

SITE APPROVAL PROCESS:
If plan review approval has been authorized, the owner/developer may proceed with installation. NO INSTALLATION CONSTRUCTION MAY BEGIN WITHOUT GRANTED APPROVAL. Contractor is responsible for notifying the project manager in advance for the following irrigation and planting inspections, according to the time indicated:

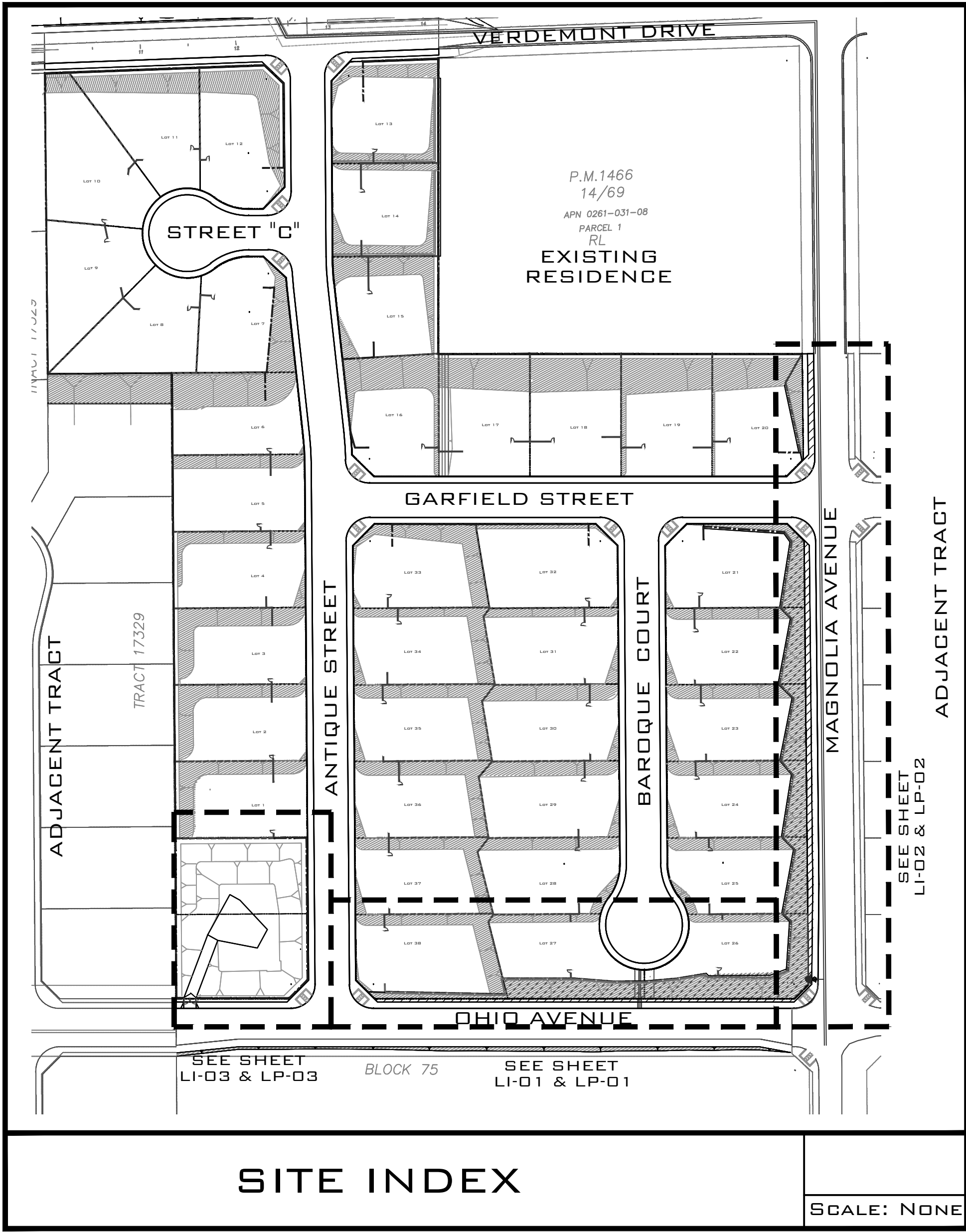
- a. Pre-job conference: 7 calendar days.
b. Pressure mainline installation (prior to back fill) and testing: 48 hours.
c. System layouts: 48 hours.
d. Coverage tests: 48 hours.
e. Final irrigation inspection: 48 hours.
f. Prior to hydroseeding; 48 hours.
g. At the final inspection of installation: Commencement of the 90-day maintenance period.
h. Prior to the final acceptance of the 90-day maintenance period.
i. Call City of San Bernardino Representative at (909) 384-5057.

- GENERAL NOTES:
1. All Work shall conform to the requirements of the City of San Bernardino Landscape Standards. All water systems shall conform with City of San Bernardino Municipal Water Department at 909-384-5215.
2. Provide all project as-builts required for City of San Bernardino site inspections.
3. Verify location of all utility lines so that proper precautions may be taken not to disturb or damage such improvements. Project engineer is WEB Associates, Contact: Paul Peck 951-320-6038.
4. Supply all work and materials, appliances, tools, equipment, facilities, transportation, and services necessary for performing all operations of the "Landscape Installation" as identified in the construction documents. The contractor shall maintain a qualified supervisor on the site at all times during construction through completion of pick-up work.
5. All construction shall be in conformance with current local building codes, permit requirements and state and health requirements.
6. Prior to submitting bid, examine the site and the conditions thereof.
7. The contractor shall carry workman's compensation, public liability an property damage insurance as required by the Owner/County.
8. All specifications and installations shall conform to the details and legends and specifications.
9. These notes shall be used in conjunction with the plans and any discrepancies shall be brought to the attention of the Landscape Architect during the bid process.
10. The drawings and specifications represent the finished structure. All barricades shall be signings, etc., is the sole responsibility of the contractor. Observation visits to the job site by the Landscape Architect do not include inspection of construction methods and safety conditions at the worksite. These visits shall not be construed as continuous and detailed inspections.
11. Conditions not specifically shown shall be constructed similar to the details for the respective materials and completed to industry standards and complying to all local building and health codes.
12. See City of San Bernardino Handbook for planting and irrigation specifications.
13. Points of connection on all irrigation plans are approximate only. Water meter and all connections must be approved by City of San Bernardino Municipal Water Department. Contractor to verify existing pressure and available G.P.M. prior to construction.
14. Contractor shall obtain and carry on the jobsite at all times a copy of the latest County of San Bernardino Landscape Specification Manual.
15. It shall be the responsibility of the developer/owner or contractor to apply to the San Bernardino County Transportation Department, Permit Section, for an Encroachment Permit for all work performed within public right-of-way, dedicated and accepted for public; and to be responsible for satisfactory compliance for all current environmental regulations during the life of construction activities for this project. additional studies and/or permits may be required.

REQUIRED LANDSCAPE INSPECTIONS:

1. Preconstruction Meeting
2. Grading and Drainage
3. Irrigation and Open Trench
4. Irrigation Mainline Test
5. Irrigation System Installation Inspection
6. Irrigation Coverage Test
7. Weed Abatement Program
8. Tree Installation
9. Plant & Ground Cover Installation
10. Sod/Hydroseeding
11. Installation Final Walk-Through to Start Maintenance
12. Every 30 day Maintenance Walk-Through
13. Final Maintenance Walk-Through to Release Project
14. Final Acceptance and Turnover

CITY OF SAN BERNARDINO
TRACT #16502
"VERDEMONT"
LANDSCAPE MAINTENANCE DISTRICT PLANS
BEAZER HOMES
310 COMMERCE, SUITE 150
IRVINE, CA 92602
PHONE: 714-672-7047 FACSIMILE: 714-484-8379



INSPECTION NOTES:

A. IRRIGATION SYSTEM

1. INSPECTION SHALL BE PERFORMED BY A PUBLIC WORKS DEPARTMENT REPRESENTATIVE AT THE FOLLOWING:

A. DEPTH OF IRRIGATION TRENCHING, SLEEVING, MAINLINE, LATERAL LINES (PRIOR TO BURIAL), VALVE INSTALLATION AND IRRIGATION HEAD ASSEMBLY.

B. PRESSURE TEST OF MAINLINE (2 HOUR 150 P.S.I.)

C. COVERAGE TEST AND FINAL ACCEPTANCE.

2. DO NOT ALLOW OR CAUSE THE ABOVE ITEMS TO BE BURIED PRIOR TO INSPECTIONS AND APPROVAL OF THE PARKS DEPARTMENT REPRESENTATIVE. A 24 HOUR NOTICE SHALL BE GIVEN PRIOR TO ANTICIPATED INSPECTIONS. CONTACT THE LANDSCAPE SECTIONS AT (909) 384-5217 OR 384-5233.

B. LANDSCAPING

1. INSPECTIONS SHALL BE PERFORMED BY A PUBLIC WORKS DEPARTMENT REPRESENTATIVE AT THE FOLLOWING:

A. UPON COMPLETION OF FINISHED GRADE, SOIL PREPARATIONS AND FINAL RAKE OUT.

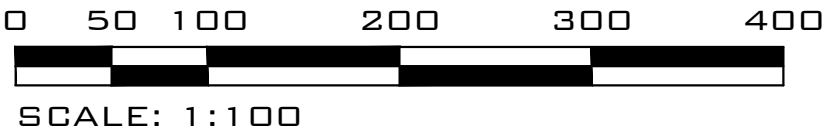
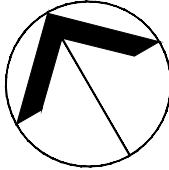
B. WHEN TREES AND SHRUBS ARE SPOTTED FOR PLANTING, WITH ONE EXAMPLE OF PLANTING HOLE FOR TREES AND SHRUBS. PROVIDE SAMPLES OF PLANT FERTILIZERS.

C. FINAL COMPLETION WHEN PLANTING AND ALL OTHER SPECIFIED WORK HAS BEEN COMPLETED.

2. A 24 HOUR NOTICE SHALL BE GIVEN TO ANTICIPATED INSPECTIONS. CONTACT THE LANDSCAPE SECTION AT (909) 384-5217 OR 384-5233.

SHEET INDEX

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PROJECT SITE

VICINITY MAP

HOLD HARMLESS & INDEMNIFICATION CLAUSE

CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER/DEVELOPER, THE COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE DESIGNER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER/DEVELOPER, COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE DESIGNER.

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING

Landscape Maintenance District
FOR
TRACT 16502
FROM
Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____

DRAWING NO.
LT-01

SHEET 1 OF 12 SHEETS

LAST MODIFIED: Jul 21, 2017 - 4:15pm BY USER: WDG-kim
DWG LOCATION: L:\CityHome\Bldg\Beazer\16-035 Tr16502 Verdemont\Production\03A160350 LMD\Drawings\16-035 Tr16502 Verdemont.dwg

IN THE CITY OF SAN BERNARDINO,
STATE OF CALIFORNIA

TRACT NO. 16502

BEING A SUBDIVISION OF PARCEL 2 OF PARCEL MAP NO. 1466, P.M.B. 14/69 AND A PORTION OF LOT 74 OF IRVINGTON LAND AND WATER COMPANY SUBDIVISION, M.B. 3/9, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA

ALBERT A. WEBB ASSOCIATES - CIVIL ENGINEERS
NOVEMBER, 2006

CONTACTS

COMPANY	COMPANY	ADDRESS	SUITE	CITY/ST/ZIP	PHONE	CONTACT
OWNER	BEAZER HOMES	310 COMMERCE	150	IRVINE, CA 92602	714-672-7017	LONNIE ELLISOR
LANDSCAPE ARCHITECT	WEILAND DESIGN GROUP	28924 OLD TOWN FRONT ST.	202	TEMECULA, CA, 92590	844 - WEILAND	KIM LONIGRO
CIVIL ENGINEER	WEBB ASSOCIATES	3788 MCCRAY ST.		RIVERSIDE, CA 92506	951-320-6038	LIN MCCAFFREY



WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY: _____ R.L.A. NO. 5508
KIM LONIGRO DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE					
BENCH MARK:									

APPROVED _____ 2017
CITY ENGINEER REGISTERED CIVIL ENGINEER NO. _____
DRAWN BY: _____
CHECKED BY: _____
RECOMMENDED BY: _____

Underground Service Alert

Call: TOLL FREE
1-800-422-4133

Call: TOLL FREE
1-800-422-4133

RECOMMENDED _____ 2017

JIM GONDOS
LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED _____ 2017

Underground Service Alert

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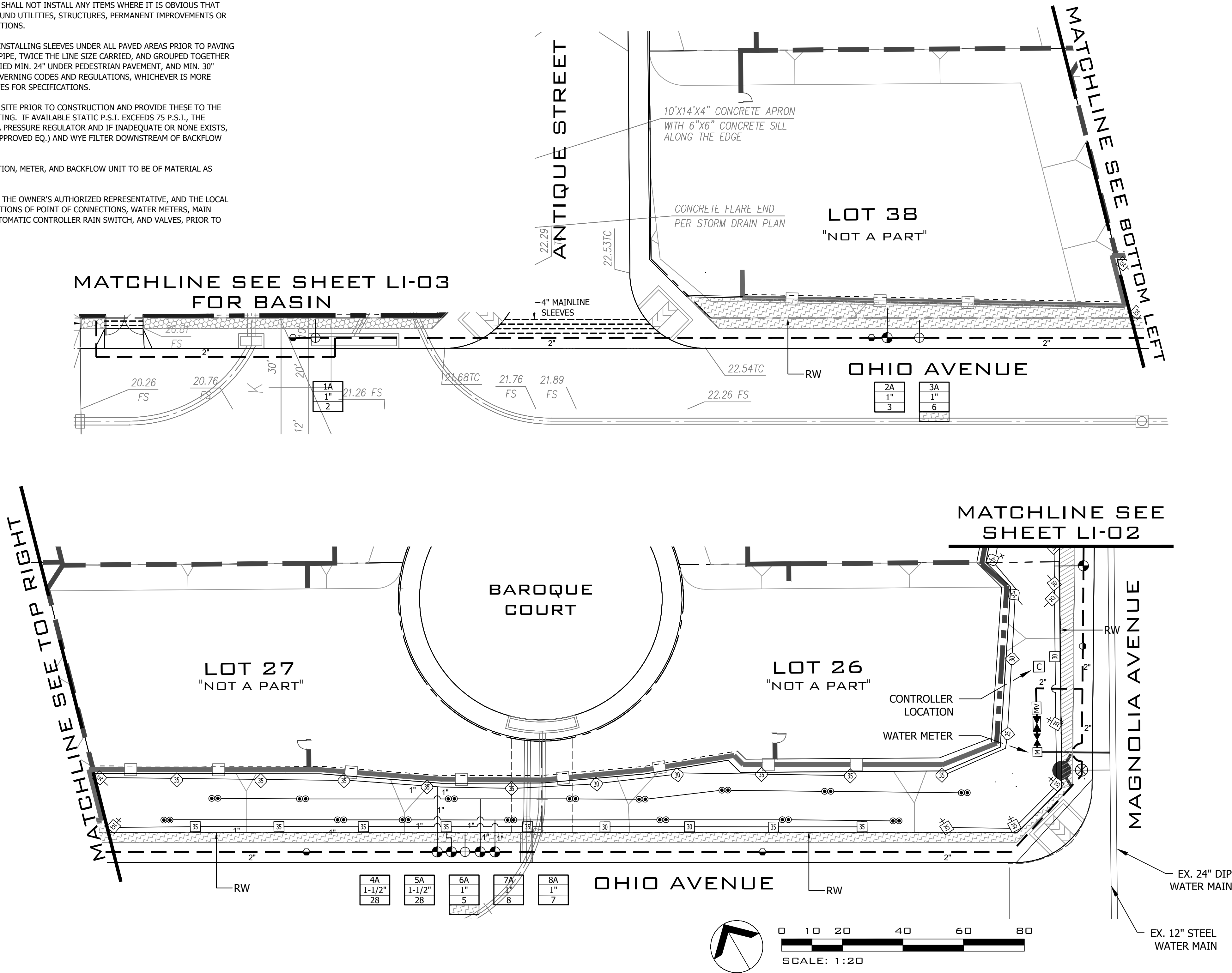
Call: TOLL FREE
1-800-422-4133

PERMIT # E1600995, DRAWING # 13121

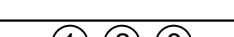
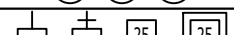





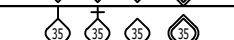


IRRIGATION GENERAL NOTES

1. IRRIGATION SYSTEM AS DRAWN ON PLANS IS DIAGRAMMATIC. ALL PIPE, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS.
2. DISCREPANCIES BETWEEN PLANS AND ACTUAL FIELD CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR REVISIONS NECESSARY. CONTRACTOR SHALL NOT INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST.
3. IRRIGATION HEADS SHALL BE LOCATED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALKS, AND STRUCTURES AND NOT SCALED OFF OF DRAWINGS. DO NOT LOCATE TREES OR TALLER SHRUBS IN LOCATIONS WHERE THEY WILL BLOCK IRRIGATION HEADS AND PREVENT ADEQUATE COVERAGE.
4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND MAINTAINING THE LATEST EDITION OF LOCAL GUIDELINES AND SPECIFICATIONS FOR LANDSCAPE DEVELOPMENTS AT THE SITE AT ALL TIMES.
5. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, CURBS, FENCES, WOOD STRUCTURES, CONCRETE STRUCTURES, BUILDINGS, UTILITIES, ETC. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR LOCATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADS, PAVING AND OTHER STRUCTURES. CONTRACTOR SHALL NOT INSTALL ANY ITEMS WHERE IT IS OBVIOUS THAT THEY ARE IN DIRECT CONFLICT WITH UNDERGROUND UTILITIES, STRUCTURES, PERMANENT IMPROVEMENTS OR PEDESTRIAN AND VEHICULAR SAFETY CONSIDERATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SLEEVES UNDER ALL PAVED AREAS PRIOR TO PAVING INSTALLATION. SLEEVING SHALL BE SCH. 40 PVC PIPE, TWICE THE LINE SIZE CARRIED, AND GROUPED TOGETHER WHERE FEASIBLE. SLEEVING SHALL ALSO BE BURIED MIN. 24" UNDER PEDESTRIAN PAVEMENT, AND MIN. 30" UNDER VEHICULAR PAVEMENT, OR PER LOCAL GOVERNING CODES AND REGULATIONS, WHICHEVER IS MORE STRINGENT. REFER TO IRRIGATION LEGEND/NOTES FOR SPECIFICATIONS.
7. CONTRACTOR SHALL VERIFY ALL PRESSURES ON SITE PRIOR TO CONSTRUCTION AND PROVIDE THESE TO THE OWNER'S AUTHORIZED REPRESENTATIVE IN WRITING. IF AVAILABLE STATIC P.S.I. EXCEEDS 75 P.S.I., THE CONTRACTOR SHALL VERIFY THE EXISTENCE OF A PRESSURE REGULATOR AND IF INADEQUATE OR NONE EXISTS, INSTALL A WILKINS PRESSURE REGULATOR (OR APPROVED EQ.) AND WYE FILTER DOWNSTREAM OF BACKFLOW ASSEMBLY.
8. MAINLINE FEEDER BETWEEN POINT OF CONNECTION, METER, AND BACKFLOW UNIT TO BE OF MATERIAL AS REQUIRED BY CURRENT WATER DISTRICT.
9. CONTRACTOR SHALL VERIFY IN THE FIELD WITH THE OWNER'S AUTHORIZED REPRESENTATIVE, AND THE LOCAL GOVERNING AGENCY REPRESENTATIVE, ALL LOCATIONS OF POINT OF CONNECTIONS, WATER METERS, MAIN WATER SUPPLY LINE, BACKFLOW PREVENTER, AUTOMATIC CONTROLLER RAIN SWITCH, AND VALVES, PRIOR TO CONSTRUCTION.

10. POINT OF CONNECTION TO BE AT SERVICE LINE DOWNSTREAM OF WATER METER, VERIFY LOCATION, TYPE AND SIZE PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL THOROUGHLY FLUSH ALL LINES AND ADJUST ALL HEADS FOR OPTIMUM SYSTEM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, STREETS, AND STRUCTURES SUCH AS BUILDINGS, WALLS, FENCES, ETC. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
12. ALL SHRUB / BUBBLER HEADS ADJACENT TO LAWN AND PAVED AREAS SHALL BE MOUNTED ON 6" BODIES MIN. OR PER LOCAL GUIDELINES.
13. ALL CONTROL EQUIPMENT, SUCH AS REMOTE CONTROL VALVES, BALL VALVES, AND QUICK COUPLER VALVES SHALL BE LOCATED IN SHRUB PLANTER AREAS.
14. CONTRACTOR SHALL COORDINATE THE LOCATION OF IRRIGATION PIPING WITH THE LOCATION OF TREES (REFER TO PLANTING PLAN) AND SHALL MAINTAIN A MIN. OF 5 FEET CLEARANCE BETWEEN PIPING AND TRUNKS OF TREES WHEREVER POSSIBLE. CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
15. CONTRACTOR SHALL INSTALL BELOW HEAD CHECK VALVES AND/OR IN-LINE CHECK VALVES (SIZE AS REQUIRED) AS REQUIRED TO ELIMINATE ALL LOW HEAD DRAINAGE.
16. ALL IRRIGATION CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL AND REGIONAL GOVERNING CODES.
17. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
18. LOCATE ALL IRRIGATION HEADS AND LINES 8" FROM SIDEYARD PROPERTY LINES ADJACENT TO FENCES, WALLS, ETC. AND 2" FROM SIDEYARD PROPERTY LINES IN LAWN AREAS WHERE OCCURS.
19. CONTRACTOR/OPERATOR SHALL ONLY APPLY SUFFICIENT WATER TO PROMOTE HEALTHY GROWTH OF THE PLANT MATERIAL. AT NO TIME WILL THE CONTRACTOR/ OPERATOR APPLY WATER AT A RATE OR FREQUENCY WHICH CAUSES RUNOFF OR SOIL SATURATION.
20. CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS. MEASUREMENTS FOR PROPER GROUND SHALL BE VERIFIED AT LEAST ONCE PRIOR TO HOMEOWNER OCCUPANCY, AND NECESSARY ADJUSTMENTS SHALL BE MADE TO COMPLY WITH MANUFACTURER'S SPECIFICATIONS.



EQUIPMENT LEGEND			
SYMBOL	MANUFACTURER/MODEL	SIZE	DETAIL
	1C-36-00-SS-PEP-SS - 36 STATION HUNTER T-CORE CONTROLLER ASSEMBLY IN TOP MOUNTED STAINLESS STEEL CABINET	36 STA	N/A
	WATER METER - SEE POINT OF CONNECTION ON PLANS	1"	N/A
	FIBCO MODEL 825Y REDUCED PRESSURE BACKFLOW PREVENTER	1"	D, LI-04
	TORO 220-06-08 BRASS MASTER CONTROL VALVE	N/A	N/A
	NIBCO T-580-70 BRONZE BALL VALVE	LINE SIZE	H, LI-04
	TORO 100-SLVLC QUICK COUPLING VALVE WITH LOCKING VINYL COVER		E, LI-04
	TORO P-220-27-04 PRESSURE REGULATING CONTROL VALVE	PER PLAN	B, LI-04
	ICZ-101/151-25-1" 7-1/2" ICV DRIP ZONE CONTROL KIT (SIZE PER PLAN) WITH 25 PSI REGULATOR	PER PLAN	L, LI-05
	SCH 40 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER	2"	N/A
	CLASS 200 PVC NON-PRESSURE LATERAL LINE - 12" MINIMUM COVER	PER PLAN	N/A
	SCH 40 PVC IRRIGATION PIPE/CONTROL WIRE SLEEVE - 18" MINIMUM COVER	PER PLAN	N/A

DISTRIBUTION EQUIPMENT LEGEND									
SYMBOL	MANUFACTURER/MODEL	NOZZLE	RAD	PSI	FLOW			DETAIL	
					Q	H	F		
SHRUB HI-POP SPRAY HEADS WITH CHECK VALVE AND PRESSURE REGULATION									
	RAIN BIRD 1812-SAM-PRS	M1000 90/210/360	8'-15"	40	.19	.43	.75	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP2000 90/210/360	13'-21"	40	0.81	1.59	3.06	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP3000 90/210/360	22'-30"	40	1.13	2.37	4.66	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP3500 90	31'-35"	40	1.54	3.04	5.99	F, LI-04	
SHRUB FIXED RISER SPRAY HEADS WITH PRESSURE REGULATION									
	RAIN BIRD PA-8S-PRS	M1000 90/210/360	8'-15"	40	.19	.43	.75	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP2000 90/210/360	13'-21"	40	0.81	1.59	3.06	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP3000 90/210/360	22'-30"	40	1.13	2.37	4.66	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP3500 90	31'-35"	40	1.54	3.04	5.99	C, LI-04	
	RAINBIRD 1402	N/A	N/A	40		.5		C, LI-04	
	HUNTER PLD DRIPLINE	PLD-06-18	N/A	40		.6		L,M,N,P,Q,R LI-05	

POINT OF CONNECTION
MAKE IRRIGATION POINT OF CONNECTION INTO NEW SITE WATER METER. VERIFY EXACT LOCATION IN THE FIELD AND ADJUST AS NECESSARY. INSTALL BALL VALVE AT POC FOR IRRIGATION SYSTEM ISOLATION. INSTALL BACKFLOW PREVENTER IMMEDIATELY DOWNSTREAM OF BALL VALVE PER ALL LOCAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. INSTALL MASTER VALVE DOWNSTREAM OF BACKFLOW DEVICE AND WIRE TO CONTROLLER PER MANUFACTURER'S DIRECTIONS. MAXIMUM DEMAND IS 30 GPM. STATIC PRESSURE AT METER IS ABOUT 78 PSI (INFORMATION FROM C. RODERICK AT SAN BERNARDINO CITY WATER DISTRICT (909-384-5141) ON 11/08/06). CONTRACTOR SHALL VERIFY PRESSURE PRIOR TO START OF INSTALLATION. IF A PRESSURE RELATED ISSUE IS IDENTIFIED, NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY.

CONTROLLER
INSTALL IRRIGATION CONTROLLER ADJACENT TO BUILDING AS SHOWN ON THE PLANS. INSTALL IN STRONG BOX SB-18-SS STAINLESS STEEL ENCLOSURE. FINAL CONTROLLER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. THE OWNER IS TO PROVIDE 120V AC POWER TO THE FINAL CONTROLLER LOCATION. THE IRRIGATION CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS PER LOCAL CODES. MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANUFACTURER'S DIRECTIONS, THESE PLANS, AND PER ALL LOCAL CODES.

SCH 40 PVC SLEEVING

1.25" SLEEVE	1-8 WIRES	N/A
1.5" SLEEVE	9-16 WIRES	0.5" PIPE
2" SLEEVE	17-26 WIRES	0.75" PIPE
2.5" SLEEVE	27-38 WIRES	1" PIPE
3" SLEEVE	39-54 WIRES	1.25" PIPE
4" SLEEVE	55-100 WIRES	1.5/2" PIPE
6" SLEEVE	100+ WIRES	2.5/3" PIPE
8" SLEEVE	N/A	4" PIPE
12" SLEEVE	N/A	6" PIPE

Underground Service Alert



Call: TOLL FREE
1-800
422-4133

TWO WORKING DAYS BEFORE YOU DIG

RECOMMENDED 2017

JIM GONDOS
LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED 2017



WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY: R.L.A. NO. 5508

KIM LONGIRO DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE
BENCH MARK:				

APPROVED 2017

CITY ENGINEER
REGISTERED CIVIL ENGINEER NO.

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING

Landscape Maintenance District

FOR
TRACT 16502

FROM

Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO.

W.O. NO.

DRAWING NO.

