

SHEET INDEX

A-1	TITLE SHEET/ SITE PLAN/ PHOTOS
A-2	ENLARGED SITE PLAN/ SITE SECTIONS
A-3	DETAILS
A-4	STORM DRAINAGE DETAILS
LC-1	LANDSCAPE LAYOUT
LI-1	IRRIGATION PLAN
LI-2	IRRIGATION DETAILS
LI-3	IRRIGATION SPECIFICATIONS
LP-1	PLANTING PLAN
LP-2	PLANTING DETAILS
LP-3	PLANTING SPECIFICATIONS
G-1	GREEN BUILDING STANDARDS
G-2	GREEN BUILDING STANDARDS

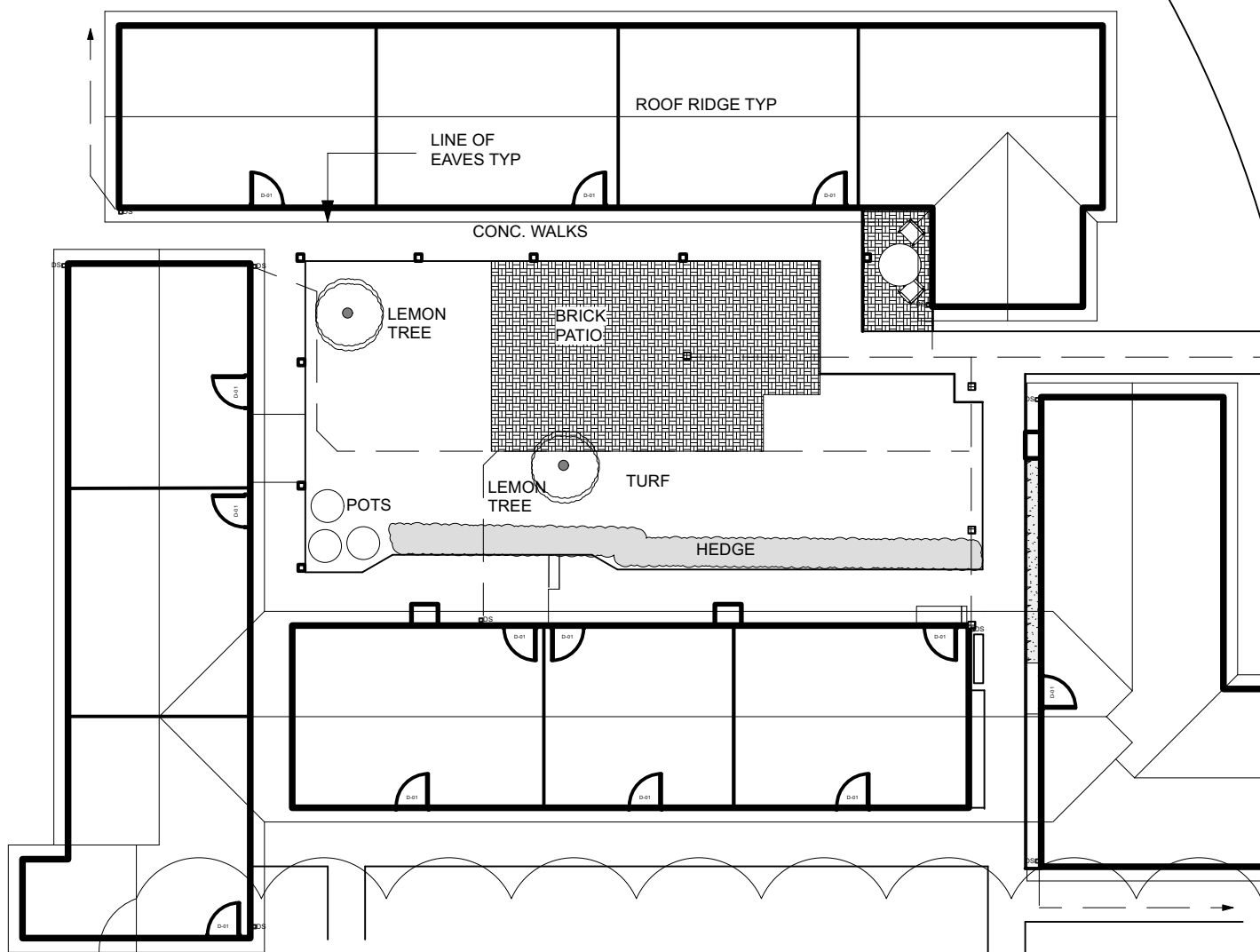
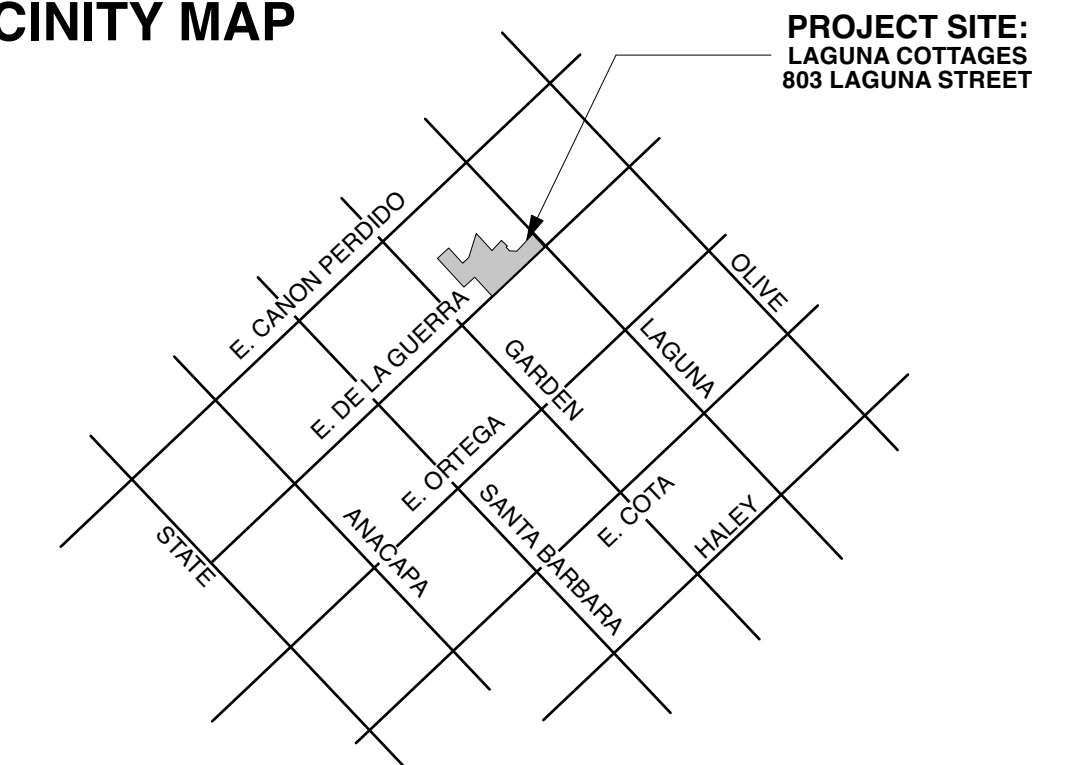
PROJECT DATA

PROPERTY OWNER	LAGUNA COTTAGES 803 LAGUNA STREET SANTA BARBARA, CA 93101
PROJECT ADDRESS	803 LAGUNA SANTA BARBARA, CA
ZONE:	C-G
APN	031 021 010
LOT AREA	.2 ACRES
LOT SLOPE	16%
FLOOD ZONE	YES
SITE USE:	SENIOR HOUSING
LAND USE DESIGNATION	MEDIUM HIGH DENSITY RESIDENTIAL
HISTORIC/LANDMARK DISTRICT	EL PUEBLO VIEJO LANDMARK DISTRICT PART I

PROJECT STATISTICS:	
AREA OF WORK (COURTYARD)	2812 SF
SLOPE OF COURTYARD	3.80%
AREA OF (E) IMPERVIOUS WALKS TO BE REPLACED	1306 SF
AREA OF (E) IMPERVIOUS BRICK PATIO TO BE REPLACED	551 SF
AREA OF (E) LANDSCAPING	1237 SF
TOTAL AREA OF EXISTING	3094 SF
AREA OF (N) NEW/REPLACED CONC. WALKS	1510 SF
AREA OF (N) PERMEABLE PATIO PAVERS	600 SF SF
AREA OF (N) LANDSCAPING	984 SF
TOTAL AREA OF WORK	3094 SF

SCOPE OF WORK:
 REMOVE (E) WALKS, LANDSCAPING AND PATIOS AT DESIGNATED COURTYARD
 REMOVE (E) TREES (2 LEMON TREES)
 INSTALL (N) WALKS TO THRESHOLD HEIGHT AT UNIT ENTRIES
 INSTALL (N) RAMP, PATIO AND LANDSCAPING

VICINITY MAP



ACCESSIBLE WALKWAYS AND PATIO

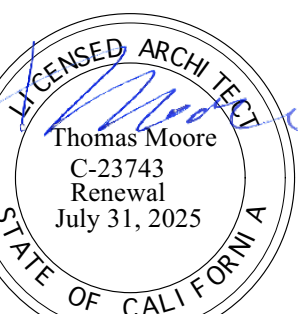
803 LAGUNA STREET, CA

ARCHITECT

THOMAS A MOORE
 818A EAST FIGUEROA,
 SANTA BARBARA, CA 93103
 PHONE: 805 963 4399
 E-MAIL: tm.tmas44@gmail.com

tmas
 Tom Moore
 Architect
 A.I.A.

Thomas Moore
 Architectural Services
 818 East Figueroa Street #A
 Santa Barbara, CA 93103
 805 963 4399



All ideas, designs and plans indicated or represented by these drawings are owned by and are the property of Mr. Thomas Moore of Thomas Moore Architectural Services and were created and developed for use in connection with the specified project. None of such ideas, designs or plans shall be used for any purpose without the written permission of Mr. Thomas Moore.

DATE	DESCRIPTION
10/15/22	SUBMITTAL

A-1

OF SHEETS

ARCHITECT

THOMAS A MOORE
818A EAST FIGUEROA,
SANTA BARBARA, CA 93103
PHONE: 805 963 4399
E-MAIL: tm.tmas44@gmail.com

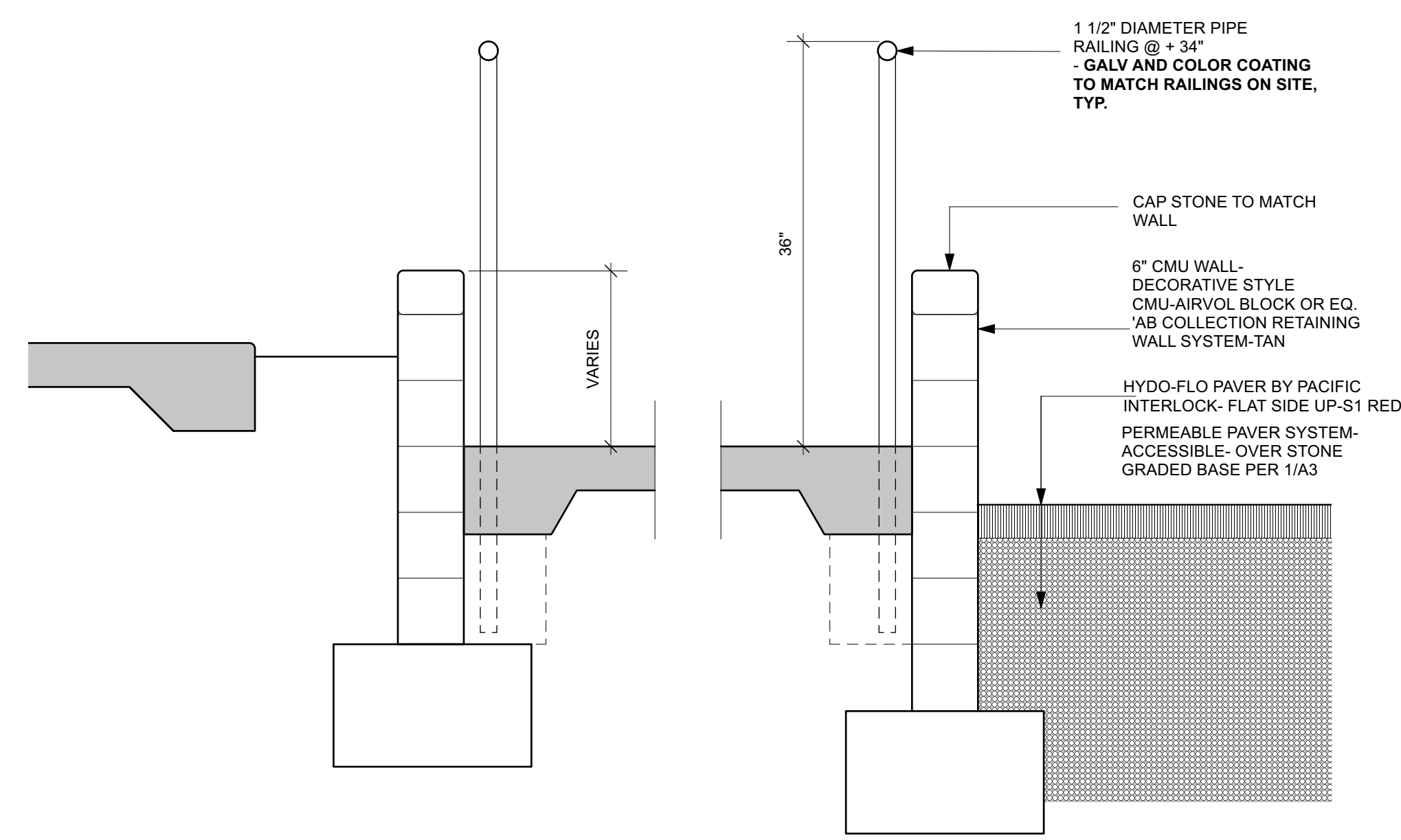


Thomas Moore
Architectural Services
818 East Figueroa Street #A
Santa Barbara, CA 93103
805 963 4399

