

	SCALE: 1"=20'	
RDINO COUNTY LAND USE SERVICES	WALL PLAN	ROAD NO.
		FILE NO.
	BLOOMINGTON,CA 92313	SHEET <u>7</u> OF <u>7</u>



DAVS REFORE YOU DI

# OWNER/APPLICANT: **COUNTY OF SAN BERNARDINO** 385 N. ARROWHEAD AVE. 3RD FLOOR SAN BERNARDINO, CA 92415 CONTACT: KENNETH HYLIN PH: (909) 387-5000 KENNETH.HYLIN@RES.SBCOUNTY.GOV

### TOTAL LANDSCAPED AREAS: TOTAL: <u>65,651</u> S.F.

PROJECT TYPE: COMMERCIAL WATER SUPPLY: POTABLE

AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE" APPLICANT'S SIGNATURE DATE

IRRIGATION AND PLANTING INSPECTION NOTE TO CONTRACTOR: THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY. THE LANDSCAPE ARCHITECT AND THE OWNER, AS NECESSARY, TO FACILITATE ALL IRRIGATION AND PLANTING INSPECTIONS REQUIRED BY THE CITY THAT RELATE TO OBTAINING CERTIFICATIONS OF COMPLETION.

> WATER PURVEYOR: MARYGOLD MUTUAL WATER CO. (909) 230–3987

## **GENERAL NOTES**

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY LANDSCAPE DEVELOPMENT GUIDELINES AND

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING BUILDING AND PLUMBING PERMITS PRIOR TO COMMENCING WALL CONSTRUCTION, AND IRRIGATION INSTALLATION RESPECTIVELY;

C. THE CONTRACTOR MUST NOTIFY THE CITY TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION; LANDSCAPE OR IRRIGATION CONTRACTOR SHALL VERIFY EXISTING P.S.I. AT JOB SITE PRIOR TO INSTALLING LANDSCAPE IRRIGATION SYSTEM;

AT THE CONCLUSION OF ROUGH GRADING, AGRONOMIC SOILS TESTING SHALL BE PROVIDED FOR THE PROJECT AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY LANDSCAPE INSTALLATION;

THE APPROXIMATE LOCATIONS OF KNOWN EXISTING UNDERGROUND UTILITIES ARE FROM CIVIL PLANS BY OTHERS. THE UTILITIES ARE PLOTTED FROM RECORD AND FIELD DATA. THE LANDSCAPE ARCHITECT ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID LINES WHETHER SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO WORK OR EXCAVATION TO DETERMINE THE EXACT LOCATION OF UNDERGROUND LINES.

ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATIONS, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS. I. SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED

BEFORE CONSTRUCTION OCCURS. FOR YOUR DIG ALERT ID NUMBER, CALL UNDERGROUND SERVICE ALERT (TOLL FREE) AT 811, TWO WORKING DAYS BEFORE YOU DIG.

QUANTITES LISTED HEREON ARE PROVIDED FOR THE PURPOSE OF COMPARING BIDS. THE CONTRACTOR SHALL DETERMINE ACTUAL CONSTRUCTION QUANTITIES.

SHEET NUMBER	SHEET DES
T-1	TITLE SHEET
CL-1	LANDSCAPE CONSTR
CL-2	LANDSCAPE CONSTR
CD-1	LANDSCAPE CONSTR
LI-1	IRRIGATION PLAN
LI-2	IRRIGATION PLAN
LID-1	IRRIGATION DETAILS
LP-1	PLANTING PLAN
LP-2	PLANTING PLAN
LPD-1	PLANTING DETAILS &
LIS-1	IRRIGATION SPECIFIC
LPS-1	PLANTING SPECIFICA

## CONSULTANTS

LANDSCAPE ARCHITECT STB LANDSCAPE ARCHITECTS, Inc. 15 S. 5TH STREET REDLANDS, CA 92373 (909) 798-7490 CONTACT: SHAWN BURCH EMAIL: SHAWN@STBLANDARCH.COM

**CIVIL ENGINEER:** 234 N. ARROWHEAD AVE SAN BERNARDINO, CA 92408 (909) 885-3806 CONTACT: JT STANTON EMAIL: JTS@BONADIMAN.COM ARCHITECT:

JOSEPH E. BONADIMAN & ASSOC., INC. MILLER ARCHITECTURE, INTERIORS, PLANNI 1177 IDAHO STREET, SUITE 200 REDLANDS, CA 92374 (909) 335-7400 CONTACT: SERGIO PENA EMAIL: SPENA@MILLER-AIP.COM

STB LANDSCAPE ARCHITECTS INC. HAS NOT BEEN RETAINED BY THE OWNER TO PROVIDE AS-BUILT SERVICES. THE CONTRACTOR SHALL PROVIDE APPROPRIATE PROFESSIONALS TO PROVIDE ALL NECESSARY AS BUILT INFORMATION TO ENABLE ALL FINAL PERMITS, INSPECTIONS, SIGN-OFFS AND CERTIFICATES TO BE ISSUED BY ALL NECESSARY JURISDICTIONS.

T: 5
GOV.
SHEET INDEX
SHEET DESCRIPTION         LE SHEET         NDSCAPE CONSTRUCTION PLAN         NDSCAPE CONSTRUCTION DETAILS         XIGATION PLAN         XIGATION PLAN         XIGATION DETAILS         ANTING PLAN         ANTING PLAN         ANTING DETAILS & WATER USE CALCS         XIGATION SPECIFICATIONS
JRE, INTERIORS, PLANNING , SUITE 200 4 PENA _ER-AIP.COM
DE TO PECTIONS,



-10					
	+				
			CONS	TRUCTION NOTES SCHEDULE	
	 c		SYMBOL	DESCRIPTION	
			A-01	RAISED SCULPTURE PAD PER DETAIL B SHEET LCD-1	
			A-03	12" WIDE X12" DEEP CONCRETE PAVER CONTAINMENT STRIP PER DETAIL D SHEET LCD-1	
			A-04	FALSE BRIDGES OVER DRY STREAM BED PER DETAIL C SHEET LCD-1	
			<u>A-05</u>	DRY STREAM—COBBLES TO BE 40% 4—8", 60% 2"—4" SIZE—COLOR SIERRA COBBLE FROM SWB—INSTALL PER DETAIL E SHEET LCD—1	
-			A-06	INSTALL STEEL EDGING BETWEEN DECOMPOSED GRANITE AND STONE MULCH BEDS PER DETAIL SHEET LCD—1—TYPICAL (NOT TO BE INSTALLED AT DRY STREAM BEDS)	
			A-07	SHADE CLOTH COVER POST PER ARCHITECT'S PLAN-TYP	
			A-08	INFILTRATION BASIN PER CIVIL PLANS	
¢.			A-09	ANIMAL CAGE AND TRUCK WASH AREA PER ARCHITECT	
			A-10	TRASH ENCLOSURE PAD PER ARCHITECT'S PLANS	
			A-12	ALL PLANTER BEDS ARE TO RECEIVE A 3" LAYER OF GOLD COLORED STABILIZED DECOMPOSED GRANITE PER	
			A-13	SHEET LP-T UNDERGROUND WQMP STRUCTURE PER CIVIL	
			PAVIN	3 SCHEDULE	
	   		SYMBOL	UNIT_PAVING DESCRIPTION	)TY
				PAVERS EQUAL TO CALSTONE 6X6 MISSION-COLOR CHARCOAL-SEE DETAIL D SHEET LCD-1 2	 236 S
				PAVERS-CALSTONE-MISSION 3 PATTERN (20% 6X6, 40% 6X12, 40% 12X12)-COLOR BROWN BEIGE CHARCOAL 1	,652
				SEE DETAIL D SHEET LCD-1	
		¢\$	STMBUL	<u>DESCRIPTION</u> LOCALLY SOURCED GREY GRANITE BOULDER–SIZES MIN. 30"X42"–INSTALL PER DETAIL SHEET LCD–1–TYPICAL	<u>ل</u> ح
	ļ				
			<u>S-02</u>	BENCH-EQUAL TO GREAT WESTERN #B6WBCLASSIC-PWS-COLORS-BURGUNDY FRAME GREEN SEAT/BACKS TYPICAL	_ 5
	I AG	٥	S-03	TRASH RECEPTACLE—EQUAL TO GREAT WESTERN TR32—PWS—COLOR BURGUNDY WITH DOME32—BLACK LID AND LINER32—BLACK	8
ADO	PTI(	q	S-04	DOG WASTE BAG STATION ULTRA SITE MODEL NO. PBARK-474-COLOR GREEN. POST MOUNT PER MANUF. RECOMMENDATIONS	4
	i		ROCK	SCHEDULE	
	ļ		<u>SYMBOL</u>	DESCRIPTION QTY	
	i			COBBLESTONE DRY STREAM BED-ARIZONA COBBLES-MIXED SIZE-70% 2-4", 30% 4-8" 1,873 SF	
				EXISTING UTILITIES NOTE:	
				CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILTIES IN THE PROJECT AREA ABOVE AND BELOW THE GROUND WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO THE	
	i			EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED WITH NEW AND LIKE MATERIAL TO THE OWNER'S STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER OR THE	
				CITY.	
1	; ┿ <b>─</b>				
<b>↓-10</b>					
= [					



A-10

A-10







**REFER TO SHEET LCD-1 FOR CONSTRUCTION DETAILS** 

CONST	TRUCTION NOTES SCHEDULE	
<u>SYMBOL</u>	DESCRIPTION	-
A-01	SEAT WALL PER DETAIL A SHEET LCD-1	
A-02	RAISED SCULPTURE PAD PER DETAIL B SHEET LCD-1	
A-03	12" WIDE X12" DEEP CONCRETE PAVER CONTAINMENT STRIP PER DETAIL D SHEET LCD-1	
A-04	FALSE BRIDGES OVER DRY STREAM BED PER DETAIL C SHEET LCD-1	
A-05	DRY STREAM—COBBLES TO BE 40% 4—8", 60% 2"—4" SIZE—COLOR SIERRA COBBLE FROM SWB—INSTALL PER DETAIL E SHEET LCD—1	
<u>A-06</u>	INSTALL STEEL EDGING BETWEEN DECOMPOSED GRANITE AND STONE MULCH BEDS PER DETAIL SHEET LOD-1-TYPICAL (NOT TO BE INSTALLED AT DRY STREAM BEDS)	
A-07	SHADE CLOTH COVER POST PER ARCHITECT'S PLAN-TYP	
A-08	INFILTRATION BASIN PER CIVIL PLANS	
A-09	ANIMAL CAGE AND TRUCK WASH AREA PER ARCHITECT	
A-10	FENCING, WALLS AND GATES PER ARCHITECT'S PLANS	
A-11	TRASH ENCLOSURE PAD PER ARCHITECT'S PLANS	
A-12	ALL PLANTER BEDS ARE TO RECEIVE A 3" LAYER OF GOLD COLORED STABILIZED DECOMPOSED GRANITE PER SHEET LP—1	
A-13	UNDERGROUND WQMP STRUCTURE PER CIVIL	
PAVING	SCHEDULE	
SYMBOL	UNIT_PAVING DESCRIPTION	QTY
	PAVERS EQUAL TO CALSTONE 6X6 MISSION-COLOR CHARCOAL-SEE DETAIL D SHEET LCD-1	 236 SF
	PAVERS-CALSTONE-MISSION 3 PATTERN (20% 6X6, 40% 6X12, 40% 12X12)-COLOR BROWN BEIGE CHARCOAL SEE DETAIL D SHEET LCD-1	1,652 SF
SITE FL	JRNISHINGS SCHEDULE	
<u>SYMBOL</u>	DESCRIPTION	QTY
S-01	LOCALLY SOURCED GREY GRANITE BOULDER-SIZES MIN. 30"X42"-INSTALL PER DETAIL SHEET LCD-1-TYPICAL	35
S-02	BENCH-EQUAL TO GREAT WESTERN #B6WBCLASSIC-PWS-COLORS-BURGUNDY FRAME GREEN SEAT/BACKS TYPIC	CAL 9
S-03	TRASH RECEPTACLE—EQUAL TO GREAT WESTERN TR32—PWS—COLOR BURGUNDY WITH DOME32—BLACK LID AND LINER32—BLACK	8
S-04	DOG WASTE BAG STATION ULTRA SITE MODEL NO. PBARK-474-COLOR GREEN. POST MOUNT PER MANUF. RECOMMENDATIONS	4
ROCK S	CHEDULE	
SYMBOL	DESCRIPTIONQTYCOBBLESTONE DRY STREAM BED-ARIZONA COBBLES-MIXED SIZE-70% 2-4", 30% 4-8"1,873 SF	

### EXISTING UTILITIES NOTE:

CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILTIES
IN THE PROJECT AREA ABOVE AND BELOW THE GROUND WHETHER
SHOWN OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO THE
EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED WITH NEW
AND LIKE MATERIAL TO THE OWNER'S STANDARDS AND
SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER OR THE