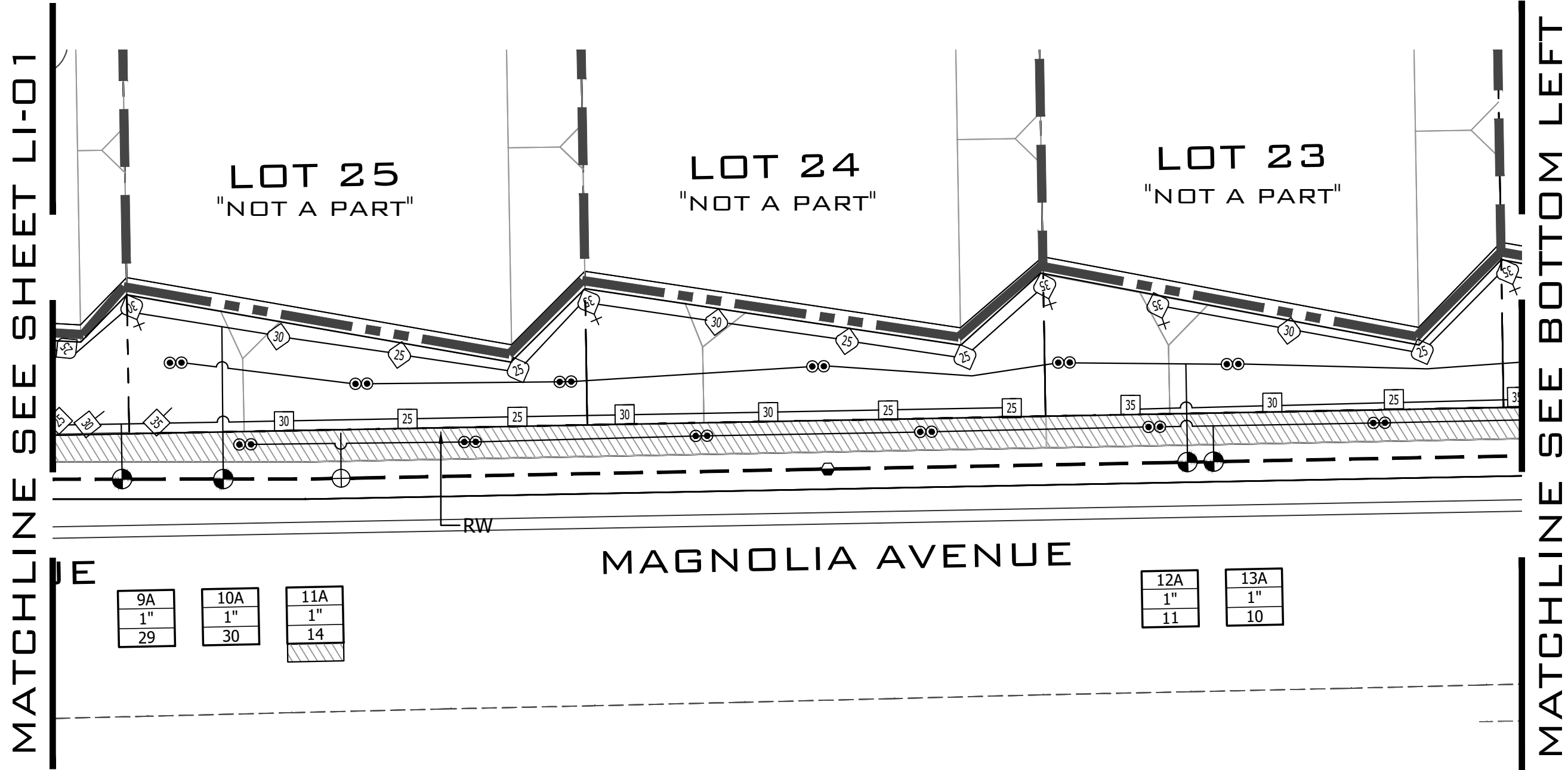
LI-01

SHEET 2 OF











12 SHEETS

Pressure Loss Calculation		
Point of Connection Designation:	LMD	
Name of Water Purveyor:	San Bernardino Municipal Water District	
Contact Name:	C. Roderick	
Phone:	909-384-5141	
Size of Water Meter:	1"	
Size of Service Line:		
Static Water Pressure:	78 PSI	
Design Water Pressure:	69.51	
Designed Highest GPM / GPH Flow:	30	
WORST CASE PRESSURE LOSS CHART		
CONTROLLER / STATION:	10A	
POC ELEVATION:	31	
TOTAL SYSTEM GPM:	30	
PSI @ POC:	78	
ELEVATION OF HIGHEST IRRIG. HEAD	44	
IRRIGATION SYSTEM COMPONENTS:		
DESCRIPTION	SIZE	PSI LOSS
WATER METER	1"	5.3
BACKFLOW PREVENTER	2"	12
MASTER CONTROL VALVE	2"	3.1
FLOW METER	1-1/2"	3
MAINLINE, CL 315	2"	0.48
MAINLINE, SCH. 40	1-1/2"	0.00
MAINLINE, SCH. 40	1-1/4"	0.00
MAINLINE, SCH. 40	1"	0.00
FITTING LOSS (20% MAINLINE LOSS)		4.78
REMOTE CONTROL VALVE	1"	1.5
LATERAL LINE, Class 200	1-1/2"	0.00
LATERAL LINE, Class 200	1-1/4"	0.85
LATERAL LINE, Class 200	1"	2.91
LATERAL LINE, Class 200	3/4"	0.00
ELEVATION CHANGE FROM POC TO HIGHEST OUTLET		5.59
PRESSURE REQUIRED @ HEAD		30
(1) TOTAL SYSTEM LOSSES		69.51
SUMMARY:		
(2) AVAILABLE STATIC PRESSURE AT POC		78.00
(3) REQUIRED MINIMUM SYSTEM PRESSURE		69.51
(4) RESIDUAL PRESSURE		8.49

WAI Water Budget Calculations	
Maximum Applied Water Allowance	
MAWA = (Eto) (0.55) (LA) (0.62)	
Eto	55.60
LA	21,783
MAWA	412,997
Shrub (Drip)	
Estimated Annual Water Use	
EAWU = (Eto) (PF) (HA) (0.62) / (IE)	
Eto	55.60
PF	0.3
HA	6,370
IE	0.8
EAWU	82,345 (Shrub, Drip)
Shrub (MPR)	
Estimated Annual Water Use	
EAWU = (Eto) (PF) (HA) (0.62) / (IE)	
Eto	55.60
PF	0.3
HA	14,661
IE	0.75
EAWU	202,158 (Shrub, MPR)
Tree	
Estimated Annual Water Use	
EAWU = (Eto) (PF) (HA) (0.62) / (IE)	
Eto	55.60
PF	0.5
HA	752
IE	0.8
EAWU	16,202 (Tree)
Total EAWU	300,704
Total MAWA	412,997



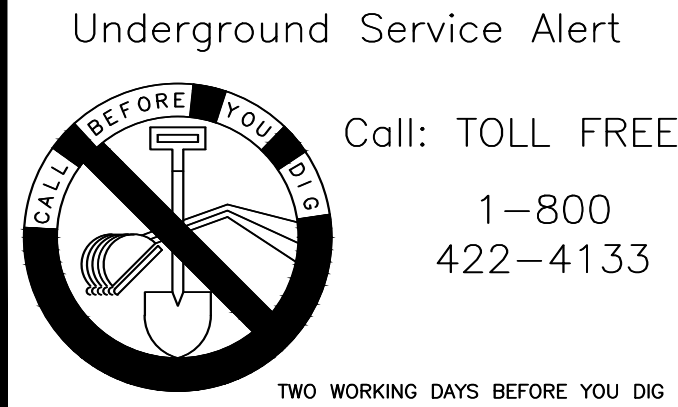
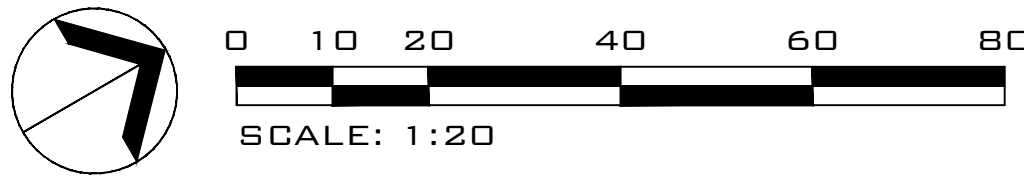
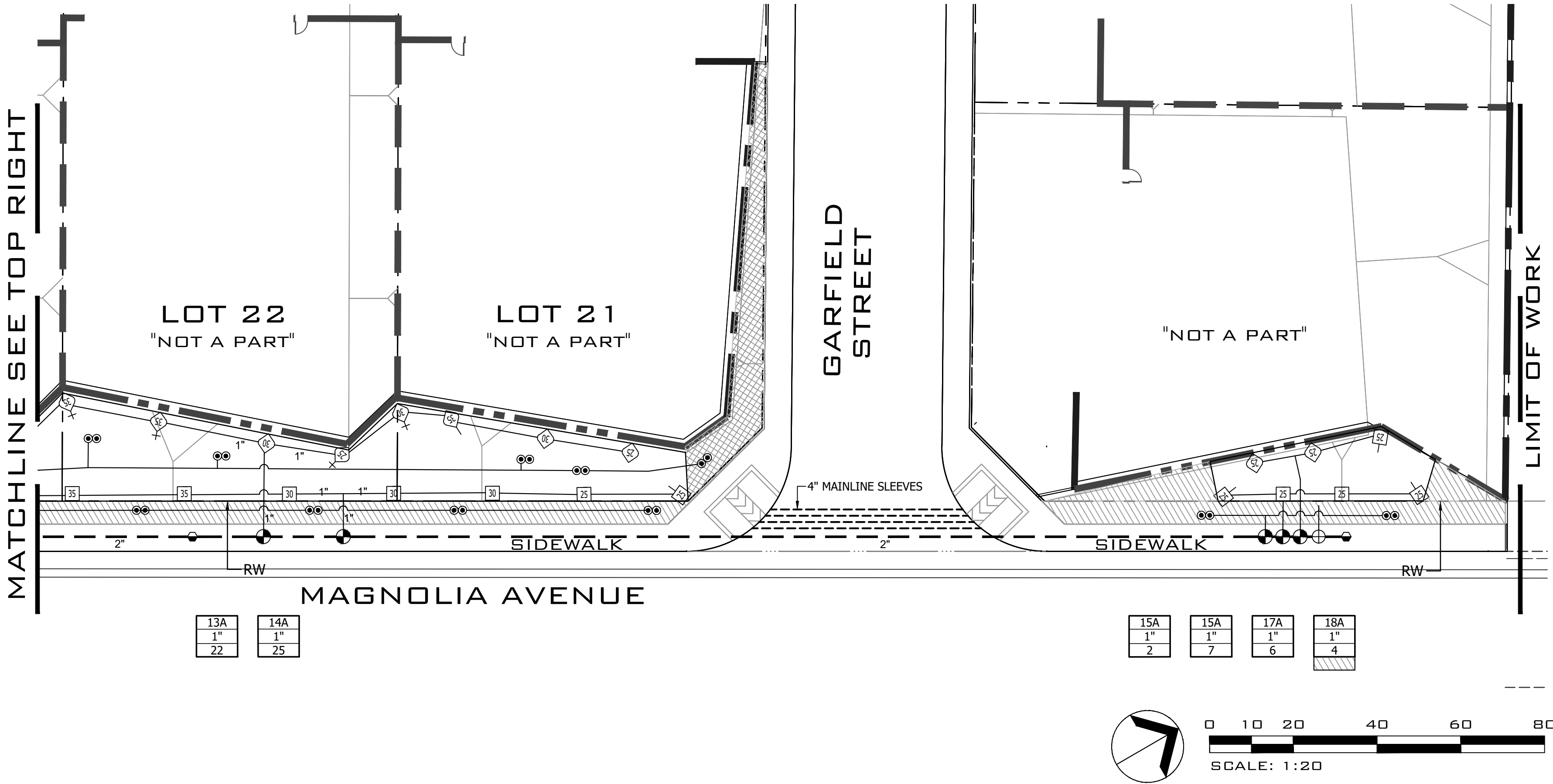
EQUIPMENT LEGEND			
SYMBOL	MANUFACTURER/MODEL	SIZE	DETAIL
[C]	IC-36-00-SS-PED-SS - 36 STATION HUNTER I-CORE CONTROLLER ASSEMBLY IN TOP MOUNTED STAINLESS STEEL CABINET	36 STA	N/A
[M]	WATER METER - SEE POINT OF CONNECTION ON PLANS	1"	N/A
[B]	FEBCO MODEL 825V REDUCED PRESSURE BACKFLOW PREVENTER	1"	D, LI-04
[MV]	TORO 220-06-08 BRASS MASTER CONTROL VALVE	N/A	N/A
[V]	NIBCO T-580-70 BRONZE BALL VALVE	LINE SIZE	H, LI-04
[C]	TORO 100-SLVLC QUICK COUPLING VALVE WITH LOCKING VINYL COVER		E, LI-04
[C]	TORO P-220-27-04 PRESSURE REGULATING CONTROL VALVE	PER PLAN	B, LI-04
[C]	ICZ-101 / 151-25 - 1" / 1-1/2" ICD DRIP ZONE CONTROL KIT (SIZE PER PLAN) WITH 25 PSI REGULATOR	PER PLAN	L, LI-05
[---]	SCH 40 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER	2"	N/A
[---]	CLASS 200 PVC NON-PRESSURE LATERAL LINE - 12" MINIMUM COVER	PER PLAN	N/A
[---]	SCH 40 PVC IRRIGATION PIPE/CONTROL WIRE SLEEVE - 18" MINIMUM COVER	PER PLAN	N/A

DISTRIBUTION EQUIPMENT LEGEND									
SYMBOL	MANUFACTURER/MODEL	NOZZLE	RAD	PSI	FLOW			DETAIL	
					Q	H	F		
SHRUB HI-POP SPRAY HEADS WITH CHECK VALVE AND PRESSURE REGULATION									
	RAIN BIRD 1812-SAM-PRS	M1000 90/210/360	8'-15"	40	.19	.43	.75	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP2000 90/210/360	13'-21"	40	0.81	1.59	3.06	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP3000 90/210/360	22'-30"	40	1.13	2.37	4.66	F, LI-04	
	RAIN BIRD 1812-SAM-PRS	MP3500 90	31'-35"	40	1.54	3.04	5.99	F, LI-04	
SHRUB FIXED RISER SPRAY HEADS WITH PRESSURE REGULATION									
	RAIN BIRD PA-8S-PRS	M1000 90/210/360	8'-15"	40	.19	.43	.75	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP2000 90/210/360	13'-21"	40	0.81	1.59	3.06	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP3000 90/210/360	22'-30"	40	1.13	2.37	4.66	C, LI-04	
	RAIN BIRD PA-8S-PRS	MP3500 90	31'-35"	40	1.54	3.04	5.99	C, LI-04	
	RAINBIRD 1402	N/A	N/A	40		.5		C, LI-04	
	HATCH ON PLANS	HUNTER PLD DRIPLINE	PLD-06-18	N/A	40	.6		L,M,N,P,Q,R LI-05	

POINT OF CONNECTION
MAKE IRRIGATION POINT OF CONNECTION INTO NEW SITE WATER METER. VERIFY EXACT LOCATION IN THE FIELD AND ADJUST AS NECESSARY. INSTALL BALL VALVE AT POC FOR IRRIGATION SYSTEM ISOLATION. INSTALL BACKFLOW PREVENTER IMMEDIATELY DOWNSTREAM OF BALL VALVE PER ALL LOCAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. THE OWNER IS TO PROVIDE 120V AC POWER TO THE FINAL CONTROLLER LOCATION. THE IRRIGATION CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS PER LOCAL CODES. MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANUFACTURER'S DIRECTIONS, THESE PLANS, AND PER ALL LOCAL CODES.

CONTROLLER
INSTALL IRRIGATION CONTROLLER ADJACENT TO BUILDING AS SHOWN ON THE PLANS. INSTALL IN STRONG BOX SB-18-SS STAINLESS STEEL ENCLOSURE. FINAL CONTROLLER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. THE OWNER IS TO PROVIDE 120V AC POWER TO THE FINAL CONTROLLER LOCATION. THE IRRIGATION CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS PER LOCAL CODES. MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANUFACTURER'S DIRECTIONS, THESE PLANS, AND PER ALL LOCAL CODES.

SCH 40 PVC SLEEVING		
1.25" SLEEVE	1-8 WIRES	N/A
1.5" SLEEVE	9-16 WIRES	0.5" PIPE
2" SLEEVE	17-26 WIRES	0.75" PIPE
2.5" SLEEVE	27-38 WIRES	1" PIPE
3" SLEEVE	39-54 WIRES	1.25" PIPE
4" SLEEVE	55-100 WIRES	1.572" PIPE
6" SLEEVE	100+ WIRES	2.573" PIPE
8" SLEEVE	N/A	4" PIPE
12" SLEEVE	N/A	6" PIPE



RECOMMENDED	2017
JIM GONDOS	
LANDSCAPE INSPECTION SUPERVISOR	
RECOMMENDED	2017



WEILAND DESIGN GROUP, INC.
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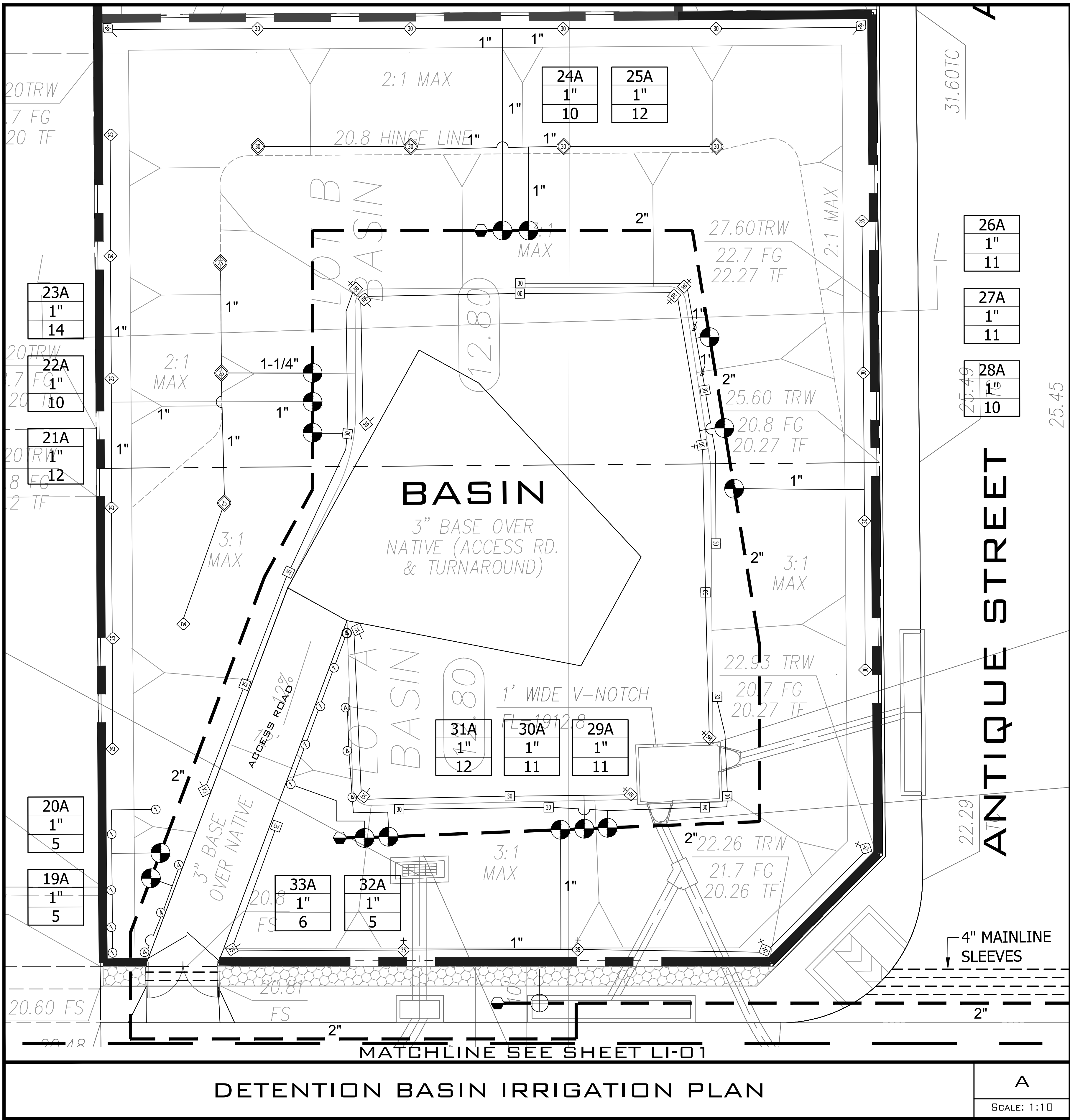
PREPARED BY: _____ R.L.A. NO. 5598
KIM LONGIRO DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE
BENCH MARK:				






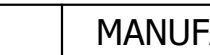

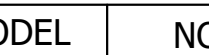
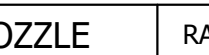
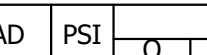
APPROVED	2017
CITY ENGINEER	
REGISTERED CIVIL ENGINEER NO.	
DRAWN BY:	
CHECKED BY:	
RECOMMENDED BY:	

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING
Landscape Maintenance District
FOR
TRACT 16502
FROM
Ohio Avenue to Magnolia Avenue
FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____

DRAWING NO. LI-02
SHEET 3 OF 12 SHEETS



EQUIPMENT LEGEND			
SYMBOL	MANUFACTURER/MODEL	SIZE	DETAIL
[C]	IC-36-00-SS-PED-SS - 36 STATION HUNTER I-CORE CONTROLLER ASSEMBLY IN TOP MOUNTED STAINLESS STEEL CABINET	36 STA	N/A
[M]	WATER METER - SEE POINT OF CONNECTION ON PLANS	1"	N/A
[B]	FEBCO MODEL 825V REDUCED PRESSURE BACKFLOW PREVENTER	1"	D, LI-04
[MV]	TORO 220-06-08 BRASS MASTER CONTROL VALVE	N/A	N/A
[BV]	NIBCO T-580-70 BRONZE BALL VALVE	LINE SIZE	H, LI-04
[CQV]	TORO 100-SLVLC QUICK COUPLING VALVE WITH LOCKING VINYL COVER		E, LI-04
[PRV]	TORO P-220-27-04 PRESSURE REGULATING CONTROL VALVE	PER PLAN	B, LI-04
[ICZ]	ICZ-101 / 151-25 - 1" / 1-1/2" ICV DRIP ZONE CONTROL KIT (SIZE PER PLAN) WITH 25 PSI REGULATOR	PER PLAN	L, LI-05
[SCH 40 PVC]	SCH 40 PVC IRRIGATION PRESSURE MAINLINE - 18" MINIMUM COVER	2"	N/A
[CLASS 200 PVC]	CLASS 200 PVC NON-PRESSURE LATERAL LINE - 12" MINIMUM COVER	PER PLAN	N/A
[SCH 40 PVC]	SCH 40 PVC IRRIGATION PIPE/CONTROL WIRE SLEEVE - 18" MINIMUM COVER	PER PLAN	N/A

DISTRIBUTION EQUIPMENT LEGEND									
SYMBOL	MANUFACTURER/MODEL	NOZZLE	RAD	PSI	FLOW			DETAIL	
					Q	H	F		
SHRUB HI-POP SPRAY HEADS WITH CHECK VALVE AND PRESSURE REGULATION									
	RAIN BIRD 1812-SAM-PRS	M1000 90/210/360	8'-15'	40	.19		.43	.75	F, LI-04
	RAIN BIRD 1812-SAM-PRS	MP2000 90/210/360	13'-21'	40	0.81		1.59	3.06	F, LI-04
	RAIN BIRD 1812-SAM-PRS	MP3000 90/210/360	22'-30'	40	1.13		2.37	4.66	F, LI-04
	RAIN BIRD 1812-SAM-PRS	MP3500 90	31'-35'	40	1.54		3.04	5.99	F, LI-04
SHRUB FIXED RISER SPRAY HEADS WITH PRESSURE REGULATION									
	RAIN BIRD PA-8S-PRS	M1000 90/210/360	8'-15'	40	.19		.43	.75	C, LI-04
	RAIN BIRD PA-8S-PRS	MP2000 90/210/360	13'-21'	40	0.81		1.59	3.06	C, LI-04
	RAIN BIRD PA-8S-PRS	MP3000 90/210/360	22'-30'	40	1.13		2.37	4.66	C, LI-04
	RAIN BIRD PA-8S-PRS	MP3500 90	31'-35'	40	1.54		3.04	5.99	C, LI-04
	RAINBIRD 1402	N/A	N/A	40			.5		C, LI-04
	HATCH ON PLANS	HUNTER PLD DRIPLINE	PLD-06-18	N/A	40		.6		L,M,N,P,Q,R, LI-05

POINT OF CONNECTION
MAKE IRRIGATION POINT OF CONNECTION INTO NEW SITE WATER METER. VERIFY EXACT LOCATION IN THE FIELD AND ADJUST AS NECESSARY. INSTALL BALL VALVE AT POC FOR IRRIGATION SYSTEM ISOLATION. INSTALL BACKFLOW PREVENTER IMMEDIATELY DOWNSTREAM OF BALL VALVE PER ALL LOCAL CODES. FINAL BACKFLOW PREVENTER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. INSTALL MASTER VALVE DOWNSTREAM OF BACKFLOW DEVICE AND WIRE TO CONTROLLER PER MANUFACTURER'S DIRECTIONS. MAXIMUM DEMAND IS 30 GPM. STATIC PRESSURE AT METER IS ABOUT 78 PSI (INFORMATION FROM C. RODERICK AT SAN BERNARDINO CITY WATER DISTRICT (909-384-5141) ON 11/08/06). CONTRACTOR SHALL VERIFY PRESSURE PRIOR TO START OF INSTALLATION. IF A PRESSURE RELATED ISSUE IS IDENTIFIED, NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY.

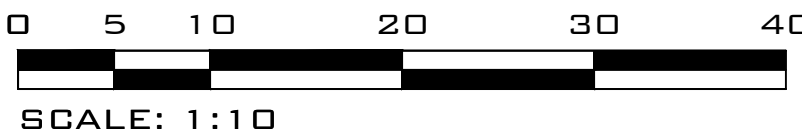
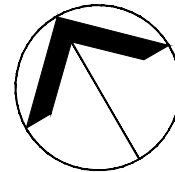
CONTROLLER
INSTALL IRRIGATION CONTROLLER ADJACENT TO BUILDING AS SHOWN ON THE PLANS. INSTALL IN STRONG BOX SB-18-SS STAINLESS STEEL ENCLOSURE. FINAL CONTROLLER LOCATION TO BE APPROVED IN THE FIELD BY THE OWNER. THE OWNER IS TO PROVIDE 120V AC POWER TO THE FINAL CONTROLLER LOCATION. THE IRRIGATION CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS PER LOCAL CODES. MOUNT, GROUND, AND WIRE ALL THE CONTROL EQUIPMENT PER THE MANUFACTURER'S DIRECTIONS, THESE PLANS, AND PER ALL LOCAL CODES.

SCH 40 PVC SLEEVING		
1.25" SLEEVE	1-8 WIRES	N/A
1.5" SLEEVE	9-16 WIRES	0.5" PIPE
2" SLEEVE	17-36 WIRES	0.75" PIPE
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3" SLEEVE	39-54 WIRES	1.25" PIPE
4" SLEEVE	55-100 WIRES	1.572" PIPE
6" SLEEVE	100+ WIRES	2.573" PIPE
8" SLEEVE	N/A	4" PIPE
12" SLEEVE	N/A	6" PIPE

DETENTION BASIN IRRIGATION PLAN

A

SCALE: 1:10



Underground Service Alert



Call: TOLL FREE
1-800
422-4133

TWO WORKING DAYS BEFORE YOU DIG

RECOMMENDED 2017

JIM GONDOS
LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED 2017



WDG

WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND.XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY:

R.L.A. NO. 5508

KIM LONGIRO

DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE
BENCH MARK:				

APPROVED 2017

CITY ENGINEER
REGISTERED CIVIL ENGINEER NO.

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING

Landscape Maintenance District

FOR
TRACT 16502

FROM
Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO.

W.O. NO.

DRAWING NO.