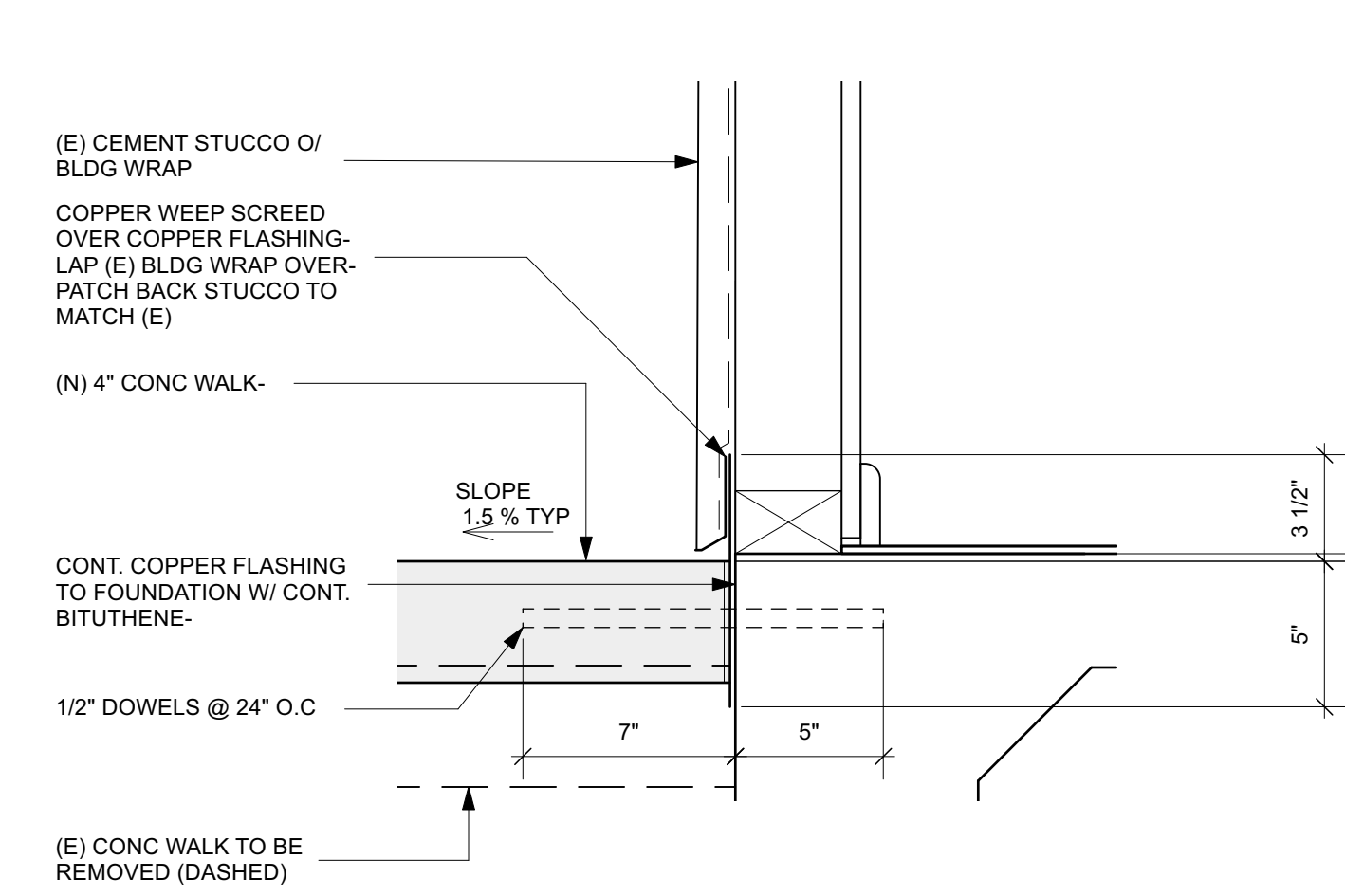


All ideas, designs and plans indicated or represented by these drawings are owned by and are the property of Mr. Thomas Moore of Thomas Moore Architectural Services and were created and developed for use in connection with the specified project. None of such ideas, designs or plans shall be used for any purpose without the written permission of Mr. Thomas Moore.

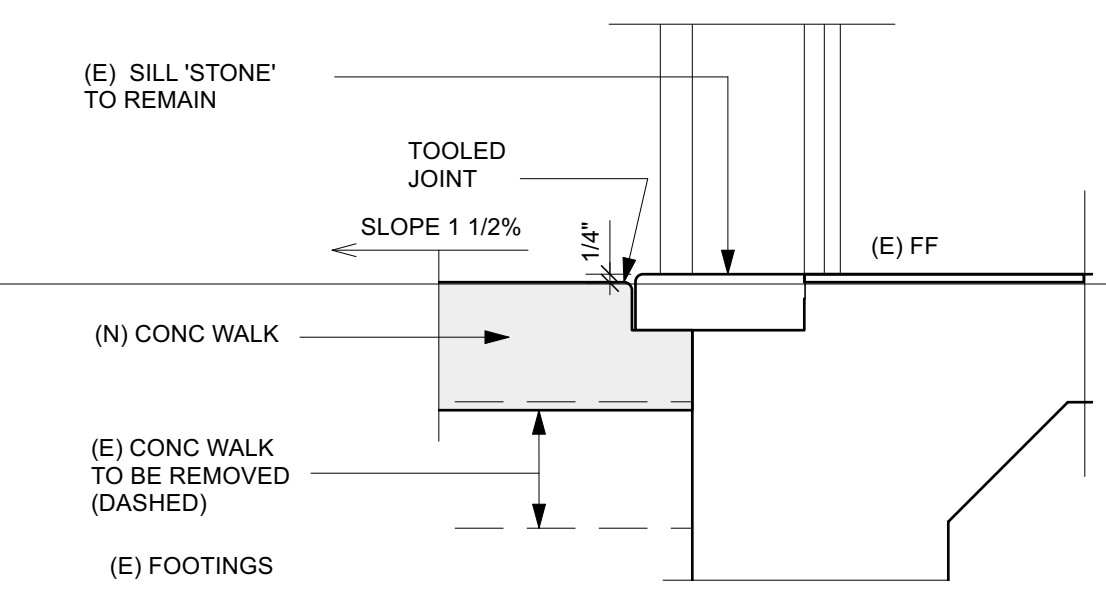
DATE	DESCRIPTION
10/15/22	SUBMITTAL



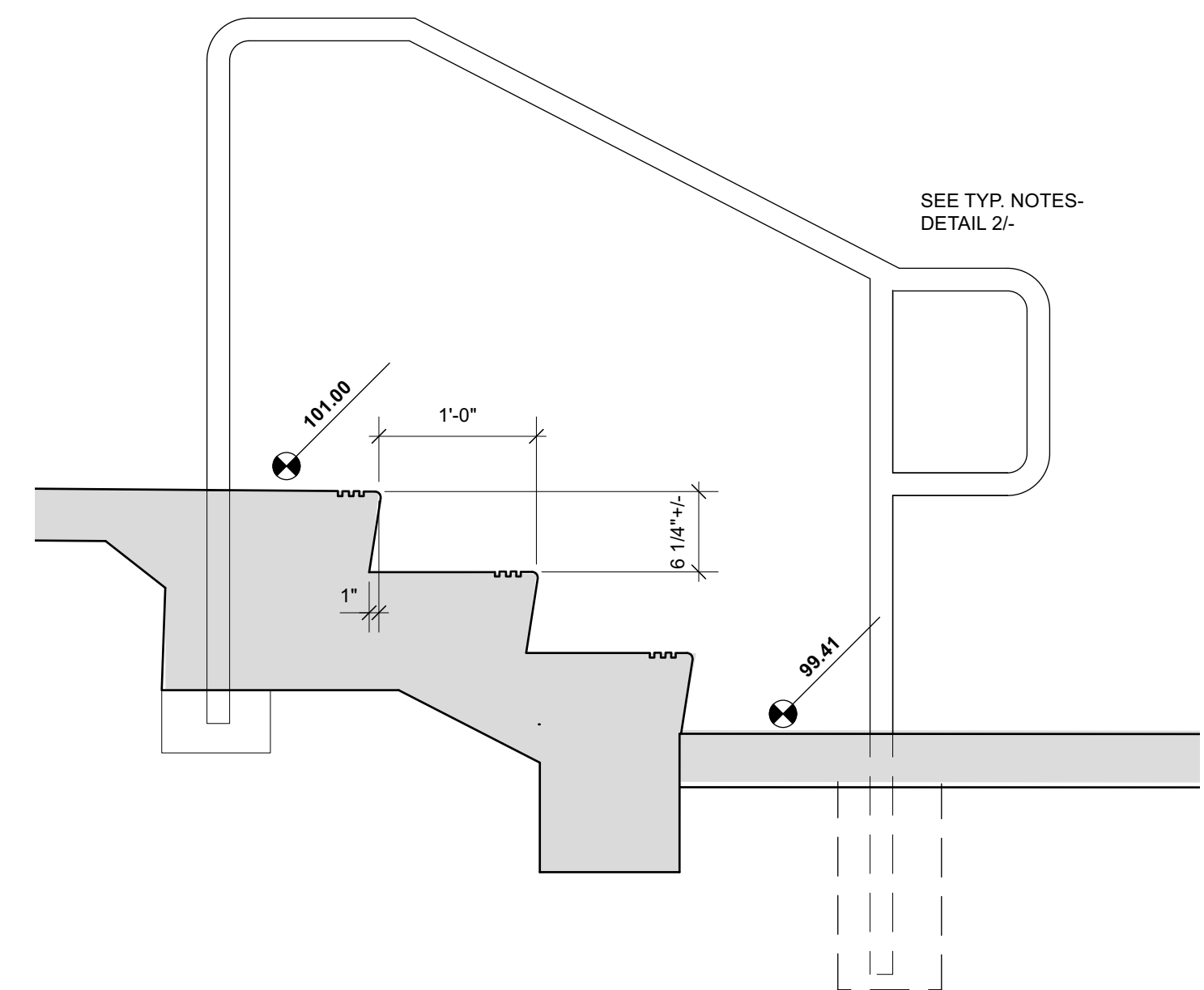
7 SECTION AT RAMP
Scale: 1" = 1'-0"



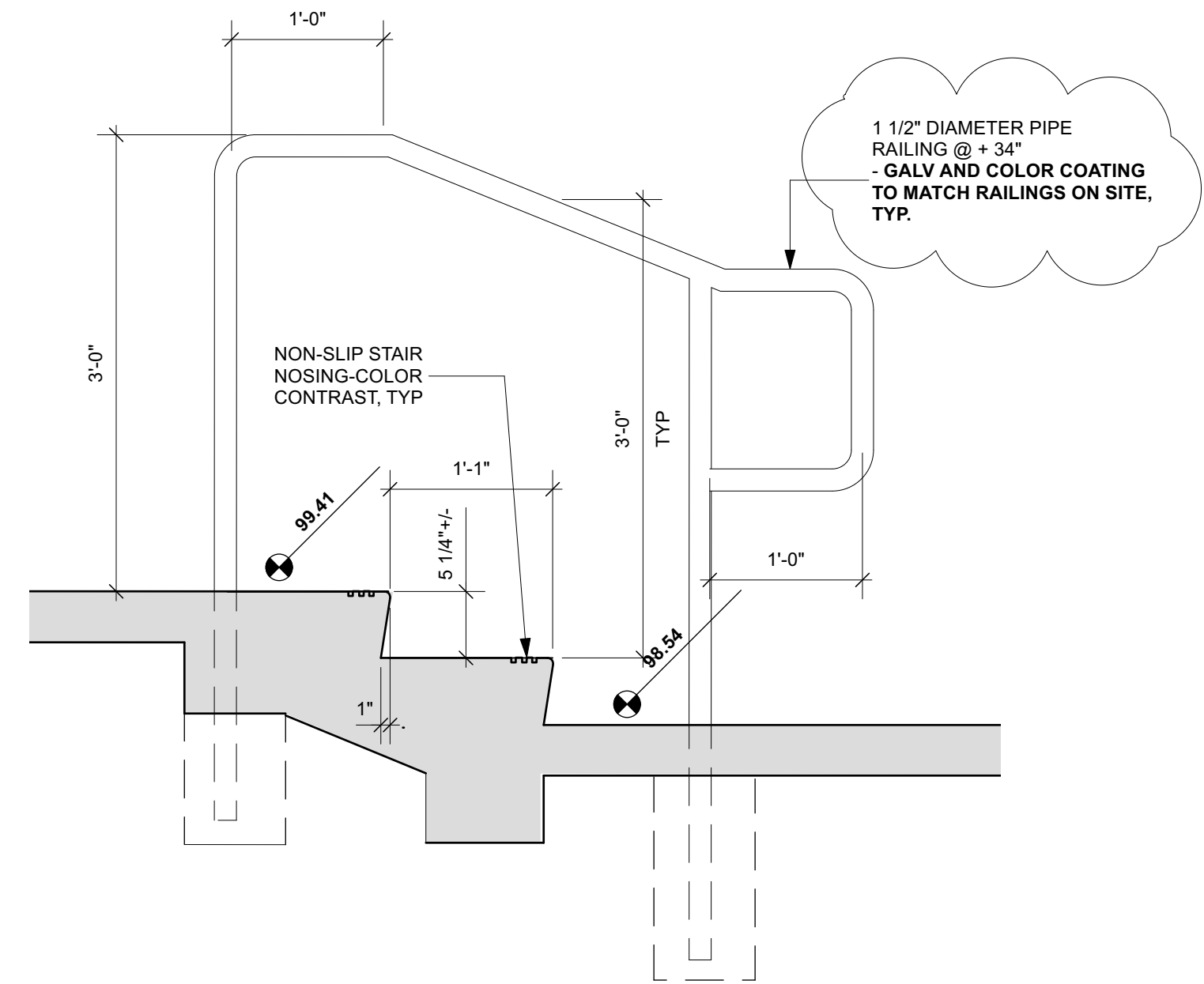
4 (N) WALK TO (E) FOOTINGS
Scale: 2" = 1'-0"



