SAN RAFAEL CITY SCHOOLS

CAPITAL FACILITIES PROGRAM

310 Nova Albion Way, San Rafael, CA 94903

ADDENDUM NO. 2

то

Venetia Valley TK-8 School Landscape Renovations

Project Number #25-03

Addendum Date: March 20, 2025

This Addendum provides clarifications, responses to Requests for Information inquiries received, revised Bid Form, as well as additional project information.

Additional Project Information:

1. ANLA Addendum #2, including Specifications and revised drawing sheets as noted.

Answers to Questions received:

- 1. Question Received: "Does contractor need to be qualified by the San Rafael City Schools ("District")?"
 - a. Answer: No.
- 2. Question Received: "Please provide the percentage of self-perform construction."
 - b. Answer: Not applicable.
- 3. Question Received: "Please provide logistic plan or at least staging area and parking location."
 - a. Answer: As noted at the site walk, access to the site is through the fire access road directly off of N. San Pedro Rd. at the northeast end of campus. Staging area can be designated prior to construction off of the access road.
- 4. Question Received: "Please provide the geotechnical soil report"
 - a. Answer: A geotechnical soils report is not required for this project. Necessary compaction rates based on historical geotechnical data have been provided on the details where relevant.
- 5. Question Received: "Does this job require PLA?"
 - a. Answer: No.

Venetia Valley TK-8 School Landscape Renovations Project #25-03 Addendum No. 2

- 6. Question Received: "There is no location to fill in alternate 1 & alternate 2 in the bid form. Please clarify."
 - a. Answer: There is only Alternate 1, references to "Alternate 2" are removed in the ANLA Addendum #2. See revised Bid Form Section 00 41 13, which shall be used by bidders to submit their bids.
 - b. Related Clarification: Bidders are advised that the District will base the award on the TOTAL BID PRICE, the sum of Base Bid (including Allowances) and Alternate #1.
- 7. Question Received: "Does \$25,000 allowance shown in bid form include \$10,000 allowance shown in the Addendum 1. If no, please confirm that \$10,000 allowance shall be included Contractor's overall project management and general conditions costs, overhead and fee."
 - a. Answer: "Yes, see the revised Bid Form Section 0041 13, which shall be used by bidders to submit their bids."
- 8. Question Received: "Please provide specs 32 18 16.16-Protective Rubber Surfacing under Synthetic Turf indicated in section 1.2/321813."
 - **a.** Answer: Specification 32 18 16.16 is provided as part of Addendum 2 response.
- 9. Question Received: "Reference to section 2.1/321813, synthetic turf shall be Playground Grass Ultra as manufactured by Forever Lawn Inc, but detail G/L2.1 indicates synthetic turf shall be Playground grass quest by Ross Recreation. Please clarify."
 - a. Answer: Synthetic turf shall be Playground Grass 'Quest', a ForeverLawn product, available through Ross Recreation.
- **10.** Question Received: "**Reference to sheet L3.2, rotor is 1-20-06-PRB-R-MPR, but this model is not available. Please confirm rotor is I-20-06-PRB-R-MPR.**"
 - a. Answer: Correct, rotor is to be I-20-06-PRB-R-MPR.
- 11. Question Received: "Reference to sheet L1.1 in addendum #1, concrete paving shall be installed per detail C/L2.2, but detail C/L2.2 is asphalt paving. Please confirm concrete paving shall be bid as detail C/L2.1."
 - a. Answer: Concrete paving is to be installed per detail A / Addendum 1-L2.1
- 12. Question Received: "Reference to sheet L5.2 in Addendum #1, hydroseed is erosion control mixture but specs 32 92 19 indicates for turf hydro seeding.

Please clarify and provide the erosion control mixture hydroseed technical specs."

a. Answer: Install erosion control hydroseed mixture as specified on sheet L5.2.

13. Question Received: "Please provide a tree installation detail."

a. Answer: Tree installation detail is added as detail H / L6 in Addendum 2 drawings.

14. Question Received: "Reference to section 3.2.F/329000, please provide location of lime treated soil need to be removal for bidding purpose."

a. Answer: No lime treated soil is to be removed as part of this project.

15. Question Received: "There is not information about clearing and grubbing for new planting areas in plans. Besides that, no technical specifications for clearing and grubbing is provided. Please clarify."

a. Answer: For clearing and grubbing information refer to specification section 31 10 00 Site Clearing, added as part of Addendum 2.

16. Question Received: "Does this job require import topsoil for all planting areas? If yes, please provide the depth for bidding purposes."

a. Answer: Import topsoil is not required throughout all planting areas, existing topsoil is to be amended and re-used wherever possible. Import of topsoil may be required at area in turf that is being re-graded due to the storm drain being raised – Contractor to determine quantity of topsoil required for this work.

17. Question Received: "Please confirm existing irrigation system is to be in fully functional and operable condition at the time of landscape construction."

a. Answer: Confirmed. The existing irrigation system is to be in fully functional and operable condition at the time of landscape construction.

18. Question Received: "Please confirm we can use existing wire for a new remotecontrol valve closed in building L1 middle school shown in sheet L3.2."

a. Answer: Confirmed. The existing control wire for the valve adjacent to the middle school area is to be re-used.

19. Question Received: "Reference to sheet L3.08B, remote control valves closed to field area are H controller station but the call-out shows B controller station. Please clarify."

- a. Answer: The 'H' or 'L' designations on the record drawings are in reference to the hydrozone type (H is for high water use, L is for low water use). All of the valves in the turf field areas function from Irrigation Controller 'B' as is labeled on sheet L3.2.
- 20. Question Received: "L3.1 shows new sleeves (bold) and existing sleeves (not bold) but calls all the sleeves and laterals inside the sleeves as existing. Are all the sleeves existing? And laterals within the existing sleeves existing?"
 - Answer: Refer to updated sheet L3.1 and L3.2 provided as part of Addendum
 Craphics have been updated on the sheets and in the irrigation legend to provide enhanced clarity as to where existing and new irrigation sleeving is to occur. Notes have also been added, clouded on the sheet, specifically labeling the irrigation sleeves that are to be installed as part of this project.

