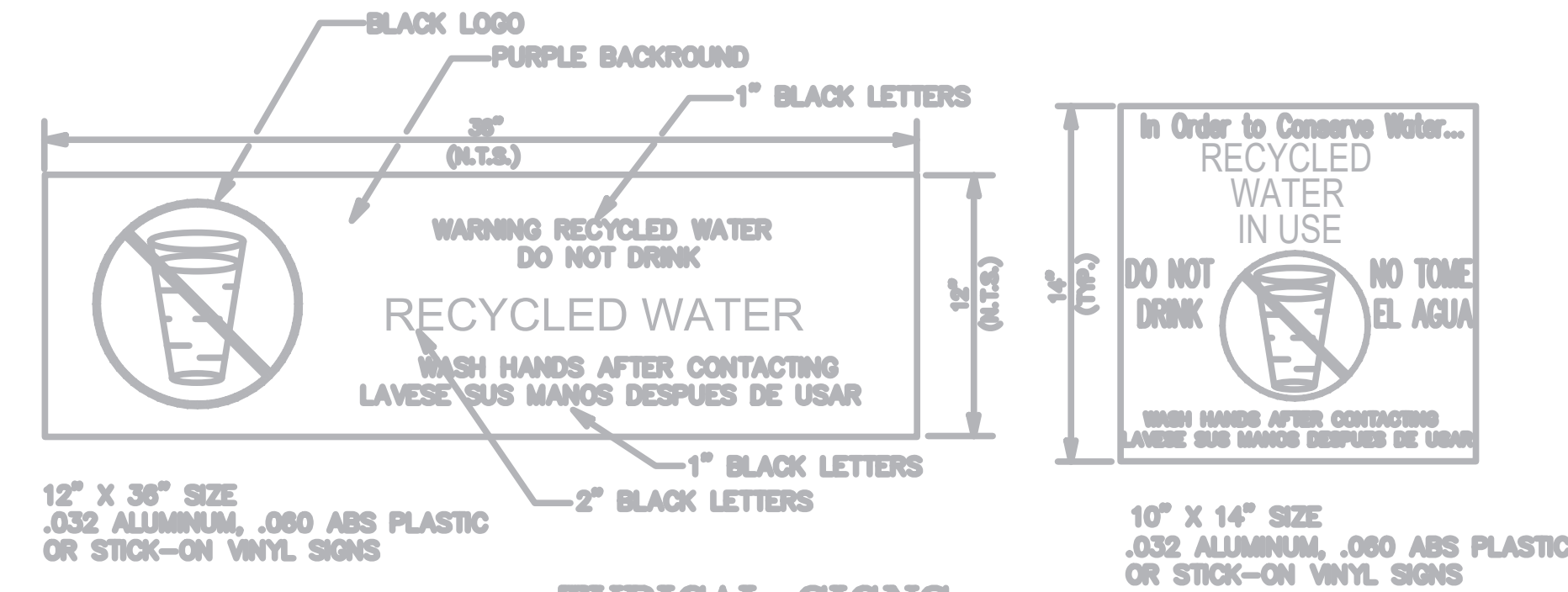


RECYCLED WATER STANDARD NOTES
COUNTY OF SAN DIEGO

- 48 hours prior to commencement of any excavation on site improvements, contractor shall notify Olivenhain Municipal Water District (OMWD), Engineering Department at (760) 632-4642.
- All work shall be done in accordance with the OMWD rules and regulations for reclaimed water use and distribution within OMWD and the San Diego County Department of Environmental Health requirements.
- All backflow preventer installations and locations shall be subjected to approval by the OMWD's water department.
- All public facilities such as comfort stations, drinking fountains, etc. shall be protected from spray and/or misting by reclaimed water.
- No ponding, runoff or overspray is permitted. Adjust all sprinkler heads to prevent overspraying onto sidewalks, streets and private lots.
- Hose bibs on reclaimed water systems are prohibited.
- On-site cross-connection between reclaimed water lines and potable is strictly prohibited.
- Quick coupling valves used in reclaimed water systems shall conform to the following:
 - Quick coupling valves shall be 1-inch nominal size Nelson #7645, with brass construction and a normal working pressure of 150 p.s.i. Or rainbird #44 np. Install quick couplers no closer than 200 feet o.c. And no closer than 100 feet to any hardscape or structure.
 - In order to prevent unauthorized use, the valve shall be operated only with a special quick coupler key with an acme thread for opening and closing the valve.
 - The cover shall be permanently attached to the quick- coupling valves. It shall be purple rubber or vinyl.
 - Locking covers are required.
- No substitution of pipe materials will be allowed without prior approval by OMWD.
- Install approved, metallic backed and stenciled warning tape over all pressure reclaimed water lines. Stencil and color code (Purple Pantone 522) all irrigation pipe. Orient the stenciling to the top of the trench.
- Provide a minimum of at least 18 inches of covering over all wiring and piping.
- Operate the irrigation system only between 10:00 pm and 6:00 am.
- When potable water lines and reclaimed water lines cross, the reclaimed line shall be installed within a protective sleeve. The sleeve shall extend 10 feet from each side, from the center line of potable line, for a total of 20 feet.
- Maintain a 10 foot horizontal separation between potable water and reclaimed water or sewer lines. Install sewer line below reclaimed water line and reclaimed water line below the potable water line.
- Provide a minimum of 12 inches of vertical separation between potable/reclaimed water/sewer.
- The site irrigation systems as shown on these documents will utilize potable water until such time as OMWD makes reclaimed water available to the site.
- Install purple colored pantone #522 material for all above ground irrigation facilities:
 - Valve and other on grade boxes - integral color
 - Backflow devices - painted 2 coats of enamel
 - Sprinkler heads - integral color plastic
- Tag all valves and other below grade facilities within boxes with permanent reclaimed water labels that id the facility as "RECLAIMED WATER - DO NOT DRINK" in both Spanish and English. Attach the label with either stainless steel wire or self locking plastic ties.
- The required cross connection test shall be done by either the OMWD and the San Diego County Department of Environmental Health. Copies of inspection reports will be forwarded to the non-inspecting party.
- The design locations proposed for reclaimed water "DO NOT DRINK" signs shall be called out on the plans.
- An annual cross connection control inspection will be done by OMWD subject to approval by the San Diego County Department of Environmental Health. Copies of the inspection reports will be forwarded to the non-inspection party.
- Prior to conversion to reclaimed water, an on-site supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property and with the basic specific requirements of reclaimed water systems. The designated "site supervisor" shall attend the County Water Authority's class for reclaimed water site supervisors. Copies of the site supervisor's certificate with a 24-hour contact number shall be provided to OMWD and the San Diego County Department of Environmental Health.
 - In case of emergency contact: Marvin Cohen at 760 415-8744
 - After hours contact: Marvin Cohen at 760 415-8744
- A physical separation shall be provided between adjacent areas of irrigation with recycled water and potable water. Separation shall be provided by concrete mow strips, chain fences or other means as approved by the water district and San Diego County Department of Environmental Health.
- Call out on the plans if there are or are not any drinking fountains and/or designated outdoor eating areas on the site.
- Non-designated use areas shall be protected from contact with reclaimed water, whether by windblown spray or by direct application through irrigation or other use. Lack of protection, whether by design, construction practice or system operations is strictly prohibited.
- The hours of irrigation with disinfected tertiary may be modified by the local authority. Irrigation during public use periods with the disinfected tertiary reclaimed water shall be under the supervision of the designated user supervisor. Irrigation with water of a lesser quality than disinfected tertiary reclaimed water shall be between the hours of 10:00 pm and 6:00 am.
- All public and private potable water mains including fire mains and any water wells and water courses within the reclaimed water project shall be shown on the plans.
- The developer/contractor shall conduct a cross-connection control test and coverage test as directed by the OMWD and/or the San Diego County Department of Environmental Health prior to any use of reclaimed water.
- Educate all maintenance personnel on a continuous basis of the presence of recycled water. Personnel must be informed that reclaimed water is meant for irrigation purposes only, and is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry, it is important this information be disseminated on an almost daily basis.



TYPICAL SIGNS

UNAUTHORIZED CHANGES & USES

The landscape architectural firm preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.

MAINTENANCE

Client is solely responsible for maintenance in all areas such as, but not limited to, tree pruning & maintenance, maintenance of the irrigation system to avoid over spray onto structures, water runoff or soil saturation that may result in damage to property, persons, or plants. Client is solely responsible for the results of any lack of or improper maintenance.



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

LANDSCAPE PLANS PREPARED FOR:

OMWD
Courtyard Gardens
1966 Olivenhain Road
ENCINITAS, CALIFORNIA

SHEET INDEX:

TITLE SHEET	L-1
IRRIGATION PLAN COURTYARDS	L-2
IRRIGATION DETAILS	L-3
IRRIGATION SPECIFICATIONS	L-4
PLANTING PLAN COURTYARDS	L-5
PLANTING DETAILS AND SPECS.	L-6

Sequencing and Duration:

- Boardroom Courtyard (Courtyard 1) to be completed first within 8 weeks of NTP. Central Lunchroom Courtyard to be completed within 4 weeks following completion of Board Courtyard.
- All concrete pours to be completed on weekends and non-office hours to avoid conflicts with office operations.

PREPARED FOR:

Olivenhain Municipal Water District
1966 Olivenhain Road
Encinitas, CA, 92024
PH: 760.753.6466

PREPARED BY:

CALIFORNIA LANDSCAPE TECHNOLOGIES
3685 Vista Campana N. Unit 41
Oceanside, CA 92057
PH: 760.809.3241

SEE EXISTING LANDSCAPE IRRIGATION
PLANS: LRWS-2018-001010 SHEETS 12 TO
21 FOR ADJOINING AREAS.

	08/31/2022
Lindsey Stephenson, P.E. OMWD Engineering Manager	Date RCE No. 80453

SIGNAGE NOTES

THE FOLLOWING GUIDELINES FOR THE USE OF RECYCLED WATER ARE TO BE PERMANENTLY POSTED INSIDE THE DOOR OF EACH CONTROLLER WHERE THEY ARE EASILY VISIBLE. PLACE ON 8-1/2" x 11" SIZED SIGN.

COLOR: PURPLE BACKGROUND WITH BLACK LETTERING.

1. GUIDELINES FOR RECYCLED WATER USE.

- IRRIGATE BETWEEN THE HOURS OF 10:00 P.M. AND 6:00 A.M. ONLY. WATERING OUTSIDE THIS TIME FRAME MUST BE DONE MANUALLY WITH QUALIFIED SUPERVISORY PERSONNEL ON-SITE. NO SYSTEM SHALL AT ANY TIME BE LEFT UNATTENDED DURING USE OUTSIDE THE NORMAL SCHEDULE.
- IRRIGATE IN A MANNER THAT WILL MINIMIZE RUN-OFF, POOLING, AND PONDING. THE APPLICATION RATE SHALL NOT EXCEED THE INFILTRATION RATE OF THE SOIL. TIMERS MUST BE ADJUSTED SO AS TO BE COMPATIBLE WITH THE LOWEST SOIL INFILTRATION RATE PRESENT. THIS PROCEDURE MAY BE FACILITATED BY THE EFFICIENT SCHEDULING OF THE AUTOMATIC CONTROL CLOCKS, (I.E., EMPLOYING THE REPEAT FUNCTION TO BREAK UP THE TOTAL IRRIGATION TIME INTO CYCLES THAT WILL PROMOTE MAXIMUM SOIL ABSORPTION).
- ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE PATIOS AND LOTS, AND STREETS AND SIDEWALKS.
- MONITOR AND MAINTAIN THE SYSTEM TO MINIMIZE EQUIPMENT AND MATERIAL FAILURE. BROKEN SPRINKLER HEADS, LEAKS, UNRELIABLE VALVES, ETC., SHOULD BE REPAIRED AS SOON AS THEY BECOME APPARENT.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR EDUCATING EACH EMPLOYEE AND ALL MAINTENANCE PERSONNEL ON A CONTINUOUS BASIS, REGARDING THE PRESENCE OF RECYCLED WATER. MAINTENANCE PERSONNEL MUST BE INFORMED THAT WATER IS FOR IRRIGATION PURPOSES ONLY AND IS NOT APPROVED FOR DRINKING OR FOR HAND AND TOOL WASHING, ETC.
- OBTAIN PRIOR APPROVAL OF ALL PROPOSED CHANGES AND MODIFICATIONS TO ANY PRIVATE ON-SITE FACILITIES. SUCH CHANGES MUST BE SUBMITTED TO, AND APPROVED BY, THE DISTRICT ENGINEERING OFFICE AND DESIGNED IN ACCORDANCE WITH DISTRICT STANDARDS.
 - ALL RECYCLED WATER SPRINKLER CONTROL VALVES SHALL BE TAGGED WITH IDENTIFICATION TAGS.
 - TAGS SHALL BE WEATHERPROOF PLASTIC, 3"x 4", PURPLE IN COLOR, WITH THE WORDS "WARNING RECYCLED WATER - DO NOT DRINK" IMPRINTED ON ONE SIDE, AND "AVISO AGUA IMPURA - NO TOMAR" IMPRINTED ON THE OTHER SIDE. IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS AS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.
 - ONE TAG SHALL BE ATTACHED TO EACH VALVE AS FOLLOWS:
 - ATTACH TO VALVE STEM DIRECTLY OR WITH PLASTIC TIE-WRAP OR
 - ATTACH TO SOLENOID WIRE DIRECTLY OR WITH PLASTIC TIE-WRAP OR
 - ATTACH TO VALVE COVER WITH EXISTING VALVE COVER BOLT.
 - ALL SPRINKLER HEADS SHALL BE IDENTIFIED AS RECYCLED WATER SPRINKLER HEADS.
- EACH AUTOMATIC CONTROLLER AND ITS ASSOCIATED EQUIPMENT SHALL BE IDENTIFIED WITH A SIGN BEARING THE WORDS "RECYCLED WATER USED FOR IRRIGATION IN ENGLISH AND SPANISH WITH BLACK LETTERS 1" HIGH ON A PURPLE BACKGROUND. THE SIGN SHALL BE PLACED SO THAT IT CAN BE READILY SEEN BY ANY OPERATIONS PERSONNEL UTILIZING THE EQUIPMENT.

