

PLAN REVISIONS		
NO.	DATE	REVISION

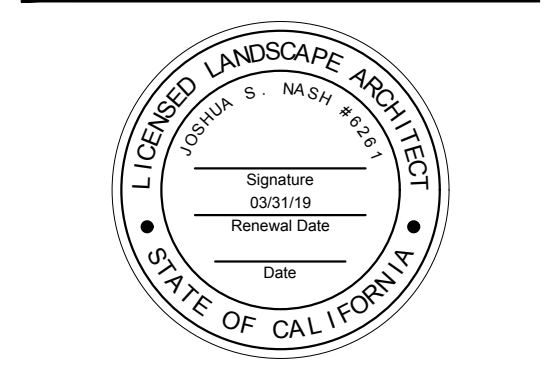
O'DELL
ENGINEERING

1165 Scenic Drive, Suite A
Modesto, CA 95350

odellengineering.com

LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
MANTECA, CALIFORNIA

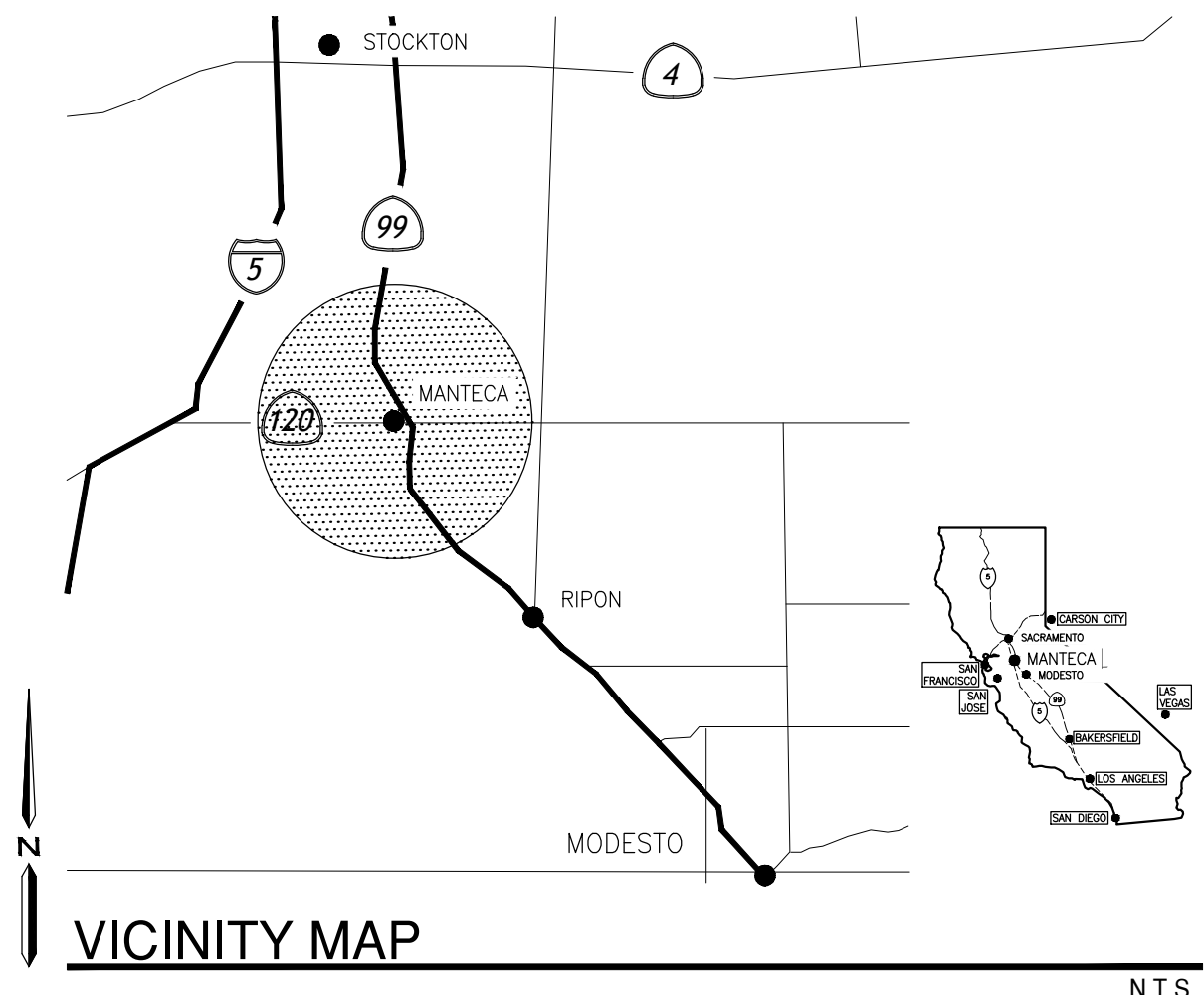
COVER SHEET



APPROVED: _____

DESIGNED: CS
DRAWN: CS
CHECKED: JN
SCALE: 1"=40'
DATE: 10/26/2017
JOB NO.: 33640
FILE NO.: 33640-IP

SHEET NO.
CS
OF
8



SHEET INDEX

CS	COVER SHEET
L1.0	SITE FEATURES & FINISHES PLAN
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L3.0	PLANTING LEGEND & NOTES
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L4.0	IRRIGATION DETAILS
L5.0	PLANTING DETAILS

ABBREVIATIONS

BC	BOTTOM OF CURB	INV	INVERT ELEVATION
BW	BOTTOM OF WALL	MAX	MAXIMUM
BOW	BACK OF WALL	ME	MECHANICAL ENGINEER
CJ	TOOLED CONTROL JOINT	MIN	MINIMUM
CL	CENTERLINE	(N)	NEW
CLR	CLEAR	OC	ON CENTER
CIP	CAST IN PLACE	PA	PLANTING AREA
CMU	CONCRETE MASONRY UNIT	PIP	POURED IN PLACE CONCRETE
C	CONCRETE	POB	POINT OF BEGINNING
DG	DECOMPOSED GRANITE	R	RADIUS
DWGS	DRAWINGS	RIM	RIM ELEVATION
(E) OR EX	EXISTING	RP	RADIUS POINT
EJ	EXPANSION JOINT	SAD	SEE ARCHITECTURAL DRAWINGS
EQ	EQUAL	SCD	SEE CIVIL DRAWINGS
FC	FACE OF CURB	SED	SEE ELECTRICAL DRAWINGS
FDE	FINISH DECK ELEVATIONS	SIM	SIMILAR
FF/FFE	FINISH FLOOR ELEVATION	SLD	SEE LANDSCAPE DRAWINGS
FG	FINISH GRADE	SP	SPACE
FL	FLOW LINE	TBD	TO BE DETERMINED
FOB	FACE OF BUILDING	TC	TOP OF CURB
FOW	FACE OF WALL	TP	TOP OF PAVEMENT
FS	FINISH SURFACE	TW	TOP OF WALL
FV	FIELD VERIFY	TYP	TYPICAL
HP	HIGH POINT		

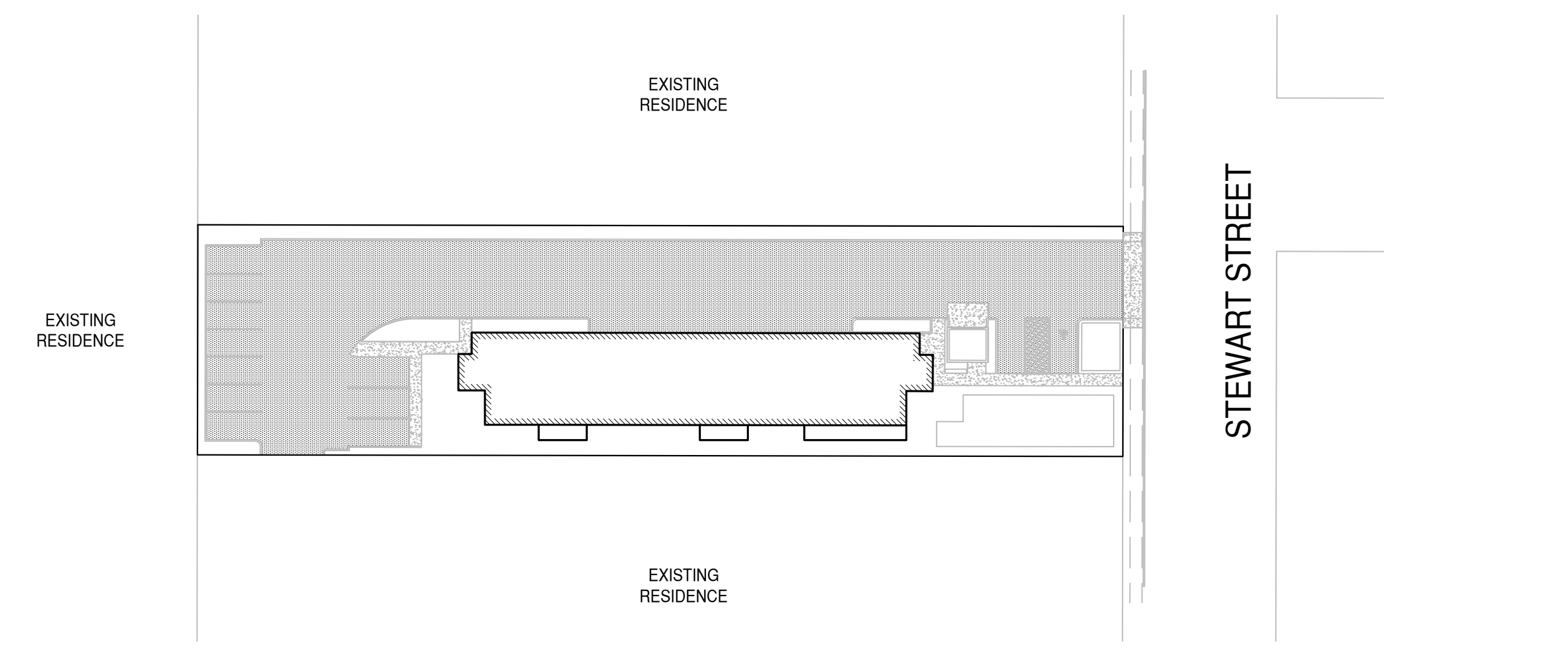
STEWART STREET APARTMENTS

LANDSCAPE IMPROVEMENT PLANS

MANTECA, CALIFORNIA

GENERAL NOTES

- LANDSCAPE IMPROVEMENTS SHALL BE CONSTRUCTED IN COMPLIANCE WITH CITY OF MANTECA, CALIFORNIA CURRENT STANDARDS AND SPECIFICATIONS AS APPROVED ON DATE, INCLUDING ALL AMENDMENTS THERETO TO DATE. IMPROVEMENTS SHALL ALSO BE IN COMPLIANCE WITH CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS LATEST EDITION, WHERE APPLICABLE. IN THE EVENT THERE IS A CONFLICT WITH THE PLANS AND REFERENCES STATED ABOVE, THE GOVERNING BODY STANDARDS AND SPECIFICATIONS SHALL PREVAIL. ALL WORK SHALL BE SUBJECT TO INSPECTION.
 - DESIGN: THE DRAWINGS HEREIN REPRESENT THE DESIGN TO BE IMPLEMENTED ON THE SITE DEPICTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LANDSCAPE ARCHITECT TO CLARIFY PLAN DETAILS RELATED TO SITE OR CONSTRUCTION DETAILS NECESSARY FOR PROJECT COMPLETION.
 - COORDINATION: CONTRACTORS SHALL COORDINATE INSTALLATION AND SCHEDULING WITH THAT OF OWNER/OWNER REPRESENTATIVE AND OTHER CONTRACTORS EFFICIENTLY AND IN A TIMELY MANNER, ENSURING THE PROJECT COMPLETION IS UNIMPEDED AND INSTALLED CORRECTLY WITH MINIMAL MAINTENANCE. OWNER/OWNER REPRESENTATIVE SHALL BE CONTACTED DIRECTLY AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO COVERING, COMPLETION, OR EXPOSING WORK THAT WILL BE INSTALLED.
 - SITE CONDITIONS: SEE GENERAL PROVISIONS, SPECIAL PROVISIONS, GENERAL REQUIREMENTS, AND TECHNICAL SPECIFICATIONS FOR CONTRACTOR RESPONSIBILITIES RELATED TO SITE CONDITIONS. CONTRACTOR SHALL EXAMINE EXISTING CONDITIONS OF SITE. IN THE EVENT THAT ON-SITE CONDITIONS DIFFER FROM CONDITIONS DEPICTED ON PLANS AND WILL IMPACT THE INSTALLATION PROCESS, THE CONTRACTOR SHALL SUBMIT THESE FINDINGS TO THE LANDSCAPE ARCHITECT/OWNER IN WRITING PRIOR TO BEGINNING WORK. COMMENCEMENT OF WORK IMPLIES ACCEPTANCE OF THE EXISTING SITE CONDITIONS.
 - BASE INFORMATION: THE PROPOSED LANDSCAPE IMPROVEMENTS SHOWN HEREIN ARE SUPERIMPOSED OVER DATA PROVIDED TO THE LANDSCAPE ARCHITECT BY OTHER SOURCES. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR THE CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS RELATED TO THIS DATA. THE BASE INFORMATION IS PROVIDED AS AN AID ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DOCUMENTS AND ACCOMMODATING ANY DISCREPANCIES.
- BASE INFORMATION PROVIDED BY:
CIVIL ENGINEER -
• WONG ENGINEERS, INC.
4578 FEATHER RIVER DRIVE, SUITE A
STOCKTON, CA 95219
PHONE: (209)476-0011
- BIDDING INFORMATION: SEE GENERAL PROVISIONS, SPECIAL PROVISIONS, GENERAL REQUIREMENTS, AND TECHNICAL SPECIFICATIONS FOR CONTRACTOR RESPONSIBILITIES RELATED TO BIDDING INFORMATION AND SITE VISITS PRIOR TO BID SUBMITTAL.
 - UTILITIES: THE CONTRACTOR AND ANY SUBCONTRACTORS SHALL CONTACT U.S.A. AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO BEGINNING WORK.
 - POT HOLING: ONLY EXCAVATION WILL REVEAL ACTUAL TYPES, LOCATIONS, SIZES, AND DEPTHS OF UNDERGROUND UTILITIES. THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF UNDERGROUND UTILITIES OR OF BURIED EXISTING OBJECTS AND UTILITIES NOT SHOWN ON THESE PLANS.
 - AS-BUILTS: FOR AS-BUILT PURPOSES, THE CONTRACTOR SHALL KEEP A CURRENT SET OF DRAWINGS ON SITE AT ALL TIMES WITH DEVIATIONS FROM ORIGINAL PLANS AND SPECIFICATIONS NOTED. UPON PROJECT COMPLETION THE CONTRACTOR SHALL PROVIDE THE CITY WITH A DIGITAL FORMAT, COMPLETE SET OF AS-BUILT DRAWINGS.



