENT NOTE

CONTRACTOR TO ADJUST ALL EXISTING UTILITY LIDS/COVERS WITHIN WORK AREA TO FINISH SURFACE ELEVATION.

EXISTING UTILITY CROSSING NOTE

LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES SHOWN ARE ESTIMATES ONLY AND WERE BASED ON AS-BUILT PLANS AND OBSERVED SURFACE EVIDENCE. CONTRACTOR SHALL POTHOLE AT PROPOSED UTILITY CROSSINGS TO FIELD VERIFY LOCATION, SIZE, DEPTH OF ALL EXISTING CROSSING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.

ELEVATION NOTE

ELEVATIONS DENOTED WITH *** ARE BASED ON AERIAL TOPO INFORMATION AND MAY VARY IN THE FIELD. CONTRACTOR SHALL FIELD VERIFY AND NOTIFY ENGINEER OF ANY CONFLICTS WITH THE PROPOSED DESIGN PRIOR TO CONSTRUCTION.

N
W E
S

SCALE: 1"=20'
0 20 40 60

811 Know what's below. Call before you dig.

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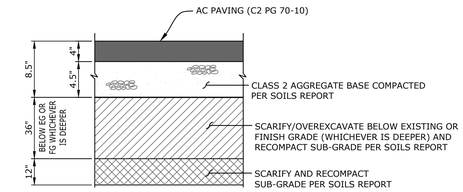
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GRADING, DRAINAGE AND PAVING PLAN

Job No.
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Date
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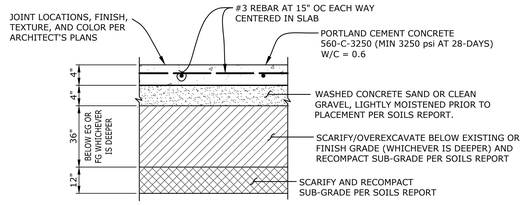
C3.04



DRIVE AISLE AC PAVEMENT SECTION TI = 7

SCALE: N.T.S.

A -



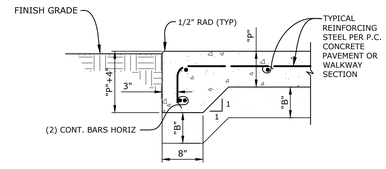
NOTES:

1. CONSTRUCT THICKENED EDGE AT WALKWAY PERIMETER PER DETAIL "C" THIS SHEET.
2. SAWCUT OR TOOLED CRACK CONTROL JOINTS PER DETAIL "D" THIS SHEET.
3. CONSTRUCT EXPANSION JOINTS PER DETAIL "E" THIS SHEET.
4. SECTION IS ESTIMATE ONLY. SOILS ENGINEER TO GIVE FINAL RECOMMENDATION BASED ON R-VALUE TEST RESULTS TAKEN PRIOR TO CONSTRUCTION.

PCC WALKWAY PAVEMENT SECTION

SCALE: N.T.S.

B -

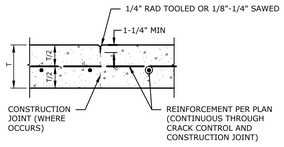


"P"= PORTLAND CEMENT CONCRETE THICKNESS (INCHES)
"B"= BASE LAYER THICKNESS (INCHES)

PCC PAVEMENT OR WALKWAY THICKENED EDGE

SCALE: N.T.S.

C -



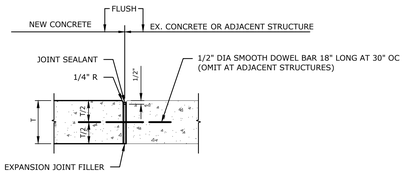
NOTES:

1. SEE SPECIFICATIONS FOR TYPE OF JOINT SEALANT.
2. CONSTRUCTION JOINTS SHALL ONLY BE LOCATED WHERE A CRACK CONTROL JOINT OR OTHER JOINT WOULD OTHERWISE HAVE BEEN REQUIRED.
3. SEE PLAN FOR THICKNESS, T.
4. FOR CRACK CONTROL JOINTS LOCATIONS, SEE ARCH. PLANS.
5. CRACK CONTROL JOINTS TO BE SPACED AT 12' MAX O.C. E.W.

CONSTRUCTION/CRACK CONTROL JOINT

SCALE: N.T.S.

D -



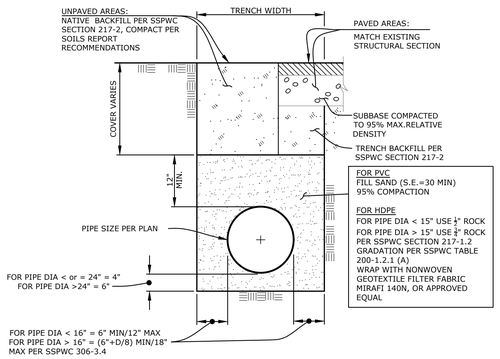
NOTES:

1. SEE SPECIFICATIONS FOR TYPE OF JOINT SEALANT & EXPANSION JOINT FILLER.
2. USE SMOOTH BARS FOR DOWELS COATED TO PREVENT BOND, GREASE END PRIOR TO POUR.
3. SEE PLAN FOR THICKNESS, T.
4. PROVIDE ADEQUATE SUPPORT FOR DOWELS TO ENSURE THEY REMAIN LEVEL WITH FINISH SURFACE.
5. STOP SLAB REINFORCING AT EXPANSION JOINTS.
6. EXPANSION JOINTS TO BE CONSTRUCTED AT ADJACENT STRUCTURES, CURBS AND WALLS.

EXPANSION JOINT

SCALE: N.T.S.

E -



TYPICAL PLASTIC GRAVITY PIPE TRENCH

SCALE: N.T.S.

F -

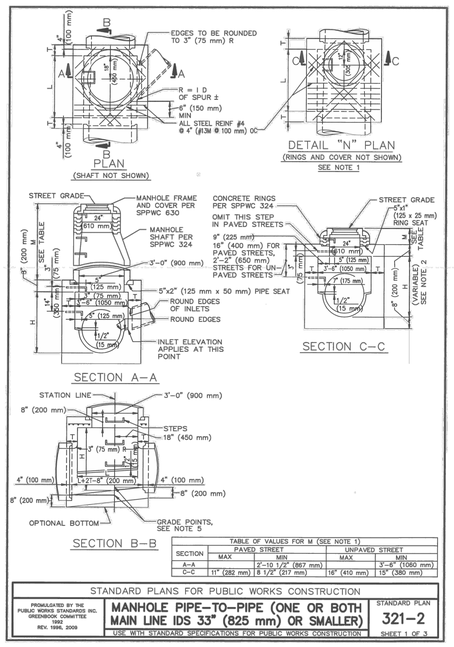


TABLE OF VALUES FOR M (SEE NOTE 1)				
SECTION	PAVED STREET		UNPAVED STREET	
	MAX	MIN	MAX	MIN
A-A		2'-10 1/2" (867 mm)		3'-6" (1060 mm)
C-C	11" (282 mm)	8 1/2" (217 mm)	16" (410 mm)	15" (380 mm)

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 1992 REV. 1998, 2009

MANHOLE PIPE-TO-PIPE (ONE OR BOTH MAIN LINE IDS 33" (825 mm) OR SMALLER)

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN 321-2 SHEET 1 OF 3

NOTES

1. WHEN DEPTH M FROM STREET GRADE TO THE TOP OF THE BOX IS LESS THAN 2'-10 1/2" (867 mm) FOR PAVED STREETS OR 3'-6" (1060 mm) FOR UNPAVED STREETS, CONSTRUCT SHAFT PER SECTION C-C AND DETAIL "N". DEPTH M MAY BE REDUCED TO AN ABSOLUTE LIMIT OF 6" (150 mm) WHEN LARGER VALUES OF M WOULD REDUCE H IN SECTION C-C TO 3'-6" (1060 mm) OR LESS.
2. H (IN SECTION A-A AND B-B) SHALL NOT BE LESS THAN 4'-0" (1.2 m), BUT MAY BE INCREASED PROVIDED THAT THE VALUE OF M SHALL NOT BE LESS THAN THE MINIMUM SPECIFIED AND THAT THE REDUCER SHALL BE USED. FOR H (IN SECTION C-C) SEE NOTE 1.
3. L SHALL BE 4'-0" (1.2 m) UNLESS OTHERWISE SHOWN. L MAY BE INCREASED OR LOCATION OF MANHOLE SHIFTED TO MEET PIPE ENDS, BUT ANY CHANGE IN LOCATION OF THE SPUR MUST BE APPROVED BY THE ENGINEER.
4. T SHALL BE 8" (200 mm) FOR VALUES OF H UP TO AND INCLUDING 8'-0" (2.4 m) AND 10" (250 mm) FOR VALUES OF H OVER 8'-0" (2.4 m).
5. STATIONS OF MANHOLES SHOWN ON PLANS APPLY AT CENTERLINE OF SHAFT. ELEVATIONS ARE SHOWN AT CENTERLINE OF SHAFT AND REFER TO THE PROLONGED INVERT GRADE LINES. SEE NOTE 3.
6. REINFORCEMENT SHALL CONFORM TO ASTM A 615, GRADE 40 (ASTM A 615M, GRADE 300), AND SHALL TERMINATE 1 1/2" (40 mm) CLEAR OF CONCRETE SURFACES UNLESS OTHERWISE SHOWN.
7. FLOOR OF MANHOLE SHALL BE STEEL TROWELED TO SPRING LINE.
8. BODY OF MANHOLE SHALL BE POURED IN ONE CONTINUOUS OPERATION EXCEPT THAT A CONSTRUCTION JOINT WITH A LONGITUDINAL KEYWAY MAY BE PLACED AT SPRING LINE.
9. THICKNESS OF THE DECK SHALL VARY WHEN NECESSARY TO PROVIDE A LEVEL SEAT BUT SHALL NOT BE LESS THAN 8" (200 mm).
10. STEPS SHALL CONFORM TO SPPWC 635 OR 636. UNLESS OTHERWISE SHOWN, STEPS SHALL BE UNIFORMLY SPACED 14" (350 mm) TO 15" (375 mm) OC. THE LOWEST STEP SHALL NOT BE MORE THAN 24" (600 mm) ABOVE THE LEDGE AT THE SIDE OF THE MANHOLE.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

MANHOLE PIPE-TO-PIPE (ONE OR BOTH MAIN LINE IDS = 33" (825 mm) OR SMALLER)

STANDARD PLAN 321-2 SHEET 2 OF 3

11. THE FOLLOWING CRITERIA SHALL BE USED FOR THIS MANHOLE:
    A. MAIN LINE = 33" (825 mm) INSIDE DIAMETER OR LESS. (EXCEPTION – IF THE MAIN LINE RCP DOWNSTREAM OF THE MANHOLE IS 36" (900 mm) TO 42" (1050 mm) INSIDE DIAMETER AND THE MAIN LINE RCP UPSTREAM IS 33" (825 mm) OR LESS.) SPPWC 320 OR 322 IS NOT APPLICABLE WHERE THE MAIN LINE CONDUIT IS LESS THAN 36" (900 mm) IN DIAMETER.
    B. SEE SECTION A – A. THE MAXIMUM SIZE LATERAL THAT MAY BE CONNECTED TO THIS MANHOLE IS SUCH THAT THE DISTANCE FROM THE OUTSIDE (TOP) OF THE LATERAL TO THE BOTTOM OF THE 8" (200 mm) THICK TOP OF THE MANHOLE CHAMBER, MEASURED VERTICALLY FROM THE END OF THE RCP, SHALL BE A MINIMUM OF 6" (150 mm).
    C. IF THE SIZE OF THE LATERAL IS SUCH THAT THE ABOVE–SPECIFIED MINIMUM DISTANCES CANNOT BE MAINTAINED, THEN ONE OF THE FOLLOWING ALTERNATE SOLUTIONS MUST BE USED.
        1. PROVIDE A SPECIAL STRUCTURE.
        2. PROVIDE TWO STANDARD STRUCTURES, CONSISTING OF THIS MANHOLE PLACED UPSTREAM OR DOWNSTREAM FROM THE APPLICABLE JUNCTION STRUCTURE OR TRANSITION STRUCTURE.
12. MANHOLE FRAME AND COVER SHALL CONFORM TO SPPWC 630 UNLESS OTHERWISE SHOWN.
13. MANHOLE SHAFT SHALL CONFORM TO SPPWC 324 UNLESS OTHERWISE SHOWN.
14. WHERE A MANHOLE SHAFT – 36" (900 mm) WITHOUT REDUCER IS SPECIFIED REFER TO SPPWC 336.
15. WHERE A PRESSURE MANHOLE SHAFT – WITH ECCENTRIC REDUCER IS SPECIFIED REFER TO SPPWC 328.
16. WHERE A PRESSURE MANHOLE SHAFT – 36" (900 mm) WITHOUT REDUCER IS SPECIFIED REFER TO SPPWC 329.
17. THE FOLLOWING SPPWC ARE INCORPORATED HEREIN:
    324 MANHOLE SHAFT – WITH ECCENTRIC REDUCER
    326 MANHOLE SHAFT – 36" (900 mm) WITHOUT REDUCER
    328 PRESSURE MANHOLE SHAFT – WITH ECCENTRIC
    329 PRESSURE MANHOLE SHAFT – 36" (900 mm) WITHOUT REDUCER
    630 24" (610 mm) MANHOLE FRAME AND COVER
    633 36" (900 mm) MANHOLE FRAME AND COVER
    635 STEEL STEP
    636 POLYPROPYLENE PLASTIC STEP

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

MANHOLE PIPE-TO-PIPE (ONE OR BOTH MAIN LINE IDS = 33" (825 mm) OR SMALLER)

STANDARD PLAN 321-2 SHEET 3 OF 3

STORM DRAIN MANHOLE DETAILS

SCALE: N.T.S.

G -

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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL LANDSCAPE & DRAINAGE PROJECT

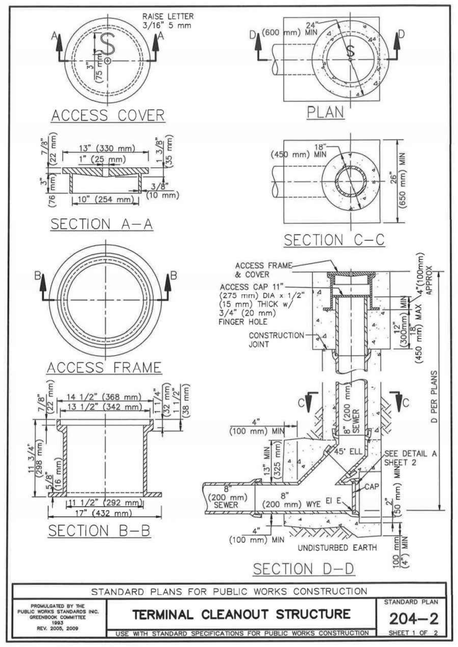
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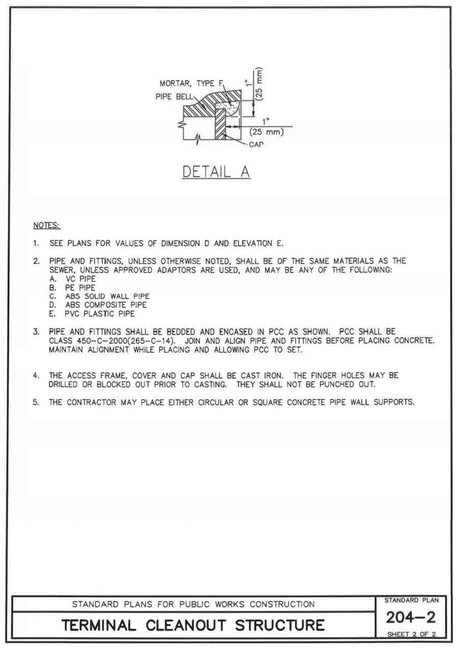
DETAILS

Job No. 2940.400

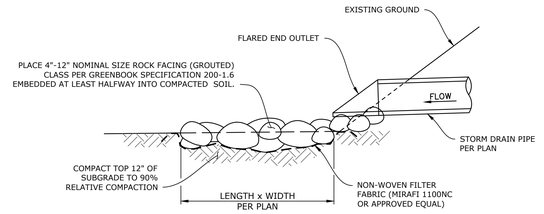
Date 10-16-2024

C4.01

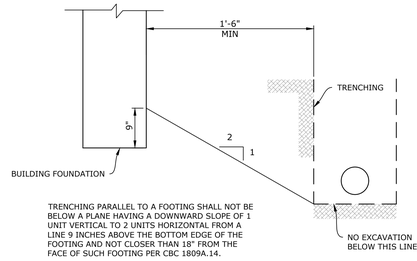




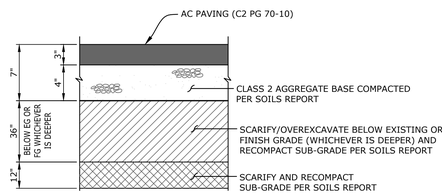
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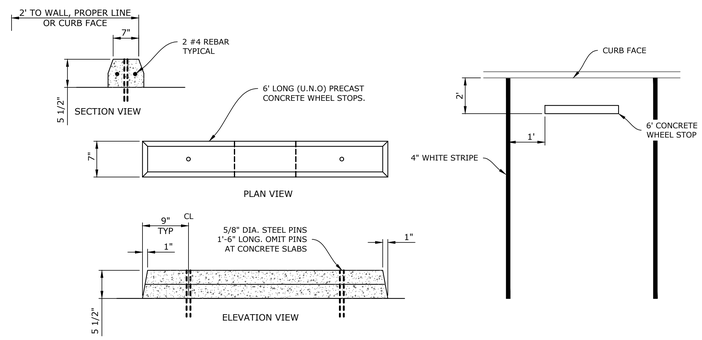
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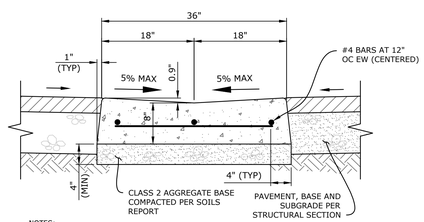
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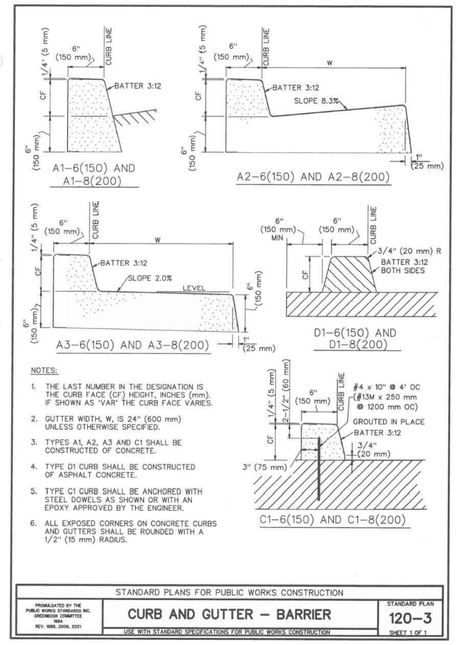
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SCALE: N.T.S.
L



WHEEL STOP DETAIL
SCALE: N.T.S.
M



CONCRETE RIBBON GUTTER
SCALE: N.T.S.
N



CURB AND GUTTER DETAIL
SCALE: N.T.S.
O

811 Know what's below. Call before you dig.

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architecture planning interiors

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CONSULTANT

REGISTERED PROFESSIONAL ENGINEER JONATHAN D. JENTSON NO 77454 CIVIL STATE OF CALIFORNIA

ECG Encompass Consultant Group
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PHONE: 661.600.9367 WEBSITE: WWW.ECGCIVIL.COM

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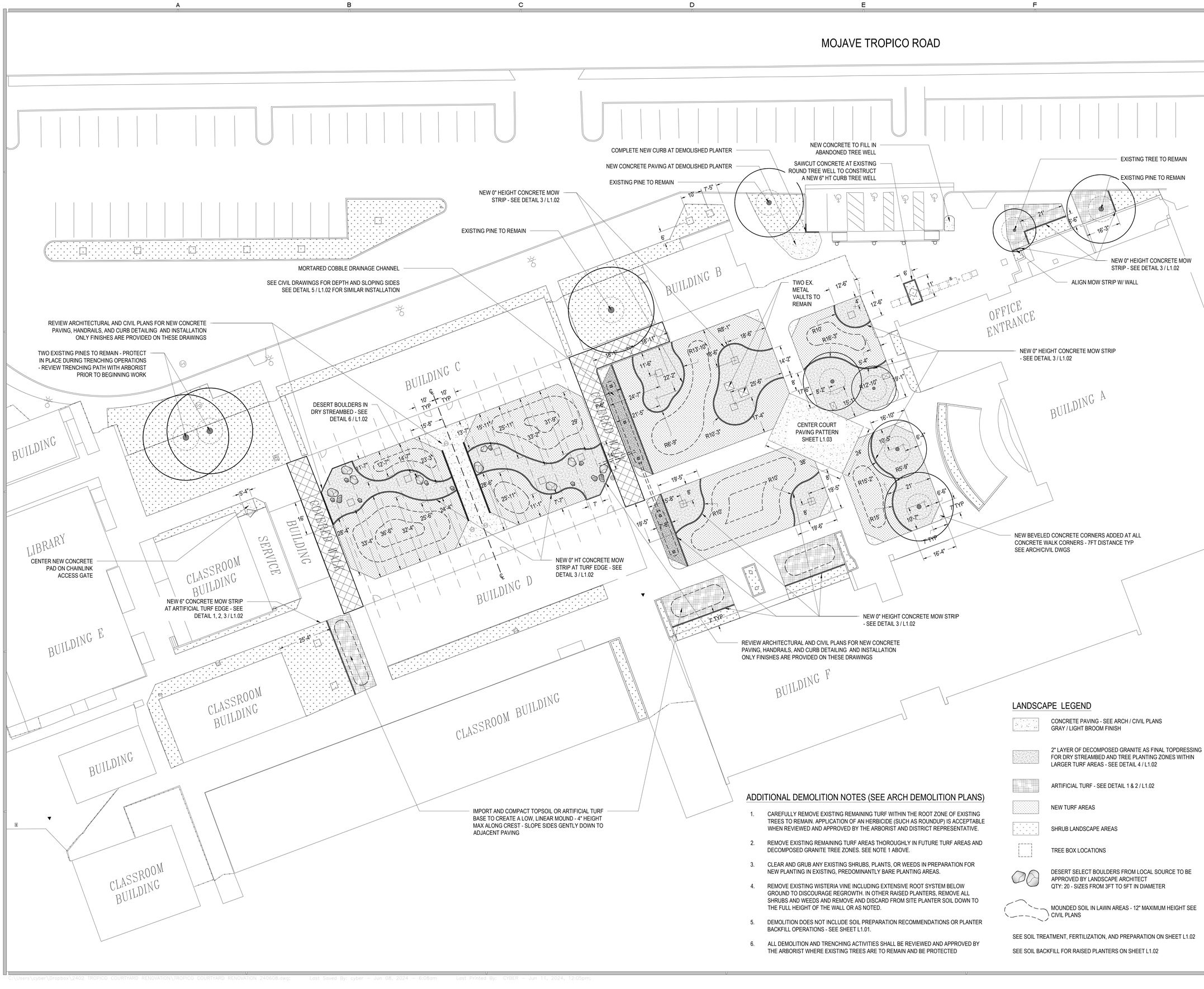
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DETAILS

Job No. 2940.400

Date 10-16-2024

C4.02



ADDITIONAL DEMOLITION NOTES (SEE ARCH DEMOLITION PLANS)

1. CAREFULLY REMOVE EXISTING REMAINING TURF WITHIN THE ROOT ZONE OF EXISTING TREES TO REMAIN. APPLICATION OF AN HERBICIDE (SUCH AS ROUNDUP) IS ACCEPTABLE WHEN REVIEWED AND APPROVED BY THE ARBORIST AND DISTRICT REPRESENTATIVE.
2. REMOVE EXISTING REMAINING TURF AREAS THOROUGHLY IN FUTURE TURF AREAS AND DECOMPOSED GRANITE TREE ZONES. SEE NOTE 1 ABOVE.
3. CLEAR AND GRUB ANY EXISTING SHRUBS, PLANTS, OR WEEDS IN PREPARATION FOR NEW PLANTING IN EXISTING, PREDOMINANTLY BARE PLANTING AREAS.
4. REMOVE EXISTING WISTERIA VINE INCLUDING EXTENSIVE ROOT SYSTEM BELOW GROUND TO DISCOURAGE REGROWTH. IN OTHER RAISED PLANTERS, REMOVE ALL SHRUBS AND WEEDS AND REMOVE AND DISCARD FROM SITE PLANTER SOIL DOWN TO THE FULL HEIGHT OF THE WALL OR AS NOTED.
5. DEMOLITION DOES NOT INCLUDE SOIL PREPARATION RECOMMENDATIONS OR PLANTER BACKFILL OPERATIONS - SEE SHEET L1.01.
6. ALL DEMOLITION AND TRENCHING ACTIVITIES SHALL BE REVIEWED AND APPROVED BY THE ARBORIST WHERE EXISTING TREES ARE TO REMAIN AND BE PROTECTED

LANDSCAPE LEGEND

- CONCRETE PAVING - SEE ARCH / CIVIL PLANS GRAY / LIGHT BROOM FINISH
- 2" LAYER OF DECOMPOSED GRANITE AS FINAL TOPDRESSING FOR DRY STREAMBED AND TREE PLANTING ZONES WITHIN LARGER TURF AREAS - SEE DETAIL 4 / L1.02
- ARTIFICIAL TURF - SEE DETAIL 1 & 2 / L1.02
- NEW TURF AREAS
- SHRUB LANDSCAPE AREAS
- TREE BOX LOCATIONS
- DESERT SELECT BOULDERS FROM LOCAL SOURCE TO BE APPROVED BY LANDSCAPE ARCHITECT QTY: 20 - SIZES FROM 3FT TO 5FT IN DIAMETER
- MOUNDED SOIL IN LAWN AREAS - 12" MAXIMUM HEIGHT SEE CIVIL PLANS

SEE SOIL TREATMENT, FERTILIZATION, AND PREPARATION ON SHEET L1.02

SEE SOIL BACKFILL FOR RAISED PLANTERS ON SHEET L1.02

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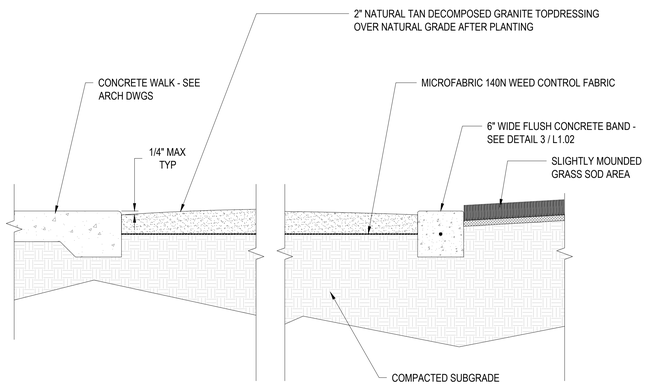
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NEW LANDSCAPE LAYOUT PLAN

Job No.
2940.400

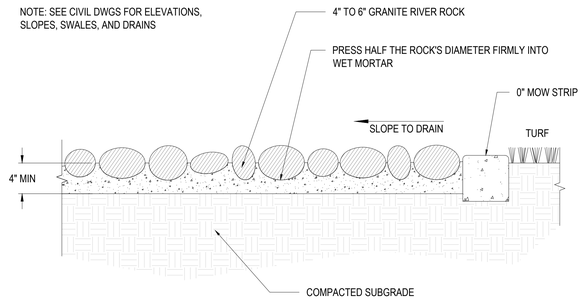
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06-01-24

L1.01



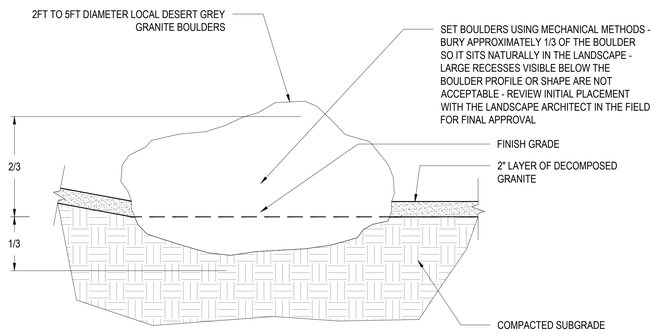
4 DECOMPOSED GRANITE TOPDRESSING

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



5 RIVER COBBLE SET IN MORTAR BASE AT DRAINAGE CHANNEL

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



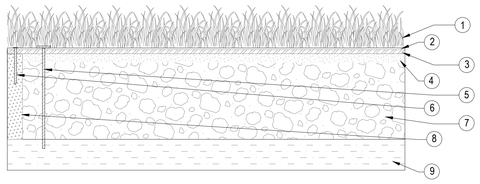
NOTE
LANDSCAPE ARCHITECT TO SELECT FINAL BOULDER VARIETY FROM SUPPLIER

6 BOULDER PLACEMENT

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

Imperial SYNTHETIC TURF

IMPERIAL SYNTHETIC TURF
4985 EAST LANDON DR.
ANAHEIM, CA 92807
PHONE: (714) 792-2920
www.imperialsyntheticturf.com



1. 4 COLOR CALIFORNIAN ROYAL 89
2. 2LB/FT^2 SUPERFILL™ ANTI MICROBIAL SAND
3. 3 OZ WEED FABRIC
4. DECOMPOSED GRANITE 1/4"-3/8" SMOOTH OUT THE BASE
5. 60D GALVANIZED NAIL
6. 1 1/4" GALVANIZED DRYWALL SCREW
7. CLASS II ROAD BASE 4" DEEP COMPACTED TO 90%+
8. BENDER BOARD 1" x 4" EDGING TO TRAP & SECURE THE BASE
9. NATURAL SOIL

TURF SPECIFICATIONS:
MODEL: CALIFORNIAN ROYAL 89.
YARN MODEL: MULTI C POLYETHYLENE WITH POLYETHYLENE THATCH.
YARN COLOR: CAL SUMMER BLEND.
THATCH COLOR: GREEN & TAN.
PILE HEIGHT: 1 7/10".
FACE WEIGHT: 89 OZ PER SQUARE YARD.
BACKING: PRIMARY = WOVEN PP, SECONDARY + URETHANE.
ROLL WIDTH: 15'-0".
WARRANTY: 15 YEARS.
DRAINAGE RATE: LESS THAN 55 INCHES PER HOUR, PER SQUARE YARD.
INFILL REQUIRED: YES, 2LB/FT^2 SUPERFILL™.
TURFTING GAUGE: 3/8".
MANUFACTURED: MADE IN USA.