1 SILL
Scale: 2" = 1'-0"



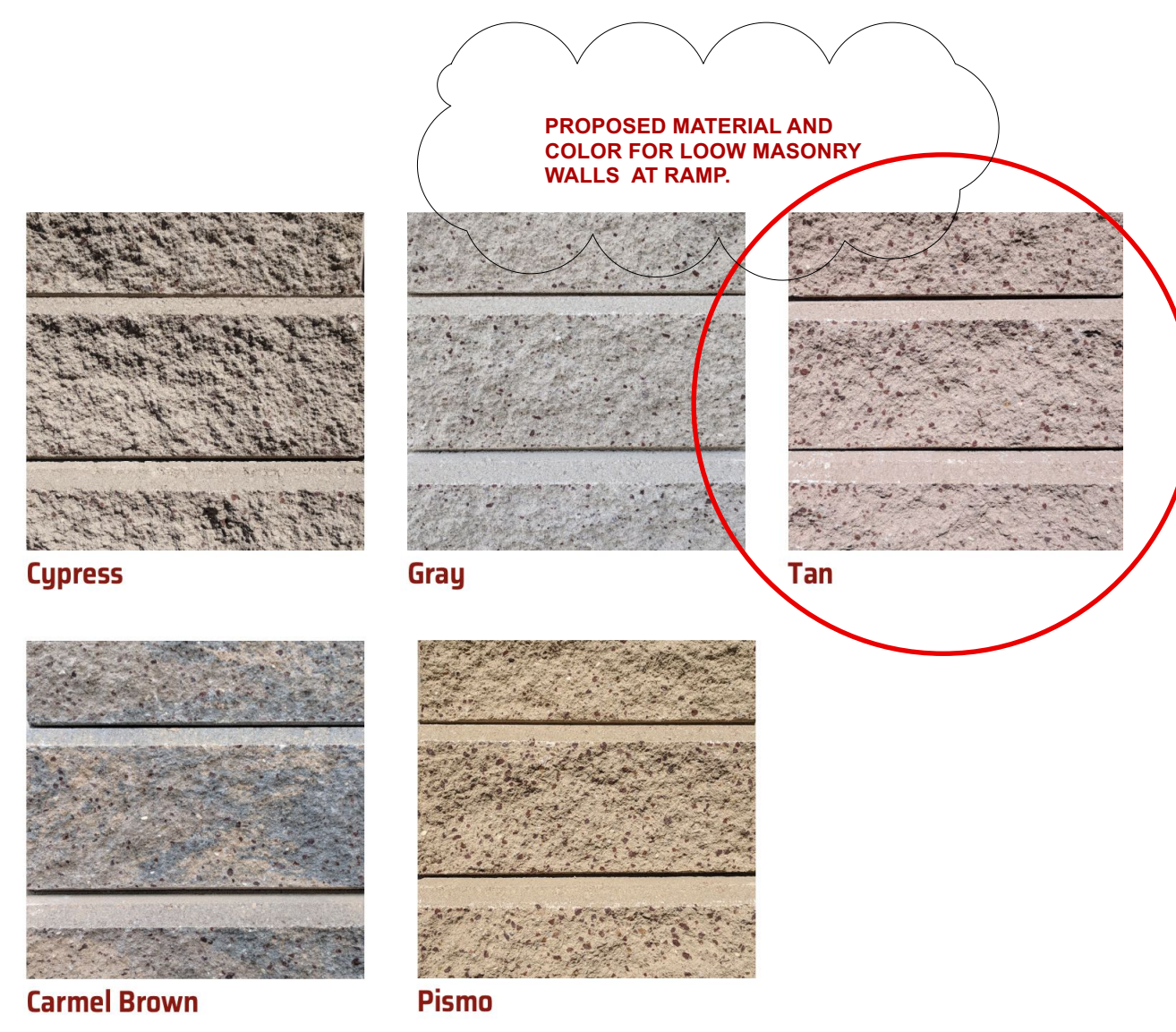
5 STEPS 'A'
Scale: 1" = 1'-0"



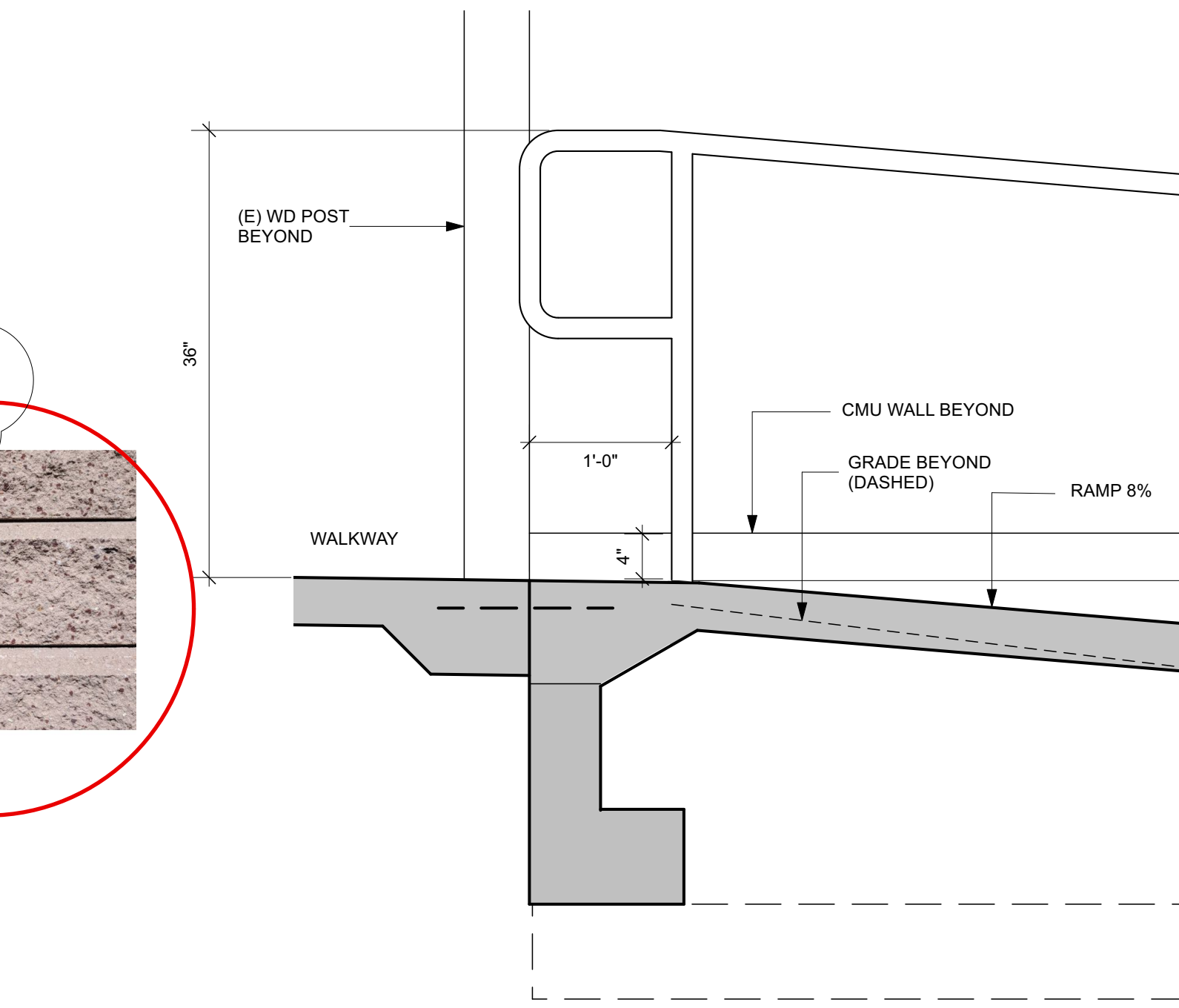
2 STEPS 'B'
Scale: 1" = 1'-0"



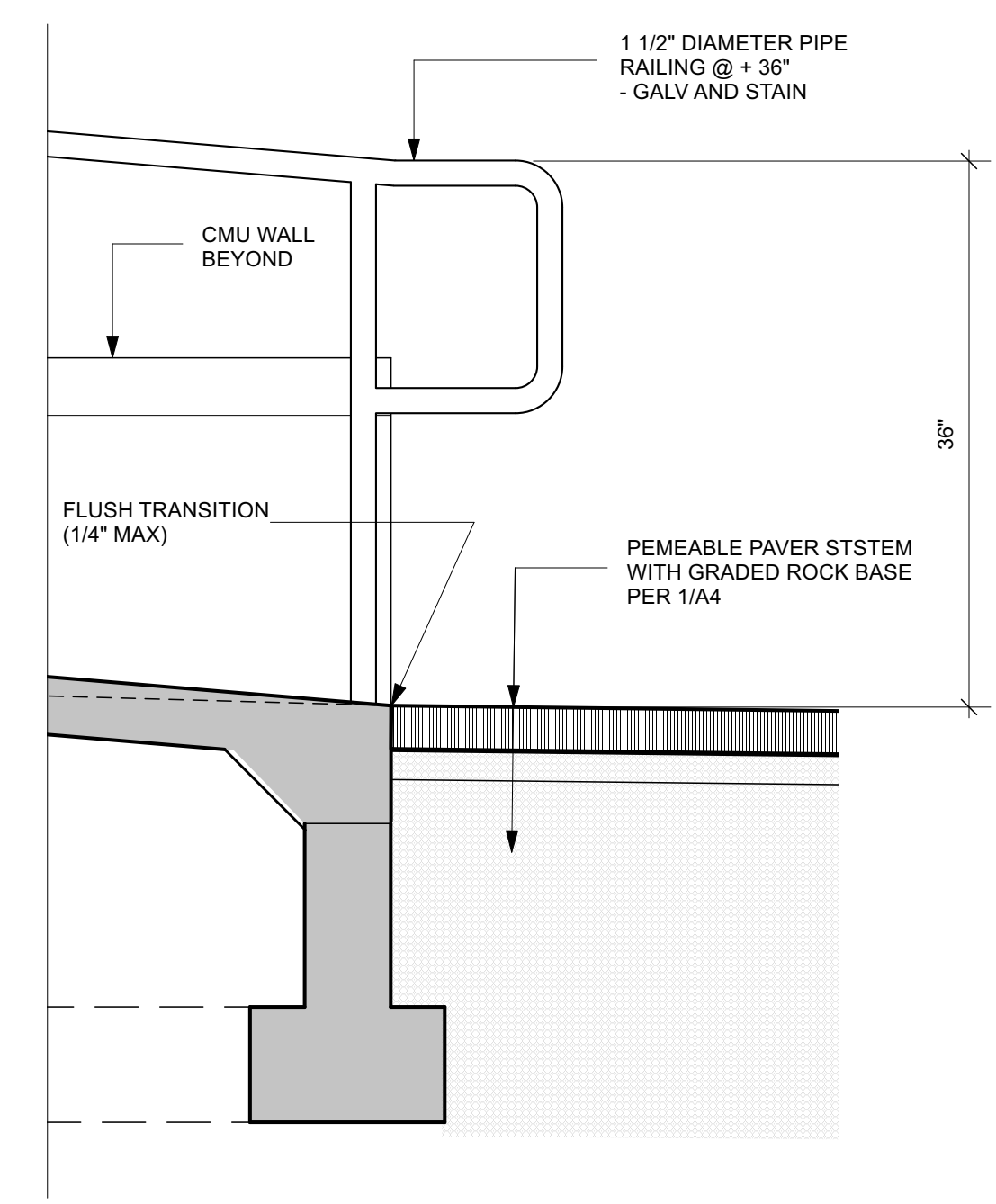
HYDRA FLOW PAVER SYSTEM BY PACIFIC INTERLOCK



AB COLLECTION RETAINING WALL SYSTEM BY AIRVOL. OR EQ.



6 RAMP TO UPPER WALK
Scale: 1" = 1'-0"



3 RAMP TO PATIO
Scale: 1" = 1'-0"



For inquiries regarding this plan contact
Bob Cunningham, ASLA at
(805) 962-9055 x 32 | bob@arcadiastudio.com

- Revisions**
- KK 04.22.2024
 - KK 04.25.2024

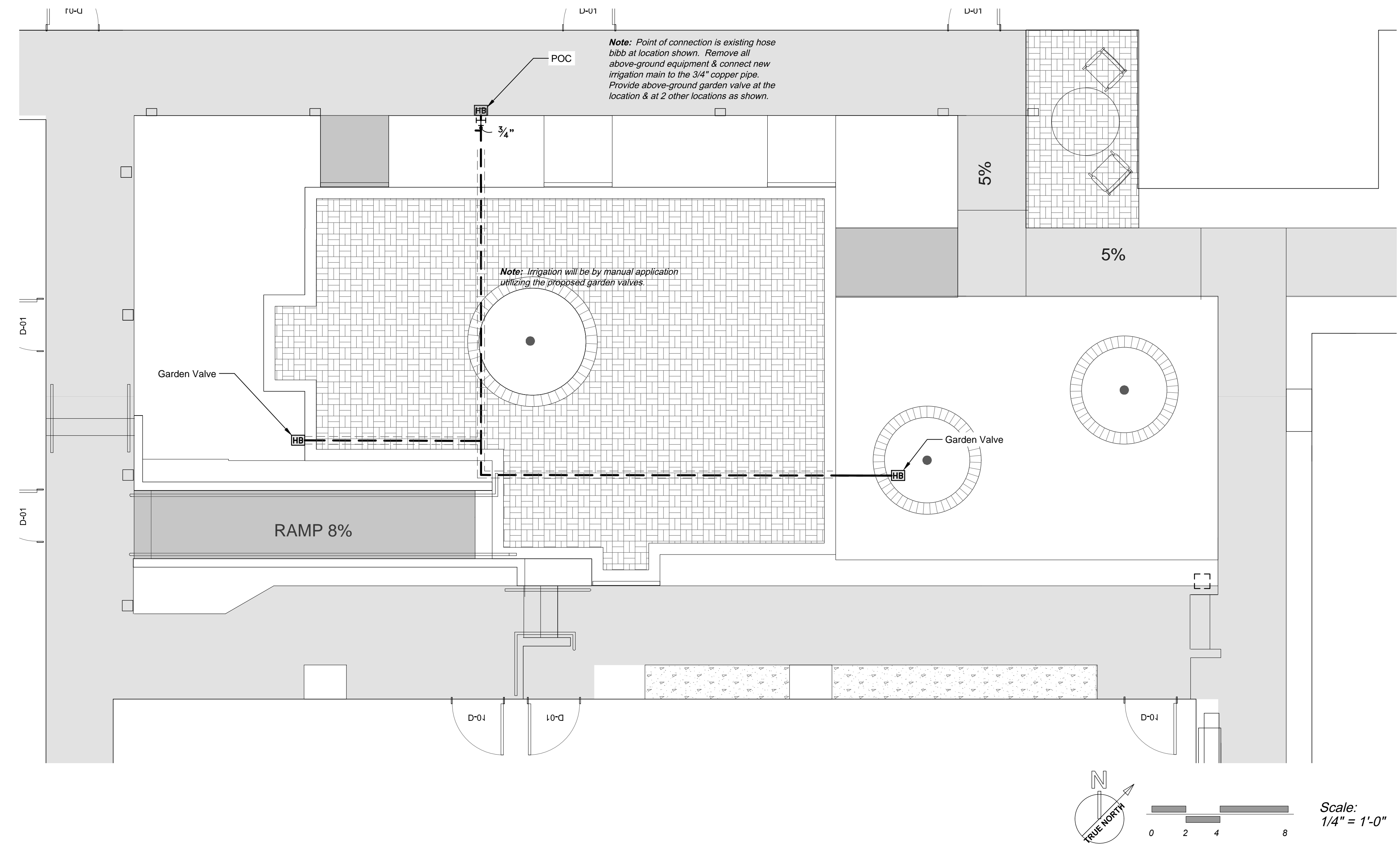
LAGUNA COTTAGES
803 Laguna Street
Santa Barbara, CA
93101

