

# Exhibit A

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# DRAFT RESOLUTION

## Before the Zoning Administrator in and for the County of Monterey, State of California

In the matter of the application of:

**CALIFORNIA-AMERICAN WATER CO (PLN250272)**

### **RESOLUTION NO. 26-**

Resolution by the County of Monterey Zoning  
Administrator:

- 1) Finding the project qualifies as a Class 3 Categorical Exemption pursuant to CEQA Guidelines section 15303, and there are no exceptions pursuant to section 15300.2; and
- 2) Approving a Combined Development Permit consisting of; 1) Design Approval for the construction of two backwash waste tanks with a capacity of 195,000 gallons each; 2) Use Permit to exceed the allowable height of 15 feet by 11.5 feet (26.5 feet in height); and
- 3) Use Permit to allow development in the Carmel Valley floodplain.

[PLN250272, CALIFORNIA-AMERICAN WATER CO, 9210 Carmel Valley Rd, Carmel Valley, Carmel Valley Master Plan (APN: (169-141-016-000 and 169-141-023-000)]

**The CALIFORNIA-AMERICAN WATER CO application (PLN250272) came on for public hearing before the County of Monterey Zoning Administrator on April 9, 2026. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Zoning Administrator finds and decides as follows:**

### **FINDINGS**

1. **FINDING:** **CONSISTENCY** – The Project, as conditioned, is consistent with the applicable plans and policies which designate this area as appropriate for development.  
**EVIDENCE:**
  - a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:
    - the 2010 Monterey County General Plan;
    - Carmel Valley Master Plan (CVMP);
    - Monterey County Zoning Ordinance (Title 21);No conflicts were found to exist. No communications were received during the course of review of the project, indicating any inconsistencies with the text, policies, and regulations in these documents.
  - b) Project. The property is a developed paved site that is fenced in and used in connection with California-American Water Company's (Cal-

Am) existing water treatment operations, known as the Begonia Iron Removal Plant, and is surrounded by residences on all sides. The Begonia Iron Removal Plant is an 11.5 million-gallon-per-day operational capacity facility that removes iron and manganese from active wells situated along the Carmel River. The site generally consists of a pressure filtration system for iron and manganese removal, sodium hypochlorite disinfection, backwash storage ponds, sludge processing facilities, and additional chemical facilities for zinc orthophosphate and caustic for pH control. The Proposed Project will fill in the existing Backwash Waste Pond No. 3 and install two 26.5-foot-tall and 44.5-foot-diameter backwash waste tanks with a total storage capacity of 390,000 gallons (195,000 gallons each) in the same location as the existing pond. The backwash waste tanks would be equipped with decanting in each tank as well as a single Sludge Fluidization and Transfer System (“SFAT”) to serve both tanks. The SFAT system includes a pump system that fluidizes and transfers settled sludge in the backwash waste storage tanks. The SFAT system also includes a new pump skid with two sludge pumps that will be installed adjacent to the backwash waste tanks within a vault. The SFAT pumps will both withdraw and recirculate sludge. Two decant pumps mounted on a skid and installed within a noise enclosure will also be constructed, which will reclaim flow via a floating decanter in each tank back to the head of the plant for treatment. A sludge holding tank, made of concrete and with a capacity of 20,000 gallons, will also be constructed. The sludge holding tank will be partially buried with the top of the tank approximately five feet above grade. The Proposed Project would be constructed entirely within the Begonia Iron Removal Plant site which is paved and developed with existing CalAm water infrastructure. This project was initiated to comply with California Code of Regulations of Title 22, Section 64585, which outlines the design and construction requirements for distribution reservoirs. The current site does not comply with Tit. 22, § 64585(a)(3), which states that vents and other openings shall be constructed and designed to prevent entry of rainwater or runoff, and birds, insects, rodents, or other animals. With the proposed tanks, the site will come into compliance with these regulations.

- c) Allowed Use. 9210 Carmel Valley Rd, Carmel Valley, Carmel Valley Master Plan (APNs: 169-141-016-000 and 169-141-023-000), Carmel Valley Master. The parcel is zoned Low Density Residential with a density of 1 acre per unit, Design Control overlay, Site Plan overlay, and a Residential Allocation overlay or “LDR/1-D-S-RAZ”. The proposed water tanks and accessory equipment are accessory to the property’s main use (office building/water system). Accordingly, pursuant to Title 21 section 21.14.030.J, the proposed development is principally allowed uses for this zoning district. Pursuant to Title 21 section 21.62.020.B, water tanks may be erected to a greater height than the limit established for the district, subject to securing a Use Permit. Pursuant to Title 21 section 21.64.130.D.1.a, all development within the floodway fringe requires a Use Permit. The Design Control overlay requires the granting of a Design Approval for all structures, such as

water tanks, pursuant to Title section 21.44. Therefore, the project is an allowed land use for this site.

- d) Lot Legality. The subject property (comprised of APNs: 169-141-016-000 and 169-141-023-000) is shown in its current configuration on a Record of Survey Map, recorded on July 17, 1990 (Volume 16 of Surveys at Page 118), which reflects the approved boundaries of a lot line adjustment (Planning Commission Resolution No. 7235). Therefore, the County recognizes the subject property as a legal lot of record.
- e) Review of Development Standards. In the LDR zoning district, the required setbacks for non-habitable accessory structures include a 50-foot front setback, a six-foot side setback, and a one-foot rear setback. The required height for accessory structure is 15 feet above average natural grade. Allowable site coverage is limited to 25%. As delineated in the attached plans, the project meets the setback requirements for development standards for the Low Density Residential zoning district for non-habitable accessory structures (Title 21 section 21.14.060.C.3), except as to the required maximum height of 15 feet. The proposed water tanks are 26.5 feet. Pursuant to Title 21 section 21.62.020.B, water tanks may be erected to a greater height than the limit established for the district, subject to securing a Use Permit in each case. The increase in maximum height allows the tanks to be sited entirely within the existing backwash pond area, thereby limiting additional ground disturbance. The proposed height (26.5 feet) is lower than the allowable height for main structures (30 feet) and will not be visible from public roads. Therefore, the Zoning Administrator finds it appropriate to allow the water tanks to exceed the 15-foot height limit by 11.5 feet. Therefore, the project meets all required development standards.
- f) Design and Visual Resources. The proposed development is subject to the regulations of the Design Control “D” zoning district outlined in Title 21 section 21.44.060, which establishes design review requirements to assure protection of the public viewshed and neighborhood character. Carmel Valley Master Plan Policy CV-1.1 indicates that all policies and ordinances and decisions regarding Carmel Valley shall be consistent with the goal of preserving the rural character of the Valley, and development shall follow a rural architectural theme with design review. As proposed the proposed tanks will be a forest green color, blending with the surrounding vegetated environment. Consistent with Carmel Valley Master Plan Policy CV-1.20, the exterior finishes of the tanks are compatible with the surrounding environment and maintain an appropriate bulk and mass. Staff conducted a site visit on February 5, 2026 to determine whether the project would be visible from any common public viewing area, including Carmel Valley Road and Laureles Grade. The water tanks’ staking and flagging were not visible from Carmel Valley Road or any other public viewshed due to intervening mature vegetation and development, along with the topography of the land. Therefore, the project, as designed and sited, assures protection of the public viewshed, is consistent with neighborhood character, and assures visual integrity.
- g) Cultural Resources. According to county GIS records, the subject

property is within a high archaeological sensitivity area and within 250 feet of a known archaeological resource. Pursuant to Title 21 section 21.66.050.C.2, a report was not required as the proposed development is located within a previously disturbed area where substantial evidence is provided that the previous ground disturbance affected depths equal to or greater than the project being considered and the development involves minimal soil disturbance. Condition No. 3 has been added to ensure that if an archaeological resource is found, work shall be halted immediately until a qualified professional archaeologist can evaluate it.

- h) Floodplain. Title 21 section 21.64.130 establishes the regulations applicable to development within the Carmel Valley Floodplain. The project site is within the Carmel Valley River's 100-year floodplain. The water tanks and associated site improvements are within the floodway fringe. Accordingly, the project includes a Use permit to allow development within the floodway fringe/floodplain, pursuant to Title 21 section 21.64.130. The project involves minimal grading, and the proposed structures are to be constructed in the same general building footprint as the previous residence and accessory structures (see Finding 6 and supporting evidence).
- i) Land Use Advisory Committee. The project was referred to the Carmel Valley Land Use Advisory Committee (LUAC) for review, on March 16<sup>th</sup>, 2026. Based on the LUAC Procedure guidelines adopted by the Monterey County Board of Supervisors, this application did warrant referral to the LUAC because the project involves a Design Approval subject to review by the Zoning Administrator. The LUAC voted unanimously to support the project as proposed.
- j) HCD-Planning staff conducted a site inspection on February 5, 2026 to verify that the project on the subject parcel conforms to the plans listed above.
- k) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development found in Project File PLN250272.

2. **FINDING:** **SITE SUITABILITY** – The site is physically suitable for the proposed development and/or use.

- EVIDENCE:**
- a) The project has been reviewed for site suitability by the following departments and agencies: HCD- Planning, Big Sur Volunteer Fire Brigade, HCD-Engineering Services, HCD-Environmental Services, and Environmental Health Bureau. County staff reviewed the application materials and plans to verify that the project on the subject site conforms to the applicable plans and regulations, and there has been no indication from these departments/agencies that the site is not suitable for the development. Conditions recommended have been incorporated.
  - b) Staff identified potential impacts to soil resources. The following reports have been prepared:
    - “Geotechnical Investigation” (LIB260079, prepared by Pacific Crest Engineering Inc., Watsonville, CA, March 26, 2025The above-mentioned technical report by outside consultants indicated that there are no physical or environmental constraints that would

indicate that the site is not suitable for the use proposed. County staff has independently reviewed these reports and concurs with their conclusions.

- c) Staff conducted a site inspection on February 5, 2026 to verify that the site is suitable for this use.
- d) The application, project plans, and related support materials submitted by the project applicant to the County of Monterey HCD - Planning for the proposed development found in Project File PLN250272.

3. **FINDING:** **HEALTH AND SAFETY** - The establishment, maintenance, or operation of the use or structure applied for, will not, under the circumstances of the particular case, be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use; or be detrimental or injurious to property and improvements in the neighborhood; or to the general welfare of the County.

- EVIDENCE:**
- a) The project was reviewed by HCD- Planning, Monterey County Regional Fire Protection District, HCD-Engineering Services, HCD-Environmental Services, and Environmental Health Bureau. The respective agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.
  - b) This project was initiated to comply with California Code of Regulations of Title 22, Section 64585. The proposed project would support CalAm’s ongoing and future ability to provide clean, safe drinking water by upgrading the backwash ponds and sludge system that supports the Begonia Iron Removal Plant, which removes iron and manganese from active wells situated along the Carmel River. Also see Finding No. 1, Evidence “b”.
  - c) Staff conducted a site inspection on February 5, 2026 to verify that the site is suitable for this use.
  - d) The application, project plans, and related support materials submitted by the project applicant to the County of Monterey HCD - Planning for the proposed development found in Project File PLN250272.

4. **FINDING:** **NO VIOLATIONS** - The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County’s zoning ordinance. No violations exist on the property.

- EVIDENCE:**
- a) Staff reviewed County of Monterey HCD - Planning and Building Services Department records and is not aware of any violations existing on subject property.
  - b) Staff conducted a site inspection on February 5, 2026 and researched County records to assess if any violation exists on the subject property.
  - c) The application, plans and supporting materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development are found in Project File PLN250272.

5. **FINDING:** **CEQA (Exempt)** - The project is categorically exempt from environmental review and no unusual circumstances were identified to exist for the proposed project.
- EVIDENCE:**
- a) California Environmental Quality Act (CEQA) Guidelines Section 15303 categorically exempts the replacement of existing structures where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity.
  - b) The proposed project involves the backfill of a backwash waste pond and the installation of two 195,000-gallon backwash tanks in the same location of the existing pond. In addition, existing Backwash Waste Pond No.1 would also be backfilled, and a single Sludge Fluidization and Transfer System (sludge system or SFAT) consisting of a 20,000-gallon concrete sludge holding tank would be installed to serve both backwash tanks. Backfilled Pond No. 1 would serve as an additional parking area and extend the road for semi-trucks. Therefore, the project is consistent with the categorical exemption requirements of CEQA Guidelines section 15303.
  - c) No adverse environmental effects were identified during staff review of the development application during a site visit on February 5, 2026.
  - d) None of the exceptions under CEQA Guidelines Section 15300.2 apply to this project. There is no significant effect on the environment due to unusual circumstances. The project location is not within a sensitive environment. There is no cumulative impact without any prior successive projects of the same type in the same place, over time, and no new land use is proposed. The site is not included on any list compiled pursuant to Section 65962.5 of the Government Code to be considered on a hazardous waste site. No trees are proposed for removal. The proposed project will also not be visible from any scenic vista or corridor (see Finding No.1, Evidence “e”). No known historical resources exist which may cause a substantial adverse change in the significance of a historical resource. Although development is proposed within the Carmel River floodplain, it has been sited and designed to minimize
  - e) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development found in Project File PLN250272.
6. **FINDING:** **CARMEL FLOODWAY FRINGE-** The project complies with the applicable policies and regulations found in the Carmel Valley Master Plan and Title 21 to allow development within the Carmel Valley floodway fringe, and sufficient setbacks and measures to avoid erosion are proposed.
- a) The project includes development within the 200 feet of the Carmel River top of bank and therefore, is subject to Monterey County Code Chapter 16.16 – Regulations for Floodplains in Monterey County, and Title 21 section 21.64.130 – Regulations for Land Use in the Carmel Valley Floodplain. Pursuant to Title 21 section 21.64.130.D.2, development within 200 feet of the riverbank or the floodway fringe (floodplain) is prohibited except where it can be shown that the development will accommodate sufficient setbacks to avoid erosion.

Additionally, Title 21 section 21.64.130 establishes regulations and standards for which development within the Carmel Valley floodway fringe may be permitted. The proposed project does not meet the exclusions listed in Title 21 section 21.64.130.G, and therefore requires the granting of a Use Permit. The Zoning Administrator is the appropriate authority to grant a Use Permit.

- b) The “Floodway Fringe” is defined in Title 21 section 21.64.130.C.4 as the portion of the valley floor outside of the floodway normally required to carry the flow which may, on average, occur once every 100 years.
- c) Approximately two-thirds of the parcel is within the Carmel Valley River floodway fringe. The remainder of the property (northern portion) abut Carmel Valley Road. The proposed development are approximately 370 feet and 500 feet from the Carmel Valley River’s top of bank edge.
- d) A Slope Map and Stream Setback Plan was completed by Valentine Environmental Engineers on November 5, 2025, and determined that the project site takes place within the Carmel Valley River’s 100-year floodplain, but is in excess of 200 feet from the Carmel River top of bank. Pursuant to Title 16 section 16.16.050.C, non-habitable structures must 1) be floodproofed and watertight, with exterior materials substantially impermeable to the passage of water to a minimum of one foot above the Base Flood Elevation (BFE); or 2) raised one foot above BFE; and 3) incorporate structural components capable of resisting hydrostatic and hydrodynamic loads, as well as buoyant forces, and be certified by a registered civil engineer or architect. The proposed design complies with Title 16, Section 16.16.050.C.3(a), as the proposed infrastructure (including tanks as well as the sludge fluidization and transfer (SFAT) vault) on site would be floodproofed so that the structures are watertight with walls substantially impermeable to the passage of water to a minimum of one (1) foot above the base flood elevation. Additionally, the project design includes structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
- e) The project complies, to the maximum extent feasible, with the regulations contained in Title 21 section 21.64.130. The project site is over 200 feet away from the Carmel Valley River’s edge, and the nearby riparian habitat will not be impacted; the natural course of the river will not be altered by the proposed development, and there will be no alteration to the existing riparian vegetation. The proposed development consists of the installation of above-ground water storage tanks and associated water infrastructure, consistent with existing operations of the proposed project site. The proposed development would be safe from flow-related erosion and would not cause flow-related erosion hazards or otherwise aggravate flow-related erosion hazards. The proposed project has been designed to be floodproofed so that the structures are watertight with walls substantially impermeable to the passage of water. The project involves minimal grading, and the proposed structures are to be constructed in the same general building footprint as the previous residence and accessory structures. The soils on site have high permeability and do not bring concern of erosion

issues per the soils report prepared by Pacific Crest Engineering (LIB260079).

- f) The application, plans and supporting materials submitted by the project applicant to Monterey County HCD-Planning for the proposed development found in Project File PLN250272.

7. **FINDING:** **APPEALABILITY** - The decision on this project may be appealed to the Planning Commission.

**EVIDENCE:** a) Planning Commission. Pursuant to Title 21 section 21.86.040, an aggrieved party may appeal the decision of the Zoning Administrator to the Planning Commission.

### **DECISION**

**NOW, THEREFORE**, based on the above findings and evidence, the County of Monterey Zoning Administrator does hereby:

1. Find the project for replacement of an existing water tank qualifies for a Class 2 Categorical Exemption pursuant to CEQA Guidelines section 15302, and no exceptions pursuant to section 15300.2 can be made; and
2. Approve a Combined Development Permit consisting of; 1) Design Approval for the construction of two backwash waste tanks with a capacity of 195,000 gallons each; 2) Use Permit to exceed the allowable height of 15 feet by 11.5 feet (26.5 feet in height); and 3) Use Permit to allow development in the Carmel Valley floodplain.

**PASSED AND ADOPTED** this 9<sup>th</sup> day of April, 2026:

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Mike Novo AICP, Zoning Administrator

COPY OF THIS DECISION MAILED TO APPLICANT ON DATE.

THIS APPLICATION IS APPEALABLE TO THE PLANNING COMMISSION.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE SECRETARY OF THE PLANNING COMMISSION ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE DATE.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

#### NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the

mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from Monterey County HCD-Planning and HCD-Building Services Department office in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

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# County of Monterey HCD Planning

## DRAFT Conditions of Approval/Implementation Plan/Mitigation Monitoring and Reporting Plan

PLN250272

### 1. PD001 - SPECIFIC USES ONLY

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** This Combined Development Permit (PLN250272) allows the construction of two (2) backwash waste tanks with the capacity of 195,000 gallons each that exceed the required height of 15 feet established by the district within the Carmel Valley floodplain. The property is located at 9210 Carmel Valley Road, Carmel Valley (Assessor's Parcel Number 169-141-016-000 and 169-141-023-000), Carmel Valley Master Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the terms and conditions described in the project file. Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of HCD - Planning. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled. (HCD - Planning)

**Compliance or Monitoring Action to be Performed:** The Owner/Applicant shall adhere to conditions and uses specified in the permit on an on-going basis unless otherwise stated.

### 2. PD002 - NOTICE PERMIT APPROVAL

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** The applicant shall record a Permit Approval Notice. This notice shall state:  
"A Combined Development Permit (Resolution Number \_\_\_\_\_) was approved by the Zoning Administrator for Assessor's Parcel Number 169-141-016-000 and 169-141-023-000 on April 9, 2026. The permit was granted subject to 5 conditions of approval which run with the land. A copy of the permit is on file with Monterey County HCD - Planning."

Proof of recordation of this notice shall be furnished to the Director of HCD - Planning prior to issuance of grading and building permits, Certificates of Compliance, or commencement of use, whichever occurs first and as applicable. (HCD - Planning)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of grading and building permits, certificates of compliance, or commencement of use, whichever occurs first and as applicable, the Owner/Applicant shall provide proof of recordation of this notice to the HCD - Planning.

### 3. PD003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** If, during the course of construction, cultural, archaeological, historical or paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. Monterey County HCD - Planning and a qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for recovery.  
(HCD - Planning)

**Compliance or Monitoring Action to be Performed:** The Owner/Applicant shall adhere to this condition on an on-going basis.

Prior to the issuance of grading or building permits and/or prior to the recordation of the final/parcel map, whichever occurs first, the Owner/Applicant shall include requirements of this condition as a note on all grading and building plans. The note shall state "Stop work within 50 meters (165 feet) of uncovered resource and contact Monterey County HCD - Planning and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered."

When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.

### 4. PD041 - HEIGHT VERIFICATION

**Responsible Department:** Planning

**Condition/Mitigation Monitoring Measure:** The applicant shall have a benchmark placed upon the property and identify the benchmark on the building plans. The benchmark shall remain visible on-site until final building inspection. The applicant shall provide evidence from a licensed civil engineer or surveyor to the Director of HCD - Building Services for review and approval, that the height of the structure(s) from the benchmark is consistent with what was approved on the building permit associated with this project. (HCD - Planning and HCD - Building Services)

**Compliance or Monitoring Action to be Performed:** Prior to the issuance of grading or building permits, the Owner/Applicant shall have a benchmark placed upon the property and identify the benchmark on the building plans. The benchmark shall remain visible onsite until final building inspection.

Prior to the foundation pre-pour inspection, the Owner/Applicant shall provide evidence from a licensed civil engineer or surveyor, to the Director of HCD - Building Services for review and approval, that the height of first finished floor from the benchmark is consistent with what was approved on the building permit.

Prior to the final inspection, the Owner/Applicant/Engineer shall provide evidence from a licensed civil engineer or surveyor, to the Director of HCD - Building Services for review and approval, that the height of the structure(s) from the benchmark is consistent with what was approved on the building permit.

## 5. PW0044 - CONSTRUCTION MANAGEMENT PLAN

**Responsible Department:** Public Works

**Condition/Mitigation Monitoring Measure:** The applicant shall submit a site-specific Construction Management Plan (CMP) to HCD-Planning and HCD-Engineering Services for review and approval that describes how the site will be managed during construction to protect onsite and nearby sensitive resources, avoid construction nuisance impacts to nearby properties, and reduce congesting/circulation impacts to the local transportation network. The applicant shall be required to adhere to the approved CMP. The Construction Management Plan shall include the following (As applicable):

Names and contact information (primary and secondary) of parties responsible for project during construction.

Summary table including:

Types of construction vehicles and number of truck and/or vehicle trips/day.

Quantity and extent (acreage) of grading per day (Air Quality Management District Standards).

Hours of operation.

Project scheduling (dates) and duration of construction.

Map illustrating:

Location of project (vicinity map).

Proposed route for hauling material.

Location of Sensitive Receptors (schools, hospitals, etc) along haul route.

Location of stockpiles and parking for construction vehicles.

Sensitive areas (tree protection zones, drainage, environmentally sensitive habitat, slopes, etc) where no parking, stockpiling, construction will occur.

The CMP shall:

Prescribe measures to reduce traffic impacts including but not limited to scheduling hauling and material deliveries off-peak hours and encouraging carpooling

Prohibit blocking of access roads or driveways.

Avoid impacting access to private properties by not parking on neighboring properties or impinging on the travel lane of access roads. Construction vehicles shall be encouraged to not park directly in-front of neighboring properties.

Ensure pedestrian paths of travel are not impeded or that alternative paths of travel are provided.

Provide adequate storage and staging areas. Staging and storage areas shall be on-site to maximum extent possible to reduce potential noise, dust, glare, and other impacts to neighboring property.

If on-site storage and staging areas cannot be accommodated, appropriate best management practices shall be implemented to ensure that off-site storage and staging do not adversely impact access or cause excessive noise, dust, or lighting for neighboring properties.

The Applicant/Owner may need to obtain separate authorization to utilize off-site storage and staging areas. The owner/applicant shall be responsible for securing this authorization prior to approval of the CMP.

Prior to the commencement of construction activities, the applicant shall post a publicly visible sign that outlines the specifics of the construction management plan, the telephone number of the on-site contractor, and the telephone number of the person to contact regarding complaints. This contact person shall respond to complaints and take corrective action within 24 hours.

Recommendations from the project biologist, arborist, archaeologist, and/or other qualified professionals relating to construction activities shall be included in the CMP.

- Compliance or Monitoring Action to be Performed:**
1. Prior to issuance of the Grading Permit or Building Permit, Owner/Applicant/Contractor shall prepare a CMP and shall submit the CMP to the HCD-Planning and HCD- Engineering Services for review and approval.
  2. On-going through construction phases Owner/Applicant/Contractor shall implement the approved measures during the construction/grading phase of the project.

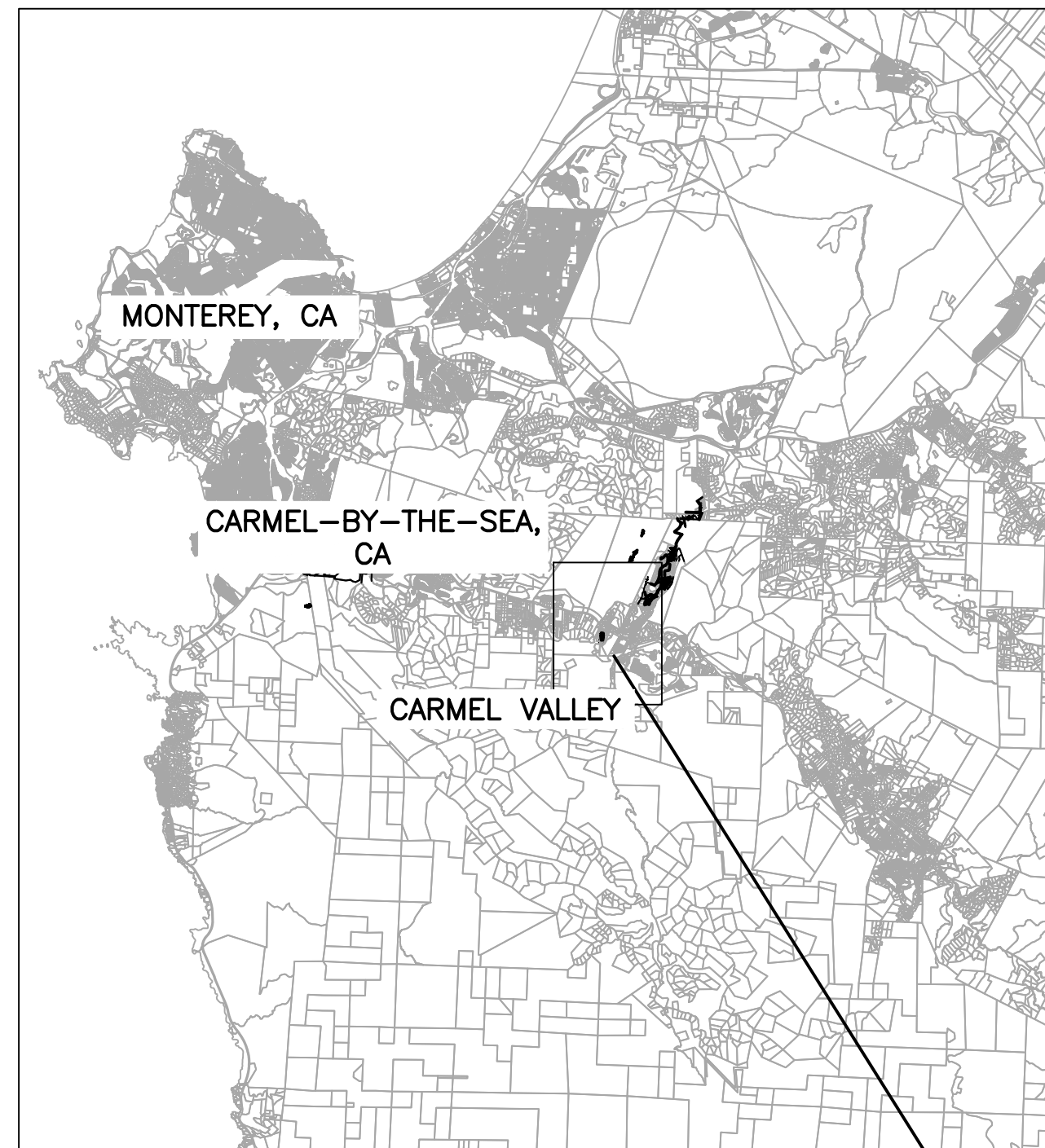
# BIRP BACKWASH SYSTEM DESIGN

## CARMEL, CALIFORNIA

### CALIFORNIA AMERICAN WATER

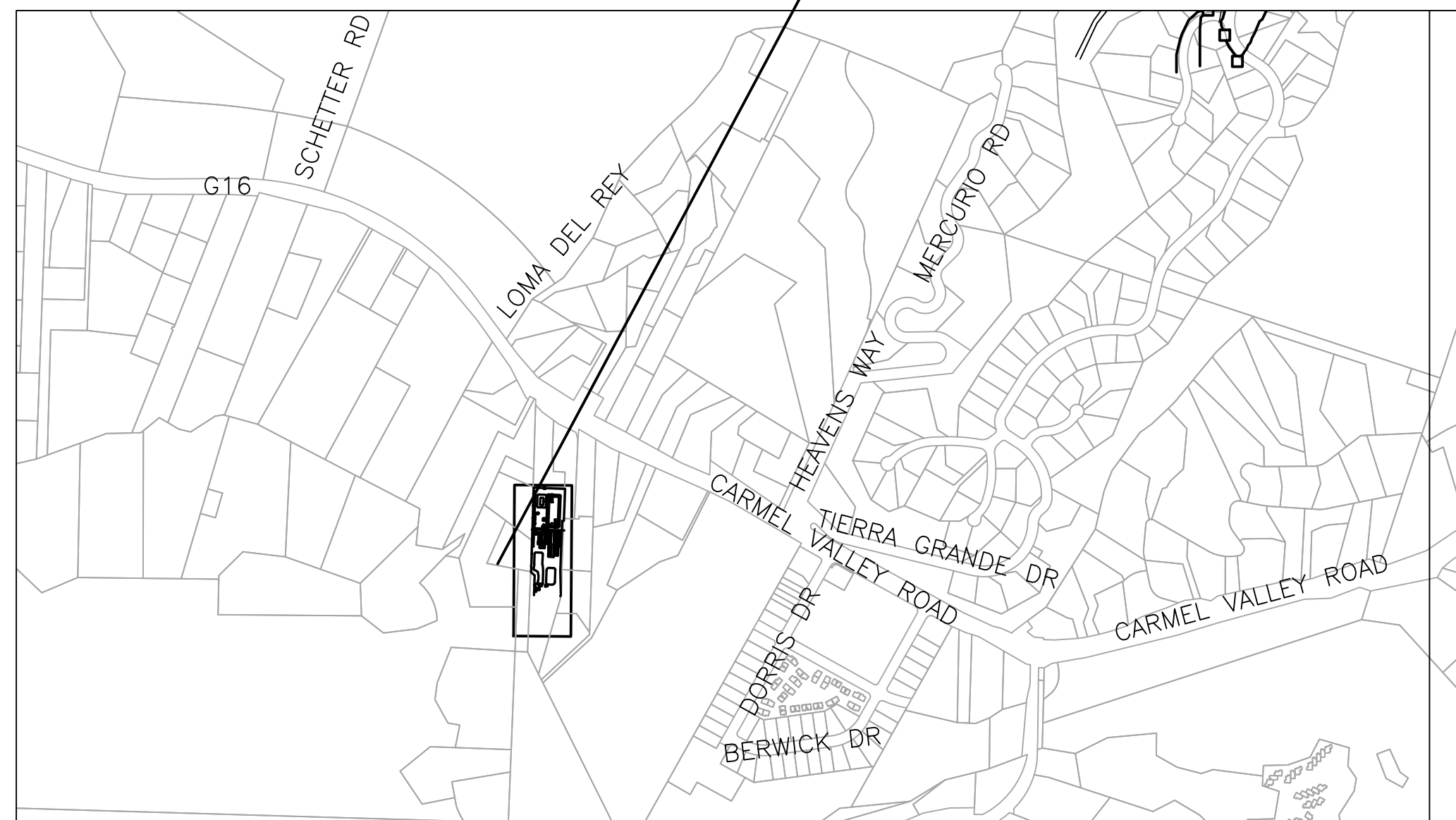
# OCTOBER 2025

# 90% SUBMITTAL



VICINITY MAP  
NTS

PROJECT LOCATION



SITE LOCATION MAP  
NTS



### INDEX

#### GENERAL

SHEET NO.	TITLE
G0.0	COVER AND INDEX
G1.0	CONSTRUCTION NOTES
G2.0	ABBREVIATIONS AND LEGEND
G3.0	EXISTING PROCESS FLOW DIAGRAM – BACKWASH WASTE
G4.0	DEMOLITION PROCESS FLOW DIAGRAM – BACKWASH WASTE
G5.0	PROPOSED PROCESS FLOW DIAGRAM – BACKWASH WASTE

#### CIVIL

SHEET NO.	TITLE
C1.0	EXISTING OVERALL SITE PLAN
C1.1	ENLARGED EXISTING SITE PLAN BACKWASH WASTE POND 3
C1.2	ENLARGED EXISTING SITE PLAN BACKWASH WASTE PONDS 1 AND 2
C2.0	OVERALL PROPOSED PLAN
C2.1	PROPOSED SITE PLAN BACKWASH WASTE POND 3
C2.2	PROPOSED SITE PLAN BACKWASH WASTE PONDS 1 AND 2
C3.0	YARD PIPING DETAILS
C4.0	PAVING AND GRADING PLAN BACKWASH WASTE POND 3
C5.0	EROSION AND SEDIMENT CONTROL PLAN WBW POND 3
C5.1	EROSION AND SEDIMENT CONTROL PLAN WBW PONDS 1 AND 2

#### DEMOLITION

SHEET NO.	TITLE
D1.0	BACKWASH WASTE POND 3 DEMOLITION SITE PLAN
D1.1	BACKWASH WASTE POND 3 DEMOLITION SECTIONS
D2.0	BACKWASH WASTE PONDS 1 AND 2 DEMOLITION SITE PLAN
D2.1	BACKWASH WASTE POND 1 DEMOLITION SECTION
D2.2	BACKWASH WASTE POND 2 DEMOLITION SECTION

#### MECHANICAL

SHEET NO.	TITLE
M1.0	SFAT PUMP SKID AND VAULT ENLARGED PLAN
M1.1	SFAT PUMP SKID AND VAULT SECTIONS
M2.0	BACKWASH WASTE TANK NO. 1 ENLARGED PLAN
M2.1	BACKWASH WASTE TANK NO. 1 SECTIONS
M3.0	BACKWASH WASTE TANK NO. 2 ENLARGED PLAN
M3.1	BACKWASH WASTE TANK NO. 2 SECTIONS
M4.0	SLUDGE HOLDING TANK ENLARGED PLAN
M4.1	SLUDGE HOLDING TANK SECTIONS
M4.2	SLUDGE THICKENER PIPING CONNECTION ENLARGED PLAN
M5.0	DECANT PUMP STATION ENLARGED PLAN
M5.1	DECANT PUMP STATION SECTIONS
M6.0	TANK DETAILS I
M7.0	TANK DETAILS II
M8.0	TANK DETAILS III
M9.0	DETAILS I
M10.0	DETAILS II
M11.0	DETAILS III
M12.0	DETAILS IV
M12.0	DETAILS IV

#### STRUCTURAL

SHEET NO.	TITLE
S1.1	STRUCTURAL NOTE SHEET
S1.2	TYPICAL STRUCTURAL DETAILS
S2.1	SFAT PUMP SKID AND VAULT – FOUNDATION PLAN AND SECTION
S2.2	SFAT PUMP SKID AND VAULT – STRUCTURAL DETAILS
S3.1	SLUDGE HOLDING TANK – FLOOR AND FOUNDATION PLAN
S3.2	SLUDGE HOLDING TANK – SECTION AND DETAILS
S4.1	DECANT PUMP STATION – FOUNDATION PLAN AND DETAILS

#### ELECTRICAL

SHEET NO.	TITLE
E1.1	COVER SHEET
E1.2	LEGEND AND SYMBOLS
E2.1	DEMOLITION LINE DIAGRAM I
E2.2	PROPOSED SINGLE LINE DIAGRAM I
E2.3	EXISTING SINGLE LINE DIAGRAM II
E2.4	DEMOLITION SINGLE LINE DIAGRAM IV
E2.5	PROPOSED SINGLE LINE DIAGRAM V
E2.6	LOAD TABLES I

#### ELECTRICAL (CONTINUED)

SHEET NO.	TITLE
E2.7	LOAD TABLES II
E2.8	LOAD TABLES III
E2.9	CONDUIT & WIRE TABLES
E3.1	DEMOLITION OVERALL SITE PLAN
E3.2	PROPOSED OVERALL SITE PLAN
E3.3	SFAT PUMP SKID AND VAULT ENLARGED PLAN
E3.4	BACKWASH WASTE TANKS ENLARGED PLAN
E3.5	SLUDGE HOLDING TANK ENLARGED PLAN
E3.6	DECANT PUMP STATION ENLARGED PLAN
E4.1	ELECTRICAL DEMOLITION DETAILS I
E4.2	ELECTRICAL DEMOLITION DETAILS II
E4.3	ELECTRICAL DEMOLITION DETAILS III
E4.4	ELECTRICAL DEMOLITION DETAILS IV
E4.5	ELECTRICAL DETAILS I
E4.6	ELECTRICAL DETAILS II
E4.7	ELECTRICAL DETAILS III
E4.8	ELECTRICAL DETAILS IV
E4.9	ELECTRICAL DETAILS V
<b>INSTRUMENTATION</b>	
I1.1	P&ID COVER SHEET
I1.2	EXISTING FLOW PROCESS I
I1.3	EXISTING FLOW PROCESS II
I1.4	EXISTING DEMOLITION FLOW PROCESS I
I1.5	EXISTING DEMOLITION FLOW PROCESS II
I1.6	PROPOSED PROCESS FLOW I
I1.7	PROPOSED PROCESS FLOW II
I1.8	PROPOSED PROCESS FLOW III
I1.9	PROPOSED PROCESS FLOW IV