LANDSCAPE IMPROVEMENT LIMITS

PROJECT INFORMATION

PROJECT TITLE:	STEWART STREET APARTMENTS	PROJECT TYPE:	NEW CONST./PRIVATE RESIDENTIAL
PARCEL NUMBER:	SEE CIVIL PLANS FOR PARCEL NUMBERS	GRADING PLANS:	SEE CIVIL ENGINEERING PLANS
ZONING:	SEE CIVIL PLANS	BUILDING ELEVATIONS:	SEE ARCHITECTURAL PLANS
PROJECT ADDRESS:	649 STEWART STREET MANTECA, CA, 95336	WATER SUPPLY TYPE & LOCAL PURVEYOR:	POTABLE/RECLAIMED/-PURVEYOR - CITY OF MANTECA
APPLICANT/OWNER:	VFT PROPERTIES/ ANDREW MOTHERSHED 112 NORTH WASHINGTON #1 MANTECA, CA 95336 (209) 823-7173 OFFICE@VFTPROPERTIES.COM	COMMUNITY FORESTRY N/A DEPT. CONTACT:	
PLANS PREPARED BY:	O'DELL ENGINEERING 1165 SCENIC DRIVE, SUITE A MODESTO, CA 95350 (209) 571-1765 OFFICE (209) 571-2466 FAX EMAIL: JNASH@ODELLENGINEERING.COM	ADJACENT PROPERTY USES:	NORTH - EXISTING RESIDENTIAL SOUTH - EXISTING RESIDENTIAL EAST - EXISTING RESIDENTIAL WEST - EXISTING RESIDENTIAL
LICENSE NUMBER:	CLA #6261	UTILITY PLANS:	SEE CIVIL ENGINEERING PLANS
LANDSCAPE AREA:	6,347 SQUARE FEET	SOIL TEST NUMBER LABORATORY: TEST DATE: TEST LOCATION: NOTES: SOIL AMENDMENTS IN THE GENERAL PLANTING NOTES ARE FOR BID PURPOSES ONLY. ACTUAL AMENDMENTS SHALL REFLECT THE RECOMMENDATIONS OF THE REPORT ONCE FINAL MASS GRADING HAS BEEN PERFORMED AND SAMPLES HAVE BEEN SUBMITTED TO SOILS LAB.	

APPROVED BY THE CITY OF CITY, CALIFORNIA

BY: _____ DATE: _____



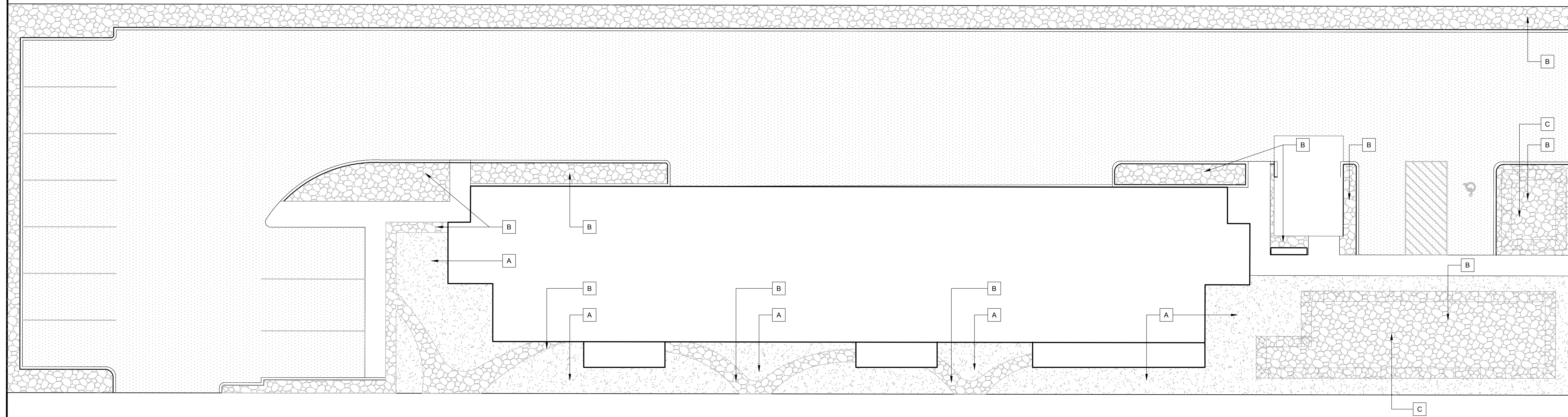
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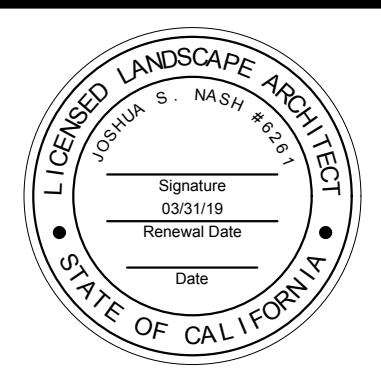


1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
 MANTECA, CALIFORNIA



SITE FEATURES & FINISHES PLAN



APPROVED: _____

DESIGNED: CS
 DRAWN: CS
 CHECKED: JN
 SCALE: SCALE
 DATE: 10/26/2017
 JOB NO.: TEST
 FILE NO.: 33640-IP

REFERENCE KEY	
<p>SCHEDULE KEY</p>	<p>SECTION CUT</p>

SITE FINISH SCHEDULE					
FINISH	DESCRIPTION	COLOR	QUANTITY	PATTERN / INFORMATION	DET REF.
A	3" TOPDRESSING OF DECORATIVE WOODCHIP MULCH (MAXIMUM 2 INCH LENGTHS).	BROWN	1,886 S.F.	AVAILABLE FROM LOCAL SOURCES.	
B	4" X 6" WASHED RIVER COBBLE		3,679 S.F.	DECORATIVE ROCK NETWORK (209) 763-5099	
C	BIORETENTION AREA		1,147 S.F.	SEE CIVIL PLANS	



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GENERAL IRRIGATION NOTES

- ANY AND ALL PORTIONS OF WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS AS SET FORTH BY LOCAL MUNICIPALITIES, STATE AND NATIONAL AGENCIES. IN THE EVENT THERE IS A CONFLICT WITH THESE PLANS AND THE AGENCIES STATED ABOVE, THE GOVERNING BODY'S REGULATIONS SHALL PREVAIL.
- IRRIGATION SHALL BE INSTALLED CONSISTENT WITH CITY WATER CONSERVATION REQUIREMENTS (CITY CODE) AND THE STATE WATER EFFICIENT LANDSCAPE ORDINANCE (AB1881).
- PRIOR TO BIDDING AND COMMENCEMENT OF SITE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH/AND EXAMINE CONDITIONS OF THE PROJECT SITE, VERIFYING LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES. LOCATIONS OF ITEMS SHOWN ON THESE PLANS ARE ONLY APPROXIMATIONS. ANY DISCREPANCIES DISCOVERED SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT/OWNER. FAILURE TO REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT/OWNER BEFORE COMMENCEMENT OF SITE WORK IMPLIES ACCEPTANCE OF SITE CONDITIONS AND COSTS ASSOCIATED WITH CORRECTING IRRIGATION LAYOUTS/ANY EXISTING SITE FEATURES, GRADE CHANGES, OR SITE PLAN DESIGN CHANGES NOT SPECIFICALLY ADDRESSED ON THESE PLANS, (OR UNKNOWN CONDITIONS THAT WERE NOT APPARENT DURING THE DESIGN PROCESS) THAT WILL IMPACT INSTALLATION OR OPERATING OF IRRIGATION SYSTEMS IN ANY WAY, SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF SITE WORK. CONTRACTOR SHALL COORDINATE & SCHEDULE INSTALLATION EFFORTS WITH THOSE OF OTHER TRADES TO AVOID COSTLY DELAYS & ERRORS.
- CONTRACTOR SHALL INSTALL IRRIGATION EQUIPMENT PER DETAILS AND SPECIFICATIONS. ALL IRRIGATION EQUIPMENT REQUIRED FOR PROJECT COMPLETION BUT NOT DETAILED ON THESE PLANS SHALL BE INSTALLED PER LOCAL AND STATE CODES AND MANUFACTURER'S WRITTEN INSTALLATION RECOMMENDATIONS.
- CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR SUCCESSFUL COMPLETION OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL PROJECT RELATED ARCHITECTURAL OR ENGINEERING DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL REPAIR, REPLACE, OR COMPENSATE OWNER FOR ALL ITEMS DAMAGED BY THEIR WORK.
- THE CONTRACTOR SHALL COORDINATE AND SCHEDULE INSTALLATION EFFORTS WITH THOSE OF OTHER TRADES TO AVOID COSTLY DELAYS AND ERRORS.
- CONTACT CITY OF MANTECA @ (916) 222-5500 AND LANDSCAPE ARCHITECT/OWNER IN ADVANCE TO SCHEDULE ALL NECESSARY IRRIGATION TESTS.
- REQUIRED TESTING
 - PRESSURE TEST: MAINLINE SHALL HOLD 120 PSI MIN. FOR 8 HOURS. IF LEAKS OCCUR, REPLACE FAULTY COMPONENTS AND RE-TEST. CONTRACTOR SHALL PROVIDE MAINLINE & WIRE AS-BUILT'S TO LANDSCAPE ARCHITECT/OWNER PRIOR TO BACKFILLING TRENCH AFTER PRESSURE TEST IS COMPLETE.
 - COVERAGE TEST: COVERAGE TEST SHALL BE PERFORMED PRIOR TO INSTALLATION OF ANY PLANT MATERIAL. IRRIGATION AUDIT SHALL BE PERFORMED AT THIS POINT, BY CERTIFIED IRRIGATION AUDITOR. CONTRACTOR SHALL PROVIDE RESULTS TO LANDSCAPE ARCHITECT/OWNER AND MAKE ALL NECESSARY CORRECTIONS PRIOR TO PLANTING. FAILURE TO DO SO SHALL MAKE ALL REQUIRED COSTS ASSOCIATED WITH ADJUSTING IRRIGATION THE CONTRACTOR'S RESPONSIBILITY.

POINT OF CONNECTION NOTES

- CONTRACTOR SHALL INVESTIGATE AND DETERMINE THE POINT OF CONNECTION LOCATION. IF DIFFERENT THAN SHOWN ON THESE PLANS THIS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT/OWNER.
- THE IRRIGATION SYSTEM AS SHOWN WITHIN THESE PLANS HAS BEEN DESIGNED BASED ON OPERATING PRESSURES OF 20 PSI AND MAXIMUM FLOW DEMANDS OF 9.4 GPM. THE CITY OF MANTECA, CALIFORNIA REPORTS THAT STATIC WATER PRESSURES AT THE SITE WILL BE APPROXIMATELY 55 PSI. THE CONTRACTOR IS TO PERFORM PRESSURE TESTS AT THE POINT OF CONNECTION TO CONFIRM ACTUAL SITE PRESSURE LEVELS. ANY DISCREPANCIES BETWEEN INFORMATION ON THESE PLANS AND THAT OF EXISTING SITE CONDITIONS OR MANUFACTURER DATA SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT/OWNER. FAILURE TO CONFIRM POC INFORMATION RESULTING IN REQUIRED CHANGES, DUE TO LOW PRESSURE OR VOLUME, WILL RESULT IN OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.

CONTROLLER ASSEMBLY NOTES

- CONTROLLER LOCATION SHOWN ON DRAWINGS IS AN APPROXIMATE LOCATION. CONTRACTOR SHALL CONFIRM LOCATION OF CONTROLLER WITH OWNER PRIOR TO CONTROLLER INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ELECTRICAL CONNECTIONS BETWEEN THE 120 VOLT POWER SOURCE TO THE CONTROLLER, VALVES, AND ADDITIONAL IRRIGATION EQUIPMENT. SEE ELECTRICAL ENGINEERING DRAWINGS FOR ELECTRICAL CONNECTION REQUIREMENTS AND LOCATION. FAILURE TO OBTAIN APPROVAL OF CONTROLLER ASSEMBLY LOCATION PRIOR TO INSTALLATION WILL RESULT IN OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.
- A LAMINATED, WATERPROOF, LEGIBLE, CHART OF THE IRRIGATION SYSTEM NOT EXCEEDING 11"x17", SHALL BE PROVIDED TO THE OWNER AND ONE ADHERED TO THE INSIDE COVER OF THE CONTROLLER. ALL VALVES AND THEIR RESPECTIVE COVERAGE AREAS SHALL BE IDENTIFIED WITH SEPARATE AND DISTINCT COLORS.

IRRIGATION VALVE NOTES

- VALVE AND QUICK COUPLER LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE LOCATIONS. CONTRACTOR SHALL STAKE THE LOCATIONS OF VALVES AND QUICK COUPLERS FOR APPROVAL BY LANDSCAPE ARCHITECT/OWNER PRIOR TO INSTALLATION.
- VALVES AND QUICK COUPLERS SHALL BE GROUPED TOGETHER AND INSTALLED IN SHRUB BEDS, UNLESS NOTED OTHERWISE.
- INSTALL ALL VALVES AND QUICK COUPLERS PER PLAN DETAILS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

DRIP AND LOW FLOW EMITTER NOTES

- INSTALL ALL DRIPLINE AND EMITTERS PER DETAILS AND PLANS. TUBING TO BE INSTALLED 1-2" BELOW SOIL SURFACE WITH GALVANIZED TIE-DOWN STAKES AT 24" INTERVALS.
- INSTALL (2) RAIN BIRD XB-20PC, OR HUNTER HE-20-B, OR EQUAL, (2GPH) EMITTERS FOR ALL 5GAL SHRUBS. INSTALL (2) RAIN BIRD XB-10PC, OR HUNTER HE-10-B, OR EQUAL, (2GPH) EMITTERS FOR ALL 1 GAL SHRUBS.

ELECTRICAL WIRING NOTES

- WIRING SHALL BE INSTALLED IN SAME TRENCH AS MAINLINE WITH 18" OF COVER.
- CONTRACTOR TO SUPPLY TWO ADDITIONAL WIRES FROM CONTROLLER (STRETCHING ALONG THE ENTIRE MAINLINE) TO THE LAST VALVE OR STUB OF EACH AND EVERY LEG OF MAINLINE. EACH WIRE SHALL BE TAGGED WITH A WATERPROOF LEGIBLE LABEL SPECIFYING IT AS AN "EXTRA WIRE".
- CONTROL WIRE TO BE U.L. LISTED, DIRECT BURIAL #14UF AWG MINIMUM. COMMON WIRE TO BE U.L. LISTED, DIRECT BURIAL #12UF AWG MINIMUM. WIRING TO BE COLOR CODED WITH CORRESPONDING STATION NUMBER TAGS AT THE CONTROLLER AND VALVES.
- WATERPROOF DBY6 WIRE CONNECTORS SHALL BE USED AT ALL WIRE CONNECTIONS.