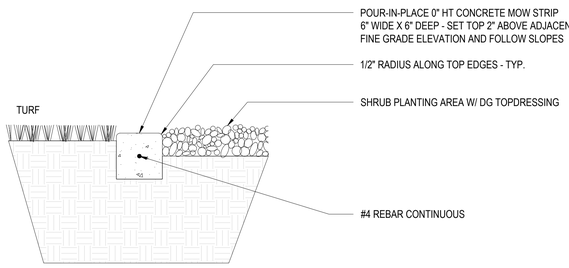
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5193-001 - Imperial Synthetic Turf - Californian Royal 89

1 LAWN AND LANDSCAPE

CALIFORNIAN ROYAL 89

5193-001 - Imperial Synthetic Turf - Californian Royal 89 REVISION DATE 11/06/2024

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NOTES
1. MOW STRIP SHALL MATCH ARCHITECTURAL 18" WIDE MOW STRIP. SEE ARCH DWGS.
2. SET MOW STRIP SO THAT TURF AREA SOIL SURFACE IS 1 INCH BELOW TOP OF MOW STRIP AND SHRUB PLANTING AREA SOIL IS 2 INCHES BELOW TOP OF HEADER
3. PROVIDE EXPANSION JOINTS EVERY 10' OF MOW STRIP LENGTH AND AT EACH RIGHT ANGLE TURNS

3 6" WIDE - 0" HT CONCRETE MOW STRIP

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

USA | CALIFORNIAN ROYAL 89

CALIFORNIAN ROYAL 89





PILE HEIGHT
1 7/10"



BACKING
Primary = Woven PP,
Secondary = Urethane

SPECIFICATIONS

YARN TYPE	Multi C Polyethylene, with Polyethylene thatch
YARN COLOR	Cal Summer Blend
THATCH COLOR	Green & Tan
PILE HEIGHT	1 7/10"
FACE WEIGHT	89 oz per square yard
TUFTING GAUGE	3/8"
BACKING	Primary = Woven PP, Secondary = Urethane
WIDTH	15'
WARRANTY	15 Years
DRAINAGE RATE	>55 inches per hour, per square yard
INFILL REQUIRED	Yes

*Meets all Federal and State of California lead level requirements

ADVANTAGES

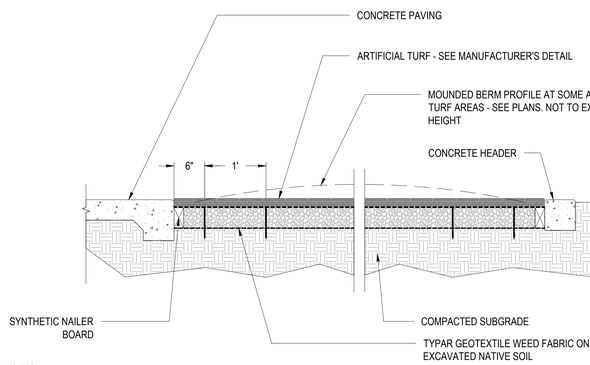
- Minimal aftercare
- Big saving on water bills
- No chemicals needed
- Resistant to bacteria, mildew and mold
- No more mowing, reduced carbon emission
- Easy to keep clean
- Safety – Easier to maintain a safe environment
- Year round beauty
- Allows maximum drainage
- Exceeds all State & Federal lead requirements
- Environmentally friendly
- Built with recyclable components

IMPERIAL SYNTHETIC TURF reserves the right to change or modify specifications of all its products at any time without notice or obligation to purchaser. Product availability is subject to change without notice. These are standard specifications subject to manufacturing tolerances.

MADE IN USA

Imperial SYNTHETIC TURF Your path to perfect green

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NOTES:
1. ADA COMPLIANT SYNTHETIC GRASS ACCESSIBLE SURFACE.
2. THE GRASS MUST BE INSTALLED AND SEAMED WITH ADJACENT PIECES RUNNING IN THE SAME DIRECTION: SEAMS SHOULD BE GLUED WITH SUITABLE SEAMING GLUE AND SEAMING CLOTH; NOT ADHESIVE TAPE.
3. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH SPECIFICATIONS BY FACTORY AUTHORIZED INSTALLERS.

2 TYPICAL ARTIFICIAL TURF DETAIL

1" = 1'-0"

ARTIFICIAL TURF INSTALLATION SPECIFICATIONS

1. Ground Preparation
   - A. Underground Hazards: Irrigation and electrical lines may be located just under the surface of the project area. Locate all irrigation/sprinkler heads. Cap off or remove all unwanted irrigation/sprinkler heads. Turn on irrigation to verify everything works correctly before you start. Do the same with any existing electrical features.
   - B. Existing Material Removal: Remove all unwanted tree roots, mulch and large rocks and existing site soil as needed to establish the required profile (mound) and grade the sub-base accordingly.
   - C. Base Preparation: Installing the base surface under the artificial lawn is critical to maintaining the stability and integrity of the artificial grass grass system. A layer of 3/8" crushed stone (also called Class 2 Road Base, Decomposed Granite, or Chat) should be spread evenly over the area. A general rule of thumb is one yard of crushed rock per 100 square feet of synthetic grass to be installed, provided that 3-4 inches of existing landscaping is removed.
   - D. The base material should be spread evenly. Grade and level to meet design and drainage requirements. Shape to desired appearance – flat, slight roll, mounded.
   - E. Lightly wet the project area and compact the base material with a roller compactor or plate compactor. Continual passes over the project area are required until a compaction rate of 90% or greater is achieved. When dry, the project area should be smooth and firm to eliminate unwanted bumps under the artificial grass grass system.
   - F. After the base is installed, the top of the artificial grass blade must be ½" above any surrounding hardscape. Add the height of the blade to the depth of the compacted base material to calculate how much material needs to be removed at these edges. The project area does not need to be flat. The area can have a slight grade, taking into account any drainage requirements.
   - G. If required, install rodent wire at this time. Install wire over entire sub-base area, with one square overlap. Secure wire to ground with landscape staples.
2. Artificial Grass Installation
   - A. Unroll the synthetic grass and stretch across the top of the prepared base. Do not drag fake grass across the prepared base. If the synthetic grass has wrinkle, lay it flat on a flat surface in the sun. Be sure to have the grain direction of each artificial grass roll facing the same direction.
   - B. Cut the artificial grass to fit the project area with a razor knife or carpet cutter. All cuts must be made from back side of synthetic grass to see the stitch rows. Complete cutting before any seaming.
   - C. When cutting curved edges, cut in small increments to match the design. Using a silver marker to draw lines on the back side of the artificial grass is recommended.
   - D. If seaming two synthetic grass rolls is required, trim the edge of each piece so that they are very straight. Once the edges of each roll are straight, lay them adjacent to each other on the base in the desired position. Make sure that the stitch lines match. If the cuts are straight and the tuft lines match, the seams will be virtually invisible.
   - E. Place both ends of the artificial grass edges together, line up the stitch lines and fold back the edges of the synthetic grass sections to lay the 6" seeming material underneath the fake sections. Apply weather resistant adhesive (UltimateBond or EZ-Seam) using a zigzag pattern. Fold the two sections of artificial grass down together over seaming material to form one seamless piece of synthetic grass.
   - F. Secure the artificial grass around the seam with 6" or 7" landscape staples. When determining how far apart to place them, alternate sides every 6" rather than placing them directly across from each other. Place weight on the seam to hold the synthetic grass in place while the glue is drying.
   - G. Attaching the artificial grass to the border:
     - i. If perimeter material is not used, use 6" or 7" stakes to secure the synthetic grass at the edges or nail into surrounding concrete flatwork. Space the stakes along the perimeter edges approximately 12" apart.
   - H. Turn on irrigation to check that all desired sprinkler heads are capped and pipes have not been punctured. All repair work must be completed prior to infilling the artificial grass grass.
3. Artificial Grass Infill
   - A. Proper infill installation is critical to maintaining your artificial grass system. Use washed sand to infill the artificial grass help to protect the synthetic grass from the elements while maintaining the blade structure and level design. The infill material must be spread evenly. Utilizing a drop spreader (the type commonly used to spread grass seed, fertilizer, lime, etc.) is recommended. Do not "dump" the infill in large quantities on the fake grass as it will be very difficult to even distribution.
   - B. Do not attempt to install the infill material while the synthetic grass or the infill material is wet, as the infill will clump.
   - C. Place the infill material into the drop spreader and set dispenser gauge on 5 or Medium. Distribute the infill material liberally, but evenly over the artificial grass. Always install sand products first. Spread ½ pounds of infill material per pass.
   - D. In between spreading the layers of infill material, brush the synthetic grass fibers upright with a stiff bristled industrial broom, Grandi Groom, carpet rake or a power broom.
   - E. Repeat the infill process until the infill material is evenly spread so that no more than ¾" of synthetic grass fibers or ½ of the blades are exposed above the top of the grass.
   - F. When the infill process is complete, water the entire area evenly with a hose to settle the material. The infill can be adjusted again after it is dry.

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3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

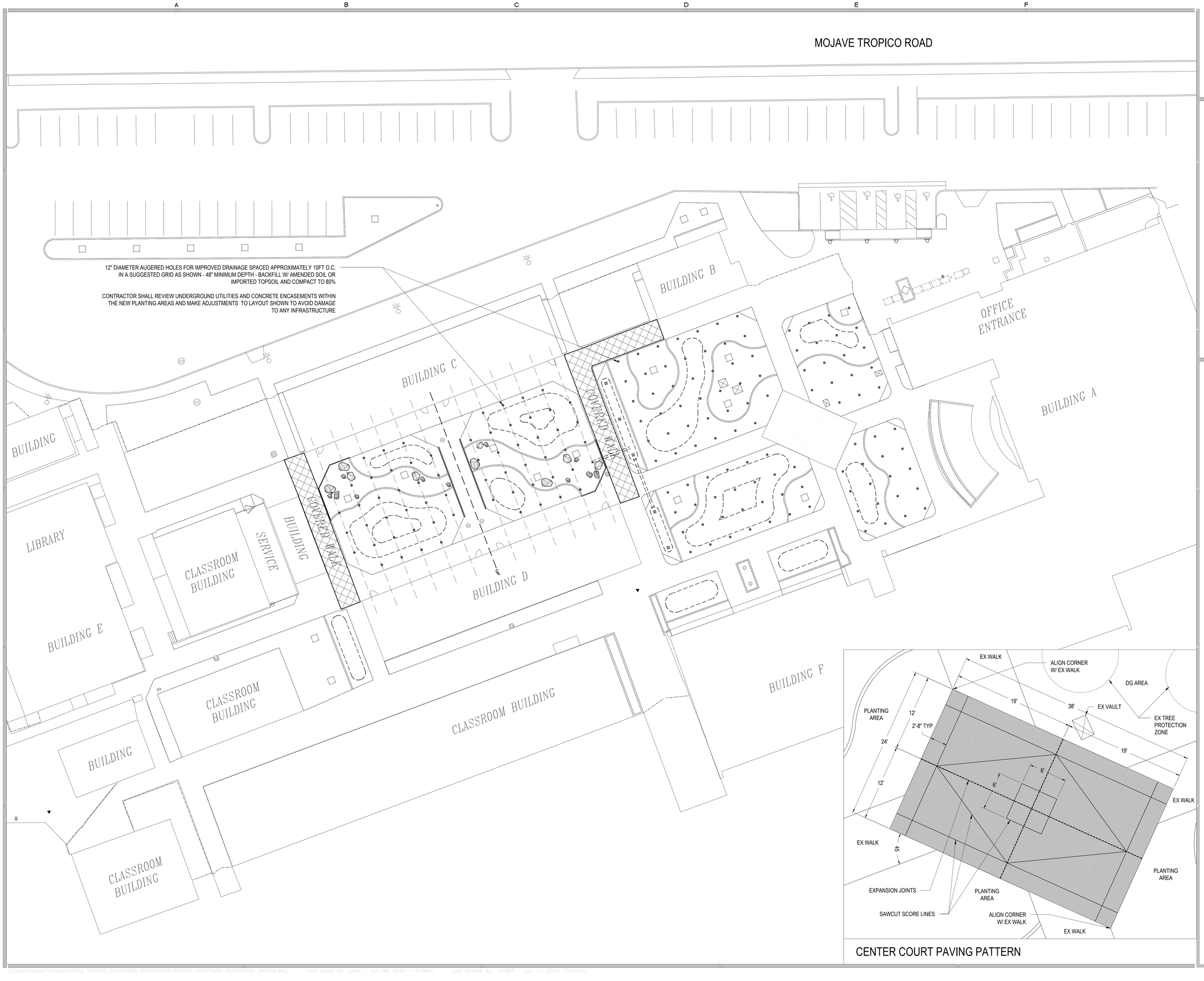
LANDSCAPE DETAILS

Job No. 2940.400

Date 06-01-24

L1.02

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TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT
UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

AUGURING PLAN

Job No.
2940.400

Date
06-01-24

L1.03

WALLACE LABORATORIES, LLC

365 Coral Circle
El Segundo, CA 90245
phone (310) 615-0116 fax (310) 640-6863

March 29, 2024

Rodrigo Mejia, RMejia@hplc.co
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RE: High Desert School, 3180 Mojave-Tropico Rd., Rosamond, 93560
Evaluations of turf in courtyard area
Site visit on March 26, 2024

Dear Rod and Phillip,

Soil Sampling Locations

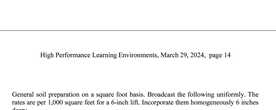


Site soils were evaluated at four locations as marked above. Soil was tested in the upper 0 to 5 inches for locations 1 and 2. Soil was also tested in the upper 0 to 6 inches for locations 3 and 4. In addition, soil was evaluated between 5 and 12 inches or between 6 and 12 inches for each of the four locations.

Turf is currently growing at location 1 but not at the other three locations. Soil is crusted for locations 2, 3 and 4. The rate of water infiltration appears to be poor as well as the rate of deep water percolation. The site appears to have surface stormwater flow to the low areas.

Surface tree roots are present in various areas. Shallow tree roots are present at locations 2, 3 and 4. Since tree roots compete with turf for moisture and nutrients, the vigor of turf will be poor when the turf competes with the trees for soil moisture and nutrients. The lack of deep tree rooting indicates the unsuitability of the soils at locations 2, 3 and 4. Since tree roots were not observed in the top 12 inches at location 1, it is assumed that active root rooting is deeper than 12 inches. Successful growth of trees in semiarid areas requires deep rooting for sufficient assimilation of water. With insufficient soil aeration, rooting is forced upward. The rate of air exchange is restricted by crusted soil, compacted soil, soil with fine sands and overly moist soil.

Location 1



Picnic tables are located in this area. The amount of foot traffic is probably lower than elsewhere.

Soil was potholed and a soil core was removed of the turf as shown above. The depth of turf rooting is about 5 inches. Deeper soil was harvested with the use of a hand soil auger.

Soil sample 1A, 0-5"

The pH is moderately alkaline at 7.55. Salinity is modest at 0.31 millimho/cm.

Nitrogen and sulfur are low. Phosphorus is modest. Potassium, iron, copper and boron are moderate. Manganese, zinc and magnesium are high. Sodium is modest. SAR (sodium adsorption ratio) is 1.

The texture is loamy sand. Based on the non-gravel fraction, it contains 77.4% sand, 16.4% silt and 6.2% clay. The gravel content is 10.0%.

Sand Sizing

very coarse sand	1 to 2 mm	8.8%
coarse sand	0.5 to 1 mm	17.3%
medium sand	0.25 to 0.5 mm	22.8%
fine sand	0.15 to 0.25 mm	17.1%
very fine sand	0.05 to 0.15 mm	24.9%

Soil organic matter is moderate at 4.21% on a dry weight basis. The carbon:nitrogen ratio is good at 11.3. The soil organic matter is mature.

Soil sample 4B, 6-12"

The pH is strongly alkaline at 8.53. Salinity is modest at 0.38 millimho/cm.

Nitrogen, phosphorus and sulfur are low. Manganese is modest. Potassium, iron and boron are moderate. Magnesium, manganese and zinc are high. Sodium is moderate. SAR is 5.1.

The texture is sandy loam. Based on the non-gravel fraction, it contains 76.0% sand, 16.5% silt and 7.4% clay. The gravel content is 10.9%.

Sand Sizing

very coarse sand	1 to 2 mm	10.4%
coarse sand	0.5 to 1 mm	17.4%
medium sand	0.25 to 0.5 mm	21.2%
fine sand	0.15 to 0.25 mm	16.9%
very fine sand	0.05 to 0.15 mm	23.2%

Soil organic matter is low at 0.88% on a dry weight basis. The carbon:nitrogen ratio is low at 5.7. The soil organic matter is old.

Evaluations

Location 4 appears to be more suitable than location 3 for the growth of trees since the soil is drier and has higher soil aeration.

The soil is not as well leached below 6 inches at location 4 as compared to location 3. The rate of water percolation appears to be poor.

Sand Sizing

very coarse sand	1 to 2 mm	10.7%
coarse sand	0.5 to 1 mm	16.3%
medium sand	0.25 to 0.5 mm	20.9%
fine sand	0.15 to 0.25 mm	17.0%
very fine sand	0.05 to 0.15 mm	25.0%

Soil organic matter is modest at 2.68% on a dry weight basis. The carbon:nitrogen ratio is good at 8.2. The soil organic matter is mature.

Soil sample 1B, 5-12"

The pH is moderately alkaline at 7.68. Salinity is low at 0.18 millimho/cm.

Nitrogen, phosphorus, manganese, zinc and copper are low. Iron and boron are modest. Potassium and copper are moderate. Magnesium is high. Sodium is low. SAR is 1.5.

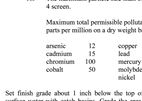
The texture is loamy sand. Based on the non-gravel fraction, it contains 77.0% sand, 16.1% silt and 6.8% clay. The gravel content is 15.0%.

Sand Sizing

very coarse sand	1 to 2 mm	9.1%
coarse sand	0.5 to 1 mm	16.9%
medium sand	0.25 to 0.5 mm	19.6%
fine sand	0.15 to 0.25 mm	14.3%
very fine sand	0.05 to 0.15 mm	25.1%

Soil organic matter is low at 0.32% on a dry weight basis. The carbon:nitrogen ratio is low at 5.4. The soil organic matter is old.

Location 2



There is no turf at this location. The soil surface is loose and friable. The soil in the top 2 inches is dark brown with high soil organic matter. Below 2 inches, the soil is light tan which indicates low soil organic matter. A composite soil was taken from the top 5 inches containing the soil with high organic matter and the soil with lower organic matter. No tree roots were present at this location. A second sample was taken between 5 and 12 inches.

Soil sample 2A, 0-5"

The pH is neutral at 7.03. Salinity is low at 0.29 millimho/cm.

Nitrogen is modest. Sulfur is low. . Phosphorus and boron are moderate. Potassium, iron, manganese, zinc, copper and magnesium are high. Sodium is modest. SAR is 1.6.

The texture is sandy loam. Based on the non-gravel fraction, it contains 68.2% sand, 24.8% silt and 7.1% clay. The gravel content is 8.3%.

Sand Sizing

very coarse sand	1 to 2 mm	9.8%
coarse sand	0.5 to 1 mm	19.3%
medium sand	0.25 to 0.5 mm	23.5%
fine sand	0.15 to 0.25 mm	17.4%
very fine sand	0.05 to 0.15 mm	23.4%

Soil organic matter is high at 9.24% on a dry weight basis. The carbon:nitrogen ratio is good at 12.0. The soil organic matter is mature.

Soil sample 2B, 5-12"

The pH is moderately alkaline at 7.68. Salinity is low at 0.25 millimho/cm.

Nitrogen is modest. Phosphorus, manganese, zinc and sulfur are low. Potassium, iron and boron are moderate. Magnesium and copper are high. Sodium is modest. SAR is 1.8.

The texture is gravelly sandy loam. Based on the non-gravel fraction, it contains 77.2% sand, 15.1% silt 7.7% clay. The gravel content is 21.2%.

Sand Sizing

very coarse sand	1 to 2 mm	12.4%
coarse sand	0.5 to 1 mm	17.5%
medium sand	0.25 to 0.5 mm	18.5%
fine sand	0.15 to 0.25 mm	12.9%
very fine sand	0.05 to 0.15 mm	17.6%

Soil organic matter is low at 0.32% on a dry weight basis. The carbon:nitrogen ratio is low at 5.9. The soil organic matter is old.

Location 3



Location 3 is a low spot where the soil moisture was high. Water appears to pond in this area. Water infiltration and percolation appear to be impaired. Active shallow tree roots were present in the upper 2 inches but not below 2 inches. Turf was not present at this location. A composite soil sample was taken between 0 and 6 inches. A second soil sample was taken between 6 and 12 inches.

Soil sample 3A, 0-6"

The pH is slightly alkaline at 7.15. Salinity is low at 0.20 millimho/cm.

Nitrogen and sulfur are low. . Phosphorus is modest. Potassium and boron are moderate. Iron, manganese, zinc, copper and magnesium are high. Sodium is low. SAR is 1.1.

The texture is sandy loam. Based on the non-gravel fraction, it contains 73.9% sand, 18.8% silt and 7.3% clay. The gravel content is 12.9%.

Sand Sizing

very coarse sand	1 to 2 mm	12.2%
coarse sand	0.5 to 1 mm	17.4%
medium sand	0.25 to 0.5 mm	20.7%
fine sand	0.15 to 0.25 mm	16.1%
very fine sand	0.05 to 0.15 mm	20.7%

Soil organic matter is moderate at 4.63% on a dry weight basis. The carbon:nitrogen ratio is good at 10.0. The soil organic matter is mature.

Soil sample 3B, 6-12"

The pH is modestly alkaline at 7.31. Salinity is low at 0.14 millimho/cm.

Nitrogen, phosphorus, manganese and sulfur are low. Zinc and boron are modest. Potassium, iron and copper are moderate. Magnesium is high. Sodium is low. SAR is 1.3.

The texture is sandy loam. Based on the non-gravel fraction, it contains 77.0% sand, 15.9% silt 7.0% clay. The gravel content is 9.2%.

Sand Sizing

very coarse sand	1 to 2 mm	8.9%
coarse sand	0.5 to 1 mm	17.5%
medium sand	0.25 to 0.5 mm	24.0%
fine sand	0.15 to 0.25 mm	17.8%
very fine sand	0.05 to 0.15 mm	22.7%

Soil organic matter is low at 0.61% on a dry weight basis. The carbon:nitrogen ratio is low at 5.6. The soil organic matter is old.

Location 4



Location 4 is a high spot where water does not pond. The soil was drier. Soil aeration is higher in drier soil.

A minor amount of turf was present at this location. Tree rooting with numerous fine feeder roots was vigorous at this location but the depth of rooting was limited to the top 4 inches. A composite soil sample was taken between 0 and 6 inches. A second soil sample was taken between 6 and 12 inches.

Soil sample 4A, 0-6"

The pH is moderately alkaline at 7.74. Salinity is modest at 0.39 millimho/cm.

Nitrogen and sulfur are low. . Phosphorus and boron are moderate. Potassium, iron, manganese, zinc, copper and magnesium are high. Sodium is modest. SAR is 1.5.

The texture is sandy loam. Based on the non-gravel fraction, it contains 71.1% sand, 22.0% silt and 6.9% clay. The gravel content is 9.0%.

Sand Sizing

very coarse sand	1 to 2 mm	8.8%
coarse sand	0.5 to 1 mm	17.3%
medium sand	0.25 to 0.5 mm	22.8%
fine sand	0.15 to 0.25 mm	17.1%
very fine sand	0.05 to 0.15 mm	24.9%

Soil organic matter is moderate at 4.21% on a dry weight basis. The carbon:nitrogen ratio is good at 11.3. The soil organic matter is mature.

Soil sample 4B, 6-12"

The pH is strongly alkaline at 8.53. Salinity is modest at 0.38 millimho/cm.

Nitrogen, phosphorus and sulfur are low. Manganese is modest. Potassium, iron and boron are moderate. Magnesium, manganese and zinc are high. Sodium is moderate. SAR is 5.1.

The texture is sandy loam. Based on the non-gravel fraction, it contains 76.0% sand, 16.5% silt and 7.4% clay. The gravel content is 10.9%.

Sand Sizing

very coarse sand	1 to 2 mm	10.4%
coarse sand	0.5 to 1 mm	17.4%
medium sand	0.25 to 0.5 mm	21.2%
fine sand	0.15 to 0.25 mm	16.9%
very fine sand	0.05 to 0.15 mm	23.2%

Soil organic matter is low at 0.88% on a dry weight basis. The carbon:nitrogen ratio is low at 5.7. The soil organic matter is old.