IRRIGATION PLAN

Issue
02/05/2024

Date	Job Number
04.29.2024	23.081
Drawn By	Checked by
KK/IMG	BC
Sheet 2	of 7

LI-1



Irrigation Notes:

- See irrigation legend for complete descriptions of all symbols shown on irrigation plan.
- Point of connection is at the approximate location shown on plan.
- Indicated pipe locations are schematic. Coordinate pipe installation with other trades.
- All piping installed under paving, through walls or footings must be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve. All pipe runs in sleeves must be straight, with no bends or angles.
- Install irrigation lines at the following minimum depths:
Schedule 40 and class 315 PVC mainline: 18" minimum cover
Schedule 40 PVC lateral line: 12" minimum cover
****Install all rigid pipe as near to edges of planting areas, to avoid conflict with large plants.**
- In the event of discrepancies in irrigation equipment count, quantities indicated by symbols on the plan prevail.
- Include in the contract price a sufficient amount to allow an additional 5% of the cost for supply and installation of additional irrigation equipment to be used. Provide the unit price for such irrigation equipment in the bid and credit the owner for each piece of equipment not installed.
- Verify location of (E) backflow preventer, (E) master control valves, controller and point of connection with Landscape Architect prior to installation.
- Landscape Contractor to coordinate with project plumber, and ensure all necessary stub-out locations for podium or raised planters are correct during construction.

CRITICAL ANALYSIS

Generated:	2024-01-11 10:45
P.O.C. NUMBER: 01	
Water Source Information:	Existing 3/4" hose bibb at location shown on plan.
FLOW AVAILABLE	
Point of Connection Size:	3/4"
Flow Available	12.48 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	60 PSI
Pressure Available:	60 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	5.37 GPM
Flow Available at POC:	12.48 GPM
Residual Flow Available:	7.11 GPM

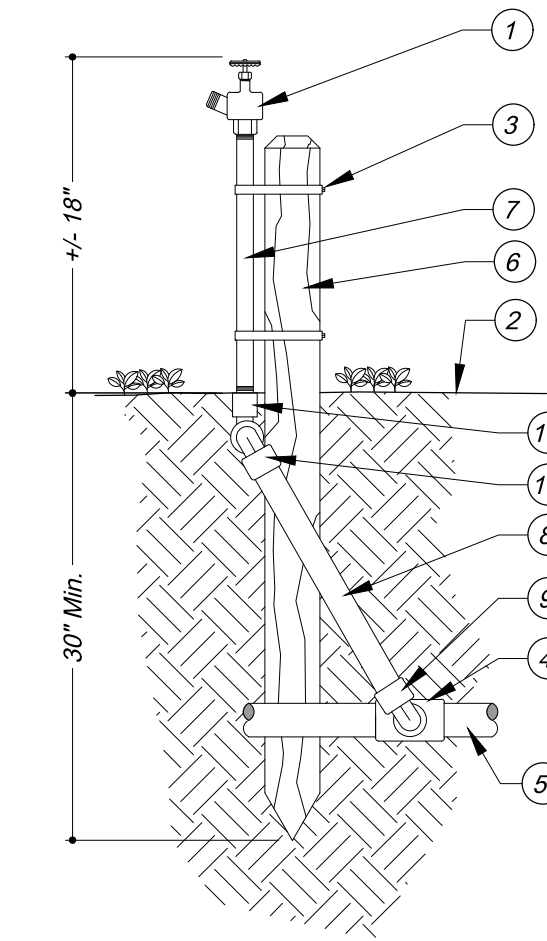
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
HB	Superior I401 Inverted Nose Garden Valve, 3/4in. x 3/4in. Female NPT Hose Bibb, Red Brass.	3
XX	Point of Connection 3/4" Existing 3/4" hose bibb at location shown on plan.	1
---	Irrigation Mainline: PVC Schedule 40	60.3 l.f.
----	Pipe Sleeve: CPVC Schedule 40	49.8 l.f.

Total Landscaped Area = 403 SF
MWEO Exempt (Projects under 500SF)

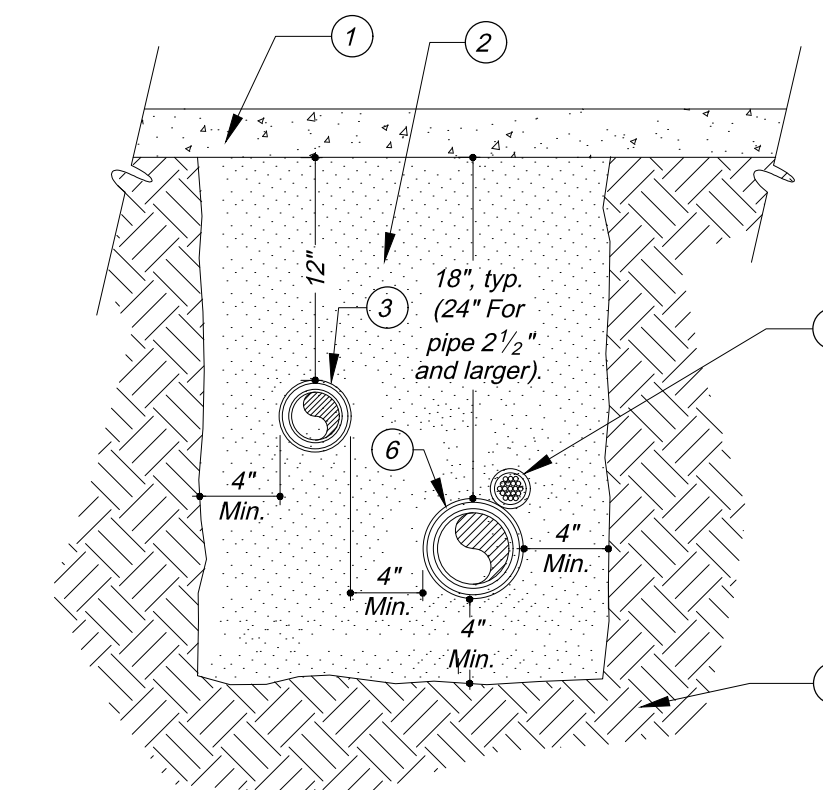
Contractor shall install all irrigation equipment within planting areas. Shown within hardscape for graphic clarification only.

Drawing Name: Z:\Shared\Projects\2023\Projects\23.081_Laguna Cottages\23.081_Card\23.081_In Progress\Laguna Cottages\Sheets\Construction Drawings\Irrigation\Plan\LI-2_Irrigation_Details.dwg Plot date: 2024-04-29 12:05 PM



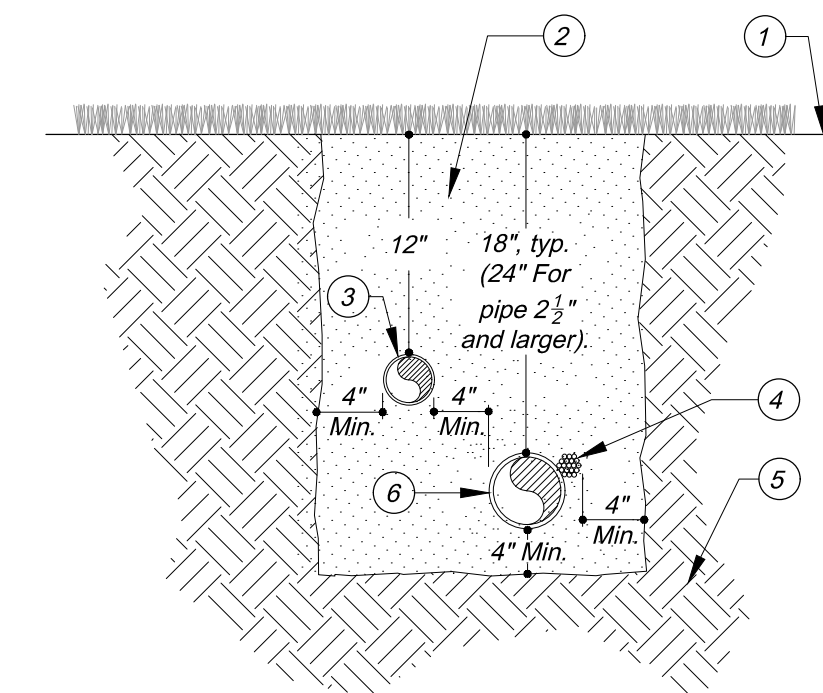
- ① Garden valve. See irrigation plan for specification.
 - ② Finish grade in shrub area.
 - ③ Stainless steel clamp, 2 per post.
 - ④ Sch. 80 PVC tee.
 - ⑤ Mainline.
 - ⑥ 4"x4" Pressure treated douglas fir or redwood post, chamfer top of post 1/2" on all sides.
 - ⑦ 3/4" Sch. 40 galvanized threaded riser.
 - ⑧ Sch. 80 PVC nipple.
 - ⑨ Sch. 40 street ell.
 - ⑩ Sch. 40 PVC ell.
 - ⑪ Galvanized ell.
- Note: Use Teflon tape on all threaded fittings, typical.

1 GARDEN VALVE
Not to Scale



- ① Paving.
 - ② Sand backfill compacted to the density of the existing soil.
 - ③ Lateral line in Sch. 40 sleeve.
 - ④ Control wires in Sch. 40 sleeve. Tape to mainline @ 4" O.C.
 - ⑤ Undisturbed soil.
 - ⑥ Mainline in Sch. 40 sleeve.
- Note: PVC sleeves to be 2x the diameter of the pipe or wire bundle carried.

2 PIPE / WIRE SLEEVE INSTALLATION
Not to Scale



- ① Finish grade.
- ② Clean compacted backfill.
- ③ Lateral line.
- ④ Control wire. Tape to mainline @ 4" O.C.
- ⑤ Undisturbed soil.
- ⑥ Mainline.

3 PIPE INSTALLATION
Not to Scale



202 East Cota Street
Santa Barbara, CA 93101
tel 805.962.9055
fax 805.962.5658
arcadiastudio.com



For inquiries regarding this plan contact:
Bob Cunningham, ASLA at:
(805) 962-9055 x 22 / bob@arcadiastudio.com

Revisions

- KK 04.22.2024
- KK 04.25.2024

LAGUNA COTTAGES
803 Laguna Street
Santa Barbara, CA
93101

IRRIGATION DETAILS

Issue
02/05/2024

Date	Job Number
04.29.2024	23.081
Drawn By	Checked by
KK/IMG	BC
Sheet 3	of 7

LI-2

Drawing Name: Z:\Shared\Projects\2023 Projects\23.081 Laguna Cottages\23.081_Cad\23.081_Irrigation_Specifications.dwg Plot date: 2024-04-29 12:22 PM

IRRIGATION SYSTEMS 028100 - 11
SECTION 028100 - IRRIGATION

PART 1 - GENERAL

0.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including the Project Conditions of Approval, General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

0.2 SUMMARY

- A. This Section includes the following:

- 1. Automatic Irrigation System including piping, fittings and accessories.
- 2. Valves, backflow preventer, and fittings.
- 3. Testing.
- 4. Excavating and backfilling Irrigation System Work.
- 5. Associated interior and exterior plumbing, and accessories to complete the system.
- 6. Pipe sleeves.

- B. Definition: The words Landscape Architect as used herein shall refer to the Owner's authorized representative.

- C. Related Sections include the following:

- 1. Division 2 Section "Landscape Planting"
- 2. Division 2 Section "Landscape Maintenance"

0.3 QUALITY ASSURANCE AND REQUIREMENTS

- A. Permits and Fees: Obtain and pay for required permits and inspections.
- B. Manufacturer's Directions: Manufacturer's directions and detailed drawings shall be followed in all cases where the manufacturers of the articles used in this Contract furnish directions covering points not shown in the Drawings and Specifications.
- C. Ordinances and Regulations: All local, municipal and state laws, rules and regulations governing or relating to any portion of this Work are hereby incorporated into and made a part of these Specifications, and their provisions shall be carried out by the Contractor. Anything contained in these Specifications shall not be construed to conflict with any of the above rules and regulations or requirements of the same. However, when these Specifications and Drawings call for or describe materials, workmanship, or construction of a better quality, higher standard, or larger size than is required by the above rules and regulations, the provisions of these Specifications and Drawings shall take precedence.
- D. Explanation of Drawings:
 - 1. Due to the scale of the Drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the Work and plan the Work accordingly, furnishing such fittings, etc. as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the Work to be installed. The Work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features.
 - 2. Furnish and install all Work called for on the Drawings by notes or details whether or not specifically mentioned in the Specifications.
 - 3. Do not install the Irrigation System as shown on the Drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been considered in design. Bring such obstructions or differences to the attention of the Landscape Architect. In the event this notification is not performed, the Contractor assumes FULL RESPONSIBILITY FOR ANY REVISION NECESSARY.