PVC PIPING NOTES

- PIPING AND EQUIPMENT LAYOUT IS SHOWN SCHEMATICALLY FOR VISUAL CLARITY. PIPING AND EQUIPMENT SHOWN WITHIN PAVED AREAS SHALL BE INSTALLED WITHIN AREAS DESIGNATED FOR LANDSCAPE. MAINLINES SHALL BE LOCATED A MINIMUM OF 18" OFF ADJACENT PAVEMENT OR OTHER OBSTACLES.
- NON-PRESSURIZED LINES SHALL BE BURIED WITH A MINIMUM OF (12") COVER. PRESSURIZED MAINLINES SHALL BE BURIED WITH A MINIMUM OF (18") COVER. UNDERGROUND WARNING TAPE READING "CAUTION, BURIED IRRIGATION LINE BELOW" SHALL BE INSTALLED 12" ABOVE PRESSURIZED LINES.
- PIPE SIZES SHALL BE INSTALLED PER PLANS. SMALLER PIPE SIZE SUBSTITUTIONS ARE NOT ACCEPTABLE; LARGER PIPE SIZES MAY BE APPROVED.
- SOLVENT WELD FITTINGS FOR MAINLINES 2½" AND SMALLER SHALL BE SCHEDULE 40 PVC. FOR MAINLINES 3"-4" USE SCH 80 SOLVENT, WELD FITTINGS. ALL THREADED FITTINGS SHALL BE SCHEDULE 80 PVC.

SLEEVING NOTES

- SCHEDULE 40 PVC SLEEVES SHALL BE PROVIDED FOR ALL IRRIGATION LINES UNDER PAVING.
- SLEEVES SHALL BE SIZED PER PLAN OR TWICE THE SIZE OF THE PIPE WHEN NOT SPECIFIED. ELECTRICAL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES. PIPING AND WIRING SHALL BE IN SEPARATE SLEEVES.
- SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND PAVED SURFACES OR AS NOTED.

WATER CONSERVATION STATEMENT

- I HAVE COMPLIED WITH THE CRITERIA OF THE (STATE/CITY WATER CONSERVATION) ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.
- CHANGES TO THE APPROVED PLANS OR FIELD SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER/LANDSCAPE ARCHITECT. IF THE OWNER/CONTRACTOR DEVIATES FROM THE APPROVED PLAN WITHOUT PRIOR WRITTEN APPROVAL THEY WILL BE REQUIRED TO MAKE ANY CORRECTIONS, AT THEIR OWN EXPENSE, TO BRING THE LANDSCAPE AND IRRIGATION INTO COMPLIANCE WITH THE APPROVED PLANS AND THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.

AS-BUILT NOTES

- CONTRACTOR SHALL MAKE DAILY AS-BUILT PLANS OF MAINLINE & WIRE. CONTRACTOR SHALL SUBMIT AS-BUILT'S TO LANDSCAPE ARCHITECT/OWNER DURING MAINLINE PRESSURE TESTING AND SHALL NOT BURY MAINLINE UNTIL AS-BUILT SET HAS BEEN APPROVED BY LANDSCAPE ARCHITECT/OWNER. AS-BUILT'S SHALL INDICATE COLOR OF ELECTRICAL TAPE ON EACH RUN/LEG OF WIRE TO AID IN FUTURE WIRE TROUBLE SHOOTING.

CLOSE-OUT DOCUMENTS

- AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:
 - PROJECT INFORMATION SHEET THAT CONTAINS:
 - DATE
 - PROJECT NAME
 - PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.
 - PROJECT ADDRESS
 - PROPERTY OWNER NAME, TELEPHONE NUMBER AND MAILING ADDRESS.
 - CERTIFICATION BY EITHER THE SIGNER OF THE LANDSCAPE DESIGN PLAN, THE DESIGNER OF THE IRRIGATION DESIGN PLAN OR THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
 - WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION.
 - A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
 - IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
 - LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
 - IRRIGATION AUDIT REPORT.
 - SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL REPORT RECOMMENDATIONS.

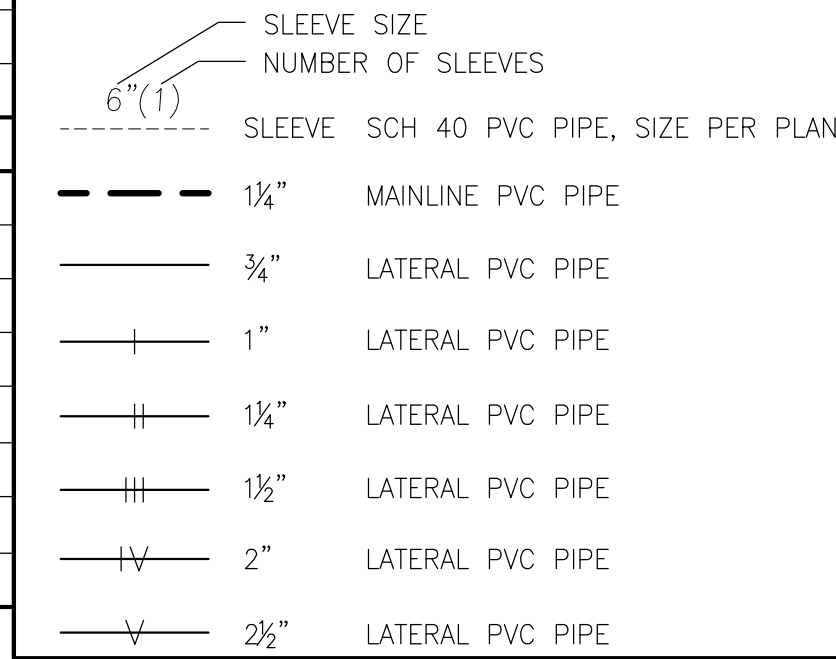
IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS	DETAIL
DRIP COMPONENTS						
	PIPE TRANSITION POINT PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP CONNECTION	14				10/L4.0
	FLUSH CAP RAIN BIRD XFF-TMA-050 WITH 1/2" THREADED CAP OR HUNTER PLD-CAP OR EQUAL	24				12/L4.0
	BLANK DRIPLINE RAIN BIRD XFD BLANK TUBING OR HUNTER PLD-BLNK OR EQUAL	777 LF				10&11/L4.0
	RAIN BIRD RWS-M-B-C-1401 ROOT WATERING SYSTEM WITH RWS-SOCK (2/TREE)	22				9/L4.0
IRRIGATION EQUIPMENT						
	RAIN BIRD XCZ-100-PRB-COM OR HUNTER ICZ-101 OR EQUAL. REMOTE CONTROL DRIP VALVE.	5				7/L4.0
	RAIN BIRD 150-PEB OR HUNTER ICV-101G OR EQUAL REMOTE CONTROL VALVE	1				6/L4.0
	NIBCO T-113 K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER. INSTALL IN A RAIN BIRD VB10RNDP VALVE BOX & VB10RNDPL LID OR EQUAL.	1				5/L4.0
	RAIN BIRD 100-PEB OR HUNTER ICV-101G, OR EQUAL 1" NORMALLY CLOSED PLASTIC MASTER VALVE THAT PROVIDES DIRTY WATER PROTECTION	1				3/L4.0
	RAIN BIRD FS-150-B 1" BRASS FLOW SENSOR W/ RAIN BIRD 2-WIRE SENSOR DECODER (SD-210TURF). INSTALL IN A RAIN BIRD VBSTDB VALVE BOX & VBSTDPD LID OR EQUAL.	1				4/L4.0
	HUNTER I-CORE W/SOLAR SYNC OR EQUAL. MOUNT CONTROLLER.	1				1/L4.0
	FEBCO 825Y (1") REDUCED PRESSURE BACKFLOW PREVENTER W/ STRONGBOX SBBC-30SS & WEATHER BLANKET.	1				2/L4.0
	1" WATER METER (SEE CIVIL PLANS)	1				
PIPING						
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.	797 LF				8/L4.0
	1-1/4" IRRIGATION MAINLINE PVC SCHEDULE 40 IRRIGATION PIPE.	642 LF				8/L4.0
	PIPE SLEEVE: PVC SCHEDULE 40	60 LF				

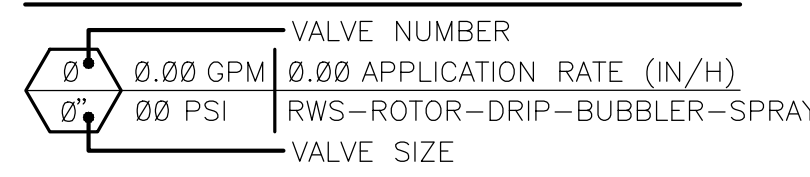
PRESSURE LOSS CALCULATIONS

STATIC WATER PRESSURE	55 PSI		
MAX. DYNAMIC FLOW	9 GPM		
PROPOSED OPERATING PRESSURE	20 PSI		
COMPONENT	SIZE	DISTANCE	PSI LOSS
ELEVATION CHANGE	+/-	N/A	0.0 PSI
WATER METER	1"	N/A	0.8 PSI
BACKFLOW PREVENTION DEVICE	1"	N/A	12.0 PSI
MASTER VALVE	1"	N/A	2.9 PSI
GATE/BALL VALVE	1 1/4"	N/A	1.5 PSI
REMOTE CONTROL VALVE	1"	N/A	7.3 PSI
MAIN LINE	1 1/4"	642 L.F.	3.6 PSI
LATERAL LINE	3/4"	1 L.F.	3.0 PSI
TOTAL PSI LOSS:			31.1 PSI
ACTUAL OPERATING PRESSURE:			23.9 PSI
BOOST PRESSURE DEMAND:			-3.90 PSI

PIPING SCHEDULE



VALVE CALLOUT



IRRIGATED LANDSCAPE WATER EFFICIENCY TABLE							IRRIGATION SCHEDULE								
WATER BUDGET CALCULATIONS							SCHEDULING NOTES & RUN TIMES								
MAXIMUM APPLIED WATER ALLOWANCE							WATERING CYCLES AND DURATION DURING PRE-ESTABLISHMENT PERIODS SHOULD BE ADJUSTED PER PLANT PROVIDER'S RECOMMENDATIONS AND CURRENT WEATHER CONDITIONS.								
MAWA=(Eto)(0.62)((0.45xLA)+(1.0-0.45)xSLA))	LOCAL Eto=	LA =	SLA =			MAWA TOTAL=	POST ESTABLISHMENT IRRIGATION SCHEDULE CALCULATED USING AVERAGE CLIMATE CONDITIONS AND AVERAGE PLANT REQUIREMENTS. THIS SCHEDULE SERVES AS A BASE FOR CONTROLLER PROGRAMMING. EXTREME AND SITE SPECIFIC CONDITIONS WILL RESULT IN Eto ADJUSTMENTS AND MAY REQUIRE ADJUSTMENTS TO SCHEDULE FREQUENCY/DURATION.								
	51.2	6,347	0			90,666 GAL.									
ESTIMATED TOTAL WATER USE							IRRIGATION CONTROLLER SHALL BE CONFIGURED TO RUN ALL ZONES ON SOAK CYCLES.								
ETWU=(Eto)(0.62)((PFxHA)/IE)+SLA)	LOCAL Eto=	PF =	LA =	SLA =		ETWU TOTAL=	STATION RUN-TIMES ARE SHOWN IN MINUTES PER DAY (MIN) AND DAYS PER WEEK (DW)								
	51.2	SEE BELOW	6,347	0		72,540 GAL.									
HYDROZONE INFORMATION TABLE							WINTER		SPRING		SUMMER		FALL		
HYDROZONE TAG	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF/IE)	HYDROZONE AREA (HA) (SQ.FT.)	ETAF X AREA	ESTIMATED TOTAL WATER USE (ETWU)	PRE-EST.	POST-EST.	PRE-EST.	POST-EST.	PRE-EST.	POST-EST.	PRE-EST.	POST-EST.
REGULAR LANDSCAPE AREAS															
VALVE # 3 (TREE/RWS/MODERATE)	0.50	RWS	0.81	0.62	311 S.F.	192	6,094 GAL.	4 MIN/2 DW	8 MIN/1 DW	17 MIN/2 DW	35 MIN/1 DW	22 MIN/2 DW	44 MIN/1 DW	9 MIN/2 DW	18 MIN/1 DW
VALVE # 1, 4, 5, 6 (SHRUB/DRIP/LOW)	0.243	DRIP	0.81	0.30	5,146 S.F.	1,544	49,006 GAL.	2 MIN/4 DW	4 MIN/2 DW	8 MIN/4 DW	16 MIN/2 DW	10 MIN/4 DW	20 MIN/2 DW	4 MIN/4 DW	8 MIN/2 DW
VALVE # 2 (SHRUB/DRIP/MODERATE)	.5	DRIP	0.81	0.62	890 S.F.	549	17,440 GAL.	4 MIN/4 DW	8 MIN/2 DW	16 MIN/4 DW	33 MIN/2 DW	21 MIN/4 DW	41 MIN/2 DW	9 MIN/4 DW	17 MIN/2 DW
					TOTAL AREA=	TOTAL=	TOTAL GALLONS=								
					6,347 S.F.	2,285	72,540								
* THIS INFORMATION DERIVED FROM PLANT FACTOR DESIGNATIONS IN THE WUCOLS DOCUMENT.															