Evaluations

Location 4 appears to be more suitable than location 3 for the growth of trees since the soil is drier and has higher soil aeration.

The soil is not as well leached below 6 inches at location 4 as compared to location 3. The rate of water percolation appears to be poor.

Sand sizing

E. J. Hewitt's monograph entitled **Sand and Water Culture Methods Used in the Study of Plant Nutrition,** published in 1952 reported that:

Sand particles larger than about 0.8 millimeters do not retain significant amounts of water. Sand with these particles have high aeration. Sands with particles below about 0.5 millimeter hold water well but have insufficient porosity when the media is moist. The sweet spot in between 0.5 and 0.8 millimeters.

The best sand size for horticultural purposes is clean, narrowly graded, sized sand with particles about 0.8 millimeter in diameter. Coarser sand has insufficient water holding capacity and finer sand has insufficient air porosity when moist. Cement sand and plaster sand are designed to cement. They contain widely graded sands in order to more fully fill the voids with sand. Horticultural sands and narrowly graded for porosity, air exchange and drainage.

Sand	No. 1	F	8 mesh
Physical constants and	85% 0.15-0.2 mm.	85% 0.2-0.7 mm.	97% 0.6-2.0 mm.
Saturation percent viscosity	45-90%	33%	9%
Air (c.c.) in pore space of 3 gm. loss when saturated with water)	8.9%	14.3%	21.6%
Permeability (i.e. air flow/min./ cm. (at 1 g./ cm.² pressure)			
(a) saturated	353	492	2450
(b) saturated and drained	2	2	218
(c) 4% moisture	358	1060	2450

Sands with predominately fine particles in the effective range of 0.15 to 0.5 millimeter have insufficient air space when the sand is saturated at 0.9% on a volume basis. Large sands such as those with an effective range of 0.6 to 1.0 millimeter have a large amount of air space at 21.6% on a volume basis when the sand is saturated but the water holding capacity is low at 9% on a weight basis. The best balance of air space and water retention is in the mid range of about 0.6 millimeter.

Sandy loam and loam sand soils are deemed to be too poorly aerated when the sum or fine sand and very fine sand exceeds 40%. These site soils are slightly over this arrount sand for locations 1A, 2A, 3B, 4A and 4B as shown below:

description	fine sand	very fine sand	sum fine and very fine sand
#1A, 0-5"	17.0%	25.0%	42.0%
#1B, 5-12"	14.3%	25.1%	39.4%
#2A, 0-5"	17.4%	23.4%	40.8%
#2B, 5-12"	12.9%	17.6%	30.4%
#3A, 0-6"	16.1%	20.7%	36.8%
#3B, 6-12"	17.8%	22.7%	40.4%
#4A, 0-6"	17.1%	24.9%	42.0%
#4B, 6-12"	16.9%	23.2%	40.1%

Soils with high amount of fine and very fine sand are effective for plant growth in non-irrigation soils. Without irrigation, deep rooting occurs. However with irrigation, soil moisture limits the rate of air exchange. This is shown at location 3.

Trees

Since the trees are shallow rooted and extend into turf areas, tree vigor is expected to be reduced if these site soils and cultivated or are replaced in order to provide for the growth of turf. Tree toppling in high winds is likely if the rooting zone were to be reduced. An option is to prune the trees in the dormant season and to improve the soils deeply for deeper rooting before stressful conditions occur but this will not guarantee the stability of trees.

Additional, shade trees will reduce sunlight for warm season grasses and reduce their vigor in shaded areas.

New growth along major limbs is due to latent buds which have emerged after tree stresses such as defoliation from water deficits or other problems. This situation is indicated at the tree at location 4 pictured below:



Some of the trees appear to have been removed. One existing tree appears to be dead. There is not sap in the branches.

Recommendations

For the best growth of turf, replace the existing soils at least 1 foot deep. Also replace trees and backfill with the import soil. Prepare planting pits at least twice as wide as the rootballs. Remove the bottom of the boxes from the boxed trees in order to allow for the development of a taproot and also for water migration through the rootball soil.

Rip the subgrade at least 12 inches deep to avoid a sharp soil interface before placing the import soil. Apply agricultural gypsum at 20 pounds per 1,000 square feet and incorporate 6 inches deep into the subgrade before the placement of import soil. Modestly compact the subgrade to about 80% compaction before the placement of import soil.

Import 2 inches of import soil over the subgrade and incorporate it 4 inches deep to make a 50/50 blend of subgrade and import soil in order to avoid a sharp soil interface. Place the balance of import soil.

Compact import soil or amended site soil to about 75% to 80% compaction to avoid future subsidence or lack of water infiltration. A foot print should make a slight depression of about ½ inch.

Set finish grade about 1 inch below the top of the pavement. Collect and discharge surface water with catch basins. Grade the area to avoid low spots which may collect surface water.

Normally irrigate deeply but not frequently. Balance soil moisture with soil aeration. Avoid overly dry and overly wet soil. Evaluate rooting vigor, soil moisture and water migration.

For site maintenance, apply Simplot or Yara calcium ammonium nitrate (27-0-0) at 4 pounds per 1,000 square feet about once per quarter or as needed based on the properties of the import soil.

Monitor the site with periodic soil and leaf tissue testing. Adjust the maintenance program as needed. The

If sodded, the soil base of the sod must contain a well drained, porous soil. Hydroseeding avoids the problems of a potential soil interface.

Import sandy loam soil suggestions

General - Topsoil shall be free of roots, clods, stones larger than 1-inch in the greatest dimension, pockets of coarse sand, noxious weeds, sticks, lumber, brush and other litter. It shall not be infested with nematodes or other undesirable disease-causing organisms such as insects and plant pathogens. Maximum gravel between 0.5 and 1 inch shall be less than 5%.

Topsoil shall be friable and have sufficient structure in order to give good tilth and aeration to the soil.

Gradation limits - soil texture shall be a sandy loam. The definition of soil texture shall be the USDA classification scheme. Gravel over 2 millimeters in diameter shall be less than 10% by weight. The clay content shall be less than 15%. Clay plus silt content shall be less than 35%. Sand finer than 100 mesh (0.15 millimeters) shall be less than 15%. Sand finer than 60 mesh (0.25 millimeters) shall be less than 35%. Sand larger than 32 mesh (0.50 millimeters) shall be at least 15%.

Permeability Rate - Hydraulic conductivity rate shall be not less than one inch per hour nor more than 10 inches per hour when tested in accordance with the USDA Handbook Number 60, method 34b or other approved methods.

Fertility - The range of the essential elemental concentration in soil shall be as follows when amended:

	Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kilogram dry weight basis
phosphorus	15 - 40
potassium	120 - 220
iron	4 - 35
manganese	0.6 - 6
zinc	1 - 8
copper	0.3 - 5
boron	0.2 - 1
magnesium	50 - 150
sodium	0 - 100
sulfur	25 - 500
molybdenum	0.1 - 2

Acidity - The soil pH range measured in the saturation extract (Method 21a, USDA Handbook Number 60) shall be 6.5- 7.5.

Salinity - The salinity range measured in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 0.5 - 2.5 dS/m.

Chloride - The maximum concentration of soluble chloride in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 150 mg/l (parts per million).

Boron - The maximum concentration of soluble boron in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 1 mg/l (parts per million).

Sodium Adsorption Ratio (SAR) - The maximum SAR shall be 3 measured per Method 20b, USDA Handbook Number 60.

Aluminum – Available aluminum measured with the Ammonium Bicarbonate/DTPA Extraction shall be less than 3 parts per million.

Cation Exchange Capacity - Minimum 15 milliequivalents per 100 dry grams

Exchangeable potassium - 3% to 8%
Exchangeable sodium - less than 3%
Exchangeable calcium - 65% to 78%
Exchangeable magnesium - 10% to 18%
Exchangeable hydrogen - 5% to 15%

Soil Organic Matter Content - Sufficient soil organic matter shall be present to impart good physical soil properties but not be excessive to cause toxicity or cause excessive reduction in the volumes of soil due to decomposition of organic matter. The desirable range is 6% to 8%. The carbon:nitrogen ratio should be about 10.

Calcium Carbonate Content - Free calcium carbonate (limestone) shall not be present for acid-loving plants.

Heavy Metals - The maximum permissible elemental concentration in the soil shall not exceed the following concentrations:

	Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kilogram) dry weight basis
arsenic	1
cadmium	1
chromium	10
cobalt	2
lead	30
mercury	1
nickel	5
selenium	3
silver	0.5
vanadium	3

If the soil pH is between 6 and 7, the maximum permissible elemental concentration shall be reduced 50%. If the soil pH is less than 6.0, the maximum permissible elemental concentration shall be reduced 75%. No more than three metals shall be present at 50% or more of the above values.

Option 2

This is less desirable but it less expensive is to amend site soils at least 1 foot deep. Work with a qualified arborist in order to determine how close the soils can be amended to the existing trees. Trees can be pruned to decrease their water requirements and potential of toppling in high winds.

Remove the existing turf and tree roots from the areas to be amending. Rip soils to be amended at least 1 foot deep, 2 feet deep is better. Amend the soils to a depth of 12 inches. Two lifts may be needed. The following recommendations are give for a 6-inch lift.

Remove severed tree roots - do not bury in the soil. If left, they will putrefy as they decompose.

Note that grade will be elevated as the soils are loosened an as amendments are applied.

General soil preparation on a square foot basis. Broadcast the following uniformly. The rates are per 1,000 square feet for a 6-inch lift: Incorporate them homogeneously 6 inches deep:

Simplot or Yara calcium ammonium nitrate (27-0-0) – 4 pounds
Potassium sulfate (0-0-50) – 6 pounds
Triple superphosphate (0-45-0) – 4 pounds
Agricultural gypsum - 15 pounds
Number 16 sand - 5 cubic yards
Organic soil amendment - about 5 cubic yards, sufficient for 5% to 7% soil organic matter on a dry weight basis

For the preparation on a volume basis, homogeneously blend the following materials into the soil. Rates are expressed per cubic yard:

Simplot or Yara calcium ammonium nitrate (27-0-0) – 1/4 pound
Potassium sulfate (0-0-50) – 1/4 pound
Triple superphosphate (0-45-0) – 1/4 pound
Agricultural gypsum - 1 pound
Number 16 sand - 20% by volume
Organic soil amendment - about 20% by volume, sufficient for 5% to 7% soil organic matter on a dry weight basis

Organic soil amendment:

1. Fully composted aerobic compost without presence of decomposition products. The organic matter content shall be at least 50% on a dry weight basis. Humus material shall have an acid-soluble ash content of no less than 6% and no more than 50%.
2. The pH of the material shall be between 6 and 7.5.
3. The salt content shall be less than 6 millimho/cm @ 25° C. (ECe less than 6) in a saturated paste extract.
4. Boron content of the saturated extract shall be less than 1.0 part per million.
5. Silicon content (acid-insoluble ash) shall be less than 50%.
6. Calcium carbonate shall not be present if to be applied on alkaline soils.
7. Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.
8. Composted wood products are conditionally acceptable [stable humus must be present]. Wood based products are not acceptable which are based on red wood or cedar.
9. Sludge-based materials are not acceptable.
10. Carbon:nitrogen ratio is between 8.0 and 25:1.
11. SAR (sodium adsorption ratio) less than 5.

12. Seed germination - over 80% germination in saturation extract diluted 1 to 3 in water compared to seeds germinated in deionized water.
13. Germination vigor - equal to or better than seed length for seeds germinated in deionized water.
14. Maturity and stability – Solvita 6 or higher.
15. Molar ratio of ammoniacal nitrogen to nitrate nitrogen less than 2.
16. Maximum concentration of ammonia as nitrogen is 400 parts per million.
17. The compost shall be aerobic without maledorous pressence of decomposition products.
18. The maximum particle size shall be 0.5 inch, 80% or more shall pass a No. 4 screen.

Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis:

arsenic	12	copper	150	selenium	30
cadmium	15	lead	100	silver	10
chromium	100	mercury	10	vanadium	50
cobalt	50	molybdenum	20	zinc	200
		nickel	100		

Set finish grade about 1 inch below the top of the pavement. Collect and discharge surface water with catch basins. Grade the area to avoid low spots which may collect surface water.

Compact import soil or amended site soil to about 75% to 80% compaction to avoid future subsidence or lack of water infiltration. A foot print should make a slight depression of about ½ inch.

Normally irrigate deeply but not frequently. Balance soil moisture with soil aeration. Avoid overly dry and overly wet soil. Evaluate rooting vigor, soil moisture and water migration.

If sodded, the soil base of the sod must contain a well drained, porous soil. Hydroseeding avoids the problems of a potential soil interface.

For site maintenance, apply Simplot or Yara calcium ammonium nitrate (27-0-0) at 4 pounds per 1,000 square feet about once per quarter.

Monitor the site with periodic soil and leaf tissue testing. Adjust the maintenance program as needed.

Drainage

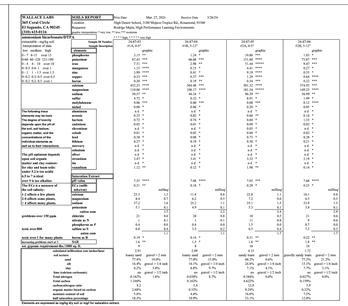
The rate of water percolation appears to be poor in soil below 5 or 6 inches.

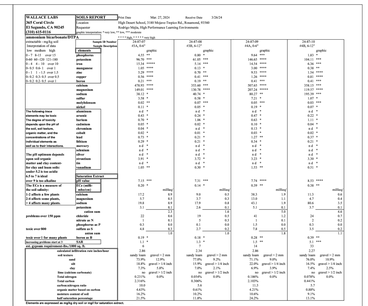
Holes can be augered one-foot wide and about four feet deep or deeper to extend into better drained soil on 10-foot centers for increasing the water percolation.

Backfill the holes with import soil or amended soil compacted to about 80%. Since there will be some subsidence, the work must be done prior to the placement of import soil or ripping and tillage of site soils for option 2.

Sincerely,

Garn A. Wallace, Ph. D.
GAW:n





SOIL MANAGEMENT PLAN

1. CONTRACTOR SHALL INCORPORATE THE RECOMMENDATIONS OF THIS SOILS REPORT IN THE REFURBISHMENT OF THE EXISTING SOIL WITHIN THIS PROJECT WITH THE GOAL BEING THE HEALTH AND VIGOROUS GROWTH OF THE NEW PLANTINGS.
2. INCLUDE AUGURING AS PART OF THE SOIL CONDITIONING AS NOTED ON SHEET L1.03 AND REVIEW PLACEMENT OF AUGURED WITH THE ARBORIST TO AVOID ANY DAMAGE TO EXISTING TREES.
3. A BID ALTERNATE WOULD BE TO WORK WITH WALLACE LABORATORIES ON A SOIL IMPROVEMENT PLAN THAT DOES NOT INVOLVE REMOVING THE TOP 12" OF SOIL BE ALLOWS FOR RIPPING OF SOIL TO 12" EXCEPT WHERE EXISTING TREES AND TREE ROOTS WOULD PRECLUDE THAT.
4. CONTRACTOR SHALL COORDINATE WITH AND FOLLOW RECOMMENDATIONS OF THE DISTRICT ARBORIST IN ALL WORK AROUND EXISTING TREES. CONTRACTOR SHOULD INCLUDE AT LEAST ONE PRE-CONSTRUCTION SITE MEETING WITH THE ARBORIST AND THE DESIGN TEAM TO ASSIST IN CLARIFYING THE SCOPE OF WORK AND EXPECTED RESULTS.

AGENCY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

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architecture planning interiors

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10/31/2025

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Drawn by

Checked by

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT
UPGRADE PROJECT

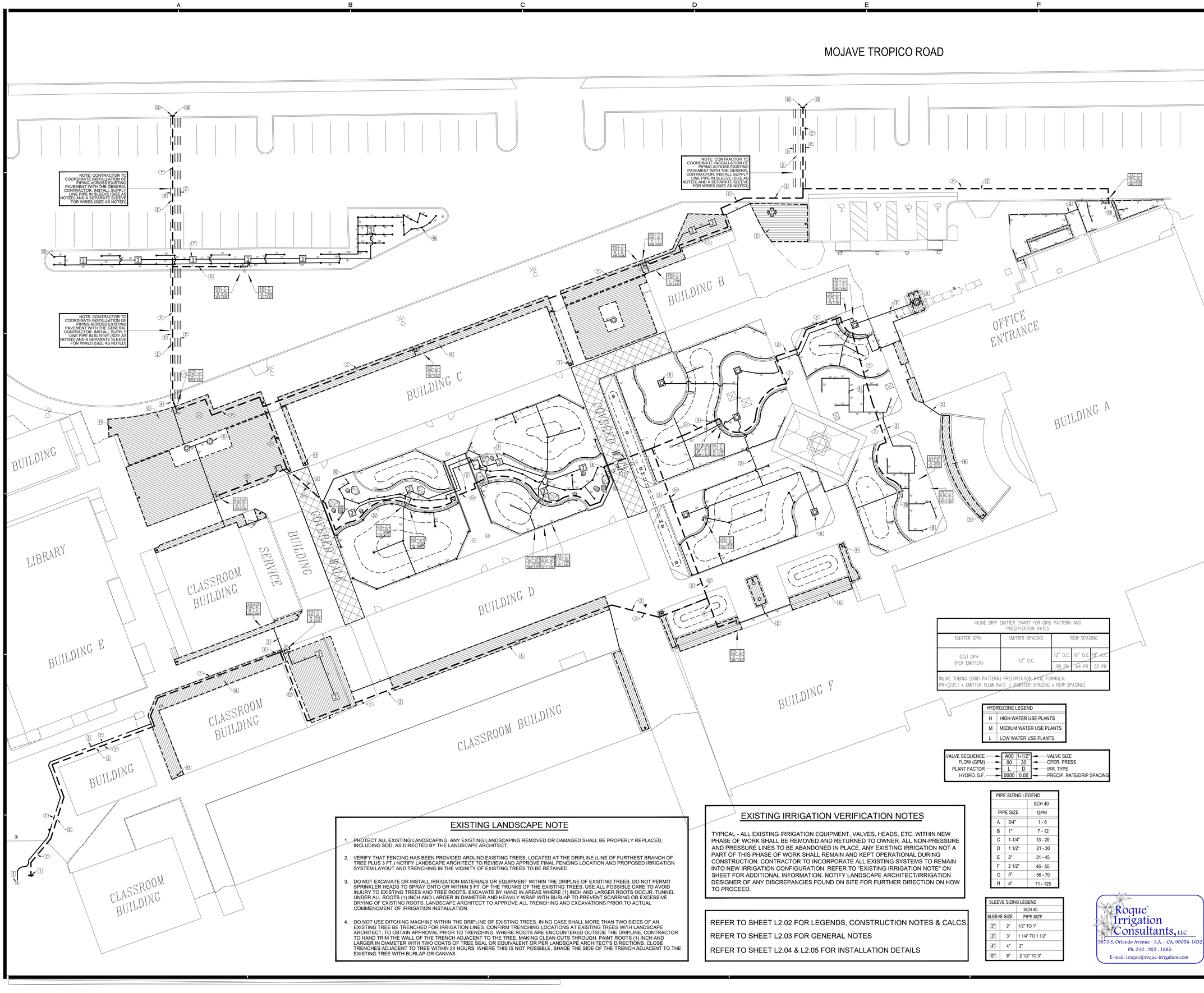
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

SOIL TESTING ANALYSIS AND RECOMMENDATIONS

Job No.
2940.400

Date
06-01-24

L1.04



EXISTING LANDSCAPE NOTE

1. PROTECT ALL EXISTING LANDSCAPING. ANY EXISTING LANDSCAPING REMOVED OR DAMAGED SHALL BE PROPERLY REPLACED, INCLUDING SOD, AS DIRECTED BY THE LANDSCAPE ARCHITECT.
2. VERIFY THAT FENCING HAS BEEN PROVIDED AROUND EXISTING TREES, LOCATED AT THE DRIPLINE (LINE OF FURTHEST BRANCH OF TREE PLUS 3 FT.) NOTIFY LANDSCAPE ARCHITECT TO REVIEW AND APPROVE FINAL FENCING LOCATION AND PROPOSED IRRIGATION SYSTEM LAYOUT AND TRENCHING IN THE VICINITY OF EXISTING TREES TO BE RETAINED.
3. DO NOT EXCAVATE OR INSTALL IRRIGATION MATERIALS OR EQUIPMENT WITHIN THE DRIPLNE OF EXISTING TREES. DO NOT PERMIT SPRINKLER HEADS TO SPRAY ONTO OR WITHIN 5 FT. OF THE TRUNKS OF THE EXISTING TREES. USE ALL POSSIBLE CARE TO AVOID INJURY TO EXISTING TREES AND TREE ROOTS. EXCAVATE BY HAND IN AREAS WHERE (1) INCH AND LARGER ROOTS OCCUR. TUNNEL UNDER ALL ROOTS (1) INCH AND LARGER IN DIAMETER AND HEAVILY WRAP WITH BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING OF EXISTING ROOTS. LANDSCAPE ARCHITECT TO APPROVE ALL TRENCHING AND EXCAVATIONS PRIOR TO ACTUAL COMMENCMENT OF IRRIGATION INSTALLATION.
4. DO NOT USE DITCHING MACHINE WITHIN THE DRIPLINE OF EXISTING TREES. IN NO CASE SHALL MORE THAN TWO SIDES OF AN EXISTING TREE BE TRENCHED FOR IRRIGATION LINES. CONFIRM TRENCHING LOCATIONS AT EXISTING TREES WITH LANDSCAPE ARCHITECT. TO OBTAIN APPROVAL PRIOR TO TRENCHING. WHERE ROOTS ARE ENCOUNTERED OUTSIDE THE DRIPLINE, CONTRACTOR TO HAND TRIM THE WALL OF THE TRENCH ADJACENT TO THE TREE, MAKING CLEAN CUTS THROUGH. PAINT ROOTS (1) INCH AND LARGER IN DIAMETER WITH TWO COATS OF TREE SEAL OR EQUIVALENT OR PER LANDSCAPE ARCHITECT'S DIRECTIONS. CLOSE TRENCHES ADJACENT TO TREE WITHIN 24 HOURS. WHERE THIS IS NOT POSSIBLE, SHADE THE SIDE OF THE TRENCH ADJACENT TO THE EXISTING TREE WITH BURLAP OR CANVAS.

EXISTING IRRIGATION VERIFICATION NOTES

TYPICAL - ALL EXISTING IRRIGATION EQUIPMENT, VALVES, HEADS, ETC. WITHIN NEW PHASE OF WORK SHALL BE REMOVED AND RETURNED TO OWNER. ALL NON-PRESSURE AND PRESSURE LINES TO BE ABANDONED IN PLACE. ANY EXISTING IRRIGATION NOT A PART OF THIS PHASE OF WORK SHALL REMAIN AND KEPT OPERATIONAL DURING CONSTRUCTION. CONTRACTOR TO INCORPORATE ALL EXISTING SYSTEMS TO REMAIN INTO NEW IRRIGATION CONFIGURATION. REFER TO "EXISTING IRRIGATION NOTE" ON SHEET FOR ADDITIONAL INFORMATION. NOTIFY LANDSCAPE ARCHITECT/IRRIGATION DESIGNER OF ANY DISCREPANCIES FOUND ON SITE FOR FURTHER DIRECTION ON HOW TO PROCEED.

REFER TO SHEET L2.02 FOR LEGENDS, CONSTRUCTION NOTES & CALCS.

REFER TO SHEET L2.03 FOR GENERAL NOTES

REFER TO SHEET L2.04 & L2.05 FOR INSTALLATION DETAILS

INLINE DRIP EMITTER CHART FOR GRID PATTERN AND PRECIPITATION RATES				
EMITTER GPH	EMITTER SPACING	ROW SPACING		
		12" O.C.	16" O.C.	18" O.C.
0.53 GPH (PER EMITTER)	12" O.C.	.85 PR	.64 PR	.57 PR
INLINE TUBING (GRID PATTERN) PRECIPITATION RATE FORMULA: PR=(231.1 x EMITTER FLOW RATE) / (EMITTER SPACING x ROW SPACING)				

HYDROZONE LEGEND	
H	HIGH WATER USE PLANTS
M	MEDIUM WATER USE PLANTS
L	LOW WATER USE PLANTS

VALVE SEQUENCE	A00	1-1/2"	VALVE SIZE
FLOW (GPM)	00	30	OPER. PRESS.
PLANT FACTOR	L	D	IRR. TYPE
HYDRO. S.F.	0000	0.00	PRECIP. RATE/DRIP SPACING

PIPE SIZING LEGEND		
		SCH 40
PIPE SIZE		GPM
A	3/4"	1 - 6
B	1"	7 - 12
C	1-1/4"	13 - 20
D	1 1/2"	21 - 30
E	2"	31 - 45
F	2 1/2"	46 - 55
G	3"	56 - 70
H	4"	71 - 125

SLEEVE SIZING LEGEND		
		SCH 40
SLEEVE SIZE		PIPE SIZE
[2"]	2"	1/2" TO 1"
[3"]	3"	1 1/4" TO 1 1/2"
[4"]	4"	2"
[6"]	6"	2 1/2" TO 3"

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AGENCY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

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Drawn by JL
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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

IRRIGATION PLAN

Job No. 2940.400

Date 04-23-24

L2.01

CONSTRUCTION NOTES

TYPICAL - DENOTES NEW 3" PRESSURE SUPPLY LINE. CONTRACTOR TO EXTEND NEW LINE AND CONNECT TO SYSTEM SUPPLY (MASTER VALVE/FLOW SENSOR, BOOSTER PUMP, BACKFLOW ASSEMBLIES PROVIDED UNDER ATHLETIC FIELD EXPANSION PROJECT. CONTRACTOR TO REFER TO ATHLETIC FIELD EXPANSION PLANS FOR ADDITIONAL INFORMATION.), AS REQUIRED. EXACT ROUTING, LOCATION OF CONNECTION POINT AND WATER PRESSURE TO BE DETERMINED AND VERIFIED ON SITE. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND ON SITE PRIOR TO PROCEEDING WITH WORK.

[1]

TYPICAL - ALL LINES SHOWN CROSSING EXISTING PAVING, HARDSCAPE, ETC., SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO BORE, CUT & PATCH, ETC. UNDER PAVING, HARDSCAPE, ETC. AS NEEDED AND REPAIRED TO MATCH EXISTING CONDITION. CONTRACTOR TO COORDINATE WITH OTHER TRADES ON SITE IN ORDER TO MINIMIZE ADDITIONAL TRENCHING. WHENEVER POSSIBLE, CONTRACTOR TO UTILIZE CROSSOVER TRENCHING PERFORMED BY OTHER TRADES. CONTRACTOR TO OBTAIN APPROVAL FROM GENERAL CONTRACTOR PRIOR TO PROCEED. EXACT LOCATION AND ROUTING OF LINES TO BE DETERMINED ON SITE. REFER TO SLEEVING NOTES ON LEGEND.

[2]

TYPICAL - DENOTES EXISTING (24 STATION) AUTOMATIC CONTROLLER ASSEMBLY. EXACT LOCATION OF EXISTING CONTROLLER TO BE DETERMINED AND VERIFIED ON SITE. CONTRACTOR TO EXTEND NEW WIRES (INSTALLED IN SLEEVE/FLEX CONDUIT, SIZE AS REQUIRED) , AS REQUIRED TO NEW VALVE LOCATIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND ON SITE.

[3]

TYPICAL - (BRASS) GATE/SECTIONAL VALVE (LINE SIZE). EXACT LOCATION TO BE DETERMINED ON SITE.