INSPECTION PROCEDURES

1. DISTRICT CONSTRUCTION INSPECTION SHALL INCLUDE:

- REQUIRED SEPARATION BETWEEN POTABLE AND RECYCLED WATER LINES (HORIZONTALLY AND VERTICALLY).
- PIPE IDENTIFICATION.
- SLEEVING AT CROSSINGS.
- APPROPRIATE MATERIALS AND MARKINGS, INCLUDING PROPER QUICK COUPLERS.

AN APPROVAL LETTER REGARDING THE INSPECTION OF THE PROJECT SHALL BE OBTAINED FROM THE CITY AND THE DISTRICT, AND BE FORWARDED TO THE COUNTY HEALTH DEPARTMENT PRIOR TO FINAL INSPECTION APPROVAL.

2. DISTRICT FINAL INSPECTION SHALL INCLUDE:

- SIGNAGE INSTALLED PER PLAN.
- CONTROLLER STICKERS.
- TAGGING OF VALVES.
- COVERAGE TEST AFTER COMPLETION OF THE SPRINKLER SYSTEM TO ENSURE PROTECTION OF AREA NOT APPROVED FOR RECYCLED WATER USE.
- ALL ASPECTS OF THE IRRIGATION CONDITIONS INCLUDING WINDBLOWN SPRAY, RUNOFF, AND PONDING.
- REQUIRED PROTECTION OF ALL RESIDENTIAL AREAS.
- REQUIRED PROTECTION OF WELLS, STREAMS, RESERVOIRS, ETC.
- CROSS-CONNECTION TEST IF REQUIRED.
- COLOR CODED, LAMINATED CHARTS INSIDE EACH CONTROLLER.

3. ANNUAL INSPECTION SHALL INCLUDE:

- A COMPLETE INSPECTION THAT WILL COVER A-I OF THE DISTRICT FINAL INSPECTION.

REVISIONS MUST BE APPROVED BY PUBLIC HEALTH ENGINEER, CITY ENGINEER AND DISTRICT ENGINEER PRIOR TO IMPLEMENTATION IN FIELD.

INSPECTION PROCEDURES:

INSPECTION OF THE PROJECT SHALL BE PERFORMED BY THE LANDSCAPE ARCHITECT OF THE WORK, OR HIS DESIGNATED AGENT. REFER TO THE SPECIFICATIONS FOR THE SCHEDULE OF REQUIRED INSPECTIONS AND REQUIRED SUBMITTALS. FOLLOWING COMPLETION OF THE WORK, THE LANDSCAPE ARCHITECT OF THE WORK WILL CERTIFY THAT THE INSTALLATION HAS BEEN COMPLETED BY SUBMITTING THE "CERTIFICATION OF COMPLETION" FORM. A REQUEST FOR A FINAL LANDSCAPE INSPECTION BY THE CITY MUST ALSO BE MADE BY CALLING THE INSPECTION REQUEST LINE. FAX THE "CERTIFICATION OF COMPLETION" FORM TO (760) 944-8943. LANDSCAPE INSPECTION REQUEST PHONE LINE: (760) 602-4602.

APPROVED FOR IRRIGATION AND
PLANTING ONLY, INCLUDING PRECISE
LOCATION OF PLANTING AREA

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION

ENVIRONMENTAL HEALTH SPECIALIST

OLIVENHAIN MUNICIPAL WATER DISTRICT
Recycled Water System Approval

DATE

Note: Signature expires 2 years after signing date.

DECLARATION OF RESPONSIBLE CHARGE:

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

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

THESE PLANS HAVE BEEN PREPARED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED LANDSCAPE CONCEPT PLAN, WATER CONSERVATION PLAN, FIRE PROTECTION PLAN, AND ALL CONDITIONS OF APPROVAL RELATED TO LANDSCAPING.

FIRM NAME & ADDRESS:
STEVEN L. SHERMAN, PLA, CLIA

CALIFORNIA LANDSCAPE TECHNOLOGIES

3685 Vista Campana N. Unit 41, Oceanside, CA 92057

PHONE NO: (760) 809-3241
REGISTRATION NO: 2887 EXPIRATION DATE: 6-30-24



REVISIONS	BY
8-36-22 REV	



3685 Vista Campana
Unit 41, Oceanside
CA 92057
760.809.3241

SPECIAL GARDEN PROJECTS

OMWD OFFICES, ENCINITAS, CALIFORNIA

TITLE SHEET COURTYARD GARDENS

DRAWN
CHECKED
DATE 8-3-22
SCALE
JOB NO. 032-22-OMWD
SHEET L-1
OF 6 SHEETS

REVISIONS	BY
B-36-22 REV	



landscape
architecture
irrigation design
3685 Vista Campana
Unit 41, Oceanside
CA 92057
760.809.3241

SPECIAL GARDEN PROJECTS

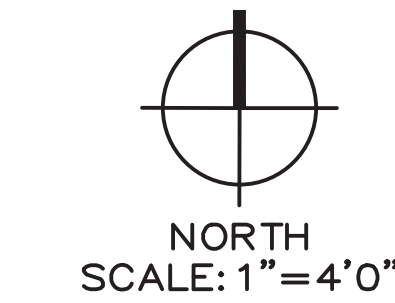
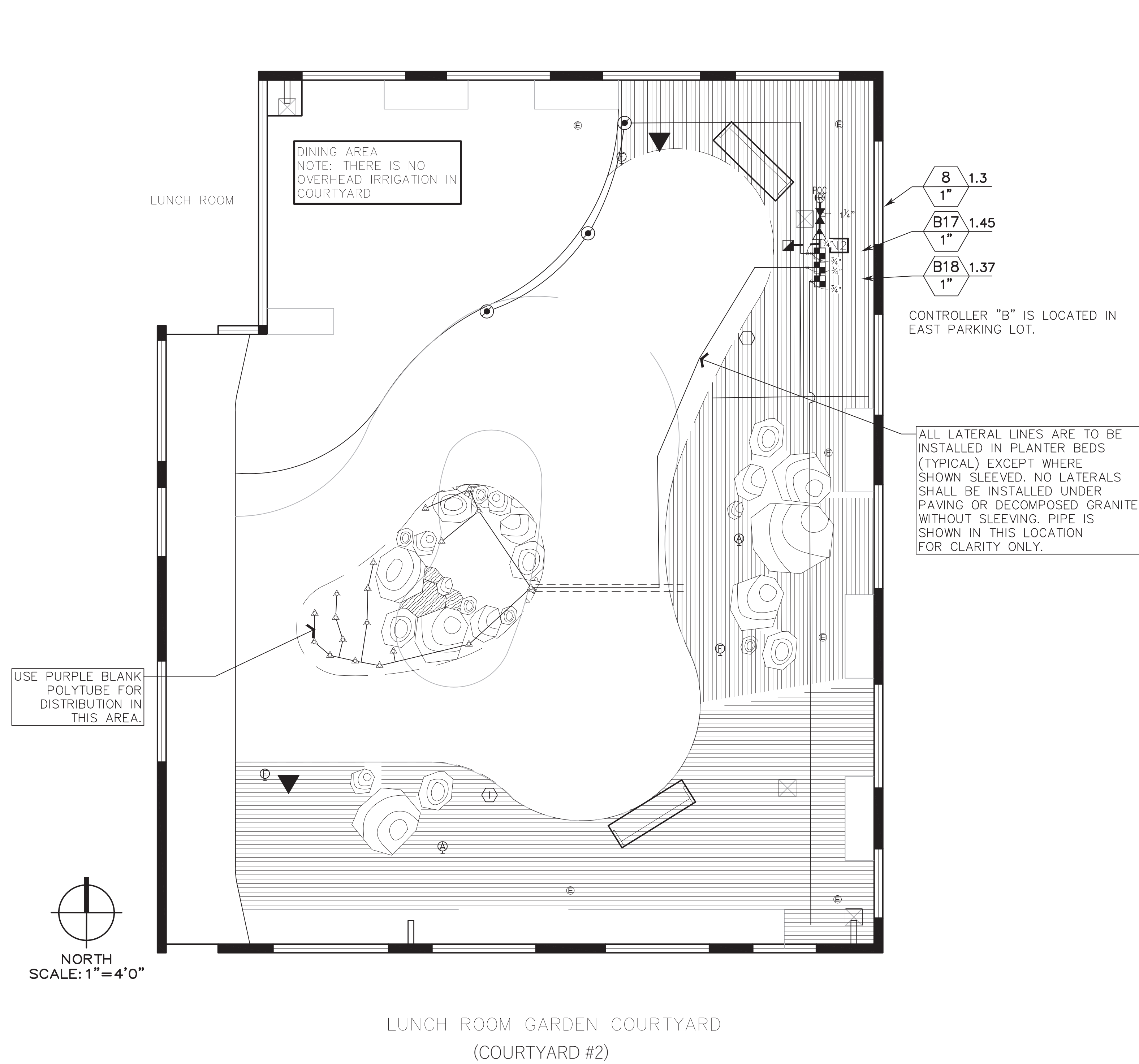
OMWD OFFICES, ENCINITAS, CALIFORNIA

COURTYARD IRRIGATION PLAN

DRAWN
CHECKED
DATE 8-3-22
SCALE 1" = 4'-0"
JOB NO. 032-22-OMWD
SHEET

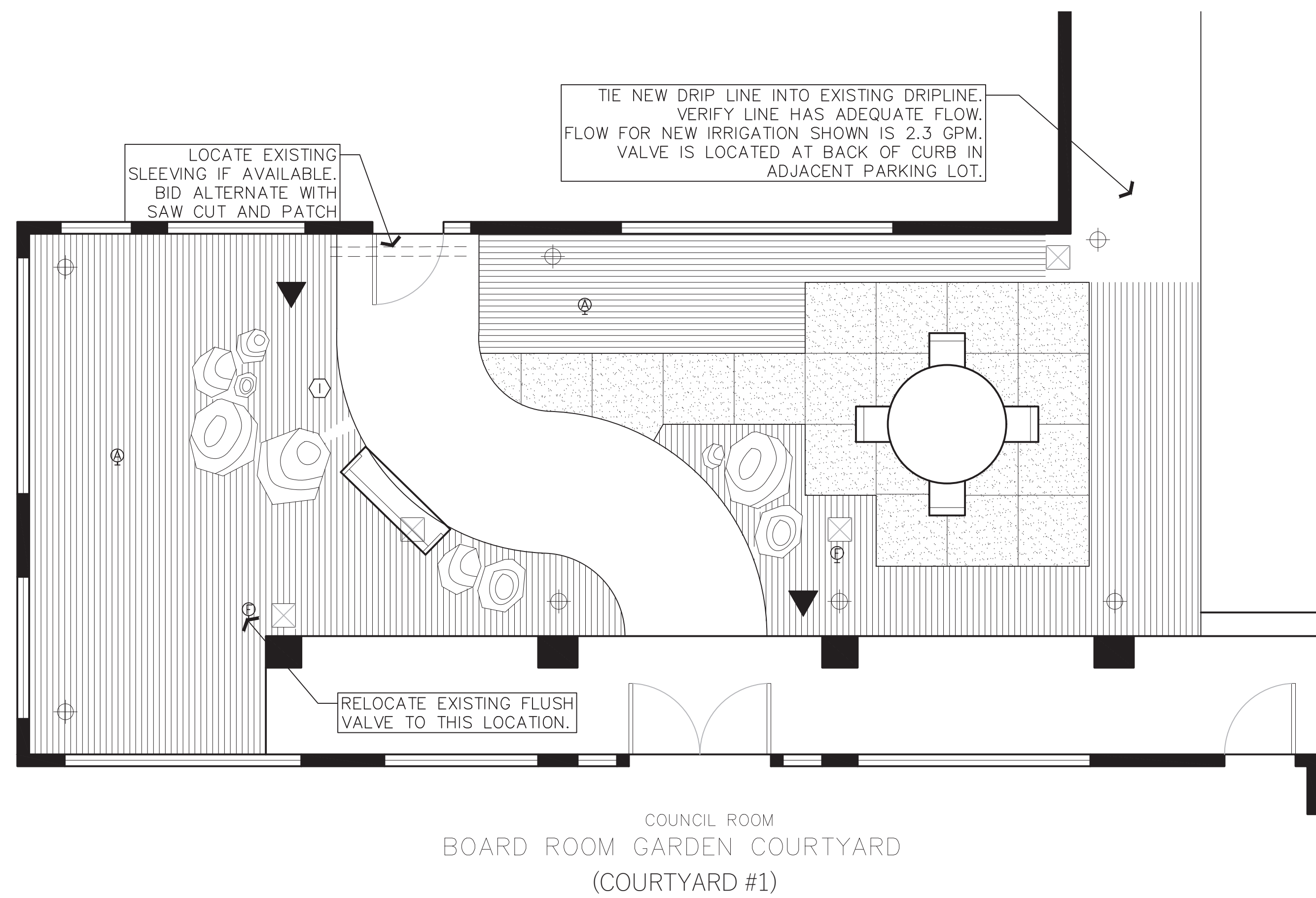
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OF 6 SHEETS



USE PURPLE BLANK
POLYTUBE FOR
DISTRIBUTION IN
THIS AREA.