	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	GPM	RADIUS	DETAIL
		HUNTER MP3000 PROS-00-PR\$40 A SHRUB ROTATOR, FIXED-RISER, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE. B=BLUE ADJ ARC	40	3.64	30'	A, LID-1
		90–210, Y=YELLOW ADJ ARC 210–270, A=GRAY 360 ARC. HUNTER MP3000 PROS-00-PR\$40 B SHRUB ROTATOR FIXED RISER PRESSURE RECULATED TO				
	<b>(B)</b>	40 PSI, MP ROTATOR NOZZLE. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.	40		30'	A, LID-1
	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI			DETAIL
		WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER 0.3GPM TO 20GPM				B, LID-1
	M	RAIN BIRD XCZ-150-LCS HIGH FLOW CONTROL ZONE KIT, FOR LARGE COMMERCIAL DRIP ZONES. 1-1/2IN. PEB GLOBE VALVE WITH SINGLE 1-1/2IN. PRESSURE REGULATING 40PSI QUICK-CHECK				B, LID-1
	٢	BASKET FILTER. FLOW RANGE: 15–62 GPM. 15 GALLON TREE 2–RINGS, XFS–9–12, 25 L.F. TOTAL	40			C, LID-1
	۲	24" BOX TREE 2-RINGS, XFS-9-12, 25 L.F. TOTAL	30			C, LID-1
	٥	36" BOX TREE 3- RINGS,XFS-09-12, 36 L.F. TOTAL	40			C, LID-1
	۵	RAIN BIRD PCT 05 GPH PRESSURE COMPENSATING THREADED LOW-FLOW BUBBLERS. OFFERED IN 5 GPH, 7 GPH, AND 10 GPH MODELS, WITH 1/2" FPT THREADED INLET. LIGHT BROWN = 5 GPH, VIOLET = 7 GPH, AND GREEN = 10 GPH.	30			D, LID-1
	Δ	RAIN BIRD PCT 10 GPH PRESSURE COMPENSATING THREADED LOW-FLOW BUBBLERS. OFFERED IN 5 GPH, 7 GPH, AND 10 GPH MODELS, WITH 1/2" FPT THREADED INLET. LIGHT BROWN = 5 GPH, VIOLET = 7 GPH, AND GREEN = 10 GPH.	30			D, LID-1
	SYMBOL	MANUFACTURER/MODEL/DESCRIPTION				DETAIL
	•	AIN BIRD PEB-IVM 1IN., 1-1/2IN., 2IN. PLASTIC INDUSTRIAL SMART VALVES W/ FACTORY INSTALLED IVM-SOL. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.				E, LID-1
		RAIN BIRD 33-DLRC 3/4IN. BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, DOUBLE TRACK KEY LUG, AND 2-PIECE BODY.				F, LID-1
	M	LANDSCAPE PRODUCTS INC. BBV LINE SIZE: FULL PORT BRASS BALL VALVE				G, LID-1
		SUPERIOR 3200 1–1/2" NORMALLY CLOSED BRASS MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION AND NO MINIMUM FLOW FEATURE, WHICH ENSURES RELIABLE OPENING AND CLOSING OF THE VALVE IN EXTREME HIGH OR LOW FLOW SCENARIOS.				H, LID-1
	BF	FEBCO 825YA IN SB ENCLOSURE 2" REDUCED PRESSURE BACKFLOW PREVENTER, W/ WYE STRAINER & WILKINS 500HR PRESSURE REDUCING VALVE				I, LID-1
	С	HUNTER A2C-3600-M 36-STATION CONTROLLER WITH FOUR (4) A2M-600 MODULES IN AN OUTDOOR GRAY STEEL WALL MOUNT ENCLOSURE.				J, LID-1
	\$\$	HUNTER WSS-SEN WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER X-CORE AND ACC CONTROLLERS, INSTALL AS NOTED. INCLUDES GUTTER MOUNT BRACKET. MODULE NOT INCLUDED.				J, LID-1
	FS	CREATIVE SENSOR TECHNOLOGY FSI-B15-001 1.5IN. BRASS TEE TYPE FLOW SENSOR W/FIPT THREADS, BRONZE ALLOY MOUNTING TEE AND ULTRA LIGHTWEIGHT IMPELLER ENHANCES LOW FLOW MEASUREMENT. 2 WIRE DIGITAL OUTPUT COMPATIBLE W/ALL IRRIGATION CONTROLLERS. FLOW RANGE 3 GPM - 90 GPM.				H, LID-1
	CW CX	WIRE BUNDLE (AS INDICATED FOR FUTURE USE) SPARE CONTROL WIRE BUNDLE FOR FUTURE USE IN JUNCTION BOX. P=PILOT WIRES, C=COMMON WIRES BUNDLED. COIL WIRES IN VALVE BOX, AND RUN CONTINUOUS WIRE BACK TO CONTROLLER. LABEL EACH WIRE WITH A PLASTIC I.D. TAG AT THE WIRE BUNDLE AND AT THE CONTROLLER				
	WM	EXISTING 2" WATER METER: PER CIVIL'S PLANS				
		- IRRIGATION LATERAL LINE: PVC SCHEDULE 40, MIN 3/4"				K, LID-1
		■ IRRIGATION MAINLINE: PVC, CL 315: 2"				K, LID-1
=		PIPE SLEEVE: PVC SCHEDULE 40				K, LID-1
	# •	Valve Callout Valve Number Valve Flow				

## IRRIGATION SCHEDULE

SYMBOL DESCRIPTION

- POC AT 2" DEDICATED IRRIGATION WATER METER. METER PER CIVIL. VERIFY SIZE IN THE FIELD. IF DIFFERENT THAN SHOWN NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO IRRIGATION INSTALLATION.
   INSTALL BACKFLOW PREVENTER PER DETAIL AND PER CITY STANDARDS. LOCATE IN LANDSCAPED AREA AND SCREEN FROM PUBLIC VIEW WITH SHRUBS.
   SOME IRRIGATION EQUIPMENT AND PIPING SHOWN IN HARDSCAPE, IN BUILDING FOOTPRINT OR OUTSIDE OF
- SOME IRRIGATION EQUIPMENT AND PIPING SHOWN IN HARDSCAPE, IN BUILDING FOOTPRINT OR OUTSIDE OF PROPERTY FOR GRAPHIC CLARITY. ALL EQUIPMENT AND PIPING TO BE INSIDE PROPERTY AND IN LANDSCAPED AREAS EXCEPT WHERE PIPING IS INSTALLED UNDER HARDSCAPES. TYPICAL
- (I-104) AUTOMATIC IRRIGATION CONTROLLER AND SOLAR SYNC. LOCATE ON OUTSIDE WALL. EAVE MOUNT SOLAR SYNC AWAY FROM FUTURE TREE CANOPIES AND PER MANUF. RECOMMENDATIONS. VERIFY LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION AND COORDINATE WITH ALL TRADES. POWER TO CONTROLLER TO BE SUPPLIED BY OWNER.
- (I-105) ETHERNET TO BE SUPPLIED BY OWNER TO CONTROLLER LOCATION. VERIFY PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.







	Server Hom Foblic View with Shrobs.
(I-103)	SOME IRRIGATION EQUIPMENT AND PIPING SHOWN IN HARDSCAPE, IN BUI PROPERTY FOR GRAPHIC CLARITY. ALL EQUIPMENT AND PIPING TO BE IN AREAS EXCEPT WHERE PIPING IS INSTALLED UNDER HARDSCAPES. TYPICA
(I-104)	AUTOMATIC IRRIGATION CONTROLLER AND SOLAR SYNC. LOCATE ON OUTS AWAY FROM FUTURE TREE CANOPIES AND PER MANUF. RECOMMENDATION REPRESENTATIVE PRIOR TO INSTALLATION AND COORDINATE WITH ALL TRA SUPPLIED BY OWNER.
(1-105)	ETHERNET TO BE SUPPLIED BY OWNER TO CONTROLLER LOCATION VERIE

**REFER TO SHEET LID-1 FOR IRRIGATION DETAILS REFER TO SHEET LPD-1 FOR WATER USE CALCULATIONS** 

PSI	GPM	RADIUS	DETAIL
40	3.64	30'	A, LID-1
40		30'	A, LID-1
PSI			DETAIL
			B, LID-1
			B, LID-1
40			C, LID-1
30			C, LID-1
40			C, LID-1
30			D, LID-1
30			D, LID-1
			DETAIL
			E, LID-1
			F, LID-1
			G, LID-1
			H, LID-1
			I, LID-1
			J, LID-1
			J, LID-1
			H, LID-1
			K, LID-1
			K, LID-1
			K, LID-1

THE CONT

CITY OR



JILDING FOOTPRINT OR OUTSIDE OF NSIDE PROPERTY AND IN LANDSCAPED

SIDE WALL. EAVE MOUNT SOLAR SYNC . VERIFY LOCATION WITH OWNER'S ADES. POWER TO CONTROLLER TO BE



#### CONTRACTOR SHALL PROVIDE PHOTOS AND SIGNED DOCUMENTED PROOF OF P.S.I. TESTING SHOWING AVAILABLE STATIC PRESSURE AT THE P.O.C. IRRIGATION METER PER PLAN PRIOR TO COMMENCING IRRIGATION INSTALLATION. FAILURE TO PROVIDE EXISTING STATIC PRESSURE TESTING WILL ABSOLVE STB LANDSCAPE ARCHITECT'S INC. FROM ANY IRRIGATION SYSTEM MALFUNCTION DUE TO TOO HIGH OR TOO LOW STATIC PRESSURE.

THE CONTRACTOR SHALL AT ALL TIMES PROTECT HIS WORK FROM DAMAGE AND THEFT AND REPLACE ALL DAMAGED OR STOLEN PARTS AT HIS EXPENSES UNTIL THE INSTALLATION IS ACCEPTED BY THE OWNER IN WRITING.

VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING ANY WORK, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY DISCREPANCY IS FOUND. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SITE CONDITIONS PRIOR TO BIDDING OR COMMENCING WORK. EXTREME CARE SHALL BE EXERCISED WHEN WORKING ADJACENT TO ANY STRUCTURES OR UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGES CAUSED BY HIS WORK AT NO COST TO THE OWNER.

IRRIGATION DESIGN IS BASED ON AN ASSUMED AVAILABLE MINIMUM WATER PRESSURE OF 103 P.S.I. WITH A MAXIMUM SYSTEM DEMAND OF 30 G.P.M. CONTRACTOR SHALL VERIFY STATIC PRESSURE AVAILABLE AT THE IRRIGATION POC PRIOR TO COMMENCING WORK. CONTRACTOR MUST PROVIDE SIGNED DOCUMENTED PROOF TO THE LANDSCAPE ARCHITECT AND OWNER OF THE STATIC P.S.I. PRIOR TO COMMENCING WORK. PSI INFORMATION WAS OBTAINED FROM A FIREFLOW TEST DATED ..

THE LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE INTERPRETATION OF THE DRAWINGS SHOULD A QUESTION ARISE. PROVIDE CHECK VALVES AS NEEDED TO ELIMINATE ALL LOW HEAD DRAINAGE. INSTALL IN-LINE CHECK/ANTI-DRAIN VALVES WHENEVER AN ELEVATION DIFFERENCE BETWEEN INLETS/OUTLETS EXCEEDS 4' OF VERTICAL HEIGHT.

ALL EQUIPMENT SHALL BE AS LISTED IN THE LEGEND. SUBSTITUTIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.

ALL EQUIPMENT SHALL BE INSTALLED PER DETAILS, IN THE ABSENCE OF DETAILS, INSTALLATION SHALL BE IN ACCORDANCE WITH THE STANDARD PRACTICE OF THE TRADE.

DESIGN INTENT IS TO PROVIDE COMPLETE IRRIGATION COVERAGE TO ALL PLANTED AREAS, AS FIELD CHANGES MAY OCCUR, CONTRACTOR IS REQUIRED TO PROVIDE 100% COVERAGE TO ALL AREAS. CONTRACTOR SHALL NOT KNOWINGLY INSTALL AN IRRIGATION SYSTEM WITH IMPROPER COVERAGE, FAILURE TO NOTIFY THE LANDSCAPE ARCHITECT SHALL RESULT IN THE CONTRACTOR REPAIRING/REPLACING SAID SYSTEM AT HIS OR HER EXPENSE. BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR MUST OBTAIN ALL NECESSARY PERMITS FROM THE CITY. INSTALL ALL COMPONENTS PER CURRENT U.P.C. AND LOCAL CODES.

CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE WORKING ENVIRONMENT. DAY AND NIGHT BARRICADES MUST BE PROVIDED FOR ALL OPEN TRENCHES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS PRIOR TO TRENCHING FOR EXACT UNDERGROUND UTILITY LOCATIONS. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THE REPAIR OR REPLACEMENT OF UNDERGROUND UTILITIES OR STRUCTURES WHICH ARE DAMAGED DURING THE COURSE OF COMPLETING THIS WORK.

#### DRIP IRRIGATION NOTES DESIGN INTENT IS TO PROVIDE A COMPLETE DRIP IRRIGATION SYSTEM TO ALL PLANTED AREAS WITH THE QUANTITY OF DRIPLINES AND EMITTERS AS INDICATED ON THE PLAN. CONTRACTOR SHALL ADJUST DRIPLINES AND EMITTERS TO PROVIDE THE OPTIMUM COVERAGE TO ALL PLANT MATERIALS AND SHALL GUARANTEE SAME.

ALL DRIP TUBING SHALL BE BURIED A MINIMUM OF 2 TO 4" PER DETAIL SHEET LID-1. THE ONLY EXPOSED TUBING WILL BE THAT SMALL PORTION NEAR THE ROOTBALL. CONTRACTOR SHALL PROVIDE FLUSHING VALVES AT THE END OF EACH DRIP LATERAL IN A ROUND PLASTIC VALVE BOX PER IRRIGATION LEGEND.

