3

RECYCLED WATER NOTES

SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- DRINKING WATER FOUNTAINS AND DESIGNATED OUTDOOR EATING AREAS SHALL BE PROTECTED AGAINST CONTACT WITH RECYCLED WATER SPRAY, MIST, OR RUNOFF.
- 3. BEST MANAGEMENT PRACTICES SHALL BE USED TO ELIMINATE OR CONTROL TO THE BEST EXTENT POSSIBLE PONDING.
- RUN-OFF, OVER-SPRAY AND MISTING. HOSE BIBS ARE STRICTLY PROHIBITED
- CROSS-CONNECTIONS BETWEEN RECYCLED WATERLINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED
- NO SUBSTITUTIONS OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE OTAY WATER DISTRICT.
- ALL MAINLINE PIPES SHALL HAVE WARNING TAPE PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- 8. HOURS FOR IRRIGATION WITH RECYCLED WATER ARE FROM 9:00P.M. TO 6:00 A.M. THE HOURS FOR IRRIGATION WITH DISINFECTED TERTIARY RECYCLED WATER MAY BE MODIFIED BY THE LOCAL AUTHORITY. IRRIGATION DURING PUBLIC USE PERIODS WITH DISINFECTED TERTIARY RECYCLED WATER SHALL BE UNDER THE SUPERVISION OF THE DESIGNATED USER SUPERVISOR. IRRIGATION WITH WATER OF A LESSER QUALITY THAN DISINFECTED TERTIARY RECYCLED WATER SHALL BE BETWEEN THE HOURS OF 9:00P.M. AND 6:00 A.M.
- 9. BURIAL OF ALL WIRING AND PIPING SHALL MEET OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- 10. NON-DESIGNATED USE AREAS SHALL BE PROTECTED FROM CONTACT WITH RECYCLED WATER, WHETHER BY WINDBLOWN SPRAY OR BY DIRECT APPLICATION THROUGH IRRIGATION OR OTHER USE. LACK OF PROTECTION, WHETHER BY DESIGN. CONSTRUCTION PRACTICE OR SYSTEM OPERATION, IS STRICTLY PROHIBITED.
- 11. IRRIGATION HEADS SHALL BE RELOCATED OR ADJUSTED TO MINIMIZE OR ELIMINATE OVER-SPRAYING ON SIDEWALKS, STREETS AND NON-DESIGNATED USE AREAS.
- 12. RECYCLED WATER QUICK COUPLING VALVES SHALL BE OF A TYPE DESIGNED FOR THE USE ON RECYCLED WATER DISTRIBUTION SYSTEMS PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- 13. ON RECYCLED WATER SYSTEMS, ALL APPURTENANCES (SPRINKLER HEADS, VALVE BOXES, ETC.) SHALL BE COLOR-CODED PURPLE PER AWWA GUIDELINES AND SECTION 116815 OF THE CALIFORNIA HEALTH AND SAFETY CODE
- 14. ALL IRRIGATION PIPES SHALL BE STENCILED WITH THE WARNING, "NON- POTABLE OR RECYCLED WATER," COLOR-CODED (PURPLE) AND LAID WITH WARNING TAPE AND STENCILING ORIENTED TOWARD THE TOP OF THE TRENCH PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- 15. ON NEW ON-SITE SYSTEMS (POST-METER), POTABLE WATER, CONSTANT PRESSURE RECYCLED WATER AND SEWER LINES SHOULD BE PLACED A MINIMUM OF FOUR FEET APART OR AS DIRECTED BY THE PROJECT ENGINEER AND /OR REGULATORY AGENCY. MEASUREMENTS SHALL BE BETWEEN FACING SURFACES, NOT PIPE CENTERLINES.
- 16. CONSTANT PRESSURE RECYCLED WATERLINES SHALL CROSS AT LEAST TWELVE INCHES BELOW POTABLE WATERLINES AND MAINTAIN AT LEAST TWELVE INCHES CROSSING SEPARATION BETWEEN OTHER UTILITIES.
- 17. IF A CONSTANT PRESSURE RECYCLED WATER LINE MUST BE INSTALLED ABOVE A POTABLE WATER LINE OR LESS THAN TWELVE INCHES BELOW A POTABLE WATER LINE, THEN THE RECYCLED WATER LINE SHALL BE INSTALLED WITHIN AN APPROVED PROTECTIVE SLEEVE AS PER OTAY WATER DISTRICT'S RULES AND REGULATIONS
- 18. DEVELOPER/CONTRACTOR SHALL CONDUCT A CROSS-CONNECTION TEST AND COVERAGE TEST AS DIRECTED BY THE OTAY WATER DISTRICT AND THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH PRIOR TO ANY USE OF
- 19. THE REQUIRED CROSS-CONNECTION INSPECTION SHALL BE DONE BY EITHER THE OTAY WATER DISTRICT AND/OR THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
- 20. THE DESIGN AND LOCATIONS PROPOSED FOR RECYCLED WATER "DO NOT DRINK SIGNS SHALL BE CALLED OUT ON THE
- 21. WHEN RECYCLED WATER BECOMES AVAILABLE, AN ON-SITE USER 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 PURVEYOR'S RULES AND REGULATIONS AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM, COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO THE OTAY WATER DISTRICT AN D/OR THE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

IN CASE OF EMERGENCY CONTACT PHONE NUMBER **BRAD SAGER** AT OR AFTER HOURS CONTACT (619) 204-2441 PHONE NUMBER A Market Market

- 22. ALL PUBLIC AND PRIVATE POTABLE WATER MAINS INCLUDING FIRE MAINS AND ANY WATER WELLS AND WATER COURSES WITHIN THE RECYCLED WATER PROJECT SHALL BE SHOWN ON THE PLANS.
- 23. CALL OUT ON THE PLANS IF THERE ARE OR ARE NOT DRINKING FOUNTAINS AND/OR DESIGNATED OUTDOOR EATING AREAS
- 24. EDUCATE ALL MAINTENANCE PERSONNEL ON A CONTINUOUS BASIS OF THE PRESENCE OF RECYCLED WATER. PERSONNEL MUST BE INFORM ED THAT RECYCLED WATER IS MEANT FOR IRRIGATION PURPOSES ONLY, AND IS NOT APPROVED FOR DRINKING PURPOSES. HAND WASHING. CLEANING OF TOOLS. ETC. GIVEN THE HIGH TURNOVER RATE OF EMPLOYEES IN THE LANDSCAPE INDUSTRY IT IS IMPORTANT THIS INFORMATION BE DISSEMINATED ON AN ALMOST DAILY BASIS.
- 25. A PHYSICAL SEPARATION SHALL BE PROVIDED BETWEEN ADJACENT AREAS IRRIGATED WITH RECYCLED WATER AND POTABLE WATER. SEPARATION SHALL BE PROVIDED BY DISTANCE, CONCRETE MOW STRIPS OR OTHER APPROVED METHODS.

OMISSION STATEMENT

THERE ARE NO DECORATIVE FOUNTAINS, OR SWIMMING POOLS, OR WELLS ON THE SITE. A COMFORT STATION, OUTDOOR EATING AREAS, DRINKING FOUNTAINS AND PLAYGROUND EQUIPMENT ARE ON THE SITE.

If one of the listed items does exist, each must be clearly identified on plan. Note shall read, "DRINKING WATER FOUNTAINS, DESIGNATED OUTDOOR EATING AREAS, POOLS, ETC. SHALL BE PROTECTED AGAINST CONTACT WITH RECYCLED WATER SPRAY, MIST, OR RUN-OFF".

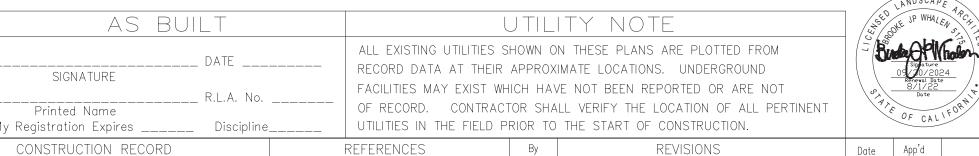
RESPONSIBILITY DISCLAIMER

ALL SCREENED FACILITIES, EXISTING OR PROPOSED, WERE OBTAINED FROM CIVIL PLAN NO. 14031 OWD D0740-090205, PLAN NO. 06033 OWD D0261-010182, PLAN NO. 16022 OWD D0740-060133 AND PLAN NO. 06071 OWD D0099-010211. ACTUAL SIZE AND LOCATION OF FACILITIES SHALL BE VERIFIED. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY TIE IN LOCATIONS, PIPE SIZE AND TYPE PRIOR TO ANY WORK BEING PERFORMED. TO THE BEST OF OUR KNOWLEDGE THE FACILITIES EXIST OR WILL EXIST AS SHOWN. THE OTAY WATER DISTRICT AND KTUA SHALL NOT BE HELD RESPONSIBLE FOR ACTUAL SIZE OR LOCATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OTAY WATER DISTRICT ENGINEER

ONTRACTOR:

DATE COMPLETED

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL



MAP # 15350

DWG. #'S 16022

DELTA A IRRIGATION REVISIONS

RECYCLED WATER PLANS FOR:

OTAY RANCH VILLAGE 2 P-2 PARK, **GROVE PARK**



SANTA DIANA RD

DRINKING FOUNTAIN OUTSIDE-

THRESHOLD VALVE OUTSIDE-

OF RESTROOM BLDG

OF RESTROOM BLDG

NEW 11/2" WATER LINE-

NEW 6" SEWER LINE-

NEW 1½" WATER LINE-

L-----

EX 6" DOMESTIC WATER LATERAL

DRINKING FOUNTAIN-

NEW 1/2" DRINKING

FOUNTAIN LATERAL

VICINITY MAP NO SCALE

DEVELOPER:

BALDWIN & SONS

P: (619) 234-4050

COORDINATOR

CONTACT:

SAN DIEGO, CA 92101

TORI MASSIE, PROJECT

610 W. ASH STREET, SUITE 1500

TMASSIE@BALDWINSONS.COM

NICK LEE, VICE PRESIDENT

NLEE@BALDWINSONS.COM

CITY OF CHULA VISTA **DEVELOPMENT SERVICES DEPARTMENT** 276 FOURTH AVENUE CHULA VISTA, CA 91910 P: (619) 407-3542 LANDSCAPE ARCHITECT MARY RADLEY

MRADLEY@CHULAVISTACA.GOV

SITE ADDRESS

1325 SANTA VICTORIA ROAD CHULA VISTA, CA 91913

ASSESSOR'S PARCEL NUMBER 644-311-14-00

TOPOGRAPHY SOURCE

DECEMBER 04. 2018

REFERENCE DRAWINGS:

GREENBOOK SPECIFICATIONS 2018 CITY OF CHULA VISTA PARK FACILITIES GUIDELINES, FEB. 2004, **UPDATED JAN. 2019** OTAY RANCH VILLAGE 2 SOUTH - BACKBONE & INTRACT STREETS

PLAN (DWG # 16022) DEPARTMENT OF WATER AGENCIES' STANDARDS, SECTION 15152

INDEX MAP LEGEND

- POC IRRIGATION POINT OF CONNECTION
- NEW 2" RECYCLED WATER METER AND BACKFLOW PREVENTERS

NEW 1" DOMESTIC BACKFLOW

- NEW 1" DOMESTIC WATER METER
- **NEW 1" DOMESTIC PRESSURE**
- REGULATOR RECYCLED WATER "DO NOT DRINK"
- FIRE HYDRANT (OFF-SITE)
- ─ W ─ DOMESTIC WATER LINE
- ---- RECYCLED WATER LINE

AS NOTED THRESHOLD VALVE (RESTROOM

OWD Revision Brandon DiPietro DN: C=US, E=brandond@otaywater.gov, 0=Otay Water District, OU=Field Services, CN=Brandon DiPietro Date: 2022.11.17 08:16:33-08'00' **OWD AS BUILT Signature and Date** Field Services Mngr. Brandon DiPietro

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE LANDSCAPE ARCHITECT OF WORK FOR THIS PROJECT THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA, THE OTAY WATER DISTRICT AND THE COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME. AS LANDSCAPE ARCHITECT OF WORK, OF MY RESPONSIBILITIES FOR PROJECT

KTUA 3916 NORMAL STREET, SAN DIEGO, CA 92103 FIRM NAME & ADDRESS

09/14/2021

REGISTRATION NO. RLA #5175

CONSTRUCTION STORM WATER PROTECTION NOTES:

- 1. TOTAL SITE DISTURBANCE AREA (ACRES) 7.1 ACRES HYDROLOGIC UNIT/ WATERSHED OTAY RIVER
- HYDROLOGIC SUBAREA NAME & NO..... OTAY VALLEY (910.20)
- 2. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE

THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100

3. CONSTRUCTION SITE PRIORITY

WATER POLLUTION CONTROL NOTES:

THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS NOTED IN THE "GREENBOOK" (LATEST EDITION) CITY SUPPLEMENT SEC 801 - WATER POLLUTION CONTROL.

WATER FEES:

THE CITY OF CHULA VISTA PROJECT MANAGER AND THE CONSULTANT SHALL COORDINATE THE FOLLOWING: WATER AND SEWER CAPACITY FEES SHALL BE PAID BY THE DEVELOPER; THE CONTRACTOR SHALL PAY ALL OTHER CONSTRUCTION AND MAINTENANCE WATER METER AND SEWER FEES, AND SHALL COORDINATE WITH THE WATER UTILITIES DEPARTMENT FOR INSTALLATION OF SERVICES. ALLOW THREE (3) MONTHS NOTICE TO THE WATER UTILITIES DEPARTMENT. FOR DEVELOPER-BUILD PROJECTS, ALL FEES SHALL BE PAID BY THE DEVELOPER.

COMPLIANCE WITH WATER CONSERVATION ORDINANCE

I AM FAMILIAR WITH AND AGREE TO COMPLY WITH THE REQUIREMENTS FOR LANDSCAPE IMPROVEMENT PLANS AS DESCRIBED IN CHAPTER 20.12 OF THE MUNICIPAL CODE. I HAVE PREPARED THIS PLAN IN COMPLIANCE WITH THOSE REGULATIONS. I CERTIFY THAT THE PLAN IMPLEMENTS THE REGULATIONS TO PROVIDE EFFICIENT LANDSCAPE WATER

Burday Ot Wholen 09/14/2021 SIGNATURE BROOKE WHALEN (RLA #5175)

SHEET INDEX

SHEET DISCIPLINE TITLE

(RECYCLED WATER SHEETS ONLY)

	NO.	CODE	TITLE
	39.	LI-01	RECYCLED WATER TITLE SHEET
	40.	LI-02	IRRIGATION PLAN
	41.	LI-03	IRRIGATION PLAN
	42.	LI-04	IRRIGATION PLAN
	43.	LI-05	IRRIGATION SCHEDULE
	44.	LI-06	IRRIGATION CALCULATIONS
$\overline{}$	45.	LI-07	IRRIGATION CALCULATIONS
)	46.	LI-08	IRRIGATION NOTES
)	47.	LI-09	IRRIGATION DETAILS
5	48.	LI-10	IRRIGATION DETAILS
\	49.	LI-11	IRRIGATION DETAILS
〈	50.	LI-12	IRRIGATION DETAILS
7	51.	LI-13	IRRIGATION DETAILS
)	52.	LI-14	IRRIGATION DETAILS
)	53.	LI-15	IRRIGATION DETAILS AND
5			WATER AGENCIES'
\			STANDARD SPECIFICATIONS
〈			SECTION 15152
7	54.	LI-16	WATER AGENCIES'
)			STANDARD SPECIFICATIONS
)			SECTION 15152
)			
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<i>)</i>			

COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH

LAND AND WATER QUALITY DIVISION

Jenna Lepore Digitally signed by Jenna Lepore Date: 2021.09.21 12:41:09 -07'00'

ENVIRONMENTAL HEALTH SPECIALIST

OTAY WATER DISTRICT

PROJECT NO. D0894-060253

Brandon DiPietro DN: cn=Brandon DiPietro, o, ou, email=brandond@otaywater.gov, c=US Date: 2021.09.22 13:49:46 -07:00' FIELD SERVICES MANAGER Juan Tamayo

RECYCLED WATER PROGRAM SUPERVISOR

Tanya Ayala-Mason

NOTE: SIGNATURE EXPIRES 1 YEAR AFTER DATE

C	NSULTA	ANT	BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG
	tua	3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	RECYCLED WATER TITLE SHEET	LI-01 SHEET 1 OF 1 W.O. NO. PRK-03
_	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
			OMAN DANGH VILLAGE O D O DADY	

PERMIT NO. PLR-19-012

VERTICAL: 446.361 (NAVD 88)

HORIZONTAL: I.E. N78"21'27"E NAD 83

EX 2" RECLAIMED-

PROPERTY LINE

INDEX MAP

TOTAL

HORIZONTAL

N/A

VERTICAL

N/A

SCALE: 1"=80'

WATER METER INFORMATION TABLE IRRIGATED LATERAL **ANNUAL** POC ID | POC STA. **DEMAND** AREA **USAGE** (GPM) (ACRE -FT) POC 'A' STA. 19+08 212,817 105 15.02

SANTA VICTORIA RD

METER SIZE SIZE (IN) (IN) 105 15.02 212,817 Designed By: SCALE

BROOKE JP. WHALEN Broke OF Whole R.L.A No.

Checked By: Drawn By:

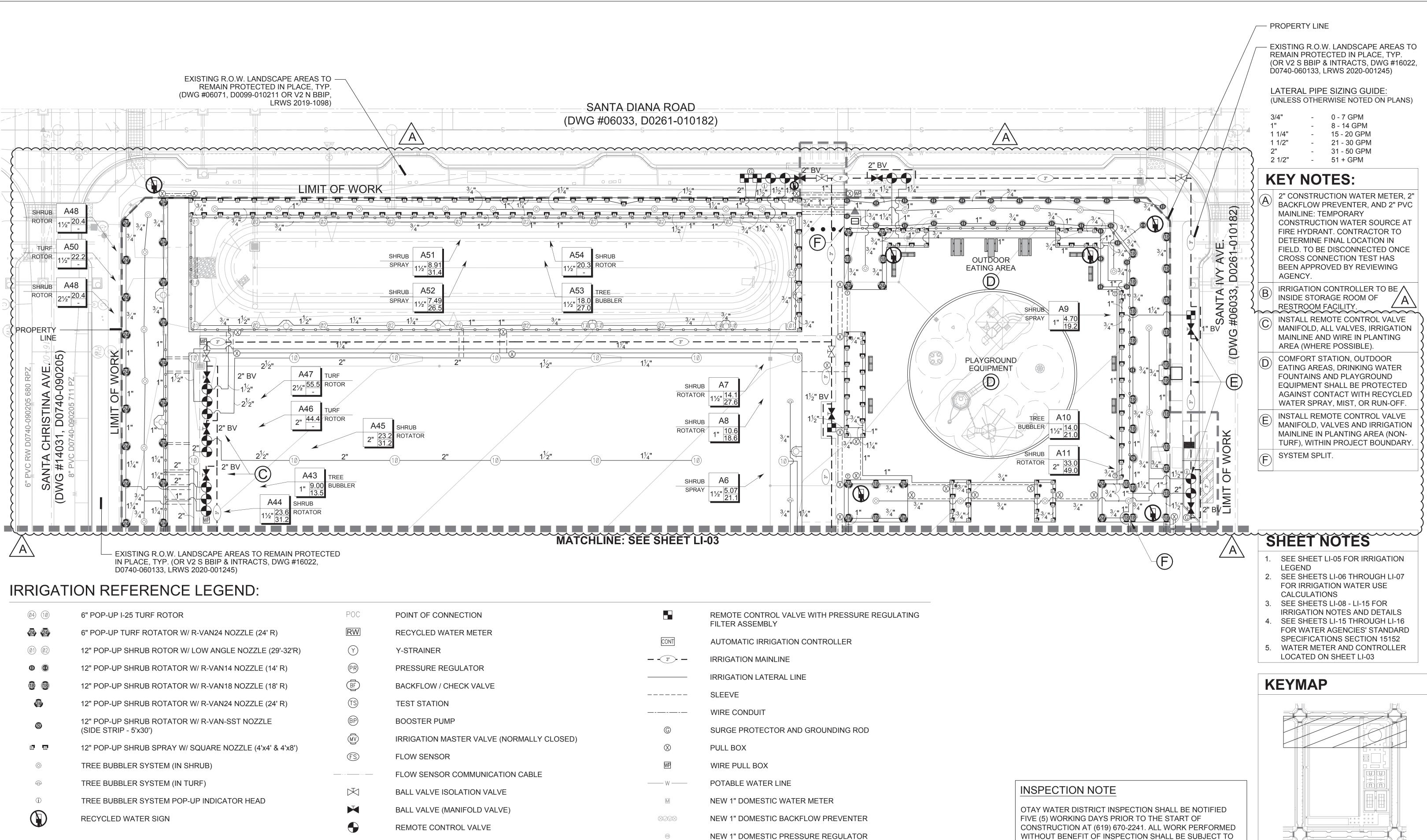
DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE

OTAY RANCH VILLAGE 2 P-2 PARK,

GROVE PARK

DATE:

DATE

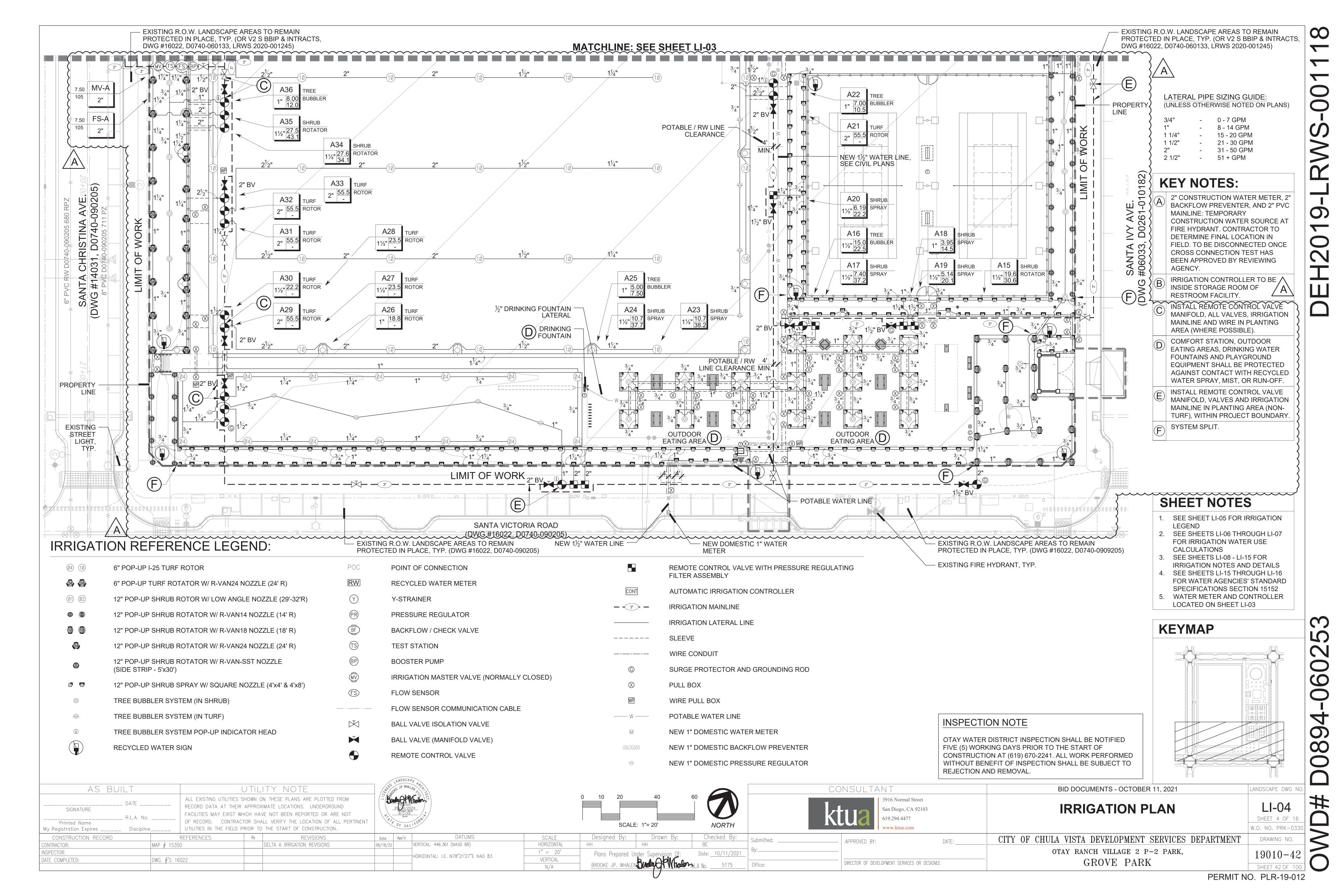


			LANDSCA	PE								II III
AS BUILT	UTIL	lty note	JSED JP WHA	LEW OF THE STATE O					CONSULTANT		BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG NO.
SIGNATURE R.L.A. No Printed Name My Registration Expires Discipline	RECORD DATA AT THEIR APPROX	ON THESE PLANS ARE PLOTTED FROM XIMATE LOCATIONS. UNDERGROUND AVE NOT BEEN REPORTED OR ARE NOT ALL VERIFY THE LOCATION OF ALL PERTINEN' O THE START OF CONSTRUCTION.	T Signature OS 20/20/20 Renewol Iba 8/1/22 Date 7 F OF CA	Sie De Le Control de la Contro		0 10 20 SCALE: 1"= 2	40 60 NORTH		3916 Normal S San Diego, CA 619.294.4477 www.ktua.com	92103	IRRIGATION PLAN	LI-02 SHEET 2 OF 16 W.O. NO. PRK-0330
CONSTRUCTION RECORD	REFERENCES By	REVISIONS	Date App'd	DATUMS	SCALE	Designed By:	Drawn By: Checked By: Su	Submitted:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
CONTRACTOR: INSPECTOR: DATE COMPLETED: DWG. ;	15350 #'S 16022	DELTA A IRRIGATION REVISIONS	08/18/22	VERTICAL: 446.361 (NAVD 88) HORIZONTAL: I.E. N78"21'27"E NAD 83	HORIZONTAL 1" = 20' VERTICAL	Plans Prepared Under Su	pervision Of: Date: 10/11/2021 By	Ву:	DIRECTOR OF DEVELOPMENT SERVICES	OD DESIGNEE	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-40
					N/A	BROOKE JP. WHALEN	Y 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Office:	DIRECTOR OF DEVELOPMENT SERVICES	OK DESIGNEE	GIVOVE FAIVI	SHEET 40 OF 100

PERMIT NO. PLR-19-012

REJECTION AND REMOVAL.