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**VALENTINE**  
Environmental Engineers, LLC

200 Clock Tower Place Building B, Suite B200  
Carmel, CA 93923  
Phone: (831) 200-9093 Fax: ---  
Website: <http://www.valentineengineers.com>

T. VALENTINE  
REGISTERED PROFESSIONAL ENGINEER  
TERESA A. VALENTINE  
C 83580  
Exp. 3-31-27  
CIVIL  
STATE OF CALIFORNIA  
CA LICENSED PROFESSIONAL ENGINEER  
NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PLACE BUILDING B  
SUITE B200, CARMEL, CA 93923

**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

**BIRP BACKWASH SYSTEM DESIGN**  
**GENERAL COVER AND INDEX**  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

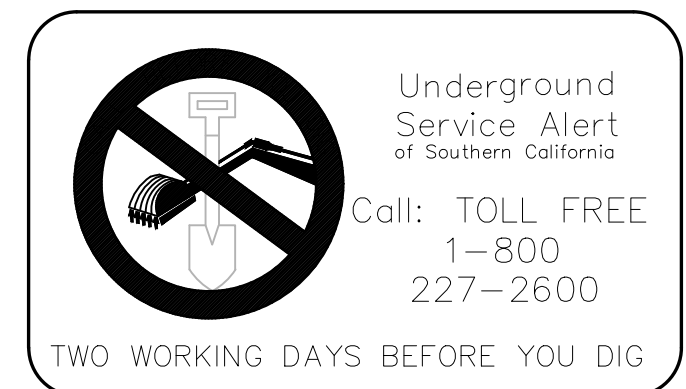
CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE NONE
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	<b>90% SUBMITTAL</b>	XXXXXX-XXXX-GO.0

**GENERAL NOTES:**

- DEFINITIONS: IN THE FOLLOWING NOTES, OWNER SHALL MEAN CALIFORNIA-AMERICAN WATER COMPANY, 511 FOREST LODGE ROAD, SUITE 100 PACIFIC GROVE, CA 93950, AND CONTRACTOR SHALL MEAN ANY DEVELOPER, CONTRACTOR, PROPERTY OWNER, FIRM OR PERSON WHO HAS BEEN DULY AUTHORIZED BY CALIFORNIA-AMERICAN WATER COMPANY TO PERFORM WORK ON THE WATER SYSTEMS AND FACILITIES OWNED AND/OR OPERATED BY CALIFORNIA-AMERICAN WATER COMPANY.
- OWNER CONTACT PERSON: FOR MATTERS RELATED TO WORK TO BE PERFORMED BY CONTRACTOR, PLEASE CONTACT OWNER'S ENGINEER : CALIFORNIA-AMERICAN WATER COMPANY, 511 FOREST LODGE ROAD, #100 PACIFIC GROVE, CA 93950, EMAIL: SCOTT.OTTMAR@AMWATER.COM.
- CONTRACTOR REPRESENTATIVE: CONTRACTOR SHALL ASSIGN AND PROVIDE OWNER WITH THE NAME AND CONTACT INFORMATION OF A REPRESENTATIVE (JOB FOREMAN) AT THE JOB SITE WHERE THE WORK WILL BE PERFORMED ON OWNER FACILITIES. CONTRACTOR'S REPRESENTATIVES IS REQUIRED TO ATTEND ANY PRE-CONSTRUCTION WALK-THROUGH MEETINGS. CONTRACTOR REPRESENTATIVE IS REQUIRED TO BE ON THE JOBSITE DURING ALL PHASES OF WORK, INCLUDING INSPECTIONS, AND CONTRACTOR SHALL NOT REPLACE THE REPRESENTATIVE WITHOUT PRIOR APPROVAL FROM OWNER.
- LOCAL, STATE AND COUNTY ROAD ENCROACHMENT PERMITS. ANY WORK WITHIN A STATE HIGHWAY RIGHT-OF-WAY SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE DEPARTMENT OF TRANSPORTATION (CALTRANS), INCLUDING ENCROACHMENT PERMITS. WORK WITHIN A COUNTY RIGHT-OF-WAY SHALL COMPLY WITH COUNTY REQUIREMENTS, INCLUDING ENCROACHMENT PERMITS. IT SHALL BE INSTALLER'S RESPONSIBILITY TO BE THOROUGHLY FAMILIAR WITH THE CITY, STATE OF CALIFORNIA AND/OR LOS ANGELES COUNTY STANDARDS OF WORK REQUIRED AND INCLUDE THE FULL COST OF COMPLIANCE INCLUDING TRAFFIC CONTROL, PERMITS, TRENCH FEES, ETC., IN THE RESPECTIVE BID ITEMS.
- OTHER PERMITS: INSTALLER OR HIS REPRESENTATIVE SHALL BE REQUIRED TO VERIFY THE REQUIRED PERMITS FOR THE WORK TO BE PERFORMED AND OBTAIN AND COMPLY WITH ALL NECESSARY PERMITS FOR CONSTRUCTION OF THE WATER SYSTEM, INCLUDING ENCROACHMENT PERMITS AND ANY REQUIRED PERMITS FOR WATER SERVICE LINES FROM WATER METERS TO BUILDINGS. INSTALLER IS RESPONSIBLE FOR NOTIFICATION TO JURISDICTIONAL AGENCIES BEFORE COMMENCEMENT OF WORK.
- IDENTIFICATION OF BURIED UTILITIES. BEFORE ANY WORK ON UNDERGROUND FACILITIES, INSTALLER SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) FOR IDENTIFYING ANY BURIED UTILITIES NEAR THE WORK AREA. USA (PHONE 1-800-642-2444) MUST BE GIVEN A 48 HOUR ADVANCE NOTICE. OWNER IS ONLY RESPONSIBLE FOR MARKING THOSE WATER FACILITIES OWNED BY CALIFORNIA-AMERICAN WATER AND SHALL NOT BE RESPONSIBLE FOR MARKING NEW FACILITIES UNTIL OWNER ACCEPTS OWNERSHIP. ANY CALLS TO THE OWNER REGARDING SUCH FACILITIES WILL BE FORWARDED TO THE CONTRACTOR. ANY DAMAGES TO WATER FACILITIES TO BE OWNED BY CALIFORNIA-AMERICAN WATER MUST BE REPORT TO OWNER IMMEDIATELY AND OWNER MUST BE ALLOWED TO INSPECT AND APPROVE REPAIRS OR REPLACEMENTS.
- WATER SHUTDOWN NOTICES. CONTRACTOR SHALL NOTIFY OWNER OR ASSOCIATED COMPANIES 48 HOURS BEFORE COMMENCING CONSTRUCTION AND FOR NOTIFICATION OF WATER SYSTEM SHUT OFF REQUESTS. CONTRACTOR MUST ENSURE THAT SHUT DOWN TIME WILL NOT EXCEED FOUR (4) HOURS WITHOUT PRIOR UTILITY APPROVAL.
- INSPECTION NOTICES. WHEN APPLICABLE, CONTRACTOR SHALL GIVE OWNER AND COUNTY INSPECTOR 48 HOURS NOTICE (MINIMUM) BEFORE SCHEDULING ANY MEETING OR STARTING CONSTRUCTION, AND 24 HOURS NOTICE (MINIMUM) FOR INSPECTION.
- VERIFICATION OF DATA AND INFORMATION PROVIDED BY OWNER. NOTICE IS HEREBY GIVEN TO THE CONTRACTOR THAT OWNER HAS MADE ALL REASONABLE EFFORTS TO IDENTIFY THE TYPES, LOCATIONS, SIZES, AND DEPTH OF EXISTING OR PLANNED UNDERGROUND OR ABOVEGROUND UTILITIES, STRUCTURES, ROADS, PIPELINES, HARD ROCK, STRATA, TOPOGRAPHY, ETC. SUCH ITEMS, WHEN DEPICTED ON THE PLANS, HAVE BEEN OBTAINED FROM SOURCES OF VARYING RELIABILITY. THEREFORE, OWNER AND ASSOCIATED COMPANIES CANNOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF SAID INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING FACILITIES BY POT-HOLING ALL WATER LINE CONNECTION POINTS TO CONFIRM SIZE, DEPTH AND MATERIAL TYPE OF EXISTING FACILITIES. IN CASE OF CONFLICT/S, CONTRACTOR SHALL BRING THE MATTER TO THE ATTENTION OF OWNER FOR RESOLUTION BEFORE CONTINUING WORK.
- SURVEYING AND LOCATING. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED SURVEYING AND STAKING, SHOWING THE LOCATION AND GRADES FOR INSTALLING THE WATER SYSTEM. CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL SURVEY MONUMENTS AND STAKING WHETHER EXISTING OR DISCOVERED DURING CONSTRUCTION.
- JBSITE SAFETY. CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY CURRENTLY APPLICABLE SAFETY LAW OF ANY JURISDICTIONAL AGENCY. CONTRACTOR IS ALSO RESPONSIBLE FOR PROJECT SITE SAFETY INCLUDING TRAFFIC CONTROL, 24-HOURS PER DAY FOR ALL DAYS FROM THE NOTICE TO PROCEED THROUGH THE NOTICE OF COMPLETION.
- MATERIAL OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MATERIALS AND INSULATION OF THE WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF OWNER AND ASSOCIATED COMPANIES, WHICH ARE INCORPORATED HEREIN BY REFERENCE, UNLESS OTHERWISE NOTED ON THESE PLANS. OWNER HAS THE FINAL DECISION ON ALL MATERIALS, INCLUDING BACKFILL, PIPE, FITTING, AND VALVES, THAT WILL BE USED FOR PLACEMENT OF ALL WATER FACILITIES INCLUDING ANY NEW WATER MAIN.
- WORK COORDINATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THEIR WORK WITH ALL OTHER SUB-CONTRACTORS TO AVOID ANY CONFLICTS.
- PIPE AND FITTINGS. CONTRACTOR SHALL PROVIDE PIPE AND FITTING MATERIALS SUBMITTAL TO OWNER FOR APPROVAL BEFORE BEGINNING WORK.
- FLANGED FITTINGS. ALL FLANGED FITTINGS SHALL BE BOLTED TOGETHER WITH ZINC COATED STEEL NUTS AND BOLTS, GRADE 5 OR BETTER.
- MECHANICAL JOINTS. USE EBAA MECHANICAL JOINT MEGA-LUGS ON ALL MECHANICAL JOINT FITTINGS.
- SEPARATION DISTANCE FORM SEWER LINES AND SOURCES OF CONTAMINATION. WATER MAINS SHALL BE LAID IN SEPARATE TRENCHES AS FAR AS POSSIBLE FROM NEARBY SEWER AND STORM DRAIN LINES. IF LESS THAN TEN-FOOT HORIZONTAL SEPARATION BETWEEN THE WATER LINES AND SEWER OR STORM DRAIN LINES, C-900 CLASS 200 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE SHALL BE USED (CLASS OR PRESSURE RATING TO BE DETERMINED OR APPROVED BY OWNER). PLACEMENT OF WATER LINES NEAR OTHER SOURCES OF CONTAMINATION OR HYDROCARBON RELATED FACILITIES SHOULD REQUIRE SPECIAL APPROVAL FROM OWNER. CONTRACTOR TO IMMEDIATELY INFORM THE OWNER'S ENGINEER WHEN INSUFFICIENT SEPARATION CONDITIONS OCCUR (LESS THAN 10-FOOT HORIZONTAL OR 1-FOOT VERTICAL).
- UNDERGROUND PIPE IDENTIFIER: ALL INSTALLATION OF MAINS AN SERVICES SHALL HAVE GREEN-COATED #10 GA STANDARD COPPER WIRE FOR LOCATING.
- HOT TAPS: ALL TAPPING SLEEVES TO BE MECHANICAL JOINT TYPE OR ALL STAINLESS STEEL CIRCUMFERENCE SEAL TYPE WITH STAINLESS STEEL FLANGE, BOLTS AND NUTS.
- EXPIRATION OF OWNER APPROVALS. OWNER'S APPROVAL SIGNATURES ON THE CONSTRUCTION PLANS ARE GOOD FOR ONE YEAR FROM DATE OF SIGNATURE. PLANS WILL BE SUBJECT TO REVIEW THEREAFTER.
- VALVES. UNLESS OTHERWISE NOTED OR DIRECTED BY OWNER, CONTRACTOR SHALL INSTALL GATE VALVES (AWWA C-509) FOR WATER MAINS 12-INCHES OR SMALLER, AND INSTALL BUTTERFLY VALVES (AWWA C-504) FOR MAINS LARGER THAN 12-INCHES. ALL VALVES SHALL BE FLANGED TO FITTINGS (CROSS, TEE, ETC) EXCEPT WHERE MAINS ARE 4- FEET BEHIND SIDEWALK WITH TEES UNDER CORNER RADIUS IN WHICH CASE THE VALVE SHALL BE PLACED IN LINE BEYOND THE RADIUS AND RESTRAINED. GATE VALVES SHALL BE RESILIENT WEDGE, EPOXY COATED WITH SS BOLTS. VALVES STEM SHALL BE PROVIDED FOR VALVES WITH A COVER OF 4-FT OR GREATER. UNDERGROUND VALVES SHALL HAVE 8" DIAMETER (MINIMUM) VALVE BOX RISER, GRADE VALVE BOX AND METAL LID MARKED "WATER", AS SHOWN ON UTILITY STANDARD DRAWINGS.
- BACKFLOW PREVENTION DEVICE. BACKFLOW PREVENTION DEVICES IF REQUIRED, SHALL BE INSTALLED AND TESTED BY A OWNER APPROVED AND CERTIFIED BACKFLOW TESTER BEFORE WATER SERVICE ACTIVATION. THE TYPE OF BACKFLOW PREVENTION DEVICE SHALL BE SPECIFIED BY OWNER AND INSTALLED ABOVE GROUND BY CONTRACTOR PER OWNER'S STANDARDS AND SPECIFICATION. NO SINGLE CHECK DETECTOR CHECKS VALVES WILL BE ALLOWED. NO TEES OR CROSS CONNECTIONS WILL BE ALLOWED BETWEEN ANY WATER METER AND ANY BACKFLOW PREVENTION DEVICE. THE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER OR POINT OF SERVICED CONNECTION (TYPICALLY WITHIN 18 INCHES).
- CONCRETE THRUST BLOCKS. THRUST BLOCK SHALL BE INSTALLED WHERE PIPE DEFLECTIONS EXCEED 4 DEGREES PER COUPLING/FITTINGS, AS SPECIFIED BY PIPE MANUFACTURER. USE EBAA MECHANICAL JOINT MEGA-LUGSON ALL MECHANICAL JOINT FITTINGS. USE EBAA SERIES 1600 PIPE RESTRAINTS IN LIEU OF CONCRETE THRUST BLOCKS. OWNER'S ENGINEER WILL ADVISE CONTRACTOR OF REQUIRED LENGTH OF PIPE TO BE RESTRAINED. CONCRETE THRUST BLOCK TO BE USED IF RESTRAINTS CANNOT BE UTILIZED.
- TRENCH DEPTH AND COVER. TRENCH DEPTH SHALL BE SUFFICIENT TO ALLOW TOP OF WATER MAIN TO HAVE A MINIMUM OF 36-INCHES OF COVER, UNLESS OTHERWISE DIRECTED BY OWNER'S ENGINEER.
- INSPECTION BEFORE BACKFILLING. ALL WATER FACILITIES TO BE OWNED AND MAINTAINED BY CALIFORNIA-AMERICAN WATER, INCLUDING MAINS, FITTINGS, VALVES AND SERVICES SHALL BE INSPECTED AND APPROVED BY OWNER BEFORE BACKFILLING.
- BACKFILL AND COMPACTION. ALL TRENCHES IN EXISTING OR PROPOSED STREETS AND PAVED AREAS SUCH AS PARKING LOTS, DRIVEWAYS, ETC., SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS BY OWNER, UNLESS OTHERWISE NOTES AND SHALL ALSO COMPLY WITH MINIMUM REQUIREMENTS OF THE COUNTY FOR WHICH THE WORK IS BEING DONE, INCLUDING ANY ENCROACHMENT PERMIT CONDITIONS. TRENCH COMPACTION SHALL BE BY MECHANICAL COMPACTION TO A MINIMUM OF 95 PERCENT, UNLESS NOTED OTHERWISE ON THE PLANS.
- BACKFILL SOIL COMPACTION TESTING. INSTALLER IS RESPONSIBLE FOR SECURING, COMPENSATING AND MONITORING OF; A STATE CERTIFIED INDEPENDENT SOILS TESTING SERVICED TO PROVIDE COMPACTION TESTING OF ALL BACKFILL WORK. COMPACTION TESTS DOCUMENTING COMPLIANCE WITH MINIMUM COMPACTION REQUIREMENTS WILL BE TAKEN AT 50 FOOT INTERVALS OR PER THE MINIMUM COUNTY REQUIREMENTS, WHICHEVER IS GREATER. ALL TESTING REPORTS SHALL BE SUBMITTED TO OWNER FOR REVIEW AND APPROVAL AS SOON AS AVAILABLE. TESTING RESULTS FROM A CERTIFIED COUNTY OR CITY REPRESENTATIVE IS PERMITTED WHERE JURISDICTIONAL REQUIREMENTS PROVIDE SUCH COMPACTION TESTING.
- LANDSCAPING RESTRICTIONS. PLANTING OF TREES AND SHRUBS IN THE AFFECTED AREAS AND/OR EASEMENT WHERE A WATER MAIN AND/OR SERVICES ARE PROPOSED OR EXISTING SHOULD BE AVOIDED. UNDER NO CIRCUMSTANCES SHOULD A TREE OR SHRUB BE PLANTED IN THE WATER TRENCH LINES. ALL SHRUBS AND/OR TREES THAT ARE ALLOWED TO BE PLANTED WITHIN THE PLANNED UNIT DEVELOPMENT SHOULD BE CENTER TAPPING ROOT ORNAMENTAL STYLE.
- DISINFECTON AND FLUSHING. CONTRACTOR SHALL PERFORM DISINFECTONS AND FLUSHING OF NEW WATER SYSTEM/S IN ACCORDANCE WITH OWNER'S STANDARDS. WITH REGARDS TO THE DISPOSAL OF THE FLUSH WATER, CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH OWNER, COUNTY AND STATE NPDES DISCHARGE PERMIT REQUIREMENTS AND SHALL PROVIDE NECESSARY DOCUMENTATION ENSURING COMPLIANCE WHERE APPLICABLE.
- INSPECTION BEFORE ACTIVATION. ALL WATER FACILITIES TO BE OWNED AND MAINTAINED BY CALIFORNIA-AMERICAN WATER, INCLUDING MAINS, FITTINGS, VALVES AND SERVICES SHALL BE INSPECTED AND APPROVED BY OWNER BEFORE ACTIVATION, CONTRACTOR SHALL PROVIDE HYDROSTATIC TEST TO BE WITNESSED BY OWNER'S REPRESENTATIVE PER OWNER'S STANDARDS. UTILITY SHALL COLLECT SAMPLES FOR BACTERIOLOGICAL TESTING, NEW SADDLES AND SERVICES SHALL BE INSTALLED PRIOR TO BACTERIOLOGICAL AND PRESSURE TESTING OF MAIN.
- AS-BUILT DRAWINGS. INSTALLER SHALL SUBMIT AS-BUILT (RECORD) DRAWINGS OF THE WATER SYSTEM, OR MODIFICATION INSTALLED BY THE INSTALLER. THE AS-BUILT DRAWINGS MUST BE SUBMITTED TO, AND APPROVED BY, UTILITY WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION, RETENTIONS SHALL BE HELD UNTIL AS-BUILT APPROVAL BY OWNER.
- WARRANTY. WARRANTY OF NEW FACILITIES TO BE CONVEYED TO OWNER SHALL BE FOR A MINIMUM PERIOD OF ONE YEAR FROM DATE OF COMMENCEMENT (OR FINAL ACCEPTANCE).
- RETURNING PROPERTY TO ORIGINAL CONDITION. INSTALLER IS ADVISED TO PHOTOGRAPH OR VIDEOTAPE JOB SITE AREA TO DOCUMENT EXISTING CONDITIONS BEFORE BEGINNING WORK TO MINIMIZE UNDUE CLAIMS. INSTALLER IS RESPONSIBLE TO RETURN ALL PROPERTY TO ORIGINAL OR BETTER CONDITION, INCLUDING TRAFFIC MARKINGS. A COPY OF THE CLAIM DOCUMENTS SHALL BE SUBMITTED TO OWNER'S ENGINEER WITHIN 48 HOURS AFTER RECEIVING SUCH ANY CLAIMS.

**CONSTRUCTION NOTES**

- INSPECTION: ALL WORK AND MATERIALS SHALL BE INSPECTED BY THE INSPECTOR OF PUBLIC WORKS DURING CONSTRUCTION PURSUANT TO LATEST EDITION OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AS AMENDED BY THE CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS "BROWN BOOK", AND THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION AS APPLICABLE. CALL (213) 485-5080 BEFORE NOON OF THE WORKING DAY BEFORE THE FIRST SCHEDULED DAY OF CONSTRUCTION. PRIOR TO THE START OF ANY CONSTRUCTION, DEMOLITION, REMOVALS, SAWCUTTING, OR INSTALLATION OF TRAFFIC CONTROL THE CONTRACTOR SHALL MEET WITH THE INSPECTOR TO DISCUSS SAFETY, TRAFFIC CONTROL REQUIREMENTS, PUBLIC ACCESS, CONSTRUCTION IMPACT MITIGATION, REMOVAL LIMITS, AND CONTRACTOR'S PLANNED SEQUENCING OF OPERATIONS. PRIOR TO OR AT THE PROJECT PRECONSTRUCTION MEETING THE PERMITTEE OR ITS CONTRACTOR SHALL PROVIDE THE INSPECTOR TWO SETS OF FULL-SIZE PLANS AND MAINTAIN ONE SET OF FULL-SIZE PLANS AT THE SITE DURING CONSTRUCTION. INDEXED PLANS ARE AVAILABLE FROM THE CITY'S WEBSITE AT HTTP://ENGVault.LAcITY.ORG.
- UNDERGROUND SERVICE ALERT: BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT (USA) INQUIRY I.D. NUMBER BY CALLING (800) 227-2600. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE CONTRACTOR STARTS THE EXCAVATION WORK SO THAT UTILITY OWNERS CAN BE NOTIFIED. IF THE UTILITY OWNER IS THE CITY OF LOS ANGELES, A CONFIRMATION NUMBER INDICATING THE CITY HAS BEEN NOTIFIED SHALL BE OBTAINED BY USA AND/OR THE CONTRACTOR FROM THE APPROPRIATE CITY DEPARTMENT. THE I.D. NUMBER TOGETHER WITH THE DATE ACQUIRED SHALL BE REPORTED TO THE BUREAU OF CONTRACT ADMINISTRATION WHEN CALLING FOR INSPECTION. I.D. NUMBERS WILL NOT BE GIVEN MORE THAN 10 DAYS BEFORE STARTING EXCAVATION WORK.
- AT LEAST THIRTY (30) DAYS BEFORE THE START OF CONSTRUCTION THE CONTRACTOR/ENGINEER SHALL CONTACT THE BUREAU OF STREET SERVICES, COORDINATING SECTION AT (213) 847-3200 TO VERIFY THAT THERE IS NO PROPOSED PROJECT IN THIS AREA.
- NOTIFICATION: AT LEAST TEN (10) DAYS BEFORE THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY, IN WRITING, ABUTTING PROPERTY OCCUPANTS OF THE PROPOSED CONSTRUCTION START DATE. A COPY OF SAID WRITTEN NOTIFICATION SHALL BE PROVIDED TO THE PUBLIC WORKS INSPECTOR FOR APPROVAL BEFORE THEY ARE DISTRIBUTED TO THE OCCUPANTS OF THE ABUTTING PROPERTY.
- ADVANCE CONSTRUCTION NOTICE SIGNS: IN ADDITION TO SIGNS REQUIRED BY THE PROVISIONS OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (WATCH), LATEST EDITION, FURNISH AND PLACE SIGNS FOR GIVING ADVANCE NOTICE TO MOTORISTS OF TRAFFIC DISRUPTION AS PART OF THIS PROJECT IN ACCORDANCE WITH STANDARD PLAN S-791-1.
- CUTS OR EXCAVATIONS IN STREETS THAT HAVE BEEN RESURFACED ONE YEAR OR LESS FROM THE DATE OF A PROPOSED CUT OR EXCAVATION ARE PROHIBITED UNLESS THE PERMITTEE RESURFACES THE ENTIRE BLOCK OR INTERSECTION WITHIN WHICH SUCH CUT OR EXCAVATION OCCURS, PER ORDINANCE NO. 171922, 171923, 171924, AND SPECIAL ORDER NO. 06-0807.
- REMOVALS:
  - REMOVE ALL EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT.
  - ALL UTILITIES SHALL BE REMOVED OR RELOCATED BY OTHERS.
- REPAIR AND/OR REPLACE ANY EXISTING BROKEN OR OFF-GRADE PAVEMENT, CONCRETE CURB, GUTTER OR SIDEWALK IMMEDIATELY ADJACENT TO OR WITHIN THE AREA OF THIS IMPROVEMENT SATISFACTORY TO THE CITY ENGINEER.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DIMENSION OF ALL BLOCKOUTS, PADS, SLEEVES, OPENINGS, EMBEDDED OR ATTACHED ITEMS. PIPES WITH WATERSTOPS SHALL BE CAST-IN-PLACE.
- THE STAMPED SET OF PLANS AND SPECIFICATIONS SHALL BE KEPT AT THE JOB SITE AND UPDATED WITH RECORD INFORMATION. THE SET SHALL BE AVAILABLE TO THE INSPECTOR, BUILDING OFFICIAL OR ENGINEER AT ANY TIME. THE CONTRACTOR SHALL NOT DEVIATE FROM THE STAMPED SET OF PLANS AND SPECIFICATIONS WITHOUT OFFICIAL APPROVAL.
- ANY CRANES OR OTHER CONSTRUCTION EQUIPMENT MUST COMPLY WITH MINIMUM SEPARATION DISTANCE OF 10- FEET FROM POWERLINES, AS REQUIRED BY OSHA.



	REVISIONS	REVISIONS				<b>BIRP BACKWASH SYSTEM DESIGN</b> GENERAL CONSTRUCTION NOTES 9210 CARMEL VALLEY ROAD CARMEL CA, 93923																					
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DATE OCTOBER 2025				PROJECT XXXXXX-XXXX				USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-G1.0																	

### ABBREVIATIONS

AC	ASPHALT CONCRETE
ACI	AMERICAN CONCRETE INSTITUTE
APN	ASSESSOR'S PARCEL NUMBER
AR	AIR RELEASE VALVE
ARFC	AS REQUIRED FOR CONSTRUCTION
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPH	ASPHALT
ASS	ASSEMBLY
@	AT
AV	AIR AND VACUUM VALVE
AVAIL	AVAILABLE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BFV	BUTTERFLY VALVE
BOC	BACK OF CURB
BC	BEGIN HORIZONTAL CURVE
BO	BLOW OFF
BOL	BEGINNING OF LINE
BLDG	BUILDING
B.S.L.	BUILDING SET BACK LINE
B.V.C.	BEGIN VERTICAL CURVE
C	CENTER
C/C	CENTER TO CENTER
CA	CEMENT ASBESTOS
CATV	CABLE TELEVISION
CBC	CONCRETE BOX CULVERT
C.C.S.	CONCRETE CYLINDER PIPE
CFS	CUBIC FEET PER SECOND
CIP	CAST IRON PIPE
CL	CENTERLINE
CLR	CLEAR
CM	CORRUGATED METAL
CMC	CEMENT MORTAR COATED
CML	CEMENT MORTAR LINED
CML&C	CEMENT MORTAR LINED & COATED
CMP	CORRUGATED METAL PIPE
CO	COMPANY
CONC	CONCRETE
CONST	CONSTRUCTION
C.O.S.	CITY OF SCOTTSDALE
CPLG	COUPLING
CS	CHLORINE SOLUTION
D	DRAIN
DOCKET	DOCKET
DG	DECOMPOSED GRANITE
DTL	DETAIL
DI	DRAIN INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
D/L	DAYLIGHT
DWG	DRAWING
EA	EACH
EC	END HORIZONTAL CURVE
E.F.	EACH FACE
EHH	ELECTRIC HANDHOLE
EL.E.	ELECTRICAL EASEMENT
EL	ELEVATION
ELEV	ELEVATION
ELEC	ELECTRIC
E'LY	EASTERLY
EM	ELECTRIC METER
EOP	EDGE OF PAVEMENT
EP	ELECTRIC PANEL
EPED	ELECTRIC PEDESTAL
ESMT	EASEMENT
EV	ELECTRIC VAULT
E.V.C.	END VERTICAL CURVE
EOL	END OF LINE
E.W.	EACH WAY
EXIST	EXISTING
FND	FOUND
F.F.	FINISHED FLOOR
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FP	FLAG POLE
FRUL	FULLY RESTRAINED JOINT LENGTH
FTW	FILTER TO WASTE
FW	FINISHED WATER
GA	GAUGE
GAC	GRANULATE ACTIVATED CARBON
GALV	GALVANIZED
GP	GUY POLE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPT	GUARD POST
GSV	GAS VALVE
GW	GUY WIRE
HDWL	HEADWALL
HH	HAND HOLE
HORIZ	HORIZONTAL
HPG	HIGH PRESSURE GASLINE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INV	INVERT
IRRIG	IRRIGATION
L	CURVE LENGTH
LF	LINEAR FEET

LOC	LIMITS OF CONSTRUCTION
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
M.O.	MARKOUT
MRKD	MARKED
MTR	METER
MW	MANWAY
N.A.O.S.	NATURAL AREA OPEN SPACE
NC	NORMALLY CLOSED
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO.	NUMBER
NPW	NON-POTABLE WATER
OFF	OFFSET
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
P	PRESSURE
PA	PROCESS AIR
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PED	PEDESTAL
PG	PRESSURE GAUGE
PIT	PRESSURE INDICATING TRANSMITTER
PLCS	PLACES
PMH	PROPOSED MANHOLE
PP(#)	POWER POLE (POLE#)
PRA	PRESSURE REGULATING ASSEMBLY
PSI	POUNDS PER SQUARE INCH
P.T.L.G.	PUBLIC TRAIL EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
P.U.I.&E.E.	PUBLIC UTILITY INGRESS & EGRESS EASEMENT
PW	PUMP WELL
Q	VOLUMETRIC FLOW RATE
R	RADIUS
RCCP	REINFORCED CONCRETE CYLINDER PIPE
RCP	REINFORCED CONCRETE PIPE
RDWYE.	ROADWAY EASEMENT
REG.	REGIONAL
REQ'D	REQUIRED
RR	RAILROAD
R/W	RIGHT-OF-WAY
RW	RAW WATER
RT	RIGHT
SEC	SECTION
SCO	SEWER CLEAN OUT
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIMENSION RATIO
SIM	SIMILAR
SMH	SEWER MANHOLE
SHT	SHEET
SHS	SODIUM HYPOCHLORITE SOLUTION
SPEC(S)	SPECIFICATION(S)
SO	SQUARE
SS	SANITARY SEWER
SSFM	SANITARY SEWER FORCE MAIN
STA	STATION
SFAT	SLUDGE FLUIDIZATION AND TRANSFER
STD	STANDARD
STL	STEEL
STLT	STREET LIGHT
SY	SQUARE YARDS
T	TANGENT
t	STEEL THICKNESS
TCE	TEMPORARY CONSTRUCTION EASEMENT
TELE	TELEPHONE
THH	TELEPHONE HANDHOLE
THK	THICK
TG	TOP OF GRATE
TOC	TOP OF CURBE
TOW	TOE OF SLOPE
T.O.P.	TOP OF PIPE
TPED	TELEPHONE PEDESTAL
TPOLE	TELEPHONE POLE
TRANS	TRANSFORMER
TYP	TYPICAL
UGE	UNDERGROUND ELECTRICAL
UTELE	UNDERGROUND TELEPHONE
UV	ULTRA VIOLET
VAC	VACUUM
VERT	VERTICAL
VLV	VALVE
V.P.I.	VERTICAL POINT OF INTERSECTION
W	WATERLINE
W/	WITH
WGV	WATER GATE VALVE
WBW	BACKWASH WASTE
W'LY	WESTERLY
W.L.E.	WATERLINE EASEMENT
WM	WATER METER
WMH	WATER MANHOLE
WS	WATER SERVICE
WSEL	WATER SURFACE ELEVATION
WSP	WELDED STEEL PIPE
WV	WATER VAULT
WW	WASH WATER

### LINE TYPE LEGEND

---	PROPERTY LINE
--- * W ---	WATERLINE / TANK OVERFLOW
---	SANITARY SEWER
---	FILTRATE PIPELINE
---	BACKWASH WASTE
---	SLUDGE
---	DECANT
---	ELECTRICAL
---	EXISTING SODIUM HYDROXIDE FEED LINE
---	EXISTING ZINC ORTHOPHOSPHATE FEED LINE
---	EXISTING BARBED WIRE FENCE
---	EXISTING CHAIN LINK FENCE
---	EXISTING CONTOUR
---	EXISTING MANHOLE
---	YARD
---	ZINC ORTHOPHOSPHATE
---	DELTA ANGLE
---	DIAMETER
---	NUMBER

### MECHANICAL LEGEND

FLANGED FITTINGS		MECHANICAL JOINT FITTINGS		SINGLE LINE FITTINGS	
	CROSS		CROSS		TEE
	TEE		TEE		TEE UP
	TEE UP		TEE DOWN		TEE DOWN
	TEE DOWN		REDUCING TEE		LATERAL
	REDUCING TEE UP		REDUCING TEE DOWN		90° ELBOW
	LATERAL		REDUCING TEE UP		45° ELBOW
	LATERAL DOWN		LATERAL		90° ELBOW DOWN
	LATERAL UP		LATERAL DOWN		90° ELBOW UP
	22.5° ELBOW		LATERAL UP		UNION
	45° ELBOW		22.5° ELBOW		CONCENTRIC REDUCER
	45° ELBOW DOWN		45° ELBOW		ECCENTRIC REDUCER
	45° ELBOW UP		45° ELBOW DOWN		CAP PLUG
	90° ELBOW		45° ELBOW UP	<b>CONCRETE FITTINGS</b>	
	90° ELBOW UP		90° ELBOW		TEE
	90° ELBOW DOWN		90° ELBOW UP		45° ELBOW
	REDUCING ELBOW		90° ELBOW DOWN		90° ELBOW
	CONCENTRIC REDUCER		REDUCER		CONCENTRIC REDUCER
	FLEXIBLE COUPLING		ENDJOINT	<b>SECTION KEY</b>	

### PROCESS FLOW DIAGRAM SYMBOLS LEGEND

	CHECK VALVE		BALL VALVE
	PRESSURE RELIEF VALVE		REDUCER
	FLOWMETER		FLOW DIRECTION
	MOTORIZED BUTTERFLY VALVE		LEVEL INDICATING TRANSMITTER
	MANUAL BUTTERFLY VALVE		TURBIDITY ANALYZER
	VACUUM/AIR RELEASE		PRESSURE GAUGE
	SAMPLE PORT		PRESSURE SWITCH
	FLOW CONTROL VALVE		CAP
	MOTORIZED BALL VALVE		FLAPPER OUTFALL CHECK VALVE
	PUMP		
	PLUG VALVE		

