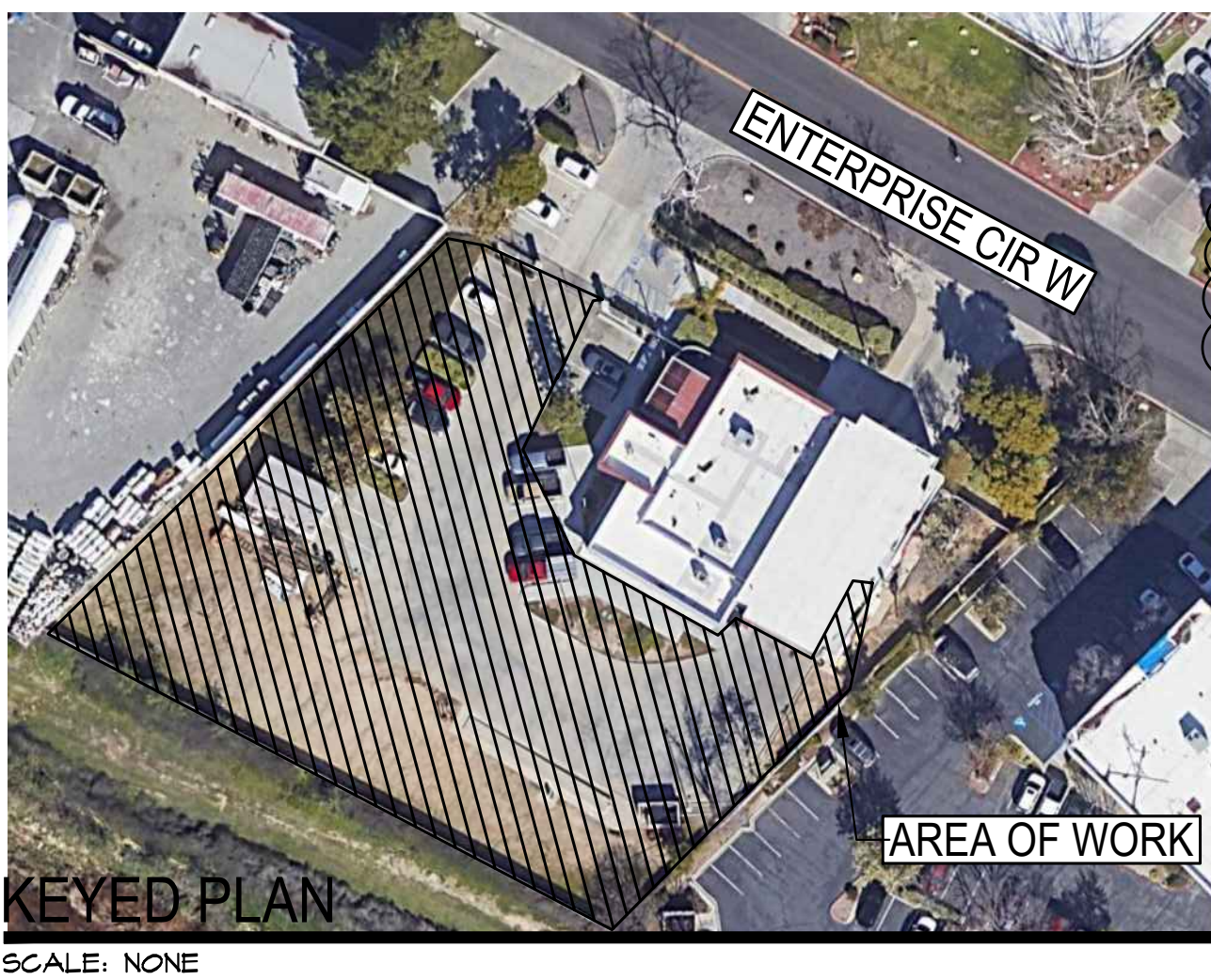
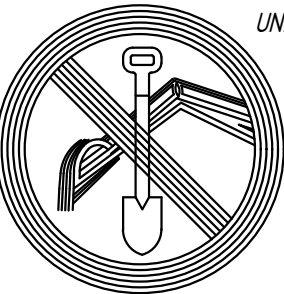


LIGHTING FIXTURE NOTES	
a)	ALL EQUIPMENTS MUST BE U.L. LISTED. NO EXCEPTION.
b)	AUTO-RESETTING THERMAL PROTECTION MUST BE PROVIDED WHEREAS RECESSED INCANDESCENT LIGHTING FIXTURES ARE INSTALLED IN GYPSBOARD CEILINGS.
c)	PROVIDE U.L LISTED THERMAL BARRIER WHEREAS LIGHTING FIXTURES IN CONTACT WITH INSULATION. OR PROVIDE 3" MINIMUM CLEARANCE.
d)	WHEN LIGHTING FIXTURES ARE INSTALLED IN FIRE RATED CEILINGS OR WALLS, AN APPROVED FIRE RESISTIVE MANNER CONSISTENT WITH FIRE RATINGS OF CEILING OR WALLS MUST BE PROVIDED. NO EXCEPTION.
e)	REFER TO LATEST ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LIGHTING FIXTURE LOCATIONS.
f)	CONFIRM WITH ARCHITECTURE FOR LIGHTING FIXTURE SPECIFICATIONS PRIOR TO ANY ORDER. NO EXCEPTION.
g)	ALL FLUORESCENT LIGHTING FIXTURES MUST BE EQUIPPED WITH INTERNAL SWITCH TO DISCONNECT ALL CONDUCTORS TO BALLAST FROM THE SOURCE SIMULTANEOUSLY, INCLUDING THE GROUNDED CONDUCTOR IF ANY.
h)	LIGHTING STANDARDS REQUIRE A SEPARATE PERMIT. ALL SIGN REQUIRE SEPARATE PERMITS AND APPROVALS ALSO. NO EXCEPTION.

GENERAL ELECTRICAL NOTES	
a)	VERIFY IN FIELD. ADJUST THE LOCATIONS OF HOMERUNS AND CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS IF NEEDED. COMMUNICATE WITH ENGINEER IF DESIGN SHOULD BE ALTERNATED. NO EXCEPTION.
b)	IDENTIFY ANY OBVIOUS EXISTING CODE VIOLATIONS THAT OCCURS AS AN EXISTING CONDITION AND PROVIDE SEPARATE PRICING TO CORRECT THE CONDITION SO THAT IN THE END, THE ENTIRE ELECTRICAL INSTALLATION COMPLIES WITH THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL CODES.
c)	IF THERE IS ANY DEVIATION FROM THE CIRCUITRY SHOWN, PROVIDE AS-BUILT DRAWINGS INDICATING SUCH.
d)	AT THE COMPLETION OF CONSTRUCTION WORK, AND PRIOR TO THE FINAL REVIEW BY THE ARCHITECT, PROVIDE PANEL DIRECTORIES IN PANELBOARD FRONTS REFLECTING ALL CHANGES MADE DURING CONSTRUCTION.
e)	THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT.

IMPORTANT PLAN CHECKER NOTES	
1.	ALL UNIT EQUIPMENT (EMERGENCY LIGHT WITH SELF-CONTAINED RECHARGEABLE BATTERY) SHALL BE OF SUITABLE RATING AND CAPACITY, MINIMUM OF 90 MINUTES, IN ACCORDANCE WITH 2022 CEC 700.12(1)(2)(3).
2.	PER CITY OF TEMECULA, NM CABLE MAY NOT BE USED IN COMMERCIAL APPLICATIONS.
3.	CONDUCTORS AS WELL AS GROUNDING CONDUCTORS FOR 20 AMPS AND BELOW SHALL BE AWG #12 CU. - SOLID, TW. UNLESS OTHERWISE NOTED ON PLAN.
4.	FUEL PLANS ARE BY OTHERS AND NOT PART OF THIS ELECTRICAL SCOPE OF WORK AND IS TO BE UNDER DEFERRED SUBMITTAL AND SEPARATE PERMIT.





UNDERGROUND SERVICE ALERT

CALL TOLL FREE
1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

LIGHTING FIXTURE SCHEDULE										
MARK	LEGEND	VOLT	COUNT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A 30		120	10	SURFACE	1X8' SURFACE MOUNTED STRIP LED	FINELITE	HP-6-SM-D-8'-S-940-120V	LED	30	OR APPROVED EQUAL
B 15		120	12	SURFACE	1X4' SURFACE MOUNTED STRIP LED	FINELITE	HP-6-SM-D-4'-S-940-120V	LED	15	OR APPROVED EQUAL
C 52		120	2	RECESSED	LED 1X8' W/ MANUAL DIMMING. SUITABLE FOR DAMP LOCATIONS.	LSI LIGHTING	SDL8-LED-TOL-U NV-DIMI-40-80C RI	LED	52	OR APPROVED EQUAL
D 19.5		120	5	SURFACE	36" UNDER CABINET LED TASKLITE	WAC LIGHTING	BA-ACLED-36-30	LED	19.5	OR APPROVED EQUAL
E 19		120	13	RECESSED	6" DOWNLIGHT LED	LITHONIA	LDN6-ALO2-SSWI (35K)-LO6-90CRI	LED	19	OR APPROVED EQUAL
F 20		120	5	WALL	ZILLA WALL MOUNTED SCONCE	SOLERA	ZILLA-20W-35K-U NV-NM	LED	20	OR APPROVED EQUAL
G 42		120	3	WALL	EXTERIOR LED FLOOD LIGHT	LITHONIA	DSXFI-P2-FL-MV OLT-40K	LED	42	OR APPROVED EQUAL
H 33		120	7	POLE	SITE AREA LIGHT TYPE 4 EXTREME BACKLIGHT CONTROL	LITHONIA	DSXO LED PI 30K 80CRI BLC4	LED	33	OR APPROVED EQUAL
I 33		120	1	POLE	SITE AREA LIGHT LEFT CORNER CUTOFF EXTREME BACKLIGHT CONTROL	LITHONIA	DSXO LED PI 30K 80CRI LCCO	LED	33	OR APPROVED EQUAL
J 33		120	1	POLE	SITE AREA LIGHT RIGHT CORNER CUTOFF EXTREME BACKLIGHT CONTROL	LITHONIA	DSXO LED PI 30K 80CRI RCCO	LED	33	OR APPROVED EQUAL
K 33		120	4	POLE	SITE AREA LIGHT TYPE 4 MEDIUM	LITHONIA	DSXO LED PI 30K 80CRI T4M	LED	33	OR APPROVED EQUAL
L 33		120	1	POLE	SITE AREA LIGHT LEFT CORNER CUTOFF EXTREME BACKLIGHT CONTROL EXTERNAL GLARE SHIELD	LITHONIA	DSXO LED PI 30K 80CRI LCCO EGS	LED	33	OR APPROVED EQUAL
M 33		120	1	POLE	SITE AREA LIGHT FORWARD THROW	LITHONIA	DSXO LED PI 30K 70CRI TFTM	LED	33	OR APPROVED EQUAL
R 33		120	1	POLE	SITE AREA LIGHT TYPE 4 LOW 6 RATING EXTERNAL GLARE SHIELD	LITHONIA	DSXO LED PI 30K 70CRI T4LG EGS	LED	33	OR APPROVED EQUAL
U 24		120	3	SURFACE	OUTDOOR UPLIGHT LED	WE-EF USA	185-272T	LED	24	OR APPROVED EQUAL
X 5		120	2	SURFACE	EXIT SIGN	LITHONIA	LXPW-16-120-ELM	LED	5	OR APPROVED EQUAL
NOTES: 1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES. 2) LIGHTING ABOVE FOOD OR UTENSILS SHALL BE SHATTERPROOF.										

CAUTION	
6MGP ENGINEERS SHALL NOT BE RESPONSIBLE FOR ANY ELECTRICAL CHANGE ORDERS THAT MAY OCCUR SHOULD FINAL BIDS AND/OR CONSTRUCTION BASED ON THESE DOCUMENTS BE STARTED PRIOR TO ELECTRICAL PLAN CHECK APPROVAL.	
ALL WORK TO COMPLY WITH THE 2022 CEC, CPC AND CMC AND THE 2022 CEC (2020 NEC) WITH STATE AND LOCAL AMENDMENTS.	
ALL EQUIPMENTS SHALL BE U.L. LISTED AND INSTALLED ACCORDING TO THE LISTINGS.	
CONDUCTORS: ALL CONDUCTORS SHALL BE COPPER AS FOLLOWS: #12 AWG AND SMALLER - SOLID, TW #10 AWG AND LARGER - STRANDED, THIN, THIN OR XHHW ALL CONDUCTORS SIZES ARE BASED ON 75°C TEMPERATURE RATING (NEC, 2020 TABLE 310.16)	
MOUNTING HEIGHT FOR RECEPTACLES AND CONTROL DEVICES: a) THE BOTTOM OF ELECTRICAL AND COMMUNICATION RECEPTACLES INTENDED TO BE USED BY THE OCCUPANT SHALL BE LOCATED NO LESS THAN 15" [ADA ACCESSIBILITY GUIDELINES 4.27.3] b) RECEPTACLE OUTLETS SHALL BE LOCATED ABOVE, BUT NOT MORE THAN 20 IN. ABOVE, THE COUNTERTOP. SUGGESTION HEIGHT IS 6" (NEC 210.52.C(5)) c) THE TOP OF SWITCHES SHALL BE INSTALLED NOT LESS THAN 36" NOR MORE THAN 46" ABOVE THE FINISH FLOOR. d) THERMOSTAT CONTROLS SHALL BE LOCATED NOT LESS THAN 36" NOR MORE THAN 46" ABOVE FINISH FLOOR LINE.	
IMPORTANT BID NOTES: a) DUE TO THE SMALL SCALE OF DRAWINGS, IT IS NOT ALWAYS POSSIBLE TO SHOW ALL DEVICES WHICH MAYBE REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR EXTRA DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOB SITE AND/OR FAILURE TO DETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. b) REFER TO COMPLETE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL NOTES, SPECIFICATIONS, DETAILS, CONTROLS, ETC. REPORT TO ARCHITECTURE IMMEDIATELY IF ANY CONFLICTS OCCUR BETWEEN THE DRAWINGS AND INCLUDE ALL COST PER ARCHITECTURE'S CLARIFICATION IN BASE BID. THIS REQUIREMENT WILL BE STRICTLY ENFORCED. NO CHANGE ORDERS WILL BE ALLOWED IF THE CONTRACTOR FAILS TO PERFORM THIS FUNCTION.	
DEMOLITION NOTES	
a) THE DRAWINGS SHOW THE WORK TO BE IN PLACE AT THE COMPLETION OF INSTALLATION. MAKE NECESSARY ALTERNATIONS TO COORDINATE AND CONNECT THE EXISTING ELECTRICAL WORK WITH THE NEW SUCH THAT, WHEN THE WORK IS DONE, THE ENTIRE ELECTRICAL INSTALLATION, EXISTING AND NEW, IS IN COMPLETE OPERATING CONDITION. b) UNLESS SPECIFICALLY NOTED ON THE CONTRARY, ALL EXISTING LIGHTING FIXTURES, SWITCHES, CONTROLS AND OTHER MATERIALS OR EQUIPMENTS WHICH ARE REPLACED BY NEW AND ARE NOT INDICATED TO BE REUSED SHALL BE RETURNED TO THE OWNER OR BE DISPOSED AS DIRECTED BY THE OWNER. c) EXISTING MATERIAL TO REMAIN UPON COMPLETION IS INDICATED ON DRAWINGS AS EXISTING. FEEDERS (CONDUIT AND WIRES) ARE EXISTING TO THEIR RESPECTIVE SOURCE. ALTHOUGH NOT INDICATED ON THE DRAWINGS, TEMPORARY REMOVAL OR RE-ROUTE CONDUITS AND REPLACE EXISTING WIRES WITH NEW DURING CONSTRUCTION WORK MAYBE REQUIRED. d) PROVIDE AND INSTALL NEW COVER PLATES FOR ALL REMOVED OUTLETS, SWITCHES, LIGHT FIXTURES, AND OTHER ELECTRICAL DEVICES WHEN THE OUTLET BOX IS TO REMAIN. e) REMOVE ALL EXISTING ABANDONED FEEDERS (CONDUITS AND WIRES) BACK TO PANEL BOARDS. LABEL NEW PANEL DIRECTORY AS "SPARE". f) MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., FED BY ABANDONED OUTLET. THEY SHOULD BE IN OPERATION AFTER THE WORK IS DONE. MAINTAINING CONTINUITY SHALL CONSIST OF RE-ROUTING OF CONDUIT AND WIRING, AS REQUIRED TO SUIT THE EXISTING CONDITIONS. g) DASHED J-BOX DENOTES APPROXIMATE LOCATION OF EXISTING BOXES IN ACCESSIBLE CEILING SPACE. ALL CONDUIT SHOWN FROM J-BOX IS NEW UNLESS SHOWN OTHERWISE AS DASHED. REFER TO ELECTRICAL SYMBOL LIST. h) EXISTING LOADS SHOWN ON PANEL SCHEDULES ARE BASED ON ASSUMPTIONS MADE BY FIELD VISIT, ELECTRICAL BILLS OR PUBLIC RESOURCES. NOTIFY ENGINEER IMMEDIATELY IF LOADS EXCEED 16 AMPS ON ANY 20A/1P CIRCUIT. NO EXCEPTION. i) CAREFULLY REVIEW ARCHITECT'S DEMO DRAWINGS FOR LOCATION OF WALLS BEING REMOVED UNDER THIS SCOPE OF THIS WORK AND REMOVE ALL FEEDERS (CONDUITS AND WIRES) BACK TO LAST DEVICE LEFT IN SERVICE. DO NOT LEAVE ABANDONED. j) CAREFULLY REVIEW ARCHITECT'S DEMO DRAWINGS FOR EXISTING FLOOR BOXES BEING REMOVED UNDER THIS SCOPE OF WORK. REMOVE FLOOR BOXES AND ALL FEEDERS (CONDUITS AND WIRES) BACK TO LAST DEVICE LEFT IN SERVICE. DO NOT LEAVE ABANDONED.	

ELECTRICAL SYMBOL LIST	
SYMBOL	DESCRIPTION
SECTION 1: SYMBOLS FOR CONDUITS	
	HOMERUN TO PANEL OR EQUIPMENT AS NOTED
	CONDUIT RUN CONCEALED IN WALL OR ABOVE FINISHED CEILING OR AS NOTED BRANCH CIRCUIT, 2#12 IN 1/2" CONDUIT OR AS NOTED OR SYMBOLIZED AS: --- 1/2"C-3 #12 --- 3/4"C-6 #12 --- 1/2"C-4#12 --- 3/4"C-7 #12 --- 3/4"C-5#12 --- 3/4"C-8#12
	CONDUIT IN OR UNDER SURFACE AS NOTED, 3/4" MINIMUM SIZE.
	CONDUIT RUN WITH EQUIPMENT GROUNDING CONDUCTOR, SAME SIZE AS CIRCUIT CONDUCTORS, OR AS NOTED.
	CONDUIT RUN WITH ISOLATED GROUNDING CONDUCTOR, SAME SIZE AS CIRCUIT CONDUCTORS, OR AS NOTED.
	CONDUIT WITH EMERGENCY CIRCUIT
	EXISTING CONDUIT TO REMAIN.
	EXISTING CONDUIT TO BE REMOVED.
SECTION 2: EQUIPMENTS	
	ELECTRICAL PANELBOARD, FLUSH OR SURFACE MOUNTED AS INDICATED LETTERED BALLOON INDICATES DESIGNATION
	JUNCTION BOX, ABOVE CEILING, OR AS REQUIRED TO SUIT THE APPLICATION
	APPROXIMATE LOCATION OF EXISTING J-BOX IN ACCESSIBLE CEILING SPACE
	DATA OUTLET IN WALL +18" OR AS NOTED. SINGLE GANG OUTLET BOX WITH 3/4" CONDUIT AND PULL WIRE TO ACCESSIBLE CEILING SPACE.
	COMBINATION TELE/DATA OUTLET BOX, +18" OR AS NOTED. SINGLE GANG OUTLET WITH 3/4" CONDUIT AND PULL WIRE TO ACCESSIBLE CEILING SPACE.
	WALL MOUNTED 2 HOUR BY PASS TIMER (TORK #A500 SERIES)
	EXHAUST FAN SWITCH, +48" OR AS NOTED ON MECHANICAL DRAWINGS
	EXHAUST FAN, F.B.M., WIRED BY ELECTRICAL.
	FUSED DISCONNECT SWITCH, SIZE AND FUSED AS NOTED ON PLAN
	SINGLE POLE SWITCH, +42" OR AS NOTED
	WALL MOUNTED DIMMER, 1000 WATT RATING OR AS NOTED. HEIGHTMOUNTING +42" A.F.F. OR AS NOTED.
	WALL MOUNTED DIMMER W/ OCCUPANCY SENSOR, LUTRON MAESTRO OR APPROVED EQUAL, HEIGHTMOUNTING +42" A.F.F. OR AS NOTED.
SECTION 3: RECEPTACLES	
	DUPLEX RECEPTACLE FLUSH IN FLOOR BOX WITH DUPLEX HINGE COVERS
	DUPLEX RECEPTACLE IN WALL 120V, 20AMPS, +18" A.F.F, 3" ABOVE COUNTER OR AS NOTED.
	TWO-GANG DUPLEX RECEPTACLE (QUADPLEX) IN WALL, +18" A.F.F OR AS NOTED
	6FI DUPLEX RECEPTACLE IN WALL, +42" A.F.F OR AS NOTED
	DUPLEX RECEPTACLE (20 AMP) +18" OR AS NOTED (ON A SEPARATE CIRCUIT)
	SPECIAL RECEPTACLE NEMA TYPE AS DESIGNATED, +18" OR AS NOTED
	FLUSH POKE THRU COMBINATION TELE/DATA AND DUPLEX
	DUPLEX PLUG RECEPTACLE, 120V, 20A, SHADED SIDE INDICATES "ISOLATED GROUND" TYPE DUPLEX RECEPTACLE. 18" A.F.F, 3" ABOVE COUNTER OR AS NOTED, DEVICE TO BE "ORANGE" IN COLOR.
SECTION 4: SENSORS	
	WALL MOUNTED MOTION SENSOR (THE WATT STOPPER "WA-300"). OR EQUIVALENT.
SECTION 5: MISCELLANEOUS	
	REFERENCE TO PLAN NOTES
	CONDUIT STUBBED UP
	CONDUIT STUBBED DOWN
	DENOTES EXISTING TO REMAIN
	DENOTES NEW TO MATCH EXISTING
	DENOTES EXISTING RELOCATED DEVICE AT NEW LOCATION

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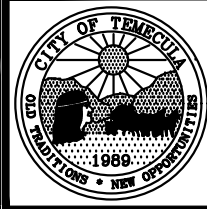
BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____ NAME _____ DATE _____

CITY OF TEMECULA

DEPARTMENT OF PUBLIC WORKS



ELECTRICAL GENERAL
NOTES & LIGHTING
SCHEDULE

Drawing No.

E-1.0

Sheet _____ of _____

CONSTRUCTION RECORD		DATE	BY	NO.	REVISIONS	ACC'D	DATE	BENCH MARK	SCALE
Contractor		05/09/25	RL	1	PLAN CHECK & REVISIONS				Horizontal
		08/18/25	RL	2	PLAN CHECK & REVISIONS				
Inspector		10/02/25	RL	3	ENVIRONMENTAL COMMENTS				Vertical
		06/11/26	RL	5	OWNER REVISIONS				
Date Completed									



Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
Date _____		
R.C.E. No. _____		

RECOMMENDED BY:	DATE: 6/18/2026
ACCEPTED BY: RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156	DATE: 6/18/2026

1. WHERE REMOVAL OF A GROUNDING OR BONDING CONNECTION IN NORMAL POWER SOURCE EQUIPMENT INTERRUPTS THE GROUNDING ELECTRODE CONDUCTOR CONNECTION TO THE ALTERNATE POWER SOURCE(S) GROUNDED CONDUCTOR, A WARNING SIGN SHALL BE INSTALLED AT THE NORMAL POWER SOURCE EQUIPMENT STATING:

WARNING:
SHOCK HAZARD EXISTS IF GROUNDING
ELECTRODE CONDUCTOR OR BONDING JUMPER
CONNECTION IN THIS EQUIPMENT IS REMOVED
WHILE ALTERNATE SOURCE(S) IS ENERGIZED.

THE WARNING SIGN(S) OR LABEL(S) SHALL COMPLY WITH
110.21(B).
2. A LISTED SPD DEVICE SHALL BE INSTALLED IN OR ON ALL EMERGENCY SYSTEMS SWITCHBOARDS AND PANELBOARDS. [2022 CEC 700.8]



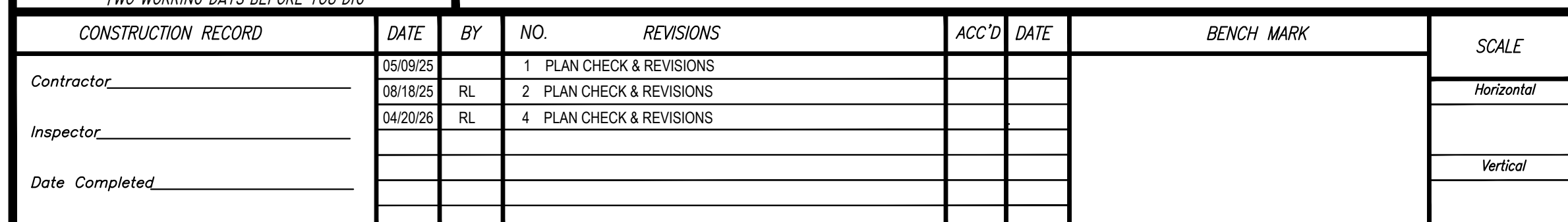
THE EQUIPMENT SHOWN IS EXISTING UNDER A PREVIOUS APPROVED CONSTRUCTION PERMIT, NOT A PART OF THIS SUBMITTAL, UNLESS NOTED AS NEW.

- a) ALL CONDUCTORS SHALL BE COPPER AS FOLLOWS:
 - #12 AWG AND SMALLER - SOLID, TN
 - #10 AWG AND LARGER - STRANDED, THHN, THHN OR XHHWALL CONDUCTORS SIZES ARE BASED ON 75°C TEMPERATURE RATING
(NEC 2020 TABLE 310.16)
- b) ALL NEW CIRCUIT BREAKERS, FUSIBLE SWITCHES IN MAINSWITCHBOARD OR PANEL BOARDS SHALL BE SERIES RATED TO MATCH EXISTING AIC RATING OR APPROVED EQUAL OR 65KAIC, UNLESS NOTED OTHERWISE.
- c) MOTOR CIRCUIT PROTECTORS SHALL NOT BE A PART OF A SERIES COMBINATION INTERRUPTING RATING.
- d) SERIES COMBINATION AIC RATING SHALL NOT BE USED WHEN THE SECONDARY EQUIPMENT IN THE SERIES IS SUBJECTED TO A TOTAL CONNECTED FULL LOAD MOTOR CURRENT OF MORE THAN 1% OF ITS AIC RATINGS.
- e) EQUIPMENT ENCLOSURES SHALL BE CLEARLY MARKED "CAUTION-SERIES RATED SYSTEM - 65KAMPS AVAILABLE, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED", IN COMPLIANCE WITH 2022 CEC (2020 NEC) SECTION 110-22. END USE EQUIPMENT SHALL ALSO BE MARKED WITH THE HIGHER SERIES COMBINATION INTERRUPTING RATINGS AS PER 2022 CEC SECTION 240-83(C). NO EXCEPTION.
- f) FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.
- g) ELECTRICAL EQUIPMENT SHALL BE LISTED BY THE CITY, WHERE THE PROJECT IS LOCATED, RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.
- h) NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
- i) MAIN SERVICE WILL NOT ENERGIZED PRIOR TO THE BUILDING INSPECTOR'S RECEIPT OF A THIRD PARTY "NRTL" TESTING LABORATORY PERFORMANCE TEST CERTIFICATION FOR THE SERVICE GROUND FAULT PROTECTION. 2020 NEC 230.95

- a) for UNDERGROUND AND EXPOSED UP TO +5'-0", OR DAMP LOCATION, THE CONDUIT SHALL BE RIGID STEEL GALVANIZED IMC. NO RUNNING THREADS ARE PERMITTED.
- b) GALVANIZED EMT SHALL BE USED IN DRY CONCEALED LOCATIONS AND EXPOSED ABOVE +5'-0". EMT CONNECTORS SHALL BE WATERTIGHT COMPRESSION TYPE.
- c) GALVANIZED FLEXIBLE CONDUIT SHALL BE USED ONLY FOR MOTOR AND FIXTURE CONNECTIONS IN LENGTHS NOT TO EXCEED 6'.
- d) CONDUITS PENETRATING THE ROOF SHALL BE FLASHED AND COUNTER FLASHED.
- e) PVC SCHEDULE 40 MAY BE USED UNDER FLOOR SLABS OR UNDERGROUND WITH GROUND WIRE. PVC UNDERGROUND TO HAVE 24 INCH COVER.
- f) SERVICE CONDUITS SHALL BE PVC SCHEDULE 40 OR AS SPECIFIED BY UTILITY COMPANIES.
- g) INSTALL FITTINGS, SPECIAL DEVICES AND MATERIAL, WHICH MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THE CONDUIT SYSTEM.
- h) REFER TO NEC 300.5 FOR UNDERGROUND INSTALLATION REQUIREMENTS AND DETAILS; NEC 300.6 FOR CORROSION AND DETERIORATION AREAS.

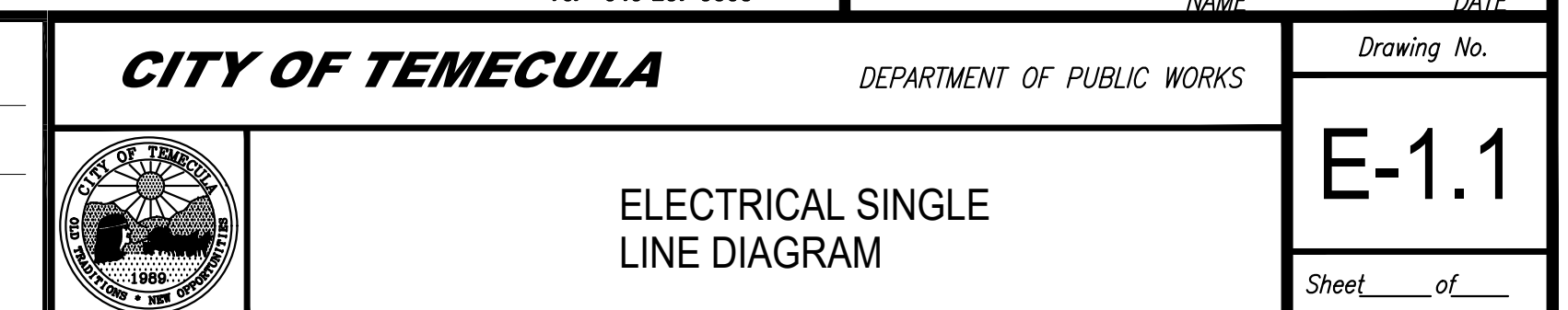
LOAD SUMMARY		
MAIN PANELS		WATTAGE (KVA)
	EXISTING MAX DEMAND LOAD PER 12 MONTH UTILITY BILLS X 125%	23.75 KVA
1.	PANEL A ADDED LOAD (INCLUDES SUBPANEL C)	15 KVA
2.	PANEL EM ADDED LOAD	.08 KVA
3.	PANEL B ADDED LOAD	.9 KVA
4.	PANEL D (INCLUDES SUBPANEL EM2)	62 KVA
SUBTOTAL		101.73 KVA
AMPERAGE @120/208V 3 PHASE 4 WIRE		282.38 AMPS

CONCLUSION: SERVICE 400A @120/208V 3 PHASE 4 WIRE IS OKAY.



SEAL: 	Designed By _____	Drawn By _____	Checked By _____
Plans Prepared Under Supervision Of _____ Date _____ R.C.E. No. _____			

RECOMMENDED BY: H. J. Mills DATE: 6/18/2026
HOSSEIN ANDER, PE, PRINCIPAL CIVIL ENGINEER
ACCEPTED BY: Ron Moreno DATE: 6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS
/ CITY ENGINEER, R.C.E. No. 69156



STANDARD FEATURES FOR MODEL SP-410-60 HZ

CONTROL PANEL:
Deep Sea 7420 digital microprocessor with logic allows programming in the field. Controller has:
• STOP-MANUAL-AUTO modes and automatic engine shutdowns, signaled by full text LCD indicators:
• Low oil pressure
• High engine temp
• Low Radiator Level
• Three auxiliary alarms
• Battery fail alarm
Also included is tamper-proof engine hour meter

ENGINE:
Full flow oil filter • Air filter • Oil pump • Solenoid type starter motor • Hi-temp radiator • Jacket water pump • Thermostat • Pusher fan and guard • Exhaust manifold
• 12 VDC battery charging alternator • Flexible exhaust connector • "Jaschroun" duty, electronic governor • Secondary dry fuel regulator • Dry fuel lock-off solenoid • Vibration isolators • Closed coolant recovery system with 50/50 water to anti-freeze mixture

AC GENERATOR SYSTEM:
AC generator • Shunt excited • Brushless design • Circuit Breaker installed and wired to gen-set • Direct connection to engine with flex disc • Class H, 180°C insulation • Self ventilated • Drip proof construction • UL Certified

VOLTAGE REGULATOR:
½% Voltage regulation • EMI filter • Under-speed protection • Over-excitation protection • total encapsulation

DC ELECTRICAL SYSTEM:
Battery tray • Battery cables • Battery hold down straps • 2-stage battery float charger with maintaining & recharging automatic charge stages

WEATHER/SOUND PROOF ALUMINUM HOUSING CORROSION RESISTANT PROTECTION CONSISTING OF:
• 9 Heated And Agitated Wash Stages
• Zinc Phosphate Etching-coating Stage
• Final Baked On Enamel Powder Coat
• 18/8 Stainless Steel Hardware

Design & specifications subject to change without prior notice. Dimensions shown are approximate. Contact Gillette for certified drawings.
DO NOT USE DIMENSIONS FOR INSTALLATION PURPOSES.

APPLICATION AND ENGINEERING DATA FOR MODEL SP-410-60 HZ

COOLING SYSTEM
Type of System Pressurized, closed recovery Coolant Pump Pre-lubricated, self-sealing Cooling Fan Type (no. of blades) Pusher (10) Fan Diameter inches (cm) 21" (533) Ambient Capacity of Radiator °F (°C) 125 (51.6) Engine Jacket Coolant Capacity Gal (L) 1.8 (6.8) Radiator Coolant Capacity (with engine) Gal. (L) 5.2 (19.7) Maximum Restriction of Cooling Air Intake and discharge side of radiator in. H₂O (kpa) 0.5 (.125) Water Pump Capacity gpm (L/min) 28 (106) Heat Reject Coolant: Bu/min (km) 2320 (40.8) Low Radiator Coolant Level Shutdown Standard Note: Coolant temp, shut-down switch setting at 220°F (104°C) with 50/50 (water/antifreeze) mix.

SOUND LEVELS MEASURED IN dB(A)
Level 2, Critical Silencer 70 64
Level 3, Hospital Silencer 59
Note: Open sets (no enclosure) have silencer system choices due to unknown job-site applications. Level 2 enclosure has installed critical silencer with upgrade to Level 3 hospital silencer. Sound tests are averaged from several test points and taken at 23 ft. (7 m) from source of noise at normal operation.

DERATE GENERATOR FOR ALTITUDE
3% per 1000 ft.(305m) above 3000 ft.(914m) from sea level

DERATE GENERATOR FOR TEMPERATURE
2% per 10°F (5.6°C) above 104°F (40s°C)

DIMENSIONS AND WEIGHTS
Length in (cm) 78 (198) 94 (238) Width in (cm) 42 (107) 42 (107) Height in (cm) 36 (91) 53 (134) 1 Ø Net Weight lbs (kg) 1326 (601) 1851 (839) 1 Ø Ship Weight lbs (kg) 1406 (638) 2011 (912) 3 Ø Net Weight lbs (kg) 1316 (597) 1771 (803) 3 Ø Ship Weight lbs (kg) 1396 (633) 1931 (875)

EXHAUST SYSTEM
Exhaust Outlet Size 2.5" Max. Back Pressure in. hg (KPA) 3" (10.2) Exhaust Flow, at rated kw: cfm (m³/min) 330 (9.4) Exhaust Temp., at rated kw: °F (°C) 1206 (652) Engines are EPA certified for LPG and Natural Gas.

DEEP SEA 7420MKII DIGITAL MICROPROCESSOR CONTROLLER
The "7420MKII" controller is an auto start mains (utility) failure module for single gen-set applications. This controller includes a backlit LCD display which continuously displays the status of the engine and generator at all times.
The "7420MKII" controller will also monitor speed, frequency, voltage, current, oil pressure, coolant temp., and fuel levels. These modules have been designed to display warning and shut down status. It also includes: (11) configurable inputs • (8) configurable outputs • voltage monitoring • mains (utility) failure detection • (250) event logs • configurable timers • automatic shutdown or warning during fault detection • remote start (on load) • engine preheat • advanced metering capability • hour meter • text LCD 132 x 64 pixel ratio display • protected solid state outputs • test buttons for: stop/reset • manual mode • auto mode • lamp test • start button • power monitoring (kW, kVAh, kWh, kVAh) • IP65 rating (with supplied gasket)

APPLICATION AND ENGINEERING DATA FOR MODEL SP-410-60 HZ

GENERATOR SPECIFICATIONS
Manufacturer Stamford Electric Generators Model & Type UC1224D-06, 4 Pole, 4 Lead, Single Phase UC1224D-31.1, 4 Pole, 12 Lead re-connectable, Three Phase UC1224C-17, 4 Pole, 6 Lead, 600V, Three Phase Exciter Brushless, shunt excited Voltage Regulator Solid State, HZ/Volts Voltage Regulation ½%, No load to full load Frequency Field convertible, 60 HZ to 50 HZ Frequency Regulation ½% (½ cycle, no load to full load) Unbalanced Load Capability 100% of standby amps Total Stator and Load Insulation Class H, 180°C Temperature Rise 130°C I/R, standby rating @ 40°C amb. 1 Ø Motor Starting @ 30% Voltage Dip (240V) 112 kVA 3 Ø Motor Starting @ 30% Voltage Dip (208-240V) 118 kVA 3 Ø Motor Starting @ 30% Voltage Dip (480V) 190 kVA 3 Ø Motor Starting @ 30% Voltage Dip (600V) 158 kVA Bearing 1. Pre-lubed and sealed Coupling Direct flexible disc. Total Harmonic Distortion Max 3½% (MIL-STD705B) Telephone Interference Factor Max 50 (NEMA MG1-22) Deviation Factor Max 5% (MIL-STD 405B) Ltd. Warranty Period 24 Months from date of start-up or 1000 hours use, first to occur.