IKRIGATION INSPECTION NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY, COUNTY OR OTHER PRESIDING AUTHORITY, THE LANDSCAPE ARCHITECT AND THE OWNER, AS NECESSARY, TO FACILITATE ALL IRRIGATION INSPECTIONS REQUIRED THAT RELATE TO OBTAINING CERTIFICATIONS OF COMPLETION.
EXISTING IRRIGATION LOCATIONS
EXISTING IRRIGATION AS SHOWN IS BASED ON SURFACE VISUAL OBSERVATION AND NOT ACTUAL FIELD SURVEY OR POT HOLING. CONTRACTOR TO VERIFY SIZE AND TYPE OF MAINLINE AND FLAG ALL LOCATIONS OF EXISTING EQUIPMENT, MAINLINES PRIOR TO DEMOLITION AND NEW CONSTRUCTION WITHIN THE PROJECT LIMITS.
EXISTING UTILITIES NOTE:
CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILTIES IN THE PROJECT AREA ABOVE AND BELOW THE GROUND WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED WITH NEW AND LIKE MATERIAL TO THE OWNER'S STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER OR THE CITY.
SOLAR SYNC/FLOW CLIK NOTE TO CONTRACTOR:
"CONTRACTOR TO CONNECT SOLAR SYNC AND FLOW CLIK SENSORS TO THE CONTROLLER VIA THE SINGLE SENSOR PORT PROVIDED AND PERFORM A COMMON WIRE INTERRUPT. PLEASE CONTACT YOUR LOCAL MANUFACTURERS REPRESENTATIVE FOR ANY FIELD SERVICE AND ASSISTANCE".











	PLANT S	CHEDULE				
	SYMBOL		SIZE	WUCOLS	BOTANICAL NAME	COMMON NAME
	TREES	4	36" BOX	LOW	BEAUCARNEA RECURVATA NATURAL CLUMP FORM	PONY TAIL PALM
	$\bigcirc$	8	24" BOX	LOW	CHITALPA TASHKENTENSIS 'PINK DAWN' NATUAL MULTI—STEM FORM	PINK DAWN CHITALPA
	$\overline{(}$	4	15 GAL	LOW	EUCALYPTUS SIDEROXYLON 'ROSEA'	RED IRONBARK
	And a share	36	24" BOX	LOW	GEIJERA PARVIFLORA	AUSTRALIAN WILLOW
	$\bigcirc$	24	15 GAL	LOW	LAGERSTROEMIA INDICA 'SEMINOLE' MULTI-TRUNK FORM	SEMINOLE CRAPE MYRTLE
	$\odot$	19	24" BOX	LOW	PITTOSPORUM PHILLYRAEOIDES LOW BRANCHED	DESERT WILLOW PITTOSPORUM
	$\bigcirc$	53	15 GAL	MOD	PITTOSPORUM T. 'WRINKLED BLUE'	WRINKLED BLUE TAWHIWHI
	$\bigcirc$	4	15 GAL	MOD	PLATANUS X ACERIFOLIA 'COLUMBIA'	LONDON PLANE TREE
		7	36" BOX	LOW	PROSOPIS ALBA COLORADO	COLORADO MESQUITE
	SYMBOL	QTY	<u>SIZE</u>	WULCOS	BOTANICAL NAME	COMMON NAME
		52	5 GAL.	LOW	ARTEMISIA X 'POWIS CASTLE'	POWIS CASTLE ARTEMISIA
	MUNUMER MANAGANA	120	5 GAL.	LOW	JUNIPERUS SABINA 'BUFFALO'	BUFFALO JUNIPER
	NUNARA CARACTER	82	5 GAL.	LOW	JUNIPERUS SCOPULORUM 'WICHITA BLUE'	WICHITA BLUE JUNIPER
	$(\cdot)$	109	5 GAL.	LOW	LAVANDULA DENTATA 'GOODWIN CREEK GRAY'	GOODWIN CREEK GRAY LAVENDER
	2	165	5 GAL.	LOW	LEUCOPHYLLUM FRUTESCENS	TEXAS SAGE
	annon the	163	5 GAL.	LOW	SALVIA LEUCANTHA 'SANTA BARBARA'	MEXICAN BUSH SAGE
	MARAN	43	5 GAL.	LOW	SENNA NEMOPHILA	DESERT CASSIA
	GRASSES					
	M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.M.	111	1 GAL.	LOW	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE BLUE RYE
	·	189	1 GAL.	LOW	LOMANDRA LONGIFOLIA 'BREEZE' TM	BREEZE MAT RUSH
	SHRUB CO	<u>DVER</u>				
		104	5 GAL.	LOW	JUNIPERUS HORIZONTALIS 'BLUE RUG'	BLUE RUG JUNIPER
		126	1 GAL.	LOW	MYOPORUM PARVIFOLIUM 'PINK'	TRAILING MYOPORUM
	•	62	1 GAL.	LOW	TEUCRIUM COSSONII MAJORICUM	GERMANDER
	SUCCULEI	NTS				
ADOPTI	Z}3	39	5 GAL.	LOW	ALOE CAMERONII	STARFISH ALOE
	$\ast$	190	1 GAL.	LOW	ALOE RUDIKOPPE 'LITTLE GEM'	LITTLE GEM ALOE
	<u>SYMBOL</u>	QTY	SIZE	WUCOLS	BOTANICAL NAME	COMMON NAME
	GROUND	COVERS 44,656 SF	3" DEEP		DECOMPOSED GRANITE SUNSET GOLD STABILIZE WITH 'SOIL SECURE' @ 6 LBS/ TON	AVAILABLE FROM SWB
	<pre></pre>	] 17,930 SF	HYDROSEED	LOW	INFILTRATION BASIN SEED MIX: SEE SHEET LP-1	NATIVE GRASSES
	(+)/()/(+)/()/()/()/()/()/()/()/()/()/()/()/()/()	1,192 SF			K9 GRASS ELITE AVAILABLE FROM FOREVER LAWN	SEE NOTE SHEET LP-2 & DET. (
					Ses	

Agrostis pallens Deschampsta bespitora Festuca microstachys Festuca rubra 'Molate' Hordeum brachyantherum Hordeum intercedens	San Diego bentgrass Tufted hargrass Small fescue Red fescue Meadow harley	300 200 600 10.00 6.00	77 72 90 81
Deschampsta cespitara Festuca microstachys Festuca rubra 'Molate' Hordeum brachyantherum Hordeum intercedens	Tufted hargrass Small fescue Red fescue Meadow harley	2 00 6 00 10 00 6 00	72 90 81
Festuca microstachys Festuca rubra 'Molate' Hordeum brachyantherum Hordeum intercedens	Small fescue Red fescue Meadow harley	6.00 10.00 6.00	90 81
Festuca rubra 'Molate' Hordeum brachyantherum Hordeum intercedens	Red feature Meadow harley	10.00	81
Hordeum brachyantherum Hordeum intercedens	Meadowharley	6.00	
Hordeum intercedens	THE STATE OF A STATE O	0.00	72
	Little barley	4.00	72
Festuca idahoensis	Idaho fescue	4.00	60
For additional plant characteristics wist <u>CONTRACTOR TO CONTA</u>	the plant database portion of ACT S&S SEEDS FOR SLURF	four website at <u>www</u> . RY SPECIFICATIONS	suceeds.com
PLAN	ITING INSPECTION NOTE TO CO	ONTRACTOR:	

### EXISTING UTILITIES NOTE:

CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILTIES IN THE PROJECT AREA ABOVE AND BELOW THE GROUND WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED WITH NEW AND LIKE MATERIAL TO THE OWNER'S STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER OR THE

CITY

![](_page_8_Picture_5.jpeg)

![](_page_9_Figure_0.jpeg)

	PL	ANT SCHE	DULE			
	<u>SYI</u>	<u>MBOL QT`</u>	<u>Y</u> <u>SIZE</u>	WUCOLS	BOTANICAL NAME	
		<u>EES</u> ************************************	36" BOX	LOW	BEAUCARNEA RECURVATA NATURAL CLUMP FORM	
		8	24" BOX	LOW	CHITALPA TASHKENTENSIS 'F NATUAL MULTI—STEM FORM	YINK DAWN'
		• 4	15 GAL	LOW	EUCALYPTUS SIDEROXYLON	'ROSEA'
	۲ ۲ ۲	· 36	24" BOX	LOW	GEIJERA PARVIFLORA	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		24	15 GAL	LOW	LAGERSTROEMIA INDICA 'SEN MULTI-TRUNK FORM	1INOLE'
		• 19	24" BOX	LOW	PITTOSPORUM PHILLYRAEOID LOW BRANCHED	ES
		53	15 GAL	MOD	PITTOSPORUM T. 'WRINKLED	BLUE'
		4	15 GAL	MOD	PLATANUS X ACERIFOLIA 'CO	)LUMBIA'
		7	36" BOX	LOW	PROSOPIS ALBA COLORADO	
	<u>SYI</u>	MBOL QT	<u>Y</u> <u>SIZE</u>	WULCOS	BOTANICAL NAME	
	<u>SHI</u>	RUBS     52	5 GAL.	LOW	ARTEMISIA X 'POWIS CASTLE	
		Manager 120	5 GAL.	LOW	JUNIPERUS SABINA 'BUFFAL	0'
		30000000 82	5 GAL.	LOW	JUNIPERUS SCOPULORUM 'W	VICHITA BLUE
		· 109	5 GAL.	LOW	LAVANDULA DENTATA 'GOODA	NIN CREEK GR
		ر ب ب ب ب ب ب ب ب ا ا ا ا ا ا	5 GAL.	LOW	LEUCOPHYLLUM FRUTESCENS	5
			5 GAL.	LOW	SALVIA LEUCANTHA 'SANTA I	BARBARA
		<sup>3</sup> <sup>3</sup> <sup>3</sup> <sup>4</sup> <sup>4</sup> 43	5 GAL.	LOW	SENNA NEMOPHILA	
		<u>ASSES</u> 2 <sup>M</sup> 2 <sup>M</sup> 2 <sup>M</sup> 111	1 GAL.	LOW	LEYMUS CONDENSATUS 'CAN	IYON PRINCE
		• 189	1 GAL.	LOW	LOMANDRA LONGIFOLIA 'BRE	eze' TM
	SHI					
		104	5 GAL.	LOW	JUNIPERUS HORIZONTALIS 'I	3LUE RUGʻ
		(~) 126	1 GAL.	LOW	MYOPORUM PARVIFOLIUM 'P	INK'
		• 62	1 GAL.	LOW	TEUCRIUM COSSONII MAJORI	CUM
	SU'					
		XX 39	5 GAL.	LOW	ALOE CAMERONII	
		190	1 GAL.	LOW	ALOE RUDIKOPPE 'LITTLE GI	ΞM
		MBOL QT	<u>Y</u> <u>SIZE</u>	WUCOLS	BOTANICAL NAME	
		OUND COVE	<u>RS</u> 56 SF 3" DEEP		DECOMPOSED GRANITE SUNS STABILIZE WITH 'SOIL SECUF	SET GOLD RE'@6_LBS/
		······································	30 SF HYDROSEE	D LOW	INFILTRATION BASIN SEED M	IX: SEE SHEET
		1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19 1,19	2 SF		K9 GRASS ELITE AVAILABLE FROM FOREVER I	_AWN
					SEEDS	
				BIOSWALE	Low Growing Grass only IRR	GATED MIX
			SPECIES Agrostis pallers	1.0	COMMON NAME San Diego bentgrass	BULK # #ACRS 3:00
			Deschampsia co Festuca microsi	reputora tachys	Tuffed hargrass Small fescue	2 00
			Festuca rubra '. Hordeum brach	Molate' yantherian	Red feature Meadow harley	10.00 6.00
			Hordeum interc Festuca idahoei	adans Isis	Little barley Idaho fescue	4.00
			For additional plant	characteristics vis	it the plant database portion of ou	r website at ww
			and the second se			