[4]

TYPICAL - ALL LINES AND EQUIPMENT SHOWN OUTSIDE OF PLANTING AREAS OR PROPERTY LINE ARE FOR GRAPHIC CLARITY PURPOSES ONLY. ALL LINES AND EQUIPMENT SHALL BE INSTALLED WITHIN PLANTING AREAS WHENEVER POSSIBLE AND WITHIN PROPERTY LINES AT ALL TIMES. EXACT ROUTING OF LINES AND LOCATION OF EQUIPMENT TO BE DETERMINED ON SITE. CONTRACTOR TO ENSURE AS-BUILT DIMENSIONS AND NOTATIONS BE KEPT CURRENT FOR ENTIRE DURATION OF CONSTRUCTION. CURRENT AS-BUILT PLANS SHALL BE AVAILABLE FOR ALL SITE REVIEWS AND SHALL BE KEPT ON SITE AT ALL TIMES.

[5]

TYPICAL - DENOTES PRESSURE COMPENSATING IN-LINE EMITTER TUBING SYSTEMS. CONTRACTOR TO INSTALL DRIP TUBING IN GRID TYPE PATTERN. EXACT LAYOUT OF TUBING TO BE DETERMINED AND APPROVED BY LANDSCAPE ARCHITECT/IRRIGATION DESIGNER PRIOR TO FINALIZING INSTALLATION AND BACKFILL. MINOR ADJUSTMENTS AND OR ADDITIONAL TUBING MAY BE REQUIRED TO ACHIEVE A MORE UNIFORM & ADEQUATE COVERAGE.TUBING SPACING SHALL BE BETWEEN 12" O.C. (MIN.) TO 18" O.C. (MAX.) REFER TO PLANS FOR SPACING REQUIRED. TUBING SHALL BE BURIED A MIN. OF 3" AND 6" MAX. BELOW FINISH GRADE (NOT INCLUDING MULCH).

[6]

TYPICAL - DENOTES ROOT WATERING SYSTEMS FOR TREES. EXACT LOCATION TO BE DETERMINED ON SITE. REFER TO DETAIL NO. 7 FOR NUMBER OF BUBBLERS PER SIZE OF TREE, UNLESS OTHERWISE NOTED.

[7]

TYPICAL - DENOTES DRIP "SPIRAL" TYPE RINGS SYSTEMS FOR TREES. EXACT LAYOUT TO BE DETERMINED AND APPROVED BY LANDSCAPE ARCHITECT/IRRIGATION DESIGNER ON SITE PRIOR TO FINALIZING INSTALLATION. REFER TO DETAIL NO. 12 FOR GENERAL INSTALLATION NOTES.

[8]

TYPICAL - DENOTES STREAM BUBBLERS (ON POP-UP HEADS) FOR EXISTING TREES ONLY. EXACT LAYOUT TO BE DETERMINED AND APPROVED BY LANDSCAPE ARCHITECT/IRRIGATION DESIGNER ON SITE PRIOR TO FINALIZING INSTALLATION. REFER TO DETAIL NO. 13 FOR GENERAL INSTALLATION. HEADS TO BE INSTALLED APPROXIMATELY 5'-6' FROM EXISTING TREE TRUNKS. SPRAY TOWARDS TREE TRUNK WITHOUT SPRAYING ONTO (ADJUST SPRAY AS NEEDED) EXISTING TREE TRUNK.

[9]

TYPICAL - DENOTES SINGLE BUBBLER HEAD (ON POP-UP HEADS) FOR SHRUB PLANTING. EXACT LOCATION TO BE DETERMINED ON SITE. INSTALL ASSEMBLY PLUMB TO FINISH GRADE. BUBBLER TO BE INSTALLED ADJACENT TO ROOTBALL, FLUSH TO FINISH GRADE. IN SLOPING CONDITIONS, INSTALL BUBBLER ON HIGH SIDE OF SLOPE.

[10]

TYPICAL - DENOTES OPERATION INDICATOR/FLUSH OUT ASSEMBLY. CONTRACTOR TO INSTALL AT END RUN OF DRIP SYSTEMS. EXACT LOCATION TO BE DETERMINED ON SITE. ASSEMBLY TO BE INSTALLED A MIN. OF 6" FROM EDGE OF HARDSCAPE OR PLANTING AREAS.

[11]

TYPICAL - CONTRACTOR TO STUB-OUT LINE (IN ROUND VALVE BOX) FOR FUTURE USE/CONNECTION. EXACT LOCATION TO BE DETERMINED.

[12]

TYPICAL - CONTRACTOR TO STUB-OUT (2) CONTROL & (1) COMMON WIRE (WIRE COLORS TO DIFFER FROM WIRES BEING USED) INSTALLED IN ROUND VALVE BOX (REFER TO NOTE NO. 12). RUN WIRE BACK TO EXISTING CONTROLLER AND BUNDLE BOTH ENDS WITH A 2 FT. EXPANSION COIL. LABEL WIRES "AUX" FOR FUTURE USE.

[13]

IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	DETAILS	SHEET
	NIBCO	T-113 SERIES w/ KEY	BRONZE GATE VALVE - NON-RISING STEM - MATCH LINE SIZE - INSTALLED WITH KEY/HANDLE	5	L2.04
	RAIN BIRD	33-DLRC-33DK	TWO PIECE BODY - DOUBLE KEY LUG - LOCKING RUBBER COVER W/ VALVE KEY	3	L2.04
	RAIN BIRD NIBCO	PEB - REMOTE CONTROL VALVE w/ PRS-D T-585-70	REMOTE CONTROL VALVE ASSEMBLY & PRESSURE REGULATOR W/ BALL VALVE - INSTALLED ON SUPPLY SIDE OF VALVE(MATCH LINE SIZE)- SIZE PER PLAN - CONTRACTOR TO SET PRESSURE REGULATOR FOR OPTIMAL PRESSURE OUTPUT. ADJUST IN FIELD AS REQUIRED.	1	L2.04
	RAIN BIRD	XCZ-100-PRB-COM SERIES	MEDIUM FLOW (DRIP) REMOTE CONTROL VALVE ASSEMBLY W/ QUICK CHECK BASKET FILTER - SIZE PER PLAN (MEDIUM FLOW VALVE WITH PRESSURE REGULATOR (40 P.S.I.) AND (200 MESH) FILTER ASSEMBLY)	2	L2.04
	RAIN BIRD	XCZ-150-LCS SERIES	HIGH FLOW (DRIP) REMOTE CONTROL VALVE ASSEMBLY W/ DISC FILTER FILTER - SIZE PER PLAN (HIGH FLOW VALVE WITH PRESSURE REGULATOR (40 P.S.I.) AND (120 MESH) FILTER ASSEMBLY) INSTALLED IN JUMBO RECTANGULAR VALVE BOX	2	L2.04
	RAIN BIRD/GPH	RD-45-12 SERIES POP-UP (FLUSH-OUT)	DRIP INDICATOR/FLUSH OUT ASSEMBLY. GPH GDFN FLUSH OUT NOZZLE (ORANGE). FLUSH OUT NOZZLE TO BE IN CLOSED POSITION DURING OPERATION OF DRIP. OPEN FOR SYSTEM FLUSH OUT. INSTALLED AT END RUN OF DRIP SYSTEMS.	9	L2.04
NO SYMBOL	RAIN BIRD	ARV050 SERIES	AIR/VACUUM RELIEF VALVE INSTALLED INSIDE RAIN BIRD SEB-7XB EMITTER BOX AT HIGHEST POINT OF DRIP SYSTEM	14	L2.05
[2]	RAIN BIRD	EXISTING ESP-LXME-24 STATION SERIES	CONTRACTOR TO VERIFY EXISTING CONTROLLER TYPE, MODEL NO., LOCATION AND OPERATIONAL STATUS ON SITE PRIOR TO START OF CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND ON SITE.	-	-
			MAIN LINE (PRESSURE SUPPLY) PIPE SCHEDULE 40 PVC FOR PIPE 1-1/2" AND SMALLER - BURY 18" BELOW FINISH GRADE - SIZE PER PLAN - REFER TO SPECIFICATIONS SECTION 328400 FOR ADDITIONAL INFORMATION SCHEDULE 315 PVC FOR PIPE 2" TO 4" - BURY 24" BELOW FINISH GRADE - SIZE PER PLAN - REFER TO SPECIFICATIONS SECTION 328400 FOR ADDITIONAL INFORMATION	SPECS.	L2.01
			DENOTES WIRE PVC SLEEVE/FLEXIBLE CONDUIT FOR WIRES. EXACT ROUTING AND SIZE TO BE DETERMINED. SLEEVE/CONDUIT SIZE TO BE SIZED ACCORDINGLY WITHOUT ANY RESISTANCE THROUGH SLEEVE WHEN PULLING WIRES THROUGH SLEEVE. CONDUIT TO BE BURIED 24" MIN. UNDER PAVED AREAS.	SPECS.	L2.01
			NON-PRESSURE (LATERAL LINE) PIPE SCHEDULE 40 PVC - BURY 12" BELOW FINISH GRADE - SIZE PER PLAN - REFER TO SPECIFICATIONS SECTION 328400 FOR ADDITIONAL INFORMATION	SPECS.	L2.01
NO SYMBOL			SLEEVE FOR PRESSURE OR NON-PRESSURE PIPE SCHEDULE 40 PVC - 2X DIAMETER OF PIPE BEING SLEEVED - SIZE PER PLAN - BURY 24" BELOW FINISH GRADE (ALL PRESSURE SUPPLY LINE SLEEVE SHALL BE ACCOMPANIED BY A 2" MINIMUM SLEEVE FOR WIRES (SCHEDULE 40 PVC) UNLESS OTHERWISE NOTED ON PLAN	SPECS.	L2.01
NO SYMBOL			SLEEVE FOR LOW VOLTAGE VALVE WIRES SCHEDULE 40 PVC - 2X DIAMETER OF PIPE BEING SLEEVED - SIZE PER PLAN - BURY 24" BELOW FINISH GRADE (ALL PRESSURE SUPPLY LINE SLEEVE SHALL BE ACCOMPANIED BY A 2" MINIMUM SLEEVE FOR WIRES (SCHEDULE 40 PVC) UNLESS OTHERWISE NOTED ON PLANS	SPECS.	L2.01
NO SYMBOL			TYPICAL TRENCHING DETAIL FOR BURIED PRESSURE LINES, LATERAL LINES, WIRES & SLEEVES	15	L2.05
NO SYMBOL			TYPICAL MULTI-VALVE JUMBO BOX ASSEMBLY-CONTRACTOR TO GROUP VALVES INTO (2 MAX.)PER JUMBO BOX TO MINIMIZE VALVE BOX FOOTPRINT WHENEVER POSSIBLE.	4	L2.04
NO SYMBOL			TYPICAL VALVE BOX LAYOUT	17	L2.05
NO SYMBOL			TYPICAL THRUST BLOCK FOR PIPING 3" AND LARGER	16	L2.05
NO SYMBOL			SLEEVE CROSSING NOTE: ALL PIPING AND WIRES CROSSING HARDSCAPE, PAVING, ETC. AREA SHALL BE INSTALLED IN SLEEVE (REFER TO SLEEVE NOTE ABOVE). PIPE AND WIRES TO BE INSTALLED IN SEPARATE SLEEVES. SLEEVES INSTALLED A MINIMUM OF (6")INTO PLANTING AREA. CONTRACTOR TO BORE UNDER/CUT & PATCH UNDER EXISTING PAVING/HARDSCAPE AS REQUIRED AND REPAIR TO ORIGINAL CONDITION. CONTRACTOR TO COORDINATE WITH NECESSARY TRADES ON SITE, PRIOR TO START OF CONSTRUCTION IN ORDER TO UTILIZE SCHEDULED UTILITY TRENCHES WHENEVER POSSIBLE. AT A MINIMUM ALL CROSSOVERS OVER PAVING SHALL RECEIVE (2) 6" SEPARATE SLEEVES.		

SPRINKLER HEAD LEGEND

SYMBOL	MANUFACTURER	MODEL: BODY / NOZZLE	RADIUS	PRESS.	NOZZLE FLOW RATE	PRECIP.	DETAILS	SHEET
BUBBLER					GPM	IN/HR		
(2) (3) (4)	RAIN BIRD	RWS-B-C-1402 (REFER TO DETAIL NO. 7)		30	0.50	0.50	7	L2.05
	RAIN BIRD	1804-SAM-PRS-1401 w/ PA-80 ADAPTOR)		30	0.25	0.50	6	L2.04
	NETAFIM	TLHCVXR7-CS-18 (SEE DRIP NOTES BELOW)		40	0.77 G.P.H.	0.75	12	L2.05
TURF POP UP								
F 2T H 1T Q	RAIN BIRD	- 1806-SAM-PRS-5 MPR	4'-5'	30	Q-0.10, H-0.20	1.78	8	L2.04
TURF POP UP								
F 2T H 1T Q	RAIN BIRD	- 1806-SAM-PRS-8 HE-VAN	6'-8'	30	Q-0.29, H-0.59	2.03	8	L2.04
TURF POP UP								
F 2T H 1T Q	RAIN BIRD	- 1806-SAM-PRS-10 HE-VAN	9'-10'	30	Q-0.45, H-0.89, 2T-1.88, F-1.78	1.98	8	L2.04
TURF POP UP								
F 2T H 1T Q	RAIN BIRD	- 1806-SAM-PRS-12 HE-VAN	11'-12'	30	Q-0.59, H-1.18, F-2.37	1.83	8	L2.04
TURF POP UP								
F 2T H 1T Q	RAIN BIRD	- 1806-SAM-PRS-15 HE-VAN	13'-15'	30	Q-0.93, H-1.85, F-3.70	1.83	8	L2.04
STREAM ROTOR								
F 2T H 1T Q	RAIN BIRD	- RD-06-S-P30-F-R-VAN24	16'-19'	30	Q-0.60, H-1.20, F-2.35	0.73	8	L2.04
STREAM BUBBLER								
F 2T H 1T Q	RAIN BIRD	1806-SAM-PRS-5F-B MPR NOZZLE	3'-5'	30	F-1.50	0.70	13	L2.05
STREAM BUBBLER								
F 2T H 1T Q	RAIN BIRD	1806-SAM-PRS-5-B MPR NOZZLE	3'-5'	30	Q-0.50, H-1.00, F-1.50	0.70	13	L2.05
DRIP								
	NETAFIM	TLHCVXR5-CS-12	0.53 GPH EMITTER FLOW RATE WITH EMITTER SPACING AT 12" O.C. ROW SPACING TO BE 12"-16" ON CENTER - INSTALL PER MANUFACTURER RECOMMENDATION BURY 4" BELOW FINISH GRADE OR MULCH - SECURE TUBING W/ EPOXY COATED WIRE STAKES (9" LONG - 5' ON CENTER)					11, 12	L2.05

DRIP NOTES:

A. SUB-SURFACE IN-LINE DRIP TUBING SHALL BE INSTALLED AT 16" MAXIMUM ROW SPACING, 4"-6" BELOW GRADE FOR SHRUB AREAS. INSTALL TUBING WITH TRIANGULAR SPACED EMITTER LAYOUT, ANCHOR TUBING WITH 9" PVC COATED GALVANIZED WIRE STAKES, GPH IRRIGATION PRODUCTS MODEL # GPH GDTS-140900, INSTALLED AT 5 FT. ON CENTER.

B. INSTALL PERIMETER TUBING MAXIMUM 6" FROM PERIMETER EDGE FOR GROUNDCOVER AREAS OR AT FIRST LINE OF SHRUBS. CONTRACTOR SHALL DETERMINE MINIMUM ROW SPACING IN THE FIELD AFTER REVIEW OF PLANT SPACING FOR EACH PLANTER. EACH AND EVERY SHRUB SHALL RECEIVE WATER FROM A MINIMUM OF TWO IN-LINE DRIP EMITTERS. AREAS OF TIGHTLY SPACED GROUNDCOVER OR SANDY SOILS WILL REQUIRE CLOSER ROW SPACING. FOR ANY SINGLE OR DOUBLE ROW TYPE PLANTINGS,INSTALL DRIP TUBING ON BOTH SIDES OF THE SHRUB ROW TO IRRIGATE SHRUBS ON EITHER SIDE. DUE TO SOIL STRATA DIFFERENCES AND POSSIBLE COMPACTION, CONTRACTOR SHALL FIELD VERIFY PRIOR TO STARTING WORK AND BEFORE BACKFILLING, THAT THE FINAL LAYOUT AND ROW SPACING WILL PROVIDE ADEQUATE WATER TO ALL PLANTS.

C. FOR SLOPE AREAS CONTRACTOR SHALL ALWAYS FOLLOW AND ROUTE IN-LINE TUBING PARALLEL TO GRADE. DIRECTIONAL LAYOUT AS SHOWN IN THE PLANS MAY NOT BE EXACTLY ACROSS SLOPE. DRIP HATCH PATTERN ANGLE SHOWN ON PLAN ARE DIAGRAMMATICAL ONLY. ALWAYS INSTALL DRIP LINES ACROSS SLOPE. INSTALL IN-LINE DRIP CHECK VALVE FOR DRIPLINE TUBING WITH 8' OR GREATER ELEVATION CHANGE MINIMUM ONE CHECK VALVE FOR EACH DRIP LINE IN SYSTEM TO PREVENT ANY LOW EMITTER DRAINAGE.

D. FOR ALL IN-LINE DRIP TUBING AREAS ON SLOPE THE CONTRACTOR SHALL BE HELD ACCOUNTABLE FOR CREATING A TRIANGULAR WETTING PATTERN ACROSS ANY SLOPE. OFFSET THE EMITTERS BY HALF THE EMITTER SPACING WHEN INSTALLING TUBING TO CREATE A TRIANGULAR WETTING PATTERN ACROSS THE SLOPE. DO NOT INSTALL TUBING WHERE THE EMITTERS ARE DIRECTLY IN LINE (PERPENDICULAR) WITH EACH OTHER.

E. TYPICAL. GRID LINE/HATCHING SHOWN ON PLANS OF DRIP TUBING SYSTEMS DOES NOT REPRESENT ACTUAL NUMBER OF DRIP TUBING LAYOUT/ROWS. EXACT LAYOUT/ROWS TO BE DETERMINED ON SITE. INSTALL DRIP TUBING PER MANUFACTURER RECOMMENDATION.

F. DRIP TUBING SPIRAL RING SPACING AND LAYOUT TO BE DETERMINED AND APPROVED BY LANDSCAPE ARCHITECT ON SITE. ADDITIONAL TUBING MAY BE REQUIRED FOR SUFFICIENT IRRIGATION.

POINT OF CONNECTION DESIGNATION: 2
NAME OF WATER PURVEYOR: N/A
CONTACT NAME: N/A
PHONE: N/A
SIZE OF WATER METER: N/A
SIZE OF SERVICE LINE: 3"
STATIC WATER PRESSURE: 85 P.S.I. MIN. (BOOST. PRESSURE)
DESIGN WATER PRESSURE: 67.62 P.S.I.
DESIGNED HIGHEST GPM/GPH FLOW: 52.3 G.P.M.

WORST CASE PRESSURE LOSS CHART CONTROLLER/STATION: 2-7 POC ELEV: GPM: 52.3 PSI AT POC: 85 P.S.I.		
0" WATER METER	*0.00*	PSI
3" BACKFLOW PREVENTER	*13.00*	PSI
3" MASTER VALVE	*3.00*	PSI
2-1/2" FLOW SENSOR	*1.00*	PSI
0 LF OF 2" PVC CL-315 MAINLINE	*0.00*	PSI
150 LF OF 2-1/2" PVC CL-315 MAINLINE (0.88)	*1.32*	PSI
425 LF OF 3" PVC CL-315 MAINLINE (0.34)	*1.50*	PSI
0 LF OF 1" PVC SCH-40 MAINLINE	*0.00*	PSI
FITTINGS (20% MAINLINE LOSS)	*1.00*	PSI
1-1/2" REMOTE CONTROL VALVE	*3.80*	PSI
LATERAL LINE LOSSES (FIXED)	*8.00*	PSI
ELEVATION CHANGE FROM POC TO HIGHEST OUTLET (+/- FT.)	*5.00*	PSI
SPRINKLER DESIGN OPERATING PRESSURE	*30.00*	PSI
#1 TOTAL SYSTEM LOSSES:	*67.62*	PSI
SUMMARY:		
#2 AVAILABLE STATIC PRESSURE AT POC:	*85.00*	PSI
#3 REQUIRED SYSTEM MINIMUM PRESSURE: #1	*67.62*	PSI
#4 RESIDUAL PRESSURE: #2 - #3	*17.38*	PSI
IF PRESSURE AT POC IS TOO HIGH, ADD THE FOLLOWING:	*0.00*	
#5 ADJUST PRESSURE REGULATOR AT POC TO: #1 + 25%	*0.00*	PSI
RESIDUAL FROM ADJUSTED PRESSURE: #5 - #3	*-67.62*	PSI
IF PRESSURE AT POC IS TOO LOW, ADD THE FOLLOWING:		
#5 TOTAL BOOSTED PSI REQ'D AT PUMP: #3 + 25%	*0.00*	PSI
RESIDUAL PRESSURE: #5 - #3	*-67.62*	PSI
PUMP BOOST REQUIRED: #5 - #2	*-85.00*	PSI

POINT OF CONNECTION DESIGNATION: 2
NAME OF WATER PURVEYOR: N/A
CONTACT NAME: N/A
PHONE: N/A
SIZE OF WATER METER: N/A
SIZE OF SERVICE LINE: 3"
STATIC WATER PRESSURE: 85 P.S.I. MIN. (BOOST. PRESSURE)
DESIGN WATER PRESSURE: 75.05 P.S.I.
DESIGNED HIGHEST GPM/GPH FLOW: 39.0 G.P.M.

WORST CASE PRESSURE LOSS CHART CONTROLLER/STATION: 2-1 POC ELEV: GPM: 39.0 PSI AT POC: 85 P.S.I.		
0" WATER METER	*0.00*	PSI
3" BACKFLOW PREVENTER	*13.00*	PSI
3" MASTER VALVE	*3.00*	PSI
2-1/2" FLOW SENSOR	*1.00*	PSI
485 LF OF 2" PVC CL-315 MAINLINE (1.41)	*6.80*	PSI
315 LF OF 2-1/2" PVC CL-315 MAINLINE (0.53)	*1.70*	PSI
425 LF OF 3" PVC CL-315 MAINLINE (0.20)	*0.85*	PSI
0 LF OF 1" PVC SCH-40 MAINLINE	*0.00*	PSI
FITTINGS (20% MAINLINE LOSS)	*1.90*	PSI
1-1/2" REMOTE CONTROL VALVE	*3.80*	PSI
LATERAL LINE LOSSES (FIXED)	*8.00*	PSI
ELEVATION CHANGE FROM POC TO HIGHEST OUTLET (+/- FT.)	*5.00*	PSI
SPRINKLER DESIGN OPERATING PRESSURE	*30.00*	PSI
#1 TOTAL SYSTEM LOSSES:	*75.05*	PSI
SUMMARY:		
#2 AVAILABLE STATIC PRESSURE AT POC:	*85.00*	PSI
#3 REQUIRED SYSTEM MINIMUM PRESSURE: #1	*75.05*	PSI
#4 RESIDUAL PRESSURE: #2 - #3	*9.95*	PSI
IF PRESSURE AT POC IS TOO HIGH, ADD THE FOLLOWING:	*0.00*	
#5 ADJUST PRESSURE REGULATOR AT POC TO: #1 + 25%	*0.00*	PSI
RESIDUAL FROM ADJUSTED PRESSURE: #5 - #3	*-75.05*	PSI
IF PRESSURE AT POC IS TOO LOW, ADD THE FOLLOWING:		
#5 TOTAL BOOSTED PSI REQ'D AT PUMP: #3 + 25%	*0.00*	PSI
RESIDUAL PRESSURE: #5 - #3	*-75.05*	PSI
PUMP BOOST REQUIRED: #5 - #2	*-85.00*	PSI

P.O.C. NOTES

P.O.C. NOTE NO. 2:
POINT OF CONNECTION SHALL BE DOWNSTREAM OF THE EXISTING IRRIGATION BACKFLOW/GATE VALVE. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE P.O.C. INFORMATION SHOWN ON THESE DRAWINGS IS FOUND TO BE DIFFERENT THAN ACTUAL P.O.C. INFORMATION GATHERED IN THE FIELD, AND ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO THE SCHOOL DISTRICT.

SITE INFORMATION

PROJECT ADDRESS: 3180 MOJAVE TROPICO ROAD ROSAMOND, CA. 93560	WATER PURVEYOR: BY OTHERS
(EXISTING) METER SIZE	FIELD VERIFIED
(EXIST.) BOOSTED PRESSURE	85-100 P.S.I.
SYSTEM DESIGN PRESSURE	85 P.S.I.
MAXIMUM SYSTEM DEMAND	150 G.P.M.
LANDSCAPE AREA SERVED	T.B.D.