ENGINE SPECIFICATIONS AND APPLICATIONS DATA

FUEL CONSUMPTION
LP GAS: FT³/HR (M³/HR) STANDBY 100% LOAD 240 (6.9) 75% LOAD 200 (5.6) 50% LOAD 145 (4.0) LPG = 2500 BTU X FT³/HR = Total BTU/HR LPG Conversion: 8.50 FT³ = 1 LB.; 36.4 FT³ = 1 GAL.
NAT. GAS: FT³/HR (M³/HR) STANDBY 100% LOAD 584 (17) 75% LOAD 485 (14.0) 50% LOAD 375 (10) NG = 1000 BTU X FT³/HR = Total BTU/HR

OIL SYSTEM
Type Full Pressure Frequency Reg. (no load to load) Isochronous Frequency Reg. (steady state) ± 1/4% Air Cleaner Dry, Replaceable Cartridge Engine Speed 1800 rpm Piston Speed, ft/min (m/min) 1044 (318) Max Power, bhp (kw) Standby /LPG 67 (50) Max Power, bhp (kw) Standby /NG 62 (46) Ltd. Warranty Period 12 Months or 2000 hrs., first to occur

FUEL SYSTEM
Type LPG or NAT. GAS, Vapor Withdrawal Fuel Pressure (kpa), in. H₂O (1.74-2.74) 7"-11" Secondary Fuel Regulator NG or LPG Vapor System Auto Fuel Lock-Off Solenoid Standard on all sets Fuel Supply Inlet Line 1" NPTP * Measured at gen-set fuel inlet, downstream of any dry fuel accessories.

GENERATOR FEATURES
• World Renown Stamford Electric Generator having UL-1446 certification.
• Full generator protection with Deep Sea 7420 controller, having UL-508 certification.
• Automatic voltage regulator with over-excitation, under-frequency compensation, under-speed protection, and EMI filtering. Entire solid-state board is encapsulated for moisture protection.
• Generator power ratings are based on temperature rise, measured by resistance method, as defined in MIL-STD 705C and IEEE STD 115, Method 6.4.4.
• Power ratings will not exceed temperature rise limitation for class H insulation as per NEMA MG1-22.40.
• Insulation resistance to ground, exceeds 1.5 meg-ohm.
• Stator receives 2000 V. hi-potential test on main windings, and rotor windings receive a 1500 V. hi-potential test, as per MIL-STD 705B.
• Full amortisseur windings with UL-1446 certification.
• Complete engine-generator torsional acceptance, confirmed during initial prototype testing.
• Full load testing on all engine-generator sets, before shipping.
• Self ventilating and drip-proof & revolving field design

LIQUID COOLED LPG/NG ENGINE GENERATOR SET
Model STANDBY 120°C RISE HZ LPG N.G. SP-410-60 HERTZ 60 41 40
All generator sets are USA prototype built and thoroughly tested. Production models are USA factory built and 100% load tested.
UL2200, UL1446, UL508, UL142, UL498 NFPA 110, 99, 70, 37 All generator sets meet NFPA-110 Level 1, when equipped with the necessary accessories and installed per NFPA standards.
NEC 700, 701, 702, 708 NEMA ICS10, MG1, ICS6, AB1 ANSI C62.41, 27, 59, 32, 480, 40Q, 81U, 360-05 ASCE 7-05 & 7-10 All generator sets meet 180 MPH rating. EPA 40CFR Part 60, 1048, 1054, 1065, 1068

60 HZ MODEL SP-410
"OPEN" GEN-SET
There is no enclosure, so gen-set must be placed within a weather protected area, un-inhabited by humans or animals, with proper ventilation. Silencer not supplied, as installation requirements are not known. However, this item is available as optional equipment.
"LEVEL 2" HOUSED GEN-SET
Full aluminum weather protection and superior sound attenuation for specific low noise applications. Critical grade muffler is standard.

GENERATOR RATINGS
GENERATOR MODEL VOLTAGE PH HZ LIQUID PROPANE GAS FUEL 120°C RISE STANDBY RATING 120°C RISE STANDBY RATING NATURAL GAS FUEL 120°C RISE STANDBY RATING 120°C RISE STANDBY RATING SP-410-1-1 120 240 1 60 41/41 171 40/40 167 SP-410-3-2 120 208 3 60 40/50 139 40/50 139 SP-410-3-3 120 240 3 60 40/50 120 40/50 120 SP-410-3-4 277 480 3 60 40/50 60 40/50 60 SP-410-3-5 127 220 3 60 40/50 131 40/50 131 SP-410-3-16 346 600 3 60 40/50 48 40/50 48
RATINGS: All single phase gen-sets are dedicated 4 lead wiring, rated at unity (1.0) power factor. All three phase gen-sets are 12 lead wiring, rated at 8 power factor. 120°C "STANDBY RATINGS" are strictly for gen-sets that are used for back-up emergency power to a failed normal utility power source. This standby rating allows varying loads, with no overload capability, for the entire duration of utility power outage. All gen-set power ratings are based on temperature rise measured by resistance method as defined by MIL-STD 705C and IEEE STD 115, METHOD 6.4.4. All generators have class H (180°C) insulation system on both rotor and stator windings. All factory tests and KW/KVA charts shown above are based on 120°C (standby) R/R winding temperature, within a maximum 40°C ambient condition. Generators operated at standby power ratings must not exceed the temperature rise limitation for class H insulation system, as specified in NEMA MG1-22.40. Specifications & ratings are subject to change without prior notice.

Molded Case Circuit Breakers Series Connected Short Circuit Ratings 240V Breaker

Series Rating	Main Breaker		Branch Breaker			
	Max. Amps	Type	Type	Poles	Amps	Volts
65,000	125	ED4 ED6 (2, 3P) cont.	QRBQ,BL	2	15-125	120/240
			QRBQ,BL	2	15-125	240
			QPH	1	15-70	120/240
			QPH	2	15-125	120/240
			BQH,BLH	1	15-70	120/240
			BQH,BLH	2	15-125	120/240
			QT	1,2	15-50	120/240
			QPF,BQF,BLF	1	15-30	120
			QPF,BLF	2	15-60	120/240
			QE,BE,BLE	1	15-30	120
			QE,BLE	2	15-60	120/240
			QPHF,BLHF	1	15-30	120
			QPHF,BLHF	2	15-60	120/240
			QAF,BQAF,BAF	1	15-20	120
			QAFH,BQAFH	1	15-20	120
			BAFH	1	15-20	120
			QAF2,BAF2	1	15-20	120
			QAFH2,BAFH2	1	15-20	120
			QFGA2,BFGA2	1	15-20	120
			QFGAH2,BFGAH2	1	15-20	120
			ED2	1	15-100	120
			ED2	2	15-100	240
			QRBQ,BL	3	15-100	240
			QPH	3	15-100	240
			BQH,BLH	3	15-100	240
			ED2	3	15-100	240
			QPH,BQH,BLH	1	15-70	120/240
			QPH,BQH,BLH	2	15-125	120/240
			QPH,BQH,BLH	3	15-100	240
			QRBQ,BL	1	15-70	120/240
			QRBQ,BL	2	15-125	120/240
			QRBQ,BL	1	15-70	120/240
			QRBQ,BL	2	15-125	120/240
			QT	1,2	15-50	120/240
			QPF,BQF,BLF	1	15-30	120
			QPF,BLF	2	15-60	120/240
QE,BE,BLE	1	15-30	120			
QE,BLE	2	15-60	120/240			
QPHF,BQHF	1	15-30	120			
QPHF,BLHF	2	15-60	120/240			
BLHF	1	15-30	120			
QEH,BLEH	1	15-30	120			
QEH,BLEH	2	15-60	120/240			
QPF2,BLF2	1	15-30	120			
QPHF2,BLHF2	1	15-30	120			
QAF,BQAF,BAF	1	15-20	120			
QAFH,BQAFH	1	15-20	120			
BAFH	1	15-20	120			
QAF2,BAF2	1	15-20	120			
QAFH2,BAFH2	1	15-20	120			
QFGA2,BFGA2	1	15-20	120			
QFGAH2,BFGAH2	1	15-20	120			
ED2	1	15-100	120			
ED2	2	15-100	240			
QRBQ,BL	3	15-100	240			
QPH	3	15-100	240			
BQH,BLH	3	15-100	240			
ED2	3	15-100	240			
QPH,BQH,BLH	1	15-70	120/240			
QPH,BQH,BLH	2	15-125	120/240			
QPH,BQH,BLH	3	15-100	240			
QRBQ,BL	1	15-70	120/240			
QRBQ,BL	2	15-125	120/240			
QRBQ,BL	1	15-70	120/240			
QRBQ,BL	2	15-125	120/240			
QT	1,2	15-50	120/240			
QPF,BQF,BLF	1	15-30	120			
QPF,BLF	2	15-60	120/240			

Molded Case Circuit Breakers Series Connected Short Circuit Ratings 240V Breaker

Series Rating	Main Breaker		Branch Breaker			
	Max. Amps	Type	Type	Poles	Amps	Volts
65,000	225	EQ978# (2P)	QFGA2,BFGA2	1	15-20	120
			QFGAH2,BFGAH2	1	15-20	120
			EQ967#	2	100-125	120/240
			QPP	2	125-200	120/240
			QPPH	2	125-200	120/240
			EQ968#	2	150-200	120/240
			QRBQ,BL	1	15-70	120/240
			QRBQ,BL	2	15-125	120/240
			QPH	1	15-70	120/240
			QPH	2	15-125	120/240
			BQH,BLH	1	15-70	120/240
			BQH,BLH	2	15-125	120/240
			QT	1,2	15-50	120/240
			QPF,BQF,BLF	1	15-30	120
			QPF,BLF	2	15-60	120/240
			QE,BE,BLE	1	15-30	120
			QE,BLE	2	15-60	120/240
			QPHF,BQHF	1	15-30	120
			QPHF,BLHF	2	15-60	120/240
			BLHF	1	15-30	120
			QEH,BLEH	1	15-30	120
			QEH,BLEH	2	15-60	120/240
			QPF2,BLF2	1	15-30	120
			QPHF2,BLHF2	1	15-30	120
			QAF,BQAF,BAF	1	15-20	120
			QAFH,BQAFH	1	15-20	120
			BAFH	1	15-20	120
			QAF2,BAF2	1	15-20	120
			QAFH2,BAFH2	1	15-20	120
			QFGA2,BFGA2	1	15-20	120
			QFGAH2,BFGAH2	1	15-20	120
			ED2	1	15-100	120
			ED2	2	15-100	240
			QRBQ,BL	3	15-100	240
			QPH	3	15-100	240
			BQH,BLH	3	15-100	240
ED2	3	15-100	240			
QPH,BQH,BLH	1	15-70	120/240			
QPH,BQH,BLH	2	15-125	120/240			
QPH,BQH,BLH	3	15-100	240			
QRBQ,BL	1	15-70	120/240			
QRBQ,BL	2	15-125	120/240			
QRBQ,BL	1	15-70	120/240			
QRBQ,BL	2	15-125	120/240			
QT	1,2	15-50	120/240			
QPF,BQF,BLF	1	15-30	120			
QPF,BLF	2	15-60	120/240			

UNDERGROUND SERVICE ALERT
CALL TOLL FREE 1-800-422-4133
TWO WORKING DAYS BEFORE YOU DIG

SIEMENS SERIES RATED CIRCUIT BREAKER
SCALE: NONE

CONSTRUCTION RECORD
Contractor
Inspector
Date Completed

DATE BY NO. REVISIONS
05/09/25 2 PLAN CHECK & REVISIONS
08/18/25 RL 2 PLAN CHECK & REVISIONS
04/20/26 RL 4 PLAN CHECK & REVISIONS

ACC'D DATE
BENCH MARK
SCALE
Horizontal
Vertical

SEAL: REGISTERED PROFESSIONAL ENGINEER
No. 018959
Exp. 12-31-2027
STATE OF CALIFORNIA

Designed By
Drawn By
Checked By
Plans Prepared Under Supervision Of
Date
R.C.E. No.

RECOMMENDED BY: HOSEIN ADEH, PE, PRINCIPAL CIVIL ENGINEER
ACCEPTED BY: RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156

CITY OF TEMECULA
DEPARTMENT OF PUBLIC WORKS
ELECTRICAL GENERATOR SPEC SHEETS

Drawing No. E-1.2
Sheet of

Z:\GMEP Engineers\Projects\2023\Jobs\178 Design Group, Architecture\123-414 Temecula Fire Station 73\Electrical.dwg, last Saved: Tue Apr 2026 - 4:13pm

(EXISTING PANEL)

PANEL 'EM'			LOCATION			ELECTRIC ROOM			BUS RATING 125A			120/208 V 3 Ø 4 W			MOUNTING: SURFACE		
DESCRIPTION			VOLT AMPS			MAIN (AMP)			FED FROM			PANEL 'ALL'			MOUNTING: SURFACE		
			ØA	ØB	ØC	L	R	F	ØA	ØB	ØC	L	R	F	ØA	ØB	ØC
2	(E)APP. BAY LTG	800							20-1	1		4	20-1		1000		(E)KITCHEN REF
	(E)INSIDE EM LTG		655						20-1	3		4	20-1		80		GYM EM LTG
	(E)FRNT DR OPN 2			690					20	5		6	20-1				SPARE
	----		690						20	7		8	20-1		720		(E)ENTRY OFFC REC
	----			690					3	9		10	20-1		720		(E)ENTRY OFFC REC
	(E)FRNT DR OPN 1				690				20	11		12	20-1		720		(E)ENTRY OFFC REC
	----		690						13			14					SPACE
	----			690					3	15		16	20-1		2000		(E)APP BAY REC
	----								17			18	20-1				(E)SPARE
	----	SPACE		690					20	19		20	20-1		720		(E)STRG REC
3	(E)REAR DR OPN 2			690					21			22	20-1		720		(E)STRG REC
	----				690				3	23		24	20-1		2000		(E)APP BAY REC
	(E)REAR DR OPN 1		690						20	25		26	25-1		2000		(E)APP BAY REC
	----		690						27			28					SPACE
	----			690					3	29		30	20-1		2000		(E)APP BAY REC
	(E)FIRE SPRINKLERS		180						20-1	31		32	20-1				SPARE
	(E)TEL BOARD			360					20-1	33		34	20-1				SPARE
	(E)PLYMO VENT				1650				30	35		36	60		5485		(E)PANEL EB-2
	----		1650						37			38			5070		----
	----			1650					3	39		40	3		5485		----
1	SPACE								41			42	20-1		360		(E)STRG RM REC
	SUB-TOTAL																
			ØA = 14900VA						ØB = 14430VA						ØC = 14975VA		
TOTAL CONNECTED VA = 44305																	
LCL @ 125 % 800 = 1000																	
LML @ 125 % 1195 = 1494																	
PANEL LOAD = 44.8 KVA																	
FEEDER AMPS = 124.5 A																	
NOTES:																	
(1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW.																	
(2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.19(A)(1)).																	
(3) THE BREAKER IS THE LARGEST MOTOR LOAD (LML) TAKEN AT 125% OF ITS FULL-LOAD CURRENT RATING (NEC 430.24(1)).																	

NOTES:

- (1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW.
 (2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.19(A)(1)).
 (3) THE BREAKER IS THE LARGEST MOTOR LOAD (LML) TAKEN AT 125% OF ITS FULL-LOAD CURRENT RATING (NEC 430.24(1)).

(EXISTING PANEL)

PANEL 'B'		LOCATION MAIN (AMP)				ELECTRIC ROOM M.L.O.				BUS RATING 100A FED FROM PANEL 'ALL'				120/208 V 3 Ø 4 W MOUNTING SURFACE							
DESCRIPTION	VOLT AMPS			L	R	F	BKR	CKT NO	BUS			CKT NO	BKR	M	S	L	F	VOLT AMPS			DESCRIPTION
	ØA	ØB	ØC						ØA	ØB	ØC										
(E)BUNK/DORM RECEPT	720							20-1	●	20-1									470		(E)BUNK & RM HALL LTG SPARE
(E)BUNK/DORM RECEPT	720							20-3	●	4	20-1										(E)DAY RM & OFF LTG
(E)BUNK/DORM RECEPT	720		720					20-1-5	●	6	20-1									470	(E)HALL & BATH LTG
(E)BUNK/DORM RECEPT	720							20-7	●	8	20-1								230	75	(E)EXT. LIGHTS
(E)BUNK/DORM RECEPT	720		720					20-9	●	10	20-1										(E)SMOKE DETECTORS
(E)BUNK/DORM RECEPT	720			720				20-11	●	12	20-1									185	(E)FACP
(E)RECEPT - GFI	720							20-11	●	14	20-1								150		(E)DAMPER/VAV
(E)RECEPT	720							20-115	●	16	20-1									120	(E)DAMPER/VAV
(E)RECEPT	720		720					20-17	●	18	20-1									1200	SPARE
(E)WASHER/DRYER RECEPT	360							20-19	●	20	20-1							1200			(E)EXT GFI
(E)MICRO		1200						20-21	●	22	20-1									360	SPACE
(E)TV RECEPT			900					20-23	●	24	20-1										SPACE
(E)MICRO								20-25	●	26											SPACE
RESTROOM REC			540					20-27	●	28											SPACE
WTR HTR REC				360				20-29	●	30											SPACE
SPACE								31	●	32											SPACE
SPACE								33	●	34											SPACE
SPACE								35	●	36											SPACE
SPACE								37	●	38											SPACE
SPACE								39	●	40											SPACE
SPACE								41	●	42											SPACE
SUB-TOTAL		ØA= 5770VA				ØB= 4095VA				ØC= 5635VA											
TOTAL CONNECTED VA = 15500																					
LCL @ 125 % 1430 = 1788																					
LML @ 125 % 0 = 0																					
PANEL LOAD = 15.9 KVA																					
FEEDER AMPS = 49.5 A																					
NOTES:																					
(1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW TO MATCH EXISTING.																					
(2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.19(A)(1)).																					

NOTES:

- (1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW TO MATCH EXISTING.
 (2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.19(A)(1)).

(EXISTING PANEL)

PANEL 'A'		LOCATION				BREAK ROOM				BUS RATING 200A				120/208V 3 Ø 4 W				MOUNTING: SURFACE			
DESCRIPTION		VOLT AMPS			MAIN (AMP)			FED FROM			PANEL 'ALL'			VOLT AMPS			DESCRIPTION				
		ØA	ØB	ØC	L	R	F	ØA	ØB	ØC	L	R	F	ØA	ØB	ØC					
(E)CLOTHES WASHER	450							20-1	1					200			(E)APP. BAY LTG				
---	450							3						4	200		(E)TIMECLOCK				
---	450							5						6	1320		(E)EXTR LTG				
(E)BENCH & CLOSET	500							20-1	7					8	900		(E)PARKING LOT REC				
(E)RECEPT	400							20-1	9					10	720		(E)RECEP.				
PANEL C	3780							60-11						12	1500		(E)PARKING LOT LTG				
---	4400							13						14	800		PARKING LOT LTG				
---	5200							15						16	400		PARKING LOT LTG				
EXISTING LOAD	1200							17						18			(E)SPARE				
(E)REFRIGERATOR	800							19						20	720		(E)HALL RECEPT				
(E)BTRY CHRGR	400							20-21						22	360		(E)CLOTHES DRYER				
(E)FRNT OFF REC	120							20-23						24	360		---				
(E)EXHAUST FAN 3	500							20-25						26	20		(E)IRRIGATION TIMER				
(E)ROOF GFI REC	540							20-27						28	1500		(E)RANGE				
(E)APP. BAY REC	400							20-29						30	1500		(E)OVENHOOD				
(E)A/C #3	3847							40	31					32	1821		(E)A/C 2				
---	3847							33						34	1821		---				
---	3847							35						36	1821		---				
(E)A/C #1	2256							30	37					38	500		(E)EXHAUST FAN 2				
---	2256							2	39					40	180		(E)ROUTER				
(E)EXHAUST FAN 1	500							20-41						42	180		(E)AP NETWORK				
SUB-TOTAL		ØA= 19020VA						ØB= 11780VA						ØC= 18584VA							
TOTAL CONNECTED VA = 57884																					
LCL @ 125 % 5350 = 6688																					
LML @ 125 % 11541 = 14426																					
PANEL LOAD = 61.5 KVA																					
FEEDER AMPS = 178.7 A																					
NOTES:																					
(1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW																					
(2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.9(A)(1)).																					
(3) THE BREAKER IS THE LARGEST MOTOR LOAD (LML) TAKEN AT 125% OF ITS FULL-LOAD CURRENT RATING (NEC 430.24(1)).																					

NOTES:

- (1) DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW.
 (2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEC 210.19(A)(1)).
 (3) THE BREAKER IS THE LARGEST MOTOR LOAD (LML) TAKEN AT 125% OF ITS FULL-LOAD CURRENT RATING (NEC 430.24(1)).

(NEW PANEL)

PANEL 'D'		LOCATION BREAK ROOM					BUS RATING 200A					120/208V 3 Ø 4 W							
		MAIN (AMP)					FED FROM PANEL 'ALL'					MOUNTING: SURFACE							
DESCRIPTION		VOLT AMPS			L T R M S			BKR			BUS ØA ØB ØC			VOLT AMPS			DESCRIPTION		
		ØA	ØB	ØC	L	T	R	M	S	BKR	ØA	ØB	ØC	ØA	ØB	ØC			
2	APPARATUS LTG	360								20-1	2	20-						MAINT. REC	
	SHOP LTG	250								20-3	4	20-						SPARE	
3	BLDG LTG			170						20-5	6	20-						SPARE	
	SPARE									20-7	8	20-		720				APP. CABINET REC	
A	HP-24		2020							30-1	10	20-			720			APP. CABINET REC	
	E 50A REC	4160								50-13	12	20-				720		APP. CABINET REC	
A	---	4160								215	14	20-			720			SHOP CABINET REC	
	APP. BAY REC			720						215	16	20-						SHOP CABINET REC	
A	ICE MACHINE	1200								19	18	20-				540		SHOP CONV REC	
	SPACE									21	20	30/-		2400				AIR COMPRESSOR	
A	INSTA-HOT			2400						23	22	2			2400			---	
	SPACE									25	24	20/-				150		FC-12B	
A	SPACE									26	26	2			150			FC-12A	
	SPACE									27	28	20/-						---	
A	OUTDOOR REC			180						20-24	30	2				150		---	
	SPACE									31	32							SPACE	
A	TIMECLOCK		200							33	34							SPACE	
	HP-24			1915						25-35	36							SPACE	
A	---			1915						25-37	38	125/-		7315				PANEL 'EM2'	
	W 50A REC	4160								50-34	40				7315			---	
A	---									21	42	3				6420		---	
	SUB-TOTAL																		
		ØA= 19120VA					ØB= 22075VA					ØC= 19545VA							
TOTAL CONNECTED VA = 60760																			
LCL @ 125 % 1185 = 1481																			
LML @ 125 % 4040 = 5050																			
PANEL LOAD = 62.0 KVA																			
FEEDER AMPS = 180.9 A																			
NOTES:																			
(1) 65 KAIC SERIES RATED OR MATCH FAULT CURRENT ON SITE.																			
(2) THE BREAKER IS A LONG CONTINUOUS LOAD (LCL) TAKEN AT 125% OF ITS CURRENT DRAW (NEG 210.19(A/I)).																			
(3) THE BREAKER IS THE LARGEST MOTOR LOAD (LML) TAKEN AT 125% OF ITS FULL-LOAD CURRENT RATINGS (NEG 480.24(I)).																			

IMPORTANT PLAN CHECKER
NOTES

- PER T24 ENERGY CODE REQUIREMENTS, SITE LIGHTING FIXTURE 'S' SHALL BE CONTROLLED VIA MOTION SENSORS. SITE LIGHTING FIXTURE 'H' IS EXEMPT FROM MOTION SENSOR CONTROLS BECAUSE THE MOUNTING HEIGHT IS GREATER THAN OR EQUAL TO 24 FEET.
- PROVIDE SURGE ARRESTERS, SURGE-PROTECTIVE DEVICES, AND CAPACITORS IN ENCLOSURES IDENTIFIED FOR CLASS 1, DIVISION 1 AND 2 LOCATIONS IN ACCORDANCE WITH 2022 CEC 501.35(A) AND (B).
- A SIGN SHALL BE PLACED AT THE SERVICE-ENTRANCE EQUIPMENT FOR COMMERCIAL AND/OR INDUSTRIAL INSTALLATIONS THAT INDICATES THE TYPE AND LOCATION OF EACH ON-SITE OPTIONAL STANDBY POWER SOURCE [2022 CEC 102.7]
- PROVIDE AUDIBLE AND VISUAL SIGNAL DEVICES TO INDICATE MALFUNCTION AND CARRYING LOAD STATUS OF THE GENERATOR [2022 CEC 102.6]

ELECTRICAL POWER KEYED
NOTES

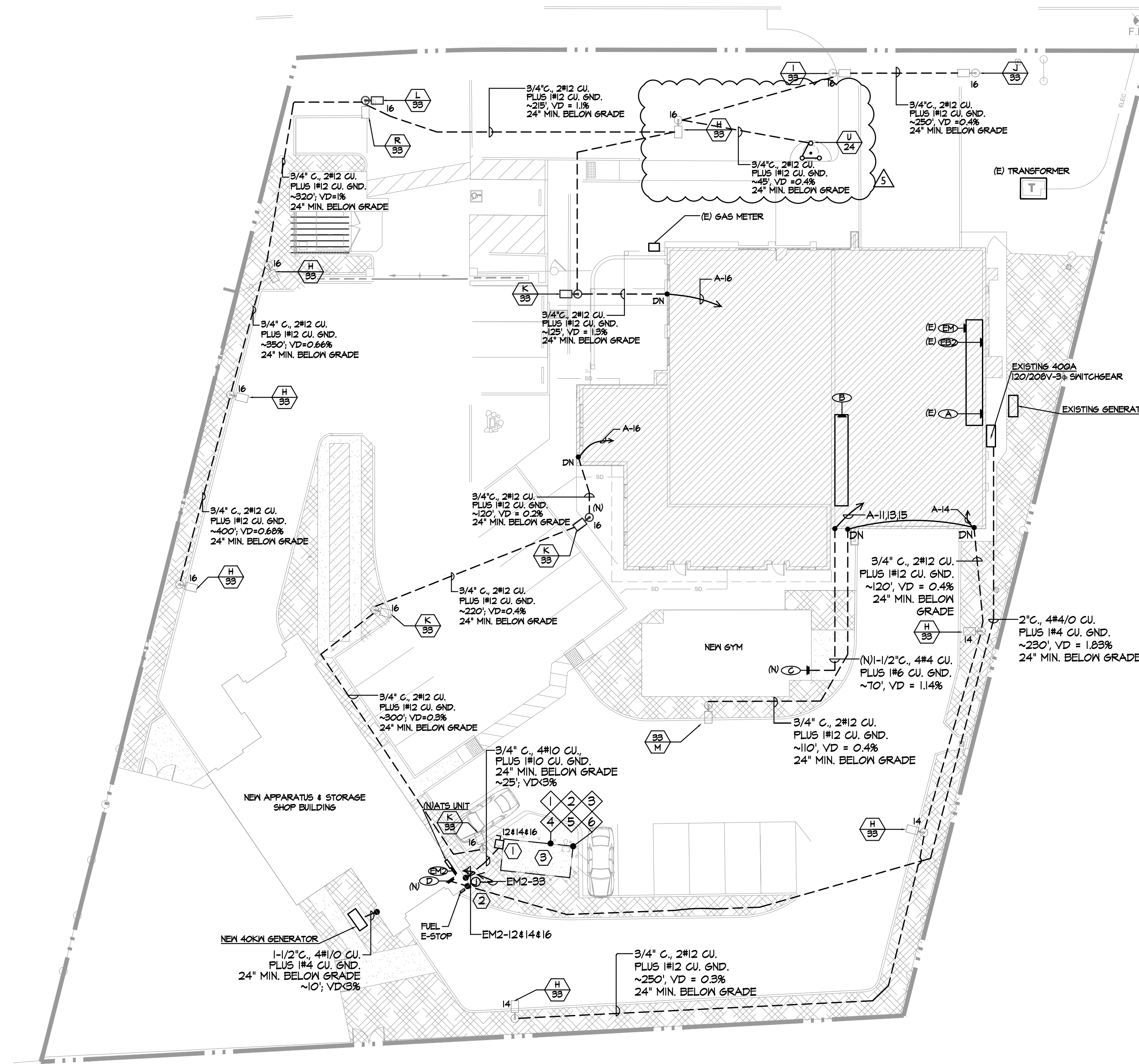
- PROVIDE 30AS/3P DISCONNECT FOR FUEL DISPENSER. DISCONNECT TO BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION IN ACCORDANCE WITH 110.25. [2022 CEC 514.18]. VERIFY EXACT POWER REQUIREMENTS AND LOCATION BEFORE ROUGH-IN.
- PROVIDE J-BOX FOR CONNECTION TO FUEL E-STOP. CONTRACTOR TO VERIFY EXACT LOCATION WITH ARCHITECT AND POWER REQUIREMENTS BEFORE ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- SEE FUEL CONSULTANT PLAN FOR DETAILED LAYOUT OF NEW FUEL DISPENSER.

HAZARDOUS AREA NOTES

- ENCLOSED AREA IS A CLASS 1, DIVISION 2 AREA AND SHALL COMPLY WITH NEC ARTICLE 500, 501, 514 AND NFPA 30A.
- ALL CONDUITS ENTERING OR LEAVING THIS AREA SHALL HAVE SEAL-OFF FITTING ON BOTH ENDS OF THE RUN. J-BOXES SHALL BE EXPLOSION PROOF AND WEATHER PROOF TYPE.
- UNDERGROUND WIRING SHALL BE INSTALLED IN THREADED RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT PER NEC 514-8. IN LOCATIONS SUBJECT TO SEVERE CORROSIVE INFLUENCES OF SOIL/MOISTURE RIGID NONMETALLIC CONDUIT COMPLYING WITH NEC 347 COULD BE PERMITTED WHERE BURIED UNDER NOT LESS THAN 2 FEET OF EARTH. WHERE RIGID NONMETALLIC CONDUIT IS USED, THREADED RIGID METAL CONDUIT OR THREADED STEEL INTERMEDIATE METAL CONDUIT SHALL BE USED FOR THE LAST 2 FEET OF UNDERGROUND TO THE POINT OF CONNECTION. GROUNDING CONDUCTOR SHALL BE INCLUDED IN ALL CONDUITS NEC 514-8. RIGID NONMETALLIC CONDUIT COMPLYING WITH TABLE 352 SHALL BE PERMITTED WHERE BURIED UNDER NOT LESS THAN 2 FT OF COVER NEC ART-514-8 EXCEPTION #2. ANY PORTION OF THE WIRING BELOW THE SURFACE OF A GDI OR GID2 LOCATION SHALL BE SEALED WITHIN 10 FEET OF THE POINT OF EMERGENCE ABOVE GRADE.
- ENCLOSED AREA IS A CLASS 1 DIVISION 1 HAZARDOUS AREA NEC 514-8 AND SHALL COMPLY WITH NEC ART 500, 501, 514 AND NFPA 30A
- ALL CIRCUIT BREAKERS SHALL DISCONNECT SIMULTANEOUSLY FROM THE SOURCE OF SUPPLY ALL CONDUCTORS OF THE CIRCUIT, INCLUDING THE GROUNDING CONDUCTORS NEC 514-5.
- UNDERGROUND CONDUIT IF METALLIC SHALL BE PVC COATED FOR CORROSION PROTECTION.

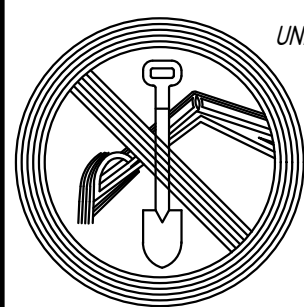
ELECTRICAL GENERAL POWER
NOTES

- RACEWAY SEALS SHALL BE PROVIDED IN EACH CONDUIT RUN ENTERING OR LEAVING A DISPENSER. THE SEALING FITTING SHALL BE THE FIRST FITTING AFTER THE CONDUIT EMERGES FROM THE EARTH OR CONCRETE. 514.1(A)
- EMERGENCY SHUT-OFFS: EACH CIRCUIT LEADING TO OR THROUGH DISPENSING EQUIPMENT SHALL BE PROVIDED WITH A CLEARLY IDENTIFIED AND READILY ACCESSIBLE SWITCH OR OTHER ACCEPTABLE MEANS TO DISCONNECT SIMULTANEOUSLY FROM THE SOURCE OF SUPPLY. ALL CONDUCTORS OF THE CIRCUIT, INCLUDING THE GROUNDING CONDUCTOR, IF ANY.
- SHUT-OFF LOCATIONS AT ATTENDED STATIONS SHALL NOT BE MORE THAN 100 FEET FROM THE DISPENSERS, AND AT UNATTENDED SELF SERVICE STATIONS THE DISTANCE SHALL BE MORE THAN 20 FEET BUT LESS THAN 100 FEET.
- RACEWAY TERMINATIONS BETWEEN THE HAZARDOUS AREA AND THE SYSTEM ELECTRODE MUST BE BONDED TO THE ENCLOSURE WITH THREADED CONDUIT ENTRY, BUSHING JUMPER, OR BONDING LOCKNUT.
- NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
- PROVIDE AND MAINTAIN REQUIRED WORK SPACE, ADEQUATE ILLUMINATION, ACCESS TO WORK SPACE AND HEAD ROOM ABOUT ELECTRICAL EQUIPMENT. (110.26)
- PROVIDE PROTECTION FROM PHYSICAL DAMAGE FRO SWITCHBOARDS, PANELBOARDS AND OTHER ELECTRICAL EQUIPMENT. (110.27(B)).
- ALL METAL RACEWAYS, THE METAL ARMOR OR METALLIC SHEATH ON CABLES, AND ALL NONCURRENT-CARRYING METAL PARTS OF FIXED AND PORTABLE ELECTRICAL EQUIPMENT, REGARDLESS OF VOLTAGE, SHALL BE GROUNDING AND BONDED. CEC 514.16



ELECTRICAL SITE PLAN

SCALE: 1/20"=1'-0"



UNDERGROUND SERVICE ALERT

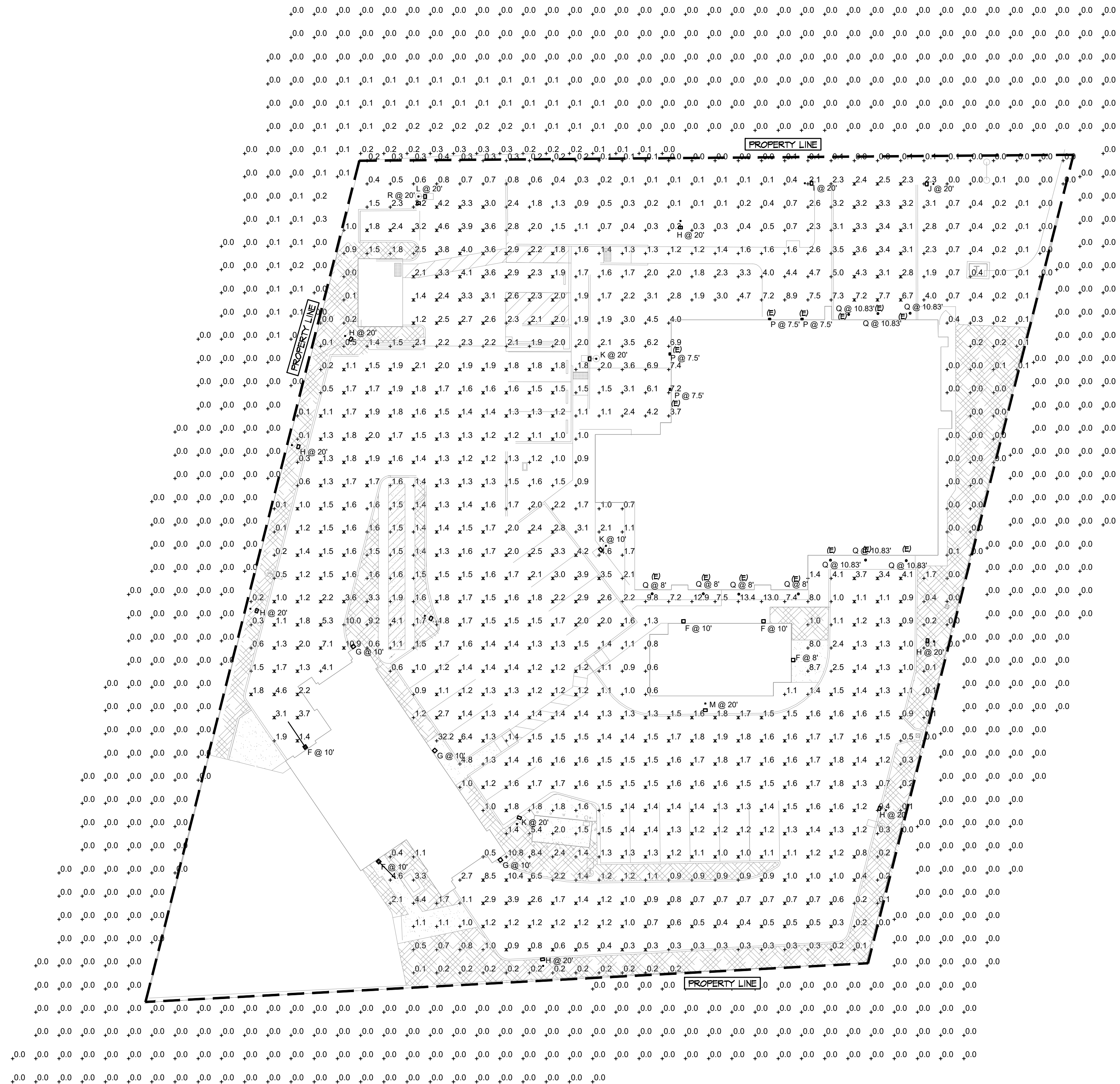
CALL TOLL FREE
1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

CONSTRUCTION RECORD		DATE	BY	NO.	REVISIONS	ACC'D	DATE	BENCH MARK	SCALE	SEAL	Designed By	Drawn By	Checked By	RECOMMENDED BY:	DATE:	ACCEPTED BY:	DATE:	CITY OF TEMECULA	DEPARTMENT OF PUBLIC WORKS	Drawing No.
Contractor		05/09/25		1	PLAN CHECK & REVISIONS						Plans Prepared Under Supervision Of			Hossein Ajideh, P.E., Principal - E&I ENGINEER	6/18/2026	RON MORENO, P.E., DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156	6/18/2026		ELECTRICAL SITE PLAN	E-2.0
Inspector		08/18/25	RL	2	PLAN CHECK & REVISIONS															
		10/02/25	RL	3	ENVIRONMENTAL COMMENTS															
Date Completed		06/11/26	RL	5	OWNER REVISIONS															
											R.C.E. No.									