BID FORM AND PROPOSAL

To: Governing Board of the San Rafael City Schools ("District" or "Owner")

From:

(Proper Name of Bidder)

The undersigned declares that Bidder has read and understands the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications of Bid No.25-03, for the following project known as:

Venetia Valley TK-8 School Landscape Renovations

("Project" or "Contract") and will accept in full payment for that Work the following total lump sum amount, all taxes included:

BASE BID: Bidder acknowledges and agrees the all Allowance(s).	dollars hat the Base Bi d	\$ d accounts for any and
Alternate #1:	dollars	\$
TOTAL BID PRICE:	dollars	\$

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SAN RAFAEL CITY SCHOOLS

Additional Detail Regarding Calculation of Base Bid

1. <u>Allowance</u>. The Bidder's Base Bid shall include the following Allowances for the Tasks/Work as noted here:

Task/Work	Allowance Value
Unforeseen Site Conditions	\$15,000
Irrigation inspection, tracing, field verification of existing irrigation lines, control wiring	\$10,000
Total Allowance Value	\$25,000

The Allowance Value for an Allowance Item includes the direct cost of labor, materials, equipment, transportation, taxes and insurance associated with the applicable Allowance Item. All other costs, including Contractor's overall project management and general conditions costs, overhead and fee, are deemed to be included in the Base Bid.

The District shall have sole discretion to authorize all expenditures from the Allowances. The District shall process expenditures from the Allowances in the form of an Allowance Expenditure Directive ("AED"). Any unused Allowance or unused portion thereof shall be deducted from the Contract Price to the benefit of the District.

- 2. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.
- 3. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents and has contacted the District before bid date to verify the issuance of any clarifying Addenda.
- 4. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
- 5. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
- It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.
 SAN RAFAEL CITY SCHOOLS
 BID FORM AND PROPOSAL

BID FORM AND PROPOSAL VENETIA VALLEY TK-8 SCHOOL LANDSCAPE RENOVATIONS BID NO. 25-03 DOCUMENT 00 41 13-2

- 7. The following documents are attached hereto:
 - Bid Bond on the District's form or other security
 - Designated Subcontractors List
 - Site Visit Certification
 - Non-Collusion Declaration
- 8. Receipt and acceptance of the following Addenda is hereby acknowledged:

No. <u>1</u> , Dated <u>March 17, 2025</u>	No. <u>2</u> , Dated <u>March 20, 2025</u>

- 9. Bidder acknowledges that the license required for performance of the Work is a **A or C-27** license.
- 10. Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
- 11. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.
- 12. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract.
- 13. Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
- 14. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
- 15. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Gov. Code, § 12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
- 16. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

SAN RAFAEL CITY SCHOOLS

BID FORM AND PROPOSAL VENETIA VALLEY TK-8 SCHOOL LANDSCAPE RENOVATIONS BID NO. 25-03 DOCUMENT 00 41 13-3

[SIGNATURE ON FOLLOWING PAGE]

Bidder hereby certifies to the District that all representations, certifications, and statements

made by Bidder, as set fort penalty of perjury.	h in this bid form,	are true and correc	t and are made un	der
Dated this	day of			_ 20
Name of Bidder:				
Type of Organization:				
Signature:				
Print Name:				
Title:				
Address of Bidder:				
Taxpayer Identification No.	of Bidder:			
Telephone Number:				
Fax Number:				
E-mail:		Web Page:		
Contractor's License No(s): I	No.:	_ Class:	_ Expiration Date:	
	No.:	Class:	_ Expiration Date:	
	No.:	Class:	_ Expiration Date:	
Public Works Contractor Re	gistration No.:			

END OF DOCUMENT

SAN RAFAEL CITY SCHOOLS

ANLA Associates, Inc. 1723 Hamilton Ave, Suite 101 San Jose, CA 95125 T.408.292.2196 ANLA-Associates.com



March 20, 2025

ANLA Associates, Inc. 1723 Hamilton Ave, Suite 101 San Jose, CA 95125

Subject: Venetia Valley TK-8 School Landscape Renovations San Rafael City Schools Project No. 2434

Addendum #2

(Total 14 Pages Emailed Including Attachments)

CHANGES AND/OR CLARIFICATION'S OF THE DRAWINGS AND SPECIFICATIONS AS FOLLOWS:

GENERAL

SPECIFICATIONS

ITEM NO. 1.1:	SECTION – 31 10 00 Site Clearing
	Add: Specification section 32 10 00 'Site Clearing' in its entirety (2 pages).
ITEM NO. 1.2:	SECTION – 32 18 16.16 Protective Rubber Surfacing Under Synthetic Turf
	<u>Add:</u> Specification section 32 18 16.16 'Protective Rubber Surfacing Under Synthetic Turf' in its entirety (6 pages).
DRAWINGS	
LANDSCAPE	
ITEM NO. 1.3:	SHEET L2.2 CONSTRUCTION DETAILS:
	<i>Replace:</i> Sheet L2.2 in its entirety with the attached sheet Addendum 1-L2.2.

<u>Add:</u> Callout to clarify scope of Base Bid versus Add Alternate 1 changes at concrete curb transition as shown on the attached sheet.

ITEM NO. 1.4: SHEET L3.1 IRRIGATION PLAN:

<u>Replace</u>: Sheet L3.1 in its entirety with the attached sheet Addendum 1-L3.2.

<u>Add:</u> Callout to clarify location of (2) new irrigation lateral lines installed in sleeves that are to be installed via direct bore under existing paving to remain.

ITEM NO. 1.5: SHEET L3.2 IRRIGATION PLAN:

- <u>Replace</u>: Sheet L3.2 in its entirety with the attached sheet Addendum 1-L3.2.
- <u>Revise:</u> Irrigation legend to include graphics for (E) SCH 40 PVC SLEEVES TO REMAIN.
- *Add:* Callout to clarify location of (2) new irrigation lateral lines installed in sleeves that are to be installed via direct bore under existing paving to remain.

ITEM NO. 1.6: SHEET L6 PLANTING DETAILS:

- <u>*Replace:*</u> Sheet L6 in its entirety with the attached sheet Addendum 2-L6.
- <u>Add:</u> Detail H "Tree Planting" in its entirety.

Attachments:

8.5" x 11"

- Specification section 32 10 00 'Site Clearing' -2 pages
- Specification section 32 18 16.16 'Protective Rubber Surfacing Under Synthetic Turf' 6 pages

30" x 42"

- Addendum 2 L2.2
- Addendum 2 L3.1
- Addendum 2 L3.2
- Addendum 2 L6

SECTION 31 10 00 SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes removal of surface debris; removal of paving, curbs, sidewalks; removal of trees, shrubs, and other plant life; and removal of abandoned utilities.

PART 2 - PRODUCTS

2.1 NOT USED

PART 3 - EXECUTION

3.1 PREPARATION

- A. Verify that existing plant life designated to remain is tagged or identified.
- B. Removed materials are to be removed from the site and disposed of in a lawful manner.

3.2 **PROTECTION**

- A. Locate, identify, and protect utilities from damage that are to remain.
- B. Protect trees, plant growth, and features designated to remain.
- C. Protect benchmarks, survey control points, and existing structures from damage or displacement.