PERMIT NO. PLR-19-012



SYMBOL	DESCRIPTION	MANUFACTURER/MODEL NO.	REMARKS	DETAIL	SYMBOL	L DE005:DE00:					
POC	POINT OF CONNECTION		APPROX. LOCATION SHOWN, FIELD VERIFY. SEE ALSO	$\langle S \rangle$	FULL AD.	J DESCRIPTION	MANUFACTURER/MODEL NO./NOZZLE		RADIUS	PSI	G
PUC	TOINT OF CONNECTION		CIVIL PLANS.			6" POP-UP GEAR DRIVEN (IN TURF)	HUNTER I-25-06-SS-R W/ ADJUSTABLE TO FULL CIRC	CLE NON-STANDARD 4.0	42'	60	4
RW	RECYCLED WATER METER	NEW 2" RECYCLED WATER METER	APPROX. LOCATION SHOWN, FIELD VERIFY	WR-08 /	<u>A</u> (Ø4)	(,	YELLOW NOZZLE				
Y	Y-STRAINER IN BOX	WILKINS SXL (2"), OR APPROVED EQUAL	APPROX. LOCATION SHOWN, FIELD VERIFY	А	10	6" POP-UP GEAR DRIVEN (IN TURF)	HUNTER I-25-06-SS-R W/ ADJUSTABLE TO FULL CIRC LIGHT GREEN NOZZLE	CLE STANDARD 10.0	52'	60	11
PR	PRESSURE REGULATOR	(WILKINS 500XL-HR (2"), SET DELIVERY PRESSURE (REGULATOR AT 115 PSI / AS REQUIRED	INSTALL UPSTREAM BACKFLOW PREVENTER	WR-08							
BF	BACKFLOW REDUCED PRESSURE	WATTS 009 QT-2"	APPROX. LOCATION SHOWN, FIELD VERIFY	WR-02	2		RAINBIRD RD06-S-P-45-F-NP W/ R-VAN24 NOZZLE - 90		23'	45 0	0.84
	L BACKFLOW REDUCED PRESSURE	V.I.T. STRONG BOX SMOOTH TOUCH	APPROX. LOCATION SHOWN, FIELD VERIFY	WR-02	2 4	6" POP-UP ROTATING STREAM (IN TURF)	RAINBIRD RD06-S-P-45-F-NP W/ R-VAN24 NOZZLE - 36	60°	23'	45	3
	ENCLOSURE	SBBC-45SS	ADDDOX LOCATION CHOWN FIELD VEDIEV	(WD 04/C)	12" POP-UP GEAR DRIVEN (IN SHRUB)	RAINBIRD 5012+PCSMRNP W/ ADJUSTABLE TO FULL	CIRCLE 1.0 LA, Q	29'	45	1.
(TS) (BP)	BOOSTER PUMP	BARRETT ENGINEERED PUMPS	APPROX. LOCATION SHOWN, FIELD VERIFY APPROX. LOCATION SHOWN, FIELD VERIFY.	(WR-04/S		12" POP-UP GEAR DRIVEN (IN SHRUB)	NOZZLE RAINBIRD 5012+PCSMRNP W/ ADJUSTABLE TO FULL	CIRCLE 2 0 LA H	32'	45	2.
(Pr)	A	IBPCO-7.5-2-3/VFD-F/PSPIPE 3" WITH BY-PASS AND GAUGES (7.5 HP PUMP ASSEMBLY)	PROVIDE SIGNAL WIRE IN CONDUIT BETWEEN CONTROLLER AND PUMP, AND DECODER IN BOX AT		/ A\ @2	12 TOT OF GEAR BRIVETY (IIV OF IIVOB)	NOZZLE	011(022 2.0 27), 11			
			PUMP. CONTACT ITS AT (714) 696-7535			12" POP-UP SPRAY (IN SHRUB)	RAINBIRD RD12-S-P-30-F-NP W/ SQ-Q NOZZLE		4'x4'	30	0
MV	MASTER VALVE (NORMALLY CLOSED)	RAINBIRD IVM200EFB-NP-HAN2, 2" SIZE	APPROX. LOCATION SHOWN, FIELD VERIFY. PROVIDE 2-WIRE CABLE IN SEPARATE CONDUIT BETWEEN	С		12" POP-UP SPRAY (IN SHRUB)	RAINBIRD RD12-S-P-30-F-NP W/ SQ-H NOZZLE		4'x8'	30	0
			CONTROLLER AND VALVE		•	,) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN14 NOZZLE - 90		14'	45 0	0.32
FS	FLOW SENSOR	UFS-200 SENSOR WITH RAIN BIRD LXIVMSEN MODULE (1-200 GPM)	IMMEDIATELY DOWNSTREAM MASTER VALVE			,) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN14 NOZZLE - 36) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN18 NOZZLE - 90		14'	45	1.
	FLOW SENSOR COMMUNICATION CABLE	P7072D MAXI WIRE	INSTALL IN CONDUIT BETWEEN FLOW SENSOR AND	M	(18) (18)	<u> </u>) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN18 NOZZLE - 90		17'	45	0.50
		{	CONTROLLER WITH NO CABLE SPLICES. PROVIDE 2-WIRE SENSOR MODULE IN BOX AT SENSOR.	}) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN24 NOZZLE - 90		23'	45	0.84
	BALL VALVE (ISOLATION VALVE)	HAYWARD TB SERIES	MAINLINE SIZE	{ E	¥4)	·					
		PVC SCH 80 TRUE UNION WITH EPDM SEALS		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>	12" POP-UP ROTATING STREAM (IN SHRUB) RAINBIRD RD12-S-P-45-F-NP W/ R-VAN-SST NOZZLE		5'x30'	45	0
	BALL VALVE (MANIFOLD VALVE)	(HAYWARD TB SERIES PVC SCH 80 TRUE UNION WITH EPDM SEALS	APPROX. LOCATION SHOWN, FIELD VERIFY, SIZE PER PLAN	} =		TREE BUBBLER SYSTEM (IN SHRUB)	EACH TREE SHALL HAVE:				
•	REMOTE CONTROL VALVE	IVM100EFB-PRS-D-NP-HAN1,	APPROX. LOCATION SHOWN, FIELD VERIFY, SIZE PER	} G		(2 BUBBLERS PER SYMBOL / TREE)	- ONE (1) 4" POP-UP (RAINBIRD RD04-S-P-30-F-NP WI FACTORY INSTALLED CHECK VALVE.	TH 5Q-B NOZZLE) WITH	5'	30	0
	(PRESSURE REGULATING)	VM150EFB-PRS-D-NP-HAN2, IVM200EFB-PRS-D-NP-HAN2.	PLAN NOTE: PRS-D REGULATOR MUST BE FIELD INSTALLED				- ONE (1) FIXED BUBBLER (RAINBIRD 1402 NOZZLE) I	N A PERFORATED PIPE.	FLOOD	30	0
		WITH FACTORY-INSTALLED IVM-SOL		\ <u>\</u>		TREE BUBBLER SYSTEM (IN TURF)	WITH ANTI-DRAIN SPRING CHECK VALVE. EACH TREE SHALL HAVE:				
-	REMOTE CONTROL VALVE WITH PRESSURE REGULATING FILTER	(RAINBIRD IVM100EFB-PRS-D-NP-HAN1 WITH OPTIONS NOTED: PES-B VALVE, PRB-QKCHK-100	APPROX. LOCATION SHOWN, FIELD VERIFY, SIZE PER PLAN. NOTE: -PRS-D REGULATOR MUST BE FIELD	} U	Θ	(2 BUBBLERS PER SYMBOL / TREE)	- ONE (1) 4" POP-UP (RAINBIRD RD04-S-P-30-F-NP WI	TH 5Q-B NOZZLE) WITH	5'	30	0
	ASSEMBLY	PRESSURE-REGULATING FILTER (0.3 - 20 GPM) FOR	INSTALLED	}			FACTORY INSTALLED CHECK VALVE ONE (1) FIXED BUBBLER (RAINBIRD 1402 NOZZLE) I	N A PERFORATED PIPE.	FLOOD	30	0
		1" VALVE ASSEMBLY, IVM150EFB-PRS-D-NP-HAN2, LCRBY150D FILTER AND PSI-H40X-150 PRESSURE					WITH ANTI-DRAIN SPRING CHECK VALVE.				
		REGULATOR (21 - 62 GPM) FOR 1-1/2" VALVE ASSEMBLY WITH FACTORY-INSTALLED IVM-SOL		}	①	TREE BUBBLER SYSTEM POP-UP INDICATOR HEAD	RAINBIRD RD12-S-P-30-F-NP WITH GPH GDFN-R EACH TREE SYSTEM SHALL REQUIRE ONE (1) POP-U	JP INDICATOR HEAD	-	30	
		A TOOL MILE TO THE THE TOTAL T		}			NEAR TREE SYSTEM REMOTE CONTROL VALVE.				
CONT	AUTOMATIC IRRIGATION CONTROLLER	RAINBIRD ESPLXIVMP: INCLUDES 240 STATIONS CONTROLLER IN PLASTIC WALL-MOUNT CABINET.	APPROX. LOCATION SHOWN (IN RESTROOM STORAGE SPACE), FIELD VERIFY.	\ \ H	SYMBOL	DESCRIPTION	MANUFACTURER/MODEL NO.	REMARKS			
		ADD RS32 COMMUNICATION CARTRIDGE FOR RADIO	WALL MOUNT WITH STAINLESS STEEL CABINET.CITY		NO SYMBO	L 2-WIRE VALVE DEVICE CABLE	14/2, PAIGE P7072D MAXI WIRE, OR AS APPROVED B	Y SPLICES, WHEN APPRO	OVED, SHALL I	USE WATER	R TI
		(COMMUNICATION, AND PSR220-IVM PUMP START RELAY	CONTROL SYSTEM MANAGEMENT: PRIMARY COMMUNICATION (ETHERNET) WILL ORIGINATE AT FIRE		>		CONTROLLER MANUFACTURER.	ELECTRICAL WIRE CONI			
			STATION 7 USING AN ETHERNET CARTRIDGE AND 900)	}			FROM CONTROLLER TO			
			MHZ RADIO. THIS PARK WILL CONNECT TO IT VIA RADIO CARTRIDGE AS SECONDARY COMMUNICATION.		NO SYMBO	L 2-WIRE FLOW SENSOR DEVICE	LXIVMSEN	USE APPROVED RAIN BI			
			CONTROL SYSTEM INSTALLATION, OPERATION AND DATA SERVICE SHALL BE REVIEWED BY TORO FIELD	}	S ©	2-WIRE GROUND ROD WITH RAIN BIRD SURGE DEVICE	5/8" DIA. X 8 FT LONG BARE COPPER ROD OR PER MANUFACTURER'S REQUIREMENTS, WITH RAIN BIRD	DO NOT SOLELY INSTAL D VERIFY AND INSTALL (1)			
			SERVICE REPRESENTATIVE PRIOR TO OBTAINING FINAL	- }	}	SORGE BEVIOL	MODEL #LXIVMSD SURGE DEVICE	SURGE DEVICE EVERY	500 FT, OR F0	OR EVERY 1	15
NO SYMBOL	L RAIN SENSOR	RAINBIRD RSD WITH LXIVMSEN	ACCEPTANCE OF SYSTEM BY RAIN BIRD AND OWNER. MOUNT THE SENSOR ON BUILDING ROOF IN EXACT	\{\}	\$			DECODERS ON 2 WIRE (DISTANCE). INSTALL PE	`		SIVIA
			LOCATION COORDINATED WITH THE CITY AND PER RAIN	1 }			OLDCASTLE / CARSON PRODUCTS	RECOMMENDATIONS.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
NO SYMBOL	L WIRE CONNECTOR	(RAIN BIRD WC20	BIRD RECOMMENDATIONS. BELOW GRADE WIRE SPLICES. ALL WIRE CONNECTIONS	5 1	\otimes	PULL BOX	OLDCASTLE / CARSON PRODUCTS	SLEEVE CROSSING.		1D2 OF EACE	, _Π
			AND SPARE WIRE ENDS SHALL BE PER STANDARD	}				LOW VOLT. = LOCKING L HIGH VOLT. = BOLTDOW			
			DRAWINGS AND ENCLOSE IN SEALANT FOR WATERTIGHTNESS					INCLUDE AT LOCATIONS	S WITH 270 D		
— 3" —	- IRRIGATION MAINLINE	PURPLE RECYCLED WATER PVC CLASS 315 (SDR	18" NORMAL DEPTH OF COVER, 30"-36" UNDER	F , J, K,				CONDUIT BENDING. INC DISTANCE SPACING ALC	_		UFE
	(SIZE AS NOTED ON PLAN)	(13.5) = 2" TO 3" SIZE WITH PVC SCH 80 FITTINGS PURPLE RECYCLED WATER PVC SCH 40 = 1-1/2" SIZE	HARDSCAPE) WI-01,)WI-02 &	WP	WIRE PULL BOX	OLDCASTLE / CARSON PRODUCTS	APPROX. LOCATION SHO	- ,		
	IDDIOATION ATTENDED	WITH PVC SCH 80 FITTINGS	411 OLZE 0 ABOVE ABELIVE CONTENT ON THE CONTENT OF THE CONTENT OF THE CONTENT ON) WI-04				WIRE AND INSTALL WIR WIRE RUN EXCEEDS 500		_	
	- IRRIGATION LATERAL LINE (SIZE AS NOTED ON PLAN)	PURPLE RECYCLED WATER PVC SCH 40 WITH PVC SCH 40 FITTINGS	1" SIZE & ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS 3/4" IN SIZE. 15" DEPTH OF COVER	J, K & WI-04				270 DEGREES OF COND SWEEPS.	UIT BENDING	3. INCLUDE	
	,	PURPLE RECYCLED WATER PVC SCH 40	MIN. 2" SIZE, TWICE THE DIA. OF PIPE SLEEVED.	} F, K,		RECYCLED WATER "DO NOT DRINK" SIGN	SIGN TYPE APPROVED BY OTAY WATER DISTRICT	INSTALL QUANTITY AND) LOCATION !	PER MUNICI	IPAL
		\	APPROX. LOCATION SHOWN, FIELD VERIFY. INSTALL AS NOTED AND UNDER PAVING/HARDSCAPE	WI-01, WI-02 &				WATER DISTRICT AND S WATER REQUIREMENTS	•	JEH) RECYC	CLEC
	WIDE CONDUIT) WI-04			······································				
	WIRE CONDUIT	GREY PVC SCH 40	MIN. 3/4" SIZE, SIZE TWICE THE DIA. OF WIRE BUNDLE SLEEVED, AND AS NOTED. APPROX. LOCATION SHOWN	K&S			E AND FLOW SENSOR CALLOUT	\overline{A}			
		}	ONLY FOR COORDINATING CONDUIT INSTALLATION PRIOR TO PAVING CONSTRUCTION. ALL WIRE/ CABLE	\		THE MINIMUM FLOW AS REQUIRED FOR FLOW SENSING.	D MEET THE 8 HOUR WORST CASE WATERING WINDOW REQUIREMEN	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
		\	SHALL BE INSIDE CONDUIT (FLOW SENSOR WIRE AND		}	Controller Designation Valve Number	— Master Valve I.D. Flow Sensor I.D.	} COLOR COD	<u>ING</u>		
		\	MASTER VALVE WIRE IN SEPARATE 1" DIA. MIN. ELECTRICAL CONDUIT). INSTALL AS NOTED AND UNDER	3	A1		Minimum Valve Flow (GPM) The second of the		TOR HEADS	AND OTHER	₹ TYF
	······································		PAVING/HARDSCAPE (, m	1" 13.5	IRRIG. TYPE 2" 105	Maximum Valve Flow (APPROX. GPM) 2" (APPROX. GPM) Maximum Sensor Flow (APPROX. GPM)	DISPERSION HEAD	DS SHALL HA	AVE THE EXP	(POS
				•	\}	Valve Flow (w/ Nozzle Performance Only) (APPROX. GPM)	— Master Valve Size Flow Sensor Size	COLORED THROU	JGH THE USE	E OF INTEGRA	RALL
****					}}	Total Valve Flow w/ Flow-By (APPROX. GPM) MASTER VA	ALVE FLOW SENSOR) PURPLE PLASTIC PLASTIC RING OR	R DISC. ALL SI	SHRUB HEADS	DS S
			INSPECTION NOTE		> REMOTE (CONTROL VALVE		PURPLE CAPS. DE	ECAL ON RISI	ERS WILL NO	OT E
			11101 20110111012		TILLING TE		RII		11 2021		
		LANDSCAPE ARC.		\TIC!CO	^	CONSULTANT	BII	D DOCUMENTS - OCTOBER	11, ZUZT		
BUILT	UTILITY N	(54/5)	OTAY WATER DISTRICT INSPECTION SHALL BE NO FIVE (5) WORKING DAYS PRIOR TO THE START OF		A		6 Normal Street				
BUILT DATE	ALL EXISTING UTILITIES SHOWN ON THESE F RECORD DATA AT THEIR APPROXIMATE LOC	PLANS ARE PLOTTED FROM ATIONS. UNDERGROUND	OTAY WATER DISTRICT INSPECTION SHALL BE NO FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PER	RFORMED	A	3916		IGATION SCHI	EDULE	•	
BUILT DATE	ALL EXISTING UTILITIES SHOWN ON THESE F RECORD DATA AT THEIR APPROXIMATE LOC FACILITIES MAY EXIST WHICH HAVE NOT BER OF RECORD. CONTRACTOR SHALL VERIFY	PLANS ARE PLOTTED FROM ATIONS. UNDERGROUND EN REPORTED OR ARE NOT THE LOCATION OF ALL PERTINENT	OTAY WATER DISTRICT INSPECTION SHALL BE NO FIVE (5) WORKING DAYS PRIOR TO THE START OF	RFORMED	A	3916 San 619.	Diego, CA 92103 IRR	IGATION SCHI	EDULE	:	
BUILT DATE	ALL EXISTING UTILITIES SHOWN ON THESE F RECORD DATA AT THEIR APPROXIMATE LOC FACILITIES MAY EXIST WHICH HAVE NOT BER OF RECORD. CONTRACTOR SHALL VERIFY	PLANS ARE PLOTTED FROM ATIONS. UNDERGROUND EN REPORTED OR ARE NOT THE LOCATION OF ALL PERTINENT	OTAY WATER DISTRICT INSPECTION SHALL BE NO FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PER WITHOUT BENEFIT OF INSPECTION SHALL BE SUE REJECTION AND REMOVAL.	RFORMED	Checked By:	Ktua 3916 San 619.	Diego, CA 92103 .294.4477 w.ktua.com				T NT
BUILT DATE R.L.A. No Disciplin	ALL EXISTING UTILITIES SHOWN ON THESE F RECORD DATA AT THEIR APPROXIMATE LOC FACILITIES MAY EXIST WHICH HAVE NOT BER OF RECORD. CONTRACTOR SHALL VERIFY NE UTILITIES IN THE FIELD PRIOR TO THE STAR REFERENCES By	PLANS ARE PLOTTED FROM ATIONS. UNDERGROUND EN REPORTED OR ARE NOT THE LOCATION OF ALL PERTINENT TOF CONSTRUCTION.	OTAY WATER DISTRICT INSPECTION SHALL BE NOT FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERWITHOUT BENEFIT OF INSPECTION SHALL BE SUBREJECTION AND REMOVAL. SCALE BY HORIZONTAL HH N/A BY BY DESIGNED HORIZONTAL HH N/A DESIGNED HORIZONTAL HH HH HH HH HH HH HH HH HH	RFORMED BJECT TO Drawn By:		3916 San 619.	Diego, CA 92103 .294.4477 w.ktua.com DATE: CITY OF CHULA	VISTA DEVELOPMENT S	SERVICES I		ENT

City/Governing Agency: City of Chula Vista Landscape Project Type: Non-residential	_A VISTA (51.15)	30 31 31 30 31 30 31	lacksquare	
ct Name: Grove Park ence ETo: 51.2 CIMIS Station # 147 (Otay Lake)	Average per Month 2.24 2.72 4.11 4.91 5.3 Average per Day 0.072 0.097 0.133 0.164 0.17	7 5.99 6.32 6.05 4.86 3.84 2.74 2.00 3 0.200 0.204 0.195 0.162 0.124 0.091 0.065	KTU+A Landscape Architecture & Planning	
pe area): 0 sq ft sq ft: landscape area): 212,817 sq ft SLA Description: Crop plants 0			3916 Normal Street San Diego, CA. 92103	
Controller 'A' RW irrigation 212,817 Recycled Water RW feature/s 0	ITROLLER 'A':4 DAY WATERING SCHEDULE	Data per Plans Planting Gallons Irri		
Water Allowance (gallons per year) Active turf 0 Total: 212,817	Type Irrig. Method Sta. # PR PF Jan Feb Mar Apr Ma		IE) Project Name: Grove Park Project #: 017-057	
SLA) 12,817)	Rotator 01 0.52 0.6 12 16 21 26 28 28 28 29 29 20 20 20 20 20 20	32 33 32 26 20 15 10 2,500 13.50 0 19 20 19 16 12 9 6 2,171 13.10 0 2 2 2 2 1 1 1 96 6.00 0	Sources: Recycled water Chula Vista, CA	
per year) ft) fectors and irrigation officiency) for non-recidential areas	Rotator 04 0.93 0.4 4 6 8 10 10 Rotor 05 0.84 0.6 7 10 13 16 17	12 12 12 10 7 6 4 1,673 16.10 0 20 20 19 16 12 9 6 5,070 44.40 0	75	
lant factors and irrigation efficiency) for non-residential areas lant factors and irrigation efficiency) for residential areas LA only	Rotator 06 0.54 0.4 7 10 14 17 18 7 10 Rotator 07 0.57 0.4 7 10 13 16 17	21 21 20 17 13 9 7 899 5.07 0 20 20 19 16 12 9 6 2,397 14.10 0	NET ELEVATION CHANGE (+) POC TO HIGH/LOW POINT OF SYSTEM: (FT.):	
q ft) crops, recycl. water features, recycl. water, recreational/active	D Rotator 08 0.83 0.4 5 7 9 11 12 D Spray 09 0.56 0.4 7 10 13 16 17 Bubbler 10 6.02 0.5 1 1 1 2 2	13 14 13 11 8 6 4 1,228 10.60 0 20 20 20 16 12 9 6 809 4.70 0 2 2 2 2 1 1 1 224 14.00 0	75	
MAWA = 6,755,663 gal/year	Bubbler 10 0.02 0.5 1 1 1 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	18 18 17 14 11 8 6 5,020 33.00 0		
Calculations:	Rotator 13 0.75 0.4 5 7 10 12 13 0.75 0.4 5 7 10 12 13 13 0.75 0.4 5 7 10 12 13	15 15 15 12 9 7 5 1,619 12.60 0	75 Service Line Cu 2" 10.09 45 105 4.5 Water Meter - 2" - 105 8.7	
0.62 x (212,817) = 6,755,663 gal/year ETWU = 6,755,663 gal/year	Rotator 15 0.61 0.4 7 9 12 15 16 Bubbler 16 6.02 0.5 1 1 1 2 2 Spray 17 1.98 0.2 1 1 2 2 2	18 19 18 15 11 8 6 3,102 19.60 0 2 2 2 2 1 1 1 240 15.00 0 3 3 3 2 2 1 1 360 7.40 0	.81 Backflow Preventer Watts 009 2" - 105 12.0	
	Spray 18 0.53 0.2 4 5 7 9 9 Spray 19 0.54 0.2 4 5 7 9 9		.75 Wye Strainer / Press Reg - 2" 105 7.5	
, moderate: 0.4-0.7, high water use: 0.8-1.0; art. turf: 0.1-0.2; or high water use, in sq ft)	Spray 20 0.50 0.2 4 5 7 9 10 Rotor 21 0.84 0.6 7 10 13 16 17	11 11 11 9 7 5 4 1,183 6.19 (20 20 19 16 12 9 6 6,337 55.50 (.75 Flow Sensor RainBird 2" 105 0.5 Brass Equip Plumbing - 2"-3" - 105 1.0	
gh water use, in sq ft) i; Microspray: 0.75; Rotator: 0.75; Rotor: 0.75; Drip: 0.81) , recycl. water features, recycl. water, recreational/active	Bubbler 22 6.02 0.5 1 1 1 2 2 2 5 5 5 6 7 7 8 7 8 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2 2 2 2 1 1 1 112 7.00 0 22 23 22 18 14 10 7 2,050 10.70 0 22 23 22 18 14 10 7 2,050 10.70 0	.81 Press Supply Line (Leg) CL 315 3" 1.21 90 105 1.1	
ecies	Spray 24 0.50 0.4 8 11 15 18 19 19 19 19 19 19 19	22 20 22 10 14 10 7 2,000 10,10 0	Press Supply Line (Leg) CL 315 3" 0.95 210 92 2.0 Remote Control Valve Rain B. EFB 2" - 56 1.5	
Hydrozone Area (HA) PF x HA PF x HA /	Rotor 27 0.64 0.6 9 13 17 21 23 Rotor 28 0.64 0.6 10 13 17 22 23	26 27 26 21 16 12 8 3,522 23.50 0 26 27 26 21 16 12 8 3,542 23.50 0	Pres. Line Isolat. Ball Valve Hayward TB 3" 53 0.6 Manifold Ball Valve Hayward TB 2" - 56 0.2	
(sq ft) (sq ft) IE IE	Rotor 29 0.84 0.6 7 10 13 16 17 Rotor 30 1.54 0.6 4 5 7 9 9	20 20 19 16 12 9 6 6,323 55.50 0 11 11 11 9 7 5 4 1,385 22.20 0	.75	
4 2,171 868 0.75 1,158 (Spray)	Rotor 31 0.46 0.6 13 18 24 30 31 Rotor 32 0.46 0.6 13 18 24 30 31 Rotor 33 0.84 0.6 7 10 13 16 17	36 37 35 29 22 17 12 11,541 55.50 0 36 37 35 29 22 17 12 11,541 55.50 0 20 20 19 16 12 9 6 6,337 55.50 0	.75	
0.5 96 48 0.81 59 (Bubbler) 0.4 1,673 669 0.75 892 (Rotator)	Rotor 33 0.84 0.6 7 10 13 16 17 Rotator 34 0.80 0.4 5 7 9 11 12 Rotator 35 0.80 0.4 5 7 9 12 12	20 20 19 16 12 9 6 6,337 55.50 0 14 14 14 11 9 6 5 3,322 27.60 0 14 14 14 11 9 6 5 3,322 27.50 0	.75 Lateral Lines sch40 varies 2.6	
0.6 5,070 3,042 0.75 4,056 (Rotor) 0.4 899 360 0.75 479 (Spray)	Bubbler 36 6.77 0.5 1 1 1 2 2 Rotor 37 0.46 0.6 13 18 24 30 31	2 2 2 2 1 1 1 128 9.00 0 36 37 35 29 22 17 12 11,541 55.50 0	.81 Other 0.0	
0.4 2,397 959 0.75 1,278 (Rotator) 0.4 1,228 491 0.75 655 (Rotator)	Rotor 38 0.46 0.6 13 18 24 30 31 Rotor 39 0.46 0.6 13 18 24 30 31 Rotor 40 0.46 0.6 13 18 24 30 31	36 37 35 29 22 17 12 11,541 55.50 0		
0.4 809 324 0.75 431 (Spray) 0.5 224 112 0.81 138 (Bubbler)	Rotor 40 0.46 0.6 13 18 24 30 31 Rotor 41 0.46 0.6 13 18 24 30 31 Rotor 42 0.46 0.6 13 18 24 30 31	36 37 35 29 22 17 12 11,541 55.50 0	PRESSORE REGUIRED AT TIEAD. Notol 60.0	
0.4 5,020 2,008 0.75 2,677 (Rotator) 0.5 176 88 0.81 109 (Bubbler)	Rotor 42 0.46 0.6 13 18 24 30 31 Bubbler 43 6.02 0.5 1 1 1 2 2 D Rotator 44 0.73 0.4 6 7 10 13 13	2 2 2 1 1 1 1 128 8.00 0	101AL PRESSURE REQUIREMENT: 111.9 11.9 1	
0.4 1,619 648 0.75 863 (Rotator) 0.4 1,619 648 0.75 863 (Rotator)	Rotator 45 0.75 0.4 5 7 10 12 13 Rotor 46 0.84 0.6 7 10 13 16 17	15 15 15 12 9 7 5 2,984 23.20 0 20 20 19 16 12 9 6 5,070 44.40 0	BOOST REQUIREMENT: n/a 35	
0.4 3,102 1,241 0.75 1,654 (Rotator) 0.5 240 120 0.81 148 (Bubbler)	Rotor 47 0.48 0.6 13 17 23 29 30 (Basin) Rotor 48 0.25 0.4 16 22 30 37 39 10 10 10 10 10 10 10 10 10 10 10 10 10	35 36 34 28 22 16 11 11,166 55.50 0 45 46 44 36 28 20 14 7,841 20,40 0	Reviewed by: BE	
360 72 0.75 96 (Spray)	Rotor 49 0.87 0.6 7 9 13 16 17 Rotor 50 1.59 0.6 4 5 7 9 9 Spray 51 0.66 0.4 6 8 11 14 15	19 20 19 16 12 9 6 6,122 55.50 0 11 11 10 9 7 5 3 1,348 22.20 0 17 17 17 14 11 8 6 1,306 8.91 0	Pressure data reference: Existing water pressure data obtained 8/22/18 through Otay Water District (OWD). Vu Tran, direct line: (619) 670-2289 RW PZ: 680 PW PZ: 711	
0.2 919 184 0.75 245 (Spray)	Spray 51 0.66 0.4 6 8 11 14 15 19 20 Spray 52 0.49 0.4 8 11 15 19 20 Bubbler 53 6.02 0.5 1 1 1 2 2	17 17 17 14 11 8 6 1,306 8.91 6 23 23 22 18 14 10 7 1,468 7.49 6 2 2 2 2 1 1 1 368 23.00 6	.75 Existing available water pressure: 91 psi @ 469 ft elev. (2016 data, at Santa Victoria Rd/Santa Ivy Ave)	
1,183 237 0.75 315 (Spray) 6,337 3,802 0.75 5,070 (Rotor)	(Basin) Rotor 54 0.26 0.4 16 21 29 35 37	43 44 42 35 27 20 14 7,549 20.30 0 1,019 1,041 996 827 632 466 329	System Design Operating Pressure: 115 psi.	
112 56 0.81 69 (Bubbler) 2,050 820 0.75 1,093 (Spray)	TOTAL HOURS PER DAY (Decimal Format) 6.15 8.26 11.28 13.92 14.7 TOTAL HOURS PER DAY (Hours: Minutes) 6:08 8:15 11:16 13:55 14:4	3 16.98 17.34 16.60 13.78 10.54 7.77 5.49	System Design Operating Pressure: 115 psi. System Design Flow Rate: 7.50 gpm to 105 gpm; varies "Flow Group" - Remote Control Valves operating simultaneously.	
2,050 820 0.75 1,093 (Spray) 80 40 0.81 49 (Bubbler)	RATE MULTIPLE SYSTEMS SIMULTANEOUSLY TO MEET THE 8 HOUR WATE	RING WINDOW REQUIREMENT. REFER TO SHEET LI-07 FOR RECOMMENDAT	ONS. Valve No. 21 is not within the "Flow Grouping" that utilizes System to 105 GPM, for calculation purposes only. *Temp - is reference for potable temporary fire hydrant water source at 105 psi available	
1,492 895 0.75 1,194 (Rotor) 3,522 2,113 0.75 2,818 (Rotor)	IMATED APPLIED WATER USE (EAWU based from Irrigation Watering Schedule)		Temp - is reference for potable temporary fire hydrant water source at 105 psi available	
0.6 3,542 2,125 0.75 2,834 (Rotor) 0.6 6,323 3,794 0.75 5,058 (Rotor)	Type Irrig. Method Sta. # PR PF Jan Feb Mar Apr Ma Rotator 01 0.52 0.6 2,793 3,391 5,124 6,122 6,69 Spray 02 0.58 0.4 1.617 1.963 2.967 3.544 3.87	Jun Jul Aug Sep Oct Nov Dec 5 7,468 7,879 7,543 6,059 4,788 3,416 2,494 6 4,324 4,562 4,367 3,508 2,772 1,978 1,444	FORMULAE:	
1,385 831 0.75 1,108 (Rotor) 11,541 6,925 0.75 9,233 (Rotor)	Bubbler 03 6.02 0.5 83 100 152 181 196 Rotator 04 0.93 0.4 1,246 1,513 2,286 2,731 2,98	221 233 223 180 142 101 74 7 3,332 3,515 3,365 2,703 2,136 1,524 1,112	Precipitation Rate (PR), Total Area Method	
6 11,541 6,925 0.75 9,233 (Rotor) 6 6,337 3,802 0.75 5,070 (Rotor)	Rotor 05 0.84 0.6 5,664 6,877 10,392 12,415 13,5 Rotator 06 0.54 0.4 670 813 1,228 1,468 1,60	8 15,145 15,980 15,297 12,288 9,709 6,928 5,057 5 1,790 1,889 1,808 1,453 1,148 819 598	PR (in/hr) = Flow GPM x 96.25 ÷ Hydrozone Planting Area	
3,322 1,329 0.75 1,772 (Rotator)	Rotator 07 0.57 0.4 1,785 2,168 3,275 3,913 4,27 Rotator 08 0.83 0.4 915 1,110 1,678 2,005 2,19	2 2,446 2,580 2,470 1,984 1,568 1,119 817	Irrigation Watering Schedule (T)	
0.4 3,322 1,329 0.75 1,772 (Rotator) 0.5 128 64 0.81 79 (Bubbler) 0.6 11,541 6,925 0.75 9,233 (Rotor)	Spray 09 0.56 0.4 602 732 1,105 1,321 1,44 Bubbler 10 6.02 0.5 193 234 354 423 463 Rotator 11 0.63 0.4 3,739 4,540 6,860 8,195 8,96	4 1,611 1,700 1,627 1,307 1,033 737 538 516 545 521 419 331 236 172 2 9,997 10,548 10,097 8,111 6,409 4,573 3,338	T = (60 x ET x PF) ÷ (PR x IE) x 7 ÷ Watering Days	
0.6 11,541 6,925 0.75 9,233 (Rotor)	Bubbler 12 6.02 0.5 152 184 278 333 364 Rotator 13 0.75 0.4 1,206 1,464 2,212 2,643 2,85	406 428 410 329 260 186 135	Estimated Applied Water Use (EAWU based from Irrigation Watering Schedule) EAWU = T x GPM x (Month ÷ 7) x Watering Days	
11,541 6,925 0.75 9,233 (Rotor) 11,541 6,925 0.75 9,233 (Rotor)	Rotator 14 0.75 0.4 1,206 1,464 2,212 2,643 2,89	0 3,224 3,402 3,257 2,616 2,067 1,475 1,077 8 6,178 6,518 6,239 5,012 3,960 2,826 2,063		
6 11,541 6,925 0.75 9,233 (Rotor) 6 11,541 6,925 0.75 9,233 (Rotor)	Bubbler 16 6.02 0.5 207 251 380 453 490 Spray 17 1.98 0.2 134 163 246 294 32	553 584 559 449 355 253 185 358 378 362 291 230 164 120	T = Irrigation Watering Schedule PF = Plant Factor from WUCOLS* (low: 0.1-0.3, moderate: 0.4-0.7, high water use: 0.8-1.0; art. turf: 0.1-0.2; water	r features: 0.8; SLA: 1.0)
0.5 128 64 0.81 79 Bubbler) 0.4 3,111 1,244 0.75 1,659 (Rotator)	Spray 18 0.53 0.2 268 326 493 588 644 Spray 19 0.54 0.2 342 416 628 750 820 Spray 20 0.50 0.2 441 535 808 966 1.05	718 757 725 582 460 328 240 915 965 924 742 587 419 306 6 1.178 1.243 1.190 956 755 539 393	ET = Evapotranspiration rate (see daily chart above) PR = Precipitation rate (see formula above)	e ≡
0.4 2,984 1,194 0.75 1,591 (Rotator) 0.6 5,070 3,042 0.75 4,056 (Rotor)	Spray 20 0.50 0.2 441 535 808 966 1,05	1,110 1,210 1,100	IE Irrigation Efficiency (Bubbler: 0.81; Spray: 0.75; Microspray: 0.75; Rotator: 0.75; Rotor: 0.75; Drip: 0.81)	
6 11,166 6,700 0.75 8,933 (Rotor)	Spray 23 0.50 0.4 1,527 1,854 2,801 3,346 3,66 Spray 24 0.50 0.4 1,527 1,854 2,801 3,346 3,66 3,346 3,66	0 4,083 4,307 4,123 3,312 2,617 1,867 1,363 0 4,083 4,307 4,123 3,312 2,617 1,867 1,363	Ft² = Hydrozone planting area GPM = Gallons per Minute (per plan)	
4 7,841 3,136 0.75 4,182 (Rotor) 6 6,122 3,673 0.75 4,898 (Rotor)	170.01	6 4,457 4,702 4,502 3,616 2,857 2,039 1,488	5	
1,348 809 0.75 1,078 (Rotor) 1,306 522 0.75 697 (Spray)	Rotor 27 0.64 0.6 3,934 4,777 7,219 8,624 9,43 Rotor 28 0.64 0.6 3,957 4,805 7,260 8,673 9,48	6 10,581 11,164 10,687 8,585 6,783 4,840 3,533	[5]	
1,468 587 0.75 783 (Spray)	Rotor 29 0.84 0.6 7,063 8,577 12,960 15,483 16,9 Rotor 30 1.54 0.6 1,547 1,879 2,839 3,391 3,70 Rotor 31 0.46 0.6 12,892 15,655 23,655 28,260 30,9	1,101	INSPECTION NOTE	
0.5 368 184 0.81 227 (Bubbler) 0.4 7,549 3,020 0.75 4,026 (Rotor)	Rotor 32 0.46 0.6 12,892 15,655 23,655 28,260 30,9	17 34,476 36,375 34,821 27,972 22,101 15,770 11,511 17 34,476 36,375 34,821 27,972 22,101 15,770 11,511 17 18,930 19,973 19,120 15,359 12,135 8,659 6,321	OTAY WATER DISTRICT INSPECTION	
tal: 212,817 115,154 153,462	Rotator 34 0.80 0.4 2,474 3,004 4,539 5,423 5,93	1 6,616 6,980 6,682 5,368 4,241 3,026 2,209 1 6,616 6,980 6,682 5,368 4,241 3,026 2,209	FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION AT (619) 670-2241.	
HA = SLA	Bubbler 36 6.77 0.5 110 134 202 242 264 Rotor 37 0.46 0.6 12,892 15,655 23,655 28,260 30,9	295 311 298 239 189 135 99 17 34,476 36,375 34,821 27,972 22,101 15,770 11,511) WITHOUT BENEFIT OF INSPECTION	
per State MWELO revisions.	Rotor 38 0.46 0.6 12,892 15,655 23,655 28,260 30,9 Rotor 39 0.46 0.6 12,892 15,655 23,655 28,260 30,9 Rotor 40 0.46 0.6 12,892 15,655 23,655 28,260 30,9 Rotor 40 0.46 0.6 12,892 15,655 23,655 28,260 30,9		REJECTION AND REMOVAL.	
(Landscape Area) and HA (Hydrozone Area) are calculated as SLA er will be used for irrigation system.		17 34,476 36,375 34,821 27,972 22,101 15,770 11,511 17 34,476 36,375 34,821 27,972 22,101 15,770 11,511 17 34,476 36,375 34,821 27,972 22,101 15,770 11,511		
e Maximum Applied Water Allowance.	Rotor 42 0.46 0.6 12,892 15,855 23,655 28,260 30,9 Bubbler 43 6.02 0.5 110 134 202 242 264 Rotator 44 0.73 0.4 2,317 2,813 4,251 5,078 5,55	295 311 298 239 189 135 99 4 6,195 6,537 6,258 5,027 3,972 2,834 2,069	COLOR CODING	
	Rotator 45 0.75 0.4 2,222 2,698 4,077 4,871 5,32 Rotor 46 0.84 0.6 5,664 6,877 10,392 12,415 13,5	7 5,943 6,270 6,002 4,822 3,810 2,718 1,984 78 15,145 15,980 15,297 12,288 9,709 6,928 5,057	SPRINKLERS, ROTOR HEADS AND	
0 1	Rotor 47 0.48 0.6 12,473 15,146 22,887 27,341 29,9 (Basin) Rotor 48 0.25 0.4 5,839 7,091 10,714 12,800 13,9	3 33,355 35,193 33,689 27,063 21,383 15,258 11,137 9 15,615 16,475 15,772 12,669 10,010 7,143 5,214	DISPERSION HEADS SHALL HAVE T	THE EXPOSED SURFACE
0	Rotor 50 1.59 0.6 1,506 1,829 2,763 3,301 3,61	15	COLORED THROUGH THE USE OF I	INTEGRALLY MOLDED
Note:	Spray 52 0.49 0.4 1,093 1,328 2,006 2,396 2,62 Bubbler 53 6.02 0.5 317 385 582 695 766	1 2,923 3,085 2,953 2,372 1,874 1,337 976 848 895 857 688 544 388 283	PURPLE PLASTIC OR PERMANENTI PLASTIC RING OR DISC. ALL SHRUE	
Sitewide ETAF is calculated with actual Plant Factor (PF) and Irrig. Efficiency (IE) figures shown above to show the	(Basin) Rotor 54 0.26 0.4 5,622 6,827 10,315 12,323 13,4 STIMATED APPLIED WATER USE (EAWU gal. / month) 214,288 260,207 393,181 469,713 513,7	18 573,030 604,599 578,770 464,929 367,352 262,121 191,329 4,893,238 gal. / yea	PURPLE CAPS. DECAL ON RISERS	
amount of water that needs to be applied to the landscape.	ANDSCAPE APP			
UTILITY NOTE	PHINTEN CH	CO	NSULTANT BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE
STING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND	Spoture of COLORA	1 .	3916 Normal Street San Diego, CA 92103 IRRIGATION CALCULATIONS	LI-C
FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT	Repewal Note		San Diego, CA 92105	- I I I - I