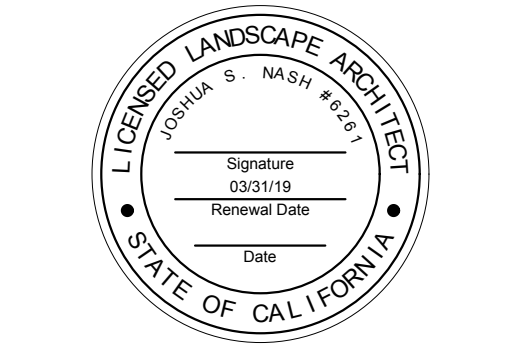
PLAN REVISIONS		
NO.	DATE	REVISION



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LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
 MANTECA, CALIFORNIA

IRRIGATION LEGEND & NOTES



APPROVED: _____

DESIGNED: CS

DRAWN: CS

CHECKED: JN

SCALE: NO SCALE

DATE: 10/26/2017

JOB NO.: 33640

FILE NO.: 33640-IP



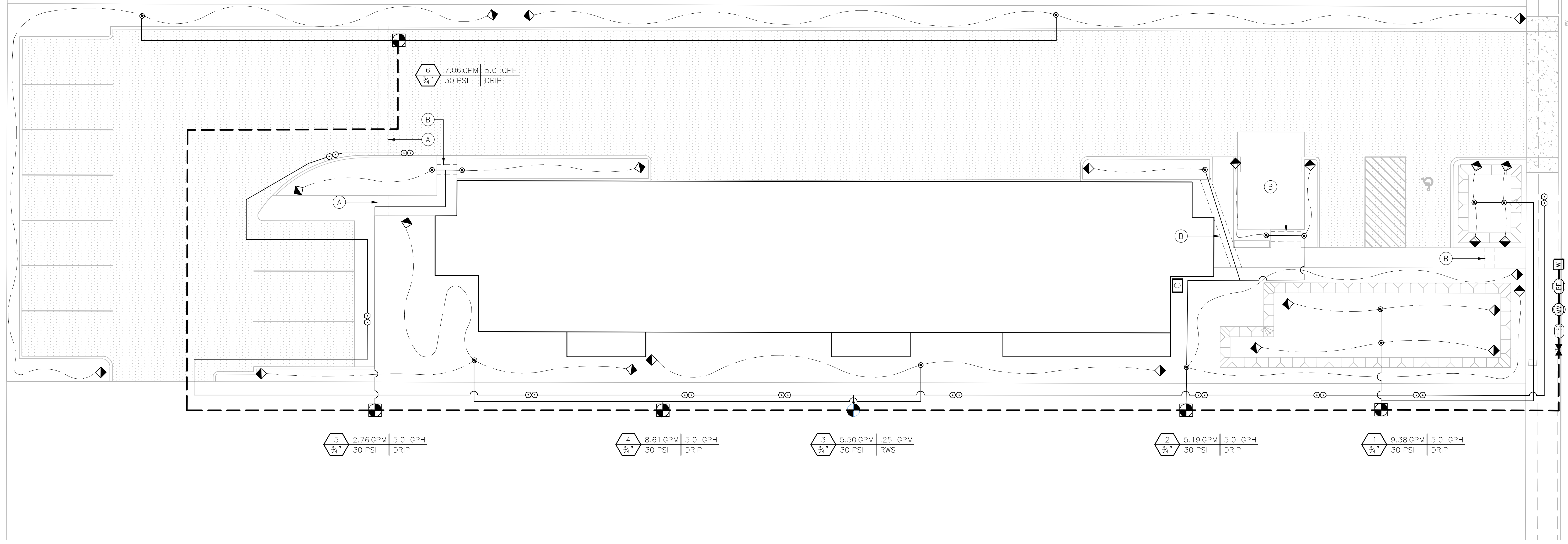
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PLAN REVISIONS		
NO.	DATE	REVISION



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LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
MANTECA, CALIFORNIA



5 2.76 GPM | 5.0 GPH
3/4" 30 PSI | DRIP

4 8.61 GPM | 5.0 GPH
3/4" 30 PSI | DRIP

3 5.50 GPM | .25 GPM
3/4" 30 PSI | RWS

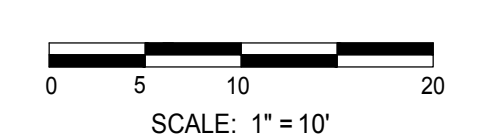
2 5.19 GPM | 5.0 GPH
3/4" 30 PSI | DRIP

1 9.38 GPM | 5.0 GPH
3/4" 30 PSI | DRIP

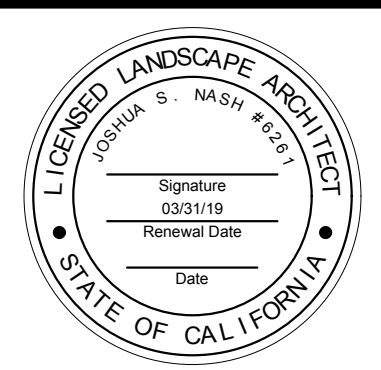
6 7.06 GPM | 5.0 GPH
3/4" 30 PSI | DRIP

SHEET NOTES

- (A) (1) 3" SLEEVE W/ (1) 3" MAINLINE WIRE SLEEVE
- (B) (1) 3" LATERAL LINE SLEEVE



IRRIGATION PLAN



APPROVED: _____

DESIGNED:	CS
DRAWN:	CS
CHECKED:	JN
SCALE:	1"=10'
DATE:	10/26/2017
JOB NO.:	33640
FILE NO.:	33640-IP

SHEET NO.
L2.1
OF
8

GENERAL PLANTING NOTES

GENERAL PLANTING NOTES

- ANY AND ALL PORTIONS OF THIS WORK ARE TO BE CONSTRUCTED IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS AS SET FORTH BY LOCAL MUNICIPALITIES, STATE AND NATIONAL AGENCIES. IN THE EVENT THERE IS A CONFLICT WITH THESE PLANS AND THE AGENCIES STATED ABOVE, THE GOVERNING BODY'S REGULATIONS SHALL PREVAIL.
- PRIOR TO BIDDING AND COMMENCEMENT OF SITE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND EXAMINE CONDITIONS OF THE PROJECT SITE, VERIFYING LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES. LOCATIONS OF ITEMS SHOWN ON THESE PLANS ARE ONLY APPROXIMATIONS. ANY DISCREPANCIES DISCOVERED SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT. FAILURE TO REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE COMMENCEMENT OF SITE WORK IMPLIES ACCEPTANCE OF SITE CONDITIONS AND COSTS ASSOCIATED WITH CORRECTING PLANTING RELATED INSTALLATIONS.
- CONTRACTOR TO PURCHASE AND PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE LANDSCAPE WORK (I.E. TREE PLANTING, LAWN HYDROSEEDING, ETC.) AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROTECTION OF THESE ITEMS UNTIL THE PROJECT IS COMPLETED.
- ALL SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES AND SHALL IMMEDIATELY INFORM THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE INFORMATION NUMBERS PROVIDED ON THIS PLAN ARE FOR REFERENCE ONLY. THE NUMBER OF SYMBOLS SHOWN ON THE PLANS SHALL HAVE PRIORITY OVER THE NUMBERS GIVEN.

SOIL PREPARATION

- THE LANDSCAPE CONTRACTOR SHALL INSPECT THE PLANTER AREAS FOR EXTREME COMPACTION PARTICULARLY AROUND CONSTRUCTION AREAS. PROVIDE MEANS FOR RIPPING TO A DEPTH OF TWELVE INCHES (12") ALL COMPACTED AREAS TO INSURE PROPER ROOT GROWTH OF NEW PLANTINGS.
- CULTIVATE TOP SIX INCHES (6") OF SOIL IN ALL AREAS.
- NO SOIL SHALL BE HANDLED OR WORKED WHEN IN A MUDDY CONDITION.
- FINISH GRADE SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE BEFORE ANY PLANTING BEGINS.
- AN EVEN FINISHED GRADE WITH NO RIDGES OR DEPRESSIONS SHALL BE CAREFULLY MAINTAINED DURING OPERATIONS TO ENSURE PROPER SURFACE DRAINAGE.
- LAWN AREAS SHALL BE FINE GRADED TO WITHIN ONE INCH (1") BELOW ADJACENT SURFACES.
- THE CONTRACTOR SHALL PERFORM A SOILS FERTILITY TEST AND SUBMIT SAMPLE TO A REPUTABLE SOILS LABORATORY. CONTRACTOR SHALL SUBMIT RESULTS OF SOILS TEST TO THE LANDSCAPE ARCHITECT FOR APPROVAL OR MODIFICATION.
- FOR BID PURPOSES ONLY; THE FOLLOWING MINIMUM AMENDMENTS SHALL BE INCORPORATED INTO ALL PLANTED AREAS AND TILLED INTO THE SOIL TO A DEPTH OF SIX TO TWELVE INCHES (6"-12"):
 - 6-20-20 FERTILIZER AT 25LBS PER 1,000 S.F.
 - NITRIFIED REDWOOD SHAVINGS AT 4 CUBIC YARDS PER 1,000 S.F.

PLANT MATERIAL

- SUBSTITUTIONS WILL NOT BE PERMITTED UNLESS APPROVED BY THE OWNER/LANDSCAPE ARCHITECT.
- PLANTS SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM NOXIOUS WEEDS, PLANT DISEASE, INSECT PESTS, OR THEIR EGGS, AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS AND COMPLY WITH ALL STATE AND LOCAL REGULATIONS.
- PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY EXCEPT AS AUTHORIZED BY THE OWNER'S REPRESENTATIVE. DO NOT "TOP" TREES.
- ALL PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL BY THE OWNER PRIOR TO INSTALLATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY REJECTED MATERIAL.
- CONTRACTOR TO PROVIDE PLANT MATERIAL DELIVERY TO JOB SITE. CONTRACTOR IS RESPONSIBLE FOR STORAGE, CARE, INSTALLATION, AND GUARANTEE FROM TIME OF DELIVERY. DO NOT STORE PLANT MATERIAL ON CONCRETE OR ASPHALT SURFACES.

WEED CONTROL

- CONTRACTOR SHALL COMPLETELY REMOVE ALL WEEDS AND REFUSE FROM SITE PRIOR TO PERFORMING ANY SITE IMPROVEMENT.
- AFTER PLANTING SHRUB BEDS AND PRIOR TO TOPDRESSING, IT IS RECOMMENDED TO APPLY RONSTAR-G (OR EQUAL) PRE-EMERGENT WEED CONTROL IN THE AMOUNTS SPECIFIED BY THE MANUFACTURER.

PLANTING OPERATIONS

- ALL PLANTS SHALL BE PLANTED, STAKED, AND TIED ACCORDING TO THESE PLANS.
- STAKE TREES AT THE LOWEST POINT WHERE THE TREE CAN SUPPORT ITSELF.
- THOROUGHLY WATER TREES, SHRUBS, AND GROUNDCOVER IMMEDIATELY AFTER PLANTING.
- RELOCATION OF TREES: IN THE EVENT THAT UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN EXCAVATION OF THE TREE HOLES, ALTERNATE LOCATIONS WILL BE SELECTED BY THE OWNER'S REPRESENTATIVE.
- ALL TREES SHALL BE PRUNED TO REMOVE BROKEN AND DAMAGED LIMBS AND BRANCHES. NO OTHER PRUNING IS APPROVED.
- INSTALL STREET TREES PER CITY OF MANTECA RESIDENTIAL STREET TREE PLANTING (ST-26).
- ROOT BARRIERS ARE REQUIRED FOR ALL TREES PLANTED WITHIN 5' OF A PAVED SURFACE. SEE DETAILS FOR MORE INFORMATION.
- 3" TOP-DRESSING OF 2" CHIP WOOD MULCH (OWNER TO SELECT COLOR) TO BE INSTALLED PER DETAILS.
- IT IS RECOMMENDED TO ADD FERTILIZER TABLET BEST-PAKS (20-10-5) PLANTER PACKETS, OR EQUAL, PLACED IN ALL PLANTING PITS PER DETAILS.

PLANT ESTABLISHMENT AND MAINTENANCE PERIODS

- THE LANDSCAPE CONTRACTOR SHALL PROVIDE A PLANT ESTABLISHMENT PERIOD OF FIFTEEN (15) DAYS COMMENCING AT COMPLETION OF PLANT MATERIAL INSTALLATION.
- APPROXIMATELY 30 DAYS AFTER INITIAL PLANTING, APPLY A BALANCED FERTILIZER TO TURF AND SHRUB AREAS PER MANUFACTURER'S RECOMMENDED RATES.
- LANDSCAPE SHALL BE MAINTAINED BY THE HOMEOWNER AFTER THE INSTALLATION: INCLUDING MOWING AND MAINTENANCE OF TURF, SHRUBS, TREES, FERTILIZATION, REMOVING CLIPPINGS FROM SITE, EDGING, AND THE CONTROL OF WEEDS. ADJUSTMENTS TO THE IRRIGATION SYSTEM FOR TIME AND DURATION OF FLOWS AND REPLACEMENT AND ADJUSTMENTS TO HEADS AND NOZZLES ARE ALSO REQUIRED.
- THE HOME OWNER SHALL BE RESPONSIBLE FOR DISEASE AND PEST CONTROL.

ACCEPTANCE

- COMPLETED WORK WILL BE REVIEWED AND OBSERVED BY OWNER. ANY MODIFICATIONS REQUIRED TO MEET THE STANDARDS AS SET FORTH IN THESE LANDSCAPE DOCUMENTS WILL BE SUBMITTED TO THE LANDSCAPE CONTRACTOR AND CORRECTED AT THE LANDSCAPE CONTRACTOR'S EXPENSE. CORRECTED ITEMS MUST BE APPROVED BY OWNER.
- UPON FINAL ACCEPTANCE, LANDSCAPE CONTRACTOR SHALL PROVIDE MAINTENANCE PROGRAM AND DOCUMENTATION TO THE OWNER.

GUARANTEE

- ALL TREES AND SHRUBS SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR TO LIVE AND GROW IN A HEALTHY UPRIGHT POSITION DURING THE ESTABLISHMENT AND MAINTENANCE PERIODS. REPLACEMENT MATERIAL WILL BE AT THE LANDSCAPE CONTRACTOR'S EXPENSE EXCEPT IF VANDALIZED OR STOLEN.

WATER CONSERVATION STATEMENT

- I HAVE COMPLIED WITH THE CRITERIA OF THE (STATE/CITY WATER CONSERVATION) ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.
- CHANGES TO THE APPROVED PLANS OR FIELD SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER/LANDSCAPE ARCHITECT. IF THE OWNER/CONTRACTOR DEVIATES FROM THE APPROVED PLAN WITHOUT PRIOR WRITTEN APPROVAL THEY WILL BE REQUIRED TO MAKE ANY CORRECTIONS, AT THEIR OWN EXPENSE, TO BRING THE LANDSCAPE AND IRRIGATION INTO COMPLIANCE WITH THE APPROVED PLANS AND THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.

CLOSE-OUT DOCUMENTS

- AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:
 - PROJECT INFORMATION SHEET THAT CONTAINS:
 - DATE
 - PROJECT NAME
 - PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.
 - PROJECT ADDRESS
 - PROPERTY OWNER NAME, TELEPHONE NUMBER AND MAILING ADDRESS.
 - CERTIFICATION BY EITHER THE SIGNER OF THE LANDSCAPE DESIGN PLAN, THE DESIGNER OF THE IRRIGATION DESIGN PLAN OR THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
- WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION.
- A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
- IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
- LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
- IRRIGATION AUDIT REPORT.
- SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL REPORT RECOMMENDATIONS.