LI-03

SHEET 4 OF

12 SHEETS

PERMIT # E1600995, DRAWING # 13121

LAST MODIFIED: Jul 21, 2017 - 4:17pm BY USER: WDG-Kim
DWG: LOCATION: L:_WOOD\Home Builders\Bozzer\16-035 Tr16502 Verdemont\Production 05\16035b LMD\DWG
DWG NAME: wdg-16035-16035b.dwg



Underground Service Alert

Call: TOLL FREE

1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

RECOMMENDED _____ 2017

JIM GONDOS
LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED _____ 2017





WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
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PREPARED BY: _____ R.L.A. NO. 5508
KIM LONGIRO DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE
BENCH MARK:				

APPROVED _____ 2017

CITY ENGINEER
REGISTERED CIVIL ENGINEER NO. _____

DRAWN BY: _____

CHECKED BY: _____

RECOMMENDED BY: _____

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING

Landscape Maintenance District

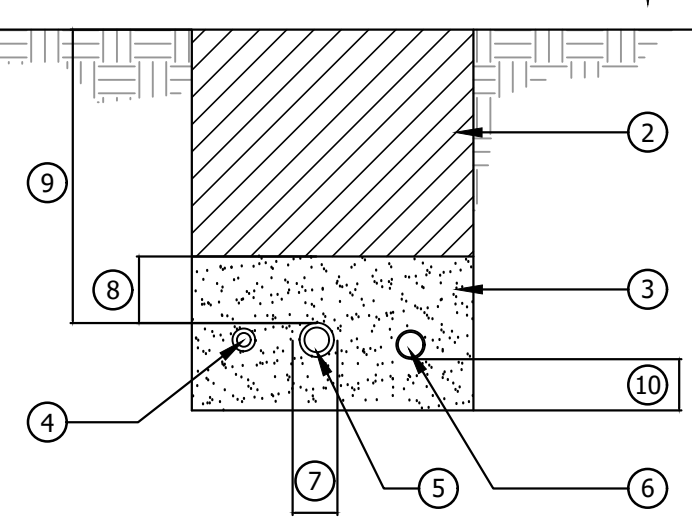
FOR
TRACT 16502

FROM
Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____

DRAWING NO.
LI-04

SHEET 5 OF 12 SHEETS



LEGEND

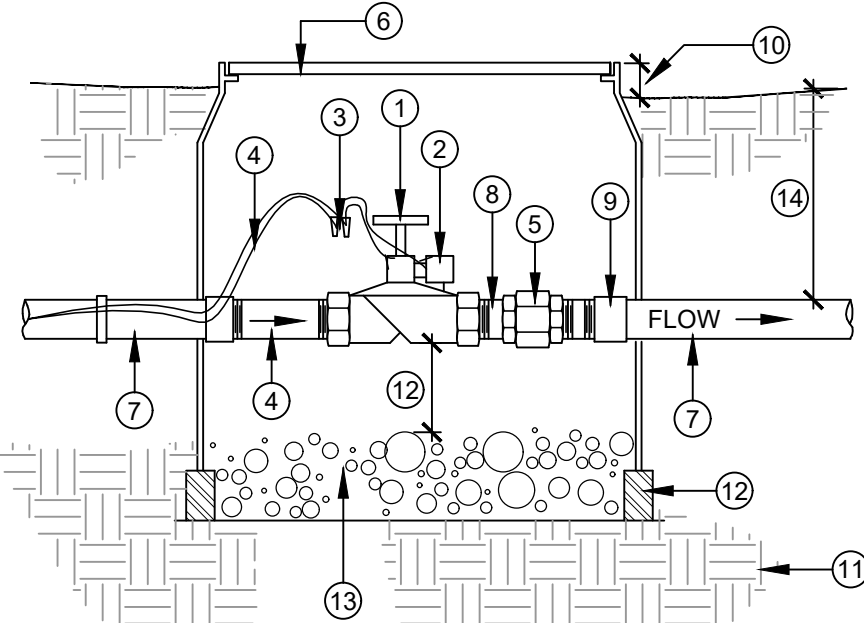
- 1 HARDSCAPE SURFACE
- 2 APPROVED BACKFILL
- 3 CLEAN GRANITE SAND (REFER TO ENG. PLANS/REPORT FOR SPECIFIC MATERIAL AND COMPACTION REQUIREMENTS)
- 4 PVC NON-PRESSURE LINE W/ SLEEVE
- 5 PVC PRESSURE PIPE W/ SLEEVE
- 6 LOW VOLTAGE CONTROL WIRES, SLEEVE SIZE AS REQUIRED
- 7 6" CLEARANCE
- 8 6" MIN
- 9 MIN. 24" UNDER PEDESTRIAN PAVEMENT; MIN. 30" UNDER VEHICULAR PAVEMENT (OR PER LOCAL CODE)
- 10 2" CLEARANCE

NOTES

- 1. ALL PVC IRRIGATION SLEEVES TO BE SCH. 40 PIPE.
- 2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
- 3. ALL SLEEVES TO BE SIZED TWICE THE DIA. OF THE PIPE RUN.
- 4. ALL SLEEVES TO EXTEND MIN. 12" BEYOND HARDSCAPE EDGES.

K IRRIGATION SLEEVING

N.T.S.



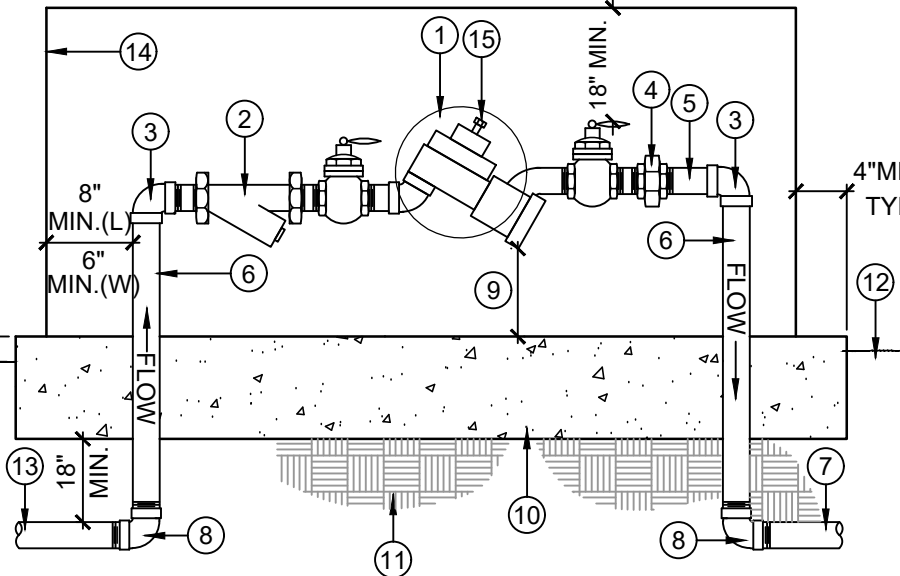
LEGEND

- 1 MASTER CONTROL VALVE
- 2 SOLENOID WATERPROOF WATER
- 3 SPLICE CONNECTORS CONTROL WIRES; BUNDLE AND TAPE (WITH 4 FEET MIN. EXTRA WIRE)
- 4 PVC SCH 80 UNION
- 5 STANDARD PLASTIC VALVE BOX - SIZE AS REQUIRED TO FIT ALL COMPONENTS AS SHOWN (TYP.)
- 6 PVC PRESSURE PIPE
- 7 PVC SCH 80 NIPPLE LENGTH AS REQUIRED (TYP.)
- 8 PVC SCH 40 FEMALE ADAPTER (TYP.)
- 9 1" ABOVE FINISH GRADE
- 10 90% COMPACTED SUBGRADE
- 11 BRICK OR CONCRETE SUPPORTS ON 90% COMPACTED SUBGRADE (4) PLACES.
- 12 6" OF CRUSHED ROCK
- 13 18" MIN.

NOTE:
CONTRACTOR SHALL INCLUDE A CHRISTY'S IRRIGATION I.D. TAG ATTACHED TO VALVE BONNET BOLT. TAG SHALL INDICATE CONTROLLER AND STATION NUMBER.

G MASTER VALVE

N.T.S.



LEGEND

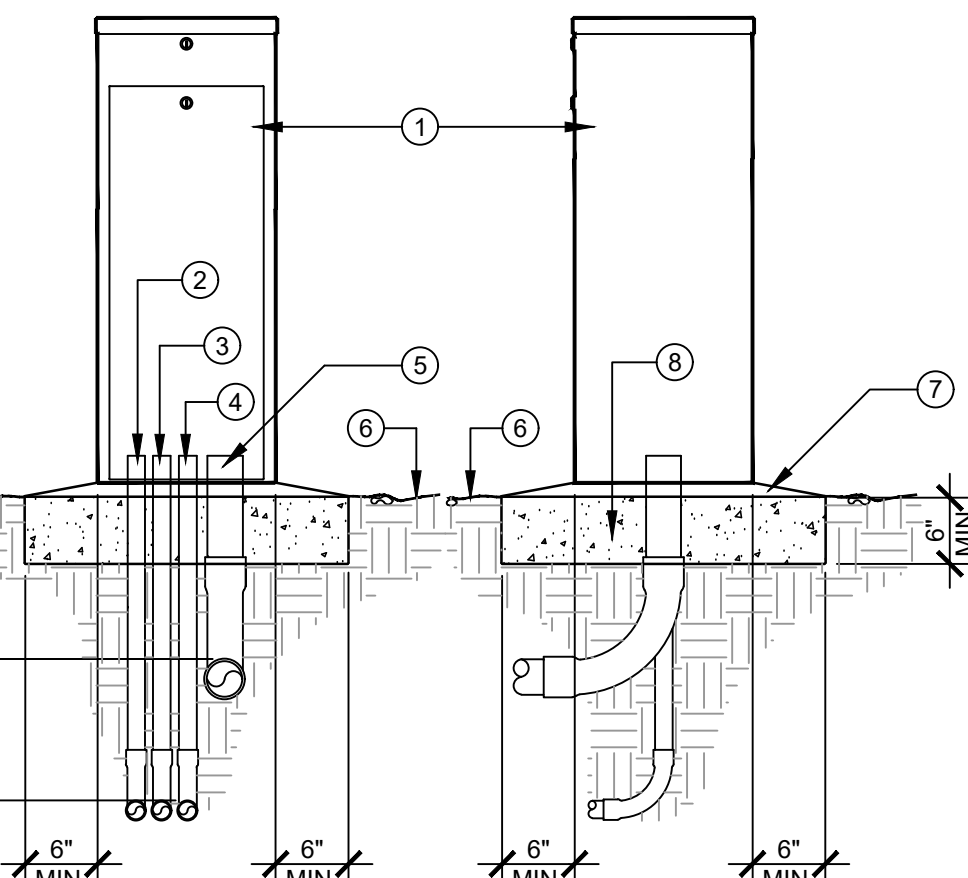
- 1 REDUCE PRESSURE TYPE BACKFLOW PREVENTION DEVICE ASSEMBLY
- 2 BRASS WYE-STRAINER WITH 20 MESH ELEMENT (AS INTEGRAL PART OF BACKFLOW ASSEMBLY)
- 3 BRASS ELL (REDUCING IF NECESSARY)
- 4 BRASS UNION
- 5 BRASS SHORT NIPPLE - TYP.
- 6 BRASS RISER (LENGH AS REQ'D.). REISER TO BE INSULATED FROM CONCRETE WITH APPROPRIATE TAPE
- 7 PVC PRESSURE PIPE
- 8 BRASS ELL (SxT) W/ SxS REDUCING BUSHING IF NECESSARY
- 9 HEIGHT PER LOCAL CODE
- 10 CONC. FOOTING (6" MIN.) x 18" WIDE
- 11 90% COMPACTED SUBGRADE
- 12 FINISH GRADE
- 13 BRASS OR TYPE "K" COPPER MAINLINE
- 14 'STRONG BOX' BACKFLOW COVER # BC-75CR, (800-729-1314), INSTALL PER MANUF. SPECIFICATIONS
- 15 TEST COCK (4 REQUIRED)

NOTES

- 1. ALL INSTALLATIONS SHALL BE ABOVE GROUND.
- 2. THE BACKFLOW PREVENTION DEVICE SHALL BE SELECTED FROM APPROVED STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES LIST ON FILE WITH THE DISTRICT.
- 3. NO CONNECTIONS SHALL BE MADE BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION DEVICE.
- 4. APPROPRIATE TEST COCKS SHALL BE IN PLACE AT ALL TIMES.
- 5. DISTRICT SHALL HAVE ACCESS TO BACKFLOW PREVENTION DEVICE AT ALL TIMES.
- 6. CONCRETE PAD SHALL BE A MINIMUM OF 18" WIDE.
- 7. PIPING MATERIAL SHALL BE BRASS OR "K", OR "L", COPPER PIPING.

D BACKFLOW PREVENTER

3/4"=1'-0"

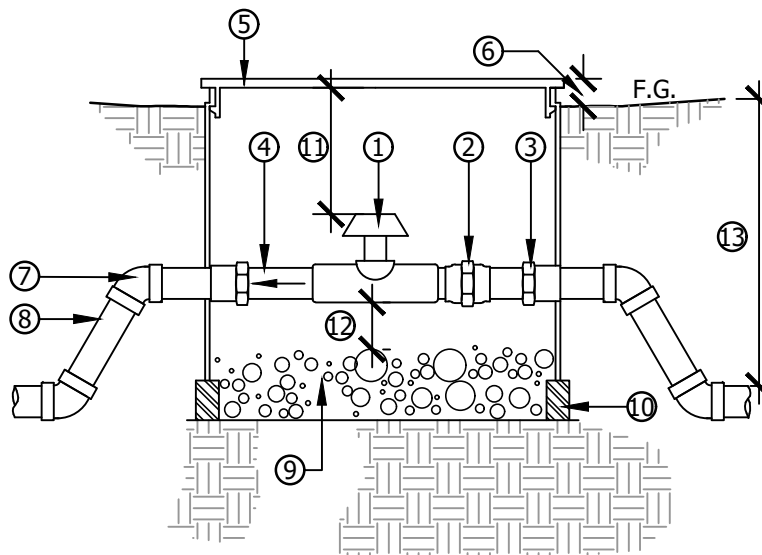


LEGEND

- 1 IRRIGATION CONTROLLER (SEE PLAN FOR NUMBER OF STATIONS.)
- 2 CONDUIT FOR GROUND
- 3 115V CONDUIT WITH CONDUCTORS PER LOCAL & NATIONAL ELECTRICAL CODES
- 4 CONDUIT FOR COMM CABLE
- 5 CONDUIT FOR VALVE WIRES
- 6 FINISHED SURFACE
- 7 SLOPE TO DRAIN
- 8 CONCRETE FOOTING

A PEDESTAL MOUNT CONTROLLER

N.T.S.

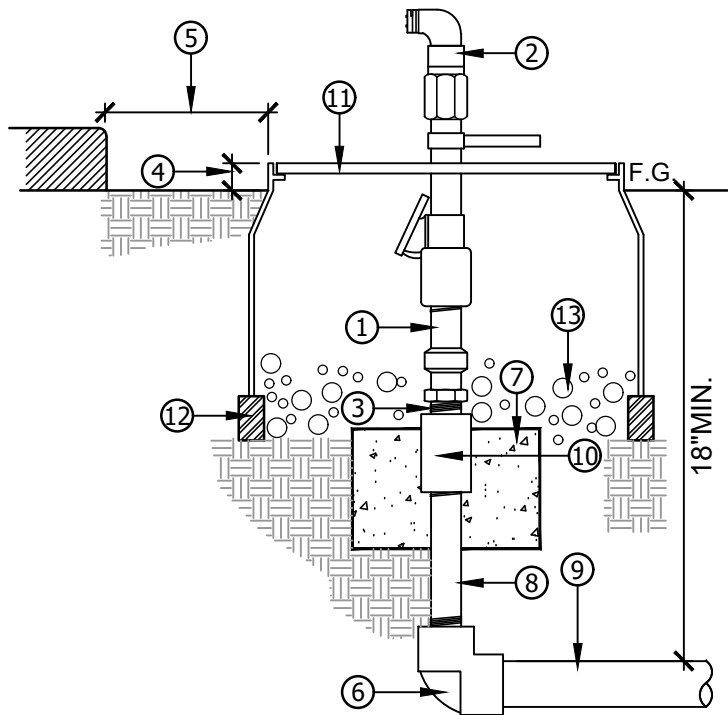


LEGEND

- 1 BALL VALVE
- 2 PVC SCH 80 UNION- 2" OR LINE SIZE (KING BROS. OR EQUAL)
- 3 PVC SCH 40 FEMALE ADAPTER TYP.
- 4 SHORT PVC SCH 80 NIPPLE TYP. (LENGTH AS REQUIRED)
- 5 STANDARD PLASTIC VALVE BOX - SIZE AS REQUIRED TO FIT ALL COMPONENTS AS SHOWN TYP.
- 6 1" ABOVE FINISH GRADE
- 7 PVC SCH 40; 45 DEG. ELL (SxS) TYP.
- 8 PVC PRESSURE PIPE
- 9 6" OF CRUSHED ROCK
- 10 BRICK OR CONC. SUPPORTS ON 90% COMPACTED SUBGRADE (4) PLACES
- 11 8" MAX.
- 12 2" MIN.
- 13 18" MIN.

H BALL VALVE

N.T.S.

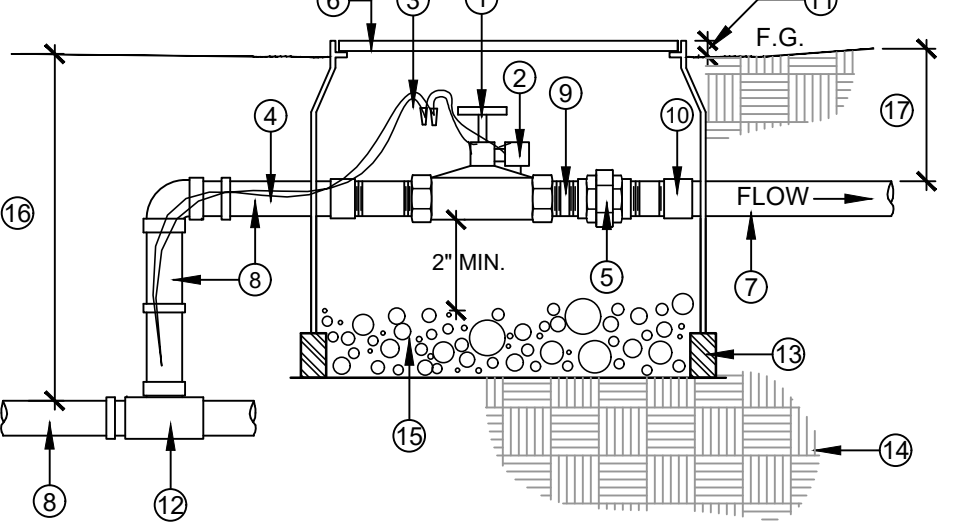


LEGEND

- 1 QUICK COUPLER VALVE
- 2 QUICK COUPLER KEY W/ SWIVEL
- 3 2" BRASS NIPPLE
- 4 1" ABOVE FINISH GRADE
- 5 12" - 18" FROM EDGE OF CURB, SIDEWALK, HEADERS, ETC.
- 6 PVC SCH. 80 ELL (ST)
- 7 1 CU. FT. CONCRETE FOOTING ON 90% COMPACTED SUBGRADE
- 8 BRASS RISER (WRAP W/ ELECT. TAPE) - LENGTH AS REQUIRED
- 9 PVC PRESSURE PIPE
- 10 BRASS COUPLER (THREADED) (WRAP W/ ELECT. TAPE)
- 11 ROUND PLASTIC VALVE BOX - SIZE AS REQ'D. TO FIT ALL COMPONENTS AS SHOWN - TYP.
- 12 BRICK OR CONC. SUPPORTS ON 90% COMPACTED SUBGRADE (4) PLACES
- 13 6" OF CRUSHED ROCK

E QUICK COUPLER VALVE

1/2"=1'-0"



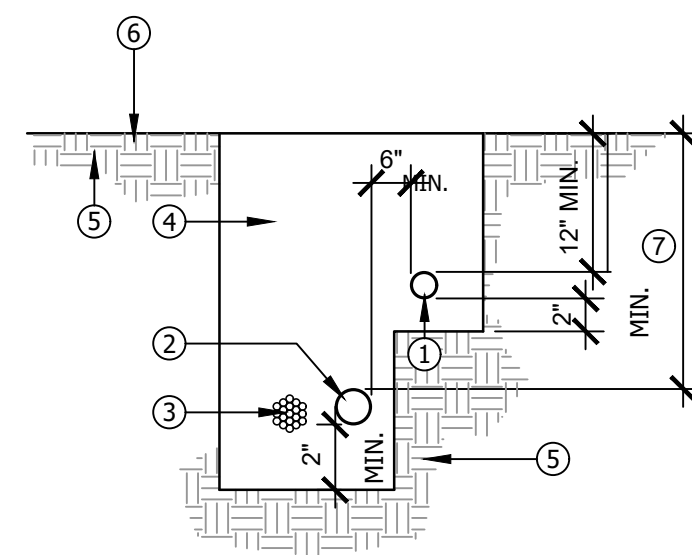
LEGEND

- 1 REMOTE CONTROL VALVE
- 2 SOLENOID
- 3 WATERPROOF WIRE SPLICE CONNECTORS
- 4 CONTROL WIRES. BUNDLE AND TEPE (W/ 4" MIN. EXTRA WIRE)
- 5 PVC SCH. 80 UNION
- 6 VALVE BOX (BROOKS, CHRISTY, OR EQUAL APPROVED) SIZE AS REQ'D. TO FIT ALL COMPONENTS AS SHOWN - TYP.
- 7 PVC NON-PRESSURE PIPE
- 8 PVC PRESSURE PIPE
- 9 PVC SCH. 80 NIPPLE - LENGTH AS REQ'D. - TYP.
- 10 PVC SCH. 40 FEMALE ADAPTER
- 11 1" ABOVE FINISH GRADE
- 12 PVC SCH. 40 TEE (SSS) OR ELL (SS) ON MAINLINE
- 13 BRICK OR CONCRETE SUPPORTS ON 90% COMPACTED SUBGRADE - (4) PLACES
- 14 UNDISTURBED/ 90% COMPACTED SUBGRADE
- 15 6" OF CRUSHED ROCK
- 16 18" MIN.
- 17 12" MIN.

NOTE:
CONTRACTOR SHALL INCLUDE A CHRISTY'S IRRIGATION I.D. TAG ATTACHED TO VALVE BONNET BOLT. TAG SHALL INDICATE CONTROLLER AND STATION NUMBER

B REMOTE CONTROL VALVE

1"=1'-0"



LEGEND

- 1 PVC NON-PRESSURE PIPE
- 2 PVC PRESSURE PIPE
- 3 CONTROL WIRE BUNDLE
- 4 APPROVED BACKFILL
- 5 UNDISTURBED SOIL
- 6 FINISH GRADE
- 7 18" MIN. - SCH.40 1-1/2" & SMALLER 24" MIN. - CL315 2" & LARGER

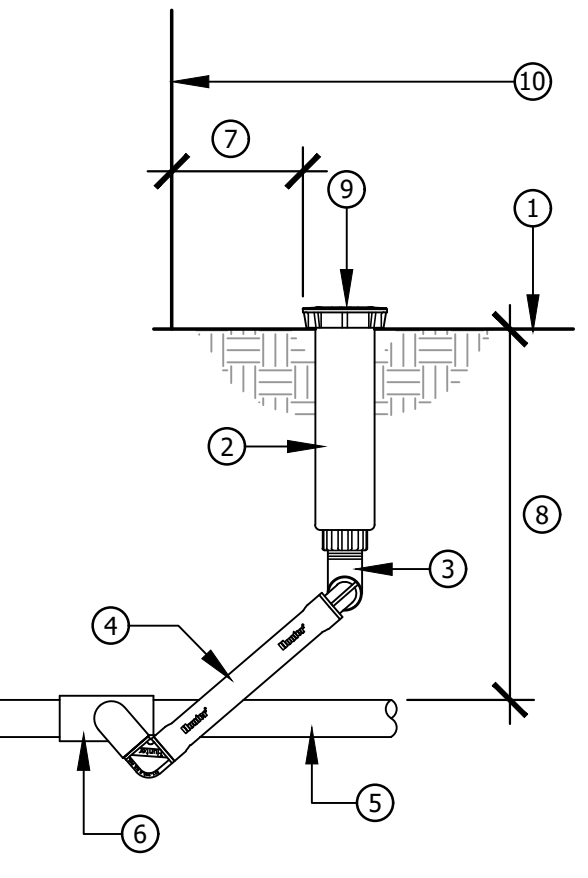
NOTES

- 1. ALL PIPE AND WIRE TO BE SLEEVED UNDER HARDSCAPE (REFER TO SLEEVE INSTALLATION DETAIL.)
- 2. BUNDLE AND TAPE WIRE AT 10' INTERVALS
- 3. TIE A LOOSE 20" LOOP IN WIRING AT CHANGE IN DIRECTION GREATER THAN 30 DEGREES.
- 4. ATTACH ALL LOOPS AFTER ALL CONNETIONS HAVE BEEN MADE.

ALL PLASTIC PIPING TO BE SNAKED IN TRENCHES.

J IRRIGATION TRENCHING

N.T.S.

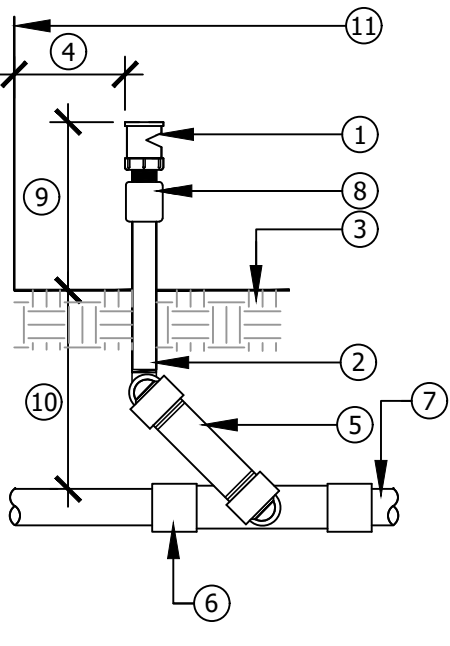


LEGEND

- 1 FINISH GRADE
- 2 POP-UP SPRAY/BUBBLER HEAD PER LEGEND ON IRRIGATION PLAN.
- 3 SCH 80 NIPPLE
- 4 PREFABRICATED HUNTER SWING JOINT (SJ-506) OR APPROVED EQUAL
- 5 PVC NON-PRESSURE LINE
- 6 PVC SCH 40 TEE OR ELL
- 7 6" FROM EDGE OF HARDSCAPE OR BUILDING SURFACE, 18" FROM TOP OF SLOPE, FENCE, OR BROW DITCH
- 8 12" MIN.
- 9 INSTALL HEAD FLUSH WITH FINISH GRADE IN TURF AREA AND SLOPE CONDITIONS. 1/2" ABOVE GRADE IN MULCHED AREAS.
- 10 LINE OF BUILDING, WALL, FENCE, OR HARDSCAPE SURFACE, ETC.

F POP-UP SPRAY

N.T.S.



LEGEND

- 1 SHRUB SPRAY NOZZLE / BUBBLER HEAD AND ADAPTER, SEE LEGEND ON IRRIGATION PLAN FOR SPECIFICATIONS
- 2 1/2" SCH 80 RISER, LENGTH AS REQUIRED
- 3 FINISH GRADE
- 4 6" FROM EDGE OF HARDSCAPE OR BUILDING SURFACE, 18" FROM TOP OF SLOPE, FENCE, OR BROW DITCH
- 5 PREFABRICATED HUNTER SWING JOINT OR APPROVED EQUAL
- 6 PVC SCH 40 TEE OR ELL
- 7 PVC LATERAL LINE
- 8 CHECK VALVE (RAINBIRD ACV SERIES OR EQUAL) (WHERE REQUIRED)
- 9 12" FOR SPRAY HEADS, 3" FOR BUBBLER HEADS
- 10 12" MIN.
- 11 LINE OF BUILDING, WALL, FENCE, OR HARDSCAPE SURFACE, ETC.

C SPRAY HEAD / BUBBLER ON RISER

N.T.S.