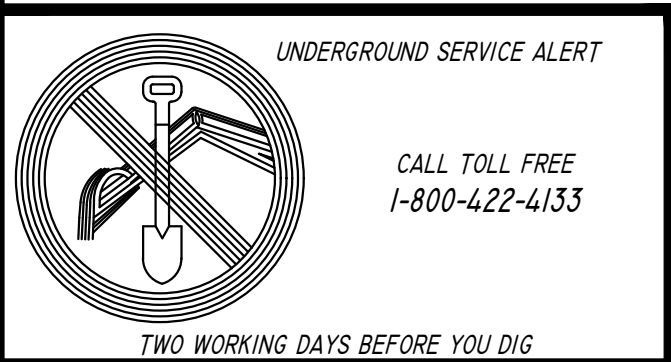
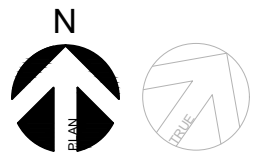
Symbol	Label	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Quantity	Light Loss Factor	Wattage
	G	Lithonia Lighting	DSXF1 LED P2 40K FL	DSXF1 LED P2 40K FL	1	Absolute	3	0.81	42
	F	Solera	ZILLA-20W-LED-NW-CL	Zilla Wall Mounted Sconce	1	2593	5	0.81	22
	H	Lithonia Lighting	DSX0 LED P1 30K 80CRI BLC4	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 4 Extreme Backlight Control	1	3135	7	1	33.21
	I	Lithonia Lighting	DSX0 LED P1 30K 80CRI LCCO	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control	1	3063	1	1	33.21
	J	Lithonia Lighting	DSX0 LED P1 30K 80CRI RCCO	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Right Corner Cutoff Extreme Backlight Control	1	3063	1	1	33.21
	K	Lithonia Lighting	DSX0 LED P1 30K 80CRI T4M	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 4 Medium	1	4236	4	1	33.21
	L	Lithonia Lighting	DSX0 LED P1 30K 80CRI LCCO EGS	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control External Glare Shield	1	3037	1	1	33.21
	P	Lithonia Lighting	WDGE2 LED P2 30K 70CRI T3M	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 70CRI, TYPE 3 MEDIUM OPTIC	1	2160	4	1	18.9815
	Q	Lithonia Lighting	LDN6 35/10 L06AR LD	6IN LDN, 3500K, 1000LM, CLEAR, MATTE DIFFUSE REFLECTOR, CRI80	1	839	10	1	10.44
	M	Lithonia Lighting	DSX0 LED P1 30K 70CRI TFTM	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 70 CRI Forward Throw	1	4698	1	1	33.21
	R	Lithonia Lighting	DSX0 LED P1 30K 70CRI T4LG EGS	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 70 CRI Type 4 Low G Rating External Glare Shield	1	4011	1	1	33.21

Statistics				
Description	Symbol	Avg	Max	Min
Calc Zone #3	+	0.0 fc	0.3 fc	0.0 fc
Fire Truck Driveway	✕	3.8 fc	7.7 fc	2.3 fc
N Gate Parking	✕	2.8 fc	4.6 fc	1.2 fc
NW Apperature Driveway	✕	2.1 fc	10.9 fc	1.0 fc
S Gate Parking	✕	1.6 fc	6.4 fc	1.0 fc
SE Apperature driveway	✕	1.5 fc	10.4 fc	0.3 fc
Calc Zone #2	+	1.7 fc	32.2 fc	0.0 fc



SITE PHOTOMETRIC

SCALE: NONE



CONSTRUCTION RECORD	DATE	BY	NO.	REVISIONS	ACC'D	DATE	BENCH MARK	SCALE
Contractor	05/09/25		1	PLAN CHECK & REVISIONS				Horizontal
Inspector	08/18/25	RL	2	PLAN CHECK & REVISIONS				Vertical
Date Completed	10/02/25	RL	3	ENVIRONMENTAL COMMENTS				

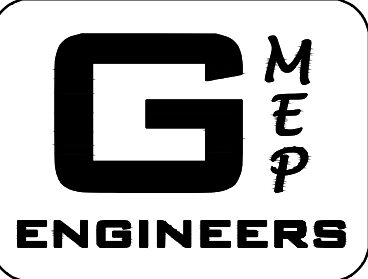


Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
Date		
R.C.E. No.		

RECOMMENDED BY:	H. Anjel	DATE:	6/18/2026
ACCEPTED BY:	RON MORENO, P.E., DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156	DATE:	6/18/2026

**CITY OF TEMECULA**

DEPARTMENT OF PUBLIC WORKS

**GMEP ENGINEERS**

28439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92650
Tel. 949-267-9095

TM-B24-5413/B25-0079

BUILDING AND SAFETY

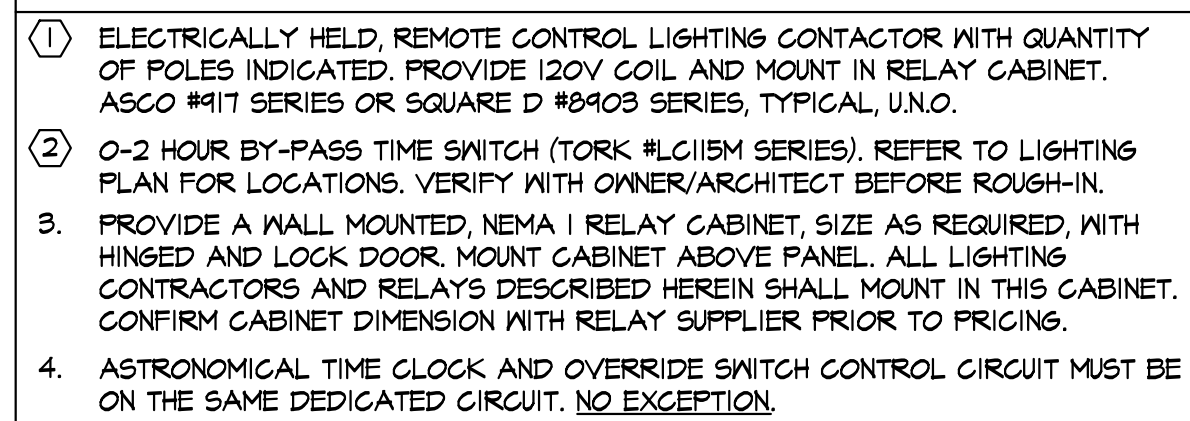
REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____ NAME _____ DATE _____

Drawing No.

E-2.1

Sheet _____ of _____

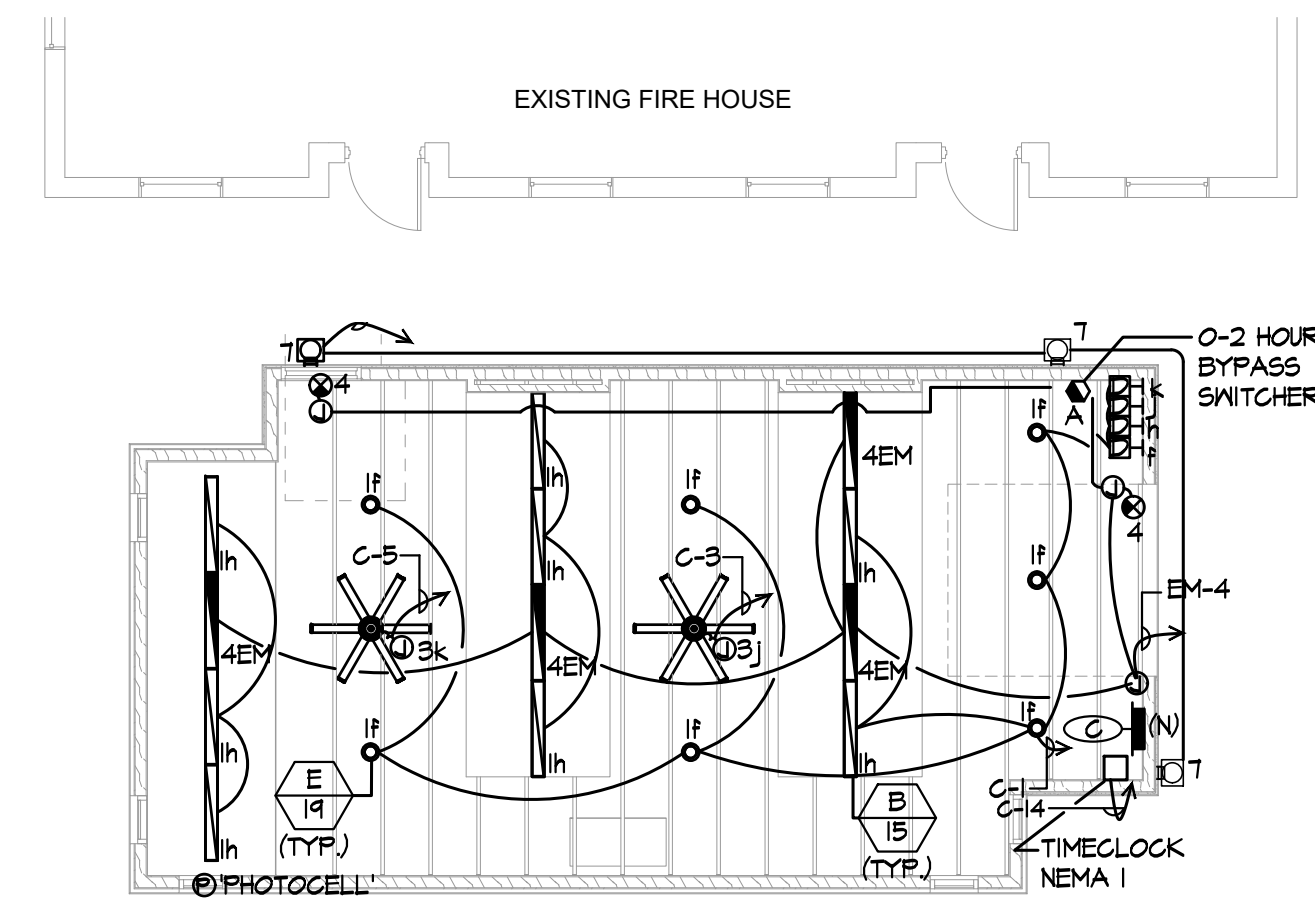


SCALE: NONE



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2	⊕	3.4 fc	8.1 fc	1.0 fc	8.1:1	3.4:1
Calc Zone #1	⊕	8.9 fc	14.3 fc	1.6 fc	8.9:1	5.6:1





ELECTRICAL LIGHTING PLAN - GYM

- ① ELECTRICALLY WELD, REMOTE CONTROL LIGHTING CONTACTOR WITH QUANTITY OF POLES INDICATED. PROVIDE 120V COIL AND MOUNT IN RELAY CABINET. ASCO #417 SERIES OR SQUARE D 88403 SERIES, TYPICAL, U.N.O.
- ② 0-2 HOUR BY-PASS TIME SWITCH (TORK #LC15M SERIES). REFER TO LIGHTING PLAN FOR LOCATIONS. VERIFY WITH OWNER/ARCHITECT BEFORE ROUGH-IN.
3. PROVIDE A WALL MOUNTED, NEMA 1 RELAY CABINET, SIZE AS REQUIRED, WITH HINGED AND LOCK DOOR. MOUNT CABINET ABOVE PANEL. ALL LIGHTING CONTRACTORS AND RELAYS DESCRIBED HEREIN SHALL MOUNT IN THIS CABINET. CONFIRM CABINET DIMENSION WITH RELAY SUPPLIER PRIOR TO PRICING.
4. ASTRONOMICAL TIME CLOCK AND OVERRIDE SWITCH CONTROL CIRCUIT MUST BE ON THE SAME DEDICATED CIRCUIT. NO EXCEPTION.

EGRESS PHOTOMETRIC - GYM

SCALE: NONE

Figure 1 shows a schematic diagram of a 10x10 grid of nodes. The nodes are arranged in a grid with a central 4x4 area. The nodes are labeled with numbers 1 through 25, with some nodes having a subscript 'A' and a superscript '10'. The nodes are arranged in a grid with a central 4x4 area. The nodes are labeled with numbers 1 through 25, with some nodes having a subscript 'A' and a superscript '10'. The nodes are arranged in a grid with a central 4x4 area. The nodes are labeled with numbers 1 through 25, with some nodes having a subscript 'A' and a superscript '10'.

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	3.8 fc	7.1 fc	1.2 fc	5.9:1	3.2:1

BUILDING AND SAFETY



APPROVED BY: _____
NAME DATE

Drawing No.

E-3.1

Sheet _____ of _____



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CONSTRUCTION RECORD		DATE	BY	NO.	REVISIONS	ACC'D	DATE	BENCH MARK	SCALE		Designed By	Drawn By	Checked By	RECOMMENDED BY:  HOSSEIN AGHAJANI, PE, PRINCIPAL CIVIL ENGINEER	DATE: 6/18/2026		CITY OF TEMECULA DEPARTMENT OF PUBLIC WORKS	ELECTRICAL GYM LIGHTING PLAN	Drawing No. E-3.1 Sheet _____ of _____	
Contractor_____	05/09/25	RL	1	PLAN CHECK & REVISIONS					Horizontal		Plans Prepared Under Supervision Of _____ Date _____				ACCEPTED BY: RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156					DATE: 6/18/2026
Inspector_____	08/18/25		2	PLAN CHECK & REVISIONS					Vertical											
Date Completed_____																				

Z:\GNEP Engineers\Projects\2023\Jobs\TR Design Group, Architecture\23-414 Temecula Fire Station 73\ELEC\23-414 Temecula Fire Station 73_Electrical.dwglast Saved: Tue Apr, 2026 - 4:13pm

ELECTRICAL KEYED NOTES

- 1

PROVIDE 30AS/20AF/3P DISCONNECT FOR CONNECTION TO APPARATUS BAY EQUIPMENT. VERIFY EXACT LOCATION BEFORE ROUGH IN.
- 2

PROVIDE J-BOX WITH 30A/2P MOTOR RATED SWITCH FOR CONNECTION TO AIR COMPRESSOR UNIT. VERIFY EXACT LOCATION BEFORE ROUGH IN.
- 3

PROVIDE J-BOX WITH 30A/1P MOTOR RATED SWITCH FOR CONNECTION TO INSTA HOT WATER HEATER. VERIFY EXACT LOCATION BEFORE ROUGH IN.
- 4

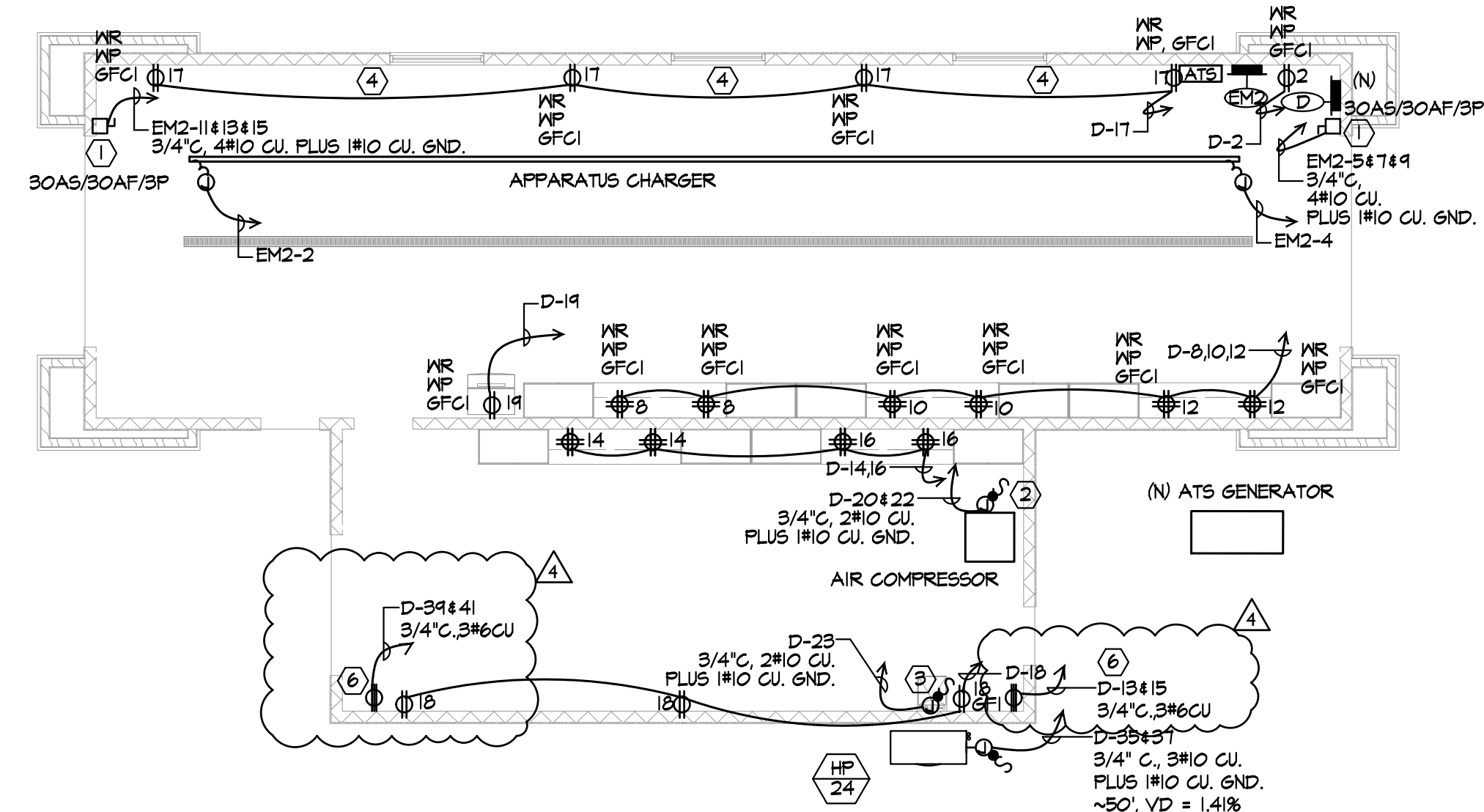
REFER TO ARCHITECTURAL PLANS FOR CONDUIT MOUNTING.
- 5

PROVIDE J-BOX WITH 30A/2P MOTOR RATED SWITCH FOR CONNECTION TO HP-24. CONTRACTOR TO VERIFY EXACT LOCATION AND POWER REQUIREMENTS BEFORE ROUGH IN.
- 6

PROVIDE 50A/2P RECEPTACLE. CONTRACTOR TO VERIFY EXACT LOCATION BEFORE ROUGH IN.

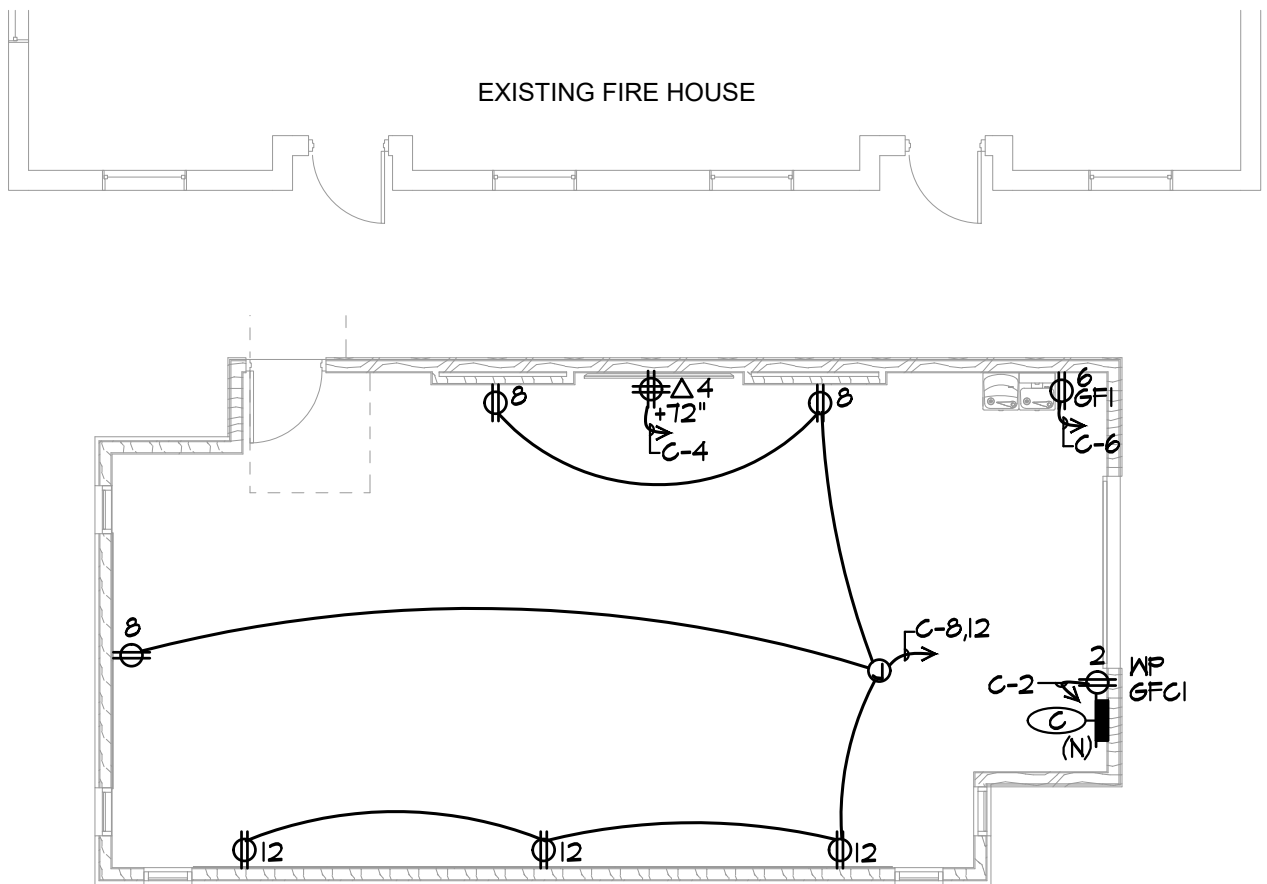
IMPORTANT PLAN CHECKER NOTES

PROVIDE RATED ELECTRICAL DISCONNECT SWITCH WITHIN SIGHT FROM THE EQUIPMENT/APPLIANCE OR A LOCK-OUT DEVICE AT CIRCUIT BREAKERS AT HARDWIRED EQUIPMENT/APPLIANCES. [2022 CEC 430.102(B), 422.31]



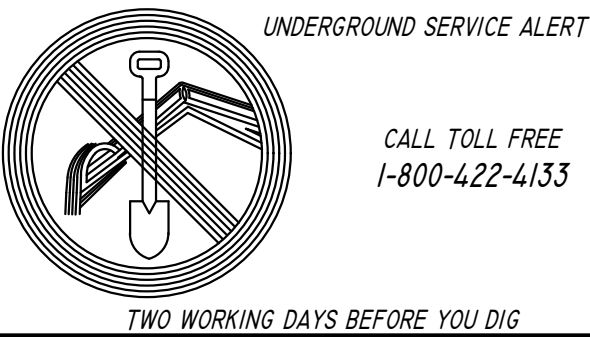
ELECTRICAL POWER PLAN - APPARATUS & SHOP

SCALE: 1/8"=1'-0"

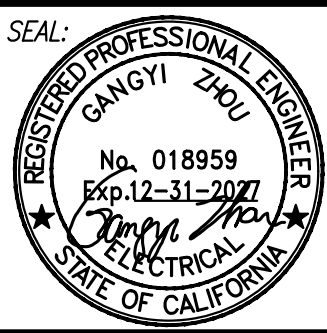


ELECTRICAL POWER PLAN - GYM

SCALE: 1/8"=1'-0"



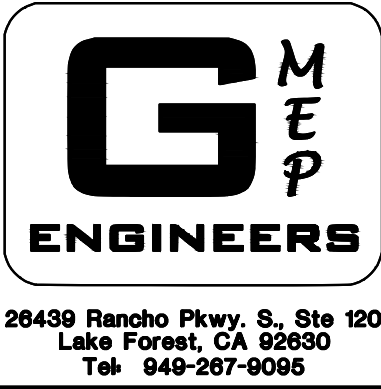
CONSTRUCTION RECORD		DATE	BY	NO.	REVISIONS	ACC'D	DATE	BENCH MARK	SCALE
Contractor		05/09/25		1	PLAN CHECK & REVISIONS				Horizontal
		08/18/25	RL	2	PLAN CHECK & REVISIONS				
		04/20/26	RL	4	PLAN CHECK & REVISIONS				
Inspector									Vertical
Date Completed									



Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
Date		
R.C.E. No.		

RECOMMENDED BY:	H. J. [Signature]	DATE:	6/18/2026
HOSSEIN ALJEDAR, PE, PRINCIPAL - CIVIL ENGINEER			
ACCEPTED BY:	R. Moreno	DATE:	6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156			

CITY OF TEMECULA		DEPARTMENT OF PUBLIC WORKS		Drawing No.
ELECTRICAL POWER PLANS				E-3.2
				Sheet of



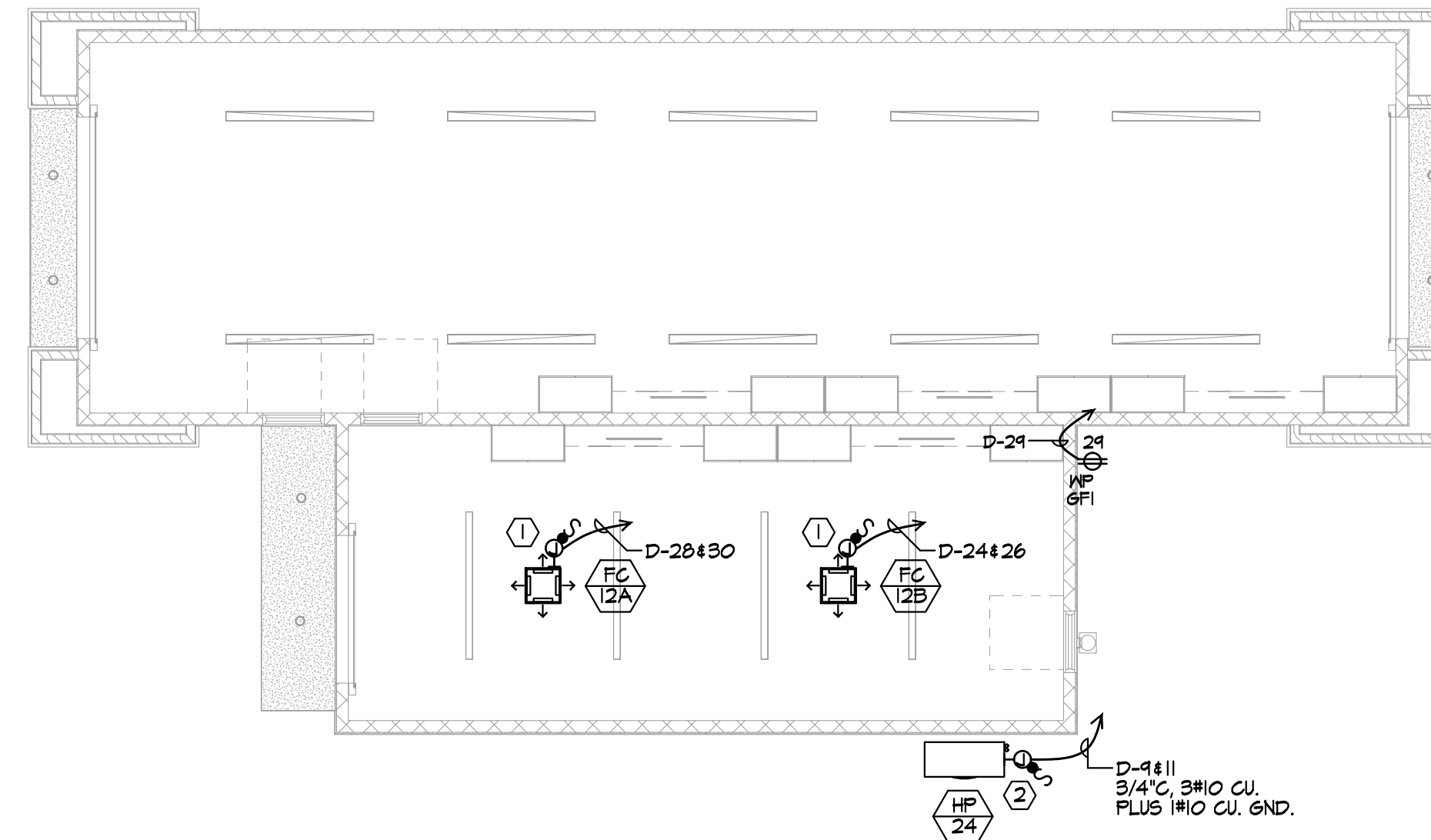
TM-B24-5413/B25-0079

BUILDING AND SAFETY

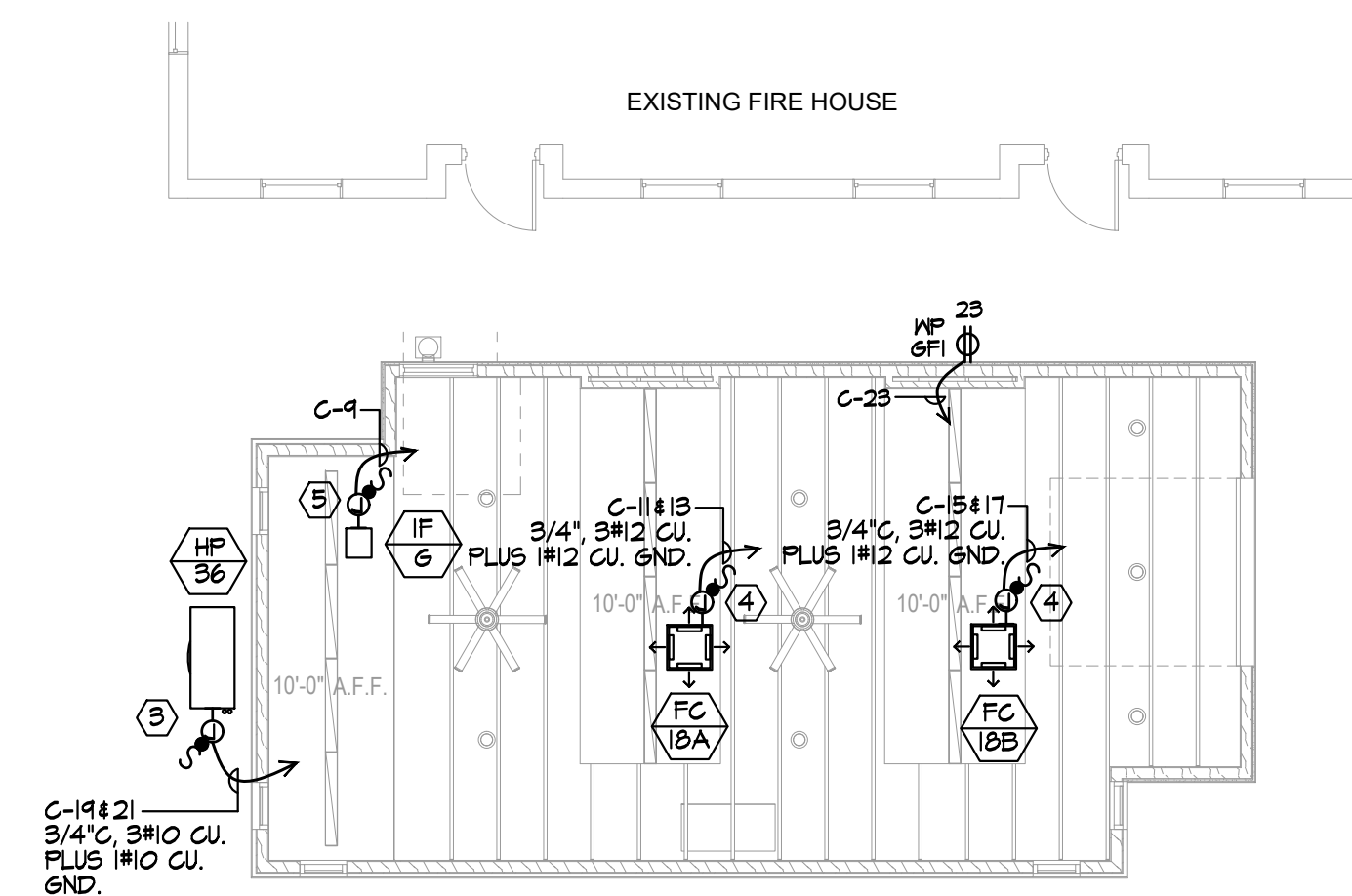
REVIEWED FOR COMPLIANCE WITH TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: NAME DATE

1. PROVIDE J-BOX WITH 20A/2P MOTOR RATED SWITCH FOR CONNECTION TO FAN COIL UNIT FC-12. VERIFY EXACT LOCATION BEFORE ROUGH IN.
2. PROVIDE J-BOX WITH 30A/2P MOTOR RATED SWITCH FOR CONNECTION TO HEAT PUMP UNIT HP-24. VERIFY EXACT LOCATION BEFORE ROUGH IN.
3. PROVIDE J-BOX WITH 30A/2P MOTOR RATED SWITCH FOR CONNECTION TO HEAT PUMP UNIT HP-36. VERIFY EXACT LOCATION BEFORE ROUGH IN.
4. PROVIDE J-BOX WITH 20A/2P MOTOR RATED SWITCH FOR CONNECTION TO FAN COIL UNIT FC-18. VERIFY EXACT LOCATION BEFORE ROUGH IN.
5. PROVIDE J-BOX WITH 20A/1P MOTOR RATED SWITCH FOR CONNECTION TO FAN UNIT IF-6. VERIFY EXACT LOCATION BEFORE ROUGH IN.



SCALE: 1/8" = 1'-0"



SCALE: 1/8" = 1'-0"

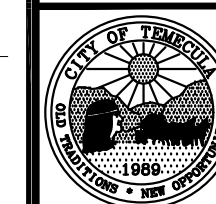


Checked By

Date _____

R.C.E. No. _____

DATE: 07/10/2020



DEPARTMENT OF PUBLIC WORKS

- 22

et _____ of _____

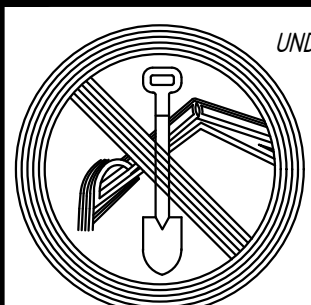
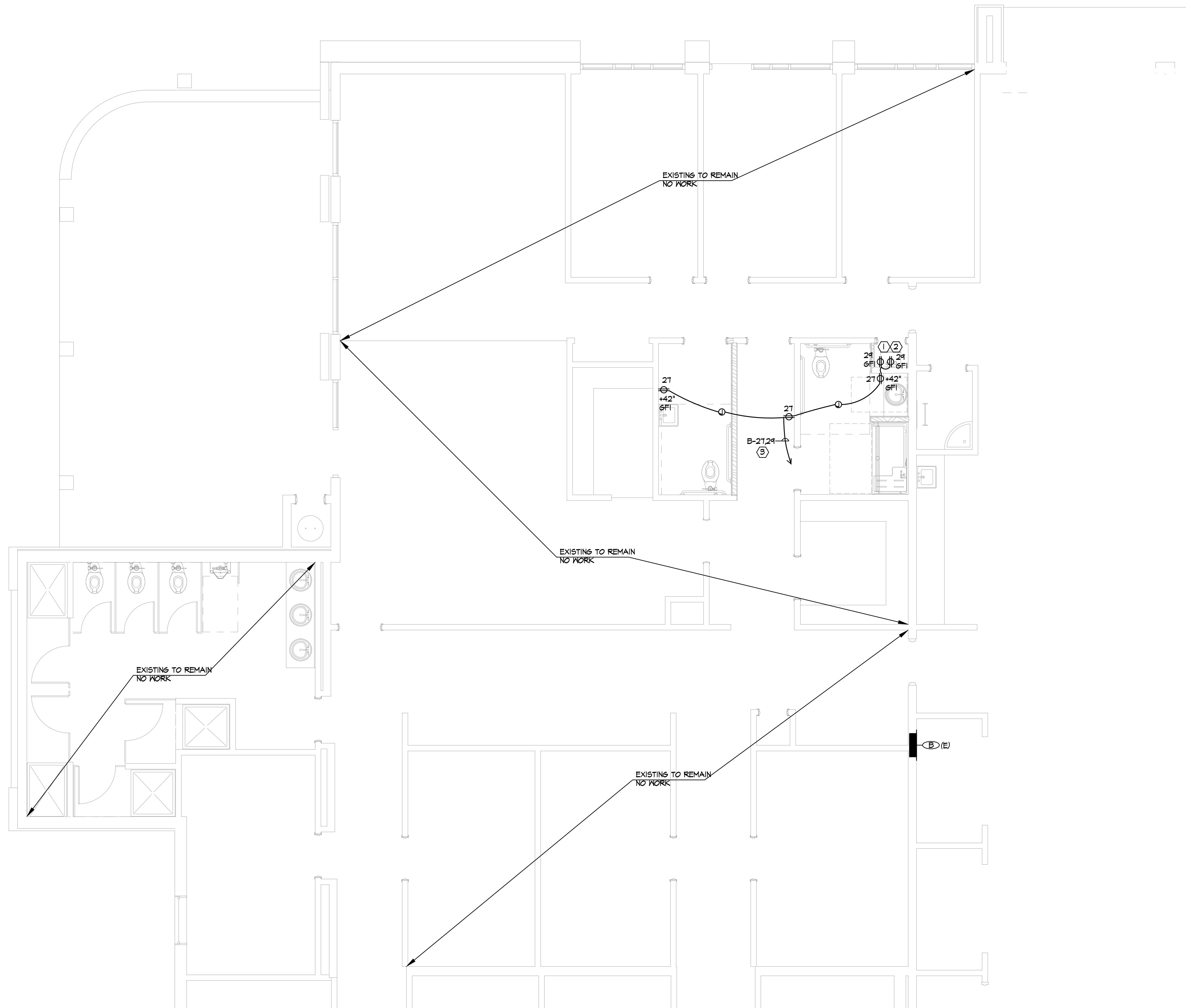
BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____
NAME DATE

ELECTRICAL KEYED NOTES

- ① PROVIDE RECEPTACLE FOR CONNECTION TO WATER HEATER IGNITION. CONTRACTOR TO VERIFY EXACT LOCATION AND POWER REQUIREMENTS BEFORE ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- ② PROVIDE RECEPTACLE FOR WATER HEATER MAINTENANCE. CONTRACTOR TO VERIFY EXACT LOCATION AND POWER REQUIREMENTS BEFORE ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- ③ DENOTES SEPARATE CIRCUITS WITHIN SAME CONDUIT. BREAKERS TO BE INTERLOCKED FOR SIMULTANEOUS TRIP.



UNDERGROUND SERVICE ALERT

CALL TOLL FREE
1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

ELECTRICAL RESTROOM POWER PLAN

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



Designed By

Drawn By

Checked By

Plans Prepared Under Supervision Of

Date _____

R.C.E. No. _____

RECOMMENDED BY:

HOSSEIN AJIDEH PE, PRINCIPAL CIVIL ENGINEER

6/18/2026

ACCEPTED BY:

BT: _____
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS
/ CITY ENGINEER R.C.E. No. 69156

DATE: 6/18/2026

CITY OF TEMECULA

DEPARTMENT OF PUBLIC WORKS

ELECTRICAL POWER
PLAN - RESTROOM

Drawing No.