LUNCH ROOM GARDEN COURTYARD
(COURTYARD #2)

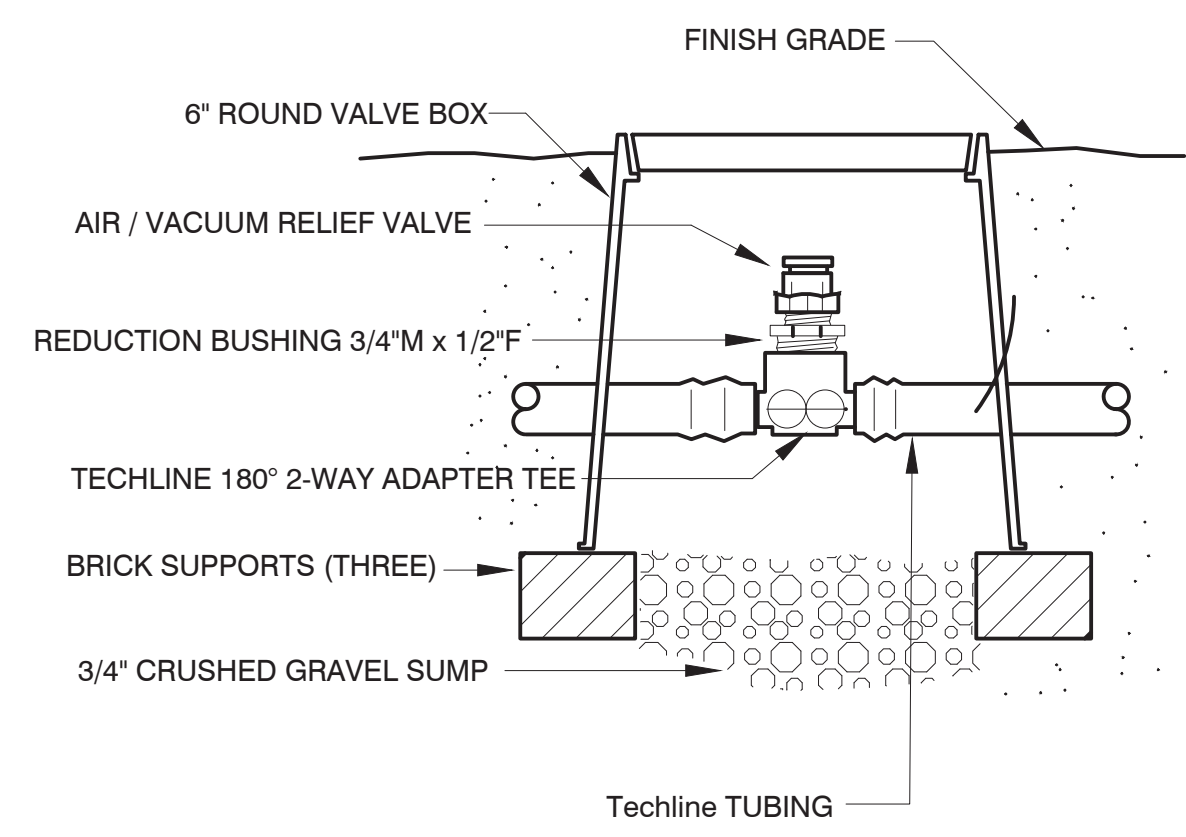
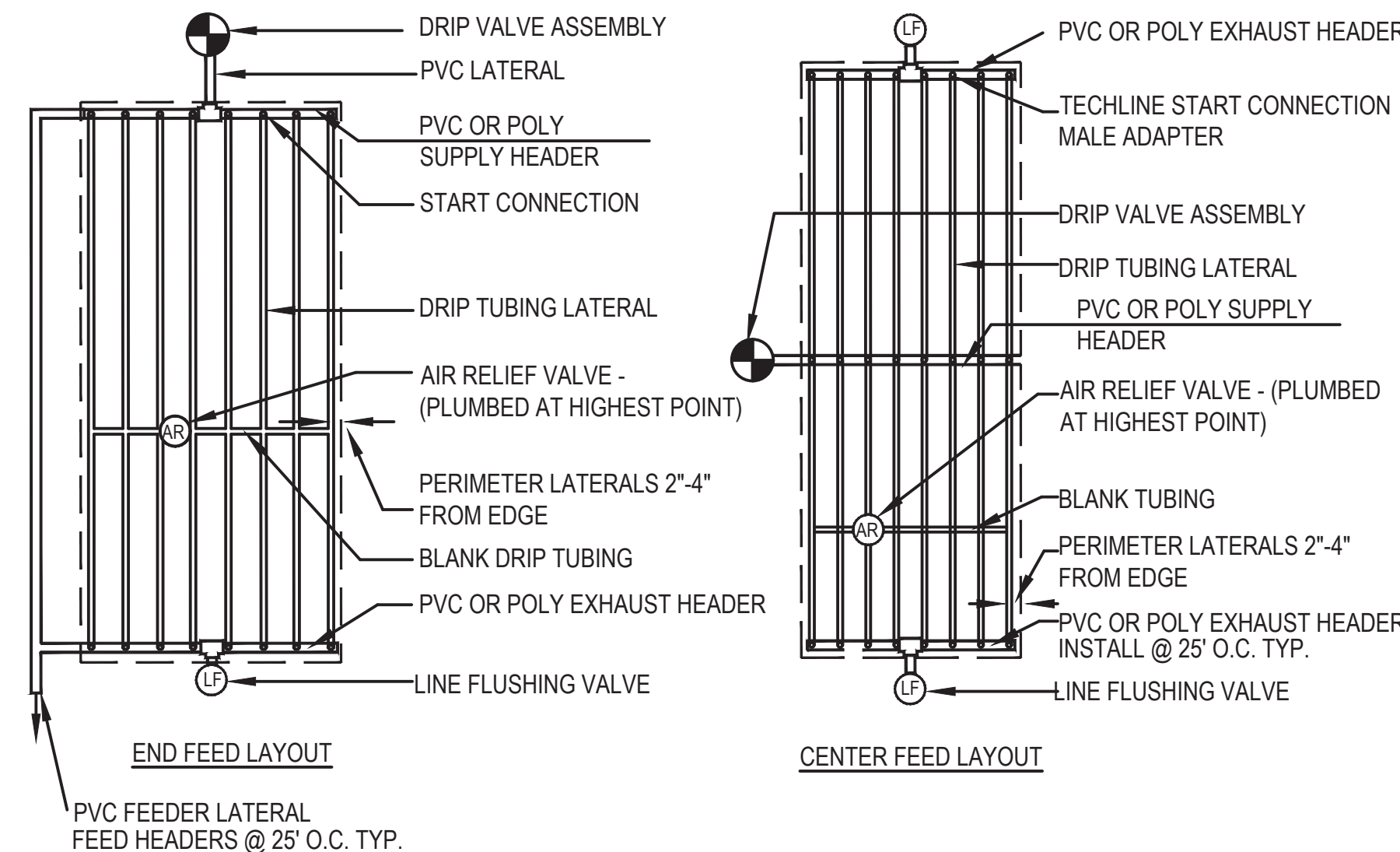
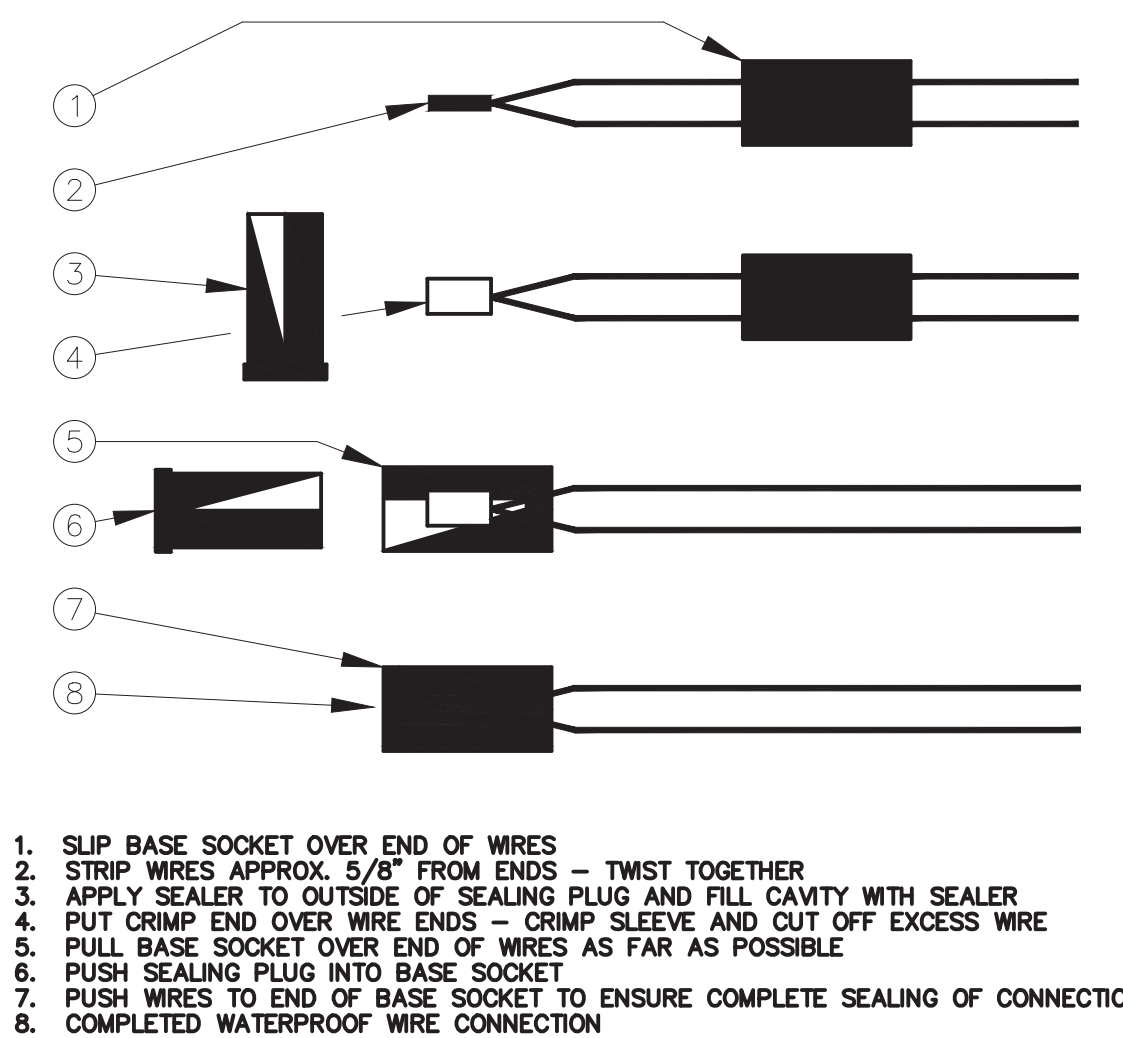