## REFER TO SHEET LPD-1 FOR PLANTING DETAILS REFER TO SHEET LPS-1 FOR PLANTING SPECIFICATIONS

COMMON NAME	
PONY TAIL PALM	
PINK DAWN CHITALPA	PLANTING NOTES: REFER TO PROJECT PLANTING SPECIFICATIONS ON SHEET LPS-1 FOR COMPLETE PLANTING SPECIFICATIONS.
RED IRONBARK	ALL LANDSCAPE INSTALLATION SHALL BE PERFORMED BY A LICENSED CONTRACTOR WITH A C-27 LICENSE OR GREATER. <u>LAYOUT OF ELEMENTS:</u> CONTRACTOR SHALL SCALE AN PLANT MATERIALS OF THE PLANS TO DETERMINE THEIR APPROXIMATE LOCATIONS. REFER TO PLANT SPA
AUSTRALIAN WILLOW	IN THE PLANTING LEGEND. MAINTAIN A DISTANCE FROM ALL HARDSCAPE ELEMENTS AND GROUND COVERS ONE-HALF THE AMOUNT OF THE INDICATED IN THE PLANTING LEGEND OR ½ THE SCALED DIMENSION OF THE SHRUB.
SEMINOLE CRAPE MYRTLE	AFTER ALL ROUGH GRADING HAS BEEN COMPLETED BUT PRIOR TO SOIL PREPARATION, THE CONTRACTOR SHALL OBTAIN A SO AGRICULTURAL SUITABILITY, FERTILITY AND WATER INFILTRATION RATE. TEST SHALL BE PREPARED BY A CALIFORNIA ASSOCIATION OF A LABORATORIES MEMBER. FURNISH ONE COPY OF TEST RESULTS TO THE LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO COMMENCIN CONDITIONING. SOILS TEST REPORT SHALL SUPERSEDE ALL SPECIFICATIONS. SOILS TESTING FACILITY SHALL BE INFORMED OF THE REQ USING ESTABLISH AMENDMENTS PER PLANTING SPECIFICATIONS.
DESERT WILLOW PITTOSPORUM	SEE PLANTING SPECIFICATIONS FOR MINIMAL AMENDMENTS TO BE USED FOR BID PURPOSES. ALL FINAL SOIL CONDITIONING AND AMENDI PER SOILS TEST RECOMMENDATIONS. TEST SHALL INCLUDE THE FOLLOWING ITEMS: SOIL TYPE (TEXTURE), PH, TOTAL SOLUBLE SALTS (B CONDUCTIVITY OF THE SOIL SATURATION EXTRACT), BORON LEVEL, EXCHANGEABLE SODIUM PERCENTAGE, NUTRIENTS (N.P.K.), MICR (NO3, NH4, P, K, Ca, Mg, Na, B, Zn, Fe, Cu, Mn, S), PERCOLATION, % OF ORGANIC MATTER, CATION EXCHANGE CAPACITY, BASE EXCESS LIME OR CARBONATES.
LONDON PLANE TREE	PLANT AVAILABILITY: DUE TO POTENTIAL PLANT MATERIAL SHORTAGES. IT IS THE CONTRACTOR'S RESPONSIBILITY, UPON AWARD OF THE CONTRACT, TO IMMEDI. PROCURE, THGROUGH CONTRACT GROWING OR OTHER MEANS, ALL PLANT MATERIAL CALLED OUT ON THESE PLANS AND GUARANTEE THE AVAILABILITY AT THE TIME OF PLANTING. SUBSTITUTIONS WILL NOT BE ACCEPTED.
COLORADO MESQUITE	GRADING! FINISH GRADE OF SOIL IN ALL SHRUB PLANTER AREAS (UNLESS OTHERWISE INDICATED) SHALL BE ESTABLISHED SO FINISH GRADE OF S MULCH IS 1/2" BELOW ADJACENT WALKS, CURBS OR PAVING AND BE FREE OF ROCKS OVER 1" IN SIZE IN THE TOP 2" OF SOIL. FINIS OF SOIL IN ALL TURF AREAS (UNLESS OTHERWISE INDICATED) SHALL BE 2" BELOW ADJACENT WALKS, CURBS OR PAVING PRIOR TO SOL BE FREE OF ROCKS OVER 1" IN SIZE IN THE TOP 6" OF SOIL. EXCESS SOIL CREATED DURING THE AMENDING PROCESS SHALL NOT RE
COMMON NAME	SITE. ALL ESTABLISHED FLOW-LINES SHALL BE MAINTAINED. CONTRACTOR SHALL GUARANTEE POSITIVE DRAINAGE FROM ALL PLANTED ARE <u>PET GRASS</u> : K9 GRASS ELITE IS AVAILABLE FROM FOREVER LAWN. CONTRACTOR SHALL CONTACT CHRIS FEICHT AT (949) 439–0177 FOR PRICING AN ARRANGE INSTALLATION.
	<u>EROSION CONTROL</u> : SLOPES EXCEEDING 3:1 SHALL RECEIVE EROSION CONTROL NETTING EQUAL TO WESTERN EXCELSIOR #EXCEL CC-4. NETTING TO BE IN MANUFACTURER'S RECOMMENDATIONS AND STAPLED AS REQUIRED. ACCEPT WHERE HYDROSEED IS APPLIED.
WICHITA BLUE JUNIPER	TREE AND SHRUB PLANTING: BACKFILL MIX FOR TREES AND SHRUBS SHALL CONSIST OF A MINIMUM OF 70% CLEAN ON-SITE SOIL AND 30% CUSTOM AMENDMENT REFER TO SOILS TEST RESULT REQUIRED ABOVE FOR FINAL BACKFILL RECOMMENDATIONS. PLANT PER DETAIL SHEET LPD-1. ALL
GOODWIN CREEK GRAY LAVENDER	TREES: ALL TREES SHALL HAVE COMPARATIVELY STRAIGHT TRUNKS, WELL-DEVELOPED LEADERS, AND TOPS AND ROOTS CHARACTERISTIC OF THE S VARIETY ALL TREES MUST BE FREE OF INSECTS DISEASE MECHANICAL INJURIES AND OTHER OBJECTIONABLE FEATURES AT THE TIME OF
TEXAS SAGE MEXICAN BUSH SAGE	TREE SIZES: THE FOLLOWING ARE THE EXPECTED CALIPER WIDTHS FOR VARIOUS CONTAINER SIZES. IF A TREE DOES NOT MEET THE MINIMUM
DESERT CASSIA	CALIPER. IT IS UNDERSTOOD THAT CERTAIN TREE SPECIES WILL BE "EXCEPTIONS" TO THESE STANDARDS AND WILL BE NEGOTIATE CASE BY CASE BASIS.
	15 GALLON $= \frac{1}{4}$ TO 1-1/4 24" BOX - 1" TO 2" 36" BOX - 2" TO 3-1/2"
BREEZE MAT RUSH	<u>TREE_STAKING</u> : STAKE ALL TREES PER DETAIL ON SHEET LPD—1. ALL STAKES SHALL EXTEND A MINIMUM OF 12" BELOW THE PLANTING PIT.
	ALL TREES PLANTED WITHIN EIGHT FEET OF PROPERTY LINES, WALLS, CURBS, PAVING OR HARDSCAPE ELEMENTS SHALL HAVE TY 'BIO-BARRIER' FABRIC INSTALLED FOR A MINIMUM LENGTH OF TWELVE FEET, MINIMUM DEPTH 29", ALONG CURB FACE/PAVING IN SAID TREE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER DETAIL SHEET LPD-1.
BLUE RUG JUNIPER	<u>SCREENING</u> : ALL GROUND MOUNTED EQUIPMENT SHALL BE SCREENED. CONTRACTOR SHALL LOCATE SHRUBS TO PROVIDE THIS SCREENING AS BY THE CITY
TRAILING MYOPORUM	QUANTITIES: QUANTITIES SHOWN ARE AN AID ONLY, CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BIDDING/ COMMENCING WORK.
GERMANDER	<u>SUBSTITUTIONS:</u> NO PLANT SUBSTITUTIONS WILL BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.
STARFISH ALOE	<u>ENVIRONMENTAL ISSUES</u> : THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL STORM WATER PHASE I AND II RULES AND ANY OTHER EN PROTECTION LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.

LITTLE GEM ALOE

COMMON NAME

LBS/ TON AVAILABLE FROM SWB

HEET LP-1 NATIVE GRASSES

SEE NOTE SHEET LP-2 & DET. G SHEET LPD-1

![](_page_9_Picture_9.jpeg)

EXISTING UTILITIES NOTE:

CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILTIES IN THE PROJECT AREA ABOVE AND BELOW THE GROUND WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED WITH NEW AND LIKE MATERIAL TO THE OWNER'S STANDARDS AND SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER OR THE CITY.

![](_page_9_Picture_12.jpeg)

![](_page_9_Picture_14.jpeg)

![](_page_9_Picture_15.jpeg)

![](_page_10_Figure_0.jpeg)

			WATERING SCHEDOLE.											
			THE SC CONTRA REQUIR ENVIROI RESPON ADEQUA	CHEDULE ACTORS ED PER NMENTAL NSIBLE II	SHOWN RESPON MANUFA FACTO NTO ASS ER FOR	I IS FOF SIBILITY ACTURER RS. THE SURE TH STRONG	R GUIDE TO PRC 'S RECC CONTR/ IAT ALL G HEALTI	ONLY. DGRAM T DMMEND ACTOR I PLANTIN HY AND	IT IS TH THE CON ATIONS S ULTIM NG RECE SUSTAIN	IE ITROLLEF AND EXI ATELY IVES NED GR(	r as Isting Dwth.			
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
	ETo/Mo	2.0	2.6	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55
	ETo/Day	0.06	0.09	0.12	0.15	0.18	0.23	0.25	0.24	0.20	0.14	0.09	0.06	
	7				1.000									
	IE													
	0.75	5.0	7.2	9.6	12.0	14.4	18.0	19.9	18.6	15.3	10.6	6.8	5.0	Min/Da
		141	203	268	335	402	503	557	522	430	296	189	141	Gal/Da
	0.75	5.0	72	9.6	12.0	14.4	18.0	19.9	18.6	15.3	10.6	6.8	5.0	Min/Da
	0.10	126	181	239	299	359	449	497	466	384	264	169	126	Gal/Da
•		-												

/	121	1/4 230 20/	344	431	4//	44		66	204	162	121	Gavba	<b>W</b>	
<u>Peak Daily E</u> af dap he given	Ta	ANNUAL E.T. PEAK E.T. MONTHLY ETo	55.60 7.90 JAN 2:00	FEB	MAR	APR	MAY	JUN 690	<b>JUL</b> 7.90	AUG 7 m)	SEP 3.90	OCT 420	NOV 2.60	DEC
SYSTEM R	UNTIM	E: STA: TREES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GPH 25	MIN. 282	MIN. PER CYC: CYCLES: SKIP DAYS:	3 L 3	4 1 3	4 1 12	2 - 2	6 1 2	8 1 74	8 J 7	2 1 7	7 1 2	5 1 2	4 1 3	3
	1	STA: TREES	JAN	FEB	MAR	APR	MAY	JUN	JUL.	AUG	SEP	OCT	NOV	DEC
GPH	MIN.	MIN. PER CYC: CYCLES:	27	39	51	51	61	76 2	85 2	79	49	34	36	27
25	41.53	SKIP DAYS:	4	4	4	3	3	3	3	3	2	3	4	4
		STA: SHRUBS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GPH	MIN.	MIN. PER CYC: CYCLES:	1	2	2	3	2	3	3	3	2	2	1	1
10	1 06	SKIP DAYS:	3	3	2	2	2	2	2	2	3	2	3	3
		STA: SHRUBS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GPH	MIN.	MIN. PER CYC: CYCLES:	13	15	20	25	23	29	32	30 1	25	17	14	11
10	10.38	SKIP DAVS:	3	3	3	3	2	2	2	2	2	3	3	3
	Peak Daily E of dap he given SYSTEM R GPH 25 GPH 25 GPH 10 I0	Teak Daily E. T.i       Peak Daily E. T.i       of dap     a       SYSTEM RUN TIME       GPH     MIN.       25     2.82       GPH     MIN.       25     41.53       GPH     MIN.       10     1.06       GPH     MIN.       10     10.38	Feak Dadre T.i.     ANNUAL E.T.       af drap     PEAK E.T.       af drap     PEAK E.T.       af drap     STA: TREES       SYSTEM RUN TIME:     STA: TREES       GPH     MIN.       MIN.     PEAK E.T.       MONTHLY ETo   SYSTEM RUN TIME: STA: TREES STA: TREES STA: TREES STA: TREES STA: TREES STA: SHRUBS S	Int         Int <thint< th=""> <thint< th=""> <thint< th=""></thint<></thint<></thint<>	Hit         I/4         230         287         344         431           Feak Dady E T.i of drap Regiven         ANNUAL ET. PEAK E.T. MONTHLY ETO JAN FEB         7.90 7.90           SYSTEM RUN TIME: STA: TREES         JAN FEB           GPH         MIN.         MIN. PER CYC: 3         3           25         222         SKIP DAYS:         3         3           25         222         SKIP DAYS:         2         2           25         41.93         SKIP DAYS:         4         4           STA: SHRUBS         JAN FEB         GPH         MIN.         MIN. PER CYC: 2         2         2           25         41.93         SKIP DAYS:         4         4           STA: SHRUBS         JAN FEB         GPH         1         2           25         41.93         SKIP DAYS:         3         3         3           10         106         SKIP DAYS:         3         3         3           10         106         SKIP DAYS:         1         1         15           10         1038         SKIP DAYS:         3         3         3         3	Image: state	Image: Problem in the system         ANNUAL ET.         55.60           PEAK E.T.         7.90           MONTHLY ET6         JAN         FEB         MAR         APR           2000         2.00         3.80         4.60           SYSTEM RUN TIME:         STA: TREES         JAN         FEB         MAR         APR           GPH         MIN.         MIN. PER CYC:         3         4         4         5           CYCLES:         1         1         1         1         1         1           25         2.82         SKIP DAYS:         3         3         2         2           STA: TREES         JAN         FEB         MAR         APR           GPH         MIN.         MIN. PER CYC:         27         39         51         51           CYCLES:         2         2         2         2         2         2         2           25         41.53         SKIP DAYS:         4         4         4         3           10         1.06         SKIP DAYS:         3         3         2         2         3           10         1.06         SKIP DAYS:         3         3         3 <td>HZI         I/4         Z30         Z67         344         431         477         447         3           Frait Dadre T.i d dag he given           MONTHELY ET6         JAN         FEB         MAR         APR         MAY           200         2/0         3/80         4/0         570           SYSTEM RUN TIME:         STA: TREES         JAN         FEB         MAR         APR         MAY           GPH         MIN.         MIN. PER CYC:         3         4         4         5         6           CYCLES:         1         1         1         1         1         1         1           25         2/22         SKIP DAYS:         3         3         2         2         2           CYCLES:         1         1         1         1         1         1         1           25         2/22         2</td> <td>Image: Product Product</td> <td>IZI         I/4         Z30         Z87         344         431         477         447         366         Z34           Be given         ANNUAL ET.         55.60         7.90         7</td> <td>Image: Part Party Part 1 and Par</td> <td>IZI         I/4         Z30         Z67         344         431         477         447         366         Z94         162         121           Exat Datable T.i of day Begiven           MONTHLY ET6         JAN         FEB         MAR         APR         MAY         JUN         JUL         AUG         SEP           200         2/0         3/80         4/9         5/70         6/90         7/90         7/40         5/90           SYSTEM RUN TIME:         STA: TREES         JAN         FEB         MAR         APR         MAY         JUN         JUL         AUG         SEP           GPH         MIN,         MIN, PER CYC:         3         4         4         5         6         8         8         7           25         2/82         SKIP DAYS:         3         3         2</td> <td>Init         Init         <th< td=""><td>Itri         Itri         <th< td=""></th<></td></th<></td>	HZI         I/4         Z30         Z67         344         431         477         447         3           Frait Dadre T.i d dag he given           MONTHELY ET6         JAN         FEB         MAR         APR         MAY           200         2/0         3/80         4/0         570           SYSTEM RUN TIME:         STA: TREES         JAN         FEB         MAR         APR         MAY           GPH         MIN.         MIN. PER CYC:         3         4         4         5         6           CYCLES:         1         1         1         1         1         1         1           25         2/22         SKIP DAYS:         3         3         2         2         2           CYCLES:         1         1         1         1         1         1         1           25         2/22         2	Image: Product	IZI         I/4         Z30         Z87         344         431         477         447         366         Z34           Be given         ANNUAL ET.         55.60         7.90         7	Image: Part Party Part 1 and Par	IZI         I/4         Z30         Z67         344         431         477         447         366         Z94         162         121           Exat Datable T.i of day Begiven           MONTHLY ET6         JAN         FEB         MAR         APR         MAY         JUN         JUL         AUG         SEP           200         2/0         3/80         4/9         5/70         6/90         7/90         7/40         5/90           SYSTEM RUN TIME:         STA: TREES         JAN         FEB         MAR         APR         MAY         JUN         JUL         AUG         SEP           GPH         MIN,         MIN, PER CYC:         3         4         4         5         6         8         8         7           25         2/82         SKIP DAYS:         3         3         2	Init         Init <th< td=""><td>Itri         Itri         <th< td=""></th<></td></th<>	Itri         Itri <th< td=""></th<>