0.4 SUBMITTALS

- A. Material List:

- 1. Furnish the articles, equipment, materials, or processes specified in the Drawings and Specifications. No substitutions will be allowed without approval as required by Division-1 "Product Substitutions" section.
 - 2. Submit complete materials list prior to performing Work. Include the manufacturer, model number and description of all materials and equipment to be used.
 - 3. Equipment or materials installed or furnished which are not specified on the Drawings may be rejected with the Contractor required to remove such materials from the site at the Contractor's expense.
 - 4. Approval of any item, alternate or substitute indicates only that the product or products apparently meet the requirements of the Drawings and Specification on the basis of the information or samples submitted.
 - 5. Manufacturer's warranties shall not relieve the Contractor of its warranty under the Contract Documents.
- B. Record Drawings
 - 1. Provide and keep up to date and complete a record set of prints which shall be corrected daily and show every change from the original Drawings and Specifications and the locations, sizes, and kinds of equipment. Prints for this purpose shall be kept on the site and shall be used only as a record set.
 - 2. These Drawings shall also serve as Work progress sheets and shall be the basis for measurement and payment for Work completed. Make neat and legible annotations thereon daily as the Work proceeds, showing the Work as actually installed. These Drawings shall be available at all times for inspection.
 - 3. Before the date of the final inspection, transfer all information from the record prints to a reproducible plan, procured from the Landscape Architect. All Work shall be neat, legible and in ink.
 - 4. Dimension from two (2) permanent points of reference, building corners, sidewalk, or road intersections, etc., the location of the following items:
 - a. Connection to existing water lines.
 - b. Gate valves.
 - c. Garden valves.
 - d. Other related equipment.
 - 5. On or before the date of the final inspection, deliver the corrected and completed reproducible to the Landscape Architect. Delivery of the reproducible will not relieve the Contractor of the responsibility of furnishing required information that may be omitted from the prints.
- D. Operation and Maintenance Manuals:
 - 1. Prepare and deliver to the Landscape Architect within ten calendar days prior to completion of construction, two binders containing the following information:
 - a. Index sheet stating Contractor's address and telephone number, list of equipment with name and addresses of local manufacturer's representative.
 - b. Catalog and parts sheets on every material and equipment installed under this Contract.
 - c. Guarantee statement.
 - d. Complete operating and maintenance instruction on all major equipment.
 - e. In addition to the above-mentioned maintenance manuals, provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Landscape Architect at the conclusion of the Project that this service has been rendered.
- E. Equipment to be Furnished:
 - 1. Supply as a part of this Contract the following tools:
 - a. Two (2) sets of special tools required for removing, disassembling and adjusting each type of valve supplied on this Project.
 - b. Two (2) five foot valve keys for operation of gate valves.
 - c. One (1) quick coupler key and matching hose swivel for every five (5) or fraction thereof of each type of quick coupling valve installed.
 - 2. Turn over the above-mentioned equipment to the Owner at the conclusion of the Project. Evidence that the Owner has received material must be shown to the Landscape Architect before final project review.

0.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Handling of PVC pipe and fittings: Exercise care in handling, and storing of PVC pipe and fittings. Transport all PVC so as not to subject it to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged will be discarded and, if installed, shall be replaced with new piping.
- 0.6 GUARANTEE
 - A. The guarantee for the irrigation system shall be made in accordance with the following form. The General conditions and Supplementary conditions of these specifications shall be filed with Owner or his representative prior to acceptance of the irrigation system.
 - B. A copy of the guarantee form shall be included in the operations and maintenance manual.
 - C. The guarantee form shall be re-typed onto the Contractor's letterhead and contain the following information:

0.7 GUARANTEE FOR IRRIGATION SYSTEM

- A. We hereby guarantee that the irrigation system we furnished and installed is free from defects in materials and workmanship, and work has been completed in accordance with the drawings and specifications, ordinary wear and tear and unusual abuse or neglect excepted. We agree to repair or replace any defects in material or workmanship which may develop during the period of one year from the date of acceptance and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Owner. We shall make such repairs or replacements within a reasonable time, as determined by the Owner, after receipt of written notification. In the event of our failure to make such repairs or replacement within a reasonable time after receipt of written notice from the Owner, we authorize the Owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefor upon demand.
- B. Include following information:
 - 1. PROJECT:
 - 2. CONTRACTOR:
 - 3. ADDRESS:
 - 4. PHONE NUMBER:
 - 5. BY:
 - 6. DATE OF ACCEPTANCE:

PART 2 - PRODUCTS

0.1 MATERIALS

- A. General: Use only new materials of brands and types noted on Drawings, specified herein, or approved equals.
- B. Copper: ASTM B88, Type L, hard-drawn copper tube and wrought solder type, paint per detail.
- C. PVC Pressure Main Line Pipe and Fittings:
 - 1. Pressure main line piping for sizes 2" and larger shall be Pacific Western (or approved equal) PVC Class 315 pipe. Pipe shall be made from an NSF approved Type I, Grade I PVC compound conforming to ASTM resin specification D1784. All pipes must meet requirements as set forth in Federal Specification PS-22-70, with an appropriate standard dimension (S.D.R.) (Solvent-weld pipe).
 - 2. Pressure main line piping for sizes 1-1/2" and smaller shall be Pacific Western (or approved equal) PVC Schedule 40 pipe. Pipe shall be made from NSF approved Type I, Grade I PVC compound conforming to ASTM resin specification 1785. All pipes must meet requirements as set forth in Federal Specification PS-22-70.
 - 3. PVC solvent-weld fittings shall be Schedule 40, 1-2, IH NSF approved conforming to ASTM test procedure D2468.
 - 4. Solvent cement and primer for solvent-weld and fittings shall be of type and installation methods prescribed by the manufacturer.
 - 5. All PVC pipe must bear the following markings:
 - a. Manufacturer's name
 - b. Nominal pipe size
 - c. Schedule or class
 - d. Pressure rating in P.S.I.
 - e. NSF (National Sanitation Foundation) approval
 - f. Date of extrusion.
 - 6. All fittings shall bear the manufacturer's name or trademark, material designation, size, applicable I.P.S. schedule and NSF seal of approval.
- E. PVC Pipe Sleeves: All piping installed under paving, through walls or footings shall be placed inside Schedule 40 PVC pipe sleeves of adequate size to allow free movement of the pipe in the sleeve.
- F. Copper Pipe and Fittings: Type "L" copper pipe with wrought copper fittings.
- G. Ball Valves:
 - 1. PVC Ball valves.
 - 2. Install per installation detail.
- H. Garden valves: size and type as indicated on Drawings.
- M. Control Valve Boxes:
 - 1. Heavy duty rectangular box, Carson, Ametek, Roby, with lockable lid. Install as detailed. Burn the valve number on the lid of the valve box with a branding iron manufactured for that purpose. Install a plastic pre-printed valve tag with a number corresponding to the valve number on each valve.
 - a. Use 10" x 10-1/4" round box for all gate valves. Extension sleeve, where required, shall match box.
 - b. Use 12" x 17" measured top rectangular box for all remote control valves. Extension sleeve, where required, shall match box.

PART 3 - EXECUTION

0.1 INSPECTION

- A. Site Conditions:
 - 1. All scaled dimensions are approximate. The Contractor shall check and verify all size dimensions and report any discrepancies to the Landscape Architect prior to proceeding with Work in this Section.
 - 2. Exercise extreme care in excavating and Working near existing utilities. Contractor shall be responsible for damages to utilities that are caused by the Contractor's operations or neglect. Check existing utilities Drawings for existing utility locations.
 - 3. Coordinate installation of irrigation materials including pipe, so they do not interfere with utilities or other construction or cause difficulty in planting trees, shrubs and groundcovers.
 - 4. Carefully check grades before starting Work on the Irrigation System.

0.2 PREPARATION

- A. Physical Layout:
 - 1. Prior to installation, stake out all pressure supply lines, routing and location of sprinkler heads.
 - 2. Pipe layout must be approved by Landscape Architect prior to installation.
- B. Water Supply:
 - 1. Connect the irrigation system to water supply point of connection indicated.
 - 2. Make connections at approximate locations shown. Contractor is responsible for minor changes caused by actual site conditions.

0.3 INSTALLATION

- A. Trenching:
 - 1. Dig trenches straight and support pipe continuously on bottom of trench. Lay pipe to an even grade. Trenching excavation shall follow layout indicated on Drawings and as noted.
 - 2. Provide for a minimum of eighteen (18) inches cover for all pressure supply lines.
 - 3. Provide for a minimum of twelve (12) inches cover for all non-pressure lines.
 - 4. Provide for a minimum of six (6) inches cover for all drip irrigation lines unless otherwise specified in the Drawing Details.
 - 5. Provide for a minimum of eighteen (18) inches cover for all control wiring.
- B. Backfilling:
 - 1. Do not backfill trenches until all required tests are performed. Carefully backfill trenches with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, or other approved materials. Free from large clods of earth or stones. Mechanically compact backfill in landscaped areas to a dry density equal to adjacent undisturbed soil in planting area. Backfill will conform to adjacent grades without dips, sunken areas, humps or other surface irregularities.
 - 2. Place a fine granular material backfill to a depth of 6" immediately above all lines. No foreign matter larger than one-half (1/2) inch in size will be permitted in the initial backfill.
 - 3. Flooding of trenches will be permitted only with the approval of the Landscape Architect.
 - 4. If settlement occurs and subsequent adjustments in pipe, valves, sprinkler heads, lawn or planting, or other construction are necessary, make all required adjustments without cost to the Owner.

C. Trenching and Backfill Under Paving:

- 1. Backfill trenches located under areas where paving, asphaltic concrete or concrete will be installed with sand (a layer six (6) inches below the pipe and three (3) inches above the pipe) and compact in layers to 95% compaction, using manual or mechanical tamping devices. Compact trenches for piping to equal the compaction of the existing adjacent undisturbed soil and leave in a firm unyielding grade. Set in place, cap and pressure test, all piping under paving prior to the paving Work.
 - 2. Piping under existing walks is generally done by jacking, boring or hydraulic driving, but where any cutting or breaking of sidewalk and/or concrete is necessary, it shall be done and replaced by the Contractor as a part of the Contract cost. Obtain permission to cut or break sidewalks and/or concrete from the Landscape Architect. No hydraulic driving will be permitted under concrete paving.
 - 3. Provide for a minimum cover of eighteen (18) inches between the top of the pipe and the bottom of the aggregate base for all pressure and on-pressure piping installed under asphaltic concrete paving.
- D. Assemblies:
 - 1. Routing of irrigation lines as indicated on the Drawings is diagrammatic. Install lines (and various assemblies) in such a manner as to conform with the details.
 - 2. Install no multiple assemblies in plastic lines. Provide each assembly with its own outlet.
 - 3. Install all assemblies specified herein in accordance with respective details. In absence of detail Drawings or Specifications pertaining to specific items required to complete the Work, perform such Work in accordance with best standard practice with prior approval of the Landscape Architect.
 - 4. Clean all PVC pipe and fittings before installation. Installation and solvent welding methods shall be as recommended by the pipe and fitting manufacturer.
 - 5. On PVC to metal connections, work the metal connections first. Use teflon tape, or approved equal, on all threaded PVC, and on all threaded PVC to metal joints. Where threaded PVC connections are required, use threaded PVC adapters into which the pipe may be welded.
 - E. Line Clearance: All lines shall have a minimum clearance of six (6) inches from each other and from lines of other trades. Parallel lines shall not be installed directly over one another.

0.4 TEMPORARY REPAIRS

- A. The Owner reserves the right to make temporary repairs as necessary to keep the irrigation system equipment in operating condition. The exercise of this right by the Owner shall not relieve the Contractor of responsibility under the Contract Documents.

0.5 EXISTING TREES AND SHRUBS

- A. Where it is necessary to excavate adjacent to existing trees and shrubs, use all possible care to avoid injury to trees, tree roots and shrubs. Excavate by hand only in areas where two (2) inch and larger roots occur. Tunnel under all roots two (2) inches and larger in diameter. Wrap roots in heavy burlap to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than two (2) inches in diameter, hand trim the wall of the trench adjacent to the tree, making clean cuts through. Plant roots one (1) inch and larger in diameter with two (2) coats of tree paint. Close trenches adjacent to tree within twenty-four (24) hours, and where this is not possible, shade the side of the trench adjacent to the tree with burlap or canvas. Excavations within the confines of existing Oak trees shall be performed under the supervision of the project Arborist.

0.6 FIELD QUALITY CONTROL

- A. Adjustment of the System:
 - 1. If it is determined that adjustments in the irrigation equipment will provide proper and more effective coverage, make adjustments prior to planting. Adjustments may also include changes in emitter sizes as required.
- B. Testing of Irrigation System:
 - 1. Request the presence of the Landscape Architect in writing at least forty-eight (48) hours in advance of testing.
 - 2. Test all pressure lines under hydrostatic pressure of 150 pounds per square inch and prove watertight.
 - a. Testing of pressure mainlines shall occur prior to installation of electrical control valves.
 - 3. Test all piping under paved areas under hydrostatic pressure of 150 pounds per square inch and prove watertight prior to paving.
 - 4. Sustain pressure in lines for not less than two (2) hours. If leaks develop, replace joints and repeat test until entire system is proven watertight.
 - 5. Make all hydrostatic tests only in the presence of the Landscape Architect or other duly-authorized representative of the Owner. Do not backfill pipe until it has been duly inspected, tested, and approved.
 - 6. Furnish force pump and all other necessary test equipment.
 - 7. When the irrigation system is completed, perform a coverage test in the presence of the Landscape Architect to determine if the water coverage for planting areas is complete and adequate. Furnish all materials and perform all Work required to correct any inadequacies of coverage due to deviations from Drawings, or after bringing this to the attention of the Landscape Architect. This test shall be accomplished before any groundcover is planted.
 - 8. Upon completion of each phase of Work, test and adjust the entire system to meet site requirements.