E-4.0

Sheet _____ of _____

TM-B24-5413/B25-0079

BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____
NAME DATE

STATE OF CALIFORNIA		10/17/2023 10:58:00 AM 10/17/2023 10:58:00 AM	
Indoor Lighting		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE		NRCC-LTI-1	
Project Name: 23-A34 Temecula Fire Station 73	Report Page:	(Page 6 of 6)	
	Date Prepared:	2025-03-28T11:27:51-07:00	
P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))			
<i>This section does not apply to this project.</i>			
Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOI-ONE ALTERATIONS			
<i>This section does not apply to this project.</i>			
R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS			
<i>This section does not apply to this project.</i>			
S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)			
<i>This section does not apply to this project.</i>			
T. DWELLING UNIT LIGHTING			
<i>This section does not apply to this project.</i>			
U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION			
<i> Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online </i>			
Form/TITLE			
NRCC-LTI-E - Must be submitted for all buildings			

Generated Date/Time:
 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000
 Schema Version: rev 202020101

Documentation Software: Energy Code Ace
 Compliance ID: 280434-0325-0002
 Report Generated: 2025-03-28 08:27:56

STATE OF CALIFORNIA

Indoor Lighting

CERTIFICATE OF COMPLIANCE

Project Name: 23-414 Temecula Fire Station 73

Report Page: 1

Date Prepared:

CALIFORNIA ENERGY COMMISSION

NICC-ETH-4

(Page 1 of 6)

2025-03-28T11:27:31-04:00

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Area Description	Complete Building or Area Category Primary Function/Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment
				Area Category	PdF
GYM	Exercise Center Gymnasium	0.5	855	427.5	No No
APPARATUS BAY	General Commercial Industrial Work AreaLow Bay	0.6	1,485	891	No No
STORAGE	Commercial Industrial Storage Area	0.4	655	262	No No
TOTALS:			2,995	1,580.5	See Tables I, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOORAND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000
Schema Version: rev 20220101

Generated Date/Time:

Documentation Software: Energy Code Ace

Compliance ID: 280434-0325-0002
Schema Generated: 2025-03-28 08:27:56

STATE OF CALIFORNIA									
Indoor Lighting									
CERTIFICATE OF COMPLIANCE CALIFORNIA ENERGY COMMISSION									
Project Name: 23-14 Temecula Fire Station 73 Report Page: NBCC-4734 (Page 4 of 6)									
Date Prepared: 2025-03-28T12:27:51-04:00									
H. INDOOR LIGHTING CONTROLS (Not including PAFs)									
<i>(This table includes lighting controls for conditioned and unconditioned spaces.)</i>									
Building Level Controls									
01				02				03	
Mandatory Demand Response 130.12(c)				Shut-off controls 130.1(c) / 160.5(b)4C				Field Inspector	
NA < 4,000W subject to multilevel				See Area/Space Level Controls				Pass ☐ Fail ☐	
Area Level Controls									
04		05		06		07		08	
Area Description		Complete Building or Area Category Primary Function Area		Manual Area Controls 130.1(a) / 160.5(b)4A		Multi-Level Controls 130.1(b) / 160.5(b)4B		Shut-Off Controls 130.1(c) / 160.5(b)4C	
GYM		Exercise Center Gymnasium		Dimmer		Auto. Time Switch		Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	
APPARATUS BAY		General Commercial Industrial Work Area/low Bay		Dimmer		Auto. Time Switch		Secondary Daylighting 130.1(e) / 160.5(b)4E	
STORAGE		Commercial Industrial Storage Area		Dimmer		Auto. Time Switch		Interlocked Systems 140.6(a) / 170.3(e)2A	
								Pass ☐ Fail ☐	
								☐ ☐	
								13	
								Plan Sheet Showing Daylit Zones:	
I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS									
<i>Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(d) are being used.</i>									
Conditioned Spaces									
01		02		03		04		05	
06		07		08		09		10	
Date: 2022-02-01 Scheme Version: rev 20220101									
Documentation Software: Energy Code Ace Compliance ID: 280434-0325-0002 Report Generated: 2025-03-08 08:27:56									

	Designed By _____		Drawn By _____		Checked By _____		RECOMMENDED BY _____ ACCEPTED BY _____
	_____		_____		_____		
	Plans Prepared Under Supervision Of _____ Date _____ R.C.E. No. _____						

CD BY: <u>H. J. Jolly</u> DATE: <u>6/18/2026</u> HOSSEIN-AUDE, PE, PRINCIPAL CIVIL ENGINEER Y: <u>LAUREN</u> DATE: <u>6/18/2026</u> RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156	 CITY OF TEMECULA
---	---

[illegible]

Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
		Date
R.C.E. No.		

RECOMMENDED BY: H. A. Miller DATE: 6/18/2026
HOSSEIN-AUDEI, PE, PRINCIPAL CIVIL ENGINEER
 ACCEPTED BY: RAMON DATE: 6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS
/ CITY ENGINEER R.C.E. No. 69156

CITY OF TEMECULA		DEPARTMENT OF PUBLIC WORKS
	ELECTRICAL T24 INDOOR	

Drawing No.
E-LTI
Sheet _____ of _____

STATE OF CALIFORNIA Outdoor Lighting		CALIFORNIA ENERGY EFFICIENCY STANDARDS NEEC	
CERTIFICATE OF COMPLIANCE		Page 3 of 10	
Project Name: 23-424 Temecula Fire Station 73	Report Page:	2026-06-11T18:48:05-04:00	
Date Prepared:		2026-06-11T18:48:05-04:00	

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been omitted by permit applicant, an explanation should be included in Table E.

Additional Remarks: These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/tcttp/providers.html>

Form/Title	Systems/Spaces To Be Field Verified
NECA-170-Q2-A: Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	GENERAL HARDSCAPE: "G"; GENERAL HARDSCAPE: "H"; GENERAL HARDSCAPE: "L"; GENERAL HARDSCAPE: "M"; GENERAL HARDSCAPE: "P"; GENERAL HARDSCAPE: "Q"; GENERAL HARDSCAPE: "R"; GENERAL HARDSCAPE: "U"; Entrance/Exits: "E"; Entrance/Exits: "F"; Entrance/Exits: "G"; Fire Station Driveway Entrance: "L"; Fire Station Driveway Entrance: "P"; Fire Station Driveway Entrance: "R"; Fire Station Driveway Entrance: "U";

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0 0.006
 Schema Version: m. 20220101

Generated Date/Time:

Documentation Software: Energy Code Ace

Compliance ID: CE-280434-0206-0001
 Report Generated: 2026-06-11 18:48:05

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
Outdoor Lighting		INSC-LED-8	
CERTIFICATE OF COMPLIANCE		Report Page:	
Project Name: 23-114 Temecula Fire Station 79		Date Prepared: 2026-06-11T18:42:58-04:00	
		Page 8 of 10	
L. LIGHTING ALLOWANCE: ORNAMENTAL			
This section does not apply to this project.			
M. LIGHTING ALLOWANCE: PER SPECIFIC AREA			
This section does not apply to this project.			
N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)			
This section does not apply to this project.			
O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION			
Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online			
Form/Title			
NRHC-LED-E - Must be submitted for all buildings			
Generated Date/Time:		Documentation Software: Energy Code Ace	
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance		Compliance ID: ECA-280434-0256-0001	
Report Version: 2022.0.000		Report Generated: 2025-05-11 15:45:19	
Schema Version: nrc-202010.01			

STATE OF CALIFORNIA					CALIFORNIA ENERGY COMMISSION				
Outdoor Lighting					INCL-010-2				
CERTIFICATE OF COMPLIANCE									
Project Name: 23-014 Temecula Fire Station 73					Report Page: _____		(Page 7 of 10)		
					Date Prepared: _____		2026-06-11TH 42:58:04-00		

J. LIGHTING ALLOWANCE: PER APPLICATION									
This table includes areas using the wattage allowance per application from Table 140.7-B / Table 170.2-5.									
01	02	03	04	05	06	07	08	09	10
Area Description	Application per Table 140.7-B ¹	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		# of Locations	Allowance per Location ²	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Entrance/Exits	Building Entrance/Exit	9	19	171	F	20	4	80	171
					Q	18	8	144	
					P	42	2	84	
					Total Design Watts for this Area:				
Fire Station Driveway Entrance	Primary Entrance (Special)	2	57	114	L	33	1	33	99
					I	33	1	33	
					J	33	1	33	
					Total Design Watts for this Area:				
Total Allowance (Watts) All Areas:									270

¹ FOOTNOTES: Primary entrance applications are only available for senior care facilities, healthcare facilities, police stations, hospitals, fire stations, and emergency vehicle facilities.

² The Allowance per Location for ATMs is 100W for the first ATM and 35W for each additional per Table 140.7-B / Table 170.2-5.

³ For luminaires indicated in Table A as linear, wattage in column 07 is W/ft instead of Watts/Luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.

K. LIGHTING ALLOWANCE: SALES FRONTAGE									
This section does not apply to this project.									

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schematic Version: 2023/01/01

Generated Date/Time: _____

Documentation Software: Energy Code As

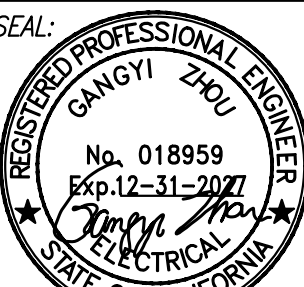
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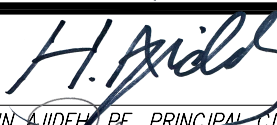
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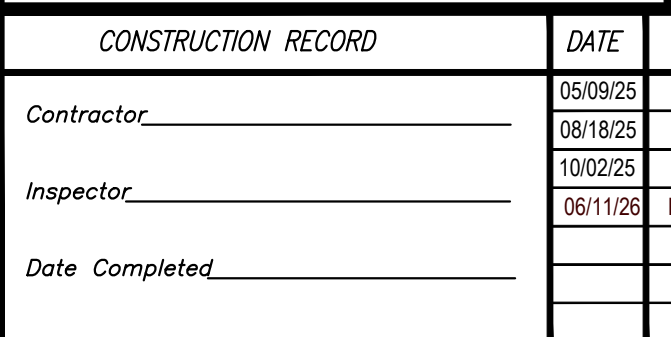
M	CHECKED BY	SERIAL NO.	REVISIONS	ACC'D	DATE	BY
		05/09/25	1 PLAN CHECK & REVISIONS			
		08/18/25	RL 2 PLAN CHECK & REVISIONS			
		10/02/25	RL 3 ENVIRONMENTAL COMMENTS			
		06/11/26	RL 5 OWNER REVISIONS			

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DIGGING DAYS BEFORE YOU DIG

BENCH MARK	SCALE	SEAL: 	Designed By
	Horizontal		
	Vertical		
			R.C.E. No. _____

Drawn By _____	Checked By _____	RECOMMENDED BY:  HOSEIN AKBARI, PE, PRINCIPAL CIVIL ENGINEER
_____ Prepared Under Supervision Of _____		ACCEPTED BY: _____ RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156
_____ Date _____		

[illegible]

SEAL: REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp. 12-31-2027
ELECTRICAL
STATE OF CALIFORNIA

RECOMMENDED BY: *H. J. J. J.* DATE: 6/18/2026
HOSSEIN-AUDEH, PE, PRINCIPAL CIVIL ENGINEER
ACCEPTED BY: *[Signature]* DATE: 6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS
/ CITY ENGINEER R.C.E. No. 69156

DEPARTMENT OF PUBLIC WORKS	Drawing No.
	E-LTO
AL T24	Sheet ____ of ____

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 Saved: Thu Jun 26 2026 3:44pm

IRRIGATION GENERAL NOTES

1. THE FOLLOWING PLANS, NOTES, AND DETAILS ARE PRESENTED IN A DIAGRAMMATIC METHOD TO CONVEY OVERALL SYSTEM MAKE UP INCLUDING, COMPONENTS, EQUIPMENT, AND LAYOUT. ITEMS MAY BE SHOWN IN AREAS WHERE NO IRRIGATION EQUIPMENT SHALL BE PLACED TO ONLY COMMUNICATE OVERALL DESIGN INTENT FOR CLARITY. THE CONTRACTOR SHALL NOT INSTALL ITEMS OFF PROPERTY, IN ROADWAYS, WALKS, OR BUILDINGS- IN ALL CASES ALL EQUIPMENT SHALL BE IN LANDSCAPE AREAS ONLY. THE PLANS ARE DIAGRAMMATIC DUE TO SCALE AND FOR OVERALL CLARITY. THE CONTRACTOR AS THE SUBJECT MATTER EXPERT AND DUE TO THEIR OWN MEANS AND METHODS HAS FINAL CONTROL OVER INSTALLED LOCATIONS AND METHODS, AS SUCH DAILY UPDATED AS- BUILTS ARE A REQUIREMENT.
2. ANY CONFLICTS WITH SITE FEATURES OR CONDITIONS, NOT KNOWN TO THE DESIGN TEAM AT THE TIME OF PLAN DEVELOPMENT SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY AND PRIOR TO BIDDING. THE CONTRACTOR SHALL INCLUDE IN THEIR BID AN ALLOWANCE FOR MINOR ADJUSTMENTS OF LOCATIONS, SPACING, AND ADDITIONAL HEADS OR DRIP MATERIAL FOR PROVIDING FULL COVERAGE TO ALL PLANTED MATERIAL PER ACTUAL SITE CONDITIONS.
3. THE FOLLOWING DRAWINGS SHOW TYPICAL REPRESENTATIONS OF THE OVERALL SYSTEM AND THE REQUIRED INFORMATION FOR OVERALL HYDRAULIC DESIGN. THEY DO NOT ILLUSTRATE EVERY POSSIBLE CONDITION, APPLICATION, AND OR SITE CONSTRAINT. IT IS THE CONTRACTORS RESPONSIBILITY AS THE SUBJECT MATER EXPERT TO SUPPLY THE APPROPRIATE MEANS AND METHODS INCLUDING ALL REQUIRED ACCESSORIES, MATERIALS, AND EQUIPMENT TO FURNISH A FULLY FUNCTIONING IRRIGATION SYSTEM INCLUDING ALL ACCESSORIES OR EQUIPMENT AS REQUIRED.
4. THE CONTRACTORS BID SHALL INCLUDE ALL ITEMS REQUIRED TO CONSTRUCT AND INSTALL A FULLY FUNCTIONAL SYSTEM TO MEET THE DEMANDS OF THE PLANTING PLANS AND THE PROVIDED WATERATION. THE CONTRACTOR SHALL ASK, PURPOSE, OR VERIFY ANY DESIGN CLARIFICATIONS DURING THE BIDDING PROCESS AS PART OF THEIR DUE DILIGENCE. FAILURE TO DO SO SHALL MAKE THE CONTRACTOR SOLELY RESPONSIBLE FOR ANY ADDITIONAL TIME, COSTS, OR WORK REQUIRED TO COMPLETE THE PROJECT WITH ALL REQUIRED ITEMS FOR A FULLY FUNCTIONAL AUTOMATIC IRRIGATION SYSTEM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED PERMITS, AUDITS, ENCROACHMENT REQUIREMENTS, INSPECTIONS, AND ANY OTHER ITEMS REQUIRED TO DO THE WORK SUCH AS TRAFFIC CONTROL, DUST CONTROL, OR SITE SAFETY AND SECURITY ITEMS.
6. MAINLINE FEEDER FROM POINT OF CONNECTION TO BACKFLOW PREVENTER SHALL BE PER LOCAL PURVEYOR OR CODE REQUIREMENTS WHICH EVER IS MORE STRINGENT.
7. THE FINAL LOCATION OF ALL MAJOR IRRIGATION EQUIPMENT SHALL BE APPROVED AND ADJUSTED AS NECESSARY PER SITE CONDITIONS PRIOR TO INSTALLATION. THE CONTRACTOR SHALL REQUEST INSPECTION/ FIELD REVIEW AND HAVE WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OR BE SOLELY RESPONSIBLE FOR ANY ADJUSTMENTS AS REQUIRED LATER.
8. THE DESIGNER OF RECORD MAY NOT BE CONTRACTED TO SUPPLY OR OVERSEE THE INSTALLATION, ITS THE CONTRACTORS RESPONSIBILITY TO CERTIFY ALL REQUIRED COORDINATION, REVIEW, AND INSPECTIONS ARE PROVIDED TO THE OWNERS REPRESENTATIVE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL SLEEVE INSTALLATIONS AS SHOWN PER PLAN AND ANY ADDITIONAL REQUIREMENTS BASED OF SITE CONSTRAINTS WITH OTHER TRADES PRIOR TO INSTALLATION OF HARDSCAPE, PAVING, WALLS OR FOUNDATIONS. ALL PIPING SHALL BE SLEEVED UNDER PAVED SURFACES OR STRUCTURES REGARDLESS OF BEING NOTED ON THE PLAN.
10. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS PER THE SPECIFICATIONS AND ANY REQUIRED BY THE GOVERNING BODY, NO WORK SHALL BE COVERED OR CLOSED PRIOR TO INSPECTION AND APPROVAL. FAILURE TO HAVE THE WORK INSPECTED SHALL RESULT IN THE CONTRACTOR BEING REQUIRED TO EXPOSE AND MAKE AVAILABLE THE WORK FOR INSPECTION AT THEIR OWN COST.
11. THE IRRIGATION SYSTEM HAS BEEN DESIGNED PER SUPPLIED STATIC WATER PRESSURE FORWARDED BY OTHERS, THE CONTRACTOR SHALL VERIFY SITE WATER PRESSURE PRIOR TO START OF WORK AND FORWARD ANY FINDINGS IN WRITING TO THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. AN AVERAGED STATIC PSI SHALL BE PROVIDED TAKEN AT THREE DIFFERENT TIMES DURING A 24 HOUR PERIOD(6 AM, 3PM, 12AM). FAILURE TO DO SO WILL RESULT IN ANY CORRECTIONS, ADJUSTMENTS, AND OR ADDITIONAL EQUIPMENT REQUIREMENTS TO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR IF DISCOVERED AFTER INSTALLATION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AN CONNECTION FOR POWER SUPPLY AND ANY REQUIRED FIELD CONNECTIONS TO ALL CONTROLLERS, PUMPS, FERTIGATION SYSTEMS AS REQUIRED BY THE PLANS. ANY METERS OR SERVICE CONNECTIONS SHALL BE PER THE ELECTRICAL ENGINEERS PLANS IF NOT PROVIDED ON SITE.
13. COORDINATE MAINLINE AND LATERAL PIPING WITH TREE AND PLANTING LOCATIONS TO SEPARATE AND REMOVE ANY CONFLICTS.
14. THE CONTRACTOR SHALL TEST THE STATIC PSI AT EACH VALVE AND ADJUST VALVE MOUNTED PRESSURE REGULATORS AS NEEDED FOR OPTIMAL PERFORMANCE.
15. NO LOW HEAD DRAINAGE, SURFACE POOLING OF WATER, OVERSPRAY ON HARDSCAPE, STRUCTURES, OR EQUIPMENT SHALL BE ALLOWED. THE CONTRACTOR SHALL INCLUDE IN THEIR BID FOR ANY ADDITIONAL CHECK VALVES OR EQUIPMENT REQUIRED TO MEET THE REQUIREMENT IF NOT CALLED OUT ON THE PLAN AND REQUIRED DUE TO FIELD CONDITIONS.
16. CONTRACTOR REQUIRED TO SUPPLY ALL EQUIPMENT FOR TESTING, AND CONTRACT/SUPPLY 3RD PARTY WATER AUDITS AS REQUIRED BY LOCAL REGULATIONS AND CODES.
17. ALL MAINLINE PRESSURE TESTING SHALL BE DONE USING A HYDROSTATIC PUMP ONLY.
18. THE CONTRACTOR SHALL FOLLOW AND UNDERSTAND ALL THE REQUIREMENTS OF THE SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND CLARIFY ANY ITEMS DURING BIDDING.
19. THE CONTRACTOR SHALL PROVIDE TEMPORARY OR ADDITIONAL IRRIGATION TO EXISTING PLANT MATERIAL IF PRESENT DURING THE COURSE OF CONSTRUCTION. ANY LOSSES INCURRED WILL BE THE SOLE RESPONSIBILITY FOR THE CONTRACTOR TO REPLACE AT HIS OWN COST.
20. BACKFLOW SHALL BE LOCATED IN SHRUB AREAS 4' FROM PAVING TO ALLOW FOR LANDSCAPE SCREENING OR AS REQUIRED PER LOCAL GOVERNING BODY REQUIREMENTS.
21. BACKFLOW PREVENTION DEVICES AND PIPES SHALL BE PAINTED GREEN AND LOCATED IN A LOCKING ENCLOSURE.
22. VALVE BOXES SHALL BE NO MORE THAN 2" ABOVE FG IN SHRUB AREAS AND 1/2" IN TURF.
23. BEFORE FINAL LANDSCAPE INSPECTION, A CERTIFIED 3RD PARTY IRRIGATION AUDITOR SHALL PROVIDE AN IRRIGATION AUDIT REPORT. THE REPORT SHALL BE THOROUGH PER MWEO REQUIREMENTS INCLUDING: SITE VISIT, EQUIPMENT PHOTO DOCUMENTATION, DOCUMENTED START TIMES, PROGRAMS, AND RUN TIMES. THE AUDIT SHALL PROVIDED A SCHEDULE AND SHALL CONSIDER APPLICATION RATE, SOIL TYPE, PLANT FACTORS, SLOPE, AND EXPOSURE. IN ADDITION IT SHALL VERIFY:
 - 23.1. CONTROLLER PROGRAMMING TO ON-SITE WEATHER SENSOR OR CIMIS STATION
 - 23.2. CONTROLLER PROGRAMMING TO FLOW SENSOR AND MASTER VALVE, OR LEARNED RUN TIMES
 - 23.3. VERIFICATION OF EFFICIENT WATER USE WITH NO RUNOFF OR OVERSPRAY BY TESTING MIN 15% OF THE SITE
 - 23.4. VERIFICATION OF THE REDUCED SIZE IRRIGATION PLAN, LAMINATED WITH LAYOUT CHART INDICATING VALVE NUMBER, AN COLOR-CODED AREA OF SYSTEM LIMITS AND IRRIGATION RUN SCHEDULE.

IRRIGATION POC NOTE:

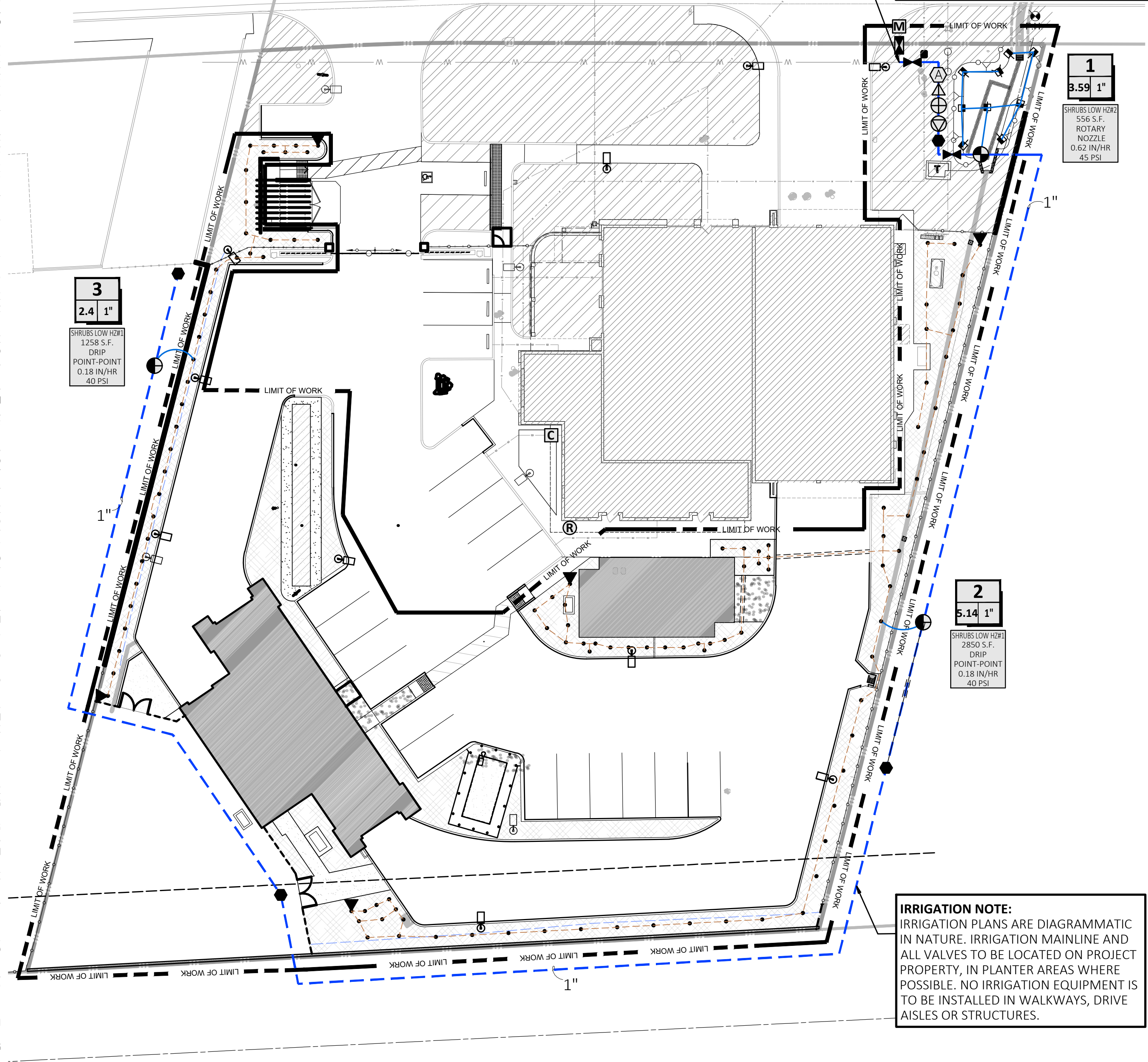
CONTRACTOR TO POT HOLE/EXPOSE MAIN LINE AND DETERMINE THE TIE IN POINT FOR NEW SYSTEM. CONTRACTOR TO BRING NEW CONTROL WIRES FROM NEW CLOCK TO FEED ALL EXISTING VALVES THAT SHALL REMAIN IN PLACE.

POINT OF CONNECTION NOTE:

MAKE POINT OF CONNECTION DOWNSTREAM OF EXISTING IRRIGATION BACKFLOW. CONTRACTOR TO PROVIDE NEW BALL VALVE CONNECTION TO EXISTING IRRIGATION SYSTEM.

STATIC WATER PRESSURE: 110PSI
SYSTEM DESIGN PRESSURE: 75PSI
MAXIMUM IRRIGATION DEMAND: 10GPM

ENTERPRISE CIRCLE WEST



IRRIGATION NOTE:

IRRIGATION PLANS ARE DIAGRAMMATIC IN NATURE. IRRIGATION MAINLINE AND ALL VALVES TO BE LOCATED ON PROJECT PROPERTY, IN PLANTER AREAS WHERE POSSIBLE. NO IRRIGATION EQUIPMENT IS TO BE INSTALLED IN WALKWAYS, DRIVE AISLES OR STRUCTURES.

EQUIPMENT LEGEND

SYMBOL	MANUFACTURER/MODEL #	SIZE	DETAIL	NOTES
	EXISTING WATER METER WITH SHARED POINT OF CONNECTION FOR BUILDING AND IRRIGATION	2"	-	-
	INSTALL RAINBIRD ESP4-ME3 WIFI COMPATIBLE IRRIGATION CONTROLLER + (2) ESPSM6 (6 STATION EXPANSION) - CONTRACTOR SHALL COORDINATE LOCATION AND ELECTRICAL SERVICE TO CONTROLLER. CONTRACTOR TO EXTEND AND CONNECT NEW IRRIGATION CONTROL WIRES TO EXISTING IRRIGATION SYSTEM ALONG ENTERPRISE CIRCLE WEST.	12 STA.	'A', LI-2	(1)
	INSTALL RAINBIRD WR2-RC RAIN SENSOR	-	'C', LI-3	(2)
	NETAFIM 65AR1B1 1" COMBINATION MAINLINE AIR/VACUUM RELIEF VALVE; INSTALL IN GREEN VALVE BOX	-	'H', LI-3	-
	EXISTING IRRIGATION BACKFLOW. PROTECT IN PLACE, CONTRACTOR SHALL TEST AND REPAIR AS REQUIRED FOR RE-CERTIFICATION.	2"	-	-
	ZURN WATER PRESSURE REDUCING VALVE. MODEL 500XL-HR. INSTALL IN GREEN VALVE BOX.	1.5"	'E', LI-3	-
	RAINBIRD 150PEB NORMALLY CLOSED MASTER VALVE; INSTALL IN GREEN VALVE BOX	1.5"	'B', LI-2	-
	FLOMEC QS200-10 FLOW METER; INSTALL IN GREEN VALVE BOX	1"	'C', LI-2	-
	NIBCO T-585 FULL PORT BALL VALVE; INSTALL IN GREEN VALVE BOX	SIZE PER MAINLINE	'E', LI-2	-
	RAINBIRD PEB SERIES ELECTRIC CONTROL VALVE WITH PRS-D DIAL; INSTALL IN GREEN VALVE BOX	PLAN SIZE	'F', LI-2	-
	RAINBIRD XCZ-100-PRB-COM DRIP CONTROL ZONE ASSEMBLY INSTALL IN JUMBO GREEN VALVE BOX	PLAN SIZE	'G', LI-2	-
	RAINBIRD #44LRC SERIES QUICK COUPLING VALVE IN GREEN VALVE BOX	1"	'D', LI-2	-
	SCH. 40 PVC NON-PRESSURE LATERAL LINE - 12" MIN. COVER	PLAN SIZE	'A','B'/ LI-3	-
	NEW IRRIGATION MAINLINE PVC SCH 40 - 18" MINIMUM COVER	PLAN SIZE	'A','B'/ LI-3	-
	EXISTING MAINLINE TO BE CAPPED AND ABANDONED. REMOVE MAINLINE WHERE IT CONFLICTS WITH NEW IMPROVEMENTS	-	-	-
	SCH 40 PVC IRRIGATION PIPE / WIRE SLEEVE - 24" MIN. COVER	SEE CHART	'B', LI-3	-
	SCH. 40 PVC POINT TO POINT DRIP DISTRIBUTION PIPE - 6" MIN. COVER	17 MM	'E','G', LI-3	-
	UF RATED CONTROL WIRE, 12 GA COMMON, 14 GA PILOT	12/14 GA	'D', LI-3	-
	PVC MANUAL FLUSH VALVE; INSTALL IN ROUND VALVE BOX	17MM	'A'/ LI-4	-
	EXISTING IRRIGATION TO REMAIN, PROTECT IN PLACE. CONTRACTOR TO ENSURE EXISTING SYSTEMS ARE OPERATING AND COMMUNICATING WITH CONTROLLER PROPERLY PRIOR TO COMPLETION OF CONSTRUCTION. CONTRACTOR TO INSTALL LATERALS AS REQUIRED TO RECONNECT EXISTING SYSTEM TO EXISTING VALVES	-	-	-

(1) CONTRACTOR TO SUPPLY 120V POWER FROM BUILDING PER ALL LOCAL CODES

DRIP EMITTER LEGEND

SYMBOL	MANUFACTURER/MODEL #	NOZZLE	PSI	FLOW (GPM)					DETAIL	NOTES
				Q	T	H	F	Van		
EMITTERS/ BUBBLERS										
	GPH GPSTM DRIP EMITTER 4.0 GPH EMITTER	F	30				0.06	'F', LI-3	(1)	
(1) 1 GAL SHRUBS TO RECEIVE (1) EMITTER PER SYMBOL; 5 GAL SHRUBS TO RECEIVE (2) EMITTERS PER SYMBOL. LOCATE EMITTERS ON OPPOSITE SIDES OF ROOT BALL, 6" MIN. CLEAR FROM PLANT BASE. FLOW IS IN GPH.										

SPRINKLER LEGEND

SYMBOL	MANUFACTURER/MODEL #	NOZZLE	RAD.	PSI	FLOW (GPM)							PRECIP RATE	DETAIL	NOTES
					Q	T	H	TT	TQ	F	Van			
SPRAY HEADS														
	RAINBIRD 1812-SAM-PRS-RVAN -14	90°/180°/210°/270°	8'-14'	45	0.32		0.63	0.73			0.62	'H', LI-2		
	RAINBIRD 1812-SAM-PRS-RVAN -14	360°	8'-14'	45					1.27		0.62	'H', LI-2		

SCH 40 PVC SLEEVING CHART

1 1/4" SLEEVE	1-4 WIRES	1/2" PIPE
1 1/2" SLEEVE	5-10 WIRES	3/4" PIPE
2" SLEEVE	11-20 WIRES	1" PIPE
2 1/2" SLEEVE	21-30 WIRES	1 1/4" PIPE
3" SLEEVE	31-40 WIRES	1 1/2" PIPE
4" SLEEVE	41-60 WIRES	2" PIPE
6" SLEEVE	61-99 WIRES	2 1/2"-3" PIPE
8" SLEEVE	100+ WIRES	4" PIPE
10" SLEEVE	N/A	6" PIPE

PIPE SIZING CHART

3/4" PIPE	1" PIPE
1" PIPE	1 1/4" PIPE
1 1/4" PIPE	1 1/2" PIPE
1 1/2" PIPE	2" PIPE
2" PIPE	2 1/2" PIPE
2 1/2" PIPE	3" PIPE
3" PIPE	4" PIPE
4" PIPE	6" PIPE
6" PIPE	8" PIPE

STATION # / CONTROLLER

FLOW (GPM)	VALVE SIZE
------------	------------

HYDROZONE AREA IRRIGATION TYPE PRECIP RATE PRESSURE

VALVE CHART

#	TYPE	PLANT TYPE	SIZE	GPM	HZ	SF
1	R-Van Spray	Shrubs	1"	3.59	HZ2	556
2	Hard Pipe P2P	Shrubs	1"	5.14	HZ1	2,850
3	Hard Pipe P2P	Shrubs	1"	2.4	HZ1	1,258

TM-B24-5413/B25-0079

BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____ NAME _____ DATE _____



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RECOMMENDED BY: *H. J. J. J.*

HOSSEIN-AJIDE, PE, PRINCIPAL-CIVIL ENGINEER

DATE: 6/18/2026

ACCEPTED BY: *R. Moreno*

RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156

DATE: 6/18/2026

CITY OF TEMECULA

DEPARTMENT OF PUBLIC WORKS

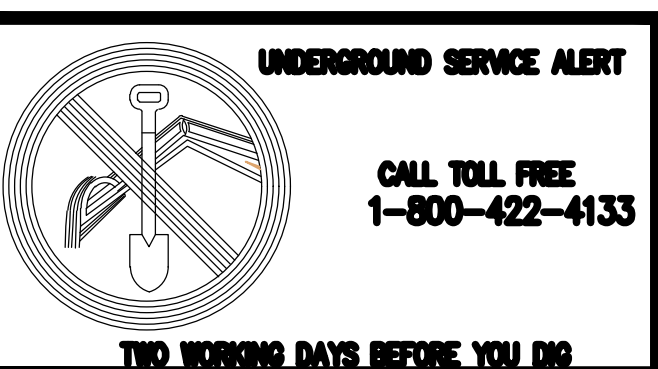


FIRE STATION 73
NEW GYM AND APPARATUS BAY W/ STORAGE
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590
IRRIGATION PLAN

Drawing No.