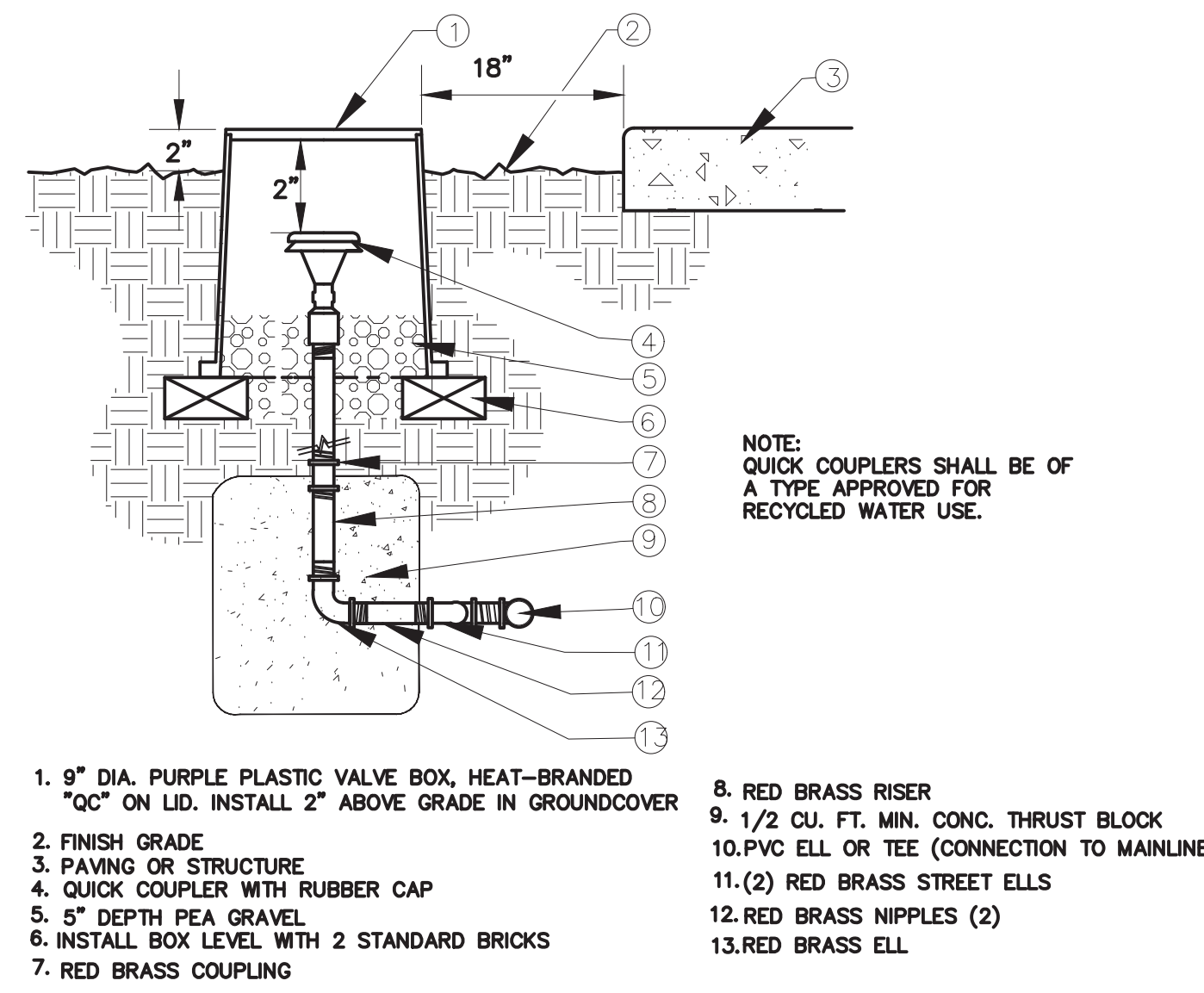
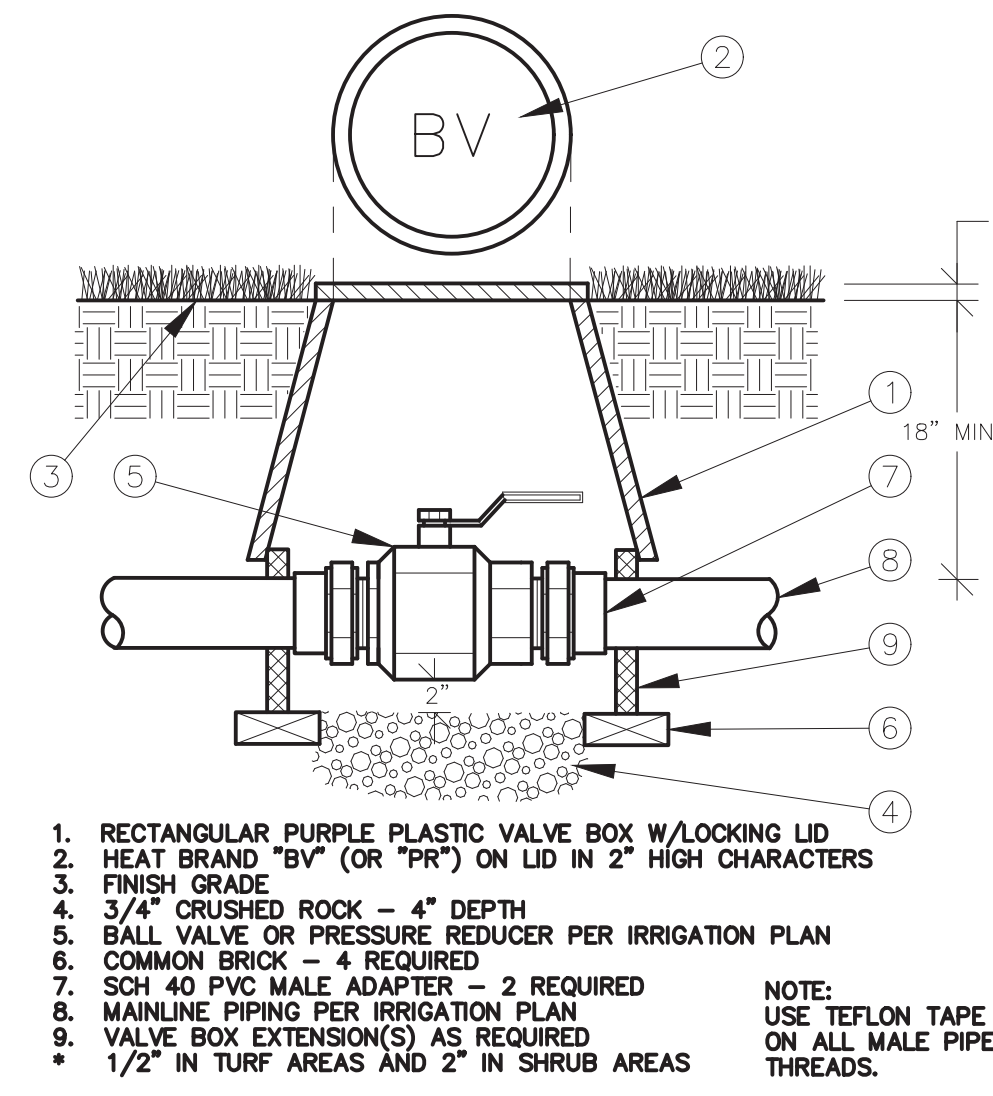
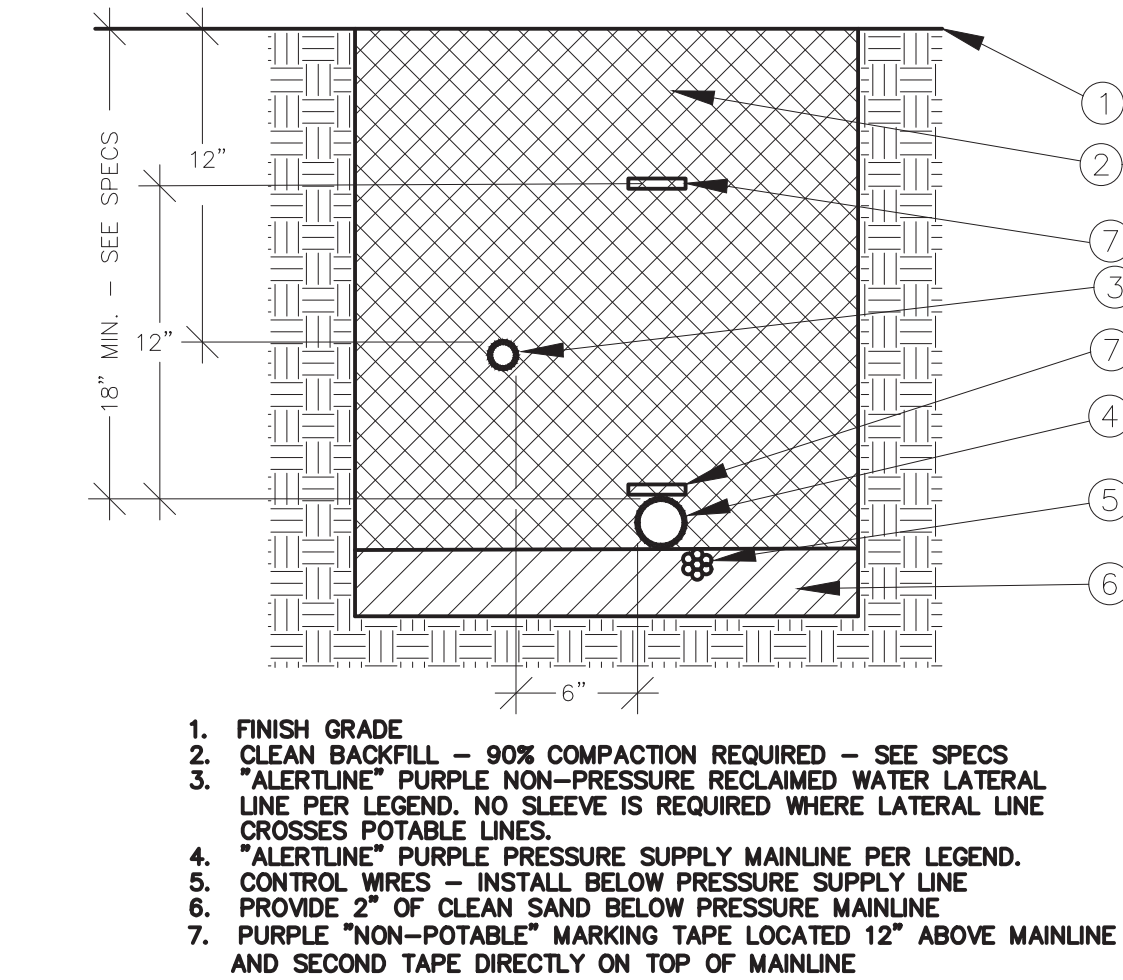
