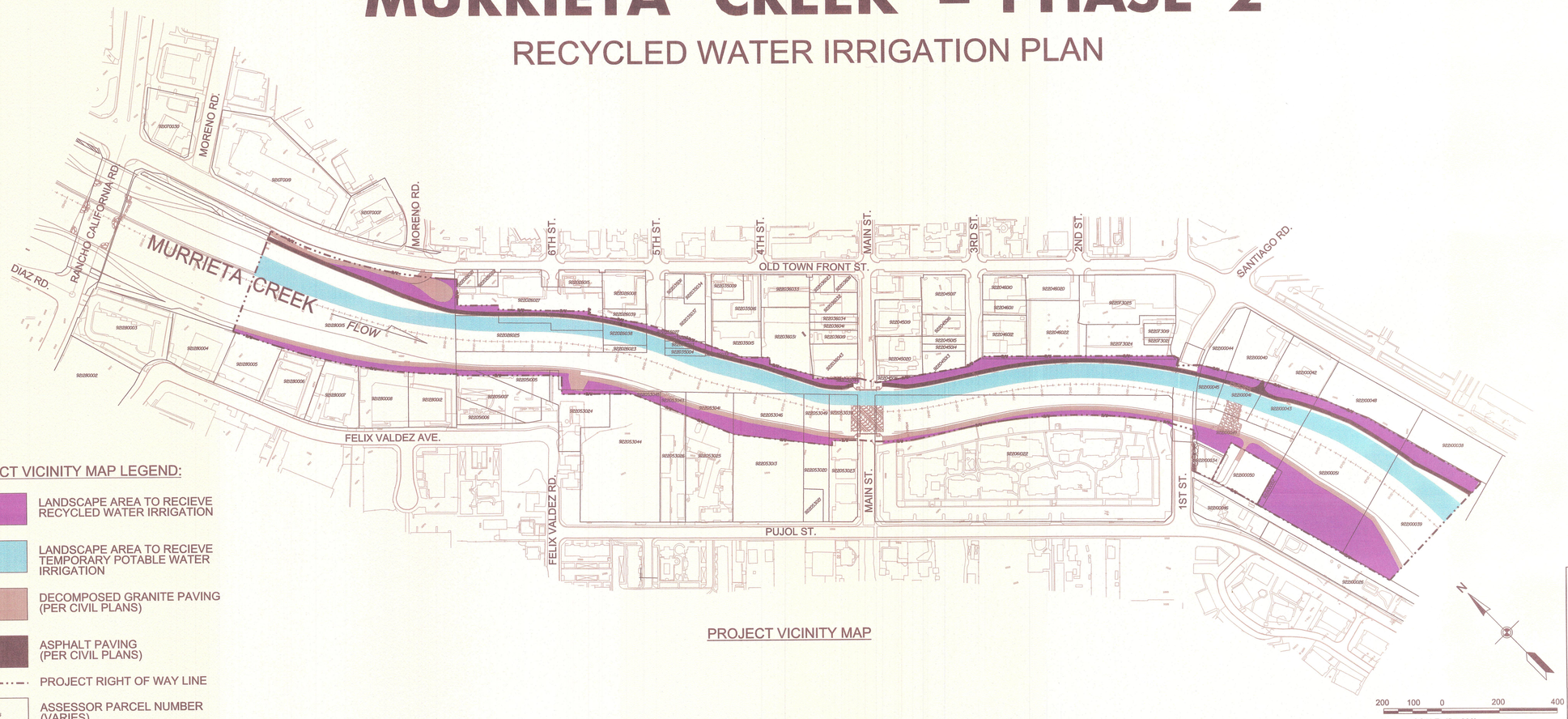
SANTA MARGARITA RIVER WATERSHED,
RIVERSIDE COUNTY, CALIFORNIA

MURRIETA CREEK – PHASE 2

RECYCLED WATER IRRIGATION PLAN



PROJECT VICINITY MAP

PROJECT VICINITY MAP LEGEND:

- LANDSCAPE AREA TO RECIEVE RECYCLED WATER IRRIGATION
- LANDSCAPE AREA TO RECIEVE TEMPORARY POTABLE WATER IRRIGATION
- DECOMPOSED GRANITE PAVING (PER CIVIL PLANS)
- ASPHALT PAVING (PER CIVIL PLANS)
- PROJECT RIGHT OF WAY LINE
- 922000005 ASSESSOR PARCEL NUMBER (VARIES)

RCWD ON-SITE IRRIGATION PLANS DISCLAIMER:

RCWD'S REVIEW AND ACCEPTANCE OF THE IRRIGATION PLANS ARE FOR THE PURPOSES OF GENERAL COMPLIANCE WITH APPLICABLE LAWS, CODES AND ORDINANCES, AS WELL AS COMPLIANCE WITH SPECIFIC RCWD REGULATIONS AND REQUIREMENTS. RCWD'S ACCEPTANCE DOES NOT REPRESENT AN ENDORSEMENT OR APPROVAL OF THE HYDRAULIC ADEQUACY OR RELIABILITY OF THE PLANNED IRRIGATION SYSTEM DESIGN. THE DESIGN OF THE IRRIGATION SYSTEM SHALL ACCOUNT FOR PRESSURE FLUCTUATIONS THAT ARE COMMON WITHIN THE RECYCLED WATER DISTRIBUTION SYSTEM AND IF NEEDED INCLUDE INSTALLATION OF A PUMP (WITH LOW FLOW / LOW PRESSURE CUT OFF SWITCH), TO ENSURE ADEQUATE SYSTEM WATER PRESSURE FOR IRRIGATION.

LANDSCAPE MAINTENANCE RESPONSIBILITY NOTE:

IT SHALL BE THE RESPONSIBILITY OF THE CITY OF TEMECULA TO MAINTAIN ALL ON SITE RECYCLED WATER IRRIGATION SYSTEMS IN ACCORDANCE WITH RCWD REQUIREMENTS AND ALL APPLICABLE CODES AND ORDINANCES.

DECLARATION OF RESPONSIBLE IN CHARGE:

THIS PROJECT WAS DESIGNED BY THE LOS ANGELES DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY E.R. 1110-1-8152. SIGNATURES AFFIXED HEREON INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL THE DRAWINGS IN THIS SET.

ADDRESS:
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT
915 WILSHIRE BLVD.
LOS ANGELES, CA 90017

RANCHO CALIFORNIA WATER DISTRICT
DEC 22 2017
APPROVED
12/22/17

THIS PROJECT WAS DESIGNED BY THE LOS ANGELES DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY E.R. 1110-1-8152. SIGNATURES AFFIXED HEREON INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL THE DRAWINGS IN THIS SET:

SYMBOL	NEW SHEET	DESCRIPTIONS	DATE	APPROVAL
M1		REVISIONS	12/5/17	OJURI

SANTA ANA RIVER MAINSTEM
LOWER SANTA ANA RIVER, CHANNEL REACH 9
BNSF RAILROAD BRIDGE PROTECTION
RIVERSIDE COUNTY, CALIFORNIA

RECYCLED WATER IRRIGATION PLAN
TITLE SHEET

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

PREPARED UNDER THE DIRECTION OF:
COL. KIRK E. GIBBS
DISTRICT ENGINEER

SUBMITTED BY: DATE:
CHIEF, DESIGN BRANCH

APPROVED BY: DATE: 12/12/2017
CHIEF, ENGINEERING DIVISION

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: F. OJURI

FILE NAME: L-T1_M1.DGN

SPEC. NO. W912PL-15-D-0005

DISTRICT FILE NO. 228400

Scale: AS SHOWN

SHEET
L-T1

RECYCLED WATER IRRIGATION PLAN SHEET INDEX

FILE NO.	SHEET TITLE	SHEET NO.
226/400	RECYCLED WATER IRRIGATION PLAN TITLE SHEET	LT-1
226/400A	RECYCLED WATER IRRIGATION PLAN SHEET INDEX & NOTES	LT-2
226/400B	RECYCLED WATER IRRIGATION PLAN INDEX MAP	LT-3
226/400C	RECYCLED WATER IRRIGATION PLAN PROJECT BOUNDARY CONTROL POINTS	LT-4
226/401	TOP OF BANK IRRIGATION - IRRIGATION EQUIPMENT LEGEND AND NOTES	L-100
226/402	NOT USED	L-101
226/403	NOT USED	L-102
226/404	NOT USED	L-103
226/405	NOT USED	L-104
226/406	NOT USED	L-105
226/407	NOT USED	L-106
226/408	NOT USED	L-107
226/409	NOT USED	L-108
226/410	NOT USED	L-109
226/411	NOT USED	L-110
226/412	NOT USED	L-111
226/413	NOT USED	L-112
226/414	NOT USED	L-113
226/415	NOT USED	L-114
226/416	NOT USED	L-115
226/417	NOT USED	L-116
226/418	NOT USED	L-117
226/419	TOP OF BANK IRRIGATION PLAN - STA 102+00 TO STA 97+00	L-118
226/420	TOP OF BANK IRRIGATION PLAN - STA 97+00 TO STA 92+00	L-119
226/421	TOP OF BANK IRRIGATION PLAN - STA 92+00 TO STA 87+00	L-120
226/422	TOP OF BANK IRRIGATION PLAN - STA 87+00 TO STA 82+00	L-121
226/423	TOP OF BANK IRRIGATION PLAN - STA 82+00 TO STA 77+00	L-122
226/424	TOP OF BANK IRRIGATION PLAN - STA 77+00 TO STA 72+00	L-123
226/425	TOP OF BANK IRRIGATION PLAN - STA 72+00 TO STA 67+00	L-124
226/426	TOP OF BANK IRRIGATION PLAN - STA 67+00 TO STA 62+00	L-125
226/427	TOP OF BANK IRRIGATION PLAN - STA 62+00 TO STA 59+00	L-126
226/428	IRRIGATION DETAILS	L-127
226/429	IRRIGATION DETAILS	L-128
226/430	IRRIGATION DETAILS	L-129
226/430A	IRRIGATION DETAILS	L-130
226/430B	IRRIGATION POC METER DATA TABLES	L-131
226/430C	IRRIGATION SCHEDULE - CONTROLLER G	L-132
226/430D	IRRIGATION SCHEDULE - CONTROLLER G	L-133
226/430E	IRRIGATION SCHEDULE - CONTROLLER J	L-134
226/430F	IRRIGATION SCHEDULE - CONTROLLER J	L-135
226/430G	TOP OF BANK IRRIGATION PLAN TYPICAL SECTION	L-136
226/431	NOT USED	E-1
226/432	NOT USED	E-2
226/433	ELECTRICAL SERVICE (IRRIGATION) PLAN - STA 89+00 TO STA 65+00	E-3

ON-SITE RECYCLED WATER IRRIGATION NOTES:

1. THE INSTALLATION, OPERATION, MAINTENANCE, AND REPAIR OF THE IRRIGATION WATER SYSTEM SHALL CONFORM TO ALL REQUIREMENTS AS SET FORTH WITHIN THE LATEST VERSIONS OF APPLICABLE RANCHO CALIFORNIA WATER DISTRICT (RCWD) REGULATIONS AND ORDINANCES.

2. ANY MODIFICATIONS TO THE POTABLE WATER OR IRRIGATION PIPING AND SYSTEMS SHOWN ON THESE PLANS MUST BE APPROVED IN WRITING BY RANCHO CALIFORNIA WATER DISTRICT.

3. ALL ON-SITE IRRIGATION PIPING SHALL BE PURPLE POLYVINYL CHLORIDE (PVC) AND IDENTIFIED IN ACCORDANCE WITH THE CURRENT STATE WATER RESOURCES CONTROL BOARD REQUIREMENTS.

4. ALL POTABLE WATER PIPING EXTERIOR TO STRUCTURES SHALL BE COPPER AND BE PROTECTED BY AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLED AT THE POINT OF CONNECTION. POTABLE WATER PIPING SHALL NOT BE TAPPED INTO FOR IRRIGATION USE. CROSS CONNECTIONS BETWEEN RECYCLED WATER LINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED. FINES MAY BE LEVIED.

5. QUICK COUPLERS ON THE RECYCLED WATER SYSTEM MUST BE ACME THREADED AND MUST BE PURPLE IN COLOR AND MARKED FOR THE USE OF RECYCLED WATER. QUICK COUPLING VALVES SHALL BE OF A TYPE APPROVED FOR RECYCLED WATER USE ONLY. QUICK COUPLER VALVES CANNOT BE LOCATED WITHIN 50 FEET OF FOOD PREPARATION, OUTDOOR EATING AREAS, OR DESIGNATED CHILDREN PLAY EQUIPMENT OR WITHIN THE FENCED PERIMETER SURROUNDING SWIMMING POOLS. AUTOMATIC FLUSH VALVES ARE NOT ALLOWED.

6. PRIOR TO THE FINAL COVERAGE TEST, ONE (1) COMPLETE SET OF LAMINATED CONTROLLER CHARTS AND IRRIGATION AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE DISTRICT. AT RCWD DIRECTION, A SECOND COPY OF CONTROLLER CHARTS SHALL BE PLACED IN THE CONTROLLER CABINET.

7. RCWD SHALL BE NOTIFIED SEVEN (7) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (951) 296-6900 TO SCHEDULE A PRE-CONSTRUCTION MEETING.

8. ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE.

9. THE RECYCLED IRRIGATION SYSTEM SHALL BE OPERATED WITHIN THE TIME PERIOD OF 9:00 P.M. TO 6:00 A.M., UNLESS OTHERWISE ESTABLISHED BY THE RANCHO CALIFORNIA WATER DISTRICT.

10. HOSE BIBBS ARE STRICTLY PROHIBITED ON RECYCLED WATER SYSTEMS.

11. RECYCLED WATER PIPING SHALL NOT BE INSTALLED INTERIOR TO ANY STRUCTURE.

12. IRRIGATION WITH RECYCLED WATER SHALL NOT RESULT IN PONDING OR RUNOFF. ADJUST ALL SPRINKLER HEADS TO MINIMIZE OVER SPRAY ONTO SIDEWALKS, STREETS, DRINKING AND DECORATIVE FOUNTAINS, COMFORT STATIONS, PLAYGROUND EQUIPMENT, PICNIC TABLES, BBQ, PRIVATE LOTS, ETC.

13. SIGNS OR DECALS IN ENGLISH AND SPANISH READING "RECYCLED WATER, DO NOT DRINK" AND THE "DO NOT DRINK" SYMBOL MUST BE POSTED ON PUMP CABINETS, ON CONTROLLER STATIONS AND AT SITE ENTRANCES OR ALONG WALKWAYS AND AT EVERY 250' ALONG FENCE OR PROPERTY LINES, AS DESIGNATED ON PLANS. RECYCLED WATER SPRINKLERS AND SPRAY HEADS MUST HAVE PURPLE CAPS, PURPLE COLLARS, AND THE RISERS HAVE A RECYCLED WATER DECAL. LARGE-THROW HEADS MUST HAVE PURPLE INSERTS. PURPLE CAPS AND COLLARS MUST BE FIRMLY AFFIXED TO SPRINKLER HEADS. ALL OTHER ABOVE GROUND EQUIPMENT MUST BE COLORED PURPLE OR HAVE A "RECYCLED WATER, DO NOT DRINK" DECAL OR SIGN.

14. ALL VALVE BOXES FOR ON-SITE BURIED VALVES AND QUICK-COUPLERS SHALL BE IN ACCORDANCE WITH DETAIL DRAWING NO. OS-13.

15. WARNING TAPE FOR THE RECYCLED WATER PIPING SHALL BE PURPLE IN COLOR PER DETAIL DRAWING OS-5, WITH THE WORDS "CAUTION: RECYCLED WATER" IMPRINTED IN MINIMUM 1 INCH HIGH LETTERS BLACK IN COLOR. IMPRINTING SHALL BE CONTINUOUS AND PERMANENT.

16. WHEN POTABLE WATER IS ONSITE, THE REQUIRED CDPH TITLE 22 CROSS CONNECTION SHUTDOWN TEST SHALL PRECEDE THE FINAL RELEASE OF THE IRRIGATION SYSTEM. THIS TEST WILL BE CONDUCTED BY RCWD.

17. ALL PUBLIC AND PRIVATE POTABLE WATER MAINS INCLUDING FIRE MAINS AND ANY WATER WELLS, AS WELL AS ALL WATER COURSES WITHIN THE RECYCLED WATER PROJECT SHALL BE SHOWN ON THE PLANS.

18. IRRIGATION SYSTEMS MUST BE COMPLETELY SEPARATED FROM THE DOMESTIC POTABLE SYSTEM. ALL TEMPORARY POTABLE CONNECTIONS FOR CONSTRUCTION OR IRRIGATION MUST BE HIGH LINED FROM AN ALTERNATE POTABLE SOURCE ONLY AS APPROVED BY RCWD. SAID CONNECTION MUST BE MADE THROUGH A TEMPORARY CONSTRUCTION METER AND AN APPROVED ABOVE GROUND REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE (RPPD) PER DETAIL DRAWING OS-3. NO PURPLE COLORED PIPING OR APPURTENANCES SHALL BE CONNECTED TO ANY POTABLE WATER SOURCE.

19. A SITE SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, WITH THE BASIC CONCEPTS OF BACKFLOW/CROSS CONNECTION PROTECTION, THE RECYCLED WATER RULES AND REGULATIONS, AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM. SAID PERSON IS REQUIRED TO PROVIDE A 24-HOUR CONTACT PHONE NUMBER AND ATTEND APPROVED SITE SUPERVISOR TRAINING. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO RCWD.

20. INTERCONNECTION OF IRRIGATION PRESSURE SUPPLY LINES ORIGINATING FROM MORE THAN ONE METER IS STRICTLY PROHIBITED.

21. FLUSHING OF RECYCLED WATER THROUGH IRRIGATION SYSTEM PIPING SHALL BE PERFORMED IN ACCORDANCE WITH NPDES REQUIREMENTS. DISCHARGES FROM THE SITE AND PONDING ARE NOT PERMITTED. IF NECESSARY, FLUSHING MAY BE DONE BY DIVERTING RECYCLED WATER INTO A STORAGE TANK, TANK TRUCK OR OTHER APPROVED HOLDING FACILITY. HOLDING FACILITIES MUST BE CLEARLY MARKED WITH WARNING SIGNS. RECYCLED WATER SHALL BE TRANSPORTED AND DISCHARGED AT AN APPROVED SITE IN AN APPROVED MANNER.

22. FAILURE TO COMPLY WITH ANY OR ALL OF THE ABOVE REQUIREMENTS MAY RESULT IN TERMINATION OF SERVICE UNTIL THE APPROPRIATE CORRECTIVE STEPS HAVE BEEN TAKEN.

RCWD INSPECTION REQUIREMENTS:

LANDSCAPE CONTRACTOR/RECYCLED WATER "USER" IS RESPONSIBLE FOR NOTIFYING RCWD IN ADVANCE FOR THE FOLLOWING IRRIGATION SYSTEM INSPECTIONS, ACCORDING TO THE TIME INDICATED:

(A) PRE-JOB CONFERENCE: 7 CALENDAR DAYS NOTICE REQUIRED.
(B) PRESSURE MAINLINE INSTALLATION INSPECTION: 48 HOURS NOTICE REQUIRED.
(C) IRRIGATION SYSTEMS & COMPONENTS: 48 HOURS NOTICE REQUIRED.
(D) CROSS-CONNECTION TEST (INITIAL): 48 HOURS NOTICE REQUIRED.
(E) COVERAGE TESTS (INITIAL): 48 HOURS NOTICE REQUIRED
(F) FINAL IRRIGATION INSPECTION: 48 HOURS NOTICE REQUIRED

EXTERIOR APPURTENANCE NOTE:

NO EXTERIOR DRINKING FOUNTAINS, HOSE BIBS, POOLS OR FOUNTAINS EXIST WITHIN THE BOUNDARIES OF THIS PROJECT.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

12/12/17 DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

RECYCLED WATER IRRIGATION PLAN SHEET INDEX & NOTES

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY:
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

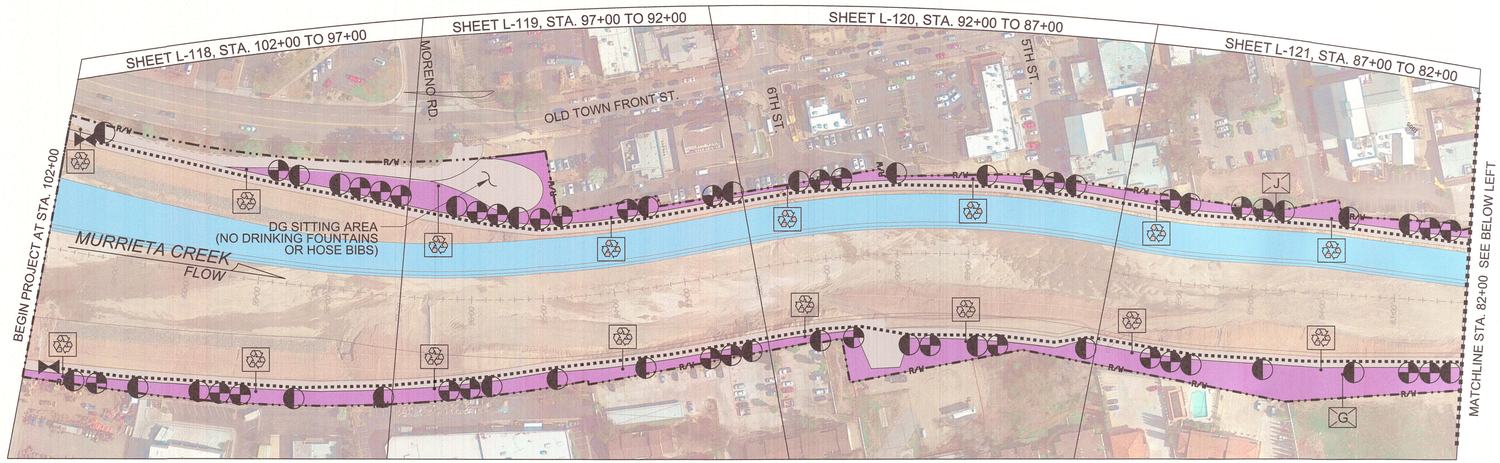
FILE NAME: L-T_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226/400A

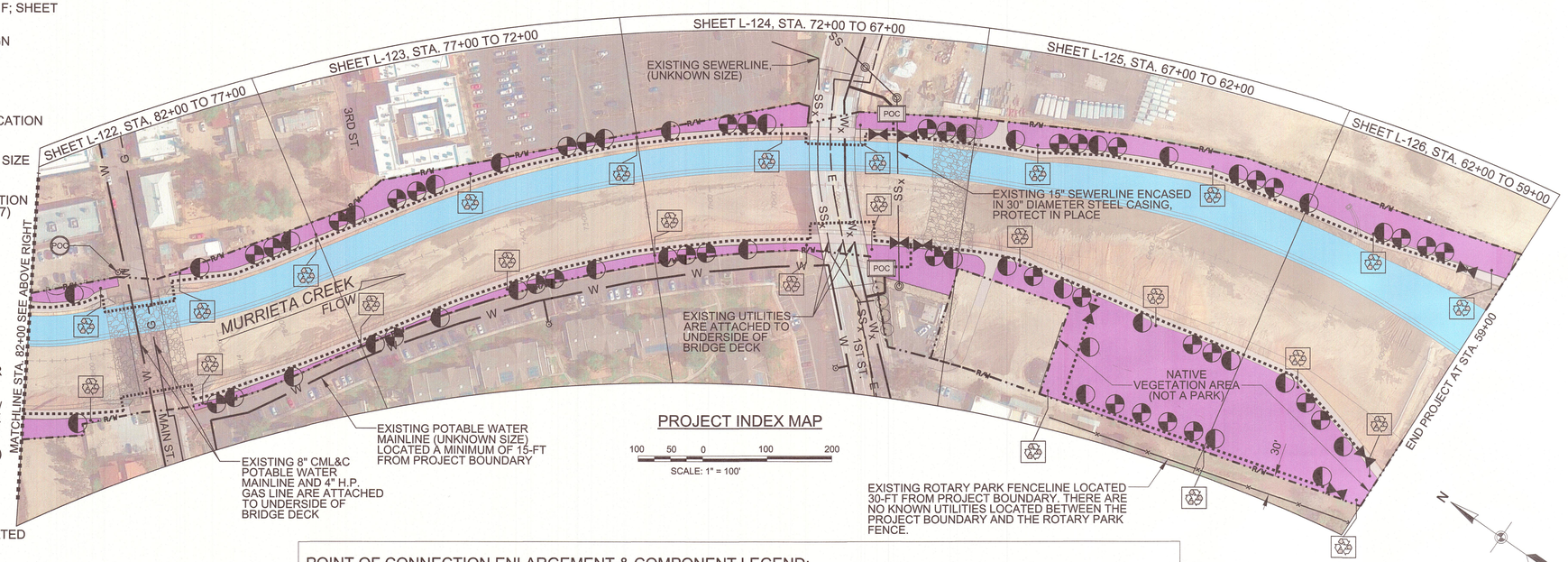
Scale: AS SHOWN
SHEET
L-T2

Plot Date: 12/7/2017

INDEX MAP LEGEND:

- LANDSCAPE AREA TO RECEIVE RECYCLED WATER IRRIGATION
- LANDSCAPE AREA TO RECIEVE TEMPORARY POTABLE WATER IRRIGATION
- MAINTENANCE ROAD (PER CIVIL PLANS)
- PROJECT RIGHT OF WAY LINE (PER CIVIL PLANS)
- RECYCLED WATER IRRIGATION MAINLINE CL 315, PURPLE PIPE, 2-1/2" SIZE
- W_X — EXISTING 20" CML&C STEEL RCWD RECYCLED WATER MAINLINE
- W — EXISTING POTABLE WATER MAINLINE
- G — EXISTING 4" H.P. NATURAL GAS MAINLINE
- E — EXISTING ELECTRICAL LINE (IN GROUND)
- SS_X — EXISTING SANITARY SEWER (SIZE AS SHOWN ON PLANS)
- GALVANIZED STEEL MAINLINE PIPE, 2-1/2" SIZE, ATTACHED TO BRIDGE ABUTMENTS (SEE SHEET L-129, DETAIL U)
- BRASS PIPE, SCH 40, 2" SIZE (SEE SHEET L-127, DETAILS E, F; SHEET 130, DETAIL OS-8)
- LARGE RECYCLED WATER SIGN (SEE SHEET 130, DETAIL OS-4)
- G — IRRIGATION CONTROLLER (SEE SHEET L-129, DETAIL S)
- REMOTE CONTROL VALVE LOCATION (SEE SHEET L-128, DETAIL J)
- GATE VALVE LOCATION, 2-1/2" SIZE (SEE SHEET L-127, DETAIL H)
- QUICK COUPLER VALVE LOCATION (SEE SHEET L-130, DETAIL OS-7)
- EXISTING FIRE HYDRANT
- EXISTING MANHOLE
- POC — RECYCLED WATER POINT OF CONNECTION LOCATION (SEE ENLARGEMENT BELOW)
- POC — POINT OF CONNECTION FOR TEMPORARY POTABLE WATER IRRIGATION SYSTEM AT FIRE HYDRANT (REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.)