LI-1

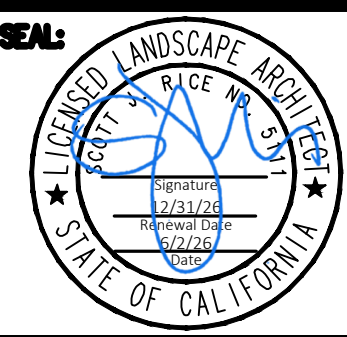
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CONSTRUCTION RECORD	DATE	BY	NO.	REVISIONS	ACCD	DATE	BENCH MARK	SCALE	SEAL
Contractor								Noted	
Inspector								Verified	
Date Completed									

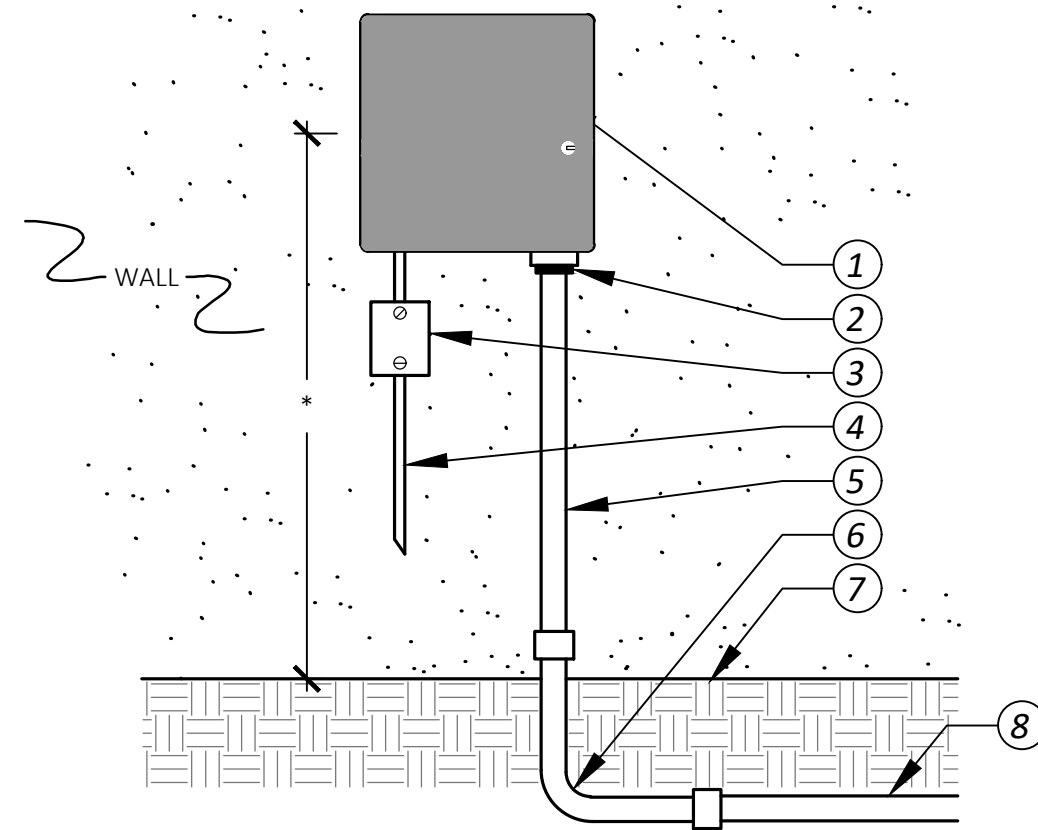


Designed By _____ Drawn By _____ Checked By _____

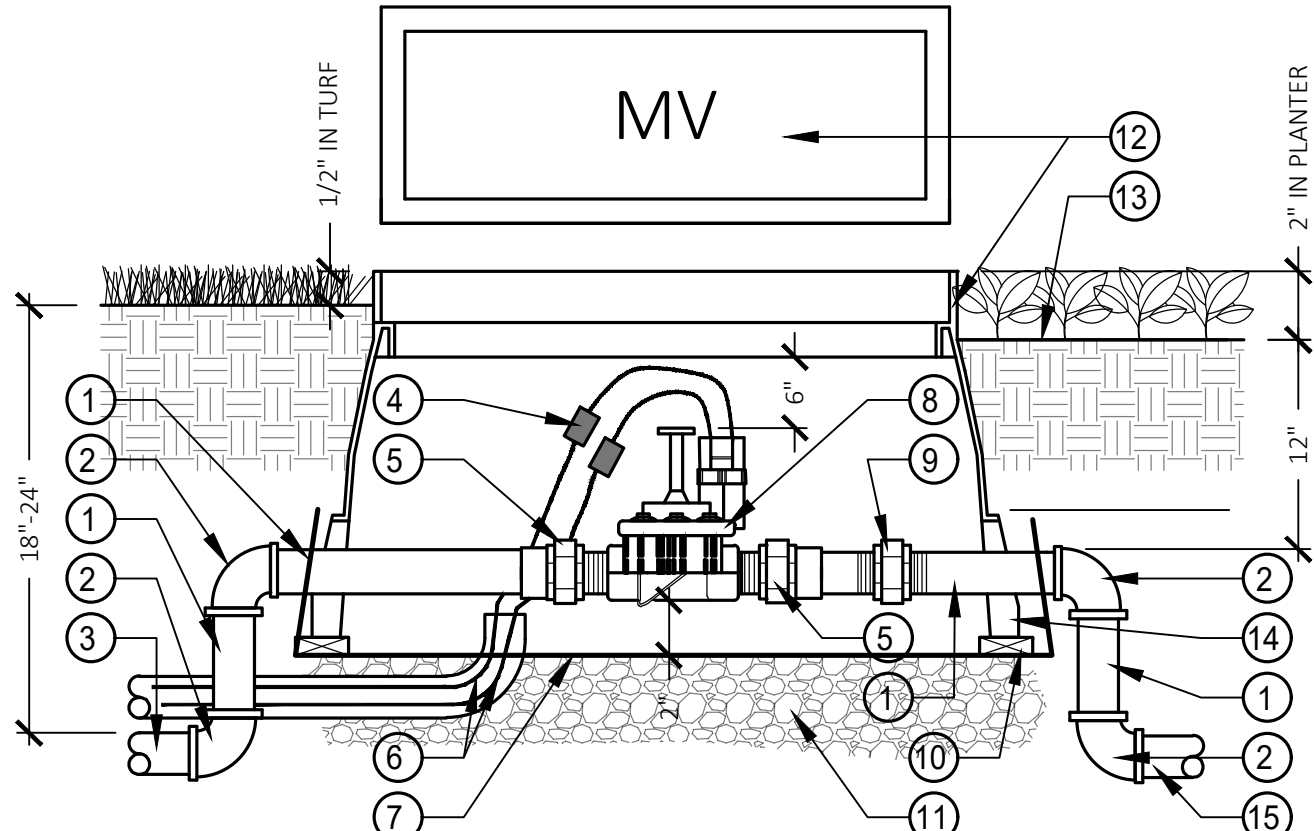
Plans Prepared Under Supervision Of _____

Date _____

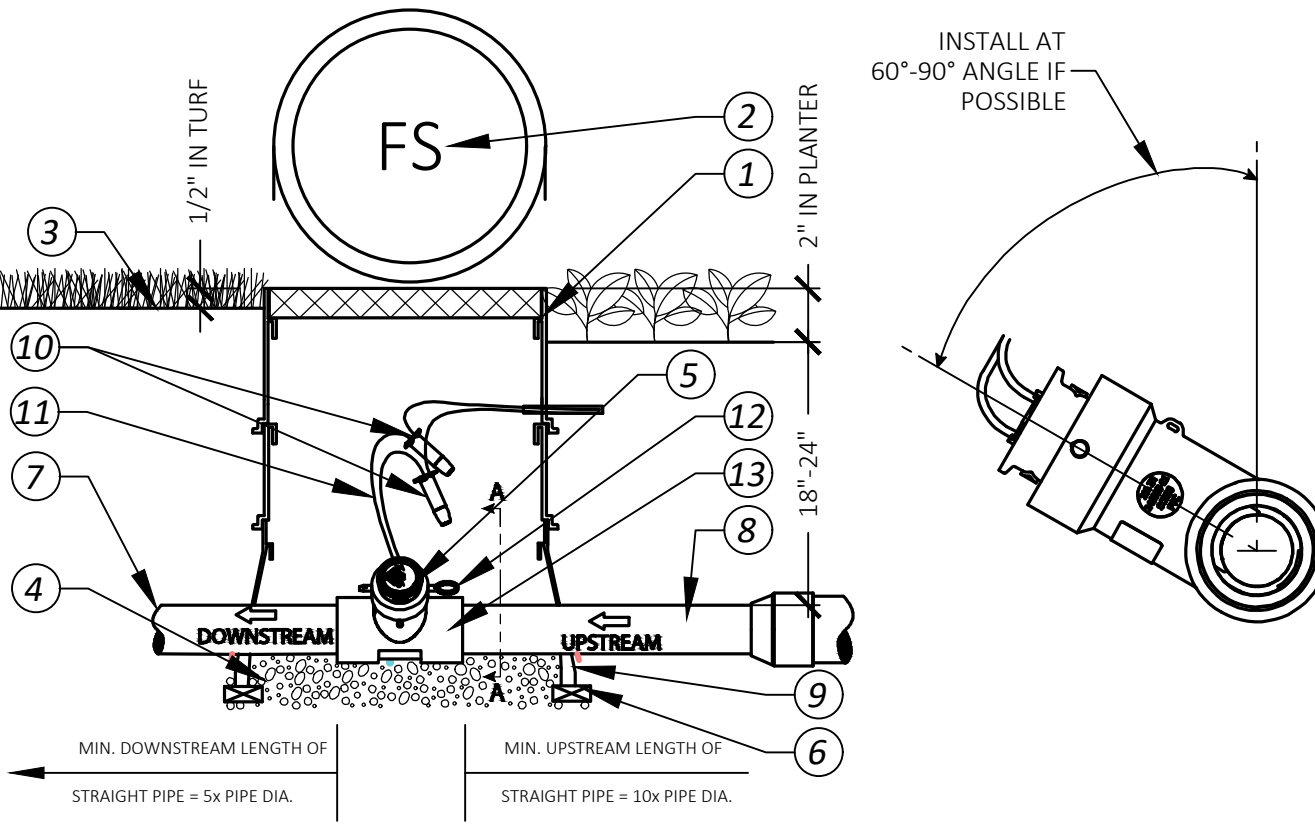
R.C.E. No. _____



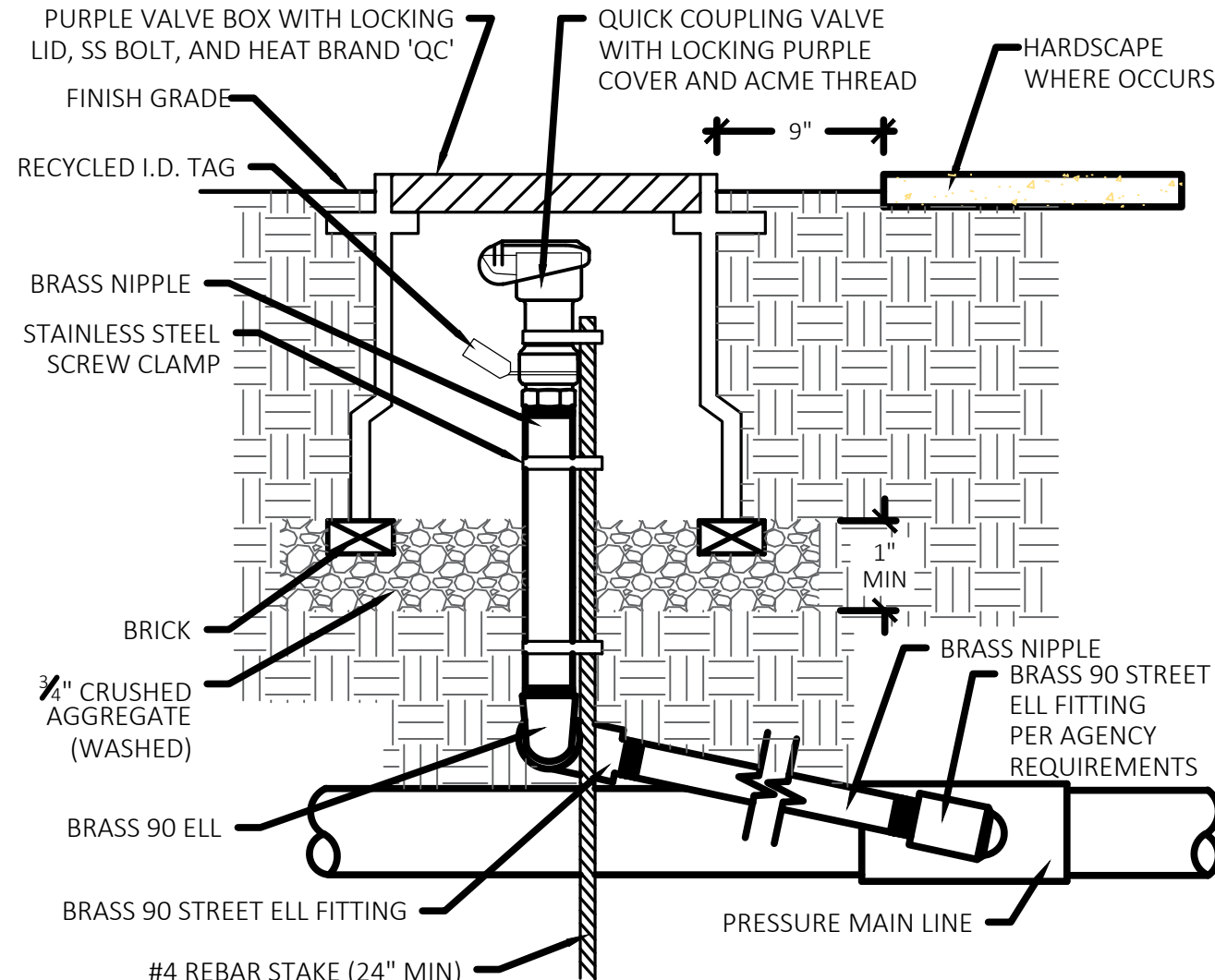
1. WALL MOUNT CONTROLLER - MOUNT PER MANUFACTURER
 2. LOCKING NUT
 3. ELECTRICAL JUNCTION BOX
 4. 120V WIRES IN RIGID CONDUIT PER LOCAL CODES
 5. RIGID CONDUIT FOR COMMON / CONTROL WIRES
 6. SWEEP ELL - SIZE AS REQUIRED
 7. FINISH GRADE (FLOOR SURFACE FOR INDOOR MOUNT)
 8. WIRE CONDUIT TO VALVES
- * MOUNT CONTROLLER AT "EYE-LEVEL" (+/- 5'-0")



- DETAIL NOTES:
1. MAINLINE PIPE PER EQUIPMENT SCHEDULE
 2. PVC SCH 40 ELL
 3. MAINLINE PIPE FROM POINT OF CONNECTION
 4. WATERPROOF WIRE CONNECTOR WITH 36" COILED EXPANSION LOOP
 5. PVC SCH 40 MALE ADAPTER
 6. UF WIRES TO CONTROLLER MASTER VALVE OUTPUT IN 1-1/4" CONDUIT; GAUGE PER EQUIPMENT SCHEDULE
 7. 1/4" SQ. GALVANIZED WIRE MESH
 8. ELECTRIC CONTROL VALVE PER EQUIPMENT
 9. PVC UNION - SIZE AS REQUIRED
 10. COMMON BRICK - 4 REQUIRED
 11. 3/4" CRUSHED ROCK - 6" DEEP
 12. JUMBO PLASTIC VALVE BOX WITH BOLT DOWN LID AND SS BOLT; LID AND BOX COLOR PER EQUIPMENT SCHEDULE - HEAT BRAND "MV" ON LID IN 2" HIGH CHARACTERS
 13. FINISH GRADE
 14. VALVE BOX EXTENSION(S)
 15. MAINLINE PIPE TO CONTROL VALVES

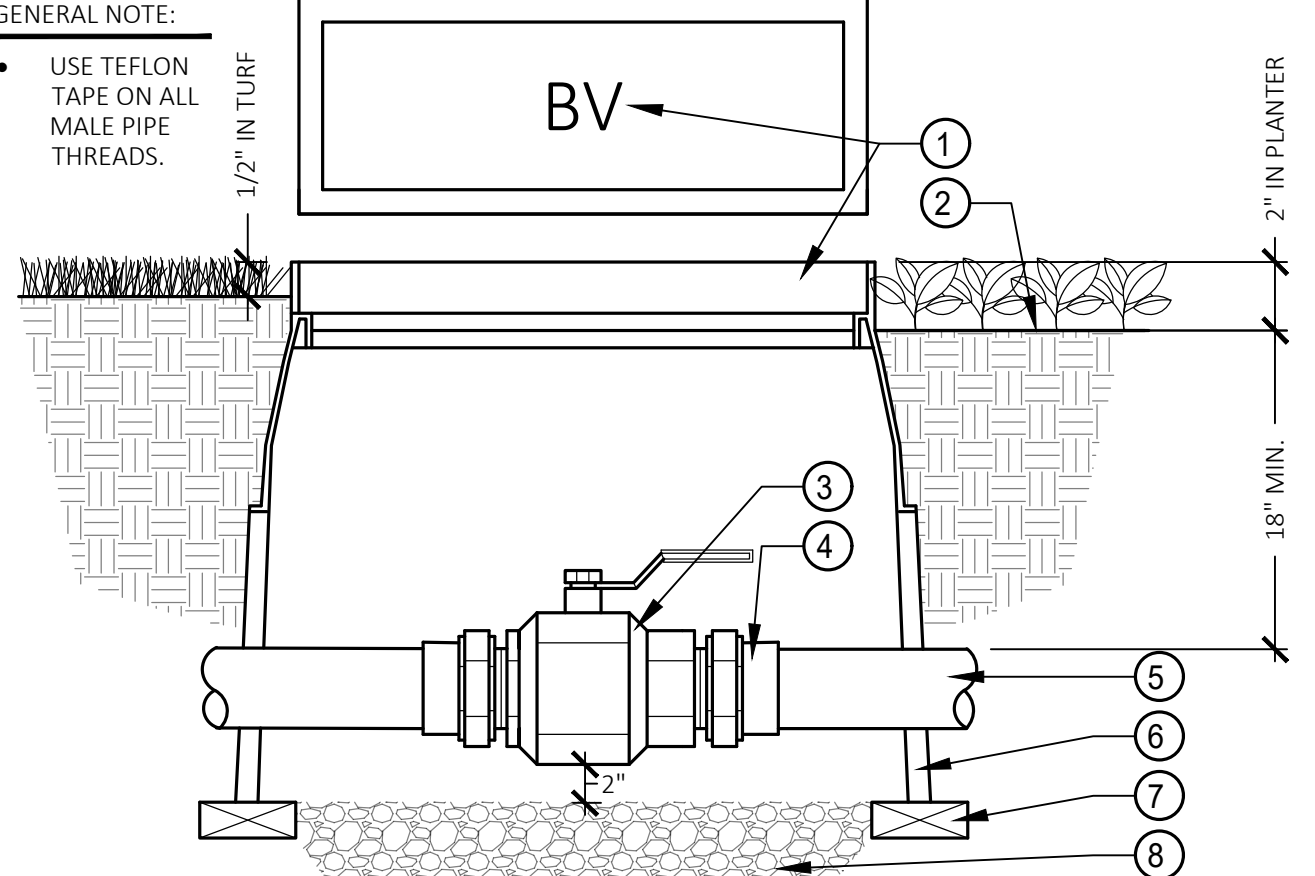


1. 10" ROUND PLASTIC VALVE BOX WITH LOCKING LID AND SS BOLT; BOX AND LID TO BE GREEN
2. HEAT BRAND "FS" ON LID IN 2" HIGH CHARACTERS
3. FINISH GRADE
4. 3/4" CRUSHED ROCK - 4" DEEP
5. FLOW SENSOR INSERT
6. COMMON BRICK - 4 REQUIRED
7. PVC MAINLINE FROM POC - PER LEGEND
8. PVC MAINLINE TO SYSTEM - PER LEGEND
9. VALVE BOX EXTENSIONS AS REQUIRED
10. WATERPROOF WIRE CONNECTORS WITH 36" EXPANSION LOOP
11. CABLE TO TRANSMITTER/CONTROLLER PER MANUFACTURER
12. QUICK RELEASE PIN
13. PVC TEE - SIZE PER PLAN



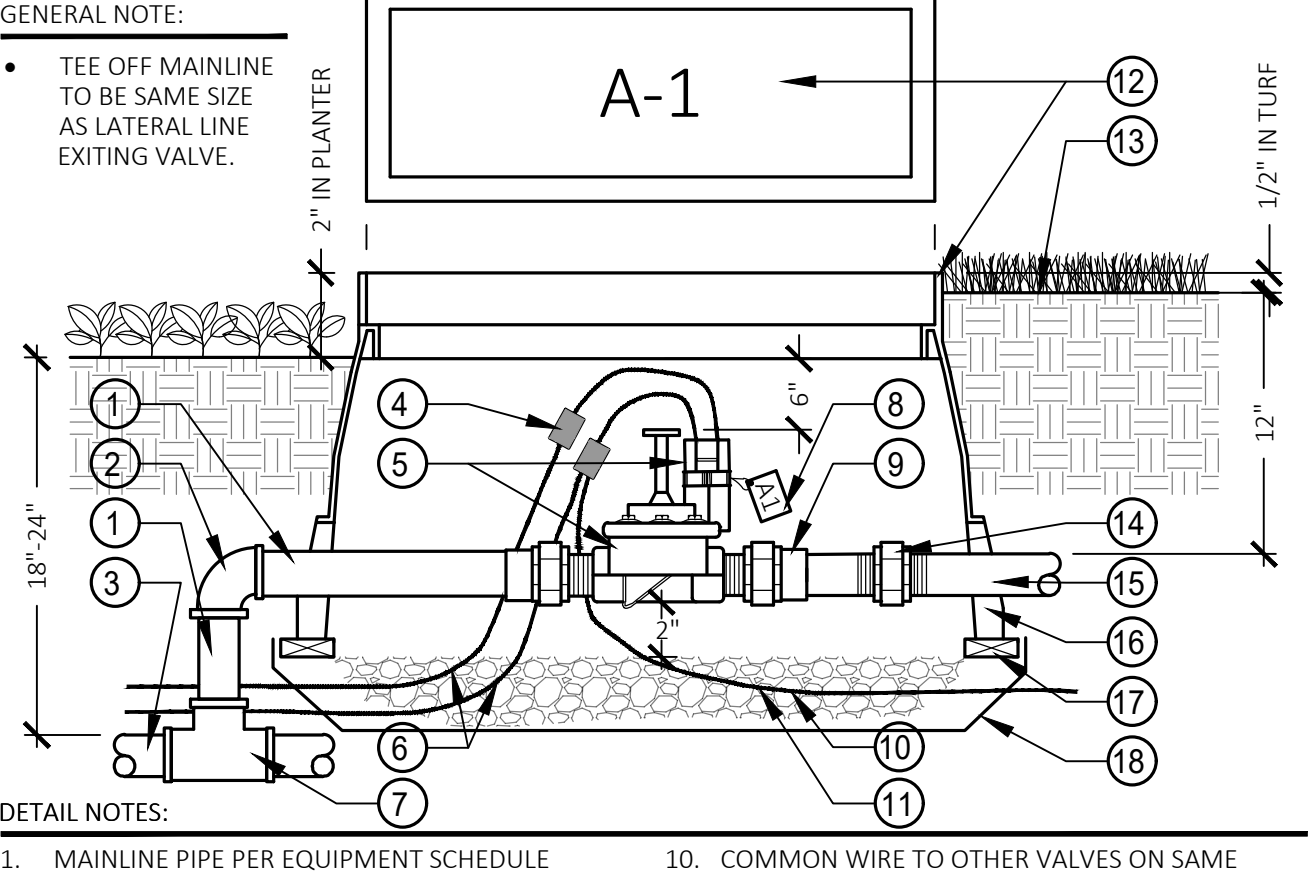
- NOTES:
1. INSTALL VALVE BOX EXTENSIONS AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAIN LINE DEPTH.
 2. INSTALL CHRISTY RECYCLED ID TAGS ON ALL RECYCLED IRRIGATION SYSTEMS.
 3. VALVE BOX LID SHALL BE PURPLE FOR RECYCLED WATER IRRIGATION SYSTEMS.
 4. QUICK COUPLERS SHALL BE OF A TYPE APPROVED FOR RECYCLED WATER USE.

A Controller



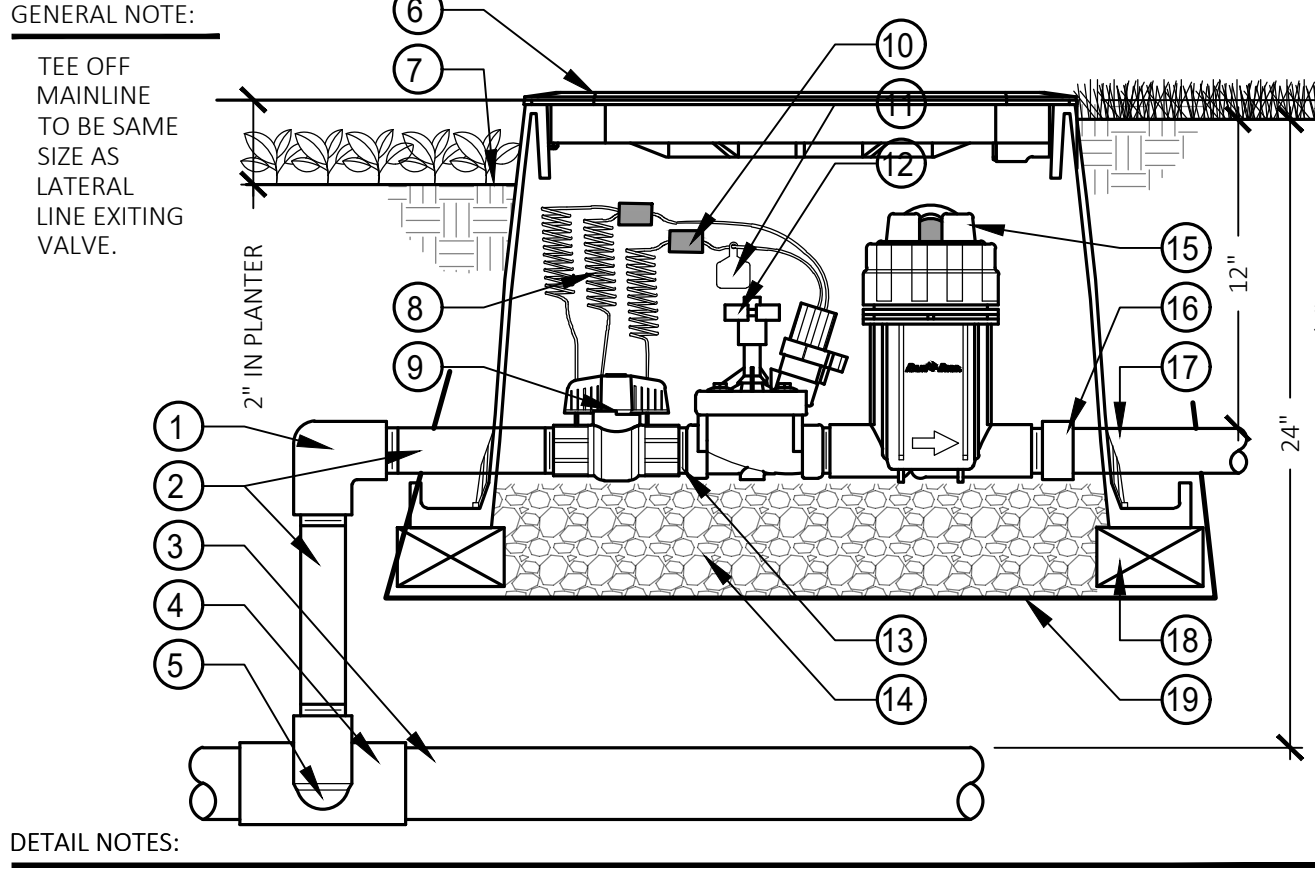
- GENERAL NOTE:
- USE TEFLON TAPE ON ALL MALE PIPE THREADS.
- DETAIL NOTES:
1. RECTANGULAR PLASTIC VALVE BOX WITH BOLT-DOWN LID AND SS BOLT; LID AND BOX COLOR PER EQUIPMENT SCHEDULE - HEAT BRAND "BV" ON LID IN 2" HIGH CHARACTERS
 2. FINISH GRADE
 3. BALL VALVE PER EQUIPMENT SCHEDULE
 4. SCH 40 PVC MALE ADAPTER - 2 REQUIRED
 5. MAINLINE PIPE PER EQUIPMENT SCHEDULE
 6. VALVE BOX EXTENSION(S) AS REQUIRED
 7. COMMON BRICK - 4 REQUIRED
 8. 3/4" CRUSHED ROCK - 6" DEEP

B Master Valve



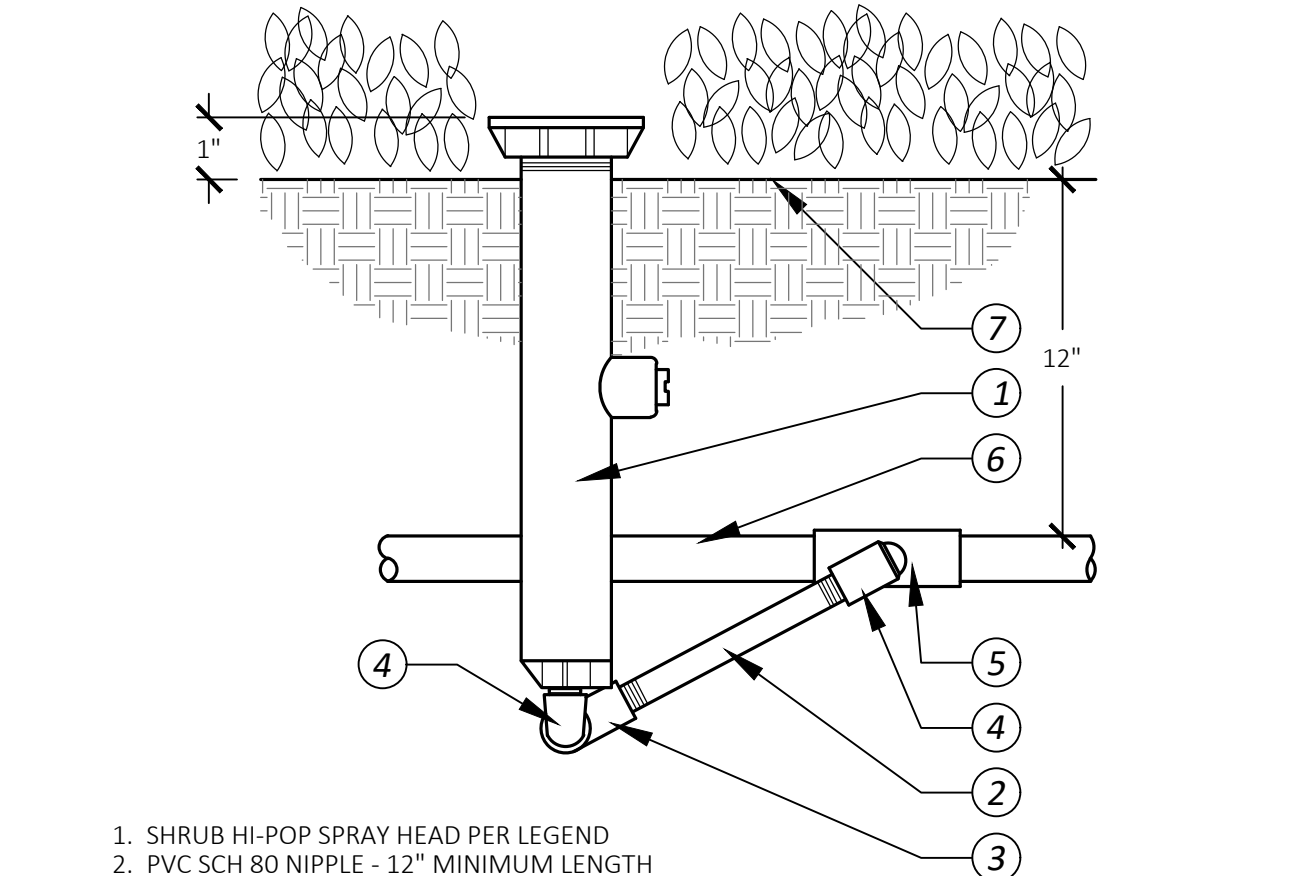
- GENERAL NOTE:
- TEE OFF MAINLINE TO BE SAME SIZE AS LATERAL LINE EXITING VALVE.
- DETAIL NOTES:
1. MAINLINE PIPE PER EQUIPMENT SCHEDULE
 2. PVC SCH 40 ELL
 3. MAINLINE PIPE FROM POINT OF CONNECTION
 4. WATERPROOF WIRE CONNECTOR WITH 36" COILED EXPANSION LOOP
 5. ELECTRIC CONTROL VALVE PER EQUIPMENT. INSTALL LEMA 1700S SOLENOID ACTUATOR AND RAINBIRD VALVE ADAPTOR
 6. WIRES FROM CONTROLLER
 7. SCH 40 PVC MAINLINE FITTING
 8. "CHRISTY'S" ID TAG PER VALVE NUMBER
 9. PVC SCH 40 MALE ADAPTER
 10. COMMON WIRE TO OTHER VALVES ON SAME CONTROLLER
 11. 3/4" CRUSHED ROCK - 6" DEEP
 12. JUMBO PLASTIC VALVE BOX WITH BOLT DOWN LID AND SS BOLT; LID AND BOX COLOR PER EQUIPMENT SCHEDULE - HEAT BRAND "MV" ON LID IN 2" HIGH CHARACTERS
 13. FINISH GRADE
 14. PVC UNION - SIZE AS REQUIRED
 15. LATERAL PIPE PER EQUIPMENT SCHEDULE
 16. VALVE BOX EXTENSION(S)
 17. COMMON BRICK - 4 REQUIRED
 18. MIRAFI MSCALE LANDSCAPE FABRIC

C Flow Sensor



- GENERAL NOTE:
- TEE OFF MAINLINE TO BE SAME SIZE AS LATERAL LINE EXITING VALVE.
- DETAIL NOTES:
1. PVC SCH 40 ELL
 2. PVC SCH 80 NIPPLE - LENGTH AS REQUIRED
 3. MAINLINE PIPE PER EQUIPMENT LEGEND
 4. PVC SCH 40 TEE OR ELL
 5. PVC SCH 80 NIPPLE - 2" LENGTH, HIDDEN
 6. JUMBO PLASTIC VALVE BOX WITH BOLT DOWN LID AND SS BOLT; LID AND BOX COLOR PER EQUIPMENT SCHEDULE - HEAT BRAND STATION NUMBER ON LID IN 2" HIGH CHARACTERS
 7. FINISH GRADE
 8. 36" LINEAR LENGTH OF WIRE, COILED
 9. BALL VALVE PER EQUIPMENT SCHEDULE
 10. WATERPROOF WIRE CONNECTION
 11. "CHRISTY'S" ID TAG PER VALVE NUMBER
 12. REMOTE CONTROL VALVE PER EQUIPMENT SCHEDULE
 13. PVC SCH 80 NIPPLE
 14. 3/4" CRUSHED ROCK - 4" DEEP MINIMUM
 15. PRESSURE REGULATING CHECK BASKET FILTER
 16. PVC SCH 40 FEMALE ADAPTER
 17. LATERAL PIPE PER EQUIPMENT SCHEDULE
 18. COMMON BRICK - 4 REQUIRED
 19. MIRAFI MSCALE LANDSCAPE FABRIC

D Quick Coupler Valve



1. SHRUB HI-POP SPRAY HEAD PER LEGEND
 2. PVC SCH 80 NIPPLE - 12" MINIMUM LENGTH
 3. PVC SCH 40 STREET ELL - TXT
 4. MARLEX STREET ELL - TXT
 5. PVC SCH 40 LATERAL LINE FITTING
 6. LATERAL LINE PER LEGEND
 7. FINISH GRADE
- NOTES:
- USE TEFLON TAPE ON ALL MALE PIPE THREADS FOR PVC TO PVC CONNECTIONS. SET PERIMETER HEADS 2"-6" FROM EDGE OF CURBS AND WALKS, AND 6"-12" FROM FIXED VERTICAL OBJECTS SUCH AS FENCES, WALLS, AND BUILDINGS, ETC. ALL FITTINGS FOR SWING JOINTS MUST BE SAME SIZE AS INLET ON BASE OF HEAD. LATERAL LINE FITTING OUTLET SHALL BE SAME SIZE AS HEAD INLET. ONLY THE BOTTOM INLET OF HEAD MAY BE USED.

E Ball Valve

F Remote Control Valve

G Drip Control Valve Assembly

H Hi-Pop Spray Head

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Inspector								Vertical	
Date Completed									

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Plans Prepared Under Supervision Of _____ Date: _____

R.C.E. No. _____

RECOMMENDED BY: *H. J. Mills* DATE: 6/18/2026
HOSSAIN AJIDEH, P.E., PRINCIPAL CIVIL ENGINEER

ACCEPTED BY: *Ron Moreno* DATE: 6/18/2026
RON MORENO, P.E., DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156