HYDROZONE LEGEND	
H	HIGH WATER USE PLANTS
M	MEDIUM WATER USE PLANTS
L	LOW WATER USE PLANTS

VALVE SEQUENCE — A00 | 1-1/2" — VALVE SIZE
FLOW (GPM) — 00 | 30 — OPER. PRESS.
PLANT FACTOR — L | D — IRR. TYPE
HYDRO. S.F. — 0000 | 0.00 — PRECIP. RATE/DRIP SPACING

PIPE SIZING LEGEND		SCH 40
PIPE SIZE		GPM
A	3/4"	1 - 6
B	1"	7 - 12
C	1-1/4"	13 - 20
D	1 1/2"	21 - 30
E	2"	31 - 45
F	2 1/2"	46 - 55
G	3"	56 - 70
H	4"	71 - 125

INLINE DRIP EMITTER CHART FOR GRID PATTERN AND PRECIPITATION RATES				
EMITTER GPH	EMITTER SPACING	ROW SPACING		
0.53 GPH (PER EMITTER)	12" O.C.	12" O.C. .85 PR	16" O.C. .64 PR	18" O.C. .57 PR
INLINE TUBING (GRID PATTERN) PRECIPITATION RATE FORMULA: PR=(231.1 x EMITTER FLOW RATE / (EMITTER SPACING x ROW SPACING)				

SLEEVE SIZING LEGEND		SCH 40
SLEEVE SIZE		PIPE SIZE
[2]	2"	1/2" TO 1"
[3]	3"	1 1/4" TO 1 1/2"
[4]	4"	2"
[6]	6"	2 1/2" TO 3"

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Ph: 310 . 923 . 1885
E-mail: iroque@roque-irrigation.com

AGENCY

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DIV. OF THE STATE ARCHITECT
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REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

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An Employee Owned Corporation

ARCHITECT

LICENSED ARCHITECT
MATTHEW BUCHANAN
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Re-Reg 08/31/2025
STATE OF CALIFORNIA

CONSULTANT

Mark Beall associates
landscape architecture

Drawn by JL
Checked by MB

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT
UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

IRRIGATION LEGENDS & NOTES PLAN

Job No. 2940.400
Date 04-23-24

L2.02

IRRIGATION INSTALLATION NOTES

1. THE CONTRACTOR SHALL OBTAIN AND PAY ANY AND ALL PERMITS AND ALL INSPECTIONS REQUIRED, INCLUDING BUT NOT LIMITED TO:
   A. COUNTY OF LOS ANGELES PLUMBING PERMIT.
   B. BACKFLOW PREVENTION ASSEMBLY CERTIFICATION.
2. THE MANUFACTURER'S RECOMMENDATIONS AND DETAILED DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURER'S OF ARTICLE USED IN THIS INSTALLATION FURNISH'S DIRECTION CONCERNING POINTS NOT SHOWN IN THE DRAWINGS AND INSTALLATION.
3. A COMPLETE MATERIAL LIST SHALL BE SUBMITTED PRIOR TO PERFORMING ANY WORK FOR ANY ITEMS THAT ARE REQUESTED TO BE SUBSTITUTED . MATERIAL LIST SHALL INCLUDE THE MANUFACTURER, MODEL NUMBER AND DESCRIPTION OF ALL MATERIALS AND EQUIPMENT TO BE USED. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT PRIOR APPROVAL OF THE DESIGNER/LANDSCAPE ARCHITECT MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE SUCH MATERIALS FROM THE SITE AT HIS/HER EXPENSE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY AND ALL DAMAGES TO OPERATIONS OR WORK OF OTHER CONTRACTORS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ACTIVITIES WITH ALL AGENCIES AND OTHER TRADES ON SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY ENCROACHMENT INTO ADJACENT PROPERTY, R.O.W.'S, EASEMENTS, SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF/HERSELF WITH ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR OR REPLACE, AT NO ADDITIONAL COST TO THE OWNER, ANY DAMAGES TO UNDERGROUND UTILITIES THAT MAY OCCUR.
7. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING PLANS BEFORE COMMENCEMENT OF WORK.
8. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON PLANS AT THE SITE PRIOR TO COMMENCEMENT OF ANY WORK. ALL DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO PROJECT DESIGNER/LANDSCAPE ARCHITECT FOR DIRECTIONS ON HOW TO PROCEED. ANY CONTINUATION OF WORK IS AT THE CONTRACTOR'S RISK AND EXPENSE.
9. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WITH WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE PROJECT DESIGNER/LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED.
10. PRIOR TO START OF CONSTRUCTION, A CONFERENCE SHALL BE HELD WITH THE PROJECT REPRESENTATIVE AND CONTRACTOR , REGARDING GENERAL REQUIREMENTS OF THIS WORK.
11. INSTALL ALL IRRIGATION COMPONENTS ACCORDING TO LOCAL CODES AND ORDINANCES.
12. THE IRRIGATION WATER METER IS TO BE PROVIDED BY THE OWNER UNLESS SHOWN OTHERWISE ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL IRRIGATION EQUIPMENT DOWNSTREAM OF THE POINT OF CONNECTION (P.O.C.) AT THE IRRIGATION WATER METER.
13. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS (INCLUDING EXISTING AND/OR NEW PLANT MATERIAL), GRADE DIFFERENCES OR DIFFERENCES IN THE AREA'S DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER/LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
15. THE WORK SHOWN ON THESE PLANS ARE DIAGRAMMATIC, ALL ITEMS, I.E. CONTROLLERS, VALVES, MAIN LINES, SLEEVES, WIRES, IRRIGATION HEADS, ETC. ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. DO NOT SCALE DIMENSIONS. DETAIL DRAWINGS MAY CLARIFY LOCATIONS OF SOME ITEMS. THE CONTRACTOR SHALL NOT LOCATE ANY ITEMS WHERE IT IS OBVIOUS THAT THEY ARE IN CONFLICT WITH UNDERGROUND UTILITIES, STRUCTURES, OTHER IMPROVEMENTS, OR VEHICULAR OR PEDESTRIAN SAFETY CONSIDERATIONS.
16. CONTROLLER LOCATIONS ARE APPROXIMATE. FINAL LOCATION OF THE AUTOMATIC CONTROLLER AND THE BACKFLOW DEVICE SHALL BE APPROVED BY THE DESIGNER/LANDSCAPE ARCHITECT PRIOR TO FINAL INSTALLATION.
17. ALL PRESSURE SUPPLY LINES SHALL BE TESTED FOR A MINIMUM OF 3 HOURS UNDER A HYDROSTATIC PRESSURE OF 150 POUNDS PER SQUARE INCH AND PROVEN WATERTIGHT. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT FOR HYDROSTATIC TESTS. HYDROSTATIC TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE DESIGNER/LANDSCAPE ARCHITECT, OR IF APPROVED BY DESIGNER/LANDSCAPE ARCHITECT, CONTRACTOR MAY SUBMIT BY EMAIL DIGITAL PHOTOGRAPHS OF THE PRESSURE GAUGE TO THE DESIGNER/LANDSCAPE ARCHITECT AT BEGINNING AND END OF TEST PERIOD. CONTRACTOR TO SUBMIT WRITTEN PROOF TO SITE SUPERINTENDENT THAT TESTS HAVE BEEN CONDUCTED.
18. 120 VOLT INDEPENDENT ELECTRICAL POWER OUTLET AT THE AUTOMATIC CONTROLLER LOCATION SHALL BE PROVIDED PER THE ELECTRICAL ENGINEER'S PLANS AND SPECIFICATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ELECTRICAL SERVICE WITH THE GENERAL CONTRACTOR AND TO MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SERVICE TO THE AUTOMATIC CONTROLLER.
19. ALL LOCAL, MUNICIPAL AND STATE LAWS RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
20. BACKFLOW DEVICE SHALL BE INSTALLED IN GROUND COVER AREA WHEREVER POSSIBLE, UNLESS OTHERWISE NOTED ON PLANS.FINAL LOCATION SHALL BE DETERMINED BY THE CLIENT'S AUTHORIZED REPRESENTATIVE AND MAY VARY FROM THAT INDICATED ON THE DRAWING.
21. QUICK COUPLER VALVES, REMOTE CONTROL VALVES AND SHUT-OFF VALVES SHALL BE INSTALLED IN GROUND COVER/SHRUB AREAS WHEREVER POSSIBLE.
22. PIPING AND WIRE CONDUIT PENETRATIONS THROUGH WALLS AND INSTALLATION OF EQUIPMENT UNDER PAVING SHALL BE INSTALLED IN SCHEDULE 40 PVC SLEEVES, AS CALLED OUT ON PLANS, OR AS PER LOCAL CODES AND MUST BE COORDINATED WITH THE GENERAL CONTRACTOR AND CONTRACTORS OF ALL VARIOUS TRADES THAT MAY BE INVOLVED TO ELIMINATE PROBLEMS THAT MAY ARISE FROM INACCESSIBILITY OR DAMAGE TO ANOTHER TRADE'S FINISH WORK. PIPING AND WIRE CONDUIT PENETRATIONS THROUGH EXISTING WALLS SHALL BE CORE DRILLED AND SLEEVED PER ABOVE, UNLESS AN EXISTING SLEEVE IS AVAILABLE FOR RE-USE WHICH WILL NOT SIGNIFICANTLY AFFECT THE SYSTEM DESIGN. ALL PENETRATIONS SHALL BE WATERFPROOFED USING APPROVED METHODS.
23. USE CHECK VALVES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.
24. THE CONTRACTOR SHALL INSTALL K.B.I. SERIES ANTI-DRAIN VALVES ON ALL LATERAL LINES IN AREAS WHERE SLOPE OF GRADE EXCEEDS 4:1, WHERE POST VALVE SHUT-OFF DRAINING OF THE IRRIGATION OCCURS, OR AS DIRECTED BY THE CLIENTS AUTHORIZED REPRESENTATIVE.
25. THE CONTRACTOR SHALL ONLY APPLY SUFFICIENT WATER TO PROMOTE HEALTHY GROWTH OF PLANT MATERIAL. AT NO TIME SHALL THE CONTRACTOR APPLY WATER AT A RATE OF FREQUENCY WHICH CAUSES RUNOFF OR OVER SATURATION OF THE SOIL.
26. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO ADJACENT PAVING, WALLS OR OTHER HARDSCAPE ELEMENTS TO THE EXTENT POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE CURRENT SITE CONDITIONS AND ADJUSTING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING FLOW FOR EACH SYSTEM.
27. WHEN RADIUS OF SPRINKLER HEADS REQUIRED FOR PROPER COVERAGE IS LESS THAN RADIUS SHOWN ON PLAN, THE CONTRACTOR SHALL EQUIP SPRINKLER HEAD WITH A PRESSURE COMPENSATING SCREEN (PCS) FOR LOW FLOW AND RADIUS CONTROL.
28. USE ADJUSTABLE ARC NOZZLES FOR ALL HEADS LOCATED IN AREAS WHERE A STANDARD ARC PATTERN SPRAYS OVER ONTO ADJACENT PAVING, WALLS OR OTHER HARDSCAPE ELEMENTS. ADJUSTABLE ARC NOZZLE SHOULD HAVE THE SAME RADIUS OF THROW AS THE NOZZLE BEING REPLACED.
29. NO OVERSPRAY OR LOW HEAD DRAINAGE SHALL BE ALLOWED.
30. WHEN VERTICAL OBSTRUCTIONS (LIGHT POLES, FIRE HYDRANTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS SO AS TO PREVENT PROPER COVERAGE, THE CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE . ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE CLIENT.
31. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON PLANS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES ARE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE IMMEDIATELY UPON REJECTION.
32. ALL ELECTRICAL CONTROL WIRE SHALL BE DIRECT BURIAL #14 GAUGE APPROVED IN AN 18" DEEP TRENCH INSTALLED UNDER THE MAINLINE PIPE. WIRE CONNECTORS SHALL BE DRI-SPLICE OR APPROVED EQUAL ONLY. COLORS FOR CONTROL WIRES SHALL BE AS FOLLOWS:
   A. COMMON WIRE - WHITE (FOR MULTIPLE CONTROLLERS USE DIFFERENT STRIP COLOR PER CONTROLLER)
   B. HOT WIRE - BLACK EXTRA COMMON WIRES - WHITE WITH ORANGE STRIPE - MINIMUM (1) ONE TO EACH LEG OF MAINLINE FROM P.O.C. PER CONTROLLER (DIFFERENT STRIPE COLOR PER CONTROLLER)
   C. EXTRA HOT WIRES, MINIMUM (1) ONE EXTRA HOT WIRE FOR EVERY (5) FIVE WIRES PLUS (3) THREE EXTRA HOT WIRES RUN TO EACH END OF MAINLINE BACK TO THE CONTROLLER - LABEL ALL SPARE WIRES AT BOTH ENDS "SPARE".
   D. MASTER CONTROL VALVE - BLUE w/ WHITE STRIPE / WHITE w/ BLUE STRIPE.
   E. FLOW SENSOR - RED w/ WHITE STRIPE / RED w/ BLUE STRIPE.
33. ALL AUTOMATIC CONTROLLER PROGRAMS MUST BE SET TO OPERATE BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.
34. THE ENTIRE SPRINKLER SYSTEM SHALL BE GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP, INCLUDING THE SETTLING OF BACKFILLED AREAS AND TRENCHES FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF THE WORK. SHOULD ANY OPERATION DIFFICULTIES IN CONNECTION WITH THE SPRINKLER SYSTEM DEVELOP WITHIN THE SPECIFIED GUARANTEE PERIOD, WHICH IN THE OPINION OF THE CLIENT MAY BE DUE TO INFERIOR MATERIAL AND/OR WORKMANSHIP, SAID DIFFICULTIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE CLIENT AT NO ADDITION COST.
35. THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS/HER EXPENSE UNTIL THE WORK IS ACCEPTED IN WRITING BY THE CLIENT.
36. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE CONTRACTOR SHALL VERIFY WATER PRESSURE IN THE FIELD PRIOR TO CONSTRUCTION TO DETERMINE IF IT IS SUFFICIENT TO OPERATE SYSTEMS AS DESIGNED. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE PROJECT /DESIGNER/LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO THE CLIENT, INCLUDING LABOR.
37. AFTER INSTALLATION OF THE IRRIGATION SYSTEMS IS COMPLETED, THE CONTRACTOR SHALL PERFORM A COVERAGE TEST IN THE PRESENCE OF THE DESIGNER/LANDSCAPE ARCHITECT TO DETERMINE IF THE IRRIGATION COVERAGE FOR PLANTING AREAS IS ADEQUATE AND COMPLETE. FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE DUE TO DEVIATIONS FROM THE PLANS OR BECAUSE DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS WERE NOT BROUGHT TO THE ATTENTION OF THE DESIGNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

EXISTING IRRIGATION NOTES

1. THE CONTRACTOR MUST FAMILIARIZE HIMSELF/HERSELF WITH THE EXISTING IRRIGATION AND PLANTING ON PROPERTY. ANY DAMAGE OR ADJUSTMENTS REQUIRED INCLUDING REPLACING OR RELOCATING IRRIGATION LINES, HEADS, VALVES, WIRES OR ANY UTILITY THAT OCCURS ON THE PARCEL DUE TO THE CONSTRUCTION OF THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE DISTRICT. THE OWNER'S REPRESENTATIVE MUST REVIEW ANY REQUIRED MODIFICATIONS TO THESE AREAS PRIOR TO COMMENCING WORK. THE CONTRACTOR MUST NOTIFY THE DISTRICT'S AUTHORIZED REPRESENTATIVE OF THESE CONDITIONS OR ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
2. CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS , PROPERTY LINES, DIMENSIONS, ETC. PRIOR TO COMMENCING WORK. ALL EXISTING IRRIGATION SYSTEMS SHALL BE VERIFIED IN THE FIELD AT START OF CONSTRUCTION. ALL EXISTING MAINLINES, RCV'S, BACKFLOW DEVICES, CONTROLLERS, METERS, SERVICE LINES, ETC. SHALL BE VERIFIED IN FIELD. ALL EXISTING IRRIGATION EQUIPMENT SHALL BE CLEARLY INDICATED INCLUDING SIZES AND MODEL NUMBERS TO SCALE ON AN ACCURATE BASE DRAWING AND SUBMITTED AS A SHOP DRAWING. SAID SHOP DRAWINGS SHALL BE SUBMITTED TO THE DESIGNER/LANDSCAPE ARCHITECT, AND DISTRICT'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND APPROVAL. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND. NO WORK SHALL PROCEED WITHOUT APPROVAL OF SAID SHOP DRAWINGS.
3. ALL EQUIPMENT AND PIPE ROUTING SHALL BE STAKED IN FIELD FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ALL LAYOUT SHALL BE AS APPROVED BY DESIGNER/LANDSCAPE ARCHITECT AND DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION. NO EQUIPMENT SHALL BE INSTALLED WITHOUT APPROVAL OF LAYOUT.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE INSTALLATION OF PROPOSED IRRIGATION EQUIPMENT AND RELATED EQUIPMENT, INCLUDING BUT NOT LIMITED R.C.V. CONTROL WIRES, ELECTRICAL WIRES, CONDUITS, REMOTE CONTROL VALVES, ETC. ALL LAYOUT AND LOCATIONS SHALL BE CONFIRMED WITH DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL IRRIGATION EQUIPMENT AFFECTED BY THE PROPOSED IRRIGATION IMPROVEMENTS. CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE REMOVED AND DISPOSED OF IN FIELD PRIOR TO COMMENCING WORK.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR/MODIFICATION OF ALL ADJACENT IRRIGATION SYSTEM EQUIPMENT THAT IS AFFECTED BY PROPOSED IRRIGATION IMPROVEMENTS. CONTRACTOR SHALL REPAIR SAID SYSTEMS TO A LIKE NEW MANNER, PROVIDING COMPLETE 100% HEAD TO HEAD COVERAGE IN ALL AREAS WITH SYSTEM LAYOUT AS APPROVED BY THE DISTRICT'S AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL CONFIRM ALL AREAS REQUIRING MODIFICATION WITH THE DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO BIDDING WORK AND PRIOR TO COMMENCING WORK.
7. CONTRACTOR SHALL ADJUST AND CAP OFF EXISTING ADJACENT IRRIGATION SYSTEM AS REQUIRED. SYSTEM SHALL PROVIDE COMPLETE 100% HEAD TO HEAD COVERAGE IN ALL AREAS AS APPROVED BY DISTRICT'S AUTHORIZED REPRESENTATIVE. ALL LAYOUT SHALL BE CONFIRMED WITH DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
8. CONTRACTOR REFER TO CORRESPONDING ON-SITE WATER AND SEWER PLANS FOR UNDERLYING WATERLINES, EASEMENTS, AND OTHER RELATED EQUIPMENT . CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS IN FIELD WITH DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO EXISTING IRRIGATION, LANDSCAPE AND HARDSCAPE DAMAGED BY ROUTING NEW WIRES, PIPING, ETC. TO CONTROLLER AND IRRIGATION SYSTEMS AT NO ADDITIONAL COST TO DISTRICT.
10. CONTRACTOR SHALL MEET WITH THE DISTRICT AUTHORIZED REPRESENTATIVE PRIOR TO BEGINNING DEMOLITION OR ANY OTHER WORK, AND WALK SITE TO LOCATE EXISTING CONTROLLER AND LINES AND OTHER IRRIGATION TO BE PROTECTED IN PLACE.
11. CONTRACTOR SHALL PROVIDE FOR THE IRRIGATION OF EXISTING PLANT MATERIAL THROUGHOUT THE CONSTRUCTION PROCESS. ANY DAMAGE DUE TO TO CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY TO PREVENT ANY LAPSE IN IRRIGATION OF THE EXISTING PLANT MATERIAL. ANY PLANT MATERIAL AND/OR IRRIGATION DAMAGED AS PART OF CONSTRUCTION SHALL BE REPAIRED/REPLACED TO A LIKE NEW CONDITION AS PART OF CONTRACT.
12. ANY EXISTING CONTROL VALVES CONNECTED TO THE EXISTING CONTROLLER SHALL BE RECONNECTED TO THE EXISTING CONTROLLER. CONFIRM PROPER CONTROLLER OPERATION AND INSTALLATION WITH DISTRICT AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK AND UPON COMPLETION OF WORK.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE ADJUSTMENTS/MODIFICATION OF EXISTING IRRIGATION SYSTEMS WITHIN THIS AND OTHER AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS. ALL LAYOUT SHALL BE CONFIRMED WITH DISTRICT'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
14. NO DISRUPTION OF THE EXISTING IRRIGATION SYSTEMS WATERING WILL BE ALLOWED DURING CONSTRUCTION. ALL ADJACENT SYSTEMS SHALL MAINTAIN AUTOMATIC PROGRAMMED WATERING SCHEDULES THROUGHOUT CONSTRUCTION.
15. CONTRACTOR SHALL OBTAIN EXISTING IRRIGATION AS-BUILT RECORD DRAWINGS FOR ADJACENT IRRIGATED AREAS PRIOR TO STARTING WORK. ALL EXISTING IRRIGATION EQUIPMENT LOCATION, SIZES AND CONDITIONS SHALL BE VERIFIED IN FIELD WITH DISTRICT'S AUTHORIZED REPRESENTATIVE AT START OF WORK.
16. WHENEVER ROOTS OF EXISTING TREES ARE ENCOUNTERED DURING TRENCHING OPERATIONS, THE CONTRACTOR SHALL REROUTE MAINLINE TRENCHES. DO NOT CUT ROOTS 1" IN DIAMETER . ALL CUTS SHALL BE A CLEAN SHARP CUT. IF TRENCHING IS REQUIRED, THE CONTRACTOR SHALL HAND DIG THE TRENCHES TAKING CARE NOT TO DAMAGE ROOTS. NO MECHANICAL TRENCHING WITHIN THE DRIPLINE OF THE EXISTING TREE WILL BE ALLOWED. CONTRACTOR TO PROTECT ALL ROOTS EXPOSED TO SUNLIGHT WITH MOIST BURLAP UNTIL COVERED WITH SOIL.

IRRIGATION NOTES:

1. DRIP EMITTERS & BUBBLERS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE DESIGNATED ON THE PLANS.
2. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION.
3. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES.
4. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL DRIP EMITTERS, BUBBLER HEADS, & SPRAY HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT WATERING ONTO WALKS, ROADWAYS AND/OR BUILDINGS. THIS SHALL INCLUDE SELECTING THE BEST LOCATION TO FIT THE EXISTING SITE CONDITIONS AND TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
5. 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 OWNER'S AUTHORIZED REPRESENTATIVE.
6. THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY. INSTALL PIPE MATERIALS AND EQUIPMENT AS SHOWN IN THE PLAN AND DETAILS. USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON SPRINKLER SWING JOINT AND VALVE ASSEMBLIES.
7. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH LOCATION OF WALLS, RETAINING WALLS, ETC. HE SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING STRUCTURES, ETC. IN ADDITION TO THE CONTROL WIRE SLEEVES SHOWN ON THE DRAWINGS.
8. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONTROL WIRE SLEEVES OF SUFFICIENT SIZE UNDER PAVED AREAS. WHEN CERTAIN OBSTRUCTIONS (FIRE HYDRANTS, TREES, LIGHTS, BOULDERS, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE IRRIGATION HEADS SO AS TO PREVENT PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM ON EACH SIDE OF THE OBSTRUCTION TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

EXISTING LANDSCAPE NOTE

1. PROTECT ALL EXISTING LANDSCAPING. ANY EXISTING LANDSCAPING REMOVED OR DAMAGED SHALL BE PROPERLY REPLACED, INCLUDING SOD, AS DIRECTED BY THE LANDSCAPE ARCHITECT.
2. VERIFY THAT FENCING HAS BEEN PROVIDED AROUND EXISTING TREES, LOCATED AT THE DRIPLINE (LINE OF FURTHEST BRANCH OF TREE PLUS 3 FT.) NOTIFY LANDSCAPE ARCHITECT TO REVIEW AND APPROVE FINAL FENCING LOCATION AND PROPOSED IRRIGATION SYSTEM LAYOUT AND TRENCHING IN THE VICINITY OF EXISTING TREES TO BE RETAINED.
3. DO NOT EXCAVATE OR INSTALL IRRIGATION MATERIALS OR EQUIPMENT WITHIN THE DRIPLINE OF EXISTING TREES. DO NOT PERMIT SPRINKLER HEADS TO SPRAY ONTO OR WITHIN 1 FT. OF THE TRUNKS OF THE EXISTING TREES. USE ALL POSSIBLE CARE TO AVOID INJURY TO EXISTING TREES AND TREE ROOTS. EXCAVATE BY HAND IN AREAS WHERE (1) INCH AND LARGER ROOTS OCCUR. TUNNEL UNDER ALL ROOTS (1) INCH AND LARGER IN DIAMETER AND HEAVILY WRAP WITH BURLAP TO PREVENT SCARRING OR EXCESSIVE DRYING OF EXISTING ROOTS. LANDSCAPE ARCHITECT TO APPROVE ALL TRENCHING AND EXCAVATIONS PRIOR TO ACTUAL COMMENCMENT OF IRRIGATION INSTALLATION.
4. DO NOT USE DITCHING MACHINE WITHIN THE DRIPLINE OF EXISTING TREES. IN NO CASE SHALL MORE THAN TWO SIDES OF AN EXISTING TREE BE TRENCHED FOR IRRIGATION LINES. CONFIRM TRENCHING LOCATIONS AT EXISTING TREES WITH LANDSCAPE ARCHITECT, TO OBTAIN APPROVAL PRIOR TO TRENCHING. WHERE ROOTS ARE ENCOUNTERED OUTSIDE THE DRIPLINE, CONTRACTOR TO HAND TRIM THE WALL OF THE TRENCH ADJACENT TO THE TREE, MAKING CLEAN CUTS THROUGH. PAINT ROOTS (1) INCH AND LARGER IN DIAMETER WITH TWO COATS OF TREE SEAL OR EQUIVALENT OR PER LANDSCAPE ARCHITECT'S DIRECTIONS. CLOSE TRENCHES ADJACENT TO TREE WITHIN 24 HOURS. WHERE THIS IS NOT POSSIBLE, SHADE THE SIDE OF THE TRENCH ADJACENT TO THE EXISTING TREE WITH BURLAP OR CANVAS.

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CONSULTANT

Mark Beall associates
landscape architecture

Drawn by JL
Checked by MB

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

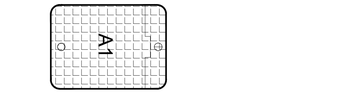
TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT
UPGRADE PROJECT

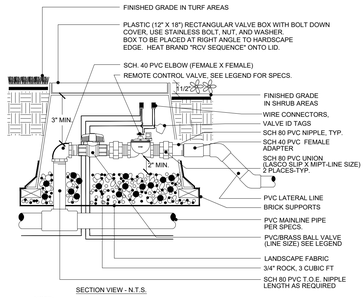
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IRRIGATION GENERAL NOTES PLAN

Job No. 2940.400
Date 04-23-24

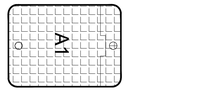
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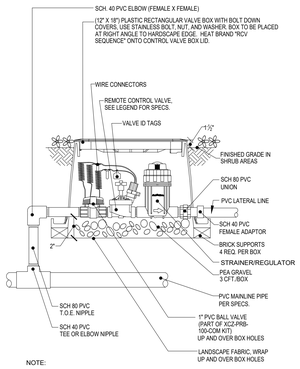




NOTE:
1. INSTALL CONTROL VALVES A MINIMUM OF 12" APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.
2. REFER TO DETAIL NO. 00 FOR TYPICAL VALVE BOX INSTALLATION LAYOUT.

1 TYPICAL REMOTE CONTROL VALVE ASSEMBLY
NO SCALE RIC-2024

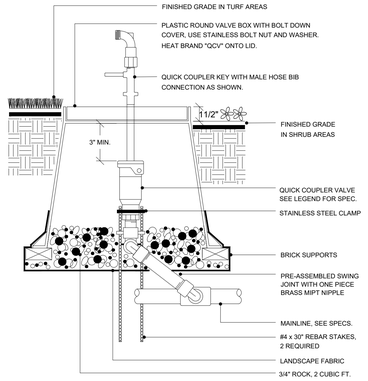




NOTE:
1. INSTALL CONTROL VALVES A MINIMUM OF 12" APART IN SHRUB AREAS UNLESS OTHERWISE NOTED.
2. REFER TO DETAIL NO. 00 FOR TYPICAL VALVE BOX INSTALLATION LAYOUT.

2 TYPICAL (DRIP) REMOTE CONTROL VALVE ASSEMBLY (RAIN BIRD XCZ-100-PRB-COM) 1"
NO SCALE RIC-2024

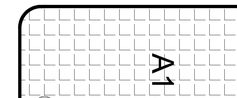


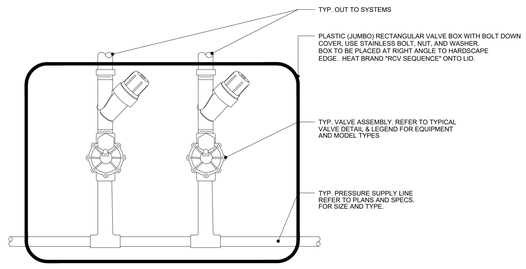


SECTION VIEW - N.T.S.

NOTE:
1. USE TEFLON TAPE ON ALL THREADED FITTINGS TYPICAL.
2. QUICK COUPLER KEY MUST CLEAR VALVE BOX.
3. ALL BOXES SHALL BE GREEN IN COLOR FOR ALL APPLICATIONS UNLESS OTHERWISE NOTED AND APPROVED.

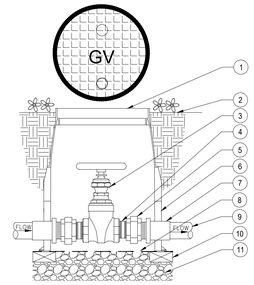
3 TYPICAL QUICK COUPLING VALVE ASSEMBLY
NO SCALE RIC-2024





NOTE:
1. INSTALL CONTROL VALVES EQUALLY SPACED WITHIN JUMBO BOX. EXACT CONFIGURATION AND VALVE TYPE TO BE DETERMINED.
2. REFER TO VALVE DETAILS FOR TYPICAL INSTALLATION & EQUIPMENT REQUIRED.