PROJECT INDEX MAP

100 50 0 100 200

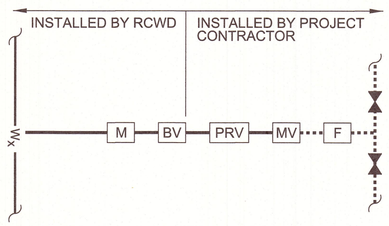
SCALE: 1" = 100'

N

ABBREVIATIONS:

AC	ASPHALT CONCRETE
BV	BALL VALVE
CL	CLASS
CML&C	CEMENT MORTARED LINED AND COATED
DC	DIRECT CURRENT
DG	DECOMPOSED GRANITE
F	FLOW SENSOR
FT	FOOT/FEET
GALV.	GALVANIZED
GPM	GALLONS PER MINUTE
GV	GATE VALVE
H.P.	HIGH PRESSURE
IN	INCH/INCHES
MV	MASTER VALVE
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
QCV	QUICK COUPLER VALVE
RCV	REMOTE CONTROL VALVE
RCWD	RANCHO CALIFORNIA WATER DISTRICT
REQ.	REQUIRED
R/W	RIGHT OF WAY
TCE	TEMPORARY CONSTRUCTION EASEMENT
TYP.	TYPICAL
USACE	UNITED STATES ARMY CORPS OF ENGINEERS

POINT OF CONNECTION ENLARGEMENT & COMPONENT LEGEND:



- M — METER, RECYCLED WATER, 2" SIZE (SEE SHEET L-130, DETAIL OS-8)
- BV — BALL VALVE, 2" SIZE (SEE SHEET L-127, DETAIL G)
- PRV — PRESSURE REDUCING VALVE, 2" SIZE (SEE SHEET L-127, DETAIL E)
- MV — MASTER CONTROL VALVE, 2" SIZE (SEE SHEET L-127, DETAIL F)
- F — FLOW SENSOR (SEE SHEET L-129, DETAIL T)

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/22/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

RECYCLED WATER IRRIGATION PLAN
INDEX MAP

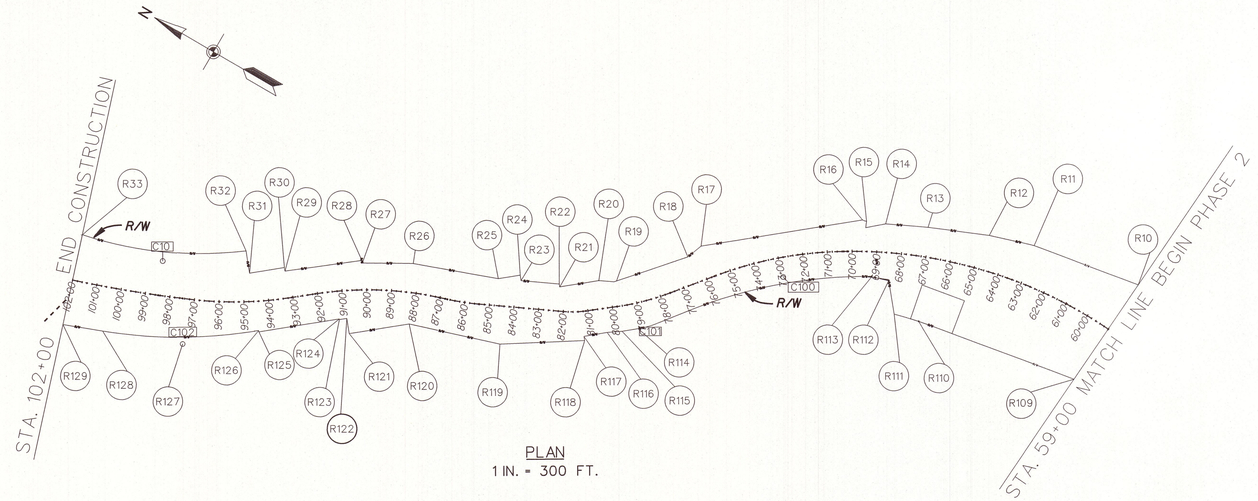
U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS
FILE NAME: L-T_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226/400B

Scale: AS SHOWN
SHEET
L-T3

Plot Date: 12/21/2017



PLAN
1 IN. = 300 FT.

RIGHT -OF-WAY COORDINATE POINTS

H

COORDINATE POINT NUMBERS	NORTHING	EASTING
R10	6288637.677	2122314.072
R11	6288515.909	2122747.272
R12	6288441.618	2122918.440
R13	6288321.227	2123137.542
R14	6288230.741	2123283.971
R15	6288193.895	2123352.691
R16	6288188.493	2123369.236
R17	6287717.862	2123831.616
R18	6287650.535	2123848.695
R19	6287401.207	2124023.102
R20	6287360.285	2124081.359
R21	6287245.982	2124193.272
R22	6287254.494	2124201.934
R23	6287173.968	2124333.984
R24	6287189.874	2124350.163
R25	6287125.652	2124413.215
R26	6286970.819	2124726.361
R27	6286850.605	2124893.353
R28	6286857.769	2124901.164
R29	6286638.678	2125125.218
R30	6286649.029	2125135.851
R31	6286546.616	2125235.847
R32	6286610.391	2125300.730
R33	6286270.194	2125872.743

COORDINATE POINT NUMBERS	NORTHING	EASTING
R109	6288174.327	2122295.002
R110	6287991.15	2122941.43
R111	6287956.426	2123038.270
R112	6288053.692	2123137.21
R113	6288026.464	2123202.018
R114	6287297.331	2123837.071
R115	6287250.044	2123883.537
R116	6287210.779	2123929.183
R117	6287142.300	2123994.781
R118	6287130.248	2123982.518
R119	6286915.560	2124249.079
R120	6286763.760	2124593.342
R121	6286588.665	2124765.249
R122	6286632.473	2124809.826
R123	6286611.066	2124830.844
R124	6286612.818	2124832.627
R125	6286377.432	2125063.727
R126	6286381.124	2125067.483
R127	6286155.206	2125281.906
R128	6286005.415	2125574.362
R129	6285931.356	2125718.957

RIGHT -OF WAY CURVE DATA

CURVE	NORTHING	EASTING	RADIUS
C10	6286378.66	2125547.60	1543.87
C100	6287812.93	2123490.38	1866.84
C101	6287334.73	2123803.82	333.00
C102	6286155.206	2125281.906	1924.84

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE 12/5/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	CJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

RECYCLED WATER IRRIGATION PLAN
PROJECT BOUNDARY CONTROL POINTS

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY:
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-T_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226400C

Scale: AS SHOWN
SHEET
L-T4

Plot Date: 12/7/2017

IRRIGATION CONSTRUCTION NOTES:

1 EXISTING UTILITIES AND CONDITIONS: PRIOR TO CUTTING INTO THE SOIL OR PAVING, LOCATE ALL CABLES, CONDUITS, AND OTHER UTILITIES COMMONLY FOUND UNDERGROUND, AND TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AN UNDERGROUND UTILITY LOCATING SERVICE TO LOCATE AND MARK ALL UTILITIES. IF A CONFLICT EXISTS BETWEEN SUCH OBSTACLES AND THE PROPOSED WORK, PROMPTLY NOTIFY THE CONTRACTING OFFICER WHO WILL ARRANGE FOR RELOCATIONS IF REQUIRED. PROCEED IN THE SAME MANNER IF ROCK LAYERS OR ANY OTHER CONDITIONS ENCOUNTERED UNDERGROUND MAKE CHANGES ADVISABLE.

2 THE INSTALLATION OF THE IRRIGATION SYSTEM SHALL CONFORM TO ALL APPLICABLE REGULATIONS AND CODES.

3 THE IRRIGATION SYSTEM IS SHOWN DIAGRAMMATICALLY FOR CLARITY. LOCATE ALL PIPING, EQUIPMENT AND APPURTENANCES WITHIN THE PLANTING AREAS SHOWN UNLESS NOTED OR DIRECTED OTHERWISE. LOCATE ALL VALVES AND VALVE BOXES IMMEDIATELY ADJACENT TO EDGE OF PLANTING AREA AND AT RIGHT ANGLES TO EDGE. LOCATE QUICK COUPLER VALVES AT THE EDGE OF PLANTING AREAS. LOCATE PRESSURE MAIN LINES WITHIN 18" OF EDGE OF PLANTING AREAS.

4 THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD, THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT PROMPTLY TO THE ATTENTION OF THE CONTRACTING OFFICER. SHOULD THE CONTRACTOR FAIL TO NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO THE AGENCY.

5 ALL PIPE AND WIRING UNDER PAVING AND ROADWAYS SHALL BE SLEEVED. COORDINATE SLEEVE INSTALLATION WITH OTHER TRADES TO ENSURE PROPER AND TIMELY INSTALLATION IN LOCATIONS REQUIRED. SLEEVE TO BE TWICE (2X) THE DIAMETER OF THE CARRYING PIPE OR WIRE BUNDLE. PIPES MAY BE SLEEVED TOGETHER IF AN EQUIVALENT INCREASE IN SLEEVE SIZE IS MADE. WIRE SLEEVES SHALL BE SEPARATE FROM WATER PIPE SLEEVES.

6 ALL BRASS PIPE AND FITTINGS TO BE IPS RED BRASS, STANDARD PIPE SIZE, SCHEDULE 40. ALL COPPER PIPE TO BE TYPE "K" COPPER.

7 USE TWO WRAPS OF 3/4" TEFLON TAPE FOR ALL THREADED CONNECTIONS.

8 ADJUST ALL SPRAY HEADS TO AVOID OVERTHROW ONTO WALLS OR STREETS. AVOID UTILITY BOXES, TRANSFORMERS, ETC. ALL HEADS TO BE INSTALLED PERPENDICULAR TO FINISH SOIL SURFACE UNLESS SHOWN OTHERWISE ON PLANS.

9 DURING INSTALLATION ALL EXPOSED PIPE AND JOINTS SHALL BE SHADED WHENEVER TEMPERATURES EXCEED 100 DEGREES FARENHEIT.

10 PROVIDE PULL BOXES FOR CONTROL WIRING AT ALL CHANGES OF DIRECTION AND WHERE RUNS EXCEED 200 FEET. SPLICES SHALL BE MADE ONLY IN PULL BOXES OR VALVE CONTROL BOXES.

11 WIRING IS BASED ON THE USE OF ONE 24 VOLT DC REMOTE CONTROL VALVE OPERATING AT ONE TIME. ALL WIRES SHALL BE LABELED AT THE TERMINAL STRIP WITHIN ONE INCH OF THE END OF THE WIRE WITH THE APPROPRIATE STATION NUMBER.

12 ANTI-DRAIN VALVES SHALL BE INSTALLED AS REQUIRED TO PREVENT ALL LOW HEAD DRAINAGE.

13 VARIABLE ARC NOZZLES SHALL ONLY BE USED WHERE SHOWN ON PLANS.

14 DURING THE FINAL CLOSEOUT PROCEDURES, NOZZLE CHANGES MAY BE REQUESTED AT NO ADDITIONAL EXPENSE TO THE AGENCY.

15 THE USE OF A MANUFACTURER'S NAME AND MODEL OR CATALOG NUMBER IS FOR THE PURPOSE OF ESTABLISHING THE STANDARD OF QUALITY AND CONFIGURATION DESIRED ONLY. DESIGN OF IRRIGATION SYSTEM IS BASED ON THESE MATERIALS. IF OTHER EQUIPMENT IS SUBSTITUTED, WITH APPROVAL, DESIGN REQUIREMENTS AND PIPE SIZES ARE TO BE ADJUSTED ACCORDINGLY.

16 SHOULD THE CONTRACTOR MAKE NOZZLE CHANGES OR ADD HEADS AS A RESULT OF SITE OBSTACLES OR CONSTRUCTION CHANGES, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATION AND ADJUSTMENTS IN PIPE SIZES.

17 MAXIMUM VELOCITY IN ALL PIPING, PRESSURE OR NON-PRESSURE TO BE 5 FEET PER SECOND.

18 UNLESS NOTED OTHERWISE ON PLANS, ALL LATERAL END RUNS TO SPRAY HEADS ARE TO BE 3/4 INCH SIZE.

19 CONTROLLER SCHEDULES, CHARTS AND AS-BUILTS ARE REQUIRED TO BE COMPLETE PRIOR TO BEGINNING THE MAINTENANCE PERIOD.

20 THE CONTRACTOR SHALL CONTACT CALSENSE IRRIGATION 800-572-8608 TO OBTAIN A REVIEW INSPECTION OF THE CONTROLLERS, ET/ GAGE, MASTER VALVES, AND FLOW SENSORS INSTALLATIONS FOR THE TOP OF BANK IRRIGATION SYSTEM.

21 ALL PLANTINGS SHALL BE FULLY WATERED IN UPON PLANTING. DO NOT RELY SOLELY UPON THE AUTOMATIC IRRIGATION SYSTEM. UTILIZE SUPPLEMENTAL HOSE WATERING AS REQUIRED. INITIALLY AND DURING THE PLANT ESTABLISHMENT PERIOD, AND AS DIRECTED ON PLANS. TO ENSURE ALL PLANTINGS RECEIVE ADEQUATE WATER TO THE ENTIRE ROOT ZONE.

22 ALL SPRINKLER HEADS SHALL BE ADJUSTED AS REQUIRED, AS TO HEIGHT, COVERAGE PATTERN, OR SPRINKLER HEAD ORIENTATION, SO AS NOT TO ALLOW RESTRICTION OF SPRAY PATTERN BY PLANT MATERIAL THAT MAY IN TURN CAUSE PLANT DECLINE OR DEMISE.

23 THE IRRIGATION SYSTEM DESIGN IS BASED ON AN AVAILABLE STATIC WATER PRESSURE OF 165 PSI AT THE POINTS OF CONNECTION, REGULATED AT THE POINTS OF CONNECTION AND AT VALVES AS REQUIRED TO THE OPERATING PRESSURE REQUIRED FOR THE HEADS.

24 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING WATER PRESSURE PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION AND PROMPTLY REPORT ANY DIFFERENCES TO THE CONTRACTING OFFICER.

25 ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

POINT OF CONNECTION NOTES:

1 THE TOP OF BANK IRRIGATION SYSTEM POINT OF CONNECTION SHALL BE THE EXISTING RECLAIMED WATER MAINLINE LOCATED NEAR THE 1ST STREET BRIDGE.

2 ALL EQUIPMENT UPSTREAM OF WATER METER, THE WATER METER AND METER BOX SHALL BE INSTALLED BY THE RANCHO CALIFORNIA WATER DISTRICT(RCWD), CONTACT: (951)296-6900. ALL PIPING AND EQUIPMENT DOWNSTREAM OF METER SHALL BE INSTALLED BY THE CONTRACTOR. ALL PIPING BETWEEN THE WATER METER AND THE MASTER CONTROL VALVE, THROUGH ALL REQUIRED ASSEMBLIES, SHALL BE BRASS WITH BRASS FITTINGS AND UNIONS.

3 PRIOR TO STARTING ANY WORK, COORDINATE WITH CITY IN OBTAINING WILL SERVE LETTER FOR WATER METERS IN THE VICINITY SHOWN ON THE PLAN SHEETS.

4 PRIOR TO STARTING ANY WORK, COORDINATE WITH CITY IN OBTAINING WILL SERVE LETTER FOR 120 VOLT POWER SOURCES FOR THE CONTROLLERS. PRIOR TO ORDERING MATERIALS AND BEGINNING INSTALLATION, THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE CONTROLLERS WITH THE INSPECTOR. ONCE THE FINAL LOCATIONS HAVE BEEN DETERMINED, INSTALL THE ELECTRICAL METER PEDESTALS AND CONTROLLERS PER DETAIL AND ANY MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR EXTENDING, LABELING AND CONNECTING ALL CONTROL EQUIPMENT, CONTROL VALVE, MASTER VALVE AND FLOW SENSING WIRES TO THE CONTROLLER.

IRRIGATION EQUIPMENT LEGEND:

SYMBOL	DESCRIPTION	PSI	GPM	RAD	MFGR/MODEL	DETAIL
● (10) ◆	POP-UP SPRAY HEAD - SEE NOZZLE CHART	30	.09 - 1.05	–	RAIN BIRD 1812 SAM-PRS BODY W/ NON-POTABLE WATER CAP	B/ L-127, OS-10/L-129
(B)	POP-UP TREE BUBBLER (TWO PER SYMBOL)	20	0.5	–	RAIN BIRD 1804 SAM-PRS W/ PA-80 ADAPTER, 1402 NOZZLE & NON-POTABLE WATER CAP	C/ L-127
(22)	ROTARY HEAD - SEE NOZZLE CHART	50	1.6-8.5	14-45'	HUNTER PGP-12-R ULTRA W/ NOZZLE SHOWN	B/ L-127
●	REMOTE CONTROL VALVE				RAIN BIRD EFB-CP-R-PRS-D	J/ L-128
(F)	FLOW SENSOR				CALSENSE FM SERIES	T/ L-129
(M)	MASTER CONTROL VALVE				RAIN BIRD EFB-CP-R-PRS-D	F/ L-127
⊗	BALL VALVE, SIZE SHOWN ON PLAN				2" & SMALLER: NIBCO	G/ L-127
⋈	GATE VALVE, SIZE SHOWN ON PLAN				2 1/2" & LARGER: AMERICAN SERIES 2500 RESILIENT WEDGE GATE VALVE W/ FLANGED ENDS	H/ L-127
◐	QUICK COUPLER VALVE				RAIN BIRD 44NP W/ 44K KEY & SH-1 SWIVEL	OS-7 / L-130
PRV	PRESSURE REDUCING VALVE				2" SIZE, WILKINS 500YSBR OR EQUAL W/ POLAR BEARIER COVER & V.I.T. SMOOTH TOUCH ENCLOSURE	E/ L-127
CE	AUTOMATIC IRRIGATION CONTROLLER				CALSENSE ET2000e-48-LR-M-FL-RRe CONTROLLER, IN SS CABINET	S/ L-129
———	LATERAL PIPING, LAVENDER COLOR, SIZE AS SHOWN				J-M OR EQUAL. SCH 40	N/ L-128
– – – –	MAIN LINE (PRESSURE) PIPING, LAVENDER COLOR, SIZE AS SHOWN				J-M OR EQUAL. SOLVENT WELDED PVC. 2-1/2" AND LARGER CL 315, 2" AND SMALLER SCH 40	N/ L-128
■ ■ ■ ■	MAIN LINE (PRESSURE) STEEL PIPING, SIZE AS SHOWN				SCH 40 STD GALV. STEEL PIPE AT BRIDGE CROSSING LOCATIONS	U/L-129
(W)	WATER METER, 2" SIZE				PER RCWD STANDARDS; SYSTEM IS DESIGNED FOR RUNNING TWO STATIONS AT A TIME	OS-8/ L-130
	STEEL CONDUIT SLEEVE					P/ L-128, U/ L-129
♲	LARGE RECYCLED WATER SIGN					OS-4/ L-130

—·—·R/W—·—· RIGHT-OF-WAY

CONCRETE MOW CURB, 6" X 18" SIZE, SEE DETAIL OS-11, SHEET L-130;
INSTALL BETWEEN AREAS IRRIGATED WITH POTABLE AND RECYCLED WATER AND BETWEEN ALL PRIVATE PROPERTIES

SPRAY HEAD NOZZLE CHART:

30 PSI

	F	TQ	H	T	Q
5'R			● 0.16	◑ 0.11	⊕ 0.08
8'R			◆ 0.42	◇ 0.29	◈ 0.21
10'R	(9) 1.30		(10) 0.65	(11) 0.43	(12) 0.33
12'R	(13) 2.10	(14) 1.59	(15) 1.05	(16) 0.70	(17) 0.53
15'R	(18) 3.00	(19) 2.25	(20) 1.50	(21) 1.00	(22) 0.75

NOZZLE CHART
RAIN BIRD MPR NOZZLES
NUMBERS ARE NOZZLE GPM

ROTARY HEAD NOZZLE CHARTS:

50 PSI

HUNTER PGP	
NOZZLE	GPM
1.5	1.6
2.0	2.0
3.0	2.7
3.5	3.2
4.0	4.2
5.0	5.5
6.0	6.3
8.0	8.5

50 PSI

HUNTER PGP		HUNTER PGP	
NOZZLE	GPM	NOZZLE	GPM
2.0LA	2.1	.5SR	.50
2.5LA	2.8	.75SR	.75
3.5LA	3.5	1.0SR	1.0
4.5LA	4.4	1.5SR	1.5
6.0LA	5.8	2.0SR	2.0
8.0LA	7.7	3.0SR	3.0

REMOTE CONTROL VALVE NOTES:

CONTROLLER A-1 SEQUENCE NUMBER
APPROXIMATE GPM # # VALVE SIZE, INCHES

PLAN SYMBOL = ●

CONTROL WIRE NOTES:

VALVE WIRE SIZING

GROUND WIRE	CONTROL WIRE						
	18	16	14	12	10	8	6
18	1020	1260	1470	1640	1770	1860	1930
16	1260	1630	2000	2330	2610	2810	2960
14	1470	2000	2590	3180	3710	4150	4480
12	1640	2330	3180	4120	5050	5900	6590
10	1770	2610	3710	5050	6540	8030	9380
8	1860	2810	4150	5900	8030	10400	12770
6	1930	2960	4480	6590	9380	12770	16540

MAXIMUM ONE-WAY DISTANCE (FT.) BETWEEN CONTROLLER AND VALVE

1. FOR EACH LEG OF MAINLINE THE CONTRACTOR SHALL INSTALL ONE SPARE CONTROL WIRE ROUTED FOR EACH FIVE REMOTE CONTROL VALVES, OR PART THERE OF, ON THE MAINLINE LEG.

2. A MINIMUM OF ONE SPARE CONTROL WIRE SHALL BE ROUTED FOR EACH MAINLINE LEG IF LESS THAN FIVE VALVES ARE PRESENT.

3. A SINGLE SPARE COMMON WIRE SHALL BE ROUTED TO THE END OF EACH MAINLINE LEG.

4. ALL SPARE WIRES SHALL BE LOOPED UP AND AND INTO THE REMOTE CONTROL VALVE BOXES AND ANY SPLICE PULL BOXES ALONG THE ENTIRE PATH OF MAINLINE LEG.

5. SPARE CONTROL WIRES SHALL BE SOLID ORANGE IN COLOR.

6. SPARE COMMON WIRES SHALL BE WHITE IN COLOR WITH AN ORANGE STRIPE.

PATTERN & SYMBOL LEGEND:

WEST BANK MAINTENANCE ROAD (DG PAVING, SEE CIVIL PLANS)

EAST BANK MAINTENANCE ROAD (AC PAVING, SEE CIVIL PLANS)

EXISTING DECOMPOSED GRANITE PAVING (PROTECT IN PLACE)

CHANNEL REVEGETATION AREA (SEE SHEET LCR-1)

MULCH AS GROUNDCOVER (SEE PLANTING PLAN)

SEED MIX A (SEE PLANTING PLAN)

SEED MIX B (SEED PLANTING PLAN)

TREE AND SHRUB SYMBOLS (SHOWN FOR CLARITY, SEE PLANTING PLAN)

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE 12/18/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION LEGEND AND NOTES

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE, CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-100.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226401

Scale: AS SHOWN
SHEET L-100

Plot Date: 12/7/2017

VALUE ENGINEERING PAYS

SAFETY PAYS

BEGIN CONSTRUCTION STA. 102+00

MATCHLINE STA. 97+00 SEE SHEET L-119

R/W

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

PROVIDE WIRING FROM CONTROLLER "J" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GV.

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

CONCRETE MOW CURB STA. 99+65 TO 98+00

SOIL CEMENT BANK PROTECTION

1 1/4" CHECK VALVE

APN 921280015

TRENCH MAINLINE AT 24" DEEP

101+00

100+00

99+00

98+00

FLOW

MURRIETA CREEK

PROVIDE WIRING FROM CONTROLLER "G" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE.

CONCRETE MOW CURB STA. 102+00 TO 98+00

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

SOIL CEMENT BANK PROTECTION

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

APN 921280005

EXISTING CMU BLOCK WALL

CONCRETE MOW CURB ALONG R/W

APN 921280006

EXISTING FENCELINE

APN 921280007

EXISTING FENCELINE

APN 921280008

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE 12/12/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	REVISIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	CJURI

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE, CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-118.DGN

SPEC. NO. W912PL-15-B-0005

DISTRICT FILE NO. 226419

Scale: AS SHOWN

SHEET L-118

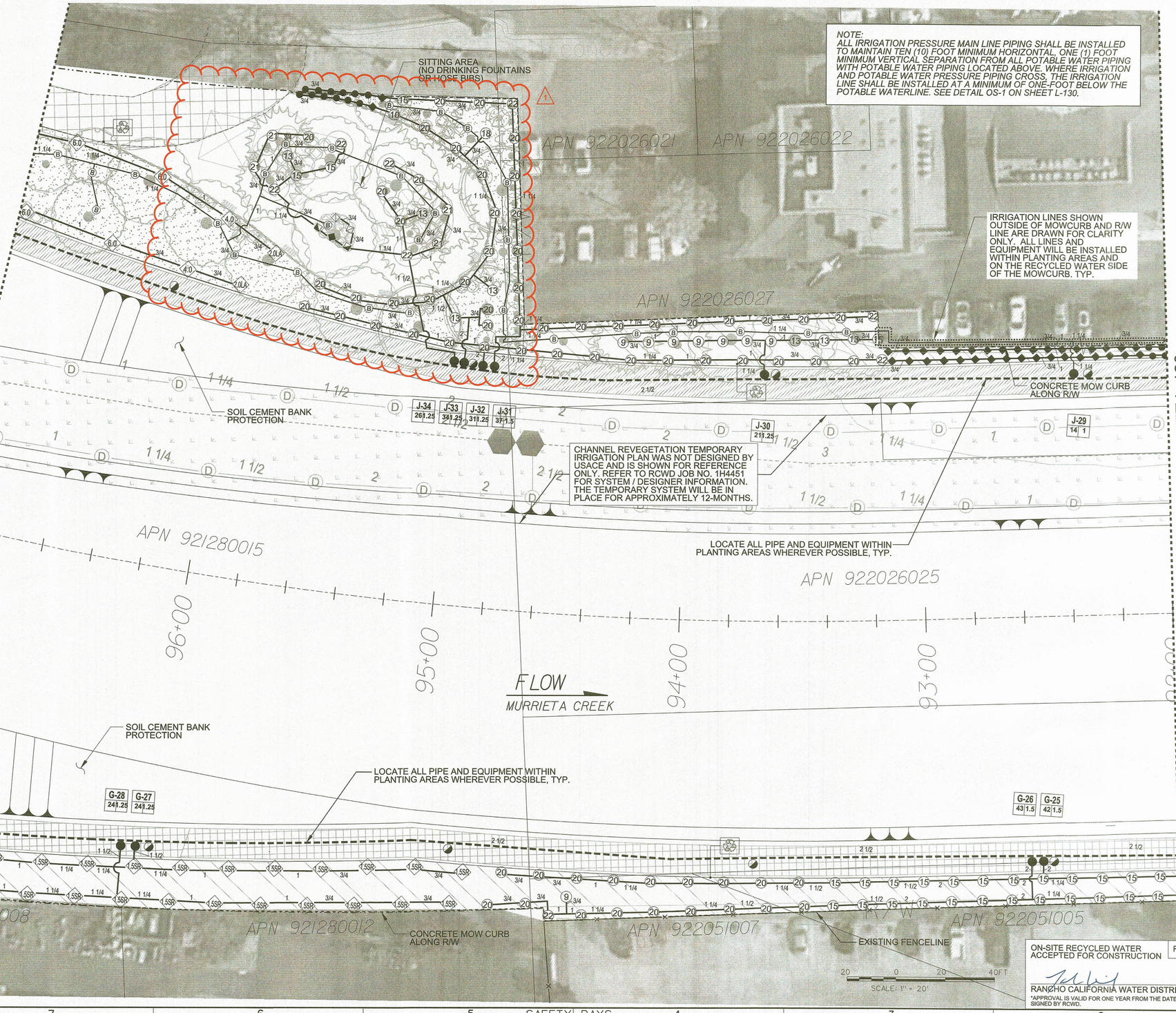
SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 102+00 TO STA 97+00

Plot Date: 12/8/2017

VALUE ENGINEERING PAYS

SAFETY PAYS



ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CA 92501
PHONE: 951-955-1200

REGISTERED PROFESSIONAL ENGINEER
JULIANNA GONZALEZ ADAMS
No. 83257
CIVIL
STATE OF CALIFORNIA

FOR 1 REVISIONS ONLY

Julianna Adams DATE: 5/14/2024
JULIANNA GONZALEZ ADAMS

RCWD PROJECT NO. E1792

Gregory M. Gill

Digitally signed by Gregory M. Gill
DN: cn=Gregory M. Gill, o=RCWD, ou=Engineering, email=gillg@ranchowater.com, c=US
Date: 2024.08.07 10:26:42 -07'00'

FOR 1 REVISIONS ONLY.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/12/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

1	SHEET L-119A SHOWS CHANGES TO LANDSCAPING AND IRRIGATION LINE CONFIGURATION	5/02/24	JA
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI
SYMBOL	DESCRIPTIONS REVISIONS	DATE	APPROVAL

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 97+00 TO STA 92+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-119.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226/420

Scale: AS SHOWN
SHEET
L-119

Plot Date: 12/21/2017

1

CONSTRUCTION NOTES

1. REMOVE GROUND COVER VEGETATION AND MULCH. RETURN AREA TO ORIGINAL GRADE.
2. REMOVE DECOMPOSED GRANITE TRAIL WITHIN APN 921-280-016. RETURN AREA TO ORIGINAL GRADE.
3. REMOVE TREE.
4. REMOVE COMPOSITE BENDER BOARD.
5. REMOVE BUBBLERS, POPUP SPRAY AND OLD LAVENDER IRRIGATION LINE.
6. CONSTRUCT CONCRETE MOW STRIP SEPARATION PER RANCHO WATER STD. DRAWING NO. OS-11.
7. CONSTRUCT LATERAL PIPING LAVENDER COLOR AS DESCRIBED IN DETAIL N/L-128. CONNECT TREE BUBBLER IRRIGATION LINE TO CONTROL VALVE J-35.
8. CONSTRUCT LATERAL PIPING LAVENDER COLOR AS DESCRIBED IN DETAIL N/L-128. CONNECT IRRIGATION LINE TO CONTROL VALVE J-34.
9. CONNECT NEW LATERAL PIPING TO PIPE CONNECTED TO CONTROL VALVE J-34.
10. CUT IRRIGATION LINE AND CONNECT EXISTING LATERAL PIPING TO NEW LATERAL PIPING.
11. SAWCUT AND REMOVE CONCRETE MOW STRIP.
12. INSTALL 2" OF D.G. FLUSH WITH EXISTING D.G.
13. INSTALL SIGNS IN ENGLISH AND SPANISH READING "RECYCLED WATER, DO NOT DRINK" PER RANCHO WATER STD. DRAWING NO. OS-4.
14. REPAIR DECORATIVE LANDSCAPE CURB.
15. CUT AND CAP IRRIGATION LINE.