PERMIT# E1600995, DRAWING# 13121

LAST MODIFIED: Jul 21, 2017 - 4:18pm BY USER: WDG-Kim
DWG LOCATION: L:_WOOD\Home Builders\Bozzer\16-035 Tr16502 Verdemon\Production 03\160356 LMD\DWG\DWG
DWG NAME: wdg-160356-160356.dwg



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JIM GONDOS	
LANDSCAPE INSPECTION SUPERVISOR	
RECOMMENDED	2017





WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY: _____ R.L.A. NO. 5508

KIM LONGIRO _____ DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE	
BENCH MARK:					
CITY ENGINEER _____					
REGISTERED CIVIL ENGINEER NO. _____					
DRAWN BY: _____					
CHECKED BY: _____					
RECOMMENDED BY: _____					

APPROVED _____ 2017

CITY ENGINEER _____

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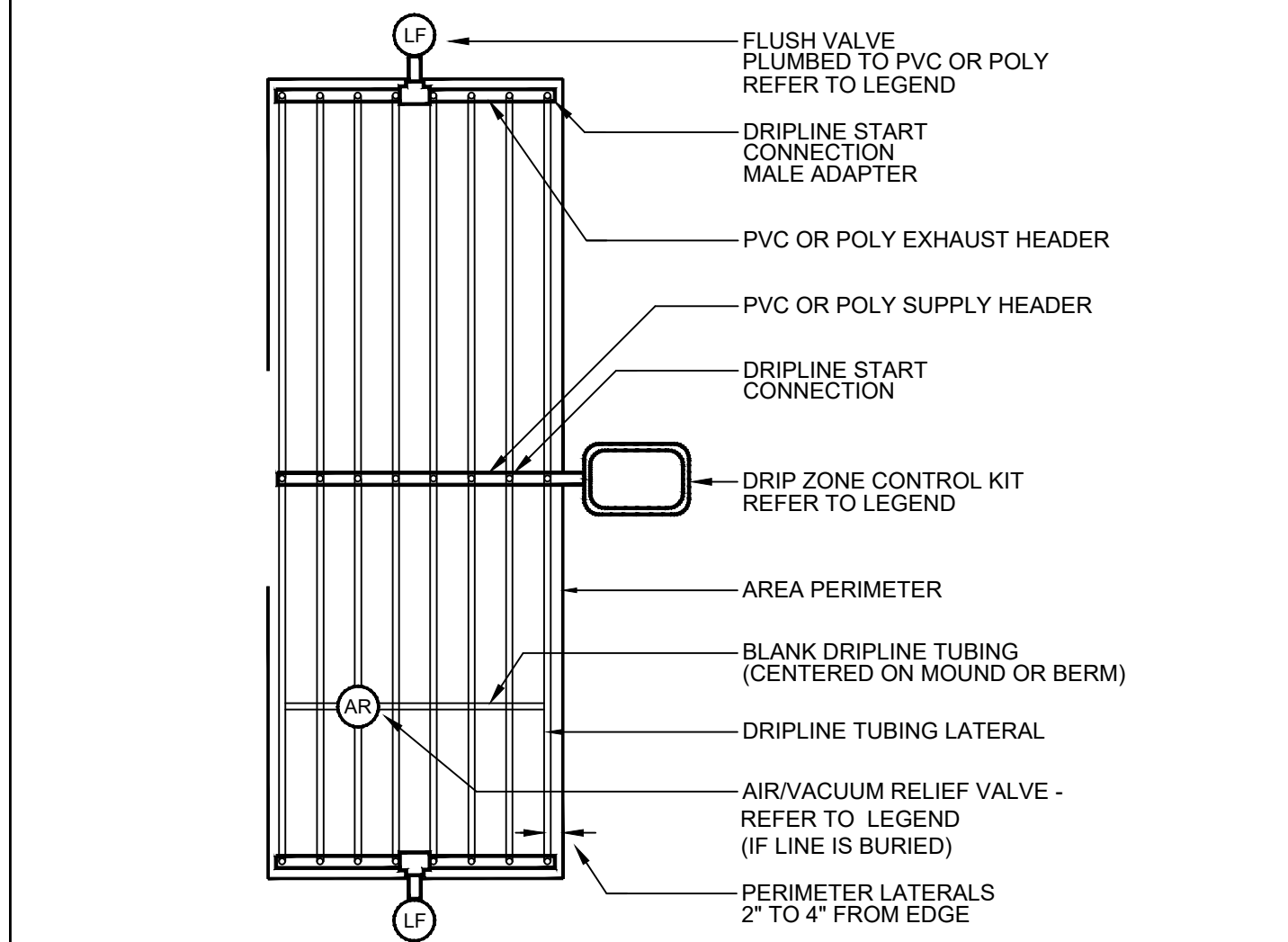
CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING
Landscape Maintenance District
FOR
TRACT 16502
FROM
Ohio Avenue to Magnolia Avenue

DRAWING NO.
LI-05
SHEET 6 OF
12 SHEETS

FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____

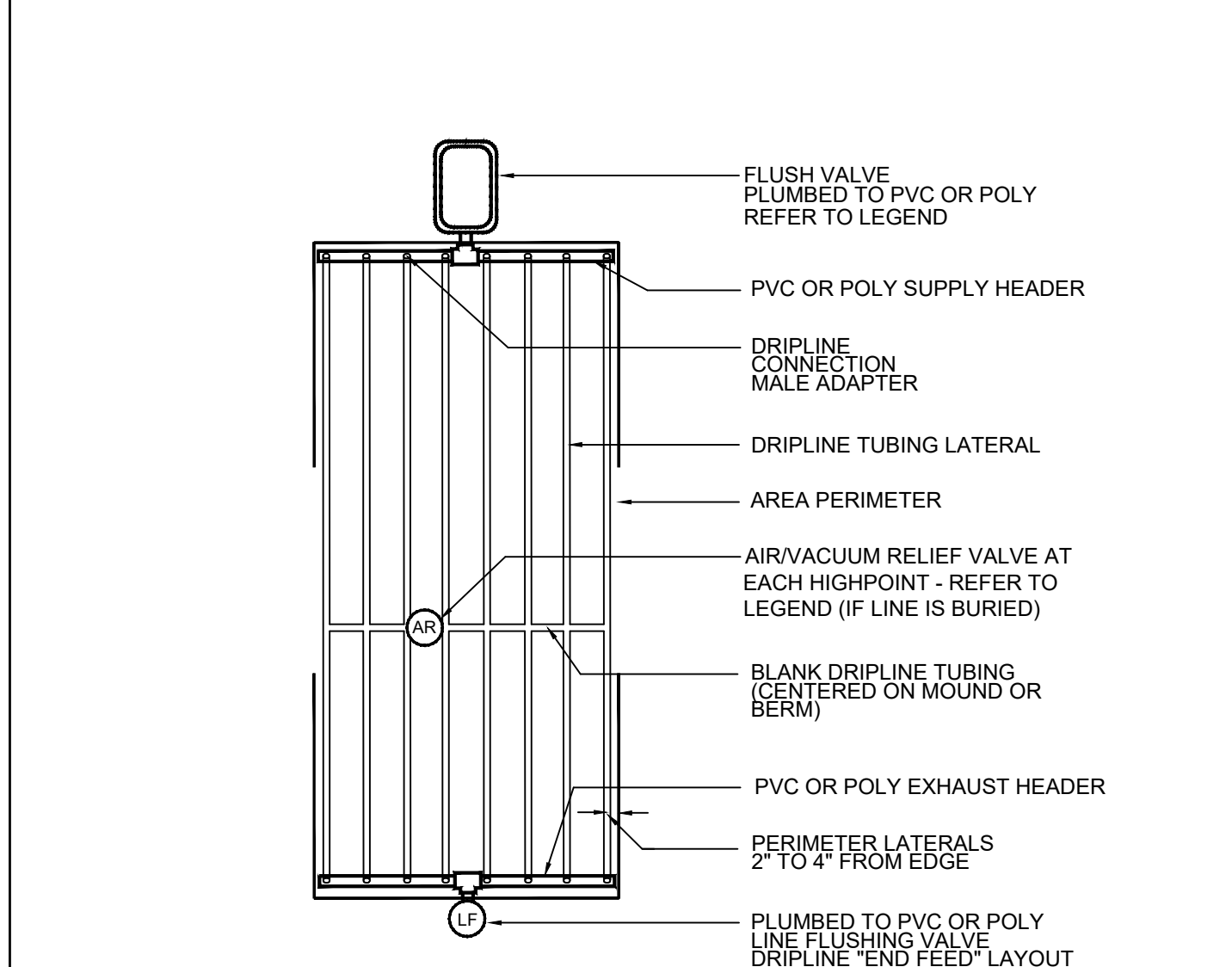
P DRIPLINE (SLOPE)

N.T.S.



Q DRIPLINE - CENTER FEED

N.T.S.



R DRIPLINE - END FEED

N.T.S.

MARK	REVISIONS	BY	APPR.	DATE	
BENCH MARK:					
CITY ENGINEER _____					
REGISTERED CIVIL ENGINEER NO. _____					
DRAWN BY: _____					
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RECOMMENDED BY: _____					

APPROVED _____ 2017

CITY ENGINEER _____

REGISTERED CIVIL ENGINEER NO. _____

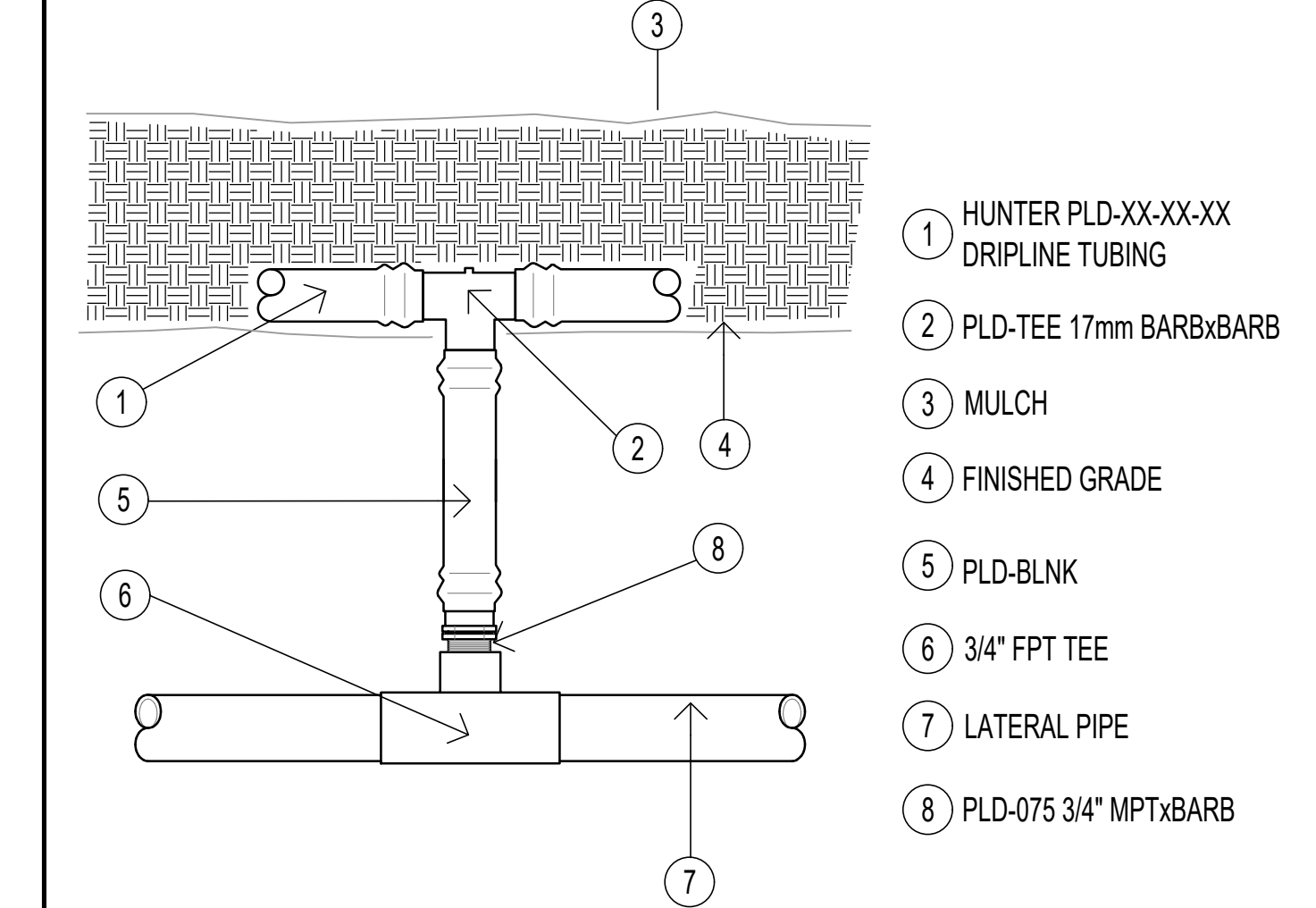
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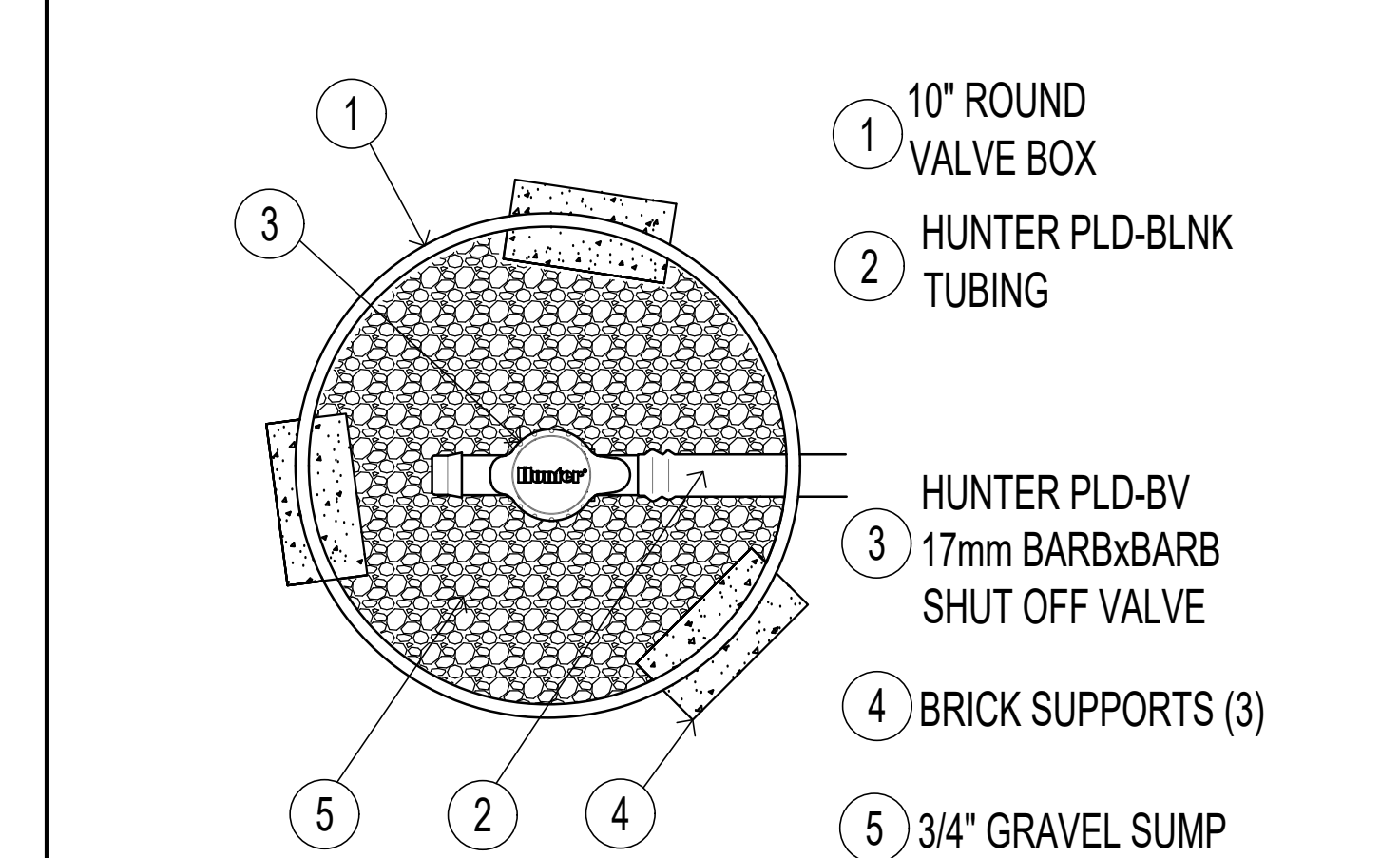
L DRIP VALVE

N.T.S.



M DRIP TUBING CONNECTION

N.T.S.



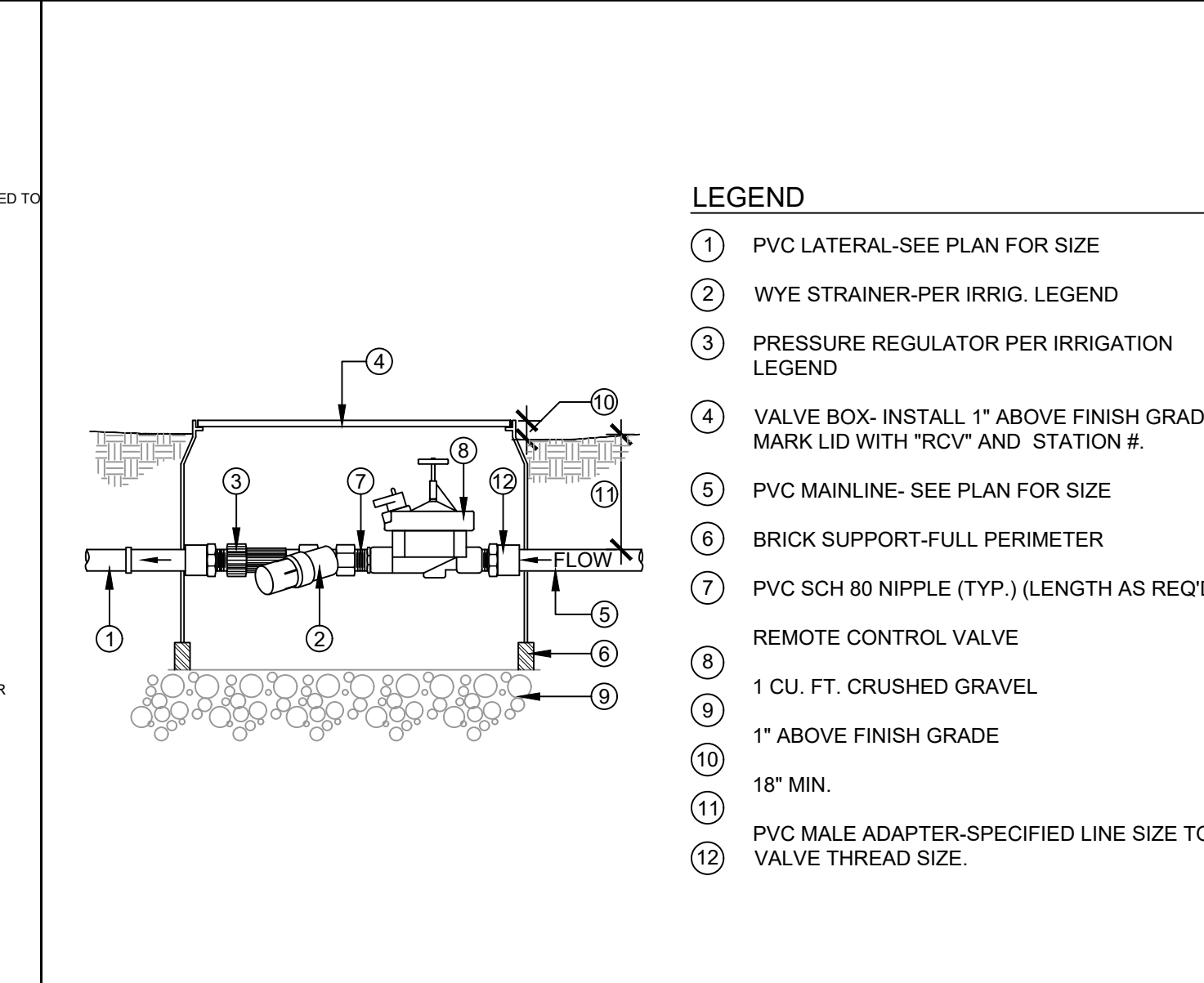
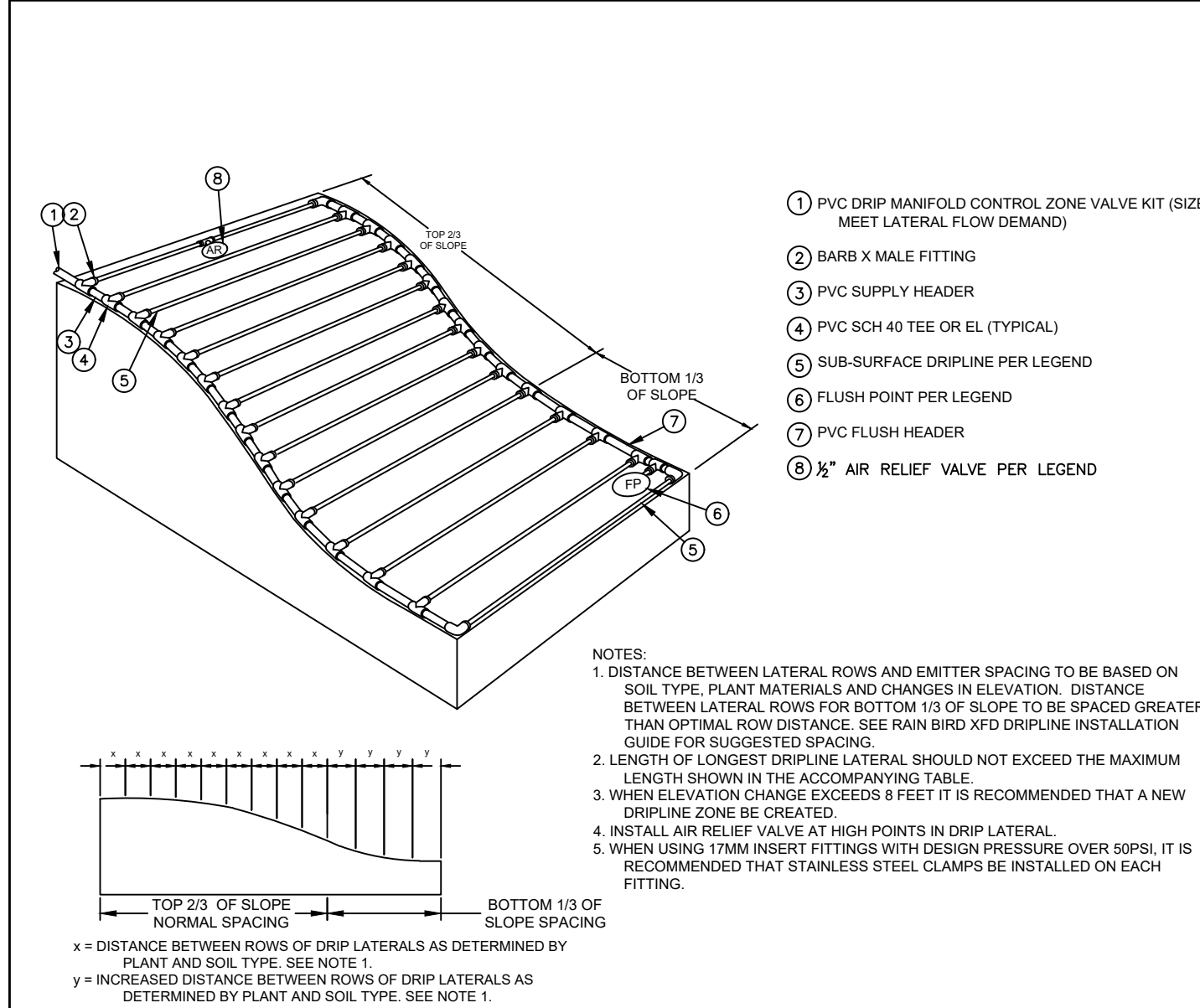
N FLUSH VALVE - MANUAL

N.T.S.

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING
Landscape Maintenance District
FOR
TRACT 16502
FROM
Ohio Avenue to Magnolia Avenue

DRAWING NO.
LI-05
SHEET 6 OF
12 SHEETS

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PERMIT # E1600995, DRAWING # 13121

IRRIGATION:

I. GENERAL:

A. SCOPE OF WORK:

1. ALL CONSTRUCTION SHALL CONFORM TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE STATE OF LOCAL GOVERNING AGENCIES.
2. PERMITS FOR ANY CONSTRUCTION DEPICTED IN THESE PLANS SHALL BE OBTAINED BY THE CONTRACTOR.
3. ALL LOCAL, MUNICIPAL, COUNTY, AND STATE LAWS, RULES, AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THE WORK DEPICTED ON THESE PLANS ARE HEREBY INCORPORATED INTO AND MADE PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER OR THE OWNER'S AUTHORIZED REPRESENTATIVE.
5. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING AND/OR ARCHITECTURAL PLANS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PERTINENT ENGINEERING PLANS, ARCHITECTURAL PLANS, AND/OR SOILS REPORT PRIOR TO COMMENCING WORK.
6. THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK, AND SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE OWNER, OWNER'S AUTHORIZED REPRESENTATIVE, OTHER CONSTRUCTION TRADE, AND GOVERNING AGENCIES.

B. BIDS CONTRACTS AND INSURANCE:

1. EACH BIDDER SHALL INSPECT THE SITE BEFORE SUBMITTING THEIR BID.
2. THE OWNER RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.
3. SEPARATE CONTRACTS: THE OWNER RESERVES THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH HIS WORK. THE CONTRACTOR SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE EXECUTION OF THEIR WORK, AND SHALL PROPERLY COORDINATE HIS WORK WITH THEIRS.
4. LIABILITY AND COMPENSATION INSURANCE: THE CONTRACTOR SHALL CARRY AND FOR ADEQUATE LIABILITY AND COMPENSATION INSURANCE AND SHALL, IF REQUIRED, FURNISH THE OWNER WITH EVIDENCE TO THIS EFFECT.
5. GUARANTEE BONDS: THE OWNER SHALL HAVE THE RIGHT, PRIOR TO THE SIGNING OF THE CONTRACT, TO REQUIRE THE CONTRACTOR TO FURNISH A BOND COVERING THE FAITHFUL PERFORMANCE OF THE CONTRACT AND THE PAYMENT OF ALL OBLIGATIONS ARISING THEREUNDER, IN SUCH FORM AS THE OWNER MAY PRESCRIBE AND WITH SUCH SURETIES AS HE MAY APPROVE. IF SUCH A BOND IS REQUIRED, THE PREMIUM SHALL BE PAID BY THE OWNER.

C. PLANS AND PERMITS:

1. ALL CONSTRUCTION SHALL BE ACCORDING TO THE CONSTRUCTION DOCUMENTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE U.B.C.
2. CORRELATION OF DRAWINGS AND SPECIFICATIONS: ANY WORK NOT ACCORDING TO DRAWINGS AND SPECIFICATIONS OR ORDINANCES AND LAWS SHALL BE REMOVED.
3. DO NOT SCALE DRAWINGS. USE DIMENSIONS INDICATED.
4. ANY DISCREPANCIES IN THE DRAWINGS OR SPECIFICATIONS SHALL BE CALLED TO THE IMMEDIATE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. FAILURE TO DO SO WILL PLACE RESPONSIBILITY ON THE CONTRACTOR.
5. PERMITS, FEES, ETC.: THE CONTRACTOR SHALL ARRANGE AND PAY FOR PERMITS FOR THEIR RESPECTIVE WORK. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE PLANS PRIOR TO CONSTRUCTION.

D. EXECUTION:

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND SERVICES BEFORE COMMENCING WORK. CONTACT UNDERGROUND SERVICE ALERT (800) 422-4133. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND SERVICES ON AND ADJACENT TO THE PROJECT SITE DURING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ALL DAMAGE RESULTING FROM HIS OPERATIONS OR NEGLIGENCE.
2. CUTTING AND PATCHING: THE CONTRACTOR SHALL DO ALL CUTTING, FITTING, OR PATCHING OF HIS WORK THAT MAY BE REQUIRED TO MAKE IT COMPLETE AS SHOWN BY DRAWINGS AND SPECIFICATIONS. ANY COST CAUSED BY DEFECTIVE OR ILL-TIMED WORK SHALL BE BORNE BY THE PARTY RESPONSIBLE THERETOFORE.
3. CLEANING: IT SHALL BE THE DUTY OF EACH SUBCONTRACTOR TO REMOVE HIS OWN RUBBISH FROM THE PREMISES AND KEEP THE JOB CLEAN AT ALL TIMES. HE SHALL PROTECT WORK OF ALL OTHER CONTRACTORS.
4. CONDUCT OF THE WORK: THE CONTRACTOR, SHALL AT ALL TIMES, KEEP A COMPETENT FOREMAN ON THE JOB WHO SHALL BE IN CHARGE OF THE ENTIRE WORK, INCLUDING THE WORK OF HIS SUBCONTRACTORS. HE SHALL BE RESPONSIBLE FOR ITS ACCURACY.
5. ALL REMOVED ORGANIC OR INORGANIC MATERIAL SHALL BE PROPERLY DISPOSED OF AT AN APPROVED LEGAL DISPOSAL SITE. VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.
6. THE CONTRACTOR SHALL ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, DRIVEWAYS, SIDEWALKS, AND ADJACENT FACILITIES.
7. THE CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS THROUGHOUT THE PROJECT SITE DURING THE ENTIRE CONSTRUCTION PERIOD.
8. THE CONTRACTOR SHALL POST SIGNS AS REQUIRED TO ALERT TRAFFIC TO CONSTRUCTION ACTIVITIES, AND TO DIRECT TRAFFIC THROUGH AND AROUND THE CONSTRUCTION AREAS WHEN NECESSARY.
9. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY MATERIALS, EQUIPMENT, SERVICES AND CONSTRUCTION PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
10. THE CONTRACTOR SHALL CONTROL THE ACCUMULATION OF WASTE MATERIALS AND RUBBISH ON THE PROJECT SITE AND SHALL PERIODICALLY DISPOSE OF ALL WASTE MATERIAL OFF-SITE AT AN APPROVED LEGAL DISPOSAL SITE. ALL CLEANING AND DISPOSAL OPERATIONS SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, REGULATIONS, AND ANTI-POLLUTION LAWS.
11. THE CONTRACTOR SHALL USE ONLY THOSE CLEANING MATERIALS WHICH WILL NOT CREATE HAZARDS TO HEALTH OR PROPERTY AND WHICH WILL NOT DAMAGE SURFACES. THE CONTRACTOR SHALL USE CLEANING MATERIALS ONLY ON SURFACES RECOMMENDED BY THE CLEANING MATERIAL MANUFACTURER.
12. DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN SPACES ADJACENT TO CONSTRUCTION AREAS AS CONSTRUCTION PROGRESSES, AND SHALL CONTINUE CLEANING ON A REGULAR BASIS UNTIL CONSTRUCTION IS FINISHED. THE CONTRACTOR SHALL ALSO MAINTAIN ROADWAYS AND WALKWAYS FREE FROM CONSTRUCTION OR EXCAVATED MATERIALS, EXCEPT IN DESIGNATED STORAGE OR STOCKPILING AREAS.
13. THE CONTRACTOR SHALL EXECUTE FINAL CLEANING PRIOR TO FINAL INSPECTION.
14. THE CONTRACTOR SHALL REMOVE ALL TOOLS, UN-INSTALLED MATERIALS, AND CONSTRUCTION DEBRIS, ETC., FROM THE PROJECT SITE.
15. THE CONTRACTOR SHALL REMOVE GREASE, MASTIC, ADHESIVES, DUST, DIRT, STAINS, FINGERPRINTS, LABELS, AND OTHER FOREIGN MATERIALS FROM SIGHT-EXPOSED SURFACES.
16. PRIOR TO FINAL INSPECTION THE CONTRACTOR SHALL CONDUCT AN INSPECTION OF SIGHT-EXPOSED SURFACES, AND ALL WORK AREAS, TO VERIFY THAT THE ENTIRE WORK IS CLEAN.
17. THE CONTRACTOR SHALL THOROUGHLY CLEAN OUT ALL EXISTING CONCRETE DRAINAGE SWALES AND PIPING OF ACCUMULATED DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.