3.3 CLEARING

- A. Clear areas required for access to site and execution of Work.
- B. Remove trees and shrubs indicated and in a manner specified on the drawings or in these specifications. Remove tree and shrub root bulbs in their entirety and to a maximum root diameter of one inch.

3.4 REMOVAL

- A. Remove debris, rock, and extracted plant life from site to the limits indicated on the drawings.
- B. Remove paving, curbs, and concrete from the site to the limits indicated on the drawings.

C. Neatly saw cut edges at limits indicated for all pavement, curbs, and walkways to be removed.

3.5 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, re-landscaped, or regraded, without mixing with foreign materials for use in finish grading.
- B. Stockpile on site and protect from erosion.
- C. Remove excess topsoil not intended for reuse, from site.

END OF SECTION

SECTION 32 18 16.16 PROTECTIVE RUBBER SURFACING UNDER SYNTHETIC TURF

PART 1 - GENERAL

1.1 POURED-IN-PLACE RUBBER SURFACING

- A. Section Includes: Poured-in-Place Playground Surfacing System: Super-7 (when aromatic urethane for the top surface is specified) with a 7-year warranty & Extreme-10 (when aliphatic urethane for the top surface is specified) with a 10-year warranty.
- B. The top layer of EPDM rubber granules (wear course) are omitted when used beneath synthetic turf surfacing.

1.2 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to the work of this section.
- B. Also reference the following specification sections:
 - 1. 32 11 23 Aggregate Base Courses.
 - 2. 32 13 13.1 Concrete Work (Landscape).
 - 3. 32 18 13 Synthetic Grass Surfacing.

1.3 DESCRIPTION OF WORK:

- A. The extent of work in this Section includes the provision and installation of the following paving materials, base foundations and appurtenances required for installation.
- B. The general extent of work for this Section is shown on the drawings and includes, but is not limited to, the following:
 - 1. Subgrade preparation.
 - 2. Base rock installation.
 - 3. Poured-in-place protective surfacing.

1.4 QUALITY ASSURANCE:

- A. All manufactured items shall be inspected and approved upon delivery.
- B. Protect from damage and intrusion of deleterious materials during delivery, handling, storage, and installation.
- C. Installer's Qualifications:

- 1. Utilize the manufacturer's installation crew that has been trained and certified, and has experience with other projects of the same scope and scale of the work described.
- D. Path of Travel: Poured in place surfacing intended to serve as accessible path of travel for persons with disabilities shall be firm, stable and slip resistant, and shall meet the requirements of ASTM F 1951-14 and ASTM F 1292-18.
- E. Wear Course: Omit beneath synthetic turf surfacing.
- F. Third party test results of tensile strength equal to or greater than 170 psi and elongation yield equal to or greater than 180%.

1.5 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers Tension.
 - 2. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
 - 3. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
 - 4. ASTM D2859 Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
 - 5. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.

1.6 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide a 2-layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
 - 1. Shock Attenuation (ASTM F1292):
 - a. Gmax: Less than 200.
 - b. Head Injury Criteria: Less than 1000.
 - 2. Flammability (ASTM D2859): Pass.
 - 3. Tensile Strength (ASTM D412): 60 psi (413 kPa).
 - 4. Tear Resistance (ASTM D624): 140%.
 - 5. Water Permeability: 0.4 gal/yd2/second.
 - 6. Accessibility: Comply with requirements of ASTM F1951.SUBMITTALS:
- B. Product Data: Submit manufacturer's technical data for review.
- C. Samples: none.

- D. Certificate of Compliance: Submit manufacturer's certificate of compliance indicating materials comply with specified requirements.
- E. Maintenance Instructions: Submit manufacturer's maintenance and cleaning instructions.
- F. Warranty: Submit manufacturer's standard warranty.
- G. Copy of manufacturer issued installation certification.
- H. Certificate of Insurance for poured in place surfacing manufacturer covering general and product liability for not less than \$1,000,000 for each occurrence, \$2,000,000 general aggregate. Issuing underwrite shall be AA rated.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened, undamaged containers and packaging, with labels clearly identifying product name and manufacturer. Inspect material in ensure nothing is broken, open or missing upon delivery to the project site.
- B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).
- C. Handling: Protect materials during handling and installation to prevent damage.

1.8 INSPECTION OF INSTALLATION AREA

- A. It is the installer's responsibility to ensure drainage is acceptable to validate the product warranty.
- B. Prepare sub-base per plans and details for concrete paving, asphalt paving or 90% compacted base material.
- C. Owner shall inspect ground surface regularly to comply with ASTM F1951 and CBC 11B-1008.2.6.

1.9 PROJECT SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in steady or heavy rain.LIMITATIONS

- B. Some chemicals may cause damage to the rubber surfacing and should be avoided. These include disinfectants, concentrated chlorine bleach, gasoline, diesel fuel, hydraulic and lubricating oils, acids, and organic solvents.
- C. Though not commonly used in water play areas, pool surrounds, and similar applications, dissolved minerals and other chemicals (hydrochlorides) may cause surface discoloration over time. This condition, should it occur, is not considered to be a product failure.

1.10 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
- C. Proper drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

PART 2 - PRODUCTS

2.1 POURED-IN-PLACE PLAYGROUND SURFACING SYSTEM

- A. Manufacturer: Surface America, Inc.
 - 1. Contact: PO Box 157, Williamsville, NY 14231; Telephone: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: <u>http://www.surfaceamerica.com</u>.
 - 2. Local Representative: Ross Recreation
 - a. Contact: Alex Hailey
 - b. Phone: (408) 538-3800
 - c. www.rossrec.com
- B. Proprietary Products/Systems. Poured-in-place playground surfacing system, including the following:
 - 1. PlayBound Poured-In-Place Primer:
 - a. Material: Urethane.
 - 2. PlayBound Poured-in-Place Basemat:

- a. Material: Blend of 100% recycled SBR (styrene butadiene rubber) and urethane.
- b. Base Thickness: Refer to Construction Details for thickness.
- c. Formulation Components: Blend of strand and granular material.
- 3. Top Layer Installation omit top layer when installed beneath Synthetic Turf Surfacing.
 - a. Refer to specification 32 18 13 Synthetic Grass Surfacing for Synthetic Turf Surfacing used as top layer.

2.2 MIXES

- A. Required mix proportions by weight:
 - Basemat: 16+% urethane (as ratio: 14% urethane divided by 86% rubber).
 14% urethane, 86% rubber (based on entire rubber & urethane mix).
 - 2. Top Surface: omit top layer when installed beneath Synthetic Turf Surfacing. Refer to specification 32 18 13 Synthetic Grass Surfacing for Synthetic Turf Surfacing used as top layer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive protective safety surfacing. Notify Owner's Representative if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.
- B. Verify finished elevations of adjacent areas are as indicated on drawings, that the appropriate sub-grade elevation has been established for the particular safety surface to be installed and the subsurface has been installed in a true, even plane and sloped to drain as indicated on drawings.
- C. Verify sub base has cured and that all concrete curing compounds and other deleterious substances that might adversely affect adhesion have been removed and that surface is clean and dry.
- D. Drainage: Proper drainage is critical to the longevity of the Safepour surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas and void the warranty.