Checked By: Submitted:

Date: __10/11/2021__

APPROVED BY:

DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE

SCALE HORIZONTAL

N/A VERTICAL

N/A

Designed By:

HH

Drawn By:

DATUMS

HORIZONTAL: I.E. N78"21'27"E NAD 83

VERTICAL: 446.361 (NAVD 88)

AS

FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT

UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.

REFERENCES

MAP # 15350

DWG. #'S 16022

OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT

REVISIONS

DELTA A IRRIGATION REVISIONS

SIGNATURE

My Registration Expires _____

CONSTRUCTION RECORD

Printed Name

CONTRACTOR:

DATE COMPLETED:

INSPECTOR:

DRAWING NO.

19010-44

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

OTAY RANCH VILLAGE 2 P-2 PARK,

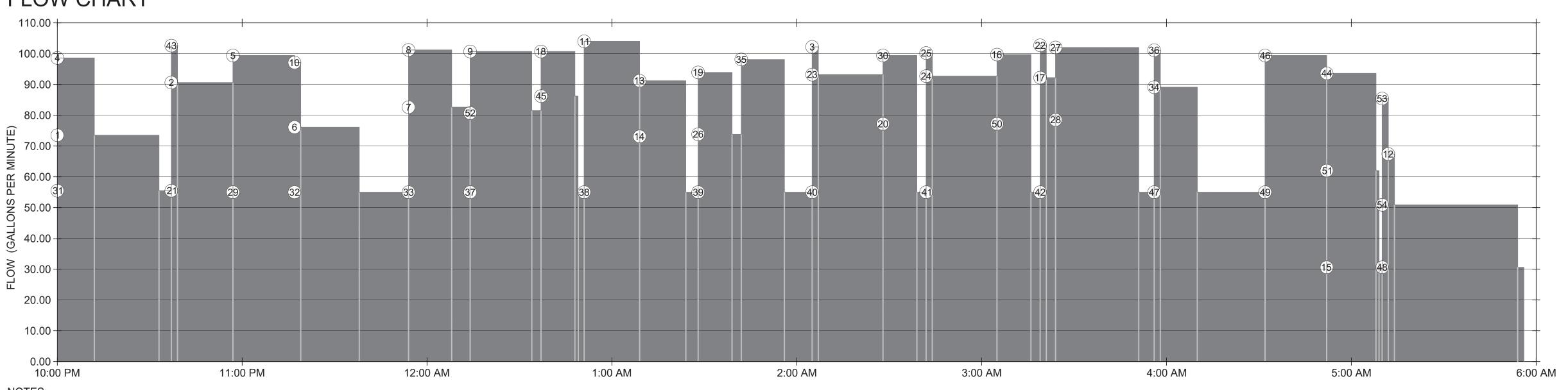
GROVE PARK



RECOMMENDATION FOR SIMULTANEOUS OPERATION OF MULTIPLE SYSTEMS (MONTH OF JULY):

(WITHIN 8 HOUR WATERING WINDOW)





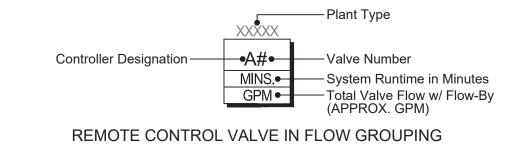
- 2. ABOVE FIGURE IS TAKEN FROM THE MONTH OF JULY, WORST CASE SCENARIO USING SINGLE ZONE OPERATION, WHICH TOTALS 17 HOURS AND 20 MINUTES.
- 3. (#)- IRRIGATION SYSTEM REMOTE CONTROL VALVE NUMBER

FLOW GROUPING

A	SHRUB A4 12 MINS. 25.1 GPM	TREE A43 2 MINS. 12.0 GPM		TREE A10 2 MINS. 21.0 GPM	SHRUB A8 14 MINS. 18.6 GPM	SHRUB A9 20 MINS. 19.2 GPM	SHRUB A18 11 MINS. 14.5 GPM		A13 15 MINS. 18.1 GPM	SHRUB A19 11 MINS. 20.1 GPM		TREE A3 2 MINS. 9.00 GPM	TURF A30 11 MINS. 22.2 GPM	TREE A25 2 MINS. 7.50 GPM	TREE A16 2 MINS. 22.5 GPM	TREE A22 2 MINS. 10.5 GPM	TURF A27 27 MINS. 23.5 GPM	TREE A36 2 MINS. 12.0 GPM		SHRUB A44 16 MINS. 31.6 GPM	TREE A53 2 MINS. 34.5 GPM	TREE A12 2 MINS. 16.5 GPM	TOTAL RUNTIME = 155 MIN. (2 HR, 35 MIN.)
В	TURF A1 33 MINS. 18.0 GPM	A2 20 MINS. 35.1 GPM	TURF A5 20 MINS. 44.4 GPM	A6 21 MINS. 21.1 GPM	SHRUB A7 20 MINS. 27.6 GPM	SHRUB A52 23 MINS. 26.5 GPM	SHRUB A45 15 MINS. 31.2 GPM	SHRUB A11 18 MINS. 49.0 GPM	SHRUB A14 15 MINS. 18.1 GPM	TURF A26 14 MINS. 18.8 GPM	SHRUB A35 14 MINS. 43.1 GPM	SHRUB A23 23 MINS. 38.2 GPM	SHRUB A20 11 MINS. 22.2 GPM	SHRUB A24 23 MINS. 37.7 GPM	TURF A50 11 MINS. 22.2 GPM	SHRUB A17 3 MINS. 37.2GPM	TURF A28 27 MINS. 23.5 GPM	SHRUB A34 14 MINS. 34.1 GPM	TURF A46 20 MINS. 44.4 GPM	SHRUB A51 17 MINS. 31.4 GPM	SHRUB A54 44 MINS. 20.3 GPM	SHRUB	TOTAL RUNTIME = 406 MIN. (6 HRS, 46 MIN.)
C	TURF A31 37 MINS. 55.5 GPM	TURF A21 20 MINS. 55.5 GPM	A29 20 MINS. 55.5 GPM	TURF A32 37 MINS. 55.5 GPM	TURF A33 20 MINS. 55.5 GPM	TURF A37 37 MINS. 55.5 GPM	TURF	TURF A38 37 MINS. 55.5 GPM	TURF	TURF A39 37 MINS. 55.5 GPM	TURF	TURF A40 37 MINS. 55.5 GPM	TURF	TURF A41 37 MINS. 55.5 GPM	TURF	TURF A42 37 MINS. 55.5 GPM	TURF	TURF A47 36 MINS. 55.5 GPM	TURF A49 20 MINS. 55.5 GPM	SHRUB A15 18 MINS. 30.6 GPM	SHRUB A48 46 MINS. 20.4 GPM	SHRUB	
	98.6 GPM 37 MINS.	102.6 GPM 20 MINS.	99.9 GPM 20 MINS.	97.6 GPM 37 MINS.	101.7 GPM 20 MINS.	101.2 GPM 37 N	101.2 GPM /IINS.	104.5 GPM 37 M	91.7 GPM IINS.	94.4 GPM 37 M	98.6 GPM /IINS.	102.7 GPM 37 N	99.9 GPM MINS.	100.7 GPM	100.2 GPM IINS.	103.2 GPM 37 M	102.5 GPM IINS.	101.6 GPM 36 MINS.	99.9 GPM 20 MINS.	93.6 GPM 18 MINS.	75.2 GPM 46 N	57.2 GPM //INS.	TOTAL RUNTIME = 476 MIN. (7 HRS, 56 MIN.)
10:00 Pľ	M 10:37	' PM 10:57	7 PM 11:1	7 PM 11:54	4 PM 12:1	4 AM	12:5	1 AM	1:28	3 AM	2:05	5 AM	2:42	2 AM	3:19) AM	3:56	6 AM 4:32	2 AM 4:52	2 AM 5:10) AM	5:56	S AM

- 1. PER COUNTY DEH & OWD, THERE IS A 9 HOUR MAXIMUM WATERING WINDOW USING RECYCLED WATER BETWEEN THE HOURS OF 9 P.M. AND 6 A.M.
- PER CITY PARKS, THERE IS AN 8 HOUR MAXIMUM WATERING WINDOW USING RECYCLED WATER BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.
- 2. FLOW GROUPING GROUPING OF SYSTEM VALVES TO OPERATE SIMULTANEOUSLY.
- 3. ROW "C" "BASE" VALVES VALVES THAT HAVE THE MOST FLOW AND HAVE BEEN CALCULATED TO OPERATE WITHIN THE 8 HOUR (480 MINS.) WATERING WINDOW.
- 4. ROW "A" AND "B" "FILLER" VALVES VALVES THAT ARE ADDED UP TO OPERATE SIMULTANEOUSLY WITH THE "BASE" VALVES.
- 5. ROW "D" TOTAL GALLONS PER MINUTE FLOW.
- 6. TOTAL MINUTES OF EACH ROW "A" AND "B" SHALL BE ONLY EQUAL TO, OR LESS THAN TOTAL MINUTES OF ROW "E" (8 HOUR MAXIMUM WATERING WINDOW)





Date: <u>10/11/2021</u>

INSPECTION NOTE

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

COLOR CODING

GROVE PARK

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

AS BUILT			UTIL	lty note	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	KE JP WHA	ALEWS			
SIGNATURE	_ DATE R.L.A. No.	RECORD DATA AT T	HEIR APPRO 5T WHICH HA	ON THESE PLANS ARE PLOTTED FROM XIMATE LOCATIONS. UNDERGROUND AVE NOT BEEN REPORTED OR ARE NOT	\0,	Siglatur 09/20/2 Rénewal I 8/1/2	Moderal Carlotte Carl			
Printed Name My Registration Expires				ALL VERIFY THE LOCATION OF ALL PERTI O THE START OF CONSTRUCTION.	NENT 37,E	OF CA	LIFORM			
CONSTRUCTION RECORD		REFERENCES	Ву	REVISIONS	Date	App'd	DATUMS	SCALE	Designed By:	Drawn By:
CONTRACTOR:		MAP # 15350		DELTA A IRRIGATION REVISIONS	08/18/22		VERTICAL: 446.361 (NAVD 88)	HORIZONTAL	HH	HH
INSPECTOR:							HORIZONTAL: I.E. N78"21'27"E NAD 83	N/A	Plans Prepared U	Inder Supervision Of
DATE COMPLETED:		DWG. #'S 16022					THURIZUNTAL: I.E. N/O ZI Z/ E NAU 83	VERTICAL	DDOOKE ID WILLIAM	b. A Abild
								,		

	CC) NSULTA	ANT	BID DOCUMENTS - OCTOBER 11, 2021
	k	tua	3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	IRRIGATION CALCULATIONS
Checked By: BE	Submitted:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
Date: 10/11/2021	By:			OTAY RANCH VILLAGE 2 P-2 PARK,

DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE

LANDSCAPE DWG N

DRAWING NO.

OTAY WATER DISTRICT RECYCLED WATER NOTES

- 1. ALL ON-SITE IRRIGATION IMPROVEMENTS SHOWN ON THESE PLANS ARE PART OF A RECYCLED WATER DISTRIBUTION SYSTEM. NO CONSTRUCTION WILL BE ALLOWED UNTIL ALL APPROVALS HAVE BEEN OBTAINED.
- CROSS CONNECTIONS BETWEEN RECYCLED WATER LINES AND POTABLE WATER LINES ARE STRICTLY PROHIBITED.
- USE OF RECYCLED WATER SHALL ADHERE TO TITLE 22, DIVISION 4, CHAPTER 3 OF THE CALIFORNIA CODE OF REGULATIONS AND THE CURRENT RULES, REGULATIONS AND SPECIFICATIONS OF THE DISTRICT.
- OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL
- 5. PUBLIC FACILITIES, SUCH AS DRINKING AND DECORATIVE FOUNTAINS, COMFORT STATIONS, PLAYGROUND EQUIPMENT, ETC., DO EXIST ON THIS PROJECT
- 6. ALL ON-SITE RECYCLED WATER IRRIGATION PIPING AND ON-SITE POTABLE WATER PIPING INSTALLED UNDER THIS DESIGN SHALL BE IDENTIFIED IN ACCORDANCE WITH THE DISTRICT STANDARD SPECIFICATIONS.
- 7. ALL ON-SITE RECYCLED WATER PIPING SHALL BE PURPLE COLORED PVC. CONTINUOUSLY STENCILED ON OPPOSITE SIDES OF THE PIPE WITH THE WORDS "CAUTION - RECYCLED WATER". APPROVED MANUFACTURERS OF THIS PIPE CAN BE FOUND IN THE DISTRICTS' "APPROVED MATERIALS LIST".
- ALL ON-SITE POTABLE WATER LINES SHALL BE WHITE OR BLUE UNLESS OTHERWISE APPROVED BY THE DISTRICT
- UNLESS OTHERWISE DIRECTED BY THE DISTRICT, A 10-FOOT HORIZONTAL AND 1- FOOT VERTICAL SEPARATION BETWEEN POTABLE WATER AND CONSTANT PRESSURE RECYCLED WATER LINES SHALL BE MAINTAINED AT ALL TIMES. THE POTABLE LINES SHALL BE INSTALLED ABOVE THE RECYCLED LINES UNLESS OTHERWISE APPROVED BY THE DISTRICT OR DEHQ.
- 10. WHERE POTABLE LINES AND CONSTANT PRESSURE RECYCLED WATER LINES CROSS, THE RECYCLED WATER LINE SHOULD BE INSTALLED BELOW THE POTABLE WATER LINE IN A SCHEDULE 40 PURPLE COLORED PVC SLEEVE. THE SLEEVE SHALL EXTEND 10- FEET ON EITHER SIDE OF THE POTABLE LINE, FOR A TOTAL OF 20-FEET.
- 11. A MINIMUM VERTICAL SEPARATION OF 12 INCHES SHALL BE MAINTAINED BETWEEN UTILITIES AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE DISTRICT
- 12. HOSE BIBS ARE STRICTLY PROHIBITED ON RECYCLED WATER SYSTEMS.
- 13. ALL SPRAY HEADS, VALVE BOXES, AND QUICK COUPLER VALVES SHALL BE CLEARLY COLOR CODED (PURPLE) TO INDICATE THE USE OF RECYCLED WATER.
- 14. RECYCLED WATER LINES SHALL NOT CROSS ROADS, STREETS, OR EASEMENTS UNLESS SPECIFICALLY SHOWN ON THESE PLANS
- 15. ALL CONSTANT PRESSURE LINES SHALL BE TESTED WITH HYDROSTATIC PRESSURE AS REQUIRED IN THE DISTRICT STANDARD SPECIFICATIONS. NO LEAKS SHALL BE ALLOWED. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT FOR HYDROSTATIC TESTS. THESE TESTS SHALL BE WITNESSED BY A REPRESENTATIVE OF THE DISTRICT.
- 16. ALL SIGNAGE SHALL BE APPROVED AND INSTALLED PRIOR TO ENERGIZING THE SYSTEM WITH WATER. A SIGNAGE PLAN INDICATING USE OF RECYCLED WATER SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL PRIOR TO INSTALLATION. AS A MINIMUM, SIGNS MUST BE POSTED AND WRITTEN IN ENGLISH AND SPANISH WITH THE INTERNATIONAL SYMBOL (DO NOT DRINK).
- 17. ALL METER SIZES SHALL BE VERIFIED BY THE DISTRICT. FINAL DETERMINATION OF METER SIZES IS RESERVED BY THE DISTRICT.
- 18. ALL RECYCLED WATER SERVICES REQUIRE BACKFLOW PREVENTION AS SHOWN IN THE POINT OF CONNECTION (POC) DETAIL. IRRIGATION SYSTEMS BEING SUPPLIED WITH RECYCLED WATER SHALL INSTALL BACKFLOW PREVENTION AND A WYE STRAINER PER DISTRICT STANDARD DRAWING WR-03, WR-04, WR-05, WR-06, AND WR-08.
- 19. PRIOR TO ENERGIZING THE ON-SITE SYSTEM WITH WATER, ONE (1) COMPLETE SET OF LAMINATED CONTROLLER CHARTS AND ONE (1) ELECTRONIC COPY CREATED FROM THE FINAL APPROVED AS-BUILT SHALL BE PROVIDED TO THE DISTRICT.
- 20. EACH AUTOMATIC CONTROLLER AND ITS ASSOCIATED EQUIPMENT SHALL BE IDENTIFIED WITH A SIGN BEARING THE WORDS "RECYCLED WATER USED FOR IRRIGATION" IN ENGLISH AND SPANISH, WITH WHITE LETTERS AT LEAST 1 INCH HIGH ON A PURPLE, PANTONE 512, BACKGROUND. THE SIGN SHALL BE PLACED AS TO BE READILY SEEN BY ANY OPERATIONS PERSONNEL UTILIZING THE EQUIPMENT
- 21. THE CONTRACTOR SHALL ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE THIS SHALL INCLUDE THROTTLING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM. CONDITIONS THAT CAUSE OVERSPRAYS, PONDING, OR RUNOFF SHALL BE ELIMINATED. ADJUST SYSTEM TO AVOID THESE CONDITIONS.
- 22. THE IRRIGATION SYSTEM HAS BEEN DESIGNED TO AND SHALL BE OPERATED BETWEEN THE HOURS OF 9:00 P.M. AND 6:00 A.M. UNLESS OTHERWISE APPROVED BY THE DISTRICT.
- 23. NO SUBSTITUTION OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE DISTRICT.

- 24. AN INITIAL CROSS-CONNECTION INSPECTION WILL BE DONE AT SITES WITH BOTH POTABLE AND RECYCLED WATER SERVICES BY THE DISTRICT AND/OR THE SAN DIEGO COUNTY ENVIRONMENTAL HEALTH (DEHQ). COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY. ANNUAL INSPECTIONS OR CROSS-CONNECTION TESTING WILL BE PERFORMED THEREAFTER.
- 25. FAILURE TO COMPLY WITH THE DISTRICT'S RULES AND REGULATIONS IS A VIOLATION AND COULD RESULT IN SUSPENSION OF SERVICE UNTIL THE APPROPRIATE CORRECTIVE STEPS HAVE BEEN TAKEN.
- 26. WHEN RECYCLED WATER BECOMES AVAILABLE, AN ON-SITE CERTIFIED RECYCLED WATER 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 PURVEYOR'S RULES AND REGULATIONS, AND THE SPECIFIC REQUIREMENTS OF A RECYCLED WATER SYSTEM. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO THE OTAY WATER DISTRICT AND SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.