E. EXTRAS AND SUBSTITUTIONS:

1. ANY EXTRAS SHALL BE APPROVED IN WRITING BY THE OWNER PRIOR TO ANY CONSTRUCTION.
2. THERE SHALL BE NO SUBSTITUTIONS WITHOUT PRIOR APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE. ANY REQUEST FOR SUBSTITUTIONS SHALL BE DOCUMENTED WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF PROPOSED SUBSTITUTION WITH PLANS. THE OWNER'S AUTHORIZED REPRESENTATIVE WILL DETERMINE ACCEPTABILITY OF PROPOSED SUBSTITUTION, AND WILL NOTIFY THE CONTRACTOR OF ACCEPTANCE OR REJECTION IN WRITING WITHIN A REASONABLE TIME.

F. PAYMENT:

1. LIEN RELEASES FOR COMPLETED WORK SHALL BE SUBMITTED PRIOR TO PAYMENT FOR THE SAID WORK.

END OF SECTION

IRRIGATION SYSTEM NOTES:

I. GENERAL:

A. QUALITY ASSURANCE:

1. ALL LOCAL, MUNICIPAL, COUNTY AND STATE LAWS, SAFETY ORDERS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THE WORK DEPICTED ON THESE PLANS ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION IN THE EVENT ANY EQUIPMENT OR METHODS INDICATED ON THE DRAWINGS OR SPECIFICATIONS CONFLICT WITH LOCAL CODES.
2. VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES, AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
3. OBTAIN THE PERTINENT ENGINEERING AND OR ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
4. OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED BY AUTHORITIES STATED ABOVE TO PERFORM THE WORK INDICATED HEREIN BEFORE COMMENCING WORK.
5. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK, AND BE RESPONSIBLE FOR COORDINATING WORK WITH THE OWNER'S AUTHORIZED REPRESENTATIVE, OTHER CONSTRUCTION TRADES, AND GOVERNING AGENCIES. CAUSE MINIMUM INTERFERENCE WITH THE WORK, MATERIALS, OR EQUIPMENT OF OTHER CONTRACTORS.
6. IRRIGATION PLAN IS DIAGRAMMATIC ONLY. REFER TO THE IRRIGATION LEGEND AND DETAILS FOR EQUIPMENT AND INSTALLATION.
7. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK IN THE EVENT OF CONFLICTS BETWEEN THE DRAWINGS AND SPECIFICATIONS.
8. PRIOR TO THE SUBMISSION OF A BID, THE CONTRACTOR SHALL EXAMINE THE SITE AND THE COMPLETE DRAWINGS AND SPECIFICATIONS FOR THE PROJECT IN ADDITION TO THE SPRINKLER IRRIGATION PORTION OF THE WORK.

B. SCOPE OF WORK:

1. THE WORK CONSISTS OF FURNISHING ALL LABOR, MATERIALS, MACHINERY, AND PROCESSES REQUIRED TO COMPLETE THE SPRINKLER AND/OR DRIP IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
2. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO INDICATE AND SPECIFY A COMPLETE SPRINKLER SYSTEM, INSTALLED READY FOR USE WITHOUT FURTHER COST IN LABOR OR MATERIALS TO THE OWNER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO BE PERFORMED UNDER THIS CONTRACT. NO SUBCONTRACTOR SHALL RELIEVE THE CONTRACTOR OF HIS LIABILITY TO COMPLETE THE WORK AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS IN A TIMELY MANNER.

C. PROTECTION:

1. USE ALL MEANS NECESSARY TO PROTECT ALL MATERIALS OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATION AND TO PROTECT ALL OBJECTS DESIGNATED TO REMAIN.
2. IN THE EVENT OF DAMAGE OR THEFT, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND FEATURES ON AND ADJACENT TO THE PROJECT SITE FROM DAMAGE AS A RESULT OF CONSTRUCTION OR MALFUNCTION DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ALL DAMAGE RESULTING FROM HIS OPERATIONS OR NEGLIGENCE.
4. THE CONTRACTOR SHALL CAREFULLY NOTE ALL FINISHED GRADES BEFORE COMMENCING WORK. ANY FINISHED GRADE CHANGED DURING THE COURSE OF HIS WORK SHALL BE RESTORED TO THE ORIGINAL CONTOURS.

D. SUBMITTALS:

1. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS, OR PROCESSES SPECIFIED IN NAME ON THE DRAWINGS. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE. EQUIPMENT OR MATERIALS FURNISHED OR INSTALLED WITHOUT THE PRIOR APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE SUCH MATERIALS FROM THE SITE AT HIS OWN EXPENSE.
2. SUBMIT CATALOGUE DATA AND FULL DESCRIPTIVE LITERATURE FOR APPROVAL OF ITEMS DIFFERENT THAN THOSE SPECIFIED.
3. SUBMIT RECORD DRAWINGS IN ACCORDANCE WITH PART 3.

II. PRODUCTS:

A. GENERAL:

1. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND UNUSED PRIOR TO INSTALLATION.

B. GALVANIZED PIPE AND FITTINGS:

1. GALVANIZED PIPE SHALL BE A.S.A. SCHEDULE 40 GALVANIZED MILD STEEL SCREWED PIPE, SIZED AS NOTED ON THE PLANS.
2. FITTINGS TO BE USED WITH GALVANIZED PIPE SHALL BE MEDIUM GALVANIZED SCREWED BEADED MALLEABLE IRON. GALVANIZED COUPLINGS MAY BE MERCHANT COUPLING.

C. BRASS PIPE AND FITTINGS:

1. BRASS PIPE SHALL BE HEAVY WALL TYPE, WITH THREADS COMPLYING TO A.S.A. SPECIFICATIONS.
2. FITTINGS TO BE USED WITH BRASS PIPE SHALL BE CASE BRASS OR CASE BRONZE THREADED JOINT, AND SHALL COMPLY WITH A.S.A. SPECIFICATIONS. THREADS ON PIPE AND FITTINGS SHALL BE TAPER TYPE.

D. PLASTIC PIPE AND FITTINGS:

1. PLASTIC PIPE SHALL BE EXTRUDED FROM ONE-HUNDRED PERCENT (100%) VIRGIN POLYVINYL CHLORIDE (PVC) TYPE 1, GRADE 11 (CLASS 1220) AS MANUFACTURED BY LASCO, JOHNS-MANVILLE, OR EQUAL.
2. ALL PLASTIC PIPE SHALL BE CONTINUOUSLY AND PERMANENTLY MARKED WITH THE FOLLOWING INFORMATION: MANUFACTURER'S NAME, NOMINAL PIPE SIZE, PVC 1220, SDR (STANDARD DIMENSION RATION OR PRESSURE RATING IN PSI).
3. PIPE SHALL BE OF THE SIZE AND CLASS OR SCHEDULE AS NOTED IN THE IRRIGATION LEGEND. EXPOSED PIPE SHALL BE "BROWNLINE" UVR PVC OR EQUAL. PIPE USED IN NON-POTABLE WATER SYSTEMS SHALL BE "ALERTLINE" OR EQUAL, PURPLE IN COLOR THROUGHOUT, AND CONTINUOUSLY MARKED "CAUTION RECLAIMED WATER".
4. PLASTIC FITTINGS SHALL BE PVC II, IPS, SCHEDULE 40 NSF AND SCHEDULE 80 THREADED AND OR SLIP FITTINGS AS SHOWN IN THE DETAILS.
5. ALL THREADED NIPPLES SHALL BE STANDARD WEIGHT SCHEDULE 80 MOLDED THREADS. THREADED NIPPLES EXPOSED ABOVE GRADE SHALL BE GRAY IN COLOR.
6. SOLVENT TO BE USED FOR JOINING PLASTIC PIPE AND FITTINGS SHALL BE AS PER THE PIPE MANUFACTURERS RECOMMENDATIONS.

E. SLEEVING:

1. SLEEVE ALL MAINLINE AND LATERAL LINES WITH PVC SCH. 40 PIPE TWICE THE DIAMETER OF THE SLEEVED LINE WHERE IT PASSES UNDER PAVED AREAS WIDER THAN FOUR FEET(4'). EXTEND SLEEVE TWELVE INCHES (12") BEYOND THE EDGE OF THE PAVEMENT.

F. WIRING:

1. CONTROL WIRE: #14-1 AWG-UF MIN. DIRECT-BURIAL TYPE. COMMON WIRE: #12-1 AWG-UF MIN. DIRECT BURIAL AND WIRE SHALL BE WHITE. USE ALTERNATE COLOR(S) FOR CONTROL WIRES.
2. WIRE CONNECTIONS. MADE WITH "PEN-TITE" CONNECTORS (OR EQUAL). LOCATE MID WIRE SPLICES IN PULL BOX (8" ROUND PLASTIC VALVE BOX).
3. HIGHER VOLTAGE CONNECTIONS OR 110 V SHALL BE MADE BY CLAMP AND SHALL BE WEATHER PROTECTED PER LOCAL CODES.
4. OTHER EQUIPMENT SHALL BE AS SPECIFIED IN THE IRRIGATION LEGEND ON THE DRAWINGS.
5. CONTROL WIRES SHALL BE INSTALLED WITH ONE (1') FOOT OF EXCESS WIRE (COILED) AT THE END OF EACH WIRE RUN, AND AT ONE-HUNDRED (100') FOOT INTERVALS FOR RUNS OVER 100 FEET.
6. RUN (4) EXTRA VALVE WIRES TO EACH GROUP OF TWO MORE VALVES.
7. CONTROL WIRES SHALL BE BUNDLED WITH TAPE AT TEN (10') FOOT INTERVALS AND LOCATED UNDER THE IRRIGATION MAINLINE.

G. CONCRETE THRUST BLOCKS:

1. INSTALL THRUST BLOCKS AS DETAILED AT ALL BENDS OR CORNERS ON TWO AND ONE-HALF INCH (2-1/2") O.D. OR LARGER PRESSURE MAINLINE.
2. INSTALL CONC. FTG. AT BASE OF BACKFLOW PREVENTERS AS DETAILED.

H. ASSEMBLIES:

1. ALL THREADED PIPE AND FITTINGS SHALL BE ASSEMBLED USING TEFLON TAPE OR EQUAL, APPLIED TO THE MALE THREADS ONLY.

I. EQUIPMENT:

1. QUICK COUPLING VALVES, CONTROLLERS, REMOTE CONTROL (AUTOMATIC) VALVES, BALL VALVES, GATE VALVES, SPRINKLER HEADS, BACKFLOW PREVENTION UNITS, AND OTHER EQUIPMENT SHALL BE AS SPECIFIED IN THE IRRIGATION NOTES AND LEGEND ON THE DRAWINGS.

J. VALVE BOXES:

1. ALL REMOTE CONTROL, GATE, BALL, AND ISOLATION VALVES SHALL BE HOUSED IN PLASTIC VALVE BOXES AS DETAILED. VALVE BOXES SHALL BE AS MANUFACTURED BY BROOKS OR EQUAL.
2. VALVE BOXES SHALL BE LOCK TOP OR BOLTED. PROVIDE TWO KEYS MINIMUM FOR LOCKABLE BOXES.
3. VALVE BOX LIDS SHALL BE MARKED W/BRANDING IRON NOTING CONTROLLER # AND STATION #.
4. INSTALL BRICK OR CONCRETE SUPPORTS UNDER FULL PERIMETER OF BOX.

K. CHECK VALVES:

1. SWING CHECK VALVES TWO INCH (2") AND LARGER SHALL BE TWO-HUNDRED (200) POUND W.O.G. BRONZE CONSTRUCTION WITH REPLACEABLE COMPOSITION NEOPRENE OR RUBBER DISC MEETING OR EXCEEDING FEDERAL SPECIFICATION WW-V-51D, CLASS A, TYPE IV.
2. ANTI-DRAIN VALVES SHALL BE OF HEAVY DUTY VIRGIN PVC CONSTRUCTION WITH F.I.P. THREAD INLET AND OUTLET. INTERNAL PARTS SHALL BE STAINLESS STEEL AND NEOPRENE. ANTI-DRAIN VALVE SHALL BE FIELD ADJUSTABLE AGAINST DRAWOUT FOR FIVE (5') TO FORTY (40') FEET OF HEAD. ANTI-DRAIN VALVE SHALL BE VALCON ADV OR APPROVED EQUAL.

III. EXECUTION:

A. SITE CONDITIONS:

1. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO PROCEEDING WITH THE WORK OF THIS CONTRACT.
2. THE INSTALLATION OF ALL SPRINKLER MATERIALS, INCLUDING PIPE SHALL BE COORDINATED WITH HE PLANTING PLANS TO AVOID INTERFERING WITH TREE, SHRUB, OR OTHER PLANT LOCATIONS.

B. WATER SUPPLY:

1. THE CONTRACTOR SHALL CONNECT TO THE WATER SOURCE AS INDICATED ON THE DRAWINGS. VERIFY STATIC PRESSURE AS STATED ON THE PLANS PRIOR TO BEGINNING WORK. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PROMPTLY IF STATIC PRESSURE OR POINT OF CONNECTION DIFFER FROM THAT SHOWN ON PLANS.

C. SPRINKLER HEAD LOCATIONS:

1. LAYOUT SPRINKLER HEADS AND MAKE 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 COSTS TO THE OWNER. WHEN DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE, THE LAYOUT SHALL BE APPROVED PRIOR TO INSTALLATION.
2. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED DURING ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.

D. VALVE LOCATIONS:

1. BACKFLOW PREVENTION DEVICES SHALL BE LOCATED IN SHRUB AREA WHERE SHOWN ON PLAN.
2. CHECK VALVES AND ANTI-DRAIN VALVES SHALL BE INSTALLED WHERE INDICATED, AND WHERE NECESSARY TO PREVENT WATER FLOW FROM LOWER ELEVATION SPRINKLER HEADS WHEN IRRIGATION SYSTEM IS TURNED OFF.

E. PIPE DEPTH:

1. ALL PRESSURE MAINLINES SHALL BE BURIED EIGHTEEN (18") INCHES DEEP, MINIMUM.
2. ALL LATERAL PIPING SHALL BE BURIED TWELVE (12") INCHES DEEP, MINIMUM.
3. PRESSURE MAINS UNDER PAVING SHALL BE THIRTY INCHES (30") INCHES DEEP, MINIMUM. NON-PRESSURE LATERALS UNDER PAVING SHALL BE TWENTY FOUR INCHES (24") DEEP, MINIMUM.

F. TRENCHING AND BACKFILLING:

1. MAKE ALL EXCAVATIONS IN OPEN CUT TO WIDTH AND DEPTH NECESSARY TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE DRAWINGS AND OR AS SPECIFIED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. EXERCISE CAREFULLY TO CARRY THE EXCAVATION TO THE PROPER LINE AND GRADE AND TO PROVIDE AN EVEN, UNIFORM BEARING SURFACE FOR ALL PIPING.
2. THE MINIMUM ALLOWABLE TRENCH WIDTH IS EIGHT (8") INCHES.
3. HAND TRIM EXCAVATIONS TO REQUIRED ELEVATIONS. DO NOT OVER EXCAVATE. REMOVE LARGE STONES OR OTHER HARD MATTER WHICH COULD DAMAGE PIPE.

G. SAND BEDDING:

1. WHEN STONES OVER ONE (1") INCH IN ANY DIMENSION, HARD PAN, DRY HARD-PACKED SOIL, OR OTHER SOILS THAT CANNOT BE SHAPED TO PROVIDE UNIFORM BEDDING ARE ENCOUNTERED AT THE GRADES AT WHICH PIPES ARE TO BE LAID, BED THE PIPE IN SAND. USE BEDDING MATERIAL CONSISTING OF FEAN, DRY PIT-RUN SAND, ALL PASSING A #4 SCREEN. PROVIDE SAND REASONABLY FREE FROM ORGANIC MATTER. INSTALL BEDDING NOT LESS THAT ARE SIX (6") INCHES DEEP. EXTEND BEDDING TO THE HORIZONTAL DIAMETER OF THE PIPE AS SHOWN ON THE PLANS. LAY ALL SAND BEDDING AGAINST ROCK OR UNDISTURBED EARTH. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE NATURE OF THE MATERIAL (SOIL) TO BE ENCOUNTERED AT ELEVATIONS WHERE PIPE IS TO BE LAID. ALL COSTS FOR AND BEDDING ARE TO BE INCLUDED IN THE CONTRACT BID PRICE.

H. BACKFILLING:

1. FOR BID PURPOSES ONLY, BACKFILL FOR TRENCHING SHALL BE COMPACTED TO DRY DENSITY EQUAL TO THE ADJACENT UNDISTURBED SOIL IN PLANTING AREAS, AND TO NINETY PERCENT (90%) UNDER PAVED AREAS. BACKFILL SHALL CONFORM TO THE ADJACENT GRADES WITHOUT DIPS, SUNKEN AREAS, HUMPS, OR OTHER IRREGULARITIES. PLACE EXCAVATED MATERIAL IN SIX (6") INCH LAYERS. LOOSE MEASURE, AND THOROUGHLY TAMP UNDER AND AROUND THE PIPE ACROSS THE FULL WIDTH OF THE TRENCH. PROVIDE MOIST, NOT WET, BACKFILL. INCLUDE NO STONES LARGER THAN TWO (2") INCHES. NOTE: FOR ACTUAL BACKFILL, CONTRACTOR SHALL REFER TO ENGINEERING PLANS AND/OR REPORTS FOR SPECIFIC MATERIAL AND COMPACTION REQUIREMENTS.
2. ALLOW FOR SETTLEMENT. IN THE EVENT OF BACKFILL SETTLEMENT, THE IRRIGATION CONTRACTOR SHALL PERFORM REQUIRED REPAIRS AT HIS OWN COST. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SETTLING OF TRENCHES FROM HIS WORK FOR A PERIOD OF ONE YEAR FROM ACCEPTANCE BY OWNER.
3. TRENCHES SHALL BE BACKFILLED PROMPTLY AFTER THE OPEN TRENCH INSPECTION.

I. ELECTRICAL:

1. VERIFY POWER SOURCES AS SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING 110 VOLT ELECTRICAL CONNECTIONS TO THE AUTOMATIC CONTROLLER, AND FOR CONNECTING REMOTE CONTROL VALVES TO THE CONTROLLER. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES.

J. PRESSURE TESTING PRIOR TO BACKFILLING IRRIGATION TRENCHES:

1. ALL MAINLINES IN THE SYSTEM SHALL BE CAPPED AND HYDROSTATICALLY PRESSURE TESTED AT 125 PSI FOR A PERIOD OF TWENTY FOUR (24) HOURS WITH ZERO (0) PSI LEAK DOWN. ANY LEAKS FOUND SHALL BE CORRECTED BY REMOVING AND REPLACING THE LEAKING PIPE OR FITTINGS, AND INSTALLING NEW MATERIAL IN ITS PLACE.
2. ALL LATERALS SHALL BE PRESSURE TESTED AT DESIGN PRESSURE FOR FOUR HOURS.
3. THE CONTRACTOR SHALL NOT ALLOW OR CAUSE ANY OF THIS WORK TO BE COVERED UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
4. CONTACT OWNER'S AUTHORIZED REPRESENTATIVE A MINIMUM OF FORTY- EIGHT (48) HOURS PRIOR TO PERFORMING PRESSURE TESTS.

K. FLUSHING:

1. AFTER ALL NEW PVC PIPE, LINE, AND RISERS ARE IN PLACE AND CONNECTED, ALL NECESSARY DIVERSION WORK HAS BEEN COMPLETED, AND PRIOR TO THE INSTALLATION OF HEADS, THE CONTROL VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE SYSTEM.
2. CAP OFF EACH HEAD IN SEQUENCE, FROM THE CONTROL VALVE TO THE END OF THE LINE. PROCEED TO THE NEXT HEAD ONLY AFTER THE FLOW OF WATER IS CLEAN AND FREE OF DIRT, GRIT, AND PARTICULATE MATTER.

L. SPRINKLER COVERAGE:

1. IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLER HEADS TO ENSURE AN EVEN COVERAGE AND TO KEEP SPRAY OFF OF BUILDINGS, WALLS, WALKS, AND DRIVES.
2. ADJUST SPRINKLER HEADS ON A DAILY BASIS AS THE SYSTEM IS BEING BALANCED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIODS. OVERSPRAY AND OVER WATERING ARE TO BE KEPT TO AN ABSOLUTE MINIMUM.
3. IF IT IS DETERMINED THAT ADJUSTMENTS IN THE IRRIGATION EQUIPMENT OR NOZZLE CHANGES WILL PROVIDE PROPER AND MORE ADEQUATE COVERAGE, MAKE NECESSARY CHANGES WITHOUT ADDITIONAL COST TO THE OWNER.

M. EQUIPMENT TO BE FURNISHED:

1. THE CONTRACTOR SHALL PROVIDE TWO SETS OF SPRINKLER WRENCHES FOR ADJUSTING, CLEANING, OR DISASSEMBLING EACH TYPE OF SPRINKLER. PROVIDE TWO KEYS FOR EACH AUTOMATIC CONTROLLER. PROVIDE TWO QUICK COUPLER KEYS WITH HOSE SWIVELS. PROVIDE TWO EACH OF ANY SPECIAL TOOLS REQUIRED FOR OTHER EQUIPMENT.
2. TWO SERVICE MANUALS SHALL BE FURNISHED TO THE OWNER. MANUALS MAY BE LOOSE LEAF AND SHOULD SHOW DRAWINGS OR EXPLODED VIEWS OF EQUIPMENT AND CATALOGUE NUMBER. OPERATING INSTRUCTIONS FOR ALL EQUIPMENT SHALL BE FURNISHED.

N. CLEAN-UP:

1. UPON COMPLETION OF THE WORK, MAKE THE GROUND SURFACE LEVEL, REMOVE EXCESS MATERIALS, RUBBISH, DEBRIS, ETC. AND REMOVE CONSTRUCTION AND INSTALLATION MATERIALS FROM THE PREMISES.

O. RECORD DRAWINGS:

1. THE CONTRACTOR SHALL FURNISH TO THE OWNER A COMPLETE SET OF "AS-BUILT" DRAWINGS ON REPRODUCIBLE SEPIA, AND TWO BLUELINE PRINTS, SHOWING EXACT LOCATIONS OF ALL ITEMS INSTALLED. CORRECTIONS AND CHANGES ARE TO BE DRAWN IN BLACK INK. DRAWINGS ARE TO BE LEGIBLE AND ACCURATE. DIMENSION LOCATIONS OF VALVES, MAINLINES, CONTROL WIRES, WATER SOURCES, AND OTHER EQUIPMENT FROM TWO VISIBLE STATIONARY POINTS. THESE ARE TO BE DELIVERED ON OR BEFORE FINAL INSPECTION AND APPROVAL.
2. A REDUCED IRRIGATION PLAN INDICATING ALL IRRIGATION SYSTEMS AND THEIR APPROPRIATE SEQUENCED CONTROL VALVE SHALL BE LAMINATED IN MYLAR AND MOUNTED ON THE INSIDE COVER OF EACH IRRIGATION CONTROLLER. THE DRAWING SHALL CLEARLY SHOW LOCATIONS OF MAINLINE, NUMBERED CONTROL VALVES (AND MANIFOLDS), SHUT OFF VALVES, AND VALVE COVERAGE AREAS.

P. INSPECTIONS:

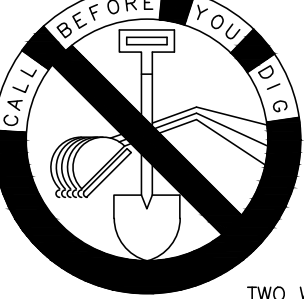
1. IN NO EVENT SHALL THE CONTRACTOR COVER-UP OR OTHERWISE REMOVE FROM VIEW ANY WORK UNDER THIS CONTRACT WITHOUT THE PRIOR APPROVAL OF THE OWNER. ANY WORK COVERED PRIOR TO INSPECTION SHALL BE UNCOVERED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
2. MAINLINE PRESSURE TEST AND TRENCH DEPTH INSPECTIONS SHALL BE MADE PRIOR TO BACKFILLING OF TRENCHES.
3. WHEN THE IRRIGATION SYSTEM IS COMPLETED AND PRIOR TO PLANTING THE CONTRACTOR SHALL IN THE PRESENCE OF THE OWNER'S AUTHORIZED REPRESENTATIVE PERFORM A COVERAGE TEST ON ALL PLANTING AREAS TO ENSURE IT IS COMPLETE AND ADEQUATE. THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK REQUIRED TO CORRECT ANY INADEQUACIES OF COVERAGE AT HIS OWN COST.
4. NOTIFY THE OWNER IN WRITING SEVEN DAYS PRIOR TO FINAL INSPECTION AT THE END OF THE MAINTENANCE PERIOD. FINAL INSPECTION WILL BE TO INSURE THAT THE SYSTEM IS FULLY OPERATIONAL, AND THAT ALL HEADS, VALVES, AND WATERING SEQUENCES HAVE BEEN ADJUSTED FOR THE PROPER IRRIGATION OF THE PLANTINGS.
5. SHOW EVIDENCE THAT THE OWNER HAS RECEIVED ALL REQUIRED ACCESSORIES, CHARTS, RECORD DRAWINGS, ETC. AT THE TIME OF FINAL INSPECTION. THE MAINTENANCE PERIOD MAY BE EXTENDED IF THESE MATERIALS HAVE NOT BEEN DELIVERED.

Q. MAINTENANCE AND GUARANTEE:

1. IRRIGATION CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM FOR A PERIOD OF NINETY (90) DAYS AFTER PRE-MAINTENANCE WALK-THRU, AND SHALL WATER ON A DAILY BASIS, OR AS REQUIRED BY PLANTINGS AND WEATHER CONDITIONS.
2. IRRIGATION CONTRACTOR SHALL GUARANTEE THE ENTIRE IRRIGATION SYSTEM AS TO MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE BY THE OWNER. SHOULD ANY OPERATIONAL DIFFICULTIES IN CONNECTION WITH THE IRRIGATION SYSTEM DEVELOP WITHIN THE GUARANTEE PERIOD, WHICH IN THE OPINION OF THE OWNER MAY BE DUE TO WORKMANSHIP OR MATERIALS, SAID DIFFICULTIES SHALL BE IMMEDIATELY CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. MANUFACTURERS WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE.

END OF SECTION

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LANDSCAPE INSPECTION SUPERVISOR

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WEILAND DESIGN GROUP, INC.

LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT

CORPORATE OFFICE

28924 OLD TOWN FRONT ST. TEMECULA, CA 92590

P (844) WEILAND XT.701

EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY:

KIM LONIGRO

R.I.A. NO. 5508

DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE	
BENCH MARK:					

APPROVED	2017
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REGISTERED CIVIL ENGINEER NO.	
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RECOMMENDED BY:	

CITY OF SAN BERNARDINO PUBLIC WORKS/ENGINEERING <i>Landscape Maintenance District</i> FOR TRACT 16502 FROM <i>Ohio Avenue to Magnolia Avenue</i>	DRAWING NO. LI-06 SHEET <u>7</u> OF <u>12</u> SHEETS
FOR CITY USE ONLY: FILE NO.	W.O. NO.