### SYMBOL LEGEND

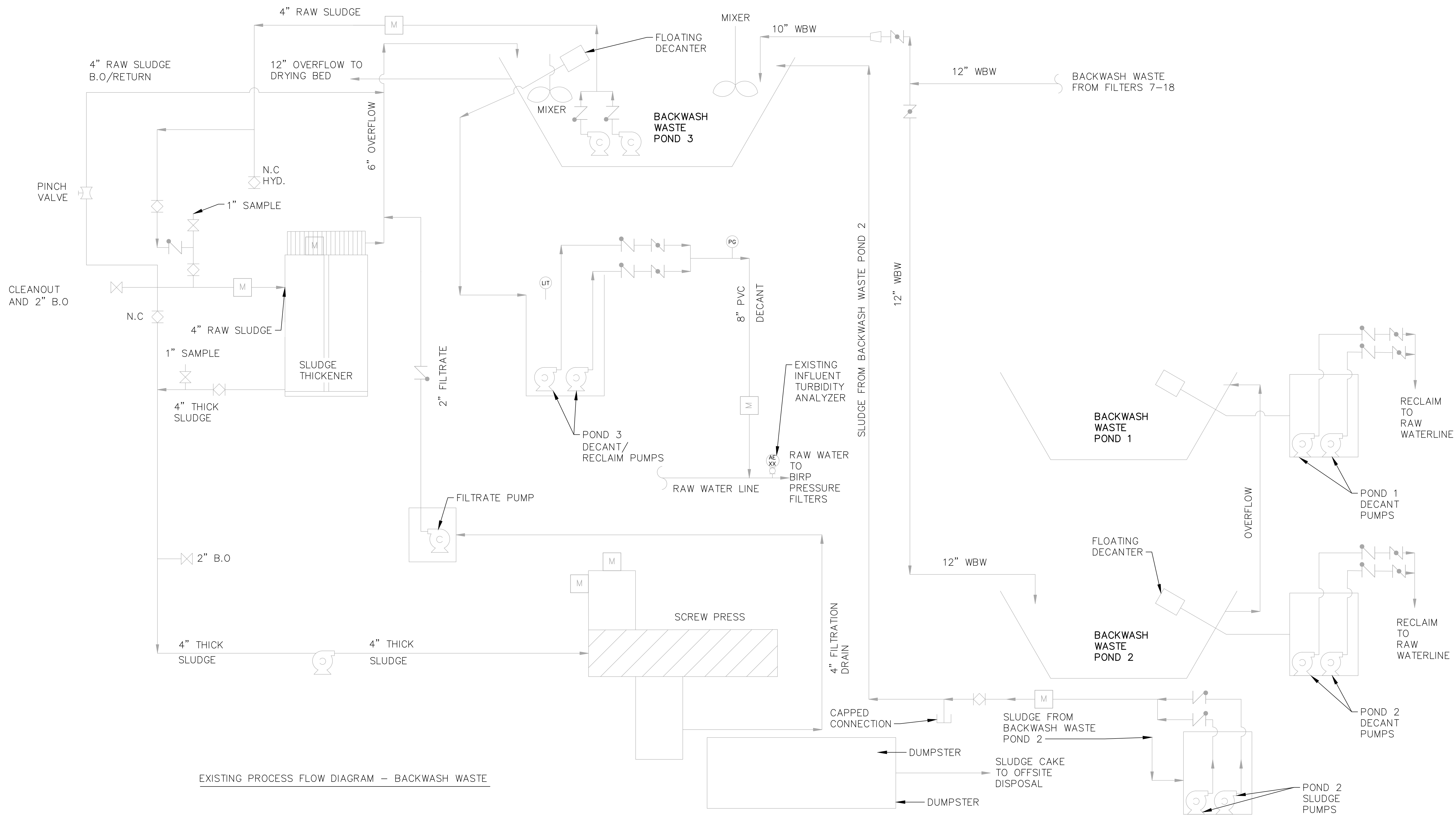
	EXISTING BUILDING/STRUCTURE
	NEW BUILDING/STRUCTURE
	EXISTING SEWER MANHOLE
	NEW SEWER MANHOLE
APN 123-456-78	ASSESSOR'S PARCEL NUMBER
	EXISTING IRRIGATION VALVE BOX
	POWER POLE
	DEMOLISH AND REMOVE

### DETAIL KEY

	DETAIL LETTER
	SHEET ON WHICH DETAIL IS REFERENCED

Underground Service Alert of Southern California  
Call: TOLL FREE 1-800-227-2600  
TWO WORKING DAYS BEFORE YOU DIG

	<b>REVISIONS</b>		<b>REVISIONS</b>					<b>BIRP BACKWASH SYSTEM DESIGN</b> <b>GENERAL ABBREVIATIONS AND LEGEND</b> <b>9210 CARMEL VALLEY ROAD CARMEL CA, 93923</b>			
											<b>DRAWN BY</b> D.BRODERICK <b>PROJECT ENG'R</b> S.TERRELL/T.VALENTINE
											<b>DATE</b> OCTOBER 2025
											CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION
											<b>USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES</b>
				<b>PROJECT</b> XXXXXX-XXXX	<b>USE DIMENSIONS ONLY SCALE</b> NONE	<b>90% SUBMITTAL</b>	<b>XXXXXX-XXXX-G2.0</b>				



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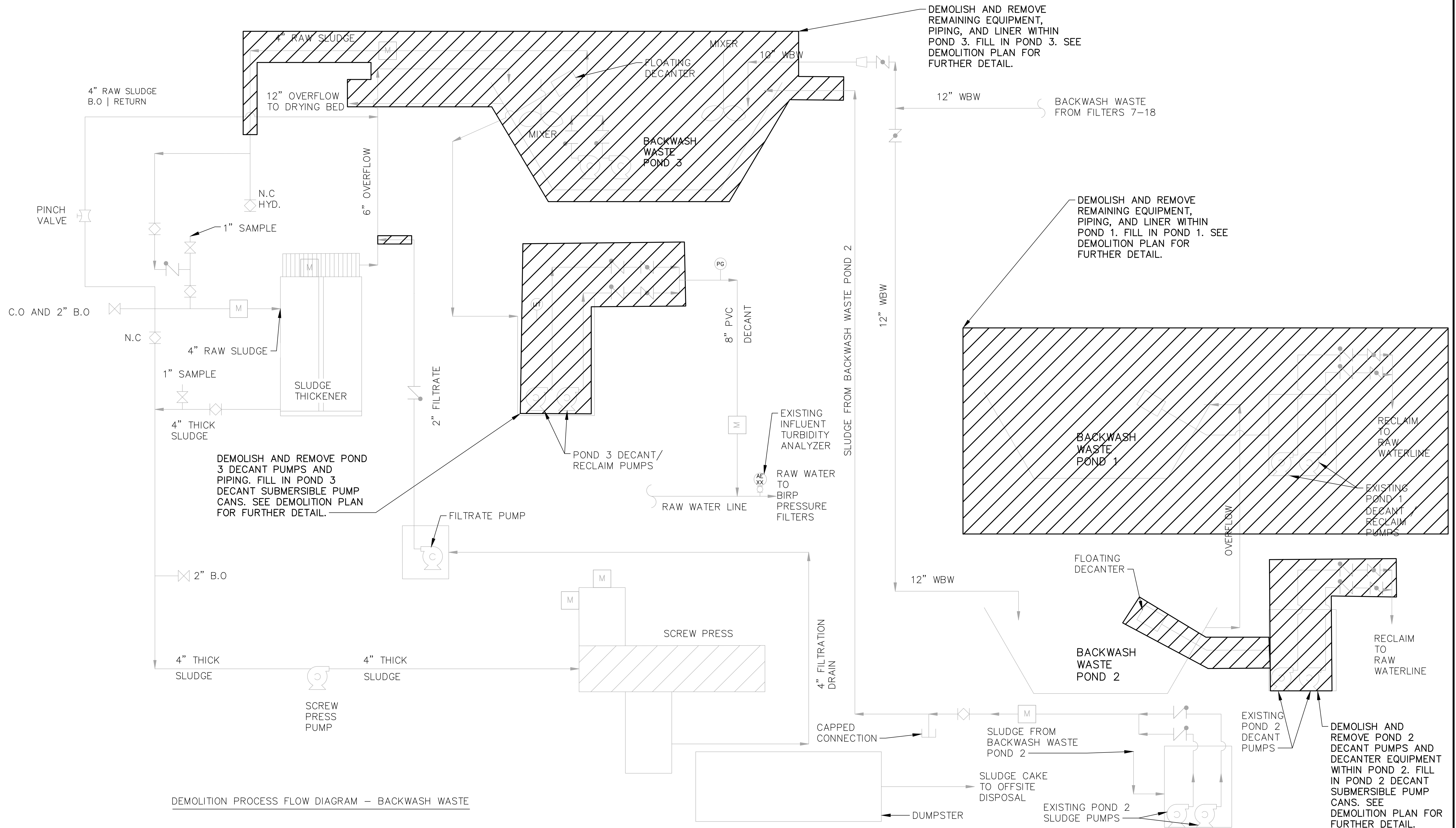
**VALENTINE**  
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REGISTERED PROFESSIONAL ENGINEER  
TERESA A. VALENTINE  
C 83580  
Exp. 3-31-27  
CIVIL  
STATE OF CALIFORNIA  
CA LICENSED PROFESSIONAL ENGINEER  
NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PLACE BUILDING B  
SUITE B200, CARMEL, CA 93923  
CALIFORNIA AMERICAN WATER  
DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE  
DATE OCTOBER 2025  
PROJECT XXXXXX-XXXX

BIRP BACKWASH SYSTEM DESIGN  
GENERAL  
EXISTING PROCESS FLOW DIAGRAM - BACKWASH WASTE  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE NONE
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-G3.0



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**CALIFORNIA AMERICAN WATER**

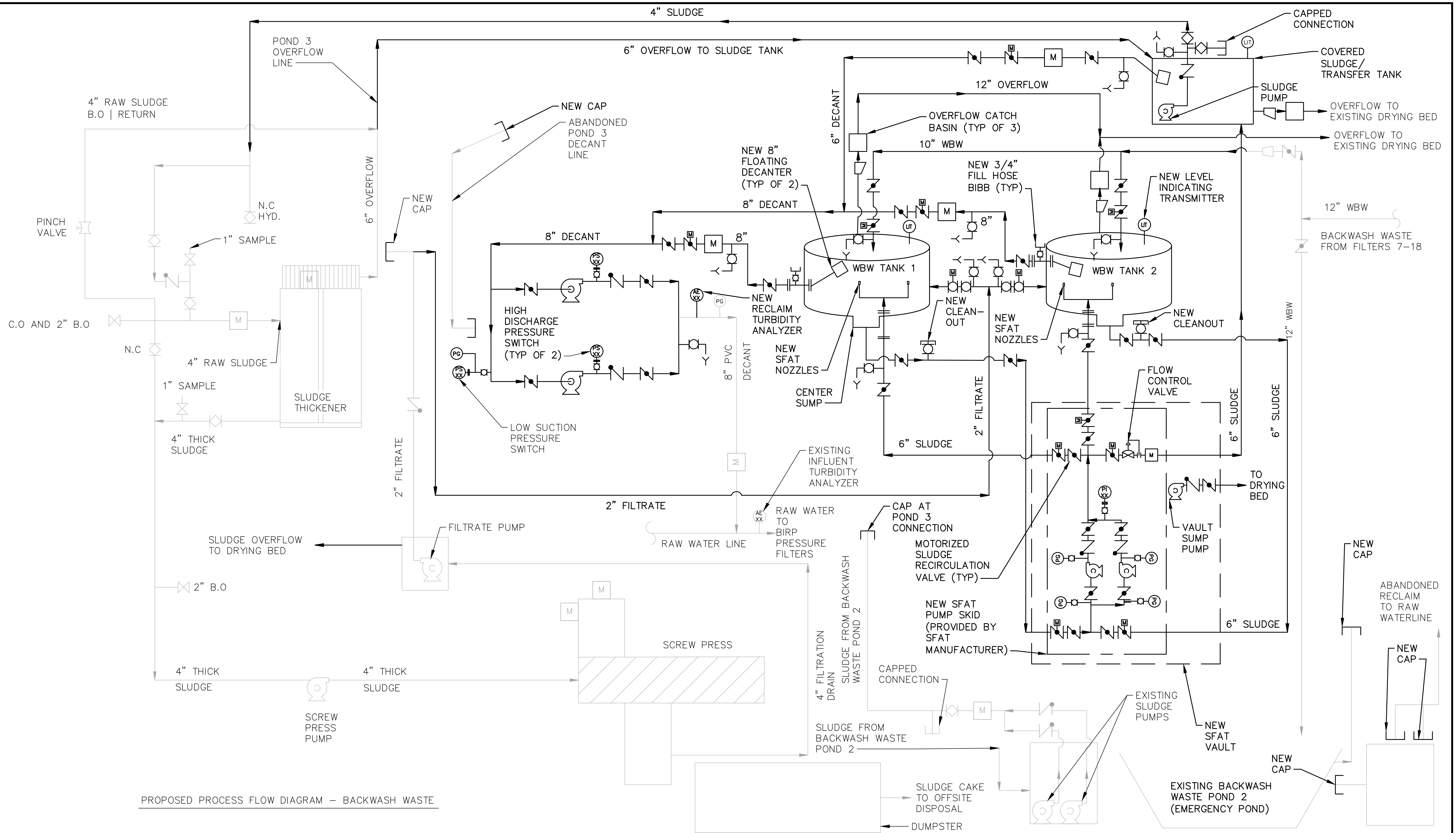
DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

**BIRP BACKWASH SYSTEM DESIGN**  
GENERAL  
DEMOLITION PROCESS FLOW DIAGRAM – BACKWASH WASTE  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE NONE
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-G4.0



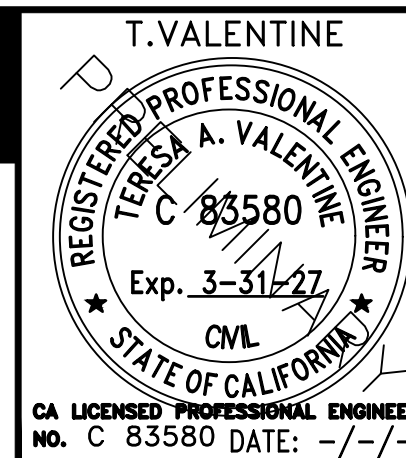
PROPOSED PROCESS FLOW DIAGRAM - BACKWASH WASTE



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DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH SYSTEM DESIGN  
GENERAL  
PROPOSED PROCESS FLOW DIAGRAM - BACKWASH WASTE  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.

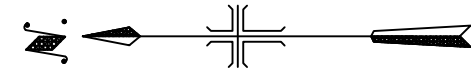
COASTAL DIVISION

USE DIMENSIONS ONLY  
SCALE NONE

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

90% SUBMITTAL

XXXXXX-XXXX-G5.0

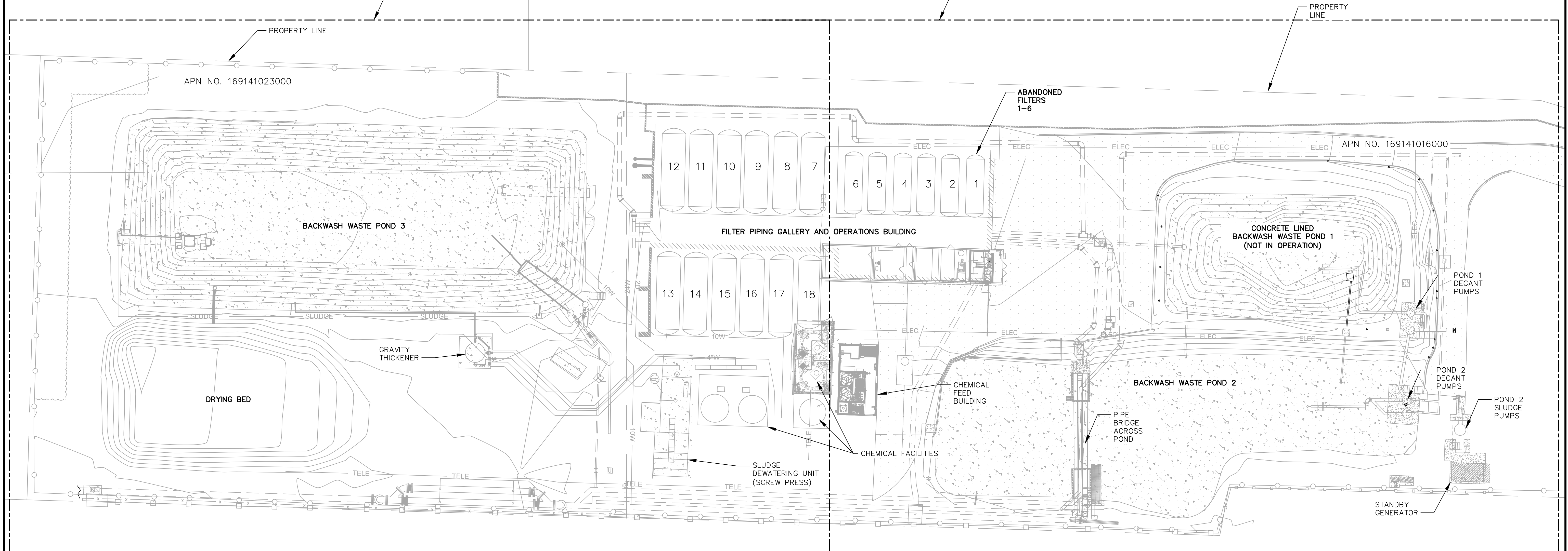


FOR ENLARGED EXISTING PLAN FOR BACKWASH WASTE POND 3 AREA, SEE SHEET C1.1 AND DEMOLITION PLAN ON SHEET D1.0

FOR ENLARGED EXISTING PLAN FOR BACKWASH WASTE PONDS 1 AND 2 AREA, SEE SHEET C1.2 AND DEMOLITION PLAN ON SHEET D2.0

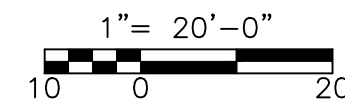
**NOTES:**

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 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.



**EXISTING OVERALL SITE PLAN**

SCALE: 1" = 20'-0"



**LEGAL DESCRIPTION**

MP OF JAMES MEADOWS TR POR OF SUB A OF SUB 1 OF L 16 & SUB A OF L 1 OF PORS OF LOTS 2 3 4 OF SEC24 T16 R1 AS DESCRIBED IN R710 PG 988 2.58 AC APRX FOR APN 169-141-016.

VOLUME 2 PAR MAPS PG 14 PAR A EXC 1.15 AC PAR FOR APN 169-141-023

THESE PARCELS ARE RECORDED IN THE OFFICE OF COUNTY RECORDED OF MONTEREY COUNTY, STATE OF CALIFORNIA.

**SITE INFORMATION**

SITE NAME: BECONIA IRON REMOVAL PLANT (BIRP)  
 SITE ADDRESS: 9210 CARMEL VALLEY RD, CARMEL-BY-THE-SEA, CA 93923  
 ASSESSOR'S PARCEL NO. 169-141-023 & 169-141-016

**UTILITY STATEMENT**

THE ENGINEER MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE/SHE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

**BENCH MARK**

**BENCHMARK INFORMATION**

BENCHMARK #1 (#1518 ON SURVEY), 1" IP LS 3772  
 NORTHING = 2085730.10'  
 EASTING = 5734402.88'  
 ELEV = 118.19'

BENCHMARK #2 (#3152 ON SURVEY), MAG NAIL AND WASHER  
 NORTHING = 2085762.28'  
 EASTING = 5734490.70'  
 ELEV = 121.97'

**BASIS OF BEARINGS**

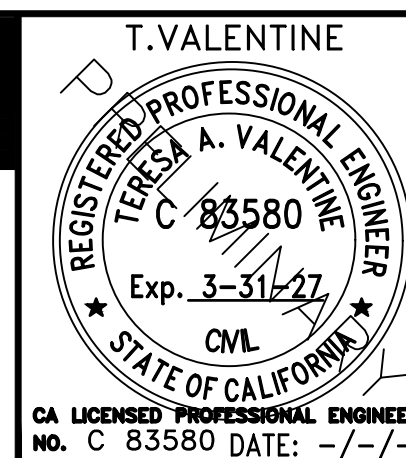
THE BEARINGS SHOWN HEREIN ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83). CALIFORNIA STATE PLANE ZONE 4. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).



REVISIONS	REVISIONS
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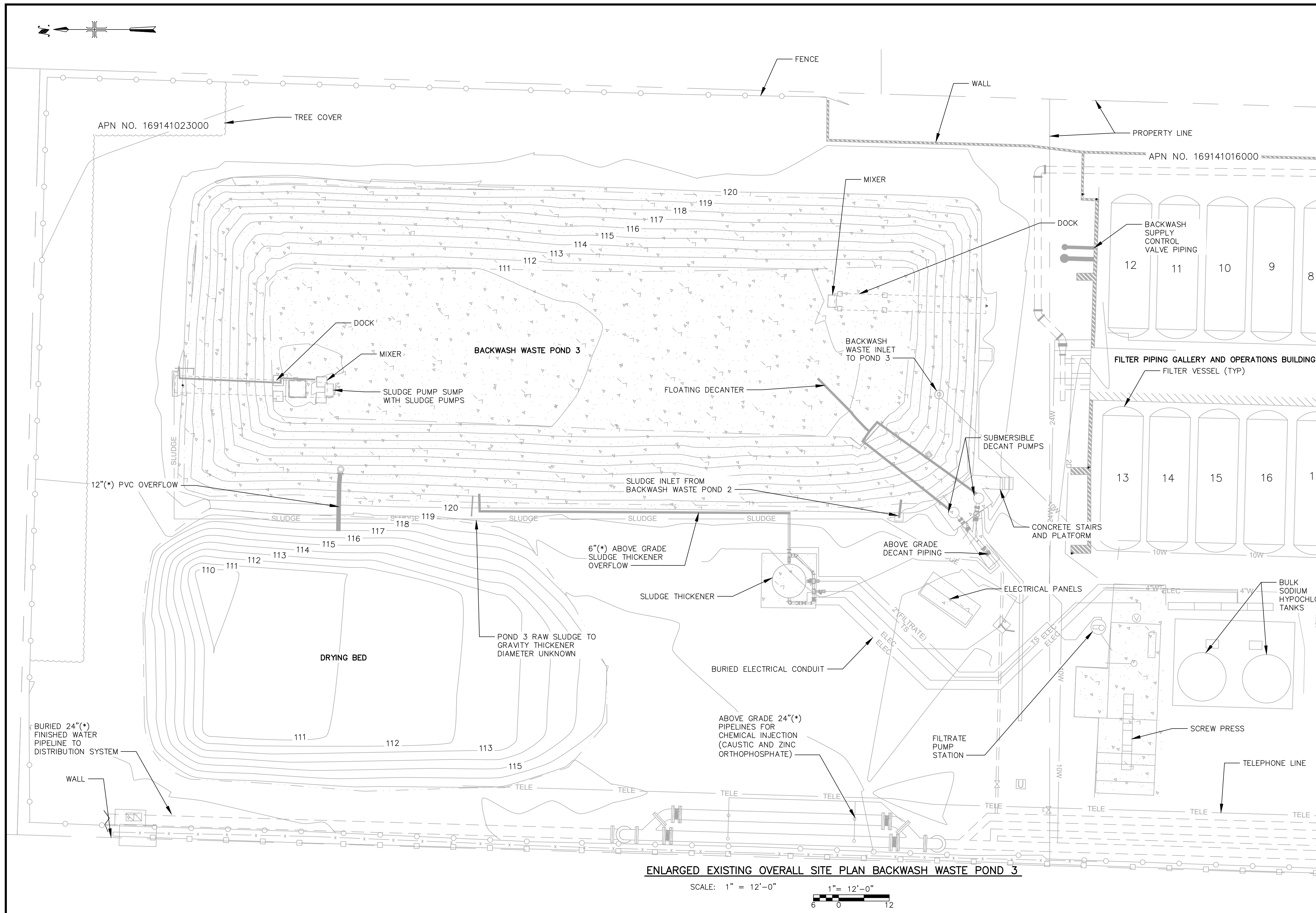
DRAWN BY: D. BRODERICK  
 PROJECT ENG'R: S. TERRELL/T. VALENTINE

DATE: OCTOBER 2025

PROJECT: XXXXXX-XXXX

BIRP BACKWASH DESIGN  
 CIVIL  
 EXISTING OVERALL SITE PLAN  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1" = 20'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-C1.0



**NOTES:**  
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 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.

ENLARGED EXISTING OVERALL SITE PLAN BACKWASH WASTE POND 3

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
 6 0 12



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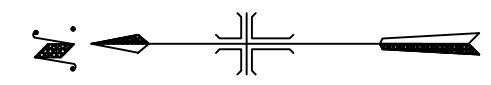
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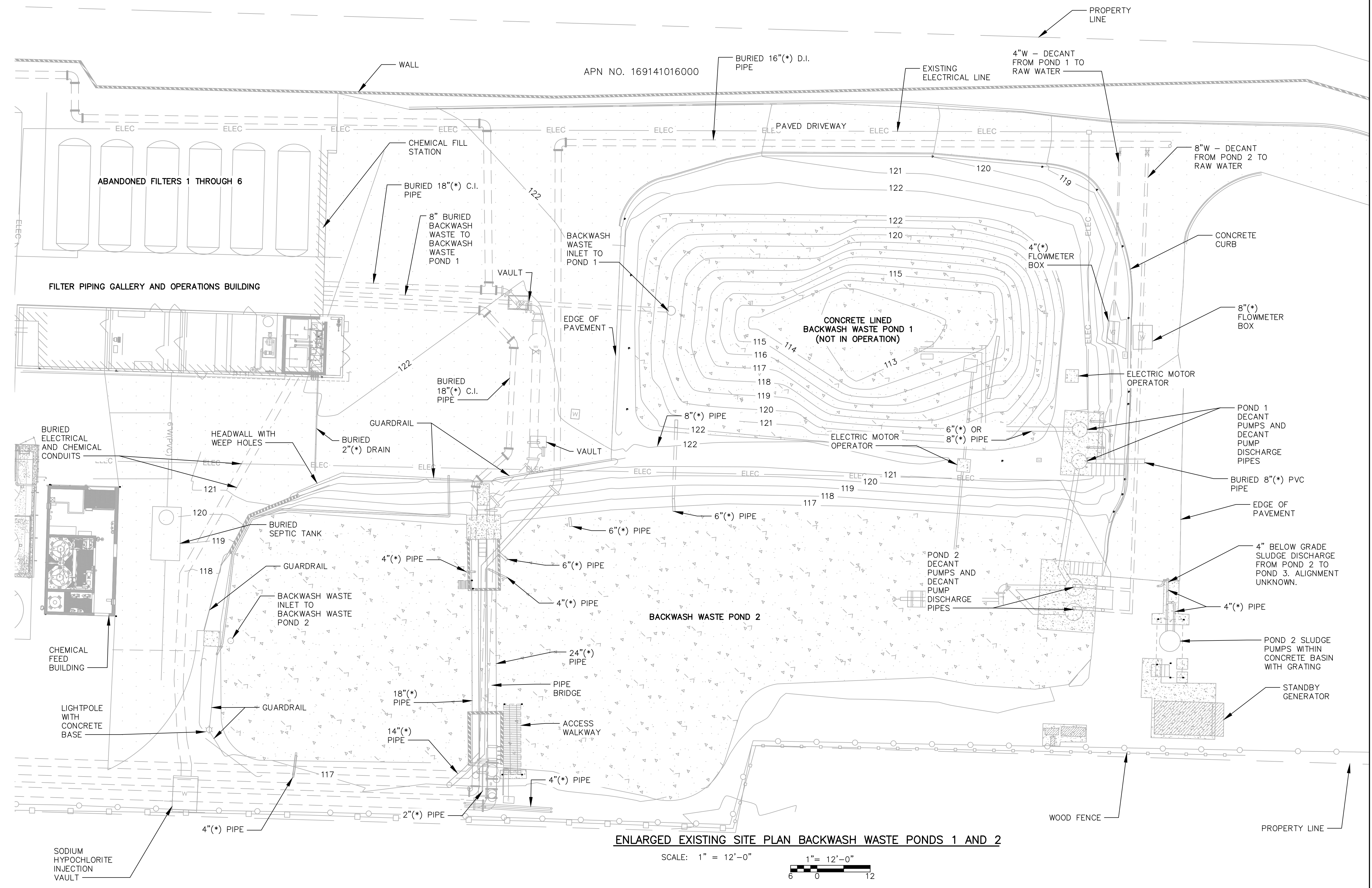
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 CALIFORNIA AMERICAN WATER  
 DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE  
 DATE OCTOBER 2025  
 PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
 CIVIL  
 ENLARGED EXISTING SITE PLAN BACKWASH WASTE POND 3  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923  
 CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
 90% SUBMITTAL  
 USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES  
 USE DIMENSIONS ONLY SCALE 1"=12'-0"  
 XXXXXX-XXXX-C1.1



**NOTES:**  
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 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.



**ENLARGED EXISTING SITE PLAN BACKWASH WASTE PONDS 1 AND 2**

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
 6 0 12



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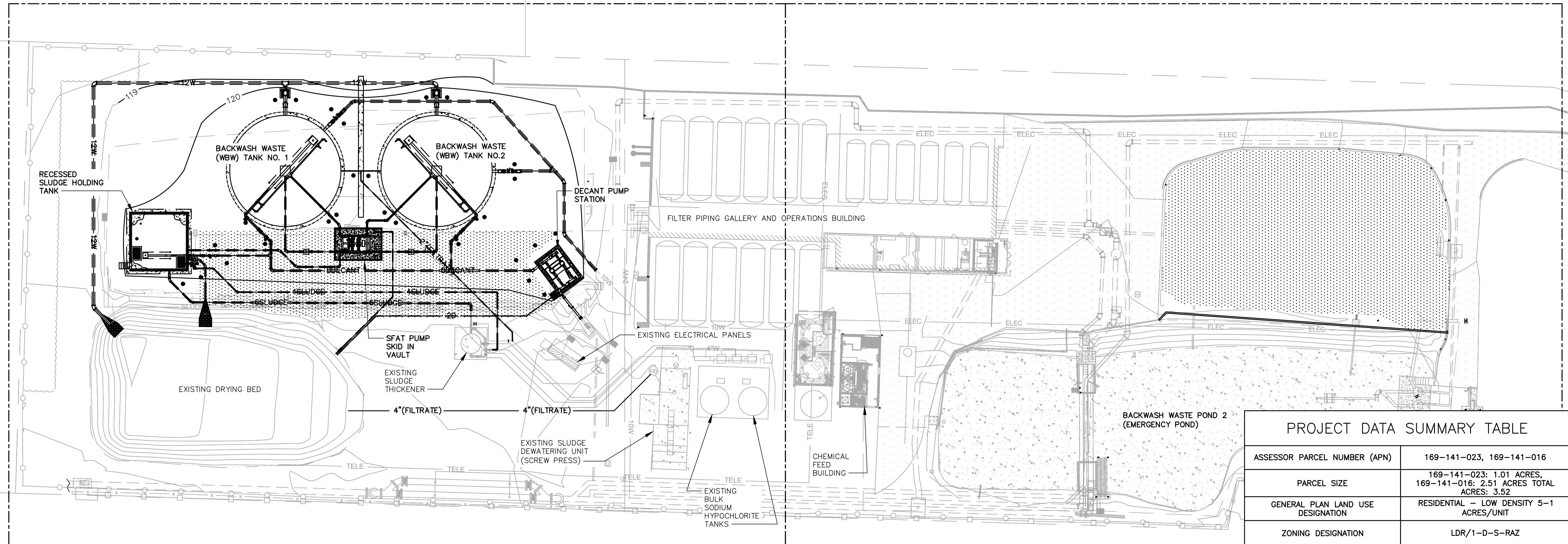
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 CARMEL, CA 93923  
 CALIFORNIA AMERICAN WATER  
 DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE  
 DATE OCTOBER 2025  
 PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
 CIVIL  
 ENLARGED EXISTING SITE PLAN BACKWASH WASTE PONDS 1 AND 2  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923  
 CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
 USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES  
 90% SUBMITTAL  
 USE DIMENSIONS ONLY SCALE 1"=12'-0"  
 XXXXXX-XXXX-C1.2



PROJECT DATA SUMMARY TABLE	
ASSESSOR PARCEL NUMBER (APN)	169-141-023, 169-141-016
PARCEL SIZE	169-141-023: 1.01 ACRES, 169-141-016: 2.51 ACRES TOTAL ACRES: 3.52
GENERAL PLAN LAND USE DESIGNATION	RESIDENTIAL - LOW DENSITY 5-1 ACRES/UNIT
ZONING DESIGNATION	LDR/1-D-S-RAZ
LOT COVERAGE CALCULATIONS	TOTAL BUILDING FOOTPRINT SF: 16953.5 LOT COVERAGE = 16953.5 SF / (3.52 ACRES x 43,560) * 100 = 11.06%
FLOOR AREA RATIO CALCULATIONS	N/A
TOTAL NEW IMPERVIOUS AREA	N/A - NEW FACILITIES WILL BE WITHIN THE VICINITY OF A CONCRETE POND THAT WAS AN IMPERVIOUS STRUCTURE
ESTIMATED CUT/FILL	4125.3 CY FILL
ESTIMATED SOIL IMPORT/EXPORT	4125.3 CY IMPORT
TREE REMOVAL	NONE - SEE NOTE 1 ON THIS SHEET
IMPERVIOUS COVERAGE	1) TOTAL AREA COVERED BY STRUCTURES: 16953.5 SF 2) TOTAL AREA COVERED BY IMPERVIOUS SURFACES (NEW + EXISTING PAVEMENT): 25248.6 SF
REQUIRED AND PROPOSED PARKING COUNTS	N/A
WATER SERVICE	CALIFORNIA-AMERICAN WATER
SEWER	N/A

FOR PROPOSED SITE PLAN  
BACKWASH WASTE POND 3  
SEE SHEET C2.1

FOR PROPOSED SITE PLAN  
BACKWASH WASTE PONDS 1  
AND 2 SEE SHEET C2.2

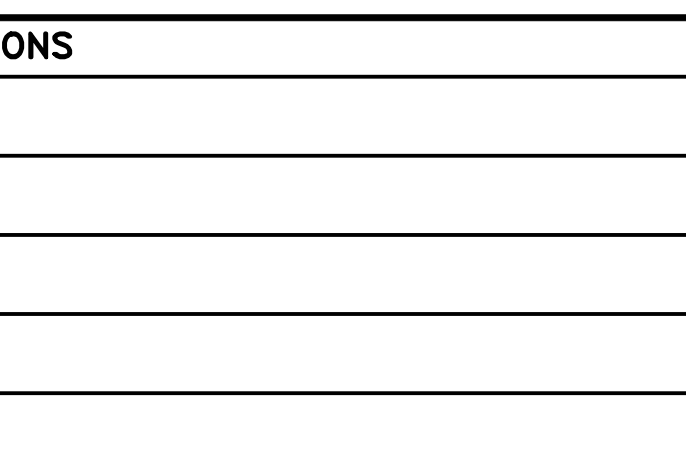
NOTES:  
1. VEGETATION MAINTENANCE - NO VEGETATION IS  
WITHIN PROPERTY LINE THAT IS WITHIN 100 FEET OF  
THE PROPOSED STRUCTURES.

**OVERALL PROPOSED PLAN**

SCALE: 1" = 20'-0"  
1" = 20'-0"  
10 0 20



REVISIONS	REVISIONS
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T. VALENTINE  
REGISTERED PROFESSIONAL ENGINEER  
TERESA A. VALENTINE  
C 83580  
Exp. 3-31-27  
CIVIL  
STATE OF CALIFORNIA

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PL BUILDING B, SUITE B200  
CARMEL, CA 93923

CALIFORNIA AMERICAN WATER

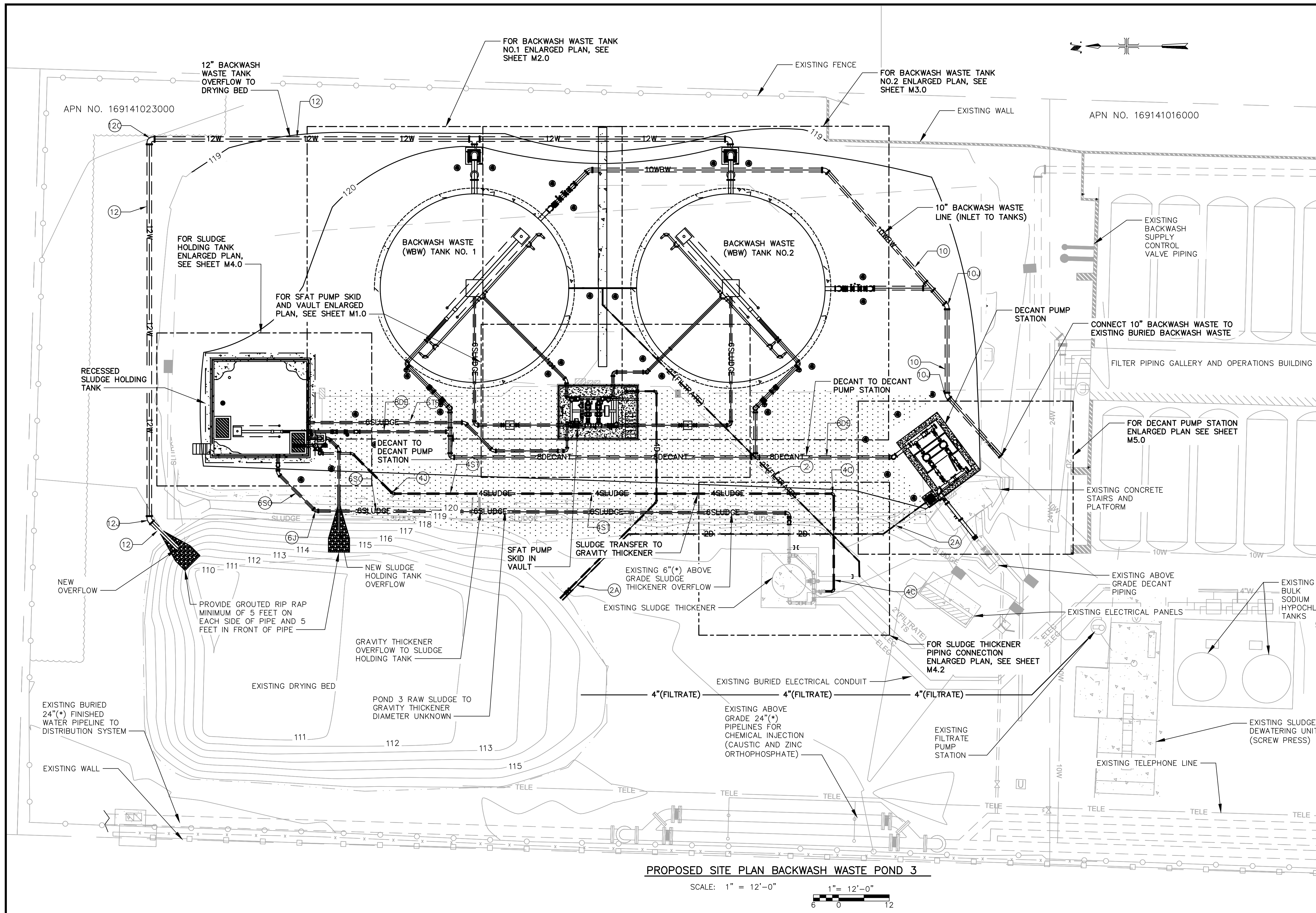
DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
CIVIL  
OVERALL PROPOSED PLAN  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=20'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-C2.0



- CONSTRUCTION NOTES:**
- (2) PROVIDE 2-INCH FILTRATE PIPE.
  - (2A) PROVIDE 2-INCH DRAIN PIPE.
  - (4) PROVIDE 4-INCH SUMP PUMP DISCHARGE.
  - (4C) PROVIDE 4-INCH 90° BEND (MxMJ).
  - (4J) PROVIDE 4-INCH 45° BEND (MxMJ).
  - (6J) PROVIDE 6-INCH 45° BEND (MxMJ).
  - (6S) PROVIDE 6-INCH SLUDGE SUCTION PIPE.
  - (6SO) PROVIDE 6-INCH SLUDGE THICKENER OVERFLOW.
  - (6TR) PROVIDE 6-INCH SLUDGE TRANSFER PIPE.
  - (8D) PROVIDE 8-INCH DECANT PIPE.
  - (10) PROVIDE 10-INCH BACKWASH WASTE PIPING.
  - (10J) PROVIDE 10-INCH 45° BEND (MxMJ).
  - (12) PROVIDE 12-INCH OVERFLOW PIPING.
  - (12C) PROVIDE 12-INCH 90° BEND (MxMJ).
  - (12J) PROVIDE 12-INCH 45° BEND (MxMJ).