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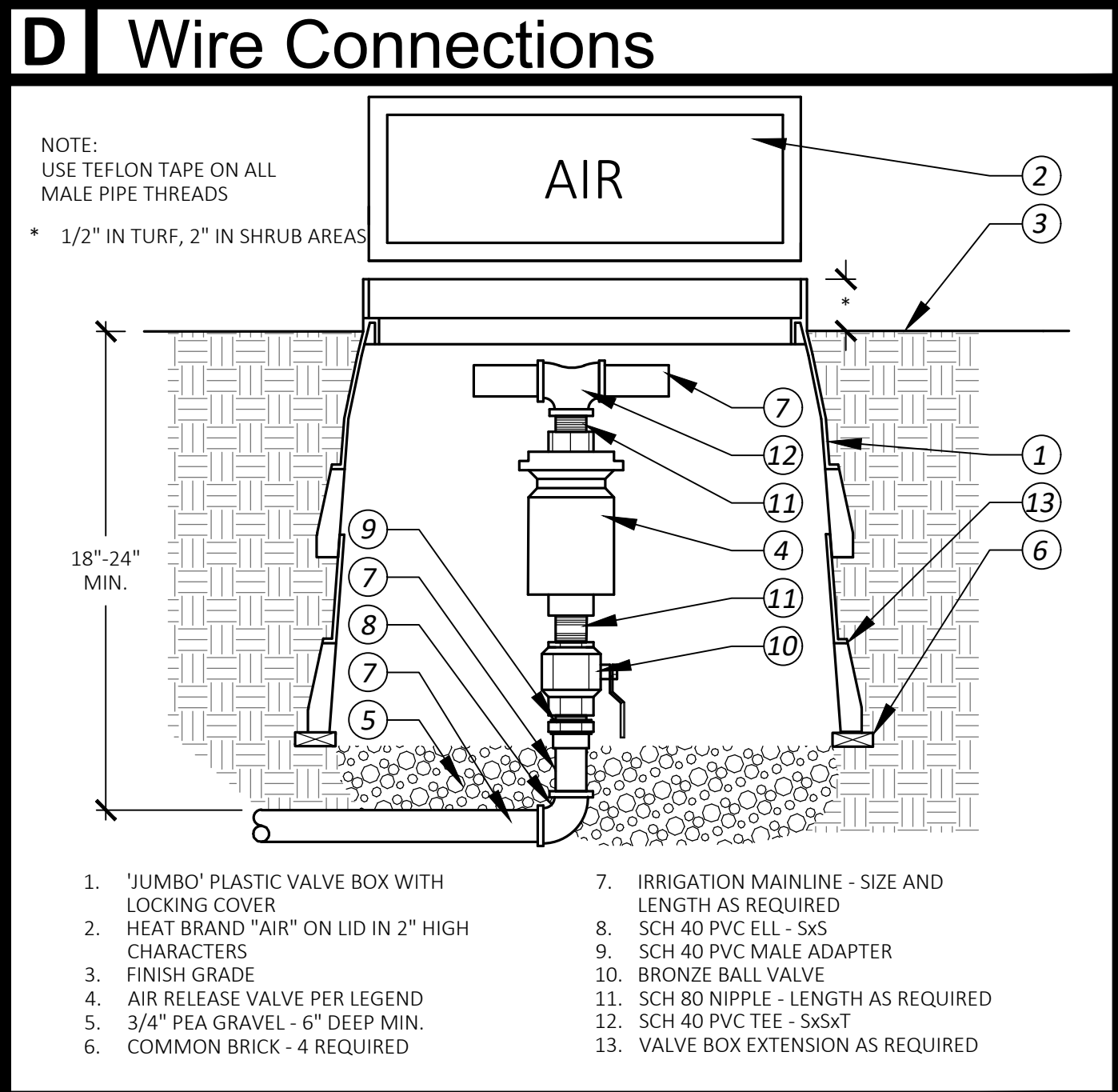
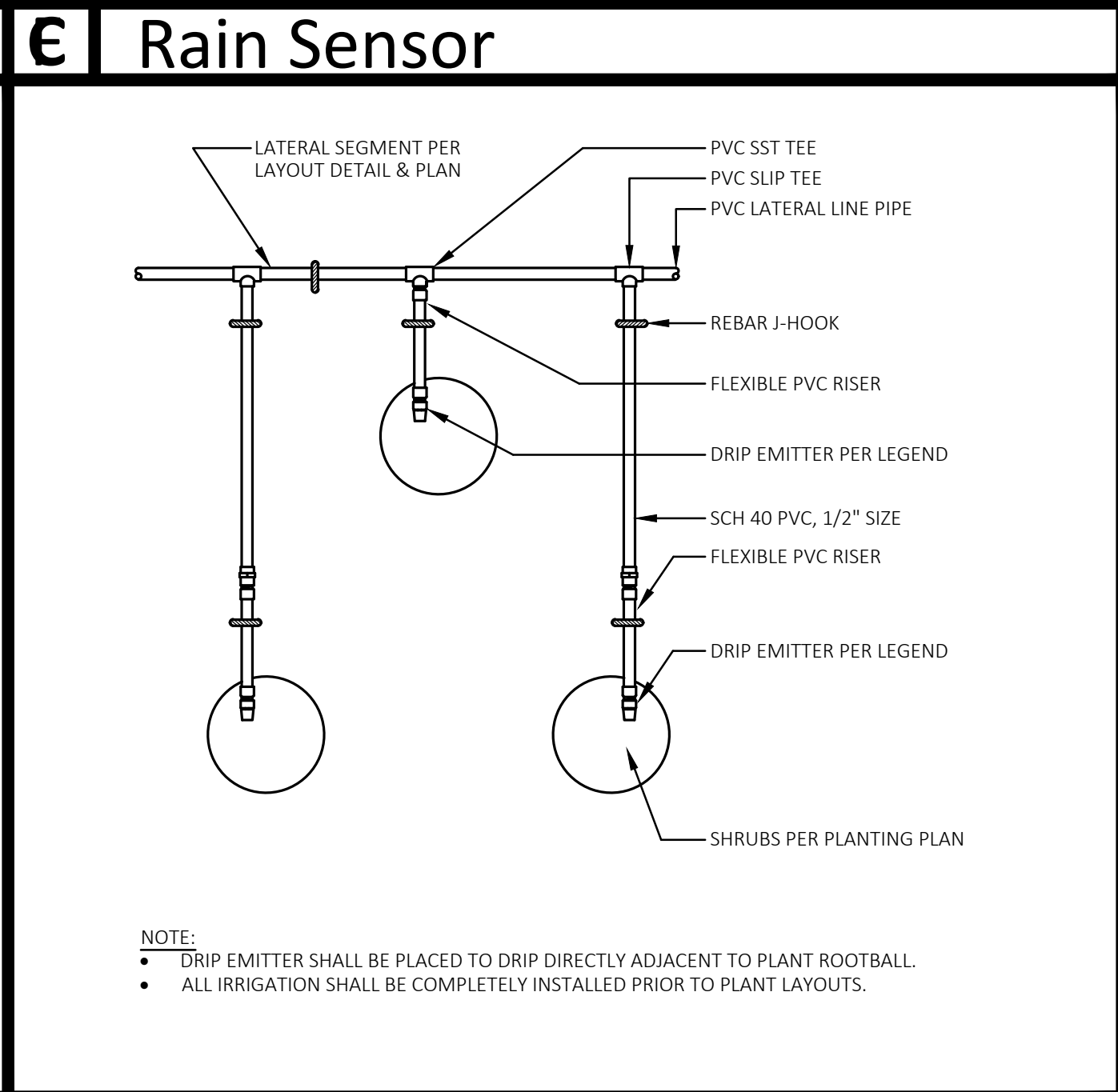
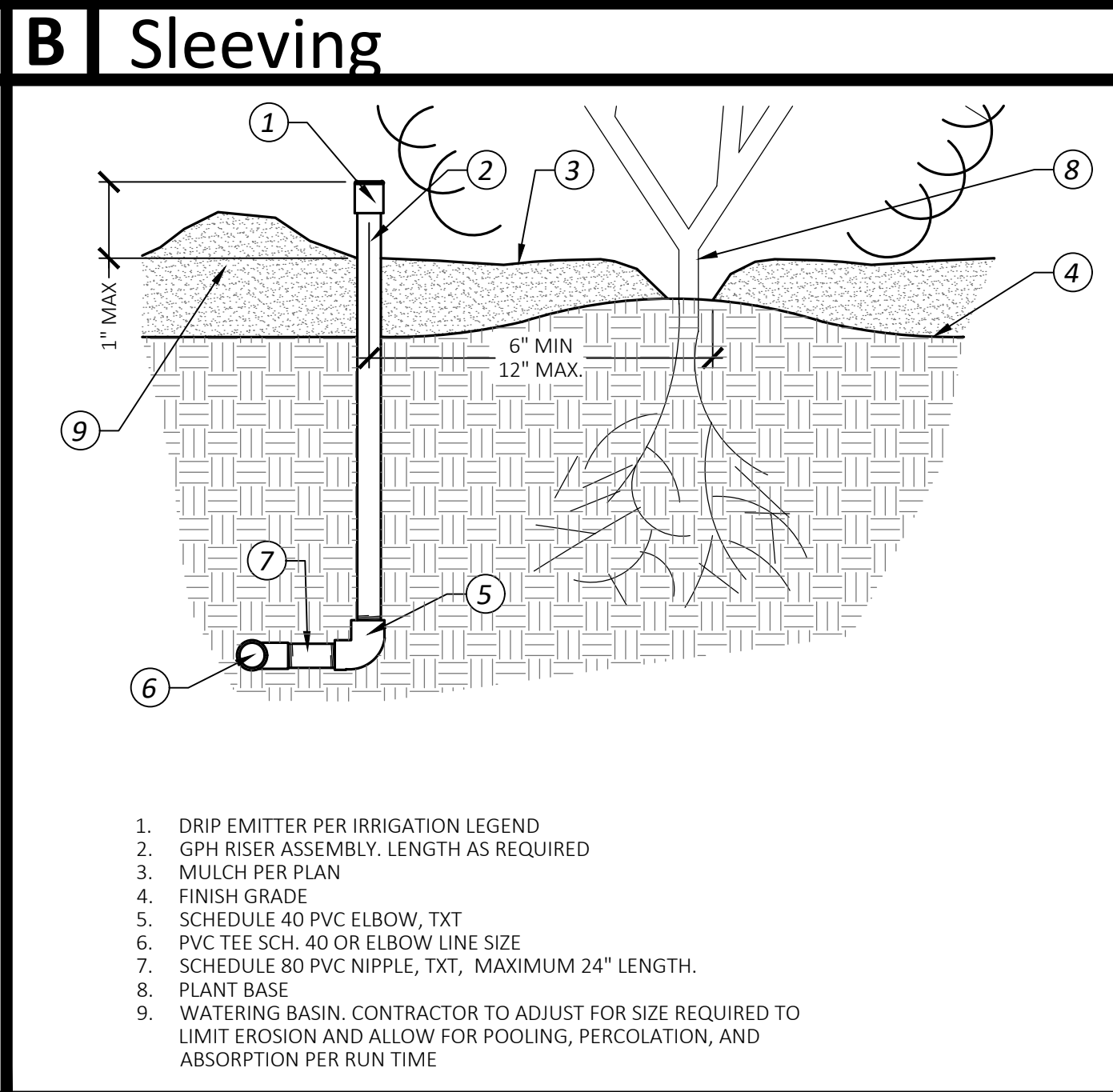
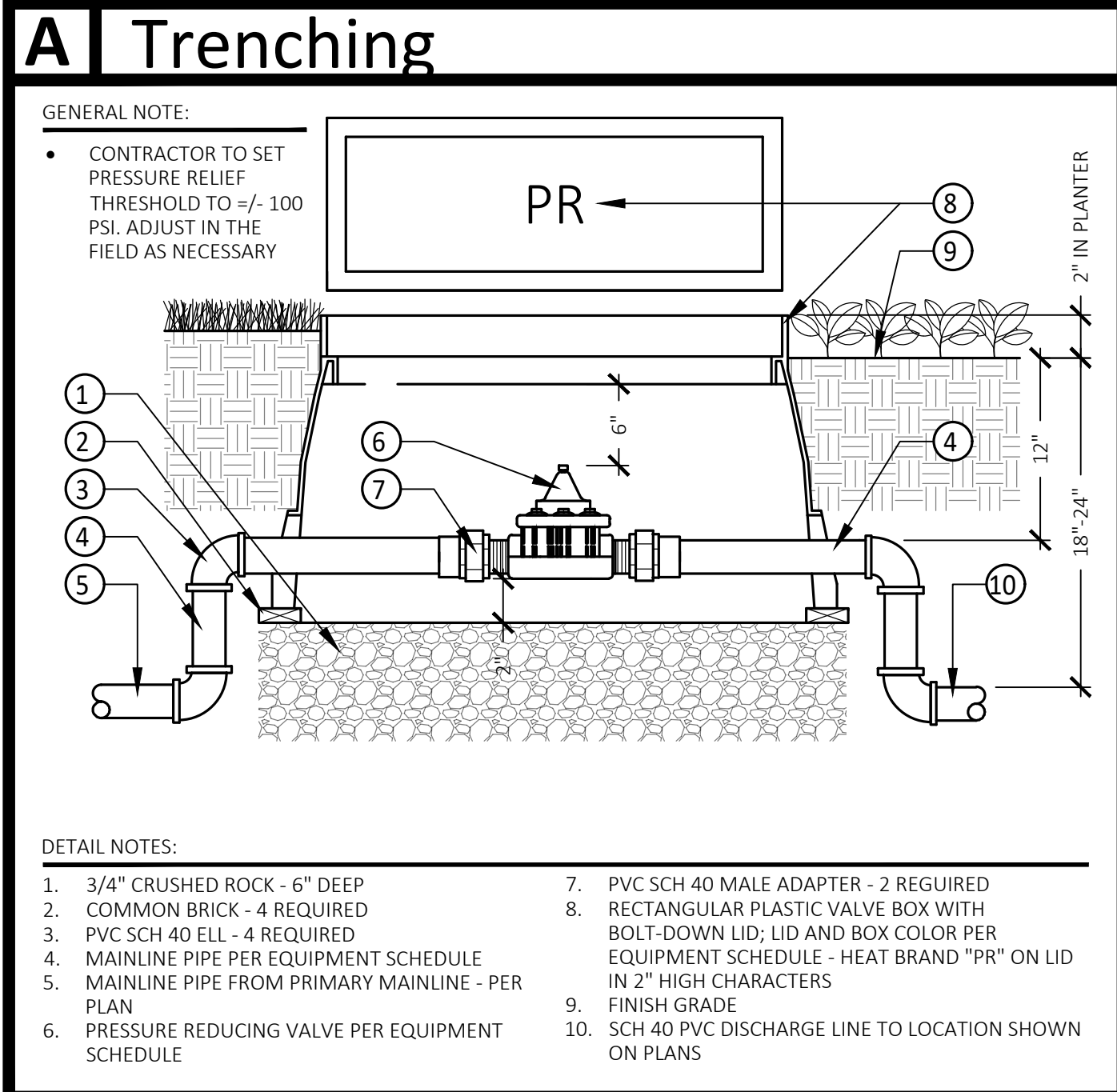
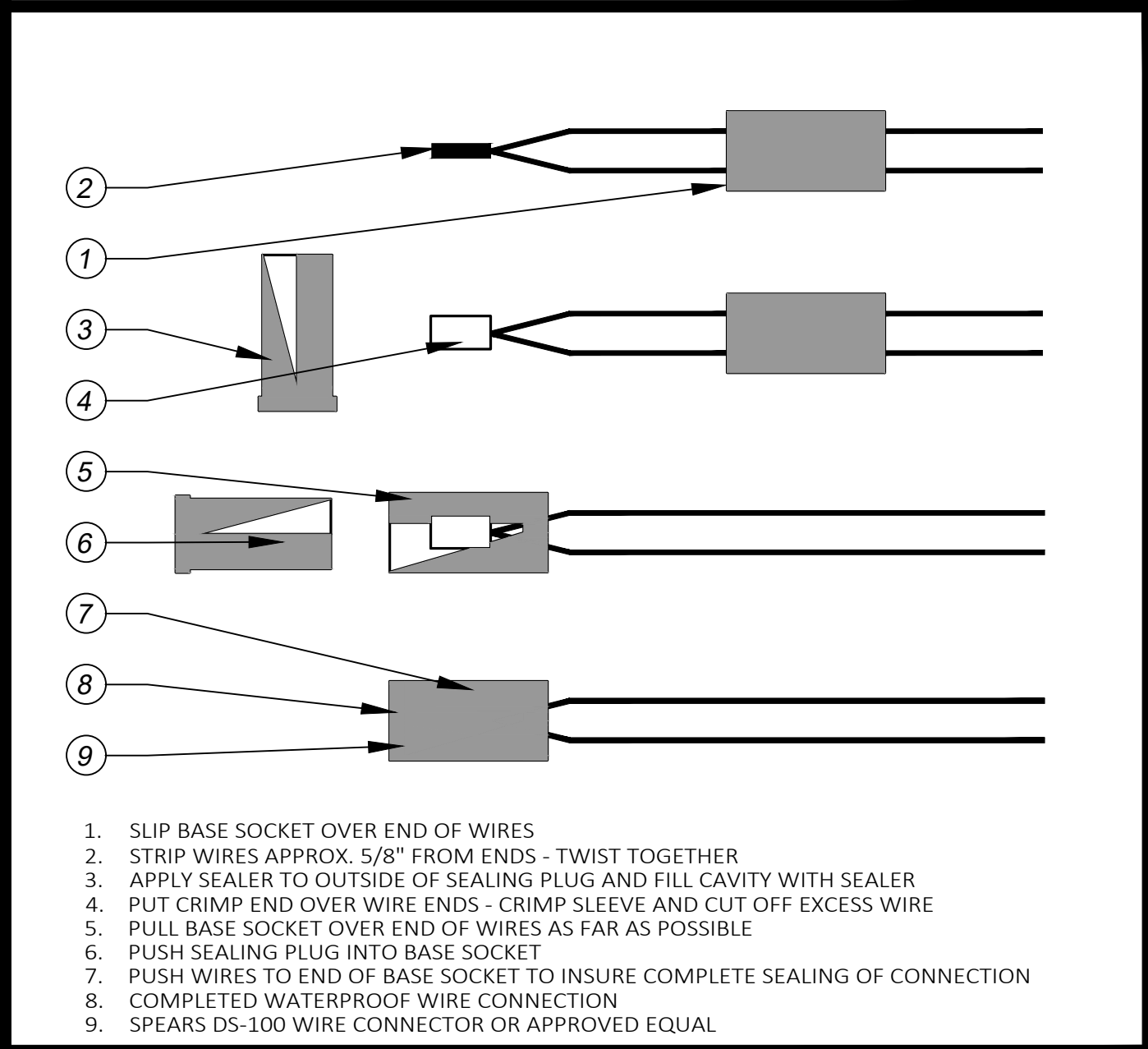
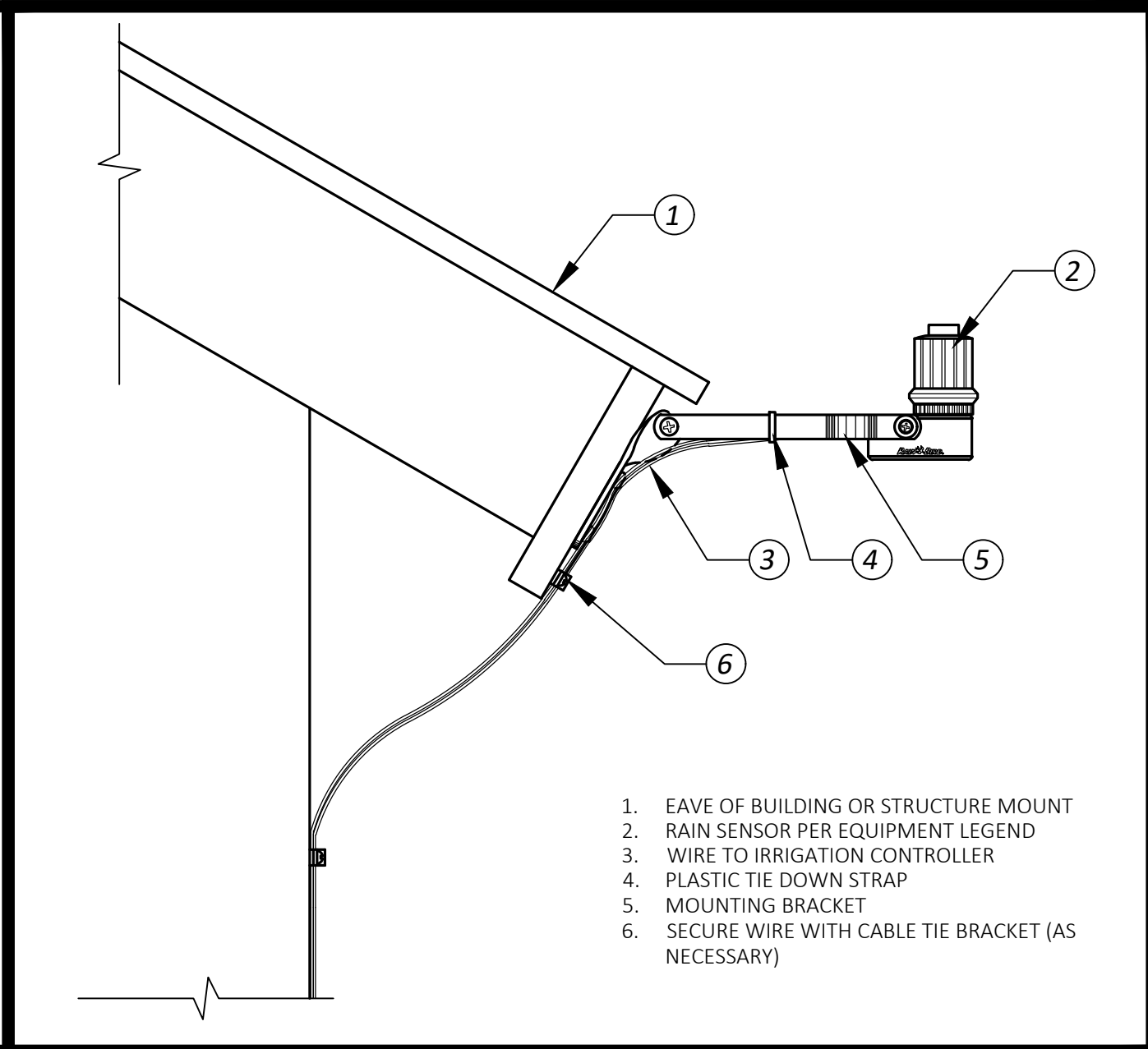
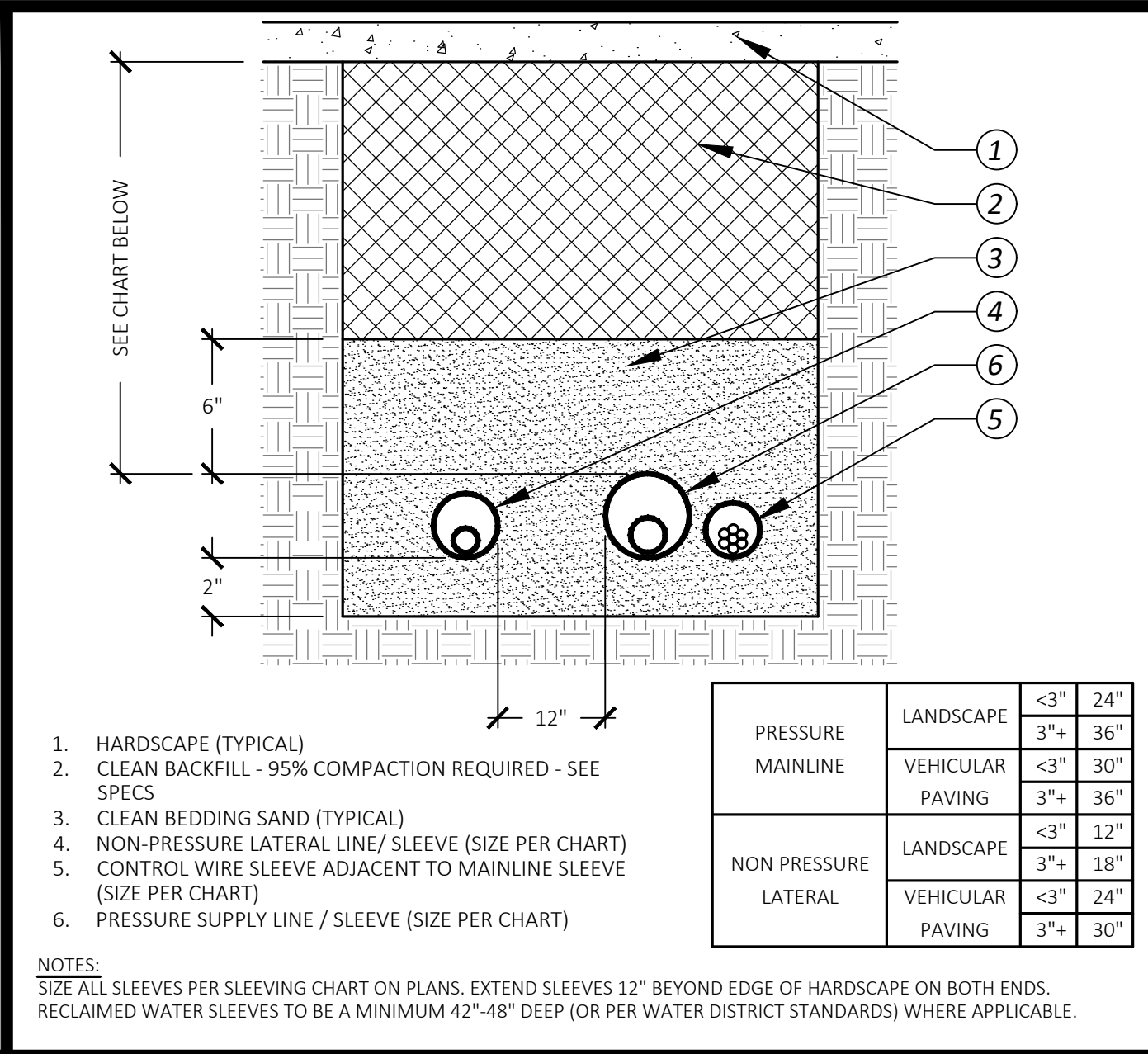
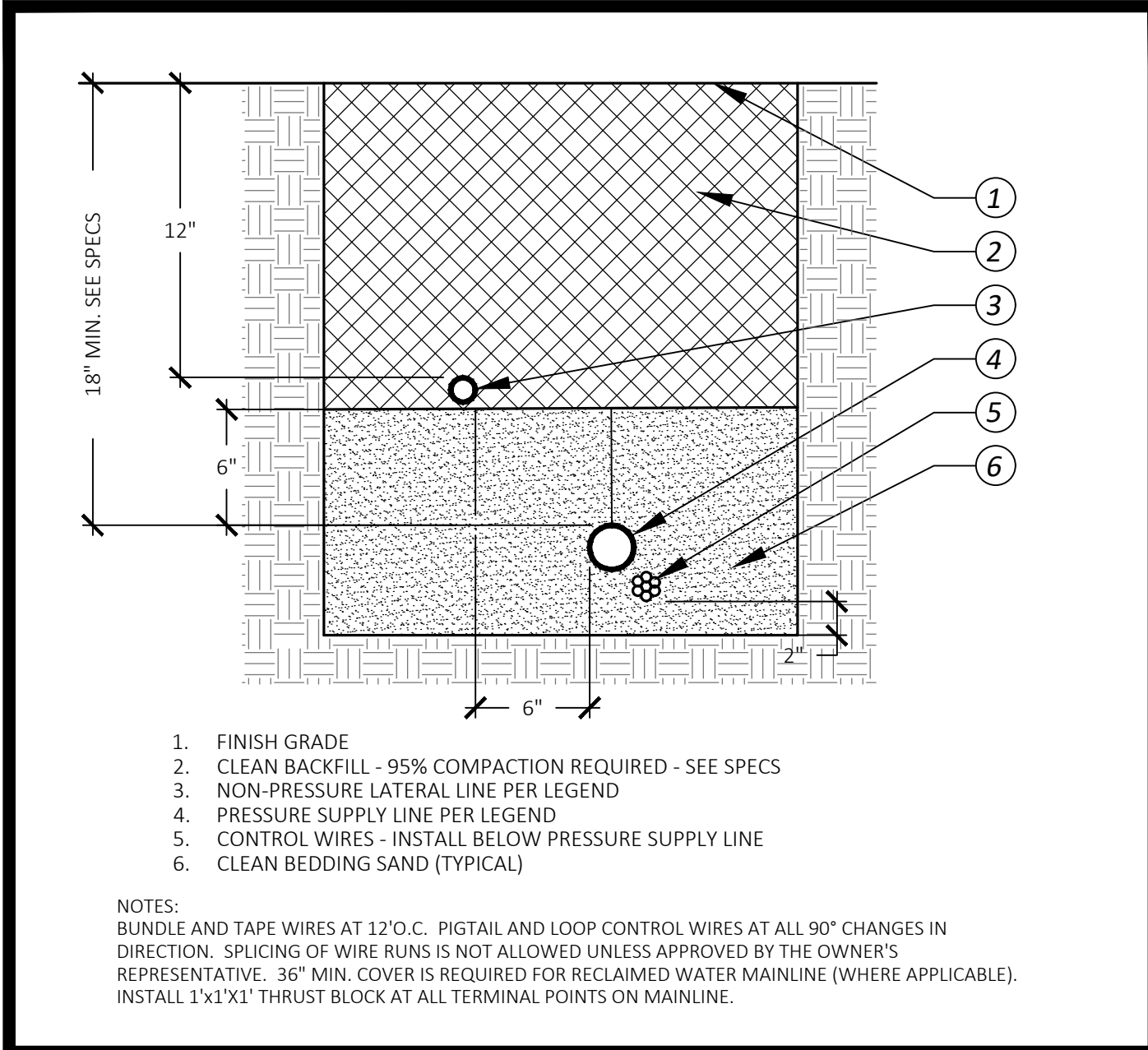
JOB#: 19-089

CITY OF TEMECULA DEPARTMENT OF PUBLIC WORKS

FIRE STATION 73
NEW GYM AND APPARATUS BAY W/ STORAGE
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590
IRRIGATION DETAILS

APPROVED BY: _____ NAME: _____ DATE: _____

Drawing No. **LI-2**
Sheet _____ of _____

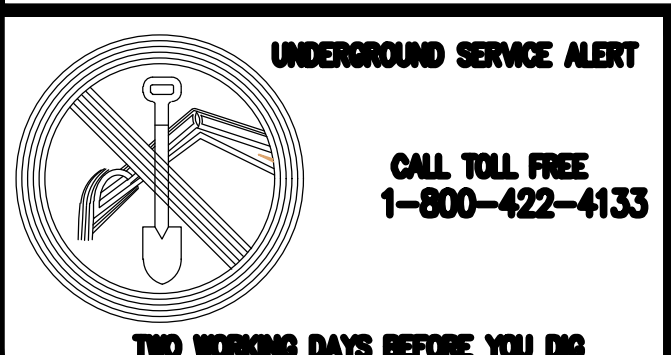


E Pressure Reducing Valve

F Drip Emitter

G Single Drip Emitter Assembly

H Air Relief Valve



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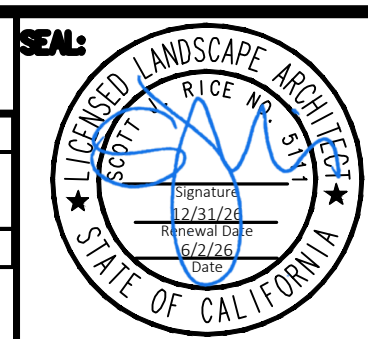
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REVIEWED FOR COMPLIANCE WITH
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Contractor							
Inspector							
Date Completed							

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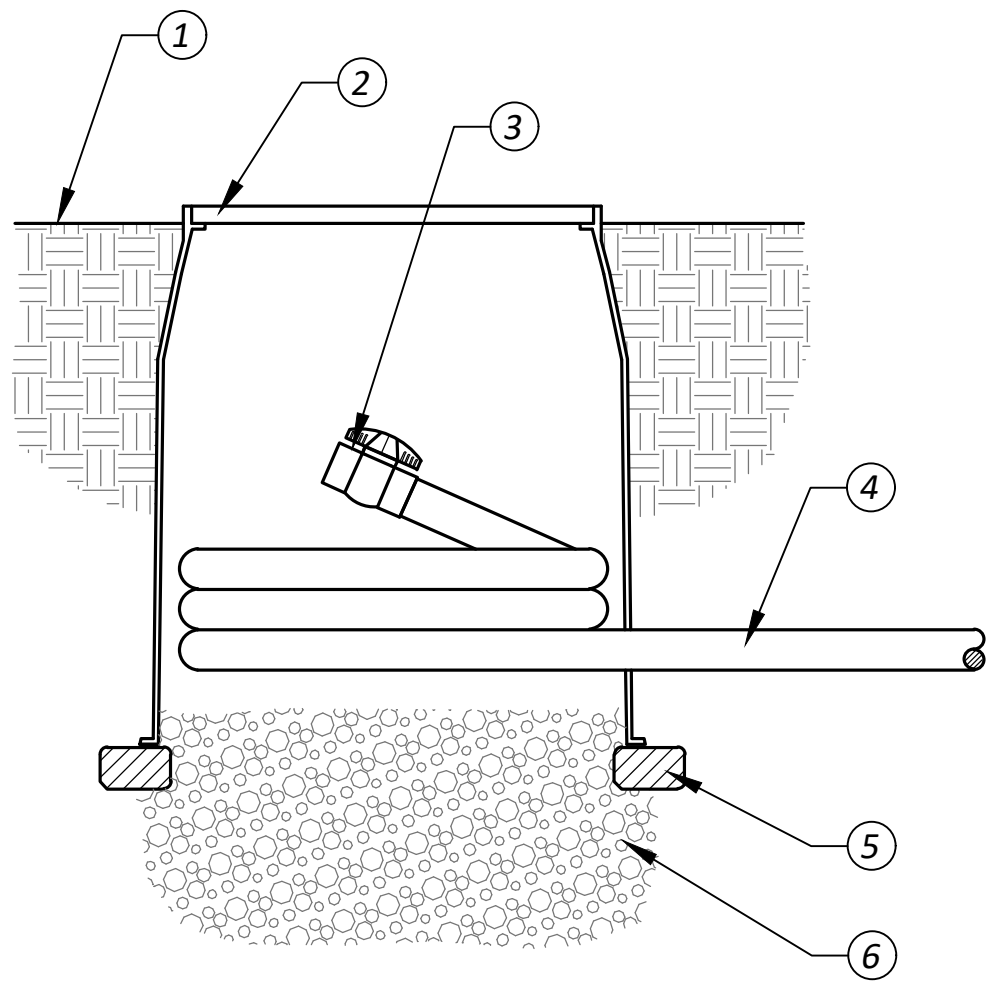


Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
Date		
R.C.E. No.		

RECOMMENDED BY:	DATE:
H. Moreno	6/18/2026
ACCEPTED BY:	DATE:
Ron Moreno, PE, Director of Public Works / City Engineer R.C.E. No. 69156	6/18/2026

CITY OF TEMECULA	DEPARTMENT OF PUBLIC WORKS
FIRE STATION 73	
NEW GYM AND APPARATUS BAY W/ STORAGE	
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590	
IRRIGATION DETAILS	
Sheet	of

LI-3



1. FINISH GRADE
2. 6" TAN ROUND VALVE BOX
3. PVC BALL VALVE - LINE SIZE
4. BLANK DRIPLINE
5. BRICK SUPPORTS (THREE REQUIRED)
6. 3/4" PEA GRAVEL SUMP

IRRIGATION CONTROLLER SCHEDULE - ESTABLISHMENT PERIOD															AVERAGE RUN TIMES (MINUTES PER DAY)																
Valve #	Equipment	I.E.	Plant Material	Water Use	K.I.	Soil Type	Infiltration Rate Inches Per Hour	Sun Amount	Sun Exposure	Exposure Factor	Slope Percent	# of Days	P.R.	Min. a Day Jan.	Min. a Day Feb.	Min. a Day Mar.	Min. a Day Apr.	Min. a Day May	Min. a Day June	Min. a Day July	Min. a Day Aug.	Min. a Day Sep.	Min. a Day Oct.	Min. a Day Nov.	Min. a Day Dec.	Valve #	Total Annual Minutes	Valve G.P.M.	Total Annual Gallons	Valve Area Sq. Ft.	
1	R-Van Spray	0.75	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	1.0%	12	0.62	12	12	21	25	33	36	40	38	29	21	13	11	1	3,514	3.59	12,615	556	
2	Hard Pipe P2P	0.81	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	1.0%	12	0.17	39	41	70	84	109	119	133	126	97	70	44	38	2	11,649	5.14	59,874	2,850	
3	Hard Pipe P2P	0.81	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	1.0%	12	0.18	37	39	66	79	103	113	126	119	92	66	42	35	3	11,012	2.4	26,429	1,258	
Monthly Evapotranspiration Rate														2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	Totals	28,957	21	127,438	5,921	
Run Time Formula = 2 * (60 * E.T. MONTH) * PLANT FACTOR * EXPOSURE FACTOR / (PRECIPITATION RATE * NO.OF DAYS * IRRIGATION FACTOR)														Infiltration Rate and Slope shown for reference only.												56.9 Annual Evapotranspiration Rate (ETo)					
NOTE: 1. The water schedules are guidelines only and shall be modified according to individual plant needs and as the weather or water requirements change. 2. It is based on the monthly evapotranspiration rates for City of Temecula, CA. 3. Contractor to verify run times with actual field conditions, adjust controller as needed, monitor schedule during the maintenance period, and verify controller settings with the manufacturer's representative for this region. 4. This schedule does not account for multiple run or soak cycles within the same day. Contractor to adjust the program as needed to eliminate water run-off.																															

IRRIGATION CONTROLLER SCHEDULE - ESTABLISHED LANDSCAPE														AVERAGE DAILY RUN TIMES (MINUTES)																	
Valve #	Equipment	I.E.	Plant Material	Water Use	K.I.	Soil Type	Infiltration Rate Inches Per Hour	Sun Amount	Sun Exposure	Exposure Factor	Slope Percent	# of Days	P.R.	Min. a Day Jan.	Min. a Day Feb.	Min. a Day Mar.	Min. a Day Apr.	Min. a Day May	Min. a Day June	Min. a Day July	Min. a Day Aug.	Min. a Day Sep.	Min. a Day Oct.	Min. a Day Nov.	Min. a Day Dec.	Valve #	Total Annual Minutes	Valve G.P.M.	Total Annual Gallons	Valve Area Sq. Ft.	
1	R-Van Spray	0.75	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	0.01	12	0.62	6	6	11	13	16	18	20	19	15	11	7	6	1	1,757	3.59	6,308	556	
2	Hard Pipe P2P	0.81	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	0.01	12	0.17	20	20	35	42	55	60	67	63	49	35	22	19	2	5,824	5.14	29,937	2,850	
3	Hard Pipe P2P	0.81	Shrubs	Low	0.20	Sandy Loam	0.30	Full Sun	South	1.20	0.01	12	0.18	19	19	33	40	52	56	63	60	46	33	21	18	3	5,506	2.4	13,214	1,258	
Monthly Evapotranspiration Rate														2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	Totals	14,478	21	63,719	5,921	
Run Time Formula = (60 * E.T. MONTH) * PLANT FACTOR * EXPOSURE FACTOR / (PRECIPITATION RATE * NO.OF DAYS * IRRIGATION FACTOR)														Infiltration Rate and Slope shown for reference only.												56.9 Annual Evapotranspiration Rate (Eto)					
NOTE: 1. The water schedules are provided as guidelines only and are to be modified according to individual plant needs and as the weather or water requirements change. 2. It is based on the monthly evapotranspiration rates for City of Temecula, CA. 3. Contractor to verify run times with actual field conditions, adjust controller as needed, monitor schedule during the maintenance period, and verify controller settings with the manufacturer's representative for this region. 4. Contractor to adjust the program as needed to eliminate water run-off. This schedule does not account for multiple run or soak cycles within the same day.																															

A Dripline Flush Valve

B IRRIGATION CONTROLLER CHART

IRRIGATION PRESSURE CALCULATION				DATE: 7/23/2024	
AGENCY :		TR Design Group			
POINT OF CONTACT:		Rick Jaeger		PH. NO.: 951-742-7179	
MAX. GPM					
IRRIGATION VALVE #:		2		IRRI. TYPE: ROTARY GPM: 20.0	
STATIC WATER PRESSURE AT WATER METER:				110.0	
SIZE	DESCRIPTION	GPM	LOSS		
1 1/2	SERVICE LINE:	25	1.14	20.0	0.29
	Length PSI loss/100'			GPM	
2	WATER METER:			20.0	2.20
2	BACKFLOW PREVENTER:			20.0	11.00
1 1/2	MASTER VALVE:			20.0	2.90
1	FLOW SENSOR:			20.0	0.10
	PRESSURE REGULATOR:			20.0	
1 1/4	GATE/BALL VALVE:	2		20.0	0.20
	Quantity			GPM	
1 1/2	CONTROL ZONE ASSEMBLY				2.90
1 1/2	MAINLINE:	355	1.14	20.0	4.05
	Length PSI loss/100'			GPM	
	MAINLINE:				0.00
	Length PSI loss/100'			GPM	
1 1/4	LATERAL LINE:	75	2.45	20.0	1.84
	Length PSI loss/100'			GPM	
1	LATERAL LINE:	16	3.69	12.0	0.59
	Length PSI loss/100'			GPM	
3/4	LATERAL LINE:	380	4.52	7.0	17.18
	Length PSI loss/100'			GPM	
	LATERAL LINE:	0	0.00	0.0	0.00
	Length PSI loss/100'			GPM	
TOTAL LATERAL LINE LOSS:				23.65	
LATERAL LINE FITTING LOSS (10%):				2.37	
TOTAL FRICTION LOSS:				45.6	
ELEVATION AT METER:		0.0		HEAD ELEVATION:	
ELEVATION DIFFERENCE:		0.0		x 0.433	
PSI REQUIRED AT HEAD:				0.00	
TOTAL PSI REQUIRED (SYSTEM DESIGNED PRESSURE):				90.6	
REGULATED PRESSURE AT POC (IF APPLICABLE):				100.0	
PRESSURE REGULATOR					
RESIDUAL PRESSURE (MUST BE POSITIVE):				9.4	

WATER EFFICIENT LANDSCAPE WORKSHEET

Non-Residential Landscape Projects

Reference ETo for the area ETo= 56.7

Estimated Total Water Use (ETWU):

ETWU is calculated using the following formula: (Eto) (.62) (ETAF) (LA)

Hydrozone # / Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Landscape Area	Estimated Total Water Use (ETWU) Gallons/Yr
Regular Landscape Areas							
HZ1 - Low Shrub	0.20	Point to point	0.81	0.25	4,108	1,014	35,657
HZ2 - Low Shrub	0.20	Rotary	0.75	0.27	1,813	483	16,996
Totals					5,921	1,498	
Special Landscape Areas							
HZ6 - Edible Plants	0.40	Drip	0.81	1.00	0	0	0
HZ7 - Recreation Turf	0.90	Rotors	0.75	1.00	0	0	0
HZ8 - Water Feature	0.90	Auto Fill	0.81	1.00	0	0	0
Totals					0	0	
Estimated Total Water Use in gallons per year, ETWU Total							52,653
Max. Annual Water Allowance in gallons per year, MAWA Total							93,666
MAWA calculation: (Eto) (.62) [(ETAFxLA) + ((1-ETAF) x SLA)]							MAWA - ETWU= 41,013
Estimated Acre Feet per Year =							0.16
Pass / Fail =							Pass

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	1,498
Total Area	5,921
Average ETAF	0.25

Average ETAF for Regular Landscape Areas must be 0.45 or below for non-residential areas.

Special

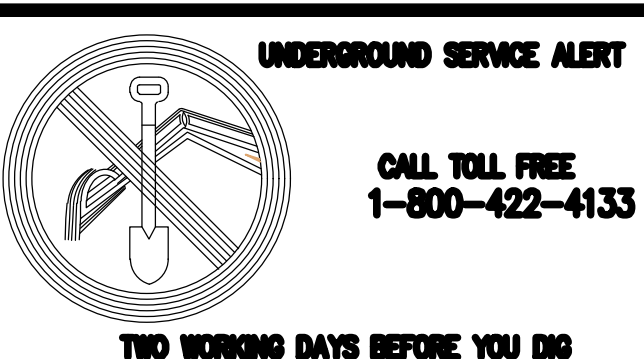
Total ETAF x Area	0
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All Landscape Areas

Total ETAF x Area	1,498
Total Landscape Area (LA)	5,921
Sitewide ETAF	0.25

B IRRIGATION PRESSURE CALCULATION CHART

C WATER EFFICIENT LANDSCAPE WORKSHEET



LANDSCAPE ARCHITECTURE
7111 Indiana Avenue, Suite 300
Riverside, CA 92504
(951) 369-0700 | www.cwdg.fun



951.742.7179

2900 ADAMS STREET
STUDIO A-400
RIVERSIDE, CA 92504

www.trdesigngroup.com

JOB#: 19-089

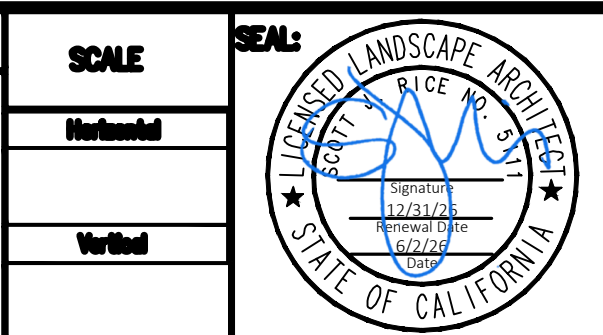
TM-B24-5413/B25-0079

BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: NAME DATE

CONSTRUCTION RECORD	DATE	BY	NO.	REVISIONS	ACCD	DATE	BENCH MARK
Contractor							
Inspector							
Date Completed							



Designed By	Drawn By	Checked By
Plans Prepared Under Supervision Of		
Date		
R.C.E. No.		