3.2 PREPARATION

A. Install Base Rock in accordance with Specification Section 32 11 23 Aggregate Base Courses.

3.3 INSTALLATION

- A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, fencing, playground equipment installation and other relevant work, has been completed.
- B. Basemat Installation:
 - 1. Using screeds and hand trowels, install the basemat at a consistent density of 29 pounds, 1 ounce per cubic foot (466 kg/m3) to the specified thickness.
 - 2. Allow basemat to cure for sufficient time so that indentations are not left in the basemat from applicator foot traffic or equipment.
 - 3. Do not allow foot traffic or use of the basemat surface until it is sufficiently cured.
- C. Primer Application: Using a brush or short nap roller, apply primer to the basemat perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal (7.5 m2/L).
- D. Top Layer Installation omit top layer when installed beneath Synthetic Turf Surfacing.
 - 1. Refer to specification 32 18 13 Synthetic Grass Surfacing and/or specification 32 18 16 Synthetic Resilient Surfacing for Synthetic Turf Surfacing used as top layer.

3.4 **PROTECTION**

A. Protect the installed surface from damage resulting from subsequent construction activity on the site.

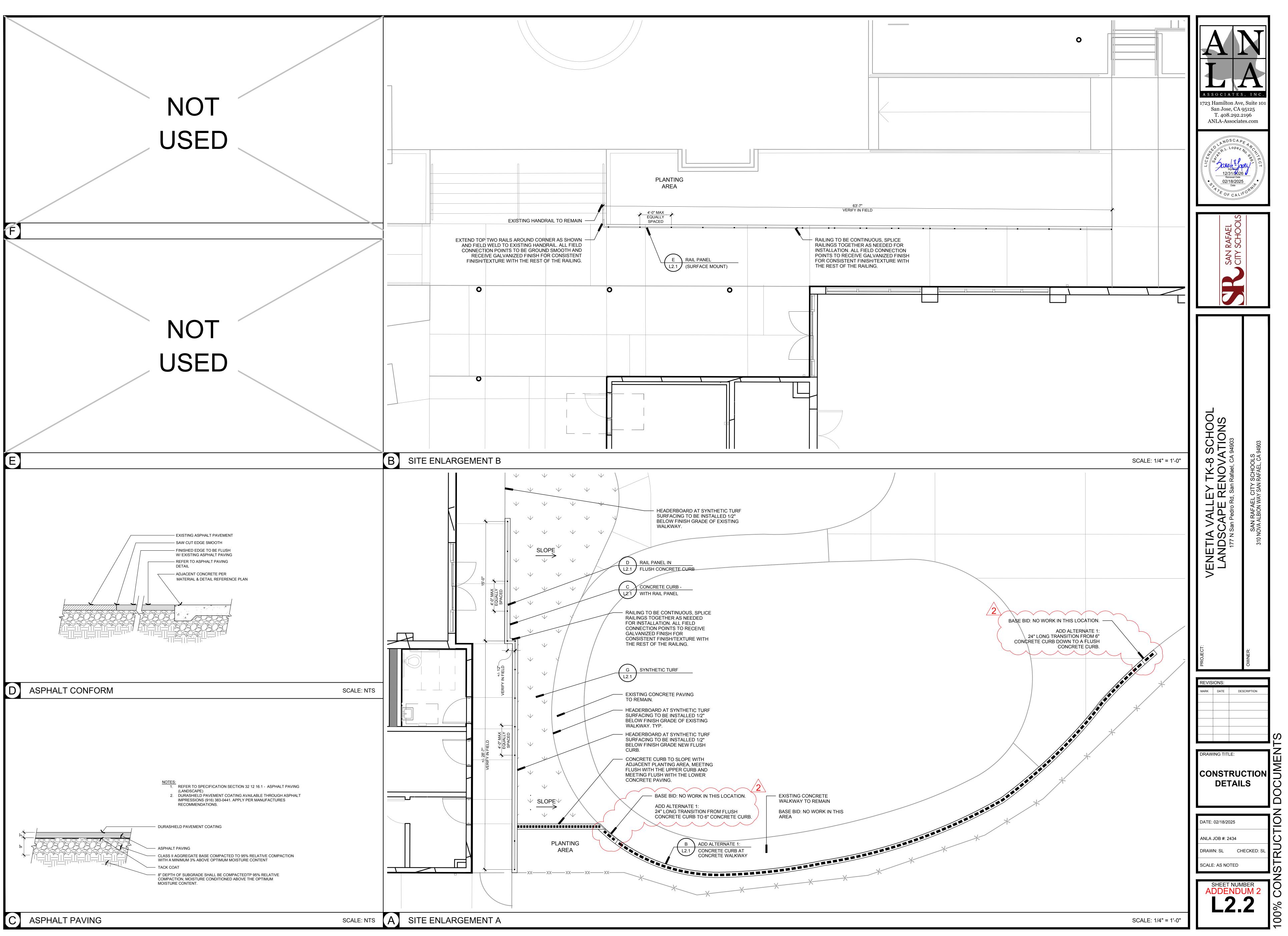
3.5 CLEANING:

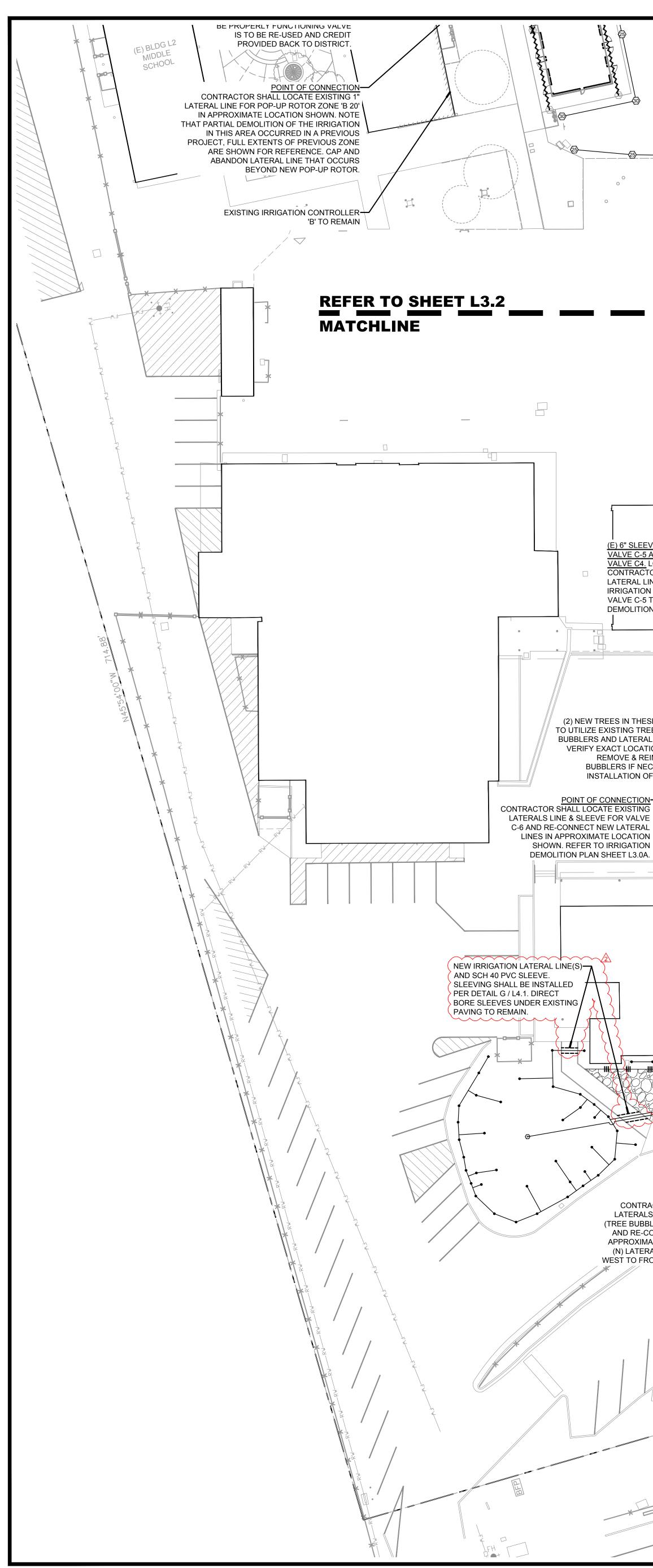
- A. Remove adhesive spills from protective safety surfacing, and adjacent paving in accordance with manufacturer's instructions.
- B. Clean safety surfacing in accordance with manufacturer's instructions.

3.6 FIELD QUALITY CONTROL

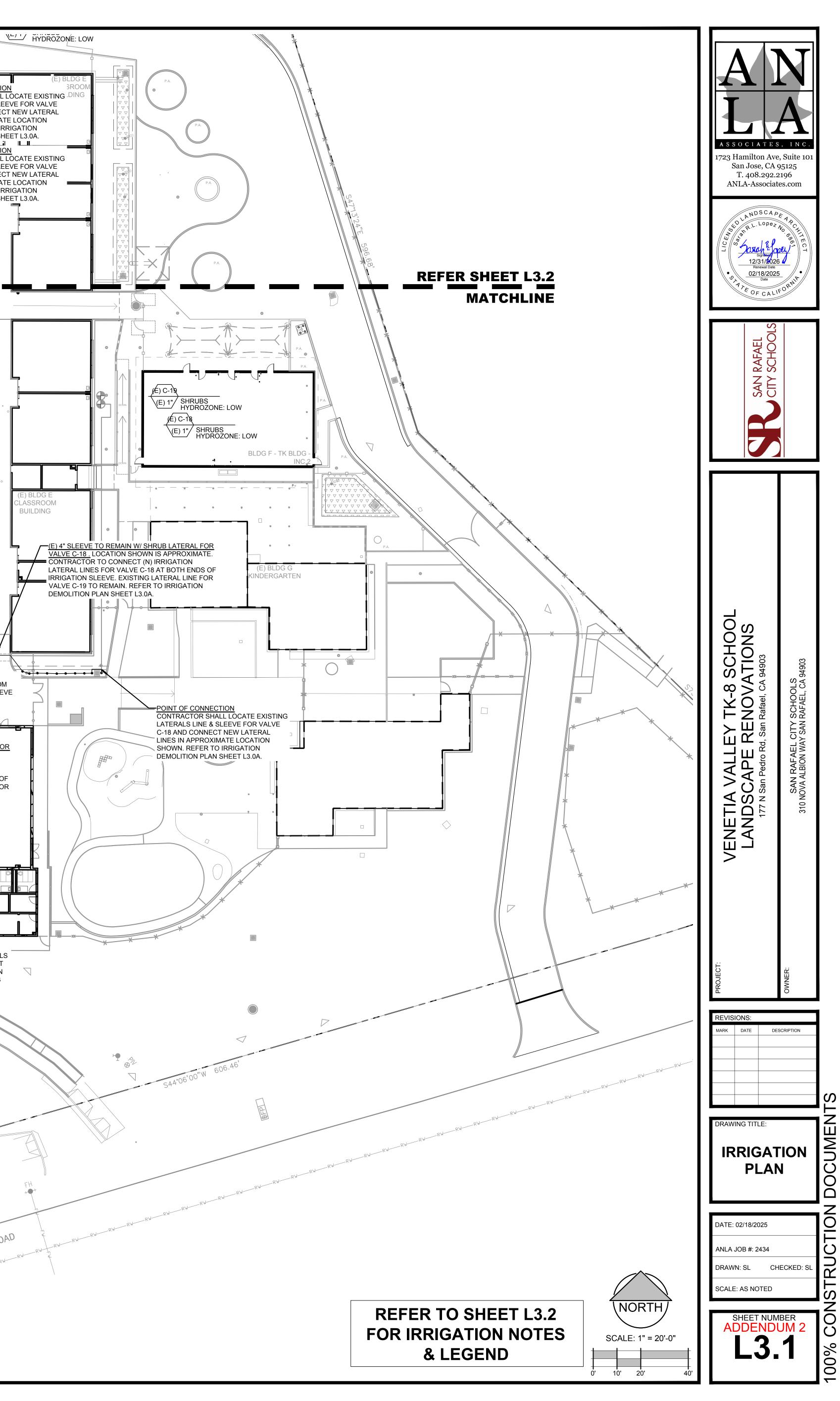
- A. After-Installation Inspection:
 - 1. Determine compliance with this Specification and Drawings and make corrections as necessary to obtain written certification of compliance with this Specification and Drawings.