LEGEND

- LIMITS OF CONSTRUCTION
- PL — PROPERTY LINE
- IRRIGATION LINE TO BE REMOVED
- EXISTING IRRIGATION LINE WITH POPUP SPRAY HEADS TO REMAIN IN-PLACE
- NEW IRRIGATION LINE
- CURB TO BE REMOVED

NOTE: AUTOMATIC IRRIGATION CONTROLLER IS LOCATED NEAR THE EAST BANK MAINTENANCE TRAIL AT FORTH STREET.

ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CA 92501
PHONE: 951-955-1200

REGISTERED PROFESSIONAL ENGINEER — JULIANNA GONZALEZ ADAMS — No. 83257 — CIVIL — STATE OF CALIFORNIA

FOR 1 REVISIONS ONLY

DATE: 6/24/24

JULIANNA GONZALEZ ADAMS

Gregory M. Gill

Digitally signed by Gregory M. Gill
DN: cn=Gregory M. Gill, o=RCWD, ou=Engineering, email=gillg@ranchowater.com, c=US
Date: 2024.08.07 10:29:21 -07'00'

0 5 10 FEET

APN#921-280-016
PRIVATE PROPERTY

3/4"

TO J-35

EXISTING 18" STORM DRAIN; PROTECT IN-PLACE

CONNECT EXISTING LATERAL TO J-33

J-PB

J-34 J-33 QC J-32 J-31

EXISTING CURB; PROTECT IN-PLACE

EXISTING DROP INLET; PROTECT IN-PLACE

EXISTING J-31 LATERAL RECONNECT/PROTECT IN PLACE

1007 1006 1005 1004

DISCLAIMER: IRRIGATION LINES SHOWN ON THIS SHEET ARE APPROXIMATE.

Don't Dig...Until You Call U.S.A. Toll Free
1-800-227-2600
for the location of buried utility lines.
Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

REF.	DESCRIPTION	APPR.	DATE
	REVISIONS		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: RLD & MS
DRAWN BY: RLD & MS
DATE DRAWN: MAY 2024
PS NUMBER:

RECOMMENDED FOR APPROVAL BY: DATE:

APPROVED BY: DATE:

MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN UPDATES
APPROX. STA 96+25 TO STA 94+60

PROJECT NO. --
DRAWING NO. --
SHEET NO. L-119A

VALUE ENGINEERING PAYS

SAFETY PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CONCRETE MOW CURB ALONG R/W

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

APN 922026008
APN 922026027
APN 922026039
APN 922035027
APN 922035026
APN 922035003
APN 922035004
APN 922026038
APN 922026025
APN 922026023
APN 922051005
APN 922053044
APN 922053024

J-28 36 1.5 | J-27 36 1.5 | J-26 311.25 | J-25 311.25

G-24 42 2 | G-23 14 1.5 | G-22 21 1.25

MATCHLINE STA. 92+00 SEE SHEET L-119

MATCHLINE STA. 87+00 SEE SHEET L-121

91+00 90+00 89+00 88+00

FLOW
MURRIETA CREEK

EXISTING FENCELINE

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

12/22/17 DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/8/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 92+00 TO STA 87+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-120.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226421

Scale: AS SHOWN
SHEET
L-120

Plot Date: 12/21/2017

VALUE ENGINEERING PAYS

SAFETY! PAYS

AUTOMATIC IRRIGATION CONTROLLER "J", 48 STATIONS MIN., PEDESTAL MOUNT IN STAINLESS STEEL CABINET. PROVIDE 120V 60HZ CONTINUOUSLY HOT POWER TO THIS LOCATION. LOCATE CONTROLLER IN PLANTING AREA. SEE ELECTRICAL PLANS, SHEET E-3.

CONTRACTOR SHALL INCLUDE A LAMINATED COPY OF THE IRRIGATION SCHEDULE IN THE CONTROLLER ENCLOSURE.

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

CONCRETE MOW CURB ALONG R/W

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

SOIL CEMENT BANK PROTECTION

MATCHLINE STA. 87+00 SEE SHEET L-120

MATCHLINE STA. 82+00 SEE SHEET L-122

FLOW
MURRIETA CREEK

APN 922035015
APN 922036031
APN 9220-36043
APN 922053046
APN 922053041
APN 922053043
APN 922053026
APN 922053025
APN 922053013

AUTOMATIC IRRIGATION CONTROLLER "G", 48 STATIONS MIN., PEDESTAL MOUNT IN STAINLESS STEEL CABINET. PROVIDE 120V 60HZ CONTINUOUSLY HOT POWER TO THIS LOCATION. LOCATE CONTROLLER IN PLANTING AREA. SEE ELECTRICAL PLANS, SHEET E-3.

CONTRACTOR SHALL INCLUDE A LAMINATED COPY OF THE IRRIGATION SCHEDULE IN THE CONTROLLER ENCLOSURE.

SOIL CEMENT BANK PROTECTION

EXISTING ORNAMENTAL CONCRETE WALL

CONCRETE MOW CURB ALONG R/W

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/21/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 87+00 TO STA 82+00

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS
FILE NAME: L-121.DGN

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY:
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DISTRICT FILE NO. 226422
SPEC. NO. W912PL-15-B-0005

Scale: AS SHOWN
SHEET
L-121

Plot Date: 12/21/2017

VALUE ENGINEERING PAYS

SAFETY PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

EXISTING FIRE HYDRANT IS THE POINT OF CONNECTION FOR TEMPORARY POTABLE WATER IRRIGATION SYSTEM. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS. PERMANENT RECLAIMED WATER PIPING WILL MAINTAIN SEPARATION REQUIREMENTS AS DESCRIBED IN THE NOTES AND DETAILS IN THIS PLAN SET.

CONCRETE MOW CURB ALONG R/W

APN 922036043

APN 922036044

APN 922045022

APN 922045011

APN 922045013

CONCRETE MOW CURB ALONG R/W

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

SOIL CEMENT BANK PROTECTION

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING, SEE DETAIL U ON SHEET L-129

J-19 / 18 1

J-18 / 18 1

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

MATCHLINE STA. 82+00 SEE SHEET L-121

MATCHLINE STA. 77+00 SEE SHEET L-123

EXISTING 8" CML&C POTABLE WATER MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK

EXISTING 4" H.P. NATURAL GAS MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK

FLOW

MURRIETA CREEK

81+00

80+00

79+00

78+00

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING, SEE DETAIL U ON SHEET L-129

G-17 / 231.25

SOIL CEMENT BANK PROTECTION

MAIN STREET

APN 922053020

APN 922053023

APN 922061022

CONCRETE MOW CURB ALONG R/W

CONCRETE MOW CURB ALONG R/W

EXISTING FENCELINE

EXISTING POTABLE WATER MAINLINE (UNKNOWN SIZE) LOCATED A MINIMUM OF 15-FT FROM PROJECT BOUNDARY

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE 12/12/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 82+00 TO STA 77+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

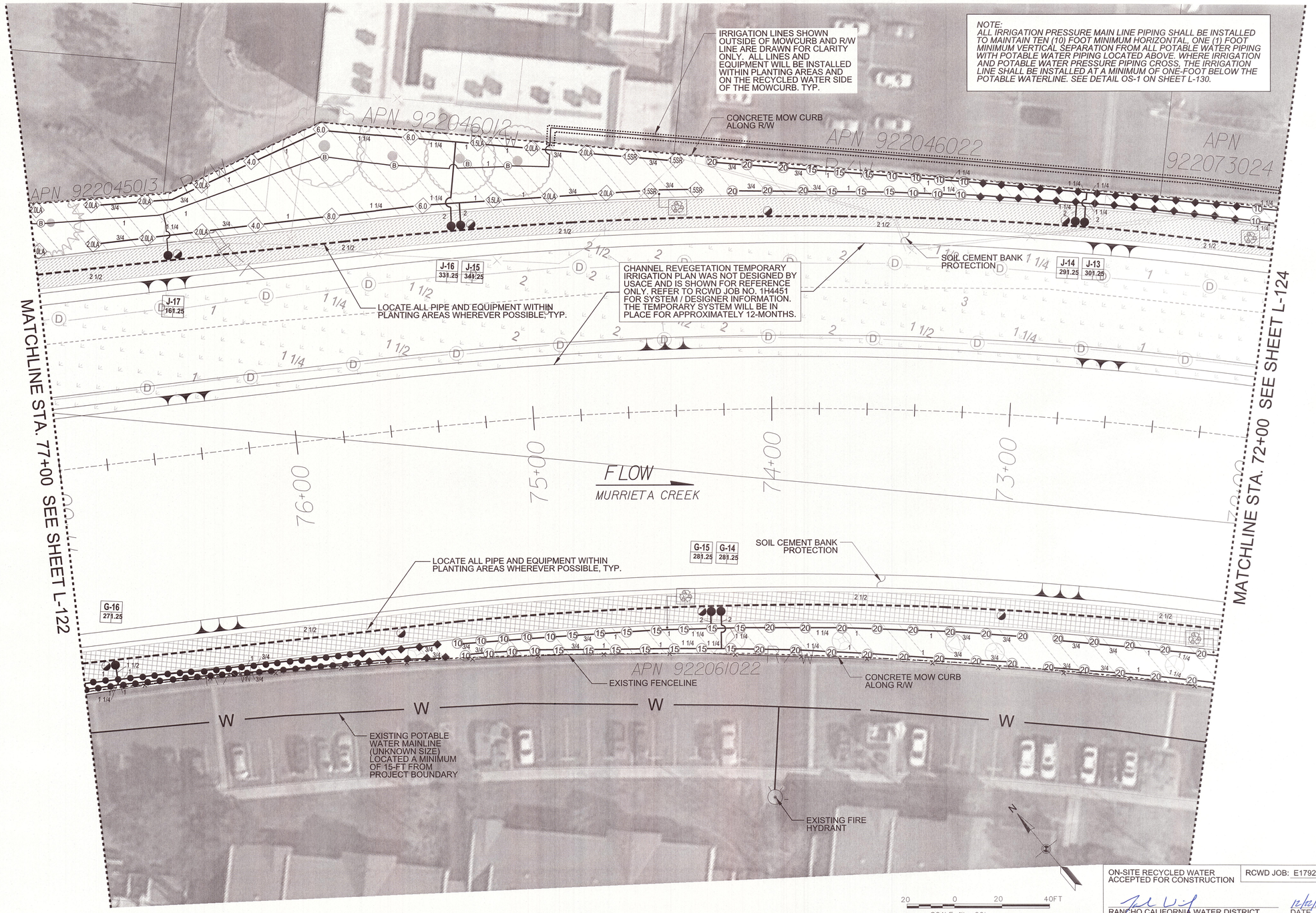
SUBMITTED BY:
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS
FILE NAME: L-122.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226423

Scale: AS SHOWN
SHEET L-122

Plot Date: 12/8/2017

VALUE ENGINEERING PAYS



SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 77+00 TO STA 72+00

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY:	D. WALKER
DRAWN BY:	D. WALKER
CHECKED BY:	S. WILLIS
FILE NAME	L-123.DGN
SPEC. NO.	W912PL-15-B-0005
DISTRICT FILE NO.	226/424

Scale: AS SHOWN

SHEET L-123

SAFETY PAYS

Plot Date: 12/21/2017

8 7 6 5 VALUE ENGINEERING PAYS 4 3 2 1

D C B A

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CONCRETE MOW CURB ALONG R/W

APN 922073021

APN 922073024

EXISTING RECLAIMED WATER MAIN

EXISTING 15" SEWERLINE

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

APN 922100044

APN 922100040

MATCHLINE STA. 72+00 SEE SHEET L-123

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

J-12 221.25 J-11 221.25

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING, SEE DETAIL U ON SHEET L-129

EXISTING ELECTRICAL LINE ATTACHED TO UNDERSIDE OF BRIDGE DECK, PROTECT IN PLACE

J-10 231.25 J-9 231.25

POINT OF CONNECTION WITH RECLAIMED WATER MAIN (AT 1ST STREET), 2" METER, PRESSURE REDUCING VALVE, MASTER VALVE AND FLOW SENSOR. CONNECT MASTER VALVE AND FLOW SENSOR TO CONTROLLER "J". (SEE POC ENLARGEMENT ON SHEET L-T3, METER DATA TABLE AND IRRIGATION SCHEDULE ON L-133 AND L-134)

EXISTING SANITARY SEWER (UNKNOWN SIZE) ATTACHED TO UNDERSIDE OF BRIDGE DECK, PROTECT IN PLACE

EXISTING 20" CML&C STEEL RCWD RECYCLED WATER MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK, PROTECT IN PLACE

FLOW
MURRIETA CREEK

EXISTING 15" SANITARY SEWER ENCASED IN 30" DIAMETER STEEL CASING, PROTECT IN PLACE

APN 922100041

POINT OF CONNECTION WITH RECLAIMED WATER MAIN (AT 1ST STREET), 2" METER, PRESSURE REDUCING VALVE, MASTER VALVE AND FLOW SENSOR. CONNECT MASTER VALVE AND FLOW SENSOR TO CONTROLLER "G". (SEE POC ENLARGEMENT ON SHEET L-T3, METER DATA TABLE AND IRRIGATION SCHEDULE ON L-131 AND L-132)

G-11 34 1.5

MATCHLINE STA. 67+00 SEE SHEET L-125

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING, SEE DETAIL U ON SHEET L-129

G-13 29 1.25 G-12 29 1.25

APN 922061022

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

EXISTING POTABLE WATER MAINLINE (UNKNOWN SIZE) LOCATED A MINIMUM OF 15-FT FROM PROJECT BOUNDARY

1ST STREET

EXISTING MANHOLE

EXISTING CMU BLOCK WALL

APN 922100031

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

12/12/17 DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	QJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 72+00 TO STA 67+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226425
FILE NAME: L-124.DGN

Scale: AS SHOWN
SHEET
L-124

8 7 6 5 SAFETY PAYS 4 3 2 1

Plot Date: 12/21/2017

VALUE ENGINEERING PAYS

SAFETY PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

MATCHLINE STA. 67+00 SEE SHEET L-124

MATCHLINE STA. 62+00 SEE SHEET L-126

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

APN 922100040

APN 922100042

APN 922100048

APN 922100050

APN 922100052

APN 922100046

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

STA. 66+00

STA. 65+00

STA. 64+00

STA. 63+00

J-8 22 1.25

J-7 34 1.25

J-6 29 1.25

J-5 37 1.5

J-4 34 1.25

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

FLOW

MURRIETA CREEK

EAST BANK

WEST BANK

CHANNEL CENTERLINE
NOT SHOWN ON THIS SHEET

G-10 18 1.5

G-9 36 1.5

G-8 23 1.5

G-7 15 1

G-4 49 2

G-3 32 1.5

G-2 12 1

G-1 45 2

FUTURE BOY'S & GIRL'S CLUB DEVELOPMENT BY OTHERS

EXISTING ROTARY PARK FENCELINE

CONCRETE MOW CURB ALONG R/W

34 Spaces

18'-0"

27'-0"

9'-0"

R/W

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 67+00 TO STA 62+00

DESIGNED BY:	D. WALKER
DRAWN BY:	D. WALKER
CHECKED BY:	S. WILLIS
FILE NAME:	L-125.DGN
SPEC. NO.	W912PL-15-B-0005
DISTRICT FILE NO.	226/426

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY:
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

Scale: AS SHOWN

SHEET
L-125

Plot Date: 12/7/2017

VALUE ENGINEERING PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

PROVIDE WIRING FROM CONTROLLER "J" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE.

APN 922100048

CONCRETE MOW CURB ALONG R/W

APN 922100038

R/W

MATCHLINE STA. 62+00 SEE SHEET L-125

APN 922100039

J-3 6 1

J-2 39 1.5

J-1 36 1.5

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

STA. 61+00

STA. 60+00

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

SOIL CEMENT BANK PROTECTION

FLOW

MURRIETA CREEK

1 1/4" CHECK VALVE

EAST BANK

WEST BANK

END OF CONSTRUCTION STA. 59+00

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CHANNEL CENTERLINE NOT SHOWN ON THIS SHEET

MATCHLINE STA. 62+00 SEE SHEET L-125

G-6 30 1.5

G-5 44 2

APN 922100039

PROVIDE WIRING FROM CONTROLLER "G" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE.

EAST BANK

WEST BANK

END OF CONSTRUCTION STA. 59+00

R/W

30'

EXISTING ROTARY PARK FENCELINE

CONCRETE MOW CURB ALONG R/W

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CAP END OF MAINLINE

APN 922100026

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE 12/21/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 62+00 TO STA 59+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DISTRICT FILE NO. 226427

SPEC. NO. W912PL-15-B-0005

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

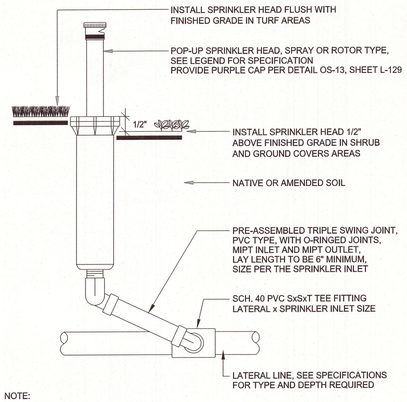
FILE NAME: L-126.DGN

Scale: AS SHOWN

SHEET L-126

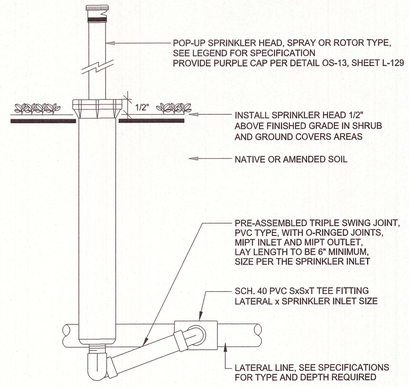
SAFETY! PAYS

Plot Date: 12/7/2017



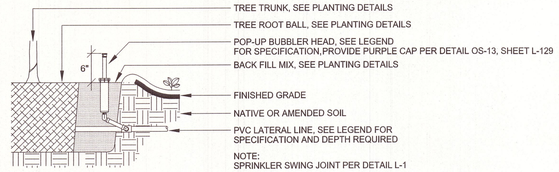
NOTE:
PRE-ASSEMBLED SWING JOINT SHALL BE SIZED TO MATCH THE SPRINKLER INLET.
INSTALL SPRINKLER HEADS 6" FROM PAVING EDGE IN GROUND COVER AREAS.
INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN TURF AREAS.
INSTALL SPRINKLER HEADS PLUMB. ADJUST NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.
USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.

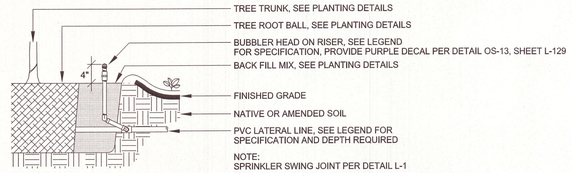
A L-127 — POP-UP SPRINKLER (4" & 6") SPRAY OR ROTOR TYPE — NO SCALE



NOTE:
PRE-ASSEMBLED SWING JOINT SHALL BE SIZED TO MATCH THE SPRINKLER INLET.
INSTALL SPRINKLER HEADS 6" FROM PAVING EDGE IN GROUND COVER AREAS.
INSTALL SPRINKLER HEADS PLUMB. ADJUST NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.
USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.

B L-127 — POP-UP SPRINKLER (12") SPRAY OR ROTOR TYPE — NO SCALE

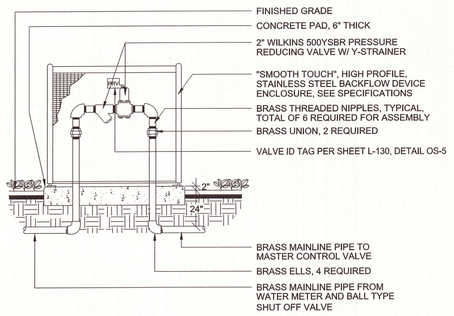




NOTE:
INSTALL SPRINKLER HEADS 24" FROM FENCES, WALLS, OR BUILDINGS. DO NOT INSTALL SPRINKLER HEAD ON RISER WITHIN 10 FEET OF PAVING, CURBS, OR TURF EDGES.
INSTALL SPRINKLER HEADS PLUMB. ADJUST NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.
USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.

C L-127 — TREE BUBBLERS — NO SCALE

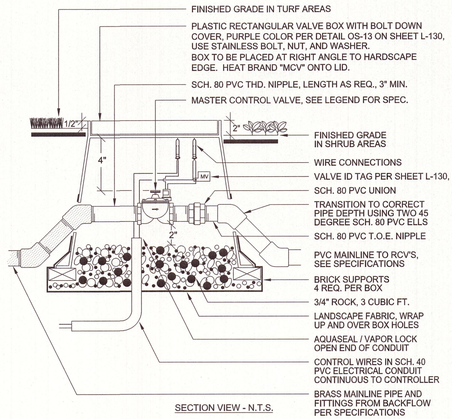
NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.



SECTION VIEW - N.T.S.

NOTE:
ALL PIPING BETWEEN THE WATER METER AND THE MASTER CONTROL VALVE SHALL BE BRASS THREADED PIPE AND BRASS THREADED FITTINGS
INSTALL A "POLAR BEARIER" INSULATING COVER OVER THE ENTIRE PRV ASSEMBLY

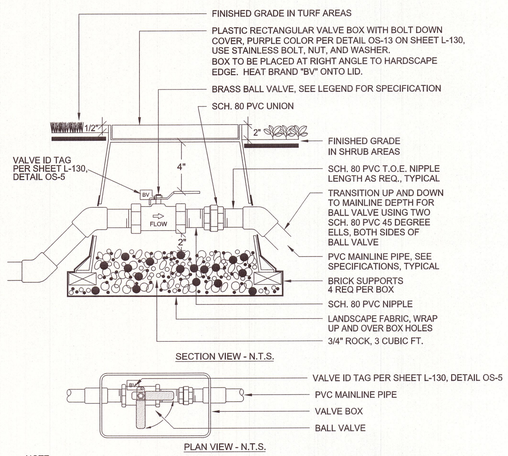
E L-127 — PRESSURE REDUCING VALVE — NO SCALE



SECTION VIEW - N.T.S.

NOTE:
BRASS ELLS, BRASS NIPPLES, UNION, FEMALE ADAPTER AND AND ALL NIPPLES SHALL BE SIZED TO MATCH THE MASTER CONTROL VALVE OR AS INDICATED ON THE DRAWINGS.
INSTALL VALVE BOXES 12" APART AS INDICATED ON DETAIL SID033.
EQUIPMENT SHALL BE INSTALLED SUCH THAT THERE IS NO LEVERAGE OR STRESS ON THE VALVE ASSEMBLY. PIPE SHALL NOT COME INTO CONTACT WITH VALVE BOX.
USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.

F L-127 — MASTER CONTROL VALVE — NO SCALE

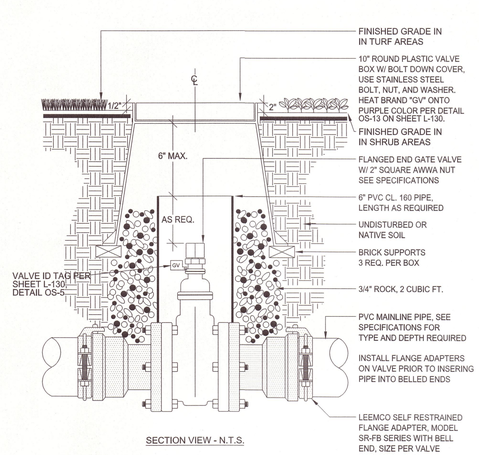


SECTION VIEW - N.T.S.

PLAN VIEW - N.T.S.

NOTE:
BOX TO BE INSTALLED AS TO ALLOW FOR PROPER OPERATION OF BALL VALVE, INSTALL VALVE AND BOX PARALLEL TO HARDSCAPE EDGE, INSTALL BOX OFF-CENTER OF VALVE.
INSTALL VALVE BOX EXTENSIONS AS REQ. TO ACHIEVE PROPER VALVE AND PIPE DEPTH

G L-127 — BALL VALVE 2" AND SMALLER — NO SCALE



SECTION VIEW - N.T.S.

NOTE:
CONTRACTOR TO PROVIDE ONE 5 FOOT LONG TEE WRENCH WITH 2" AWWA SQUARE NUT ADAPTER FOR THE OPERATION OF GATE VALVES. SEE SPECIFICATIONS.
INSTALL VALVE BOX EXTENSIONS AS REQ. TO ACHIEVE PROPER VALVE AND PIPE DEPTH.

H L-127 — GATE VALVE 2 1/2" AND LARGER — NO SCALE

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/5/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

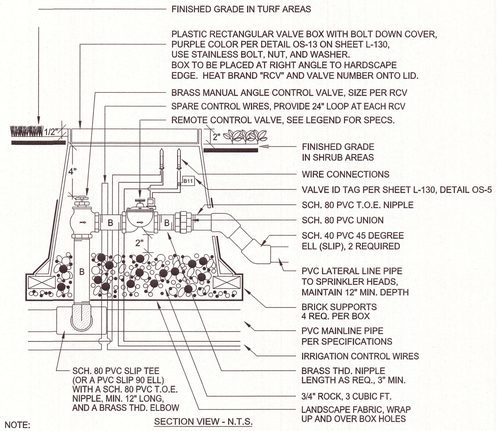
TOP OF BANK IRRIGATION DETAILS

DESIGNED BY:	D. WALKER
DRAWN BY:	D. WALKER
CHECKED BY:	S. WILLIS
FILE NAME:	L-127.DGN
SPEC. NO.	W912PL-15-B-0005
DISTRICT FILE NO.	226/428
Scale:	AS SHOWN
SHEET	L-127

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

Plot Date: 12/7/2017



SECTION VIEW - N.T.S.

NOTE:

BRASS ELLS, UNION AND AND ALL NIPPLES SHALL BE SIZED TO MATCH THE R.C.V., AT THE 45 DEGREE ELL INCREASE THE LATERAL SIZE TO MATCH THE SIZE INDICATED ON THE DRAWINGS.

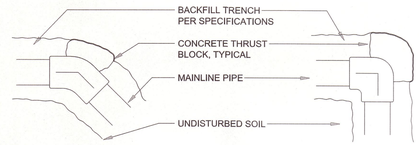
INSTALL VALVE BOXES 12" APART AS INDICATED ON DETAIL SID033.

EQUIPMENT SHALL BE INSTALLED SUCH THAT THERE IS NO LEVERAGE OR STRESS ON THE VALVE ASSEMBLY. PIPE SHALL NOT COME INTO CONTACT WITH VALVE BOX.

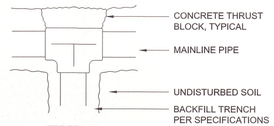
USE A NON-HARDENING TEFLON PIPE SEALANT ON ALL THREADED CONNECTIONS.

J / L-128 **REMOTE CONTROL VALVE** NO SCALE

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.



45 DEGREE ELL 90 DEGREE ELL



TEE FITTING

ALL SECTION VIEWS - N.T.S.