**NOTES:**

(\*) INDICATES DIMENSIONS, DISTANCES, COORDINATES OR ELEVATIONS TO BE SURVEYED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING ANY OF THE WORK.

(\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.

**PROPOSED SITE PLAN BACKWASH WASTE POND 3**

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
 6 0 12



REVISIONS	REVISIONS
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 STATE OF CALIFORNIA  
 CA LICENSED PROFESSIONAL ENGINEER  
 NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
 200 CLOCK TOWER PL BUILDING B, SUITE B200  
 CARMEL, CA 93923

**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE

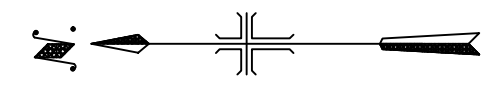
DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

**BIRP BACKWASH DESIGN CIVIL**

**PROPOSED SITE PLAN BACKWASH WASTE POND 3**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

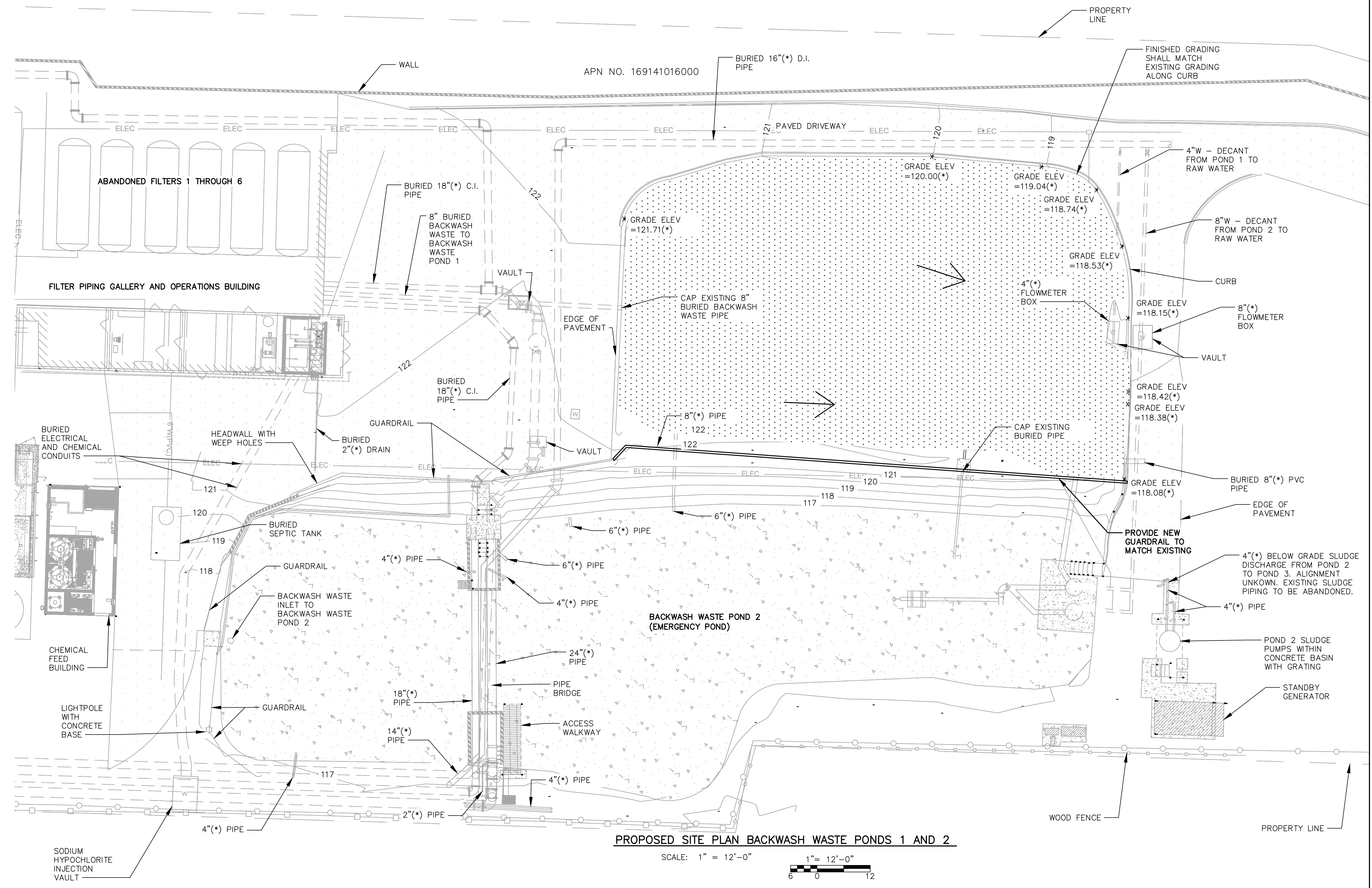
CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=12'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	<b>90% SUBMITTAL</b>	XXXXXX-XXXX-C2.1



**NOTES:**  
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 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.

**EARTHWORK CALCULATIONS**  
 TOTAL CUT: 0 CY  
 TOTAL FILL: 863.36 CY  
 NET: 863.36 CY FILL (IMPORT)  
 FILL MATERIAL AND PLACEMENT SHALL MEET ALL REQUIREMENTS OF THE PROJECT GEOTECHNICAL REPORT.

**LEGEND**  
 FLOW DIRECTION OF DRAINAGE  
 NEW ASPHALT



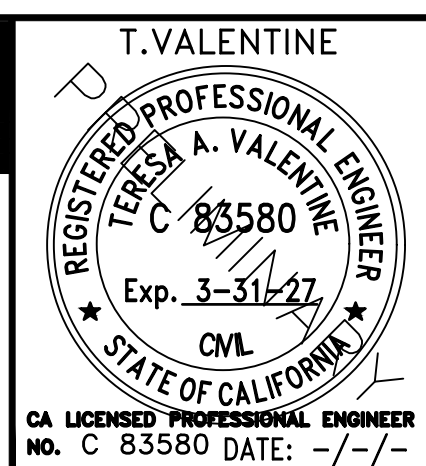
**PROPOSED SITE PLAN BACKWASH WASTE PONDS 1 AND 2**

SCALE: 1" = 12'-0"



REVISIONS	REVISIONS
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 NO. C 83580 DATE: -/-/-

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 CARMEL, CA 93923

**CALIFORNIA AMERICAN WATER**

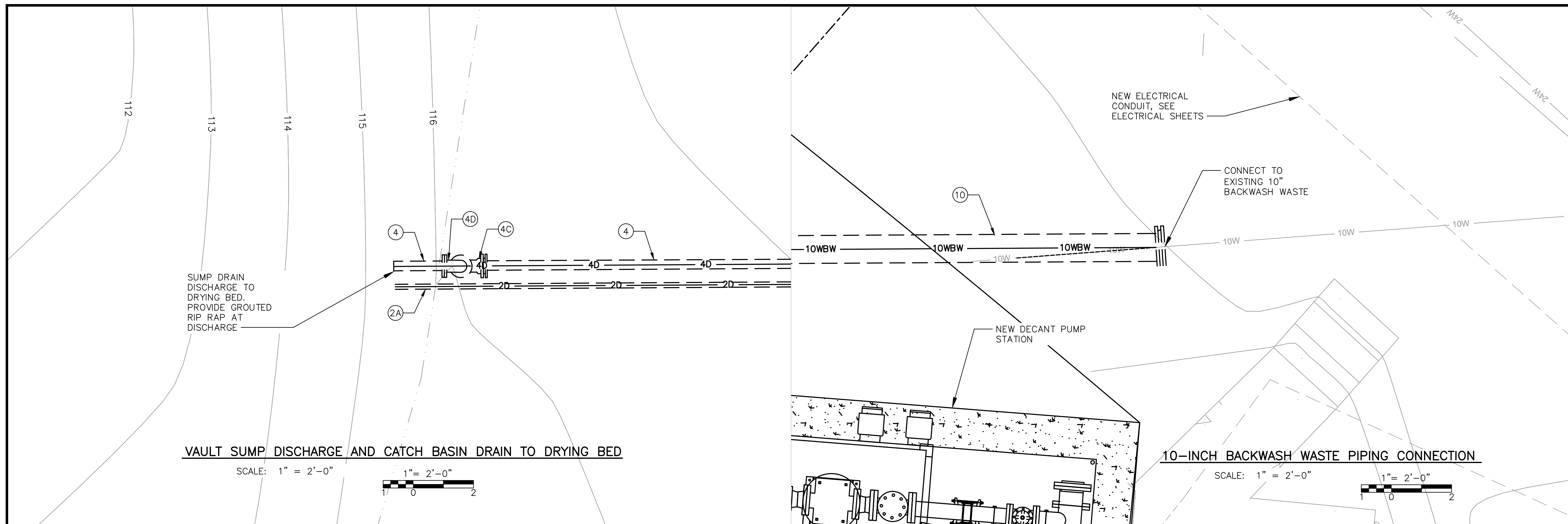
DRAWN BY: D. BRODERICK  
 PROJECT ENG'R: S. TERRELL/T. VALENTINE

DATE: OCTOBER 2025

PROJECT: XXXXXX-XXXX

**BIRP BACKWASH DESIGN CIVIL**  
**PROPOSED SITE PLAN BACKWASH WASTE PONDS 1 AND 2**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=12'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-C2.2



SUMP DRAIN DISCHARGE TO DRYING BED. PROVIDE GROUTED RIP RAP AT DISCHARGE

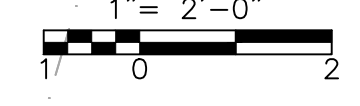
NEW ELECTRICAL CONDUIT, SEE ELECTRICAL SHEETS

CONNECT TO EXISTING 10" BACKWASH WASTE

NEW DECANT PUMP STATION

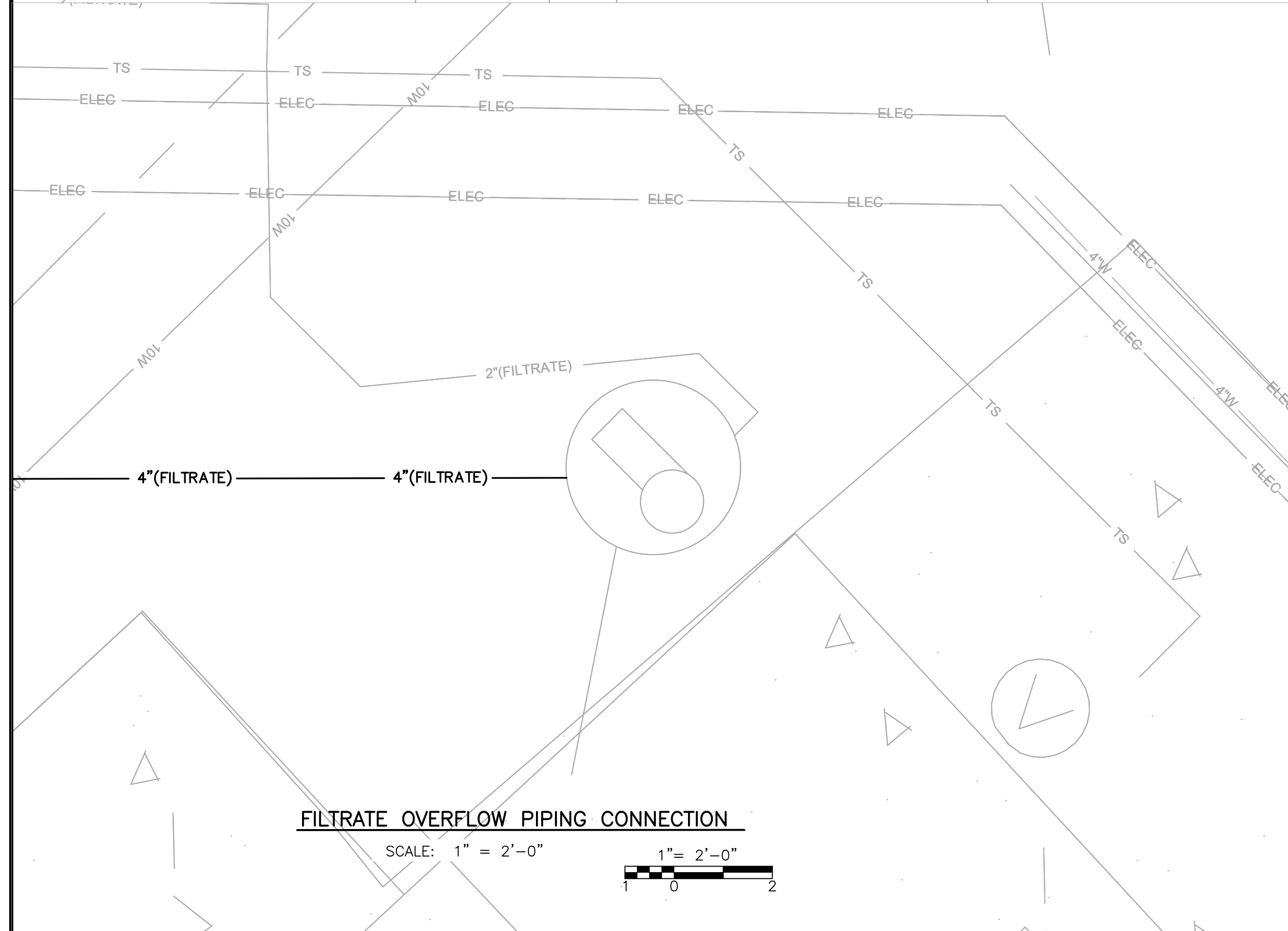
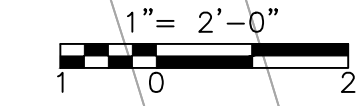
**VAULT SUMP DISCHARGE AND CATCH BASIN DRAIN TO DRYING BED**

SCALE: 1" = 2'-0"



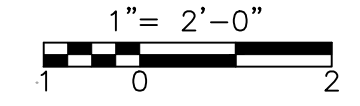
**10-INCH BACKWASH WASTE PIPING CONNECTION**

SCALE: 1" = 2'-0"



**FILTRATE OVERFLOW PIPING CONNECTION**

SCALE: 1" = 2'-0"



**CONSTRUCTION NOTES:**

- (2A) PROVIDE 2-INCH DRAIN PIPE
- (4) PROVIDE 4-INCH DRAIN PIPE.
- (4C) PROVIDE 4-INCH 90° BEND (MJxMJ).
- (4D) PROVIDE 4-INCH 90° BEND (FLGxFLG).
- (10) PROVIDE 10-INCH BACKWASH WASTE PIPING.

(\*) INDICATES DIMENSIONS, DISTANCES, COORDINATES OR ELEVATIONS TO BE SURVEYED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING ANY OF THE WORK.  
 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.



REVISIONS		REVISIONS	
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 NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
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**CALIFORNIA AMERICAN WATER**

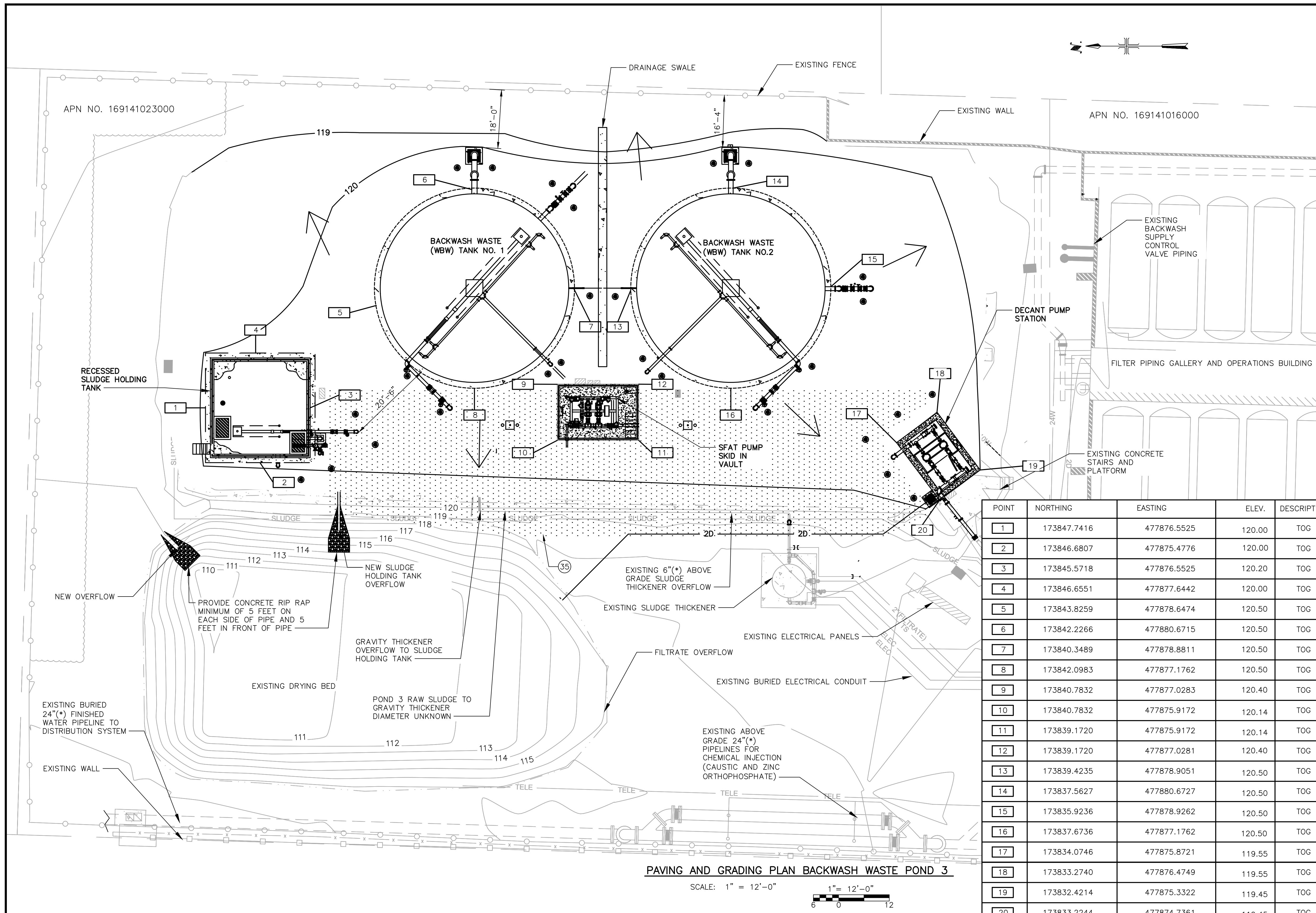
DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
 CIVIL  
 YARD PIPING DETAILS  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1" = 2'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-C3.0



**CONSTRUCTION NOTES:**  
 (35) PROVIDE ASPHALT PAVEMENT. SEE TRENCH DETAIL AND SPECIFICATION SECTION 02740.

**NOTES:**  
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 (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.

1. A MINIMUM SLOPE OF 2% SHALL BE MAINTAINED FOR DRAINAGE AWAY FROM THE TANKS.

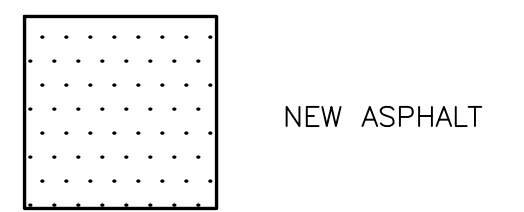
**EARTHWORK CALCULATIONS**

TOTAL CUT: 0 CY  
 TOTAL FILL: 3261.94 CY

NET: 3261.94 CY FILL (IMPORT)

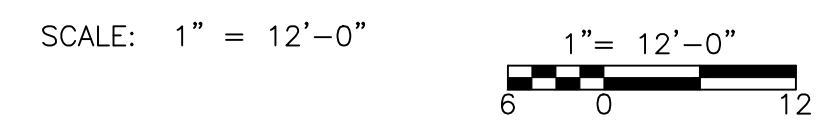
FILL MATERIAL AND PLACEMENT SHALL MEET ALL REQUIREMENTS OF THE PROJECT GEOTECHNICAL REPORT.

**LEGEND**



POINT	NORTHING	EASTING	ELEV.	DESCRIPT
1	173847.7416	477876.5525	120.00	TOG
2	173846.6807	477875.4776	120.00	TOG
3	173845.5718	477876.5525	120.20	TOG
4	173846.6551	477877.6442	120.00	TOG
5	173843.8259	477878.6474	120.50	TOG
6	173842.2266	477880.6715	120.50	TOG
7	173840.3489	477878.8811	120.50	TOG
8	173842.0983	477877.1762	120.50	TOG
9	173840.7832	477877.0283	120.40	TOG
10	173840.7832	477875.9172	120.14	TOG
11	173839.1720	477875.9172	120.14	TOG
12	173839.1720	477877.0281	120.40	TOG
13	173839.4235	477878.9051	120.50	TOG
14	173837.5627	477880.6727	120.50	TOG
15	173835.9236	477878.9262	120.50	TOG
16	173837.6736	477877.1762	120.50	TOG
17	173834.0746	477875.8721	119.55	TOG
18	173833.2740	477876.4749	119.55	TOG
19	173832.4214	477875.3322	119.45	TOG
20	173833.2244	477874.7361	119.45	TOG

**PAVING AND GRADING PLAN BACKWASH WASTE POND 3**



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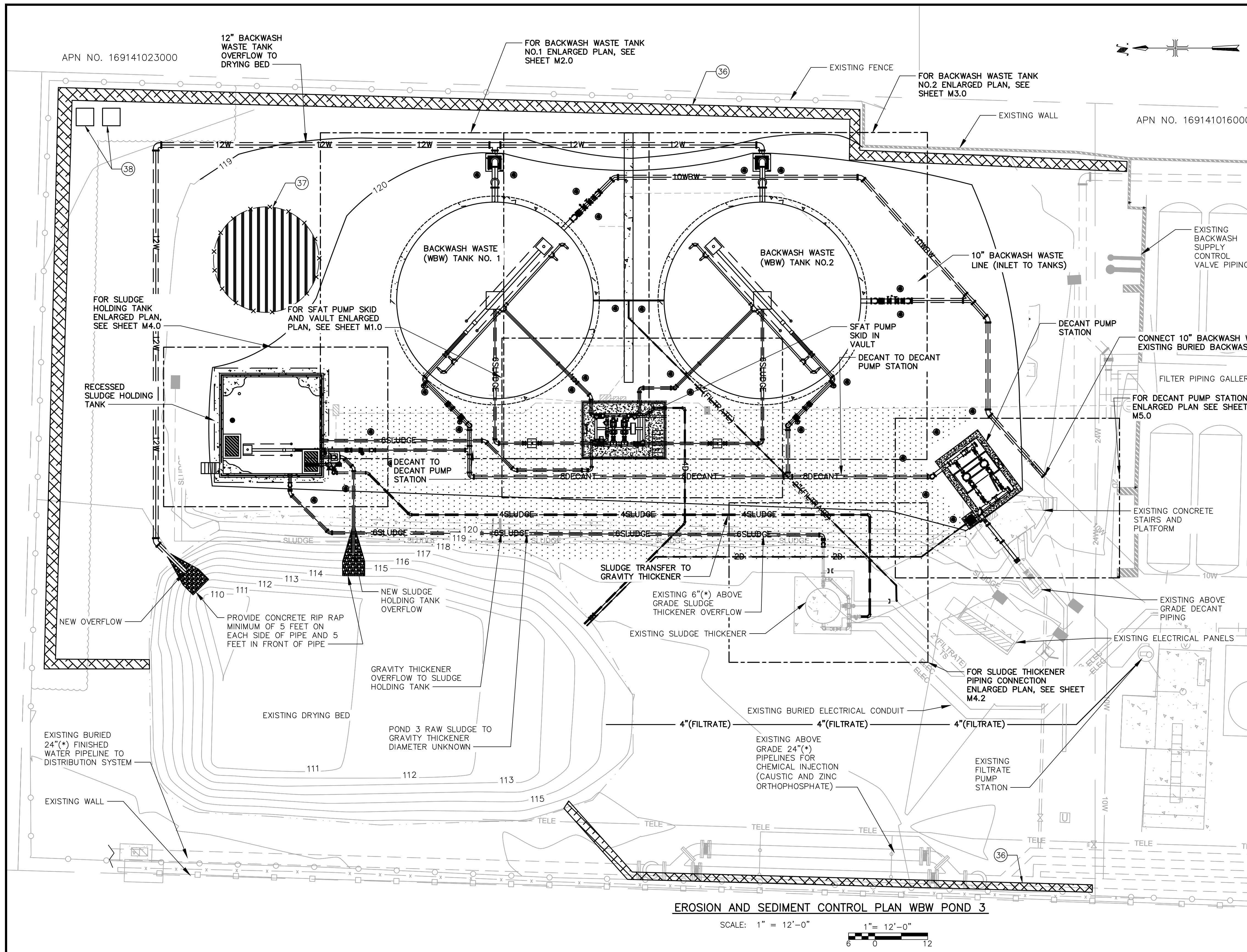
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 NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
 200 CLOCK TOWER PL BUILDING B, SUITE B200  
 CARMEL, CA 93923  
 CALIFORNIA AMERICAN WATER  
 DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE  
 DATE OCTOBER 2025  
 PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
 CIVIL  
**PAVING AND GRADING PLAN BACKWASH WASTE POND 3**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923  
 CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
 USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES  
**90% SUBMITTAL**  
 USE DIMENSIONS ONLY SCALE 1"=12'-0"  
**XXXXXX-XXXX-C4.0**



- CONSTRUCTION NOTES:**
- (36) PROVIDE FIBER ROLL IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.
  - (37) PROVIDE STOCKPILE WITH PERIMETER FENCE IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.
  - (38) PROVIDE SANITARY FACILITIES IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.

**NOTES:**

(\*) INDICATES DIMENSIONS, DISTANCES, COORDINATES OR ELEVATIONS TO BE SURVEYED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING ANY OF THE WORK.

(\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.

**GENERAL NOTES:**

- 1.) FINISHED GRADE ELEVATIONS AROUND FOUNDATIONS SHALL MAINTAIN A MINIMUM OF 2% SLOPE FOR FIVE HORIZONTAL FEET AROUND EDGE OF FOUNDATION TO PROVIDE POSITIVE DRAINAGE AWAY FROM FOUNDATION.
- 2.) FINISHED GRADE ELEVATIONS SHALL CONFORM TO THE POINTS CALLED OUT ON THIS PLAN. CONTRACTOR SHALL VERIFY THAT FINISHED GRADE IS SMOOTH AND THERE ARE NO HIGH POINTS OBSTRUCTING FLOW TO EXISTING STORM DRAIN BASINS.
- 3.) CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING STORM DRAINS AND CATCH BASINS FROM LOOSE DEBRIS, GRAVEL, SEDIMENT, SAND OR TRASH DURING THE CONSTRUCTION OF THIS PROJECT AND SHALL BE IN COMPLIANCE WITH GOOD HOUSEKEEPING BMP'S.

**STANDARD NOTES FOR EROSION CONTROL PLAN**

INCLUDE EROSION AND SEDIMENT CONTROL NOTES ON ALL PLANS. ADDITIONAL NOTES ARE REQUIRED TO DIRECT THE CONTRACTORS AND CREW ON SITE SPECIFIC CONDITIONS.

1. THIS PLAN MAY NOT COVER ALL THE SITUATIONS OR PHASES THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS IN GENERAL. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STORM RUN-OFF FROM LEAVING THE SITE. SEDIMENT ROLLS AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
2. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE ENGINEER (OCTOBER 15 TO APRIL 15).
3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES & IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND/OR PROJECT STOP ORDER.
4. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
5. IF EXISTING DRIVEWAY IS REMOVED DURING CONSTRUCTION, THE CONTRACTOR SHALL PLACE DRAIN ROCK AS A GRAVEL ROADWAY (8" MINIMUM THICKNESS FOR THE FULL WIDTH AND LENGTH OF SITE EGRESS AREA AS DEFINED IN THESE PLANS) AT ENTRANCE TO THE SITE. CONSTRUCTION EGRESS SHALL BE EQUIPPED WITH A TRUCK WASHING STATION. ALL TRUCKS SHALL WASH TIRES AND UNDERSIDE OF VEHICLES AS APPROPRIATE WHEN LEAVING THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THE SAME DAY AS REQUIRED BY THE CITY ENGINEER.
6. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN SYSTEM.
7. DURING PERIODS WHEN STORMS ARE FORECAST:
  - A. EXCAVATE SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
  - B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY END OF THE DAY.
  - C. WHERE STOCKPILING IS NECESSARY, USE A TARPULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS.
  - D. USE INLET CONTROLS AS NEEDED (E.G. BLOCK & GRAVEL SEDIMENT BARRIER) FOR STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
8. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
9. STAND-BY CREWS SHALL BE ALERTED BY THE PERMIT APPLICANT OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
10. AFTER OCTOBER 15TH TO APRIL 15TH, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. BREACHES IN DIKES AND TEMPORARY SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHEREVER RAIN IS FORECAST.
11. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES SHALL BE INSTALLED COMPLETE AS SHOWN ON THE IMPROVEMENT PLANS.
12. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.
13. SANDBAGS SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.
14. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE SAND, DECOMPOSED GRANITE, AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFETY OF VEHICLES OPERATING IN ROADWAY ADJACENT TO EROSION CONTROL FACILITIES.
16. AFTER RAINSTORM CONTRACTOR SHALL CHECK FOR AND REMOVE SEDIMENT TRAPPED BY SANDBAGS AT STAGING AREAS. REPLACE SANDBAGS IF DETERIORATION IS EVIDENT.
17. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITE WITH EXPOSED SOIL AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS AN INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING OR REVEGETATION.

**EROSION AND SEDIMENT CONTROL PLAN WBW POND 3**

SCALE: 1" = 12'-0" 1" = 12'-0"



REVISIONS	REVISIONS
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NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PL BUILDING B, SUITE B200  
CARMEL, CA 93923

**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

**BIRP BACKWASH DESIGN CIVIL**

**EROSION AND SEDIMENT CONTROL PLAN WBW POND 3**  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=12'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	<b>90% SUBMITTAL</b>	XXXXXX-XXXX-C5.0

**CONSTRUCTION NOTES:**

- 36 PROVIDE FIBER ROLL IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.
- 39 PROVIDE STABILIZED CONSTRUCTION ACCESS IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.
- 40 PROVIDE CONCRETE WASHOUT IN ACCORDANCE WITH MONTEREY COUNTY CONSTRUCTION SITE BMP HANDBOOK.

**NOTES:**

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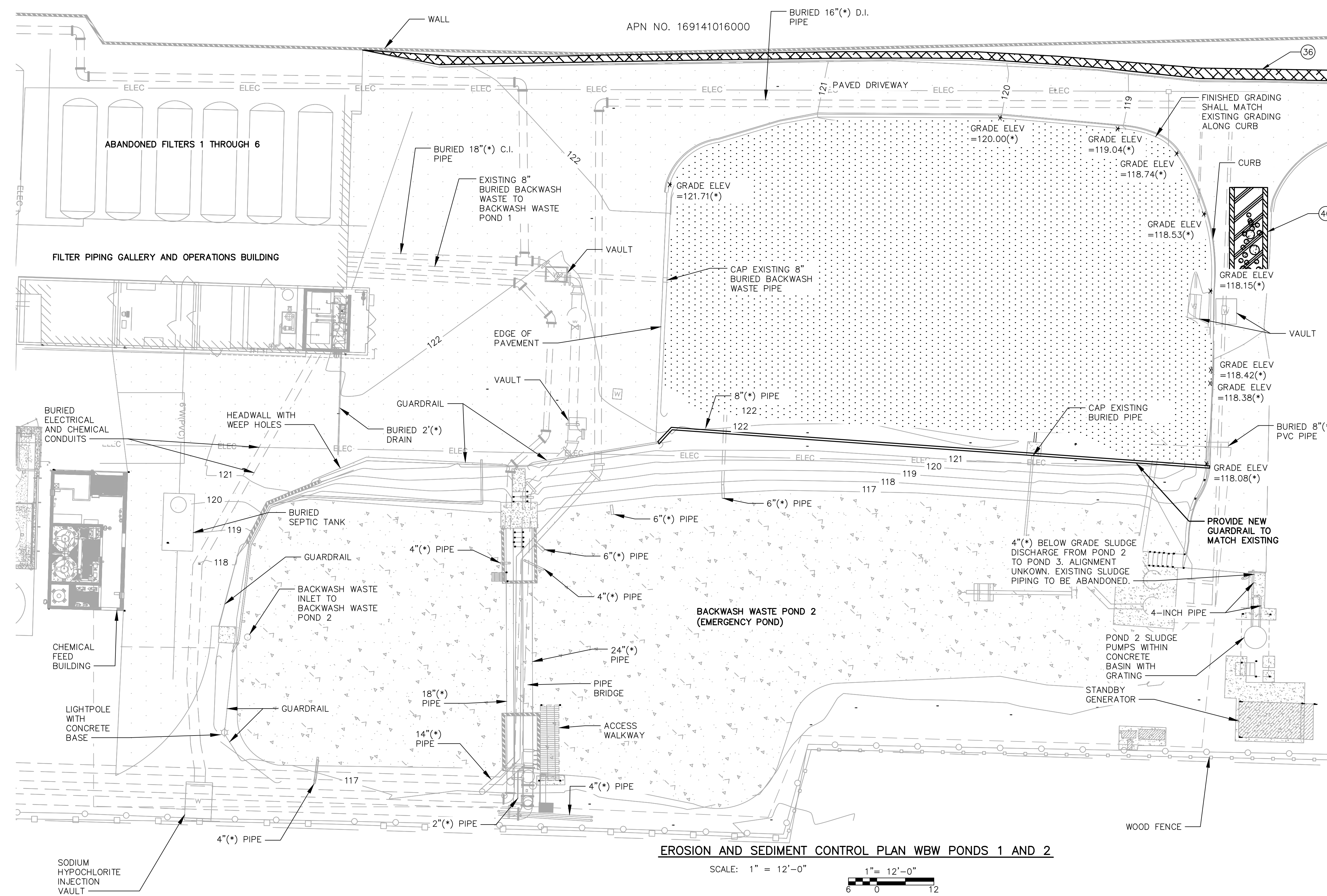
**GENERAL NOTES:**

- 1.) FINISHED GRADE ELEVATIONS AROUND FOUNDATIONS SHALL MAINTAIN A MINIMUM OF 2% SLOPE FOR FIVE HORIZONTAL FEET AROUND EDGE OF FOUNDATION TO PROVIDE POSITIVE DRAINAGE AWAY FROM FOUNDATION.
- 2.) FINISHED GRADE ELEVATIONS SHALL CONFORM TO THE POINTS CALLED OUT ON THIS PLAN. CONTRACTOR SHALL VERIFY THAT FINISHED GRADE IS SMOOTH AND THERE ARE NO HIGH POINTS OBSTRUCTING FLOW TO EXISTING STORM DRAIN BASINS.
- 3.) CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING STORM DRAINS AND CATCH BASINS FROM LOOSE DEBRIS, GRAVEL, SEDIMENT, SAND OR TRASH DURING THE CONSTRUCTION OF THIS PROJECT AND SHALL BE IN COMPLIANCE WITH GOOD HOUSEKEEPING BMP'S.

**STANDARD NOTES FOR EROSION CONTROL PLAN**

INCLUDE EROSION AND SEDIMENT CONTROL NOTES ON ALL PLANS. ADDITIONAL NOTES ARE REQUIRED TO DIRECT THE CONTRACTORS AND CREW ON SITE SPECIFIC CONDITIONS.