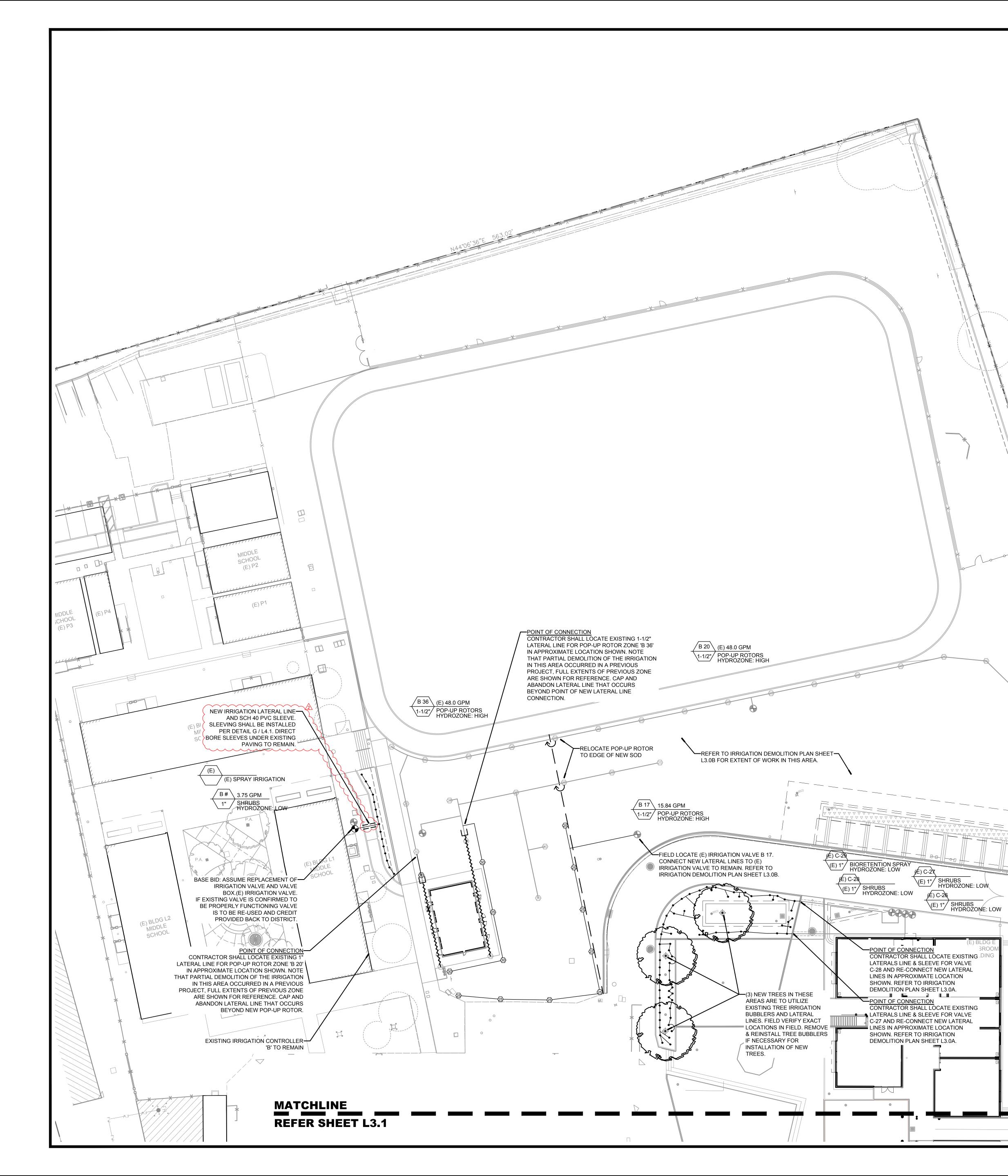
END OF SECTION

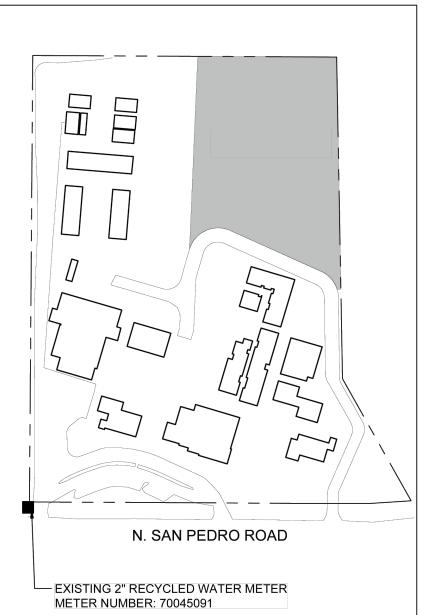




POINT OF CONNECTION CONTRACTOR SHALL LOCATE EXISTING LATERALS LINE & SLEEVE FOR VALVE C-28 AND RE-CONNECT NEW LATERAL LINES IN APPROXIMATE LOCATION SHOWN. REFER TO IRRIGATION DEMOLITION PLAN SHEET L3.0A. (3) NEW TREES IN THESE POINT OF CONNECTION CONTRACTOR SHALL LOCATE EXISTING AREAS ARE TO UTILIZE EXISTING TREE IRRIGATION LATERALS LINE & SLEEVE FOR VALVE BUBBLERS AND LATERAL LINES. FIELD VERIFY EXACT C-27 AND RE-CONNECT NEW LATERAL LOCATIONS IN FIELD. REMOVE 🚟 LINES IN APPROXIMATE LOCATION & REINSTALL TREE BUBBLERS SHOWN. REFER TO IRRIGATION IF NECESSARY FOR DEMOLITION PLAN SHEET L3.0A. INSTALLATION OF NEW TREES. `⊗ Ĵ● (E) 6" SLEEVE TO REMAIN W/ SHRUB LATERAL FOR VALVE C-5 AND BIORETENTION LATERAL LINE FOR ASSROOM VALVE C4. LOCATION SHOWN IS APPROXIMATE. BUILDING CONTRACTOR TO CONNECT (N) IRRIGATION LATERAL LINES FOR VALVE C-4 AT BOTH ENDS OF IRRIGATION SLEEVE. EXISTING LATERAL LINE FOR VALVE C-5 TO REMAIN. REFER TO IRRIGATION DEMOLITION PLAN SHEET L3.0A. (E) C-5 ∥+--∢ (E) 1" SHRUBS HYDROZONE: LOW ∥**†**–•(♦ ■ pcp (E) C-4 ↓**↓**→ (E) 1" BIORETENTION HYDROZONE: LOW (2) NEW TREES IN THESE AREAS ARE TO UTILIZE EXISTING TREE IRRIGATION BUBBLERS AND LATERAL LINES. FIELD (E) C-3 (E) 1" TREES HYDROZONE: LOW VERIFY EXACT LOCATIONS IN FIELD. REMOVE & REINSTALL TREE -CONNECT NEW BUBBLERS IF NECESSARY FOR LATERAL LINE FROM ~<u>1,1,1,1,1,</u>` VALVE C-4 TO SLEEVE INSTALLATION OF NEW TREES. · · · · · · (E) 6" SLEEVE TO REMAIN W/ SHRUB LATERAL FOR VALVE C-5 AND TREE LATERAL FOR VALVE C-3. LOCATION SHOWN IS APPROXIMATE CONTRACTOR TO CONNECT (N) IRRIGATION LATERAL LINES FOR VALVE C-5 AT BOTH ENDS OF IRRIGATION SLEEVE. EXISTING LATERAL LINE FOR VALVE C-3 TO REMAIN. REFER TO IRRIGATION DEMOLITION PLAN SHEET L3.0A. -(E) 6" SLEEVE TO REMAIN W/ SHRUB LATERAL FOR VALVE C-6 AND TREE LATERAL FOR VALVE C-3. LOCATION SHOWN IS APPROXIMATE. CONTRACTOR TO CONNECT (N) IRRIGATION (E) C-ð∖ LATERAL LINES FOR VALVE C-6 AT BOTH ENDS OF (E) 1"/ SHRUBS HYDROZONE: LOW IRRIGATION SLEEVE. EXISTING LATERAL LINE FOR VALVE C-3 TO REMAIN. REFER TO IRRIGATION DEMOLITION PLAN SHEET L3.0A. • ╼╼┲╼╼┛┝╾╸ -POINT OF CONNECTION CONTRACTOR SHALL LOCATE EXISTING LATERALS LINE & SLEEVE FOR VALVE C-6 AND RE-CONNECT NEW LATERAL LINES IN APPROXIMATE LOCATION SHOWN. EXISTING LATERAL LINE FOR VALVE C-3 TO REMAIN. REFER TO IRRIGATION DEMOLITION PLAN SHEET L3.0A. <u>— POINT OF CONNECTION</u> CONTRACTOR SHALL LOCATE EXISTING LATERALS LINE & SLEEVE FOR VALVE C-6 AND RE-CONNECT NEW LATERAL LINES IN APPROXIMATE LOCATION SHOWN. INSTALL (N) LATERAL LINE IN SLEEVE THAT RUNS POINT OF CONNECTION NORTH TO PLANTING AREA THAT RUNS ALONG THE FRONT OF BUILDING AS SHOWN. LATERALS LINE & SLEEVE FOR VALVE C-3 EXISTING LATERAL LINE FOR VALVE C-3 TO (TREE BUBBLERS) AND VALVE C-6 (SHRUBS) REMAIN. REFER TO IRRIGATION DEMOLITION AND RE-CONNECT NEW LATERAL LINES IN PLAN SHEET L3.0A. APPROXIMATE LOCATION SHOWN. INSTALL (N) LATERAL LINES IN SLEEVE THAT RUNS WEST TO FRONT PLANTER AREA AS SHOWN. NORTH SAN PEDRO ROAD