RECOMMENDED BY: H. Mills	DATE: 6/18/2026
ACCEPTED BY: Ron Moreno	DATE: 6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. NO. 69156	

CITY OF TEMECULA	DEPARTMENT OF PUBLIC WORKS	Drawing No.
FIRE STATION 73	NEW GYM AND APPARATUS BAY W/ STORAGE	LI-4
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92509	IRRIGATION DETAILS	Sheet of

IRRIGATION

PART 1 - GENERAL

Refer to standard contract documentation for items outside of technical installation scope.

1.01 GENERAL CONDITIONS:

- A. Provide all labor, materials, tools, transportation, equipment and incidentals necessary to perform the work as indicated on the Irrigation Plans and as herein specified to install a complete and fully functioning Automatic Irrigation system providing full coverage of all planted areas.

1.02 SCOPE OF WORK:

- A. Irrigation materials and equipment.
B. Installation standards.
C. System location and layout.
D. Excavation and backfill.
E. Installation of pipe, equipment, and appurtenances.
F. Water flow meters.
G. Field quality control - Coverage Tests, as built, and 3rd party water audit.
H. Plant irrigation establishment period.
I. Clean up.

1.03 REFERENCES:

- A. The Standard Specifications for Public Works Construction, "Greenbook", latest edition at the time of Bid, is reference as if herein contained and the contractor shall keep a copy at the project site. These Specifications shall supersede conflicts with information given in the "Greenbook", unless otherwise determined by the Owner or their designated representative.
B. American Society for Testing and Materials (ASTM):
1. ASTM A53, ASTM D1557, ASTM D1785, ASTM D2241, ASTM D2464, ASTM D2466, ASTM D2466, ASTM D2564.
C. California Code of Regulations, Title 24:
1. Part 3 California Electrical Code.
D. Underwriters Laboratories Inc. (UL):
1. UL 651 Schedule 40 and 80 Rigid PVC Conduit.

1.04 VERIFICATION OF DIMENSIONS:

- A. Dimensions and layout of proposed system, before proceeding with any work, Contractor shall verify all dimension and shall immediately inform the L.A. and owner of any discrepancies between the drawings and/or specifications and actual field conditions. No work shall be done in any area where there is such a discrepancy until approval has been given by L.A. and owner. Any work done without notification and prior approval will be the sole responsibility of the Contractor to remedy as required by L.A. and Owner.

1.05 SUBMITTALS:

- A. Existing Static water pressure/ Water service size verification:
Contractor to document readings in writing on Contractors form that list time & date, reading in PSI, location, and type of gauge used in addition to date stamped photographs of readings. Contractor to document all data in evidence including both potable and recycled. Final results shall be submitted to the Owners representative prior to purchase of equipment and material.

B. Materials List:

1. Complete material list shall be submitted prior to performing any work. Catalog data and full descriptive literature must be submitted whenever the use of the item is different than those specified is requested. Notarized certificate must be submitted by plastic pipe and fitting manufacturer indicating that material complies with specifications, unless material has been previously approved.
2. Material list shall be submitted using the following format (double spaced between each item):

Item	Description	Manufacturer	Model
1. Pressure Pipe	Lasco	Sch. 40	
2. Lawn Head	Rainbird	1804-SAM-PRS	
Etc. Etc.	Etc.	Etc.	

C. Record Drawings:

1. Record accurately on one set of contract drawings all changes in the work constituting departures from the original contract drawings daily including noting when work was done.
2. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Owners Representative. Prior to final inspection of work, submit record drawings to Owners Representative for approval.
3. Dimensions shall be from two permanent points of reference (buildings, monuments, sidewalks, curbs, pavement, etc.). Data to be shown on record drawing shall be recorded day to day as the project is being installed. All lettering on drawings shall be minimum 1/8 inch in size.
4. Show locations and depths of the following items:
a. Point of connection.
e. Routing of sprinkler pressure lines (dimension maximum 100 feet along routing) and Routing of control wires.
f. Gate valves/ Isolation valves and Sprinkler control valves.
g. Quick coupling valves.
h. Related equipment (as may be directed).
5. Maintain record drawings on-site at all times. Upon completion of work, transfer all as-built information to clean blackline print for reproduction and create a digital PDF.
D. Operation and Maintenance Manual: Operation and Maintenance Data, for submittal requirements. As a minimum, provide operation and maintenance instructions for the following items:
1. Electric Remote-Control Valves (including master control valves);
2. Satellite Irrigation Controllers;
3. Water Flow Meters; and
4. Irrigation Controller Software.

1.05 QUALITY ASSURANCE:

- A. The landscape irrigation system shall consist of a completely automatic, electrically-controlled bubbler, drip, and spray-irrigation system. The system shall be installed to provide complete coverage with minimum maintenance. The irrigation system shall be installed to prevent overspray onto walks and structures.
B. The irrigation system shall avoid conflicts with plant materials, lighting standards, sign posts, architectural features, above and below ground utilities, and drainage system, Contractor responsible for coordination with other trades to verify acceptable locations to avoid conflicts in addition to providing additional heads or adjustments as required.
C. Irrigation piping layout is schematic, showing location of pipes and fittings close to landscape areas is not always possible graphically. All equipment shall be located inside the landscape areas.
D. Planting Irrigation establishment period is specified in the Planting Specifications and is the same duration as the Plant Establishment period..

1.06 SEQUENCE AND SCHEDULING:

- A. Contractor to coordinate layout and installation of irrigation sleeves, conduits, and piping under paved areas and other features prior to their construction with other trades.
B. Coordinate installation of irrigation system with excavation of planting beds and backfilling of planting beds with topsoil.
C. The irrigation system shall be installed and tested prior to installation of plant material.
D. Tree and plant locations shall be staked or flagged in the field prior to installation of irrigation pipe and heads/emitters. Refer to the plant list on the Contract Drawings for plant setbacks and spacing requirements.

1.07 EXISTING UTILITIES:

- A. Existing utilities and conditions: Prior to cutting into the soil, locate all cables, conduits, sewer lines, septic systems, and other utilities commonly encountered underground and take proper precautions not to damage or disturb such improvements. If a conflict exists between such obstacles and the proposed work, promptly notify the L.A. and Owner who will give direction. Proceed in the same manner if a rock layer or any other conditions encountered underground make changes advisable.
1. Where investigation of subsurface conditions has been made by a qualified body in areas in which local materials may be obtained, the Contractor may request the use of such information but will be solely responsible for its verification and accuracy
2. It is the Contractors sole responsibility to verify any located or demarked utilities via pot holing or other method prior to start of excavation. Failure to do so will result in all damages being the sole responsibility of the Contractor.

1.08 INSPECTIONS:

- A. Inspections will be required for:
1. Pressure test of irrigation main line.
2. Coverage test.
3. Manufacture certification, for warranty, verification of installation per manufacture requirements.
4. Final inspection/start of maintenance. Final inspection shall be performed by the Owners Representative and Landscape Architect. All sensors, gauges, grounding, and accessories must be installed and functioning/programmed per manufacture. A third party water audit by a Certified Landscape Irrigation Auditor per MWEL0 requirements must be completed and final report supplied prior to inspection.
5. Completion of maintenance and owner's Final acceptance.
B. Inspection Requests:

1. Contractor shall notify the Owners Representative and Landscape Architect in advance for requesting all inspections as follows:
Pressure supply line installation and testing - 36 hours (1- 2 working days)
System layout - 36 hours (1- 2 working days)
Coverage Tests - 36 hours (1- 2 working days)
Final Inspection - 48 hours (2 working days)
2. When inspections have been conducted by other approved personnel, the Contractor shall show evidence in writing of when and by whom these inspections were made including a signature of the referenced inspector.
3. No inspection will commence without updated "record" prints. In the event the Contractor calls for an inspection without the appropriate information or completed work the inspection will be terminated and the Contractor charged for the inspectors time and must reschedule.
C. Closing in Un-inspected Work:
1. Do not allow or cause any of the work of this section to be covered up or enclosed until it has been inspected, tested, and approved by the Owners Representative.
2. Any additional inspections required due to the Contractor's actions, such as failing to have work inspected or covering it prior will result in additional inspections charged by the current hourly rate of the Landscape Architect or Certified Irrigation designer/Auditor including travel time and expenses.
D. Coverage Test/ Adjustments:
1. When the sprinkler system is completed, Contractor shall perform a coverage test in the presence of the Owners Representative and the Landscape Architect to determine if the water coverage for planting areas is complete and adequate. This test shall be accomplished before any planting.
2. Any adjustment required for proper coverage shall be the Contractors Responsibility, and shall include field adjustments and additions as needed to head layout as directed by the Landscape Architect. All additional cost associated with final system tuning and adjustments shall be the Contractors Responsibility.
E. Hydrostatic Tests:
1. All pressure lines shall be tested under a hydrostatic pressure of 150 psi for a period of not less than two hours or per local governing regulation, whichever is greater.
2. All hydrostatic tests shall be made in the presence of the Owners Representative. No pressure line shall be backfilled until it has been inspected, tested, and approved in writing.
F. Contractor shall furnish necessary force pump and all other test equipment.

1.09 TURNOVER ITEMS:

- A. Controller Charts:
1. Record drawings must be approved by Owners representative before charts are prepared.
2. Provide one controller chart for each automatic controller. Chart shall show the area covered by controller.
3. The chart is to be a reduced copy of the actual "record" drawing. In the event the controller sequence is not legible when the drawing is reduced, it shall be enlarged to a readable size.
4. Chart shall be a blackline print with a different color used to show the area of coverage for each station.
5. When completed and approved, the chart shall be hermetically sealed between two pieces of plastic, each piece being a minimum 20 mils in thickness.
B. Operation and Maintenance Manuals:
1. Two individually bound copies of operation and maintenance manuals shall be delivered to the Owners Representative 10 calendar days prior to final inspection. The manuals shall describe the material installed.
2. Each complete, bound manual shall include the following information:
a. Index sheet stating Contractor's address and telephone number, duration of guarantee period, list of equipment including names and addresses of local manufacturer representatives.
b. Complete operating and maintenance instructions for all equipment.
c. Spare parts lists and related manufacturer information for all equipment.
C. Equipment:
1. Supply as part of this contract the following items:
a. 4 additional sprinkler heads and/or emitter of each type and spray pattern shown.
b. Two (2) wrenches for disassembly and adjustment of each type of sprinkler head involved.
c. 10 additional drip emitters of each type and flow rate shown.
d. 25' of each type of drip tubing used per plan, and 6 of each fittings used.
e. Two keys for each automatic controller.
D. Contractor to supply and verify with the Owners Representative what type of padlocks and keys are required for enclosures that can be padlocked. Each locking mechanism must have 4 copies of the correct key for turnover to the Owners Representative. Depending on actual enclosure per plan this includes locks for gates, any needed chains/cables, and other security instruments for the protection of irrigation equipment.

1.12 GUARANTEE:

- A. General:
The entire sprinkler system, including all work done under this contract, shall be guaranteed against all defects and fault of material and workmanship for a period of one (1) year following the filing of the Notice of Completion. All materials used shall carry a manufacturer's guarantee of one (1) year.
Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by the Contractor at no additional expense to the Owner within ten (10) calendar days of receipt of written notice from the Owners Representative. When the nature of the repairs as determined by the Owners Representative constitute an emergency (e.g. broken pressure line) the Owner may proceed to make repairs at the Contractor's expense. Any and all damages to existing improvement resulting either from faulty materials or workmanship, or from the necessary repairs to correct same, shall be repaired to the satisfaction of the Owners Representative by the Contractor, all at no additional cost to the Owner.

PART 2 - MATERIALS

2.01 GENERAL:

- A. Materials and or equipment installed or furnished shall be new and in pristine condition. Materials that have faded, are dirty, or have been improperly stored will be rejected and shall be removed from the site and replaced at no expense to the Owner.
B. All materials shall be stored per manufactures recommendation and protected from, weather, construction activities, and vandalism/theft.

2.02 PIPE:

- A. Pressure supply line from point of connection through backflow prevention unit shall be Type "K" brass or copper pipe or per local code requirements.
B. Pressure supply lines 2-1/2 inches in diameter and up to 6 inches in diameter downstream of backflow prevention unit shall be Class 315 PVC.
C. Pressure supply lines 2 inches in diameter and smaller downstream of the backflow prevention unit shall be Schedule 40 solvent weld PVC.
D. Non-pressure lines shall be Schedule 40 solvent weld PVC.

2.03 COPPER PIPE AND FITTINGS:

- A. Copper pipe shall be Type "K", hard tempered ASTM B 88 and fittings shall be wrought solder joint type in accordance with ANSI B16.22.
B. Joints shall be soldered with silver solder, conforming to ASTM B206.

2.04 BRASS PIPE AND FITTINGS:

- A. Brass pipe shall be 85 percent red brass, ANSI, Schedule 40 screwed pipe.
B. Fittings shall be medium brass, screwed 125-pound class.

2.05 GALVANIZED STEEL PIPE AND FITTINGS:

- A. All galvanized steel pipe shall be Schedule 40, threaded, coupled, and hot-dipped galvanized, and shall comply with the requirements of ASTM A 120-66 or ASTM A 53-67.
B. All fittings for galvanized steel pipe shall be 150-pound rated galvanized malleable iron, banded pattern.
C. Pipe sizes indicated on the drawings are nominal inside diameter, unless otherwise noted.

2.06 CONDUIT:

- A. Conduit: Provide rigid non-metallic conduit conforming to UL Standard No. 651 for rigid non-metallic conduit, such as Schedule 40 PVC conduit, unless otherwise indicated.

2.07 PLASTIC PIPE AND FITTINGS:

- A. All plastic pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, type of material, pressure rating in psi, NSF seal of approval, and the date of extrusion.
B. All plastic pipe shall be extruded of an improved PVC virgin pipe compound.
C. Rubber gasket PVC pipe, couplings, and fittings shall conform to ASTM D 1784 Type I, Grade I, 2,000-psi design stress. Couplings, rubber gaskets, and fittings shall be as approved by the pipe manufacturer.
D. Ring-type rubber gasket couplings shall permit a 5 degree deflection of the pipe at each coupling (2-1/2 degree each side) without exfiltration or infiltration, cracking or breaking.
E. All fittings shall be standard weight Schedule 40 and shall be injection molded of an improved PVC fitting compound. Threaded plastic fittings shall be injection molded. All tees and ells shall be side gated.
F. When connection is plastic to metal, male adapters shall be used. The male adapter shall be hand tightened, plus one turn with a strap wrench. Joint compound shall be nonhardening sealing compound compatible with plastics. Compound must not lubricate the joint.
G. All threaded nipples shall be standard weight Schedule 80 with molded threads.
H. All solvent cementing of plastic pipe and fittings shall be a two-step process, using primer and solvent cement applied per the manufacturer's recommendations. Cement shall be of a fluid consistency, not gel-like or ropy.
I. Solvent cementing shall be neat and demonstrate quality workmanship- Primer and Glue shall not be used in excess or applied in a way to affect the portions of the pipe that are not part of the actual connected joint. Any joints with excessive runs/drips, trails, or globing of Glue and or Primer shall be cut out in whole and replaced at cost by the Contractor until an acceptable professional product is completed and accepted by the Owners Representative.

2.08 VALVES:

- A. Gate and Ball Valves:
1. Ball valves 2 inches or smaller shall have screwed joints and brass bodies.
2. All gate valves larger than 3 inches in diameter shall have 2-inch-square operating units and have an arrow cast in the metal indicating the direction of opening. Valves shall have iron body and be bronze-mounted.
3. All gate valves larger than 2 inches and up to 3 inches in diameter shall conform to [1] or [2] above.
4. All gate valves shall have a minimum working pressure of not less than 150 psi and shall conform to AWWA standards.
B. Quick Coupling Valves:
1. Body of valves shall be brass with a wall thickness guaranteed to withstand normal working pressure of 150 psi without leakage. Valves shall have 3/4-inch female threads opening at base, with two-piece body. Construct valves to be operated only with a coupler, designed for that purpose. Coupler is inserted into valve and a positive, watertight connection shall be made between coupler and valve. Hinge cover shall be brass with a yellow rubber-like vinyl cover bonded to it.
C. Remote Control Valves:
1. Valves shall be spring-loaded, self-cleaning, packless diaphragm activated, of a normally closed type.

2.09 VALVE BOXES:

- A. Valve boxes shall be fabricated from a durable, weather-resistant plastic material resistant to sunlight and chemical action of soils, color to be green unless otherwise specified by plans
B. The valve box cover shall be secured with a hidden latch mechanism or bolts.
C. The cover and box shall be capable of sustaining a load of 1,500 pounds.
D. Valve box extensions shall be by the same manufacturer as the valve box.
E. Gate valve boxes shall be round plastic boxes with bolt-down covers marked "GV," heat branded in 2" high characters; AMETEK or approved equal.
F. Remote control valve boxes shall be rectangular plastic boxes with bolt-down covers marked "RCV"; and with the valve identification number heat branded in 2" high characters; AMETEK or approved equal.
G. Valve boxes shall be sized to fit all equipment with ample room for operation and any required maintenance tasks, Contractor to adjust as needed per field conditions and final assembly of components at no additional cost.

2.10 AUTOMATIC CONTROLLER:

- A. Automatic controller and enclosure shall be as called for on the plans

2.11 ELECTRICAL:

- A. All electrical equipment shall be NEMA Type 3, waterproofed for exterior installation.
B. All electrical work shall conform to local codes and ordinances.

2.12 WIRING:

- A. Remote control wire shall be direct-burial AWG-U/F type, sized according to manufacturer's specifications per the drawings, and in no case smaller than 14 gauge.
B. Connections shall be either Spears Dri Splice or 3M DBR/Y Direct burial type connectors per the details.
C. Common wires shall be white in color. (Where two or more controllers are used, the common wires shall be white with a different color stripe for each controller.) Control wires shall be black (where two or more controllers are used, the control wires shall be a different color for each controller.) These colors shall be noted on as-built plans located on controller door.
D. Two wire systems shall use the required specified wire and connectors per the manufacture.

2.13 SPRINKLERS:

- A. Sprinklers shall be as called for on the plans.

PART 3 - EXECUTION

3.01 GENERAL:

- A. Water Supply:
1. Connections to or for the installation of the water supply shall be at the locations shown on the drawings. Any changes caused by actual site conditions shall be made at no additional cost to the Owner.
B. Electrical Service:
1. Contractor shall make and supply all electrical connections including conduit, wiring, and support breakers/switches to supply the irrigation controller, booster pump, and fertigation system in addition to any required ancillary equipment.
C. Layout:
1. Layout irrigation system prior to excavation and make minor adjustments required due to differences between site and diagrammatic drawings/plans. All equipment to be located within planter areas. It is the Contractors responsibility to notify the Landscape Architect of any items of concern prior to start of installation. Any changes in layout or design by the Contractor not disclosed and approved prior by the Landscape Architect are made at the Contractors sole liability.
D. Diagrammatic Intent:
1. The drawings are purposely diagrammatic, due to scale it is impossible to show all items in their actual location on the plan. The size and location of equipment and fixtures are drawn to scale where possible to show overall system makeup and design. Provide offsets in piping and changes in equipment locations as necessary to conform with structures, hardscape, and to avoid obstructions or conflicts with other work. Contractor shall not willfully install any equipment that would be out of place, cause issue/ interference with other work, or appear to be out of location per industry standards. All equipment shall be located in landscape areas with consistent offsets from hardscape unless specifically approved by the Owners Representative prior to installation for any non-conforming circumstances.
E. Modifications:
1. Contractor shall modifications to the irrigation system to avoid blockage of sprinkler irrigation patterns, to prevent overspray and excessive runoff onto walkway and parking areas, and to provide full irrigation coverage to the planted areas. Such modifications also include adjusting locations and or adding heads as required to spray around trees, light poles, sign posts, other objects that obstruct spray pattern, and any other adjustments required due to field conditions unknown at the time of design. All cost's associated with Modifications are the Contractors sole responsibility as they shall be considered included as part of the bid.
F. Grades:
1. Before starting work, carefully check all grades to determine that the site is properly graded and work may safely proceed, keeping within the specified material depths with respect to finish grade.
G. Inspections:
1. Prior to all work of this section, carefully inspect the current work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Any installation prior to the completion of other trades that requires work to be adjusted or redone is the sole responsibility of the contractor.
2. Verify existing grades are correct and that proper coverage per the details and final equipment locations and heights are correct. Any work installed that is found to be incorrectly installed per the details that requires adjustment to equipment or pipe relocation is the sole responsibility of the Contractor.
3. Verify that irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations.
H. Discrepancies:
1. In the event of discrepancy, notify the Owners Representative and the Landscape Architect prior to starting work.
2. Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved and approval of solution has been granted in writing.
3. Failure of the Contractor to accurately lay out or knowingly install the system in a way that creates design inadequacies without prior acknowledgement to the Owners Representative will be the direct responsibility of the Contractor to remedy without any additional costs or impact to the Owner.

- I. Field Measurements:
1. Contractor shall be responsible to make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Contractor shall coordinate the installation of all irrigation materials with all other trades, including the proper location of required sleeves, and support items that may involve other trades.

3.02 INSTALLATION STANDARDS:

- A. The landscape irrigation system shall be installed in accordance with applicable requirements of the California Plumbing Code and California Electrical Code, and the requirements of the jurisdictional water company or utility district.
B. Manufactured materials and equipment shall be installed in accordance with the respective manufacturer's instructions for the location and conditions including any manufacture specific requirements such as specialized connectors and or hardware regardless of there specific inclusion in the plans or details.

3.03 TRENCHING:

- A. Dig trenches and support pipe continuously on bottom of ditch. Lay pipe to an even grade and snake for contraction and expansion requirements. Trenching excavation shall follow layout indicated on drawings to the depths below finished grade and as noted. Where lines occur under paved area, these dimensions shall be considered below subgrade.
B. Contractor responsible for all trenching activities which shall be in accordance with current safety and OSHA requirements.
C. Provide minimum cover of 24 inches, maximum 30 inches on pressure supply lines 3 inches and larger.
D. Provide minimum cover of 18 inches, maximum 24 inches on pressure supply lines 2-1/2 inches and smaller.
E. Provide minimum cover of 4" for subsurface drip lines, or as recommended by the subsurface drip line manufacturer.
F. Provide minimum cover of 18 inches, maximum 24 inches for control wires.

- G. Provide minimum cover of 12 inches, maximum 16 inches for non-pressure lines.
H. Provide minimum cover of 24 inches, maximum 30 inches for all pipe sleeved under paving.
I. Provide minimum cover of 36 inches in infiltration areas (6" minimum backfill cover over pipe beneath gravel layer).
J. When two pipes are to be placed in the same trench, maintain a six-inch space between pipes as a minimum. No pipe shall be installed directly over or next to another.
K. For pressurized lines, snake as needed in the trench to allow for minor expansion and contraction depending on the type of pipe used. Follow manufactures recommendations.
L. Where it is necessary to excavate adjacent to existing trees, the Contractor shall avoid injury to trees and tree roots. Excavation in areas where 2-inch and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be tunneled under and shall be heavily wrapped with wet burlap to prevent scarring or drying. Where trenching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making a clean cut through the roots. Roots 2 inch and larger in diameter shall be painted with two coats of Tree Seal or approved equal. Trenches adjacent to trees shall be closed within 24 hours. Any damage to tree root structure and resulting decline will be the sole responsibility of the Contractor.
M. After trenches have been excavated, pipe shall be installed, tested, and inspected, and the trench shall be backfilled and compacted without undue delay.

3.04 PIPING:

- A. Piping under existing pavement may be installed by jacking, boring, or hydraulic driving. No hydraulic driving is permitted under asphaltic concrete pavement.
B. Cutting or breaking of existing pavement is not permitted.
C. Carefully inspect all pipe and fittings before installation, removing dirt, scale, and burrs and reaming; install pipe with all markings up for visual inspection and verification.
D. Exercise care in handling, loading, unloading, and storing plastic pipe and fittings: store plastic pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow the pipe to lay flat, avoid undue bending and any concentrated external load.
E. Remove all dented, crushed, scratched, and damaged pipe sections.
F. Contractor shall install concrete thrust blocking at all changes of direction and terminal points of pressure pipe per plans and for a pipe 3" and larger as a standard.
G. All lines shall have a minimum clearance of 6 inches from each other and 12 inches from lines of other trades.
H. Parallel lines shall not be installed directly over one another.
I. In solvent welding/ cementing, use only the specified primer and solvent cement and make all joints in strict accordance with the manufacturer's recommended methods; allow solvent welds at least 15 minutes setup time before moving or handling and 24 hours curing time before filling.
J. Solvent welding/ cementing shall be neat and demonstrate quality workmanship- Primer and Glue shall not be used in excess or applied in a way to affect the portions of the pipe that are not part of the actual connected joint. Any joints with excessive runs/drips, trails, or globing of Glue and or Primer shall be cut out in whole and replaced at cost by the Contractor until an acceptable professional product is completed and accepted by the Owners Representative.
K. 360-degree applicators shall be used to apply primer and solvent on sizes - 2 inches and larger.
L. Center load all plastic pipe prior to pressure testing.
M. All threaded plastic-to-plastic connections shall be assembled using Teflon tape.
N. For plastic-to-metal connections, work the metal connections first. Use a nonhardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.
O. Snake all piping to allow for expansion and contraction due to environmental conditions.

3.05 ASSEMBLIES:

- A. Install all assemblies specified herein according to the respective detail drawings or specifications, using best standard practice.
B. Install backflow assemblies at locations approved in the field and at height required by local codes.
C. Valves shall be installed in Landscape areas whenever possible per Owners Representative standards.
D. Each valve box shall be installed on a foundation of gravel backfill; 3 cubic feet minimum. Place boxes on common bricks bedded in backfill per details. Valve boxes shall be installed with their tops 1/2" inch above the surface of surrounding finish grade in lawn areas and 2" inch above the surface of surrounding finish grade in shrub areas or per details.
E. Valve box risers or extensions shall be installed as needed per field conditions at no additional cost, they shall be by the same manufacture as the installed box.
F. Areas with evidence burying rodents on site or adjacent will require metal fabric or wire mesh installed under boxes prior to gravel and shall be placed at all other possible entry points to protect the equipment from damage. All cost associated with wire fabric installation shall be the responsibility of the contractor.

3.06 BACKFILLING:

- A. Before pipeline trenches are backfilled, the irrigation system shall be pressure tested and the location of irrigation heads modified as required to obtain complete and uniform coverage of each plant's root ball. Refer to field quality control requirements specified herein.
B. Initial backfill on all lines shall be of fine granular material with no foreign matter larger than 2 inch in size. Reference section 217-1.1 of the "Greenbook" for further requirements of bedding material. All protruding rocks or other material capable of damaging pipe will shall be removed from trench walls or bottom prior to placement of pipes or conduits.
C. Compaction of backfill in landscaped areas shall be not less than that of surrounding ground as determined by ASTM D1557.
D. Backfill shall be tamped in 4-inch lifts under the pipe and uniformly on both sides for the full width of the trench and the full length of the pipe. Materials shall be sufficiently damp to permit thorough compaction, free of voids. Backfill shall be compacted to dry density equal to adjacent undisturbed soil and shall conform to adjacent grades.
E. Flooding in lieu of tamping is not allowed without specific prior approval.
F. Under no circumstances shall truck wheels be used to compact soil.
G. Provide washed sand backfill a minimum of 6 inches over and under all piping under paved areas.

3.07 CONTROLLER:

- A. The exact location of the controller shall be approved by the Owners Representative before installation. The electrical service shall be coordinated to this location by the Contractor.
B. Fertigation controller will be located next to fertigation unit per plan if included. Maintenance access shall be provided.
C. Pump starter shall be connected to controller pump starter relay switch.
D. The irrigation system shall be programmed to operate during the periods of minimal use of the design area, and for maximum efficiency.
E. Testing/Certifications Requirements:
1. All manufacturer's requirements for certification and or warranty release of the system in addition to electrical code requirements are the Contractors responsibility to meet and supply proof in the form of documentation of inspection and compliance.

3.08 WIRING:

- A. Wiring shall occupy the same trench and shall be installed along the same route as the pressure supply lines and shall be located below the supply lines wherever possible.
B. Where more than one wire is placed in a trench, the wiring shall be taped together at intervals of 10 feet.
C. All connections shall be of an approved type and shall occur in a valve box. Provide an 18-inch service loop at each connection.
D. An expansion loop of 12 inches shall be provided at each wire connection and/or directional turn, and one of 24 inches shall be provided at each remote-control valve.
E. A continuous run of wire shall be used between a controller and each remote-control valve. Under no circumstances shall splices be used without prior approval.

3.09 FLUSHING THE SYSTEM:

- A. Prior to installation of sprinkler heads, the valves shall be opened and a full head of water used to flush out the lines and risers.
B. Sprinkler heads shall be installed after flushing the system has been completed.

3.10 SPRINKLERS HEADS:

- A. Sprinkler heads shall be installed as designated on the drawings and per Owners Representative standards.
B. Spacing of heads shall not exceed maximum indicated on the drawings.

3.11 ADJUSTING THE SYSTEM:

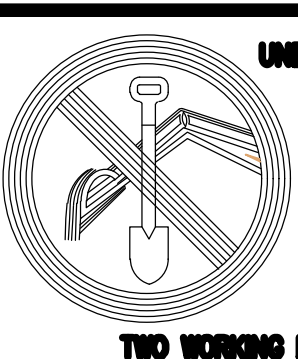
- A. Contractor shall adjust valves, align heads, and verify coverage and pressure levels of each system prior to coverage test.
B. If it is determined by the Owners Representative that additional adjustments, heads or nozzle changes/ additions will be required to provide proper coverage, all necessary changes or adjustments shall be made prior to acceptance and any planting.
C. The entire system shall be operating automatically with permanent water and power properly before any planting operations commence.

3.12 PLANT ESTABLISHMENT:

- A. Contractor to continually check and adjust the system for proper run times, coverage, and function throughout the Plant Establishment Period listed in planting specifications.

3.13 COMPLETION CLEANING:

- A. Upon completion of the work, Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters, walkways, and trails; and remove construction equipment from the premises. Contractor is responsible for removing and cleaning any tracking, tire marking, or other visible signs of damage to existing facilities.



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CONSTRUCTION RECORD	DATE	BY	NO.	REVISIONS	ACCD	DATE	BENCH MARK	SCALE	SEAL	Designed By	Drawn By	Checked By	RECOMMENDED BY:	DATE:	ACCEPTED BY:	DATE:	CITY OF TEMECULA	DEPARTMENT OF PUBLIC WORKS	Fire Station 73	NEW GYM AND APPARATUS BAY W/ STORAGE	27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590	IRRIGATION SPECIFICATIONS	Drawing No.	LI-5	Sheet	of
Contractor													H. J. J. J.	6/18/2026												
Inspector														6/18/2026												
Date Completed																										



LANDSCAPE ARCHITECTURE
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Riverside, CA 92504
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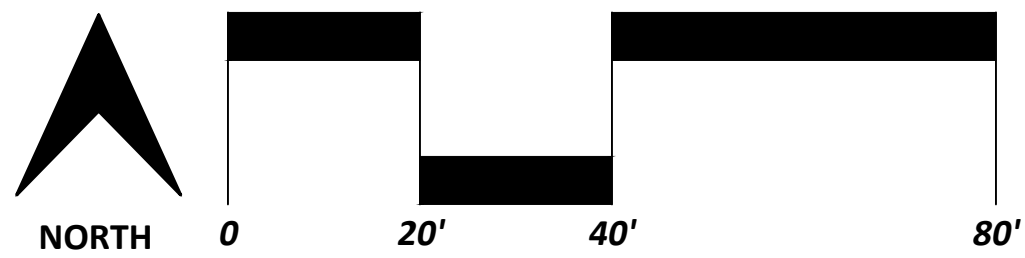
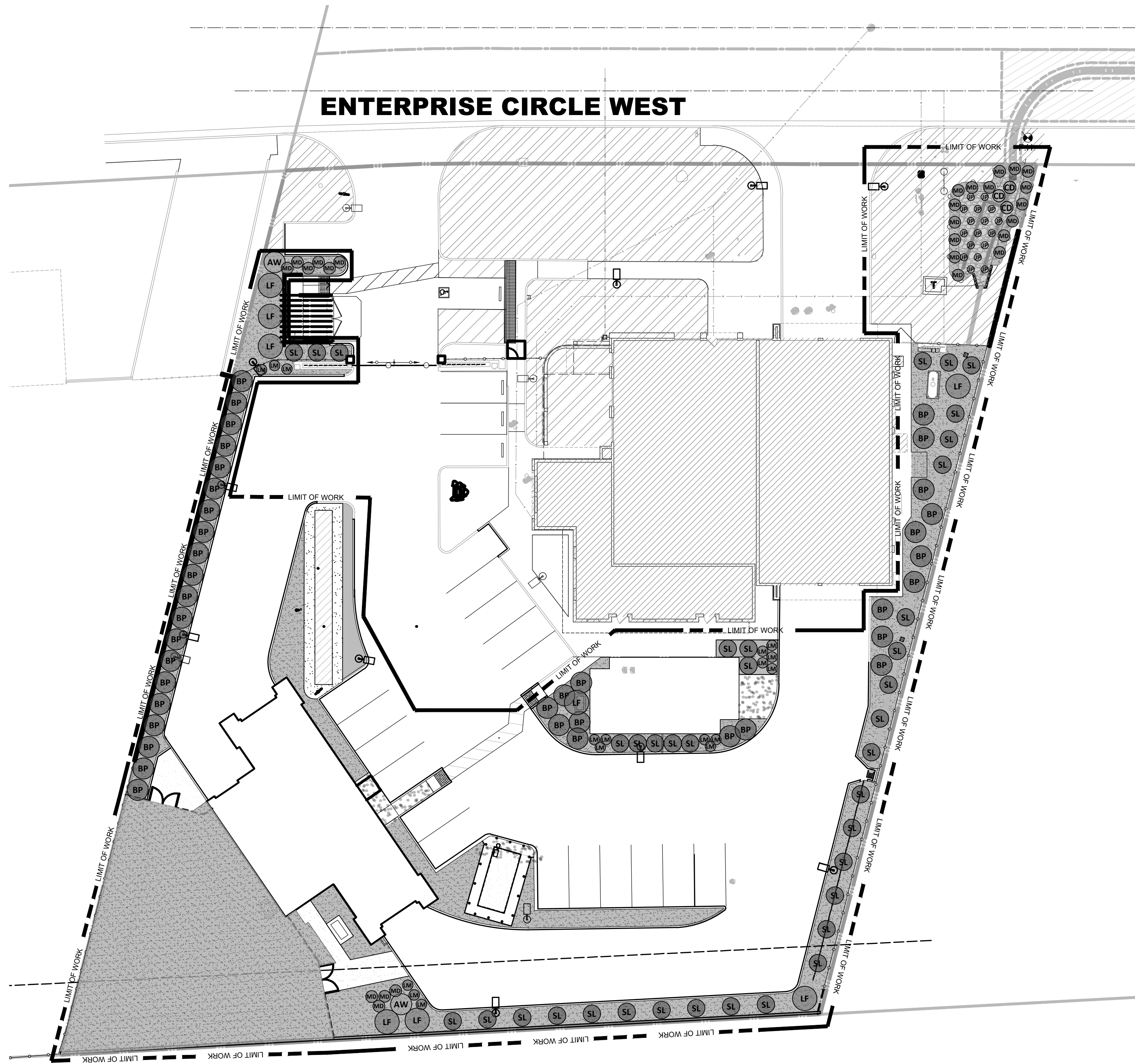
NEW GYM AND APPARATUS BAY W/ STORAGE
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590
IRRIGATION SPECIFICATIONS

Drawing No.

LI-5

Sheet

of



PLANT LEGEND

BOTANIC NAME	COMMON NAME	SIZE/SPACING	WUCOLS	QTY.	DETAIL
--------------	-------------	--------------	--------	------	--------

SHRUBS & GROUND COVER

AW	Agave weberi	WEBER'S AGAVE	1 GAL	LOW	2	'A', SHEET LP-2
BP	Baccharis pilularis 'Pigeon Point'	PIGEON POINT COYOTE BUSH	1 GAL	LOW	38	'A', SHEET LP-2
BP	Lantana x 'Dallas Red'	DALLAS RED LANTANA	1 GAL	LOW	17	'A', SHEET LP-2
LF	Leucophyllum frutescens 'Green Cloud'	GREEN CLOUD TEXAS RANGER	1 GAL	LOW	8	'A', SHEET LP-2
MD	Muhlenbergia dubia	PINE MUHLY	1 GAL	LOW	26	'A', SHEET LP-2
SL	Salvia leucantha 'Santa Barbara'	SANTA BARBARA MEXICAN SAGE	1 GAL	LOW	38	'A', SHEET LP-2

BASIN PLANTING

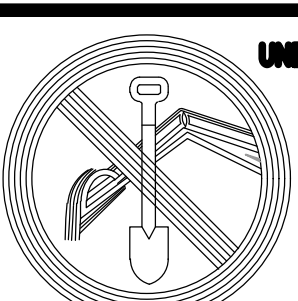
CD	Carex divulsa	GRAY SEDGE	1 GAL	LOW	3	'C', SHEET LP-2
EL	Juncus patens 'Elk Blue'	ELK BLUE CALIFORNIA GRAY RUSH	1 GAL	LOW	17	'C', SHEET LP-2

HARDSCAPE & EXISTING LANDSCAPE

	3" MIN. LAYER DECOMPOSED GRANITE; CALIFORNIA GOLD.	10,447 SF
	3/4" CRUSHED ROCK; GRAY	341 SF
	EXISTING LANDSCAPE CONTRACTOR TO PROTECT IN PLACE - ANY LOSSES DUE TO CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR BY THEIR SOLE EXPENSE.	