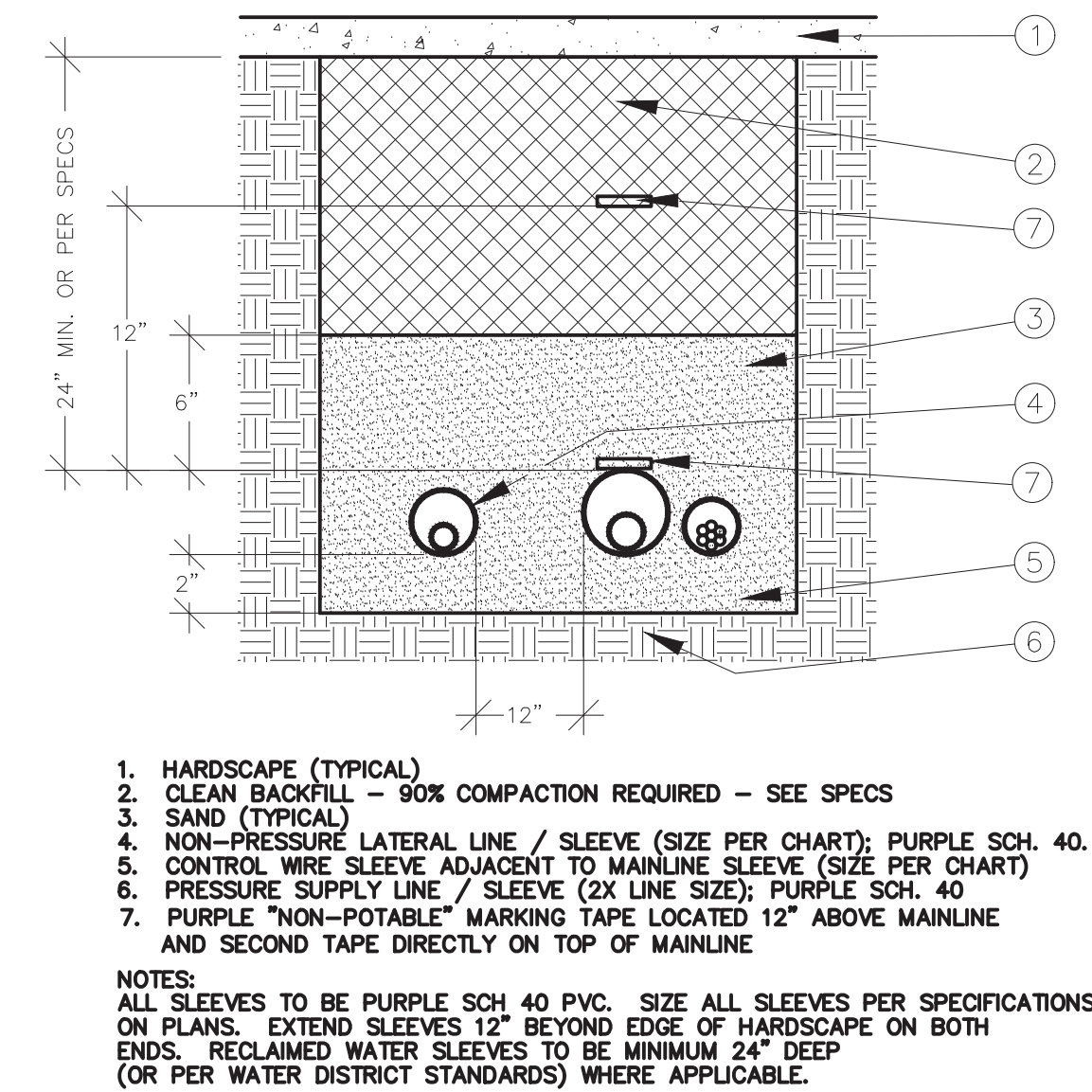
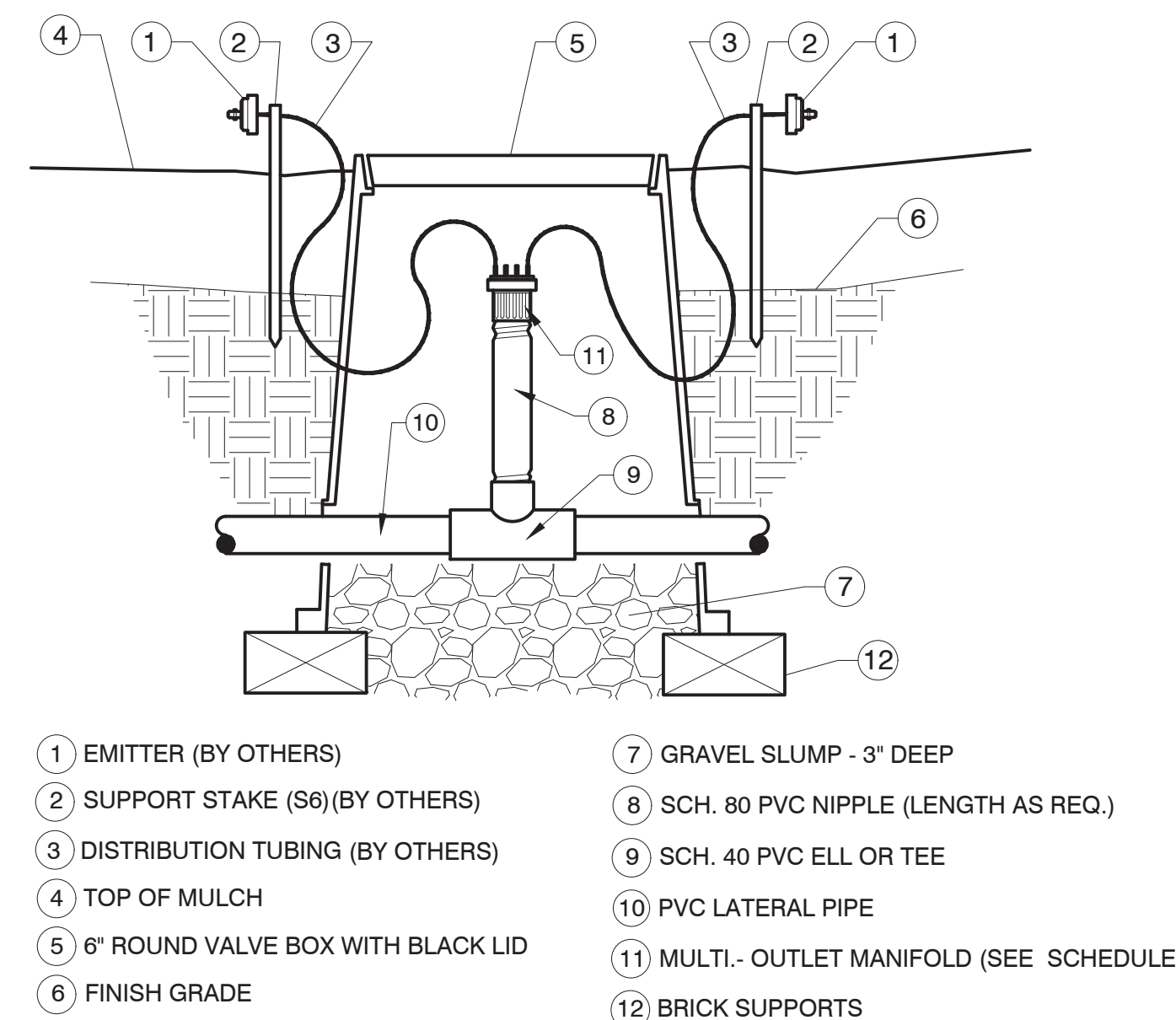
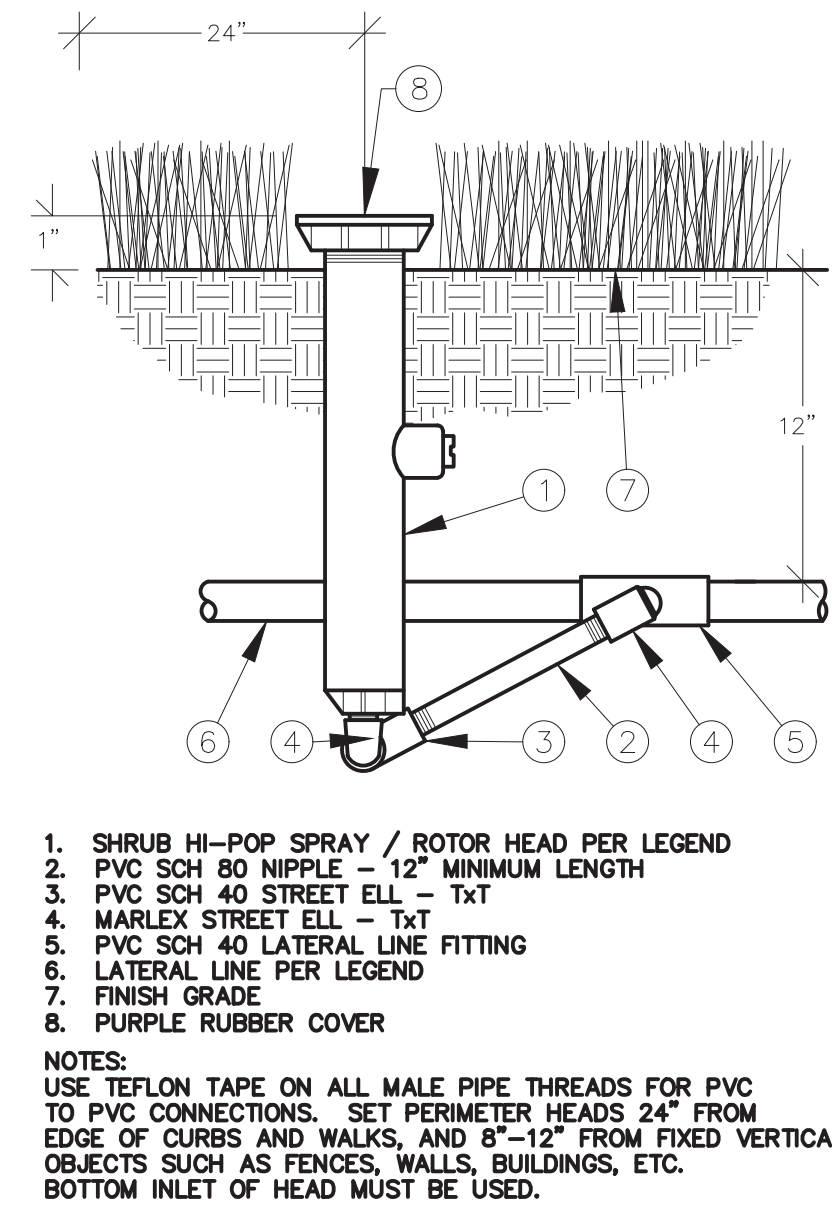
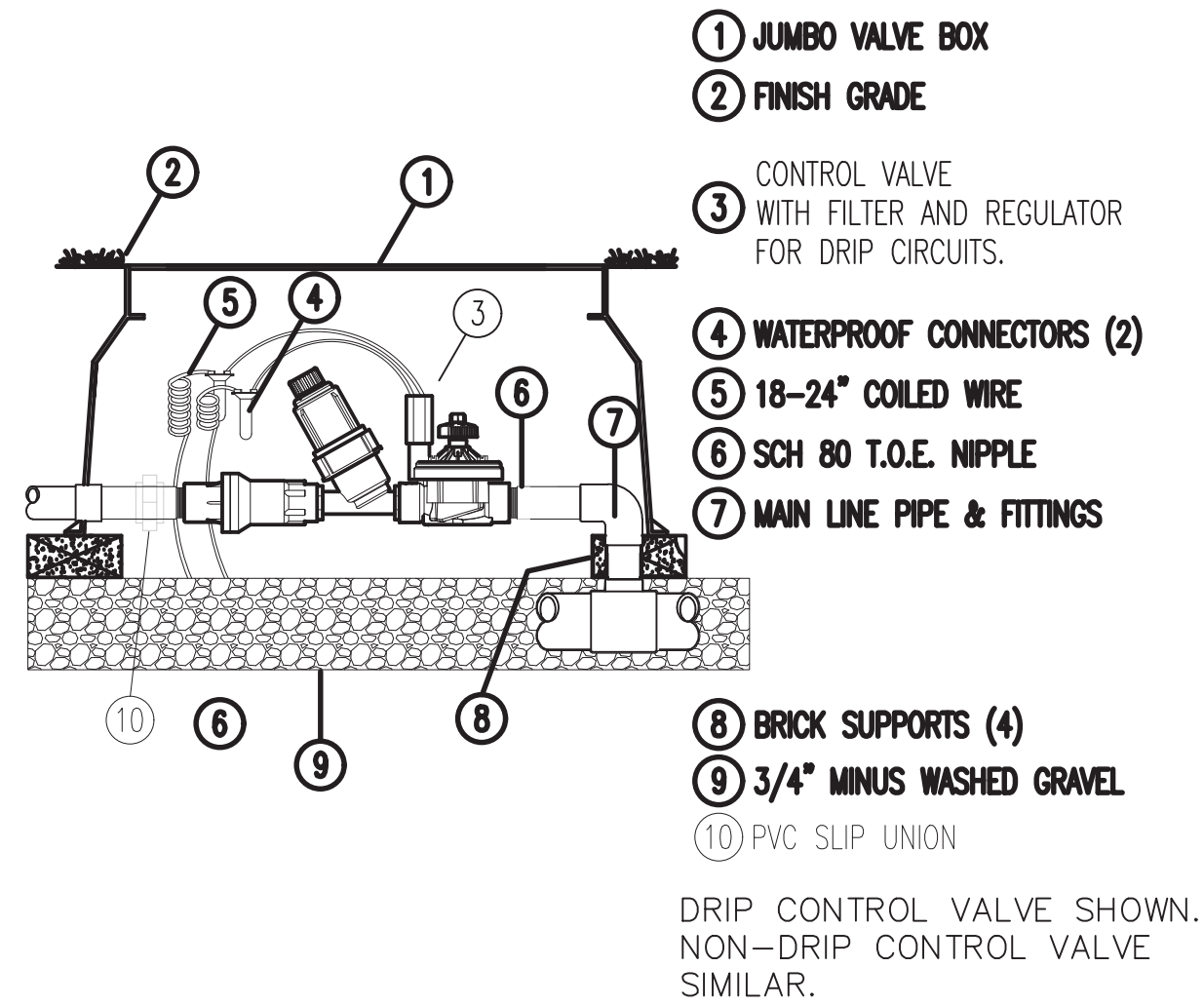