NOTES:

ALL CONCRETE USED IN THRUST BLOCKS SHALL BE 470-C-2000.

SOLVENT WELD MAINLINE PIPE AND FITTINGS SHALL RECEIVE CONCRETE THRUST BLOCKING.

BELL AND GASKET MAINLINE PIPE AND FITTINGS SHALL USE PIPE RESTRAINT SYSTEMS.

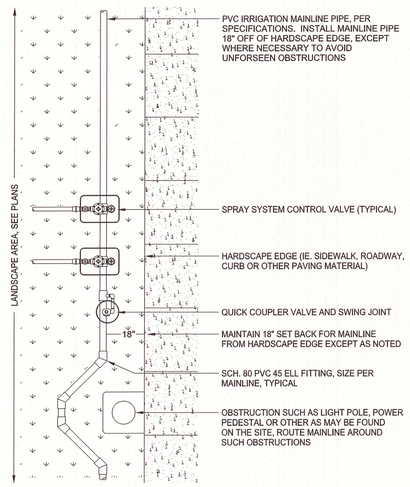
CONCRETE THRUST BLOCKS SHALL BE A MINIMUM OF 1 CUBIC FOOT IN VOLUME. THRUST BLOCKS SHALL NOT ENCASE THE FITTINGS IN CONCRETE.

ALL MAINLINES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS AND PRESSURE TESTED PER THE SPECIFICATIONS.

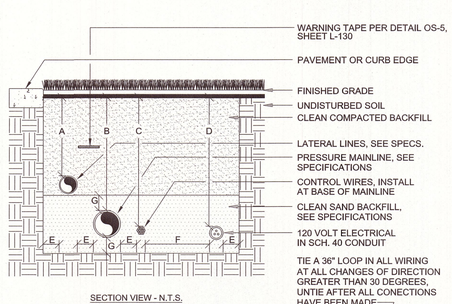
ALL TRENCH DEPTH AND WIDTH SHALL BE PER THE SPECIFICATIONS.

WRAP PLASTIC FITTINGS IN CONTACT WITH CONCRETE USING BLACK PIPE WRAP.

L / L-128 **THRUST BLOCKS** NO SCALE

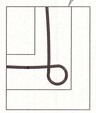


M / L-128 **MAINLINE AND VALVE MANIFOLD LAYOUT** NO SCALE



SECTION VIEW - N.T.S.

DIMENSION	A	B	C	D	E	F	G
1/2" TO 1 1/2" SIZE	18"	24"	26"	30"	6"	24"	6"
2" TO 2 1/2" IN SIZE	18"	24"	26"	30"	6"	24"	6"
3" AND LARGER	18"	24"	26"		6"	24"	6"



PLAN VIEW - N.T.S.

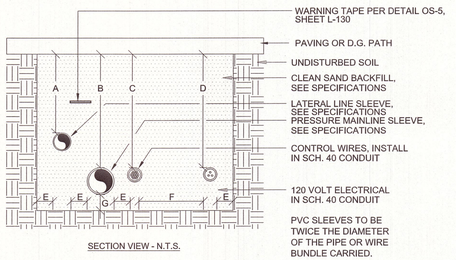
NOTE:

ALL PLASTIC PIPING SHALL BE SNAKED WITHIN TRENCH.

BUNDLE WIRING AND WRAP WITH TAPE AT TEN FOOT INTERVALS.

ALL MAINLINE PIPING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTALLATION SPECIFICATIONS.
MAINTAIN HORIZONTAL AND VERTICAL PIPE SEPERATION BETWEEN ALL POTABLE AND RECYCLED WATER LINE PER SHEET L-130, DETAIL OS-1.

N / L-128 **PIPE AND WIRE TRENCHING** NO SCALE



SECTION VIEW - N.T.S.

DIMENSION	A	B	C	D	E	F	G
DEPTH BELOW GRADE	24"	36"	36"	36"	6"	24"	6"

NOTE:

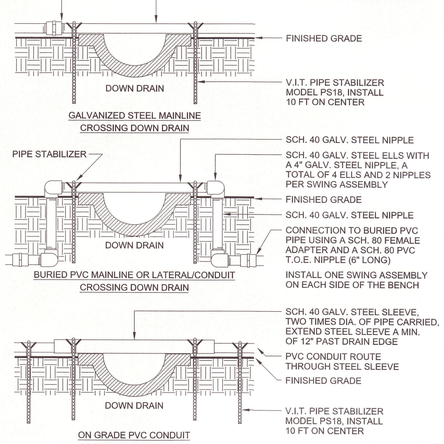
ALL PVC MAINLINE, PVC LATERAL LINES, AND CONTROL WIRES SHALL BE SLEEVED BELOW ALL HARDSCAPE ELEMENTS WITHIN A SCH. 40 PVC SLEEVE. SLEEVES SHALL BE TWICE THE DIAMETER OF THE PIPE OR CONTROL WIRE BUNDLE CARRIED WITHIN, OR 4" MINIMUM, WHICH EVER IS THE GREATER.

ALL SLEEVES SHALL EXTEND 24 INCHES BEYOND THE EDGE OF PAVING.

ALL CURBS SHALL BE MARKED WITH A "SCORE" MARK TO DESIGNATE SLEEVE LOCATION.

SLEEVE DETAIL SHALL ALSO BE USED FOR INSTALLATION OF PIPE IN ROCK SOIL.

O / L-128 **SLEEVE TRENCHING** NO SCALE



NOTE: SCH. 40 GALVENIZED STEEL PIPE, IRRIGATION MAINLINE, SHALL HAVE A FACTORY-APPLIED EXTERIOR COATING OF A UNIVERSAL PHENOLIC PRIMER AND TWO FIELD COATS OF AN ALKYD ENAMEL (2 MILS DFT PER COAT), PURPLE IN COLOR

P / L-128 **IRRIGATION LINES/CONDUITS CROSSING DOWN DRAIN** NO SCALE

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/20/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION DETAILS

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY:

PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

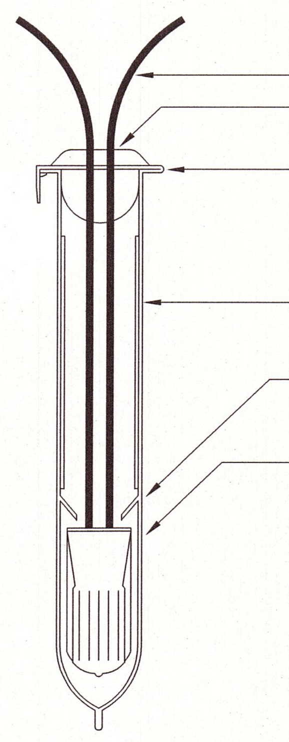
DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-128.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226429

Scale: AS SHOWN
SHEET L-128

Plot Date: 12/7/2017

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.



SECTION VIEW - N.T.S.

NOTE:

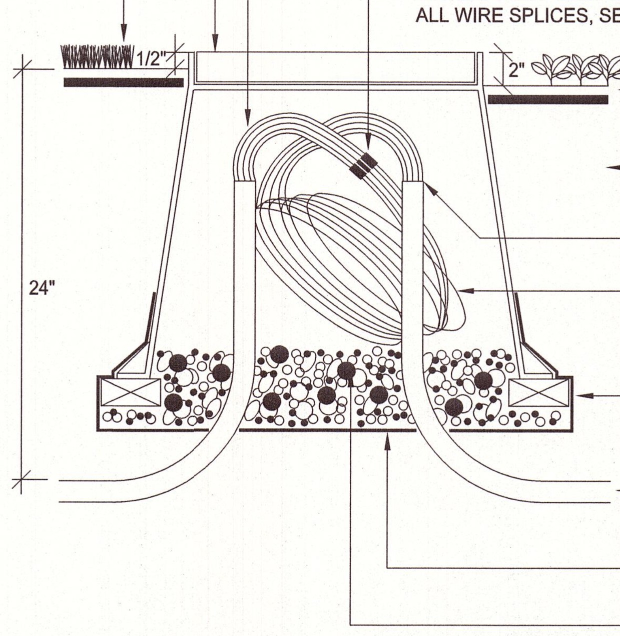
WIRE CONNECTOR SHALL BE A 3M DBY DIRECT BURY SPLICE KIT.

KIT SHALL INCLUDE A SCOTCHLOK SPRING CONNECTOR, A POLYPROPYLENE TUBE AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PREFILLED WITH GEL.

DIRECT BURY SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2 - 3 #14 OR 2 #12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.

(Q / L-129) WIRE CONNECTOR

NO SCALE



SECTION VIEW - N.T.S.

NOTE:

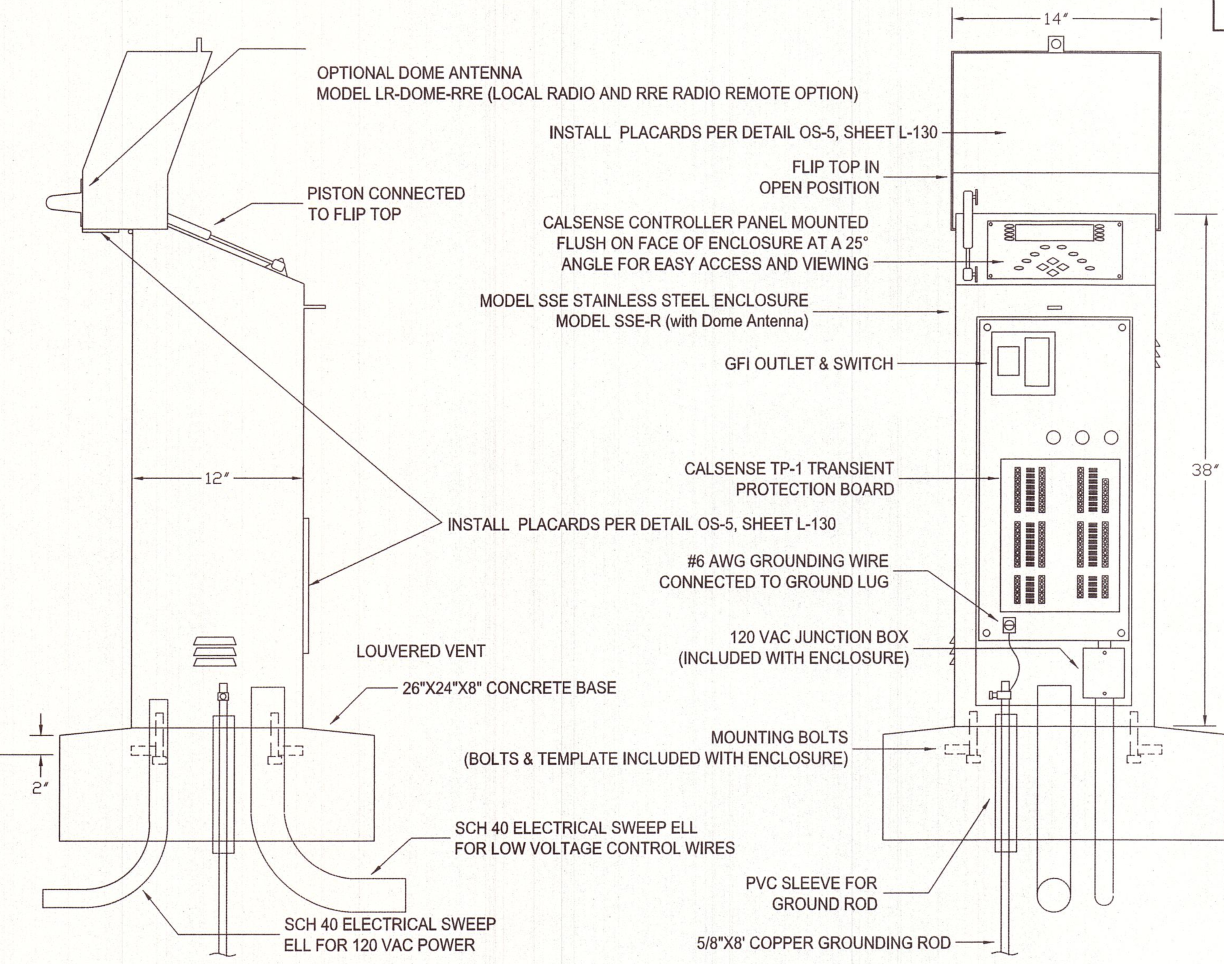
ALL CONTROL WIRE SPLICES SHALL BE PRE-APPROVED BY TCSD SUPERINTENDENT PRIOR TO INSTALLATION.

ALL CONTROL WIRE SPLICES SHALL BE INSTALLED INSIDE PULL BOXES.

ALL SPLICES SHALL BE MADE USING WATERPROOF ELECTRICAL CONNECTORS.

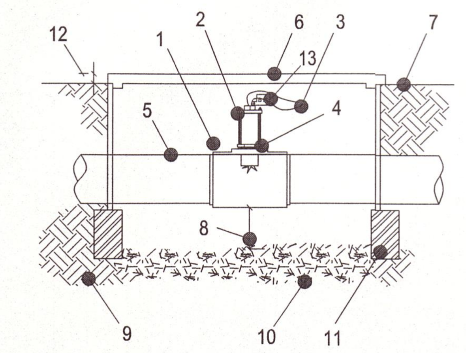
(R / L-129) CONTROL WIRE PULL BOX

NO SCALE



(S / L-129) CALSENSE CONTROLLER

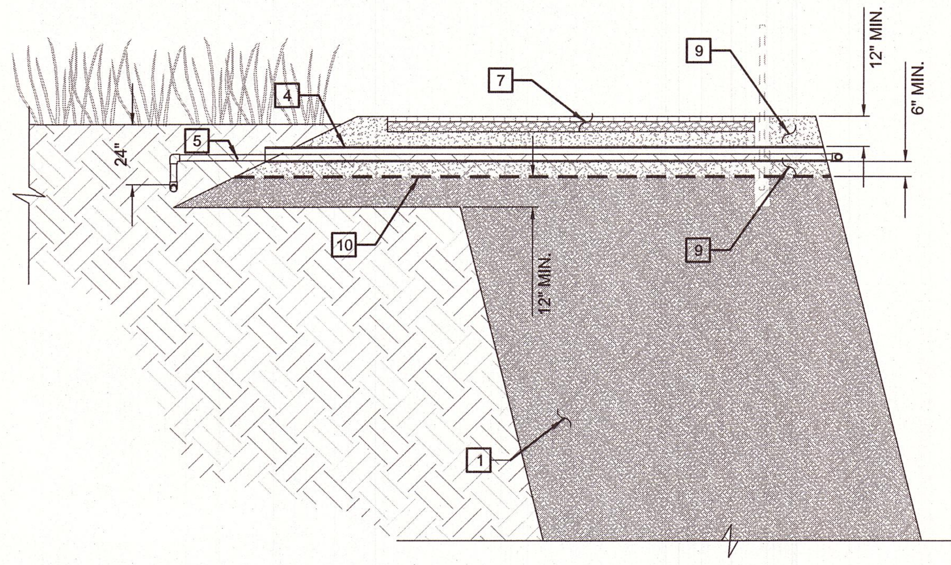
NO SCALE



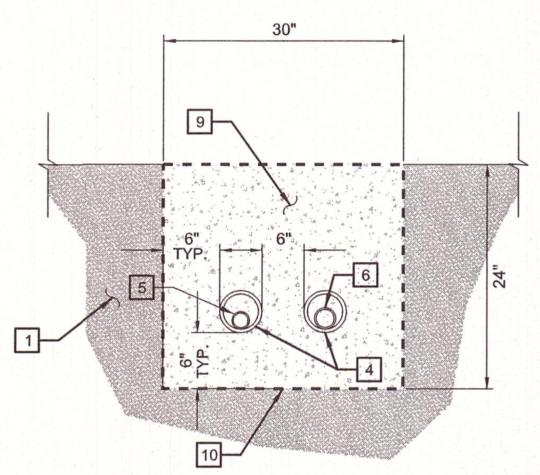
1 PVC FITTINGS AS REQUIRED
2 FLOW SENSOR
3 WIRES TO CONTROLLER
4 INSTALL PER MANUFACTURERS REQUIREMENTS
5 MAIN LINE (3 FT CLEAR OF OTHER EQUIPMENT ON EITHER SIDE OF FLOW METER)
6 VALVE BOX W/ LOCKING COVER MARKED "FV", PURPLE COLOR PER DETAIL OS-13 ON SHEET L-130,
7 FINISH GRADE
8 2" MIN, 6" MAX CLEAR
9 UNDISTURBED OR 95% COMPACTED SOIL
10 2 CU FT MIN PEA GRAVEL
11 SET BOX ON 4 BRICKS
12 2" MIN, 3" MAX IN GROUND COVER
13 VALVE ID TAG PER SHEET L-130, DETAIL OS-5

(T / L-129) FLOW SENSOR

NO SCALE



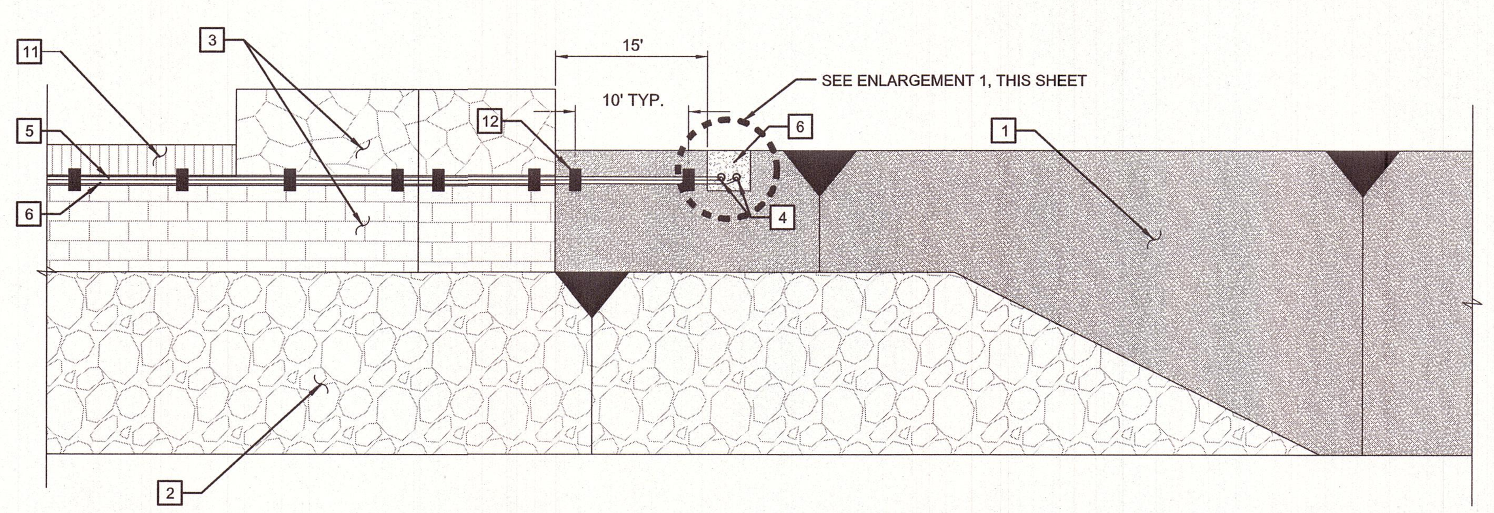
SECTION A-A: 6" SLEEVE THROUGH SOIL CEMENT BANK PROTECTION
N.T.S.



ENLARGEMENT 1: SOIL CEMENT TRENCHING DETAIL
N.T.S.

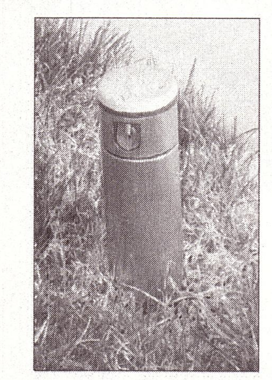
CONSTRUCTION NOTES:

1 SOIL CEMENT BANK PROTECTION
2 EXISTING RIP RAP BANK PROTECTION AT MAIN ST. ONLY
3 EXISTING BRIDGE ABUTMENT
4 6" PVC SDR-13.5 PIPE SLEEVE, CUT FLUSH WITH SC FACE
5 2.5" SCH. 40 GALVENIZED STEEL PIPE, IRRIGATION MAINLINE, SHALL HAVE A FACTORY-APPLIED EXTERIOR COATING OF A UNIVERSAL PHENOLIC PRIMER AND TWO FIELD COATS OF AN ALKYD ENAMEL (2 MILS DFT PER COAT), PURPLE IN COLOR
6 3" SCH. 40 GALVENIZED STEEL PIPE, CONTROL WIRE CONDUIT
7 15' MAINTENANCE ROAD WITH BASE COURSE, PER CIVIL PLANS
8 PLANTING AREA
9 CONCRETE SLURRY BACKFILL; COMPRISED OF 2-SACK PORTLAND CEMENT PER ONE CUBIC YARD OF SAND.
10 TRENCH INTO SOIL CEMENT BANK PROTECTION, 30" WIDE X 24" DEEP, WHERE REQUIRED
11 BRIDGE DECK
12 PIPE SUPPORT SYSTEM; INSTALL SUPPORTS 10' O.C. AND 3' FROM EVERY CHANGE IN DIRECTION (TO BE DESIGNED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL)



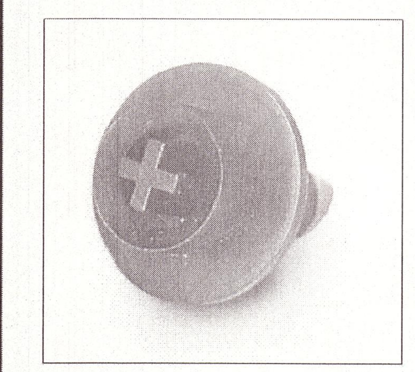
ELEVATION B-B: 6" SLEEVE THROUGH SOIL CEMENT BANK PROTECTION
N.T.S.

(U / L-129) WATER MAINS AND CONTROL WIRE AT BRIDGES

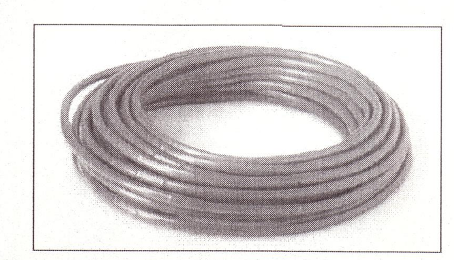


ROTORS

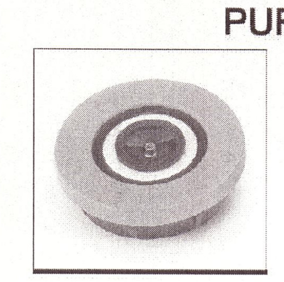
SHRUB SPRAY WITH DECAL



PURPLE DRIP HEAD



PURPLE DRIP LINE



PURPLE SPRAY HEADS

DATE	BY	REVISION	APP'D	DATE

APPROVED ____ ENGINEERING DATE

Rancho Water
Rancho California Water District

IRRIGATION HEAD AND DRIPLINE COLOR CODING

DRAWING NO: OS-10

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION — RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/22/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION DETAILS

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

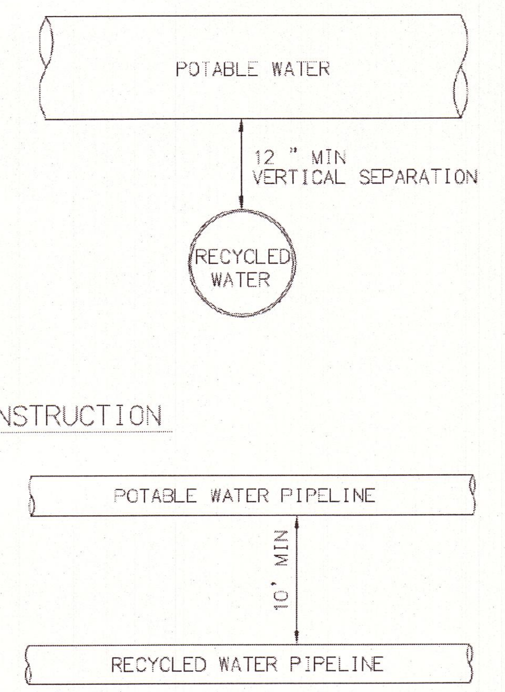
SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DISTRICT FILE NO. 226/430
SPEC. NO. W912PL-15-B-0005
FILE NAME: L-129.DGN

Scale: AS SHOWN
SHEET L-129

Plot Date: 12/7/2017

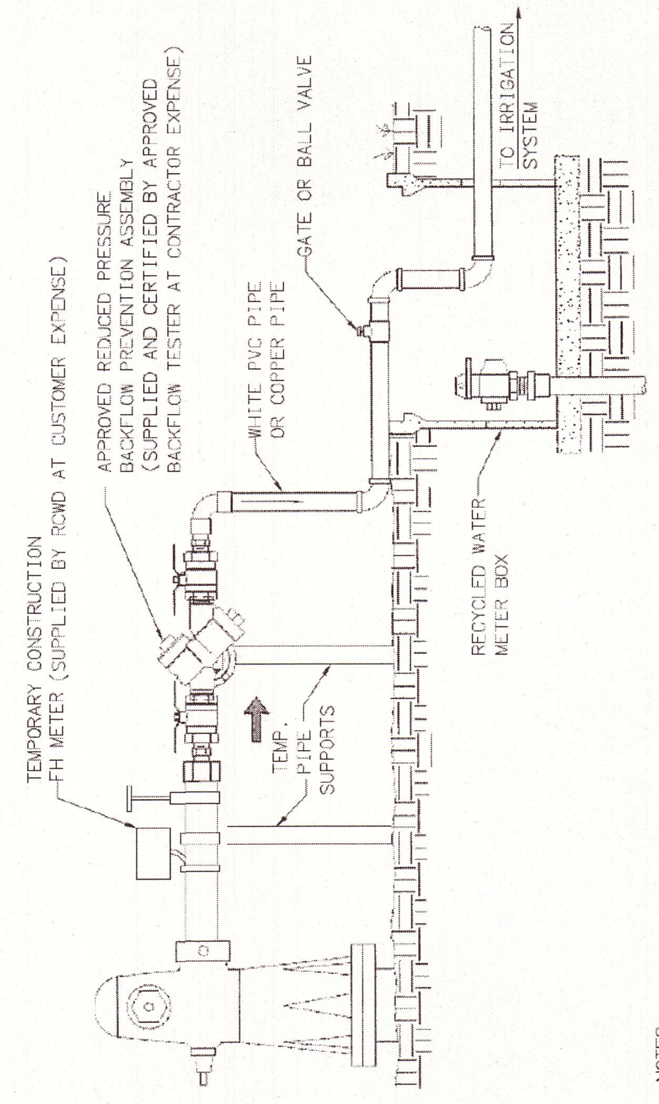
CROSSING DETAIL



RECYCLED WATER IRRIGATION PIPELINES AND PRIVATE POTABLE WATER PIPELINES SHALL BE INSTALLED IN SEPARATE TRENCHES WITH THE GREATEST POSSIBLE SEPARATION. MINIMUM CLEARANCES OF TEN (10)-FEET HORIZONTAL AND ONE (1)-FOOT VERTICAL SHALL BE MAINTAINED BETWEEN POTABLE AND RECYCLED WATER LINES. WHERE RECYCLED WATER IRRIGATION PUPELINES AND PRIVATE POTABLE WATER PIPELINES CROSS, THE POTABLE WATER PIPE SHALL BE INSTALLED A MINIMUM OF TWELVE (12) INCHES ABOVE THE RECYCLED WATER PIPING.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — HORIZONTAL & VERTICAL PIPE SEPARATION — DRAWING NO: OS-1

H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-1.DWG EHERNANDEZ 1/23/08 6:12 pm