0.7 MAINTENANCE

- A. The entire irrigation system will consist of 3 garden valves, requiring manual application.

0.8 CLEAN-UP

- A. Clean-up as each portion of Work progresses. Remove refuse and excess dirt from the site, sweep all walks and paving clean, and repair any damage done to the Work of others to original conditions.

0.9 FINAL OBSERVATION PRIOR TO ACCEPTANCE

- A. Operate each system in its entirety for the Landscape Architect at time of final observation. Rework any items deemed not acceptable by the Landscape Architect to the complete satisfaction of the Landscape Architect.
- B. Show evidence to the Landscape Architect that the Owner has received all accessories, charts, record drawings, and equipment as required before final observation can occur.

0.10 OBSERVATION SCHEDULE

- A. Notify the Landscape Architect in advance for the following observation meetings, according to the time indicated:
 - 1. Pre-Job conference: 7 days
 - 2. Pressure supply line installation and testing: 48 hours
 - 3. Final inspection: 7 days.
- B. When observations have been conducted by other than the Landscape Architect, show evidence in writing of when and by whom these observations were made.
- C. No site observations will commence without record drawings. In the event that the Contractor calls for a site visit without record drawings, without completing previously noted corrections, or without preparing the system for said visit, he shall be responsible for reimbursing the Owner for the Landscape Architect's time for the site visit at his current billing rates per hour, portal to portal (plus transportation costs) for inconvenience. No further site visits will be scheduled until this charge has been paid and received.

END OF SECTION 028100



202 East Cota Street
Santa Barbara, CA 93101
tel 805.962.9055
fax 805.962.5658
arcadiastudio.com



For inquiries regarding this plan contact
Bob Cunningham, ASLA at
(805) 962-9055 x 12 | bob@arcadiastudio.com

Revisions

- KK 04.22.2024
- KK 04.25.2024

LAGUNA COTTAGES
803 Laguna Street
Santa Barbara, CA
93101

IRRIGATION
SPECIFICATIONS

Issue
02/05/2024

Date 04.29.2024	Job Number 23.081
Drawn By KK/IMG	Checked by BC
Sheet 4	of 7

LI-3

PLANT SCHEDULE




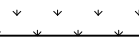
CODE	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
TREES					
CC	Cercis canadensis	Eastern Redbud - Standard Form	24"box	Medium	1
CA	Citrus x aurantifolia 'Bearss Lime'	Bearss Lime	24"box	Medium	1
CL	Citrus x limon	Lemon	24"box	Medium	1
LC	Lyonothamnus floribundus	Catalina Ironwood	24"box	Low	2

SHRUBS					
Ha	Helleborus argutifolius	Corsican Hellebore	5 gal	Low	6
Hm	Heuchera maxima	Island Alum Root	1 gal	Low	40
Hs	Heuchera maxima 'Santa Ana Cardinal'	Island Alum Root	1 gal	Low	28
Ng	Nandina domestica 'Gulf Stream'	Gulf Stream Heavenly Bamboo	5 gal	Low	30
Pp	Polygala fruticosa 'Petite Butterfly'	Sweet Pea Shrub	5 gal	L - SB Addendum	9

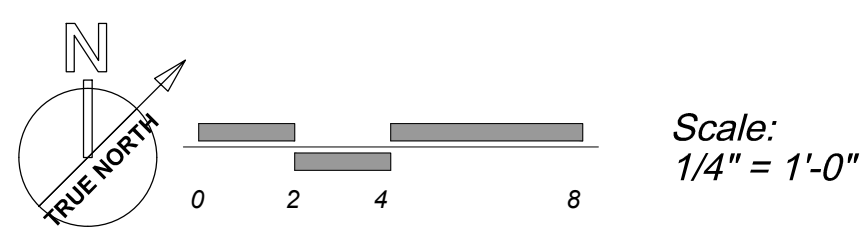
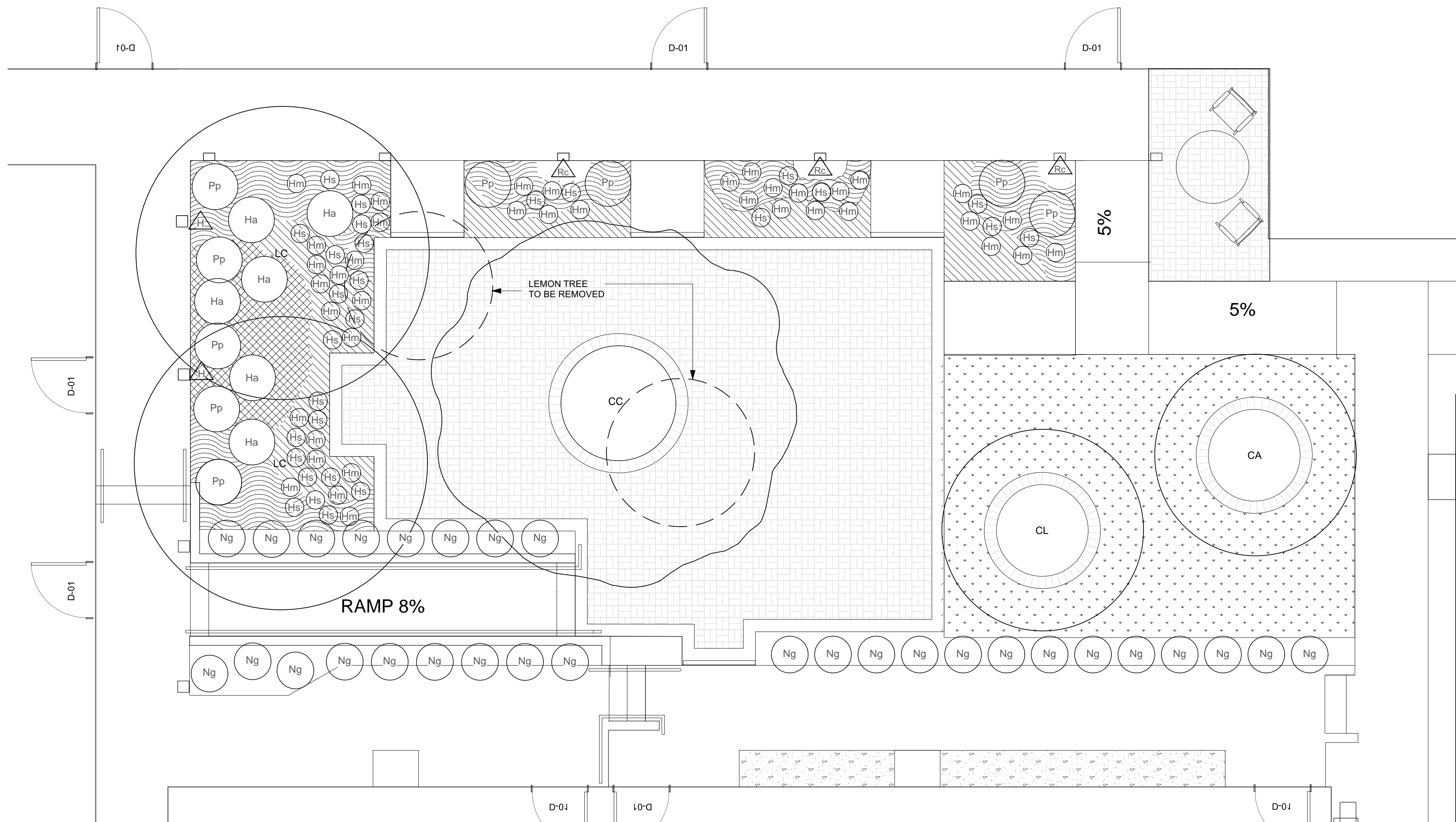
ROSES					
Rc	Rosa x 'Cecile Brunner'	Cecile Brunner Climbing Rose - Staked	15 gal	Low	3

VINE/ESPALIER					
H	Hardenbergia violacea	Lilac Vine - Staked	15 gal	Low	2

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
--------	----------------	-------------	------	--------	---------

GROUND COVERS					
	Ajuga reptans	Carpet Bugle	1 gal	Medium	12" o.c.
	Bergenia cordifolia	Heartleaf Bergenia	1 gal	Low	18" o.c.
	Liriope muscari	Lilyturf	1 gal	Medium	24" o.c.
	Synthetic Turf - -	-	roll	N/A	-

Total Landscaped Area = 403 SF
MWEO Exempt (Projects under 500SF)



Planting Notes:

- All plants are identified by typical symbols. Plant quantities are approximate and provided for the contractor's convenience. In the event of discrepancies in plant count, quantities indicated by plant symbols on the plan prevail.
- Specification Section 02950 or 032 93 00, Landscape Planting & Section 028100 Irrigation. Do not bid planting plan without reference to applicable specification section.
- Contractor is responsible for finish grades and for fine grading required for surface drainage and uniformity to the satisfaction of the Landscape Architect. Advise Landscape Architect of drainage problems and make recommendations for solution. Final grades to within a tenth of a foot must be established prior to commencing planting operations.
- Grades and flow lines must be maintained during irrigation and planting operations. Contractor may not alter established grade and flow lines without the knowledge and permission of the Landscape Architect.
- The Landscape Architect reserves the right to review all plant material at the nursery prior to delivery to job site. In lieu of nursery review the Landscape Architect may request photos and/or specifications of plant material to be provided prior to delivery.
- Landscape Architect reserves the right to refuse plants delivered to site that are substandard. Replacement plants are to be supplied by contractor at no additional cost to owner.
- Plant materials and installation to meet highest quality industry standard. Locate and secure all specified plants within two weeks of award of contract and show proof of to Landscape Architect in writing that plants have been secured. Notify Landscape Architect immediately of any plant sourcing difficulty.
- Guaranty plant material 5 gallon or smaller except transplants for a period of 90 days from date of final review. Replace dead plants and plants not in vigorous condition, without cost to owner, as determined by Landscape Architect at the end of warranty period. Guaranty 15 gallon plants and larger, for 1 year from date of final review.
- Notify Landscape Architect of intended planting schedule a minimum of two weeks prior to planting.
- Set out all plant materials as shown on plan. Final locations must be approved by the Landscape Architect prior to planting.
- Plant crown to be 2" above adjacent grade for 15 gallon and larger plants; 1" above adjacent grade or plants smaller than 15 gallon.
- Install all plants per details.
- Stake trees according to industry standards per details. Review with Landscape Architect prior to work.
- Contact Landscape Architect for decision regarding proposed plant substitutions 4 weeks prior to installation.
- All plants delivered to the site must have legible identification tags.
- Plant groundcovers adjacent to shrubs and/ or trees 1.5 times the distance of their specified spacing away from the stems of the adjacent shrubs and trees. Groundcovers adjacent to curbs and pavement shall be spaced at specified spacing away from paved areas.
- Plant backfill: See Specifications
- Completely eradicate all bermuda, kikuyu grass, and other weed growth or other visible or alleged invasive weeds from areas within project limits prior to installing planting.
- Provide and install bark mulch over all shrub and groundcover areas. Use walk-on bark mulch. Walk on Bark mulch shall be a virgin forest product consisting of shredded fir bark and bark nuggets. Source from Agromin (800) 247-6646 or as listed in the specifications. Spread mulch evenly over all shrub and groundcover areas to a depth of 3" (three inches). Keep mulch away from plant stems. Submit mulch samples to Landscape Architect for approval prior to purchase and delivery.
- Preserve and protect all existing trees unless otherwise noted.
- Pottery planting mix by volume:
1/3 medium ground peat moss
1/3 #16 sand
1/3 medium vermiculite
plus
1/2 pound per cubic yard urea nitroform
1 pound per cubic yard single superphosphate

- Thoroughly mix and moisten planter soil in pots prior to placement. After installation, supplement planter soil as required to compensate for settling. Install gravel in bottoms of all pots to a depth of 2" and place a layer of filter fabric between the gravel and potting soil. Place a 1/8" mesh copper screen over the planter drain hole. Provide and install bark mulch in all pots. Bark mulch shall be walk on bark, spread evenly to a minimum depth of 1". Top of bark mulch layer should be approximately 2" below rim of pot.
- Set out all pots and plant materials as shown on plan. Final locations must be approved by the landscape architect prior to placement and planting.
- Any tree or plant containing pathogens, bacteria or viruses harmful to plant health shall be replaced at the Contractor's expense.
 - In areas with significant gopher populations that can not be controlled through traps or other conventional methods, all plant material is to be placed in an appropriately sized gopher basket.