METER LOCATION

IRRIGATION NOTES

I. I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

ARAH R.L. LOPEZ 💋 CALIFORNIA LANDSCAPE ARCHITECT #6861

- 2. CONTRACTOR SHALL CONTACT MARIN MUNICIPAL WATER DISTRICT (MMWD) RECLAMATION AND BACKFLOW GROUP PRIOR TO BEGINNING ANY WORK.
- 3. ALL PIPING MUST BE INSPECTED BY MMWD RECLAMATION AND BACKFLOW GROUP BEFORE BEING COVERED.
- 4. THESE NOTES ARE FOR GENERAL REFERENCE IN CONJUNCTION WITH AND AS A SUPPLEMENT TO THE WRITTEN SPECIFICATIONS, DETAILS, ADDENDA AND CHANGE ORDERS ASSOCIATED WITH THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF EXISTING AND PROPOSED UNDERGROUND SERVICES. CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 642-2444 PRIOR TO BEGINNING WORK. CONTACT DISTRICT REPRESENTATIVE SHOULD ANY CONFLICTS ARISE. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND
- REGULATIONS. SCHOOL IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 100 PSI AND 100 GPM FROM THE POINT OF CONNECTION. CONTRACTOR SHALL VERIFY PRESSURE AND FLOW PRIOR TO BEGINNING OF WORK CONTACT DISTRICT REPRESENTATIVE IMMEDIATELY SHOULD CONFLICTS ARISE.
- THE IRRIGATION SYSTEM DESIGN IS DIAGRAMMATIC. WHERE PIPING, VALVES, ETC. ARE SHOWN OUTSIDE OF PLANTING AREAS, THE INTENT IS FOR PIPING, VALVES, ETC. TO BE INSTALLED WITHIN PLANTING AREAS UNLESS OTHERWISE NOTED AND DETAILED. CONTRACTOR SHALL COORDINATE IRRIGATION INSTALLATION WITH OTHER TRADES. CONTRACTOR TO COORDINATE AND VERIFY ALL SLEEVING, PIPING, ELECTRICAL SUPPLY, POINT OF CONNECTION, ETC.
- CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND UNIFORM COVERAGE OF ALL PLANTING AND TURF AREAS. CONTRACTOR TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN OPTIMUM OPERATING PRESSURE FOR EACH CIRCUIT. ADJUST SPRAY HEADS AND NOZZLES FOR OPTIMUM COVERAGE WHILE PREVENTING OVERSPRAY ONTO WALKWAYS AND STRUCTURES BY USE OF PRESSURE COMPENSATING DEVICES.
- 1. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN TRENCHING AROUND EXISTING TREES AND SHRUBS. CONTRACTOR SHALL HAND TRENCH WHEN TRENCHING ACROSS ROOTS 2" AND LARGER TO PRESERVE ROOT SYSTEM. ROOTS SMALLER THAN 2" MAY BE TRIMMED. DO NOT TEAR ANY ROOTS. 12. REMOTE CONTROL VALVES FOR TURF FIELD ARE BURIED BELOW FINISH GRADE. CONTRACTOR SHALL ENSURE (E) VALVES ARE OPERATION BEFORE, DURING AND AFTER CONSTRUCTION. 13. REFER TO IRRIGATION DETAILS ON L6.1, L6.2 & L6.3.
- 14. REFER TO THE FOLLOWING SPECIFICATION SECTION: 32 84 00 PLANTING IRRIGATION