1. THIS PLAN MAY NOT COVER ALL THE SITUATIONS OR PHASES THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS IN GENERAL. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STORM RUN-OFF FROM LEAVING THE SITE. SEDIMENT ROLLS AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
2. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE ENGINEER (OCTOBER 15 TO APRIL 15).
3. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES & IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND/OR PROJECT STOP ORDER.
4. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
5. IF EXISTING DRIVEWAY IS REMOVED DURING CONSTRUCTION, THE CONTRACTOR SHALL PLACE DRAIN ROCK AS A GRAVEL ROADWAY (8" MINIMUM THICKNESS FOR THE FULL WIDTH AND LENGTH OF SITE EGRESS AREA AS DEFINED IN THESE PLANS) AT ENTRANCE TO THE SITE. CONSTRUCTION EGRESS SHALL BE EQUIPPED WITH A TRUCK WASHING STATION. ALL TRUCKS SHALL WASH TIRES AND UNDERSIDE OF VEHICLES AS APPROPRIATE WHEN LEAVING THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THE SAME DAY AS REQUIRED BY THE CITY ENGINEER.
6. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN SYSTEM.
7. DURING PERIODS WHEN STORMS ARE FORECAST:
  - A. EXCAVATE SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
  - B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY END OF THE DAY.
  - C. WHERE STOCKPILING IS NECESSARY, USE A TARPULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS.
  - D. USE INLET CONTROLS AS NEEDED (E.G. BLOCK & GRAVEL SEDIMENT BARRIER) FOR STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
8. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
9. STAND-BY CREWS SHALL BE ALERTED BY THE PERMIT APPLICANT OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
10. AFTER OCTOBER 15TH TO APRIL 15TH, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. BREACHES IN DIKES AND TEMPORARY SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHEREVER RAIN IS FORECAST.
11. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES SHALL BE INSTALLED COMPLETE AS SHOWN ON THE IMPROVEMENT PLANS.
12. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.
13. SANDBAGS SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.
14. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE SAND, DECOMPOSED GRANITE, AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFETY OF VEHICLES OPERATING IN ROADWAY ADJACENT TO EROSION CONTROL FACILITIES.
16. AFTER RAINSTORM CONTRACTOR SHALL CHECK FOR AND REMOVE SEDIMENT TRAPPED BY SAND BAGS AT STAGING AREAS. REPLACE SANDBAGS IF DETERIORATION IS EVIDENT.
17. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITE WITH EXPOSED SOIL AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS AN INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING OR REVEGETATION.



**EROSION AND SEDIMENT CONTROL PLAN WBW PONDS 1 AND 2**

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
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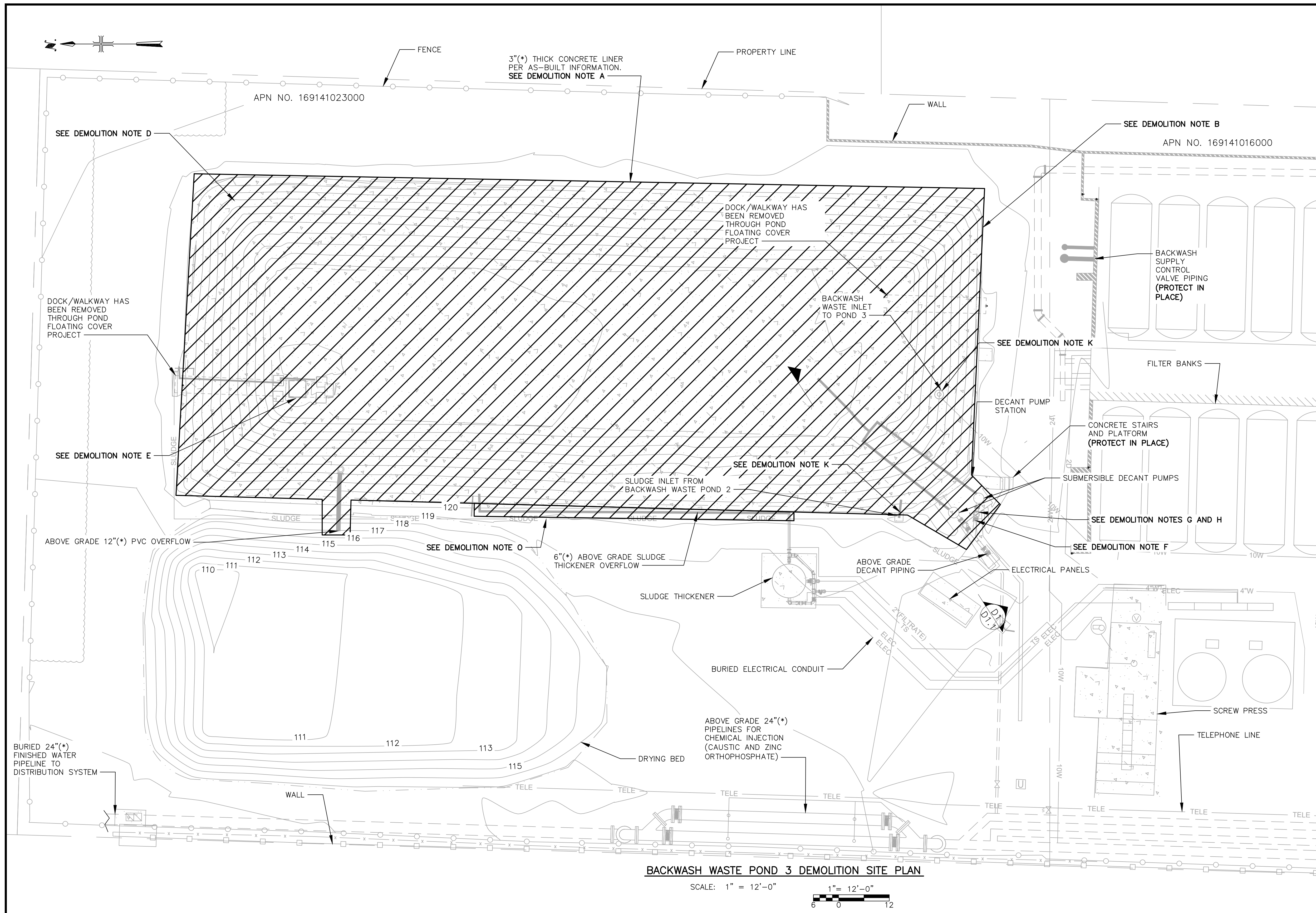
VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
 200 CLOCK TOWER PL BUILDING B, SUITE B200  
 CARMEL, CA 93923  
 CALIFORNIA AMERICAN WATER  
 DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE  
 DATE OCTOBER 2025  
 PROJECT XXXXXX-XXXX

**BIRP BACKWASH DESIGN**  
 CIVIL  
**EROSION AND SEDIMENT CONTROL PLAN WBW PONDS 1 AND 2**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923  
 CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
 USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES  
**90% SUBMITTAL**  
 USE DIMENSIONS ONLY SCALE 1"=12'-0"  
**XXXXXX-XXXX-C5.1**

# DEMOLITION NOTES

- A. DEWATER BACKWASH WASTE STORAGE POND AND REMOVE AND DISPOSE OF ALL SLUDGE. DEMOLISH AND REMOVE EXISTING BACKWASH WASTE STORAGE POND CONCRETE LINER. DISPOSE OF IN ACCORDANCE WITH REGULATORY REQUIREMENTS. AS DESCRIBED IN DEMOLITION NOTE D.
- B. DEMOLISH AND REMOVE ALL EQUIPMENT WITHIN EXISTING BACKWASH WASTE STORAGE POND INCLUDING MIXERS, PUMPS, AND FLOATING DECANTERS. CONFIRM ITEMS TO SALVAGE WITH OWNER
- D. FILL BACKWASH WASTE POND WITH ENGINEERED/NON-EXPANSIVE NATIVE FILL. FILL SHALL MEET ALL REQUIREMENTS OF THE BEGONIA IRON REMOVAL PLANT GEOTECHNICAL REPORT (PACIFIC CREST ENGINEERING, MARCH 26, 2025) INCLUDING PLACING IN MAXIMUM 8-INCH LIFTS BEFORE COMPACTION AND PROVIDING A MINIMUM OF 5 FEET ENGINEERED FILL BENEATH ALL TANK FOUNDATIONS AND STRUCTURAL IMPROVEMENTS COMPACTED TO GEOTECHNICAL REQUIREMENTS DESCRIBED WITHIN THE GEOTECHNICAL REPORT. PER GEOTECHNICAL REPORT REQUIREMENTS A MAXIMUM ENGINEERED FILL DIFFERENTIAL BELOW NEW BACKWASH TANKS IS LIMITED TO 4 FEET.
- E. DEMOLISH AND REMOVE ALL ELECTRICAL PANELS, CONDUIT AND OTHER APPURTENANCES ASSOCIATED WITH DEMOLISHED EQUIPMENT. SEE ELECTRICAL DRAWINGS.
- F. DEMOLISH AND REMOVE ABOVE GRADE PIPING TO EXTENTS REQUIRED TO FACILITATE CONNECTION OF NEW DECANT PUMP STATION DISCHARGE. DEMOLISH AND REMOVE HANDRAIL. PROTECT IN PLACE EXISTING CONCRETE PLATFORM AND STAIRS.
- G. DEMOLISH AND REMOVE EXISTING DECANT PUMPS, FILL CANS WITH CLSM.
- H. DEMOLISH AND REMOVE EXISTING WINCH SYSTEMS ASSOCIATED WITH DECANT PUMP STATION/FLOATING DECANTERS.
- K. DEMOLISH AND REMOVE EXISTING PIPING TO MINIMUM 3 FEET BELOW GRADE AND PROVIDE RESTRAINED BLIND FLANGE ON EXISTING PIPE.
- O. DEMOLISH AND REMOVE ABOVE GRADE SLUDGE THICKENER OVERFLOW PIPING TO POINT OF CONNECTION.
- P. COORDINATE ALL DEMOLITION WORK AND SHUT DOWN OF EXISTING FACILITIES WITH OWNER'S OPERATIONS IN ACCORDANCE WITH TECHNICAL SPECIFICATION 01047.

- NOTES:**
- (\*) INDICATES DIMENSIONS, DISTANCES, COORDINATES OR ELEVATIONS TO BE SURVEYED AND FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING ANY OF THE WORK.
  - (\*\*) INDICATES DIMENSIONS OR ELEVATIONS TO BE DETERMINED BASED UPON EQUIPMENT MANUFACTURER SELECTED.
1. CONTRACTOR SHALL PREPARE MOPO AS SUBMITTAL - SEE SPECIFICATION SECTION 01047.
  2. COORDINATE ALL DEMOLITION WORK AND SHUT DOWN OF EXISTING FACILITIES WITH OWNER'S OPERATIONS IN ACCORDANCE WITH TECHNICAL SPECIFICATION 01047.



**BACKWASH WASTE POND 3 DEMOLITION SITE PLAN**

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
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**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

**BIRP BACKWASH DESIGN DEMOLITION**  
**BACKWASH WASTE POND 3 DEMOLITION SITE PLAN**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=12'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	<b>90% SUBMITTAL</b>	XXXXXX-XXXX-D1.0

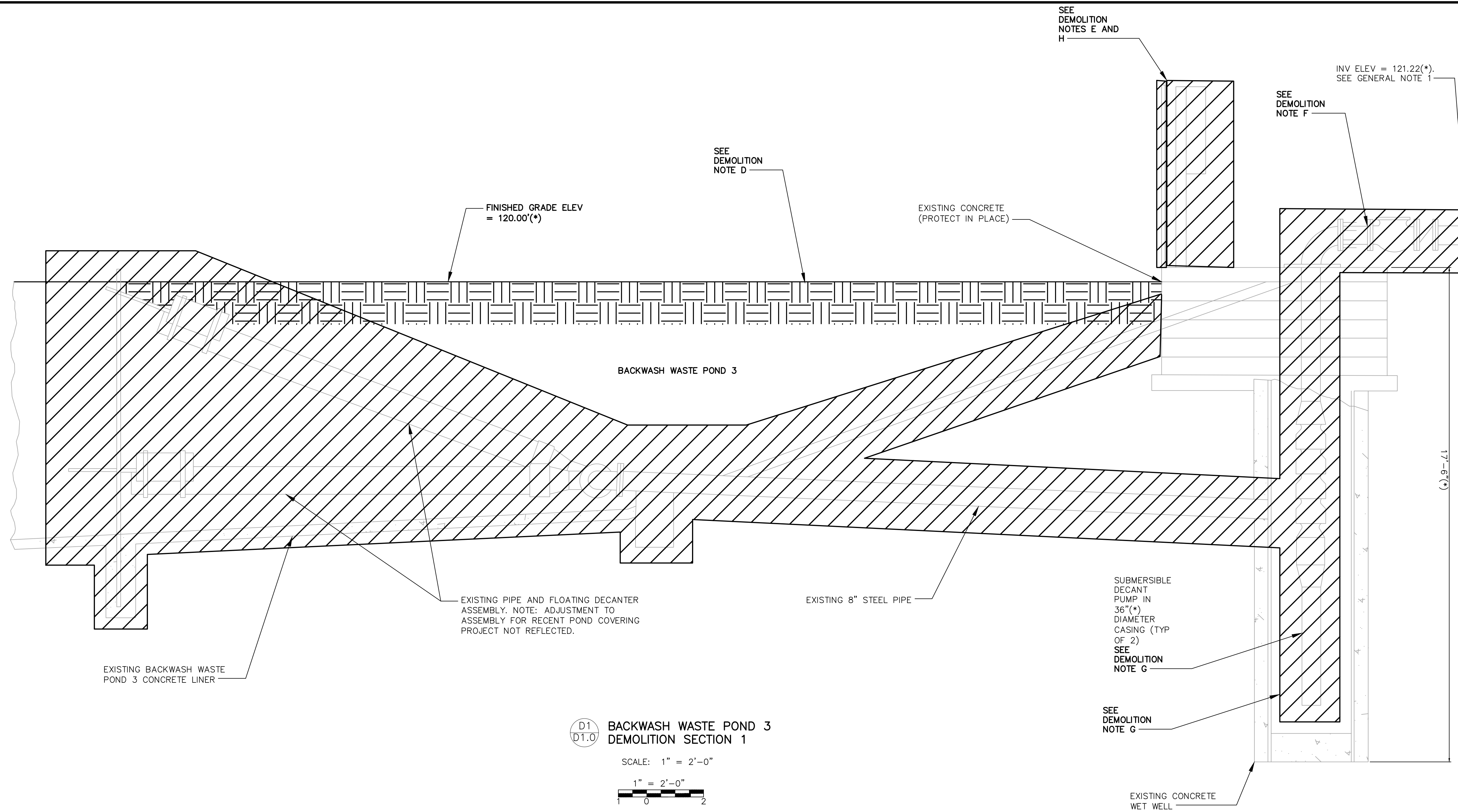
## DEMOLITION NOTES

- D. FILL BACKWASH WASTE POND WITH ENGINEERED/NON-EXPANSIVE NATIVE FILL. FILL SHALL MEET ALL REQUIREMENTS OF THE BEGONIA IRON REMOVAL PLANT GEOTECHNICAL REPORT (PACIFIC CREST ENGINEERING, MARCH 26, 2025) INCLUDING PLACING IN MAXIMUM 8-INCH LIFTS BEFORE COMPACTION AND PROVIDING A MINIMUM OF 5 FEET ENGINEERED FILL BENEATH ALL TANK FOUNDATIONS AND STRUCTURAL IMPROVEMENTS COMPACTED TO GEOTECHNICAL REQUIREMENTS DESCRIBED WITHIN THE GEOTECHNICAL REPORT. PER GEOTECHNICAL REPORT REQUIREMENTS A MAXIMUM ENGINEERED FILL DIFFERENTIAL BELOW NEW BACKWASH TANKS IS LIMITED TO 4 FEET.
- E. DEMOLISH AND REMOVE ALL ELECTRICAL PANELS, CONDUIT AND OTHER APPURTENANCES ASSOCIATED WITH DEMOLISHED EQUIPMENT. SEE ELECTRICAL DRAWINGS.
- F. DEMOLISH AND REMOVE ABOVE GRADE PIPING TO EXTENTS REQUIRED TO FACILITATE CONNECTION OF NEW DECANT PUMP STATION DISCHARGE. DEMOLISH AND REMOVE HANDRAIL. PROTECT IN PLACE EXISTING CONCRETE PLATFORM AND STAIRS.
- G. DEMOLISH AND REMOVE EXISTING DECANT PUMPS, FILL CANS WITH CLSM.
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### NOTES:

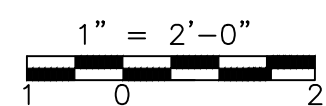
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1. EXISTING INVERT ELEVATION UNAVAILABLE FROM AS-BUILTS. CONTRACTOR TO VERIFY EXISTING PIPELINE DISCHARGE AND MATCH NEW DECANT PUMP STATION TIE-IN PRIOR TO INSTALLATION OF NEW DECANT PUMP STATION TIE-IN.
2. COORDINATE ALL DEMOLITION WORK AND SHUT DOWN OF EXISTING FACILITIES WITH OWNER'S OPERATIONS IN ACCORDANCE WITH TECHNICAL SPECIFICATION 01047.



D1 BACKWASH WASTE POND 3  
 D1.0 DEMOLITION SECTION 1

SCALE: 1" = 2'-0"



BACKWASH WASTE POND 3 DEMOLITION SECTIONS



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**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
 PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN DEMOLITION BACKWASH WASTE POND 3 DEMOLITION SECTIONS 9210 CARMEL VALLEY ROAD CARMEL CA, 93923		
CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1" = 2'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	D1.1

# DEMOLITION NOTES

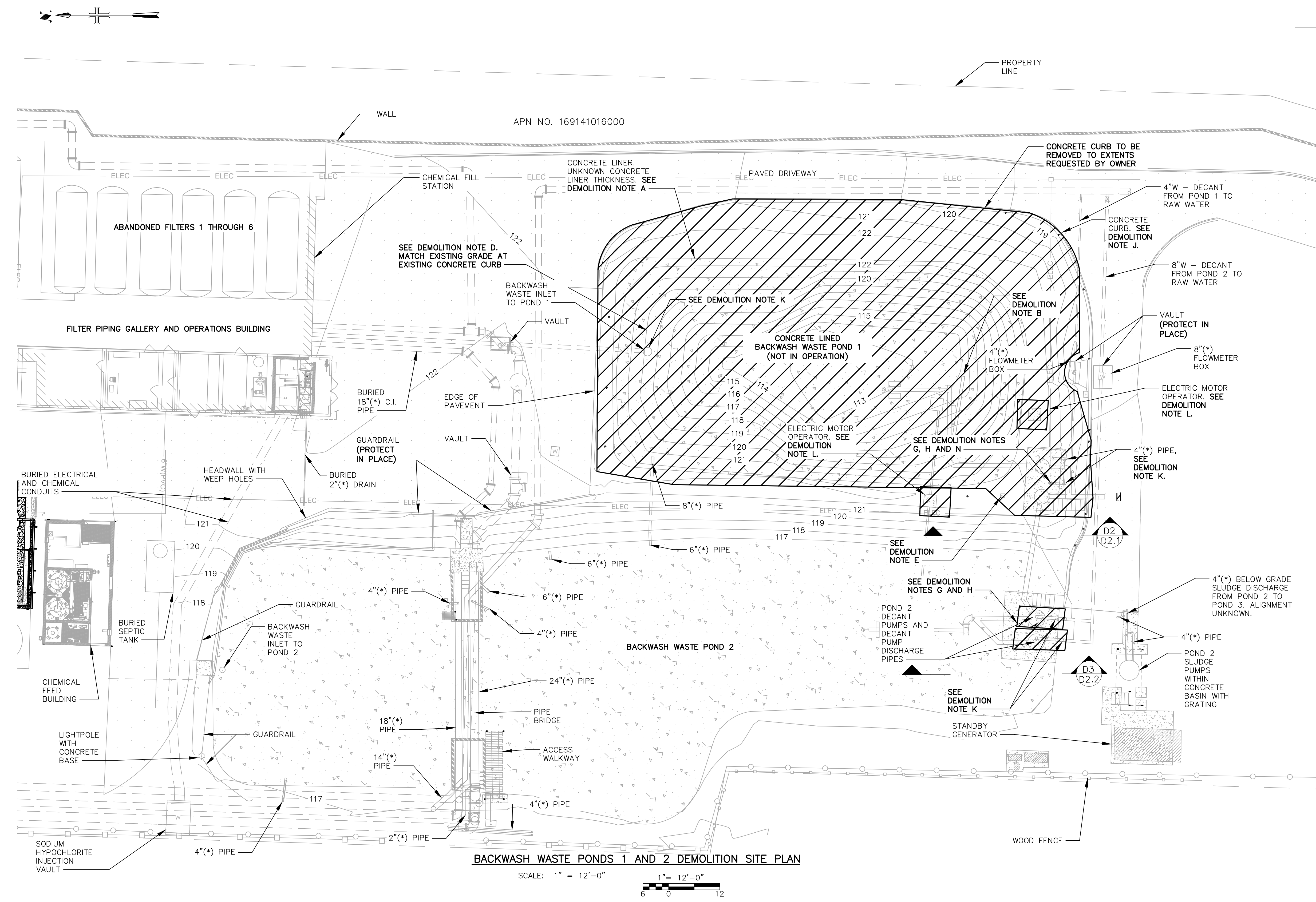
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- D. FILL BACKWASH WASTE POND WITH ENGINEERED/NON-EXPANSIVE NATIVE FILL. FILL SHALL MEET ALL REQUIREMENTS OF THE BEGONIA IRON REMOVAL PLANT GEOTECHNICAL REPORT (PACIFIC CREST ENGINEERING, MARCH 26, 2025) INCLUDING PLACING IN MAXIMUM 8-INCH LIFTS BEFORE COMPACTION AND PROVIDING A MINIMUM OF 5 FEET ENGINEERED FILL BENEATH ALL TANK FOUNDATIONS AND STRUCTURAL IMPROVEMENTS COMPACTED TO GEOTECHNICAL REQUIREMENTS DESCRIBED WITHIN THE GEOTECHNICAL REPORT. PER GEOTECHNICAL REPORT REQUIREMENTS A MAXIMUM ENGINEERED FILL DIFFERENTIAL BELOW NEW BACKWASH TANKS IS LIMITED TO 4 FEET.
- E. DEMOLISH AND REMOVE ALL ELECTRICAL PANELS, CONDUIT AND OTHER APPURTENANCES ASSOCIATED WITH DEMOLISHED EQUIPMENT. SEE ELECTRICAL DRAWINGS.
- G. DEMOLISH AND REMOVE EXISTING DECAT PUMPS, FILL CANS WITH CLSM.
- H. DEMOLISH AND REMOVE EXISTING WINCH SYSTEMS ASSOCIATED WITH DECAT PUMP STATION/FLOATING DECATERS.
- J. DEMOLISH AND REMOVE CONCRETE CURB TO EXTENTS REQUESTED BY OWNER.
- K. DEMOLISH AND REMOVE EXISTING PIPING TO MINIMUM 3 FEET BELOW GRADE AND PROVIDE RESTRAINED BLIND FLANGE ON EXISTING PIPE.
- L. DEMOLISH AND REMOVE ELECTRIC MOTOR OPERATORS. PROVIDE RESTRAINED BLIND FLANGE ON PIPING FROM BACKWASH WASTE POND 2 TO BACKWASH WASTE POND 1.
- N. DEMOLISH AND REMOVE EXISTING DECAT PUMP STATION STRUCTURE FOR BACKWASH WASTE POND 1.

**NOTES:**

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1. COORDINATE ALL DEMOLITION WORK AND SHUT DOWN OF EXISTING FACILITIES WITH OWNER'S OPERATIONS IN ACCORDANCE WITH TECHNICAL SPECIFICATION 01047.



**BACKWASH WASTE PONDS 1 AND 2 DEMOLITION SITE PLAN**

SCALE: 1" = 12'-0"  
 1" = 12'-0"  
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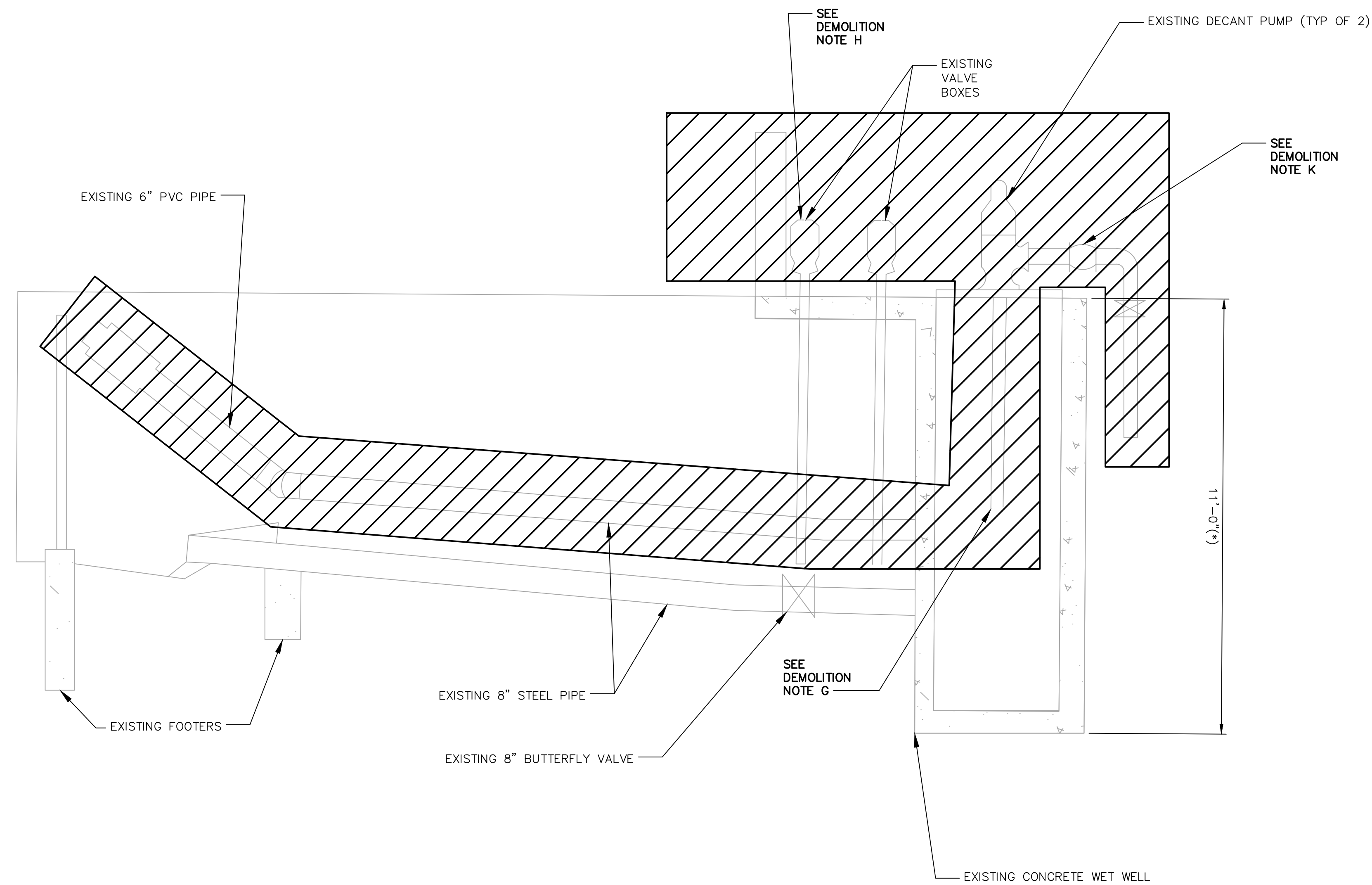
PROJECT XXXXXX-XXXX

**BIRP BACKWASH DESIGN DEMOLITION**  
**BACKWASH WASTE PONDS 1 AND 2 DEMOLITION SITE PLAN**  
 9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1"=12'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	XXXXXX-XXXX-D2.0

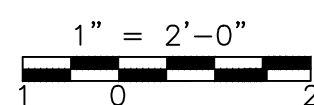
## DEMOLITION NOTES

- G. DEMOLISH AND REMOVE EXISTING DECANT PUMPS, FILL CANS WITH CLSM.
- H. DEMOLISH AND REMOVE EXISTING WINCH SYSTEMS ASSOCIATED WITH DECANT PUMP STATION/FLOATING DECANTERS.
- K. DEMOLISH AND REMOVE EXISTING PIPING TO MINIMUM 3 FEET BELOW GRADE AND PROVIDE RESTRAINED BLIND FLANGE ON EXISTING PIPE.



D2  
D2.0 BACKWASH WASTE POND 1  
DEMOLITION SECTION

SCALE: 1" = 2'-0"



BACKWASH WASTE POND 1 DEMOLITION SECTION

### NOTES:

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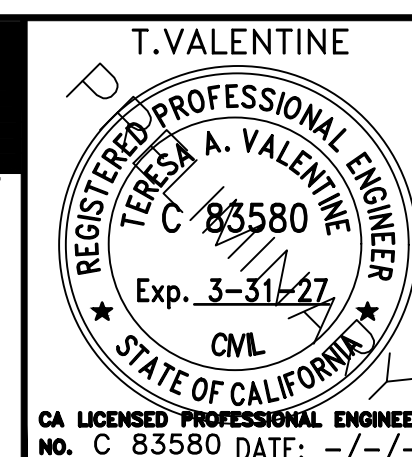
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DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
DEMOLITION  
BACKWASH WASTE POND 1 DEMOLITION SECTION  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.

COASTAL DIVISION

USE DIMENSIONS ONLY  
SCALE 1" = 2'-0"

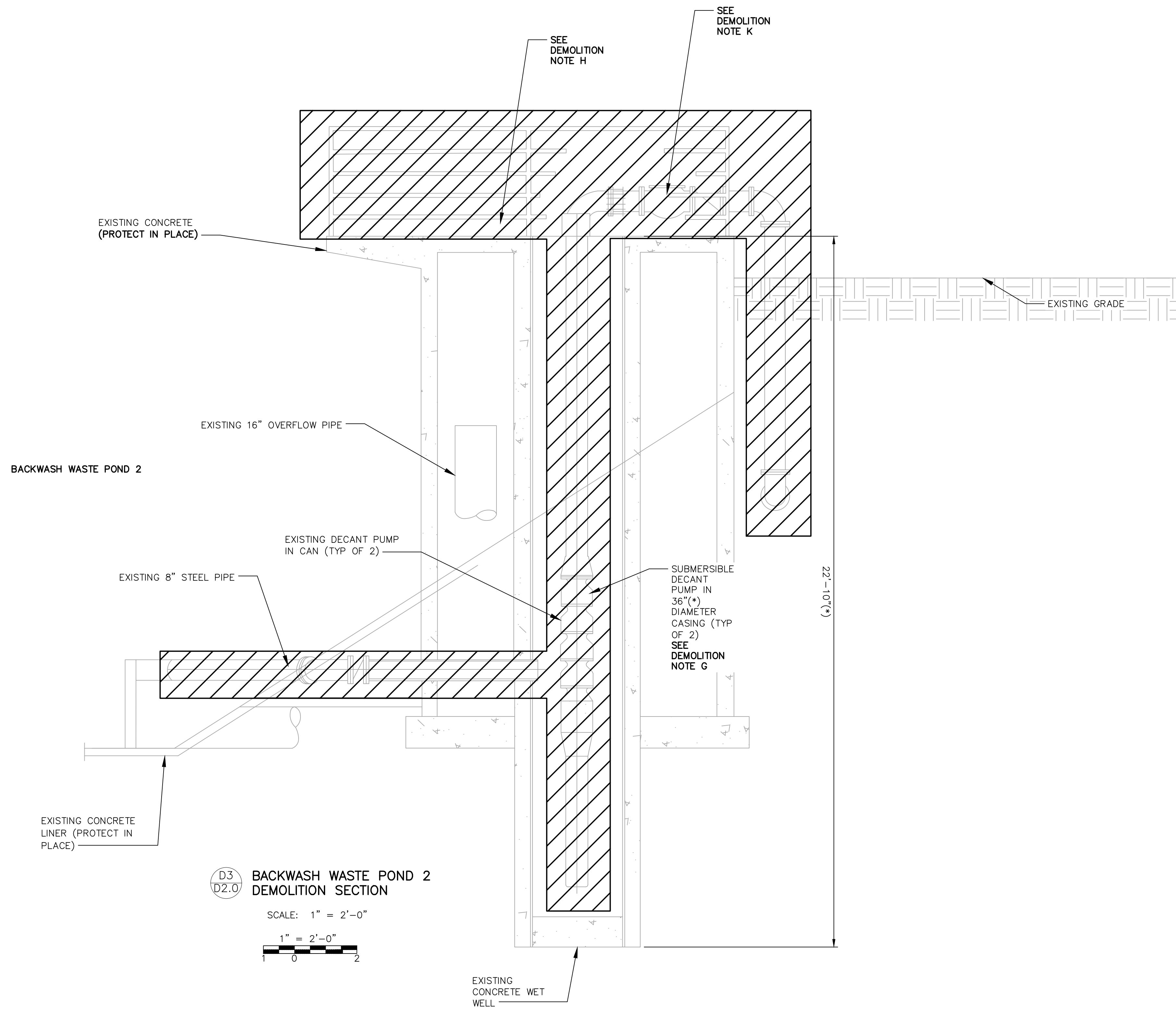
USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

90% SUBMITTAL

D2.1

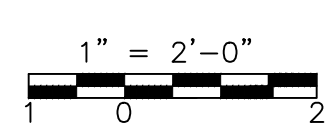
## DEMOLITION NOTES

- G. DEMOLISH AND REMOVE EXISTING DECANT PUMPS, FILL CANS WITH CLSM.
- H. DEMOLISH AND REMOVE EXISTING WINCH SYSTEMS ASSOCIATED WITH DECANT PUMP STATION/FLOATING DECATERS.
- K. DEMOLISH AND REMOVE EXISTING PIPING TO MINIMUM 3 FEET BELOW GRADE AND PROVIDE RESTRAINED BLIND FLANGE ON EXISTING PIPE.



D3  
D2.0 BACKWASH WASTE POND 2  
DEMOLITION SECTION

SCALE: 1" = 2'-0"



BACKWASH WASTE POND 2 DEMOLITION SECTION

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REGISTERED PROFESSIONAL ENGINEER  
TERESA A. VALENTINE  
C 83580  
Exp. 3-31-27  
CIVIL  
STATE OF CALIFORNIA  
CA LICENSED PROFESSIONAL ENGINEER  
NO. C 83580 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PL BUILDING B, SUITE B200  
CARMEL, CA 93923

**CALIFORNIA AMERICAN WATER**

DRAWN BY D. BRODERICK  
PROJECT ENG'R S. TERRELL/T. VALENTINE

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
DEMOLITION  
BACKWASH WASTE POND 2 DEMOLITION SECTION  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE 1" = 2'-0"
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	D2.2

**STRUCTURAL SHEET INDEX**

SHEET NO.	SHEET NAME
S1.1	STRUCTURAL NOTE SHEET
S1.2	TYPICAL STRUCTURAL DETAILS
S2.1	SFAT PUMP SKID AND VAULT - FOUNDATION PLAN AND SECTION
S2.2	SFAT PUMP SKID AND VAULT - STRUCTURAL DETAILS
S3.1	SLUDGE HOLDING TANK - FLOOR AND FOUNDATION PLAN
S3.2	SLUDGE HOLDING TANK - SECTION AND DETAILS
S4.1	DECANT PUMP STATION - FOUNDATION PLAN AND DETAILS

**GENERAL NOTES**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE STARTING WORK. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- NOTES AND DETAILS ON THESE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.
- THE DETAILS ON THESE DRAWINGS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, DETAILS OF A CHARACTER SIMILAR TO THOSE SHOWN SHALL BE USED, SUBJECT TO REVIEW.
- FOR OPENINGS NOT SHOWN AND/OR DETAILED ON THE STRUCTURAL DRAWINGS AND WHICH PENETRATE STRUCTURAL ELEMENTS, OBTAIN APPROVAL FROM THE ENGINEER BEFORE PROCEEDING WITH WORK.
- IT IS THE INTENTION OF THESE DRAWINGS TO PROVIDE FOR THE FOLLOWING CONTINUITIES:
  - ALL ROOF AND FLOOR STRUTS SHALL BE CONTINUOUSLY CONNECTED FOR THE LENGTH OF THE ROOF OR FLOOR SYSTEM.
  - ALL WALL BRACING AND/OR SHEAR PANELS SHALL BE CONNECTED TO THE ROOF AND/OR FLOOR STRUTS, IF DETAILS REQUIRED TO EFFECT THESE CONTINUITIES ARE NOT EVIDENT ON THE DRAWINGS THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR CLARIFICATION.
- FRAME OPENINGS AND SUPPORT MISCELLANEOUS EQUIPMENT AS DETAILED ON THE DRAWINGS. WHERE NO DETAILS ARE PROVIDED, OBTAIN APPROVAL FROM THE ENGINEER BEFORE PROCEEDING WITH WORK.
- IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FRAMEWORK, ETC. AS REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THESE DRAWINGS AND PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
- DESIGN DATA:
 

GOVERNING CODE.....2021 INTERNATIONAL BUILDING CODE (I.B.C.)