PLANTING GENERAL NOTES

- PRIOR TO THE START OF PLANTING THE CONTRACTOR SHALL CERTIFY ALL WEED AND PEST CONTROL MEASURES HAVE BEEN COMPLETED AND ACCEPTED BY THE OWNER REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY FINAL GRADE CERTIFICATION PRIOR TO THE START OF SOIL AMENDING AND PLANTING OPERATIONS, INCLUDING THE CORRECT DRAINAGE SLOPE PERCENTAGES AND FLOW LINES ARE PRESENT AND ALL DRAINS ARE SET TO THE CORRECT HEIGHT AND PLANTER AREAS ARE AT THE CORRECT ELEVATION VERSUS HARDSCAPE.
- ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND TOWARDS DRAINAGE INFRASTRUCTURE AT A MINIMUM 2% OR PER CIVIL PLANS.
- PLANT COUNTS ARE SHOWN FOR CLIENT CONVENIENCE ONLY - CONTRACTOR SHALL VERIFY ORDER AND COUNT OF ACTUAL SYMBOLS PER PLAN FROM THEIR OWN PERSONNEL'S TAKE-OFF.
- PLANT SYMBOL SIZE REPRESENTS PLANT AT TYPICAL MATURE SIZE, PLANT SPACING AS SHOWN ON PLAN.
- ALL PLANT MATERIAL SHALL BE OF A SIZE, CHARACTER, AND QUALITY THAT MATCHES OR EXCEEDS THE APPROVED SUBMITTAL MATERIAL, ANY FOUND TO BE SUBSTANDARD WETHER PRIOR TO OR AFTER BEING PLANTED SHALL BE REMOVED AND REPLACED TO MEET THE REQUIRED STANDARD AT THE CONTRACTORS COST.
- TREES/ SHRUBS/ GROUNDCOVERS MAY BE NATIVE TO CALIFORNIA AND ONLY BE SEASONALLY AVAILABLE. ANY REQUESTED SUBSTITUTIONS MADE DUE TO AVAILABILITY SHALL BE ALTERNATIVE CALIFORNIA NATIVE SPECIES AND SHALL BE PRIOR APPROVED BY LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL 15 GALLON AND LARGER SHALL BE SPOTTED FOR FINAL LOCATION PRIOR TO EXCAVATION BY OWNERS REPRESENTATIVE.
- PLANTING ADJUSTMENTS/ REALIGNMENT DUE TO FINAL FIELD LOCATIONS OF UTILITIES SHALL BE INCLUDED AS PART OF CONTRACTOR BID. NO PLANT MATERIAL SHALL BLOCK OR OBSTRUCT LIGHTING, SIGHT LINES, OR CREATE ANY SAFETY HAZARDS FOR THE GENERAL PUBLIC.
- ALL TREES WITHIN 6' OF HARDSCAPE OR STRUCTURES SUCH A WALLS SHALL RECEIVE ROOT BARRIER PER DETAILS.
- TREE STAKING PER THE INCLUDED DETAILS; AREAS OF HIGH WINDS OR TREE MATERIAL REQUIRING ADDITIONAL STAKING DUE TO DELIVERED SPECIES SIZE AND STRUCTURE SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
- TREE STAKING IS A TEMPORARY SUPPORT MEASURE AND SHALL ONLY BE USED UP TO THE POINT OF PROPER ROOT AND TRUNK DEVELOPMENT AT WHICH TIME STAKING SHALL BE REMOVED. ALL NURSERY TRUNK STAKES SHALL BE REMOVED AT THE TIME OF PLANTING.
- NO TREE STAKING SHALL CONTACT THE CROWN BRANCHES OF TREES- THE CONTRACTOR SHALL CUT THEM DOWN AS NEEDED IF MINIMUM SOIL EMBEDMENT IS MET.
- ANY FIRE OR PUBLIC WORKS STANDARDS THAT REQUIRE GREATER SPACING OR OFFSET FROM STRUCTURES OR INFRASTRUCTURE SHALL TAKE PRECEDENCE OVER PLANS.
- PLANT WATER USE VALUES ARE PER WUCOLS IV PLANT LIST PER MWEO REQUIREMENTS.
- SOIL MANAGEMENT PLAN SHALL CALL FOR AND CONTROL THE REQUIRED SOIL AMENDMENTS AND ANY SOIL MITIGATION IF REQUIRED. THE SOIL MANAGEMENT PLAN SHALL BE THE AGRONOMIC SOIL TEST/ REPORT INCLUDED WITHIN THE PLANTING DETAILS OR AS SUPPLIED BY THE CONTRACTOR AND APPROVED BY THE LANDSCAPE ARCHITECT IF NOT PART OF THE PLANS.
- CONTRACTOR SHALL COMPLETE PLANTING PIT INFILTRATION TESTS PRIOR TO TREE/SHRUB PLANTING WITH VERIFICATION FROM LANDSCAPE ARCHITECT AND OR THE OWNER'S REPRESENTATIVE, ANY ADDITIONAL REQUIRED ROOT ZONE DRY WELLS, OR BREATHER TUBES SHALL BE INCLUDED BASED UPON SOIL MANAGEMENT PLAN FINDINGS AS PART OF THE BID.
- RODENT/PEST CONTROL IS THE CONTRACTORS SOLE RESPONSIBILITY UNTIL FINAL ACCEPTANCE BY THE OWNER- THIS SHALL INCLUDE TREATMENTS, DETERRENTS, AND ANY OTHER PROTECTIONS AS REQUIRED. THE CONTRACTOR DURING BIDDING SHALL REVIEW THE SITE AND ADJACENT AREAS FOR SIGNS OF PEST PRESENT AND BID ACCORDINGLY.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE AND ANY REPLACEMENTS THROUGH THE ESTABLISHMENT AND MAINTENANCE PERIOD, THIS SHALL INCLUDE STAKING, MULCH REPLENISHMENT, PLANT REPLACEMENT, AND ANY OTHER WORK REQUIRED TO PRESENT A FULLY COMPLETED AND INSTALLED PROJECT PER THE PLANS AND SPECIFICATION.
- ANY PLANT MATERIAL REQUIRING REPLACEMENT SHALL BE REPLACED IN KIND WITHIN SEVEN DAYS OF NOTICE OF REJECTION OF MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMAGED LANDSCAPE AREAS BEYOND THE LIMIT OF WORK, INCLUDING REPAIRING ANY IRRIGATION LINES/SPRINKLER HEADS, WHERE DAMAGE IS A DIRECT RESULT OF LANDSCAPE CONSTRUCTION ACTIVITIES AND OR THEIR SUB-CONTRACTOR'S ACTIVITIES. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATION OF ORIGINAL WORK OR PLANTS, UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE.



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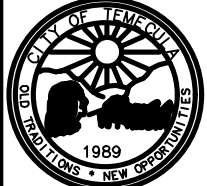
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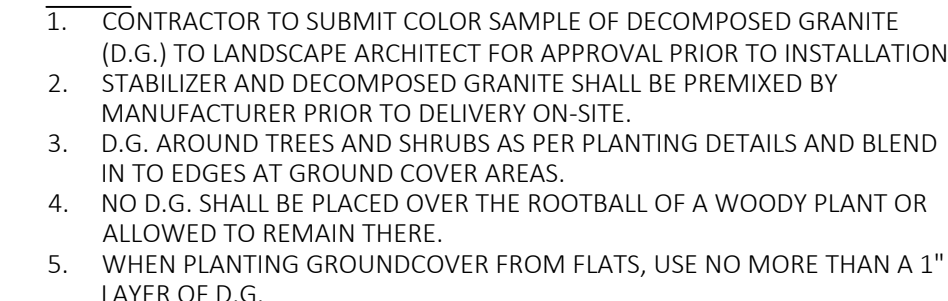
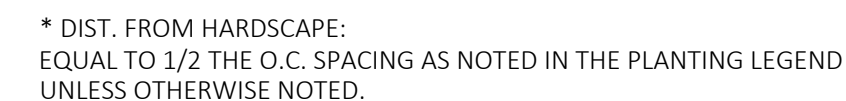
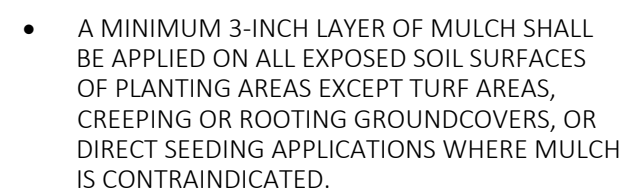
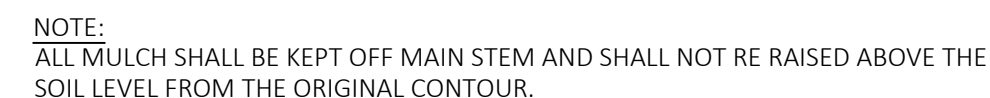
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BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____ NAME _____ DATE _____

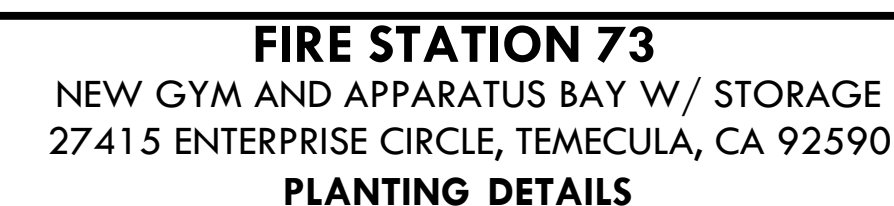
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Inspector							Vertical														
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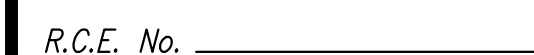
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Contractor								Horizontal
Inspector								Vertical
Date Completed								



DATE: 6/18/202



PLANTING

PART 1 - GENERAL

Refer to standard contract documentation for items outside of technical installation scope.

1.01 SCOPE OF WORK:

A. Work Included:
All labor and materials, tools, equipment, facilities, transportation, permits, and services necessary for and incidental to performing all operations in connection with furnishing, delivery, and installation of Landscaping, complete as shown on the drawings and/or specifications as part of the Contract documents.

Work includes, but is not limited to the following:

1. Provide and verify fine grading in all areas to be planted with positive drainage towards inlets, drains, and collection points per the grading plans.
2. Soil testing and analysis with specific recommendations based on the projects planting palette.
3. Furnish and apply weed control to all planting areas after the completion and acceptance of the Irrigation System- the Contractor is responsible for supplying all needed irrigation including additional temporary overhead irrigation to facilitate germination of all areas regardless of final irrigation coverage.
4. Preparation of soil in all planting areas per the soil analysis report and recommendations.
5. Furnish and install all plant material including, trees, shrubs, vine, and ground-covers if called for as called for by plans and details.
6. Furnish and install any plant related drainage devices per the plans and details, including sumps, drainage pipes, and air vents.
7. Remove temporary nursery stakes and replace with establishment staking per the plans and details.
8. Furnish and install mulches, including organic, aggregate, or decorative if called for per the plans and details.
9. Furnish and install all boulders, stones, and or outcroppings if called for per the plans and details.
10. Furnish and install any specified Sod or turf if called for per the plans and details.
11. Furnish and install any planter separation devices such as redwood headers, aluminum edging, and or mow curbs if called for per the plans and details.
12. Furnish and install and then place any stones or boulders as root protection/shading devices if called for per the plans and details for shrubs and trees.
13. Maintenance and care of all plants and landscape material until final acceptance and official notice of completion of specified establishment and maintenance periods.
14. Guarantee of all installed material and workmanship for specified period.

B. Related Work:

Contractor to coordinate and be aware of other previously or simultaneously in process work affected by their own scope(Contacts, Plans, and As-Built's available from Owner):

1. Concrete and flat work including sidewalks, curb and gutter, V gutters
2. Asphalt Paving
3. Utilities
4. Civil/ grading

1.02 RELATED SECTIONS:

A. Related work specified elsewhere:

1. 32 84 00 Planting Irrigation
2. 32 90 00 Planting Maintenance

1.03 GUARANTEE:

- A. All trees installed under the contract shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one (1) year.
- B. All plant material 15 gallon or larger shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one (1) year.
- C. During the guarantee period, any material found to be dead, missing, or in poor condition shall be replaced by the Contractor within seven (7) days of written notification. The Owners Representative/ Landscape Architect shall be the sole judge as to the condition of the material.
- D. Replacement shall be made in accordance with these specifications and the plans.
- E. Material and labor involved in replacing plant material shall be provided by the Contractor at no additional cost to the Owner.

1.04 REFERENCES:

- A. The Standard Specifications for Public Works Construction, "Greenbook", latest edition, is reference as if herein contained and the contractor shall keep a copy at the project site. These Specifications shall supersede conflicts with information given in the "Greenbook", unless otherwise determined by the Owner or their designated representative.

1.05 QUANTITIES AND TYES:

- A. Plant materials shall be furnished in the quantities and/or spacing as shown and noted for each location, and shall be the species, kinds, sizes, etc. as symbolized and/or described in the "Plant Materials Legend", as indicated by the drawings. The LA has provided this list and/or counts only as a convenience to the Owner and Contractor and assumes no responsibility for its accuracy. As part of his/her bid the Contractor shall be solely responsible for accurately identifying the counts and species as shown on the plans by symbols.

1.06 VERIFICATION OF DIMENSIONS:

- A. Dimensions are approximate, before proceeding with any work, Contractor shall verify all dimension and shall immediately inform the L.A. and owner of any discrepancies between the drawings and/or specifications and actual field conditions. Minor adjustments to planting locations for interference with infrastructure or other site features shall be included in the bid by the contractor. No work shall be done in any area where there is such a discrepancy until approval has been given by L.A. and owner. Any work done without notification and prior approval will be the sole responsibility of the Contractor to remedy as required by L.A. and Owner.

1.07 INSPECTIONS:

1. Inspections will be required to observe and verify the work. The Contractor shall contact the Owners Representative at least 48 hours (2 working days) in advance of an anticipated inspection. An inspection will be required at each of the steps listed below:
 1. Upon completion of fine grading, and prior to commencement of soil preparation, for acceptance of fine grading work and taking of soils samples.
 2. Inspection of completed finish grading work per this section following soil amendment work.
 3. Percolation test of selected planting locations.
 4. On site delivery of plant material.
 5. When trees and shrubs are spotted for planting, but before planting holes are excavated.
 6. When planting and all other indicated or specified work has been completed.
 7. During application of pre-emergent chemical.
 8. At start of plant establishment and maintenance period.
 9. At the end of the plant establishment period, concurrent with final acceptance of the project for maintenance by the Owner. This acceptance for maintenance will be confirmed in writing by the Landscape Architect or Owners Representative.

1.08 SOILS TEST:

- A. Agronomic soil analysis shall be required with interpretation and recommendations (include texture, organic matter, estimated nitrogen release, Phosphorus (P 1, P 2), potassium, magnesium, calcium, soil pH, hydrogen, cation exchange capacity, percent base saturation, soluble salts, excess lime rate, sodium and boron at the acceptance of fine grading. Total amount of tests required shall be as stated per the per plans or at a minimum of 1 test per 25,000 sq. ft. whichever is greater. The tests shall be individual to identify any irregularities in soil types on site and amend them as necessary per plant or area needs. Creating a single composite mix of all samples is not allowed. The final approved recommendation shall take precedence over the minimums listed herein or elsewhere in the plans. Recommendations shall be based on the plants listed per the planting plans specifically. The recommendations shall call for any needed special requirements for the listed trees, shrubs, ground covers, turf, and or any other special specie requirements. Any additional costs due to recommendations of the soil test shall be the responsibility of the Contractor who has reviewed the site during bidding and made their own observations and tests as needed to make an accurate bid based on the site conditions and their experience as a professional contractor. See plans for amount and locations of tests required based on project size. All costs for testing shall be the responsibility of the Contractor and included in their bid as well as the proper scheduling allowing for analysis and reporting lead times.

1.09 SUBMITTALS:

- A. Contractor to submit date stamped photos documenting current appearance of each plant listed in the plant legend. Photos shall clearly document size and condition from the nursery, including height, spread, and size of caliper noted for trees for approval by Landscape Architect.
- B. In addition to photos the Contractor shall supply documentation of the required quantities available from the supplier at the time of

submital, it is the Contractors responsibility to procure all plant material ahead of delivery once the submittal is approved. Any additional cost as a result of scheduling or order of operations for holding, growing, and caring for plant material shall be included in the Contractors bid.

- C. Contractor to submit written recommendations from a Certified Pest Control Advisor for all herbicides and pesticides to be used on site for approval by Landscape Architect.
 - D. Contractor to submit samples of Mulch or other listed ground cover material per plan in a 1-gallon zip-lock type plastic bag for approval by Landscape Architect.
 - E. The following written certifications and or delivery tickets are required to be submitted to the Landscape Architect within 10 working days upon delivery of the respective materials to the job site:
 1. Total Quantity of commercial fertilizers by type
 2. Total Quantity of soil amendments and conditioners by type
 3. Total Quantity of mulch
 4. Total Quantity of iron sulphate
 - F. Also, all items per section 32 92 00 (turf seeding or sod)
- Failure to supply proof of delivery to the site of the required products shall cause a delay in scheduled billings being approved until the documentation is approved in full.
- F. All bagged products (fertilizers, etc.) shall stay on the site in a neat and orderly manner until the final approval by the Landscape Architect.

1.10 SUBSTITUTIONS:

- A. Substitutions for any indicated plant material shall be permitted only if the provided substituted materials are approved in advance at the start of work, and if found to be acceptable by the L.A. with no additional costs to the owner. The L.A. has final authority on the approval of substitutions based on their opinion of overall impact to plant palette and the substitutions previous performance. No substitutions shall be allowed based on failures of the Contractor to locate and reserve plant quantities at the time of award. For any additional required inspections, nursery visits, or staff time spent verifying additional plant material after the original approval will be the responsibility of the Contractor and charged at the Landscape Architects current rates at time of Design Award.

1.11 WARRANTY:

- A. General:
The Contractor shall guarantee all plant material against all defects and fault of material and workmanship/installation for the entire combined period of the plant establishment/maintenance periods. The Contractor shall guarantee all trees and plant material 15 gallon and larger for a period of one year from completion of plant establishment. Any trees that fail or are found to be in decline will be replaced by the Contractor at no cost to the owner. The final decision on the health and status of the material will be the sole discretion of the Landscape Architect and or the City's Representative.
Should any problem with the planting installation be discovered within the guarantee period, it shall be corrected by the Contractor at no additional expense to the Owner within ten (10) calendar days of receipt of written notice from the Owners Representative. When the nature of the repairs as determined by the Owners Representative constitute an emergency (i.e. Tree Failures, etc.) the Owner may proceed to make repairs at the Contractor's expense. Any and all damages to existing improvement resulting either from faulty materials or workmanship, or from the necessary repairs to correct same, shall be repaired to the satisfaction of the Owners Representative by the Contractor, at all no additional cost to the Owner.

PART 2 - MATERIALS

2.01 FERTILIZER, SOIL AMENDMENTS, AND CONDITIONERS:

Samples of soils amendments and plants shall be submitted for inspection and stored on the site until furnishing of materials is completed. Photographs may be used for Plant Material if they include the following: date of image, person or object for scale, nursery name and contact info, multiple views of any items 24" or larger. Delivery may begin upon approval of samples and completed grow and kill period, or as directed by the Owner's Representative. Substitutions in any material will not be permitted unless presented during bidding and specifically approved in writing by the Owner's Representative in the form of an official bid addendum.

A. Soil and Soil Amendments:

1. Fertilizer and amendments for soil conditioning and maintenance shall bear the manufacturer's guaranteed analysis and shall be as recommended in the required soils laboratory report.
2. Fertilizer tablets if called for shall be Gro-Power 7 gram 20-10-5, to be applied per Manufacturer's Specifications.
3. Myco tabs if called for shall be TRI-C 1.68 gram Myco Tabs(Mycohrizal + NPK) to be applied per Manufacturer's Specifications.
4. Myco Paks if called for shall be TRI-C 4 gram Myco Paks to be applied per Manufacturer's Specifications.
5. Premium Humate if called for shall be TRI-C premium humate applied per manufacturer's specification for soil preparation via Rototilling.
6. Revival Plus if called for shall be TRI-C Myco Revitalz plus and installed in conjunction with TRI-C humate per manufacturer's specifications.
7. Organic amendments if called for shall be nitrolevel redwood sawdust (.5% actual nitrogen), or Fir Bark 1% nitrogen). It shall be fine textured, having minimum 80% passing #8 screen and minimum 95% passing #4 mesh screen. Salinity shall be no higher than 3.5 millilnhs per centimeter at 25 Centigrade as measured by saturation Pine shall not be used as an organic amendment.

B. Application Rates

Application rates when called for shall be at a minimum as listed below - Note: Soil analysis may adjust listed rates and shall take precedence.

1. Fertilizer tablets- Apply 7 grams Gro-Power tablets at the following rates per plant by size:

Shrubs:

-1 gal. shrub - 2 tablets

-5 gal. shrub - 6 tablets

-15 gal. & 24" box shrubs - 12 tablets

Ground Cover:

Apply one 7 gram Gro-Power tablet per rooted ground cover cutting. Refer to Manufacturer's Specification for installation procedure.

2. Myco tabs shall be used at the following rates per plant by size:

-1 gal. - 2 tabs

-5 gal - 8 tabs

-15 gal - 16 tabs

-24" box - 22 tabs

-36" box - 28 tabs

3. Myco Pak shall be used at the following rates per plant by size:

-1 gal - 1 pak

-5 gal - 3 paks

-15 gal - 8 paks

4. Premium humate shall be incorporated at 50lbs. per 100 square feet

5. Myco Revival Plus shall be topically applied per manufacture and watered in accordance with the manufacture's instructions

A. INORGANIC CONDITIONERS:

Inorganic conditioners shall be agricultural grade gypsum, soil sulfur and iron sulphate. Iron sulphate shall be ferric sulphate or ferrous sulphate in pelleted or granular form containing not less than 18.5% iron, expressed as metallic iron, and shall be registered as an agricultural mineral with the State Department of Agriculture in compliance with Article 2 "Fertilizing Materials", Section 1030 of the Agriculture Code.

B. PLANTS:

1. All plants shall be true to name, and one of each bundle or lot shall be tagged with the name and size of plants in accordance with the standards of practice recommended by American Standard for Nursery Stock ANSI Z601-2014. The root condition of plants furnished in containers shall be determined by removal of earth from the roots of not less than two plants nor more than 2% of the total number of plants of each species or variety except when container-grown plants are from several different sources: in which case, the roots of not less than two plants of each species or variety from each source shall be checked by the Owners Representative / Landscape Architect at this option. The selection of plants to be checked will be made by the Owners Representative / Landscape Architect. All plants rendered unsuitable for planting shall be considered as samples, and replacements shall be provided at no additional cost; in case the sample plants are found to be defective, the entire lot or lots of plants represented by the defective samples will be rejected.
2. All trees and shrubs supplied by Contractor shall be of the specified standard height and diameter set by the American Standard for Nursery Stock. The height of the trees shall be measured from the root crown to the last division of the terminal leader and the diameter shall be measured six (6) inches above the crown roots. The trees shall stand erect without support.
3. No plants or trees shall be accepted with compromised root systems, including girdling, root bound, and or recently up planted from smaller container stock.
4. Container stock shall have grown in the container for at least 6 months, but not over two years.
5. Do not prune any plants prior to delivery without specific prior approval.
6. Material that has been trimmed, damaged, or does not meet the standard approved via photographs will be rejected.
7. All cost associated with returning and replacing rejected material shall be the Contractors sole responsibility.
8. Substitutions shall not be permitted unless the contractor can prove in writing that no specimens can be located within 100 miles of the project. A minimum of 5 notices from suppliers stating the plant is not available are a required.
9. At all times plants shall come from Nursery stock grown in similar conditions and climate zones as associated with the project.

2.02 BACKFILL MATERIAL:

- A. Topsoil shall be free from noxious weed seed and shall be of a loam characteristic, fertile and friable.
- B. Wood shavings shall be leached nitrogen fortified and shall be free of foreign matter.
- C. Native plantings shall use native soil only for backfill.
- D. Soil used for backfill of planting pits for bidding purposes shall be enriched using the following blend per cubic yard (agronomic soil test recommendations shall take precedence where these minimum amounts are exceeded):
 - 60% site soil or approved import 40% wood shavings
 - 17 lbs. soil condition/fertilizer (Gro-Power Plus) 1 lb. iron sulphate
- E. All soil backfill shall be bulk mixed, not individually mixed at each plant pit.

2.03 STAKES AND TIES:

- A. Tree stakes shall be 3" dia. x 10-foot-long straight-grained copper naphthenate treated lodgepole pine unless called for differently per the plans. Stakes shall be free from knots, checks, splits, or disfigurement.
- B. Tree ties shall be "Cinch-Tie Tree Support" supplied by V.I.T. Co., Escondido, California, (760) 480-6702. For 5- 15-gallon trees, Model CT24; for 24"- 36" box trees, Model CT32. Total amount of ties per tree shall be as called for by the Details.
- C. Multi-stem trees and 48" box trees and larger shall require underground tree guying/earth anchors system that include strapping of the root ball and soil anchors. Duckbill Root Ball anchor sized per manufactures recommendations or approved substitution shall be required.

PART 3 - EXECUTION

3.01 LANDSCAPE GRADING:

- A. The Contractor shall complete Fine grading as required by adding soil, removing surplus soil, removing rocks and debris over 1 inch in diameter within the top 2" of soil in flat and slope areas, and removing rocks over 2" in diameter within the top 6" of soil in areas with slopes less than 3:1. Bring all areas to be landscaped to fine grade. All areas shall slope to drain. Flow lines shall be established to drain inlets, existing road curbs, sidewalks, and or other drainage conveyance structures as shown on the grading plans. Contractor shall notify Owners Representative/ Landscape Architect of any areas that appear to have drainage issues prior to soil preparation for complete mitigation and or correction.
- B. The Contractor shall key/cut and remove all soil for mulch, ground cover, turf interfaces with hardscape per the details.

3.02 WEED CONTROL MEASURES:

- A. Upon completion and acceptance of all fine grading work and prior to soil preparation, the Contractor shall perform weed control (Grow/Kill) measures as follows:
 1. Irrigate all areas designated to be planted for a minimum of 10 minutes per setting, two settings per day for 14 days continuously to germinate existing seed bank.
 - a) In instances of point source or drip irrigation it is the Contractors responsibility to completely irrigate all planting areas which may require additional or supplemental irrigation above the designed system per plans. This may include adding above ground temporary irrigation, watering from water trucks/tanks, and or hand watering and shall be included in the Contractors bid.
 2. Apply a contact non selective herbicide per the written recommendations of a Certified Pest Control Advisor specific to the site- allow 7 days or sufficient time to pass to allow a complete kill of all weeds germinated.
 3. Remove all weeds present including any viable root systems and above ground vegetation, this includes all weeds within the limit of work- not only planting areas.
 4. Repeat step one for only 7 days and then follow steps 2-3 as above until weed cover is less than 1%.
 5. Contractor shall call for inspection and verification of the completion of the Grow Kill Period prior to planting.
 6. Contractor to indicate on master schedule total grow kill period as part of submittals.
 7. If the Contractor wants to phase the grow kill operation, the Contractor will be responsible for providing plans documenting treatments including start and stop dates, in addition to reporting and requesting inspections for verification.
 8. Any failure by the Contractor to continually irrigate or miss herbicide or clean up windows as listed above would require the process starting over from step one.
- B. Contractor is responsible for the purchase and erection of all signs and barriers required to prevent intrusion into treated areas in addition to all required forms of public notice as required by local governing boards and or manufacture requirements for the safe and responsible use of products.
- C. No material or method applied shall affect the success or ability of hydroseeded or planted material to germinate/thrive.

3.03 SOIL PREPARATION:

- A. All fine grading and mounding and all weed control measures shall be documented, completed, and approved prior to any soil preparation.
- B. This work shall not commence until the agronomic soils tests have been completed. Should 30 calendar days elapse between completion of soil preparation and commencement of planting, all areas shall be prepared again.
- C. In planting areas with gradients less than 3:1, a layer of soil amendments shall be spread and rototilled into the soil to a minimum depth of 6 inches, or as required by the soils report, so that the soils shall be loose, friable, and free from all rocks, sticks, and other objects undesirable to planting.
- D. The following soil amendments shall be used for estimating purposes and added per 1,000 square feet to all planting areas with gradients less than 3:1 (agronomic soil test recommendations shall take precedence where these minimum amounts are exceeded). Contractor shall be responsible for any additional cost due to Soil report recommendations and shall have inspected and understood the current soil conditions at time of Bid (Note: the following is for typical ornamental planting installation- they will not apply to Native plantings, see Soil Management report for further information if included in plans)
 1. 3 cubic yards organic amendment
 2. 200 pounds soil conditioner/fertilizer (Gro-Power Plus)
 3. 25 pounds gypsumAll landscape areas shall be re-fine graded to "dress out", maintain, and/or reestablish grades and flow lines as approved prior to amending the soil. Fine grades will be inspected upon completion. Contractor shall not proceed with planting work until fine grades have been inspected and accepted by the Landscape Architect.
- E. Moisture Content - The soils shall not be worked when the moisture content is so great that excessive compaction will occur; and not when it is so dry that dust will form in the air or that clods will not break easy. Water shall be applied, as necessary, to provide ideal moisture content for tilling, planting, and required dust control.
- F. Note: Special soil preparation areas such as drainage basins or areas with different agronomic requirements shall be per plan and or notes/details.

3.04 FINISH GRADING:

- A. After completion of all soil preparation work the Contractor shall finish grade all planting areas filling as needed or removing surplus dirt, removing rocks and debris over 1 inch in diameter, and floating to a smooth uniform grade. All areas shall slope to drain. Flow lines shall be established to inlets, road curbs and/or a sidewalk as shown on the plans and as directed.

3.05 PLANTING:

- A. Prior to planting the Contractor shall dig test planting holes for percolation tests. Per direction of the Landscape Architect, locations shall be selected to address all soil types and situations on site, such as examples for slope, exposure, soil type, etc. Holes will be dug to the depth per planting details and filled to 25% capacity with water. Test start time will be documented and checked every half hour until fully infiltrated to ensure proper drainage. Any areas found to not infiltrate per the recommended time frame for the selected material will require additional drains and specialized planting techniques per the details for Trees and Shrubs in Wet Soils, which require deeper pits, additional gravel sumps, and drain pipes. The Contractor shall include the cost of these additional items per the site conditions at the time of bidding and if not installed shall refund a credit.
- B. Trees and Shrubs: Plant holes shall be dug to size as indicated in the drawings. Before trees and shrubs are set in the holes, all holes shall be pre-watered as follows: All planting holes shall be filled to the brim with water and allowed to drain before any planting is done. If any holes fail to drain then they will be added to the holes for wet soils treatment as stated in item "A" above.
- C. Soil surrounding planting pit shall be in a friable condition and moist to a depth of 8".
- D. Backfill using specified soil mix per the details to within 8" of finish grade. At this depth, place the fertilizer tablets or Mycro packs/ tans per details. Complete backfilling to finish grade.
- E. Plants and Trees shall be planted at such a depth that the crown roots bear the same relative position to finish grade as they did to the soils where they were grown. At no time shall the soil level be raised around the crown. If the soil level per grower's container is higher than base of the trunk flare the Contractor shall remove excess soil per ISA standards and BMP's. Backfill after planting shall be compacted carefully into place without injuring the roots of the tree or breaking up the ball of earth surrounding the roots.
- F. Contractor shall create and mound soil as required for water basins per the details including adding slope grades, stones for root cover/ soil moisture protection on southwestern exposures, trunk protection, and additional straw watties when required.
- G. All excess soil spoils and excavated debris shall be removed from the site by the Contractor.

3.06 GROUND COVER AND VINE PLANTING:

- A. Soil preparation and fine grading shall be completed prior to ground cover planting.
- B. Add Soil Amendments and conditioners to ground cover areas per Section 3.03, part of the above planting specifications.
- C. All rooted ground cover and bare dirt areas are to be treated with a pre-emergent chemical (subject to approval by the Landscape Architect prior to application as recommended by a CPA). Chemicals are to be applied by a DPR Qualified or Certified applicator. This treatment shall be applied at the following times during the contract: a) before planting, b) at beginning of plant establishment period, and c) at the end of plant establishment period. The Owners Representative / Landscape Architect shall be given a minimum of 48 hours (2 working days) notice prior to each application. No chemicals shall be applied other than in the presence of the inspector.
- D. Ground cover shall be planted below all shrubs and trees to within 12" of the shrub main stem unless otherwise noted on the plans.
- E. Ground cover and vines shall be planted in moist soil and spaced as indicated on the plans.
- F. Each plant shall be planted with its proportionate amount of flat soil to minimize root disturbance. Soil moisture shall be such that the soil does not crumble when removing plants.
- G. Following planting, ground cover and vine areas shall be re-finished graded to restore smooth finish grade and to ensure proper surface drainage. All excess soil spoils and excavated debris shall be removed from the site by the Contractor.
- H. A 3-inch layer of mulch per plans shall be spread over the planted areas. Watering shall begin immediately following mulching.
- I. When necessary to prevent plant damage from pedestrian traffic during the initial growing stage, the Contractor shall erect temporary protective fencing around the plants and be removed at the end of the plant establishment period.
- J. Vines shall be tied to walls, fences, etc., in the manner prescribed on the plans and details. At a minimum the contractor shall provide attached fasteners and guying for vines requiring support. Temporary staking shall be removed at the beginning of the plant establishment period.

3.07 TREE STAKING:

- A. Stake trees as per planting details. No metal wire shall circle any part of any tree.
- B. All nursery stake shall be removed at the time of planting.
- C. Contractor to adjust staking as needed for locations in high wind areas, including adding more restraints and stakes per the plans and current ISA guidelines at no additional cost.

3.08 WATERING:

- A. It shall be the Contractor's responsibility to maintain a balanced watering program to ensure proper growth until final acceptance of the work.
- B. Immediately after planting, apply water to each tree, shrub or vine. Apply water using a gentle spray pattern via a water wand in the planting hole until the material about the roots is completely saturated from the bottom of the hole to the top of the ground.
- C. Apply water in sufficient quantities and as often as seasonal conditions require to keep the planted areas moist at all times, well below the root system of plants.
- D. Contractor shall be responsible for monitoring all planting areas and adjusting irrigation as needed for severe weather conditions such as high wind or high heat waves including working weekends and holidays as any part of their Bid based on project timelines and schedules per seasonal requirements.
- E. For turf or hydroseed installation using Eco Mat or other subsurface irrigation the Contractor will be responsible for any head adjustments or hand watering required to germinate the seeds against any hardscape buffer areas (typically 24") at no additional cost.
- F. Irrigation:
 1. Contractor shall properly and completely maintain the irrigation system. Contractor to program controller per watering schedule on irrigation plans and adjust in the field as necessary. Overhead irrigation areas to have a maximum run time of 15 minutes per cycle, with additional cycles as needed. At no time will run off or erosion be allowed.

3.09 MULCHING:

- A. Contractor to apply a 3" minimum mulch layer to all planting areas unless specified as other ground cover treatment by the plans.
- B. Contractor to keep mulch from plant trunks as follows:
 1. Shrubs shall have 3" of clearance from trunks/main stems to mulch
 2. Trees shall have 6" of clearance from crown/ base of the flume to mulch
- C. Contractor to overhead water entire mulched area to help settle and lock material together and start the process of nutrients moving into the below soil.

3.10 PLANT PROTECTION:

- A. The Contractor is responsible for all aspects of protection of the installed landscape from loss or damage through the Plant Establishment and Maintenance periods until the final acceptance via written notice. This shall include any additional materials or protection methodologies such as but not limited to ground wire fences, shields, trunk covers, shading, herbivore protection above/below via product use or trapping and or removal, application of deterrents, and Pest and insect control.

3.11 PRUNING:

- A. All shrubs and trees shall be pinch pruned as necessary to encourage new growth and to eliminate rack sucker growth. Old flowers, and dead foliage and damaged limbs shall be removed. No major pruning shall be done without the approval of the Landscape Architect. Any damage to shrubs and trees that drastically changes structure and or appearance shall require the Contractor to replace in kind with an approved replacement at no additional cost per the direction of the Landscape Architect.

3.12 MAINTENANCE:

- A. All areas landscaped by Contractor under this contract shall be maintained by said Contractor for a minimum plant establishment period of not less than ninety (90) days or as called for by the Contract documents from the date of written acceptance of initial installation and substantial completion per the requirements of the plans, specifications, and contract documents.

3.13 START OF PLANT ESTABLISHMENT:

- A. Criteria for start of plant establishment period:
 1. The plant establishment period shall not start until all elements of the project that impact the landscape are completed in accordance with the contract documents. Projects will not be segmented into phases or have portions separated for multiple Plant Establishment programs.
 2. Permanent Water and Power for the irrigation system shall be established.
 3. Fully automatic irrigation including acceptance of installation and as-built/controller charts.
 4. Written acceptance of the Owners Representative must be obtained prior to the start of the plant establishment period.
 5. If project maintenance fails to continuously meet standards required, the plant establishment period "day count" will be suspended and will not recommence until Contractor has corrected all deficiencies.
 6. The 90-day establishment period is the minimum required and will be extended as needed at no additional cost to remedy issues with failure to service/meet the requirements and bring the project into compliance.

3.14 LANDSCAPE MAINTENANCE (PLANT ESTABLISHMENT):

- A. Refer to section 32 90 05 Landscape Maintenance

3.15 CLEAN UP:

- A. Upon completion of the work, the Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters, walkways, and trails; and remove construction equipment from the premises.
- B. This shall include power washing all hardscape, site structures, site furnishings to return them to a state of clean and unsoiled. If the finish has been sealed the ability to be washed off the Contractor shall be responsible to returning it to a new finish state, including repainting, refinishing, and in extreme cases replacing in whole.

TM-B24-5413/B25-0079

BUILDING AND SAFETY

REVIEWED FOR COMPLIANCE WITH
TITLE 24 DISABLED ACCESSIBILITY ONLY

APPROVED BY: _____ NAME _____ DATE _____

JOB#: 19-089

CITY OF TEMECULA

DEPARTMENT OF PUBLIC WORKS



FIRE STATION 73
NEW GYM AND APPARATUS BAY W/ STORAGE
27415 ENTERPRISE CIRCLE, TEMECULA, CA 92590
PLANTING SPECIFICATIONS

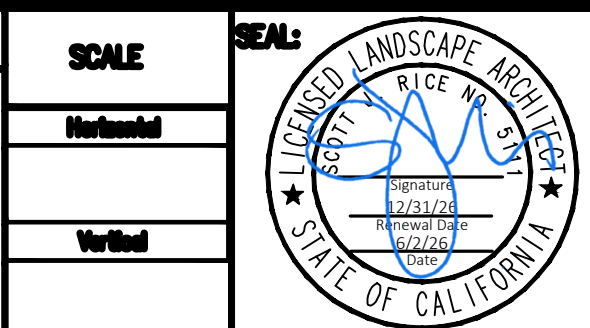
Drawing No.

LP-3

Sheet of



CONSTRUCTION RECORD	DATE	BY	NO.	REVISIONS	ACCD	DATE	BENCH MARK
Contractor							
Inspector							
Date Completed							



Designed By _____ Drawn By _____ Checked By _____

Plans Prepared Under Supervision Of _____

Date _____

R.C.E. No. _____

RECOMMENDED BY: H. J. Mills DATE: 6/18/2026
HOUSSEN ANJEL, PE, PRINCIPAL CIVIL ENGINEER
ACCEPTED BY: Ron Moreno DATE: 6/18/2026
RON MORENO, PE, DIRECTOR OF PUBLIC WORKS / CITY ENGINEER R.C.E. No. 69156