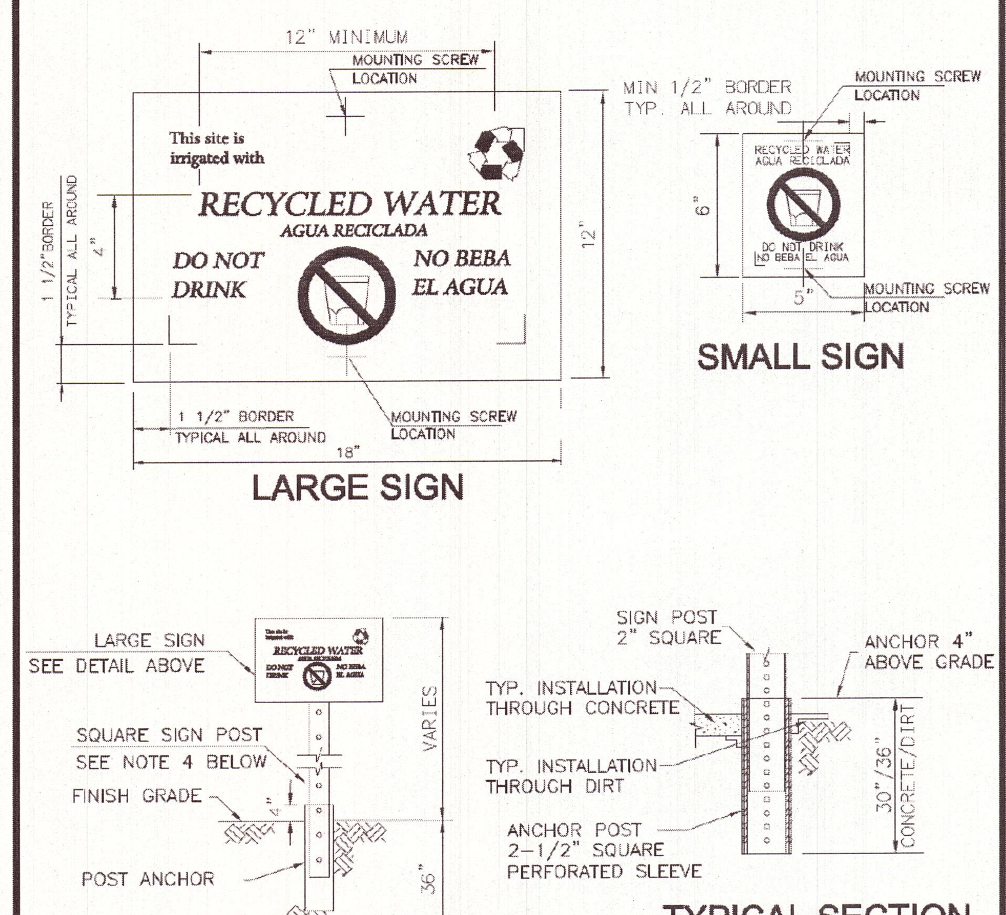


NOTES:

1) CUSTOMER MUST SUPPLY ALL FITTINGS, NIPPLES, VALVES, AND APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY. PRESSURE REGULATOR, IF NEEDED, SHALL BE INSTALLED AFTER THE LAST DOWNSTREAM BACKFLOW PREVENTOR ASSEMBLY. ALL FITTINGS AND NIPPLES FROM HYDRANT TO DOWNSTREAM SIDE OF PRESSURE REGULATOR MUST BE BRASS. THE DISTRICT SHALL SUPPLY THE TEMPORARY CONSTRUCTION WATER METER.
2) BACKFLOW ASSEMBLY MUST BE TESTED AND CERTIFIED BEFORE USE BY A CERTIFIED BACKFLOW ASSEMBLY TESTER APPROVED BY RCWD AT CONTRACTOR'S EXPENSE.
3) HYDRANT MUST BE FULLY OPENED DURING USE.
4) CUSTOMER TO PROVIDE ADJUSTABLE PIPE SUPPORT AS REQUIRED BY RCWD.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — TEMPORARY HIGH LINE POTABLE WATER TEST CONNECTION — DRAWING NO: OS-3

H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-3.DWG EHERNANDEZ 1/23/08 4:34 pm

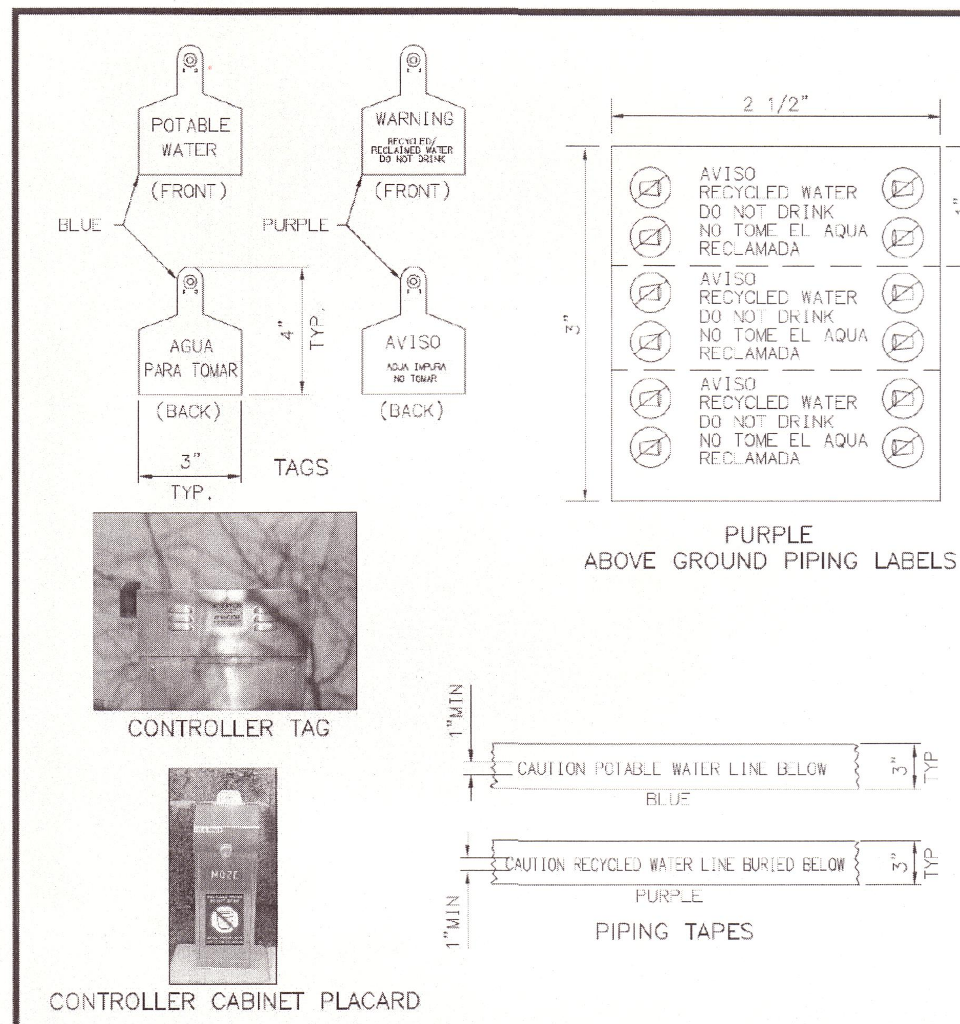


NOTES:

1) SIGNS SHALL BE MANUFACTURED OF ALUMINUM SHEET, THICKNESS 0.063" OR 18 GAUGE OR AS OTHERWISE APPROVED BY RCWD.
2) THE SIGN SHALL INCORPORATE A PURPLE BACKGROUND WITH WHITE LETTERS AND SYMBOLS.
3) LARGE SIGN POST SHALL BE PERFORATED STEEL POSTS WITH TWO PIECE ANCHOR AND "TELESPAR" SLEEVE. THE ANCHOR AND SLEEVE ASSEMBLY SHALL CONSIST OF A 2 1/2" SQUARE BY 30" (THROUGH SIDEWALK) OR 36" (THROUGH SOIL). ANCHOR WITH A 2 1/4" SQUARE BY 10" SLEEVE. SECURE POST INTO THE ANCHOR ASSEMBLY WITH TWO 3/8" DRIVE RIVETS. ANCHOR ASSEMBLY SHALL NEVER BE SECURED IN CONCRETE FOOTING.
4) SMALL SIGN MAY BE MOUNTED ON A METAL STAKE OR OTHER POST, AS APPROVED BY RCWD.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — RECYCLED WATER SIGNS — DRAWING NO: OS-4

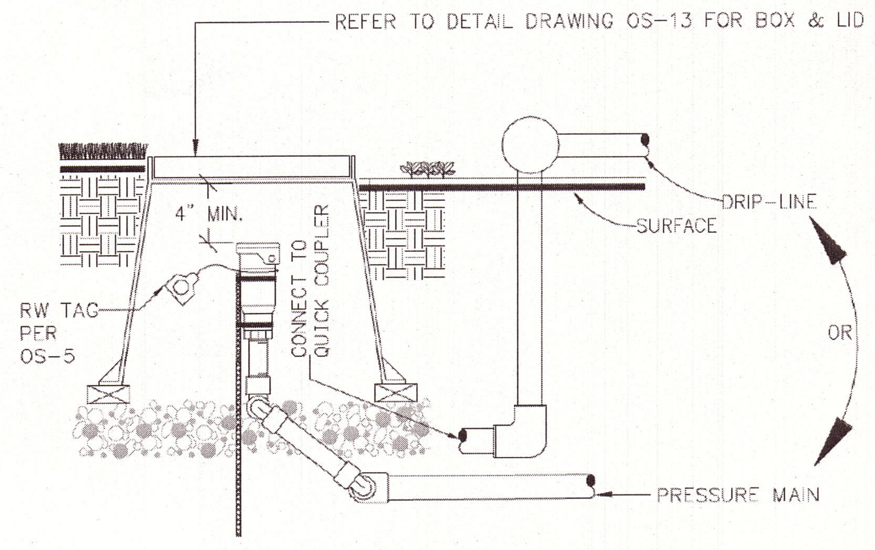
H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-4.DWG EHERNANDEZ 1/23/08 4:34 pm



NOTES:

1. USE IDENTIFICATION MATERIALS ABOVE OR APPROVED EQUALS
2. LETTERS SHALL BE BLACK ON PURPLE BACKGROUND

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — RECYCLED WATER TAGS & PIPING LABELS — DRAWING NO: OS-5



QUICK COUPLER/DRIP LINE FLUSH VALVE

SECTION VIEW – N.T.S.

NOTES:

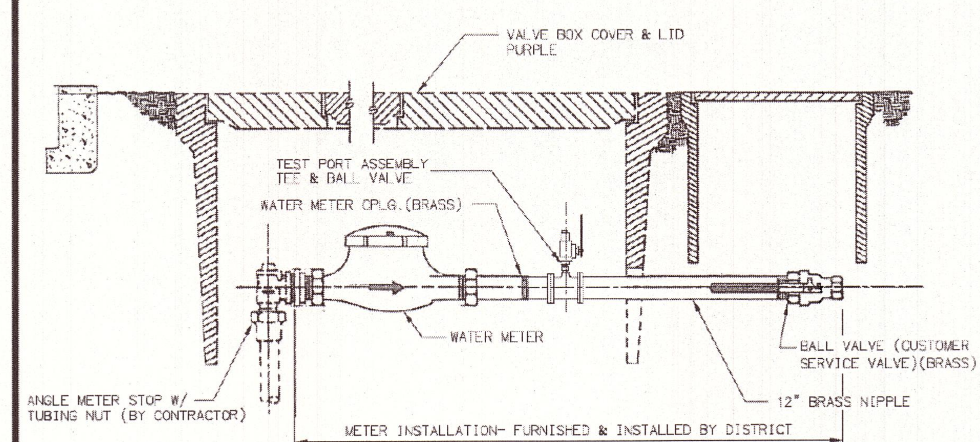
1) ACME THREAD QUICK COUPLING VALVE FOR RECYCLED WATER USE (MODEL 075-SLSC OR EQUAL)
2) USE PURPLE RECYCLED WATER BOX AND COVER

DISCHARGE LIMITATIONS

FLUSHING OF RECYCLED WATER THROUGH IRRIGATION SYSTEM PIPING SHALL BE PERFORMED IN ACCORDANCE WITH NPDES REQUIREMENTS. DISCHARGES FROM THE SITE AND PONDING ARE NOT PERMITTED. IF NECESSARY, FLUSHING MAY BE DONE BY DIVERTING RECYCLED WATER INTO A STORAGE TANK, TANK TRUCK, OR OTHER APPROVED HOLDING FACILITY. HOLDING FACILITIES MUST BE CLEARLY MARKED WITH WARNING SIGNS. RECYCLED WATER SHALL BE TRANSPORTED AND DISCHARGED AT A SITE APPROVED BY RCWD.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — QUICK COUPLER / FLUSH VALVE — DRAWING NO: OS-7

H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-7.DWG EHERNANDEZ 1/23/08 4:35 pm

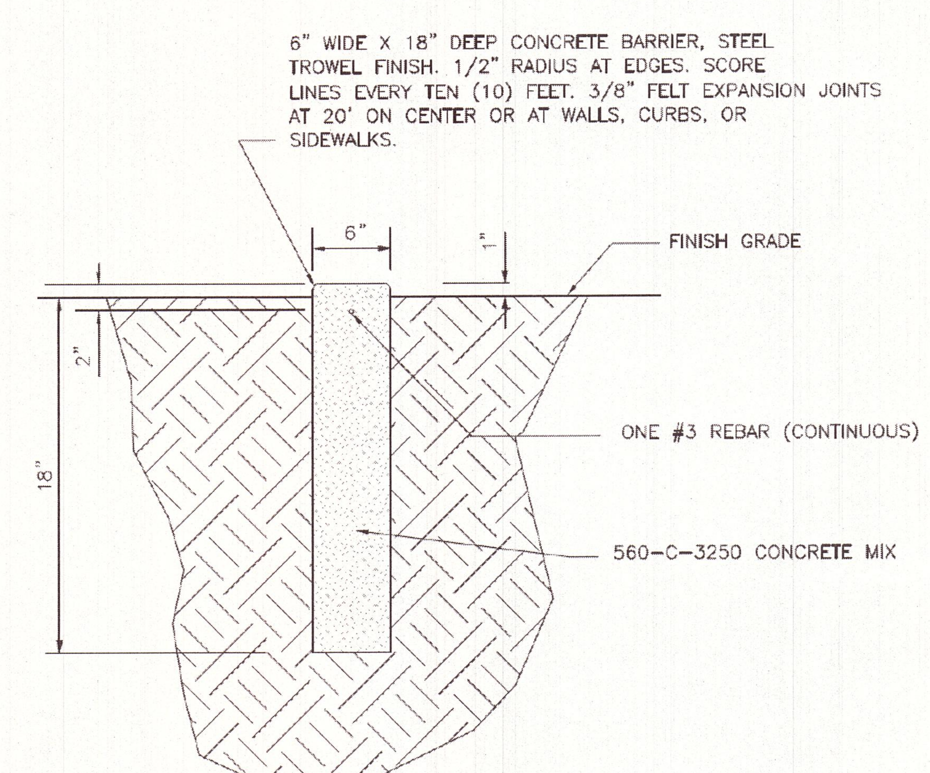


NOTES:

1) REFERENCE RCWD STANDARD DRAWING RW-16 FOR 3/4 " AND 1" METERS
2) REFERENCE RCWD STD DRAWING RW-14 FOR 2" SERVICE CONNECTION
3) MARKING OF METER BOX & LID TO BE PURPLE
4) METER REGISTER CAP TO BE PURPLE.
5) 3/8" BRASS BALL VALVE INSTALLED AS TEST PORT ON DOWNSTREAM SIDE OF METER.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — METER CONNECTION 2" & SMALLER — DRAWING NO: OS-8

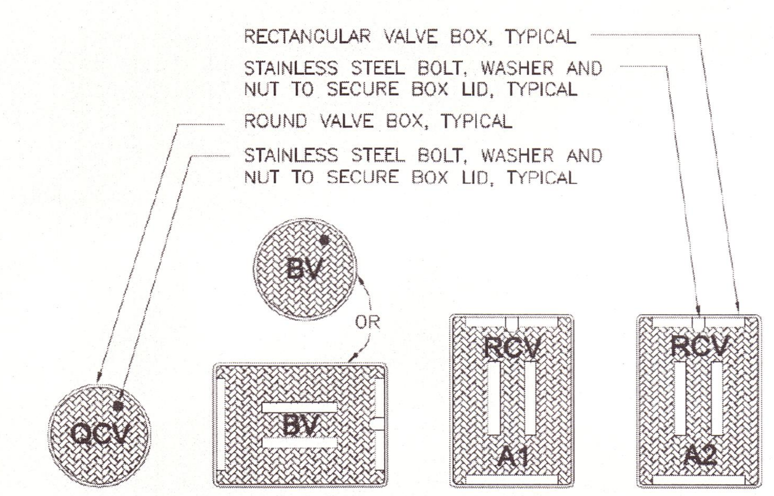
H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-8.DWG EHERNANDEZ 2/4/08 1:39 pm



DATE	BY	REVISION		APP'D	DATE
10/15	PDD	CONC. DEPTH		PDD	10/15
3/14	PDD	CONC. DEPTH		PDD	3/14
2/14	PDD	CONC. DEPTH		PDD	2/14

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — MOW STRIP SEPARATION — DRAWING NO: OS-11

R:\Everyone\...\On-Site Recycled Water\CAD Files\OS-11.DWG PDAUBEN 10/5/15 3:28 pm



NOTES:

1) REFER TO DRAWING OS-5 FOR EQUIPMENT ID TAGS.
2) ALL BOXES AND LIDS TO BE COLOR PURPLE.
3) HEAT BRAND LIDS WITH APPROPRIATE FUNCTION LABELING AS SHOWN.

APPROVED ENGINEERING DATE — Rancho Water, Rancho California Water District — VALVE BOXES — DRAWING NO: OS-13

H:\PDATA\15101676\CADD\WATER\EXHIBITS\RCWD STD DWGS\OS-13.DWG EHERNANDEZ 1/23/08 4:36 pm

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION — RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/12/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION DETAILS

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS
FILE NAME: L-130_M1.DGN

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226430A

Scale: AS SHOWN
SHEET L-130

Plot Date: 12/7/2017

VALUE ENGINEERING PAYS

SAFETY PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

POC METER DATA TABLE	
POC DESIGNATION	G
STREET STATION	68+20
SERVICE LATERAL LNE SIZE (IN)	2
RECYCLED WATER METER SIZE (IN)	2*
RCWD METER DETAIL REFERENCE NUMBER	OS-8, RW-14
DESIGN MAX FLOW (GPM)	49
CHEMICAL INJECTION SYSTEM (Y/N)	N
BACKFLOW SIZE (IN)	N/A
BOOSTER PUMP (PSI BOOST)	N/A
PRESSURE ZONE (FT)	1381
METER ELEVATION (FT)	1007.5
STATIC PRESSURE (PSI)	165
DESIGN PRESSURE (PSI)	50
TOTAL AREA SERVED (SF)	154,737.00
ANNUAL WATER USAGE (ACRE/FT)	6.19
RCWD RECORD DRAWING NUMBER	E1792
SOURCE WATER SUPPLY	RECYCLED
IRRIGATION TYPE (DRIP, SPRAY, ROTOR, ECT)	SPRAY, ROTOR, BUBBLER
WATER WINDOW RESTRICTION	9:00PM TO 6:00AM

*METER IS SIZED AT 2" FOR FUTURE EXPANSION OF THE IRRIGATION SYSTEM. MULTIPLE STATIONS WILL BE REQUIRED TO RUN AT THE SAME TIME ONCE THE FULL SYSTEM IS IN PLACE.

POC METER DATA TABLE	
POC DESIGNATION	J
STREET STATION	68+60
SERVICE LATERAL LNE SIZE (IN)	2
RECYCLED WATER METER SIZE (IN)	2*
RCWD METER DETAIL REFERENCE NUMBER	OS-8, RW-14
DESIGN MAX FLOW (GPM)	40
CHEMICAL INJECTION SYSTEM (Y/N)	N
BACKFLOW SIZE (IN)	N/A
BOOSTER PUMP (PSI BOOST)	N/A
PRESSURE ZONE (FT)	1381
METER ELEVATION (FT)	1007.5
STATIC PRESSURE (PSI)	165
DESIGN PRESSURE (PSI)	50
TOTAL AREA SERVED (SF)	91,572.00
ANNUAL WATER USAGE (ACRE/FT)	3.75
RCWD RECORD DRAWING NUMBER	E1792
SOURCE WATER SUPPLY	RECYCLED
IRRIGATION TYPE (DRIP, SPRAY, ROTOR, ECT)	SPRAY, ROTOR, BUBBLER
WATER WINDOW RESTRICTION	9:00PM TO 6:00AM

*METER IS SIZED AT 2" FOR FUTURE EXPANSION OF THE IRRIGATION SYSTEM. MULTIPLE STATIONS WILL BE REQUIRED TO RUN AT THE SAME TIME ONCE THE FULL SYSTEM IS IN PLACE.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT

12/6/17
DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION POC METER DATA TABLES

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226430A
FILE NAME: L-131_M1.DGN

Scale: AS SHOWN
SHEET
L-131

Plot Date: 12/7/2017

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

Controller: G — **January**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:16	16		1		1		1		3	45.0	2,160
2	B	21:16	21:26	10		1				1		2	12.0	240
3	R	21:26	21:34	8		1		1		1		3	32.0	768
4	R	21:34	21:50	16		1		1		1		3	49.0	2,352
5	R	21:50	22:00	10		1		1		1		3	44.0	1,320
6	R	22:00	22:20	20		1		1		1		3	30.0	1,800
7	B	22:20	22:30	10		1				1		2	15.0	300
8	R	22:30	22:38	8		1		1		1		3	23.0	552
9	R	22:38	22:46	8		1		1		1		3	36.0	864
10	R	22:46	22:59	13		1		1		1		3	18.0	702
11	R	22:59	23:12	13		1		1		1		3	34.0	1,326
12	S	23:12	23:17	5		1				1		2	29.0	290
13	S	23:17	23:22	5		1				1		2	29.0	290
14	S	23:22	23:27	5		1				1		2	28.0	280
15	S	23:27	23:32	5		1				1		2	28.0	280
16	S	23:32	23:37	5		1				1		2	27.0	270
17	S	23:37	23:42	5		1				1		2	23.0	230
18	R	23:42	23:55	13		1		1		1		3	35.0	1,365
19	R	23:55	0:21	26		1		1		1		3	42.0	3,276
20	R	0:21	0:47	26		1		1		1		3	46.0	3,588
21	R	0:47	1:00	13		1		1		1		3	40.0	1,560
22	S	1:00	1:05	5		1				1		2	15.0	150
23	R	1:05	1:18	13		1		1		1		3	14.0	546
24	S	1:18	1:23	5		1				1		2	42.0	420
25	S	1:23	1:28	5		1				1		2	42.0	420
26	S	1:28	1:33	5		1				1		2	43.0	430
27	R	1:33	1:42	9		1		1		1		3	24.0	648
28	R	1:42	1:51	9		1		1		1		3	24.0	648
29	R	1:51	2:00	9		1		1		1		3	24.0	648
30	R	2:00	2:09	9		1		1		1		3	24.0	648
31	S	2:09	2:14	5		1				1		2	25.0	250
		TOTAL RUN TIME PER DAY (MIN.):			0	314	0	239	0	314	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	5.2	0.0	4.0	0.0	5.2	0.0			

Controller: G — **February**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:19	19		1	1	1	1	1		5	45.0	4,275
2	B	21:19	21:29	10		1				1		2	12.0	240
3	R	21:29	21:45	16		1		1		1		3	32.0	1,536
4	R	21:45	22:04	19		1	1	1	1	1		5	49.0	4,655
5	R	22:04	22:23	19		1		1		1		3	44.0	2,508
6	R	22:23	22:46	23		1	1	1	1	1		5	30.0	3,450
7	B	22:46	22:56	10		1				1		2	15.0	300
8	R	22:56	23:12	16		1		1		1		3	23.0	1,104
9	R	23:12	23:28	16		1		1		1		3	36.0	1,728
10	R	23:28	23:43	15		1	1	1	1	1		5	18.0	1,350
11	R	23:43	23:58	15		1	1	1	1	1		5	34.0	2,550
12	S	23:58	0:04	6		1		1		1		3	29.0	522
13	S	0:04	0:10	6		1		1		1		3	29.0	522
14	S	0:10	0:16	6		1		1		1		3	28.0	504
15	S	0:16	0:22	6		1		1		1		3	28.0	504
16	S	0:22	0:28	6		1		1		1		3	27.0	486
17	S	0:28	0:34	6		1		1		1		3	23.0	414
18	R	0:34	0:50	16		1	1	1	1	1		5	35.0	2,800
19	R	0:50	1:21	31		1	1	1	1	1		5	42.0	6,510
20	R	1:21	1:52	31		1	1	1	1	1		5	46.0	7,130
21	R	1:52	2:08	16		1	1	1	1	1		5	40.0	3,200
22	S	2:08	2:15	7		1		1		1		3	15.0	315
23	R	2:15	2:31	16		1	1	1	1	1		5	14.0	1,120
24	S	2:31	2:37	6		1		1		1		3	42.0	756
25	S	2:37	2:43	6		1		1		1		3	42.0	756
26	S	2:43	2:49	6		1		1		1		3	43.0	774
27	R	2:49	3:06	17		1		1		1		3	24.0	1,224
28	R	3:06	3:23	17		1		1		1		3	24.0	1,224
29	R	3:23	3:40	17		1		1		1		3	24.0	1,224
30	R	3:40	3:57	17		1		1		1		3	24.0	1,224
31	S	3:57	4:03	6		1		1		1		3	25.0	450
		TOTAL RUN TIME PER DAY (MIN.):			0	423	201	403	201	423	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.1	3.4	6.7	3.4	7.1	0.0			

Controller: G — **March**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:18	18		1	1	1	1	1		5	45.0	4,050
2	B	21:18	21:28	10		1				1		2	12.0	240
3	R	21:28	21:43	15		1		1		1		3	32.0	1,440
4	R	21:43	22:01	18		1	1	1	1	1		5	49.0	4,410
5	R	22:01	22:19	18		1		1		1		3	44.0	2,376
6	R	22:19	22:41	22		1	1	1	1	1		5	30.0	3,300
7	B	22:41	22:51	10		1				1		2	15.0	300
8	R	22:51	23:06	15		1		1		1		3	23.0	1,035
9	R	23:06	23:21	15		1		1		1		3	36.0	1,620
10	R	23:21	23:36	15		1	1	1	1	1		5	18.0	1,350
11	R	23:36	23:51	15		1	1	1	1	1		5	34.0	2,550
12	S	23:51	23:57	6		1		1		1		3	29.0	522
13	S	23:57	0:03	6		1		1		1		3	29.0	522
14	S	0:03	0:09	6		1		1		1		3	28.0	504
15	S	0:09	0:15	6		1		1		1		3	28.0	504
16	S	0:15	0:21	6		1		1		1		3	27.0	486
17	S	0:21	0:27	6		1		1		1		3	23.0	414
18	R	0:27	0:42	15		1	1	1	1	1		5	35.0	2,625
19	R	0:42	1:12	30		1	1	1	1	1		5	42.0	6,300
20	R	1:12	1:42	30		1	1	1	1	1		5	46.0	6,900
21	R	1:42	1:57	15		1	1	1	1	1		5	40.0	3,000
22	S	1:57	2:03	6		1				1		2	15.0	270
23	R	2:03	2:18	15		1	1	1	1	1		5	14.0	1,050
24	S	2:18	2:24	6		1		1		1		3	42.0	756
25	S	2:24	2:30	6		1		1		1		3	42.0	756
26	S	2:30	2:36	6		1		1		1		3	43.0	774
27	R	2:36	2:52	16		1		1		1		3	24.0	1,152
28	R	2:52	3:08	16		1		1		1		3	24.0	1,152
29	R	3:08	3:24	16		1		1		1		3	24.0	1,152
30	R	3:24	3:40	16		1		1		1		3	24.0	1,152
31	S	3:40	3:46	6		1		1		1		3	25.0	450
		TOTAL RUN TIME PER DAY (MIN.):			0	406	193	386	193	406	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	6.8	3.2	6.4	3.2	6.8	0.0			