IN CASE OF EMERGENCY, CONTACT BRAD SAGER AT (619) 204-2441 NAME PHONE NO. BRAD SAGER AT (619) 204-2441 OR AFTER HOURS, CONTACT NAME PHONE NO.

- 27. BEST MANAGEMENT PRACTICES SHALL BE USED TO ELIMINATE OR CONTROL TO THE BEST EXTENT POSSIBLE PONDING, RUN-OFF, OVER-SPRAY AND MISTING.
- 28. AT THE DESCRETION OF OTAY WATER DISTRICT, RECYCLED WATER QUICK COUPLERS MAY BE ALLOWED WITHIN SLOPES AND PARKWAYS.
- 29. RECYCLED WATER QUICK COUPLING VALVES SHALL BE OF A TYPE DESIGNED FOR USE ON RECYCLED WATER DISTRIBUTION SYSTEMS (SPIKES NOT INTERCHANGEABLE WITH POTABLE WATER QUICK COUPLER SPIKES) PER OTAY WATER DISTRICT'S RULES AND REGULATIONS.
- 30. ALL BUILDINGS SHALL HAVE INDIVIDUAL POTABLE WATER SHUT-OFF VALVES INSTALLED ON THE EXTERIOR OF EACH BUILDING AND SHALL BE MAINTAINED IN WORKING ORDER FOR THE PURPOSE OF THE CROSS-CONNECTION SHUTDOWN TEST. A DETAIL OF POTABLE WATER SHUT-OFF VALVE INSTALLATION MUST BE INCLUDED ON PLANS FOR DISTRICT APPROVAL.
- 31. ALL BOX LIDS SHALL BE BRANDED.
- 32. A 10-FOOT SEPARATION BETWEEN RECYCLED WATER IRRIGATION MAIN LINE TIE IN POINT AND PROJECT POINT OF CONNECTION (POC) IS TO BE MAINTAINED DURING THE CONSTRUCTION PROCESS AND IS TO BE TIED IN AT THE INSPECTIONS DIRECTION, AFTER DEH APPROVALS AND METER(S) SET(S) HAVE TAKEN PLACE.
- 33. RECYCLED WATER IRRIGATION PROJECTS THAT REQUIRE PHASING OF CONSTRUCTION SHALL REQUIRE A DETAILED PHASING PLAN BE SUBMITTED BY THE PROJECT ARCHITECT TO THE DISTRICT FOR REVIEW. UPON APPROVAL OF THE PHASING PLAN BY THE DISTRICT. A COPY OF THE APPROVED PHASING PLAN SHALL BE INCORPORATED INTO THE APPROVED PLAN SET(S) BY THE PROJECT ARCHITECT
- 34. ALL DUAL SOURCED RECYCLED WATER USE SITES SHALL BE DESIGNED AND BUILT TO UTILIZE SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH APPROVED TEST METHOD 1, UTILIZING PRESSURE RECORDERS FOR THE RECYCLED AND POTABLE CROSS-CONNECTION TESTING. PROPOSED ALTERNATIVE TEST METHODS MUST BE APPROVED BY THE OTAY WATER DISTRICT AND SAN DIEGO COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH.

GENERAL IRRIGATION NOTES

- THE IRRIGATION SYSTEM DESIGN IS BASED ON AN AVAILABLE CITY WATER PRESSURE OF 91 +/-10 PSI. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING WATER PRESSURE PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION AND SHALL PROMPTLY REPORT ANY DIFFERENCES TO THE CITY LANDSCAPE INSPECTOR.
- THIS SYSTEM IS DESIGNED FOR USE OF RECYCLED WATER AT 8 GPM TO 90 GPM AT 91 PSI. PRIOR TO PERMANENT CONNECTION TO RECYCLED WATER MAIN, ALL NEW IRRIGATION SHALL BE CONNECTED TO A TEMPORARY POTABLE WATER SOURCE UNTIL CROSS CONNECTION TEST CAN BE COMPLETED AND APPROVED. DO NOT CONNECT TO THE RECYCLED WATER IRRIGATION SYSTEM UNTIL APPROVED.
- THE IRRIGATION SYSTEM IS SHOWN DIAGRAMMATICALLY FOR CLARITY PURPOSES. LOCATE ALL PIPING, VALVES AND OTHER IRRIGATION EQUIPMENT WITHIN LANDSCAPE AREAS, AND IN ACCORDANCE WITH THE CRITERIA AND STANDARDS OF THE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT, OTAY WATER DISTRICT, CITY OF CHULA VISTA'S PARK AND FACILITIES GUIDELINES, THE CITY OF CHULA VISTA'S LANDSCAPE MANUAL AND ANY WATER RESTRICTIONS IN EFFECT. REFER ALSO TO SPECIFIC NOTES ON PLANS AND DETAILS.
- PRIOR TO ANY EXCAVATION OR TRENCHING, LOCATE AND VERIFY ALL CABLES. CONDUITS, AND UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AN UNDERGROUND UTILITY LOCATING SERVICE TO LOCATE AND MARK ALL UTILITIES. THE CONTRACTOR WILL TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH UNDERGROUND UTILITIES. NOTIFY THE CITY LANDSCAPE INSPECTOR IMMEDIATELY IF A CONFLICT EXISTS BETWEEN SUCH OBSTACLES AND THE PROPOSED WORK. PROCEED IN SAME MANNER IF ROCK LAYERS OR ANY OTHER CONFLICTING CONDITIONS ARE ENCOUNTERED UNDERGROUND.
- 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 LANDSCAPE ARCHITECT AND CITY LANDSCAPE INSPECTOR. SHOULD THE CONTRACTOR FAIL TO NOTIFY THE CITY LANDSCAPE INSPECTOR OF ANY DISCREPANCIES, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH GENERAL CONTRACTOR AND VERIFYING THE AVAILABLE POWER SOURCE FOR THE CONTROLLER IN THE AREA SHOWN ON THE PLANS. SHOULD A POWER SOURCE NOT BE AVAILABLE IN THE LOCATION SHOWN, THEN THE CONTRACTOR SHALL PROMPTLY NOTIFY THE LANDSCAPE ARCHITECT AND CITY LANDSCAPE INSPECTOR PRIOR TO PROCEEDING WITH INSTALLATION.
- 7. THE CONTROLLER FOR THIS SYSTEM SHALL BE A PRE-ASSEMBLED UNIT AS SPECIFIED. AT LEAST TWO WEEKS PRIOR TO THE FINAL WALK THROUGH, THE CONTRACTOR SHALL CONTACT THE PRE-ASSEMBLER AND ARRANGE FOR THEIR REPRESENTATIVE TO APPROVE THE INSTALLATION AND PROVIDE IN WRITING THAT THE INSTALLATION HAS MET THEIR SPECIFICATIONS. THE WRITTEN STATEMENT SHALL BE AVAILABLE PRIOR TO, OR AT THE FINAL WALK THROUGH.
- THE BOOSTER PUMP SHALL BE A PRE-ASSEMBLED UNIT AS SPECIFIED. WHEN ORDERING, CONTACT PUMP SUPPLIER AT LEAST FOUR WEEKS PRIOR TO INSTALLATION. AT AN APPOINTED TIME FOLLOWING PUMP INSTALLATION, CONTACT PUMP SUPPLIER'S FIELD TECHNICIAN FOR START-UP APPOINTMENT.
- ALL CONTROL VALVES SHALL BE MANIFOLDED AND GROUPED IN GENERAL AREAS SHOWN AND AS NOTED ON PLANS. WHEREVER POSSIBLE. LOCATE IN ACCESSIBLE AREAS WITHIN PLANTING AREA AND NOT IN TURF AREA.
- 10. VALVES SHALL BE LOCATED IN PLANTING AREAS (WHERE POSSIBLE) AND IMMEDIATELY ADJACENT TO WALKS, CURBS, OR PAVING AREAS AND SET AT RIGHT ANGLES TO EDGES UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. MANIFOLD PIPE AND BALL VALVE SIZES SHALL BE AS NOTED. ALL VALVE BOXES AND IRRIGATION LINES SHALL BE SPACED WITH A 12" TYPICAL CLEAR DISTANCE BETWEEN VALVE BOXES AND 12" MAXIMUM FROM EDGE OF PAVEMENT.
- 11. DO NOT INSTALL POTABLE WATER LINE AND RECYCLED WATER LINE IN SAME TRENCH.
- 12. IRRIGATION LINES SHALL INSTALLED IN LANDSCAPE AREAS WHEREVER POSSIBLE AND WITHIN 12" OF LANDSCAPE AREA EDGES UNLESS INDICATED OTHERWISE.
- 13. EVEN IF NOT SHOWN, ALL IRRIGATION LINES UNDER PAVING SHALL BE SLEEVED WITH PVC SCH 40 PIPE. SLEEVE SHALL BE A MINIMUM 2 TIMES THE DIAMETER OF PIPE TO BE SLEEVED (2" MIN. DIA.). SLEEVES SHALL EXTEND 12" BACK UNDER HARDSCAPE
- 14. EVEN IF NOT SHOWN, ALL WIRES UNDER PAVING SHALL BE SLEEVED WITH PVC SCH 40 GRAY CONDUIT. SLEEVE SHALL BE A MINIMUM 2 TIMES THE DIAMETER OF WIRE BUNDLE TO BE SLEEVED (2" MIN. DIA.). SLEEVES SHALL EXTEND 12" BACK UNDER HARDSCAPE.
- 15. WIRE COLOR SHALL BE AS FOLLOWS:
- A. CONTROLLER 'A' CONTROL VALVES: ORANGE.
- B. MASTER VALVE: BLACK C. FLOW SENSOR: RED
- SPARE WIRES: ORANGE
- 14. SPARE CONTROL WIRE SHALL BE RUN ALONG EACH MAINLINE TO BRANCH TO THE FURTHEST VALVE MANIFOLD. BUNDLE AND TAPE 10 FEET OF ADDITIONAL WIRE AND INSTALL IN A PULL BOX ADJACENT TO THE VALVE MANIFOLD.

- 15. CONTROL WIRE RUNS UNDER PAVING SHALL BE INSTALLED IN A SCHEDULE 40 PVC SLEEVE.
- 16. ALL CONTROL WIRES SHALL BE TAGGED INSIDE CONDUIT GRAY SCHEDULE 40 ELECTRICAL CONDUIT.
- 17. NO SPLICES WILL BE ALLOWED ON RUNS OF LESS THAN 500 FEET. ON RUNS GREATER THAN 500 FEET, SPLICES ARE TO MADE WITH AN APPROVED SPLICE UNIT AND TO BE INSTALLED IN A CONCRETE PULL BOX. IDENTIFY WHERE SPLICES ARE MADE AND PULL BOX LOCATIONS ON PLANS. CONNECTION SHALL BE MADE WITH APPROVED DBY6 CONNECTORS
- 18. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO THE FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE DESIGNED ON THE PLANS.
- 19. ALL SPRINKLER HEADS SHALL BE INSTALLED AND ADJUSTED TO KEEP WATER AND SPRAY OFF ALL PAVING, WALKS, WALLS, OBSTRUCTIONS, AND AREAS NOT UNDER THE CONTROL OF THE OWNER AT ALL TIMES. UTILIZE ADDITIONAL HEADS AT OBSTACLES AS NECESSARY AND ADJUST ALL HEADS TO MINIMIZE BACKSPLASH AND DEFLECTION FROM PLANTS OR ANY OTHER OBSTACLES. INSTALL BUBBLERS WITHIN SMALL PLANTERS WITH SHRUBS SUCH THAT BUBBLERS ARE BETWEEN PLANTS AND NOT ADJACENT TO PAVEMENT.
- 20. 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.
- 21. INSTALL FIXED ARC NOZZLES WHENEVER POSSIBLE. VARIABLE ARC NOZZLES SHALL ONLY BE USED IN AREAS WHERE FIXED ARC NOZZLES CANNOT ACHIEVE EFFECTIVE COVERAGE OR WOULD CAUSE EXCESSIVE OVERSPRAY. DURING THE FINAL CLOSEOUT PROCEDURES, NOZZLE CHANGES MAY BE REQUESTED AT NO ADDITIONAL EXPENSE TO THE CITY.
- 22. 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. IN NO CASE SHALL FLOW VELOCITIES EXCEED 5 FEET PER SECOND.
- 23. REFER TO THE DETAILS AND SPECIFICATIONS FOR FURTHER INFORMATION.
- 24. 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.
- 25. NO LOW HEAD DRAINAGE IS PERMITTED. ALL LOW HEAD DRAINAGE SHALL BE CORRECTED BY THE CONTRACTOR. SPRING CHECK AND / OR SWING CHECK VALVES SHALL BE INSTALLED WHERE NEEDED AT NO ADDITIONAL COST TO THE CITY.
- 26. THE WORK INCLUDES ALL SERVICES NECESSARY TO PERFORM THE IRRIGATION WORK AS SHOWN AND / OR NOTED ON THE DRAWINGS AND / OR AS SPECIFIED WITHOUT ADDITIONAL COST TO THE CITY. NO CHANGES FROM THE CONSTRUCTION DOCUMENTS ARE ALLOWED UNLESS PREVIOUSLY AUTHORIZED IN WRITING BY THE CITY LANDSCAPE INSPECTOR.
- 27. UPON COMPLETION OF THE PROJECT. A POST-PROJECT WALK-THROUGH SHALL BE SCHEDULED WITH THE CITY LANDSCAPE INSPECTOR TO CONFIRM ALL IRRIGATION WORK HAS BEEN MAINTAINED IN A FUNCTIONAL MANNER AND IS IN A CONDITION ACCEPTABLE TO THE CITY LANDSCAPE INSPECTOR
- 28. INSTALLATION AND MATERIALS FOR RECYCLED WATER IRRIGATION SYSTEM SHALL CONFORM AND SPECIFICATIONS, SECTION 15152 RECYCLED WATER FACILITIES.
- 29. PROVIDE MEGOHM TESTING OF ALL WIRES PRIOR TO CONNECTIONS BEING MADE AND BACKFILLING TO VERIFY PERFORMANCE WITHIN THE CONTROLLER MANUFACTURER'S REQUIREMENTS. NO CIRCUIT CHECKING LOWER THAN 1 MEGOHM WILL BE ACCEPTABLE. REPAIR/REPLACE SUBSTANDARD PERFORMING WIRE

INSPECTION NOTE

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

COLOR CODING

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

AS BL	JILT			JTIL	ITY NOTE	
SIGNATURE	DATE R.L.A. No.		RECORD DATA AT THEIR	APPROX	N THESE PLANS ARE PLOTTED FROM IMATE LOCATIONS. UNDERGROUND /E NOT BEEN REPORTED OR ARE NOT	
Printed Name My Registration Expires					LL VERIFY THE LOCATION OF ALL PERTINENT THE START OF CONSTRUCTION.	
CONSTRUCTION RECORD			REFERENCES	Ву	REVISIONS	
CONTRACTOR:		MAP # 15350	0		DELTA A IRRIGATION REVISIONS	08

DWG. #'S 16022

CONTRACTOR

DATE COMPLETED



VERTICAL: 446.361 (NAVD 88)

HORIZONTAL: I.E. N78"21'27"E NAD 83

Designed By:	Drawn By:	Checked By:	Submitted:
HH	HH	BE	
	nder Supervision Of:	Date:10/11/2021	By:
BROOKE JP. WHALEN	Budley HV holen	L.A No5175	Office:

HH

SCALE

HORIZONTAL

N/A

VERTICAL

N/A

CONSULTANT 3916 Normal Street San Diego, CA 92103

DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE

APPROVED BY:

DATE:

IRRIGATION NOTES

LI-08 SHEET 8 OF 16 W.O. NO. PRK-033

LANDSCAPE DWG

DRAWING NO.

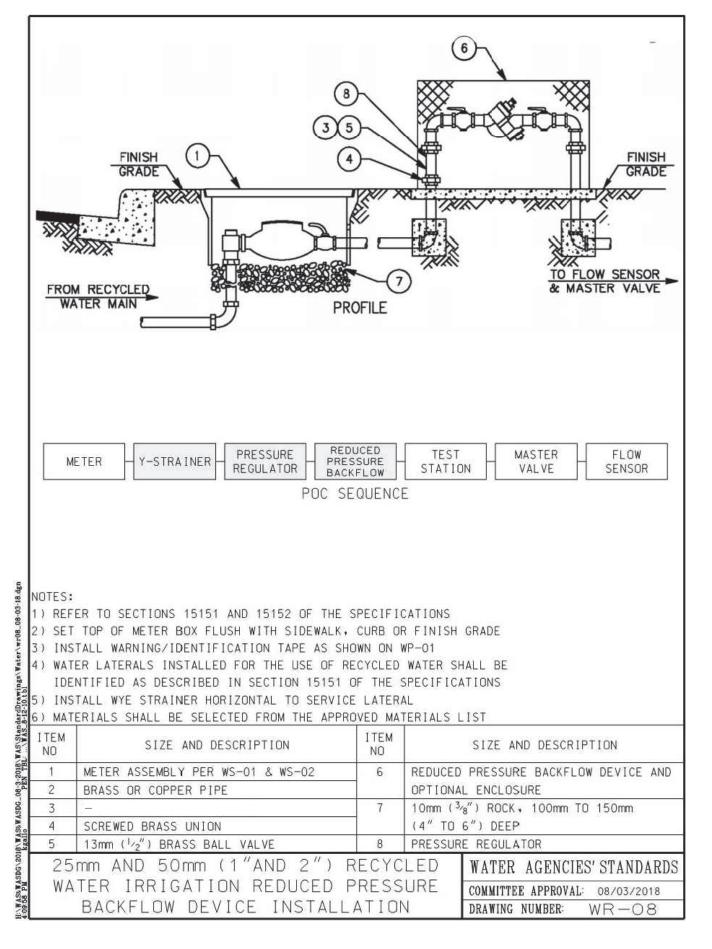
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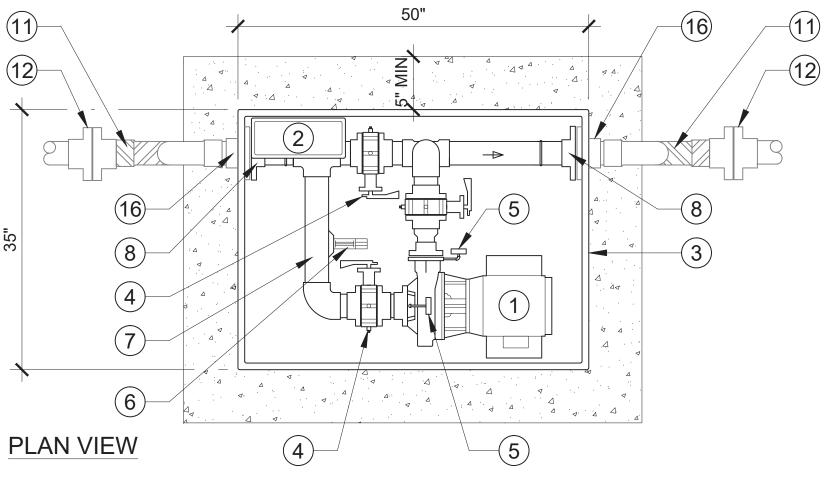
CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK

BID DOCUMENTS - OCTOBER 11, 2021

SHEET 46 OF 1

PERMIT NO. PLR-19-012





LEGEND

B)BOOSTER PU

- (1) CLOSE-COUPLED END SUCTION CENTRIFUGAL PUMP, CAST IRON BRONZE FITTED, BACK PULLOUT DESIGN, MECHANICAL SEAL, ODP MOTOR
- (2) NEMA 4 ENCLOSED CONTROL PANEL, WITH CIRCUIT BREAKER, MAGNETIC STARTER, HOA SWITCH, AND COMPONENTS FOR AUTOMATIC BOOSTER PUMP CONTROL
- (3) MARINE GRADE ALUMINUM ENCLOSURE TOP HINGED DESIGN WITH VENTING. AFFIX ADHESIVE BACKED RECYCLED WATER WARNING DECAL (8.25"L x 2.5"W) (CHRISTY PROD., INC. #ID-4200) TO FRONT SIDE OF **ENCLOSURE**

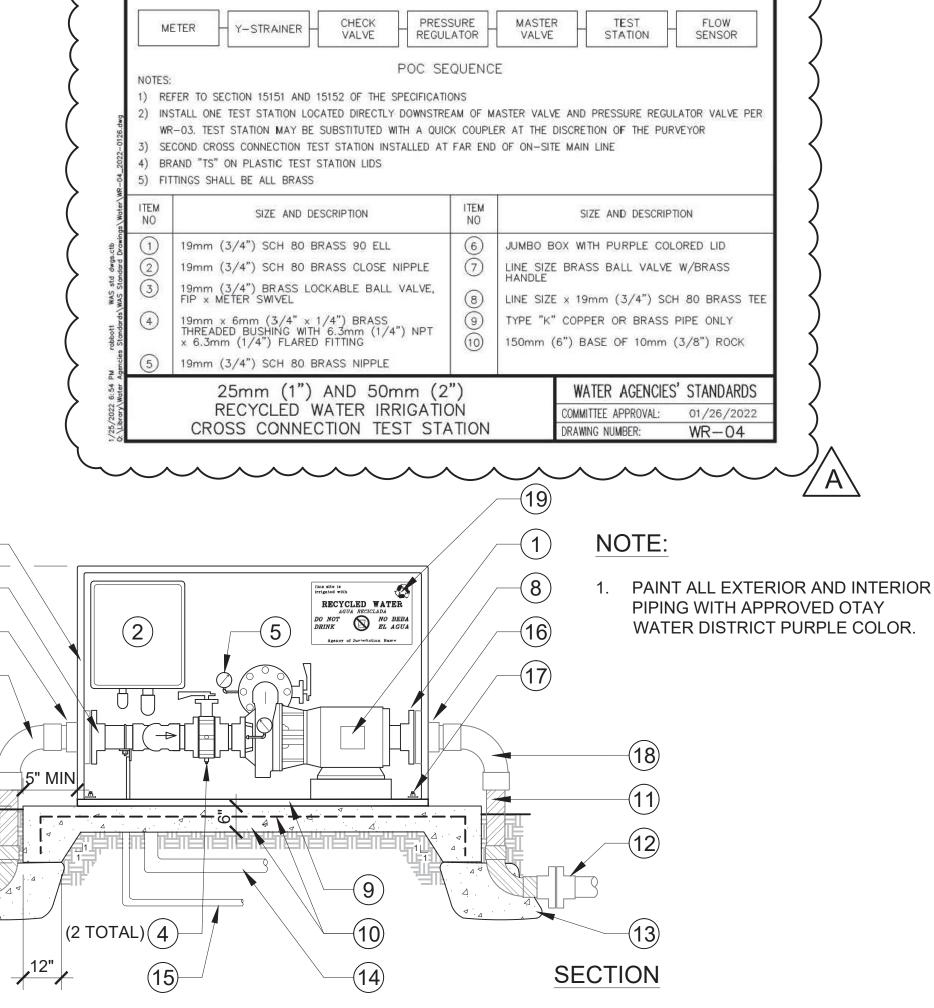
****BOOSTER PUMP ASSEMBLY

- (4) CAST IRON ELASTOMER LINED FULL LUG BYPASS PIPING
- (5) PRESSURE GAUGE, 21/2" DIAL, LIQUID FILLED, STAINLESS CASE, 0-200 PSI
- (7) 3" INCH TYPE 304 STAINLESS STEEL WITH POWDER COAT PANTONE 522 PURPLE PAINT ON ALL PUMP ASSEMBLY PIPING. DIRECTION
- (8) 150# ANSI RATED STAINLESS STEEL **OUTPUT FLANGE**

WAFER STYLE BUTTERFLY VALVE ON PUMP

12

- (6) FLOW SWITCH, THERMAL DISPERSION, 150 ~~~PSYRATEQ
- AFFIX PURPLE RECLAIMED WATER ID TAG WITH NYLON ZIP TIE TO EACH PIPE IN EACH



SECTION VIEW

PLAN VIEW

- (9) FABRICATED STRUCTURAL ALUMINUM BASE
- (10) 6" THICK CONCRETE PAD SET 2" ABOVE FINISH GRADE. USE #5 BAR AT 18" O.C. BOTH WAYS AT MID-DEPTH. CONCRETE MIX PER STRUCTURAL REQUIREMENTS

FROM MASTER VALVE
SEE NOTE 2

- (11) DOUBLE WRAP PIPING AND FITTINGS WITH 20 MIL PIPE WRAP TAPE
- (12) COMPANION FLANGE CONNECTION

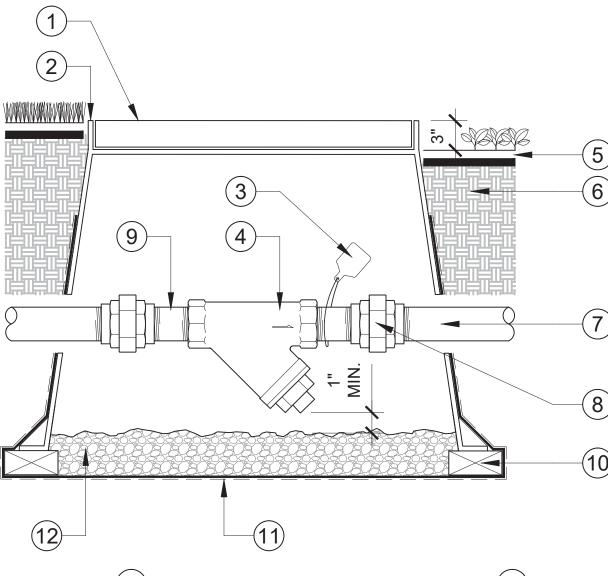
PLATE

3

8

(13) THRUST BLOCK OR JOINT RESTRAINT

- (15) IRRIGATION CONTROLLER SIGNAL CONDUIT
- (16) CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL INLET AND OUTLET PIPING, BRASS OR CAST IRON. SPRAY PAINT 3 COATS OF PANTONE 522 PURPLE PAINT ON ALL EXPOSED PIPING AND FITTINGS
- (17) (4) ½" DIA. KB-TZ SS 304, 2" MIN EMBEDMENT. INSTALL PER ICC-ESR 1917 TYP. EACH CORNER
- (18) AFFIX PURPLE RECLAIMED WATER WARNING TAG WITH NYLON ZIP TIE TO EACH PIPE IN EACH DIRECTION
- (19) WM-08 DECAL REQUIRED ON EXTERIOR



LEGEND

- (1) PURPLE PLASTIC RECT. VALVE BOX WITH BOLT DOWN PURPLE LID, USE STAINLESS STEEL BOLT, NUT AND WASHER. BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "YR" ONTO LID
- (2) FINISH GRADE IN TURF AREAS
- (3) RECYCLED WATER VALVE I.D. TAG. (THREAD NYLON TIE THROUGH HOLE IN TAG)
- (4) WYE STRAINER. REFER TO DETAIL **NOTES AND LEGEND**
- (5) FINISH GRADE IN SHRUB AREAS
- (6) UNDISTURBED / COMPACTED SUBGRADE
- 7 PRESSURE SUPPLY. BRASS MAINLINE
- (8) BRASS UNION
- (9) BRASS NIPPLE, TYP.
- (10) BRICK SUPPORTS, END TO END **UNDER BOX BOTTOM**
- (11) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH $\frac{1}{4}$ " GALV. WIRE MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM FEATURE
- (12) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.