![](_page_10_Picture_3.jpeg)

### IRRIGATION SYSTEM SPECIFICATIONS

- 1.1 SCOPE OF WORK:
- .1 Install a new underground irrigation system as shown and specified. Furnish labor, materials, equipment, appliances and services necessary for the execution and completion of "Landscape Irrigation" as indicated on the drawings and/or herein specified. The work includes but is not limited to: Installation of piping, fittings, sprinkler heads/ water emission devices, controllers, valves, wiring, irrigation equipment, sleeving and accessories.
- Testing and adjustment.
- Excavating and backfilling irrigation system work. Refurbishment/modifications to existing irrigation systems.

### 1.2 <u>SUBMITTALS</u>:

- .1 Provide the following submittals to the Client's Representative for approval prior to commencing any irrigation construction: No substitutions will be allowed without prior written approval of the Client's Representative.
- Written proof of available water pressure at the point-of-connections. Manufacturer's product data for all proposed irrigation equipment indicated on the drawings-ie: sprinklers, driplines, emitters, bubblers, control valves, controllers, wiring, piping, fittings, valve boxes, filtration, wire connectors, etc.
- Equipment or materials installed or furnished without the prior approval of the Client'S Representative may be rejected and such material removed from the site at no expense to the Client. Approval of any items, alternates, or substitutes indicates only that product(s) apparently meet the requirements of the drawings and specifications on the basis of the information or samples
- Manufacturer's warranties shall not relieve liability under the guarantee. Such warranties shall only supplement the guarantee. The Client's Representative may, at his option, require a manufacturer's warranty on any product offered for use.

#### 1.3 <u>Record Drawings</u>:

- .1 Record accurately on one set of contract drawings all changes in the work constituting departures from the original contract drawings. .2 The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Clients' Representative. Prior to final inspection of work, submit record drawings to the
- Client's Representative for approval. .3 Dimension from two permanent points of reference (buildings, monuments, sidewalks, curbs, pavement, etc.). Data to be shown on record drawings shall be recorded day to day as the project is being installed and shall be made available to the Client's Representative upon request. All lettering on drawings shall be minimum 1/8 inch in size. .4 Show locations and depths of the following items:
- Point of connection Routing of sprinkler pressure lines (dimension maximum 100 feet along routing).
- Gate valves. Sprinkler control valves.
- Quick coupling valves Routing of control wires.
- Related equipment (as may be directed)
- .5 Maintain record drawings on site at all times. Upon completion of work, transfer all record drawing information and dimensions, in ink, to reproducible prints available from Client's Representative at cost. 1.4 INSPECTIONS

- .1 Inspections will be required for: Pressure test of all new irrigation main lines. Test at 150 P.S.I. for four hours. Contractor shall provide all required test pumps, gauges and temporary isolation valves as required. Pipe depth. Coverage test.
- Final inspection/ start of maintenance. Final inspection shall be performed by the Client's Representative. Final acceptance.
- .2 Inspection requests: Contractor shall notify the Client's Representatives in advance for requesting all inspections as follows:
  - Pre-iob conference/ walk- 120 hours (5 working days) Pressure supply line installation and testing - 72 hours (3 working days)
  - System layout and coverage Tests- 72 hours (3 working days)
  - Final Inspection \_ 72 hours (3 working days) Final Acceptance \_ 72 hours (3 working days)
- .3 Do not allow or cause the above items to be buried prior to inspection and approval by the Client's's Representative. A 72-hour notice shall be given prior to anticipated inspections.
- When inspections have been conducted by other than the Client's Representative, the Contractor shall show evidence of when and by whom these inspections were made and who authorized. .5 No inspection will commence without record prints. In the event the Contractor calls for an inspection without up to date record prints, without completing previously noted corrections, or without preparing the system for inspection, the inspection will be canceled and the Contractor back charged for the direct costs of all personnel time and consultant time lost.
- .6 Closing In Uninspected Work: .1 Do not allow or cause any of the work of this section to be covered up or enclosed until it has been inspected, tested, and approved by the Client's Representative. Day and night barricades shall be provided as needed for all open trenches.

### 1.5 <u>TURNOVER ITEMS</u>

- .1 Controller Charts:
- Record drawings: Must be reviewed by the Client's Representative before charts are prepared.
- Provide one controller chart for each automatic controller. Chart shall show the area covered by the controller and color-coded legend with corresponding irrigation control values with each valve/zone location clearly defined. The chart is to be a reduced copy of the actual record drawing. In the event the controller sequence is not legible when the drawing is reduced, it shall be enlarged to a readable size. Chart shall be a black line print with a different color used to show the area of coverage for each station. Chart shall be approved by the Client's Representative prior to final approval. When completed and approved, the chart shall be hermetically sealed between two pieces of plastic, each piece being a minimum 20 mils in thickness.
- .2 Spare Equipment and Accessories .1 Contractor shall provide Client five (5) spare sprinkler heads and emission devices of each model used including full nozzle sets and two (2) of any specialty or proprietary tools required to adjust or maintain said sprinkler heads
- Contractor shall provide Client's two (2) Quick Coupler key assemblies including swivel and one 1" commercial grade 75-foot hose, and two (2) cap keys to open Quick Coupler cap. Prepare and deliver to the Client's Representative within ten days by calendar prior to completion of construction, all required and necessary descriptive material in complete detail and sufficient quantity, properly prepared in individual bound copies of the operation and maintenance manual. The manual shall describe the material installed and shall be in sufficient detail to permit the operating personnel to understand, operate, and maintain all equipment. Spare parts lists and related manufacturer information shall be included for each equipment item installed. Binders may be tandard 3-ring type or similar permanent type clearly labeled on front and spine. .4 Contractor shall provide the Client's with any and all other accessories, keys, installation, repair, maintenance instructions, rebate forms, or other items included with equipment and supplies from
- manufacturers .5 The above equipment shall be turned over to the Client at the conclusion of the project. Before final acceptance can occur, evidence that the Client has received materials must be shown to the
- Client's Representative. .6 In addition to the above maintenance manuals, provide the maintenance personnel with instructions for major equipment and show written evidence to the Client's Representative at the conclusion of the project that this service has been rendered.

### 1.6 <u>GUARANTEE</u>

- .1 General: All work done under this contract, shall be guaranteed against all defects and fault of material and workmanship for a period of one (I) year following the filing of the Notice of Completion. All materials used shall carry a manufacturer's guarantee of one (1) year minimum. .2 Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by the Contractor at no additional expense to the Client's within ten (10) calendar days of receipt of written notice from the Client's. When the nature of the repairs as determined by the Client's constitute an emergency (e.g. broken pressure line) the Client's may proceed to make repairs at the Contractor's expense. Any and all damages to existing improvement resulting either from faulty materials or workmanship, or from the necessary repairs to correct same, shall be repaired to the
- satisfaction of the Client's by the Contractor. all at no additional cost to the Client's. .3 Guarantee shall be submitted on Contractor's own letterhead as follows:

#### FOR SPRINKLER IRRIGATION SYSTEM

We hereby guarantee that the sprinkler irrigation system we have furnished and installed is free from defects in materials and workmanship, and the work has been completed in accordance with the drawings and specifications, ordinary wear and tear and unusual abuse, or neglect expected. We agree to repair or replace any defects in materials or workmanship which may develop during the period of one year from date of filing of the Notice of Completion and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Client's. We shall make such repairs or replacements within 10 calendar days following written notification by the Client's. In the event of our failure to make such repairs or replacements within the Time specified after receipt of written notice from the Client's, we authorize the Client's to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon

demana.		
PROJECT:	Location:	
SIGNED:	ADDRESS:	

.4 After the system has been completed: the Contractor shall instruct the Client's in the operation and maintenance of the system and shall furnish two complete sets of operating instructions. .5 Any settling of trenches which may occur during the one\_year period following acceptance shall be repaired to Client's satisfaction by the Contractor without any additional expense to the Client's. Repairs shall include the complete restoration of all damage to planting, paving or other improvements of any kind as a result of the work.

#### PART 2- MATERIALS 2.1 GENERAL

.1 Materials or equipment installed or furnished that does not meet the Client's standards will be rejected and shall be removed from the site at no expense to the Client's.

2.2 <u>PIPE</u>

- .1 Pressure supply lines larger than 4" shall be Class 200 gasketed (Ring-Tite) PVC pipe. .2 Pressure supply lines 2 to 4 inches in diameter shall be Class 315 solvent weld PVC.
- 3 Pressure supply lines 1-1/2 inches in diameter and smaller shall be Schedule 40 solvent weld PVC.
- .4 All non-pressure lines shall be PVC-size and type per Irrigation Legend with no pipe smaller than 3/4" being used. .5 Pressure supply line from point of connection through backflow prevention unit shall be per local code.

#### 2.3 PLASTIC PIPE AND FITTINGS

- .1 All pipe shall be extruded of an improved PVC virgin pipe compound featuring high tensile strength, high chemical resistance and high impact strength. In terms of the current ASTM Standard D-1769 or D-2241, this compound shall meet the requirements of cell classification 12454B for pipe and 13454B for fittings. This compound
- must have a 2,000 psi hydrostatic design stress rating. .2 All pipe must bear the following markings: Manufacturer's name, nominal pipe size, schedule or class, pressure rating in P.S.I., and NSF (National Sanitation Foundation).
- The manufacturer shall also mark the date of extrusion on the pipe. .3 Solvent cement joints for plastic pipe and fittings shall be made as prescribed by the manufacturer. The high chemical resistance of the pipe and fitting comp specified in the foregoing sections makes it mandatory that an aggressive primer, which is a true solvent for PVC, be used in conjunction with a solvent of
- for the fit of the pipe and the fittings of each size range specified. .4 Each pipe installer expected to make solvent joints shall receive instructions in the proper assembly of such joints from the representative of either pipe, cerr
- fitting manufacturer before starting the job, unless he has been previously instructed on recommended solvent cementing procedures by a competent represent manufacturer.
- .5 All fittings shall be standard weight schedule 40. At the purchaser's discretion, contract preference may be given those suppliers able to furnish all types of fittings required under this contract from a single manufacturer, in order that responsibility will not be divided in warranty claim situations.
- .6 All fittings shall be injection molded of an improved PVC fittings compound featuring high tensile strength, high chemical resistance, and high impact strength. In terms of the current ASTM Standard D-1784-69, the compound must meet the requirements described in cell classification 13454B. Where threads are required in plastic fittings, these shall be injection molded also. All tees and ells shall be side gated. 7 Apply primer and solvent on all pipe sizes and fittings. Primer solvent on both female and male ends. All solvent cementing of plastic pipe and fittings shall be a
- two\_step process, using primer and solvent cement applied per the manufacturer's recommendations. Cement shall be of a fluid consistency, not gel\_like. .8. All fittings shall bear the company's name or trademark, material designation, size applicable
- I.P.S. schedule, and NSF seal of approval. .9 All threaded nipples shall be standard weight Schedule 80, with molded threads.

![](_page_11_Picture_59.jpeg)

- 2.4 <u>PVC\_CONDUIT/SLEEVING</u>
- .1 Pipe that is used for control wires sleeving shall be PVC conduit Schedule 40: Type 1220. All wires under paving shall be installed in PVC conduit, or sleeves as indicated in details and Legend.
- 2.5 <u>RING-TITE PVC PIPE</u>
- 1 All Ring—tite pipe indicated on the working drawings, shall be minimum Class 160 PSI Johns—Manville PVC pipe with ring—tite joints. All ring-tite joints shall be sealed with rubber rings as provided by the manufacturer. All pipe joints shall provide for expansion and contraction.
- 3 Thrust blocks shall be provided as required for proper anchorage and durability of the ring-tite pipe. (Refer to Details)
- 2.6 ADJUSTABLE ARC, ADJUSTABLE RADIUS, MATCHED PRECIPITATION RATE, MULTI-STREAM, MULTI-TRAJECTORY, ROTATING STREAM SPRINKLER
- 1. The sprinkler and nozzles shall be as indicated in the Irrigation Legend or approved equal. 2.7 ELECTRIC CONTROLLERS and ENCLOSURES
- 1 The automatic controller shall be as indicated in the Irrigation legend
- All wiring to and from the controller shall be through color-coded fittings. .3 Contractor to install a grounding rod for all inclosure installed controllers per local electrical codes and manufacturers recommendations.
- 2.8 <u>ELECTRIC CONTROL VALVES</u> The electric remote control valve shall be as indicated in the Irrigation Legend. The valve pressure rating shall not be less than 200 psi.
- The valve shall be capable of being operated in the field manually without electricity using a bleed valve or equal. The valve shall be capable of being serviced in the field without removing it from the supply line. Provide waterproof plastic marker tags for all remote control valves. Tags shall indicate the respective controller station of each valve and "purple-alert" notification if
- 2.9 DRIP IRRIGATION COMPONENTS
- .1 Provide Drip Control Zone Kits as indicated in the Irrigation Legend. .2 The drip tubing shall be as specified in the Irrigation Legend.

with detent positions for regulating water flow.