PLANT LEGEND

TREES	BOTANICAL NAME	COMMON NAME	SIZE	APPROX SPACING	WATER USE	QTY	REMARKS
ACE PAL	ACER PALMATUM	JAPANESE MAPLE	24" BOX	PER PLAN	MODERATE	5	F&B, FGR, HI BR, MATCH
CER OCC	CERCIS OCCIDENTALIS	WESTERN REDBUD MULTI-TRUNK	15 GAL	PER PLAN	VERY LOW	3	F&B, FGR, PINK FLW, HI BR, MATCH, MULTI
PIS KEI	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	24" BOX	PER PLAN	LOW	3	F&B, FGR, HI BR, MATCH, SL
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	APPROX SPACING	WATER USE	QTY	REMARKS
C	CHONDRPETALUM TECTORUM	CAPE RUSH	1 GAL	48" O.C.	LOW	24	F&B, FGR, MATCH, TRI SP
CI	CISTUS X PURPUREUS	ORCHID ROCKROSE	5 GAL	36" O.C.	LOW	14	F&B, FGR, PINK FLW, MATCH, TRI SP
D	DIETES BICOLOR	FORTNIGHT LILY	5 GAL	36" O.C.	LOW	77	F&G, FGR, MATCH, TRI SP
▲	FICUS PUMILA	CREeping FIG	1 GAL	PER PLAN	MODERATE	6	F&B, FGR, MATCH, TTW
J	LIGUSTRUM JAPONICUM 'TEXANUM'	WAX LEAF PRIVET	5 GAL	36" O.C.	LOW	36	BR GR, F&B, FGR, WHITE FLW, MATCH
U	LOROPETALUM CHINENSE RUBRUM 'RAZZLEBERRI'	RAZZLEBERRI FRINGE FLOWER	5 GAL	48" O.C.	LOW	26	F&B, FGR, PINK FLW, MATCH, TRI SP
N	NANDINA DOMESTICA 'GULF STREAM'	HEAVENLY BAMBOO	5 GAL	36" O.C.	LOW	6	F&B, FGR, MATCH, TRI SP
O	OLEA EUROPAEA 'LITTLE OLLIE'	LITTLE OLLIE OLIVE	5 GAL	48" O.C.	LOW	39	DV, F&B, FGR, MATCH
⊕	PENSTEMON HETEROPHYLLUS 'MARGARITA BOP'	BEARD TONGUE	1 GAL	18" O.C.	LOW	108	F&B, FGR, MATCH
R	RHAPHIOLEPIS UMBELLATA 'MINOR'	YEDDA HAWTHORN	5 GAL	48" O.C.	LOW	44	F&B, FGR, WHITE FLW, MATCH, TRI SP
RC	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	5 GAL	36" O.C.	LOW	19	F&B, FGR, MATCH
⊖	SISYRINCHIUM BELLUM	BLUE EYED GRASS	1 GAL	24" O.C.	LOW	63	F&B, FGR, MATCH
⊕	TULBAGHIA VIOLACEA 'VARIEGATA'	STRIPED CAPE GARLIC	1 GAL	18" O.C.	LOW	136	F&B, FGR, MATCH, TRI SP
X	XYLOSMA CONGESTUM	SHINY XYLOSMA	5 GAL	60" O.C.	LOW	15	F&B, FGR, MATCH
MISCELLANEOUS						48 L.F.	DEEPROOT OR EQUAL WWW.DEEPROOT.COM P: (800) 458-7668
---	UB-24-2 24" ROOT BARRIER						

PLAN LIST ABBREVIATIONS

BR GR	BRANCHED TO GROUND	MATCH	MATCHED SIZE, FORM, CALIPER, BRANCHING AND CULTIVAR. SELECT FORM ONE LOT, ONE GROWER, FOR GUARANTEED CONSISTENCY THROUGH LIFE OF PLANTS. IN GENERAL PLANTS WITHIN A GROUP OR AREA ARE TO BE MATCHED, UNLESS NOTED OTHERWISE
DV	DWARF VARIETY		
F&B	FULL DENSE, BUSHY, VIGOROUS PLANTS, WITH YOUNG GROWTH CLOSELY SPACED ON BRANCHES		
FGR	FREE OF GIRDLING ROOTS	MULTI	MULTI STEMMED
FLW	FLOWER	SL	SINGLE, STRAIGHT, DOMINANT LEADER
GAL	GALLON CAN	TRI SP	TRIANGULARLY SPACED
HI BR	HIGH BRANCHED	TTW	TRAIN TO WALL
LO BR	LOW BRANCHED	VAR	VARIEGATED SPECIES
ST	STREET	SHD	SHADE

PLAN REVISIONS

NO.	DATE	REVISION

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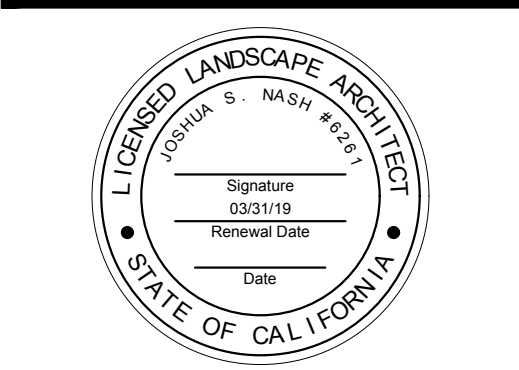
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LANDSCAPE IMPROVEMENT PLANS

STEWART STREET APARTMENTS

MANTECA, CALIFORNIA

PLANTING LEGEND & NOTES



APPROVED: _____

DESIGNED: CS

DRAWN: CS

CHECKED: JN

SCALE: NO SCALE

DATE: 10/26/2017

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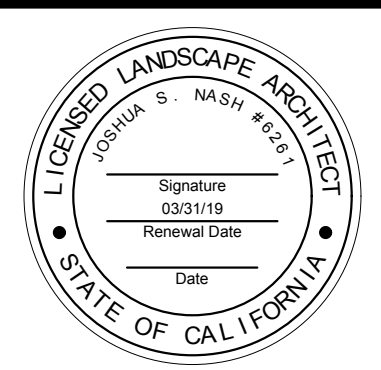
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STEWART STREET APARTMENTS
MANTECA, CALIFORNIA

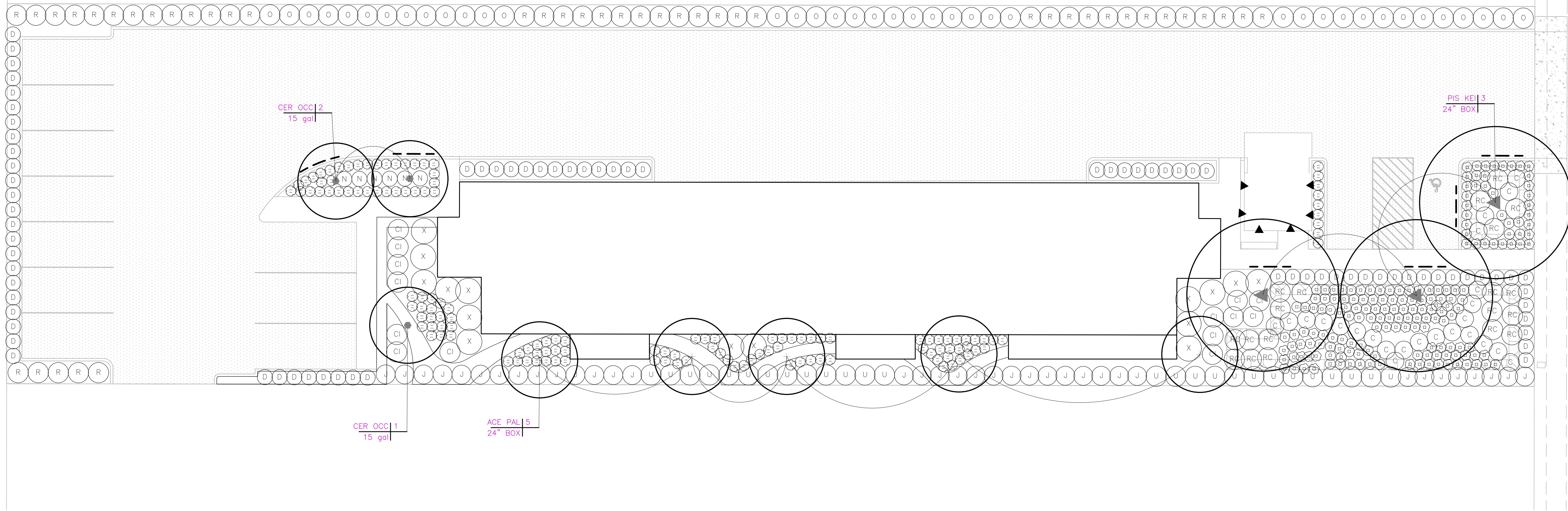
PLANTING PLAN



APPROVED: _____

DESIGNED: CS
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DATE: 10/26/2017
JOB NO.: 33640
FILE NO.: 33640-IP

SHEET NO.
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OF
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SCALE: 1"=10'



Know what's below.
Call before you dig.

PLAN REVISIONS		
NO.	DATE	REVISION

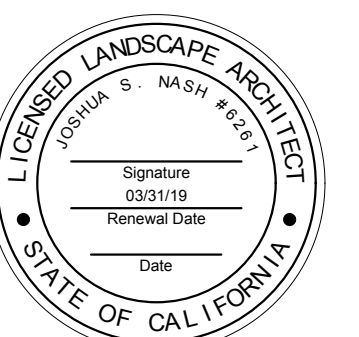


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LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
 MANTECA, CALIFORNIA