Controller: G — **April**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:24	24		1	1	1	1	1		5	45.0	5,400
2	B	21:24	21:34	10		1				1		2	12.0	240
3	R	21:34	21:46	12		1	1	1	1	1		5	32.0	1,920
4	R	21:46	22:10	24		1	1	1	1	1		5	49.0	5,880
5	R	22:10	22:25	15		1	1	1	1	1		5	44.0	3,300
6	R	22:25	22:54	29		1	1	1	1	1		5	30.0	4,350
7	B	22:54	23:04	10		1				1		2	15.0	300
8	R	23:04	23:16	12		1	1	1	1	1		5	23.0	1,380
9	R	23:16	23:28	12		1	1	1	1	1		5	36.0	2,160
10	R	23:28	23:47	19		1	1	1	1	1		5	18.0	1,710
11	R	23:47	0:06	19		1	1	1	1	1		5	34.0	3,230
12	S	0:06	0:11	5		1	1	1	1	1		5	29.0	725
13	S	0:11	0:16	5		1	1	1	1	1		5	29.0	725
14	S	0:16	0:21	5		1	1	1	1	1		5	28.0	700
15	S	0:21	0:26	5		1	1	1	1	1		5	28.0	700
16	S	0:26	0:31	5		1	1	1	1	1		5	27.0	675
17	S	0:31	0:36	5		1	1	1	1	1		5	23.0	575
18	R	0:36	0:56	20		1	1	1	1	1		5	35.0	3,500
19	R	0:56	1:36	40		1	1	1	1	1		5	42.0	8,400
20	R	1:36	2:16	40		1	1	1	1	1		5	46.0	9,200
21	R	2:16	2:36	20		1	1	1	1	1		5	40.0	4,000
22	S	2:36	2:41	5		1	1	1	1	1		5	15.0	375
23	R	2:41	3:01	20		1	1	1	1	1		5	14.0	1,400
24	S	3:01	3:06	5		1	1	1	1	1		5	42.0	1,050
25	S	3:06	3:11	5		1	1	1	1	1		5	42.0	1,050
26	S	3:11	3:16	5		1	1	1	1	1		5	43.0	1,075
27	R	3:16	3:29	13		1	1	1	1	1		5	24.0	1,560
28	R	3:29	3:42	13		1	1	1	1	1		5	24.0	1,560
29	R	3:42	3:55	13		1	1	1	1	1		5	24.0	1,560
30	R	3:55	4:08	13		1	1	1	1	1		5	24.0	1,560
31	S	4:08	4:13	5		1	1	1	1	1		5	25.0	625
		TOTAL RUN TIME PER DAY (MIN.):			0	433	413	413	413	433	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.2	6.9	6.9	6.9	7.2	0.0			

Controller: G — **May**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:23	23		1		1		1		3	45.0	3,105
2	B	21:23	21:33	10		1				1		2	12.0	240
3	R	21:33	21:45	12		1		1		1		3	32.0	1,152
4	R	21:45	22:09	24		1		1		1		3	49.0	3,528
5	R	22:09	22:23	14		1		1		1		3	44.0	1,848
6	R	22:23	22:51	28		1		1		1		3	30.0	2,520
7	B	22:51	23:01	10		1				1		2	15.0	300
8	R	23:01	23:13	12		1		1		1		3	23.0	828
9	R	23:13	23:25	12		1		1		1		3	36.0	1,296
10	R	23:25	23:44	19		1		1		1		3	18.0	1,026
11	R	23:44	0:03	19		1		1		1		3	34.0	1,938
12	S	0:03	0:08	5		1		1		1		3	29.0	435
13	S	0:08	0:13	5		1		1		1		3	29.0	435
14	S	0:13	0:18	5		1		1		1		3	28.0	420
15	S	0:18	0:23	5		1		1		1		3	28.0	420
16	S	0:23	0:28	5		1		1		1		3	27.0	405
17	S	0:28	0:33	5		1		1		1		3	23.0	345
18	R	0:33	0:52	19		1		1		1		3	35.0	1,995
19	R	0:52	1:29	37		1		1		1		3	42.0	4,662
20	R	1:29	2:06	37		1		1		1		3	46.0	5,106
21	R	2:06	2:25	19		1		1		1		3	40.0	2,280
22	S	2:25	2:30	5		1		1		1		3	15.0	225
23	R	2:30	2:50	20		1		1		1		3	14.0	840
24	S	2:50	2:55	5		1		1		1		3	42.0	630
25	S	2:55	3:00	5		1		1		1		3	42.0	630
26	S	3:00	3:05	5		1		1		1		3	43.0	645
27	R	3:05	3:18	13		1		1		1		3	24.0	936
28	R	3:18	3:31	13		1		1		1		3	24.0	936
29	R	3:31	3:44	13		1		1		1		3	24.0	936
30	R	3:44	3:57	13		1		1		1		3	24.0	936
31	S	3:57	4:02	5		1		1		1		3	25.0	375
		TOTAL RUN TIME PER DAY (MIN.):			0	422	0	402	0	422	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.0	0.0	6.7	0.0	7.0	0.0			

Controller: G — **June**

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	WATERING DAYS (run times per day) SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:23	23		1		1		1		3	45.0	3,105
2	B	21:23	21:33	10		1				1		2	12.0	240
3	R	21:33	21:45	12		1		1		1		3	32.0	1,152
4	R	21:45	22:08	23		1		1		1		3	49.0	3,381
5	R	22:08	22:22	14		1		1		1		3	44.0	1,848
6	R	22:22	22:50	28		1		1		1		3	30.0	2,520
7	B	22:50	23:00	10		1				1		2	15.0	300
8	R	23:00	23:12	12		1		1		1		3	23.0	828
9	R	23:12	23:24	12		1		1		1		3	36.0	1,296
10	R	23:24	23:43	19		1		1		1		3	18.0	1,026
11	R	23:43	0:02	19		1		1		1		3	34.0	1,938
12	S	0:02	0:09	7		1				1		2	29.0	406
13	S	0:09	0:16	7		1				1		2	29.0	406
14	S	0:16	0:23	7		1				1		2	28.0	392
15	S	0:23	0:30	7		1				1		2	28.0	392
16	S	0:30	0:37	7		1				1		2	27.0	378
17	S	0:37	0:44	7		1				1		2	23.0	322
18	R	0:44	1:03	19		1		1		1		3	35.0	1,995
19	R	1:03	1:41	38		1		1		1		3	42.0	4,788
20	R	1:41	2:19	38		1		1		1		3	46.0	5,244
21	R	2:19	2:38	19		1		1		1		3	40.0	2,280
22	S	2:38	2:43	5		1		1		1		3	15.0	225
23	R	2:43	3:02	19		1		1		1		3	14.0	798
24	S	3:02	3:07	5		1		1		1		3	42.0	630
25	S	3:07	3:12	5		1		1		1		3	42.0	630
26	S	3:12	3:17	5		1		1		1		3	43.0	645
27	R	3:17	3:30	13		1		1		1		3	24.0	936
28	R	3:30	3:43	13		1		1		1		3	24.0	936
29	R	3:43	3:56	13		1		1		1		3	24.0	936
30	R	3:56	4:09	13		1		1		1		3	24.0	936
31	S	4:09	4:14	5		1		1		1		3	25.0	375
		TOTAL RUN TIME PER DAY (MIN.):			0	434	0	372	0	434	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.2	0.0	6.2	0.0	7.2	0.0			

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/20/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION SCHEDULE CONTROLLER G

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

SUBMITTED BY:

SPEC. NO. W912PL-15-B-0005

DISTRICT FILE NO. 2264304

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS
FILE NAME: L-132_M1.DGN

Scale: AS SHOWN
SHEET
L-132

Plot Date: 12/7/2017

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

Controller: G — **July** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:18	18		1		1		1		3	45.0	2,430
2	B	21:18	21:28	10		1				1		2	12.0	240
3	R	21:28	21:37	9		1		1		1		3	32.0	864
4	R	21:37	21:55	18		1		1		1		3	49.0	2,646
5	R	21:55	22:06	11		1		1		1		3	44.0	1,452
6	R	22:06	22:28	22		1		1		1		3	30.0	1,980
7	B	22:28	22:38	10		1				1		2	15.0	300
8	R	22:38	22:47	9		1		1		1		3	23.0	621
9	R	22:47	22:56	9		1		1		1		3	36.0	972
10	R	22:56	23:10	14		1		1		1		3	18.0	756
11	R	23:10	23:24	14		1		1		1		3	34.0	1,428
12	S	23:24	23:30	6		1				1		2	29.0	348
13	S	23:30	23:36	6		1				1		2	29.0	348
14	S	23:36	23:41	5		1				1		2	28.0	280
15	S	23:41	23:46	5		1				1		2	28.0	280
16	S	23:46	23:52	6		1				1		2	27.0	324
17	S	23:52	23:57	5		1				1		2	23.0	230
18	R	23:57	0:12	15		1		1		1		3	35.0	1,575
19	R	0:12	0:42	30		1		1		1		3	42.0	3,780
20	R	0:42	1:12	30		1		1		1		3	46.0	4,140
21	R	1:12	1:27	15		1		1		1		3	40.0	1,800
22	S	1:27	1:32	5		1		1		1		3	15.0	225
23	R	1:32	1:47	15		1		1		1		3	14.0	630
24	S	1:47	1:52	5		1				1		2	42.0	420
25	S	1:52	1:57	5		1				1		2	42.0	420
26	S	1:57	2:02	5		1				1		2	43.0	430
27	R	2:02	2:12	10		1		1		1		3	24.0	720
28	R	2:12	2:22	10		1		1		1		3	24.0	720
29	R	2:22	2:32	10		1		1		1		3	24.0	720
30	R	2:32	2:42	10		1		1		1		3	24.0	720
31	S	2:42	2:47	5		1				1		2	25.0	250
TOTAL RUN TIME PER DAY (MIN.):					0	347	0	274	0	347	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	5.8	0.0	4.6	0.0	5.8	0.0			

Controller: G — **August** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:16	16		1		1		1		3	45.0	2,160
2	B	21:16	21:26	10		1				1		2	12.0	240
3	R	21:26	21:34	8		1		1		1		3	32.0	768
4	R	21:34	21:50	16		1		1		1		3	49.0	2,352
5	R	21:50	22:00	10		1		1		1		3	44.0	1,320
6	R	22:00	22:20	20		1		1		1		3	30.0	1,800
7	B	22:20	22:30	10		1				1		2	15.0	300
8	R	22:30	22:38	8		1		1		1		3	23.0	552
9	R	22:38	22:46	8		1		1		1		3	36.0	864
10	R	22:46	22:59	13		1		1		1		3	18.0	702
11	R	22:59	23:12	13		1		1		1		3	34.0	1,326
12	S	23:12	23:17	5		1				1		2	29.0	290
13	S	23:17	23:22	5		1				1		2	29.0	290
14	S	23:22	23:27	5		1				1		2	28.0	280
15	S	23:27	23:32	5		1				1		2	28.0	280
16	S	23:32	23:37	5		1				1		2	27.0	270
17	S	23:37	23:42	5		1				1		2	23.0	230
18	R	23:42	23:55	13		1		1		1		3	35.0	1,365
19	R	23:55	0:21	26		1		1		1		3	42.0	3,276
20	R	0:21	0:47	26		1		1		1		3	46.0	3,588
21	R	0:47	1:00	13		1		1		1		3	40.0	1,560
22	S	1:00	1:05	5		1		1		1		3	15.0	225
23	R	1:05	1:18	13		1		1		1		3	14.0	546
24	S	1:18	1:23	5		1				1		2	42.0	420
25	S	1:23	1:28	5		1				1		2	42.0	420
26	S	1:28	1:33	5		1				1		2	43.0	430
27	R	1:33	1:42	9		1		1		1		3	24.0	648
28	R	1:42	1:51	9		1		1		1		3	24.0	648
29	R	1:51	2:00	9		1		1		1		3	24.0	648
30	R	2:00	2:09	9		1		1		1		3	24.0	648
31	S	2:09	2:14	5		1				1		2	25.0	250
TOTAL RUN TIME PER DAY (MIN.):					0	314	0	244	0	314	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	5.2	0.0	4.1	0.0	5.2	0.0			

Controller: G — **September** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:13	13		1		1		1		3	45.0	1,755
2	B	21:13	21:23	10		1				1		2	12.0	240
3	R	21:23	21:30	7		1		1		1		3	32.0	672
4	R	21:30	21:44	14		1		1		1		3	49.0	2,058
5	R	21:44	21:52	8		1		1		1		3	44.0	1,056
6	R	21:52	22:08	16		1		1		1		3	30.0	1,440
7	B	22:08	22:18	10		1				1		2	15.0	300
8	R	22:18	22:25	7		1		1		1		3	23.0	483
9	R	22:25	22:32	7		1		1		1		3	36.0	756
10	R	22:32	22:42	10		1		1		1		3	18.0	540
11	R	22:42	22:52	10		1		1		1		3	34.0	1,020
12	S	22:52	22:56	4		1				1		2	29.0	232
13	S	22:56	23:00	4		1				1		2	29.0	232
14	S	23:00	23:04	4		1				1		2	28.0	224
15	S	23:04	23:08	4		1				1		2	28.0	224
16	S	23:08	23:12	4		1				1		2	27.0	216
17	S	23:12	23:16	4		1				1		2	23.0	184
18	R	23:16	23:27	11		1		1		1		3	35.0	1,155
19	R	23:27	23:49	22		1		1		1		3	42.0	2,772
20	R	23:49	0:11	22		1		1		1		3	46.0	3,036
21	R	0:11	0:22	11		1		1		1		3	40.0	1,320
22	S	0:22	0:26	4		1		1		1		3	15.0	180
23	R	0:26	0:37	11		1		1		1		3	14.0	462
24	S	0:37	0:41	4		1				1		2	42.0	336
25	S	0:41	0:45	4		1				1		2	42.0	336
26	S	0:45	0:49	4		1				1		2	43.0	344
27	R	0:49	0:56	7		1		1		1		3	24.0	504
28	R	0:56	1:03	7		1		1		1		3	24.0	504
29	R	1:03	1:10	7		1		1		1		3	24.0	504
30	R	1:10	1:17	7		1		1		1		3	24.0	504
31	S	1:17	1:21	4		1				1		2	25.0	200
TOTAL RUN TIME PER DAY (MIN.):					0	261	0	201	0	261	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	4.4	0.0	3.4	0.0	4.4	0.0			

Controller: G — **October** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:20	20		1		1		1		3	45.0	2,700
2	B	21:20	21:30	10		1				1		2	12.0	240
3	R	21:30	21:40	10		1		1		1		3	32.0	960
4	R	21:40	22:00	20		1		1		1		3	49.0	2,940
5	R	22:00	22:12	12		1		1		1		3	44.0	1,584
6	R	22:12	22:36	24		1		1		1		3	30.0	2,160
7	B	22:36	22:46	10		1				1		2	15.0	300
8	R	22:46	22:56	10		1		1		1		3	23.0	690
9	R	22:56	23:06	10		1		1		1		3	36.0	1,080
10	R	23:06	23:22	16		1		1		1		3	18.0	864
11	R	23:22	23:38	16		1		1		1		3	34.0	1,632
12	S	23:38	23:44	6		1				1		2	29.0	348
13	S	23:44	23:50	6		1				1		2	29.0	348
14	S	23:50	23:56	6		1				1		2	28.0	336
15	S	23:56	0:02	6		1				1		2	28.0	336
16	S	0:02	0:08	6		1				1		2	27.0	324
17	S	0:08	0:14	6		1				1		2	23.0	276
18	R	0:14	0:31	17		1		1		1		3	35.0	1,785
19	R	0:31	0:51	20		1	1	1	1	1		5	42.0	4,200
20	R	0:51	1:11	20		1	1	1	1	1		5	46.0	4,600
21	R	1:11	1:28	17		1		1		1		3	40.0	2,040
22	S	1:28	1:32	4		1		1		1		3	15.0	180
23	R	1:32	1:49	17		1		1		1		3	14.0	714
24	S	1:49	1:55	6		1				1		2	42.0	504
25	S	1:55	2:01	6		1				1		2	42.0	504
26	S	2:01	2:07	6		1				1		2	43.0	516
27	R	2:07	2:18	11		1		1		1		3	24.0	792
28	R	2:18	2:29	11		1		1		1		3	24.0	792
29	R	2:29	2:40	11		1		1		1		3	24.0	792
30	R	2:40	2:51	11		1		1		1		3	24.0	792
31	S	2:51	2:57	6		1				1		2	25.0	300
TOTAL RUN TIME PER DAY (MIN.):					0	357	40	277	40	357	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	6.0	0.7	4.6	0.7	6.0	0.0			

Controller: G — **November** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:17	17		1		1		1		3	45.0	2,295
2	B	21:17	21:27	10		1				1		2	12.0	240
3	R	21:27	21:36	9		1		1		1		3	32.0	864
4	R	21:36	21:53	17		1		1		1		3	49.0	2,499
5	R	21:53	22:03	10		1		1		1		3	44.0	1,320
6	R	22:03	22:23	20		1		1		1		3	30.0	1,800
7	B	22:23	22:33	10		1				1		2	15.0	300
8	R	22:33	22:42	9		1		1		1		3	23.0	621
9	R	22:42	22:51	9		1		1		1		3	36.0	972
10	R	22:51	23:05	14		1		1		1		3	18.0	756
11	R	23:05	23:19	14		1		1		1		3	34.0	1,428
12	S	23:19	23:24	5		1				1		2	29.0	290
13	S	23:24	23:29	5		1				1		2	29.0	290
14	S	23:29	23:34	5		1				1		2	28.0	280
15	S	23:34	23:39	5		1				1		2	28.0	280
16	S	23:39	23:44	5		1				1		2	27.0	270
17	S	23:44	23:49	5		1				1		2	23.0	230
18	R	23:49	23:54	5		1		1		1		3	35.0	525
19	R	23:54	0:21	27		1		1		1		3	42.0	3,402
20	R	0:21	0:48	27		1		1		1		3	46.0	3,726
21	R	0:48	1:02	14		1		1		1		3	40.0	1,680
22	S	1:02	1:06	4		1		1		1		3	15.0	180
23	R	1:06	1:20	14		1		1		1		3	14.0	588
24	S	1:20	1:25	5		1				1		2	42.0	420
25	S	1:25	1:30	5		1				1		2	42.0	420
26	S	1:30	1:35	5		1				1		2	43.0	430
27	R	1:35	1:44	9		1		1		1		3	24.0	648
28	R	1:44	1:53	9		1		1		1		3	24.0	648
29	R	1:53	2:02	9		1		1		1		3	24.0	648
30	R	2:02	2:11	9		1		1		1		3	24.0	648
31	S	2:11	2:16	5		1				1		2	25.0	250
TOTAL RUN TIME PER DAY (MIN.):					0	316	0	246	0	316	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	5.3	0.0	4.1	0.0	5.3	0.0			

Controller: G — **December** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:20	20		1		1		1		3	45.0	2,700
2	B	21:20	21:30	10		1				1		2	12.0	240
3	R	21:30	21:40	10		1		1		1		3	32.0	960
4	R	21:40	22:00	20		1		1		1		3	49.0	2,940
5	R	22:00	22:12	12		1		1		1		3	44.0	1,584
6	R	22:12	22:36	24		1		1		1		3	30.0	2,160
7	B	22:36	22:46	10		1				1		2	15.0	300
8	R	22:46	22:56	10		1		1		1		3	23.0	690
9	R	22:56	23:06	10		1		1		1		3	36.0	1,080
10	R	23:06	23:22	16		1		1		1		3	18.0	864
11	R	23:22	23:38	16		1		1		1		3	34.0	1,632
12	S	23:38	23:44	6		1				1		2	29.0	348
13	S	23:44	23:50	6		1				1		2	29.0	348
14	S	23:50	23:56	6		1				1		2	28.0	336
15	S	23:56	0:02	6		1				1		2	28.0	336
16	S	0:02	0:08	6		1				1		2	27.0	324
17	S	0:08	0:14	6		1				1		2	23.0	276
18	R	0:14	0:31	17		1		1		1		3	35.0	1,785
19	R	0:31	0:51	20		1	1	1	1	1		5	42.0	4,200
20	R	0:51	1:11	20		1	1	1	1	1		5	46.0	4,600
21	R	1:11	1:28	17		1		1		1		3	40.0	2,040
22	S	1:28	1:32	4		1		1		1		3	15.0	180
23	R	1:32	1:49	17		1		1		1		3	14.0	714
24	S	1:49	1:55	6		1				1		2	42.0	504
25	S	1:55	2:01	6		1				1		2	42.0	504
26	S	2:01	2:07	6		1				1		2	43.0	516
27	R	2:07	2:18	11		1		1		1		3	24.0	792
28	R	2:18	2:29	11		1		1		1		3	24.0	792
29	R	2:29	2:40	11		1		1		1		3	24.0	792
30	R	2:40	2:51	11		1		1		1		3	24.0	792
31	S	2:51	2:57	6		1				1		2	25.0	300
TOTAL RUN TIME PER DAY (MIN.):					0	357	40	277	40	357	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	6.0	0.7	4.6	0.7	6.0	0.0			

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/22/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS REVISIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION SCHEDULE CONTROLLER G

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-133_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226430A

Scale: AS SHOWN
SHEET L-133

Plot Date: 12/7/2017

VALUE ENGINEERING PAYS

SAFETY PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

Controller J — **January** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:09	9		1				1		2	36.0	648
2	R	21:09	21:18	9		1				1		2	39.0	702
3	B	21:18	21:28	10		1				1		2	6.0	120
4	R	21:28	21:44	16		1				1		2	34.0	1,088
5	R	21:44	22:00	16		1				1		2	37.0	1,184
6	R	22:00	22:12	12		1				1		2	29.0	696
7	R	22:12	22:24	12		1				1		2	34.0	816
8	B	22:24	22:34	10		1				1		2	22.0	440
9	R	22:34	22:45	11		1				1		2	23.0	506
10	R	22:45	22:56	11		1				1		2	23.0	506
11	R	22:56	23:07	11		1				1		2	22.0	484
12	R	23:07	23:18	11		1				1		2	22.0	484
13	S	23:18	23:24	6		1				1		2	30.0	360
14	S	23:24	23:30	6		1				1		2	29.0	348
15	R	23:30	23:41	11		1				1		2	34.0	748
16	R	23:41	23:52	11		1				1		2	33.0	726
17	B	23:52	0:02	10		1				1		2	16.0	320
18	R	0:02	0:16	14		1				1		2	18.0	504
19	R	0:16	0:30	14		1				1		2	18.0	504
20	S	0:30	0:36	6		1				1		2	24.0	288
21	S	0:36	0:42	6		1				1		2	32.0	384
22	S	0:42	0:48	6		1				1		2	40.0	480
23	S	0:48	0:54	6		1				1		2	30.0	360
24	B	0:54	1:04	10		1				1		2	14.0	280
25	S	1:04	1:10	6		1				1		2	31.0	372
26	S	1:10	1:16	6		1				1		2	31.0	372
27	S	1:16	1:22	6		1				1		2	36.0	432
28	S	1:22	1:28	6		1				1		2	36.0	432
29	S	1:28	1:34	6		1				1		2	14.0	168
30	S	1:34	1:40	6		1				1		2	21.0	252
31	S	1:40	1:46	6		1				1		2	~~37.0~~14.3	~~444~~ 172
32	S	1:46	1:52	6		1				1		2	~~31.0~~24.8	~~372~~ 298
33	S	1:52	1:58	6		1				1		2	~~34.0~~9.6	~~408~~ 115
34	S	1:58	2:04	6		1				1		2	~~26.0~~11.5	~~312~~ 138
35	B	2:04	2:14	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:14	2:29	15		1				1		2	36.0	1,080
37	R	2:29	2:44	15		1				1		2	36.0	1,080
38	S	2:44	2:49	5		1				1		2	13.0	130
		TOTAL RUN TIME PER DAY (MIN.):			0	349	0	0	0	349	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	5.8	0.0	0.0	0.0	5.8	0.0			

Controller J — **February** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:11	11		1		1		1		3	36.0	1,188
2	R	21:11	21:22	11		1		1		1		3	39.0	1,287
3	B	21:22	21:32	10		1				1		2	6.0	120
4	R	21:32	21:52	20		1		1		1		3	34.0	2,040
5	R	21:52	22:12	20		1		1		1		3	37.0	2,220
6	R	22:12	22:28	16		1		1		1		3	29.0	1,392
7	R	22:28	22:44	16		1		1		1		3	34.0	1,632
8	B	22:44	22:54	10		1				1		2	22.0	440
9	R	22:54	23:08	14		1		1		1		3	23.0	966
10	R	23:08	23:22	14		1		1		1		3	23.0	966
11	R	23:22	23:36	14		1		1		1		3	22.0	924
12	R	23:36	23:50	14		1		1		1		3	22.0	924
13	S	23:50	0:01	11		1				1		2	30.0	660
14	S	0:01	0:12	11		1				1		2	29.0	638
15	R	0:12	0:26	14		1		1		1		3	34.0	1,428
16	R	0:26	0:40	14		1		1		1		3	33.0	1,386
17	B	0:40	0:50	10		1				1		2	16.0	320
18	R	0:50	1:08	18		1		1		1		3	18.0	972
19	R	1:08	1:26	18		1		1		1		3	18.0	972
20	S	1:26	1:37	11		1				1		2	24.0	528
21	S	1:37	1:48	11		1				1		2	32.0	704
22	S	1:48	1:59	11		1				1		2	40.0	880
23	S	1:59	2:10	11		1				1		2	30.0	660
24	B	2:10	2:20	10		1				1		2	14.0	280
25	S	2:20	2:31	11		1				1		2	31.0	682
26	S	2:31	2:42	11		1				1		2	31.0	682
27	S	2:42	2:53	11		1				1		2	36.0	792
28	S	2:53	3:04	11		1				1		2	36.0	792
29	S	3:04	3:15	11		1				1		2	14.0	308
30	S	3:15	3:26	11		1				1		2	21.0	462
31	S	3:26	3:37	11		1				1		2	~~37.0~~14.3	~~814~~ 315
32	S	3:37	3:48	11		1				1		2	~~31.0~~24.8	~~682~~ 546
33	S	3:48	3:59	11		1				1		2	~~34.0~~9.6	~~748~~ 211
34	S	3:59	4:10	11		1				1		2	~~26.0~~11.5	~~572~~ 253
35	B	4:10	4:20	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	4:20	4:35	15		1		1		1		3	36.0	1,620
37	R	4:35	4:50	15		1		1		1		3	36.0	1,620
38	S	4:50	5:00	10		1				1		2	13.0	260
		TOTAL RUN TIME PER DAY (MIN.):			0	480	0	244	0	480	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	8.0	0.0	4.1	0.0	8.0	0.0			

Controller J — **March** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:11	11		1		1		1		3	36.0	1,188
2	R	21:11	21:22	11		1		1		1		3	39.0	1,287
3	B	21:22	21:32	10		1				1		2	6.0	120
4	R	21:32	21:52	20		1		1		1		3	34.0	2,040
5	R	21:52	22:12	20		1		1		1		3	37.0	2,220
6	R	22:12	22:28	16		1		1		1		3	29.0	1,392
7	R	22:28	22:44	16		1		1		1		3	34.0	1,632
8	B	22:44	22:54	10		1				1		2	22.0	440
9	R	22:54	23:07	13		1		1		1		3	23.0	897
10	R	23:07	23:20	13		1		1		1		3	23.0	897
11	R	23:20	23:33	13		1		1		1		3	22.0	858
12	R	23:33	23:46	13		1		1		1		3	22.0	858
13	S	23:46	23:56	10		1				1		2	30.0	600
14	S	23:56	0:06	10		1				1		2	29.0	580
15	R	0:06	0:19	13		1		1		1		3	34.0	1,326
16	R	0:19	0:32	13		1		1		1		3	33.0	1,287
17	B	0:32	0:42	10		1				1		2	16.0	320
18	R	0:42	0:59	17		1		1		1		3	18.0	918
19	R	0:59	1:16	17		1		1		1		3	18.0	918
20	S	1:16	1:26	10		1				1		2	24.0	480
21	S	1:26	1:36	10		1				1		2	32.0	640
22	S	1:36	1:46	10		1				1		2	40.0	800
23	S	1:46	1:56	10		1				1		2	30.0	600
24	B	1:56	2:06	10		1				1		2	14.0	280
25	S	2:06	2:16	10		1				1		2	31.0	620
26	S	2:16	2:26	10		1				1		2	31.0	620
27	S	2:26	2:36	10		1				1		2	36.0	720
28	S	2:36	2:46	10		1				1		2	36.0	720
29	S	2:46	2:56	10		1				1		2	14.0	280
30	S	2:56	3:06	10		1				1		2	21.0	420
31	S	3:06	3:16	10		1				1		2	~~37.0~~14.3	~~740~~ 286
32	S	3:16	3:26	10		1				1		2	~~31.0~~24.8	~~620~~ 496
33	S	3:26	3:36	10		1				1		2	~~34.0~~9.6	~~680~~ 192
34	S	3:36	3:46	10		1				1		2	~~26.0~~11.5	~~520~~ 230
35	B	3:46	3:56	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	3:56	4:11	15		1		1		1		3	36.0	1,620
37	R	4:11	4:26	15		1		1		1		3	36.0	1,620
38	S	4:26	4:35	9		1				1		2	13.0	234
		TOTAL RUN TIME PER DAY (MIN.):			0	455	0	236	0	455	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.6	0.0	3.9	0.0	7.6	0.0			