- 2.10 QUICK COUPLER VALVES
- .1 The guick coupling valve shall be in the Irrigation Legend and have a two piece type capable of having a discharge rate of 15 gallons per minute (G.P.M.) with a pressure loss not to exceed 4.3 pounds per square inch (PSI). .2 The valve body shall be constructed of heavy cast brass. The cover shall be a durable, protective self-closing rubber cover. When so specified, the cover shall be a locking rubber cover (LRC). .3 The valve shall be opened and closed by a brass key of the same manufacturer having a 3/4" (MNPT) and 3/4 " (FNPT) outlet. The valve throat shall have a keyway
- 2.11 <u>WIRING, LOW VOLTAGE</u>
- 1 Connections between the controller and remote control valves shall be made with valve manufacturer's wire chart and specifications. 2 Wiring shall occupy the same trench and shall be installed along with the same route as the pressure supply lines wherever possib
- .3 Where more than one wire is placed in a trench, the wiring shall be taped together at intervals of 10 feet.
- .4 All splices shall be made using Scotch Lok Unipack waterproof sealing packets, Pen-Tite Connectors, or equal. An expansion loop of 18" shall be provided at connection and directional turr .5 Sizing of wire shall be according to manufacturer recommendations, in no case less than AWG #12 gauge unless otherwise .6 Use a continuous wire between controller and remote control valves. Under no circumstances shall splices exist without prior written approval. Any splices allowed
- installed in an approved box. .7 All ground wires shall be white AWG #12 size. .8 Provide spare oranae wires from controller to the end each mainline branch in system as shown on the plans to be used as required as a spare. Label these wires as spare in the controller. Loop wires into each valve box along the mainline run. .9 Provide a tracer wire over all new mainline installations.
- 2.12 BACKFLOW PREVENTERS
- .1 Shall be Reduced Pressure type listed in the Irrigation Legend or approved equal.
- 2.13 VALVE BOXES
- 1. Valve boxes shall be used as durable, rigid enclosures for valves or other irrigation system components requiring subsurface protection for installation or main The valve box shall be made of structural foam HDPE resin that is resistant to UV light, weather, moisture, and chemical action of soils. 2. The standard rectangular body shall have knock-outs molded into the sides that can be readily removed. The knock-outs shall remain an integral part of the body un removed to run pipes or wires through the valve box.
- 3. The valve box shall have corrugated sides. Rectangular valve boxes shall have a grooved feature on one side, just below the lid at the top of the box, for inserting a shovel blade or other prying tool to provide easy lid removal. This is useful following compaction of the surrounding soil or after the eventual accumulation of thatch over the valve box.
- 4. Extension models shall have vertical ribs inside that make them capable of being mounted directly over the top of another box.
   5. Boxes shall have a stepped feature on the bottom that securely interlocks two boxes together when mated bottom—to—bottom for use in a deep installation.
   6. There shall be no hole in the valve box lid unless the bolt—hole knock—out is removed in order to use the locking bolt. Lids shall be green unless otherwise stated and have beveled 7. edges to minimize potential damage from lawn equipment. Lids shall be clearly marked with the words "Irrigation Control Valve" molded onto the top. Lids shall have a marking area measuring at least 6" by 2" that is suitable for branding or other means of identification.
- The locking bolt, washer, and clip shall be made of stainless steel.
   The valve box shall be manufactured by Rain Bird Corporation, Azusa, California. or approved equa
- 2.14 GATE AND BALL VALVES
- Approved gate and ball valves shall be as indicated in the Irrigation Legend. Size and location shall be as indicated
- 2.15 ELECTRICAL, HIGH VOLTAGE
- .1 Power to and connection to the automatic controller shall be provided by the Client.
- .2 All electrical equipment outside of buildings shall be Nema 3 type, waterproof for such installation. .3 All high voltage work shall be installed under this section. Refer to Wiring, Low Voltage for additional information.
- PART 3 EXECUTION
- 3.1 <u>GENERAL</u>
- Layout irrigation systems and make minor adjustments required due to differences between site and drawings. Where piping is shown on drawings under paved areas, but running parallel and adjacent to planted areas, install the piping in the planted areas. All work called for on the drawings by notes shall be furnished and installed whether or not specifically mentioned in the specifications. 2 Diagrammatic Intent:
- .1 The drawings are essentially diagrammatic. The size and location of equipment and fixtures are drawn to scale where possible. Provide offsets in piping and changes in equipment locations as necessary to conform to present and future structures and to avoid obstructions or conflicts with other work. Coordinate the installation of all sprinkler materials, including pipe, with the landscape drawings, to avoid interfering with the trees, shrubs, other planting and other equipment being installed by the various trades. Do not willfully install the sprinkler system as indicated on the drawings when it is obvious in the field that unknown obstructions or grade differences exist, that might not have been considered in the engineering or if discrepancies in construction details, legend, or specific notes are discovered. All such obstructions or discrepancies should be brought to the attention of the Client's Representative. In the event this is not done, the Contractor must assume full responsibility for ons necessary. Before any work commences, confer with the Client's Representative regarding general details of work of this contract.
- Before starting work, carefully check grades to determine that work may safely proceed, keeping within the specified material depths with respect to finish grade. .4 Inspections:
- .1 Prior to all work of this section carefully inspect the installed work of other trades and verify that all work is complete to the point where installation may properly .2 Verify that irrigation system may be installed in strict accordance with all pertinent codes and regulations, the original design, the referenced standards, and the manufacturer's recommendations. .5 Discrepancies:
- .1 In the event of discrepancy notify the Landscape Architect and Client's Representative. The Landscape Architect shall be responsible for the interpretation of any irrigation design guestions Do not proceed with installation in areas of discrepancy until all discrepancies have been resolved. Layout sprinkler heads and make any minor adjustments required due to differences between site and drawings. Any such deviations in layout shall be within the
- intent of the original drawings, and without additional cost to the Client. Layout shall be approved by the Client's Representative before installation. .6 Field Measurements: Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. Contractor shall coordinate the installation of all
- irrigation materials with all other work. Materials: .1 Materials shall be of first quality and of domestic manufacturer whenever possible unless otherwise noted.
- WATER SUPPLY
- Connections at the point of connection (POC) shall be at the approximate location(s) shown in the drawings. Minor changes caused by actual site conditions shall be made without additional cost to the Client.

PHONE: \_\_\_\_\_

### 3.3 TRENCHING

- Dig trenches and support pipe continuously on bottom of ditch. Lay pipe to an even grade. Trenching excavation shall follow layout indicated on drawings to the depths below finished grade and as noted. Where lines occur under paved areas, these dimensions shall be considered below subgrade.
   Provide minimum cover of 24 inches on pressure supply lines 4 inches and larger.
   Provide minimum cover of 18 inches on pressure supply lines 3 inches and smaller.
- .4 Provide minimum cover of 18 inches for wires.
- .5 Provide minimum cover of 12 inches for non-pressure lines. .6 Provide minimum cover of 24 inches for all pipe sleeved under paving. .7 Provide horizontal clearance between pipes per Trenching/ Sleeving Detail.
- .8 Where it is necessary to excavate adjacent to existing trees, the Contractor shall avoid injury to trees and tree roots. Excavation in areas where 2 inch and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be tunneled under and shall be heavily wrapped with wet burlap to prevent scarring or drying. Where trenching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making a clean cut through the roots. Roots 1 inch and larger in diameter shall be painted with two coats of Tree Seal or approved equal. Trenches adjacent to trees shall be closed within 24 hours.

### 3.4 <u>BACKFILLING</u>

backfill on all lines shall be of fine granular material with no foreign matter larger than 1 inch in size. ill shall be tamped in 4 inch layers under the pipe and uniformly on both sides for the full width of the trench and the full length of the pipe. Materials shall be iently damp to permit thorough compaction, free of voids. Backfill shall be compacted to dry density equal to adjacent undisturbed soil and shall conform to adjacent Flooding in lieu of tamping is not allowed without specific prior approval. Under no circumstances shall truck wheels be used to compact soil.

### <u>PIPING</u>

- isting pavement may be installed by jacking, boring, or hydraulic driving. No hydraulic driving is permitted under asphaltic concrete pavement. breaking of existing pavement is not permitt
- efully inspect all pipe and fittings before installation, removing dirt, scale, and burrs and reaming; install pipe with all markings up for visual inspection and verification. .4 Exercise care in handling, loading, unloading, and storing plastic pipe and fittings; store plastic pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow the pipe to lay flat, avoid undue bending and any concentrated external load. 5 Remove all dented and damaged pipe sections
- .6 Contractor shall install concrete thrust blocking at all changes of direction and terminal points of pressure pipe when indicated in plans. .7 All lines shall have a minimum clearance of 4 inches from each other and 6 inches from lines of other trades.
- .8 Parallel lines shall not be installed directly over one another. .9 PVC pipe shall be snaked in a manner which will provide for expansion and contraction as recommended by the pipe manufacturer installed label up.
- .10 In solvent welding, use only the specified primer and solvent cement and make all joints in strict accordance with the manufacturer's recommended methods; allow solvent welds at least 15 minutes setup time before moving or handling and 24 hours curing time before filling. .11 360 degree applicators shall be used to apply primer and solvent on sizes 2-1/2 inches and larger.
- .12 Centerload all plastic pipe prior to pressure testing. .13 All threaded plastic to plastic connections shall be assembled using Teflon tape.

Provide sand backfill a minimum of 4 inches over and under all piping under paved areas.

.14 For plastic to metal connections, work the metal connections first. Use a non-hardening pipe dope on all threaded plastic to metal connections, except where noted .15 Main lines shall be tested in place before backfilling for a period of not less than four (4) hours and shall shown no leakage or loss of pressure. During the test period, minimum test pressure, at the highest point of the section being tested, shall be 150 pounds per square inch. Center filling of pipe lengths is allowed.

### 3.6 <u>RING-TITE PCV INSTALLATION</u>

Except as may be noted in other parts of the Specifications or on the drawings, installation of Ring-Tite pipe and connecting fittings shall be outlined in manual as Turnished by pipe manufacturer, or as set forth by the Johns-Mansville Company Manual #772-62A. This shall include, but not be limited to, the installation of the pipe at the proper depth and the correct location of concrete thrust blocks of adequate sizes. Contractor shall make available the services of the manufacturer's representative at the start of the installation and during construction.

### 3.7 <u>SPRINKLERS</u>

.1 All nozzles on sprinklers shall be tightened after installation. All sprinklers having an adjustment stem shall be adjusted on a lateral line for the proper radius, diameter and/or gallonage per approval of the Client's Representative. Sprinkler heads and risers shall be installed according to details for final approval. .3 Spacing of heads shall not exceed the maximum indicated on the drawings. In no case shall the spacing exceed the maximum recommendation by the manufacturer.

### 3.8 <u>VALVES</u>

.1 Remote control valves shall be adjusted in order that a uniform distribution of water is applied by the sprinkler heads to the planting areas for each individual valve system. .2 Quick coupling valves shall be set approximately 12" from walks, curbs, header boards, or paved areas where designed. Refer to installation detail. Place quick couplers in

### 3.9 <u>VALVE BOXES</u>

Valve boxes shall be set one inch (1") above the designated finish grade in lawn areas and three inches (3") above finish grade in ground cover areas. Valve boxes installed near walks, curbs, header boards, and paving shall not abut those items. Top surfaces shall be flush with, and perpendicular to, items listed above. .3 Valve boxes shall be installed in shrub planters, not in turf areas whenever possible, unless otherwise approved.

#### 3.10 CONTROLLER LOCATION AND INSTALLATION

.1 The automatic controller shall be installed at the approximate location shown on the Plan, unless otherwise instructed by the Client's Representative. .2 All local and other applicable codes shall take precedence in connecting the 120 volt electrical service to the controller. Client shall provide power to controller. Irrigation Contractor shall complete hook-up to controller. .3 There shall be adequate coverage of earth (18" minimum) over the 24-volt control wire. Bundle and tape wires at 10' O.C. and install adjacent to mainline.

#### 3.11 BACKFLOW PREVENTER

.1 The backflow prevention units shall be installed as shown on Plans and Details. Backflow prevention units shall be installed per local codes including certification.

### 3.12 ASSEMBLIES

.1 Install all assemblies specified herein according to the respective detail drawings or specifications, using best standard practice. .2 Install the backflow assembly at the height required by local codes.

.3 Routing of pressure supply lines as indicated on drawings is diagrammatic. Install lines (and various assemblies) to conform with the details on the plans. .4 Brass pipe and fittings shall be assembled using Teflon dope, or equivalent, applied to the male threads only. This is also true of plastic pipe and threaded fittings.