LAST MODIFIED: Jul 21, 2017 - 3:56pm BY USER: WDG-Kim
DWG. LOCATION: L:\WORK\Home Builders\Beezer\16-035 Tr16502 Weidmont\Production CD\A\16035b.dwg
DWG. NAME: 16-035 Tr16502 Weidmont.dwg



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28924 OLD TOWN FRONT ST. TEMECULA, CA 92590


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EMAIL - KLONIGRO@W-D-G.COM

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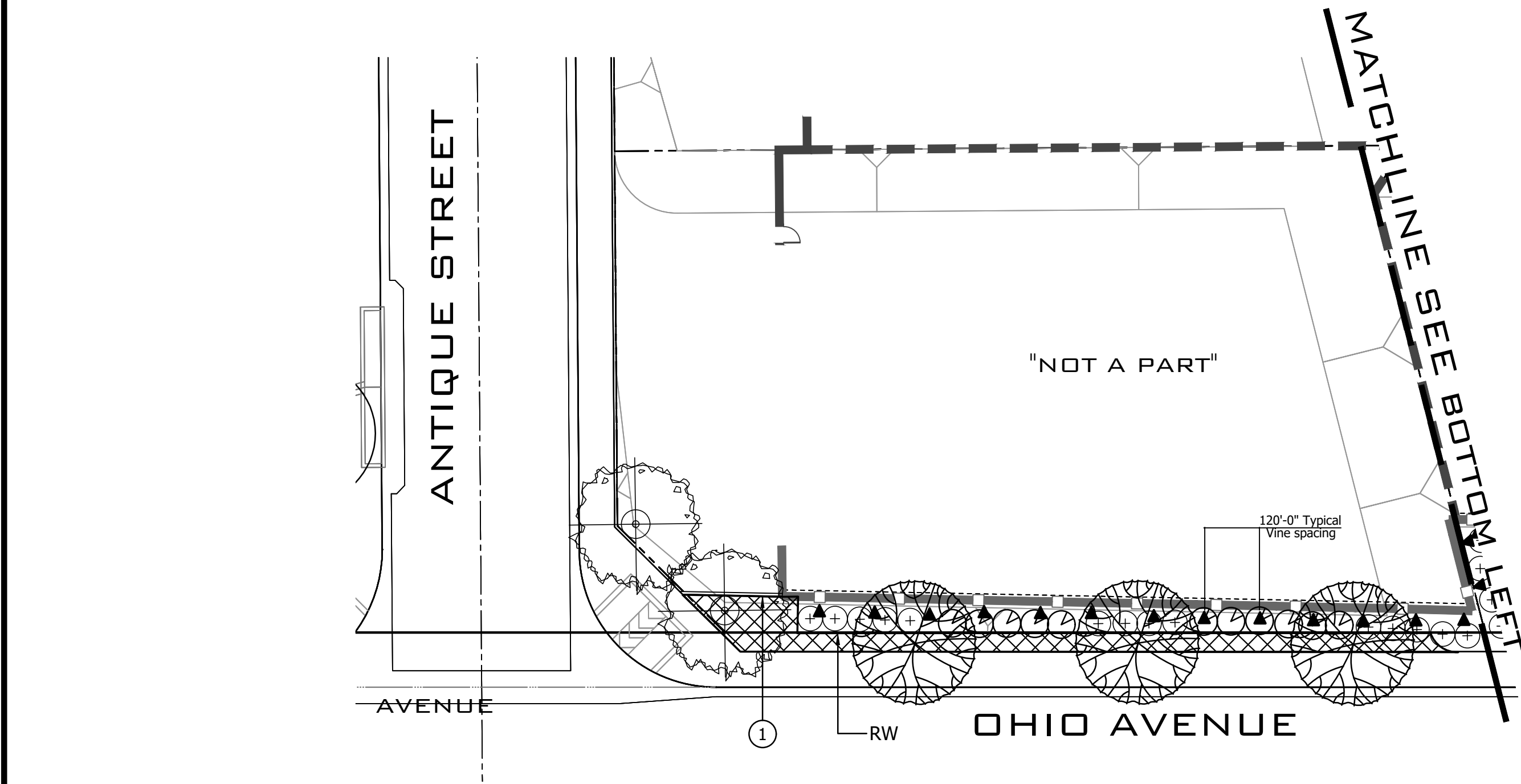
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PLANTING NOTES

- ALL PLANTED AREAS SHALL BE RAKED CLEAN OF ALL EXTRANEIOUS MATERIALS. FINISH GRADES AND SURFACE DRAINAGE PATTERNS SHALL BE RESTORED TO THE APPROVED SPECIFIED GRADING PLAN AFTER TREE AND SHRUB INSTALLATION AND PRIOR TO GROUND COVER OR BARK INSTALLATION.
- ALL PLANT MATERIAL SHALL CONFORM TO NURSERYMAN'S STANDARDS FOR SIZE AND HEALTH AND SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO PLANTING. THE CONTRACTOR SHALL SUBMIT PHOTOS OF ALL BOX SIZE TREES FOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE. SHRUBS WILL BE REVIEWED ON SITE.
- LANDSCAPE CONSTRUCTION INSTALLATION AND PRACTICES SHALL COMPLY WITH ALL LOCAL AND REGIONAL STANDARDS AND IF APPLICABLE, CLCA'S STANDARDS FOR LANDSCAPE CONSTRUCTION AND MAINTENANCE.
- ANY PLANT MATERIAL DELETIONS OR SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- ALL PLANT MATERIAL SHALL BE INSTALLED ACCORDING TO THE DETAILS AND NOTES SHOWN ON THESE PLANS.
- ALL LEVEL SHRUB AREAS SHALL BE TOP DRESSED (AFTER INSTALLATION OF GROUND COVER) WITH A 3" LAYER OF SHREDDED "WALK-ON" BARK MULCH OR APPROVED EQUAL (PROVIDE SAMPLE TO DEVELOPER). LEAVE A 12" DIAMETER AREA AROUND EACH TREE AND SHRUB MAINSTEM FREE OF BARK MULCH.
- ALL TREES SHALL BE LOCATED AS FOLLOWS:
 - MIN. SIX FEET (6') FROM PROPERTY LINE FENCING AND WALLS, HARDSCAPE SURFACES, BUILDING EAVES AND SUBSURFACE UTILITIES INCLUDING DRAINAGE LINES, DOMESTIC SUPPLY LINES AND SEWER LINES WHEREVER POSSIBLE/ APPLICABLE.
 - MIN. 3' (FEET) FROM ALL FIRE HYDRANTS, MAIL BOXES, WATER METERS, AND SUBSURFACE UTILITIES INCLUDING TELEPHONE, ELECTRICAL AND CABLE TV.
 - MIN. 8' (FEET) FROM THE DOOR SIDE OF ALL TRANSFORMER BOXES.
 - MIN. 10' (FEET) FROM ALL EASEMENT BOUNDARIES.
 - MIN. 10' (FEET) FROM ALL STREET LIGHTS, SIGNS AND POWER POLES.CONTRACTOR SHALL VERIFY ALL UTILITIES, EASEMENTS, HARDSCAPE AND EQUIPMENT PRIOR TO THE INSTALLATION OF TREES.
- ANY TREE PLANTED WITHIN FIVE FEET (5') OF HARDSCAPE SURFACES SHALL RECEIVE "BIO-BARRIER" ROOT BARRIER TO A DEPTH OF 19", UNLESS OTHERWISE NOTED ON THE PLANS. INSTALL PER MANUFACTURER'S DETAILS AND SPECIFICATIONS, ADJACENT AND PARALLEL TO THE HARDSCAPE AND/OR UTILITY AND 5' BEYOND THE TREE TRUNK IN BOTH DIRECTIONS. IN CASE OF DISCREPANCIES IMMEDIATELY NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE.
- REMOVE ALL VINE OR ESPALIER STAKES AND/OR TRELLISES AND ATTACH TO FENCE, WALL, POST OR VINE TRELLIS SHOWN ON PLAN.
- PRIOR TO BIDDING, CONTRACTOR SHALL VERIFY IF AN AGRONOMIC SOILS REPORT HAS BEEN COMPLETED FOR THE PROJECT. IF NONE IS AVAILABLE, CONTRACTOR IS RESPONSIBLE FOR INCLUDING COST FOR AGRONOMIC SOILS REPORT IN PROJECT BID. FOR MULTI-LOT PROJECT A MINIMUM OF 1 TEST FOR EVERY 7 LOTS IS REQUIRED.
- PRIOR TO PLANTING ALL PLANTABLE SOIL AREAS SHALL BE MIXED WITH 4 YARDS OF COMPOST PER 1,000 SF TO A DEPTH OF 6" TO MAKE THE SOIL FRIABLE FOR PLANTING, UNLESS OTHERWISE SPECIFIED IN THE AGRONOMIC SOILS REPORT. IN THE EVENT OF A CONFLICT BETWEEN THE AGRONOMIC SOILS REPORT AND THESE NOTES, THE REPORT SHALL SUPERCEDE. SOILS WITH GREATER THAN 6% ORGANIC MATTER IN THE TOP 6" OF SOIL SHALL BE EXEMPT FROM ADDING COMPOST AND FILLING.


TREE LEGEND

SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	DETAIL	REMARKS
	Pistacia chinensis Chinese Pistache	24" Box	2	A, B, C, LP-04	Standard
	Pistacia chinensis Chinese Pistache	24" Box	2	See Landscape Production Plans prepared by P&D Consultants	Standard
	Pinus canariensis Canary Island Pine	24" Box	15	A, B, C, LP-04	Standard
	Koelruteria paniculata Goldenrain Tree	24" Box	17	A, B, C, LP-04	Standard
	Lagerstroemia indica Crape Myrtle	24" Box	12	A, B, C, LP-04	Standard
	Platanus racemosa California Sycamore	24" Box	7	A, B, C, LP-04	Standard

SHRUB LEGEND

SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	DETAIL	REMARKS
	Dietes Bicolor (Fortnight Lily)	5 gal	203	A, B, LP-04	Bushy & full to the ground
	Xylosma Congestum (Xylosma)	5 gal	188	A, B, LP-04	Bushy & full to the ground
	Dodonaea Viscosa (Hop bush)	5 gal	171	A, B, LP-04	Bushy & full to the ground
	Phormium Tenax 'Bronze Baby' (New Zealand Flax)	5 gal	149	A, B, LP-04	Bushy & full to the ground

VINE LEGEND






SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	DETAIL	REMARKS
	Parthenocissus tricuspidata (Boston Ivy)	5 gal @ 10' o.c.	118	F, LP-04	Bushy & full to the ground

GROUND COVER LEGEND

SYMBOL	BOTANICAL/COMMON	SIZE	SF./QTY.	LOCATION
	SEE PLAN	All planters to receive 3" min. Forest Blend Mulch. Contact: www.pacificsod.com	E, LP-04	Slopes
	Myoporum parvifolium	1 gal @ 6' o.c.	7,378 sf	Planter

IMPROVEMENTS PER SEPARATE PLANS BY OTHERS, SHOWN FOR REFERENCE PURPOSES ONLY

WALL & FENCE LEGEND

SYMBOL	WALL DESCRIPTION
	6'-0" High Slump stone wall (Perimeter Walls).
	5'-6" High Slump stone wall (Street Adjacent).
	5'-6" High Wood fence (Side & Rear yards).
	5'-6" High Slump stone (Wall Returns).
	5'-6" High wood gate.

CONSTRUCTION NOTE:

SYM	NOTE
1	Construction 6"x6" concrete mowcurb. See sheet L2.2/ 8.

PERMIT# E1600995, DRAWING# 13121

LAST MODIFIED: Jul 21, 2017 - 3:56pm BY USER: WDG-Kim
LIVE LOCATION: L:\MDC\Home Builders\Beezer\16-035 Tr16502 Verdmont\Production CD\A\16035b.dwg
DWG NAME: 16-035 Tr16502 Verdmont\Production CD\A\16035b.dwg



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LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND.XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY: _____ R.L.A. NO. 5508

KIM LONIGRO DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE	
BENCH MARK:					

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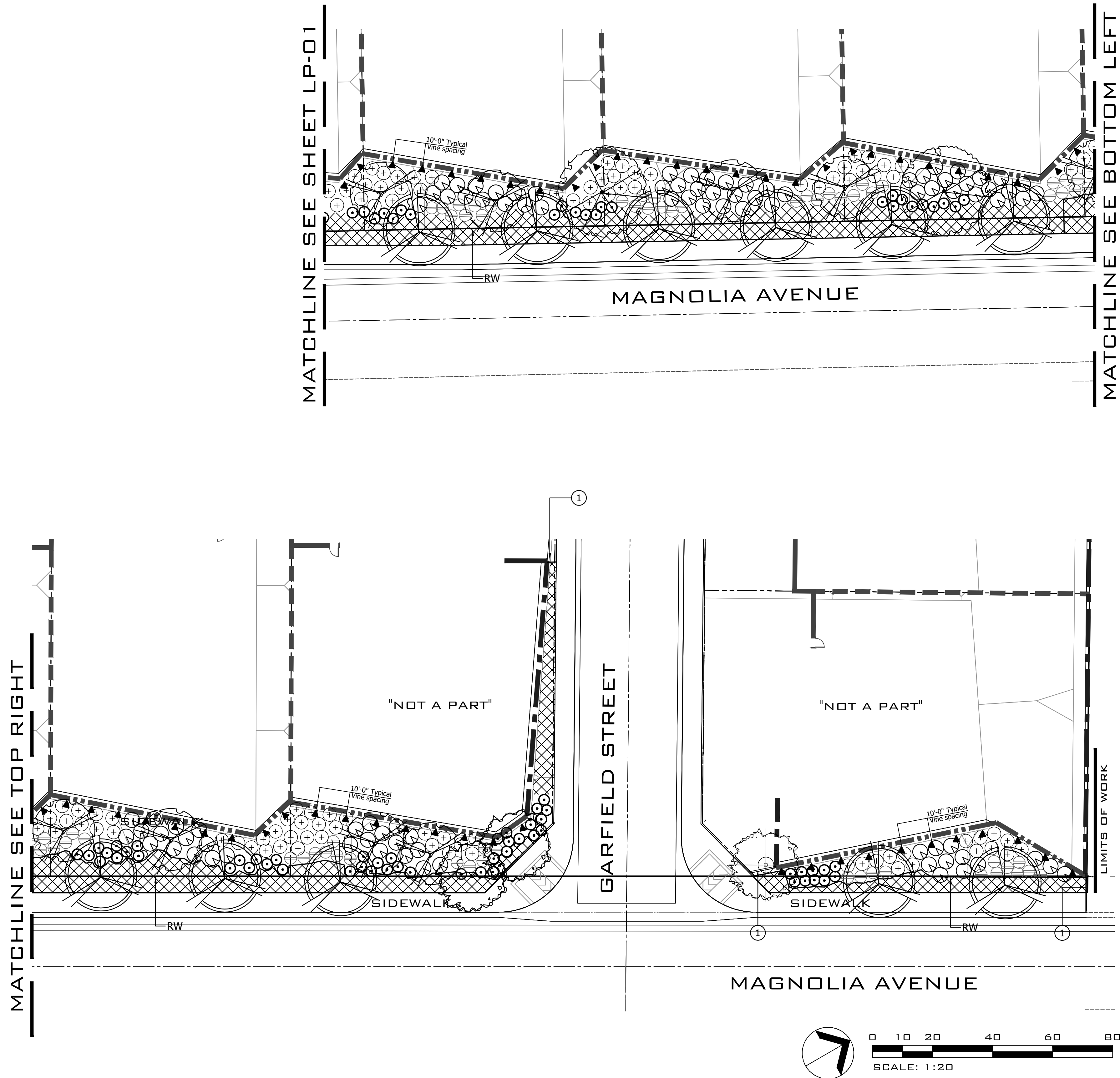
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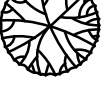


CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING
Landscape Maintenance District
FOR
TRACT 16502
FROM
Ohio Avenue to Magnolia Avenue





DRAWING NO. LP-02


SHEET 9 OF 12 SHEETS

FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____



TREE LEGEND					
SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	DETAIL	REMARKS
	Pistacia chinensis Chinese Pistache	24" Box	2	A, B, C, LP-04	Standard
	Pistacia chinensis Chinese Pistache See Landscape Production Plans prepared by P&D Consultants	24" Box	2	See Landscape Production Plans	Standard
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	Koelruteria paniculata Goldenrain Tree	24" Box	17	A, B, C, LP-04	Standard
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GROUNDCOVER LEGEND					
SYMBOL	BOTANICAL/COMMON	SIZE	SF./QTY.	LOCATION	
	SEE PLAN All planters to receive 3" min. Forest Blend Mulch. Contact: www.pacificsod.com		E, LP-04	Slopes	
	Myoporum parvifolium	1 gal @ 6' o.c.	7,378 sf	Planter	

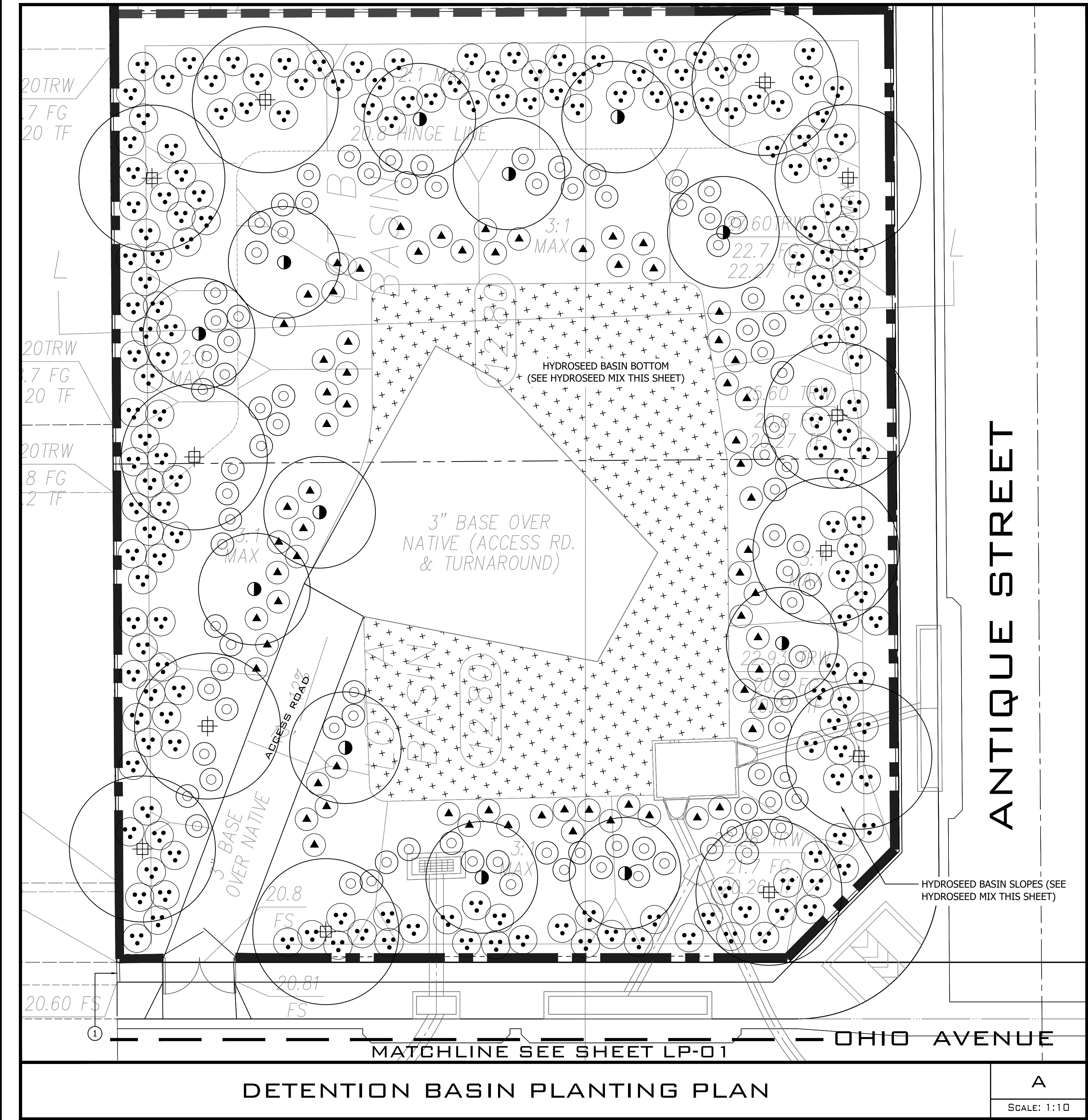
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	5'-6" High Slump stone wall (Street Adjacent).
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CONSTRUCTION NOTE:	
SYM	NOTE
1	Construction 6"x6" concrete mowcurb. See sheet L2.2/ 8.

PERMIT# E1600995, DRAWING# 13121

LAST MODIFIED: Jul 21, 2017 - 4:19pm BY USER: WDG-Kim
DWG LOCATION: L:\WDO\Home Builders\Bezeq\16-035 Tr16502 Verdemont\Production CD\A160356 LWD\DWG\WDO\16-035 Tr16502



TREE LEGEND

SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	LOCATION
	PLATANUS RACEMOSA (CALIFORNIA SYCAMORE)	24" Box	12	BASIN SLOPE
	RHUS LANCEA (AFRICAN SUMAC)	24" Box	12	BASIN SLOPE

SHRUB LEGEND

SYMBOL	BOTANICAL/COMMON	SIZE	QTY.	LOCATION
	BACCHARIS PILULARIS (COYOTE BUSH)	1 GAL	95	BASIN SLOPE
	JUNIPERUS CALIFORNICA (CALIFORNIA JUNIPER)	1 GAL	69	BASIN SLOPE
	ARCTOSTAPHYLOS GLAUCA (EASTWOOD MANZANITA)	1 GAL	188	BASIN SLOPE

HYDROSEED LEGEND (BASIN BOTTOM)

SYMBOL	BOTANICAL NAME	SIZE	SF./QTY.	LOCATION
	PLANTAGO OVATA (PLANTAGO)	POUNDS / ACRE	#15	BASIN BOTTOM
	LEYMUS CONDENSATUS (GIANT WILD RYE)	POUNDS / ACRE	#4.0	BASIN BOTTOM
	MIMULUS AURANTICUS (STICKY MONKEY FLOWER)	POUNDS / ACRE	#4.0	BASIN BOTTOM
	LOTUS SCOPULARUS (DEERWEED)	POUNDS / ACRE	#2.0	BASIN BOTTOM
	LUPINUS BICOLOR (LUPINE)	POUNDS / ACRE	#2.0	BASIN BOTTOM
	NASSELLA LEPIDA (FOOTHILL NEEDLEGRASS)	POUNDS / ACRE	#1.5 (DEAWNED)	BASIN BOTTOM
	ERIOPHYLLUM CONFERTFLORIUM (GOLDEN YARROW)	POUNDS / ACRE	#1.0	BASIN BOTTOM
	GNAPHALIUM CALIFORNICUM (CALIFORNIA EVERLASTING)	POUNDS / ACRE	#0.5	BASIN BOTTOM
BASIN SLOPE: HYDROSEED MIX				
NO SYMBOL	ARTEMISIA CALIFORNICA CALIFORNIA SAGEBRUSH	POUNDS / ACRE	#1.0	BASIN SLOPE
	ERIOGNOM FASCICULATUM CALIFORNIA BUCKWHEAT	POUNDS / ACRE	#4.0	BASIN SLOPE
	SALVIA APIANA WHITE SAGE	POUNDS / ACRE	#0.5	BASIN SLOPE
	LOTUS SCOPULARUS DEERWEED	POUNDS / ACRE	#2.0	BASIN SLOPE
	NASSELLA LEPIDA FOOTHILL NEEDLEGRASS	POUNDS / ACRE	#1.5	BASIN SLOPE
	GNAPHALIUM CALIFORNICUM CALIFORNIA EVERLASTING	POUNDS / ACRE	#0.5	BASIN SLOPE

IMPROVEMENTS PER SEPARATE PLANS BY OTHERS,
SHOWN FOR REFERENCE PURPOSES ONLY

WALL & FENCE LEGEND

SYMBOL	WALL DESCRIPTION
	6'-0" High Slump stone wall (Perimeter Walls).
	5'-6" High Slump stone wall (Street Adjacent).
	5'-6" High Wood fence (Side & Rear yards).
	5'-6" High Slump stone (Wall Returns).
	5'-6" High wood gate.

CONSTRUCTION NOTE:

SYM	NOTE
1	Construction 6"x6" concrete mowcurb. See sheet L2.2/ 8.

Underground Service Alert

Call: TOLL FREE

1-800

422-4133

TWO WORKING DAYS BEFORE YOU DIG

RECOMMENDED _____ 2017

JIM GONDOS

LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED _____ 2017

WEILAND DESIGN GROUP, INC.

LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT

CORPORATE OFFICE

28924 OLD TOWN FRONT ST. TEMECULA, CA 92590

P (844) WEILAND XT.701

EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY: _____ R.L.A. NO. 5508

KIM LONGIRO _____ DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE
BENCH MARK:				

APPROVED _____ 2017

CITY ENGINEER

REGISTERED CIVIL ENGINEER NO. _____

DRAWN BY: _____

CHECKED BY: _____

RECOMMENDED BY: _____

CITY OF SAN BERNARDINO

PUBLIC WORKS/ENGINEERING

Landscape Maintenance District

FOR

TRACT 16502

FROM

Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO. _____ W.O. NO. _____

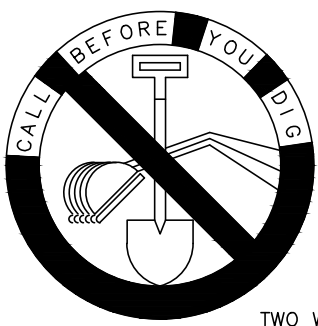
DRAWING NO.

LP-03

SHEET 10 OF 12 SHEETS

PERMIT # E1600995, DRAWING# 13121

LAST MODIFIED: Jul 21, 2017 - 4:19pm BY USER: WDG-kfm
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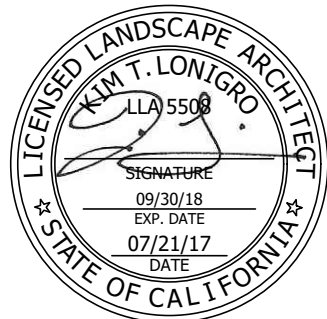
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422-4133

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EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY:

R.L.A. NO. 5598

KIM LONIGRO

DATE: 07/21/17

MARK	REVISIONS	BY	APPR.	DATE	
BENCH MARK:					

APPROVED 2017

CITY ENGINEER _____
REGISTERED CIVIL ENGINEER NO. _____
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RECOMMENDED BY: _____

CITY OF SAN BERNARDINO
PUBLIC WORKS/ENGINEERING

Landscape Maintenance District

FOR
TRACT 16502

FROM
Ohio Avenue to Magnolia Avenue

FOR CITY USE ONLY: FILE NO.