Controller J — **April** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:11	11		1		1	1	1		4	36.0	1,584
2	R	21:11	21:22	11		1		1	1	1		4	39.0	1,716
3	B	21:22	21:32	10		1				1		2	6.0	120
4	R	21:32	21:52	20		1		1	1	1		4	34.0	2,720
5	R	21:52	22:12	20		1		1	1	1		4	37.0	2,960
6	R	22:12	22:27	15		1		1	1	1		4	29.0	1,740
7	R	22:27	22:42	15		1		1	1	1		4	34.0	2,040
8	B	22:42	22:52	10		1				1		2	22.0	440
9	R	22:52	23:06	14		1		1	1	1		4	23.0	1,288
10	R	23:06	23:20	14		1		1	1	1		4	23.0	1,288
11	R	23:20	23:34	14		1		1	1	1		4	22.0	1,232
12	R	23:34	23:48	14		1		1	1	1		4	22.0	1,232
13	S	23:48	0:02	14		1				1		2	30.0	840
14	S	0:02	0:16	14		1				1		2	29.0	812
15	R	0:16	0:29	13		1		1	1	1		4	34.0	1,768
16	R	0:29	0:42	13		1		1	1	1		4	33.0	1,716
17	B	0:42	0:52	10		1				1		2	16.0	320
18	R	0:52	1:09	17		1		1	1	1		4	18.0	1,224
19	R	1:09	1:26	17		1		1	1	1		4	18.0	1,224
20	S	1:26	1:39	13		1				1		2	24.0	624
21	S	1:39	1:48	9		1		1		1		3	32.0	864
22	S	1:48	1:57	9		1		1		1		3	40.0	1,080
23	S	1:57	2:06	9		1		1		1		3	30.0	810
24	B	2:06	2:16	10		1				1		2	14.0	280
25	S	2:16	2:25	9		1		1		1		3	31.0	837
26	S	2:25	2:34	9		1		1		1		3	31.0	837
27	S	2:34	2:43	9		1		1		1		3	36.0	972
28	S	2:43	2:52	9		1		1		1		3	36.0	972
29	S	2:52	3:01	9		1		1		1		3	14.0	378
30	S	3:01	3:10	9		1		1		1		3	21.0	567
31	S	3:10	3:19	9		1		1		1		3	~~37.0~~14.3	~~999~~ 386
32	S	3:19	3:28	9		1		1		1		3	~~31.0~~24.8	~~837~~ 670
33	S	3:28	3:37	9		1		1		1		3	~~34.0~~9.6	~~918~~ 259
34	S	3:37	3:46	9		1		1		1		3	~~26.0~~11.5	~~702~~ 311
35	B	3:46	3:56	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	3:56	4:16	20		1		1	1	1		4	36.0	2,880
37	R	4:16	4:36	20		1		1	1	1		4	36.0	2,880
38	S	4:36	4:48	12		1				1		2	13.0	312
		TOTAL RUN TIME PER DAY (MIN.):			0	468	0	365	248	468	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	7.8	0.0	6.1	4.1	7.8	0.0			

Controller J — **May** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:09	9		1		1		1		3	36.0	972
2	R	21:09	21:18	9		1		1		1		3	39.0	1,053
3	B	21:18	21:28	10		1				1		2	6.0	120
4	R	21:28	21:43	15		1		1		1		3	34.0	1,530
5	R	21:43	21:58	15		1		1		1		3	37.0	1,665
6	R	21:58	22:11	13		1		1		1		3	29.0	1,131
7	R	22:11	22:24	13		1		1		1		3	34.0	1,326
8	B	22:24	22:34	10		1				1		2	22.0	440
9	R	22:34	22:46	12		1		1		1		3	23.0	828
10	R	22:46	22:58	12		1		1		1		3	23.0	828
11	R	22:58	23:10	12		1		1		1		3	22.0	792
12	R	23:10	23:22	12		1		1		1		3	22.0	792
13	S	23:22	23:30	8		1				1		2	30.0	480
14	S	23:30	23:38	8		1				1		2	29.0	464
15	R	23:38	23:50	12		1		1		1		3	34.0	1,224
16	R	23:50	0:02	12		1		1		1		3	33.0	1,188
17	B	0:02	0:12	10		1				1		2	16.0	320
18	R	0:12	0:27	15		1		1		1		3	18.0	810
19	R	0:27	0:42	15		1		1		1		3	18.0	810
20	S	0:42	0:50	8		1				1		2	24.0	384
21	S	0:50	0:58	8		1				1		2	32.0	512
22	S	0:58	1:06	8		1				1		2	40.0	640
23	S	1:06	1:14	8		1				1		2	30.0	480
24	B	1:14	1:24	10		1				1		2	14.0	280
25	S	1:24	1:32	8		1				1		2	31.0	496
26	S	1:32	1:40	8		1				1		2	31.0	496
27	S	1:40	1:48	8		1				1		2	36.0	576
28	S	1:48	1:56	8		1				1		2	36.0	576
29	S	1:56	2:04	8		1				1		2	14.0	224
30	S	2:04	2:12	8		1				1		2	21.0	336
31	S	2:12	2:20	8		1				1		2	~~37.0~~14.3	~~592~~ 229
32	S	2:20	2:28	8		1				1		2	~~31.0~~24.8	~~496~~ 397
33	S	2:28	2:36	8		1				1		2	~~34.0~~9.6	~~544~~ 154
34	S	2:36	2:44	8		1				1		2	~~26.0~~11.5	~~416~~ 184
35	B	2:44	2:54	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:54	3:09	15		1		1		1		3	36.0	1,620
37	R	3:09	3:24	15		1		1		1		3	36.0	1,620
38	S	3:24	3:32	8		1				1		2	13.0	208
		TOTAL RUN TIME PER DAY (MIN.):			0	392	0	206	0	392	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	6.5	0.0	3.4	0.0	6.5	0.0			

Controller J — **June** — WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:08	8		1		1		1		3	36.0	864
2	R	21:08	21:16	8		1		1		1		3	39.0	936
3	B	21:16	21:26	10		1				1		2	6.0	120
4	R	21:26	21:41	15		1		1		1		3	34.0	1,530
5	R	21:41	21:56	15		1		1		1		3	37.0	1,665
6	R	21:56	22:08	12		1		1		1		3	29.0	1,044
7	R	22:08	22:20	12		1		1		1		3	34.0	1,224
8	B	22:20	22:30	10		1				1		2	22.0	440
9	R	22:30	22:40	10		1		1		1		3	23.0	690
10	R	22:40	22:50	10		1		1		1		3	23.0	690
11	R	22:50	23:00	10		1		1		1		3	22.0	660
12	R	23:00	23:10	10		1		1		1		3	22.0	660
13	S	23:10	23:18	8		1				1		2	30.0	480
14	S	23:18	23:26	8		1				1		2	29.0	464
15	R	23:26	23:36	10		1		1		1		3	34.0	1,020
16	R	23:36	23:46	10		1		1		1		3	33.0	990
17	B	23:46	23:56	10		1				1		2	16.0	320
18	R	23:56	0:09	13		1		1		1		3	18.0	702
19	R	0:09	0:22	13		1		1		1		3	18.0	702
20	S	0:22	0:30	8		1				1		2	24.0	384
21	S	0:30	0:38	8		1				1		2	32.0	512
22	S	0:38	0:46	8		1				1		2	40.0	640
23	S	0:46	0:54	8		1				1		2	30.0	480
24	B	0:54	1:04	10		1				1		2	14.0	280
25	S	1:04	1:12	8		1				1		2	31.0	496
26	S	1:12	1:20	8		1				1		2	31.0	496
27	S	1:20	1:28	8		1				1		2	36.0	576
28	S	1:28	1:36	8		1				1		2	36.0	576
29	S	1:36	1:44	8		1				1		2	14.0	224
30	S	1:44	1:52	8		1				1		2	21.0	336
31	S	1:52	2:00	8		1				1		2	~~37.0~~14.3	~~592~~ 229
32	S	2:00	2:08	8		1				1		2	~~31.0~~24.8	~~496~~ 397
33	S	2:08	2:16	8		1				1		2	~~34.0~~9.6	~~544~~ 154
34	S	2:16	2:24	8		1				1		2	~~26.0~~11.5	~~416~~ 184
35	B	2:24	2:34	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:34	2:49	15		1		1		1		3	36.0	1,620
37	R	2:49	3:04	15		1		1		1		3	36.0	1,620
38	S	3:04	3:11	7		1				1		2	13.0	182
		TOTAL RUN TIME PER DAY (MIN.):			0	371	0	186	0	371	0			
		TOTAL RUN TIME PER DAY (HRS.):			0.0	6.2	0.0	3.1	0.0	6.2	0.0			

ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CA 92501
PHONE: 951-955-1200

REGISTERED PROFESSIONAL ENGINEER — JULIANNA GONZALEZ ADAMS — No. 83257 — CIVIL — STATE OF CALIFORNIA

FOR 1 REVISIONS ONLY

Julianna Adams DATE: 5/14/2024
JULIANNA GONZALEZ ADAMS

RCWD PROJECT NO. E1792

Gregory M. Gill — Digitally signed by Gregory M. Gill DN: cn=Gregory M. Gill, o=RCWD, ou=Engineering, email=gillg@ranchowater.com, c=US Date: 2024.08.07 10:32:39 -07'00'

FOR 1 REVISIONS ONLY.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/5/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		
M1	NEW SHEET	12/5/17	OJURI
1	SHEET L-119A SHOWS CHANGES TO LANDSCAPING AND IRRIGATION LINE CONFIGURATION	5/02/24	JA

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION SCHEDULE CONTROLLER J

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE, CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226/430A
FILE NAME: L-134_M1.DGN

Scale: AS SHOWN
SHEET L-134

Plot Date: 12/7/2017

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

Controller J — July

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:10	10		1				1		2	36.0	720
2	R	21:10	21:20	10		1				1		2	39.0	780
3	B	21:20	21:30	10		1				1		2	6.0	120
4	R	21:30	21:47	17		1				1		2	34.0	1,156
5	R	21:47	22:04	17		1				1		2	37.0	1,258
6	R	22:04	22:18	14		1				1		2	29.0	812
7	R	22:18	22:32	14		1				1		2	34.0	952
8	B	22:32	22:42	10		1				1		2	22.0	440
9	R	22:42	22:54	12		1				1		2	23.0	552
10	R	22:54	23:06	12		1				1		2	23.0	552
11	R	23:06	23:18	12		1				1		2	22.0	528
12	R	23:18	23:30	12		1				1		2	22.0	528
13	S	23:30	23:36	6		1				1		2	30.0	360
14	S	23:36	23:42	6		1				1		2	29.0	348
15	R	23:42	23:54	12		1				1		2	34.0	816
16	R	23:54	0:06	12		1				1		2	33.0	792
17	B	0:06	0:18	12		1				1		2	16.0	384
18	R	0:18	0:33	15		1				1		2	18.0	540
19	R	0:33	0:48	15		1				1		2	18.0	540
20	S	0:48	0:54	6		1				1		2	24.0	288
21	S	0:54	1:02	8		1				1		2	32.0	512
22	S	1:02	1:08	6		1				1		2	40.0	480
23	S	1:08	1:14	6		1				1		2	30.0	360
24	B	1:14	1:24	10		1				1		2	14.0	280
25	S	1:24	1:30	6		1				1		2	31.0	372
26	S	1:30	1:36	6		1				1		2	31.0	372
27	S	1:36	1:42	6		1				1		2	36.0	432
28	S	1:42	1:48	6		1				1		2	36.0	432
29	S	1:48	1:54	6		1				1		2	14.0	168
30	S	1:54	2:01	7		1				1		2	21.0	294
31	S	2:01	2:07	6		1				1		2	~~37.0~~14.3	~~444~~ 172
32	S	2:07	2:13	6		1				1		2	~~31.0~~24.8	~~372~~ 298
33	S	2:13	2:19	6		1				1		2	~~34.0~~9.6	~~408~~ 115
34	S	2:19	2:25	6		1				1		2	~~26.0~~11.5	~~312~~ 138
35	B	2:25	2:35	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:35	2:52	17		1				1		2	36.0	1,224
37	R	2:52	3:09	17		1				1		2	36.0	1,224
38	S	3:09	3:15	6		1				1		2	13.0	156
TOTAL RUN TIME PER DAY (MIN.):					0	375	0	0	0	375	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	6.3	0.0	0.0	0.0	6.3	0.0			

Controller J — August

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:09	9		1				1		2	36.0	648
2	R	21:09	21:18	9		1				1		2	39.0	702
3	B	21:18	21:28	10		1				1		2	6.0	120
4	R	21:28	21:43	15		1				1		2	34.0	1,020
5	R	21:43	21:58	15		1				1		2	37.0	1,110
6	R	21:58	22:10	12		1				1		2	29.0	696
7	R	22:10	22:22	12		1				1		2	34.0	816
8	B	22:22	22:32	10		1				1		2	22.0	440
9	R	22:32	22:43	11		1				1		2	23.0	506
10	R	22:43	22:54	11		1				1		2	23.0	506
11	R	22:54	23:05	11		1				1		2	22.0	484
12	R	23:05	23:16	11		1				1		2	22.0	484
13	S	23:16	23:22	6		1				1		2	30.0	360
14	S	23:22	23:28	6		1				1		2	29.0	348
15	R	23:28	23:39	11		1				1		2	34.0	748
16	R	23:39	23:50	11		1				1		2	33.0	726
17	B	23:50	0:00	10		1				1		2	16.0	320
18	R	0:00	0:14	14		1				1		2	18.0	504
19	R	0:14	0:28	14		1				1		2	18.0	504
20	S	0:28	0:34	6		1				1		2	24.0	288
21	S	0:34	0:40	6		1				1		2	32.0	384
22	S	0:40	0:46	6		1				1		2	40.0	480
23	S	0:46	0:52	6		1				1		2	30.0	360
24	B	0:52	1:02	10		1				1		2	14.0	280
25	S	1:02	1:08	6		1				1		2	31.0	372
26	S	1:08	1:14	6		1				1		2	31.0	372
27	S	1:14	1:20	6		1				1		2	36.0	432
28	S	1:20	1:26	6		1				1		2	36.0	432
29	S	1:26	1:32	6		1				1		2	14.0	168
30	S	1:32	1:38	6		1				1		2	21.0	252
31	S	1:38	1:44	6		1				1		2	~~37.0~~14.3	~~444~~ 172
32	S	1:44	1:50	6		1				1		2	~~31.0~~24.8	~~372~~ 298
33	S	1:50	1:56	6		1				1		2	~~34.0~~9.6	~~408~~ 115
34	S	1:56	2:02	6		1				1		2	~~26.0~~11.5	~~312~~ 138
35	B	2:02	2:12	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:12	2:27	15		1				1		2	36.0	1,080
37	R	2:27	2:42	15		1				1		2	36.0	1,080
38	S	2:42	2:47	5		1				1		2	13.0	130
TOTAL RUN TIME PER DAY (MIN.):					0	347	0	0	0	347	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	5.8	0.0	0.0	0.0	5.8	0.0			

Controller J — September

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:07	7		1				1		2	36.0	504
2	R	21:07	21:14	7		1				1		2	39.0	546
3	B	21:14	21:24	10		1				1		2	6.0	120
4	R	21:24	21:36	12		1				1		2	34.0	816
5	R	21:36	21:48	12		1				1		2	37.0	888
6	R	21:48	21:58	10		1				1		2	29.0	580
7	R	21:58	22:08	10		1				1		2	34.0	680
8	B	22:08	22:18	10		1				1		2	22.0	440
9	R	22:18	22:27	9		1				1		2	23.0	414
10	R	22:27	22:36	9		1				1		2	23.0	414
11	R	22:36	22:45	9		1				1		2	22.0	396
12	R	22:45	22:54	9		1				1		2	22.0	396
13	S	22:54	22:59	5		1				1		2	30.0	300
14	S	22:59	23:04	5		1				1		2	29.0	290
15	R	23:04	23:13	9		1				1		2	34.0	612
16	R	23:13	23:22	9		1				1		2	33.0	594
17	B	23:22	23:32	10		1				1		2	16.0	320
18	R	23:32	23:43	11		1				1		2	18.0	396
19	R	23:43	23:54	11		1				1		2	18.0	396
20	S	23:54	23:59	5		1				1		2	24.0	240
21	S	23:59	0:04	5		1				1		2	32.0	320
22	S	0:04	0:09	5		1				1		2	40.0	400
23	S	0:09	0:14	5		1				1		2	30.0	300
24	B	0:14	0:24	10		1				1		2	14.0	280
25	S	0:24	0:29	5		1				1		2	31.0	310
26	S	0:29	0:34	5		1				1		2	31.0	310
27	S	0:34	0:39	5		1				1		2	36.0	360
28	S	0:39	0:44	5		1				1		2	36.0	360
29	S	0:44	0:49	5		1				1		2	14.0	140
30	S	0:49	0:54	5		1				1		2	21.0	210
31	S	0:54	0:59	5		1				1		2	~~37.0~~14.3	~~370~~ 143
32	S	0:59	1:04	5		1				1		2	~~31.0~~24.8	~~310~~ 248
33	S	1:04	1:09	5		1				1		2	~~34.0~~9.6	~~340~~ 96
34	S	1:09	1:14	5		1				1		2	~~26.0~~11.5	~~230~~ 115
35	B	1:14	1:24	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	1:24	1:36	12		1				1		2	36.0	864
37	R	1:36	1:48	12		1				1		2	36.0	864
38	S	1:48	1:53	5		1				1		2	13.0	130
TOTAL RUN TIME PER DAY (MIN.):					0	293	0	0	0	293	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	4.9	0.0	0.0	0.0	4.9	0.0			

Controller J — October

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:11	11		1				1		2	36.0	792
2	R	21:11	21:22	11		1				1		2	39.0	858
3	B	21:22	21:32	10		1				1		2	6.0	120
4	R	21:32	21:51	19		1				1		2	34.0	1,292
5	R	21:51	22:10	19		1				1		2	37.0	1,406
6	R	22:10	22:25	15		1				1		2	29.0	870
7	R	22:25	22:40	15		1				1		2	34.0	1,020
8	B	22:40	22:50	10		1				1		2	22.0	440
9	R	22:50	23:04	14		1				1		2	23.0	644
10	R	23:04	23:18	14		1				1		2	23.0	644
11	R	23:18	23:32	14		1				1		2	22.0	616
12	R	23:32	23:46	14		1				1		2	22.0	616
13	S	23:46	23:53	7		1				1		2	30.0	420
14	S	23:53	0:00	7		1				1		2	29.0	406
15	R	0:00	0:13	13		1				1		2	34.0	884
16	R	0:13	0:26	13		1				1		2	33.0	858
17	B	0:26	0:36	10		1				1		2	16.0	320
18	R	0:36	0:53	17		1				1		2	18.0	612
19	R	0:53	1:10	17		1				1		2	18.0	612
20	S	1:10	1:17	7		1				1		2	24.0	336
21	S	1:17	1:24	7		1				1		2	32.0	448
22	S	1:24	1:31	7		1				1		2	40.0	560
23	S	1:31	1:38	7		1				1		2	30.0	420
24	B	1:38	1:48	10		1				1		2	14.0	280
25	S	1:48	1:55	7		1				1		2	31.0	434
26	S	1:55	2:02	7		1				1		2	31.0	434
27	S	2:02	2:09	7		1				1		2	36.0	504
28	S	2:09	2:16	7		1				1		2	36.0	504
29	S	2:16	2:23	7		1				1		2	14.0	196
30	S	2:23	2:30	7		1				1		2	21.0	294
31	S	2:30	2:37	7		1				1		2	~~37.0~~14.3	~~518~~ 200
32	S	2:37	2:44	7		1				1		2	~~31.0~~24.8	~~434~~ 347
33	S	2:44	2:51	7		1				1		2	~~34.0~~9.6	~~476~~ 134
34	S	2:51	2:58	7		1				1		2	~~26.0~~11.5	~~364~~ 161
35	B	2:58	3:08	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	3:08	3:27	19		1				1		2	36.0	1,368
37	R	3:27	3:46	19		1				1		2	36.0	1,368
38	S	3:46	3:52	6		1				1		2	13.0	156
TOTAL RUN TIME PER DAY (MIN.):					0	412	0	0	0	412	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	6.9	0.0	0.0	0.0	6.9	0.0			

Controller J — November

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:09	9		1				1		2	36.0	648
2	R	21:09	21:18	9		1				1		2	39.0	702
3	B	21:18	21:28	10		1				1		2	6.0	120
4	R	21:28	21:44	16		1				1		2	34.0	1,088
5	R	21:44	22:00	16		1				1		2	37.0	1,184
6	R	22:00	22:13	13		1				1		2	29.0	754
7	R	22:13	22:26	13		1				1		2	34.0	884
8	B	22:26	22:36	10		1				1		2	22.0	440
9	R	22:36	22:47	11		1				1		2	23.0	506
10	R	22:47	22:58	11		1				1		2	23.0	506
11	R	22:58	23:09	11		1				1		2	22.0	484
12	R	23:09	23:20	11		1				1		2	22.0	484
13	S	23:20	23:26	6		1				1		2	30.0	360
14	S	23:26	23:32	6		1				1		2	29.0	348
15	R	23:32	23:43	11		1				1		2	34.0	748
16	R	23:43	23:54	11		1				1		2	33.0	726
17	B	23:54	0:04	10		1				1		2	16.0	320
18	R	0:04	0:18	14		1				1		2	18.0	504
19	R	0:18	0:32	14		1				1		2	18.0	504
20	S	0:32	0:38	6		1				1		2	24.0	288
21	S	0:38	0:44	6		1				1		2	32.0	384
22	S	0:44	0:50	6		1				1		2	40.0	480
23	S	0:50	0:56	6		1				1		2	30.0	360
24	B	0:56	1:06	10		1				1		2	14.0	280
25	S	1:06	1:12	6		1				1		2	31.0	372
26	S	1:12	1:18	6		1				1		2	31.0	372
27	S	1:18	1:24	6		1				1		2	36.0	432
28	S	1:24	1:30	6		1				1		2	36.0	432
29	S	1:30	1:36	6		1				1		2	14.0	168
30	S	1:36	1:42	6		1				1		2	21.0	252
31	S	1:42	1:48	6		1				1		2	~~37.0~~14.3	~~444~~ 172
32	S	1:48	1:54	6		1				1		2	~~31.0~~24.8	~~372~~ 298
33	S	1:54	2:00	6		1				1		2	~~34.0~~9.6	~~408~~ 115
34	S	2:00	2:06	6		1				1		2	~~26.0~~11.5	~~312~~ 138
35	B	2:06	2:16	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	2:16	2:32	16		1				1		2	36.0	1,152
37	R	2:32	2:48	16		1				1		2	36.0	1,152
38	S	2:48	2:53	5		1				1		2	13.0	130
TOTAL RUN TIME PER DAY (MIN.):					0	353	0	0	0	353	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	5.9	0.0	0.0	0.0	5.9	0.0			

Controller J — December

WATERING DAYS (run times per day)

Station No.	Irrigation Type: Bubbler (B) Spray (S) Rotar (R)	Start Time	Stop Time	Run Time (min)	SU	M	TU	W	TH	F	SA	Total Days	Station GPM	Total Gallons per Week
1	R	21:00	21:11	11		1				1		2	36.0	792
2	R	21:11	21:22	11		1				1		2	39.0	858
3	B	21:22	21:32	10		1				1		2	6.0	120
4	R	21:32	21:51	19		1				1		2	34.0	1,292
5	R	21:51	22:10	19		1				1		2	37.0	1,406
6	R	22:10	22:25	15		1				1		2	29.0	870
7	R	22:25	22:40	15		1				1		2	34.0	1,020
8	B	22:40	22:50	10		1				1		2	22.0	440
9	R	22:50	23:03	13		1				1		2	23.0	598
10	R	23:03	23:16	13		1				1		2	23.0	598
11	R	23:16	23:29	13		1				1		2	22.0	572
12	R	23:29	23:42	13		1				1		2	22.0	572
13	S	23:42	23:49	7		1				1		2	30.0	420
14	S	23:49	23:56	7		1				1		2	29.0	406
15	R	23:56	0:09	13		1				1		2	34.0	884
16	R	0:09	0:22	13		1				1		2	33.0	858
17	B	0:22	0:32	10		1				1		2	16.0	320
18	R	0:32	0:49	17		1				1		2	18.0	612
19	R	0:49	1:06	17		1				1		2	18.0	612
20	S	1:06	1:13	7		1				1		2	24.0	336
21	S	1:13	1:20	7		1				1		2	32.0	448
22	S	1:20	1:27	7		1				1		2	40.0	560
23	S	1:27	1:34	7		1				1		2	30.0	420
24	B	1:34	1:44	10		1				1		2	14.0	280
25	S	1:44	1:51	7		1				1		2	31.0	434
26	S	1:51	1:58	7		1				1		2	31.0	434
27	S	1:58	2:05	7		1				1		2	36.0	504
28	S	2:05	2:12	7		1				1		2	36.0	504
29	S	2:12	2:19	7		1				1		2	14.0	196
30	S	2:19	2:26	7		1				1		2	21.0	294
31	S	2:26	2:33	7		1				1		2	~~37.0~~14.3	~~518~~ 200
32	S	2:33	2:40	7		1				1		2	~~31.0~~24.8	~~434~~ 347
33	S	2:40	2:47	7		1				1		2	~~34.0~~9.6	~~476~~ 134
34	S	2:47	2:54	7		1				1		2	~~26.0~~11.5	~~364~~ 161
35	B	2:54	3:04	10		1				1		2	~~23.0~~11.5	~~460~~ 230
36	R	3:04	3:23	19		1				1		2	36.0	1,368
37	R	3:23	3:42	19		1				1		2	36.0	1,368
38	S	3:42	3:48	6		1				1		2	13.0	156
TOTAL RUN TIME PER DAY (MIN.):					0	408	0	0	0	408	0			
TOTAL RUN TIME PER DAY (HRS.):					0.0	6.8	0.0	0.0	0.0	6.8	0.0			

ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CA 92501
PHONE: 951-955-1200

REGISTERED PROFESSIONAL ENGINEER — JULIANNA GONZALEZ ADAMS — No. 83257 — CIVIL — STATE OF CALIFORNIA

FOR 1 REVISIONS ONLY

JULIANNA GONZALEZ ADAMS DATE: 5/14/2024

RCWD PROJECT NO. E1792

Gregory M. Gill — Digitally signed by Gregory M. Gill DN: cn=Gregory M. Gill, o=RCWD, ou=Engineering, email=gillg@ranchowater.com, c=US Date: 2024.08.07 10:32:03 -07'00'

FOR 1 REVISIONS ONLY.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION — RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/22/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	CJIURI
1	SHEET L-119A SHOWS CHANGES TO LANDSCAPING AND IRRIGATION LINE CONFIGURATION	5/02/24	JA

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION SCHEDULE CONTROLLER J

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

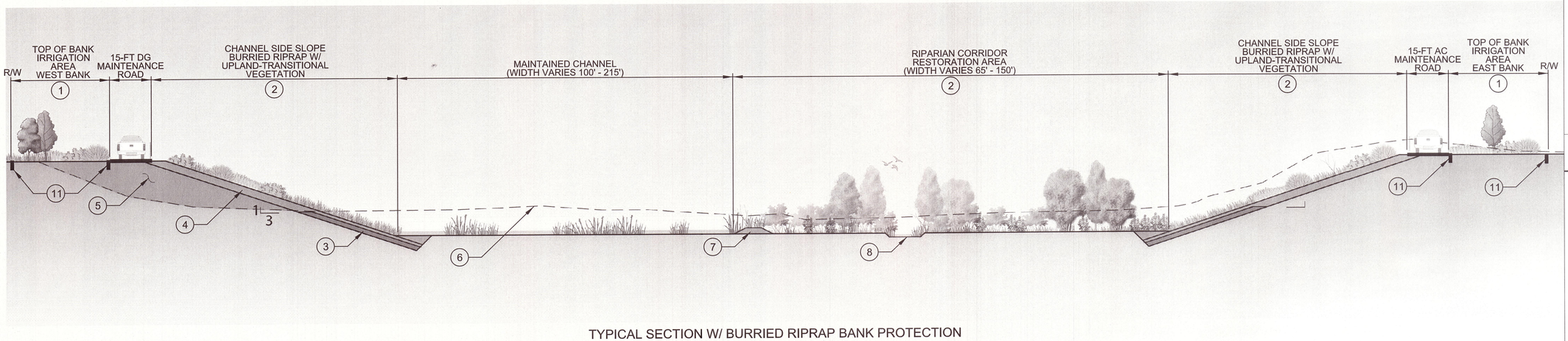
DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-135_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226430A