NOTES:

- 1. USE TEFLON TAPE ON ALL
- THREADED CONNECTIONS. 2. ORIENT Y-STRAINER FOR EASE OF
- MAINTENANCE ACCESS 3. INSTALL WYE STRAINER HORIZONTAL TO SERVICE LATERAL. REPLACE THREADED PLUG WITH 1/2" BRONZE BENT NOSE HOSE BIB (FOR FLUSHING)



NOT TO SCALE

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COLOR CODING

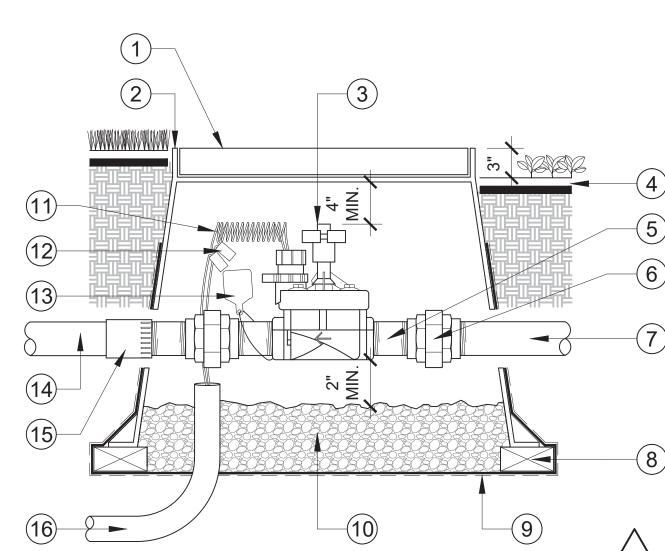
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NOT TO SCALE

AS BUILT		JTILITY NOTE	LANDSCA LANDSCA	PE 1RCH					CONSULTANT		BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG NO
DATE	ALL EXISTING UTILITIES SH RECORD DATA AT THEIR . FACILITIES MAY EXIST WHI	HOWN ON THESE PLANS ARE PLOTTED FROM APPROXIMATE LOCATIONS. UNDERGROUND ICH HAVE NOT BEEN REPORTED OR ARE NOT OR SHALL VERIFY THE LOCATION OF ALL PERRIOR TO THE START OF CONSTRUCTION.	Sighoture 09/70/20 Renewal Da 8/1/22 Date	024 2 te					3916 Normal Stro San Diego, CA 99 619.294.4477 www.ktua.com		IRRIGATION DETAILS	LI-09 SHEET 9 OF 16 W.O. NO. PRK-033
CONSTRUCTION RECORD CONTRACTOR:	REFERENCES MAP # 15350	By REVISIONS DELTA A IRRIGATION REVISIONS	Date App'd	DATUMS VERTICAL: 446.361 (NAVD 88)	SCALE HORIZONTAL	Designed By: Drawn By:	Checked By:	Submitted:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
INSPECTOR: DATE COMPLETED:	DWG. #'S 16022	DELIA A INNIVATION REVISIONS		HORIZONTAL: I.E. N78"21'27"E NAD 83	N/A VERTICAL N/A	Plans Prepared Under Supervision O BROOKE JP. WHALEN	f: Date: 10/11/2021	By:Office:	DIRECTOR OF DEVELOPMENT SERVICES C	R DESIGNEE	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-47 SHEET 47 OF 100
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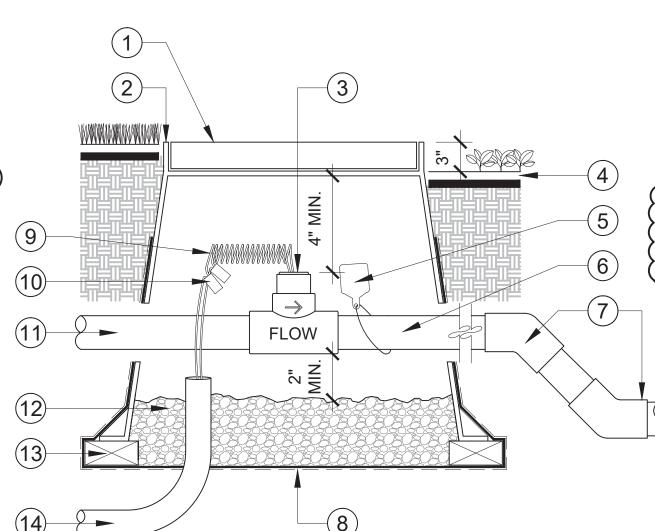


NOTES:

- 1. ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.
- 2. ALL SYMBOLS ARE TYPICAL. 3. PAINT MASTER VALVE AND FITTINGS WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR.

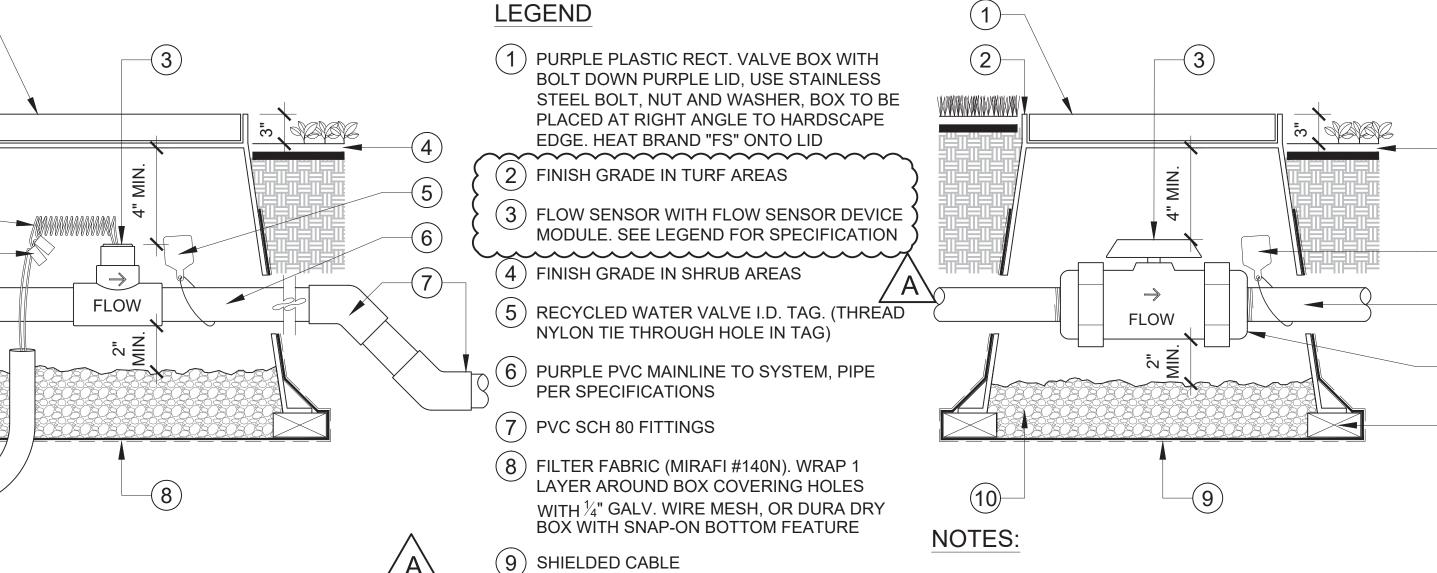
MASTER VALVE

- 1 PURPLE PLASTIC RECT. VALVE BOX WITH BOLT DOWN PURPLE LID, USE STAINLESS STEEL BOLT, NUT AND WASHER, BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "MV" ONTO LID
- (2) FINISH GRADE IN TURF AREAS
- (3) MASTER CONTROL VALVE WITH WITH INTEGRATED VALVE MODULE. SEE LEGEND FOR SPECIFICATION (4) FINISH GRADE IN SHRUB AREAS
- (5) BRASS NIPPLE, TYP.
- (7) BRASS MAINLINE TO MASTER VALVE PER **SPECIFICATIONS**
- (8) (4) BRICK SUPPORTS
- (9) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH 1/4" GALV. WIRE MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM FEATURE
- (10) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.
- (11) 36" WIRE / CABLE LOOP
- $\widetilde{\sim}$ 12) RAINBIRD WC20 OR APPROVED CONNECTOR PER CONTROLLER MANUFACTURER SPECIFICATIONS
- (13) RECYCLED WATER VALVE I.D. TAG. (THREAD NYLON TIE THROUGH HOLE IN TAG)
- (14) BRASS MAINLINE TO FLOW SENSOR PER **SPECIFICATIONS**
- (15) BRASS FEMALE ADAPTER
- (16) 1" DIA. MIN. ELECTRICAL CONDUIT TO FLOW SENSOR



NO FITTINGS 10x PIPE O.D. UPSTREAM OF SENSOR, NO FITTINGS 6x PIPE O.D. DOWNSTREAM OF FLOW SENSOR INSTALL FLOW SENSOR PER MANUFACTURER'S RECOMMENDATIONS ROUTE WIRES THROUGH CONDUIT TO IRRIGATION CONTROLLER. USE 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH ON THE

- DOWNSTREAM SIDE OF THE FLOW SENSOR TALL'SYMBOLS ARE TYPICAL.
- PAINT FLOW SENSOR AND FITTINGS WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR. FLOW SENSOR



- 10) RAINBIRD WC20 OR APPROVED CONNECTOR PER CONTROLLER MANUFACTURER **SPECIFICATIONS**
- (11) BRASS MAINLINE FROM MASTER VALVE

NOT TO SCALE

- (12) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.
- (13) (4) BRICK SUPPORTS
- (14) 1" DIA. MIN. ELECTRICAL CONDUIT TO CONTROLLER

BOX TO BE INSTALLED TO ALLOW FOR PROPER OPERATION OF BALL VALVE HANDLE. INSTALL AT RIGHT ANGLE TO HARDSCAPE EDGE.

USE 45 DEGREE FITTINGS AS REQUIRED TO ACHIEVE PROPER VALVE INSTALLATION AT MAINLINE DEPTH. ALL THREADED CONNECTIONS SHALL HAVE TEFLON TAPE OR (10) 3/8" ROCK, 2 CUBIC FEET, TYP.

BALL VALVE SHALL BE HAYWARD TB SERIES WITH INTEGRAL UNIONS (AVAILABLE IN $\frac{1}{2}$ " TO 6" SIZE RANGE)

PAINT BALL VALVE AND FITTINGS WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR.

(1) PURPLE PLASTIC RECT. VALVE BOX WITH

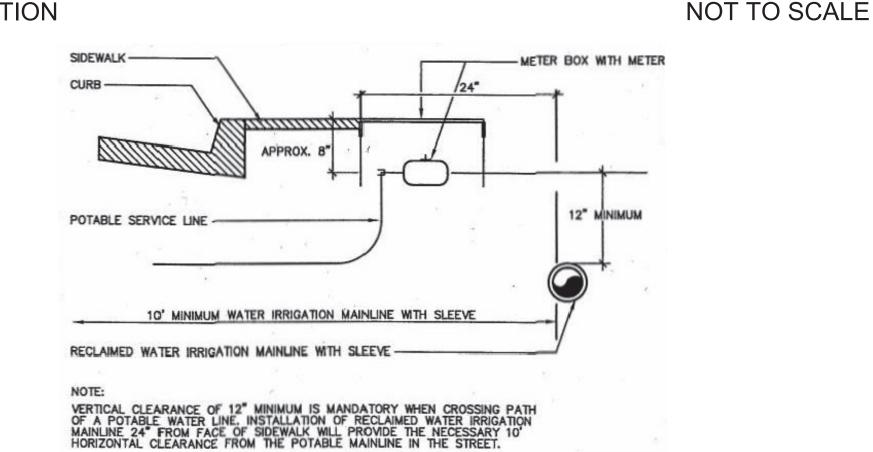
LEGEND

BOLT DOWN PURPLE LID, USE STAINLESS STEEL BOLT, NUT AND WASHER, BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "BV" ONTO LID

- (2) FINISH GRADE IN TURF AREAS
- (3) PVC SCH 80 BALL VALVE. SEE LEGEND FOR SPECIFICATION
- FINISH GRADE IN SHRUB AREAS
- (5) RECYCLED WATER VALVE I.D. TAG. (THREAD NYLON TIE THROUGH HOLE IN
- (6) PURPLE MAINLINE, DEPTH AS PER SPECIFICATIONS. ANY MAINLINE FITTINGS SHALL BE SCH 80 PVC
- (7) USE DUAL UNION CONNECTIONS AS PART OF BALL VALVE, AS SPECIFIED IN LEGEND.
- (8) (4) BRICK SUPPORTS
- Úg) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH $\frac{1}{4}$ " GALV. WIRE MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM FEATURE

ISOLATION BALL VALVE

NOT TO SCALE



POTABLE MAINLINE CROSSING STREET SURFACE-POTABLE SERVICE LINE -MINIMUM REQUIRED VERTICAL SEPARATION-

ALL RECLAIMED WATER IRRIGATION PIPE AND SLEEVES SHALL BE PURPLE AND LABELED AS SPECIFIED IN THE "STANDARD SPECIFICATIONS FOR PRIVATE IRRIGATION SYSTEMS WATER DISTRICT" RULES AND REGULATIONS FOR CONSTRUCTION OF RECLAIMED WATER MAINS

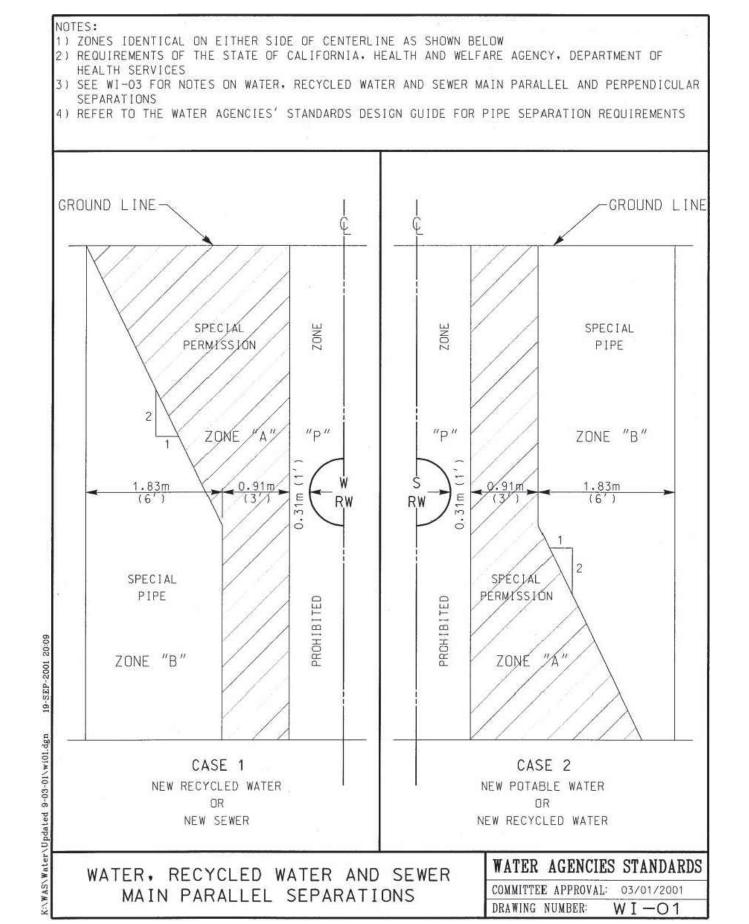
POTABLE SERVICE LINE CROSSING

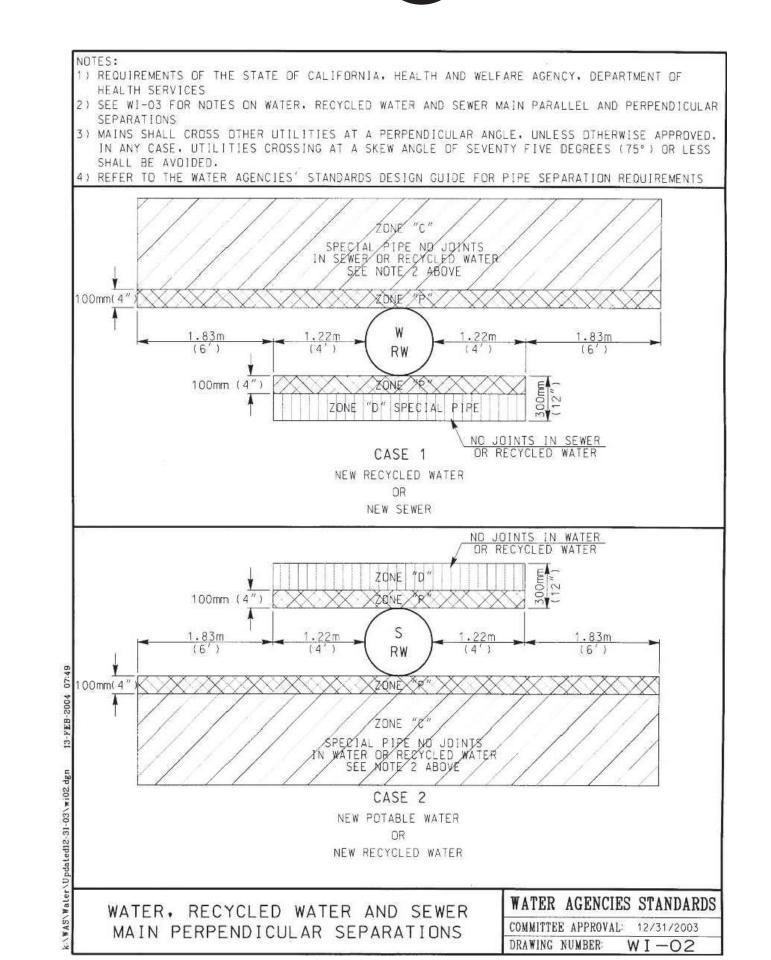
RECLAIMED WATER IRRIGATION

MAINLINE IN SLEEVE -

TYPICAL LINE CROSSINGS

NOT TO SCALE





INSPECTION NOTE

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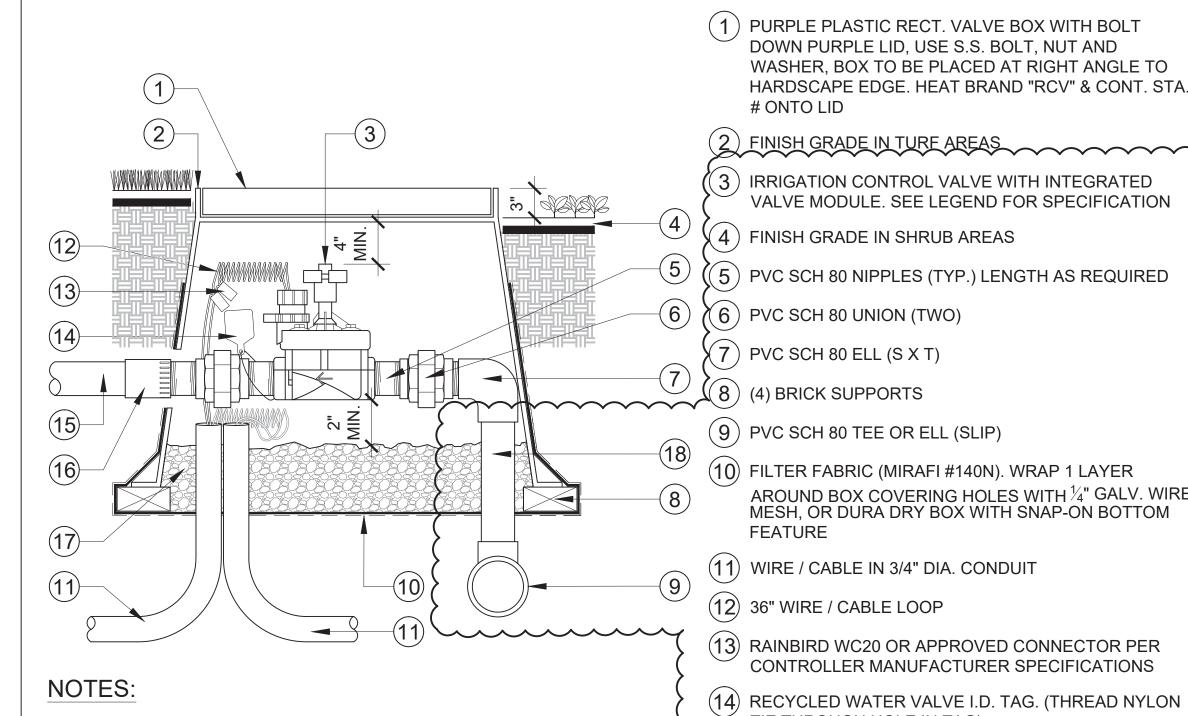
COLOR CODING

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

AS BUIL	T	UTILITY NOTE	LANDSCAPE ARCHING		CONSULTANT	BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG
SIGNATURE	RECORD DATA AT THE FACILITIES MAY EXIS OF RECORD. CONT	ES SHOWN ON THESE PLANS ARE PLOTTED FROM HEIR APPROXIMATE LOCATIONS. UNDERGROUND TO WHICH HAVE NOT BEEN REPORTED OR ARE NOT RACTOR SHALL VERIFY THE LOCATION OF ALL PERLO PRIOR TO THE START OF CONSTRUCTION.	Signature		3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	IRRIGATION DETAILS	LI-10 SHEET 10 OF 16 W.O. NO. PRK-03
CONSTRUCTION RECORD CONTRACTOR:	REFERENCES MAP # 15350	By REVISIONS DELTA A IRRIGATION REVISIONS	Date App'd DATUMS 08/18/22 VERTICAL: 446.361 (NAVD 88)	SCALE Designed By: Drawn By: Checked By: Submitted:	APPROVED BY: DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	
INSPECTOR: DATE COMPLETED:	DWG. #'S 16022		HORIZONTAL: I.E. N78"21'27"E NAD 83	N/A Plans Prepared Under Supervision Of: Date: 10/11/2021 By:	DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-4 SHEET 48 OF 1
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PERIVITI NO. PLR-19-012

#



- ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.
- 2. ALL FITTINGS SHALL BE PVC SCH 80, TYPICAL
- 3. ALL SYMBOLS ARE TYPICAL

В

(3)

4

NOTES:

COLOR CODE

SIGNATURE

CONSTRUCTION RECORD

Printed Name

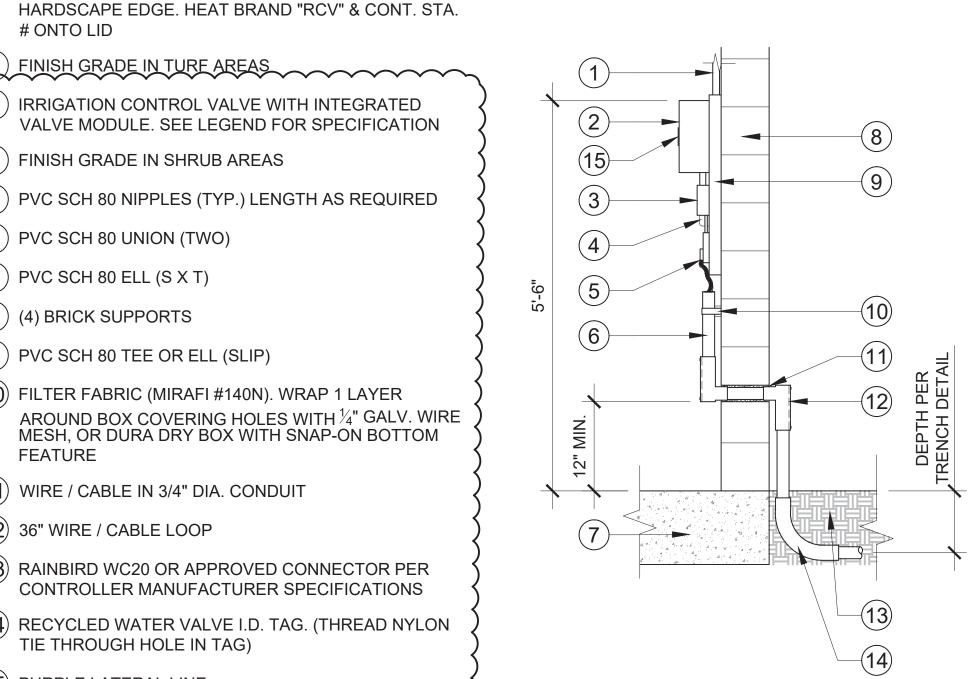
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CONTRACTOR:

DATE COMPLETED

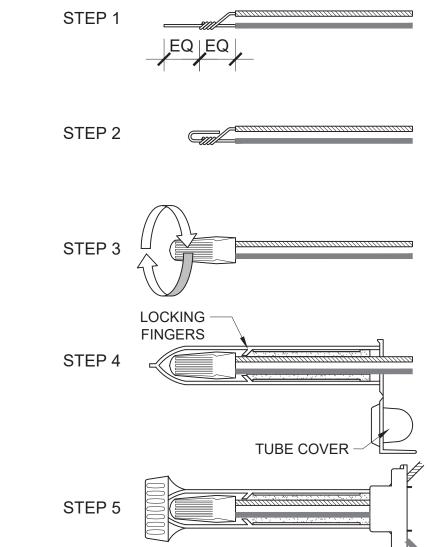
NSPECTOR:

4. PAINT REMOTE CONTROL VALVE AND FITTINGS WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR.



LEGEND

- (1) CONDUIT FOR RAIN SENSOR
- (2) CONTROLLER (WALL MOUNTED)
- (3) POWER SOURCE JUNCTION BOX WITH SWITCH AND OUTLET (ELECTRICAL CONTRACTOR)
- (4) ELL-BOX AND CONDUIT FROM POWER SOURCE
- (5) TERMINAL STRIP
- (6) ONE 1-1/4" CONDUIT FOR TWO-WIRE CABLE
- (7) BUILDING FLOOR
- (8) BUILDING WALL
- (9) PRE-ASSEMBLED BACKBOARD. ANCHORED TO WALL PER MANUFACTURER'S SPECIFICATIONS
- (10) CONDUIT STRAPS, 1 EVERY 18"
- (11) WATERPROOF SEALANT
- (12) ELL-BOX FOR WIRE CONDUIT (8) REQUIRED INSIDE AND (8) REQUIRED OUTSIDE
- (13) EXTERIOR SURFACE
- (14) CONDUITS AND SWEEPS. (8) REQUIRED (1 FOR MASTER VALVE, 1 FOR FLOW SENSOR, 1 FOR RAIN SENSOR - IF #1 IS NOT INSTALLED, 1 FOR CONTROL WIRES, 1 FOR INTERNET CABLE, 1 FOR REMOTE CABLE, 1 FOR GROUND WIRE AND 1 FOR PUMP SIGNAL WIRES)
- (15) "DO NOT DRINK" DECAL ON IRRIGATION CONTROLLER (MOUNT ON ENCLOSURE DOOR) PER WM-08



INSTALLATION STEPS

- STRIP BOTH WIRES. TWIST STRAND AROUND RIGID STRAND OVER HALF THE LENGTH OF STRIPPED WIRES.
- (2) FOLD THE OTHER HALF OF THE RIGID STRAND OVER TWISTED STRAND AS SHOWN.
- INSERT THE TWISTED SPLICE INTO THE "Y" ELECTRICAL SPRING CONNECTION AND TWIST OVER WIRE STRANDS IN A CLOCKWISE DIRECTION.
- INSERT THE CONNECTOR INTO THE GEL-FILLED DIRECT BURY SPLICE KIT. PUSH PAST THE LOCKING FINGERS TO SECURE CONNECTOR INSIDE TUBE.

NOT TO SCALE

(5) POSITION ALL THE WIRES THROUGH THE DEDICATED INSULATOR CHANNELS AND SNAP INSULATOR TUBE COVER CLOSED

REMOTE CONTROL VALVE ASSY

1. DETECTABLE WARNING TAPE SHALL BE PROVIDED FOR ALL PURPLE

ALUMINUM CORE. PERMANENTLY PRINTED AND A.P.W.A. UNIFORM

OF THE 120 VAC ELECTRICAL LINE FROM THE ELECTRICAL METER

PRESSURE MAINLINES. STANDARD THICKNESS, 3" WIDTH WITH

3. AS-BUILT IRRIGATION PLANS TO SHOW THE INSTALLED LOCATION

4. WHERE FLOW SENSOR WIRE AND MASTER VALVE WIRE CONDUITS ARE IN THE SAME TRENCH, INSTALL SEPARATE WIRE CONDUITS

2. MAINTAIN 6" BETWEEN PARALLEL PURPLE LATERAL LINES.

LEGEND

(1) FINISH GRADE

LEGEND

ONTO LID

(4) BRICK SUPPORTS

FEATURE

DOWN PURPLE LID, USE S.S. BOLT, NUT AND

WASHER, BOX TO BE PLACED AT RIGHT ANGLE TO

IRRIGATION CONTROL VALVE WITH INTEGRATED VALVE MODULE. SEE LEGEND FOR SPECIFICATION

MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM

CONTROLLER MANUFACTURER SPECIFICATIONS

NOT TO SCALE

TIE THROUGH HOLE IN TAG)

(16) PVC SCH 80 FEMALE ADAPTER

(17) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.

(15) PURPLE LATERAL LINE

(18) PVC SCH 80 PIPE

- 2 PURPLE LATERAL LINES, PER **SPECIFICATIONS**
- (3) 6" BEDDING DEPTH BELOW MAINLINE WITH 6" COVER, SAND BACKFILL (S.E. 30 OR BETTER) COMPACTED TO THE DENSITY OF **EXISTING SOIL**
- (4) 120V WIRING IN GRAY PVC SCH 40 CONDUIT, MIN. 12" AWAY FROM OTHER PIPING. NOTE: ONLY APPLICABLE WHEN 120V LINE CAN BE INSTALLED IN THE IRRIGATION TRENCH
- CLEAN COMPACTED BACKFILL OVER SAND BEDDING
- (6) (2) DETECTABLE WARNING TAPES
- (7) UNDISTURBED SOIL
- (8) PURPLE MAINLINE AND CONTROL WIRES IN CONDUIT, PER SPECIFICATIONS. MIN. 6" FROM OTHER PIPING

DIMENSION - PEDESTRIAN	Α	В	С	D
1/2" TO 2-1/2" SIZE	18"	12"	6"	12"
3" IN SIZE	24"		6"	12"
4" AND LARGER	36"		6"	12"

AUTOMATIC IRRIGATION

CONTROLLER (WALL MOUNT, INTERIOR)

DIMENSION - PEDESTRIAN	Α	В	С	D
2" TO 12" SIZE	30"	24"	24"	6"
DIMENSION - VEHICLE	Α	В	С	D
4" TO 12" SIZE	36"	30"	30"	6"

TRENCH IN HARDSCAPE

Designed By:

Plans Prepared Under Superv

HH

Drawn By:

BROOKE JP. WHALEN BURGE PWholon LA No.