### 3.13 FLUSHING THE SYSTEM

.1 After all new sprinkler PVC piping, poly tubing and risers are in place and connected, all necessary work has been completed and prior to the installation of sprinkler heads, control valves shall opened and a full head of water used to thoroughly flush out the system. .2 At the conclusion of a system flushing, the heads shall be installed and tested for operation in accordance with design requirements under normal operating pressure. Contractor shall verify head pressures with pilot tube and adjust valve to correspond with design pressure.

### 3.14 ADJUSTING THE SYSTEM

.1 Contractor shall adjust valves, align heads, and check coverage of each system prior to coverage test.

.2 If it is determined by the Client's Representative that additional adjustments or nozzle changes will be required to provide proper coverage, or reduce overspray, all necessary changes or adjustments shall be made prior to any planting at no additional cost to the Client. .3 The entire system shall be operating properly before any planting operations commence.

.4 Contractor to adjust all bubblers, emitters, sprayheads and driplines to assure no flooding occurs causing erosion to the slopes. Any erosion caused by incorrectly adjusted irrigation or controller shall be repaired by the contractor at no additional cost to the Clier

### 3.15 COVERAGE TEST

.1 When the sprinkler system is completed, perform a coverage test in the presence of the Client's Representative to determine if the water coverage for planting areas is complete and adequate. The Contractor shall furnish, at his or her cost, all materials and perform all work required to correct any inadequacies of coverage due to deviations from plans, or where the system has been willfully installed when it is obviously inadequate if not brought to thee Client's attention before installation. This test shall be accomplished before planting begins.

### 3.16 HYDROSTATIC TEST

.1 All Hydrostatic tests shall be made only in the presence of the Client's Representative, or other duly authorized representative of the Client. No pipe shall be backfilled until it has been inspected, tested, and approved in writing. Pressure supply lines shall be tested under a hydrostatic pressure of 150 pounds per square inch for a period of four

### 3.17 <u>COMPLETION CLEANING</u>

.1 Upon completion of each phase of work, Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters, walkways, and trails; and remove construction equipment from the premises. \* \* \* \* FND OF SECTION \* \* \* \*

![](_page_11_Picture_159.jpeg)

### PLANTS AND GROUND COVERS

1.1 <u>GENERAL</u>

- .1 Provide trees, plants, ground covers, import soil, wood mulch, tree pruning and equipment as shown and specified. The work includes but is not limited to:
- .1 Soil testing and analysis per notes on plans. Trees, shrubs, and ground covers.
- Planting mixes and amendments. .4 Stone/Wood mulch and planting accessories.
- Maintenance.
- Weed and rodent control. Pruning of existing trees to remain.
- .8 Removal of trees/shrubs/concrete per plans.
- .9 Product Submittals for plant materials (provide photos of all plants), including but not limited to; tree stakes, root deflector fabric, soil amendments, fertilizers, boulders, rock mulches, etc.
- 1.2 <u>GUARANTEE:</u>
- .1 All trees installed under this contract shall be guaranteed against any and all poor, inadequate or inferior materials and/or workmanship for a period of one (I) year. .2 During the guarantee period, any material found to be dead, missing, or in poor condition shall be replaced by the Contractor within ten (10) days of written notification. The Client's authorized representative shall be the sole judge
- as to the condition of the material. .3 Replacement shall be made in accordance with these specifications and the plans. .4 Material and labor involved in replacing plant material shall be provided by the Contractor at no additional cost to the Client.

#### 1.3 INSPECTIONS:

- .1 Inspections will be required. The Contractor shall contact the Client Representative at least 72 hours (3 working days) in advance of an anticipated inspection. An inspection will be required at each of the steps listed below:
  - Upon completion of fine grading for acceptance of fine grading work prior to installation of irrigation systems. When trees and shrubs are spotted for planting, but before planting holes are excavated. When planting and all other indicated or specified work has been completed. During application of pre-emergent chemical
  - At start of plant establishment and maintenance period, current with final acceptance of the project for maintenance by the Client. This acceptance for maintenance will be confirmed in writing by the Client's Representative.
- 1.4 <u>SUBMITTALS:</u>
- .1 The following written certifications are required to be submitted to the Client's Representative upon delivery of the respective materials to the job site:
  - Total Quantity of commercial fertilizers by type Total Quantity of import soil, soil amendments and conditioners by type
- .2 The Contractor shall provide to the Client's Representative a complete submittal package of cut-sheets describing all planting materials to be used, including pictures of all plants and boulders as called out in the approved landscape construction documents prior to beginning work. Contractor shall also submit the required soils test results and supply a one pound sample of all mulches and amendments-if different than as specified on plans.

Total Quantity of decomposed granite, stone and wood mulch

- 2.1 FERTILIZER, SOIL AMENDMENTS AND CONDITIONERS: .1 Planting Packets: (BEST-PAKS) Controlled-release 12 month fertilizer planter packets having an analysis of 20-10-5 derived from the sources listed in the following guaranteed analysis.
- GUARANTEED ANALYSIS
- Total Nitrogen (N).....20% Available Phosphoric Acid (P2 05)......10%
- Derived from calcium phosphate
- Soluble Potash (K2 0)......5% Iron (expressed as elemental Fe).....(.9)%
- .2 Organic Soil Amendment: Shall be Custom Amendment Mix (WCP33) as available from Earthworks at (951) 782-0260 or approved equal. Material containing pine, or other materials will not be accepted. Provide a 1 pound sample to the Landscape Architect for approval.
- .3 Organic Fertilizer shall consist of Establish as available from Earthworks at (951) 782-0260 or approved equal.
- 2.2 <u>PLANTS:</u>
- .1 All plants shall be true to name, and one of each bundle or lot shall be tagged with the name and size of plants in accordance with the standards of practice recommended by the American Association of Nurserymen. The root condition of plants furnished in containers shall be determined by removal of earth from the roots of not less than two plants nor more than 2% of the total number of plants of each species or variety except when containergrown plants are from several different sources: in which case, the roots of not less than two plants of each species or variety from each source shall be checked by the Client Representative at his option. The selection of plants to be checked will be made by the Client Representative. All plants rendered unsuitable for planting shall be considered as samples, and replacements shall be provided at no additional cost. In case the sample plants are found to be defective, the entire lot or lots of plants represented by the defective samples will be rejected. .2 All shrubs supplied by Contractor shall be of the specified standard height and diameter set by the American Standard for Nursery Stock.
- .3 As soon as the work contract has been executed between the Client and the Contractor, Contractor shall immediately make arrangements for ordering all plant materials. Some of the plant materials will require additional lead time in order to arrive on site to meet any required schedules.

#### 2.3 <u>BACKFILL MATERIAL</u>

- .1 Topsoil shall be free of noxious weed seeds and shall be of a loam characteristic, fertile and friable.
- .2 Organic amendments shall consist of Custom Amendment Mix (WCP33) as available from Earthworks at (951 782-0260 or approved equal. Provide a 1-pound sample to the Landscape Architect for approval. .3 Soil used for backfill of planting pits shall be enriched using the following blend per cubic yard:
  - 2/3 site soil, 1/3 Custom Amendment Mix (WCP33)

### Fertilizers as recommended by the soils testing results 3.1 LANDSCAPE GRADING:

.1 The Contractor shall complete preliminary grading as indicated on the plans, removing existing soil and filling needed bringing all areas to be landscaped within .1 foot of finish grade after amending. Soil displaced dur planting shall be removed from site if leaving it would impact the finish grade depth

#### 3.2 SOIL PREPARATION:

- .1 All fine grading and all weed control measures shall be completed prior to soil preparation. .2 All landscape areas shall be finish graded to dress out maintain, and/or reestablish grades and flow lines as approved prior to amending the soil. Finish grades will be inspected upon completion. Contractor shall not proceed with planting
- work until finish grades have been inspected and accepted by the Client's Representative. .3 Unless otherwise indicated on the plans or soils report, all lawn and flatted ground cover areas shall receive 4 cu. Yards of Custom Amendment Mix (WCP33) and 90 lbs. per 1000 s.f. of Establish rototilled into the top six inches of soil in two directions. WCP33 and Establish available thru Earthworks. (951) 782-0262
- 3.3 WEED CONTROL MEASURES:
- .1 Existing grass and weeds shall be killed with a contact herbicide. Once dead, remove all existing grass and roots a weeds from the site prior to new planting. Pre-germinate all weeds by overhead watering for minimum of once a day for one week. After complete germination-spray with a contact herbicide and remove dead weeds/roots in all pla beds. Root systems shall be removed as needed to guarantee the plant material will not grow back.
- .2 After planting, prior to any decomposed granite, stone or wood mulch placement, treat all planter areas with a pre-emergent herbicide. If pre-emergent herbicide is not applied prior to the mulch placement, mulch shall be removed, the herbicide applied and the mulch reinstalled. .3 Any chemicals applied shall be as directed by a licensed Pest Control Agent. This treatment shall be applied at the
- times recommended by the manufacturer. The Client's Representative shall be given a minimum of 72 hours (3 working days) notice prior to each application. No chemicals shall be applied other than in the presence of the inspector.
- 3.4 <u>FINISH GRADING:</u>
- .1 After completion of all weed removal/soil preparation work the Contractor shall finish grade all planting areas filling as needed or removing surplus dirt, removing rocks and debris over 1 inch in diameter, and floating to a smooth uniform grade. All areas shall slope to drain. Flow lines shall be established to existing drain inlets or swales as shown on the grading plans and as directed by the Client's Representative. .2 When conditions detrimental to plant growth are encountered, such as rubble fill, natural rocky conditions or adverse drainage conditions, notify the Architect and Landscape Architect before planting.

![](_page_12_Picture_45.jpeg)

3.5 <u>PLANTING:</u>

.5

3.6 <u>MULCHES:</u>

materials

3.7 <u>WATERING;</u>

around.

3.8 <u>MAINTENANCE;</u>

plant establishment perio

3.10 MAINTENANCE TASKS

**Replacement Plantings:** 

anting Establishment:

.5 Grading And Drainage:

.6 General Conditions:

General:

.2 Iron Chlorosis:

3.9 <u>START OF PLANT ESTABLISHMENT:</u>

.1 Criteria for start of plant establishment period

installation of all materie

eliminate sucker growth.

.4 Irrigation:

expense.

mulches (see 3.3.2).

manufacturer's recommendations.

all times, well below the root system of plants.

irriaation system shall be watered with a

acceptance of the work.

- .1 Trees and Shrubs: The location of each plant is as shown and may be scaled from the plan unless the Landscape Architect designates otherwise. Maintain a distance from all hardscape elements and ground covers of one-half of the spacing indicated in the planting legend or 1/2 the scaled diameter of the shrub. .2 Plant holes shall be dug to size as indicated in the drawings. Before trees or shrubs are set in the holes, a water test should be made as follows:

backfill to the required level. If a plant settles deeper than shown, replant it at the required level.

specified on the drawings. Refer to plans for packet quantities. Complete backfilling to finish grade.

and groundcovers in adjacent rows. Adjust the alignment of the plants within the outer rows.

.2 All mulched areas are to be treated with a pre-emergent chemical prior to the installation of the stone

shall be equal to Western Excelcior "C-44". Provide samples to the Landscape Architect for approval. I

erect temporary protective fencing to be removed at the end of the plant establishment period.

Immediately after planting apply water to each individual shrub. Apply water in a moderate strea

.1 All areas landscaped by Contractor under this contract shall be maintained by him for a minimum plant

.5 If the project maintenance fails to continuously meet standards required, the plant establishment period day

count will be suspend and will not recommence until Contractor has corrected all deficiencies.

materials shall be in a healthy, growing condition and spaced as indicated on the plans.

ntervals until the plant material is established. If a good rate of growth has not been demonstrated

fertilizers are needed, up to a maximum 30% beyond the amount specified, such amendments shall be provided

within 30 days of first planting, the Contractor shall be responsible to determine the appropriate

All paved areas shall be cleaned and maintained in a neat and clean condition at all times.

silt and debris. Keep all drain inlets clear of leaves, trash, and other debris.

repair damage as soon as evidence of rodent activity is noticed.

.5 Debris and trash shall be removed from the site daily at a minimum.

horticultural practices necessary to obtain good growth. The Contractor shall obtain agronomic soils

the start of growing season, May 1st or as determined by the Architect.

in accordance with the contract documents.

apply FE 138Geigy or equivalent at manufacturers recommended rates.

by the Contractor at no additional cost to the Client.

.6 When necessary to prevent plant damage from pedestrian traffic during the initial growing stage, the Contractor shall

to a fence must be tied to the fence at the time of planting.

for approval prior to installation if it differs from what is specified on the plans.