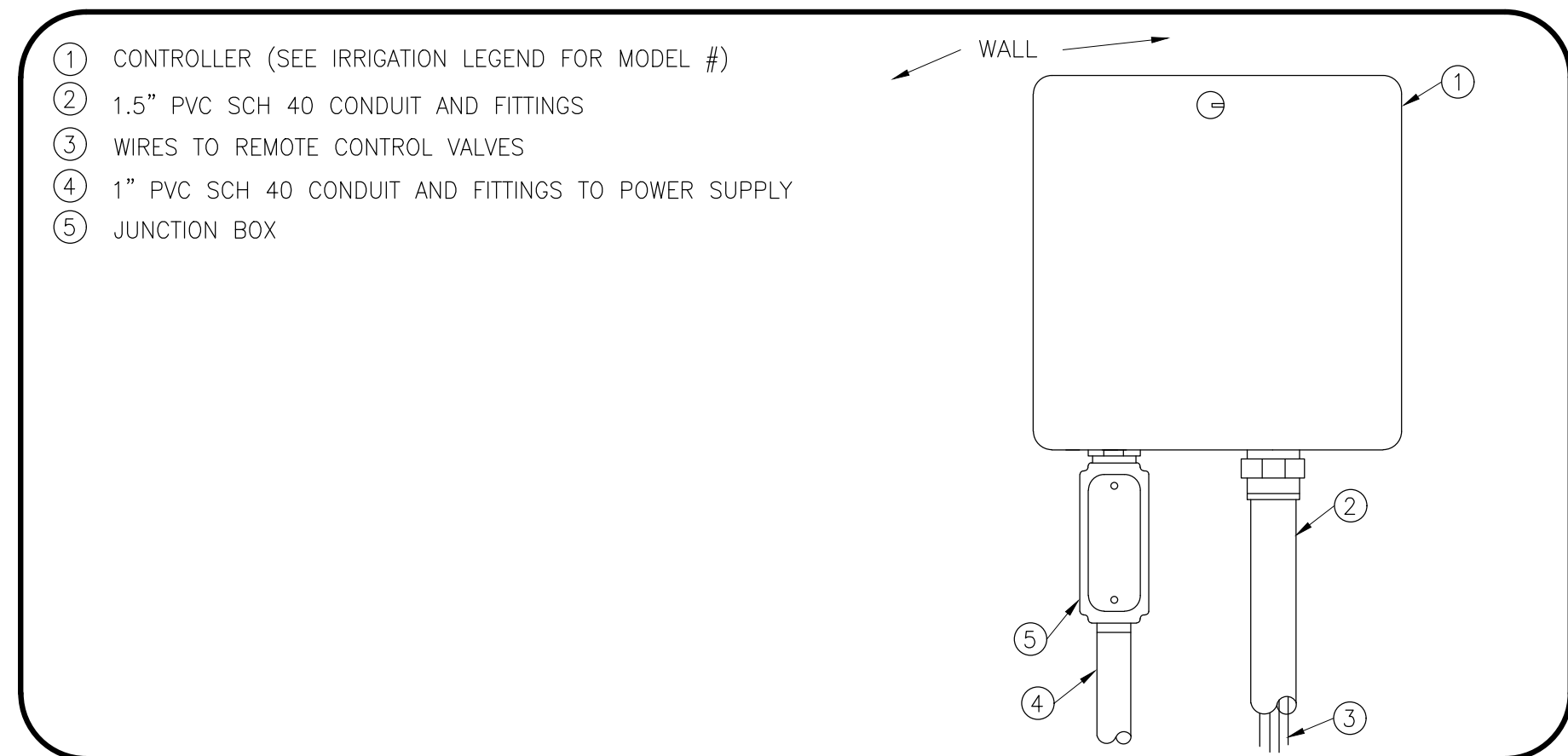
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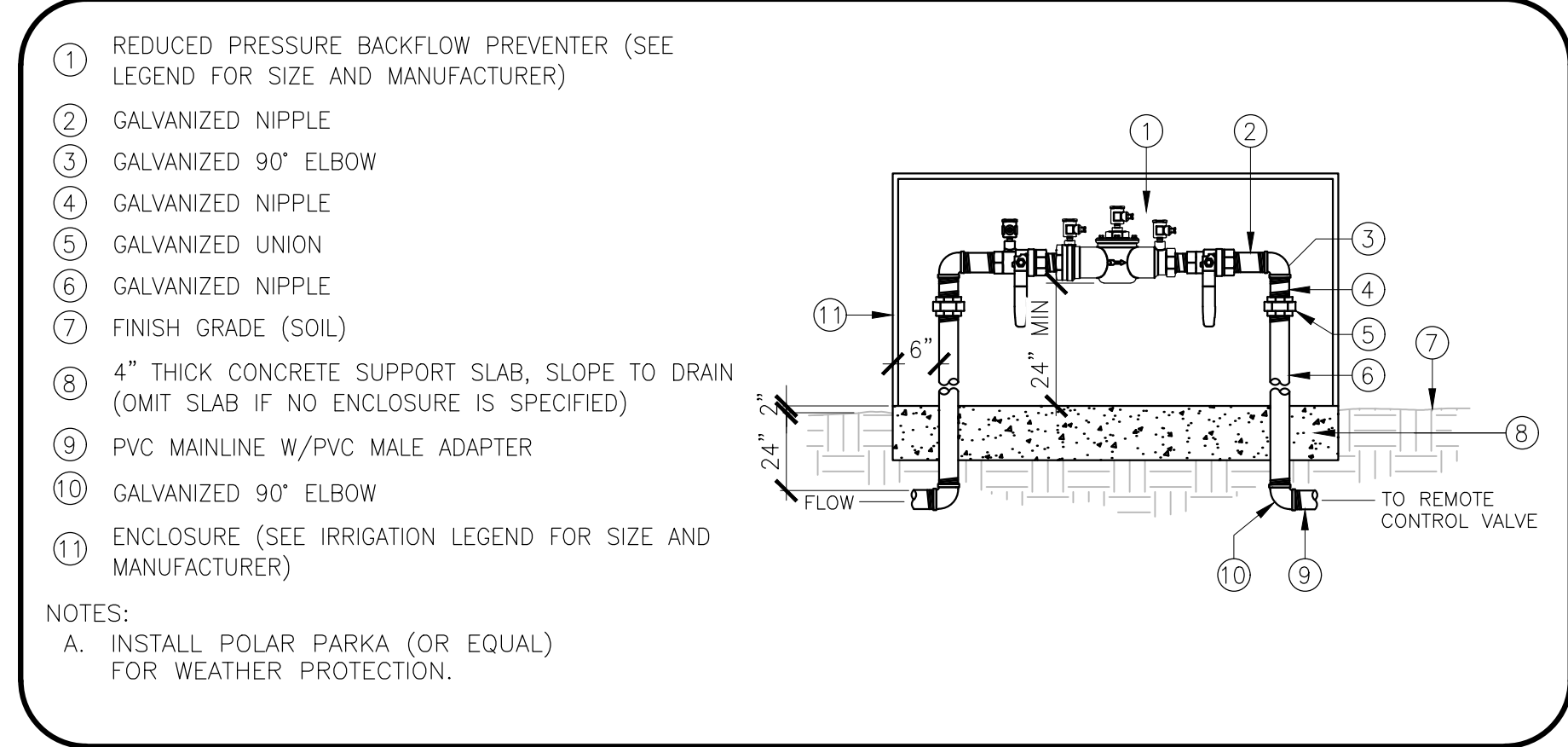
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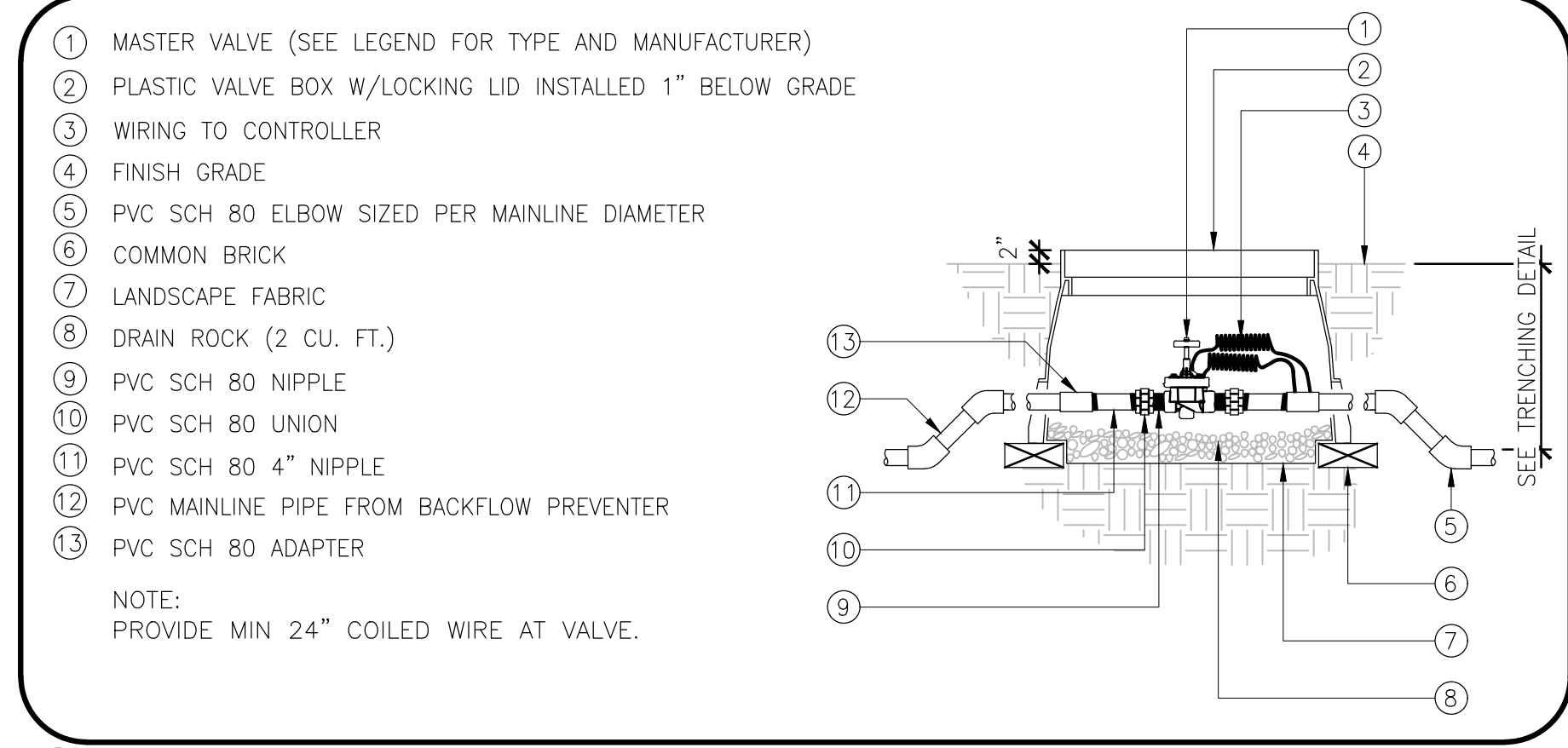
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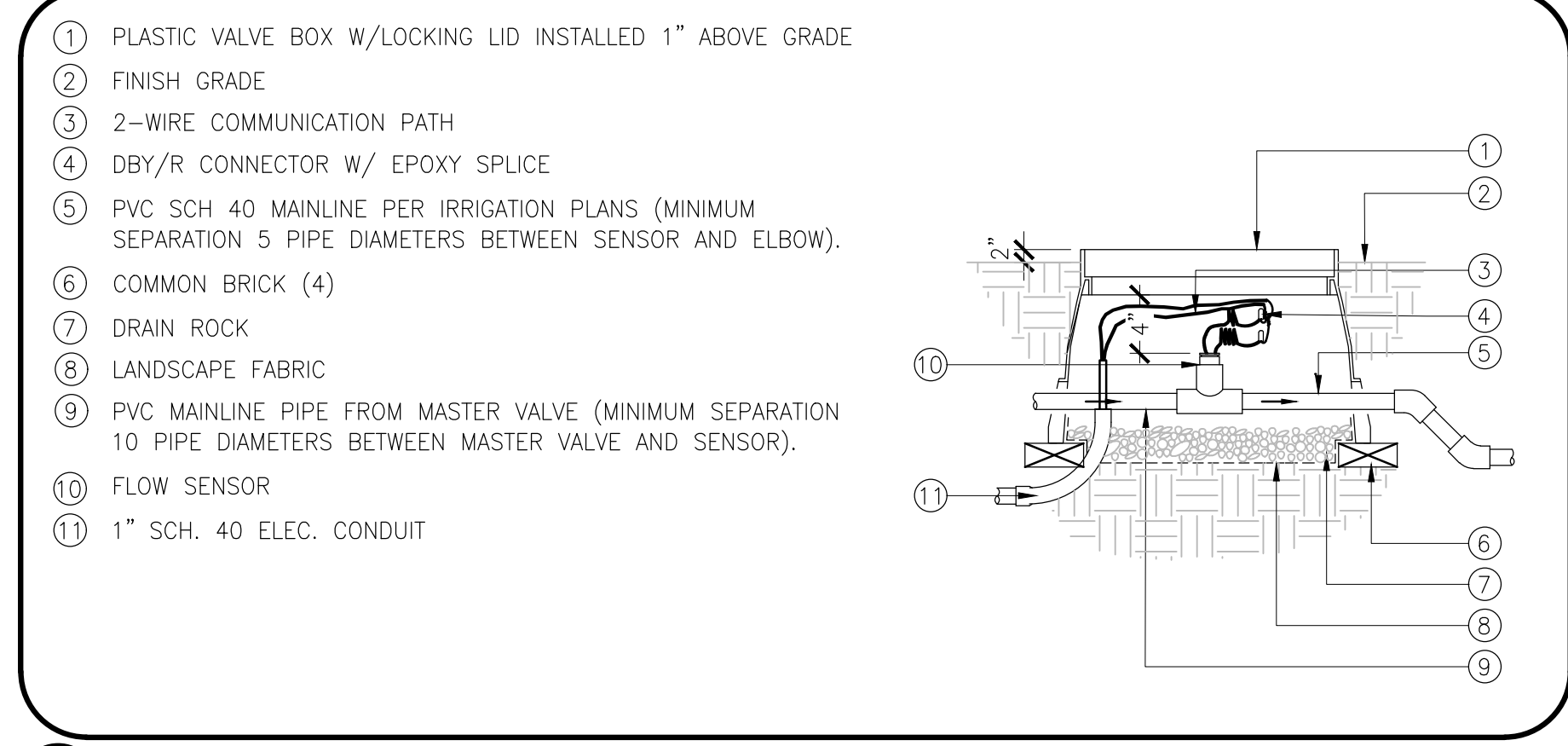
1 WALL MOUNT IRRIGATION CONTROLLER NOT TO SCALE



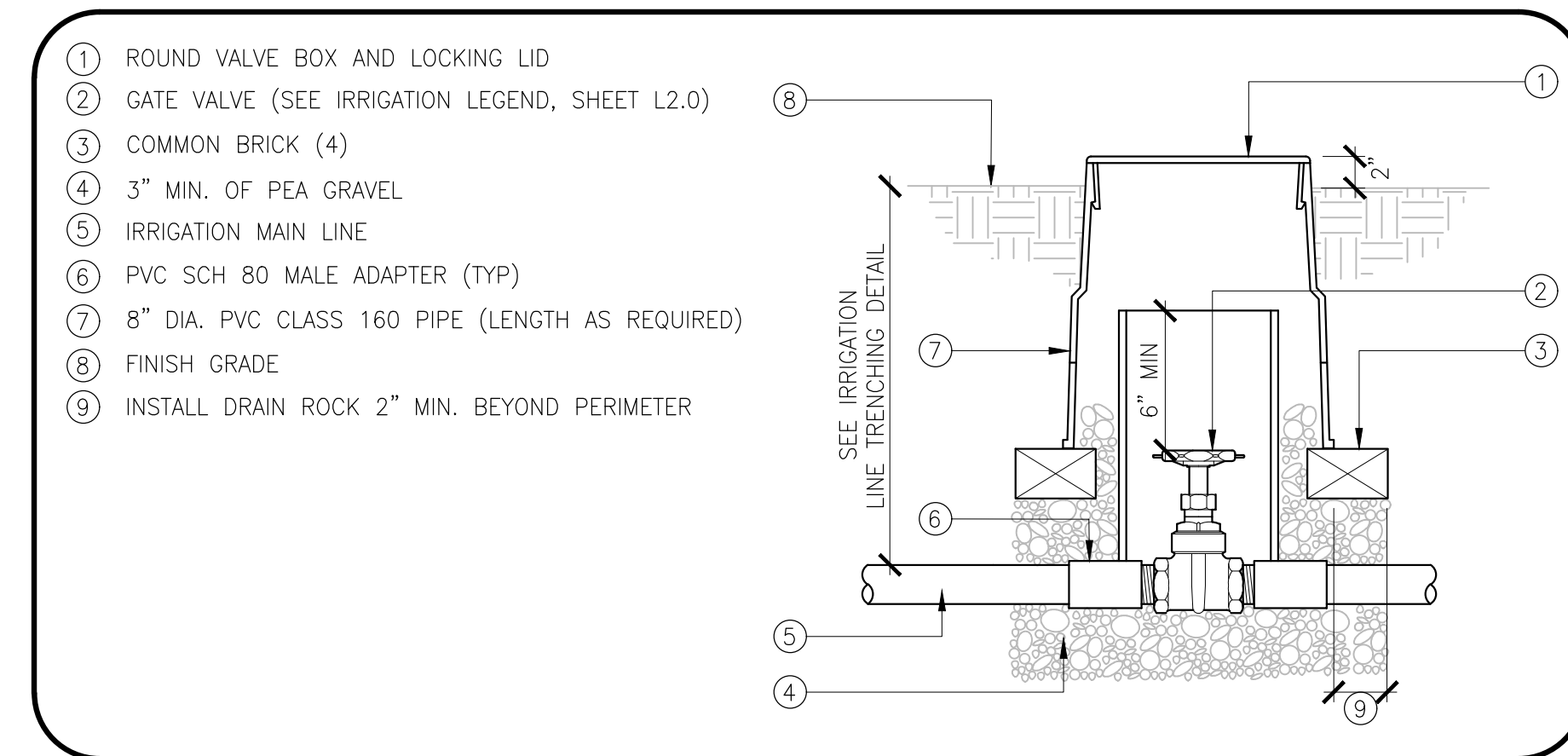
2 REDUCED PRESSURE DEVICE NOT TO SCALE



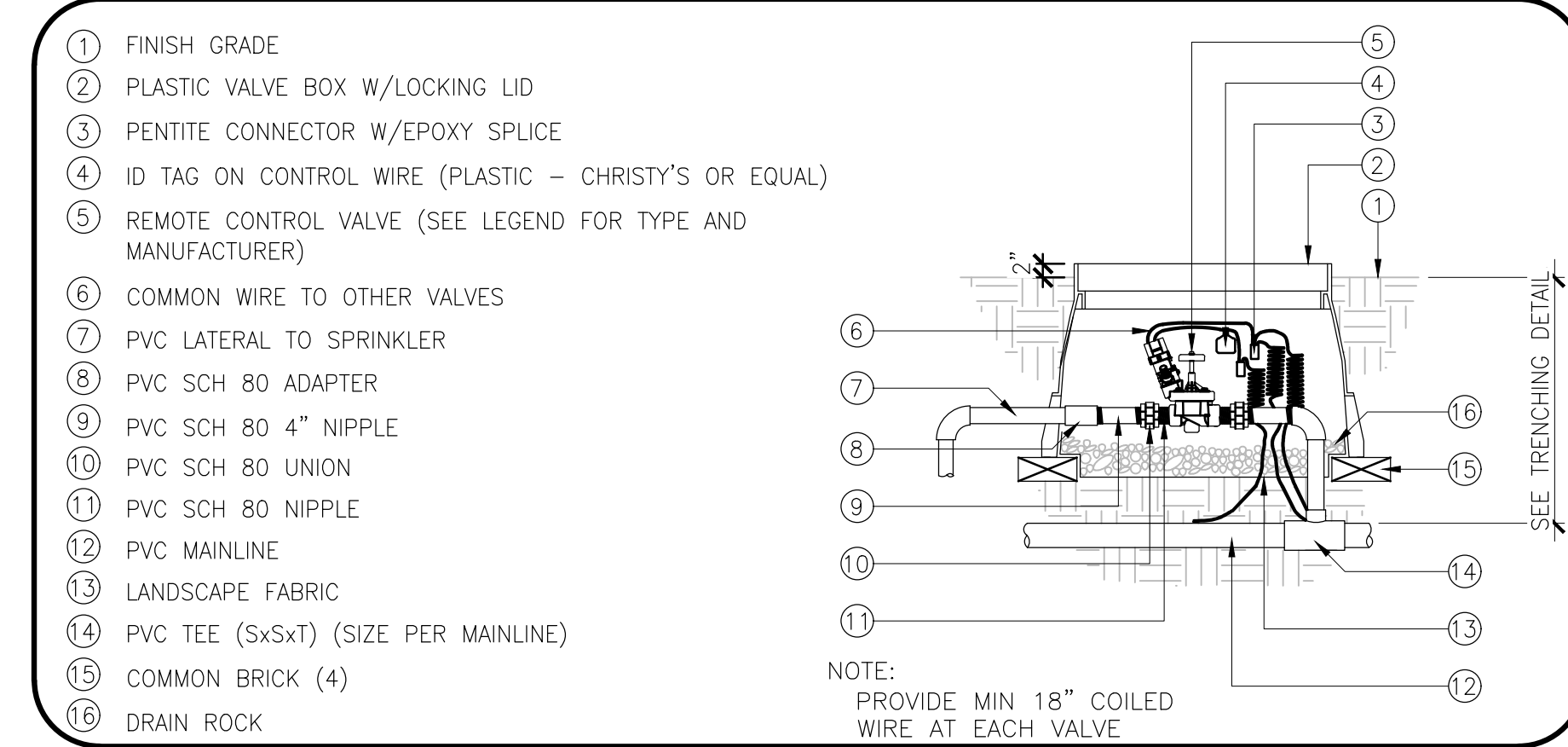
3 MASTER VALVE IN PLASTIC VALVE BOX NOT TO SCALE