LEGEND

- 1 PAVING
- 2) PURPLE LATERAL LINE SLEEVE, PER SPECIFICATIONS
- (3) CONTROL WIRE IN CONDUIT, PER SPECIFICATIONS. MIN. 6" FROM OTHER PIPING. PULL BOX SHALL BE AT EVERY 200 3 FEET, OR 270 DEGREES CONDUIT BENDS

NOT TO SCALE

- (4) PURPLE MAINLINE SLEEVE, PER **SPECIFICATIONS**
- (5) 120V WIRING IN GRAY PVC SCH 40 CONDUIT, MIN. 12" AWAY FROM OTHER PIPING. NOTE: ONLY APPLICABLE WHEN 120V LINE CAN BE INSTALLED IN THE IRRIGATION TRENCH

(6) CLEAN COMPACTED FILL OVER SAND

- (7) (2) DETECTABLE WARNING TAPES
- (8) UNDISTURBED SOIL

Checked By:

Date: <u>10/11/2021</u>

(9) 6" SAND BEDDING DEPTH WITH 6" COVER SAND BACKFILL (S.E. 30 OR BETTER) COMPACTED TO THE DENSITY OF **EXISTING SOIL**

NOTES:

1. PURPLE SLEEVES SHALL BE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED

ISOMETRIC

WIRE CONNECTOR (RAIN BIRD WC20)

- DETECTABLE WARNING TAPE SHALL BE PROVIDED FOR ALL PURPLE PRESSURE MAINLINES, STANDARD 5MIL THICKNESS, 3" WIDTH WITH ALUMINUM CORE PERMANENTLY PRINTED AND A.P.W.A. UNIFORM COLOR
- ALL SAND BEDDING AT WALKS AND STREETS SAND BED SHALL BE COMPACTED TO THE DENSITY OF THE EXISTING SOIL REQUIRED PER OWD.
- 4. SLEEVES AT CURB OR EDGE OF HARDSCAPE SHALL EXTEND 12" BACK UNDER HARDSCAPE.
- MAINTAIN A SEPARATION OF 6" BETWEEN PARALLEL PURPLE LATERAL LINES.
- AS-BUILT IRRIGATION PLANS TO SHOW THE INSTALLED LOCATION OF THE 120 VAC ELECTRICAL LINE FROM THE ELECTRICAL METER PEDESTAL TO THE IRRIGATION CONTROLLER.
- WHERE FLOW SENSOR WIRE AND MASTER VALVE WIRE CONDUITS ARE IN THE SAME TRENCH, INSTALL SEPARATE WIRE CONDUITS FOR EACH ON OPPOSITE SIDES OF THE TRENCH.

INSPECTION NOTE

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

COLOR CODING

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

FOR EACH ON OPPOSITE SIDES OF THE TRENCH.

PEDESTAL TO THE IRRIGATION CONTROLLER.

NOT TO

	LANDSCAPE
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O SCALE	SECTION	
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SCALE

HORIZONTAL

N/A

VERTICAL

N/A

NOT TO SCALE

	CC	NSULTANT		BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG NO.
	K	3916 Normal Stree San Diego, CA 92 619.294.4477 www.ktua.com		IRRIGATION DETAILS	LI-11 SHEET 11 OF 16 W.O. NO. PRK-0330
:	Submitted:	APPROVED BY:	DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
021_	By:	DIDECTAD OF DEVELOPMENT CEDWOLC OF	D DECIONIE	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-49
	Office:	DIRECTOR OF DEVELOPMENT SERVICES OF	R DESIGNEE	GROVE PARK	SHEET 49 OF 100

PERMIT NO. PLR-19-012

	TRENCH IN LANDSCAPE SECTION
(J	SECTION

REFERENCES

MAP # 15350

DWG. #'S 16022

AS BUILT UTILITY NOTE ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT R.L.A. No. ____ OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTIN

UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION

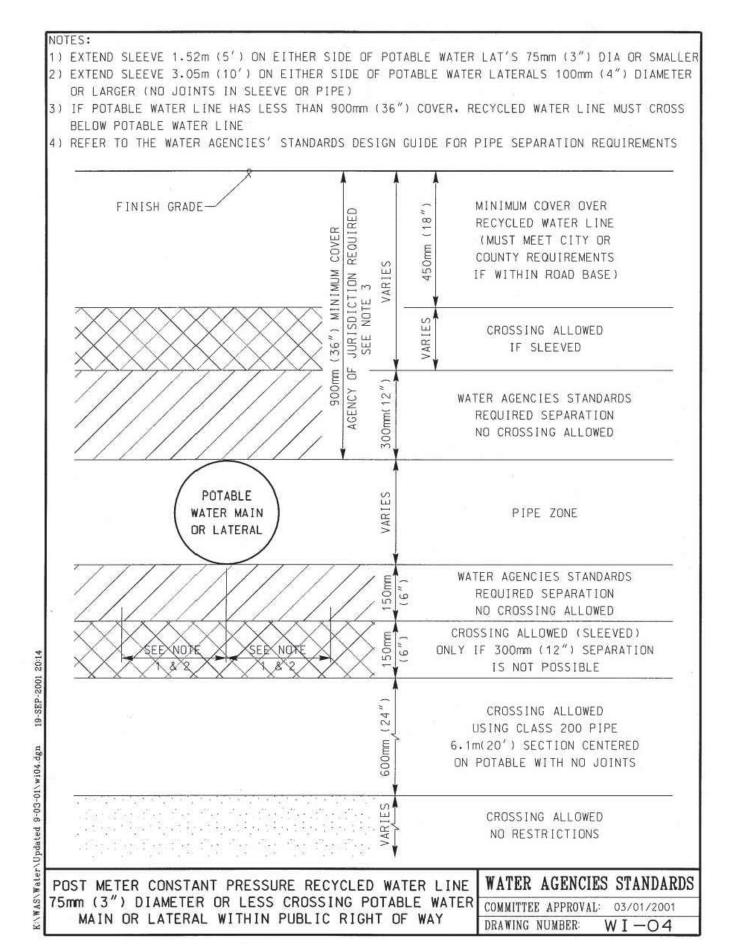
REVISIONS

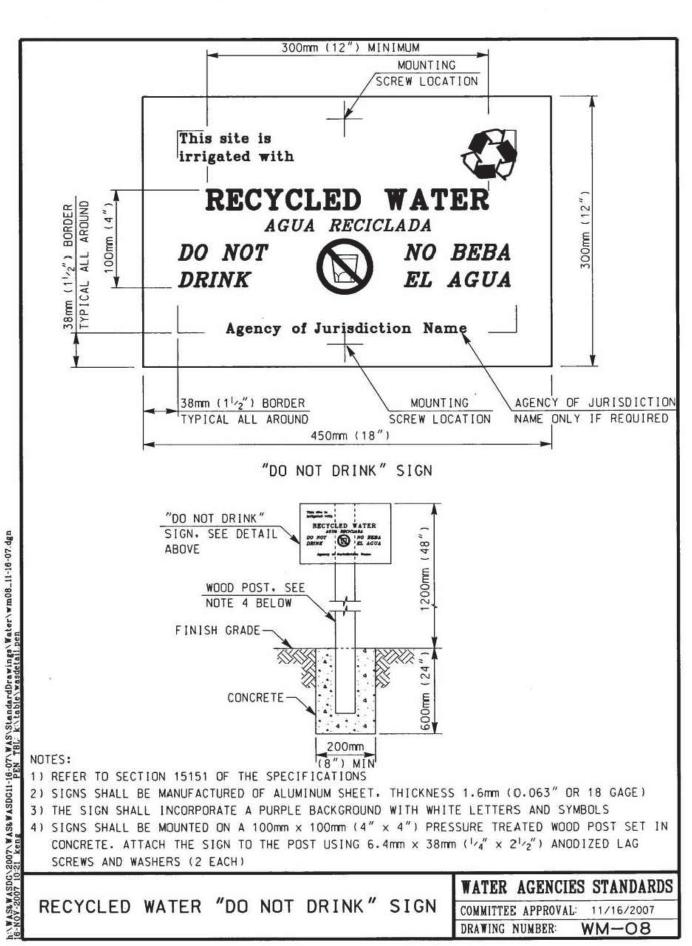
DELTA A IRRIGATION REVISIONS

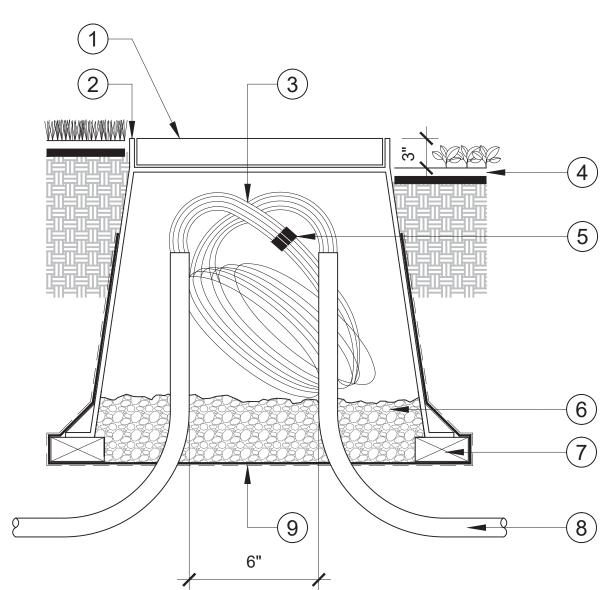
| VERTICAL: 446.361 (NAVD 88)

HORIZONTAL: I.E. N78"21'27"E NAD 83









24" FROM EDGES OF HARDSCAPE

(REFER TO NOTES 1 AND 2 BELOW)

IN FLAT / GENTLE GRADES,

24" IN SLOPED GRADES

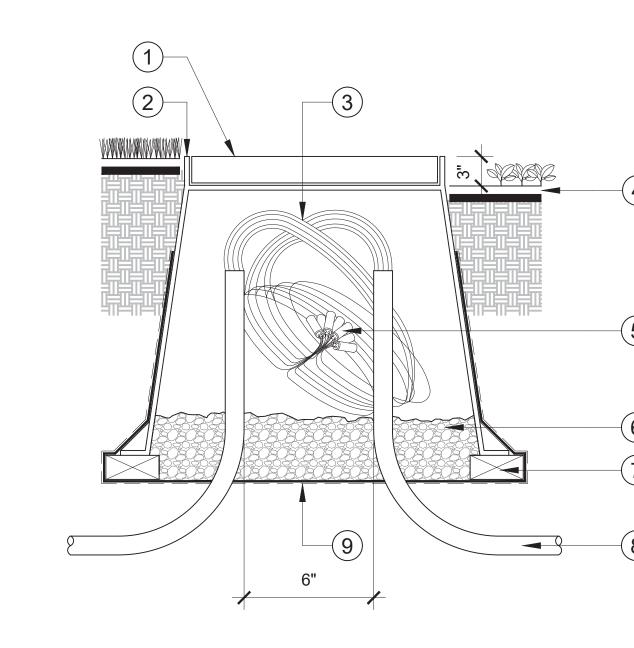
LEGEND

- 1 PURPLE 6" ROUND PLASTIC VALVE BOX WITH BOLT DOWN PURPLE LID, USE STAINLESS STEEL BOLT, NUT AND WASHER. HEAT BRAND "PB" ONTO LID
- (2) FINISH GRADE IN TURF AREAS
- (3) 36" WIRE / CABLE EXPANSION LOOP (TYP.)
- 4) FINISH GRADE IN SHRUB AREAS
- (5) PVC ADHESIVE TAPE
- (6) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.
- (7) (4) BRICK SUPPORTS
- (8) PVC ELECTRICAL SWEEP 3/4" TO 1-1/4" DIA. (WIRING IN CONDUIT). REFER TO DETAIL 'S'
- (9) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH 1/4" GALV. WIRE MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM FEATURE

NOTES:

- 1. SWEEPS AND PULL BOXES SHALL BE NO MORE THAN 200 FEET MAX.
- 2. NO CONDUIT BENDS GREATER THAN 270 DEGREES.

NOT TO SCALE



WIRE SPLICE BOX

LEGEND

- (1) PURPLE 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN PURPLE LID, USE STAINLESS STEEL BOLT, NUT AND WASHER. HEAT BRAND "PB" ONTO LID
- (2) FINISH GRADE IN TURF AREAS
- (3) PROVIDE 18" MIN. WIRE LEAD FROM EACH
- (4) FINISH GRADE IN SHRUB AREAS
- (5) RAINBIRD WC20 OR APPROVED CONNECTOR PER CONTROLLER MANUFACTURER SPECIFICATIONS.
- (6) $\frac{3}{8}$ " ROCK, 2 CUBIC FEET, TYP.
- (7) (4) BRICK SUPPORTS
- $_{ullet}(8)$ PVC ELECTRICAL SWEEP 3/4" TO 1-1/4" DIA. (WIRING IN CONDUIT).
- (9) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH 1/4" GALV. WIRE MESH, OR DURA DRY BOX WITH SNAP-ON BOTTOM FEATURE

NOTES:

- WIRE SPLICE BOXES SHALL BE NO LESS THAN 500 FEET APART.
- 2. NO CONDUIT BENDS GREATER THAN 270 DEGREES.

NOT TO SCALE

ROUND PULL BOX

LEGEND

- (1) INSTALL 2" ABOVE FINISH GRADE IN SHRUB AREAS / FLUSH WITH FINISH GRADE IN TURF AREAS
- 2 FINISH GRADE
- (3) POP-UP BODY WITH SPRAY / ROTATOR NOZZLE. REFER TO LEGEND
- (4) SWING JOINT ASSEMBLY, (3) PVC SCH 40 STREET ELLS WITH (1) PVC SCH 80 NIPPLE
- (5) LINE SIZE PVC SCH 40 SLIP X SLIP X $\frac{1}{2}$ " FIPT TEE OR LINE SIZE SLIP X 1/2" FIPT ELL AT TERMINAL ENDS
- (6) PVC NON-PRESSURE LATERAL LINE. REFER TO PLAN FOR SIZE. 12" MIN. SOIL COVER FOR ALL 6" POP-UP HEADS, 18" MIN. SOIL COVER FOR ALL 12" POP-UP HEADS

NOTES:

- 1. REFER TO PLANS FOR SPECIFIC DIMENSIONS AND IRRIGATION NOTES FOR SPRINKLER PLACEMENT.
- 2. DISTANCES MAY NEED ADJUSTMENT ACCORDING TO SPECIFIC LOCATION, TYPE AND HEAD ETC. SEE CITY OF CHULA VISTA LANDSCAPE WATER CONSERVATION ORDINANCE, CHAPTER 20.12 OF THE MUNICIPAL CODE. WHERE LOW VOLUME IRRIGATION IS IN USE OR ADJACENT PAVING DRAINS ENTIRELY INTO PLANTED AREA, THE DISTANCE BETWEEN EDGE OF HARDSCAPE AND POP-UP BODY TO BE 3"
- 3. USE TEFLON TAPE ON ALL THREADED
- CONNECTIONS. 4. POP-UP INDICATOR HEAD FOR TREE BUBBLER ZONES SHALL BE LOCATED ON THE LATERAL LINE NEAR THE REMOTE CONTROL VALVE THAT CONTROLS ZONE.

NOT TO SCALE

INSPECTION NOTE

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

COLOR CODING

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.



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AS BUILT		UTILITY NOTE	SOUTH JP WHALEN OF HELD WHALEN		CONSULTANT	BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG NO.
SIGNATURE	RECORD DATA AT THEI No FACILITIES MAY EXIST V	SHOWN ON THESE PLANS ARE PLOTTED FROM R APPROXIMATE LOCATIONS. UNDERGROUND WHICH HAVE NOT BEEN REPORTED OR ARE NOT CTOR SHALL VERIFY THE LOCATION OF ALL PERTIN PRIOR TO THE START OF CONSTRUCTION.	ENT Signature OF CALIFORNIA OF CA		3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	IRRIGATION DETAILS	LI-12 SHEET 12 OF 16 W.O. NO. PRK-0330
CONSTRUCTION RECORD	REFERENCES	By REVISIONS	Date App'd DATUMS 08/18/22 VERTICAL: 446.361 (NAVD 88)	SCALE Designed By: Drawn By: Checked By: Su	ubmitted: APPROVED BY: DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
CONTRACTOR: INSPECTOR: DATE COMPLETED:	MAP # 15350 DWG. #'S 16022	DELTA A IRRIGATION REVISIONS	08/18/22 VERTICAL: 446.361 (NAVD 66) HORIZONTAL: I.E. N78"21'27"E	N/A Plans Prepared Under Supervision Of: Date: 10/11/2021 By VERTICAL	y:	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-50 SHEET 50 OF 100
						PERMIT N	NO. PLR-19-012

24" FROM EDGES OF HARDSCAPE IN FLAT / GENTLE GRADES (REFER TO NOTES 1 AND 2 BELOW) 3 (5)

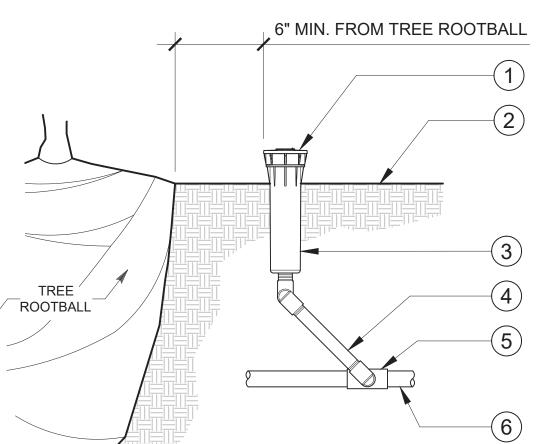
LEGEND

- (1) INSTALL FLUSH WITH FINISH GRADE IN **TURF AREAS**
- (2) FINISH GRADE
- (3) POP-UP BODY. REFER TO LEGEND
- (4) SWING JOINT ASSEMBLY, (3) PVC SCH 40 STREET ELLS WITH (1) PVC SCH 80 NIPPLE, 3/4" PARTS ASSEMBLY
- (5) SEE SPECIFICATIONS FOR DEPTH
- 6 PVC SCH 40 TEE (SST) OR ELL (ST)
- 7 PVC NON-PRESSURE LATERAL LINE. REFER TO PLAN FOR SIZE

NOTES:

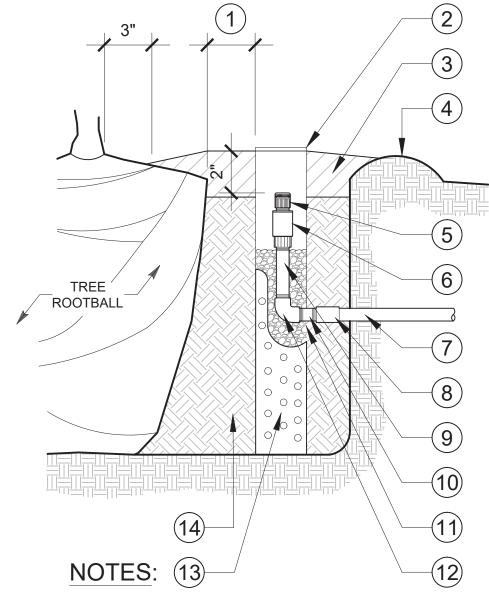
- 1. REFER TO PLANS FOR SPECIFIC DIMENSIONS AND IRRIGATION NOTES FOR SPRINKLER PLACEMENT.
- DISTANCES MAY NEED ADJUSTMENT ACCORDING TO SPECIFIC LOCATION, TYPE AND HEAD ETC. SEE CITY OF CHULA VISTA LANDSCAPE WATER CONSERVATION ORDINANCE, CHAPTER 20.12 OF THE MUNICIPAL CODE. WHERE LOW VOLUME IRRIGATION IS IN USE OR WHERE ADJACENT PAVING DRAINS ENTIRELY INTO PLANTED AREA, THE DISTANCE BETWEEN EDGE OF HARDSCAPE AND POP-UP BODY TO BE 3"
- 3. USE TEFLON TAPE ON ALL THREADED

DISTRICT SIDE OF



LEGEND

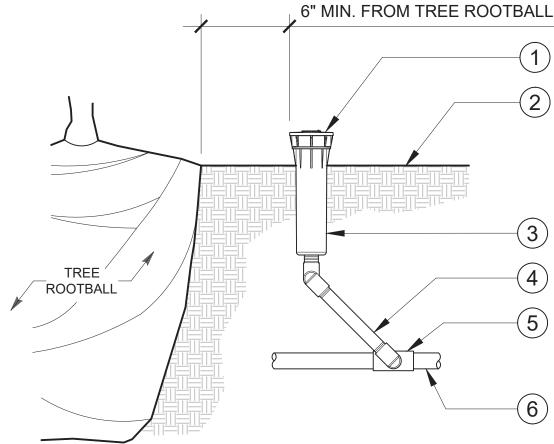
- (1) INSTALL 2" ABOVE FINISH GRADE IN SHRUB AREAS / FLUSH WITH FINISH GRADE IN TURF AREAS
- (2) FINISH GRADE
- (3) POP-UP BODY WITH BUBBLER NOZZLE. REFER TO LEGEND
- (4) SWING JOINT ASSEMBLY, (3) PVC SCH 40 STREET ELLS WITH (1) PVC SCH 80 NIPPLE
- (5) LINE SIZE PVC SCH 40 SLIP X SLIP X $\frac{1}{2}$ " FIPT TEE OR LINE SIZE SLIP X ½" FIPT ELL AT TERMINAL ENDS
- $(\, f 6\,)\,$ PVC NON-PRESSURE LATERAL LINE. REFER TO PLAN FOR SIZE. 12" MIN. SOIL COVER FOR ALL 6" POP-UP HEADS, 18" MIN. SOIL COVER FOR ALL 12" POP-UP HEADS



- 1. PLACE BUBBLER ON UPHILL SIDE OF TREE OPPOSITE TREE DRAIN. INSTALL BUBBLER INSIDE PLANTING HOLE ADJACENT TO ROOTBALL.
- 2. USE TEFLON TAPE ON ALL THREADED CONNECTIONS.

LEGEND

- (1) BUBBLER MIN. 6" FROM EDGE OF ROOTBALL
- (2) BUBBLER TUBE WITH PURPLE FLAT DRAIN GRATE, FLUSH WITH TOP OF MULCH
- (3) MULCH
- 4 WATERING BERM
- (5) BUBBLER NOZZLE. SEE IRRIGATION LEGEND
- (6) ANTI-DRAIN VALVE
- (7) LATERAL LINE, SEE SPECIFICATIONS FOR
- (8) COUPLING FIPT X LINE SIZE SLIP
- $(9) \frac{1}{2}$ " RISER, LENGTH AS REQUIRED
- (10) 1/2" NIPPLE, LENGTH AS REQUIRED
- (11) DRILL HOLE IN PERFORATED PIPE TWICE THE DIAMETER OF LATERAL PIPE
- (12) FIPT X FIPT ½" ELBOW
- (13) 4" PERFORATED PIPE RESTING ON BOTTOM OF PLANT PIT. FILL PIPE FROM BOTTOM OF PIPE TO BOTTOM OF ANTI-DRAIN VALVE WITH 3/8" PEA GRAVEL. WRAP ENTIRE PERFORATED PIPE WITH ONE LAYER OF FILTER FABRIC.
- (14) APPROVED BACKFILL MATERIAL



NOTES:

- 1. SEE CITY OF CHULA VISTA LANDSCAPE WATER CONSERVATION ORDINANCE, CHAPTER 20.12 OF THE MUNICIPAL CODE
- USE TEFLON TAPE ON ALL THREADED CONNECTIONS.
- REFER TO PLANTING PLAN FOR TREE LOCATIONS, SIZE, AND TYPE. VERIFY ON SITE THAT ALL POP-UP BUBBLERS ARE AT CORRECT TREE LOCATIONS AND HAVE THE CORRECT NUMBER OF POP-UP BUBBLERS INSTALLED FOR THEIR SIZE AND TYPE. COORDINATE ON SITE WITH LANDSCAPE ARCHITECT FOR TREE
- 4. INSTALL BUBBLERS EQUIDISTANT FROM EACH OTHER AROUND TREES. TYP.
- 5. ON SLOPES, INSTALL BUBBLERS ON UPHILL SIDE OF TREE.



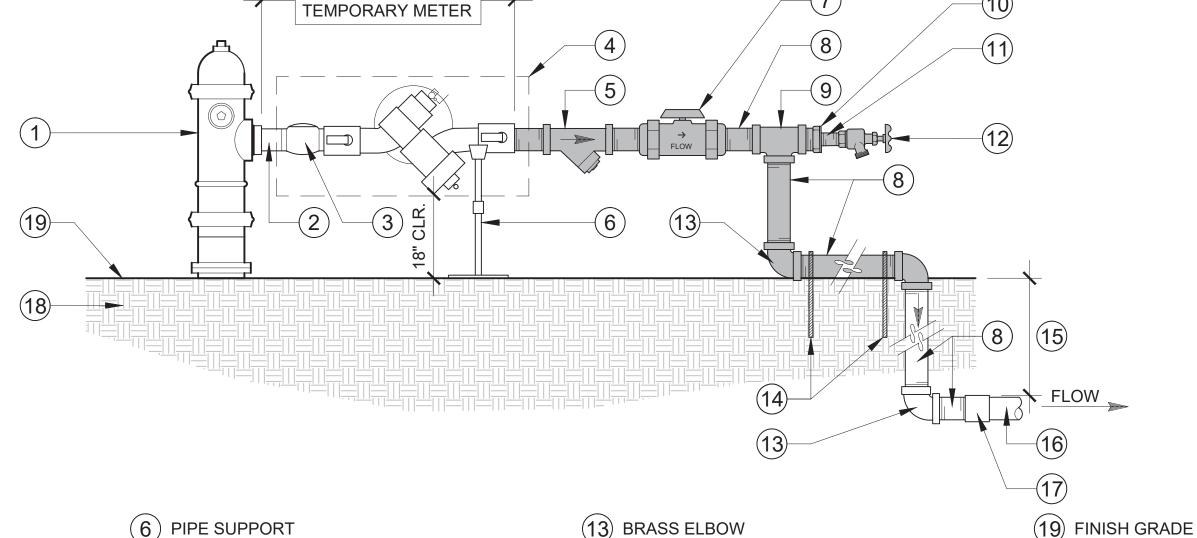
4" POP-UP BUBBLER HEAD

NOT TO SCALE

FIXED BUBBLER IN PERFORATED PIPE NOT TO SCALE

NOTES:

- 1. ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.
- 2. PAINT ALL ABOVE GRADE **EQUIPMENT / PIPING AND** FITTINGS ON DOWNSTREAM SIDE OF OTAY WATER DISTRICT INSTALLED BACKFLOW PREVENTER ASSEMBLY WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR.



NOT TO SCALE

LEGEND

- (1) FIRE HYDRANT
- (2) BRASS FIRE HYDRANT COUPLER
- (3) TEMPORARY 2" CONSTRUCTION WATER **METER**
- (4) TEMPORARY 2" CONSTRUCTION WATER METER AND BACKFLOW TO BE INSTALLED BY OTAY WATER DISTRICT
- (5) Y-STRAINER (SAME SIZE AS BACKFLOW PREVENTER) (WILKINS 500XL-YSBR-HR) (SET PRESSURE REGULATOR AT 95 PSI, FIELD TEST)
- (6) PIPE SUPPORT
- 7 BALL VALVE
- (8) BRASS NIPPLE (LENGTH AS REQUIRED). ALL EXPOSED PIPE SHALL BE THREADED BRASS
- 9 BRASS TEE
- (10) BRASS BUSHING REDUCER
- (11) BRASS NIPPLE (LENGTH AS REQUIRED) TO
- (12) HOSE BIB (BENT HOSE, LOOSE KEY TYPE)

- (13) BRASS ELBOW
- (14) 'U' HOOK REBAR, LENGTH AS REQUIRED. DRIVE INTO SOIL A MIN. 18" DEEP
- (15) SEE SPECIFICATIONS FOR DEPTH
- (16) PVC PRESSURE PIPE (SEE SPECIFICATIONS) TEMPORARY POINT OF CONNECTION
- (17) THREADED BRASS COUPLING WITH PVC SCH 80 MALE ADAPTER
- (18) UNDISTURBED / COMPACTED SUBGRADE

WATER SOURCE AT FIRE HYDRANT (TEMPORARY CONSTRUCTION)

SECTION

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SCALE	Designed By:	Drawn By:	Checked By:	Submitte

CONSULTANT					
ktua	3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com				

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	3916 Normal Street					
	San Diego, CA 92103					
	619.294.4477					
	www.ktua.com					

BID DOCUMENTS - OCTOBER 11, 2021

INSPECTION NOTE

REJECTION AND REMOVAL.