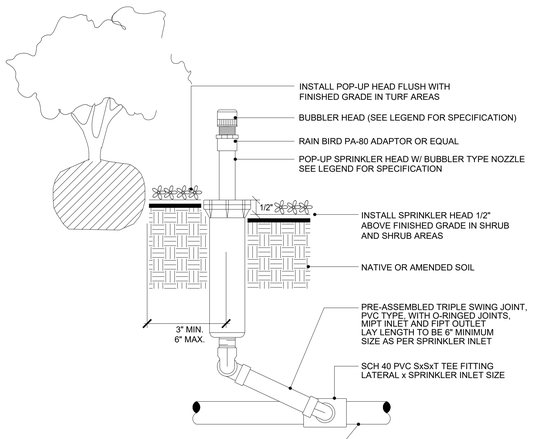
4 TYPICAL VALVE LAYOUT IN JUMBO BOX CONFIGURATION (MAXIMUM 2 VALVES PER BOX)
NO SCALE RIC-2024



1	ROUND VALVE BOX W/BOLT-DOWN COVER. HEAT BRAND "GV" ON VALVE BOX LID IN 2" HIGH CHARACTERS.	7	PVC SCH 80 ADAPTOR
2	FINISH GRADE	8	1/4"SQ 16GA. GALV. WELDED WIRE MESH
3	GATE VALVE - LINE SIZE	9	PVC MAINLINE
4	BRASS NIPPLE	10	THREE (3) BRICK SUPPORTS
5	BRASS UNION	11	3/4" GRAVEL (12" DEEP)
6	VALVE BOX EXTENSION (AS REQUIRED)		

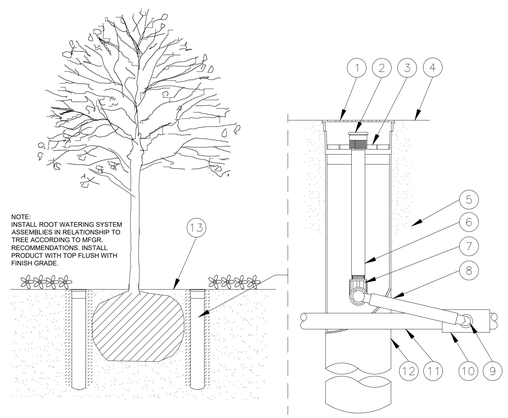
NOTES:
1. ALL VALVE BOXES TO BE PLACED IN SHRUB AREAS WHERE POSSIBLE. SET VALVE BOX 1/2" ABOVE FINISH GRADE IN LAWN AREAS, 1" IN PLANTING AREAS AND 12" MIN FROM EDGE OF HARDSCAPE.
2. CLOSED NIPPLES OR BUSHINGS ARE NOT ALLOWED.
3. USE TEFLON TAPE ON ALL THREADED PIPE. 1-1/2" WRAPS.
4. NO GALVANIZED NIPPLES SHALL BE USED.

5 TYPICAL GATE VALVE ASSEMBLY (1" TO 3")
NO SCALE RIC-2024



NOTE:
- INSTALL SPRINKLER HEADS 12" FROM FENCES, WALLS OR BUILDINGS.
- INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN GROUND COVER AREAS.
- INSTALL SPRINKLER HEADS 2" FROM PAVING EDGE IN TURF AREAS.
- INSTALL SPRINKLER HEADS PLUMB. ON SLOPED LANDSCAPE AREAS, INSTALL BUBBLER ASSEMBLY ON HIGH SIDE OF SLOPE.
- USE TEFLON TAPE ON ALL THREADED FITTINGS.

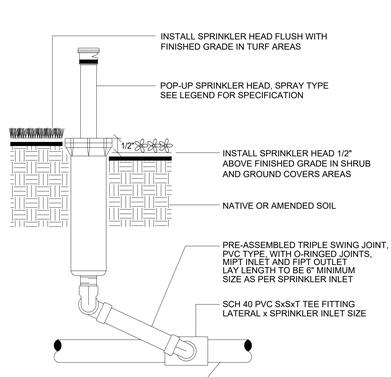
6 TYPICAL POP-UP BUBBLER ASSEMBLY
NO SCALE RIC-2024



1	4-INCH GRATE (INCLUDED)
2	BUBBLER: RAIN BIRD 1402 0.50 GPM
3	ROOT WATERING SYSTEM: RAIN BIRD RWS-B-C-1402 (INCLUDES 1402 0.50 GPM BUBBLER WITH RISER, GRATE, SWING ASSEMBLY, 1/2" MALE NPT INLET, AND BASKET CANISTER)
4	FINISH GRADE
5	OPTIONAL PEA GRAVEL OR RWS SAND SOCK (RWS-SOCK) FOR SANDY SOILS
6	1/2-INCH PVC SCH 80 NIPPLE
7	1/2-INCH 90-DEGREE ELBOW
8	12-INCH SWING ASSEMBLY (INCLUDED)
9	1/2-INCH MALE NPT INLET
10	PVC SCH 40 TEE OR EL
11	LATERAL PIPE
12	4-INCH BASKET WEAVE CANISTER
13	FINISH GRADE

BUBBLERS PER TREE (REFER TO LANDSCAPE PLANS FOR TREE SIZES)
1. (2) 24" BOX TREES: 2 BUBBLERS EACH
2. (3) 36" BOX TREES: 3 BUBBLERS EACH
3. (4) 48" BOX TREES: 4 BUBBLERS EACH

7 TYPICAL ROOT WATERING SYSTEM FOR TREES (2 ASSEMBLIES PER TREE-MIN.)
NO SCALE RIC-2024

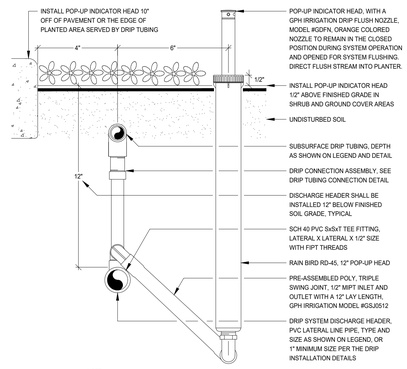


NOTE:
INSTALL SPRINKLER HEADS 12" FROM FENCES, WALLS OR BUILDINGS.
INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN GROUND COVER AREAS.
INSTALL SPRINKLER HEADS 2" FROM PAVING EDGE IN TURF AREAS.

INSTALL SPRINKLER HEADS PLUMB. ADJUST SPRAY ARC AND RADIUS TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.

USE TEFLON TAPE ON ALL THREADED FITTINGS.

8 TYPICAL SPRINKLER POP-UP ASSEMBLY
NO SCALE RIC-2024



NOTE:
INSTALL INDICATOR HEAD 10" FROM THE EDGE OF PAVING OR THE PLANTER EDGE.

INSTALL ORANGE COLORED INDICATOR NOZZLE ON POP-UP HEAD AND ADJUST TO FULLY CLOSED.

9 TYPICAL DRIP TUBING FLUSH-OUT & OPERATION INDICATOR
NO SCALE RIC-2024

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ARCHITECT

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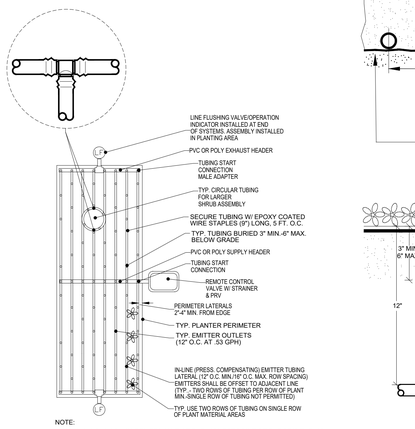
TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

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IRRIGATION DETAILS PLAN

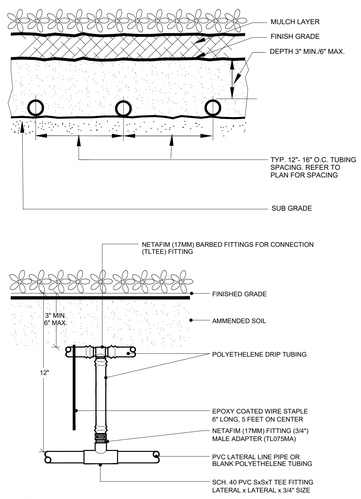
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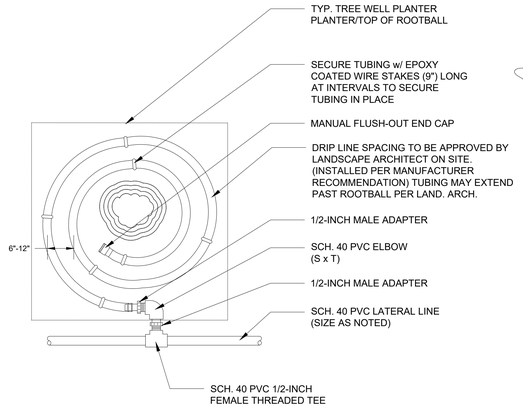
NOTE:
1. INSTALL AIR / VACUUM RELIEF VALVE AT THE HIGHEST POINT OF THE DRIP TUBING SYSTEM. FLUSH ALL LINES PRIOR TO INSTALLATION OF VALVE.
2. ALL BOXES SHALL BE GREEN IN COLOR FOR ALL APPLICATIONS UNLESS OTHERWISE NOTED AND APPROVED.
3. DRIP TUBING LINES SHALL BE BURIED A MIN. OF 3" BELOW FINISH GRADE IN ADDITION TO MULCH COVER.

10 TYPICAL DRIP TUBING LAYOUT (GRID PATTERN) — NO SCALE — RIC-2024



NOTE:
- INSTALL TUBING AT CONSISTANT DEPTH BELOW GRADE. SECURE TUBING WITH STAPLES 5 FEET ON CENTER TO PREVENT SURFACING OF TUBING DURING BACKFILL.
- DRIPPERLINE TUBING SHALL BE INSTALLED IN PARALLEL ROWS.
- INSTALLATION OF TUBING & LAYOUT SHALL BE APPROVED, ON SITE BY THE ARCHITECT, PRIOR TO BACKFILLING OR MULCH COVER.

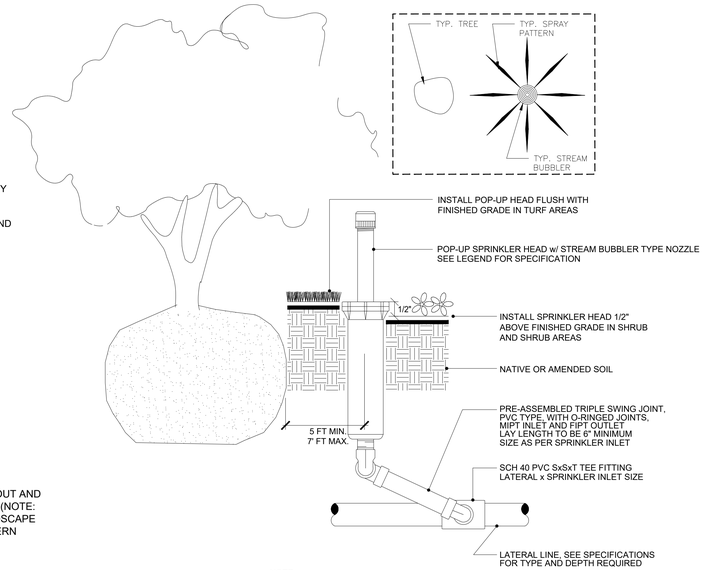
11 TYPICAL DRIP TUBING CONNECTION INSTALLATION — NO SCALE — RIC-2024



NOTES:

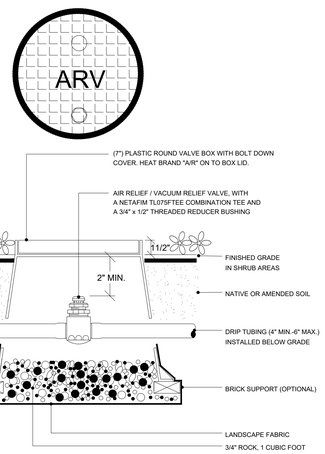
1. (SPIRALING) RINGS OF TUBING AROUND TREE TRUNK (TYP.). LANDSCAPE ARCHITECT TO APPROVE LAYOUT AND CONFIGURATION ON SITE PRIOR TO FINALIZING INSTALLATION. ADDITIONAL TUBING MAY BE REQUIRED. (NOTE: TUBING LENGTH AND LAYOUT WILL BE DETERMINED BY SIZE OF TRUNK AND OR PLANTING AREAS. LANDSCAPE ARCHITECT TO APPROVE FINAL TUBING LAYOUT. AN APPROXIMATE OF 15' FEET (MIN.) OF SPIRAL PATTERN TUBING PER TREE.
2. TYP. DRIP TUBING FOR NEW, RELOCATED TREES AND EXISTING TREES WITHIN PLANTING AREAS SHALL BE BURIED A MIN. OF 4" BELOW FINISH GRADE, UNLESS OTHERWISE DIRECTED.
3. TREES IN GRAVEL OR MULCH SHALL BE COVERED WITH LIKE MATERIALS UNLESS OTHERWISE NOTED. LANDSCAPE ARCHITECT TO APPROVE FINAL CONFIGURATION AND INSTALLATION ON SITE.
4. NETAFIM TECHLINE TLHCVXR7-CS-18 SERIES TUBING (18" O.C. EMITTER SPACING AT (.77) G.P.H. REFER TO LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

12 TYPICAL INLINE EMITTER TUBING (TREES) (SPIRAL PATTERN) — NO SCALE — RIC-2024



NOTE:
- INSTALL SPRINKLER HEADS 12" FROM FENCES, WALLS OR BUILDINGS.
- INSTALL SPRINKLER HEADS 24" FROM PAVING EDGE IN GROUND COVER AREAS.
- INSTALL SPRINKLER HEADS 24" FROM PAVING EDGE IN TURF AREAS.
- INSTALL SPRINKLER HEADS PLUMB. ON SLOPED LANDSCAPE AREAS, INSTALL BUBBLER ASSEMBLY ON HIGH SIDE OF SLOPE.
- CONTRACTOR TO ADJUST SPRAY, AS NECESSARY TO AVOID SPRAY ONTO TREE TRUNKS. EXACT LOCATION OF HEADS TO BE EQUALLY SPACED AROUND TREE. LAND. ARCH. TO APPROVE FINAL LAYOUT

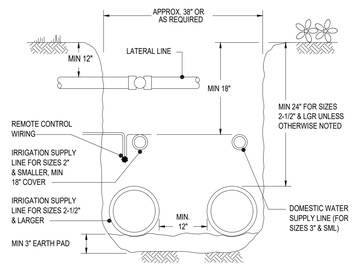
13 TYPICAL POP-UP BUBBLER ASSEMBLY — NO SCALE — RIC-2024



SECTION VIEW - N.T.S.

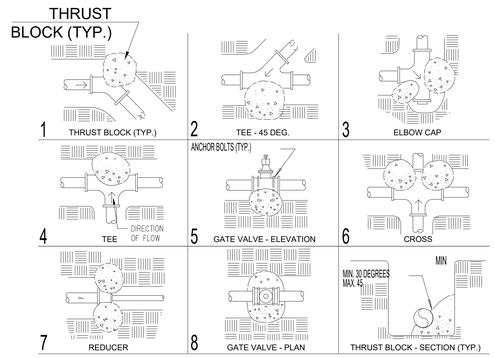
NOTE:
1. INSTALL AIR / VACUUM RELIEF VALVE AT THE HIGHEST POINT OF THE DRIP TUBING SYSTEM. FLUSH ALL LINES PRIOR TO INSTALLATION OF VALVE.
2. ALL BOXES SHALL BE GREEN IN COLOR FOR ALL APPLICATIONS UNLESS OTHERWISE NOTED AND APPROVED.

14 TYPICAL (DRIP) AIR/VACUUM RELIEF VALVE ASSEMBLY — NO SCALE — RIC-2024



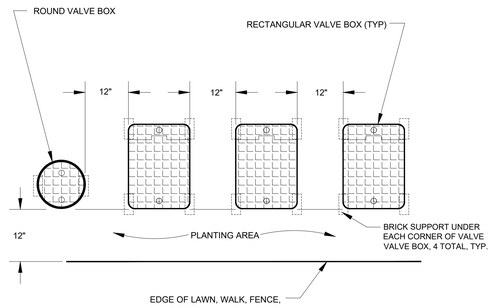
NOTE:
1. PROVIDE SAND BACKFILL A MIN OF 12" OVER & UNDER ALL PIPING UNDER PAVED AREAS AND A MIN OF 6" ON ALL OTHER PRESSURE PIPING WHEN NOTED.
2. INSTALL ALL SUPPLY LINES (DOMESTIC & IRRIGATION) MIN 10 FT IN HORIZONTAL DISTANCE FROM SEWER LINES AND MIN 3 FT ABOVE THE ELEVATION OF NEARBY SEWER LINES WHERE THESE LINES CROSS.

15 TYPICAL GENERAL TRENCHING DETAIL — NO SCALE — RIC-2024



1. PLASTIC PIPE SHALL BE INSTALLED ACCORDING TO THESE DETAILS UNLESS OTHERWISE NOTED OR DETAILED.
2. THE PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN. 470-B-2000 CONC.
3. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL MIN. ½" IN DIAMETER.
4. SIZE OF THRUST BLOCK: 4" PIPE = 4 CU. FT. CONC., 6" PIPE = 6 CU. FT., 8" PIPE = 8 CU. FT.
5. WRAP ALL EPOXY COATED FITTINGS WITH 6 MIL. PLASTIC BEFORE POURING THRUST BLOCKS.
6. POOR SOIL CONDITIONS: USE THRUST BLOCKS FOR 3" PIPE AT SIZE SHOWN FOR 4" PIPE.
7. ALL THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL.

16 TYPICAL THRUST BLOCKING — NO SCALE — RIC-2024



TOP VIEW

NOTES:
1. CENTER BOXES OVER VALVES.
2. SET BOXES IN GROUND COVER/SHRUB AREA WHERE POSSIBLE.
3. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
4. AVOID HEAVILY COMPACTING SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOXES.

17 TYPICAL VALVE BOX LAYOUT — NO SCALE — RIC-2024

Roque Irrigation Consultants, LLC
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AGENCY

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APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

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MATTHEW BUCHANAN
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RENEWAL 08/31/2025
STATE OF CALIFORNIA

CONSULTANT

Mark Beall associates
landscape architecture

Drawn by JL
Checked by MB

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

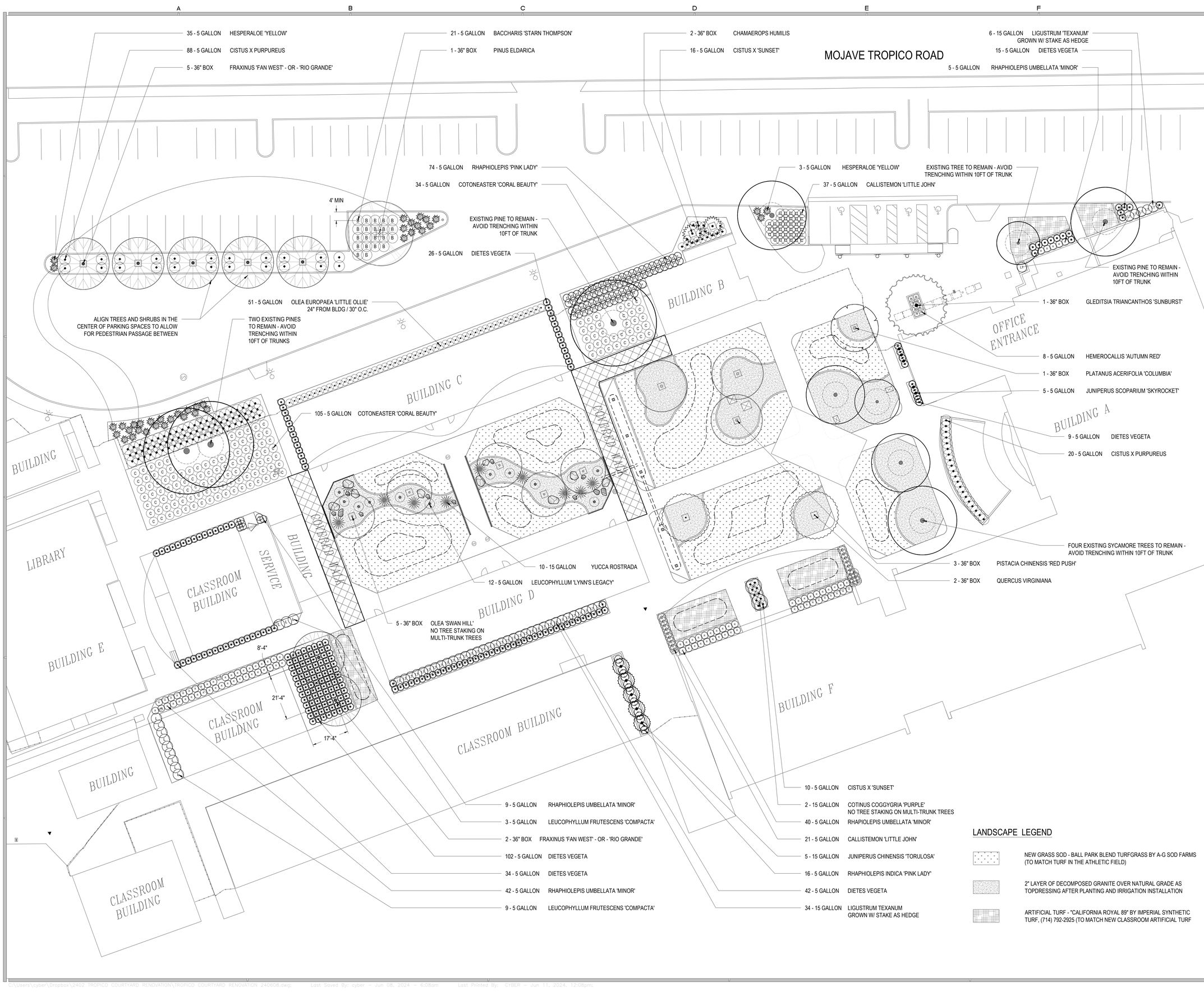
TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

IRRIGATION DETAILS PLAN

Job No. 2940.400
Date 04-23-24

L2.05



LANDSCAPE LEGEND

- NEW GRASS SOD - BALL PARK BLEND TURFGRASS BY A-G SOD FARMS (TO MATCH TURF IN THE ATHLETIC FIELD)
- 2" LAYER OF DECOMPOSED GRANITE OVER NATURAL GRADE AS TOPDRESSING AFTER PLANTING AND IRRIGATION INSTALLATION
- ARTIFICIAL TURF - "CALIFORNIA ROYAL 89" BY IMPERIAL SYNTHETIC TURF, (714) 792-2925 (TO MATCH NEW CLASSROOM ARTIFICIAL TURF

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Drawn by

Checked by

Revisions

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SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

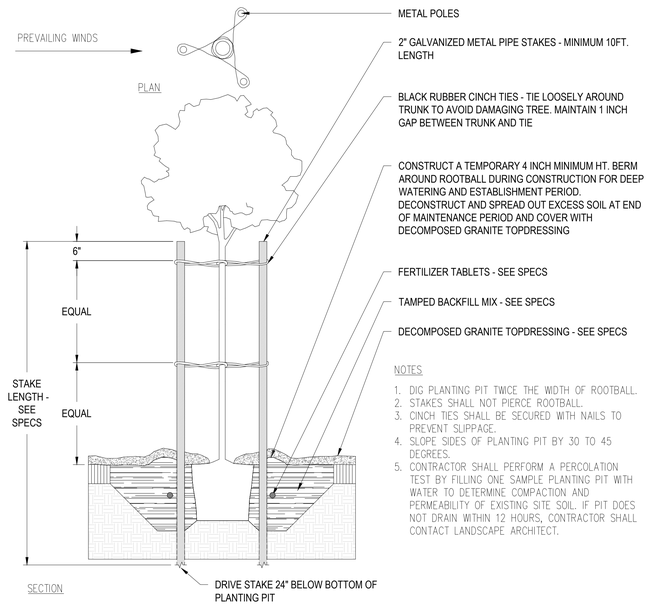
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

PLANTING PLAN

Job No.
2940.400

Date
06-01-24

L3.01



NOTES

1. DIG PLANTING PIT TWICE THE WIDTH OF ROOTBALL.
2. STAKES SHALL NOT PIERCE ROOTBALL.
3. CINCH TIES SHALL BE SECURED WITH NAILS TO PREVENT SLIPPAGE.
4. SLOPE SIDES OF PLANTING PIT BY 30 TO 45 DEGREES.
5. CONTRACTOR SHALL PERFORM A PERCOLATION TEST BY FILLING ONE SAMPLE PLANTING PIT WITH WATER TO DETERMINE COMPACTION AND PERMEABILITY OF EXISTING SITE SOIL. IF PIT DOES NOT DRAIN WITHIN 12 HOURS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT.

1 TRIPLE TREE STAKING - METAL POLES

1/2" = 1'-0"

2 SHRUB PLANTING DETAIL

NOT TO SCALE

PLANTING LEGEND

NOTE: THE PLANT LIST IS FOR THE CONTRACTOR'S CONVENIENCE ONLY, IF DISCREPANCIES EXIST BETWEEN THE PLANT LIST AND PLANTING PLANS,THE PLANS SHALL GOVERN.

BASE BID (SEE SHEET L3.01)

SYM	QTY	SIZE	HEIGHT	WIDTH	CALIPER	BOTANICAL NAME	COMMON NAME	REMARKS	WUCOLS H20
		TREES							
	2	36" BOX				CHAMAEROPS HUMILIS			M
	2	15 GALLON				COTINUS COGGYGRIA 'PURPUREUS'			L
	7	36" BOX				FRAXINUS 'FAN WEST' OR 'RIO GRANDE'			M
	1	36" BOX				GLEDITSIA TRIANCANTHOS 'SUNBURST'			L
	5	36" BOX				OLEA EUROPAEA 'SWAN HILL'			L
	1	36" BOX				PINUS ELDARICA			M
	3	36" BOX				PISTACIA CHINENSIS			M
	1	36" BOX				PLATANUS ACERIFOLIA 'COLUMBIA'			H
	2	36" BOX				QUERCUS VIRGINIANA			M
		SHRUBS							
	21	5 GALLON				BACCHARIS 'STARN THOMPSON'			L
	58	5 GALLON				CALLISTEMON 'LITTLE JOHN'			M
	108	5 GALLON				CISTUS X PURPUREUS			M
	26	5 GALLON				CISTUS X 'SUNSET'			M
	139	5 GALLON				COTONEASTER 'CORAL BEAUTY'			M
	228	5 GALLON				DIETES VEGETA			M
	8	5 GALLON				HEMEROCALLIS 'AUTUMN RED'			M
	38	5 GALLON				HESPERALOE PARVIFOLIA 'YELLOW'			L
	5	5 GALLON				JUNIPERUS SCOPARIUM 'SKYROCKET'			M
	5	15 GALLON				JUNIPERUS CHINENSIS 'TORULOSA'			M
	12	5 GALLON				LEUCOPHYLLUM LANGMANIAE 'LYNN'S LEGACY'			L
	12	5 GALLON				LEUCOPHYLLUM FRUTESCENS 'COMPACTA'			L
	40	15 GALLON				LIGUSTRUM JAPONICUM 'TEXANUM'			M
	51	5 GALLON				OLEA EUROPAEA 'LITTLE OLLIE'			L
	90	5 GALLON				RHAPHIOLEPIS INDICA 'PINK LADY'			M
	96	5 GALLON				RHAPHIOLEPIS UMBELLATA 'MINOR'			M
	10	15 GALLON				YUCCA ROSTRATA			L
		SOD	10,500 SQUARE FEET			"TIFFTUFF" HYBRID BERMUDA	HYBRID BERMUDA	BY AG SOD	

ALL TREES SHALL BE TAGGED BY THE LANDSCAPE ARCHITECT - TREE NURSERY SOURCES SHALL BE AT THE LANDSCAPE ARCHITECT'S DISCRETION

WATER USE BASED ON STATE OF CALIFORNIA WATER USE CLASSIFICATION OF LANDSCAPE SPECIES (WUCOLS)

VL - VERY LOW USE, L = LOW, M = MEDIUM, H = HIGH

GENERAL NOTES

1. See architect/civil engineer's drawings for additional construction and utility routing information.
2. Landscape Contractor shall be responsible for making himself familiar with all understructure utilities, pipes, and structural conditions. Landscape Contractor shall take sole responsibility for any cost incurred due to damage of said utilities.
4. Landscape Contractor shall not willfully proceed with construction as designed when it is obvious that unknown obstructions that may not have been known during design exist. Such conditions shall be immediately brought to the attention of the Landscape Architect (323) 683-1450. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
5. The General Contractor shall be responsible for insuring that underground utility piping, boxes, and vaults do not interfere with the placement of trees in locations indicated on plans. The general contractor shall review tree locations and other landscape elements with the Landscape Architect and other consultants. All new vaults, boxes, and other in-ground structures that are designated to be within new planting areas shall have their locations adjusted or modified as needed to prevent trip hazards or avoid conflict with planting design.
6. Landscape Contractor shall be responsible for any coordination with other subcontractors, as required, to accomplish irrigation and planting operations. Landscape Contractor shall coordinate with the General Contractor for all necessary sleeving and conduits, as shown on plan.
7. Grades for lawn and shrub areas adjacent to paving areas shall be set 1" below top of paving. All paved areas shall drain away from buildings and drainage shall be directed to planting areas or existing drains as directed by civil engineer.
8. Contractor shall submit a source list of nursery names and addresses for all plant materials for approval from the Landscape Architect. Color nursery images of trees shall be part of the landscape submittal as required by the landscape specifications. Images shall be submitted to the Landscape Architect for approval prior to planting. Images shall include the height, spread, and caliper. A person shall stand next to each tree in the photo for a sense of scale.
9. Landscape Contractor shall procure and reserve trees and plant materials at the start of contract to insure availability and quality. The Landscape Architect shall have the opportunity to inspect and approve all boxed tree and specimens at the nursery prior to delivery and reserves the right to tag any trees at the nursery of his choice.
10. All tree and shrub materials specified shall meet accepted nursery standards of height and width for the container size indicated. If the Landscape Contractor cannot locate materials of acceptable size at the time of delivery, contact the Landscape Architect for sourcing, substitutions, or container downsizing or upsizing. Substitutions are not acceptable without approval of the Landscape Architect.