IRRIGATION LEGEND

SYM	MODEL	MANUF. DESCRIPTION		RADIUS	GPM		
BUBBLE	RS						
0	1402 R/		IRD TR	REE	FLOOD BUBBLER, TWO PER EXISTING TREE	-	.5
•	1401	RAINB	IRD Sł	HRI	JB FLOOD BUBBLER, ONE PER SHRUB	-	.25
TURF SI	PRAY						
2 5	1-20-06-PRB-R-M	PR HUNTE	ER PO	POP-UP ROTOR		25	.5
30	1-20-06-PRB-R-M	PR HUNTE	ER PO	POP-UP ROTOR		30	.25
VALVES	/ CONTROLLER						
TOD-1 / OMR-100 IRRITROL		. REMC	REMOTE CONTROL VALVE ASSEMBLY WITH PRESSURE REGULATION. SIZE I			. SIZE PI	
PIPING							
SCH 40 PVC NON-PRESSURIZED, PURPLE COLOR, LATERAL LINE, 18" DEPTH, NSF APPROV SIZE PER PIPE SIZE CHART. INSTALL WITH 6" OF SAND BACKFILL.						APPROV	
COMPARISON OF A COMPACT OF							
EXISTING SCH 40 PVC SLEEVES TO REMAIN.						• •	
EXISTING IRRIGATION PIPING							
		(E)	(E) IRRIGATION LATERAL LINE, TO REMAIN				
\sim	~~~~~	(E)	(E) IRRIGATION LATERAL LINE, TO BE ABANDONED. REFER TO IRRIGATION DEMOLITION PLAN SHEET L4.1				
EXISTIN	IG IRRIGATION EQU	JIPMENT					
			(E)	(E) 2" RECYCLED WATER METER #70045091 TO REMAIN LOCATED AT STUDENT DROP-OFF LANE EXIT ALONG S			EDRO RO
			(E)		(E) EXTERIOR WALL MOUNTED IRRIGATION CONTROLLER TO LOCATED ALONG THE BACK SIDE OF THE ADMINISTRATION		
				-			

(E) IRRIGATION VALVE, TO REMAIN

(E) TREE BUBBLER (E) (E) POP-UP ROTOR TO REMAIN, 25' RADIUS (E) POP-UP ROTOR TO REMAIN, 30' RADIUS (F)

(E)

IRRIGATION LATERAL LINE SIZE CHART (SCH 40)

SIZE CHART (C	5011 4 0)	
GPM	PIPE SIZE	C= GALLONS PER MINUTE A= VALVE NUMBER
0 - 12 GPM	1"	B= VALVE SIZE
12.01 - 22 GPM	1 1/4"	D= DESCRIPTION /
22.01 - 30 GPM	1 1/2"	
30.01 - 50 GPM	2"	

MARIN MUNICIPAL WATER DISTRICT **RECYCLED WATER IRRIGATION NOTES**

- 1. Regulations Prior to start of work contractors shall familiarize themselves with all State and local laws, codes, regulations, and ordinances pertaining to the installation, use, and operation of recycled water. In addition,
- seven days before any work is started, the installing contractor shall contact the Reclamation and Backflow Group and schedule an on-site meeting to discuss the project and the inspection process (415-945-1558). 2. Approved Plans - Contractor shall conduct all work from plans approved and stamped by MMWD. 3. Temporary Connection* - A temporary point-of-connection (POC) from the potable water system may be necessary to supply the irrigation system until final approval has been granted. When required, the temporary
- POC shall be removed and inspected by MMWD prior to activation of the recycled water supply. 4. Controller - Irrigation system(s) shall be equipped with a high-efficiency, weather based, or other sensor-based self-adjusting irrigation controller. Recycled water controllers shall be designated for recycled water use only and shall not control any potable water irrigation system. Each recycled water controller shall have a sign (supplied by MMWD) noting recycled water operating parameters. Location of this sign shall be at the direction of MMWD.
- 5. Irrigation Schedule* The contractor shall provide MMWD a detailed irrigation schedule for each recycled water controller. Irrigation schedules shall include a color coded map depicting areas served by each control valve. Scheduling of all overhead spray irrigation systems shall be restricted to the hours of 9:00 p.m. - 6:00
- 6. Backflow Protection* Backflow protection is not required on recycled water services unless provisions for chemical injection i.e., in-line chemigation or other conditions exist which make backflow protection necessary as determined by MMWD. Backflow protection, when required, shall be of a type specified by MMWD and shall be installed in accordance with MMWD standards installation instructions. 7. Pressure Regulation - A pressure reducing valve (PRV) shall be installed between the recycled water meter
- and the first control valve. The PRV shall be set so that all components of the irrigation system operate at the manufacturer's recommended optimal pressure. Additional pressure compensating devices may be necessary to meet equipment manufacturer's specifications. 8. Quick Couplers - Quick couplers (QC) shall have locking, purple color thermoplastic covers marked with "Do
- Not Drink" in English and Spanish and shall include the international symbol for "do not drink". QC's shall be installed in planter areas, in round irrigation valve boxes. 9. Irrigation Control Valves - Use of special irrigation control valves (dirty water valves) shall not be required. **10. Irrigation Valve Boxes** - Valve boxes shall be purple in color, shall be installed in planters, and shall be
- grouped whenever possible. This requirement shall not apply to subterranean emitter boxes. 11. Piping - All new buried irrigation pipe (PVC) shall be purple PVC with "CAUTION RECYCLED WATER DO NOT DRINK" clearly imprinted on the pipe. All copper pipe and/or irrigation pipe installed inside a structure shall comply with the provisions of the California Plumbing Code for marking recycled water piping systems.
- **12.** Water Waste Irrigation system components shall be installed and adjusted to prevent recycled water from leaving the landscape area via overspray, mist, or runoff. Check valves shall be installed at each sprinkler head where low head drainage may occur. Slopes greater than 15% shall not be irrigated by any form of spray irrigation.
- 13. Appurtenance Identification* All appurtenances within the irrigation system, i.e., control valves, shut-off valves, quick couplers, etc. shall have attached, by nylon wire tie an identification tag as manufactured by T. Christy Enterprises. Tags shall read "WARNING RECYCLED WATER DO NOT DRINK", in English and Spanish
- 14. Signage Notification signs as supplied by MMWD shall be installed in locations designated by MMWD. Signs shall at all times be visible to users of the site. Additional signs may be required where recycled water is supplied to water features. **15. Inspections** - All irrigation pipe and components installed in a recycled water irrigation system shall be
- inspected by the MMWD prior to burial. Contractor shall contact the MMWD Recycled Water Section at least three (3) working days prior to start of work. **16.** Separation Test - Contractor shall perform a recycled water system separation test in the presence of an
- MMWD Recycled Water representative following installation of the irrigation system and prior to activation of the recycled water service. 17. Coverage Test - Contractor shall perform an irrigation system coverage test in the presence of an MMWD Recycled Water representative following the installation of the irrigation system prior to final approval.
- **18.** Final Approval Final project approval shall be granted following installation of all system components, a separation test and coverage test has been conducted and all codes, regulations, and ordinances have bee satisfied.
- *Requirement does not apply to irrigation projects where recycled water is not readily available.



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