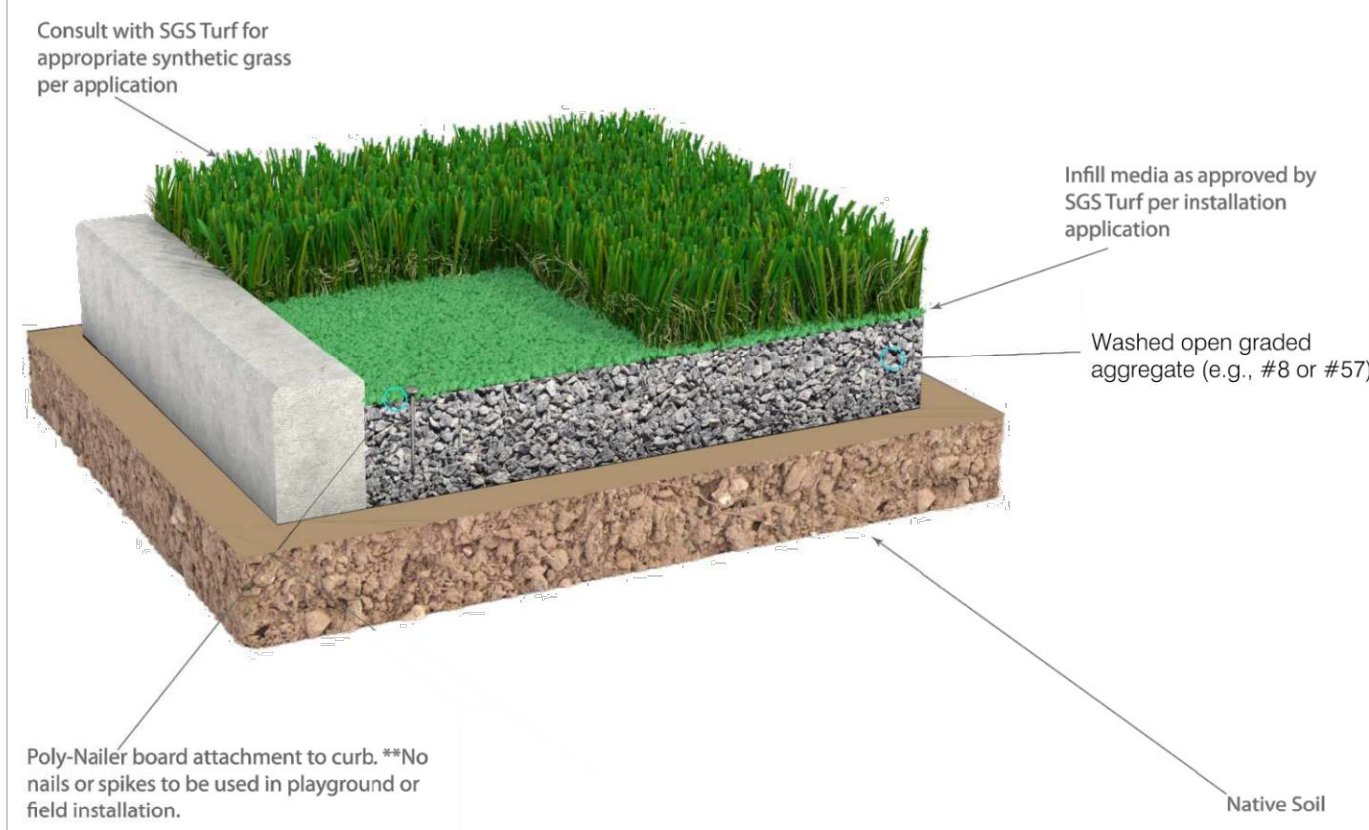
LAGUNA COTTAGES
803 Laguna Street
Santa Barbara, CA
93101

PLANTING PLAN

Issue
02/05/2024

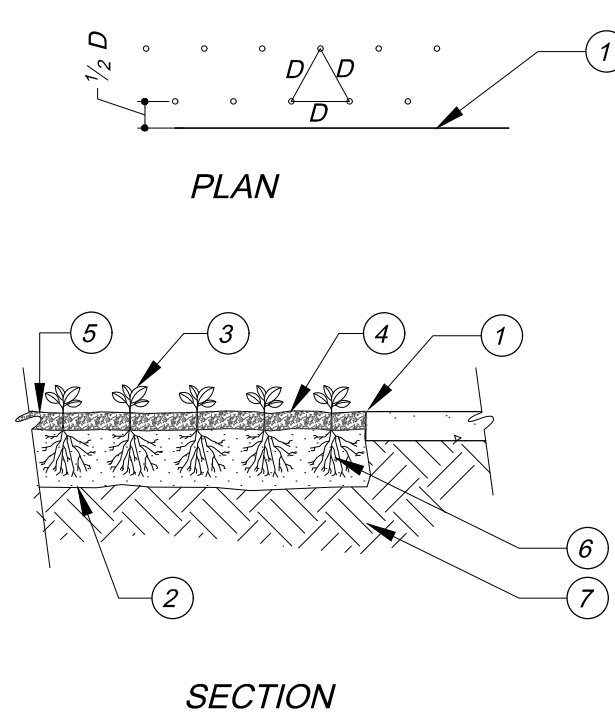
Date 04.29.2024	Job Number 23.081
Drawn By KK/IMG	Checked by BC
Sheet 5	of 7

LP-1



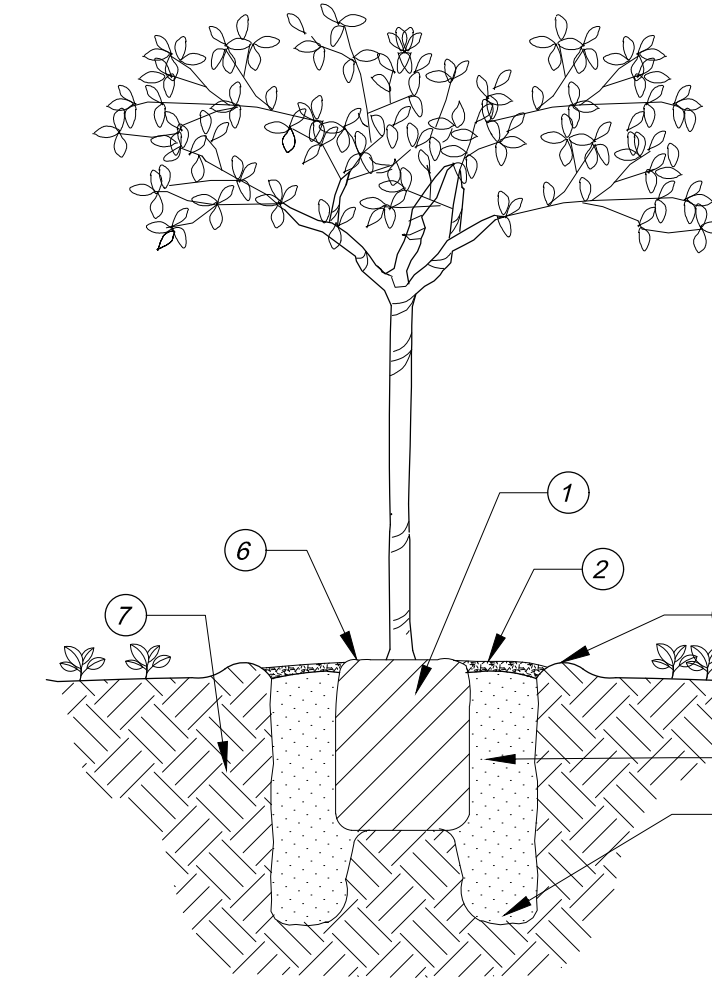
www.sgturf.com
info@sgturf.com
Typical landscape installation. For illustration purposes.

7 SYNTHETIC TURF INSTALLATION SECTION
Not to Scale



- Edge of paving, walk, wall, etc.
 - 10" Minimum deep tilled planting bed over scarified subgrade.
 - Groundcover.
 - Install 2" thick mulch layer prior to planting groundcover.
 - Finish grade.
 - Amended soil.
 - Unamended subgrade.
- Note: Locate plants spaced equal distance (D) from each other as shown. D = as shown on planting plan.

4 GROUNDCOVER PLANTING
Not to Scale



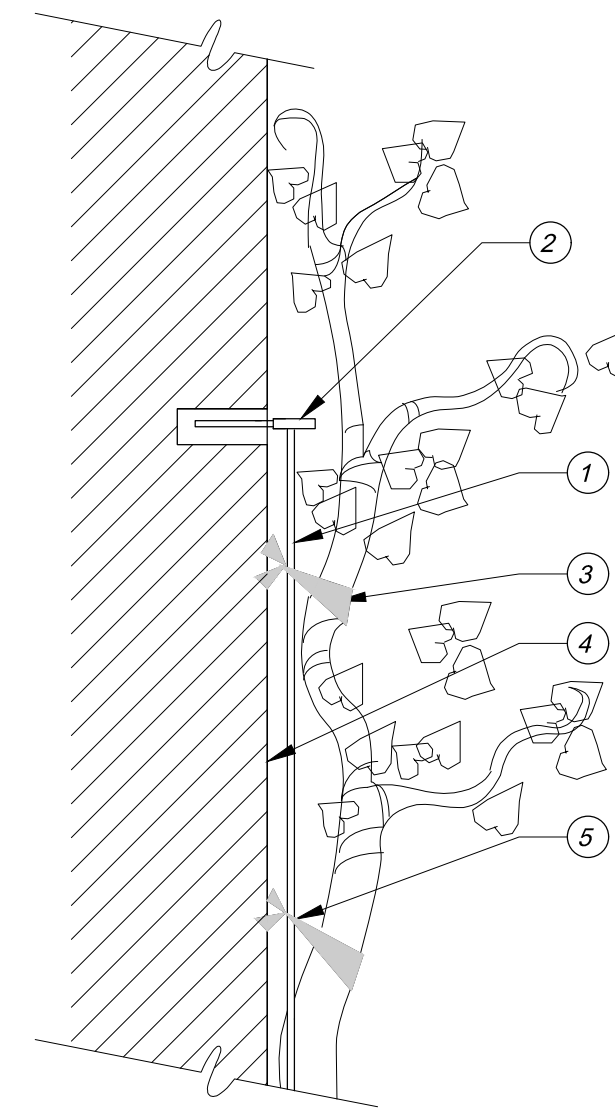
- Rootball: set on firm soil at bottom of pit.
- Mulch over basin per specifications.
- Backfill: see specifications.
- 6" High temporary berm.
- 6" Diameter by 18" deep augured holes backfilled with amended soil. Roughen sides of holes to prevent glazing.

15 gal trees: 3 holes at outer edge of rootball.
24" box & 36" box trees: one hole at each corner and one in the center.
Larger than 36" box trees: one hole at each corner, one each side, and one in the center (9 total).

- Set rootball with crown 1" above finish grade.
- Undisturbed soil. If necessary, compact subsoil and form pedestal to prevent settling.

Note: Where tree is installed in turf area, keep 2'-0" min. radius area clear of turf, as measured from the outside of the trunk. Radius size may be increased at Landscape Architect's discretion depending on box size of tree.

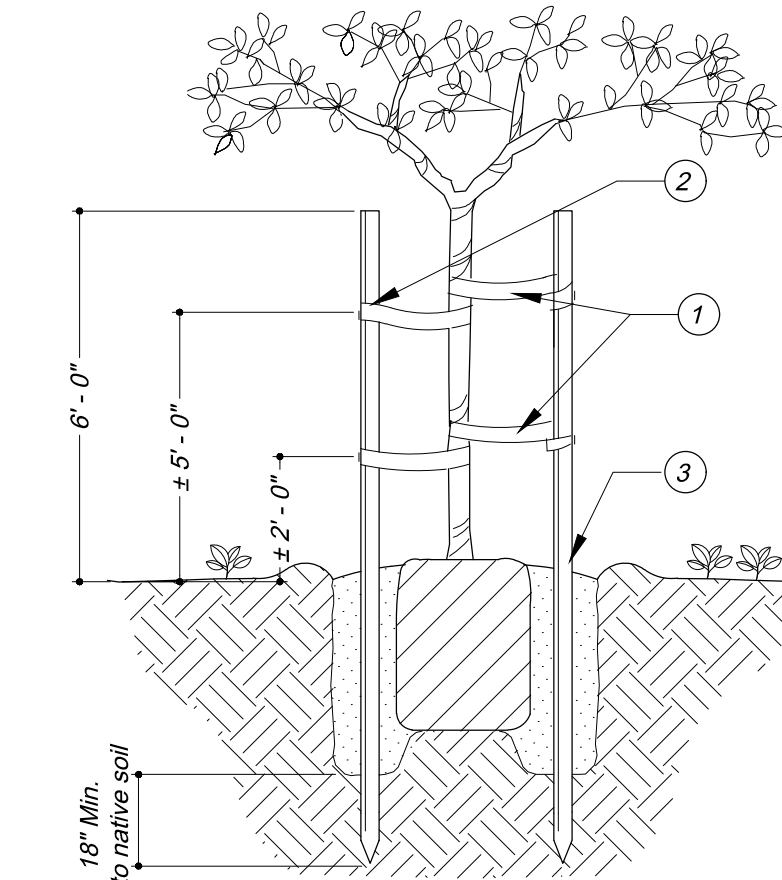
1 TREE PLANTING
Not to Scale



- 12 Gauge galvanized wire secured to eye bolt.
- Galvanized eye screw.
- Clear plastic nursery tape.
- Column.
- Tie vines onto screws with plastic tape.

Notes: 1. For vine attachment to wood posts, use galvanized eye screws and loosely tie vines to eye screws with clear plastic nursery tape.
2. Landscape Architect will determine wire pattern for vine and espalier attachment in field.

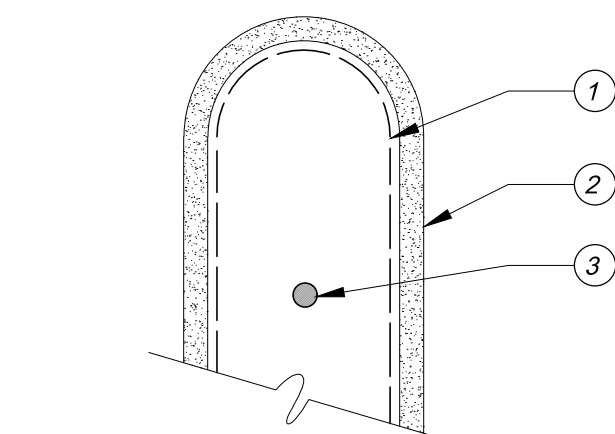
5 VINE ATTACHMENT
Not to Scale



- Two nylon reinforced ties: 1" Wide figure 8 "Super Tie 1" tree ties or approved equal. Adjust to allow for tree movement.
- Attach to stake with galvanized roofing nail.
- 2 1/2" Diameter lodgpole. Drive 18" minimum into undisturbed subgrade outside rootball.