DESIGN LOADS:

ROOF LIVE LOAD .....20 PSF (REDUCIBLE)

FLOOR LIVE LOAD .....N/A

RISK CATEGORY .....IV

WIND LOAD .....115 MPH ULTIMATE (3-SEC GUST), EXP. C

INTERNAL PRESSURE COEFFICIENT  $C_{pi} = +0.18$

SEISMIC LOAD .....DESIGN CATEGORY D,  $R=2.0$ ,  $I_e = 1.5$ , SITE CLASS D

$S_s = 0.264$ ,  $S_1 = 0.082$ ,  $S_{D1} = 0.280$ ,  $S_{D2} = 0.131$ ,  $C_e=0.210$

**SPECIAL INSPECTION NOTES**

- SPECIAL INSPECTIONS REQUIRED BY THIS CODE ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISE OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATOR PRACTICES BY AN APPROVED INSPECTION AGENCY.
- INSPECTORS SHALL SUBMIT THEIR REPORTS DIRECTLY TO THE ENFORCEMENT AGENCY WITH COPIES TO THE ARCHITECT, STRUCTURAL ENGINEER, GENERAL CONTRACTOR AND OWNER.
- APPROVAL BY THE INSPECTOR DOES NOT MEAN APPROVAL OF FAILURE TO COMPLY WITH THE PLANS OR SPECIFICATIONS. ANY WORK TO BE DONE OR ANY MATTER RELATIVE THERETO THAT IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- IN ACCORDANCE WITH 2021 I.B.C. SECTIONS 110 AND 1704.2, THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR WHO SHALL PROVIDE SPECIAL INSPECTION DURING CONSTRUCTION ON THE FOLLOWING TYPES OF WORK:
  - CONCRETE: PER CBC SECTION 1705.3 AND TABLE 1705.3 WITH EXCEPTIONS. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION: ALL CONCRETE EXCEPT: SLAB-ON-GRADES, SIDEWALKS AND DRIVEWAYS.
  - STEEL CONSTRUCTION: SPECIAL INSPECTIONS FOR STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360. SPECIAL INSPECTION FOR SEISMIC RESISTANCE SHALL BE IN ACCORDANCE WITH AISC 341 AND SHALL COMPLY WITH SECTION 1705.2. PROVIDE INSPECTION PER CBC SECTION 1704.2.5 FOR STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES FABRICATED ON THE PREMISES OF A FABRICATOR'S SHOP. THESE INSPECTIONS SHALL BE AT CONTRACTOR'S EXPENSE IN THE FABRICATOR IS NOT AN APPROVED FABRICATOR PER SECTION 1704.2.5.2.
  - WELDING: WELDING INSPECTION SHALL BE IN COMPLIANCE WITH AWS D1.1. THE BASIS FOR WELDING INSPECTOR QUALIFICATIONS SHALL BE AWS D1.1. PROVIDE SPECIAL INSPECTION IN ACCORDANCE WITH AISC TABLES N5.4-1 THROUGH TABLE N5.4-3.
  - GRADING, EXCAVATION AND FILLING: PER CBC SECTION 1705.6. SEE CIVIL DRAWINGS AND SPECIFICATION DIVISION 31.
  - EXPANSION BOLT, SCREW ANCHOR AND ADHESIVE ANCHORS: INSTALLATION TO VERIFY INSTALLATION IN ACCORDANCE WITH APPLICABLE ICC REPORTS NOTED ON NOTE SHEET OR DETAILS.
  - HEADED CONCRETE SHEAR CONNECTORS: INSPECTED AND TESTED PER AMERICAN WELDING SOCIETY CODE AWS D1.1.

**CONCRETE NOTES**

- THE QUALITY, DESIGN AND PLACEMENT OF CONCRETE SHALL BE IN ACCORDANCE WITH THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE (C.B.C.), EXCEPT ITEMS NOT SPECIFICALLY COVERED THEREIN SHALL ALSO CONFORM TO ACI 318, LATEST EDITION, MAXIMUM SLUMP SHALL BE 5 INCHES.
- UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS:
 

FOOTINGS, STEMWALLS & PIERS .....4000 PSI

SLABS ON GRADE .....4000 PSI
- MATERIALS USED IN THE CONCRETE MIX SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
 

AGGREGATE (NORMAL-WEIGHT CONCRETE, 1-1/2" MAX) ..... ASTM C-33

PORTLAND CEMENT (TYPE II, U.N.O.) ..... ASTM C-150

ADMIXTURES ..... NOT ALLOWED W/O APPROVAL

WATER ..... POTABLE
- READY-MIXED CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C-94 OR C-685.
- ALL EXPOSED INTERIOR CONCRETE FLOORS ARE TO RECEIVE A STEEL TROWELED FINISH.
- UNLESS NOTED OTHERWISE, ALL EXPOSED EXTERIOR CONCRETE SLABS ARE TO RECEIVE A MEDIUM BROOM FINISH.
- FORMS FOR PERMANENTLY EXPOSED SURFACES SHALL PRODUCE A SMOOTH, EVEN, LEVEL FINISH WITHOUT FINIS. DESIGN OF FORM WORK SHALL TAKE INTO CONSIDERATION THE REQUIREMENTS OF ACI 318-19 SECTION 26.11.2.1.
- UNLESS NOTED OTHERWISE, ALL EXPOSED EDGES OF CONCRETE SURFACES SHALL RECEIVE A 3/4" MINIMUM CHAMFER OR A 1/2" MINIMUM TOOLED RADIUS & THE TOP OF ALL EXPOSED FOOTINGS, PIERS AND COLUMNS SHALL RECEIVE A SMOOTH TROWELED FINISH.
- ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY SUITABLE MEANS DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT, ANCHOR BOLTS, OTHER EMBEDDED ITEMS AND INTO THE CORNERS OF FORMS. ANY "HONEYCOMB" CONCRETE AND/OR ROCK POCKETS SHALL BE REMOVED AND REPLACED WITH SOUND CONCRETE.
- ALL CONCRETE FLATWORK SHALL BE WET CURED BY MIST CURING, BY MOISTURE-RETAINING CURING, OR BY COMBINATIONS THEREOF IN ACCORDANCE WITH ACI 301 PROCEDURES. KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS AFTER THE FINISHING OPERATION IS COMPLETE.
- ALTERNATELY, A CURING COMPOUND MEETING ASTM C-309 TYPE 1, CLASS B AND AASHTO 148, TYPE 1 SPECIFICATIONS AND STATE OF CALIFORNIA AIR REGULATION BOARD SOLVENT EMISSIONS STANDARDS MAY BE USED SUCH AS "EUCLID" SUPER DIAMOND CLEAR VOX.
- REINFORCING STEEL SHALL BE BILLET STEEL CONFORMING TO ASTM A615/A615M-96A AS FOLLOWS, UNLESS NOTED OTHERWISE:
 

#4 (13 MM) AND SMALLER .....GRADE 40 (GRADE 300)

#5 (16 MM) AND LARGER .....GRADE 60 (GRADE 420)
- FABRICATING DETAILS SHALL CONFORM TO ACI 315, "ACI DETAILING MANUAL" AND CRSI "MANUAL OF STANDARD PRACTICE".
- SPLICE LENGTHS OF REINFORCING BARS SHALL COMPLY WITH THE REQUIREMENTS OF ACI 318. REFER TO DETAILS ON THESE PLANS.
- ALL WELDING OF REINFORCING STEEL SHALL BE WITH LOW HYDROGEN ELECTRODES UNLESS OTHERWISE NOTED. WELDING OF REINFORCING ALLOWED ONLY WHERE DETAILED ON THE DRAWINGS AND SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PER ACI 318-19 SECTION 26.6.4.1 AND 25.5.7.2.
- ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- ALL VERTICAL REINFORCING BARS AT WALLS, STEMWALLS, PEDESTALS, ETC. SHALL HAVE A STANDARD ACI 90° OR 180° HOOK INTO THE FOUNDATION BELOW WITH EMBEDMENT REQUIRED BY THE BUILDING CODE. ALSO SEE DETAILS, THESE PLANS.
- UNLESS OTHERWISE NOTED, ALL REINFORCING SHALL HAVE A MINIMUM CONCRETE COVER AS FOLLOWS:
 

SURFACES POURED AGAINST EARTH .....3 INCHES

FORMED SURFACES EXPOSED TO GROUND OR WEATHER:

#5 AND SMALLER .....1 1/2" INCHES

#6 AND LARGER .....2 INCHES

FORMED CONCRETE NOT EXPOSED TO GROUND OR WEATHER .....3/4" INCH

BEAMS, JOISTS & GIRDERS .....1 1/2" INCHES

COLUMNS .....1 1/2" INCHES
- WHERE GROUT IS SPECIFIED ON THE DRAWINGS USE A HIGH STRENGTH, NON SHRINK, NON-METALLIC GROUT. USE MASTERBUILDERS "MASTERFLOW 713 GROUT" OR APPROVED SUBSTITUTE.
- REFER TO BOTH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SPACING OF ALL PLUMBING FIXTURES.
- NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE WALLS OR SLAB UNLESS SPECIFICALLY DETAILED.

**FOUNDATION NOTES**

- OVER-EXCAVATION, ENGINEERED FILL AND RECOMPACTION SHALL MEET REQUIREMENTS OF GEOTECHNICAL EVALUATION REPORT LISTED BELOW.
- ANY EXISTING FILL AT THE BUILDING PAD SHALL MEET THE 90% COMPACTION REQUIREMENTS. ALL ORGANIC MATERIAL, RUBBLE OR OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE.
- NOMINAL TOP OF FLOOR SLAB ELEVATION = DATUM +0'. 0" UNLESS NOTED OTHERWISE.
- ALL SPREAD OR CONTINUOUS BEARING WALL FOOTINGS SHALL BE FOUNDED A MINIMUM DEPTH OF 12 INCHES BELOW LOWEST ADJACENT FIRM NATURAL SUBGRADE OR COMPACTED FILL UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- CONSTRUCTION OR CONTROL JOINTS (C.J.) ARE TO BE PROVIDED AT INTERIOR NON-BEARING PARTITIONS AND AT HIGH OR LOW POINTS OF FLOOR SLOPES TO BREAK FLOOR INTO WORKING AREAS NOT LARGER THAN 100 SQUARE FEET.
- PROVIDE A MINIMUM SEPARATION OF 8" BETWEEN UNTREATED WOOD AND EARTH OR 3" BETWEEN UNTREATED WOOD AND CONCRETE OR ASPHALTIC PAVING.
- SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF EXTERIOR WALKWAYS.
- SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF NON-BEARING PARTITIONS.
- FOUNDATION DESIGN IS BASED ON GEOTECHNICAL EVALUATION REPORT BY CERTERRA WESTERN TECHNOLOGIES, PROJECT NO. 29-225051-0, DATED 7-7-2025.
 

FOUND. PRESSURE: 2000 PSF (2' FTG DEPTH BELOW FIN. GRADE)

3000 PSF (3' FTG DEPTH BELOW FIN. GRADE)

4000 PSF (4' FTG DEPTH BELOW FIN. GRADE)

ALLOWABLE COEFFICIENT OF FRICTION: 0.35 (SHALLOW FOUNDATIONS)

0.40 (EARTH RETAINING STRUCTURES)

PASSIVE PRESSURE: 225 PSF/FT (SHALLOW WALL FTGS)

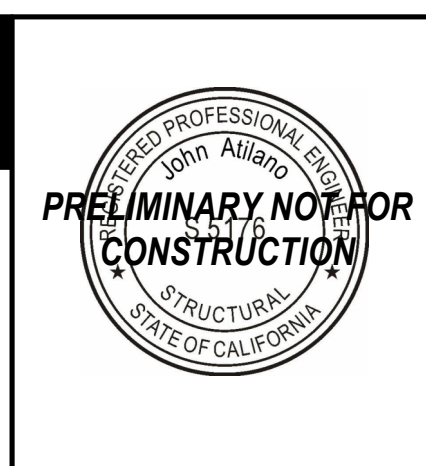
LATERAL ACTIVE EARTH PRESSURE: 35 PSF/FT (COMPACTED SITE SOILS)



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DRAWN BY: T.C.  
PROJECT ENGR: J.A.

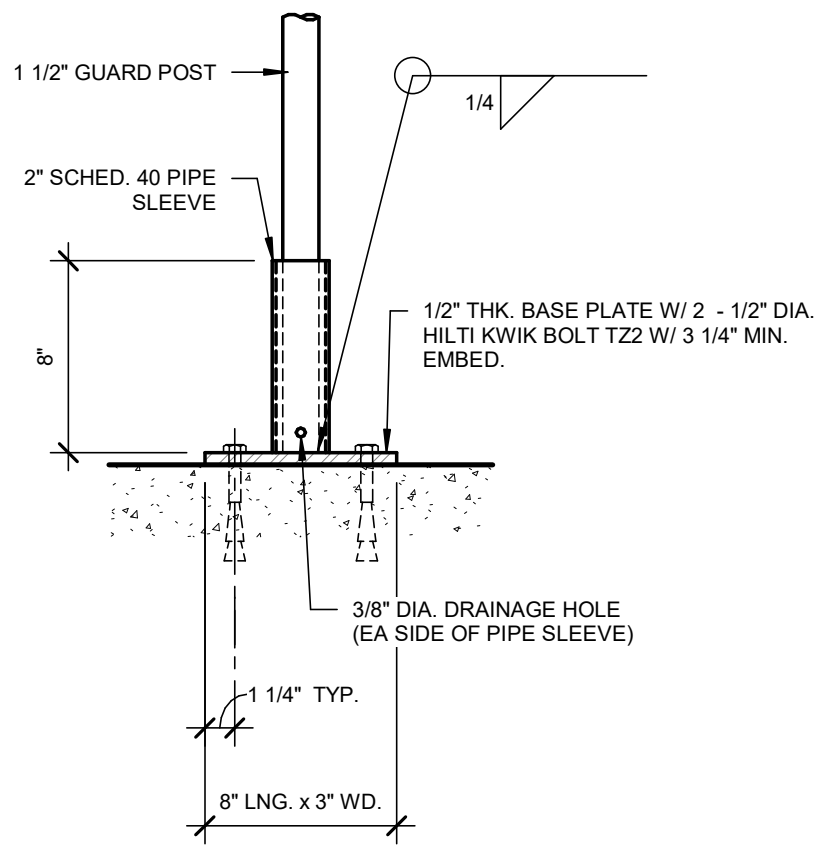
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PROJECT: XXXXXX-XXXX

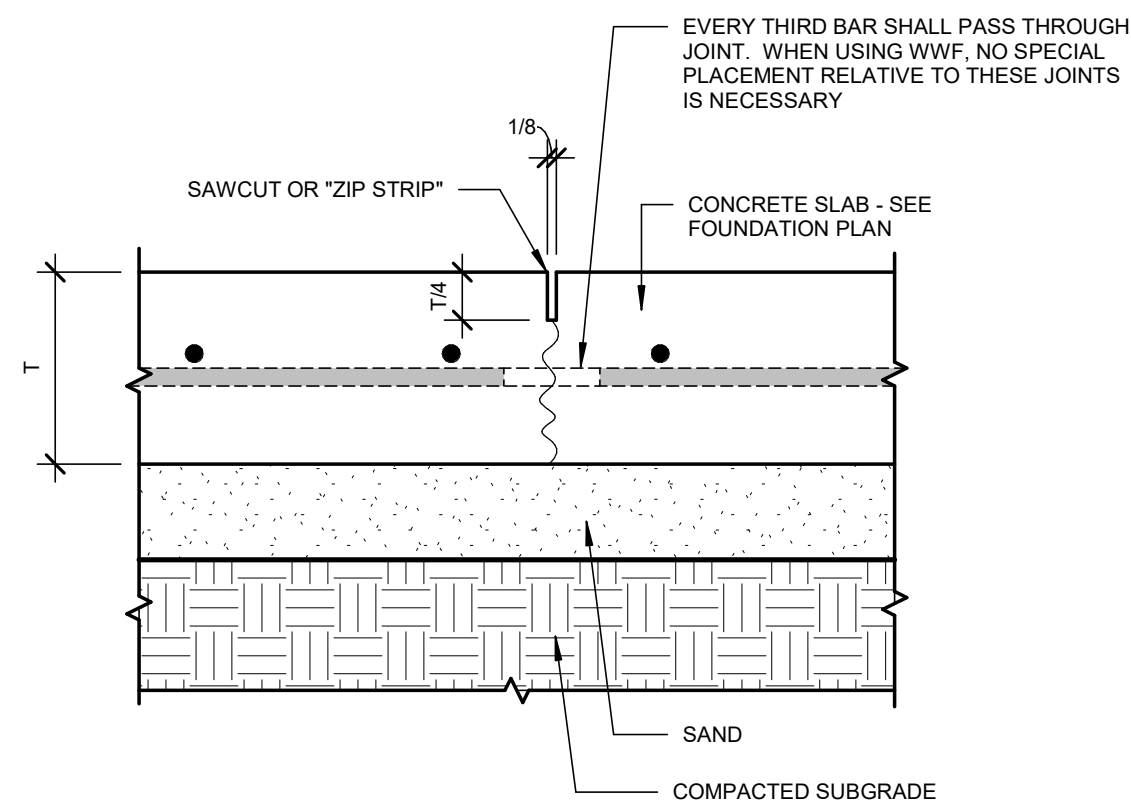
BIRP BACKWASH DESIGN  
STRUCTURAL  
STRUCTURAL NOTE SHEET  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSION ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	<b>S1.1</b>

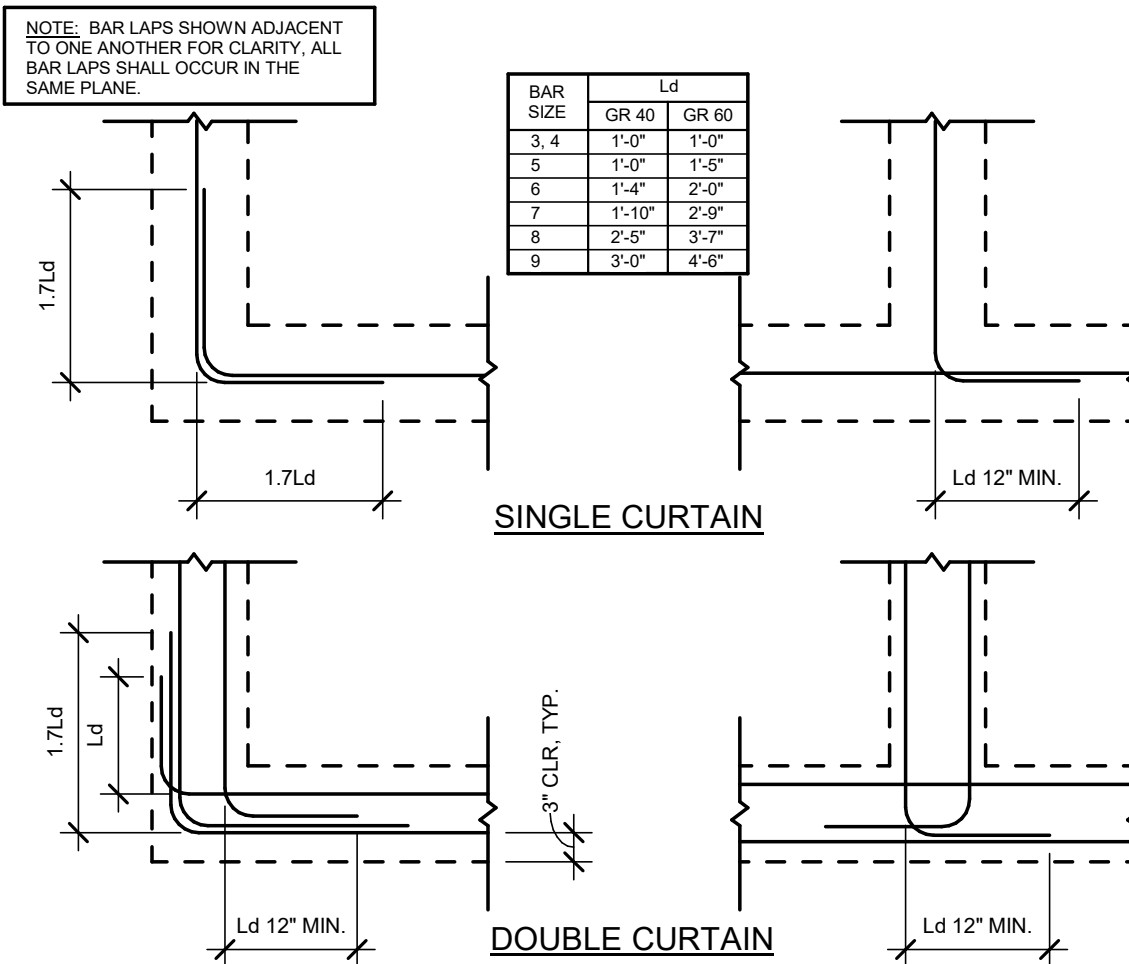
LANE PROJECT NO. 23311



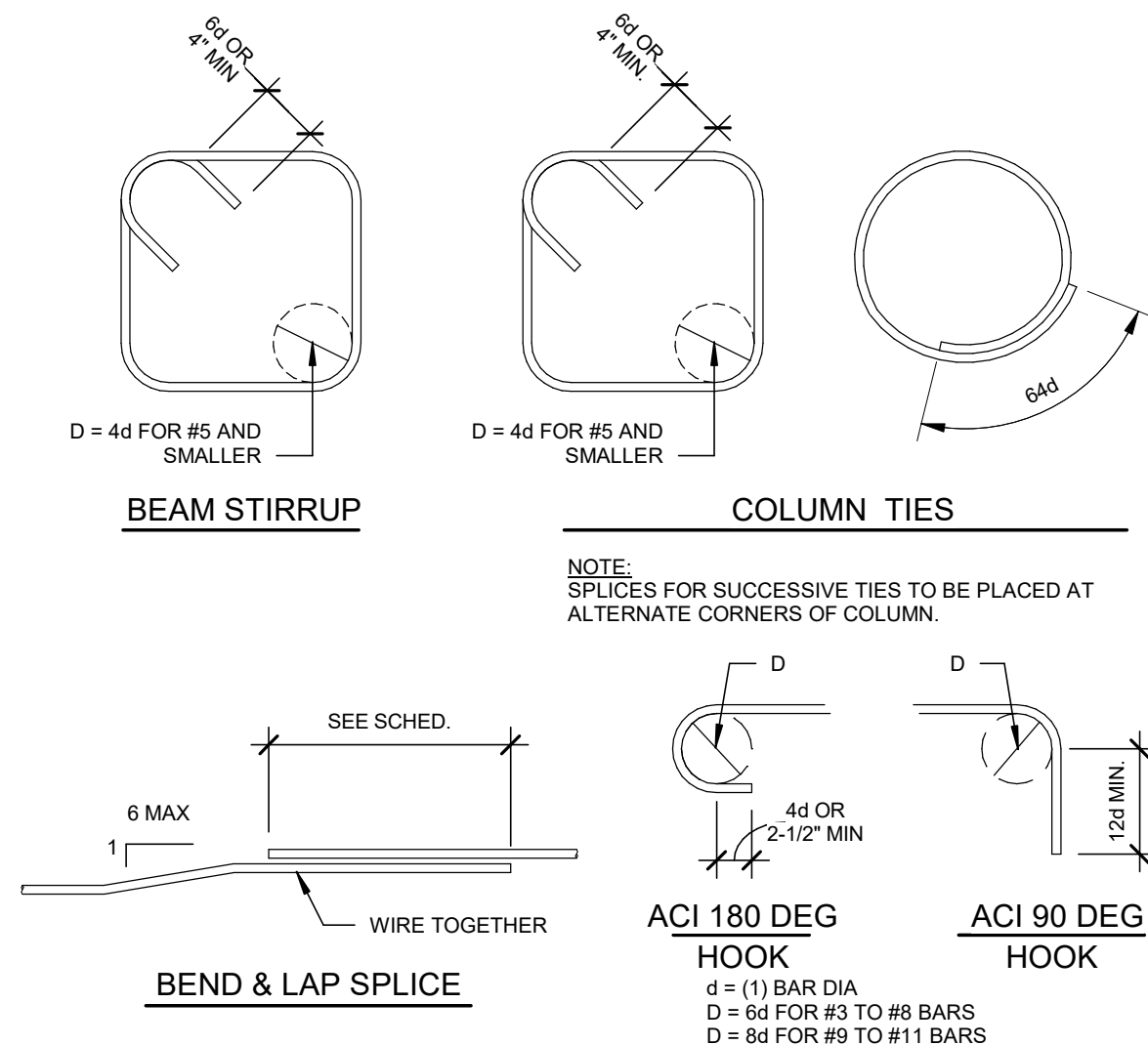
REMOVEABLE GUARD POST BASE PLATE 41



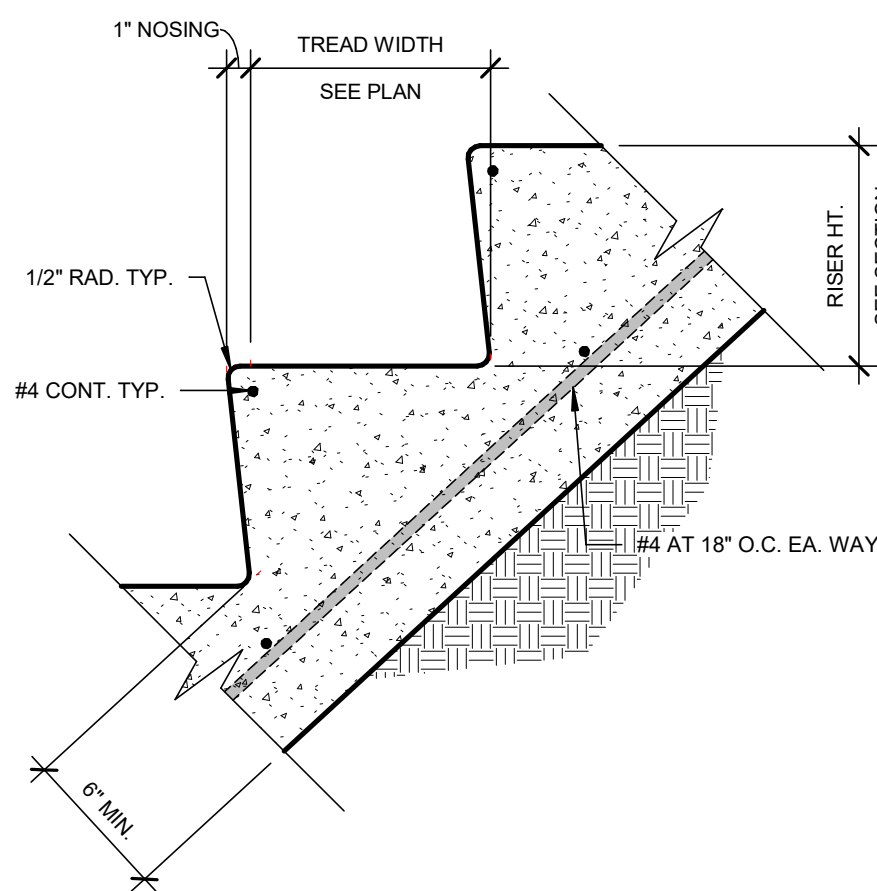
CONTROL JOINT NO SCALE 31



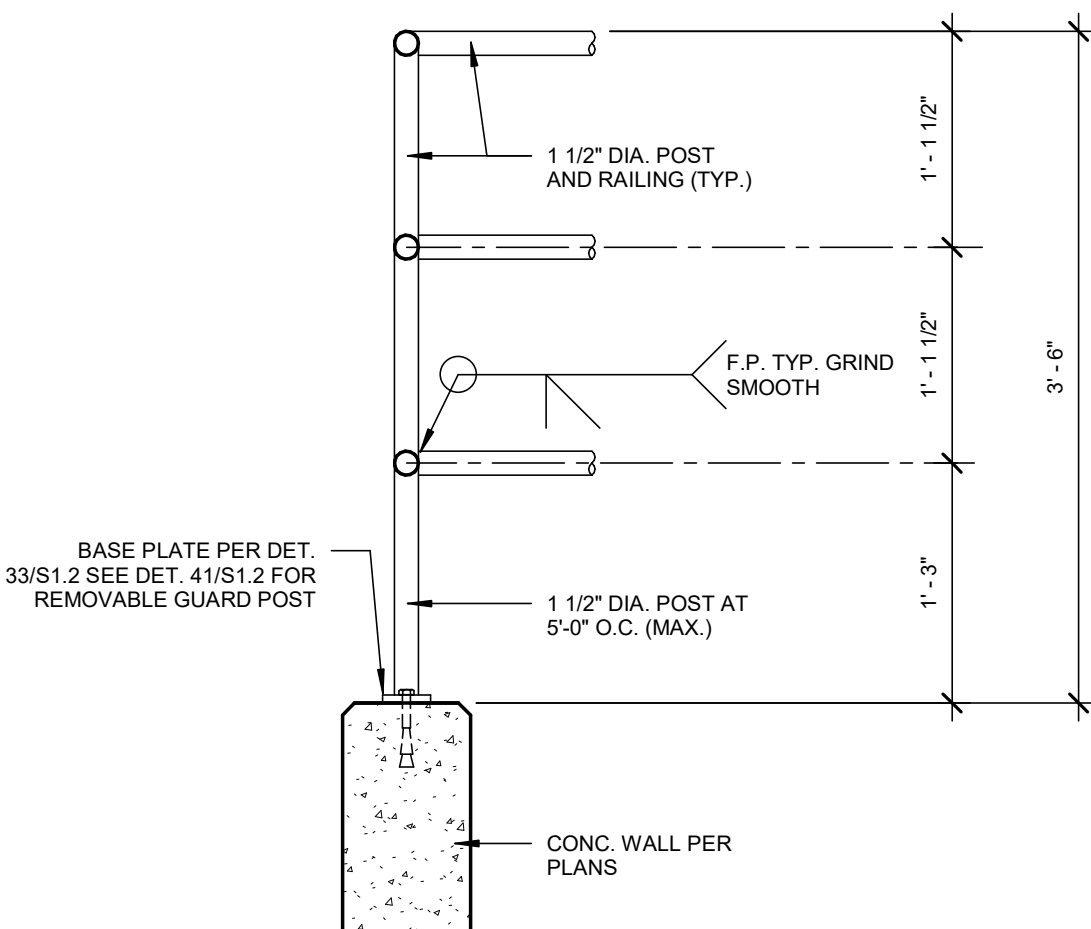
FOUNDATION CORNERS NO SCALE 21



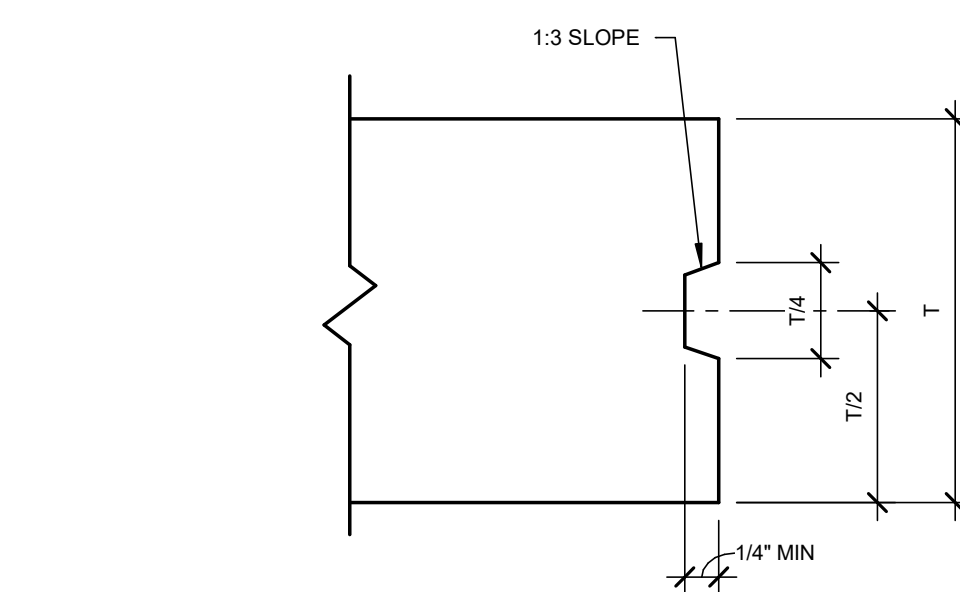
CONCRETE REINF. BAR SPLICES NO SCALE 12



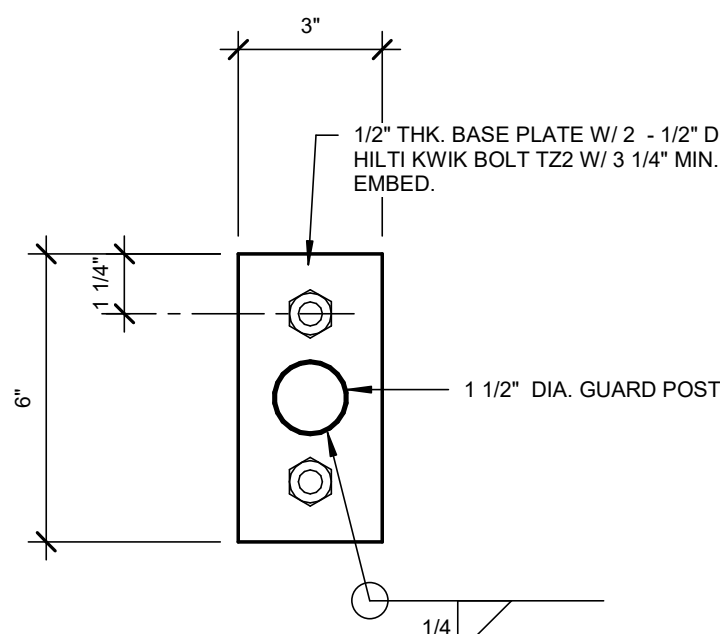
CONCRETE STAIRS NO SCALE 42



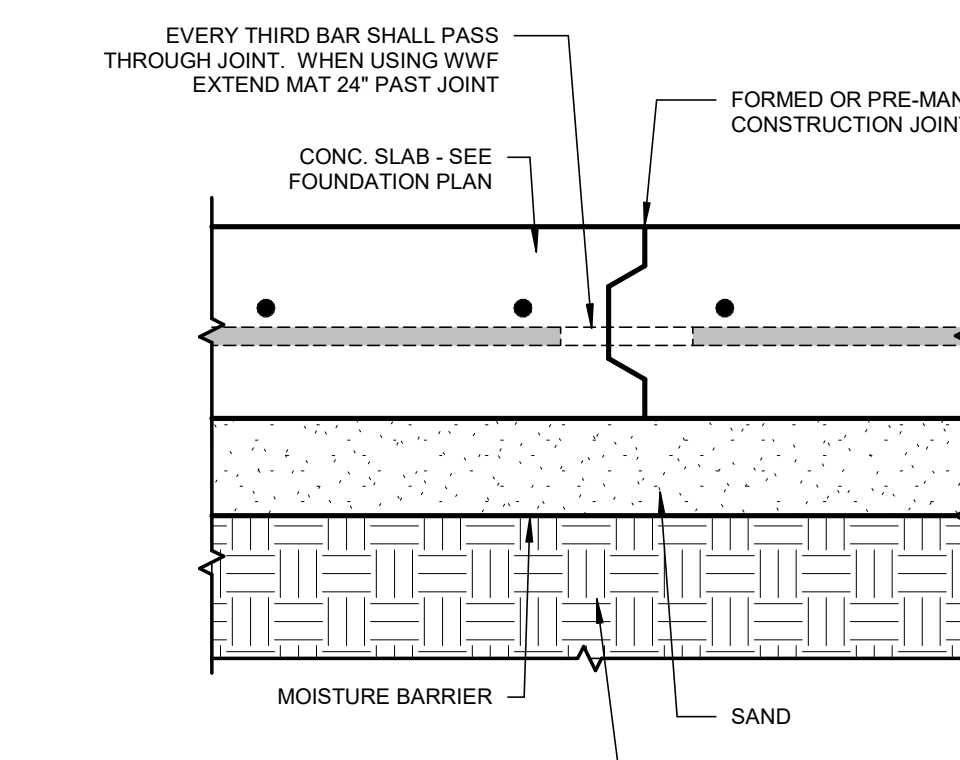
GUARD RAIL DETAIL NO SCALE 32



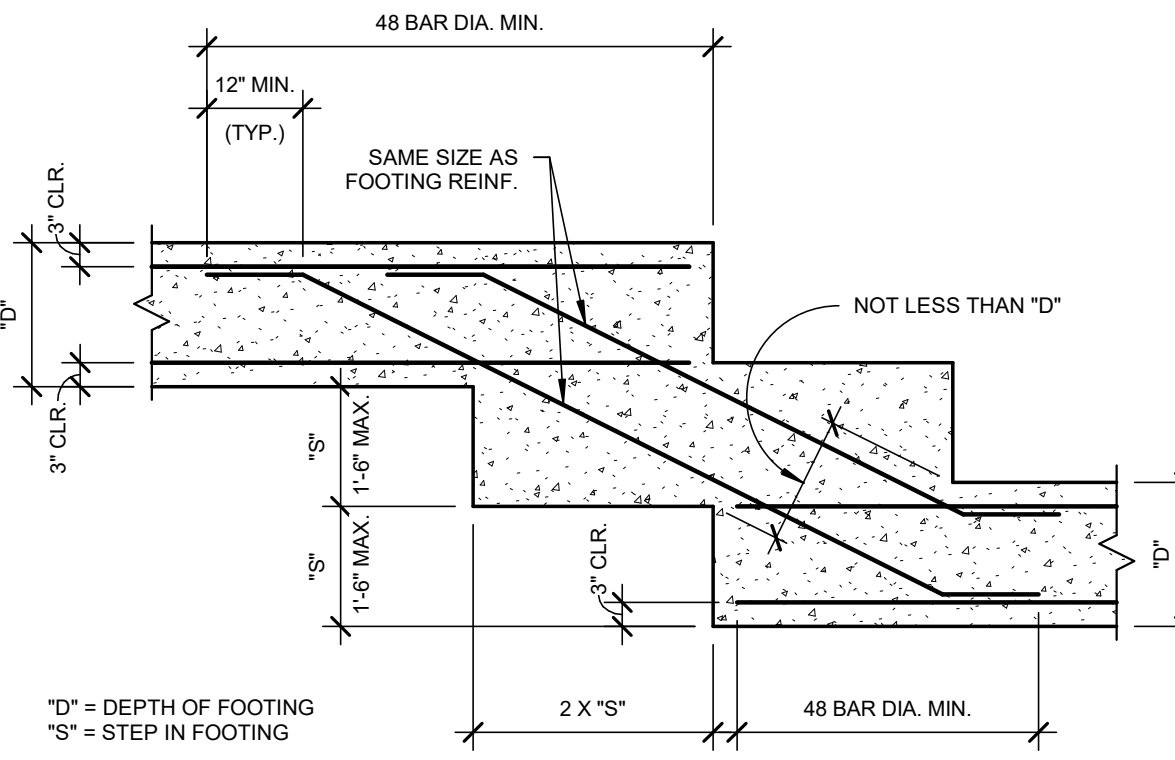
TYP. FORMED KEY JOINT NO SCALE 22



GUARD POST BASE PLATE 33



CONSTRUCTION JOINT NO SCALE 23



TYPICAL STEP FOOTING NO SCALE 13



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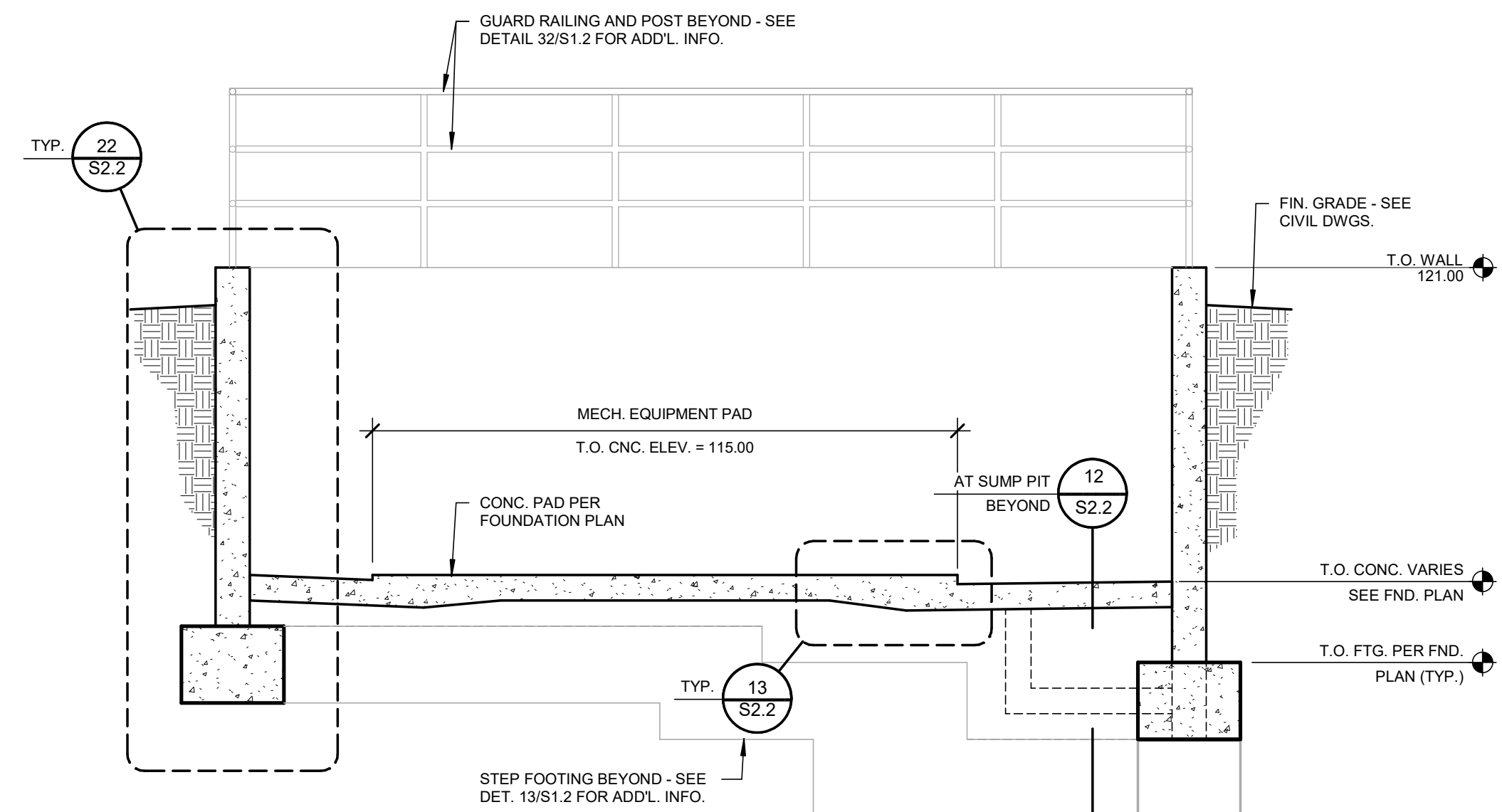