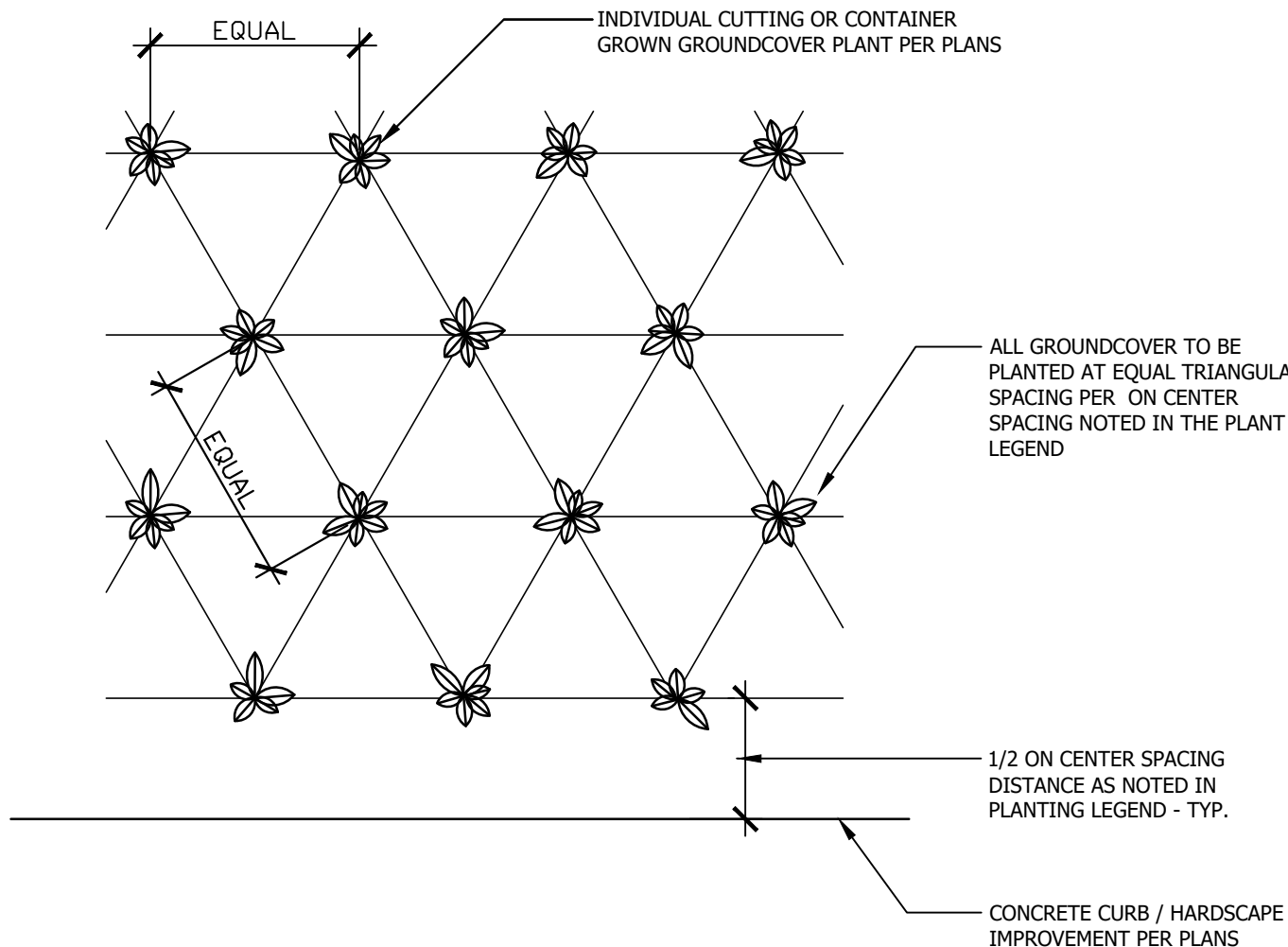
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LP-04

SHEET 11 OF
12 SHEETS

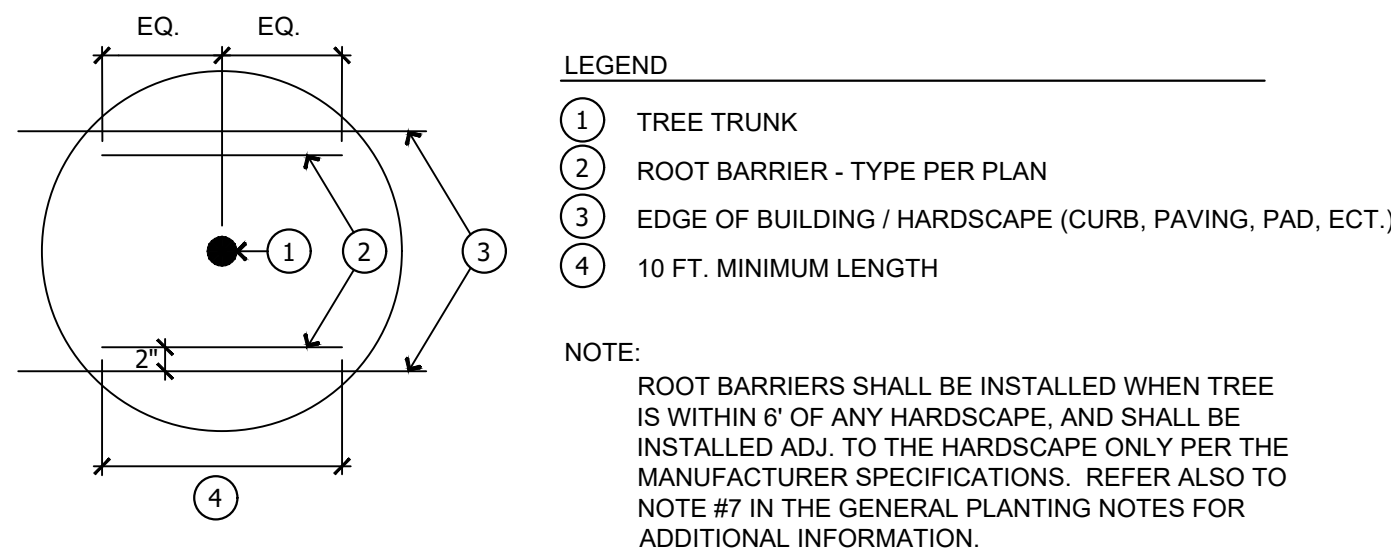
G GROUNDCOVER PLANTING

N.T.S.



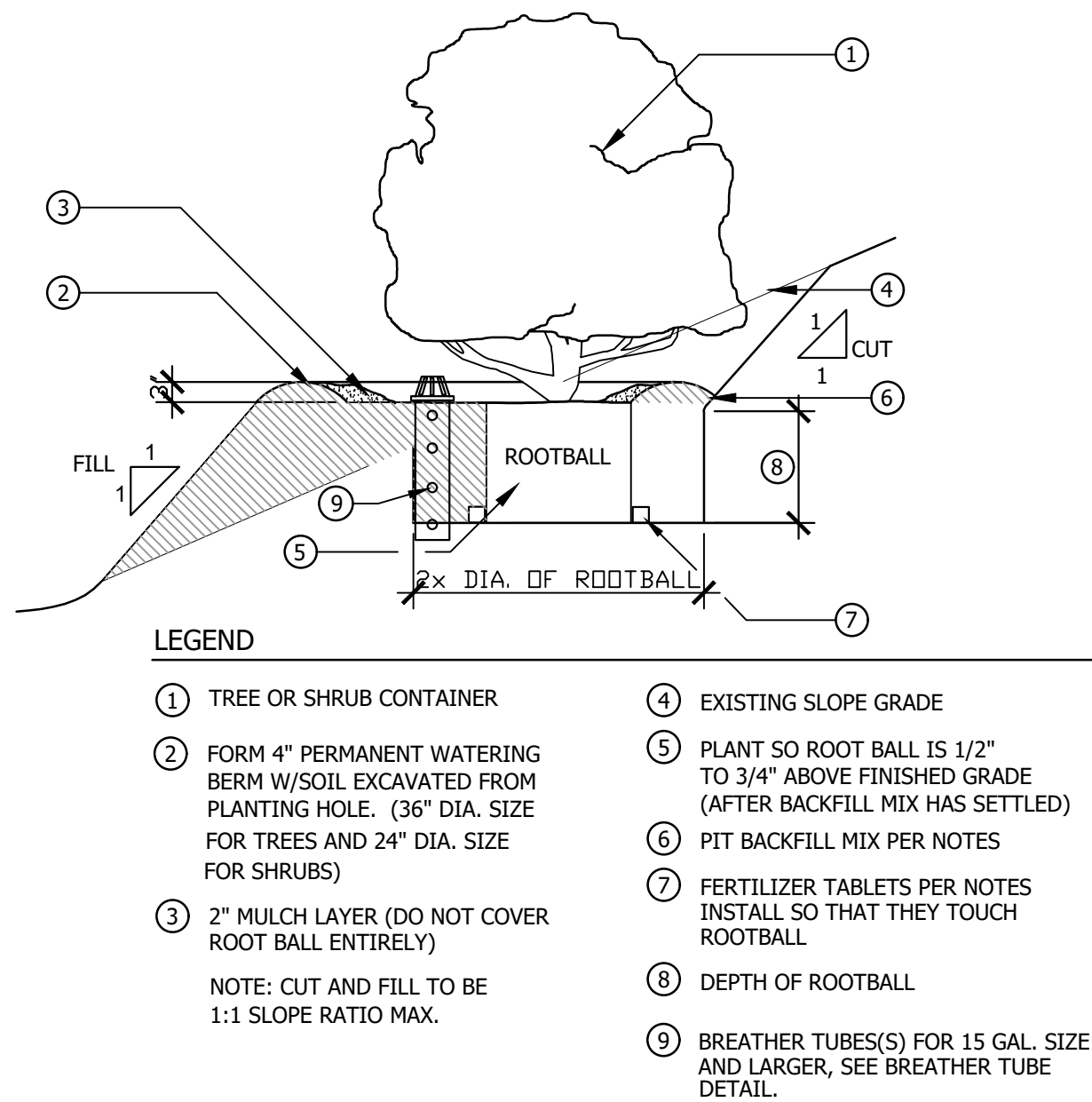
D ROOT BARRIER

1 1/2" = 1'-0"



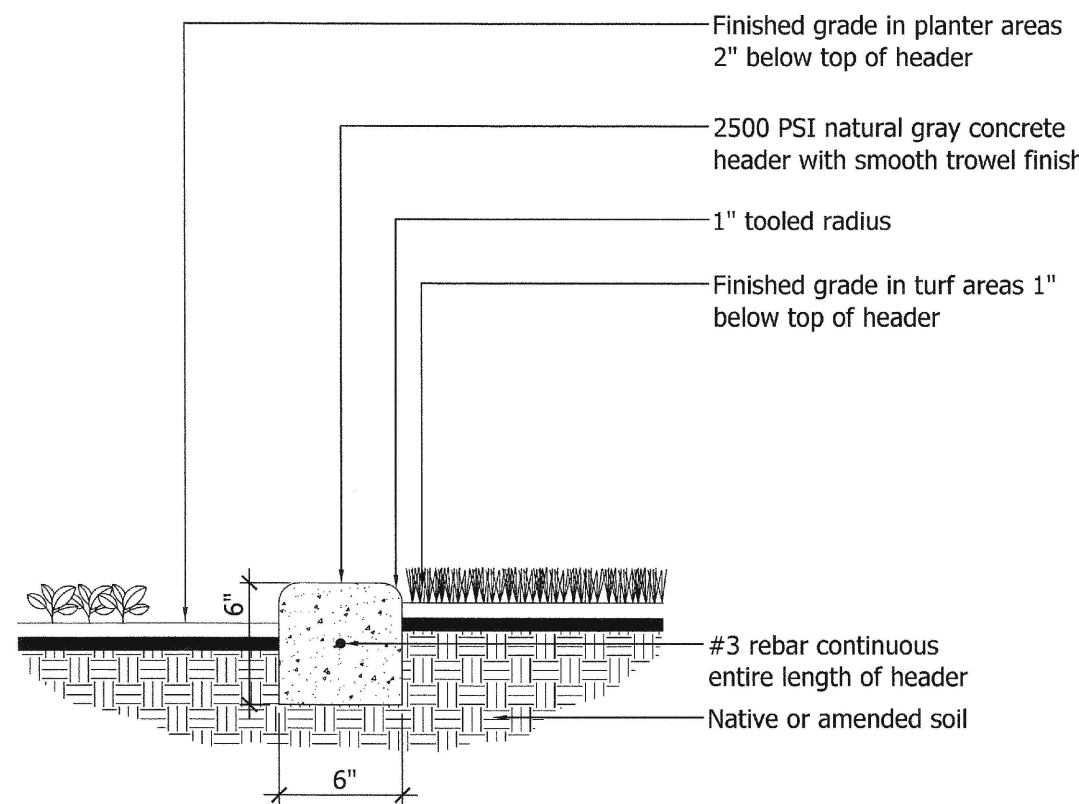
A TREE/SHRUB CONTAINER PLANTING (SLOPE)

N.T.S.

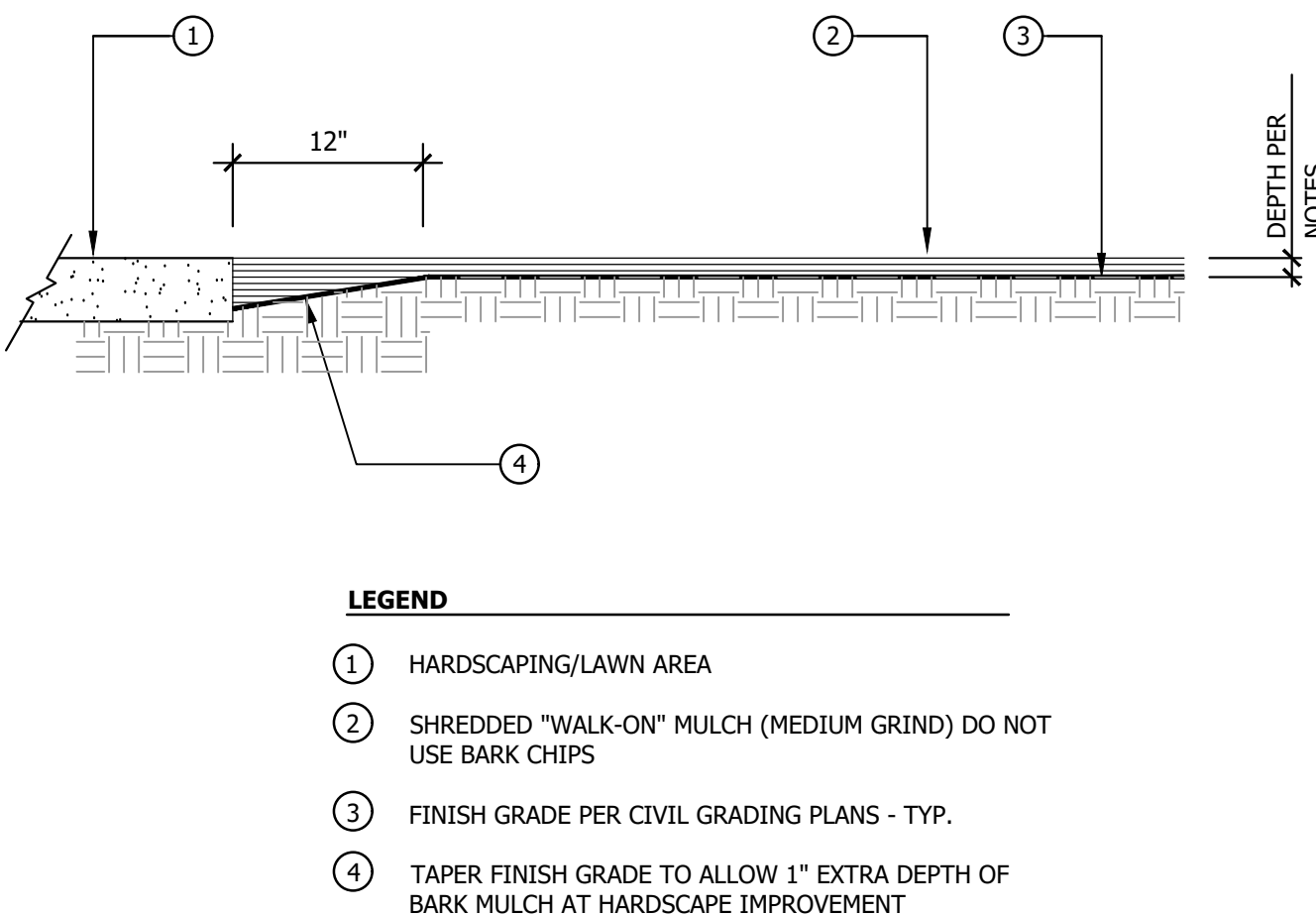


H CONCRETE MOWCURB

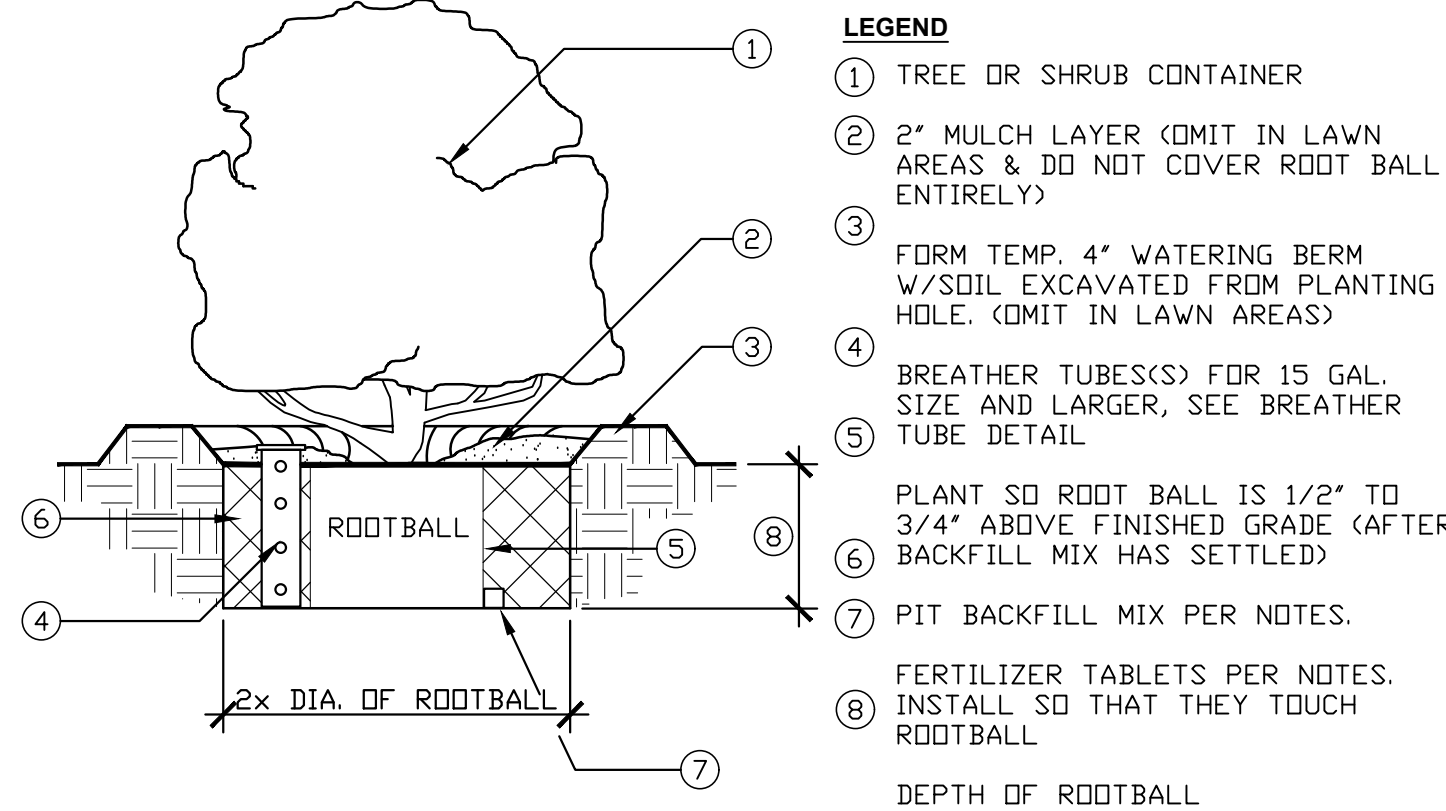
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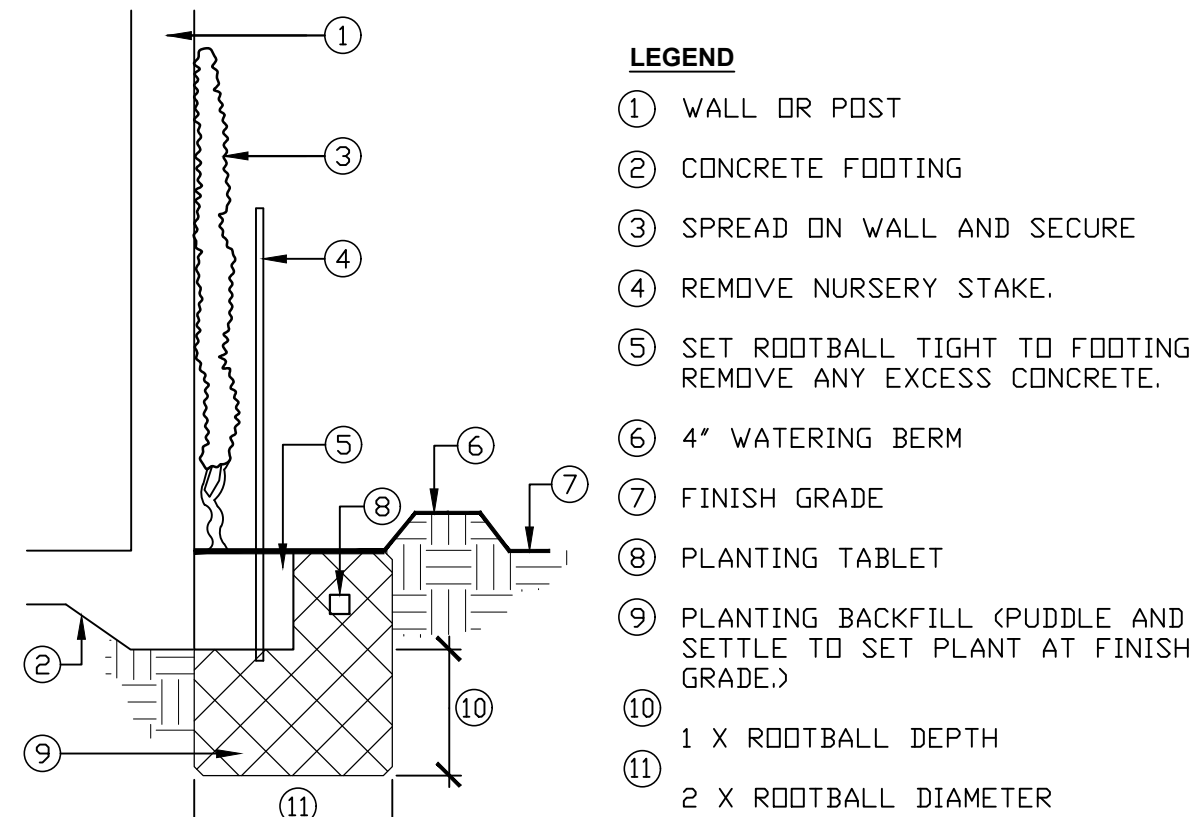
E MULCH INSTALLATION



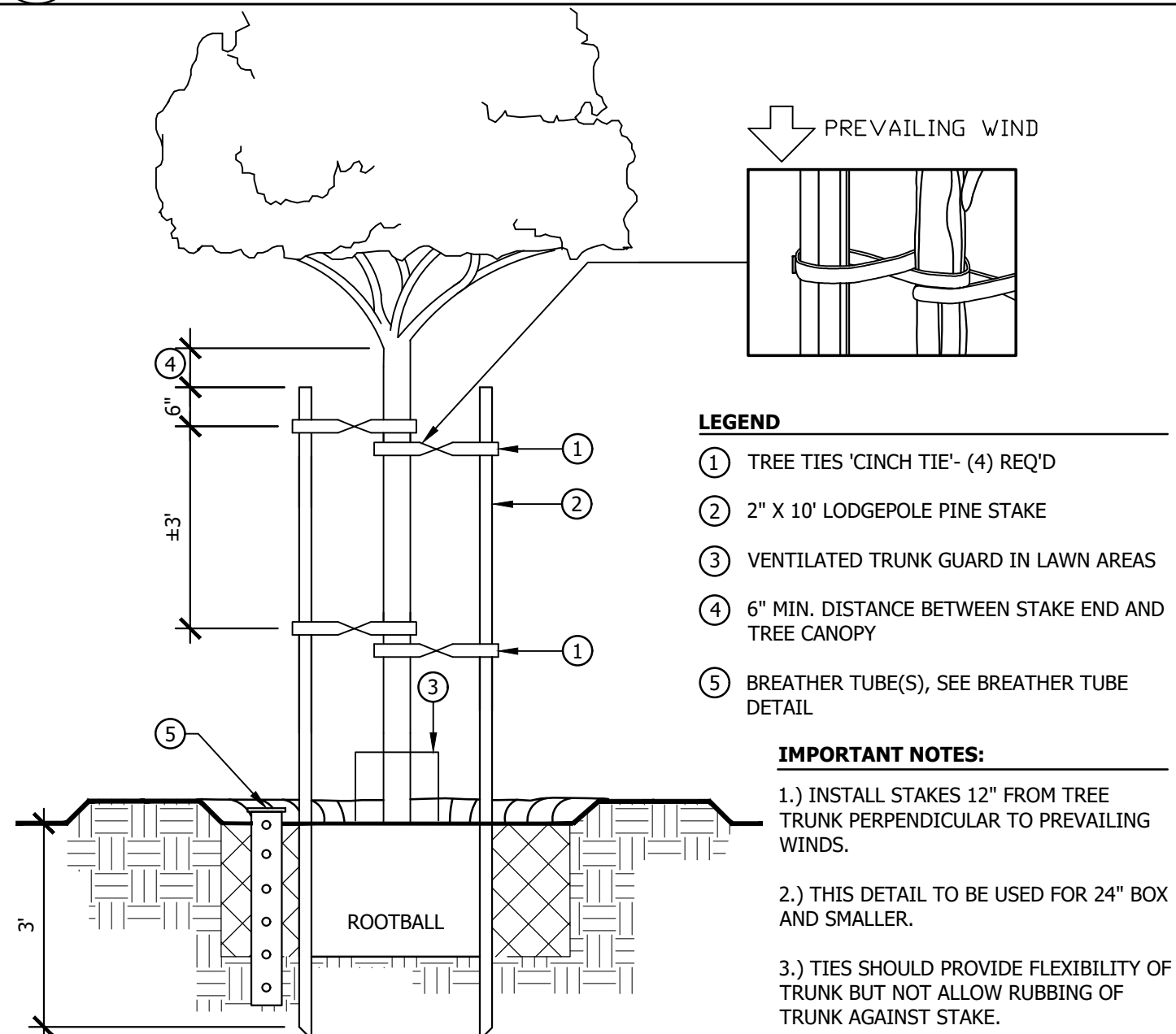
B TREE/SHRUB CONTAINER PLANTING



F VINE PLANTING



C TREE PLANTING



PERMIT# E1600995, DRAWING# 13121

LAST MODIFIED: Jul 21, 2017 - 3:53pm BY USER: WDG-Kim
DWE LOCATION: L:\MOT\Home Builders\Brazzer\16-035 Tr16502 Wredmont\Production CD\A\16035b.dwg
DWE NAME: wdg-16035-Tr16502.dwg

TREES, SHRUBS AND GROUND COVERS

PART 1: GENERAL

1.1 SCOPE OF WORK

- A. FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT IN ORDER TO PROVIDE, INSTALL, AND MAINTAIN SOIL PREPARATION, HEADERS, FINISH GRADING, PLANTING AND ESTABLISHMENT PERIOD AS DESCRIBED HEREIN AND ON THE PLANS.
- B. THE CONTRACTOR SHALL ADEQUATELY PROTECT THE WORK, ADJACENT PROPERTY, AND THE PUBLIC, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE, INJURY, AND LOSS DUE TO HIS ACTS OR NEGLIGENCE.
- C. WORK NOT INCLUDED: ROUGH GRADING.

1.2 QUALITY ASSURANCE

- A. VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES, AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO PROCEEDING WITH ANY WORK.
- B. PROTECT ALL EXISTING UTILITIES AND FEATURES ON AND ADJACENT TO THE PROJECT SITE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS/HER OWN EXPENSE, ALL DAMAGE RESULTING FROM HIS/HER OPERATIONS OR NEGLIGENCE.
- C. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING AND OR ARCHITECTURAL PLANS BEFORE COMMENCING WORK.
- D. NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK AND BE RESPONSIBLE FOR COORDINATING WORK WITH THE OWNER, THE OWNER'S AUTHORIZED REPRESENTATIVE, OTHER CONSTRUCTION TRADES, AND GOVERNING AGENCIES.
- E. THE PLANTING PLAN IS DIAGRAMMATIC, AND ALL PLANT LOCATIONS DEPICTED THEREON ARE APPROXIMATE. CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY OF ANY DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON CONTRACTOR, RESPONSIBILITY FOR (AT HIS/HER EXPENSE) MAKING ANY AND ALL ADJUSTMENTS RESULTING FROM WORK HEREUNDER.
- F. PRIOR TO PLANTING, THE IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL AND ALL PLANTING AREAS SHALL BE THOROUGHLY MOISTENED TO A DEPTH OF 24 INCHES.
- G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PAY FOR ALL PERMITS AND CERTIFICATES OF INSPECTION OF PLANT MATERIALS THAT MAY BE REQUIRED BY FEDERAL, STATE, OR OTHER AUTHORITIES. COPIES OF PERMITS AND INSPECTION CERTIFICATES SHALL BE FURNISHED TO THE OWNER WITHOUT CHARGE.
- H. PROTECT BENCH MARKS, EXISTING STRUCTURES, FENCES, ROADS, SIDEWALKS, LAWNS, AND OTHER FINISH SURFACES AGAINST DAMAGE FROM EQUIPMENT OR OTHER PLANTING OPERATIONS. REPAIR ANY DAMAGE AT NO COST TO OWNER.