COUNCIL ROOM
BOARD ROOM GARDEN COURTYARD
(COURTYARD #1)

IRRIGATION SCHEDULE COURTYARDS

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
■	Hunter PCZ-101-25 Drip Control Valve Kit. 1" PGV globe valve with 1" HY100 filter system. Pressure Regulation: . Flow range: 0.5 GPM to 15 GPM. 150 mesh stainless steel screen.
●	Pipe Transition Point in Drip Box Pipe transition point from PVC lateral to riser in 8" drip box. Install Rain Bird EMT-6XERI. For future installation of drip for future pots.
⊕	Netafim TLFV-1 Automatic Flush Valve, with Insert Inlet
⊗	Netafim TLAVRV Air/Vacuum relief valve, 1/2" male pipe thread.
①	Hunter ECO-ID ECO-ID: 1/2" FPT connection with 12 psi-70 psi operating pressure. Specify with Hunter SJ swing joint.
△	Hunter HE-B Point-Source Emitter Point Source Drip Emitter with Self Piercing Barb. Color coded emitters for flow rates of 0.5 GPH, 1.0 GPH, 2.0 GPH, 4.0 GPH, and 6.0 GPH. Can be inserted into 1/2" and 3/4" tubing and have pressure compensating from 15 PSI-50 PSI. Optional diffuser cap (HE) available.
■	Area to Receive Dripline Netafim 08WRAM-06-18 Bioline Pressure Compensating Landscape Dripline w/Purple Color Tubing for Non-Potable Water Applications. 0.6 GPH emitters at 18" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. Reclaimed Water Use Only.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
■	Buckner-Superior QB44AT-NP 1" Brass Quick Coupling Valve. Two-Piece, ACME Thread with Locking Purple Non-Potable Tuff Top Lid for Reclaimed Water Use. Install in round 8" purple RW valve box per details.
⊕	Landscape Products Inc. BBV 1-1/4" Full Port Brass Ball Valve. Install in purple RW valve box with pressure reducer per details.
△	Apollo Valves 3610601 Pressure reducing valve, single union NPT connection, size 1-1/4", 25-75 psi pressure range, bronze ASTM B584 body. Install in Purple RW valve box with shut off valve. Pressure downstream required is 40.13 PSI
POC 1"	Point of Connection 2" Recycled Water. Provide new connection to existing 2" mainline located approximately 10' from parking and running east/west. Verify mainline location in field with OMWD representative.
—	Irrigation Lateral Line: PVC Schedule 40 Purple Pipe for RW Water
- - - - -	Irrigation Mainline: PVC Schedule 40 Purple Pipe for RW water.
- - - - -	Pipe Sleeve: PVC Schedule 40 Purple Pipe for RW water
Valve Callout # • # • # • # •	Valve Number Valve Flow Valve Flow Valve Size
▼	Recycled Water Do Not Drink Signage. Two per courtyard.



REVISIONS	BY
8-36-22 REV	

CALIFORNIA

LANDSCAPE TECHNOLOGIES
landscape architecture
irrigation design
3685 Vista Campana
Unit #1, Oceanside
CA 92057
760.809.3241

SPECIAL GARDEN PROJECTS

OMWD OFFICES, ENCINITAS, CALIFORNIA

COURTYARD IRRIGATION DETAILS

DRAWN
CHECKED
DATE 8-3-22
SCALE
JOB NO. 032-22-OMWD
SHEET
L3

OF 6 SHEETS

IRRIGATION SPECIFICATIONS

1. Irrigation plan is diagrammatic. Irrigation design assumes no deviation in grading, paving and/or planting plan layout from actual field conditions. All new irrigation equipment shall be located in planting areas only unless noted otherwise. All new equipment shall be installed as shown in the details and as noted in these specifications. Contractor shall be responsible for reviewing planting and irrigation plan layout against actual graded field conditions prior to commencement of work. Any deviations in actual field conditions from those shown on irrigation plan shall be brought to the attention of the Landscape Architect prior to commencement of Work. Contractor shall be responsible for the cost of replacing and/or modifying any irrigation equipment installed where field conditions differ from those shown on planting and/or irrigation plans when said installation has not been approved in advance by Owner or Landscape Architect.

2. Contractor shall keep the premises clean and free of excess equipment, materials and rubbish incidental to work covered under this section.

3. PVC Specifications:

A. All risers shall be P.V.C. Schedule 80.

B. All pipe fittings shall be P.V.C. Schedule 40.

C. All mainline pipe 1-1/2" or less shall be purple P.V.C. Schedule 40;

D. All lateral pipe shall be P.V.C. purple Sch. 40 (minimum 3/4 inch).

G. All sleeves shall be Purple PVC Schedule 40.

4. Contractor shall install pressure regulator to provide correct operating pressure to heads on each circuit.

5. Contractor shall adjust pressure regulators at backflow preventer and flow at valves to provide correct operating volume and pressure to heads on each circuit.

6. Contractor shall install new controller(s). New automatic controller shall be size and type as noted and installed as indicated on irrigation plan or where directed by Owner. Controller shall be installed per manufacturer's instructions. Interior courtyard shall utilize existing controller "B". Wires have been provided and are stubbed up at POC. Test wires for continuity prior to installation.

7. Wire Specifications:

A. Contractor shall install new wire from controller to valves. All new wire shall be 14-gauge ANG-UF, direct burial type. A red wire shall be provided for each valve station including extra wire. Common wire shall be white. Wire runs are to be continuous from controller to valve with splices at valves only. Splices and connections shall be made with pen-tite connectors or equivalent and shall be placed in valve box.

B. All wires shall be installed with twelve inches (12") of excess wire (coiled) at the end of each wire run and at ninety degree changes in direction.

C. Control wire shall be laid eighteen inches (18") deep. Control wire shall be bundled and placed beneath mainline where possible, taped to mainline at ten feet (10') on center.

8. All automatic control valves shall be of size and type noted in legend. Valve manifold shall be connected off of a single tee on the mainline except at the end of the mainline run. Valves shall be set a minimum of eight inches (8") apart to allow servicing. Valve shall be tagged with controller letter and valve number permanently marked on plastic tag. Install plastic "Do Not Drink" tag on valve per detail.

9. One (1) valve shall be installed in each box. Valve boxes shall be purple in color and rectangular and shall be located within shrub planter beds (wherever possible) and shall be set flush with the mow curb, or a minimum of twelve inches (12") away from any other hardscape or structure. Valve box shall be large enough to accommodate servicing valves.

10. All pressure mainlines shall be eighteen inches (18") deep and all PVC laterals shall be twelve inches (12") deep. Trench backfill shall be free of any material that may damage irrigation pipe or equipment including rocks in excess of one inch (1") in diameter. In the event of backfill settlement, Contractor shall perform required repairs at his own cost. Avoid cutting roots over 6" in diameter. Trench over or under such roots. Protect existing trees to the greatest extent possible when trenching.

11. Design assumes point of connection at new one-inch (1") reclaimed irrigation mainline. Contractor shall contact OMWD contact or Landscape Architect if service line or water meter size does not meet requirements noted above.

12. All mainline, wiring and lateral lines shall be sleeved with purple PVC Schedule 40 two and one half (2x) times the diameter of the sleeved line where it passes under paved areas or through walls. (See Sleeving Detail). Irrigation Contractor shall coordinate with Concrete and A.C. Paving Contractor to ensure all sleeving is set prior to concrete pours and D.G. placement. Contractor is to locate and utilize existing sleeves under walks, if available. Under no circumstances shall new irrigation lines be installed under D.G. or concrete without sleeving.

13. Check valves shall be used where indicated and wherever necessary to prevent water flow from lower elevation heads when system is turned off, including dripper lines.

14. Prior to backfilling irrigation trenches, the following procedures shall be implemented:

A. All mainlines in the system shall be capped and pressure tested at 125 psi for a period of four (4) hours. Any leaks found shall be corrected by removing the leaking pipe or fittings and installing new material in its place.

B. Contractor shall not allow nor cause any of his work to be covered until it has been inspected, tested and approved by the builder/Owner's authorized representative.

15. Irrigation Contractor shall adjust all heads and nozzles to provide even coverage to all planter areas and to keep spray off buildings, walkways, walls and drives. Under no circumstance shall over spray be allowed onto buildings, walls, fences or hardscape. This includes, 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.

16. Sprinkler Coverage Test: When installation of the irrigation system is completed and prior to planing, the Contractor, in the presence of the Owner, shall perform a coverage test of water to ensure it is complete and adequate. Contractor shall furnish all materials and perform all work required to correct any inadequacies of coverage at his own cost. Operational Test: The entire irrigation system shall be under full automatic operation for a period of seven (7) days prior to start of planting work. Request presence of Engineer in writing at least 48 hours in advance of testing.

17. Contractor shall furnish to Owner a complete "As Built" drawing of new and existing equipment installed showing exact size, type, and dimensioned locations of the following items:

A. Point of Connection

B. Ball Valves

C. Quick Couplers

D. Control Valves

E. Controllers

F. Mainline

G. Controller Wire

H. Sleeving

18. The "As Built" drawing shall be prepared in accordance with Section 01300

19. Contractor shall also provide a reduced "As Built" drawing (maximum 11x17 size), color-coded, showing areas irrigated by each station. This plan shall be encased in plastic upon Owner's approval of drawing. Contractor shall also provide irrigation programming chart. These are to be delivered on or before final inspection. Final As Built plans will be required to be reviewed, approved, and signed by the Owner prior to release of securities.

20. Irrigation Contractor shall maintain the system for a period of sixty (60) days upon Owner acceptance of construction completion and shall water as required to establish new plant material.

21. Contractor shall provide controller keys and manuals, one (1) quick coupler key with hose swivel, and an additional quantity of six of each nozzle type used to Owner at turnover.

22. Irrigation Contractor shall guarantee in writing the entire newly installed irrigation system to be free of defects in workmanship and materials for a period of two (2) years from final acceptance from the Owner. Contractor shall repair and replace defects in materials and workman ship at no additional cost to the Owner. Contractor shall repair and replace within 72 hours after receipt of written notice.

IRRIGATION OPERATION

1. This section is provided as a requirement for maintenance during the establishment period and as a recommendation for future continued maintenance.
2. Irrigation is to be maintained and operated in such a manner as to prevent water from collecting on or running across concrete or asphalt or from overspraying onto buildings, fences, walls or other hardscape features.
3. Where landscape irrigation is required adjacent to buildings, the subgrade soils shall be maintained in a moist but not saturated state.
4. Maintenance Contractor shall be required to have available and use a soil tube or probe to frequently check soil moisture before and after operation of the irrigation system to evaluate the necessity for irrigation scheduling adjustments. Contractor shall adjust system timing and coverage patterns on an ongoing basis to compensate for reduced water requirements as plants mature and pattern deflection as plants grow.
5. Maintenance Contractor shall be required to frequently test the irrigation system to ensure that all heads operate correctly and that no breaks or leaks exist. The Maintenance Contractor shall not permit the irrigation system to operate with broken equipment. Repairs to the system shall be made with originally specified materials in accordance with the Landscape Architect's plans to ensure proper coverage and pressure within the irrigation system. Failure to match originally specified materials may result in an inoperable system with significant water waste.