COLOR CODING

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED

CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED

WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO

FIVE (5) WORKING DAYS PRIOR TO THE START OF

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF

DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE

COLORED PURPLE. THE EXPOSED SURFACE SHALL BE

COLORED THROUGH THE USE OF INTEGRALLY MOLDED

PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE

PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE

PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

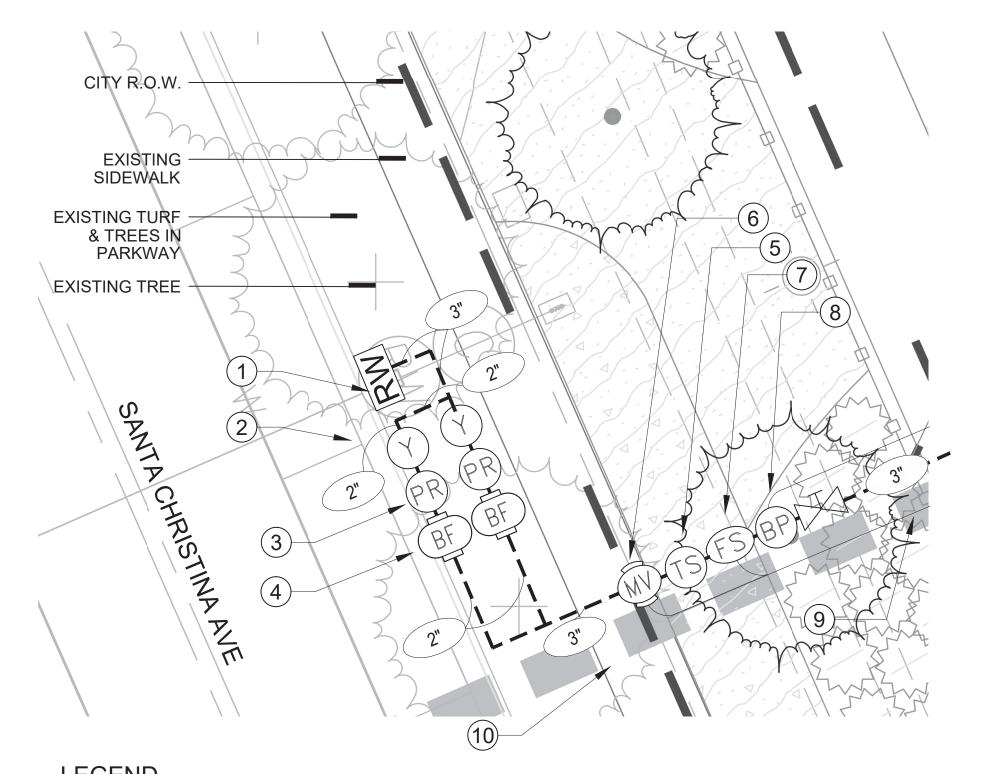
LI-13 SHEET 13 OF W.O. NO. PRK-03

LANDSCAPE DWG

DRAWING NO. 19010 - 51

SHEET 51 OF 1 PERMIT NO. PLR-19-012

AS BUILT UTILITY NOTE ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND **IRRIGATION DETAILS** SIGNATURE FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT Printed Name UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION My Registration Expires CONSTRUCTION RECORD REFERENCES REVISIONS DATUMS CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT APPROVED BY: DELTA A IRRIGATION REVISIONS VERTICAL: 446.361 (NAVD 88) HORIZONTAL CONTRACTOR: MAP # 15350 OTAY RANCH VILLAGE 2 P-2 PARK, N/A NSPECTOR: Date: <u>10/11/2021</u> Plans Prepared Under Super HORIZONTAL: I.E. N78"21'27"E NAD 83 BROOKE JP. WHALEN BURGE Whole R.L.A. N. VERTICAL DWG. #'S 16022 DATE COMPLETED GROVE PARK DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE N/A



LEGEND

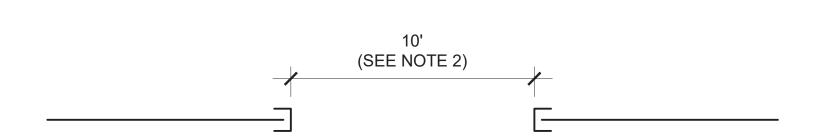
- (1) 2" RECYCLED WATER METER
- (2) 2" Y-STRAINER (QUANTITY: 2)
- (3) 2" PRESSURE REGULATOR (QUANTITY: 2)
- (4) 2" BACKFLOW PREVENTER IN ENCLOSURE (QUANTITY: 2)
- (5) RECYCLED WATER TEST STATION

- (6) 2" MASTER VALVE
- 7 2" FLOW SENSOR
- (8) BOOSTER PUMP
- (9) TO IRRIGATION SYSTEM
- (10) REMOVE & REPLACE EXISTING CONCRETE SIDEWALK PANEL FOR NEW IRRIGATION

SECTION P.O.C. ENLARGEMENT SECTION

NOT TO SCALE

NOT TO SCALE



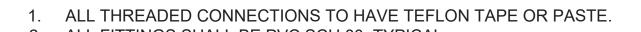
NOTES:

- 1. STUBOUTS SHALL BE VISIBLE AT ALL TIMES (12" MIN. ABOVE EXISTING GRADE)
- 2. MAINTAIN 10-FOOT MIN. SEPARATION BETWEEN EXISTING AND PROPOSED IRRIGATION SYSTEM AT ALL TIMES DURING CONSTRUCTION.

OWD 10-FOOT SEPARATION DETAIL

- CONTRACTOR SHALL SATISFY ALL THE REQUIREMENTS OF THE SD WAS STANDARD SPECIFICATIONS, AND DRAWINGS PRIOR TO SCHEDULING THE FINAL CONNECTION WITH OTAY WATER DISTRICT.
- 4. CONTRACTOR SHALL PERFORM FINAL CONNECTION WITH DISTRICT REPRESENTATIVE(S) PRESENT AT TIME OF FINAL CONNECTION BETWEEN EXISTING AND PROPOSED IRRIGATION SYSTEMS.

REMOTE CONTROL VALVE WITH



16

2. ALL FITTINGS SHALL BE PVC SCH 80, TYPICAL

3) LOCATE BACKFLOW PREVENTION DEVICE (BPD) IN SUCH A MANNER THAT WILL ALLOW THE DEVICE TO BE READILY

NO CONNECTIONS OF ANY KIND WILL BE ALLOWED IN THIS AREA, INSPECTION BY THE DISTRICT SHALL TAKE PLACE

INSTALL A PRESSURE REDUCING VALVE IN LINE WHEN SYSTEM PRESSURE EXCEEDS 1.03 MPa (150 PSI) OR WHEN

PRIOR TO BACKFILL. INSTALL A CASING ENCASED IN CONCRETE WHEN THE DISTANCE BETWEEN THE METER BOX AND

LEGEND ON PLANS

11/12/2020

SIZE AND DESCRIPTION

(6) BRASS OR COPPER PIPE, SEE NOTES 4 & 6

(8) BALL VALVE "SHUT-OFF"

ENCLOSURE (OPTIONAL)

(7) 75mm (3") LONG NIPPLE, SEE NOTES 4 & 6

REDUCED PRESSURE BACKFLOW DEVICE

UNION, SEE NOTE 4 (ONLY ONE REQUIRED)

WATER AGENCIES' STANDARDS

) ALL ABOVE GROUND PIPING, UNIONS, ELBOWS, & NIPPLES SHALL BE SOLDERED OR THREADED BRASS

TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 15112 OF THE SPECIFICATIONS

) BPD & APPURTENANCES INSTALLED FOR THE USE OF RECYCLED WATER SHALL BE IDENTIFIED

3m (10') MAX SEE NOTE 5 150mm (6")

REFER TO SECTION 15112 OF THE SPECIFICATIONS

THE RISER TO THE BPD EXCEEDS 450mm (18").

RECOMMENDED BY THE BACKFLOW MANUFACTURER

AS DESCRIBED IN SECTION 15151 OF THE SPECIFICATIONS

MATERIALS SHALL BE SELECTED FROM THE APPROVED MATERIALS LIST

9mm THRU 50mm (3/4" THRU 2") REDUCEI

PRESSURE BACKFLOW PREVENTION DEVICE

PRIOR TO ACCEPTANCE BY THE DISTRICT

METER BOX & METER ASSEMBLY SEE WS-01 & WS-02

90° ELL, SEE NOTE 4

2) SCH 80 PVC, BRASS OR COPPER PIPE

CONCRETE THRUST BLOCK, SEE WT-01

CONCRETE SLAB, MINIMUM 100mm (4") THICK x 450mm (18") WIDE

ACCESSIBLE FOR INSPECTION & REPAIR

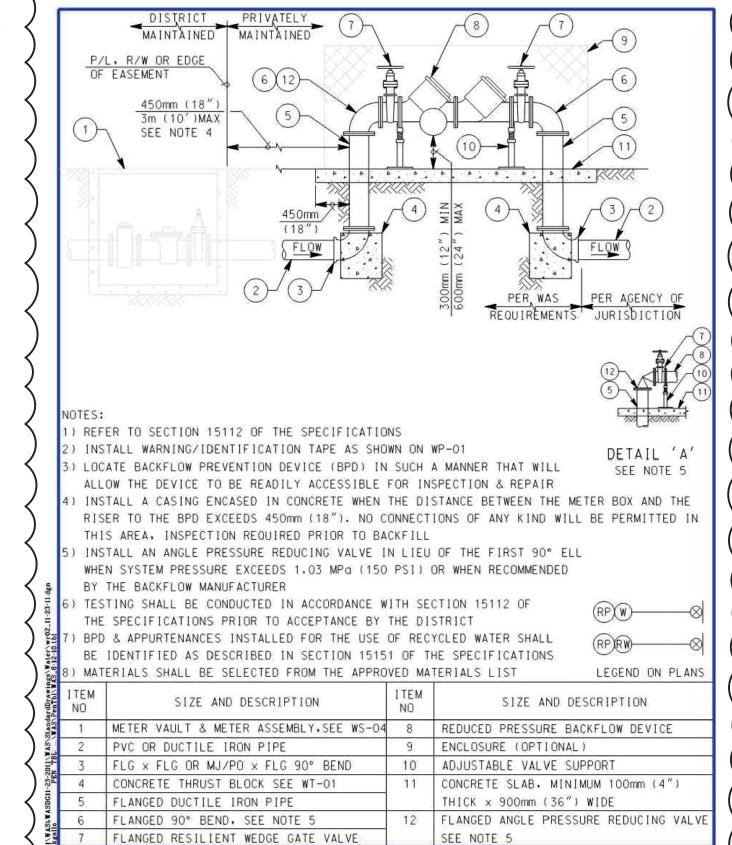
2) INSTALL WARNING/IDENTIFICATION TAPE AS SHOWN ON WP-01

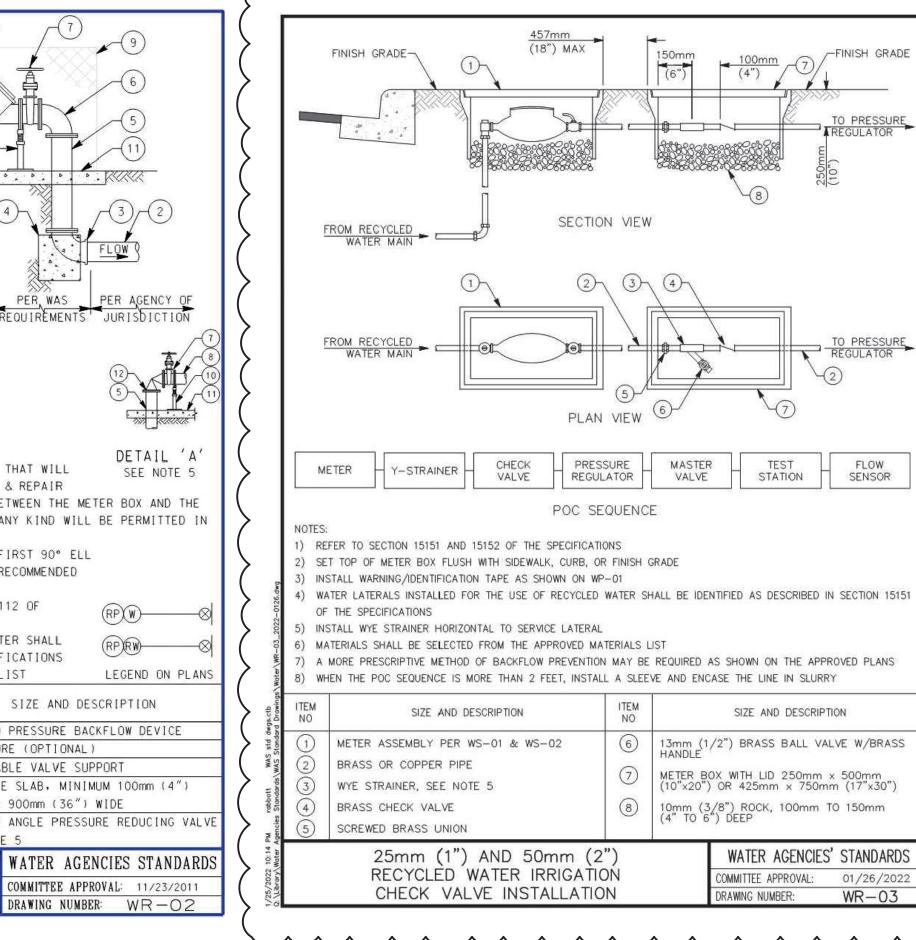
3. ALL SYMBOLS ARE TYPICAL

NOTES:

4. PAINT REMOTE CONTROL VALVE AND FITTINGS WITH APPROVED OTAY WATER DISTRICT PURPLE COLOR.

PRESSURE REGULATING FILTER ASSEMBLY SECTION





LEGEND

75mm (3") AND LARGER REDUCED

PRESSURE BACKFLOW PREVENTION DEVICE

1 PURPLE PLASTIC RECT. VALVE BOX WITH BOLT DOWN PURPLE LID, USE S.S. BOLT, NUT AND WASHER, BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "RCV" & CONT. STA. # ONTO LID

DRAWING NUMBER: WR-02

(2) FINISH GRADE IN TURF AREAS

IRRIGATION CONTROL VALVE ASSEMBLY (BALL VALVE, RCV REMOTE CONTROL VALVE WITH INTEGRATED VALVE MODULE, AND PRESSURE REGULATING 40 PSI FILTER). SEE LEGEND FOR SPECIFICATION

(4) FINISH GRADE IN SHRUB AREAS

- (5) 36" WIRE / CABLE LOOP
- (6) PVC SCH 80 NIPPLES (TYP.) LENGTH AS REQUIRED
- 7 PVC SCH 80 (S X T)

- 9 PVC SCH 80 TEE OR ELL (SLIP)
- (10) WIRE / CABLE IN 3/4" DIA. CONDUIT
- (11) RECYCLED WATER VALVE I.D. TAG. (THREAD NYLON TIE THROUGH HOLE IN TAG)
- (12) PURPLE LATERAL LINE
- (13) PVC SCH 80 FEMALE ADAPTER
- (14) PVC SCH 80 UNION (TWO)
- (15) FILTER FABRIC (MIRAFI #140N). WRAP 1 LAYER AROUND BOX COVERING HOLES WITH $\frac{1}{4}$ " GALV. WIRE MESH, OR DURA DRY **BOX WITH SNAP-ON BOTTOM FEATURE**
- 16) 3/8" ROCK, 2 CUBIC FEET, TYP.
- (17) RAINBIRD WC20 OR APPROVED CONNECTOR PER CONTROLLER MANUFACTURER SPECIFICATIONS.
- (18) PVC SCH 80 PIPE

NOT TO SCALE

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED

CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED

WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO

FIVE (5) WORKING DAYS PRIOR TO THE START OF

INSPECTION NOTE

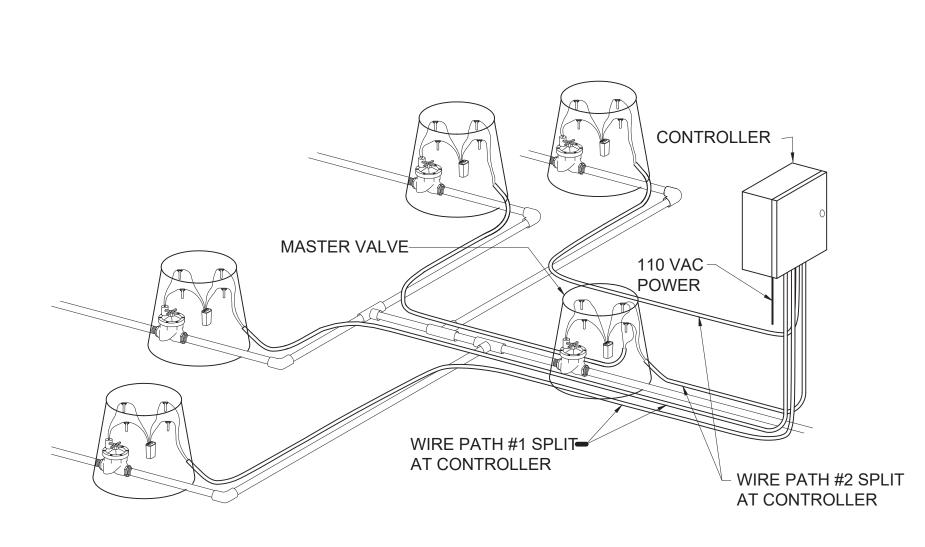
REJECTION AND REMOVAL.

COLOR CODING

		LANDSCAPE				
AS BUILT	UTILITY NOTE	SED JP WHALEW SCH		CONSULTANT	BID DOCUMENTS - OCTOBER 11, 2021	LANDSCAPE DWG NO.
SIGNATURE R.L.A. No. Printed Name My Registration Expires Discipline	ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.	Siglature OS/J0/2024 Renewal Bate 8/1/22 Date OF CALIFORNIA		3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	IRRIGATION DETAILS	LI-14 SHEET 14 OF 16 W.O. NO. PRK-0330
CONSTRUCTION RECORD	REFERENCES By REVISIONS	Date App'd DATUMS	SCALE Designed By: Drawn By: Checked By: Submitted:	APPROVED BY: DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT	DRAWING NO.
INSPECTOR:	15350 DELTA A IRRIGATION REVISIONS 'S 16022	08/18/22 VERTICAL: 446.361 (NAVD 88) HORIZONTAL: I.E. N78"21'27"E NAD 83	HORIZONTAL HH HH BE N/A Plans Prepared Under Supervision Of: Date: 10/11/2021 VERTICAL BROOKE JP. WHALEN TO THE PROPERTY OF	DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE	OTAY RANCH VILLAGE 2 P-2 PARK, GROVE PARK	19010-52

PERMIT NO. PLR-19-012

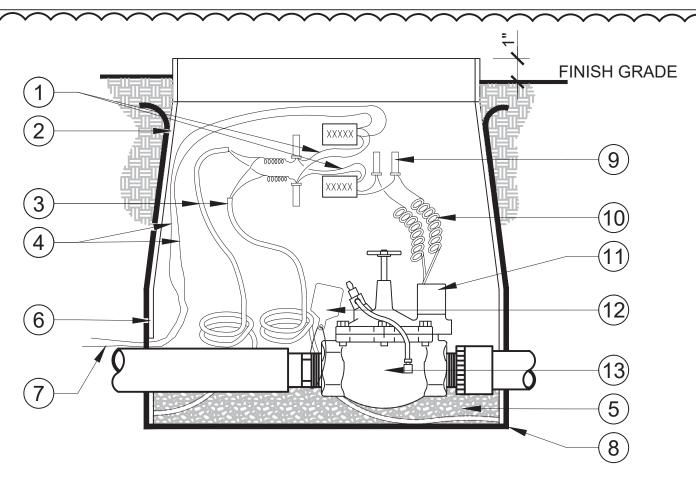
#



NOTES:

- ALL WIRE CONNECTIONS SHALL BE MADE WITH APPROVED CONNECTORS (RAINBIRD WC20 OR APPROVED CONNECTOR PER CONTROLLER MANUFACTURER SPECIFICATIONS).
- MAKE ALL WIRE SPLICES IN VALVE BOXES.
- LEAVE A MINIMUM OF 12" EXTRA WIRE AT ALL SPLICE POINTS.
- REFER TO CONTROLLER MANUFACTURER FOR SPECIFIC DIRECTIONS.

WO WIRE PATH DIAGRAM



LEGEND

- (1) BLUE WIRES TO TWO WIRE **COMUNICATION PATH**
- (2) PURPLE VALVE BOX AND PURPLE (3) TWO WIRE COMMUNICATION
- FOR WIRE LENGTH (4) #6AWG SOLID GROUND WIRE CONNECTED TO GROUND ROD USING BRASS CLAMP, WHERE REQUIRED, WHERE REQUIRED
- (5) 3/8" GRAVEL

NOT TO SCALE

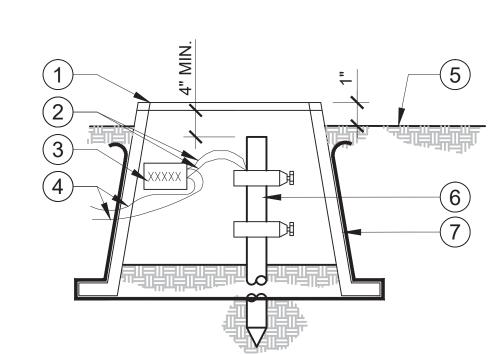
(6) BOX EXTENSION (LENGTH AS

- GROUND WIRE TO CONNECT TO GROUNDING ROD
- FILTER FABRIC (MIRAFI #140N, OR APPROVED EQUAL). WRAP 1 LAYER AROUND BOX COVERING **HOLES** PATH. REFER TO NOTES BELOW
 - (9) WIRE CONNECTORS. RAINBIRD
 - (10) EXPANSION COILS
 - (11) SOLENOID WITH INTEGRATED VALVE MODULE
 - TAG. (THREAD NYLON TIE

(13) ELECTRIC VALVE WITH **DECODER AS REQUIRED**

NOTES:

- 1. WIRE COIL 36" LENGTH (ITEM
- 2. ALL CABLE / WIRE SHALL BE INSTALLED IN CONDUIT / SWEEPS INTO VALVE BOX
- DETAIL MAY NOT REFLECT ALL COMPONENTS FOR VALVE BOX INSTALLATION. PROVIDE BRICK FOR BASE OF BOX.

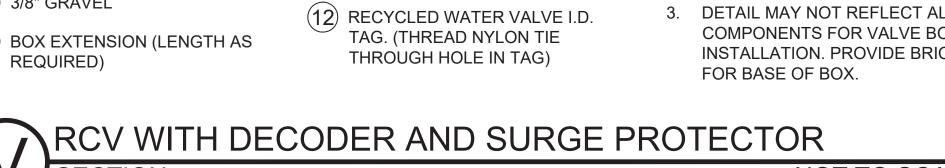


LEGEND

- (1) 10" PURPLE ROUND VALVE BOX AND PURPLE LID
- (2) #6 AWG SOLID GROUND WIRE CONNECTED TO GROUND ROD USING BRASS CLAMP
- (3) SURGE DEVICE
- (4) TWO WIRE PATH
- (5) FINISH GRADE
- (6) 5/8-INCH X 8 FT. COPPER CLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIANGULAR PATTERN SPACED A MINIMUM OF 16 FT. APART FROM EACH OTHER GROUNDING GRID TO HAVE MAXIMUM RESISTANCE REQUIRED BY CONTROL SYSTEM MANFACTURER'S SPECIFICATIONS
- (7) FILTER FABRIC (MIRAFI #140N, OR APPROVED EQUAL). WRAP 1 LAYER AROUND BOX **COVERING HOLES**

NOTES:

- 1. REFER TO MANUFACTURER'S SPECIFICATIONS FOR GROUND ROD INSTALLATION
- 2. ALL CABLE / WIRE SHALL BE INSTALLED IN CONDUIT SWEEPS INTO VALVE BOX.
- 3. DETAIL MAY NOT REFLECT ALL COMPONENTS FOR VALVE BOX INSTALLATION. PROVIDE BRICK FOR BASE OF BOX.
- PRIOR TO ACCEPTANCE OF THE 2-WIRE SYSTEM, THE RESISTANCE OF THE 2-WIRE PATH MUST BE TESTED IN THE PRESENCE OF A CITY INSPECTOR. TEST MUST INDICATE A READING OF 10 OHMS OR LESS OR SYSTEM WILL NOT BE ACCEPTED



GROUNDING ROD AND SURGE DEVICE NOT TO SCALE

WATER AGENCIES' STANDARDS STANDARD SPECIFICATIONS (DATE: 08/03/2018)

SECTION 15152 RECYCLED WATER FACILITIES (ONSITE)

PART 1 GENERAL 1.01 DESCRIPTION

udes special provisions, materials, and identification of onsite (post meter, private) recycled water irrigation or plumbing systems. The purpose o this section is to provide Rules and Regulations and establish procedures and specifications for the development and operation of recycled water systems in the District's service area.

1.02 REFERENCE STANDARDS

- The publications listed below form part of this specification to the extent referenced and are referred to in the text by the basic designation only. Reference shall be made to the latest edition of said standards unless otherwise called for
- AWWA American Waterworks Association Guidelines for Distribution of Non- potable Water CCR - California Code of Regulations Title 22 and Title 17.
- DOHS Department of Health Services Recycled Water Plan Check and Inspection Manual, County of San Diego, Department of Environmental Health

1.03 RELATED WORK SPECIFIED ELSEWHERE

irrigation and plumbing systems.

- WAS Standard Drawings
- WAS Standard Specification 01000
- 1.04 OFFSITE AND ONSITE CRITERIA Recycled water facilities are separated into two categories:
- A. "Offsite" (pre-meter, public) recycled water facilities consist of those facilities which are on the upstream side of the meter. These facilities are, or will be, owned,
- operated and maintained by the District. Specification Section 15151 details the requirements for construction of Offsite Recycled Water Facilities B. "Onsite" (post-meter, private) recycled water facilities consist of those facilities which are on the downstream side of the water meter. These are facilities which will be owned, operated and maintained by the customer. This specification will detail the requirements for the design, installation and testing of onsite recycled

1.05 POLICY The District operates and maintains a recycled water distribution system within its service area enabling it to provide disinfected tertiary treated recycled water for a

- variety of beneficial uses. Recycled Water usage as an alternate will conserve an equal amount of potable water for domestic use. The beneficial use of recycled water is regulated by the California State Water Resources Control Board (CWRCB). California Water Code Section 13551 establishes a State policy to encourage the use of recycled water. Permission to use recycled water is based on the ability to adequately treat wastewater to the point that the recycled water (effluent) meets or exceeds the requirements of existing Title 22, Chapter 3, regulations of the California Code of Regulations. Title 22 was promulgated by the State of California Department of Health Services (DOHS) to ensure proper health protection and specify the treatment degree to match the intended applications.
- In accordance with waste discharge requirements for water reclamation projects, the Regional Water Quality Control Board, San Diego Region, (RWQCB) requires that Rules and Regulations for facilities using recycled water be established.

1.06 APPROVED USE

DATE COMPLETED

- These Rules and Regulations pertain to recycled water service to lands and/or improvements lying within the legal boundaries of the District unless otherwise stated. It is the intent of the District to provide recycled water service in accordance with these Rules and Regulations to all areas identified in the District's Water Reclamation Master Plan, including all subsequent revisions for the use of recycled water. Recycled water service shall be provided to the service area when related transmission distribution facilities are completed and service becomes available.
- In accordance with the goals of the District, the uses of recycled water include only those uses approved by the State of California Department of Health Services (DOHS), the County of San Diego Department of Environmental Health (DEH) and for which Title 22 of the California Code of Regulations provides treatment requirements. All potential applications of recycled water shall be reviewed and approved by the District prior to installation of facilities. Prior to approval and at its discretion, the District may set forth specific requirements as conditions for providing service and/or require specific prior approval from the appropriate regulatory agencies.
- The facilities shall be constructed in accordance with the procedures and requirements of the District. No recycled water mains or connections to the recycled water mains shall be installed unless shown on the Approved Plans.

1.07 CONDITIONS OF SERVICE

- Recycled water service shall be provided by the District only if such service is obtained in the manner provided in these Rules and Regulations. Recycled water service shall be available, provided, and used in accordance with other codes, rules, and regulations referenced in this specification. If any of the following conditions of service are not satisfied at all times recycled water service may be revoked by the District.
- A. Financial: Conditions relating to service rates, fees and billing shall be established by the Board of Directors B. Operational:
- 1. Liability: The District shall not be liable for any water-related damage resulting from, but not limited to:
- a. defective plumbing
- b. broken or faulty services
- c. onsite facilities failures d. high or low pressure conditions
- e. interruptions of service
- f. unauthorized connections
- 2. Service: All recycled water will be provided to the user as specified in the Application/Permit For Recycled Water Service. Recycled water use will be subject to the same restrictions as stated in these specifications and the regulatory requirements of DOHS and DEH.
- C. Regulatory: Recycled water service may be suspended whenever the quality of the recycled water does not comply with the requirements of the regulatory
- agencies or at any time these Rules and Regulations For Recycled Water Service are violated.