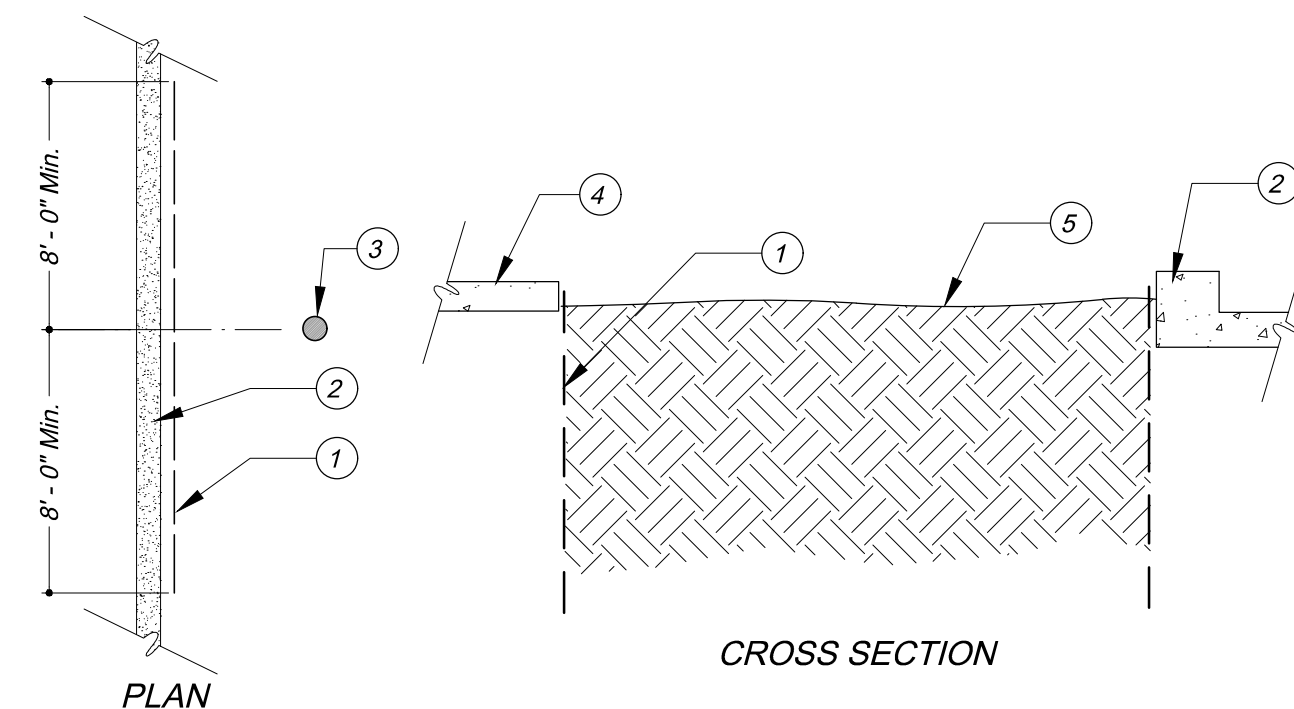
Notes:
1. Refer to planting detail for hole size, backfill, etc.
2. Modify installation as required for trees in public right of way.

2 TREE STAKING
Not to Scale

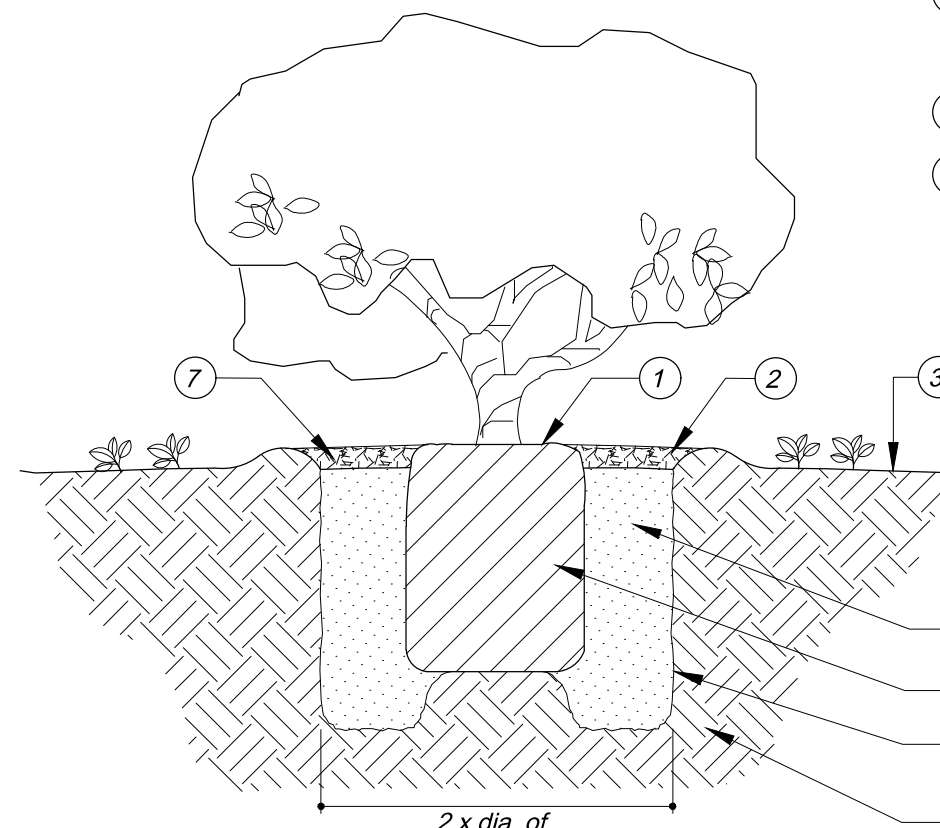


- Deep Root UB 18-2: Top of root barrier to be 1/2" below adjacent pavement. Install flush to edge of pavement.
- Curb
- Tree trunk
- Sidewalk
- Finish grade 1" below top of root control barrier.

PLAN AT PARKING FINGER (Where Applies)



6 ROOT CONTROL BARRIER
Not to Scale



- Set rootball with crown 1" above finish grade.
- 2" Deep basin.
- Finish grade.
- Backfill mix per specifications.
- Scarify sides and bottom of hole.
- Undisturbed soil. If necessary, compact subsoil and form pedestal to prevent settling.
- Mulch over basin per specifications.
- Rootball.

Note: Excavate planting hole 2 times wider than plant rootball. Excavate outer edges deeper than center. Rootball should rest on undisturbed subgrade.

3 SHRUB PLANTING
Not to Scale



TESTING SERVICES, INC.
817 SHOWALTER AVE. - P.O. BOX 2041
DALTON, GEORGIA 30702-0041
PHONE: (706) 226-1400 - FAX: (706) 226-6118

CLIENT:	Synthetic Grass Superstore	REPORT NUMBER:	587820
	PO Box 2727	LAB TEST NUMBER:	2554-7759
	Pomona CA.	DATE:	August 22, 2013

Test Material:			
Turf Identification			
ELAN-0022			

Test Scope: This test method determines rainfall drainage capacity (permeability) of submitted turf.

Test Method: ASTM F1551-09: Standard Test Methods for Comprehensive Characterization of Synthetic Turf Playing Surfaces and Materials: Suffix-D1M 18-035, Part 6: Water Permeability of Synthetic Turf Systems and Permeable Bases

Test Equipment:
Tube: 10.75" OD 10.00" ID 6' Length (Beveled)
Tube Weight: 39 lbs
Tube Flow Head: 2 Gallons
Tube Index Mark: 6"
Flange: 9.375" Diameter

Test Sampling:
of Specimens: (3) 11.5" Diameter
Pre-Conditioning: 70°F 65% RH for 24 Hours Minimum

Test Procedure: Three specimens, 11.5" diameter were die cut from the turf roll. A specimen was sealed by means of mechanical latches to the flange and tube. Water was pumped into the tube faster than could drain, until the water level was above the timing mark of 6". A stopwatch was activated when the water level reached 6" and terminated when the water level reached the highest areas of the pile surface. The flow time was recorded in seconds. This procedure was repeated four passes on each specimen, with the first pass for system conditioning, and not included for calculation. Test data values represent drainage rates for the turf only, and do not take into account the percolation properties of a pad, infill and/or underlying sub base.

Specimen #	Water Flow Thru 6" Zone	Gallons/minute/ft²	Rainfall Capacity
1	64.8 Seconds	31.2	95.7 inches/hour
2	21.0 Seconds	96.0	294.5 inches/hour
3	28.0 Seconds	72.0	221.0 inches/hour

Water Flow Thru 6" Zone	Gallons/minute/ft²	Rainfall Capacity
37.9 Seconds	66.4	163.3 inches/hour

Erie Miles, Jr V.P., Testing Services Inc.

TSI Accreditation: Our laboratory is accredited with US Dept of Commerce, National Institute of Standards and Technology, ISO/IEC 17025:2015. Our code # is NTLAP 100108-0. However, it should be noted that some or all of the tests performed are not under our scope of accreditation due to the work not fully conforming to the standard, or being outside the scope of our accreditation, or subcontracted.

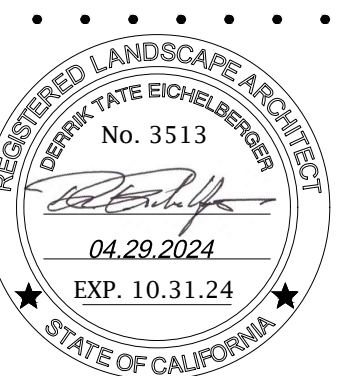
Uncertainty: We undertake all assignments for our clients on a best effort basis. Our findings and judgments are based on the information to us using the latest test methods available.

OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS. THESE LETTERS AND REPORTS ARE FOR THE USE ONLY OF THE CLIENT TO WHOM THEY ARE ADDRESSED AND THEIR COMMUNICATION TO ANY OTHERS OR THE USE OF THE NAME TESTING SERVICES, INC. MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. THE REPORTS AND LETTERS, AND OUR NAME, OUR SEAL, OR OUR INDIANA ARE NOT UNDER ANY CIRCUMSTANCES TO BE USED IN ADVERTISING TO THE GENERAL PUBLIC. VISIT OUR WEBSITE AT www.tsi-lab.com

8 SYNTHETIC TURF PERMEABILITY TEST RESULTS



202 East Cota Street
Santa Barbara, CA 93101
tel 805.962.9055
fax 805.962.5658
arcadiastudio.com



For inquiries regarding this plan contact
Bob Cunningham, ASLA at
(805) 962-9055 x 302 / info@arcadiastudio.com

Revisions
• KK 04.22.2024
• KK 04.25.2024

LAGUNA COTTAGES
803 Laguna Street
Santa Barbara, CA 93101

PLANTING DETAILS

Issue
02/05/2024

Date	Job Number
04.29.2024	23.081
Drawn By	Checked by
KK/IMG	BC
Sheet	of
6	7

LP-2

301.1.1 Additions and alterations. [HCU] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

OW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of visual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

3N 302 MIXED OCCUPANCY BUILDINGS

IXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building must comply with the specific green building measures applicable to each specific occupancy.

EVIATION DEFINITIONS:

Department of Housing and Community Development
California Building Standards Commission
Division of the State Architect, Structural Safety
Office of Statewide Health Planning and Development
Low Rise
High Rise
Additions and Alterations
New

**PTER 4
DENTIAL MANDATORY MEASURES**

ION 4.1 PLANNING AND DESIGN

3N 4.102 DEFINITIONS

DEFINITIONS
The following terms are defined in Chapter 2 (and are included here for reference)

RAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar material used to collect or channel drainage or runoff water.

Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials by straw or similar material shaped in the form of tubes and placed on a downhill slope. Wattles are also srimeter and inlet controls.

ITE DEVELOPMENT

ENERAL. Preservation and use of available natural resources shall be accomplished through evaluation careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, agement of storm water drainage and erosion controls shall comply with this section.

ORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

- Retention basins of sufficient size shall be utilized to retain storm water on the site.
- Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
- Compliance with a lawfully enacted storm water management ordinance.

e: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or part of a larger common plan of development which in total disturbs one acre or more of soil.

bsite: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html

RADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

- Swales
- Water collection and disposal systems
- French drains
- Water retention gardens
- Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

electric vehicle (EV) charging for new construction. New construction shall comply with Sections 106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions:

- On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - Where there is no commercial power supply.
 - Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per dwelling unit.
- Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each parking unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the enclosed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or sealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Notes:

- Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
- There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

2. The EV space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric Vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following:

- The minimum length of each EV space shall be 18 feet (5486 mm).
- The minimum width of each EV space shall be 9 feet (2743 mm).
- One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).

- Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.

4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:

- Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
- There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1	
TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

- The minimum length of each EV space shall be 18 feet (5486mm).
- The minimum width of each EV space shall be 9 feet (2743mm).

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging stations in the *California Building Code*, Chapter 11B.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GPM @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

4.304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

- The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations*, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: <https://www.water.ca.gov/>

openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

- Excavated soil and land-clearing debris.
- Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
- The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

- Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
- Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
- Identify diversion facilities where the construction and demolition waste material collected will be taken.
- Identify construction methods employed to reduce the amount of construction and demolition waste generated.
- Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs. sq. ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

- Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
- Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

- Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
- Operation and maintenance instructions for the following:
 - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
 - Roof and yard drainage, including gutters and downspouts.
 - Space conditioning systems, including condensers and air filters.
 - Landscape irrigation systems.
 - Water reuse systems.
- Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
- Public transportation and/or carpool options available in the area.
- Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
- Information about water-conserving landscape and irrigation design and controllers which conserve water.
- Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
- Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
- Information about state solar energy and incentive programs available.
- A copy of all special inspections verifications required by the enforcing agency or this code.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

4.501.1 Scope

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS

The following terms are defined in Chapter 2 (and are included here for reference)

AGRFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

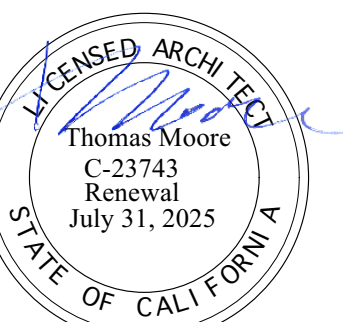
DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

ARCHITECT

THOMAS A MOORE
818 EAST FIGUEROA,
SANTA BARBARA, CA 93103
PHONE: 805 963 4399
E-MAIL: tm.tmas44@gmail.com



Tom Moore
Architect
A.I.A.
◆
Thomas Moore
Architectural Services
818 East Figueroa Street #A
Santa Barbara, CA 93103
805 963 4399



All ideas, designs and plans indicated or represented by these drawings are owned by and are the property of Mr. Thomas Moore of Thomas Moore Architectural Services and were created and developed by him. In connection with the specified project, none of such ideas, designs or plans shall be used for any purpose whatsoever without the written permission of Mr. Thomas Moore.

DATE	DESCRIPTION
10/15/22	SUBMITTAL