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DRAWN BY: T.C.  
PROJECT ENGR: J.A.  
DATE: OCTOBER 2025  
PROJECT: XXXXXX-XXXX

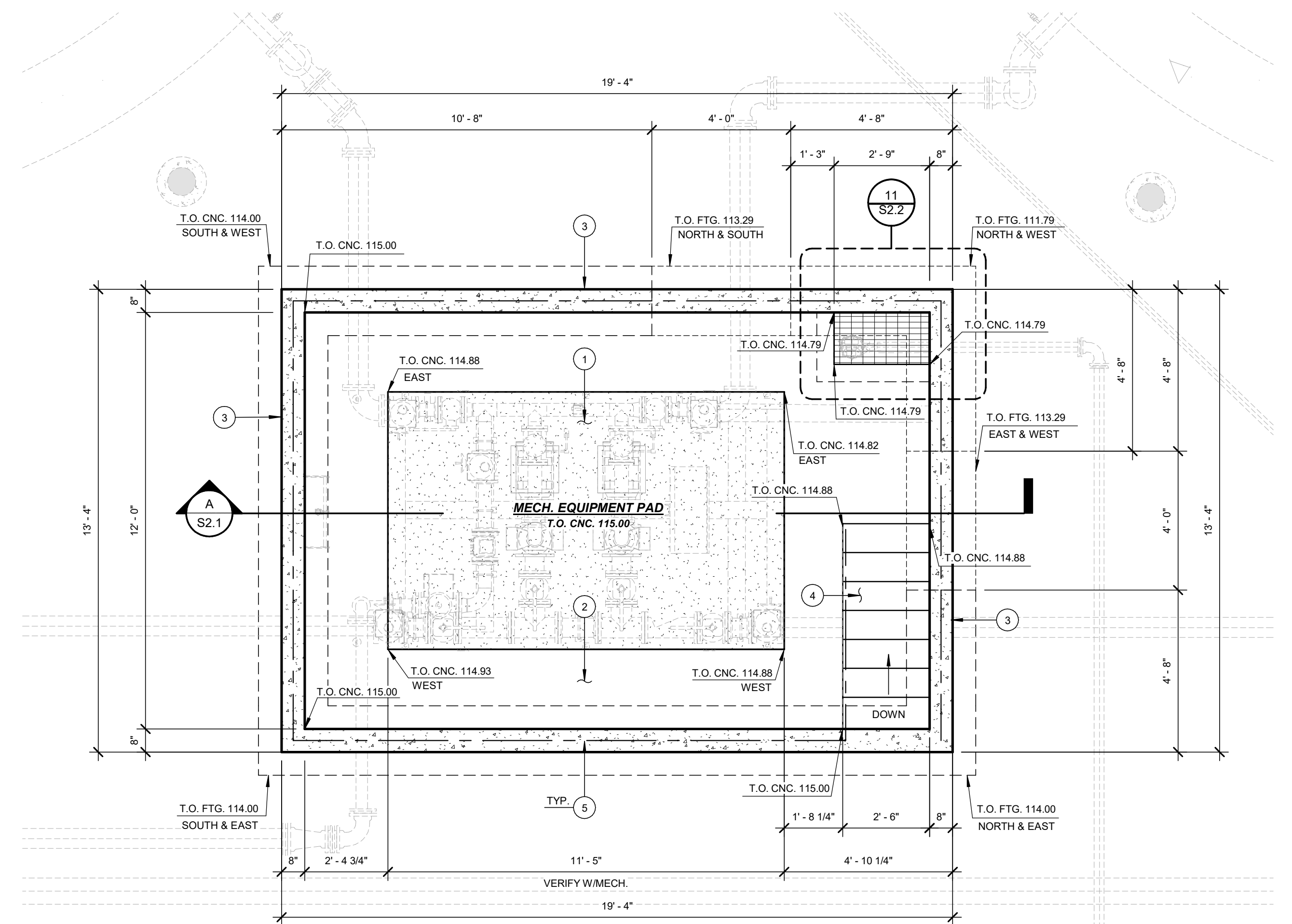
BIRP BACKWASH DESIGN  
STRUCTURAL  
TYPICAL STRUCTURAL DETAILS  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES 90% SUBMITTAL  
USE DIMENSION ONLY SCALE AS NOTED  
**S1.2**  
LANE PROJECT NO. 23311



**SECTION A**

3/8" = 1'-0"



**FOUNDATION PLAN**

3/8" = 1'-0"



**CONSTRUCTION KEYNOTES**

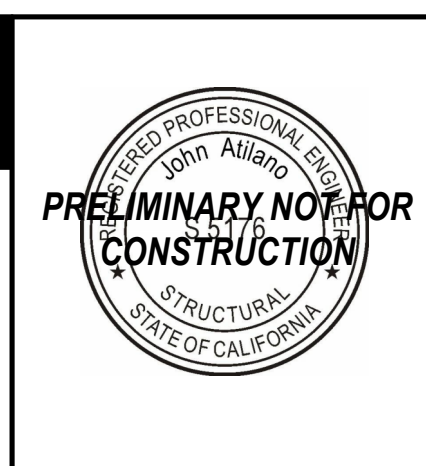
MARK	DESCRIPTION
1	6" THK. CONCRETE MECH. EQUIPMENT PAD. W/ #4 AT 18" O.C. EA. WAY - SEE DETAIL 13/S2.2 FOR ADDL. INFO.
2	6" THK. SLOPED CONCRETE SLAB W/ #4 AT 18" O.C. EA. WAY - SEE DETAIL 13/S2.2 FOR ADDL. INFO.
3	8" THK. CONCRETE WALL W/ #5 AT 12" O.C. VERT. AND #5 AT 18" O.C. HORIZ.
4	CONCRETE STAIRS PER DETAIL 23/S2.2
5	GUARD RAIL ATOP CONCRETE WALL PER DETAIL 32/S1.2



REVISIONS	REVISIONS
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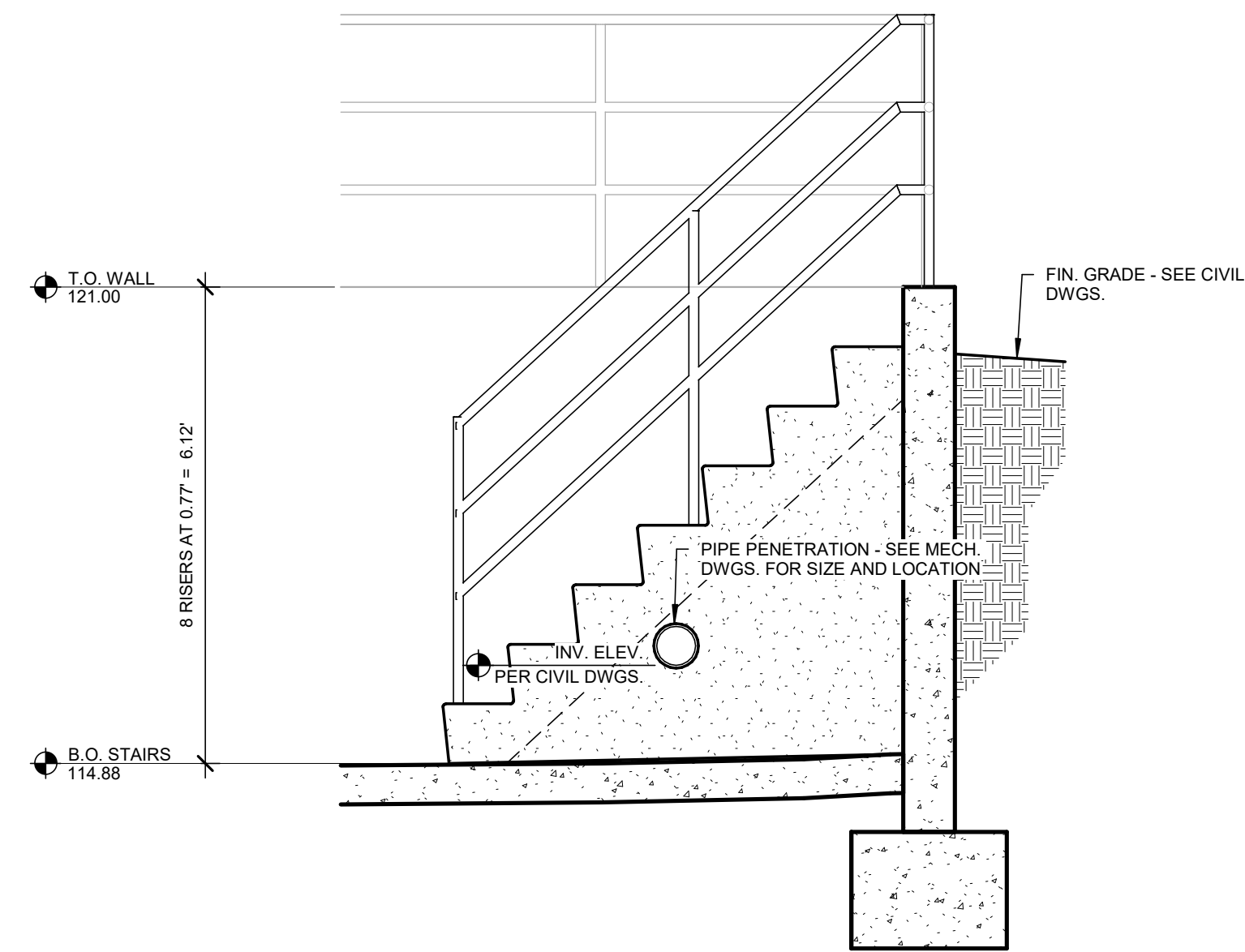
DATE: OCTOBER 2025

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BIRP BACKWASH DESIGN  
STRUCTURAL  
SFAT PUMP SKID AND VAULT - FOUNDATION PLAN AND SECTION  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSION ONLY SCALE AS NOTED
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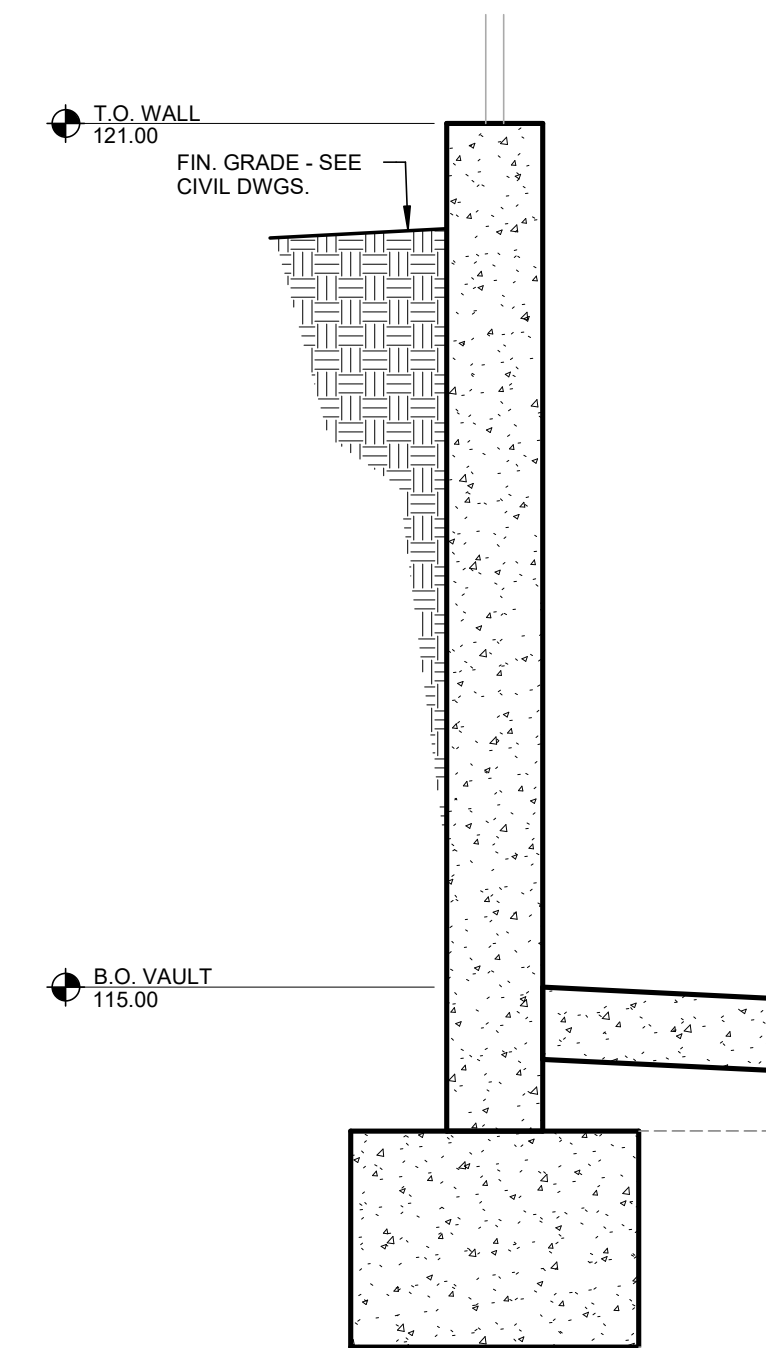
LANE PROJECT NO. 23311



STAIR SECTION

1/2" = 1'-0"

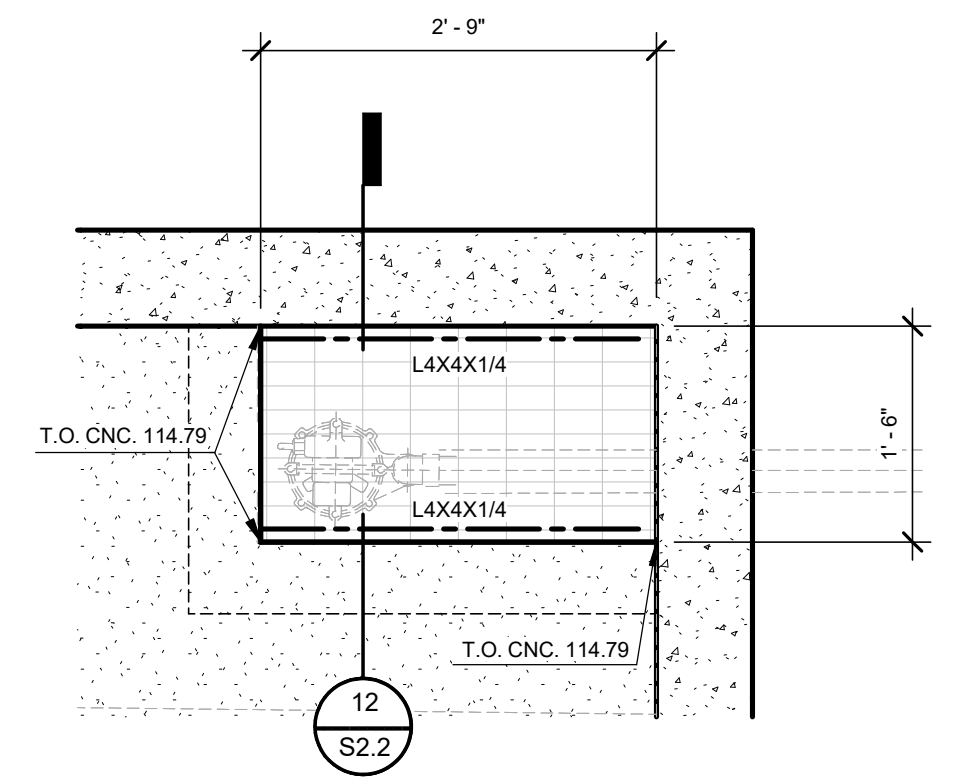
32



WALL SECTION

3/4" = 1'-0"

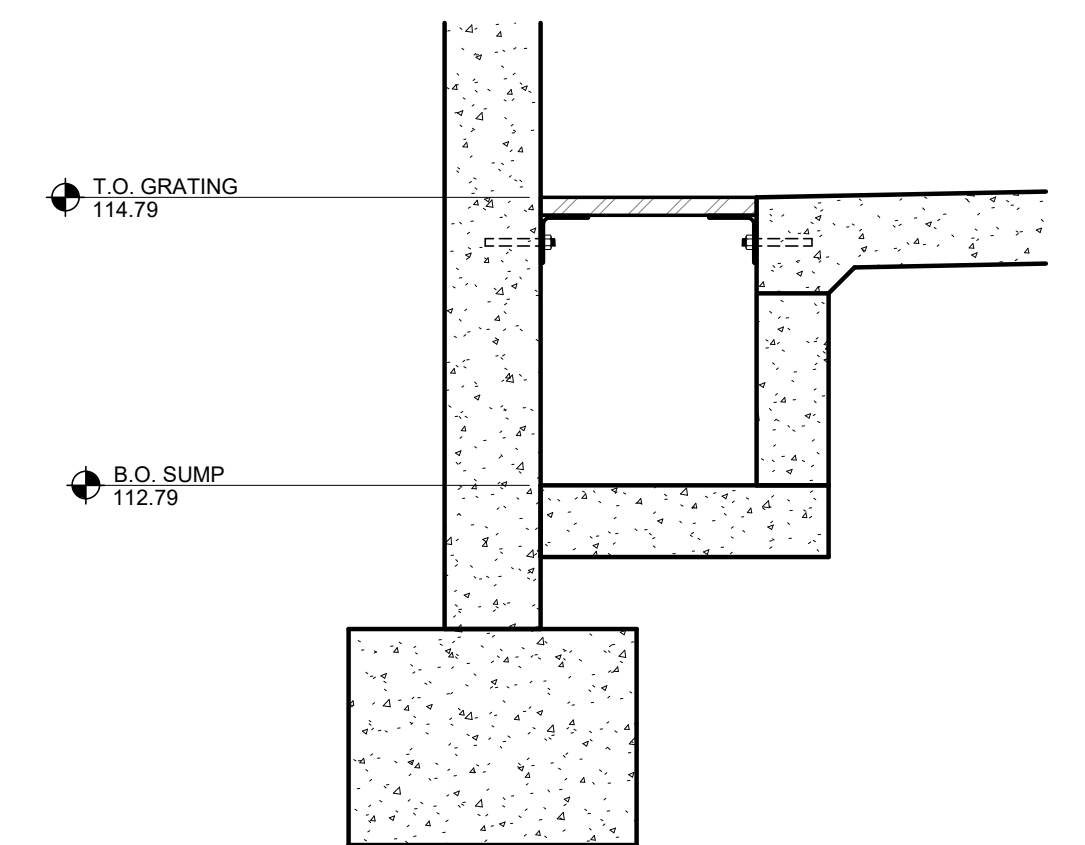
22



PLAN AT SUMP PIT

3/4" = 1'-0"

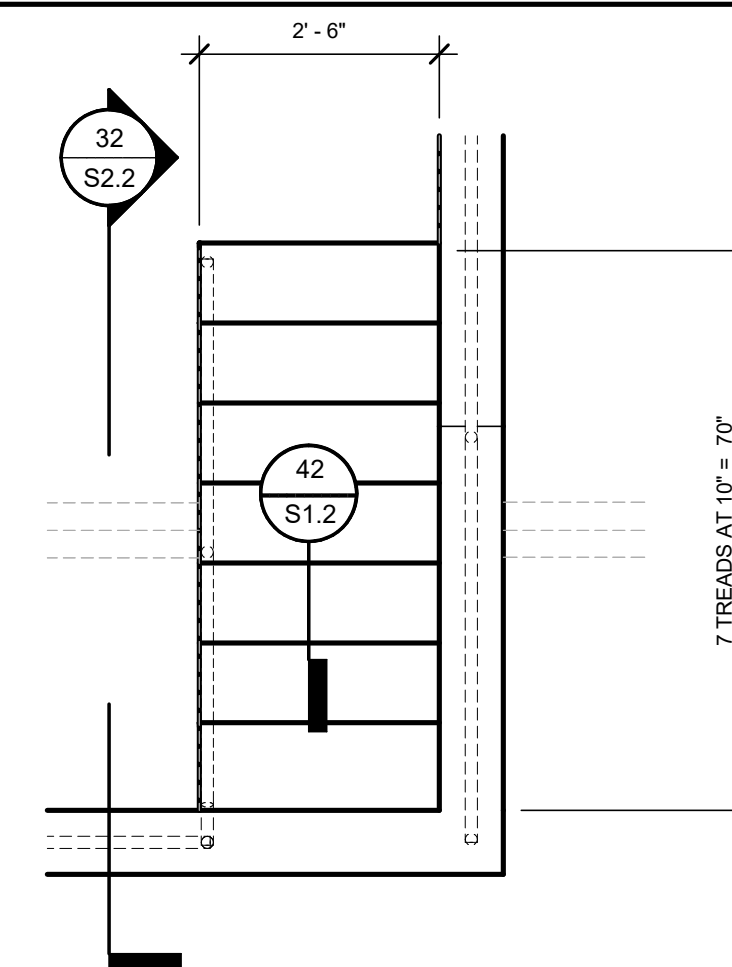
11



SECTION AT SUMP PIT

3/4" = 1'-0"

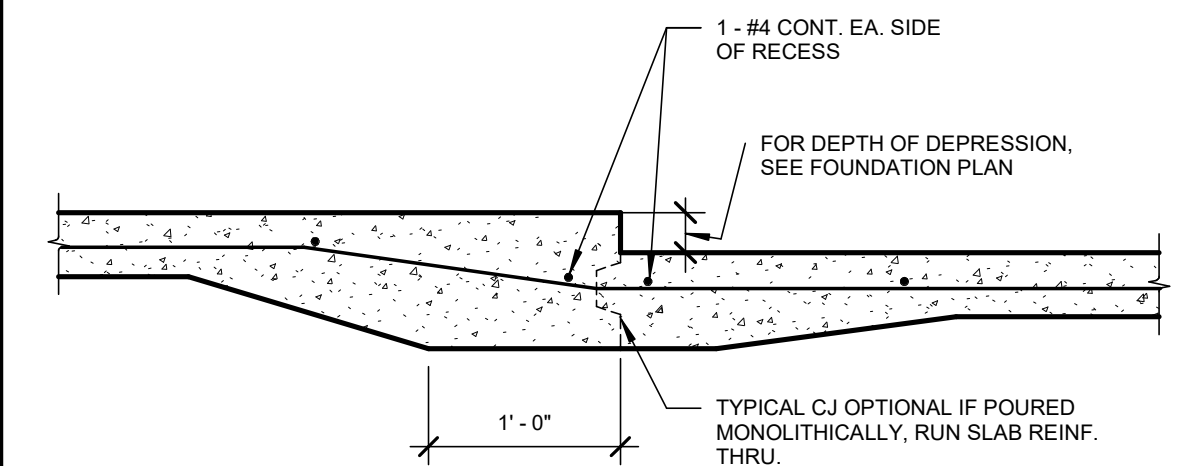
12



PLAN AT STAIRS

1/2" = 1'-0"

23



TYPICAL DEPRESSED SLAB

NO SCALE

13



REVISIONS	REVISIONS
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△	△
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PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
STRUCTURAL  
SFAT PUMP SKID AND VAULT - STRUCTURAL DETAILS  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO.

COASTAL DIVISION

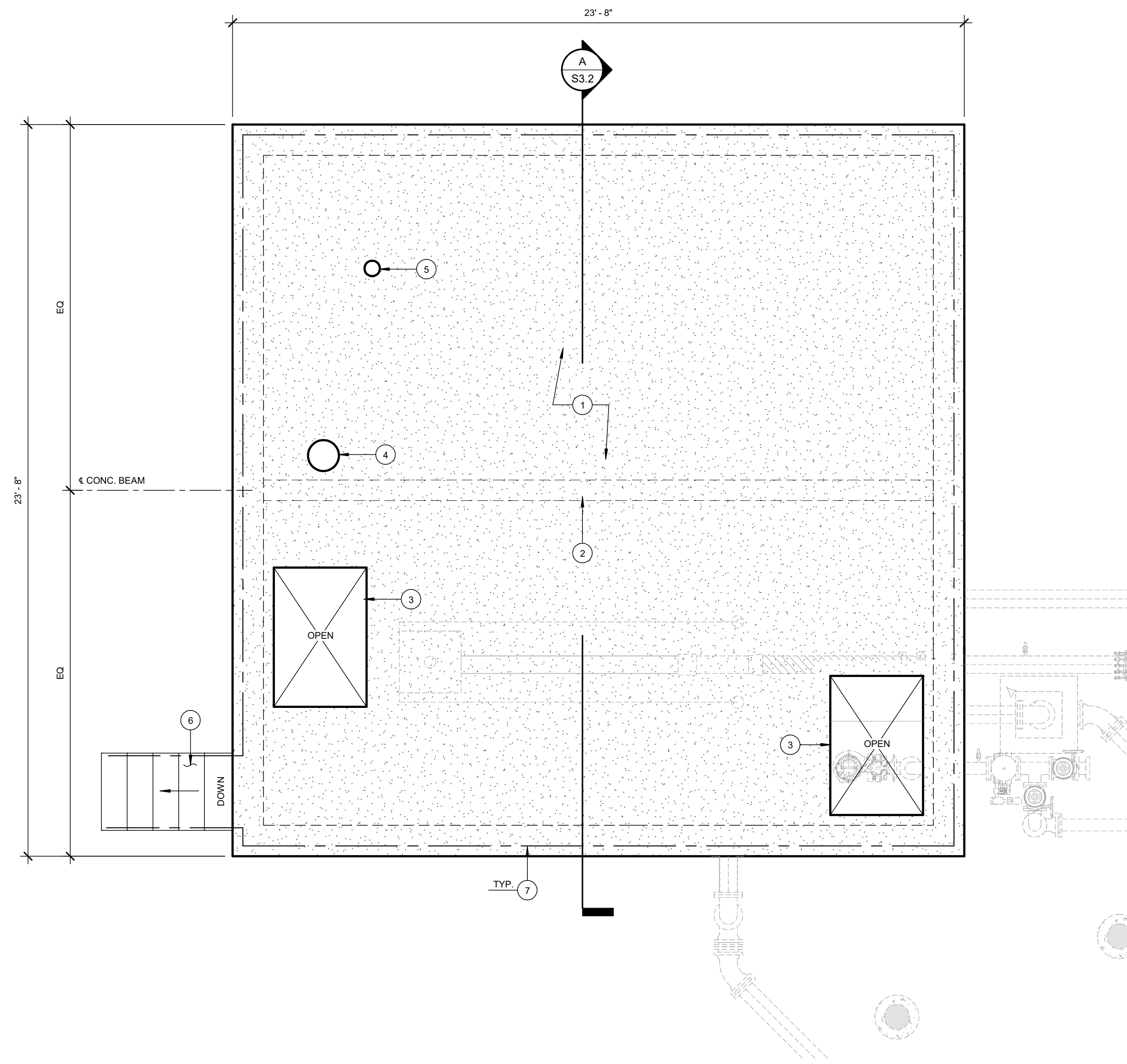
USE DIMENSION ONLY  
SCALE AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

90% SUBMITTAL

**S2.2**

LANE PROJECT NO. 23311

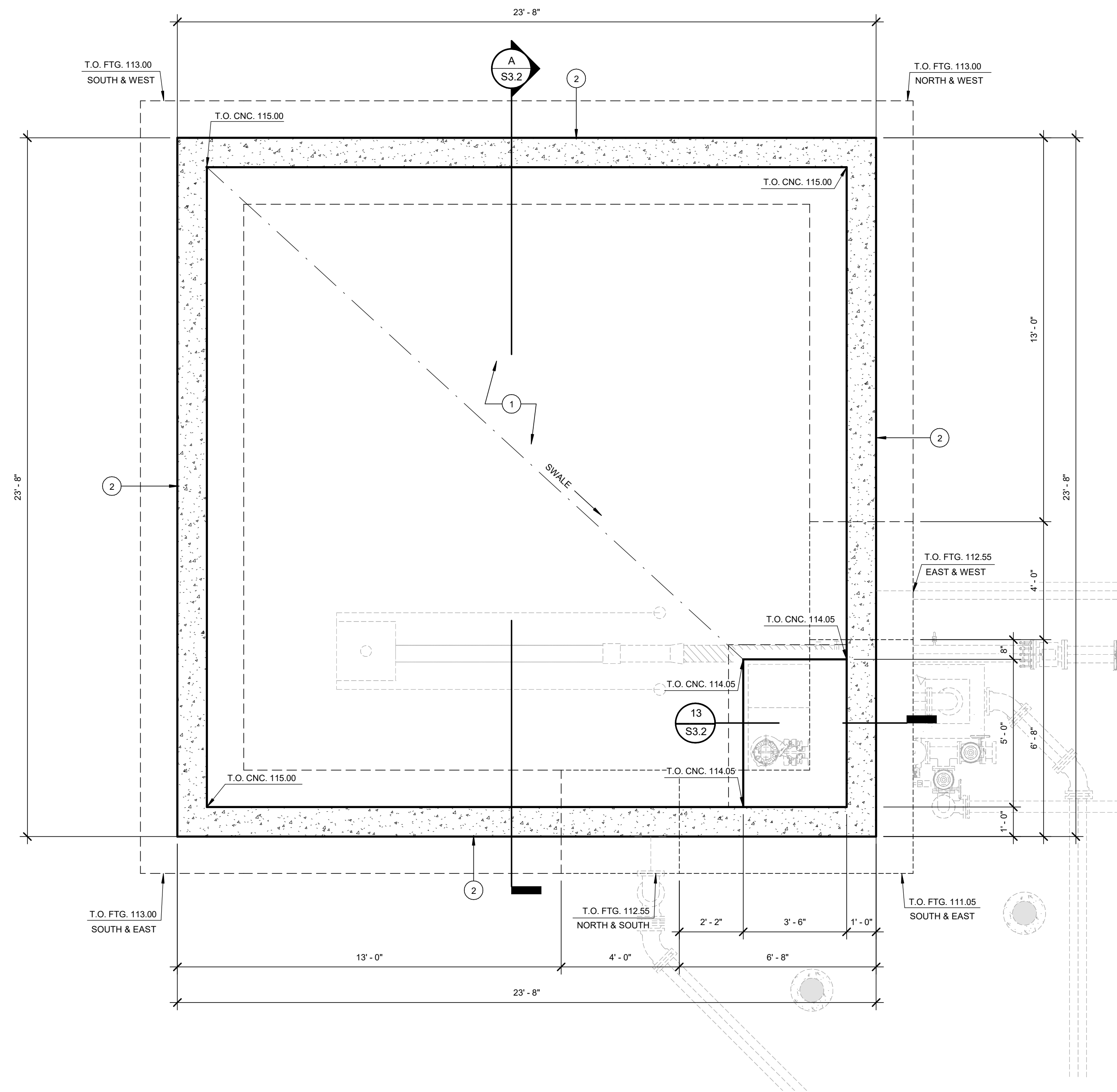


**FLOOR PLAN**

3/8" = 1'-0"

**CONSTRUCTION KEYNOTES**

MARK	DESCRIPTION
1	8" THK. CONC. SLAB W/ ??
2	8" WD. x 12" DEEP CONC. BEAM W/ ??
3	FRAMED OPENING FOR ACCESS HATCH - SEE MECH. DWGS FOR LOCATION (VERIFY CLEAR OPENING REQUIREMENTS W/ ACCESS HATCH MANUF.)
4	12" DIA. OPENING ROOF VENT PER MECH. DWGS. (VERIFY LOCATION AND CLEAR OPENING REQUIREMENTS W/ MECH. DWGS.)
5	LEVEL INDICATOR (VERIFY LOCATION AND CLEAR OPENING REQUIREMENTS W/ MECH. AND ELEC. DWGS.)
6	CONCRETE STAIRS PER DETAIL 33/S3.2
7	GUARD RAIL ATOP CONCRETE WALL PER DETAIL 32/S1.2



**FOUNDATION PLAN**

3/8" = 1'-0"

**CONSTRUCTION KEYNOTES**

MARK	DESCRIPTION
1	6" THK. SLOPED CONCRETE SLAB W/ #4 AT 18" O.C. EA. WAY
2	12" THK. CONC. WALL W/ ??