1.08 DESIGN CRITERIA - ONSITE RECYCLED SYSTEMS

- A. The design of onsite recycled water facilities, including the preparation of plans and specifications, shall be under the responsibility of a licensed Landscape
- Architect or Civil Engineer registered with the State of California. A Declaration of Responsible Charge shall appear on the title sheet of the plans. B. The design of onsite recycled facilities shall conform to the most current provisions set forth herein and to any other conditions, standards, and requirements set forth by the District.
- C. In those areas where recycled water is not immediately available, and the District has determined that recycled water will be supplied in the future, the onsite facilities shall be designed to use recycled water. Provisions shall be made, as directed by the District, to allow for connection to the recycled distribution main when it becomes available. In the interim, potable water shall be supplied through a temporary potable water connection using a master reduced pressure principal backflow device installed per these Standard Specifications. When recycled water becomes available, the Owner shall remove the backflow prevention device in the presence of, and as directed by, the District Engineer. The onsite system will be connected to the recycled water distribution main per the requirements of the Standard Specifications at the time the connection is made.
- D. Onsite recycled water systems shall be designed to include backflow prevention per the requirements of the Standard Specifications. In some cases, more stringent backflow protection may be required.
- E. The recycled water system shall be separate and independent of any potable water system. Cross connections between potable water facilities and recycled water facilities are prohibited.
- F. Hose bibs on recycled water facilities are prohibited.

SCALE

HORIZONTAL

N/A

VERTICAL

N/A

HORIZONTAL: I.E. N78"21'27"E NAD 83

- G. Fire hydrants, wharf heads, or other appurtenances shall only be included in the design when these appurtenances are expressly approved by the District and
- H. Drinking fountains shall be protected from the spray of recycled water. There shall be no direct contact of recycled water with a drinking fountain. Protection of drinking fountains can be accomplished either by maintaining a horizontal separation of at least 9m (30') between the drinking fountain and the nearest spray type emitter, spray head modification, or by the use of a covered fountain. The manner used to protect drinking fountains from the spray of recycled water shall be approved by the District and DOHS.
- I. Potable and recycled lines shall not to be installed in the same trench. Recycled lines shall be designed to be installed below the potable lines where the two pipelines run parallel to each other. Where this is not possible, the recycled line shall be installed in a casing. Details of this installation shall be clearly drawn on
- J. Onsite recycled water irrigation systems shall be designed to meet the peak moisture demand of the plant material to be irrigated. The use of moisture sensors
- is encouraged, but not mandatory. K. Onsite recycled water irrigation systems shall be designed to apply irrigation water in a manner compatible with the infiltration rates of the soil types within the approved use area. Evidence that infiltration rates have been assessed shall be included with the design. Where varying soil types are present, the system
- design shall be compatible with the lowest infiltration rate present. L. Onsite recycled water systems shall be designed to prevent discharge onto areas not under control of the Owner. Appropriate sprinklers, bubblers, emitters, rotors, etc., shall be employed in the design to confine the discharge to the approved use area. The design shall avoid spray patterns which discharge onto obstructions that tend to concentrate water which results in ponding and/or runoff.

Drawn By

BROOKE JP. WHALEN BURGE PW hollow, LA No

Checked By:

Date: 10/11/2021

Submitted:

CONTINUED - SEE NEXT LANDSCAPE DWG NO. L1-16 / SHEET 54



APPROVED BY:

CONSULTANT

3916 Normal Street San Diego, CA 92103

DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE

DATE:

IRRIGATION DETAILS AND WATER **AGENCIES' STD SPECS SECTION 15152**

BID DOCUMENTS - OCTOBER 11, 2021

DRAWING NO.

LANDSCAPE DWG

OTAY RANCH VILLAGE 2 P-2 PARK, 19010-53 GROVE PARK SHFFT 53 OF

INSPECTION NOTE

REJECTION AND REMOVAL.

COLOR CODING

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED

CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED

WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO

FIVE (5) WORKING DAYS PRIOR TO THE START OF

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF

DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE

COLORED PURPLE. THE EXPOSED SURFACE SHALL BE

COLORED THROUGH THE USE OF INTEGRALLY MOLDED

PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE

PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE

PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

AS BUILT			UTILITY NOTE					EN ST. A.		
SIGNATURE	DATE ATURE R.L.A. No.		ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE PLOTTED FROM RECORD DATA AT THEIR APPROXIMATE LOCATIONS. UNDERGROUND FACILITIES MAY EXIST WHICH HAVE NOT BEEN REPORTED OR ARE NOT					Siglature 09/10/2024 Renewal Bate 8/1/22 Date		
Printed Name / Registration Expires			OF RECORD. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PERTINENT UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.					PAR OF CALIFORNIA		
CONSTRUCTION RECORD		F	REFERENCES	Ву	REVISIONS	Date	App'd	DATUMS		
NTRACTOR:		MAP # 15350)		DELTA A IRRIGATION REVISIONS	08/18/22		VERTICAL: 446.361 (NAVD 88)		

DWG. #'S 16022

Designed By:

HH

CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT

PERMIT NO. PLR-19-012

- M. Onsite recycled irrigation systems shall be designed to provide a physical separation between adjacent areas irrigated with potable water. The means of separation shall be provided by either a distance of 3m (10'), concrete mow strips, approved fence or other approved means. Where concrete mow strips or other means are used, they shall be shown on the plans.
- N. Onsite recycled water systems shall be designed to operate during periods of minimal public use of the area. The total time required to irrigate the design area
- shall not exceed nine (9) hours in any twenty four (24) hour period. The system shall be designed to operate between the hours of 9 PM and 6 AM. O. Onsite recycled water system designs shall include automatic system control devices which can be easily adjusted to minimize ponding and runoff.
- P. Onsite recycled water system design plans shall contain the following information for each meter requested: 1. Meter location and size
- 2. Gross and net irrigation area served by each meter (sq ft or acres)
- 3. Peak flow through the meter in liters/minute (gpm)
- 4. Estimate of the yearly demand (acre-feet)
- 5. Design operating pressure at the meter in Kpa (psi)
- Q. Onsite recycled water system design plans shall contain a legend showing the pertinent data for the materials to be used in the system construction. Included shall be a pipe schedule (listing pipe sizes and materials of construction), valve types (including quick- coupling type valves), and the following information for each type of sprinkler device:
- 1. Manufacturer and model number
- 2. Sprinkler radius in meters (feet)
- 3. Operating pressure in Kpa (psi)
- 4. Flow in liters/minute (gpm)
- 5. Sprinkler pattern
- R. Onsite recycled water design plans shall contain the following detailed information:
- Points of connection
- 2. Routing of all pipes
- Gate valves
- 4. Control valves Quick-coupling valves
- 6. Routing of control wires
- 7. Control stations
- 8. The area controlled by each control station
- 9. Signage plan and sign detail
- 10. Cross connection test station locations and detail
- 11. Location of mow strips, fences, walls, or other barriers
- 12. Adjacent parcels, lots or home sites irrigated with potable water
- S. Onsite recycled water design plans shall clearly detail backflow prevention devices, all potable water lines, buildings, walls, exterior drinking, and decorative fountains, swimming pools, playgrounds, or any other permanent facilities in the design area. If none of the items listed in this paragraph are present in the design area, it shall be specifically stated on the plans that none exist.
- T. Onsite recycled water design plans shall clearly indicate the following minimum top of pipe depth requirements:
- 1. Intermittent pressure lines 50mm (2") in diameter and smaller: 300mm (12") deep.
- 2. Constant pressure lines less than 150mm (6") in diameter: 450mm (18") deep.
- 3. Constant pressure lines 150mm (6") in diameter and larger: 750mm (30") deep.
- U. The District's Recycled Water Use Notes are to be included on all onsite recycled water system design plans. These notes, as appended, may be expanded or otherwise modified as directed by the District.
- V. The name(s) and 24-hour contact telephone number for the party responsible for operation and maintenance of the system shall appear on the cover sheet of the
- W. An Inspection Note shall be shown on each page of the design plans. The note shall be as follows: The District Inspection Division shall be notified 48 hours (2 working days) prior to the start of construction. All work performed without benefit of inspection shall be subject to rejection and removal.
- 1.09 WARNING/IDENTIFICATION TAPE
- All irrigation pipe, both potable and recycled, shall include the installation of Warning/Identification Tape.

PART 2 MATERIALS

2.01 ONSITE RECYCLED WATER FACILITIES

- A. Pipe shall be solid purple-colored PVC material conforming to the following:
- 1. 75mm (3") or smaller pipe shall conform to ASTM-D1784. Type 1, Grade 1, PVC- 1120 for schedule 40 or 80, or
- ASTM-D2241, Type 1, Grade 1, PVC-1120 for SDR rated pipe. Ends shall be solvent welded joints conforming to ASTM- D2672. 2. 100mm (4") and larger pipe shall conform to either AWWA C900 or C905 with elastomeric ring bell-type pipe ends, conforming to ASTM-D3139. Where
- purple pipe is unavailable, 0.203mm (0.008" or 8 mils) purple plastic sleeve material maybe used in accordance with Section 15151.
- 3. Identification markings shall be continuous on two sides of the pipe. Markings shall include the nominal pipe size, PVC type, ASTM or AWWA designation, pressure rating and the words "CAUTION-RECYCLED WATER".
- B. Fittings for PVC pipe shall conform to the following:
- 1. 75mm (3") and smaller pipe shall use solvent weld joint type fittings, minimum Schedule 40, with a working pressure rating no lower than that of the pipe. Schedule 40 fittings shall conform to ASTM-D2466 and Schedule 80 fittings to ASTM-D2464 and D-2467. PVC solvent cement shall conform to
- 2. 100mm (4") and larger pipe shall use either mechanical joint ductile-iron Class 350 fittings conforming to AWWA C153; or grip tite fittings conforming to
- C. Warning tape shall be an inert plastic film formulated for prolonged underground conditions. The minimum thickness shall be 0.102mm (0.004" or 4 mils) and the overall width shall be a minimum of 75mm (3"). The tape shall have purple printing on a silver background or black printing on a purple background with the words "CAUTION: RECYCLED WATERLINE BELOW".
- D. Quick-coupling valves shall be acme thread type for operation with a special coupler key. They shall be constructed of brass with a solid purple-colored locking rubber or vinyl cover. The locking cover shall have the warning "NON-POTABLE-DO NOT DRINK" in English and Spanish, and the International "DO NOT DRINK" symbol. The warnings shall be permanently molded into the cover.
- E. Sprinklers, rotor heads and other types of dispersion heads shall have the exposed surface colored purple. The exposed surface shall be colored through the use of integrally molded purple plastic or permanently attached purple plastic ring or disc.
- F. Valve boxes shall be per industry standards with solid purple-colored lids as a minimum. The entire box may be molded from purple-colored PVC. The lids shall have the warning "NON-POTABLE- DO NOT DRINK" in English and Spanish and the International "DO NOT Drink" symbol. The warnings shall be permanently
- G. Valves shall have their exterior surface painted purple and be tagged with identification tags. The purple paint shall be as listed on the Approved Materials List. Identification tags shall be 75mm x 100mm (3" x 4") weatherproof purple plastic. The plastic tags shall be imprinted in black permanent markings with the words "Caution: Recycled Water- Do Not Drink" on one side and "Peligro: Agua Impura- No Beber" on the opposite side. H. Warning labels and signs shall be required and installed per the approved signage plans. Labels and signs shall be submitted to the District Engineer for approval
- prior to installation. The labels and signs shall notify that the system contains recycled water that is unsafe to drink. They shall be in English and Spanish with the international "Do Not Drink" symbol. As a minimum, signs shall be installed at impoundments, ingress and egress points, and on the exterior front panel of
- I. Strainers shall be the same nominal size as the service meter and shall have a ball valve on the strainer leg for flushing. 50mm (2") and smaller wye pattern strainers shall be bronze body, in-line type with stainless steel screens. Strainers shall have a 13mm (1/2") bronze ball valve installed on the strainer's wye leg. 75mm (3") and larger wye pattern strainers shall be cast-or ductile-iron and have the size ball valve recommended by the manufacturer installed on the
- J. Check valves shall be in-line, spring-loaded, bronze-body construction. Check valves shall be globe, wafer, or dual check type valves with stainless steel springs. Check valves shall be the same size as the service meter
- K. A more stringent method of backflow prevention may be required when a fertilizer or pesticide injection system is shown on the Approved Plans.
- 2.02 ONSITE POTABLE WATER FACILITIES
- A. Pipe shall be white-or blue-colored PVC material conforming to this specification.
- B. Quick-coupling valves shall not be acme thread type. They shall have a cover made of brass, yellow rubber or vinyl.
- C. Onsite systems distributing potable water shall not have purple markings.
- 2.03 WARNING/IDENTIFICATION TAPE
- Warning/Identification Tape materials shall conform to Section 15000.

PART 3 EXECUTION

3.01 ONSITE RECYCLED WATER FACILITIES

- A. Onsite recycled water facilities shall not be installed until the plans have been approved by the District Engineer and the San Diego County, Department of Environmental Health Services (DOHS), and a pre-construction meeting has been held with the District Inspection Division. If any portion of the onsite recycled system is installed prior to plan approval and/or inspection, all or any portion of the system shall be exposed and corrected as directed by the District Engineer.
- B. Onsite recycled water facilities shall be installed as shown on the approved plans. Deviations from these plans by the installer shall not be permitted until the revised plans have been submitted to, and approved by, the governing regulatory agencies.
- C. Installation of onsite recycled water facilities shall conform to the following:
- 1. The recycled water system shall be separate and independent of any potable water system. Cross connections between potable water facilities and onsite recycled water facilities are prohibited.
- 2. Hose bibs on recycled water facilities are prohibited.
- 3. Drinking fountains shall be protected from the spray of recycled water in a manner approved by the governing regulatory agencies and as directed by the
- District Engineer. 4. Conditions that cause overspray, ponding and runoff shall be limited or prevented.
- D. Onsite recycled water and potable water facilities shall be installed in accordance with the following criteria:
- 1. The horizontal separation between onsite recycled and potable lines shall be a minimum of 1200mm (48"), measured between outside diameters.
- 2. In general, onsite recycled water lines shall be installed below potable water lines, with a minimum vertical separation of 300mm (12"), measured between outside diameters. Exceptions to this general requirement are as follows:
 - a. Recycled water lines may be installed above potable water lines where the recycled lines (laterals) are intermittently pressurized. No special construction requirements are necessary, provided the 300mm (12") vertical separation is maintained.
- b. Constantly pressurized recycled water lines may be installed above potable water lines providing the recycled pressured line has an automatic flow control/shut-off device installed, or the recycled line is sleeved. An automatic flow control/shut-off device shall terminate all flow to a lateral automatically should the flow exceed a preset maximum Kpa (gpm). Sleeving shall extend 1.5m (5') each side from the center-line of the potable line, for a total length of 3m (10'). The sleeve shall be purple PVC. In all cases, the 300mm (12") vertical separation shall be maintained.
- E. Onsite recycled water systems shall be installed to prevent discharge onto areas not under control of the Owner. Appropriate irrigation components shall be employed in the installation to confine the discharge to the approved use area. The installation shall avoid spray patterns which discharge onto obstructions that tend to concentrate water to produce ponding and/or runoff.
- F. Onsite recycled water systems shall be installed to operate during periods of minimal public use of the area. The total time required to irrigate the design area shall not exceed nine (9) hours in any 24-hour period. The system shall be installed to operate between the hours of 9 PM and 6 AM.
- G. Onsite recycled water systems shall be installed to the following minimum top of pipe depth requirements:
- 1. Intermittent pressure lines 50mm (2") and smaller 300mm (12").
- 2. Constant pressure lines smaller than 150mm (6") 450mm (18").
- 3. Constant pressure lines 150mm (6") and larger 750mm (30").
- H. Warning/Identification Tape shall be installed on all onsite potable and recycled lines as called for in Section 15000.
- I. Hydrotesting shall be performed on all constant pressure lines in the presence of the District Engineer. The test pressure shall be a minimum of 345 Kpa (50 psi) above the rating of the pipe. The two hour pressure test will consist of a one hour pump up period and a one hour hold period. No leakage (drop in pressure) shall be allowed. If leakage exceeds this rate, the leak points shall be located and repaired, and the hydrotest repeated until there is zero leakage.
- J. Only potable water shall be used for hydrotesting, flushing, the operational test and the cross connection test (if required). Potable water shall be supplied through a separate temporary water meter obtained from the District and located at a District-approved potable water source. A reduced pressure principal backflow device shall be installed at ground level immediately downstream of the temporary potable water meter. A temporary high line shall be installed to supply the proposed recycled irrigation system during the construction and testing period.
 - K. A wye strainer and check valve shall be installed in accordance with Standard Drawing WR-03 selected from the Approved Materials List.
 - 1. For meter sizes 19mm (¾") through 50mm (2"), the strainer and check valve shall be installed in a separate 25mm (1") meter box abutted to the service
 - 2. For meter sizes larger than 50mm (2"), the strainer and check valve shall be installed in a separate vault adjacent to meter vault. The vault shall be of sufficient size to provide adequate room for maintenance and removal of the strainer and check valve.
 - The strainer and check valve shall be installed and inspected prior to service being established.
 - L. Cross connection test stations shall be installed at the locations shown on the Approved Plans and detailed on the Standard Drawings. In general, one test station shall be installed directly downstream of each point of connection, downstream of any pressure reducing valves. Additional cross connection station(s) may be required as indicated on the Approved Plans.
 - M. A controller recycled irrigation map shall be prepared and submitted to the District prior to commencing service. The map shall be prepared as follows: 1. Provide one map for each automatic controller showing the area covered. The map shall be 275mm x 425mm (11" x 17") in size.
 - 2. The map is to be a reduced drawing of the actual system. The line weights and lettering on the original controller map drawing shall be so drawn that, when reduced, it is clearly legible.
 - 3. The map shall be a blackline print with a different color used to show area of coverage for each station and subsystem.
- N. The owner or owner's representative shall contact the District's Inspection Division and arrange for a coverage test inspection. The owner or owner's representative must be in attendance along with persons capable of making system adjustments. If modifications to the system are required, other than minor adjustments, the owner will be notified in writing of the changes required. To avoid suspension of service, the modifications must be made in a timely manner. All modifications to the system are the responsibility of the owner, applicant, or customer and said owner, applicant or customer shall pay all costs associated with such modifications.
- O. Either prior to or at the time of the coverage test, a Final Inspection shall also be performed. The following items must be completed to the satisfaction of the
- District Engineer before permanent service will be established: 1. Application for recycled service has been made to the District.
- 2. Warning signs and labels are installed.
- 3. Quick coupling valves, valve boxes, controllers and other system components are clearly identified with the proper markings indicating distribution of either
- recycled water or potable water.
- 4. Windblown spray, runoff and ponding have been limited or prevented. 5. Controller clocks are set to operate during approved hours.
- 6. Controller maps have been submitted to the District.
- 7. Site supervisor and twenty four (24) hour contact phone number identified.
- P. In those areas where recycled water is not immediately available, but the District has determined that recycled water will be supplied in the future, the onsite facilities shall be installed to use recycled water. Provisions shall be made, as directed by the District, to allow for connection to the recycled distribution main when it becomes available. In the interim, potable water shall be supplied through a temporary potable water connection installed in accordance with the District's Standard Specifications. When recycled water becomes available, the Owner shall remove the backflow prevention device in the presence of and as directed by the District Engineer, and shall connect the onsite system to the recycled water service lateral.

3.02 OPERATION AND MAINTENANCE A. General:

- 1. The operation, surveillance, maintenance, and repair of all onsite recycled water facilities are the responsibility of the customer. The customer's designated "On- Site Recycled Water Supervisor" shall bear the responsibility for the distribution of recycled water in accordance with the District Rules and Regulations. The District shall receive the following information regarding the individual designated as "On-Site Supervisor": their name, address and telephone number of
- their location during normal working hours, and a telephone number at which they can be reached during off hours. 2. The District must be notified in writing of any change in the information in Section 15152.3.02.A.1 within ten (10) working days.
- B. The customer shall have the following responsibilities pertaining to operation of onsite facilities:
- 1. To ensure that all operations and maintenance personnel are trained and familiarized with the use of recycled water.
- 2. To ensure precautionary measures be taken to minimize direct contact with recycled water. For work involving more than a casual contact with recycled water, employees must be provided with proper protective equipment. Adequate first aid supplies should be available on the premises. All cuts and abrasions should be promptly treated to prevent infection.
- 3. To furnish their operations and maintenance personnel with maintenance instructions, irrigation schedules, controller charts, and as-built plans to ensure proper operation in accordance with these Rules and Regulations.
- 4. To ensure all recycled water facilities are operated and maintained in accordance with these Rules and Regulations and other documents governing recycled water systems within the District. C. The customer shall be responsible for any and all subsequent uses of the recycled water. Operation, maintenance and control measures to be utilized in this
- regard, where appropriate, shall include but are not limited to the following: 1. Operation of onsite recycled water facilities shall be operated to prevent or minimize discharge onto areas not under control of the customer so as to
- 2. Operation of the onsite recycled water facilities shall be during periods of minimal human use of the service area. Consideration shall be given to allow a maximum dry-out time before the irrigated area will be used by the public.
- 3. Utilization of automatic controller systems to minimize ponding and runoff of recycled water. Total sprinkler run times shall not be greater than the time needed to supply the landscape's water requirement. If runoff occurs before the landscape's water requirements are met, the automatic controllers shall be reprogrammed with a greater number of water cycles of shorter duration to meet the requirements. This method of operation is intended to minimize ponding and runoff.

- 4. The customer reporting to the District any and all failures in the recycled water system that cause an unauthorized discharge of recycled water.
- 5. Protection of all drinking fountains located within the approved use area from contact with windblown recycled water spray, direct application through irrigation or other approved uses by location and/or a protecting structure. Protection shall be by design, construction practice and system operation.
- 6. Protection of facilities that may be used by the public. They include but are not limited to, eating surfaces and playground equipment located within the approved use areas. These shall be protected by siting and/or shelter from contact with recycled water to the maximum extent possible. Windblown spray, direct contact through wash down or by irrigation application, or other approved uses are considered sources of recycled water. Protection shall be by design, construction practice and system operation.
- 7. Notification of the District of all updates and proposed changes. Approval by the District and DOHS shall be obtained prior to construction in accordance with District procedures. All updates and proposed changes shall comply with these Rules and Regulations and the governing documents of all other regulatory

D. The customer shall enforce the following prohibitions:

- 1. Cross-connections; Cross-connections, as defined by the California Code of Regulations, Title 17, resulting from the use of recycled water or from the physical presence of a recycled water service, whether by design, construction practice or system operation, are strictly prohibited.
- 2. Hose Bibs: Use or installation of permanent hose bibs on any customer water system that presently operates or is designed to operate with recycled water, regardless of the hose bib construction or identification, is prohibited.
- 3. Runoff: Conditions that directly or indirectly cause runoff of recycled water either within or outside of the approved use area, whether by design, construction practice or system operation, are prohibited.
- 4. Ponding: Conditions that directly or indirectly cause recycled water to pond either within or outside of the approved use area, whether by design, construction practice, or system operation, are prohibited.
- 5. Windblown Spray: Conditions that directly or indirectly permit windblown spray to pass outside of the approved use area, whether by design, construction
- practice, or system operation, are prohibited. 6. Disposal in Unapproved Areas: Disposal of recycled water for any purposes, including approved uses, in areas other than those specifically approved by the
- District and without the prior knowledge and approval of the governing regulatory agencies, is prohibited. 7. Unapproved Uses: Use of recycled water for any purposes other than those specifically approved by the District, is prohibited.

3.03 MONITORING AND INSPECTION

The District shall monitor and inspect the entire recycled distribution facility, including both offsite and onsite facilities. The District shall conduct monitoring programs, maintain records as deemed necessary, inspect onsite facilities for compliance with these Rules and Regulations, and provide reports as requested by other regulating agencies. For these purposes, the District shall have the right to enter upon the customer's premises during reasonable hours to inspect onsite recycled water facilities and approved use areas. Reasonable hours shall include hours when irrigation is occurring. The District, Regional Water Quality Control Board, DOHS and DEH shall have the right to enter upon the customer's premises during reasonable hours, from time to time, to verify that the customer's irrigation practices conform with these Rules and Regulations. Where necessary, keys and/or lock combinations shall be issued upon request to the District to provide such access

3.04 VIOLATION AND NOTIFICATION

- A. The District reserves the right to determine whether a violation of the Rules and Regulations has resulted from any action or occurrence that is the responsibility of a customer. Insofar as the violation of these Standards Specifications constitutes a violation of any regulatory agency requirement, the District shall make its determination with consultation on behalf of the concerned agency.
- B. Specific violations shall include those that directly cause noncompliance with any one of the specific prohibitions as listed in these Rules and Regulations. However, by definition, noncompliance with any condition or conditions of these Rules and Regulations, whether willfully or by accident, shall constitute a
- C. It is the responsibility of the customer to notify the District of any and all failures in the onsite recycled water system whether or not in the customer's opinion the failures resulted in violations. Failures may occur as a result of the customer's action, an action by unauthorized personnel or any non-designated use of the recycled water service. If there are any doubts regarding whether a violation has occurred, the customer should notify the District so that a determination can be
- D. Notification of failures and violations should be made by telephone, as soon as possible, to the District. If the failure occurs after normal business hours, notification should be made no later than 9:00 a.m. on the next regular business day following the occurrence.

- A. If the District's investigation results in the determination that a violation has occurred, then it shall be the responsibility of the customer to initiate corrective action.
- Pertinent violations will be documented and a copy of this notice will be hand-delivered or mailed to the customer. B. A timetable for completing the corrective action should be negotiated with the District by the customer. Such corrections can involve human factors, such as additional training or procedures modifications, as well as physical alterations to the system. Corrections not made in accordance with the timetable shall result in
- the termination of service by shutting off and locking the meter. C. If, in the opinion of the District, the violation constitutes an immediate danger to the public health, then service shall be terminated immediately by shutting off the
- meter or service and locking it. Service shall be resumed only after the violation has been corrected to the satisfaction of the District. D. The customer is to maintain a written log of all system failures and violations, including corrective action taken. The log will be reviewed by the District regularly. 3.06 ADMINISTRATIVE REVIEW

A mandatory administrative review will be conducted to examine customer's irrigation practice if three written violations are issued within a 30-day period. The District and customer or agent is required to present reasons for non-compliance with these Rules and Regulations. The customer shall present a plan for corrective action acceptable to the District and the regulatory agencies. The accepted plan and implementation schedule shall be adhered to or service may be suspended.

END OF SECTION

INSPECTION NOTE

OTAY WATER DISTRICT INSPECTION SHALL BE NOTIFIED FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AT (619) 670-2241. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.

COLOR CODING

SPRINKLERS, ROTOR HEADS AND OTHER TYPES OF DISPERSION HEADS SHALL HAVE THE EXPOSED SURFACE COLORED PURPLE. THE EXPOSED SURFACE SHALL BE COLORED THROUGH THE USE OF INTEGRALLY MOLDED PURPLE PLASTIC OR PERMANENTLY ATTACHED PURPLE PLASTIC RING OR DISC. ALL SHRUB HEADS SHALL HAVE PURPLE CAPS. DECAL ON RISERS WILL NOT BE ACCEPTED.

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SIGNATURE ———————————————————————————————————	No RECORD DATA AT THEIR APPLEADANCE RECORD DATA AT THEIR APPLEADANCE FACILITIES MAY EXIST WHICH OF RECORD. CONTRACTOR	N ON THESE PLANS ARE PLOTTED FROM ROXIMATE LOCATIONS. UNDERGROUND HAVE NOT BEEN REPORTED OR ARE NOT SHALL VERIFY THE LOCATION OF ALL PERTINENT TO THE START OF CONSTRUCTION.	Siglature OSCIVEDE Reneval Bate 8/1/22 Date OF CALIFORNIA			ktua	3916 Normal Street San Diego, CA 92103 619.294.4477 www.ktua.com	WATER AGENCIES' STANDARD SPECIFICATIONS SECTION 15152
CONSTRUCTION RECORD	REFERENCES B	REVISIONS	Date App'd DATUMS	SCALE	Designed By: Drawn By: Checked By:	Submitted: APPROVED	BY: DATE:	CITY OF CHULA VISTA DEVELOPMENT SERVICES DEPARTMENT
CONTRACTOR:	MAP # 15350	DELTA A IRRIGATION REVISIONS	08/18/22 VERTICAL: 446.361 (NAVD 88)	HORIZONTAL F	HH BE	By:		OTAY RANCH VILLAGE 2 P-2 PARK,
DATE COMPLETED:	DWG. #'S 16022		HORIZONTAL: I.E. N78"21'27"E NAD 83	VERTICAL	BROOKE JP. WHALEN WALEN TO STATE STA	Office: DIRECTOR OF	DEVELOPMENT SERVICES OR DESIGNEE	GROVE PARK

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