PLANTING NOTES

1. Contractor shall break up, rip, turn over and otherwise cultivate to a depth of at least 12" (FULL DEPTH) either mechanically or by hand the existing soils that are heavily compacted to achieve 80% compaction levels for planting areas.
2. Contractor shall auger 12" diameter holes to a depth of 4 feet or greater spaced 10ft o.c. throughout new sod areas to improve drainage
3. Soil amendments within specifications are for bidding purposes only. A soil report's recommendations shall govern.
3. Existing trees designated to be removed shall include the removal of the stump and roots larger than 2" at least 12" below the soil surface.
4. Existing trees designated to remain shall have the root zones within 6ft of the trunk protected. Any excavation, digging, or trenching within these zones must be approved by the landscape architect, and the arborist.
5. Install root barriers along edges of paving that are within 48" of new trees.
6. Grades for lawn and shrub areas adjacent to paving areas shall be set 1" below top of paving. All paved areas shall drain away from buildings and drainage shall be directed to planting areas or existing drains as directed by civil engineer.
7. All new and existing planting areas shall be free of construction debris, rocks, form boards, weeds and any and all existing plants or turf designated to be removed.
8. Tree locations shown on plans with dimensions shall be placed accurately and shall not be adjusted without approval of the Landscape Architect.
9. A representative sample of the botanical name tag from the nursery shall be provided for each species of plant to correctly indentify it and shall remain attached to the plant until final inspection.
10. All planting areas shall have a wood or mineral mulch or topdressing as designated on the plans and as per the specifications.

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TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

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ROSAMOND, CA 93560

PLANT LEGEND, DETAILS, AND NOTES

Job No.
2940.400

Date
06-01-24

L3.02

ABBREVIATIONS:

AB	ANCHOR BOLT
ABV	ABOVE
ADDL	ADDITIONAL
ADHES	ADHESIVE
ADJ	ADJACENT
ALT	ALTERNATE
AMP	AMPLITUDE
ARCH	ARCHITECT/ ARCHITECTURAL
AVG	AVERAGE
BF	BOUNDARY FASTENER
BLDG	BUILDING
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BN	BOUNDARY NAILING
BOTT	BOTTOM
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
BYND	BEYOND
CF	CUBIC FOOT
CIP	CAST IN PLACE
CJ	CONTROL JOINT/ CEILING JOIST
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTRSNK	COUNTERSINK/ COUNTERSUNK
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CVR	COVER
DIA	DIAMETER
DIM	DIMENSION
DIR	DIRECTION
DIST	DISTANCE
DL	DEAD LOAD
DMG	DAMAGE
DO	DO OVER
DP	DEEP
DS	DRAG STRUT
DSA	DEPARTMENT OF STATE ARCHITECTS
DTL	DETAIL
DWG	DRAWING
DWL	DOWEL
(E)	EXISTING
EA	EACH
EF	EACH FACE/ EDGE FASTENER
ELEC	ELECTRICAL
ELEV	ELEVATION
EMB	EMBEDMENT
EN	EDGE NAILING
ENGR	ENGINEER
ES	EDGE SCREW
EJ	EXPANSION JOINT
EQ	EQUAL
EW	EACH WAY

EXT	EXTERIOR
FDN	FOUNDATION
FF	FINISH FLOOR/ FIELD FASTENER
FG	FINISH GRADE
FH	FULL HEIGHT
FN	FIELD NAILING
FL	FLOOR
FLG	FLANGE
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FS	FAR SIDE/ FINISHED SURFACE
FT	FOOT/FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GRND	GROUND
GRD	GRADE
GT	GIRDER TRUSS
HNGR	HANGER
HT	HEIGHT
HORIZ	HORIZONTAL
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION
ID	INSIDE DIAMETER
INFO	INFORMATION
INT	INTERIOR
INV	INVERTED
JT	JACK TRUSS
KP	KING POST
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
LD	LONG DIRECTION
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC'S	LOCATIONS
LONG	LONGITUDINAL
LT WT	LIGHT WEIGHT
MANUF	MANUFACTURER
MAX	MAXIMUM
MB	MACHINE BOLT
MD	METAL DECK
MECH	MECHANICAL
MEP	MECH/ELEC/PLUMBING
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
(N)	NEW
NS	NEAR SIDE/NELSON STUD
NW	NORMAL WEIGHT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OMF	ORDINARY MOMENT FRAME
OPNG	OPENING
OPP	OPPOSITE
PERIM	PERIMETER
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLF	POUNDS PER LINEAR FOOT
PLT	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH

PT	PLATE TRUSS/ PRESSURE TREATED
REINF	REINFORCEMENT
REQ	REQUIRE
REQ'D	REQUIRED
R&R	REMOVE AND REPLACE
SCHED	SCHEDULE
SD	SHORT DIRECTION
SF	SQUARE FOOT
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SMRF	SPECIAL MOMENT - RESISTING FRAME
SN	SOLE PLATE NAILING
SOG	SLAB ON GRADE
SPCNG	SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STAGG	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
SW	SHEARWALL
SWO	SHEARWALL WITH OPENING
SYM	SYMMETRICAL
THK	THICK
THRD	THREADED
T&B	TOP AND BOTTOM
TN	TOE NAILING
TOF	TOP OF FOOTING
TOP	TOP OF PODIUM
TOS	TOP OF STEEL
TL	TOP OF LEDGER
TOW	TOP OF WALL
TRANV	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
WF	WIDE FLANGE BEAM
W/	WITH
W/O	WITHOUT
WT	WEIGHT
WP	WORKING POINT
WWF	WELDED WIRE FABRIC
WWO	WALL W/ OPENING & OR PERFORATED SHEARWALL

SYMBOLS:

∠.................. ANGLE
@................. AT
℄.................. CENTERLINE
℘.................. PLATE/PROPERTY LINE
#................. POUNDS
Ø................. DIAMETER
//................. PARALLEL
d_b................. BAR DIAMETER

REINFORCED CONCRETE NOTES CONT.:

36. ACI 318 TABLE 26.4.1.1.1(a) - SPECIFICATIONS FOR CEMENTITIOUS MATERIALS.

CEMENTITIOUS MATERIALS	SPECIFICATION
PORTLAND CEMENT	ASTM C150
BLENDED HYDRAULIC CEMENTS	ASTM C595, EXCLUDING TYPE IS (≥70) AND TYPE IT (S≥70)
EXPANSIVE HYDRAULIC CEMENTS	ASTM C845
HYDRAULIC CEMENT	ASTM C1157
FLY ASH AND NATURAL POZZOLAN	ASTM C618
SLAG CEMENT	ASTM C989
SILICA FUME	ASTM C1240

37. AGGREGATES - COMPLIANCE REQUIREMENTS:
    A. AGGREGATES SHALL CONFORM TO (1) OR (2):
        1. NORMALWEIGHT AGGREGATE: ASTM C33.
        2. LIGHTWEIGHT AGGREGATE: ASTM C330.
    B. AGGREGATES NOT CONFORMING TO ASTM C33 OR ASTM C330 ARE PERMITTED IF THEY HAVE BEEN SHOWN BY TEST OF ACTUAL SERVICE TO PRODUCE CONCRETE OF ADEQUATE STRENGTH AND DURABILITY AND ARE APPROVED BY THE BUILDING OFFICIAL.
    C. MAXIMUM AGGREGATE SIZE:
        1. FOOTINGS..1" MAX.
        2. SLAB ON GRADE..1" MAX.
        3. GRADE BEAMS..1" MAX.*
        4. ELEVATED STRUCT. SLABS, BEAMS, FRAME COLUMNS, WALLS.................... ⅜" MAX.
        5. REMAINDER..¾" MAX.
    NOTE: * INDICATES VERIFY MINIMUM 1½" BETWEEN BARS.
38. WATER - COMPLIANCE REQUIREMENTS:
    A. MIXING WATER SHALL CONFORM TO ASTM C1602.
    B. MIXING WATER, INCLUDING THAT PORTION OF MIXING WATER CONTRIBUTED IN THE FORM OF FREE MOISTURE ON AGGREGATES, SHALL NOT CONTAIN DELETERIOUS AMOUNTS OF CHLORIDE ION WHEN USED FOR PRESTRESSED CONCRETE, FOR CONCRETE THAT WILL CONTAIN ALUMINUM EMBEDMENTS, OR FOR CONCRETE CAST AGAINST STAY-IN-PLACE GALVANIZED STEEL FORMS.
39. ADMIXTURES - COMPLIANCE REQUIREMENTS:
    A. ADMIXTURES SHALL CONFORM TO (1) THROUGH (4):
        1. WATER REDUCTION AND SETTING TIME MODIFICATION: ASTM C494.
        2. PRODUCING FLOWING CONCRETE: ASTM C1017.
        3. AIR ENTRAINMENT: ASTM C260.
        4. INHIBITING CHLORIDE-INDUCED CORROSION: ASTM C1582.
    B. ADMIXTURES THAT DO NOT CONFORM TO THESE SPECIFICATIONS SHALL BE SUBJECT TO PRIOR REVIEW BY THE LICENSED DESIGN PROFESSIONAL.
    C. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDE FROM SOURCES OTHER THAN IMPURITIES IN ADMIXTURE INGREDIENTS SHALL NOT BE USED IN PRESTRESSED CONCRETE, IN CONCRETE CONTAINING EMBEDDED ALUMINUM, OR IN CONCRETE CAST AGAINST STAY-IN-PLACE GALVANIZED STEEL FORMS.
    D. ADMIXTURES USED IN CONCRETE CONTAINING EXPANSIVE CEMENTS CONFORMING TO ASTM C845 SHALL BE COMPATIBLE WITH THE CEMENT AND PRODUCE NO DELETERIOUS EFFECTS.
40. STEEL FIBER REINFORCEMENT - COMPLIANCE REQUIREMENTS:
    A. STEEL FIBER REINFORCEMENT USED FOR SHEAR RESISTANCE SHALL SATISFY (1) AND (2):
        1. BE DEFORMED AND CONFORM TO ASTM A820.
        2. HAVE A LENGTH-TO-DIAMETER RATIO OF AT LEAST 50 AND NOT EXCEEDING 100.
41. COVER THICKNESS FOR REINFORCED CONCRETE FLOOR OR ROOF SLABS (INCHES)

FIRE-RESISTING RATING (HOURS)									
INTERIOR SPAN					END SPAN				
1 HR	1½ HR	2 HR	3 HR	4 HR	1 HR	1½ HR	2 HR	3 HR	4 HR
¾	¾	¾	¾	¾	¾	¾	1	1¼	1⅝

42. COVER THICKNESS FOR PRE-STRESSED CONCRETE FLOOR OR ROOF SLABS (INCHES)

FIRE-RESISTING RATING (HOURS)									
INTERIOR SPAN					END SPAN				
1 HR	1½ HR	2 HR	3 HR	4 HR	1 HR	1½ HR	2 HR	3 HR	4 HR
¾	¾	¾	¾	¾	1⅛	1½	1¾	2⅜	2¾

43. MINIMUM COVER FOR MAIN REINFORCING BARS OF REINFORCED CONCRETE BEAMS[b] (APPLICABLE TO ALL TYPES OF STRUCTURAL CONCRETE)

BEAM WIDTH[a] (inches)	FIRE-RESISTING RATING (HOURS)				
	1 HR	1½ HR	2 HR	3 HR	4 HR
5	¾	1	1¼	-	-
7	¾	¾	¾	1¾	3
≥ 10	¾	¾	¾	1	1¾

S1: 1 INCH = 25.4mm 1 FOOT = 304.8mm
a. FOR BEAM WIDTHS BETWEEN THE TABULATED VALUES,THE MINIMUM COVER THICKNESS CAN BE DETERMINED BY DIRECT INTERPOLATION.
b. THE COVER FOR AN INDIVIDUAL REINFORCING BAR IS THE MINIMUM THICKNESS OF CONCRETE BETWEEN THE SURFACE OF THE BAR AND THE FIRE-EXPOSED SURFACE OF THE BEAM. FOR BEAMS IN WHICH SEVERAL BARS ARE USED, THE COVER FOR THE CORNER BARS USED IN THE CALCULATION SHALL BE REDUCED TO ONE-HALF OF THE ACTUAL VALUE. THE COVER FOR AN INDIVIDUAL BAR MUST BE NOT LESS THAN ONE-HALF OF THE VALUE GIVEN IN TABLE 722.2.3 (3) NOR LESS THAN ¾ INCH.

44. TABLE 722.2.4 MINIMUM DIMENSION OF CONCRETE COLUMNS (INCHES)

FIRE-RESISTING RATING (HOURS)				
1 HR	1½ HR	2[a] HR	3[a] HR	4[b] HR
8	9	10	12	14

S1: 1 INCH = 25mm
a. THE MINIMUM DIMENSION IS PERMITTED TO BE REDUCED TO 8 INCHES FOR RECTANGULAR COLUMNS WITH TWO PARALLEL SIDES NOT LESS THAN 36 INCHES IN LENGTH.
b. THE MINIMUM DIMENSION IS PERMITTED TO BE REDUCED TO 10 INCHES FOR RECTANGULAR COLUMNS WITH TWO PARALLEL SIDES NOT LESS THAN 36 INCHES IN LENGTH.

45. 722.2.4.2 COVER FOR REINFORCED CONCRETE COLUMNS.
    THE MINIMUM THICKNESS OF CONCRETE COVER TO THE MAIN LONGITUDINAL REINFORCEMENT IN COLUMNS, REGARDLESS OF THE TYPE OF AGGREGATE USED IN THE CONCRETE AND THE SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE, f'_c SHALL BE NOT LESS THAN 1 INCH (25mm) TIMES THE NUMBER OF HOURS OF REQUIRED FIRE RESISTANCE OR 2 INCHES (51mm), WHICHEVER IS LESS.

REINFORCED CONCRETE NOTES:

1. CONCRETE MIXES SHALL BE DESIGNED BY A RECOGNIZED TESTING LABORATORY AND COPIES OF THE DESIGN SHALL BE SENT TO THE ARCHITECT AND THE ENGINEER. COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND THE ARCHITECT. ALL CONCRETE EXCEPT FOUNDATION CONCRETE SHALL CONTAIN POLYMER BASED WATER REDUCING ADMIXTURE.
2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150. TYPE II. AGGREGATE FOR STONE CONCRETE SHALL CONFORM TO ASTM C-33. NON-REACTIVE AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM ASTM C-330.
3. ALL REINFORCING BARS, ANCHOR BOLTS, PRE STRESSING TENDONS, AND ALL OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
4. THE MAXIMUM SLUMP SHALL NOT EXCEED 4" +/- 1" FOR FOOTINGS, SLABS ON EARTH, AND MASS CONCRETE, AND 5" +/- 1" FOR OTHER CONCRETE. SLUMP MAY BE INCREASED WHEN CHEMICAL ADMIXTURES ARE USED, PROVIDED THAT ADMIXTURE-TREATED CONCRETE HAS THE SAME OR LOWER WATER: CEMENT OR WATER: CEMENTITIOUS MATERIAL RATIO. (ACI 211 TABLE 6.3.1)
5. MINIMUM COMPRESSIVE STRENGTH:
   PROVIDE CONCRETE WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH (f'c) AT 28 DAYS UNLESS NOTED OTHERWISE (MINIMUM 5 SACKS OF CEMENT PER CUBIC YARD) (MAXIMUM WATER/CEMENT RATIO BY WEIGHT SHALL BE .65 FOR BALANCE):

MINIMUM COMPRESSIVE STRENGTH (f'c)			
CONSTRUCTION TYPE	PSI	SPEC. INSP. REQUIRED	AGGREGATE
SLAB ON GRADE	3000 PSI	NO	NORMAL WT.
CONTINUOUS FOOTINGS	3000 PSI	NO	NORMAL WT.
NOTE: * 2500 PSI ~~STRENGTH USED FOR DESIGN, SPECIAL INSPECTION NOT REQUIRED.~~			

6. ~~THE COMPRESSIVE STRENGTH OF EXTERIOR SLABS AND FLAT WORK SHALL BE INCREASED FOR MODERATE AND SEVERE WEATHERING EXPOSURE PER TABLE 1904.2.2 OF THE CBC.~~
7. ALL STRUCTURAL CONCRETE IS TO BE REINFORCED.
8. CONTRACTOR SHALL SUBMIT SLAB CONSTRUCTION JOINT LAYOUT DRAWINGS TO THE ARCHITECT AND ENGINEER FOR REVIEW. THE MAXIMUM SPACING OF CONTROL JOINTS IN SLAB ON GRADE EACH WAY SHALL BE 30X THE SLAB THICKNESS BEFORE 7 DAYS OF CURING. SLABS REQUIRE AT LEAST 7 DAYS CURING (14 DAYS WHERE FLY ASH OR POZOLAN IS USED), AND THE ENVIRONMENT (HUMIDITY AND TEMPERATURE) OF ROOM SHALL BE ACCLIMATED TO LONG TERM CLIMATE CONDITIONS PRIOR TO INSTALLATION OF FLOORING. THE SLAB TEMPERATURE SHALL BE WITHIN 5 DEGREES OF DEW POINT DURING CURING. SEE NOTES BELOW ON CURING REQUIREMENTS. MOISTURE AND HUMIDITY TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY HIRED BY THE OWNER, AND TESTS RESULTS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF FLOORING.
9. PROJECTING CORNERS OF BEAMS, COLUMNS, WALLS, ETC.. SHALL BE FORMED WITH A 3/4" CHAMFER UNLESS DETAILED OTHERWISE.
10. IF EXPOSURE TO SULFATES, OR SPECIAL EXPOSURE CONDITIONS OCCUR, THE CONCRETE STRENGTH, WATER CEMENT RATIOS, AND OTHER PROPERTIES OF THE CONCRETE MIX SHALL BE IN ACCORDANCE WITH ACI 318 SECTION 19.3. VERIFY WITH SOILS REPORT FOR CORROSIVE CHEMICALS IN THE SOILS.
11. DO NOT POUR CONCRETE WHEN THE TEMPERATURE EXCEEDS 90°F OR 80°F WHEN THE WIND EXCEEDS 12MPH. START CURING AS SOON AS HARD TRAWLING IS DONE. WHEN WIND, TEMPERATURE AND HUMIDITY CONDITIONS CAUSE EARLY DISAPPEARANCE OF BLEED WATER, STEPS SHALL BE TAKEN TO USE A FOG SPRAY. CURING SHALL COMMENCE IMMEDIATELY AFTER FINISHING TRAWLING.
12. CURE CONCRETE ACCORDING TO ACI 308.1 BY ONE OF THE FOLLOWING METHODS:
    A. WET CURING BY USING BURLAP FOR A MINIMUM OF 7 DAYS. BURLAP MUST BE PLACED WITHIN 2 HOURS OF POURING.
    B. CURING COMPOUND MUST CONFORM TO ASTM C309. APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURE'S WRITTEN INSTRUCTION.
    C. MOISTURE RETAINING COVER SHOULD CONFORM TO ASTM C171, BE AT LEAST 0.4 MILL. THICK, AND PREFERABLE REINFORCED WITH GLASS FIBER.
13. WHERE AIR ENTRAINED CONCRETE IS SPECIFIED, THE VOLUME OF AIR IN THE MORTAR FRACTION OF CONCRETE MIX DESIGN SHALL BE 9% ±1%.
14. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 60. AT GRADE BEAMS & CONCRETE FRAMES ALL REINF. SHALL CONFORM TO ASTM A706 REBAR. U.N.O.
15. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
16. REINFORCING STEEL SHALL BE SPLICED WITH CLASS B SPLICES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
17. LOW HYDROGEN ELECTRODES SHALL BE USED WHEREVER REINFORCING STEEL IS WELDED. BARS SHALL BE A706 GRD. 60 MIN. FOR WELD ABILITY.
18. AT THE TIME CONCRETE IS PLACED, REINFORCEMENT SHALL BE FREE FROM MUD, OIL, OR OTHER NONMETALLIC COATINGS THAT DECREASE BOND. WHERE SPECIFIED IN THE DETAILS, EPOXY-COATING OF STEEL REINFORCEMENT IN ACCORDANCE WITH ACI STANDARDS. EXCEPT FOR PRESTRESSING STEEL, STEEL REINFORCEMENT WITH RUST, MILL SCALE, OR A COMBINATION OF BOTH SHALL BE CONSIDERED SATISFACTORY, PROVIDED THE MINIMUM DIMENSIONS (INCLUDING HEIGHT OF DEFORMATIONS) AND WEIGHT OF A HAND-WIRE-BRUSHED TEST SPECIMEN COMPLY WITH APPLICABLE ASTM SPECIFICATIONS.
19. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL BE d_b BUT NOT LESS THAN 1 IN. WHERE PARALLEL REINFORCEMENT IS PLACED IN TWO OR MORE LAYERS, BARS IN THE UPPER LAYERS SHALL BE PLACED DIRECTLY ABOVE BARS IN THE BOTTOM LAYER WITH CLEAR DISTANCE BETWEEN LAYERS NOT LESS THAN 1 IN. CLEAR DISTANCE LIMITATION BETWEEN BARS SHALL APPLY ALSO TO THE CLEAR DISTANCE BETWEEN A CONTACT LAP SPLICE AND ADJACENT SPLICES OR BARS.
20. IN SPIRALLY REINFORCED OR TIED REINFORCED COMPRESSION MEMBERS, CLEAR DISTANCE BETWEEN LONGITUDINAL BARS SHALL BE NOT LESS THAN $1.5d_b$ NOR LESS THAN 1½ IN.
21. IN WALLS AND SLABS OTHER THAN CONCRETE JOIST CONSTRUCTION, PRIMARY FLEXURAL REINFORCEMENT SHALL NOT BE SPACED FARTHER APART THAN THREE TIMES THE WALL OR SLAB THICKNESS, NOR FARTHER APART THAN 18 IN.
22. WHERE CONCRETE MUST BE INSTALLED AND CURED IN COLD WEATHER, THE GENERAL REQUIREMENTS AND SPECIFICATIONS OF ASTM STD C-31 SHALL BE IMPLEMENTED.
23. CAST-IN-PLACE CONCRETE (NON-PRESTRESSED)
    THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
    A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH........................ 3" MIN.
    B. CONCRETE EXPOSED TO EARTH OR WEATHER:
        - NO.6 THROUGH NO.18 BARS.. 2" MIN.
        - NO.5 BAR, W31 OR D31 WIRE, AND SMALLER..1½" MIN.
    C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
       SLABS, WALLS, JOISTS:
        - NO.14 AND NO.18 BARS..1½" MIN.
        - NO.11 BAR AND SMALLER..¾" MIN.
       BEAMS, COLUMNS:
        - PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS..1½" MIN.
       SHELLS, FOLDED PLATE MEMBERS:
        - NO.6 BAR AND LARGER..¾" MIN.
        - NO.5 BAR, W31 OR D31 WIRE, AND SMALLER..½" MIN.
24. BUNDLED BARS:
    FOR BUNDLED BARS, MINIMUM CONCRETE COVER SHALL BE EQUAL TO THE EQUIVALENT DIAMETER OF THE BUNDLE, BUT NEED NOT TO BE GREATER THAN 2 IN.; EXCEPT FOR CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH, WHERE MINIMUM COVER SHALL BE 3 IN. GROUPS OF PARALLEL REINFORCING BARS BUNDLED IN CONTACT TO ACT AS A UNIT SHALL BE LIMITED TO FOUR IN ANY ONE BUNDLE. BUNDLED BARS SHALL BE ENCLOSED WITHIN STIRRUPS OR TIES. BARS LARGER THAN NO. 11 SHALL NOT BE BUNDLED IN BEAMS. INDIVIDUAL BARS WITHIN A BUNDLE TERMINATED WITHIN THE SPAN OF FLEXURAL MEMBERS SHALL TERMINATE AT DIFFERENT POINTS WITH AT LEAST $40d_b$ STAGGER.
25. CORROSIVE ENVIRONMENTS:
    IN CORROSIVE ENVIRONMENTS OR OTHER SEVERE EXPOSURE CONDITIONS, AMOUNT OF CONCRETE PROTECTION SHALL BE SUITABLY INCREASED, AND DENSENESS AND NONPOROSITY OF PROTECTING CONCRETE SHALL BE CONSIDERED, OR OTHER PROTECTION SHALL BE PROVIDED. "COVER" WHERE NOTED ON PLANS AND DETAILS IS NOT A MINIMUM, UNLESS NOTED AS "MIN." THE COVER SHALL BE AS NOTED WITH TOLERANCE.
26. MINIMUM DIAMETER OF BEND:

MINIMUM DIAMETERS OF BEND	
BAR SIZE	MINIMUM DIAMETER
NO.3 THROUGH NO.8	$6d_b$
NO.9, NO.10, AND NO.11	$8d_b$
NO.14 AND NO.18	$10d_b$

27. TOLERANCE FOR d AND MINIMUM CONCRETE COVER IN FLEXURAL MEMBERS, WALLS, AND COMPRESSION MEMBERS SHALL BE AS FOLLOWS:

	TOLERANCE ON d	TOLERANCE ON MINIMUM CONCRETE COVER
d ≤ 8 IN.	±⅜ IN.	-⅜ IN.
d > 8 IN.	±½ IN.	-½ IN.