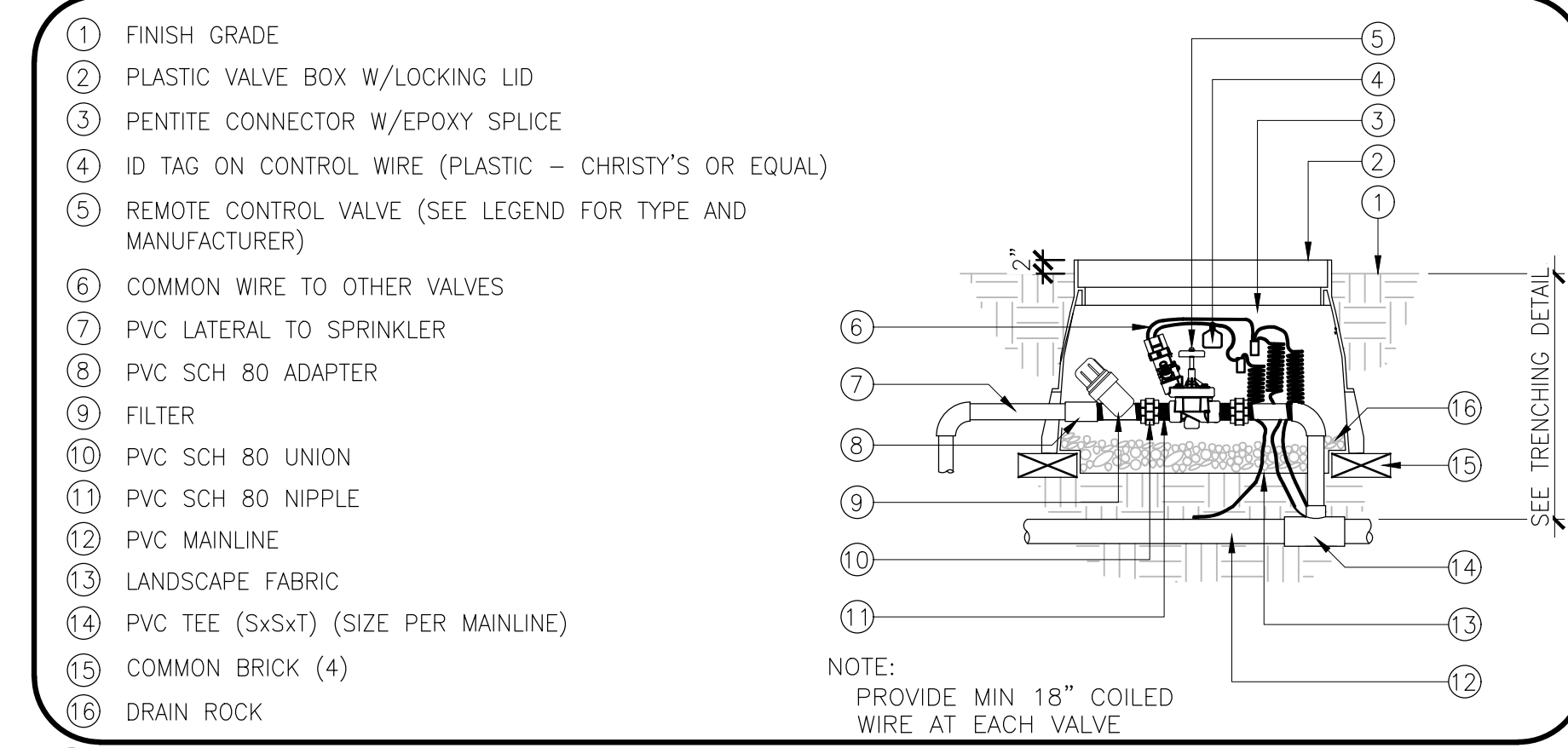
4 FLOW SENSOR IN PLASTIC VALVE BOX NOT TO SCALE



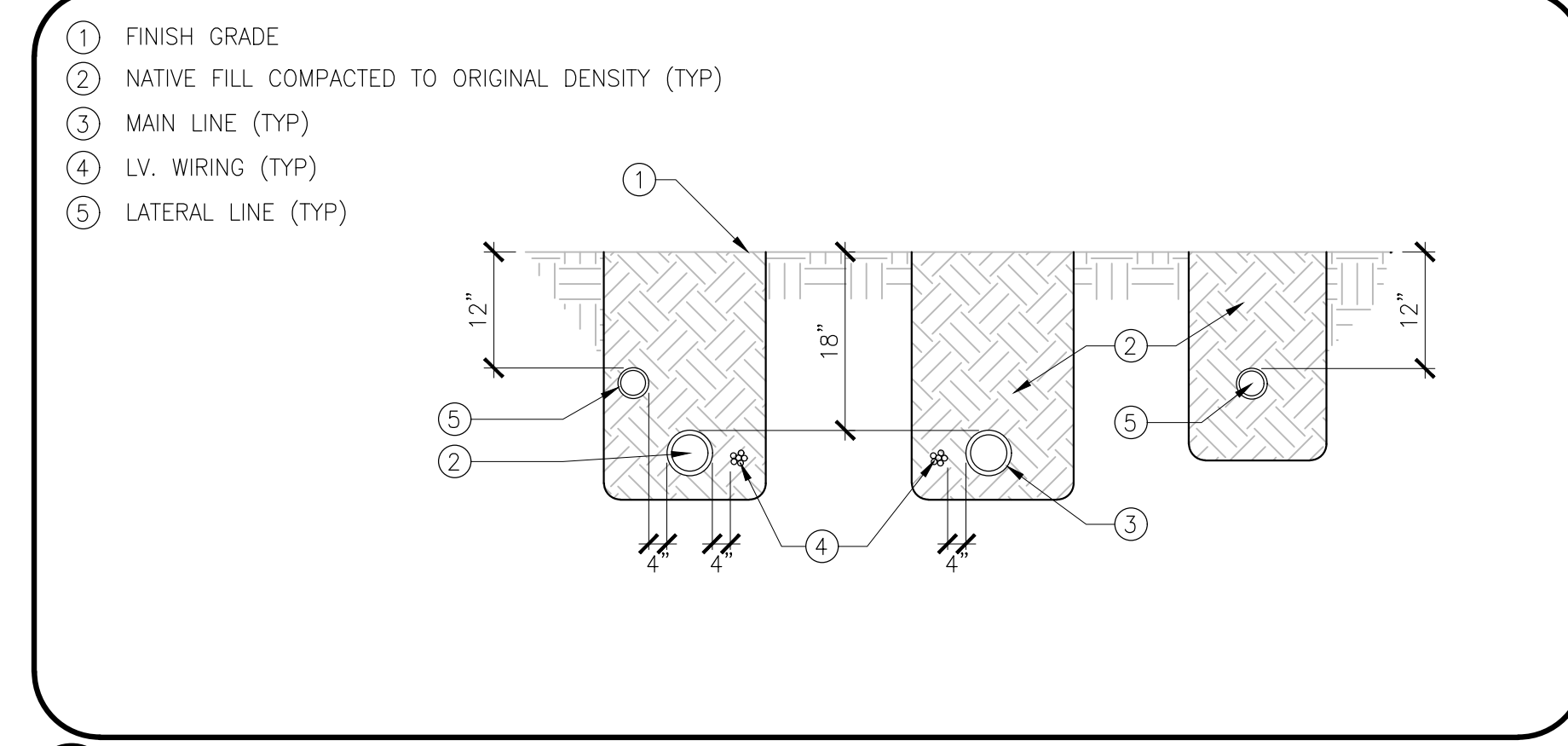
5 GATE VALVE NOT TO SCALE



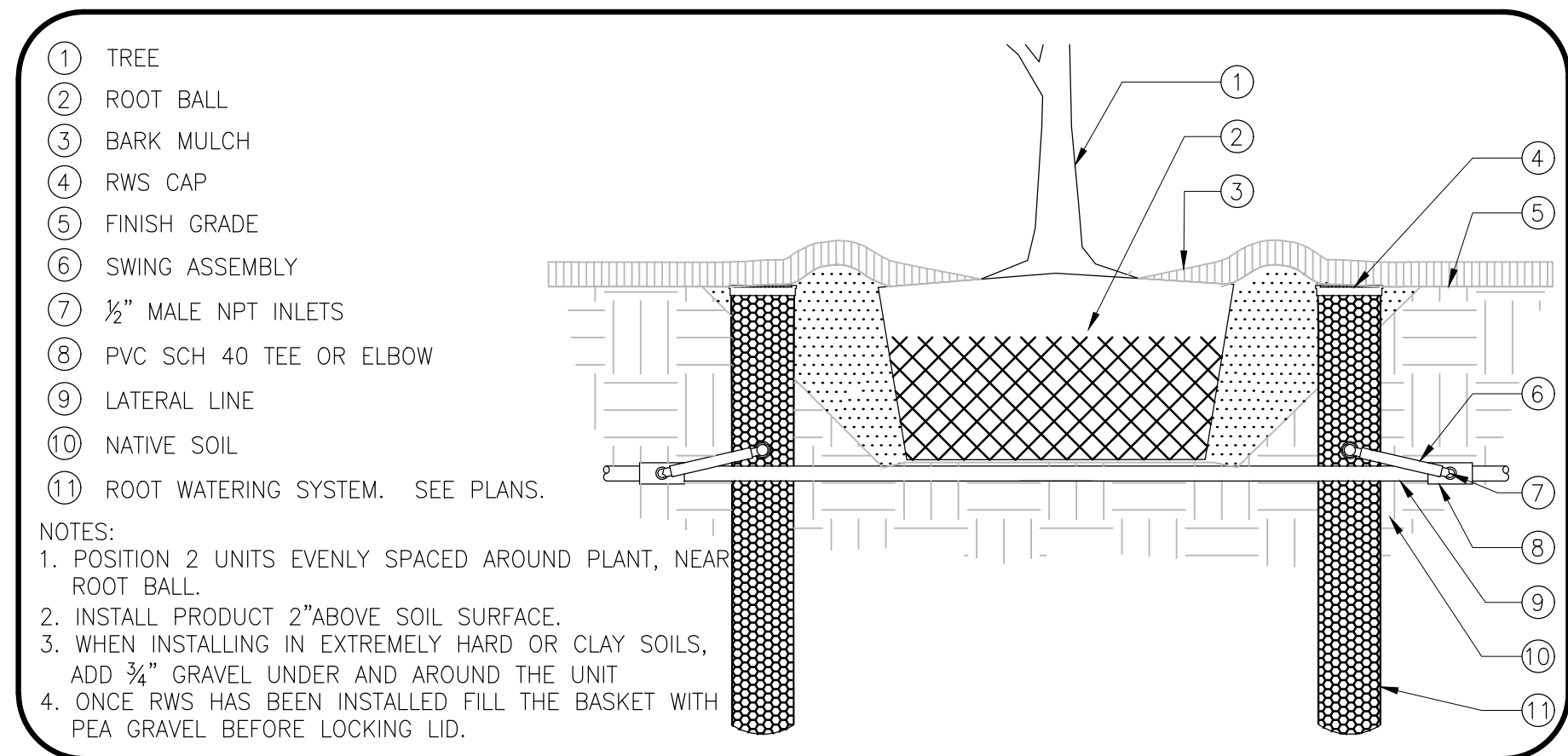
6 REMOTE CONTROL VALVE IN PLASTIC VALVE BOX NOT TO SCALE