REVISIONS	BY
8-3-22 REV	

CALIFORNIA

LANDSCAPE TECHNOLOGIES

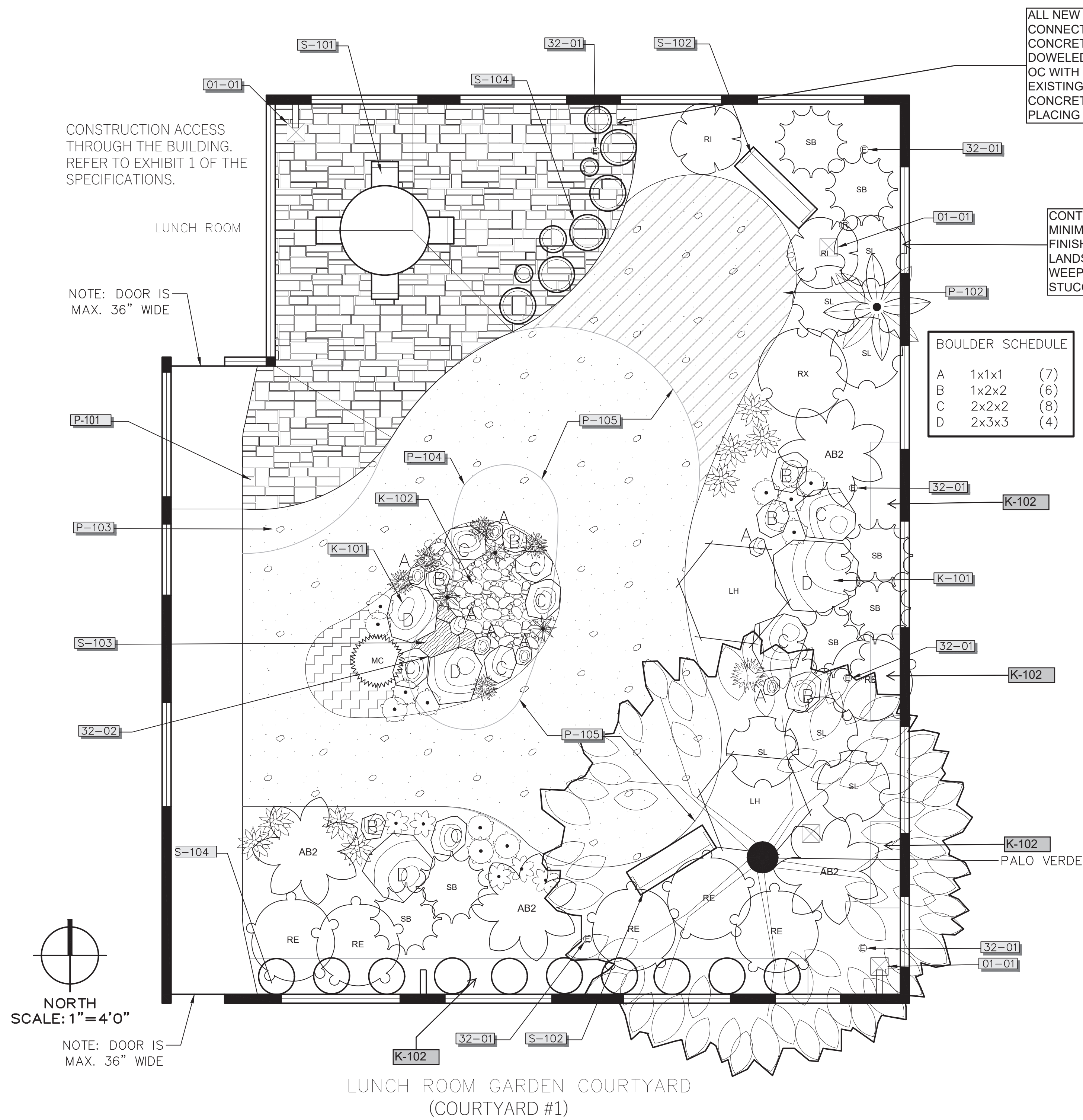
landscape architecture irrigation design

3685 Vista Campana
Unit 41, Oceanside
CA 92057
760.809.3241

SPECIAL GARDEN PROJECTS

OMWD OFFICES, ENCINITAS, CALIFORNIA

DRAWN
CHECKED
DATE 8-3-22
SCALE
JOB NO. 032-22-OMWD
SHEET L4



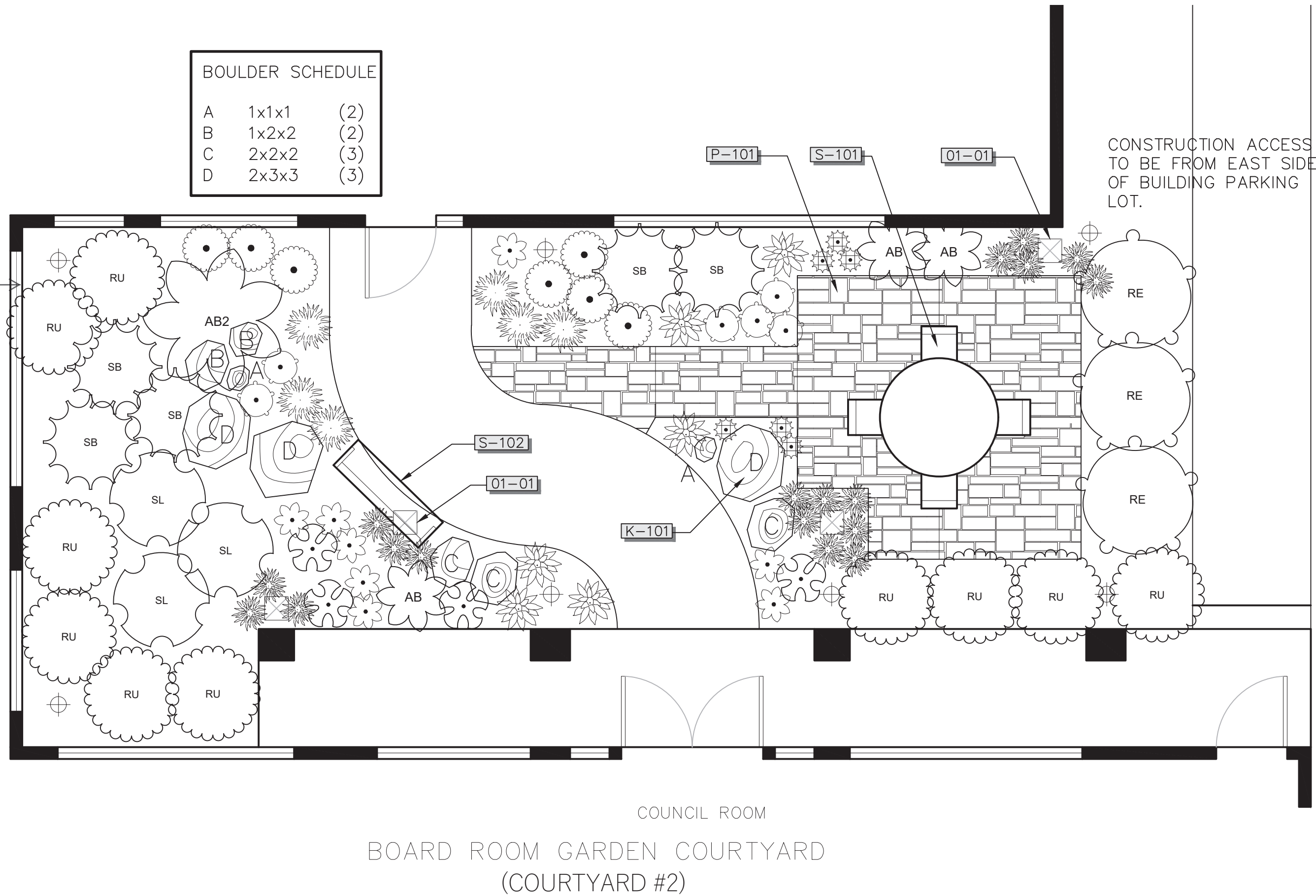
ALL NEW CONCRETE TO BE CONNECTED TO EXISTING CONCRETE FOOTINGS (TYP) USING DOWELED EPOXY REBAR #4 @ 16" OC WITH 6" MIN EMBEDMENT IN EXISTING FOOTING. ROUGHEN CONCRETE SURFACE PRIOR TO PLACING NEW CONCRETE.

CONTRACTOR SHALL MAINTAIN MINIMUM 1/2" CLEARANCE BETWEEN FINISHED GRADE (HARDSCAPE AND LANDSCAPED AREAS) AND EXISTING WEEP SCREED ALONG EXTERIOR STUCCO WALLS (TYP).

BOULDER SCHEDULE		
A	1x1x1	(7)
B	1x2x2	(6)
C	2x2x2	(8)
D	2x3x3	(4)



BOULDER SCHEDULE		
A	1x1x1	(2)
B	1x2x2	(2)
C	2x2x2	(3)
D	2x3x3	(3)



REFERENCE NOTES SCHEDULE COURTYARDS

SYMBOL	01 GENERAL DESCRIPTION
	Existing Drain Inlets - Grade landscape to drain to existing drain inlets. Reset inlets as needed to provide 2% drainage of all landscape areas.
SYMBOL	32 EXTERIOR IMPROVEMENTS DESCRIPTION
	Up lights provided by others. Lights to match Board Courtyard lighting.
	OMWD to provide power for fountain, concurrent to contractor's work. Contractor to coordinate with OMWD for timing and location.
SYMBOL	ROCK DESCRIPTION
	Boulders - Boulders to be provided by OMWD. See quantity list on this sheet.
	Beach Pebble Mix, 10% 3" to 5", 30% 2" to 3" 60% 1" to 2" . Create 8" deep basin in which to place beach pebbles in non concrete areas. Coverage shall be 3in. minimum over concrete footings
SYMBOL	PAVING DESCRIPTION
	New concrete walk and patio. Stamped concrete with dust on colors. 4 inch thick with #4 bar at 16 inches o.c. both ways. Thickened edge of slab 6 inches deep by 8 inches wide. Provide score joints and expansion joints as needed. Install new concrete flush with edge of existing curb/walk and provide smooth tapered slope to drain. Contractor shall establish positive drainage. Refer to Section 03000 of the Specifications.
	Install 4" deep decomposed granite to match existing. Remove plastic header and replace with black aluminum edging. Future Artificial Turf area shown hatched.
	Existing decomposed granite path to be modified as shown with new black aluminum edging. Keep decomposed granite clean during modification work and replace with new as needed.
	Edge of existing granite path to be modified.
	Existing decomposed granite. Protect in place except as noted.
SYMBOL	SITE FURNISHINGS DESCRIPTION
	Five foot diameter garden table with four chairs (2). Umbrella on moveable stand to provide flexibility during various times of day. OMWD provided.
	5' benches (3). OMWD provided.
	Natural water fall with zero pond under river rock. Mound under boulders on west side max. 18". Pump power provided by others. Pump to be trickle waterfall and shall look natural with earth color grout hidden by sand and pebbles.
	Pots by others.

PLANT SCHEDULE COURTYARDS

TREES	CODE	BOTANICAL / COMMON NAME	CONT	QTY
	PD	Parkinsonia x 'Desert Museum' / Desert Museum Palo Verde	24"box	1
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT	QTY
	AM	Achillea x 'Moonshine' / Moonshine Yarrow	1 gal	18
	AB2	Agave x 'Blue Flame' / Blue Flame Agave	5 gal	5
	CP	Carex pansa / Meadow Sedge	1 gal	23
	CT	Cordyline australis 'Torbay Dazzler' / Torbay Dazzler Grass Palm	15 gal	1
	JC	Juncus effusus 'Curly Wurly' / Curly Wurly Corkscrew Rush	1 gal	3
	LH	Lantana x 'New Gold' / New Gold Lantana	5 gal	2
	MC	Mimulus cardinalis / Scarlet Monkeyflower	1 gal	1
	RE	Rhamnus californica 'Eve Case' / Eve Case Coffeeberry	5 gal	9
	RU	Rhipsolepis umbellata 'Minor Gulf Green' TM / Gulf Green Indian Hawthorn	5 gal	10
	RI	Rosa floribunda 'Iceberg' / Iceberg Rose	5 gal	2
	RX	Rosa x 'Flower Carpet Scarlet' / Scarlet Carpet Rose	1 gal	2
	SL	Salvia greggii 'Lipstick' / Lipstick Autumn Sage	1 gal	9
	SB	Salvia leucantha 'Santa Barbara' / Mexican Bush Sage	1 gal	12
SUCCULENTS	CODE	BOTANICAL / COMMON NAME	CONT	QTY
	AK	Aeonium x 'Kiwi' / Kiwi Aeonium	1 gal	13
	AS	Aeonium x 'Sunburst' / Sunburst Aeonium	1 gal	4
	AB	Agave x 'Blue Glow' / Blue Glow Agave	5 gal	3
	AS2	Aloe striata / Coral Aloe	1 gal	14
	CH2	Crassula ovata 'Hummel's Sunset' / Variegated Jade Plant	1 gal	7
	EL	Echeveria agavoides 'Lipstick' / Lipstick Echeveria	1 gal	6
	MF	x Mangave x 'Falling Waters' / Falling Waters Mangave	5 gal	7
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	CONT	SPACING
	FC	Fragaria chiloensis / Beach Strawberry	flat	6" o.c.

REVISIONS	BY

PLANTING SPECIFICATIONS

1. A. The planting plan is diagrammatic. All plant locations are approximate.
B. Quantities shown on the planting plan are approximate and are for the convenience of the contractor only. Plant symbols take precedence over plant quantities specified.
C. Contractor shall notify the Landscape Architect of discrepancies between quantities and symbols shown.

2. Contractor shall apply a contact herbicide (herbicide applicator shall be licensed by the State of California) where weeds are present, per manufacturer's specifications, a minimum of ten (10) days prior to commencement of any planting or irrigation work. Weeds shall be allowed to completely die back, including the roots, and shall then be removed before proceeding with work.

3. Contractor shall receive site grades at + one-tenth foot (0.10') of finished grade. Contractor will be responsible for verifying grades prior to beginning work and shall be responsible for all grades once work has commenced.

4. Soil level in all planters shall be a minimum of four inches (4") below edge of building screed at the conclusion of planting.