.5 After planting, any areas showing erosion shall have an approved erosion control mat

- does not drain out of hole within 24 hours, this fact must be brought to the attention of the Client's
- .1 All plant holes shall be filled to the brim with water and allowed to drain before any planting is done. If water

### 3.11 EXISTING TREE CARE RRU

Representative so that corrections can be made. Correctional work shall be considered as an extra, at additional .2 Soil surrounding planting pit shall be in a friable condition and moist to a depth of 8". Distribute backfill uniformly throughout the entire depth of the plant hole without clods or lumps. After the planting holes have

been backfilled, jet water into the backfill with a pipe or tube inserted into the bottom of the hole until the backfill material is saturated for the full depth. If the backfill material settles below this level, add additional

Backfill using specified soil mix to within 6" of finish grade. At this depth, place the plant fertilizer packs as Where shrubs and groundcovers are shown to be planted in groups, the outer rows directly adjacent to the nearest roadway or highway fence must be parallel to the nearest roadway or highway fence. Stagger shrubs

Where a vine is to be planted against a wall or fence, plant it as close as possible to the wall or fence. If a vine planted next to a wall is to be staked, stake and tie the vine at the time of planting. A vine planted next

.1 Mulches shall be as specified on the plans. Provide a 2-pound sample of each variety to the Landscape Architect

.3 Following planting, shrub areas shall be re-graded to restore smooth finish grade and to ensure proper surface drainage. Watering shall begin immediately following mulching or as needed during operations to sustain the plant .4 Decomposed granite mulches to be rolled and compacted as recommended by the manufacturer after installation

tting installed as needed. Matting

.1 It shall be the Contractor's responsibility to maintain a balanced watering program to ensure proper growth until final

hole until the material around the roots is completely saturated from the bottom of the hole to the top of the .3 Apply water in sufficient quantities and as often as seasonal conditions require, to keep the planted areas moist at

.1 Contractor shall properly maintain the irrigation system. A balanced water program shall be maintained to ensure proper growth until final acceptance of the work. Plants which cannot be watered efficiently with the .2 All controllers are to have each station individually adjusted on a minimum of a weekly basis. System shall be set considering the application rate each area is capable of receiving. The irrigation system shall operate on short intervals with the cycle repeating at a later time to reduce runoff.

establishment period of not less than forty-five (45) days from the date of written acceptance for start of the .2 Areas sodded or seeded after October 1st will be accepted the following spring, approximately one (1) month after

establishment period shall not start until all elements of the project that impact the landscape are

Permanent power to the controller shall be established. The plant establishment period for the project shall not begin until the Project Inspector has approved the

Written acceptance by the Client's Representative must be obtained prior to the start of the plant establishment

During the contract period provide all watering, weeding, fertilizing and cultivation, and spraying necessary to keep the plants in a healthy growing condition and to keep the planted areas neat, edged, and attractive. All plants planted under the contract shall be pinched and pruned as necessary to encourage new growth and to

.1 After planting and during the plant establishment period in the event that plants exhibit iron chlorosis symptoms,

During the plant establishment period, should the appearance of any plant indicate weakness, that plant shall be replaced immediately with a new, healthy plant. At the end of the plant establishment period, all plant

ny planting areas that do not show a prompt establishment of plant material shall be replanted at 10 day

testing, at their cost, of all areas not showing good growth and shall provide copies of the test results to the Client to verify the appropriateness of all maintenance work performed. If additional soil amendments or

During the plant establishment period all flow lines shall be maintained to allow for free flow of surface water. Displaced material which interferes with drainage shall be removed and placed as directed. Low spots and

pockets shall be graded to drain properly. Erosion control netting shall be installed at flow lines and other locations where erosion is evident at no additional cost to the Client, when directed by the Project Inspector.

Damage to planting areas shall be repaired immediately and throughout the plant establishment period. Depressions caused by vehicles, bicycles, or foot traffic shall be filled and leveled. Replant damaged areas. Any subsurface drains with the project area shall be periodically flushed with clear water to avoid build up of

.4 Throughout the plant establishment period, all plants shall be maintained in a disease and pest free condition at the Contractor's expense. A licensed pest control operator shall be retained by the Contractor to recommend and apply all pesticides, herbicides, and fungicides. Exterminate gophers, moles, and all other rodents, and

.1 Contractor shall have all existing trees evaluated and pruned by an I.S.A. Board Certified Arborist per "ANSI a330 part1, Pruning", published by the Tree Care Industry Association. Pruning shall remove dead branches, crossing branches and minor "lacing" of the tree canopies. Pollarding of trees is not permitted. Arborist shall meet with the Project Representa itive prior to any pruning work done to discuss the level of pruning required. One tree of each species shall be pruned for approval and to provide a representation of the pruning to be accomplished on all trees. Pruning shall be accomplished after utilities installation and fine grading but prior plant installation.

.2 All trenching for sprinklers, electrical, or other predominant features should be carefully considered to limit the affect upon the trees. Trenches should be laid out wherever possible to run in lines radiating out from the trunks of adjacent trees as opposed to lines perpendicular to those lines radiating from the trunks. Any necessary trenching hin the drip lines shall be done by hand to allow for cutting of any uncovered roots. Wherever possible, trenches ould be dug under large roots that are found above the necessary depth of the trenches leaving viable root tissues in place wherever possible. Root ends should be cut smoothly by means of loppers or hand saws. Root pruning shall lowed within 24 hours by a soil drench which includes ROOTSTM concentrate, and Dyna-GrOTM "Grow 7—9—5" or equivalent hydroponically balanced mineral concentrate. ROOTSTM concentrate is to be diluted 50:1 (2 oz. per gal.) and then applied at the rate of 1 gallon (i.e., 2 oz. of concentrate.) per caliper-inch of trunk diameter. If Dyna\_GrOTM is the mineral additive used, it can be included with the ROOTSTM solution, in a 750:1 dilution (1 tsp. per gal.). Application shall be made in the presence of the Client's Representative. No roots 1-inch or larger are to be cut without the approval of the owner's representative. See Irrigation Specifications.

on the site shall abide by the following specifications to avoid damage to the trees: .3 All

vehicles shall be parked or driven within any zone of protection. No materials shall be stacked within any zone of protection. All staging areas shall be at a distance of 10 feet or more beyond any tree canopy. No concrete slurry, paints or any other liquid construction wastes shall be poured upon the soil surface within 20 feet of any tree. All construction wastes should be disposed of offsite. No objects shall be fastened to or hung from trees, except as needed in the course of pruning or other tree intenance

trenching or grade changes shall be effected within any zone of protection, except as approved rist, 'in collaboration with appropriate agents such as engineers or representatives of the general the Client, etc. ractor. 1

eavy equipment shall be operated in a manner to produce physical impact with any visible part of any tree designated for preservation. 7 No branch removal or clearance pruning of any kind shall be performed except as prescribed or approved by the arborist

.8 Any construction related damage to trees observed by the Client's Representative shall be reported in writing, with assessment of the dollar value of the damage and recommended indemnification and/or corrective action. the report to be presented to appropriate representatives of the general contractor and the Client.

3.12 <u>DEBRIS\_REMOVAL:</u>

1. Contractor shall remove all trash, weeds and plant debris within the project area and recycle or dispose of in a legal manner prior to applying any stone or wood mulches.

3.13 END OF PLANT ESTABLISHMENT PERIOD

.1 When the Contractor believes he has completed the plant establishment period and the entire project is ready for final acceptance, he shall request inspection of the project. The Client's Representative will inspect the project for final acceptance. Deficiencies noted during inspection shall extend the plant establishment period until all are corrected. .2 All planting areas shall show a good rate of growth and shall be well established filled in plantings free of voids. Bare areas will be unacceptable. .3 Final Acceptance shall occur only upon written acceptance of the project for maintenance by the Client's authorized

representative. 3.14 <u>CLEAN UP:</u>

.1 Upon completion of each phase the work, the Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters, walkways, and remove construction equipment from the premises.

![](_page_12_Picture_190.jpeg)

![](_page_13_Figure_1.jpeg)

![](_page_14_Figure_1.jpeg)

	PROPERTY LINE735.35'		32.29				
	ev space ev space ev space ev space						
			STAFF PARKING (41	I I I I I I SPACES)	32.33	VEHICLE LOOP OPEN	
		23.15	1				X V
DOG EXERCISE DO VARD 3	GEXERCISE YARD 1			32.34)			
	1 SIM						
SHADE STR. 2	AS-108	SUPPORT BUILDING BLO 029		DOG BUILDING BI O 000		K DOG BUILDING BLO 000	
					41		
			2.44				*
32	45		4 , 5				
-32.46-				G	-		
	ADOPTION DOG BUILDING 1 BLO 25	ADOPTION DOG BUILDING BLO 026	2	ADOPTION DOG BUILDING 3 BLO 027	STRAY DOG BUILDING BLO 028	4 4	DC
4 AS-103 SIM							
IIMAL DROP OFF				32.34			
	32.30		(32 SPAC			7777777	
	PROPERTY LINE 745.76'		///////////////////////////////////////			<u>//////</u>	
	$\sim \sim \sim$						
WITHIN 200' OF SE 8 HALL BE 5% OF	NUMBER OF PARKING SPACES 144 PER TABLE 11B-208.2, NUMBER OF REC NUMBER OF PARKING SPACES 101 TO	UIRED ACCESSIBLE SPACES FF 150: 5 WITH AT LEAST 1 BEING V	ROM TOTAL	CSI #	KEYNOTE LE	EGEND E TEXT	
<b>C</b>	ACCESSIBLE PER TABLE 5.106.5.3.1, NUMBER OF REG FROM TOTAL OF ACTUAL PARKING SPA	QUIRED EV CAPABLE SPACES A CES 101-150: 25 EV CAPABLE, 6	ND EVCS 32 EVCS 32	27 Gate Swing Operator 28 Motorized Gate with T 29 8'0" Tall Masonry Wal	omar Device I, See civil drawings for CM	U wall details, heigt	hts, etc
	PER TABLE 11B-228.3.2.1, NUMBER OF E TOTAL NUMBER OF EVCS 5 TO 25: 1 VA 0 AMBULATORY	EVCS REQUIRED TO BE ACCESS N ACCESSIBLE, 1 STANDARD AC	SIBLE FROM 32 CCESSIBLE, 32	CMU pattern and finis .30 Emergency Generator .31 Video Intercom with C	h. r Enclosure card Reader and Knox Box		,
	PARKIN	G SCHEDULE	32 32 32	.33Reinforced 6'0" High I.34Visual Screen Wall, S.37Wrought Iron Fence, S	Fence ee civil drawing for CMU wa See 11/AS-501	all details, heights, e	etc.
	Parking Space Type Parking Space - ADA: Public 9' x 19' (8' Aisle Parking Space - ADA: Public 9' x 19' (8' Aisle	e) EVCS-Van	er of Parking 32 aces 32 2 32 1 32	.38 Wrought Iron Gate, So .44 Bark Wall .45 Get Acquainted Yards 46 Medical Dog Outdoor	ее 10/АS-501 , Тур. Yard		
	Parking Space - ADA: Public 9' x 19' (8' Aisle Parking Space - ADA: Staff 9' x 19' (5' Aisle) Parking Space - ADA: Staff 9' x 19' (5' Aisle)	e) Van EVCS	1 32 1 32 1 1	.47 Five (5) Wall-Hung Lc	ng-Term Bicyle Parking in S	Support	
	Parking Space - ADA: Staff 9' x 19' (8' Aisle) Parking Space Parallel: Staff 9' x 28' - paralle Parking Space: Public 9' x 19' - 90 deg	Van	1 6 29				
	Parking Space: Public 9' x 19' - 90 deg EV S Parking Space: Public 9' x 19' - 90 deg EVCS Parking Space: Staff 9' x 19' - 90 deg	pace 1 S 7	1 3 73				
	Parking Space: Staff 9' x 19' - 90 deg EV Spa Parking Space: Staff 9' x 19' - 90 deg EVCS Total: 144		1				-1
	PARKING INFORMAT						

![](_page_14_Figure_3.jpeg)

![](_page_15_Figure_1.jpeg)

![](_page_16_Figure_1.jpeg)

2023 Miller Architectural Corporation

![](_page_17_Figure_1.jpeg)

rs\michae||Documents\San Barnardino\_00\_Site Dian\_P32\_Central Eile\_mhede||GG3

![](_page_17_Picture_3.jpeg)

SOLE       1         W1 = 137       1         SCALE       1         VENDOTE LEGEND       101         VENDOTE INFORMATION       101         VENDOTE STATE       <					arc inte pla 1177 P i i i i i i i i i i i i i i i i i i	hite prior nnir Idaho S Redlands hone: 9 Fax: 90 fo@mil Fax: 90 fo@mil No. REN Compose fo@mil No. REN Compose fo@mil Compose fo fo@mil Compose fo fo fo fo f	CT4635 9-335-729 Iler-aip.co ARY MILLER CT4635 9-335-729 Iler-aip.co CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 9-30-25 CALIFO MILLER CT4635 DENDA COMM	Planners Planners rerica"
Art = 1:0"       I         Image: Second	SCALE 1							
		CSI # 01.01 03.07 03.32 03.33 26.16 32.13 32.14 32.25	KEYNOTE LEGEND           International Symbol of Accessibility, per 5/G-501           G' Concrete Curb           Concrete Wheel Stop, per 12/AS-501           EV Charging Station           4' Wide Access Aile Striping - Shall be marked with blue painted perimeter. The area within the borderlines shall be marked with hamaxinum of 36' o.c. in contrasting color to that of the aisle surface 3' Wide White Parking Striping           Truncated Dome, per AS-501	borderline around atched lines at a e, preferably blue.	PROJEC Project N Drawn B Checked Issue Da SHEET SHEET	TINFO Iumber: By: te: BAME ARC AS	SAN BERNARDINO COUNTY ED TOL	385 N. ARROWHEAD AVENUE 385 N. ARROWHEAD AVENUE 385 N. ARROWHEAD AVENUE 385 N. ARROWHEAD AVENUE SAN BERNARDINO, CA 92415 TO 92415 SAN BERNARDINO, CA 92415 FHONE: 1-888-818-8988 GV12/2024 SITE

![](_page_18_Figure_0.jpeg)

![](_page_18_Figure_1.jpeg)

© 2023 Miller Architectural Corporation

![](_page_19_Figure_1.jpeg)

2023 Miller Architectural Corporation

![](_page_20_Figure_1.jpeg)

	SCALE	DACKER ROD AND SEALANT DOOR FRAME SHIM CMU DOOR JAMB	GENERATOR ENCLOS

![](_page_20_Figure_3.jpeg)