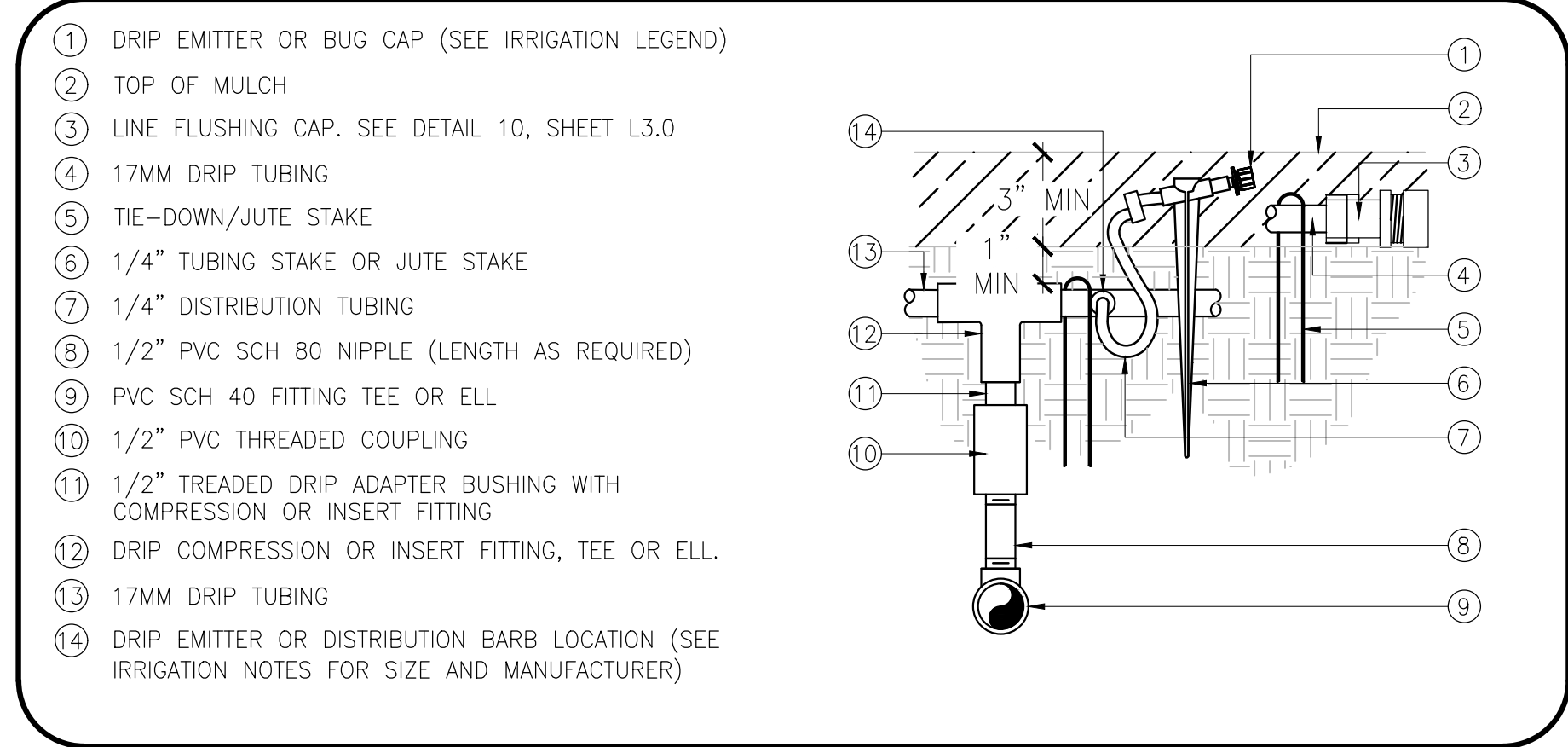
7 REMOTE DRIP CONTROL VALVE IN PLASTIC VALVE BOX NOT TO SCALE



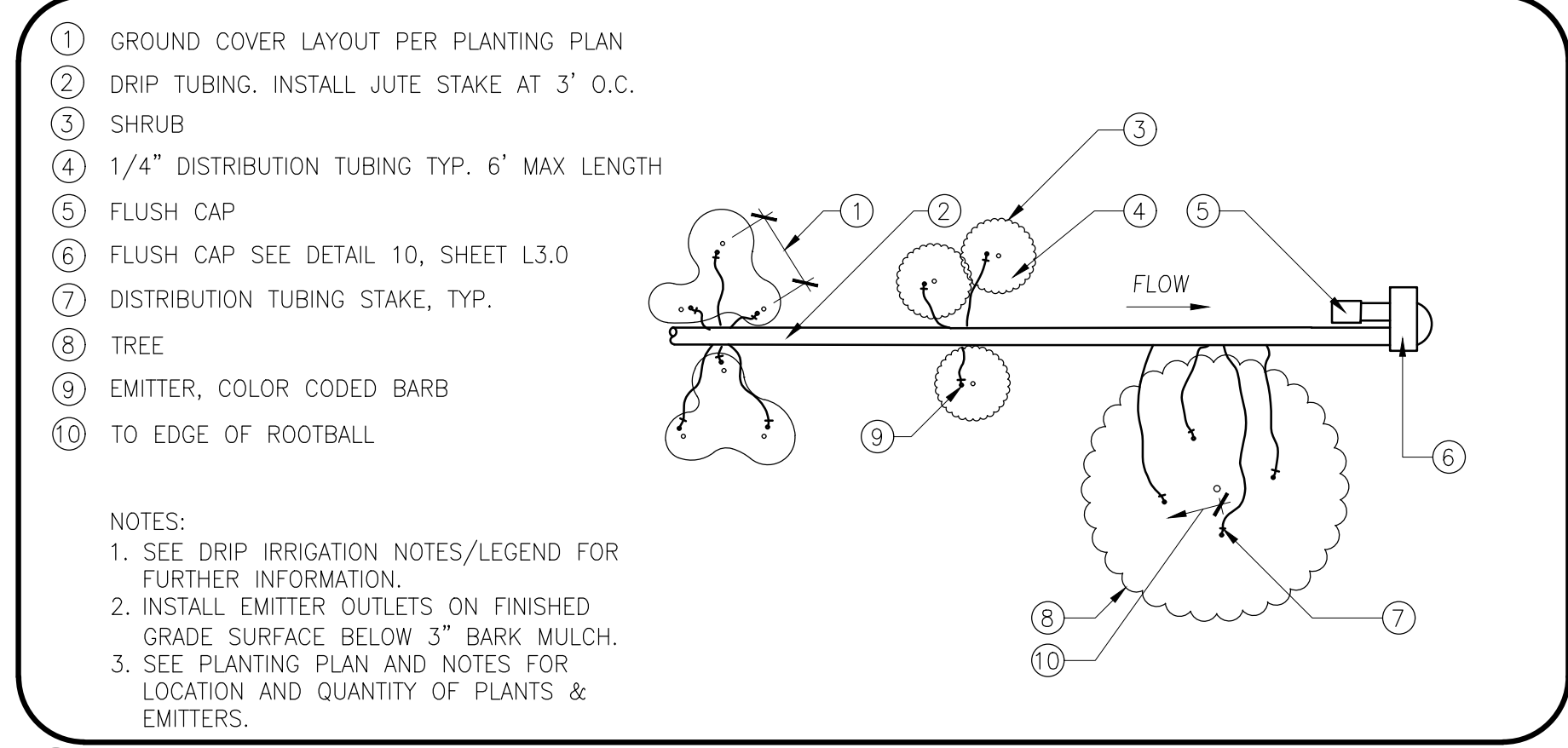
8 IRRIGATION LINE TRENCHING NOT TO SCALE



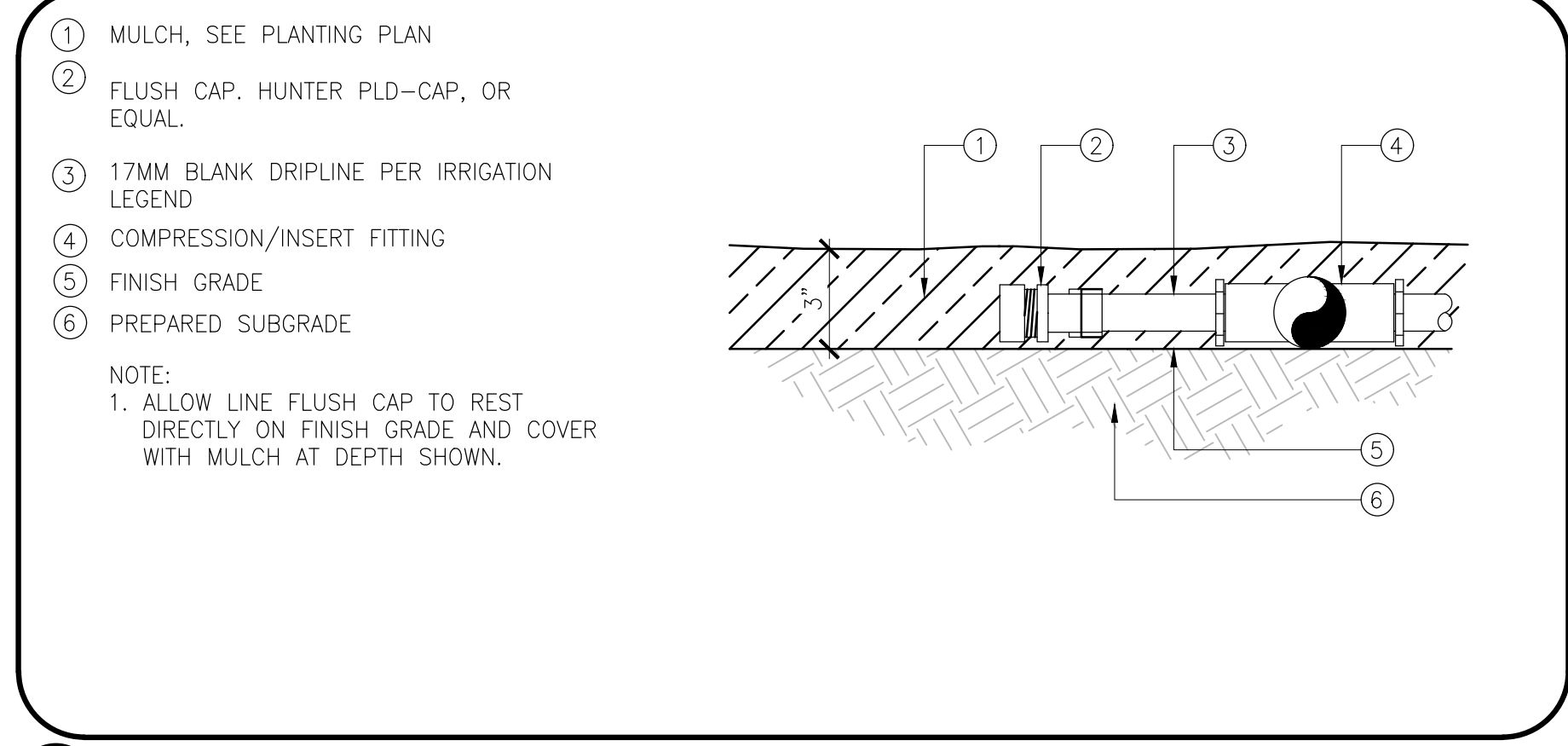
9 TREE BUBBLER NOT TO SCALE



10 POINT SOURCE DRIP INSTALLATION NOT TO SCALE



11 POINT SOURCE DRIP IRRIGATION LAYOUT NOT TO SCALE



12 DRIPLINE FLUSH POINT NOT TO SCALE

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PLAN REVISIONS		
NO.	DATE	REVISION

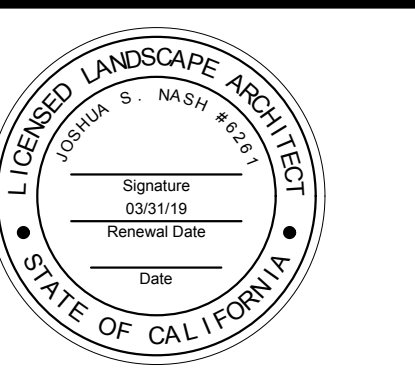


1165 Scenic Drive, Suite A
Modesto, CA 95350

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LANDSCAPE IMPROVEMENT PLANS
STEWART STREET APARTMENTS
 MANTECA, CALIFORNIA

PLANTING DETAILS



APPROVED: _____

DESIGNED:	CS
DRAWN:	CS
CHECKED:	JN
SCALE:	NOT TO SCALE
DATE:	10/26/2017
JOB NO.:	33640
FILE NO.:	33640-IP

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8



1 EACH TREE SHALL BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

2 3" HIGH EARTH BERM BEYOND EDGE OF ROOT BALL.

3 SEE PLANTING NOTES FOR SOIL AMENDMENT MIXTURE.

4 REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM TOP HALF OF ROOT BALL.

5 PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.

6 21-GRAM FERTILIZER PLANT TABS: 5 PER 15 GAL TREE, 8 PER 24" BOX TREE, 12 PER 36" BOX TREE.

7 TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE IN 9" LIFTS SO THAT ROOT BALL DOES NOT SHIFT.

8 SET TOP OF ROOT BALL FLUSH TO GRADE OR (1"-2") HIGHER IN SLOWLY DRAINING SOILS.

9 NATIVE SOIL

10 MULCH RING, (3') DIA. MIN. (4') DIA. PREFERRED.

11 DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE DURING THE MAINTENANCE PERIOD.

12 MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE.

13 "GRO STRAIT" 36" 'Z' STRAP OR EQUAL

14 SECURE WITH 1-1/2" GALVANIZED NAIL OR SCREW

15 2" DIA. X 8' (15 GAL.-24" BOX), 3" DIA. X 10' (36"-48" BOX) HARDWOOD LODGEPOLE STAKES OR OTHER APPROVED STAKE MATERIAL. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOTBALL.

NOTES:

A. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

B. SEE STAKING DETAIL FOR STAKING INFORMATION

C. AMENDED SOIL MUST NOT BE SO COMPACTED AS TO IMPEDE ROOT GROWTH OR DRAINAGE. THE SOIL STRUCTURE SHALL NOT BE PLATY OR MASSIVE.

D. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.

E. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS SHALL BE REJECTED.

2 X ROOT BALL DIAMETER

1 TREE PLANTING NOT TO SCALE

1 CROWN 2" ABOVE GROUND

2 FERTILIZER PLANT TABS: 1 PER 1 GAL., 3 PER 5 GAL.

3 BACKFILL MIX (SEE PLANTING NOTES)

4 ROOTBALL

5 SCARIFY BOTTOM OF HOLE

3 SHRUB PLANTING NOT TO SCALE

1 SHRUBS

2 SHRUBS SHALL BE TRIANGULAR SPACED PER O.C. SPACING ON PLANTING LEGEND AND/OR PLANTING PLAN.

1/2 SPACING FROM EDGE OF WALKBACK OF CURB, OR BUILDING FACE.

4 SHRUB SPACING NOT TO SCALE

1 LINEAR ROOT BARRIER INSTALLATION. INSTALL 10' O.C.

2 SEE TREE PLANTING DETAIL 1, THIS SHEET

3 MULCH. SEE PLANTING NOTES

4 ROOT BARRIER: ROOT INHIBITOR IMPREGNATED NODULES OR FABRIC

5 BACK OF CURB OR WALK

NOTES:

A. ALL TREES WITHIN 8' OF A CURB OR SIDEWALK SHALL HAVE ROOT BARRIERS INSTALLED.

B. INSTALL ROOT BARRIERS PER MANUFACTURER'S RECOMMENDATIONS.

SECTION

5 ROOT BARRIER DETAIL NOT TO SCALE

1 GRO STRAIT-36" 'Z' STRAP OR EQUAL

2 SECURE WITH 1" GALVANIZED SCREW

3 2" DIA. X 8' (15 GAL.-24" BOX), 3" DIA. X 10' (36"-48" BOX) HARDWOOD LODGEPOLE STAKES OR OTHER APPROVED STAKE MATERIAL. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOTBALL.

4 SECURE TREE 6" TO 12" ABOVE LOWEST POINT NECESSARY TO KEEP TREE UPRIGHT AND TOP OF TAKE SHALL BE CUT OFF NO MORE THAN 3" ABOVE THE HIGHEST TIE.

NOTES:

A. FASTEN STRAP TIGHT ENOUGH TO KEEP FROM SLIPPING WHILE ALLOWING FOR SOME TRUNK MOVEMENT.

B. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS.

C. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.

D. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS SHALL BE REJECTED.

WIND DIRECTION

PLAN VIEW

2 TREE STAKING NOT TO SCALE

1 TRAIN VINE TO WALL

2 GRADE

3 ROOTBALL 1" ABOVE GRADE TO ACCOMMODATE TOP DRESSING

4 21 GRAM PLANT TAB/PACKET PLACED IN UPPER PORTION OF PLANT PIT (1 PER 1-GAL., 3 PER 5-GAL., 5 PER 15-GAL.)

6 VINE PLANTING AGAINST WALL NOT TO SCALE

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