5. Contractor shall submit a soil analysis report from an authorized testing agency to Owner/Landscape Architect for review prior to beginning work. Actual soil amendment and plant backfill shall conform to soil report requirements. For bidding purposes, assume that all areas to be planted (except slopes in excess of 3:1) shall be roto-tilled to a depth of eight inches (8") and the following amendments spread evenly and thoroughly blended in per 1000 square feet:

A. 4 cubic yards compost
B. 100 pounds agricultural gypsum
C. 15 pounds soil sulfur
D. 25 pounds 16-6-8 slow release fertilizer

6. Soil shall be suitable for plant growth and free of harmful substances or deleterious materials prior to planting.

7. Contractor shall remove all rock in excess of one-inch (1") diameter exposed at the soil surface.

8. Prior to planting, irrigation system shall be fully operational and all planting areas shall be thoroughly soaked.

9. Each plant shall receive "agriform" (or equal) plant tablet as follows:

1 gallon container (1) 21 gram
5 gallon container (3) 21 gram
15 gallon container (5) 21 gram
per three inches (3") of boxed tree size (1) 21 gram

10. Plant material shall not be root bound. Five gallon plants and larger shall have been grown in containers for a minimum of six months and a maximum of two years. Plants shall exhibit healthy growth and be free of diseases and pests.

11. Plant pit shall be twice the width of the designated nursery container but shall be no deeper than the container. Root ball shall protrude above the plant pit 1/2 inch (1/2") at the completion of planting.

12. Backfill shall be per soil test. For bidding purposes, assume plant backfill shall be 75% rock-free site soil, and 25% compost by volume.
13. The following shall apply to the insertion and removal of stakes:

A. stake all plants per detail.
B. remove nursery stakes and ties from all container stock. Maintain side growth on all trees. Tie all vines to wall, trellis, or fence with clear nursery ties.

14. Plants shall not be placed within twelve inches (12") of sprinkler heads or within eighteen inches (18") of buildings.

15. Contractor shall install root barriers on all new trees within eight feet (8') of walls, walkways or other hardscape areas. Root barrier shall be as manufactured by Deep Root Corporation or equivalent. Size and installation shall be per manufacturer's specifications and details. Installation of root barriers shall be a linear installation and shall NOT encircle root balls. Root barrier shall extend ten feet (10') minimum length on each side of tree requiring barriers.

16. Contractor shall install drainage chimneys in all plant pits where obstruction to root growth or drainage is encountered, such as in rock, clay or caliche. If rock is encountered where a planting is indicated, review location with Owner or Landscape Architect.

17. Contractor shall maintain a minimum 2% drainage away from all buildings, structures, and walls. Finished grades shall be smoothed to eliminate puddling or standing water.

18. All areas not planted with ground cover shall be mulched to a depth of three inches (3") at the conclusion of planting up to the edge of each plant pit. Mulch shall be decomposed shredded wood such as Forest Fines.

19. Contractor shall leave site in a clean condition, removing all unused material, trash, and tools.

20. Contractor shall maintain all plantings for a period of sixty (60) days or until plants are deemed established and irrigation is operating properly to the satisfaction of Owner and Landscape Architect - whichever period is longer.

21. At completion of all work outlined in these plans, Contractor shall contact Owner and arrange for a walkthrough to determine that all aspects of work are completed. Work must be fully completed according to all plans and specifications and must be completed in a good workmanship manner and must be accepted by Owner in writing prior to the beginning of the establishment period.

22. The establishment period shall include the following scope of work:

A. daily watering of all plant material.
B. adjustment of sprinkler head height and watering pattern.
C. weeding and removal of all weeds from ground cover areas, on a weekly basis.
D. replacement of any dead, dying, or damaged trees, shrubs, or ground covers.
E. filling and recompaction of eroded areas.
F. filling and replanting of any low areas which may cause standing water.
G. weekly removal of all trash, litter, clippings, and all foreign debris.
H. at 30 days after planting, ammonium sulfate shall be applied to areas at the rate of five (5) pounds per 1,000 square feet.
I. at 60 days after planting, and prior to the end of the establishment period, Best Fertilizer Company 16-6-8 (or equal) shall be applied at the rate of six (6) pounds per 1,000 square feet to planting areas. Additional fertilizations shall be per soil test.

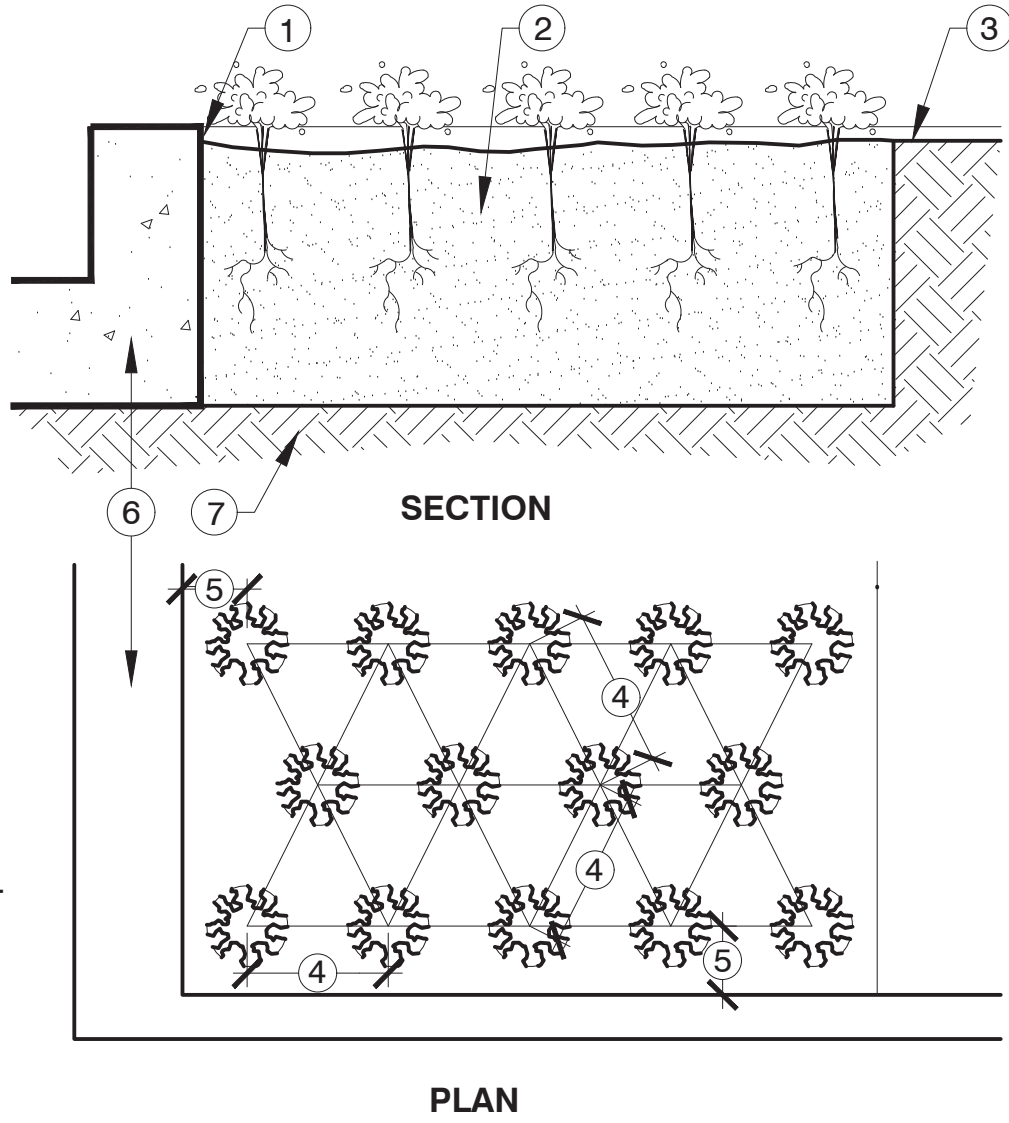
23. Prior to end of establishment period, Contractor shall contact Owner and arrange for a final walk through. Owner must accept all maintained areas in writing prior to end of establishment period.

A. All groundcover and shrubs shall be guaranteed by Contractor in writing as to growth and health for a period of sixty (60) days after completion of establishment period and final acceptance. All trees shall be guaranteed by Contractor in writing to live and grow in an acceptable upright position for a period of one (1) year after completion of the specified establishment period and final acceptance.

B. Contractor, within fifteen (15) days of written notification by Owner, shall remove and replace all guaranteed plant materials which, for any reason, fail to meet the requirements of the guarantee. Replacement shall be made with plant materials as indicated or specified on the original plans, and all such replacement materials shall be guaranteed as specified for the original material guarantee.
24. Note: Upon approval of final inspection by Owner, an irrigation audit must be provided by a third party certified auditor (not the designer) per City, State and Local codes.

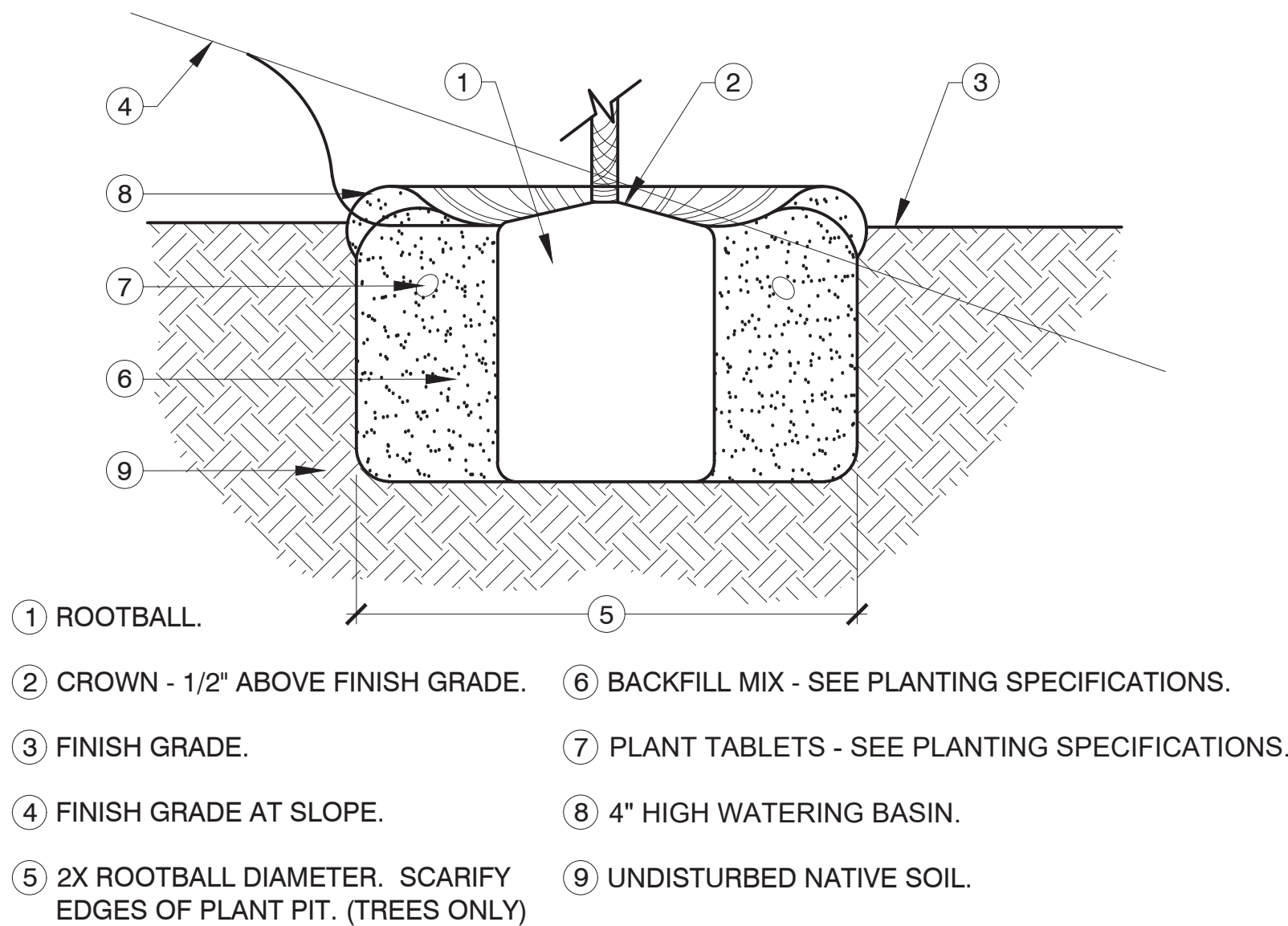


CONCEPT FOR POND. PLEASE NOTE THAT WATER FLOW TO BE TRICKLE OR ABOUT HALF FLOW AS SHOWN HERE.



GROUND COVER PLANTING

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

REVISIONS	BY



SPECIAL GARDEN PROJECTS

OMWD OFFICES, ENCINITAS, CALIFORNIA

COURTYARD PLANTING DETAILS

DRAWN
CHECKED
DATE 8-3-22
SCALE
JOB NO. 032-22-OMWD
SHEET L6
OF 6 SHEETS