1.3 SUBMITTALS

- A. OBTAIN, PAY FOR, AND SUBMIT TO THE OWNER'S AUTHORIZED REPRESENTATIVE AN AGRICULTURAL SOIL ANALYSIS REPORT FROM AN AUTHORIZED SOIL TESTING AGENCY PRIOR TO COMMENCEMENT OF WORK. SOIL AMENDMENTS LISTED BELOW ARE SUBJECT TO CHANGE PER THE SOIL ANALYSIS.
- B. IF A PLANT IS FOUND NOT TO BE SUITABLE OR AVAILABLE, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IN WRITING PRIOR TO BIDDING. THE OWNER'S AUTHORIZED REPRESENTATIVE WILL SELECT A SUITABLE ALTERNATE AND/OR INFORM CONTRACTORS OF THE AVAILABILITY OF THE PLANT.
- C. SUBMIT PHOTOGRAPHS FROM THE NURSERY OF TREES TAGGED FOR SHIPMENT AND INSTALLATION ON THIS PROJECT. PHOTOGRAPHS SHALL SHOW TREES OF SIZE AND BRANCHING STRUCTURE TYPICAL OF THOSE SUPPLIED FOR EACH SPECIES. THE OWNER'S AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO REJECT PLANT MATERIAL ON SITE WHICH DOES NOT MEET THE STANDARD ESTABLISHED BY THE APPROVED PHOTOGRAPHS.

1.4 MODIFICATIONS

- A. DESIGN MODIFICATIONS MAY BE MADE ONLY AS NECESSARY TO MEET FIELD CONDITIONS. PLANTING SHALL BE LOCATED WHERE SHOWN ON THE PLANS EXCEPT WHERE OBSTRUCTIONS BELOW GROUND OR OVERHEAD ARE ENCOUNTERED, OR AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- B. EXACT POSITIONING OF BOX TREES WILL BE DETERMINED IN THE FIELD. POSITION MATERIALS AS DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

PART 2: PRODUCTS

2.1 PLANTING MATERIALS

- A. PLANTS SHALL HAVE A HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES AND SHALL BE SYMMETRICAL, SOUND, HEALTHY, VIGOROUS, AND FREE OF INSECT PESTS, PLANT DISEASE, AND INJURY. TREES SHALL NOT HAVE CROSSING BRANCHES OR WEAK BRANCH STRUCTURES ATYPICAL OF THEIR SPECIES.
- B. ROOT BOUND PLANT MATERIAL IS NOT ACCEPTABLE. FIVE GALLON PLANTS AND LARGER SHALL BE GROWN IN THEIR CONTAINERS FOR A MINIMUM OF SIX MONTHS AND MAXIMUM OF TWO YEARS. ALL PLANT MATERIAL SHALL BE SUBJECT TO INSPECTION AND POSSIBLE REJECTION PRIOR TO INSTALLATION.
- C. ALL PLANTS SHALL EQUAL OR EXCEED THE MEASUREMENTS SPECIFIED IN THE PLANT LIST, WHICH ARE MINIMUM ACCEPTABLE SIZES.
- D. SUBSTITUTIONS FOR INDICATED PLANT MATERIALS WILL NOT BE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE. SUBSTITUTIONS ARE TO BE AT NO ADDITIONAL COST TO THE OWNER. IF ACCEPTED SUBSTITUTE MATERIALS ARE OF LESS VALUE THAN THOSE ORIGINALLY SPECIFIED, THE CONTRACT PRICE WILL BE ADJUSTED IN ACCORDANCE WITH THE PROVISIONS OF THE CONTRACT.
- E. IN ALL CASES, QUANTITIES OF PLANT MATERIALS SHALL BE FURNISHED AS NEEDED TO COMPLETE THE WORK AND INDICATED ON THE DRAWINGS, INCLUDING RE-SEEDING, REDRESSING, AND MAINTENANCE (REPLACEMENTS) DURING THE CONTRACT PERIOD.

2.2 PLANTING MIXES, SOILS AND FERTILIZERS

- A. THE FOLLOWING SOIL AMENDMENTS (ITEMS B & C BELOW) ARE TO BE USED AS THE BASIS FOR BIDS. ONCE SITE IMPROVEMENTS ARE IN PLACE AND APPROXIMATE FINISH GRADES ESTABLISHED, THE CONTRACTOR SHALL FURNISH TO THE OWNER'S AUTHORIZED REPRESENTATIVE A SOILS TEST MADE FROM THE SURFACE AND SUB-SURFACE (18 INCHES BELOW GRADE) SOIL BY AN APPROVED AGRICULTURAL LAB. THE REPORT SHALL INCLUDE PH, N/P/K, SAR, ECC, BORON LEVELS, AND SOIL PARTICLE EVALUATION. ACTUAL SOIL AMENDMENTS TO BE INSTALLED MAY BE ADJUSTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE BASED ON THE FINDING OF THE REPORT. LOAMEX, AND SARVON AVAIL. FROM JOHN DEERE LANDSCAPES (800) 347-4272.
- B. GENERAL SOIL PREPARATION, AMOUNT PER 1,000 SQUARE FEET:
- GROUND COVERS: 3 C.Y. OF LOAMEX
LAWNS: 4 C.Y. OF LOAMEX
80 LBS. OF AGRICULTURAL GYPSUM
50 LBS. OF MILORGANITE
15 LBS. OF BEST TRIPLE PRO 15-15-15 OR 15 LBS. OF BEST 6-20-20XB
- C. SOIL PLANT BACKFILL FOR CONTAINER PLANT MATERIAL (UNLESS SPECIFIED OTHERWISE ON PLAN AND SUBJECT TO CHANGE PER SOILS ANALYSIS) SHALL BE A THOROUGHLY BLENDED MIXTURE OF THE FOLLOWING PER YARD OF EXISTING SITE SOIL.

.25 C.Y. OF LOAMEX
10 LBS. OF AGRICULTURAL GYPSUM
10 LBS OF MILORGANITE
1 LB. OF SOIL MOIST
1 OZ. SARVON SOIL PENETRANT
1 OZ. SUPERTHRIVE HORMONE
FERTILIZER TABLETS PER SPECIFICATIONS

- D. IMPORT SOIL OR TOPSOIL SHALL BE NATURAL, FRIABLE SOIL POSSESSING THE SAME CHARACTERISTICS OF THE EXISTING SITE SOIL. PROVIDE TOPSOIL FREE FROM SUBSOIL, BRUSH, OBJECTIONABLE WEEDS, ROCKS, ORGANIC DEBRIS, AND CLAY. SOIL SHALL BE FREE OF TOXIC SUBSTANCES, SOIL STERILANTS, AND SALTS. DO NOT PROVIDE SOIL FROM ROADBED EXCAVATIONS.

- E. LIGHTWEIGHT SOIL FOR PLANTERS SHALL BE OF THE FOLLOWING COMPOSITION, PREMIXED BY MACHINE BLENDER PRIOR TO DELIVERY TO SITE.

NINE (9) PARTS BY VOLUME LOAMEX
ONE (1) PART BY VOLUME WASHED PLASTER SAND
TWO (2) CU. FT. PER CU. YD. PERLITE
TEN (10) LBS. PER CU. YD. MICRO-MAX PLUS MICRONUTRIENT
COMPLEX, OR EQUAL
TEN (10) LBS. PER CU. YD. 16-6-8 FERTILIZER

THE MIX SHALL ALSO CONTAIN A LONG LASTING FORM OF IRON (G.U. 49) AND A NON-IONIC WETTING AGENT.

2.3 SOD

- A. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS. MEASUREMENTS FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO A STANDARD LENGTH AND WIDTH. BROKEN ROLLS OR SLABS, AND SOIL WITH UNEVEN ENDS WILL NOT BE ACCEPTABLE. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT FROM A FIRM GRASP ON THE UPPER 10 % OF THE SECTION.

2.4 HEADER MATERIAL

- A. CONCRETE HEADERS AND MOW STRIPS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. FORMS FOR HEADERS AND MOW STRIPS SHALL BE STAKED AT 4 INCH INTERVALS, AND ALL FORMING SHALL BE APPROVED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO POURING.
- B. FORMING STAKES SHALL BE AT LEAST ONE INCH BY TWO INCHES, OF LENGTH NECESSARY TO EXTEND INTO SOLID GROUND AT LEAST TWELVE INCHES.
- C. WOOD HEADERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS. WOOD SHALL BE 2" X 4" OR 1" X 4" ROUGH, CONSTRUCTION HEART REDWOOD, FREE FROM SPLITS.

2.5 TREE STAKES

- A. TREE STAKES SHALL BE 2" DIAMETER BY 10' LONG NEW LODGE PINE POLES TREATED WITH COPPER NAPHTHENATE UNLESS OTHERWISE NOTED.

PART 3: EXECUTION

3.1 SCHEDULING

- A. PLANTING SHALL NOT COMMENCE UNTIL COMPLETION OF ALL CONSTRUCTION WORK, GRADING, SOIL PREPARATION, WEED CONTROL AND SPRINKLER INSTALLATION.

3.2 PRE-PLANTING

- A. APPLY "ROUND-UP" SYSTEMATIC HERBICIDE (OR APPROVED EQUAL) PER MANUFACTURER'S SPECIFICATIONS TO EXISTING UNDESIED VEGETATION TEN (10) DAYS PRIOR TO COMMENCEMENT OF ANY PLANTING OR IRRIGATION WORK.
- B. ALL AREAS TO BE PLANTED, WHICH HAVE A SLOPE OF 4:1 OR LESS SHALL BE CROSS-RIPPED TO A DEPTH OF SIX (6) INCHES AND SOIL AMENDMENTS SPREAD EVENLY AS SPECIFIED AND THOROUGHLY BLENDED-IN PER 1,000 SQUARE FEET.
- C. SLOPES STEEPER THAN 4:1 SHALL BE RAKED SMOOTH, BUT SHALL NOT RECEIVE SOIL AMENDMENTS (EXCEPT IN PLANT PITS) UNLESS SPECIFIED ON THE PLANS OR AS REQUIRED BY THE LOCAL GOVERNING AGENCY.
- D. MAINTAIN PROOF OF DELIVERY FOR ALL PLANTING AMENDMENTS ON-SITE AND AVAILABLE FOR INSPECTION UNTIL ACCEPTANCE OF THE ENTIRE INSTALLATION.

3.3 FINISH GRADING

- A. CONTRACTOR SHALL COORDINATE ALL FINISH GRADING WORK WITH GENERAL CONTRACTOR.
- B. FINISH GRADING AFTER SOIL PREPARATION SHALL ESTABLISH FINAL FLOW LINES AND GRADIENTS FOR UNIFORM WATER DRAINAGE. FLOW LINES AND GRADIENTS SHALL BE ESTABLISHED FROM THE HIGH POINT TO THE DRAINAGE OUTLET OR AN INLET STRUCTURE.
- C. RAKE-OUT AND REMOVE ALL ROCKS 1/2 INCH DIAMETER OR LARGER FROM THE TOP TWO INCHES OF FINISHED GRADE, EXCEPT ON SLOPES STEEPER THAN 3:1.
- D. FINISHED GRADES SHALL BE MIN. 4" BELOW BUILDING STUCCO SCREEDS AND MIN. 1" BELOW FINISH SURFACES OF HARDSCAPE PAVING AND CURBS IN SHRUB PLANTING AREAS. WHERE SOD IS TO BE LAID NEXT TO CONCRETE PAVING AND CURBS, FINISHED GRADE BEFORE SOD INSTALLATION SHALL BE 1-1/2 INCH BELOW THE TOP. AT LOCATIONS WHERE DRAINAGE IS TO FLOW ACROSS HARDSCAPE, THE GRADE SHALL BE FLUSH, OR NO MORE THAN 1/2" BELOW THE HARDSCAPING.
- E. MAINTAIN A MINIMUM 2% SURFACE DRAINAGE AWAY FROM ALL BUILDINGS AND SITE WALL FOOTINGS IN PLANTING AREAS. FINISHED GRADES SHALL BE RAKED AND SMOOTHED TO ELIMINATE PUDDLING OR STANDING WATER AND ALLOW SMOOTH, EVEN FLOW.
- F. FLOAT TURF AREAS WITH A FOUR (4") FOOT MINIMUM WIDTH FLOAT. ROLL ALL PROPOSED TURF AREAS AND REFLOAT TO ELIMINATE DEPRESSIONS.

3.4 LAYOUT AND SPACING

- A. STAKE LOCATIONS OF TREES AND OUTLINE PLANTING AREAS AS SHOWN ON PLANS. OBTAIN OWNER'S AUTHORIZED REPRESENTATIVE APPROVAL PRIOR TO EXCAVATION OF PLANT PITS. THE OWNER'S AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INTERCHANGE OR SHIFT PLANT LOCATIONS PRIOR TO PLANTING.
- B. WHEN PLANT MATERIAL IS SPACED IN ROWS, THE TOTAL DIMENSION SHALL BE VERIFIED, AND THE PLANTS EQUALLY SPACED WITHIN THE DESIGNATED AREA. WHEN PLANT MATERIAL IS SHOWN IN A LOOSE PATTERN, THE CONTRACTOR SHALL SPACE MATERIAL AS SHOWN ON THE PLANS AND DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- C. GROUND COVER MATERIAL SHALL BE TRIANGULARLY SPACED PER DIMENSION SHOWN ON THE PLANS.

3.5 PLANT MATERIAL INSPECTION

- A. REVIEW BY THE OWNER'S AUTHORIZED REPRESENTATIVE OF THE PLANTS UPON DELIVERY SHALL BE FOR QUALITY, SIZE, AND VARIETY ONLY, AND SHALL NOT IN ANY WAY IMPAIR THE RIGHT OF REJECTION FOR FAILURE TO MEET OTHER REQUIREMENTS DURING PROGRESS OF THE WORK.

3.6 PLANTING

- A. PLANT PITS SHALL BE AS SHOWN IN THE PLANTING DETAILS. ROUGHEN SMOOTH PIT WALLS CAUSED BY AUGURING HOLES. SLICK PIT WALLS CAUSED BY AUGURING IN TO WET SOIL WILL NOT BE ACCEPTED.
- B. PLANT MATERIAL WITH ROOT BALLS BROKEN OR CRACKED PRIOR TO OR DURING PLANTING OPERATIONS SHALL NOT BE PLANTED.
- C. EACH PLANT SHALL RECEIVE "AGRIFORM" (OR APPROVED EQUAL) PLANT TABLETS AS FOLLOWS (EVENLY SPACE AROUND ROOT BALL):

1 GALLON CONTAINER 1-21 GM
5 GALLON CONTAINER 3-21 GM
15 GALLON CONTAINER 7-21 GM
PER 6 INCH BOXED TREE SIZE 4-21 GM

- D. BACKFILL PIT WITH PLANTING MIX HALF-WAY TO FINISH GRADE AND WATER THOROUGHLY. BACKFILL TO FINISH GRADE AND TAMP FIRM. FORM A SHALLOW BASIN AROUND EACH PLANT PIT AS DETAILED.
- E. REMOVE NURSERY STAKES ON ALL VINES AND ATTACH TO ADJACENT WALL OR FENCE WITH GREEN PLASTIC VINE TIES.
- F. REMOVE NURSERY STAKES FROM ALL CONTAINER STOCK. PRUNE SIDE GROWTH ON TREES ONLY AS DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- G. CONTAINER PLANTS SHALL NOT BE PLACED WITHIN 12 INCHES OF SPRINKLER HEADS.
- H. SHRUBS AND TREES SHOWN IN PLANTING AREAS SHALL BE UNDER-PLANTED WITH GROUNDCOVER SHOWN BY ADJACENT SYMBOL, TO WITHIN 12 INCHES OF MAIN PLANT STEM.
- I. UPON COMPLETION OF THE WORK, ALL TREES AND SHRUBS SHALL HAVE HAD ANY BROKEN BRANCHES REMOVED AND INJURIES REPAIRED. CLEAN AND RE-CUT WOUNDS OVER 3/4 INCHES AND COAT WITH TREE WOUND PAINT.

3.7 TREE STAKING OR GUYING

- A. STAKE OR GUY ALL TREES 5 GALLONS AND LARGER PER DETAILS. DRIVE STAKE INTO FIRM SOIL NEXT TO ROOT BALL. TREE STAKES SHALL BE VERTICAL IN ALL CASES. ONE GALLON TREES SHALL BE PLANTED WITH STAKES REMOVED.
- B. GUY 36" BOX AND LARGER PLANT MATERIAL WITH AT LEAST THREE GUY WIRES (9 GAUGE) IN TRIANGULAR PATTERN AS DETAILED. GUY WIRE SHALL BE ENCASED IN RUBBER HOSE WHERE IT COMES IN CONTACT WITH THE TREE. (NOTE: GUYING MAY BE OMITTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE WHERE CONDITIONS PERMIT.)

3.8 SODDED LAWN

- A. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 24 HOURS, UNLESS A SUITABLE METHOD IS APPROVED PRIOR TO DELIVERY. SOD NOT INSTALLED WITHIN THIS TIME SHALL BE INSPECTED AND ACCEPTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION. SOD SHALL NOT BE HARVESTED OR DELIVERED WHEN MOISTURE CONTENT (EXCESSIVELY WET OR DRY) MAY ADVERSELY AFFECT ITS ESTABLISHMENT.
- B. PREPARE SOD BED AS NOTED FOR SOIL PREPARATION AND FINE GRADING.
- C. ROLL AREAS TO BE SODDED LIGHTLY TO ELIMINATE AIR POCKETS. WATER THOROUGHLY TO A DEPTH OF AT LEAST 6 INCHES. REGRADE IF SETTLING OCCURS.
- D. UNROLL SOD IN THE SAME DIRECTION EACH TIME. SOD SHALL BE LAID IN A STAGGERED PATTERN, WITH NO GAPS OR VOIDS. START LAYING SOD ALONG THE LONGEST STRAIGHT EDGE AND AT THE BOTTOM OF SLOPES.
- E. PEG BOTH ENDS OF SOD LAID ON SLOPES OF 3:1 OR GREATER WITH WOODEN PEGS.
- F. WATER SOD WITHIN 30 MINUTES OF LAYING. IF SOD ENDS AGAINST AN OPEN BED OF SOIL, MOUND THE SOIL AGAINST THE SOD EDGES TO PREVENT DRYING. WATER THOROUGHLY AT THE END OF THE DAY ALL SOD PLACED THAT DAY TO PENETRATE THE SOIL AT LEAST 6 INCHES.
- G. ROLL ALL SODDED AREAS WITH A ROLLER WEIGHING APPROXIMATELY 16 POUNDS PER LINEAL INCH TO COMPACT THE SOIL AROUND THE ROOTS AND PROVIDE A SMOOTH EVEN MOWING SURFACE.

3.9 FLATTED GROUND COVER

- A. ROOTED CUTTINGS SHALL BE PLANTED SUFFICIENTLY DEEP TO COVER ALL ROOTS, AND SHALL BE SPACED AS NOTED ON THE DRAWINGS.
- B. ROOTED CUTTING SHALL HAVE BEEN GROWN IN FLATS AND SHALL REMAIN IN THOSE FLATS UNTIL TIME OF TRANSPLANTING. AT TIME OF TRANSPLANTING THE SOIL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT THE SOIL DOES NOT FALL APART WHEN LIFTING PLANTS FROM THE FLAT. EACH PLANT SHALL BE PLANTED WITH ITS PROPORTIONATE AMOUNT OF SOIL IN A MANNER THAT WILL ENSURE A MINIMUM OF DISTURBANCE TO THE ROOT SYSTEM.
- C. ROOTED CUTTINGS SHALL NOT BE ALLOWED TO DRY OUT OR WILT BEFORE OR DURING PLANTING. WILTED PLANTS WILL NOT BE ACCEPTED.
- D. AT THE TIME OF PLANTING EACH GROUND COVER PLANT, THE EARTH SHALL BE FIRMED SUFFICIENTLY TO FORCE OUT AIR POCKETS. WATER GROUND COVER BEDS IMMEDIATELY AFTER PLANTING.

3.10 MULCHING

- A. WHEN PLANTING OPERATIONS ARE COMPLETE AND SHRUB AREAS HAVE BEEN RAKED AND DRESSED, MULCH ALL SHRUB AREAS WHICH HAVE A SLOPE OF 4:1 OR LESS WITH A 3 INCH LAYER OF SHREDDED FIR BARK (WALK-ON BARK OR EQUAL). MULCH FLATTED GROUND COVER BEDS PRIOR TO PLANTING.

3.11 PROTECTION AND CLEAN-UP

- A. THE CONTRACTOR SHALL CAREFULLY AND CONTINUOUSLY PROTECT ALL AREAS INCLUDED IN THE CONTRACT, INCLUDING LAWN AREAS, PLANT MATERIAL, SUPPORTS, ETC. UNTIL FINAL ACCEPTANCE BY THE OWNER. REPAIR AND/OR REPLACE ANY DAMAGED AREAS AT NO ADDITIONAL COST TO THE OWNER.
- B. AFTER PLANTING OPERATIONS ARE COMPLETED, THE CONTRACTOR SHALL REMOVE ALL TRASH, EXCESS SOIL, EMPTY PLANT CONTAINERS, AND OTHER ACCUMULATED DEBRIS FROM THE SITE. LEAVE THE SITE IN A CLEAN, WASHED CONDITION, REMOVING ALL UNUSED MATERIAL, TRASH, AND TOOLS.

3.12 INSPECTIONS

- A. THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE AND SET APPOINTMENTS FOR THE REVIEW OF THE FOLLOWING OPERATIONS BY THE OWNER'S AUTHORIZED REPRESENTATIVE:
- FINISH GRADING
 - REVIEW OF PLANT MATERIAL AFTER DELIVER TO THE SITE
 - TREE AND SHRUB PLACEMENT PRIOR TO DIGGING HOLES
 - GROUND COVER LINES AND HEADERBOARD PLACEMENT
 - PRE-MAINTENANCE PERIOD WALK-THRU
 - POST MAINTENANCE/FINAL ACCEPTANCE WALK-THRU
- B. IN THE EVENT THE CONTRACTOR REQUESTS INSPECTION OF THE WORK, AND SAID WORK IS SUBSTANTIALLY INCOMPLETE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OWNER'S AUTHORIZED REPRESENTATIVE'S HOURLY CHARGES AND PER DIEM.

3.13 COMPLETION AND WALK-THRU

- A. AT THE COMPLETION OF ALL WORK AS OUTLINED ON THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE AND SCHEDULE A REVIEW OF SAID WORK ("WALK-THRU") TO DETERMINE THAT ALL ASPECTS OF WORK ARE COMPLETE. WORK MUST BE FULLY COMPLETED ACCORDING TO ALL DRAWINGS AND SPECIFICATIONS, AND MUST BE ACCEPTED BY THE OWNER IN WRITING PRIOR TO COMMENCEMENT OF THE MAINTENANCE PERIODS.

3.14 MAINTENANCE AND ACCEPTANCE

- A. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL AREAS INCLUDED IN THE CONTRACT DURING THE PROGRESS OF THE WORK, THROUGH THE ESTABLISHMENT PERIOD, AND UNTIL FINAL ACCEPTANCE OF THE WORK.
- B. THE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS FOR A PERIOD OF NINETY (90) CALENDAR DAYS AFTER APPROVAL OF COMPLETION AND NOTIFICATION IN WRITING OF THE START OF THE MAINTENANCE PERIOD. THE MAINTENANCE PERIOD SHALL INCLUDE THE FOLLOWING SCOPE OF WORK:

- DAILY WATERING OF ALL PLANT MATERIAL.
- REMOVAL OF ALL WEEDS FROM PLANTING AREAS.
- REPLACEMENT OF ANY DEAD, DYING OR DAMAGED TREES, SHRUBS, OR GROUNDCOVERS.
- RE-SEEDING OR RE-SODDING OF DEAD OR DAMAGED TURF AREAS AT TEN DAY INTERVALS.
- PROPER ADJUSTMENT AND MAINTENANCE OF THE IRRIGATION SYSTEM.
- FILLING RECOMPACTION, AND REPLANTING OF ANY ERODED OR SETTLED AREAS.
- WEEKLY REMOVAL OF ALL TRASH, LITTER, CLIPPINGS AND FOREIGN DEBRIS.
- MOWING OF LAWNS ON A WEEKLY BASIS.
- REMOVAL BY SHOVEL CUTTING OF LAWN WITHIN 1 FOOT OF THE BASE OF TREES OR SHRUBS LOCATED IN LAWN AREAS.
- DISEASE, INSECT AND RODENT PREVENTION AND CONTROL MEASURES.
- AT 30-DAYS AFTER COMPLETION OF PLANTING APPLY AMMONIUM PHOSPHATE AT THE RATE OF 5 LBS. PER 1,000 SQUARE FEET TO ALL PLANTING AREAS.
- AT 60-DAYS AFTER COMPLETION OF PLANTING APPLY 16-6-8 FERTILIZER AT THE RATE OF 6 LBS. PER 1,000 SQUARE FEET TO ALL PLANTING AREAS.

- C. ANY DAY THE CONTRACTOR FAILS TO ADEQUATELY WATER, REPLACE UNSUITABLE PLANTS, WEED, OR OTHER WORK OF THE MAINTENANCE PERIOD WILL NOT BE CREDITED TOWARDS THE COMPLETION OF THE PERIOD. PLANTS AND LAWNS WHICH DECLINE DUE TO LACK OF CONTRACTOR MAINTENANCE SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- D. PRIOR TO THE END OF THE MAINTENANCE PERIOD, AGAIN CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE TO SCHEDULE A FINAL REVIEW ("WALK-THRU"). THE OWNER MUST ACCEPT ALL MAINTAINED AREAS IN WRITING TO RATIFY THE END OF THE MAINTENANCE PERIOD.
- E. IF, DURING THE MAINTENANCE PERIOD, ON SITE OBSERVATIONS BY THE OWNER'S AUTHORIZED REPRESENTATIVE OR OWNER DETERMINE THAT PROPER MAINTENANCE PROCEDURES ARE NOT BEING FOLLOWED, THE CONTRACTOR WILL BE NOTIFIED IN WRITING. CORRECTIONS SHALL BE MADE WITHIN TWO WORKING DAYS OF NOTIFICATION, OR THE OWNER MAY ELECT TO EXTEND THE MAINTENANCE PERIOD BEYOND 90 DAYS, SUCH EXTENSION BEING EQUAL TO THE AMOUNT OF TIME REQUIRED TO CORRECT THE MAINTENANCE PRACTICES.

3.15 PROTECTION

- A. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WORK COVERED BY THIS SECTION FROM VANDALISM AND ACCIDENTAL DAMAGE. ANY DAMAGE SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- B. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WORK COVERED BY THIS SECTION FROM DAMAGE CAUSED BY FROST OR TORRENTIAL RAINS. ANY DAMAGE SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

3.16 GUARANTEE

- A. ALL SHRUBS, GROUND COVERS, LAWN AREAS AND 5 GALLON SIZE TREES OR LESS SHALL BE GUARANTEED AS TO GROWTH AND HEALTH FOR A PERIOD OF NINETY (90) DAYS AFTER FINAL ACCEPTANCE BY THE OWNER. 15 GALLON AND ALL BOX SIZED TREES AND LARGER SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER.
- B. PLANTS WHICH DIE OR LOOSE MORE THAN THIRTY PERCENT (30%) OF THEIR LEAF OR BRANCHING STRUCTURE SHALL BE REPLACED UNDER THIS SECTION.
- C. THE CONTRACTOR, WITHIN FOURTEEN (14) DAYS OF WRITTEN NOTIFICATION BY THE OWNER, SHALL REMOVE AND REPLACE ALL GUARANTEED PLANTS WHICH FOR ANY REASON FAIL TO MEET THE REQUIREMENTS OF THE GUARANTEE. ALL PLANT MATERIALS REPLACED SHALL BE GUARANTEED FOR THE ORIGINAL PERIOD, BEGINNING WITH THE DATE OF REPLACEMENT.

END OF SECTION

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TWO WORKING DAYS BEFORE YOU DIG

RECOMMENDED 2017

JIM GONDOS
LANDSCAPE INSPECTION SUPERVISOR

RECOMMENDED 2017



WEILAND DESIGN GROUP, INC.
LANDSCAPE ARCHITECTURE + PLANNING + CONSTRUCTION MANAGEMENT
CORPORATE OFFICE
28924 OLD TOWN FRONT ST. TEMECULA, CA 92590
P (844) WEILAND.XT.701
EMAIL - KLONIGRO@W-D-G.COM

PREPARED BY:
KIM LONIGRO

R.L.A. NO. 5508
DATE: 07/21/17

MARK		REVISIONS		BY	APPR. DATE
BENCH MARK:					

APPROVED	2017
CITY CIVIL ENGINEER	
REGISTERED CIVIL ENGINEER NO.	
DRAWN BY:	
CHECKED BY:	
RECOMMENDED BY:	

CITY OF SAN BERNARDINO PUBLIC WORKS/ENGINEERING	
<i>Landscape Maintenance District</i> FOR TRACT 16502	
FROM <i>Ohio Avenue to Magnolia Avenue</i>	
FOR CITY USE ONLY: FILE NO.	W.O. NO.

DRAWING NO.
LP-05
SHEET 12 OF
12 SHEETS

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