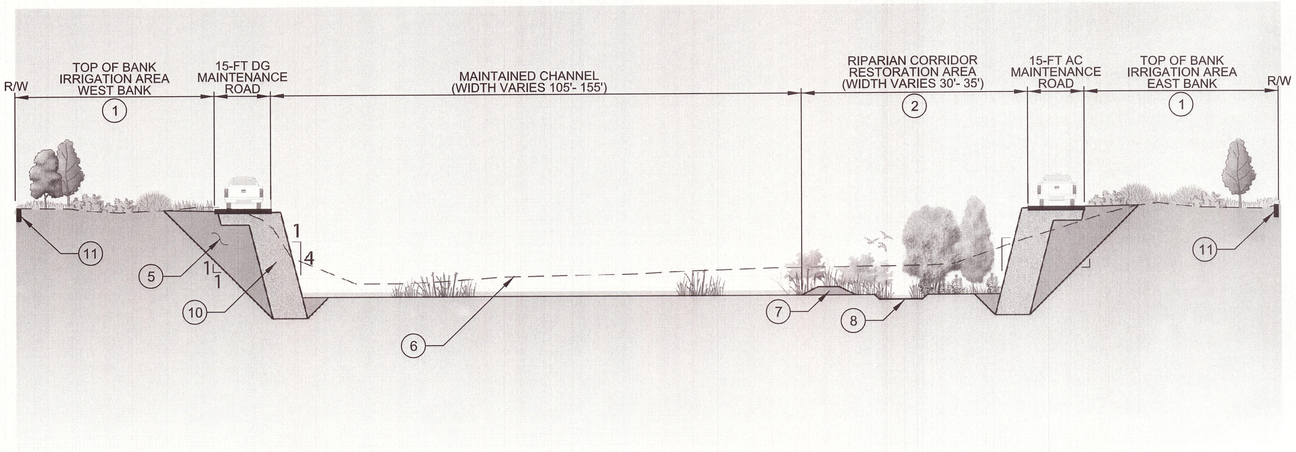
Scale: AS SHOWN
SHEET L-135

Plot Date: 12/7/2017

VALUE ENGINEERING PAYS



TYPICAL SECTION W/ BURRIED RIPRAP BANK PROTECTION
STATION 102+00 TO 98+00



TYPICAL SECTION W/ SOIL CEMENT BANK PROTECTION
STATION 98+00 TO 59+00

LEGEND

1. IRRIGATED WITH RECYCLED WATER
2. IRRIGATED WITH TEMPORARY POTABLE WATER SYSTEM DURING 12-MONTH ESTABLISHMENT PERIOD
3. BURIED RIPRAP BANK PROTECTION
4. PLANTING FILL (12" - 27" LAYER)
5. COMPACTED BACKFILL
6. EXISTING GROUND
7. 3' HIGH SOIL BERM
8. LOW FLOW CHANNEL
9. COMPACTED BACKFILL
10. SOIL CEMENT BANK PROTECTION
11. CONCRETE MOW CURB, 6" X 18" SEE DETAIL OS-11, SHEET L-130

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION | RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT — DATE 12/21/17

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	NEW SHEET	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN TYPICAL SECTION

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

FILE NAME: L-133_M1.DGN
SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226430A

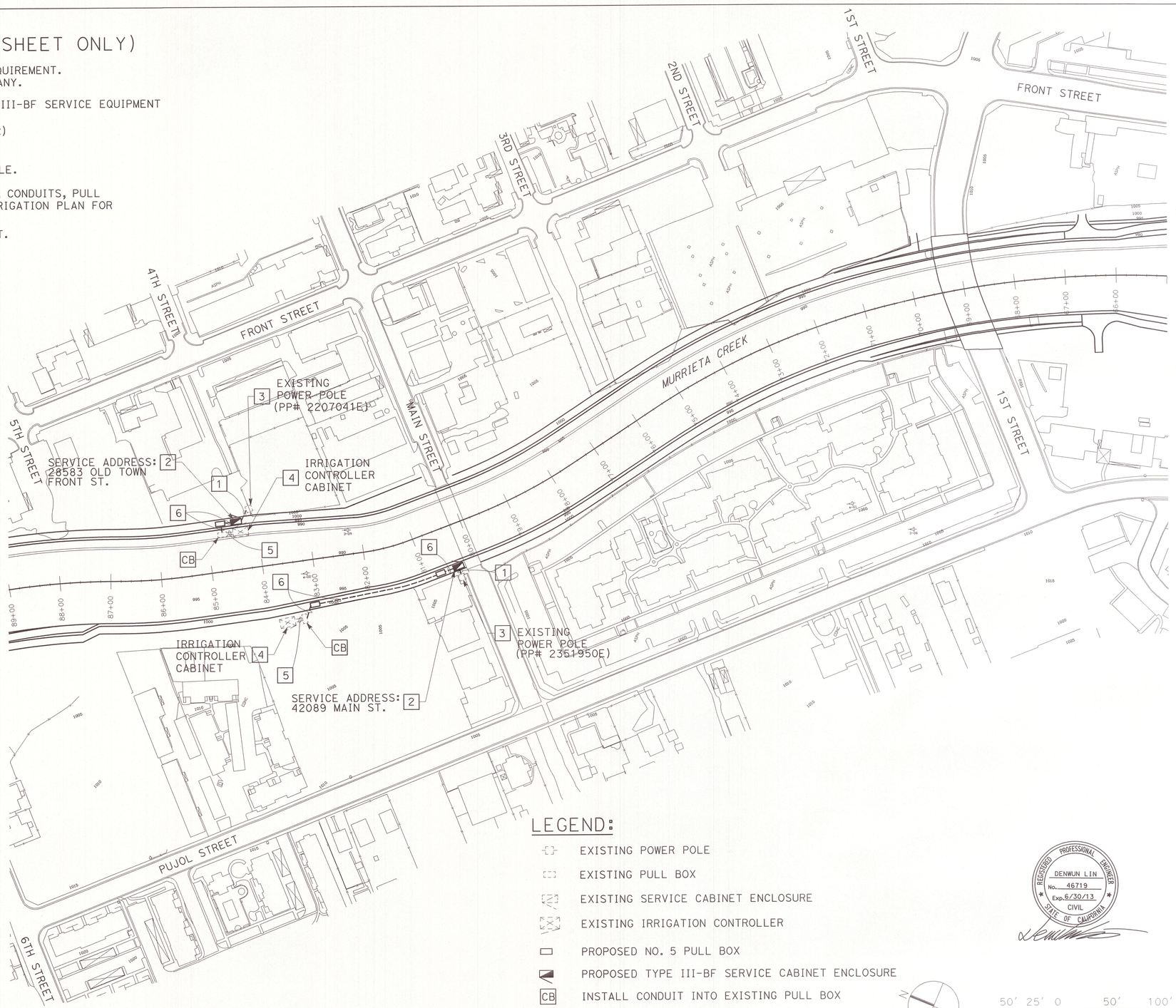
Scale: AS SHOWN
SHEET
L-136

SAFETY! PAYS

Plot Date: 12/7/2017

CONSTRUCTION NOTES: (THIS SHEET ONLY)

1. INSTALL 3" CONDUIT PER POWER COMPANY'S REQUIREMENT. CONDUCTORS TO BE INSTALLED BY POWER COMPANY.
2. INSTALL 120/240V METERED SERVICE IN TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
   - 1 - 240 V, 2P, 100 A, CB (MAIN BREAKER)
   - 1 - 120 V, 1P, 20 A, CB (IRRIGATION)
3. INSTALL TYPE H RISER ON EXISTING POWER POLE.
4. FOR REFERENCE ONLY. IRRIGATION CONTROLLER, CONDUITS, PULL BOX INSTALLED PER IRRIGATION PLANS SEE IRRIGATION PLAN FOR INSTALLATION DETAILS.
5. INSTALL 2#8 CONDUCTORS IN EXISTING CONDUIT.
6. INSTALL 2" CONDUIT WITH 2#8 CONDUCTORS.



LEGEND:

- EXISTING POWER POLE
- EXISTING PULL BOX
- EXISTING SERVICE CABINET ENCLOSURE
- EXISTING IRRIGATION CONTROLLER
- PROPOSED NO. 5 PULL BOX
- PROPOSED TYPE III-BF SERVICE CABINET ENCLOSURE
- CB — INSTALL CONDUIT INTO EXISTING PULL BOX

50' 25' 0 50' 100'
1" = 100'-0"

REGISTERED PROFESSIONAL ENGINEER
DENWUN LIN
No. 46719
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		

SANTA MARGARITA RIVER WATERSHED, RIVERSIDE COUNTY, CALIFORNIA

MURRIETA CREEK–PHASE 2
AESTHETIC TREATMENT AND EROSION CONTROL
ELECTRIC SERVICE (IRRIGATION) PLAN

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: LIN Consulting, Inc. — Water, Air and Environmental Engineers — 1420 E. Edinger Avenue, #200, Santa Ana, CA 92705, TEL:(714)566-8411

DESIGNED BY: TT
DRAWN BY: VE
CHECKED BY: MO

SUBMITTED BY: DATE: APPROVED: DATE:
CHIEF, DESIGN BRANCH — CHIEF, ENGINEERING DIVISION

DISTRICT FILE NO. 266/433 — SPEC. NO. W912PL-15-B-0005 — CADD FILE NAME:

SCALE: AS SHOWN

SHEET E-3 OF SHEETS

VALUE ENGINEERING PAYS

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

PROVIDE WIRING FROM CONTROLLER "J" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GV.

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

CONCRETE MOW CURB STA. 99+65 TO 98+00

SOIL CEMENT BANK PROTECTION

1 1/4" CHECK VALVE

BEGIN CONSTRUCTION STA. 102+00

MATCHLINE STA. 97+00 SEE SHEET L-119

APN 921280015

TRENCH MAINLINE AT 24" DEEP

FLOW
MURRIETA CREEK

PROVIDE WIRING FROM CONTROLLER "G" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE.

CONCRETE MOW CURB STA 102+00 TO 98+00

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

SOIL CEMENT BANK PROTECTION

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE SEE DETAIL OS-1 ON SHEET L-130

APN 921280005
EXISTING CMU BLOCK WALL

CONCRETE MOW CURB ALONG R/W

APN 921280006
EXISTING FENCELINE

APN 921280007
EXISTING FENCELINE

APN 921280008

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

SCALE 1" = 20'

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		
M11	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 102+00 TO STA 97+00

U.S ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY
PAUL W. UNDERWOOD, PE
Chief, Plan Review Branch

DESIGNED BY	DRAWN BY	CHECKED BY
D WALKER	D WALKER	S WILLIS

FILE NAME: L-118.DGN
SPEC NO W912PL-15-B-0005
DISTRICT FILE NO 226419

Scale AS SHOWN
SHEET
L-118

VALUE ENGINEERING PAYS

SITTING AREA (NO DRINKING FOUNTAINS OR HOSE BIBS)

IRRIGATION LINES/ MOW STRIP/ VEGETATION REMOVED

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURE AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

APN 922026027

SOIL CEMENT BANK PROTECTION

CONCRETE MOW CURB ALONG R/W

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE. TYP.

APN 922026025

VALVE J30 IS CAPPED

MATCHLINE STA. 97+00 SEE SHEET L-118

MATCHLINE STA. 92+00 SEE SHEET L-120

FLOW

MURRIETA CREEK

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE. TYP.

APN 921280008

APN 921280012

CONCRETE MOW CURB ALONG R/W

APN 922051007

EXISTING FENCELINE

APN 922051005

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB E1792

RANCHO CALIFORNIA WATER DISTRICT

DATE

"APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD"

ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
1995 MARKET STREET
RIVERSIDE, CA 92501
PHONE: 951-955-1200

REGISTERED PROFESSIONAL ENGINEER
JULIANNA GONZALEZ ADAMS
No. 83257
CIVIL
STATE OF CALIFORNIA

FOR 1 REVISIONS ONLY

Julianna Adams DATE: 5/14/2024

JULIANNA GONZALEZ ADAMS

RCWD PROJECT NO. E1792

Gregory M. Gill

Digitally signed by Gregory M. Gill
DN: cn=Gregory M. Gill, o=RCWD, ou=Engineering, email=gillg@ranchowater.com, c=US
Date: 2024.08.07 10:31:11 -07'00'

FOR 1 REVISIONS ONLY.

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
1	SHEET L-119A SHOWS CHANGES TO LANDSCAPING AND IRRIGATION LINE CONFIGURATION	12/5/17	OJURI
M1	ADDED RCWD REQUIREMENTS	5/2024	

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 97+00 TO STA 92+00

U S army ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

DESIGNED BY D WALKER
DRAWN BY D WALKER
CHECKED BY S WILLIS
SUBMITTED BY PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

FILE NAME L-119.DGN
SPEC. NO W912PL-15-B-0005
DISTRICT FILE NO 426420

Scale AS SHOWN
SHEET
L-119

VALUE ENGINEERING PAYS

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

CONCRETE MOW CURB ALONG R/W

APN 922026039

APN 922035027

APN 922026035

APN 922035004

APN 922026025

APN 922026023

J-28 36 1.5

J-27 36 1.5

J-26 311.25

J-25 311.25

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

VALVES J25 & J27 ARE CAPPED

MATCHLINE STA. 92+00 SEE SHEET L-119

MATCHLINE STA. 87+00 SEE SHEET L-121

FLOW
MURRIETA CREEK

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

G-24 42 2

G-23 14 1.5

G-22 21 1.5

APN 922051005

EXISTING FENCELINE

APN 922053024

APN 922053044

CONCRETE MOW CURB ALONG R/W

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

"APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD"

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	CJURRI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN
STA 92+00 TO STA 87+00

U S ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

DESIGNED BY D WALKER
DRAWN BY D WALKER
CHECKED BY S WILLIS

FILE NAME L-120.DGN

SPEC NO W912PL-15-B-0005

DISTRICT FILE NO 226421

SCALE AS SHOWN
SHEET
L-120

VALUE ENGINEERING PAYS

AUTOMATIC IRRIGATION CONTROLLER "J", 48 STATIONS MIN., PEDESTAL MOUNT IN STAINLESS STEEL CABINET. PROVIDE 120V 60HZ CONTINUOUSLY HOT POWER TO THIS LOCATION. LOCATE CONTROLLER IN PLANTING AREA. SEE ELECTRICAL PLANS, SHEET E-3.

CONTRACTOR SHALL INCLUDE A LAMINATED COPY OF THE IRRIGATION SCHEDULE IN THE CONTROLLER ENCLOSURE.

NOTE
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

CONCRETE MOW CURB ALONG R/W

APN 922035015

APN 922036031

APN 9220-36043

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

VALVE J22 IS CAPPED

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

SOIL CEMENT BANK PROTECTION

VALVES G18, G19, G20, AND G21 ARE DELETED. VALVE IS REMOVED, LATERAL IS PLUGGED

MATCHLINE STA. 87+00 SEE SHEET L-120

MATCHLINE STA. 82+00 SEE SHEET L-122

FLOW
MURRIETA CREEK

APN 922053041

APN 922053046

APN 922053045

AUTOMATIC IRRIGATION CONTROLLER "G", 48 STATIONS MIN., PEDESTAL MOUNT IN STAINLESS STEEL CABINET. PROVIDE 120V 60HZ CONTINUOUSLY HOT POWER TO THIS LOCATION. LOCATE CONTROLLER IN PLANTING AREA. SEE ELECTRICAL PLANS, SHEET E-3.

CONTRACTOR SHALL INCLUDE A LAMINATED COPY OF THE IRRIGATION SCHEDULE IN THE CONTROLLER ENCLOSURE.

SOIL CEMENT BANK PROTECTION

APN 922053026

APN 922053025

APN 922053013

EXISTING ORNAMENTAL CONCRETE WALL

CONCRETE MOW CURB ALONG R/W

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION RCWD JOB E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

"APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD"

SAFETY PAYS

SYMBOL	REVISIONS	DATE	APPROVAL
[M1]	ADDED RCWD REQUIREMENTS	12/5/17	OJ/IRI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 87+00 TO STA 82+00

DESIGNED BY D. WALKER
DRAWN BY D. WALKER
CHECKED BY S. WILLIS
FILE NAME L-121.DGN

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

SPEC. NO. W912PL-15-B-0005
DISTRICT FILE NO. 226422

Scale AS SHOWN
SHEET L-121

VALUE ENGINEERING PAYS

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130

EXISTING FIRE HYDRANT IS THE POINT OF CONNECTION FOR TEMPORARY POTABLE WATER IRRIGATION SYSTEM. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS. PERMANENT RECLAIMED WATER PIPING WILL MAINTAIN SEPARATION REQUIREMENTS AS DESCRIBED IN THE NOTES AND DETAILS IN THIS PLAN SET.

CONCRETE MOW CURB ALONG R/W

APN 922056043

APN 922045022

APN 922045011

CONCRETE MOW CURB ALONG R/W

APN 922045013

MATCHLINE STA. 82+00 SEE SHEET L-121

MATCHLINE STA. 77+00 SEE SHEET L-123

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING. SEE DETAIL U ON SHEET L-129.

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

J-19 J-18

8+00

30+00

79+00

78+00

EXISTING 8" CML&C POTABLE WATER MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK

EXISTING 4" H.P NATURAL GAS MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK

FLOW

MURRIETA CREEK

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING. SEE DETAIL U ON SHEET L-129

SOIL CEMENT BANK PROTECTION

APN 922053020

CONCRETE MOW CURB ALONG R/W

APN 922053023

MAIN STREET

APN 922061022

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

EXISTING POTABLE WATER MAINLINE (UNKNOWN SIZE) LOCATED A MINIMUM OF 15-FT FROM PROJECT BOUNDARY

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		
M1	ADDED RCWD REQUIREMENTS	12/5/17	DJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 82+00 TO STA 77+00

DESIGNED BY	D WALKER
DRAWN BY	D WALKER
CHECKED BY	S WILLIS
FILE NAME	L-122 DGN

U S ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY
PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

SPEC. NO. W912PL-15-B-0005

DISTRICT FILE NO. 226421

Scale AS SHOWN

SHEET L-122

VALUE ENGINEERING PAYS

APN 922045013

APN 922046012

APN 922046022

APN 922073024

APN 922061022

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB TYP.

CONCRETE MOW CURB ALONG R/W

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

J-16 331.25 J-15 331.25

J-17 161.25

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

SOIL CEMENT BANK PROTECTION

J-14 291.25 J-13 291.25

VALVE J14 IS CAPPED

MATCHLINE STA. 77+00 SEE SHEET L-122

VALVE G16 IS CAPPED

G-16 271.25

76+00

75+00

74+00

73+00

MATCHLINE STA. 72+00 SEE SHEET L-124

FLOW
MURRIETA CREEK

G-15 281.25 G-16 281.25

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

EXISTING POTABLE WATER MAINLINE (UNKNOWN SIZE) LOCATED A MINIMUM OF 15-FT FROM PROJECT BOUNDARY

EXISTING FIRE HYDRANT

20 0 20 40FT
SCALE: 1"=20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

SYMBOL	DESCRIPTIONS REVISIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/8/17	OJURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 77+00 TO STA 72+00

U S ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE, CHIEF, DESIGN BRANCH

DESIGNED BY: D WALKER
DRAWN BY: D WALKER
CHECKED BY: S WILLIS

FILE NAME: L-123.DGN

SPEC NO: W912PL-15-B-0005

DISTRICT FILE NO: 220424

Scale: AS SHOWN

SHEET
L-123

VALUE ENGINEERING PAYS

IRRIGATION LINES SHOWN OUTSIDE OF MOWCURB AND R/W LINE ARE DRAWN FOR CLARITY ONLY. ALL LINES AND EQUIPMENT WILL BE INSTALLED WITHIN PLANTING AREAS AND ON THE RECYCLED WATER SIDE OF THE MOWCURB. TYP.

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE. TYP.

CONCRETE MOW CURB ALONG R/W

APN 922073024

APN 92207302

EXISTING RECLAIMED WATER MAIN

EXISTING 15" SEWERLINE

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

APN 922100044

APN 922100040

MATCHLINE STA. 72+00 SEE SHEET L-123

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

J-12 291.25 J-11 291.25

2 1/2" SCH 40 GALV. STEEL MAINLINE PIPE & 3" GALV. STEEL CONDUIT FOR CONTROL WIRING. SEE DETAIL U ON SHEET L-129

J-10 291.25 J-9 291.25

POINT OF CONNECTION WITH RECLAIMED WATER MAIN (AT 1ST STREET), 2" METER, PRESSURE REDUCING VALVE, MASTER VALVE AND FLOW SENSOR. CONNECT MASTER VALVE AND FLOW SENSOR TO CONTROLLER "J". (SEE POC ENLARGEMENT ON SHEET L-T3, METER DATA TABLE AND IRRIGATION SCHEDULE ON L-133 AND L-134)

EXISTING ELECTRICAL LINE ATTACHED TO UNDERSIDE OF BRIDGE DECK. PROTECT IN PLACE

EXISTING SANITARY SEWER (UNKNOWN SIZE) ATTACHED TO UNDERSIDE OF BRIDGE DECK. PROTECT IN PLACE

EXISTING 20" CML&C STEEL RCWD RECYCLED WATER MAINLINE ATTACHED TO UNDERSIDE OF BRIDGE DECK. PROTECT IN PLACE

FLOW
MURRIETA CREEK

EXISTING 15" SANITARY SEWER ENCASED IN 30" DIAMETER STEEL CASING. PROTECT IN PLACE

POINT OF CONNECTION WITH RECLAIMED WATER MAIN (AT 1ST STREET) 2" METER, PRESSURE REDUCING VALVE, MASTER VALVE AND FLOW SENSOR. CONNECT MASTER VALVE AND FLOW SENSOR TO CONTROLLER "G" (SEE POC ENLARGEMENT ON SHEET L-T3, METER DATA TABLE AND IRRIGATION SCHEDULE ON L-131 AND L-132)

G-13 291.25 G-12 291.25

APN 922061022

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

EXISTING POTABLE WATER MAINLINE (UNKNOWN SIZE) LOCATED A MINIMUM OF 15-FT FROM PROJECT BOUNDARY

1ST STREET

EXISTING MANHOLE

EXISTING CMU BLOCK WALL

APN 922100041

APN 922100039

MATCHLINE STA. 67+00 SEE SHEET L-125

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		
M1	ADDED RCWD REQUIREMENTS	7/5/17	O.JURI

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 72+00 TO STA 67+00

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W. UNDERWOOD, PE, CHIEF, DESIGN BRANCH

DESIGNED BY: D. WALKER
DRAWN BY: D. WALKER
CHECKED BY: S. WILLIS

DISTRICT FILE NO. 226425
SPEC. NO. W912PL-15-B-0005
FILE NAME: L-124.DGN

SCALE: AS SHOWN
SHEET
L-124

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130.

VALUE ENGINEERING PAYS

MATCHLINE STA. 67+00 SEE SHEET L-124

MATCHLINE STA. 62+00 SEE SHEET L-126

EXISTING FENCELINE

CONCRETE MOW CURB ALONG R/W

APN 922100042

APN 922100048

APN 922100040

APN 922100050

APN 922100052

APN 922100046

SOIL CEMENT BANK PROTECTION

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

STA. 66+00

STA. 65+00

STA. 64+00

STA. 63+00

FLOW
MURRIETA CREEK

CHANNEL CENTERLINE
NOT SHOWN ON THIS SHEET

EAST BANK

WEST BANK

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

FUTURE BOY'S & GIRL'S CLUB DEVELOPMENT BY OTHERS

EXISTING ROTARY PARK FENCELINE

J-8 223.25
J-2 341.25
J-6 290.25
J-5 377.5
J-4 341.25
G-10 181.5
G-9 39.1.5
G-8 23.1.9
G-7 15.1
G-6 40.2
G-5 32.1
G-4 6.1
G-3 32.1
G-2 12.1
G-1 6.1

M1	ADDED RCWD REQUIREMENTS	12/5/17	G.M.P.I.
SYMBOL	DESCRIPTIONS	DATE	APPROVAL
	REVISIONS		

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK
IRRIGATION PLAN
STA 67+00 TO STA 62+00

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

DESIGNED BY	D. WALKER
DRAWN BY	D. WALKER
CHECKED BY	S. WILLIS
FILE NAME L-125.DGN	
SPEC. NO. W912PP-15-B-0005	
DISTRICT FILE NO. 226426	
SCALE	AS SHOWN
SHEET	L-125

U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

PAUL W. UNDERWOOD, PE
CHIEF, DESIGN BRANCH

SUBMITTED BY

NOTE:
ALL IRRIGATION PRESSURE MAIN LINE PIPING SHALL BE INSTALLED TO MAINTAIN TEN (10) FOOT MINIMUM HORIZONTAL, ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ALL POTABLE WATER PIPING WITH POTABLE WATER PIPING LOCATED ABOVE. WHERE IRRIGATION AND POTABLE WATER PRESSURE PIPING CROSS, THE IRRIGATION LINE SHALL BE INSTALLED AT A MINIMUM OF ONE-FOOT BELOW THE POTABLE WATERLINE. SEE DETAIL OS-1 ON SHEET L-130

VALUE ENGINEERING PAYS

PROVIDE WIRING FROM CONTROLLER "J" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE.

APN 922100048

CONCRETE MOW CURB ALONG R/W

APN 922100038

MATCHLINE STA. 62+00. SEE SHEET L-125

APN 922100039

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

STA. 61+00

STA. 60+00

CHANNEL REVEGETATION TEMPORARY IRRIGATION PLAN WAS NOT DESIGNED BY USACE AND IS SHOWN FOR REFERENCE ONLY. REFER TO RCWD JOB NO. 1H4451 FOR SYSTEM / DESIGNER INFORMATION. THE TEMPORARY SYSTEM WILL BE IN PLACE FOR APPROXIMATELY 12-MONTHS.

SOIL CEMENT BANK PROTECTION

EAST BANK

WEST BANK

FLOW

MURRIETA CREEK

1 1/4" CHECK

END OF CONSTRUCTION STA. 59+00

SOIL CEMENT BANK PROTECTION

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CHANNEL CENTERLINE NOT SHOWN ON THIS SHEET

STA. 61+00

STA. 60+00

EAST BANK

WEST BANK

PROVIDE WIRING FROM CONTROLLER "G" FOR 5 ADDITIONAL RCV'S TO BE INSTALLED BY OTHERS. INSTALL EXTRA WIRING IN LOCKABLE RECTANGULAR VALVE BOX. CAP MAINLINE AFTER GATE VALVE

MATCHLINE STA. 62+00. SEE SHEET L-125

APN 922100039

END OF CONSTRUCTION STA. 59+00

EXISTING ROTARY PARK FENCELINE

CONCRETE MOW CURB ALONG R/W

LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE, TYP.

CAP END OF MAINLINE

APN 922100025

N

0 20 40FT

SCALE: 1" = 20'

ON-SITE RECYCLED WATER ACCEPTED FOR CONSTRUCTION

RCWD JOB: E1792

RANCHO CALIFORNIA WATER DISTRICT DATE

*APPROVAL IS VALID FOR ONE YEAR FROM THE DATE THAT THE PLANS WERE SIGNED BY RCWD

SYMBOL	DESCRIPTIONS	DATE	APPROVAL
M1	ADDED RCWD REQUIREMENTS	12/5/17	OJURI

REVISIONS

SANTA MARGARITA RIVER WATERSHED
RIVERSIDE COUNTY, CALIFORNIA
MURRIETA CREEK PHASE 2

TOP OF BANK IRRIGATION PLAN STA 62+00 TO STA 59+00

U S ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS

SUBMITTED BY: PAUL W UNDERWOOD, PE
CHIEF, ENGINEERING BRANCH

DESIGNED BY D WALKER
DRAWN BY D WALKER
CHECKED BY S WILLIS

FILE NAME: L-126 DGN

SPEC NO W912PL-15-B-0005

DISTRICT FILE NO 226427

Scale AS SHOWN

SHEET L-126