    EXCEPT THAT TOLERANCE FOR THE CLEAR DISTANCE TO FORMED SOFFITS SHALL BE MINUS ¼ IN. AND TOLERANCE FOR COVER SHALL NOT EXCEED MINUS ⅓ THE MINIMUM CONCRETE COVER REQUIRED IN THE DESIGN DRAWINGS AND SPECIFICATIONS.
28. MAXIMUM CHLORIDE ION CONTENT FOR CORROSION PROTECTION OF REINFORCEMENT:

TYPE OF MEMBER	MAXIMUM WATER SOLUBLE CHLORIDE ION (Cl') IN CONCRETE, PERCENT BY WEIGHT OF CEMENT
PRESTRESSED CONCRETE	0.06
REINFORCED CONCRETE EXPOSED TO CHLORIDE IN SERVICE	0.15
REINFORCED CONCRETE THAT WILL BE DRY OR PROTECTED FROM MOISTURE IN SERVICE	1.00
OTHER REINFORCED CONCRETE CONSTRUCTION	0.30

29. TOLERANCE FOR REINFORCEMENT AND CONCRETE LOCATION SHALL BE PER ACI 117.
30. TOLERANCE FOR LONGITUDINAL LOCATION OF BEND AND ENDS OF REINFORCEMENT SHALL BE ± 2 IN., EXCEPT THE TOLERANCE SHALL BE ± ½ IN. AT THE DISCONTINUOUS ENDS OF BRACKETS AND CORBELS, AND ± 1 IN. AT THE DISCONTINUOUS ENDS OF OTHER MEMBERS.
31. REINFORCEMENT RESISTING EARTHQUAKE-INDUCED FLEXURAL AND AXIAL FORCES IN FRAME MEMBERS AND IN STRUCTURAL WALL BOUNDARY ELEMENTS SHALL COMPLY WITH ASTM A 706. ASTM A 615 GRADE 60 REINFORCEMENT SHALL BE PERMITTED IN THESE MEMBERS IF:
    A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED f_y BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3000 PSI); AND
    B. THE RATIO OF THE ACTUAL TENSILE STRENGTH TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.THE VALUE OF f_{yt} FOR TRANSVERSE REINFORCEMENT INCLUDING SPIRAL REINFORCEMENT SHALL NOT EXCEED 60,000 PSI.
32. CONCRETE FLOOR FLATNESS SHALL BE A MINIMUM OF ¼" : 10 FT. TYP. U.N.O.
33. WHERE CORROSION-RESISTANT REINFORCEMENT (CRR) IS SPECIFIED, USE MMFX2 REBAR ASTM A1035 GRADES 690 AND 830.
34. WELDING OF ELECTRICAL CONDUCTORS TO REINFORCING STEEL IS PROHIBITED WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
35. PERFORMANCE OF SHOTCRETE SHALL BE PER ACI 506.2 SPECIFICATIONS

DSA SUPPLEMENTARY NOTES:

1. THE HORIZONTAL DIMENSIONS OF UNFORMED CONCRETE FOOTINGS SHALL BE INCREASED 1 INCH (25mm) AT EVERY VERTICAL SURFACE AT WHICH CONCRETE IS PLACED DIRECTLY AGAINST THE SOIL.
2. MASONRY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH SECTION 2104A.6 OF 2022 CBC.
3. FASTENERS USED FOR THE ATTACHMENTS OF EXTERIOR WALL COVERINGS SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, MECHANICALLY DEPOSITED ZINC-COATED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATINGS WEIGHTS FOR HOT-DIPPED ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A 153. THE COATING WEIGHTS FOR MECHANICALLY DEPOSITED ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM.
4. COMPLIANCE WITH TITLE 24, FOR PARTS 1-6 AND 9.
5. TITLE 24, PARTS 1-5 MUST BE KEPT ON SITE DURING CONSTRUCTION.
6. ALL ADDENDA MUST BE SIGNED BY ARCHITECT AND APPROVED BY DSA. (SECTION 4-338, PART 1).
7. ALL SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE CONSIDERED AS A CCD OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION. (IR-A6) (SECTION 4-338(c), PART 1).
8. CCD (SECTION 4-338(c), APRT 1) MUST BE SIGNED BY ALL THE FOLLOWING:
    A. A/E OF RECORD
    B. OWNER (CHANGE ORDER ONLY)
    C. SEOR (WHEN APPLICABLE)
    D. DELEGATED PROFESSIONAL ENGINEER (WHEN APPLICABLE)
    E. DSA
11. PROJECT INSPECTOR AND TESTING LAB MUST BE EMPLOYED BY THE OWNER AND APPROVED BY ALL OF THE FOLLOWING:
    A. A/E OF RECORD
    B. SEOR (WHEN APPLICABLE)
    C. DSA
12. TEST AND INSPECTIONS-CHAPTER 17AAND DSA-103 FORM
    A. ALL TESTS SHALL BE PERFORMED BY A TESTING FACILITY ACCEPTABLE TO THE ARCHITECT AND DSA. THE TESTING FACILITY SHALL BE DIRECTLY EMPLOYED BY THE SCHOOL DISTRICT AND NO OTHER ENTITY OR INDIVIDUAL. SEE TITLE 24, PART 1, § 4-335(b).
    B. TEST REPORTS SHALL BE ADDRESSED TO, AND SENT TO, THE SCHOOL DISTRICT BY THE TESTING FACILITY. COPIES OF ALL TEST REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE STRUCTURAL ENGINEER, AND THE PROJECT INSPECTOR BY THE TESTING FACILITY. ALL REPORTS SHALL BE SENT WITHIN 14 DAYS OF THE DATE OF THE TEST. SEE TITLE 24, PART 1, § 4-335(d).
    C. A VERIFIED REPORT, SIGNED BY THE CALIFORNIA LICENSED CIVIL ENGINEER IN CHARGE OF THE TESTING FACILITY WHICH CONDUCTED THE TESTS, SHALL BE SUBMITTED TO DSA UPON COMPLETION OF THE PROJECT. THE VERIFIED REPORT SHALL STATE THAT ALL TESTS AND INSPECTIONS WERE MADE AS REQUIRED BY THE DSA APPROVED DOCUMENTS. IF THE TESTS OR INSPECTIONS INDICATE THAT MATERIALS OR WORKMANSHIP DID NOT MEET THE REQUIREMENTS OF THE DSA APPROVED DOCUMENTS, THE VERIFIED REPORT SHALL LIST ALL NONCOMPLIANT WORK. A COPY OF ALL TEST REPORTS INVOLVING UNRESOLVED NONCOMPLIANT WORK SHALL BE ATTACHED TO THE VERIFIED REPORT. IN THE EVENT THAT NOT ALL REQUIRED TESTS OR INSPECTIONS WERE MADE BY THE TESTING FACILITY MAKING THIS VERIFIED REPORT, THOSE TESTS AND INSPECTIONS NOT MADE SHALL BE LISTED ON THE VERIFIED REPORT. SEE TITLE 24, PART 1, § 4-335(e).
13. THE OWNER OR OWNER'S REPRESENTATIVE SHALL REQUEST THE ENGINEER OF RECORD TO PERFORM STRUCTURAL OBSERVATION IN ACCORDANCE WITH THE 'DSA 6-AE' FORM AND THE APPROVED PLANS AT EACH CONSTRUCTION STAGE.

DSA SPECIAL INSPECTIONS:

1. REFER TO DSA FORM 103 FOR REQUIRED INSPECTIONS
2. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
3. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND-OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTION SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
    A. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
    B. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
    C. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS; AND
    D. IDENTIFICATION AND QUALIFICATION OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

FOUNDATION NOTES:

1. BUILDING CODE MINIMUM RECOMMENDATION IS USED IN THIS PROJECT 1806A.2 CLASS 5 MATERIAL.
2. FOOTINGS ARE DESIGNED FOR A BEARING PRESSURE OF 1500 PSF AND NEGLIGIBLE EXPANSION INDEX 21-50. WHERE SLAB-ON-GRADE OCCURS, EXISTING LOOSE SURFACE SOILS AND FILL PLACED WITHIN THE SLAB AREA SHALL BE RECOMPACTED TO A MINIMUM OF 90 PERCENT RELATIVE COMPACTION.
3. THE CONTRACTOR SHALL SUBMIT TO DSA OR COUNTY FOUNDATION EXCAVATIONS AND RECOMPACTION REPORTS PRIOR TO PLACING ANY STRUCTURAL AND NON-STRUCTURAL CONCRETE AND REBAR AT THE SUBJECT AREAS.
4. CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.
5. FOOTING AND UTILITY TRENCH BACK FILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS. FLOODING WILL NOT BE PERMITTED.
6. ALL FOOTINGS SHALL BE FOUNDED IN UNDISTURBED NATURAL SOIL PER CODE.
7. IF SOIL IS FOUND TO BE EXPANSIVE, (EXPANSION INDEX < 21) THE FOOTINGS MUST MEET THE FOLLOWING MINIMUM REQUIREMENTS.
    A. DEPTH OF FOOTINGS BELOW THE NATURAL AND FINISH GRADES SHALL NOT BE LESS THAN 27 INCHES FOR EXTERIOR AND 18 INCHES FOR INTERIOR FOOTINGS.
    B. EXTERIOR WALLS AND INTERIOR BEARING WALLS SHALL BE SUPPORTED ON CONTINUOUS FOOTINGS.
    C. FOOTINGS SHALL BE REINFORCED WITH MINIMUM (4) #4 DEFORMED REINFORCING BARS. TWO BARS SHALL BE PLACED 4 INCHES OF THE BOTTOM OF THE FOOTING AND TWO BARS WITHIN 4 INCHES OF THE TOP OF THE FOOTINGS.
    D. THE SOIL BELOW AN INTERIOR CONCRETE SLAB SHALL BE SATURATED WITH MOISTURE TO A DEPTH OF 18 INCHES PRIOR TO PLACING THE CONCRETE.
8. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.
9. EXCAVATION FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION.
10. THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, COBBLES AND BOULDERS OR WITH A CONTROLLED LOW-STRENGTH MATERIAL (CLSM). THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMPPROOFING MATERIAL.
    EXCEPTION: CLSM NEED NOT BE COMPACTED.
11. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5-PERCENT SLOPE) FOR A MINIMUM DISTANCE OF 10 FEET (3048 MM) MEASURED PERPENDICULAR TO THE FACE OF THE WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET (3048 MM) OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM FOUNDATION. SWALES USED FOR THIS PURPOSE SHALL BE SLOPED A MINIMUM OF 2 PERCENT WHERE LOCATED WITHIN 10 FEET (3048 MM) OF THE BUILDING FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET (3048 MM) OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2 PERCENT AWAY FROM THE BUILDING.
    EXCEPTION: WHERE CLIMATIC OR SOIL CONDITIONS WARRANT, THE SLOPE OF THE GROUND AWAY FROM THE BUILDING FOUNDATION SHALL BE PERMITTED TO BE REDUCED TO NOT LESS THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2-PERCENT SLOPE).
    THE PROCEDURE USED TO ESTABLISH THE FINAL GROUND LEVEL ADJACENT TO THE FOUNDATION SHALL ACCOUNT FOR ADDITIONAL SETTLEMENT OF THE BACKFILL.
12. THE SOIL BEHIND RESTRAINED RETAINING WALLS CANNOT BE BACKFILLED TILL THE FLOORS USED FOR RESTRAINING ARE CURED AT LEAST 14 DAYS OR 75% OF SPECIFIED STRENGTH.

CALL BEFORE YOU DIG:

ONE EASY PHONE CALL TO 811 STARTS THE PROCESS TO GET YOUR UNDERGROUND PIPELINES AND UTILITY LINES MARKED FOR FREE. WHEN YOU CALL 811 FROM ANYWHERE IN THE COUNTRY, YOUR CALL WILL BE ROUTED TO YOUR STATE ONE-CALL CENTER. ONCE YOUR UNDERGROUND LINES HAVE BEEN MARKED FOR YOUR PROJECT, YOU WILL KNOW THE APPROXIMATE LOCATION OF YOUR PIPELINES AND UTILITY LINES, AND CAN DIG SAFELY. MORE INFORMATION REGARDING 811 CAN BE FOUND AT www.call811.com

DESIGN CRITERIA:
(CBC 2022 BUILDING CODE)

WIND DESIGN DATA:
BASIC WIND SPEED (3-SEC GUST) = 101 MPH
WIND IMPORTANCE FACTOR = 1.25
WIND EXPOSURE = C

EARTHQUAKE DESIGN DATA:
SEISMIC IMPORTANCE FACTOR = 1.25
SEISMIC RISK CATEGORY = III
MAPPED SPECTRAL RESPONSE ACCELERATIONS, Ss = 1.137, S1 = 0.451
SOIL SITE CLASS = D (DEFAULT)
SPECTRAL RESPONSE COEFFICIENT, Sds = 0.91
SEISMIC DESIGN CATEGORY = D

SOIL DATA:
ALLOWABLE SOIL BEARING = 1500PSF

SNOW DATA:
GROUND SNOW LOAD = 5PSF

FLOOD HAZARD ZONE = X

AGENCY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

FLEWELLING & MOODY
architecture planning interiors

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An Employee Owned Corporation

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LICENSED ARCHITECT
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C-26053
Ren. Date 08/31/2025
STATE OF CALIFORNIA

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JEFFREY SCOTT LUBBERTS
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Drawn by

Checked by

Revisions

No.	Date	Description

All dimensions must be checked at the job by the contractor who accepts full responsibility for their accuracy under the contract. These plans & the specifications in connection therewith have been prepared for a specific site. Any and all responsibility for their use in whole or in part on any other site is hereby disclaimed by Flewelling & Moody.

SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT UPGRADE PROJECT

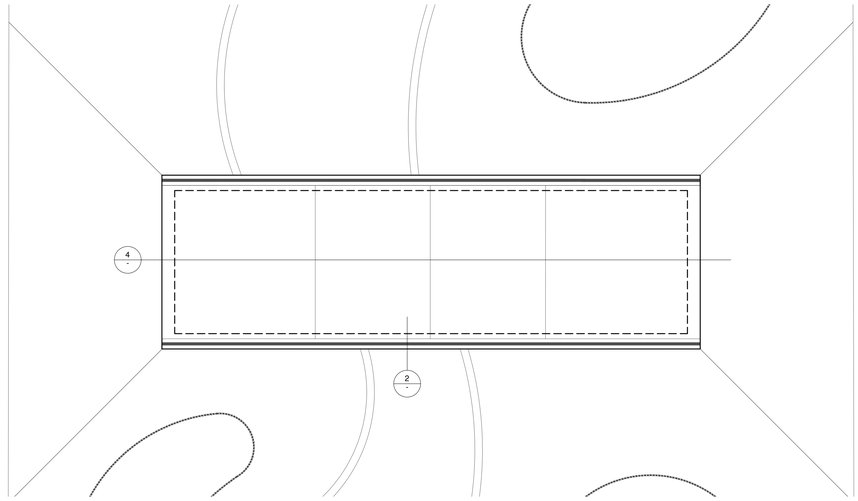
3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

GENERAL NOTES

Job No.
24386

Date
10/17/2024

S0.01



WALKWAY FOUNDATION PLAN

SCALE: 1/4"=1'-0"

FOUNDATION NOTES:

1. SEE FOUNDATION NOTES ON SHEET S0.01 FOR DESIGN SOIL BEARING PRESSURE, ETC.
2. SEE ARCH. FOR ALL DIMENSIONS & CONDITIONS NOT SHOWN.
3. SEE GENERAL NOTES AND SPECIFICATIONS FOR SPECIAL GRADING REQUIREMENTS UNDER FOOTINGS.
4. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITY WORK TO AVOID CONFLICTS WITH FOOTINGS.
5. EXCAVATIONS SHALL BE MADE IN COMPLIANCE WITH CAL/OSHA REGULATIONS.

AGENCY

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APP: 03-124766 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/04/2024

FLEWELLING & MOODY
architecture planning interiors

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An Employee Owned Corporation

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LICENSED ARCHITECT
MATTHEW BUCHANAN
C-26053
Exp. 08/31/2025
STATE OF CALIFORNIA

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JEFFREY SCOTT LINDSEY
No. 6422
STRUCTURAL
STATE OF CALIFORNIA

R G S E inc.
Structural Engineers
2720 Cochran St. Suite 8B
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Drawn by

Checked by

Revisions

No.	Date	Description

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SOUTHERN KERN UNIFIED
SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL
LANDSCAPE, DRAINAGE, AND PARKING LOT
UPGRADE PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

WALKWAY FOUNDATION PLAN

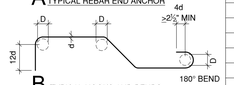
Job No.
24386

Date
10/17/2024

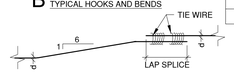
S1.00

REBAR END ANCHORS SHALL HAVE AN EVALUATION REPORT DEMONSTRATING COMPLIANCE WITH THE CURRENT ACCEPTABLE CRITERIA UNDER THE REFERENCED DESIGN CODE.

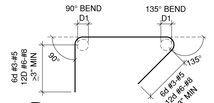
A TYPICAL REBAR END ANCHOR



B TYPICAL HOOKS AND BENDS



C OFFSETS AND SPLICES



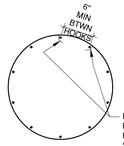
D TYPICAL STIRRUPS AND TIES

BAR DEVELOPMENT & LAP SPLICE LENGTH SCHEDULE (INCHES)	
BAR SIZE	f'c=3000 PSI MIN
#3	28
#4	37
#5	47
#6	56
#7	81
#8	93
#9	105

MINIMUM BEND DIA.
D=6d FOR #3 THRU #8
D=8d FOR #9
MINIMUM INSIDE

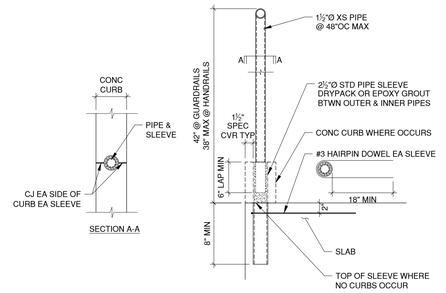
STIRRUP & TIES
MIN BEND DIAMETERS
D = 4d FOR #3 THRU #5
D = 6d FOR #6 THRU #8

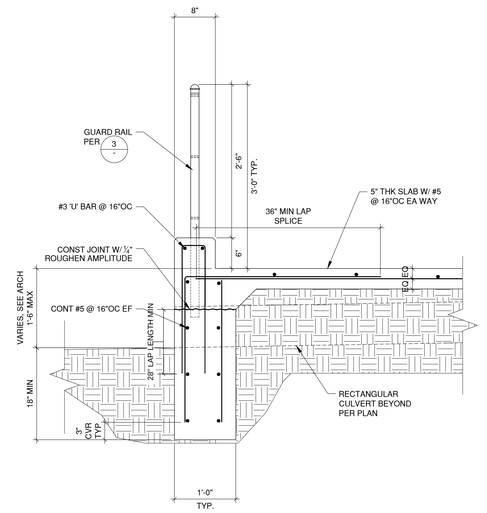
NOTE:
135° BENDS REQUIRED @ ROUND HOOP TIES SPLICES.

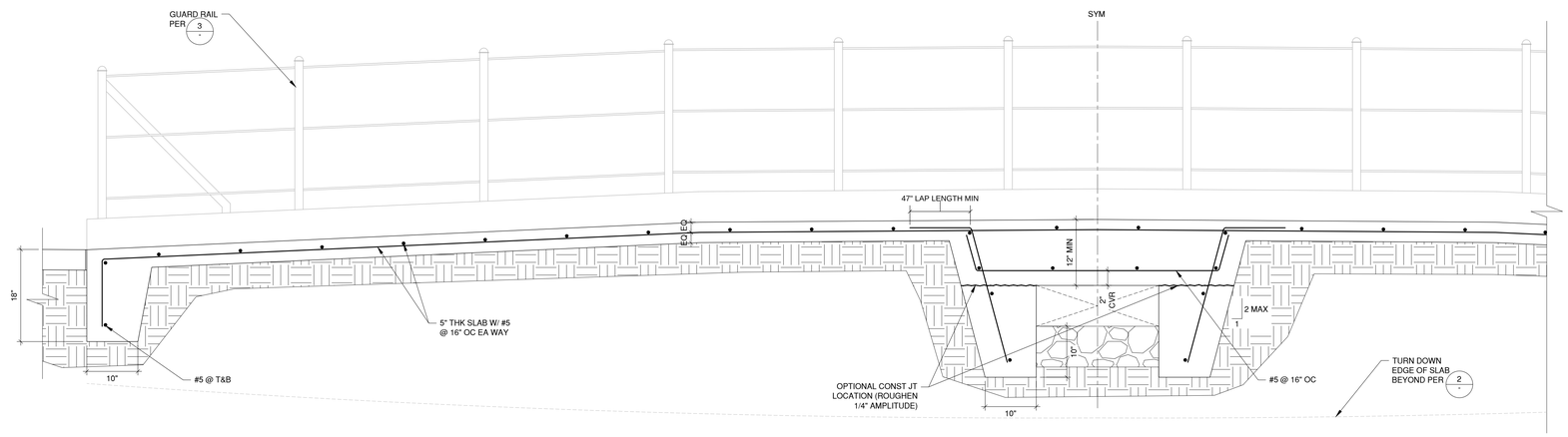


PROVIDE (2) 135° HOOKS (STAGG HOOK LOCATION FOR SUCCESSIVE TIES)

E TYPICAL HOOP TIES



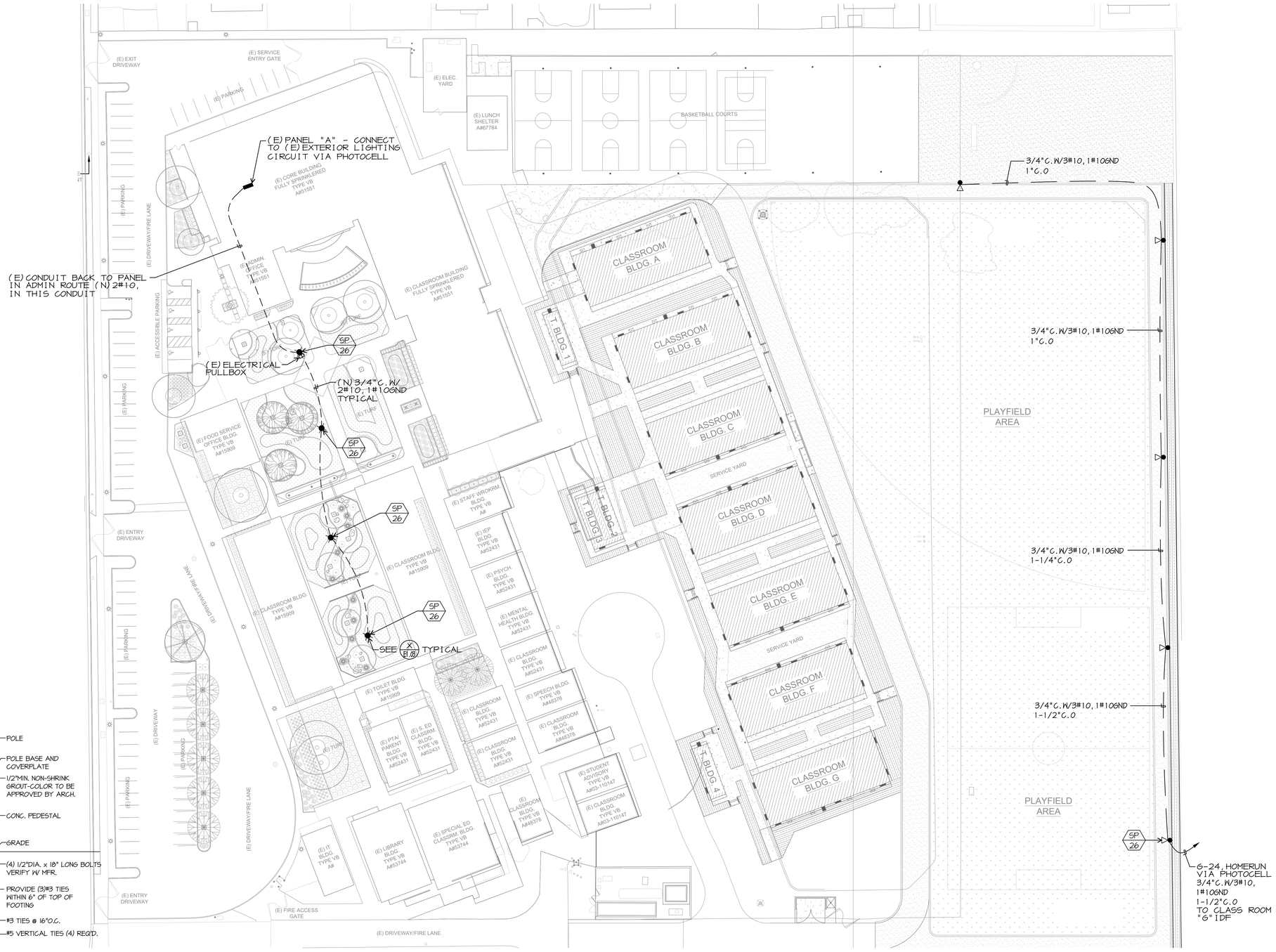




-	SCALE: 1"=1'-0"	7	TYPICAL REINFORCING DETAIL	SCALE: 1"=1'-0"	5
GUARD RAIL POST @ SLAB EDGE	SCALE: 1"=1'-0"	3	SECTION AT WALKWAY	SCALE: 1"=1'-0"	4
SECTION AT WALKWAY	SCALE: 1"=1'-0"	2			

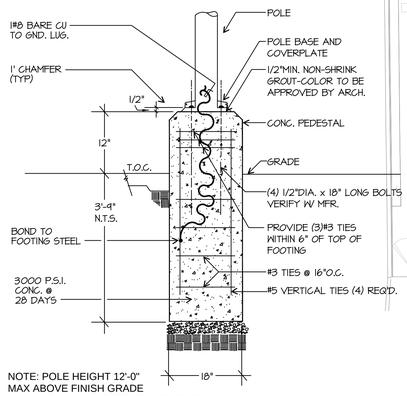
LED FIXTURE SCHEDULE

TYPE	MANUFACTURER AND CATALOG NUMBER	LED MODULE TYPE	LED MODULE COLOR TEMP	LED MODULE WATTS	DRIVER	OPTIC/LENS	REMARKS
SP 26	LITHONIA RADPTLEDP130KPATHMVOLT PTDDBXD RSS 12FT 4CPTDDBXD		3000K	26	0-10V	FLAT CLEAR	PEDESTRIAN POST TOP FULL CUTOFF LIGHT, SEE DET. X/E1.03



SITE LIGHTING PLAN

SCALE: 1/32" = 1'-0"



NOTE: POLE HEIGHT 12'-0" MAX ABOVE FINISH GRADE AND 24" MAX. DIAMETER FOR FIXTURE

POLE BASE DETAIL

SCALE: NONE

NOT PART OF THE DSA APPROVAL

AGENCY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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ARCHITECT

LICENSED ARCHITECT MATTHEW BUCHANAN C-26053 EXP. 08/31/2025 STATE OF CALIFORNIA

CONSULTANT

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REGISTERED PROFESSIONAL ENGINEER KEVIN MALONEY E013083 EXP. 06/30/2025 ELECTRICAL STATE OF CALIFORNIA

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Checked by

Revisions

No.	Date	Description

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SOUTHERN KERN UNIFIED SCHOOL DISTRICT

TROPICO MIDDLE SCHOOL EXPANSION PROJECT

3180 MOJAVE TROPICO ROAD
ROSAMOND, CA 93560

SITE LIGHTING PLAN

Job No.
2940.000

Date
09-19-23

E1.03

RText (RText)