REVISIONS	REVISIONS
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△	△

**VALENTINE**  
Environmental Engineers, LLC

1500 Palma Drive, Suite 257  
Ventura, California 93003  
Phone: (480) 283 - 8991 Fax: (480) 283 - 0082  
Website: <http://www.valentineengineers.com>



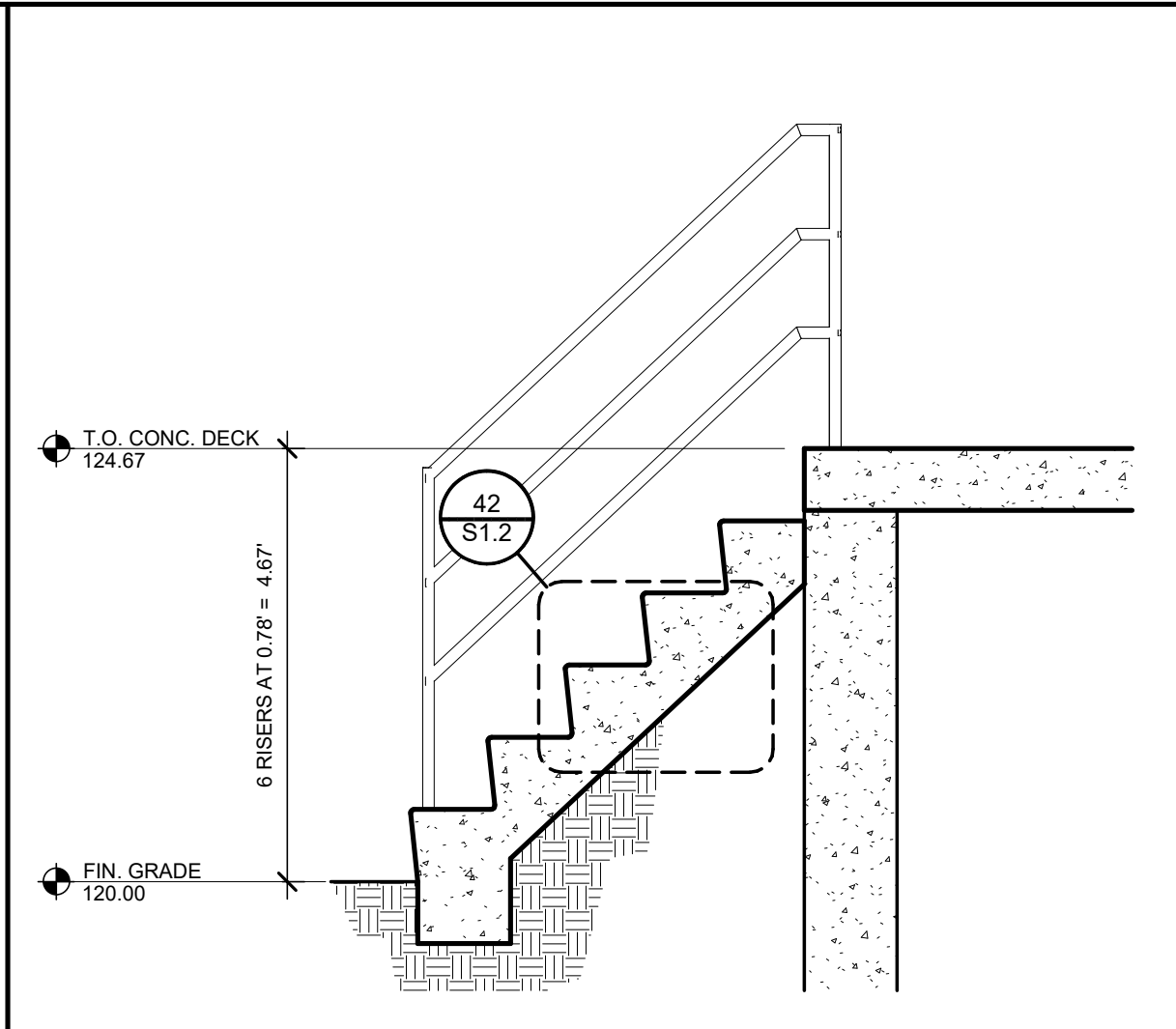
LANE ENGINEERS INC.  
CIVIL - STRUCTURAL - SURVEYING  
979 North Blackstone Street  
Tulare, California 93274  
559.688.5263  
[www.laneengineers.com](http://www.laneengineers.com)

DRAWN BY: T.C.  
PROJECT ENGR: J.A.  
DATE: OCTOBER 2025  
PROJECT: XXXXXX-XXXX

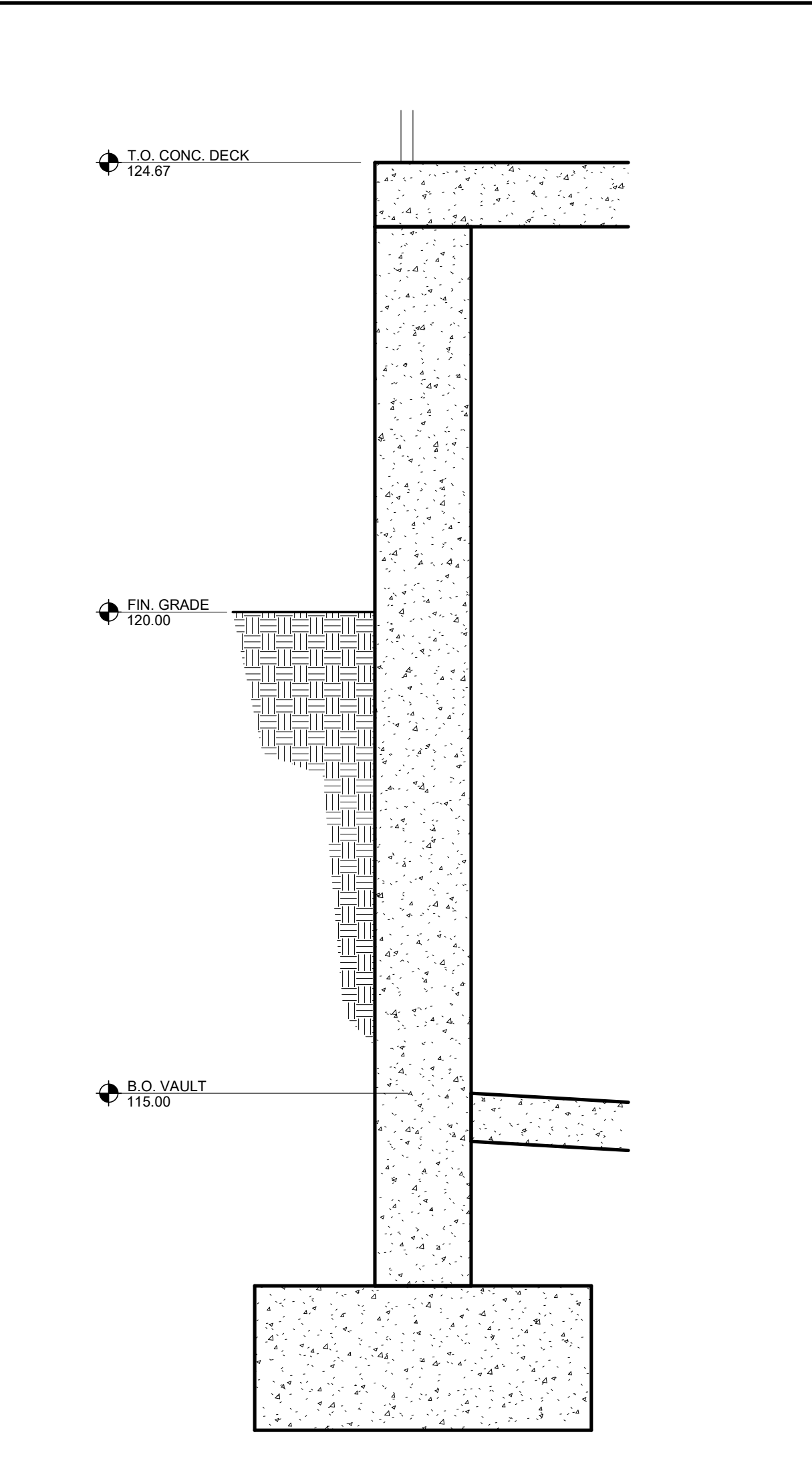
**BIRP BACKWASH DESIGN**  
**STRUCTURAL**  
**SLUDGE HOLDING TANK - FLOOR AND FOUNDATION PLAN**  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSION ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	<b>S3.1</b>

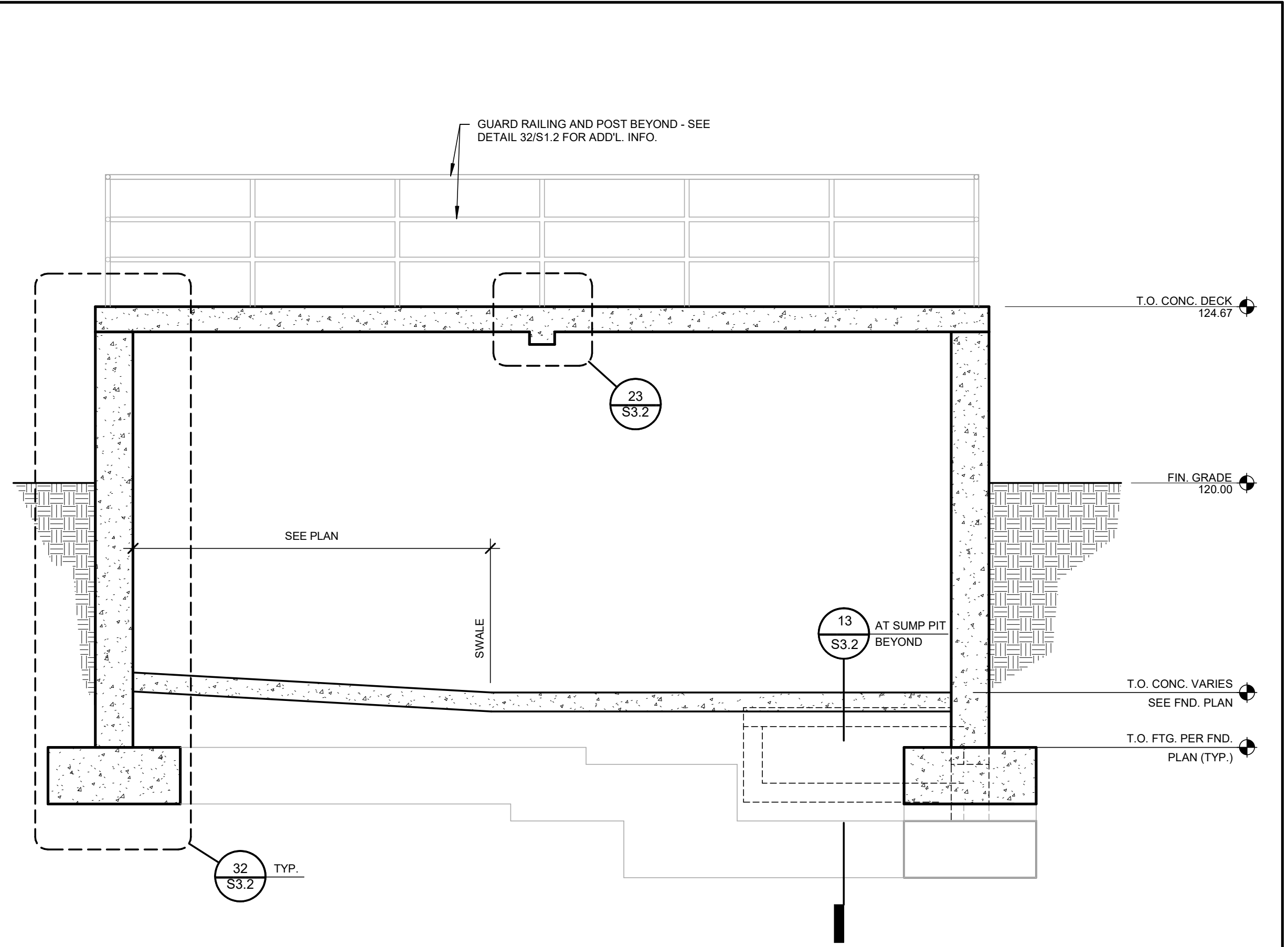
LANE PROJECT NO. 23311



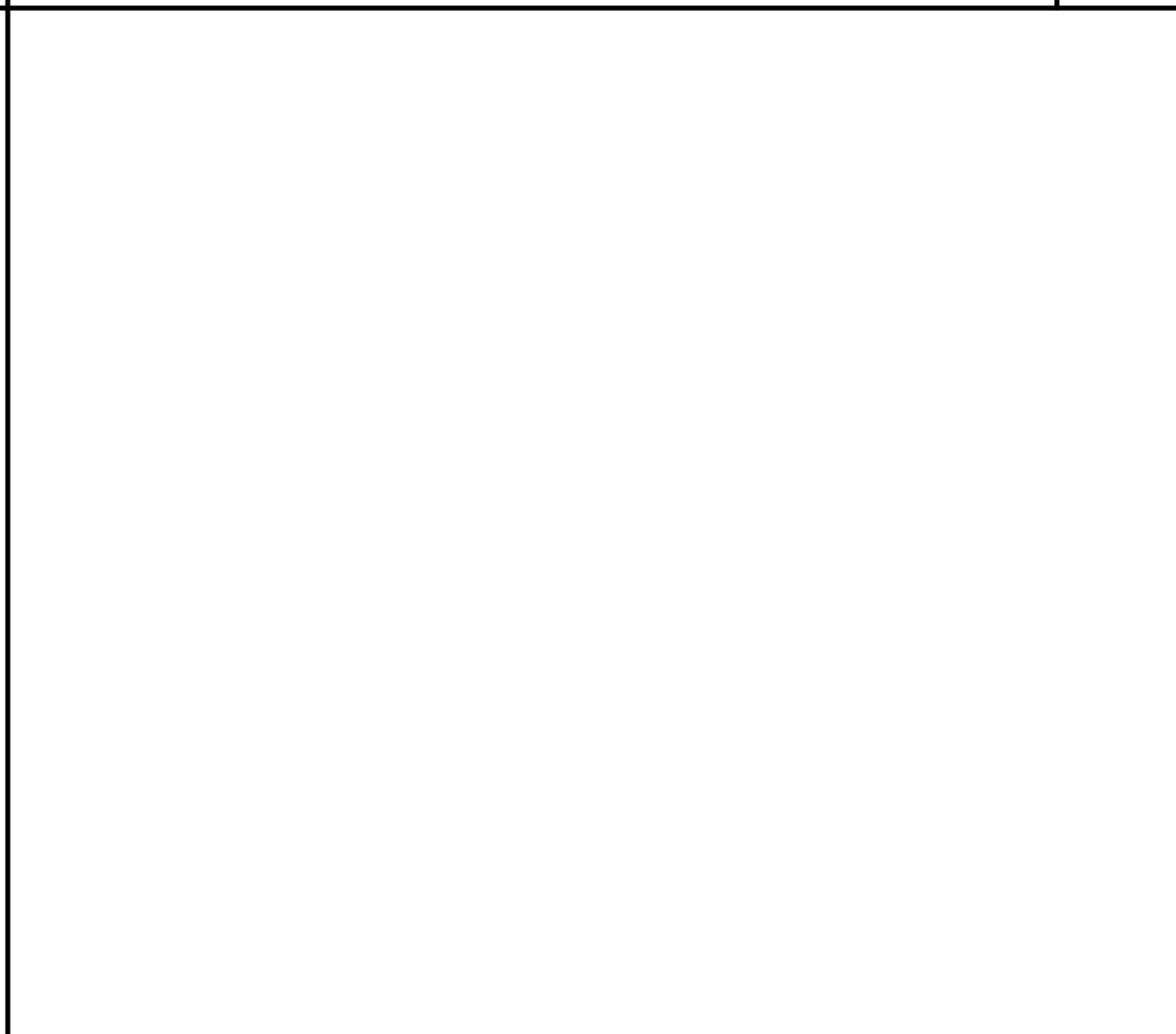
SECTION AT STAIRS 1/2" = 1'-0" 41



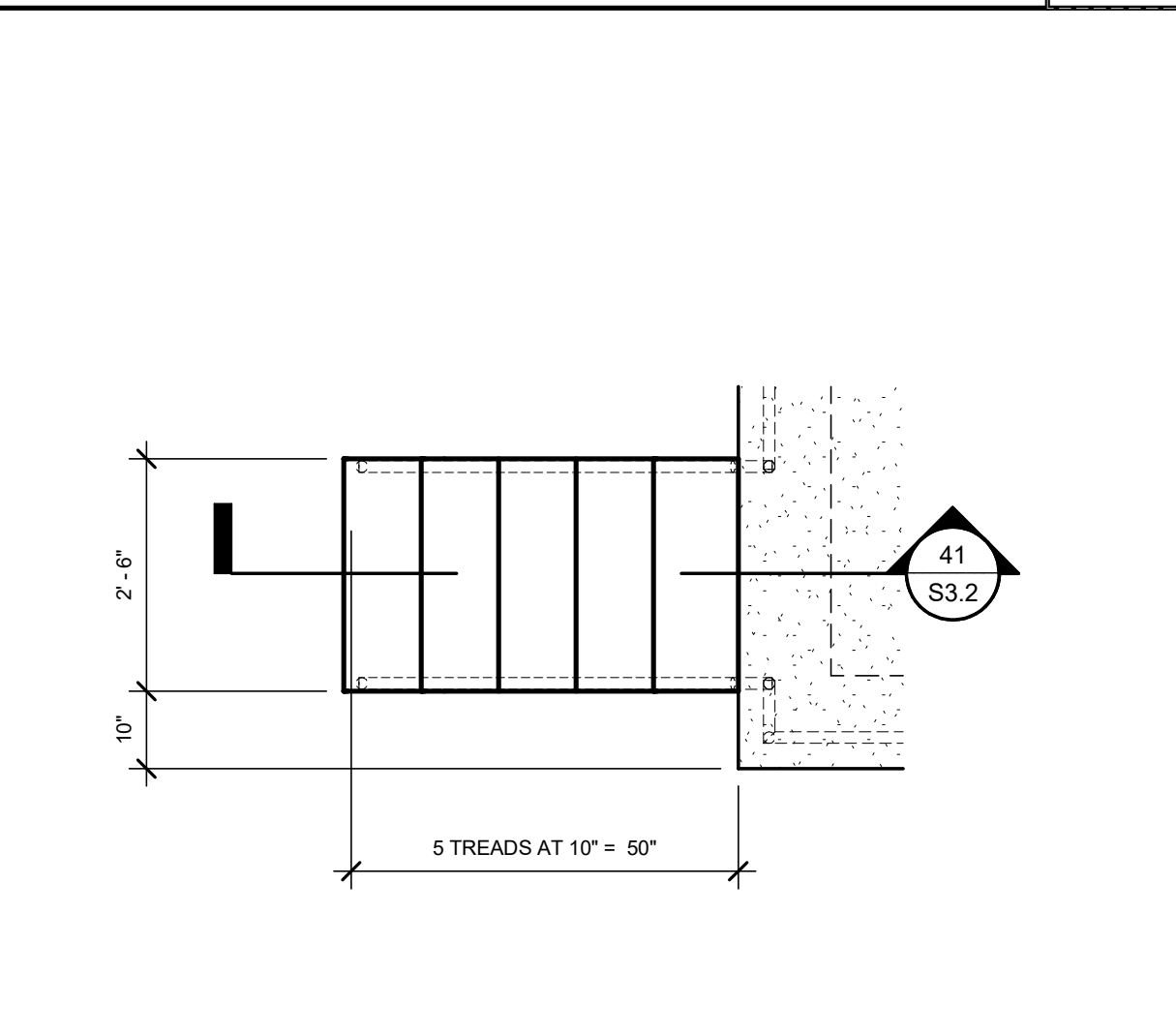
WALL SECTION 3/4" = 1'-0" 32



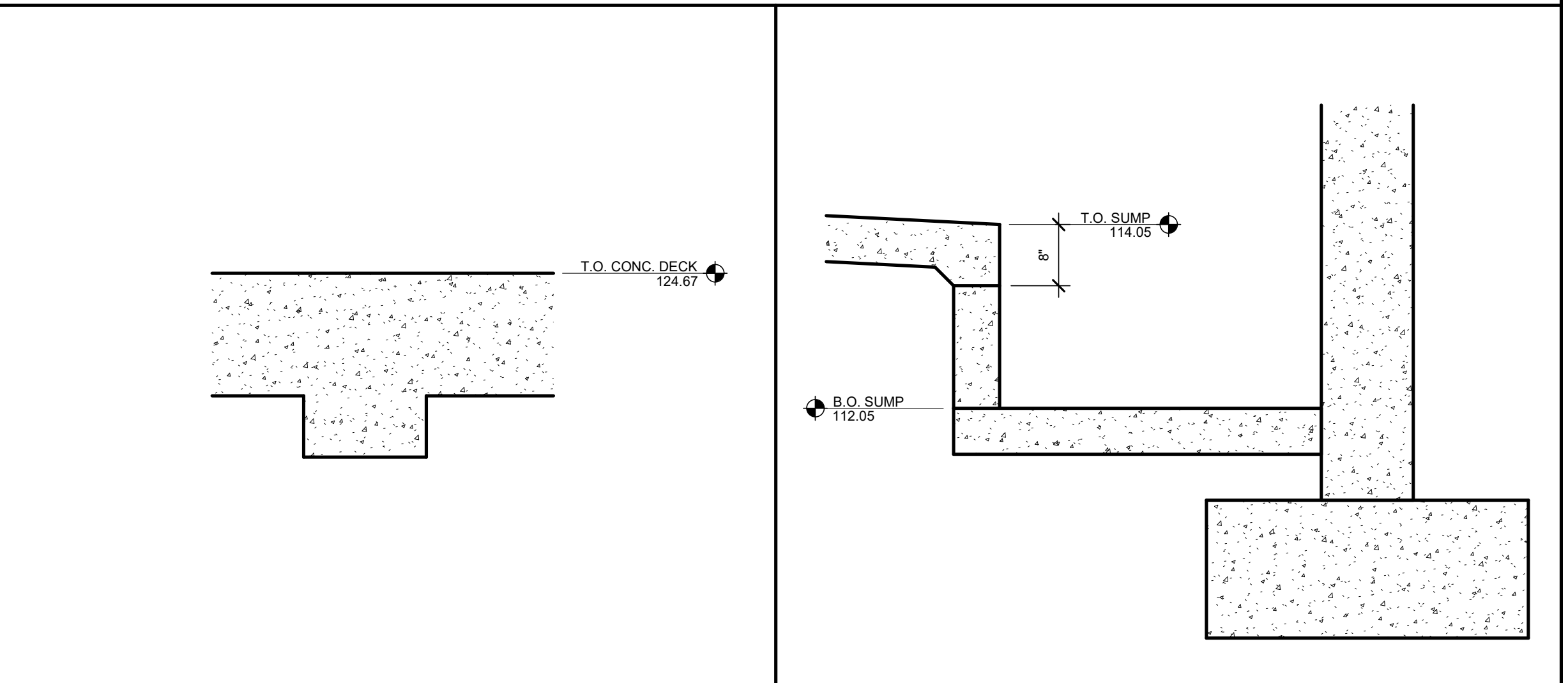
SECTION A 3/8" = 1'-0"



PLAN AT STAIRS 1/2" = 1'-0" 33



SECTION AT CONC. BEAM 1 1/2" = 1'-0" 23



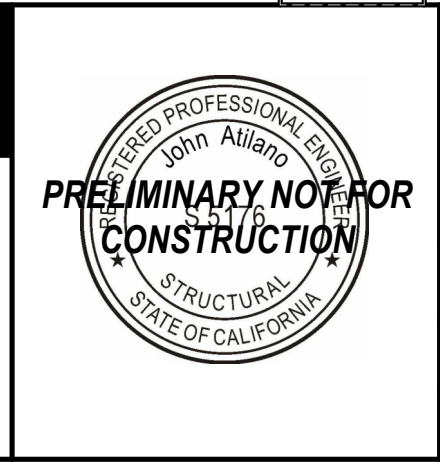
SECTION AT SUMP PIT 3/4" = 1'-0" 13



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DRAWN BY: T.C.  
PROJECT ENGR: J.A.

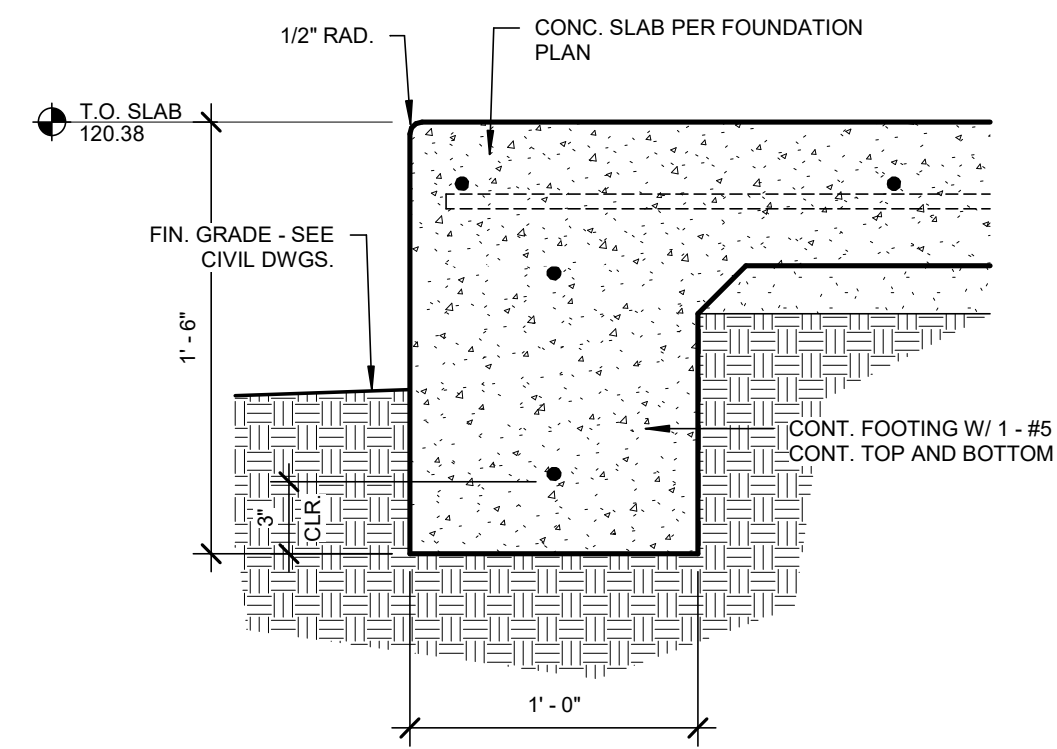
DATE: OCTOBER 2025

PROJECT: XXXXXX-XXXX

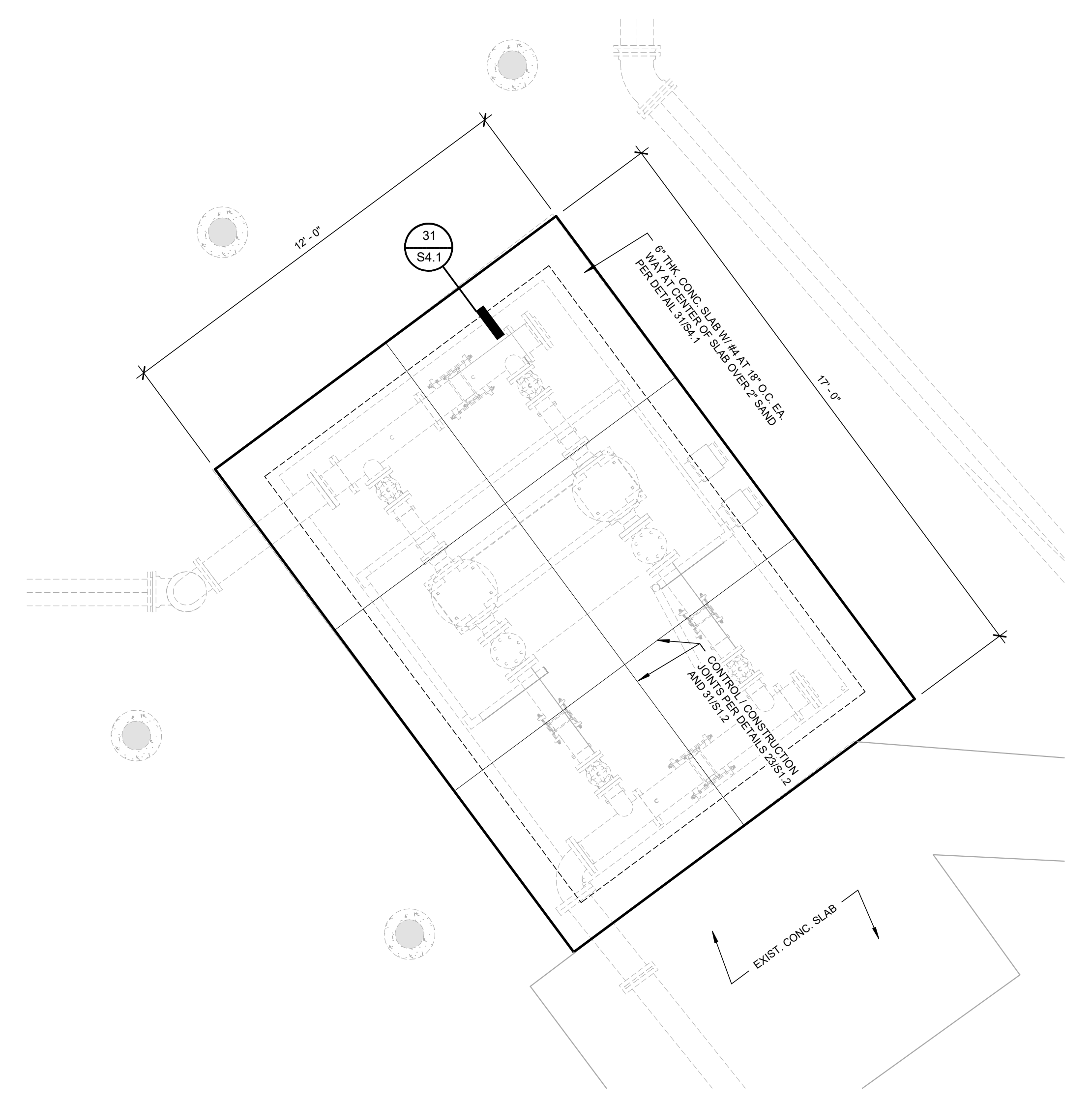
BIRP BACKWASH DESIGN  
STRUCTURAL  
SLUDGE HOLDING TANK - SECTION AND DETAILS  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO. COASTAL DIVISION  
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES 90% SUBMITTAL

USE DIMENSION ONLY SCALE AS NOTED  
**S3.2**  
LANE PROJECT NO. 23311



EDGE OF SLAB 1 1/2" = 1'-0" 31



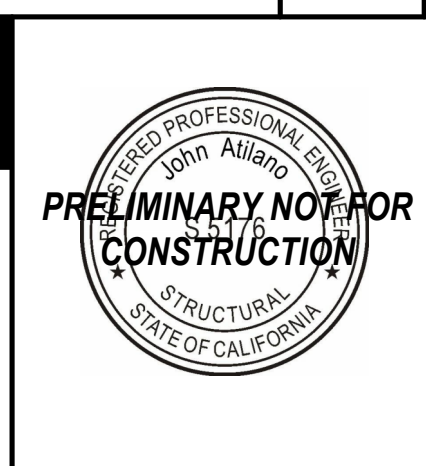
FOUNDATION PLAN  
3/8" = 1'-0" NORTH



REVISIONS		REVISIONS	
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DRAWN BY: T.C.  
PROJECT ENGR: J.A.

DATE OCTOBER 2025

PROJECT XXXXXX-XXXX

BIRP BACKWASH DESIGN  
STRUCTURAL  
DECANT PUMP STATION - FOUNDATION PLAN AND DETAILS  
9210 CARMEL VALLEY ROAD CARMEL, CA 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSION ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	90% SUBMITTAL	<b>S4.1</b>

LANE PROJECT NO. 23311

# MONTEREY DISTRICT BEGONIA IRON REMOVAL PLANT BACKWASH WASTE DESIGN ELECTRICAL

## GENERAL ELECTRICAL NOTES

1. ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (2020), FEDERAL, STATE (2022 CALIFORNIA ELECTRICAL CODE) AND LOCAL JURISDICTION CODES.
2. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
3. VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES CAUSED AS A RESULT OF HIS WORK. CALL 1-800-227-2600 FOR BLUE STAKES. IRRIGATION LINES LESS THAN 2" WILL NOT BE MARKED AND SHALL BE REPAIRED IN KIND BY THE CONTRACTOR.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
7. ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
8. CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
9. PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
10. LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
11. IT IS THE OBLIGATION OF THE CONTRACTOR TO ORGANIZE HIS WORK SO THAT A COMPLETE ELECTRICAL, INSTRUMENTATION, AND/OR CONTROL SYSTEM FOR THE FACILITY WILL BE PROVIDED AND SUPPORTED BY ACCURATE SHOP AND RECORD DRAWINGS, AND ALL O & M MANUALS.
12. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
13. PROVIDE RMC OR IMC FOR INDOOR AND OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30. USE PVC COATED RMC OR IN CORROSIVE ENVIRONMENTS. EMT IS NOT ALLOWED ON THIS PROJECT.
14. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
15. ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE: XHHW-2 (75 DEGREE C). MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT.
16. A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY PER NEC CODE.
17. WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDED CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
18. BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
19. CONTRACTOR SHALL PLAN AND INSTALL WORK IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.
20. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
21. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
22. ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
23. ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
24. WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT WALKS. ASPHALT WALKS SHALL BE REPLACED IN KIND.
25. CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXPECTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR

REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.

26. CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32-INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4-INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF-TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
27. ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
28. CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDERS AND BRANCH CIRCUIT WIRING. CONTRACTOR SHALL INSURE LOW IMPEDANCE GROUND PATH SYSTEM.
29. CONTRACTOR SHALL PERFORM HIGH POTENTIAL (HIPOT) TESTING WHEN REQUIRED BY LOCAL JURISDICTION OR OWNER.
30. CONTRACTOR SHALL PROVIDE A GROUND-FAULT COORDINATION STUDY AND PERFORM RECOMMENDED SETTINGS ON OVERCURRENT PROTECTION DEVICES, AS NEEDED OR WHEN REQUIRED BY LOCAL JURISDICTION OR OWNER. PROVIDE LABELS ON EQUIPMENT INDICATING SETTINGS.
31. CONTRACTOR SHALL PROVIDE AN ARC-FLASH STUDY WHEN REQUIRED BY LOCAL JURISDICTION OR OWNER. PROVIDE ALL APPLICABLE LABELS ON EQUIPMENT AFTER STUDY IS COMPLETED.
32. ALL CONDUIT AND J-BOXES SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT AND J-BOXES MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
33. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
34. ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURES RECOMMENDATIONS AND U.L. APPROVAL.
35. ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
36. FULL LOAD AMPS (FLA) SIZES, AS NOTED IN THESE DRAWINGS, ARE BASED ON SPECIFIED EQUIPMENT DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIPMENT SUPPLIED AND COORDINATE ACCORDINGLY PER EQUIPMENT SUPPLIERS RECOMMENDATIONS.
37. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R OR NEMA-4 ENCLOSURES.
38. CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A PLIABLE SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
39. CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
40. INSTALL FIRE SEALS IN ALL CONDUITS PENETRATING THE FIRE WALL TO MAINTAIN THE FIRE RESISTANCE RATING OF THE WALL, AS REQUIRED BY NEC 300.21.
41. ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR INLINE FUSING, PROVIDE 5A FUSING IN FUSEHOLDER.
42. PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
43. MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
44. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER-RESISTANT TYPE. ALL WEATHERPROOF WHILE IN-USE RECEPTACLE COVERS SHALL BE METAL.
45. SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: 1) LIGHT FIXTURES, 2) POLES, 3) POLE BASES, 4) SERVICE ENTRANCE SECTION, 5) ELECTRICAL EQUIPMENT, 6) DISCONNECT SWITCHES, 7) TIME CLOCKS AND OTHER CONTROLS, 8) LIGHTING CONTACTORS AND 9) PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
46. THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.
47. ALL SPORTS LIGHTING FIXTURES SHALL BE EQUIPPED WITH AN EXTERNAL GLARE SHIELD.
48. ALL FIXTURES AND CROSS ARMS SHALL BE MANUFACTURED AND FACTORY AIMED BY A SINGLE MANUFACTURER.

## ELECTRICAL ENGINEER

WRIGHT ENGINEERING CORPORATION  
165 EAST CHILTON DRIVE  
CHANDLER, AZ 85225  
PHONE: (480) 497-5829  
CONTACT: JACOB BIELEFELDT  
EMAIL: JBIELEFELDT@WRIGHTENGINEERING.US



REVISIONS		REVISIONS	
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Phone: (831) 200-9093  
Website: <http://www.valentineengineers.com>

W. WILLIAMS

CA LICENSED PROFESSIONAL ENGINEER  
NO. C 35943 DATE: -/-/-

VALENTINE ENVIRONMENTAL ENGINEERS, LLC  
200 CLOCK TOWER PLACE BUILDING B  
SUITE B200, CARMEL, CA 93923

DRAWN BY: C. KASTER  
PROJECT ENG'R: J. BIELEFELDT

DATE: OCTOBER 2025

PROJECT: XXXXXX-XXXX

BIRP BACKWASH SYSTEM DESIGN  
ELECTRICAL  
COVER SHEET  
9210 CARMEL VALLEY ROAD CARMEL CA, 93923

CALIFORNIA AMERICAN WATER CO.	COASTAL DIVISION	USE DIMENSIONS ONLY SCALE: NONE
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	PRELIMINARY	XXXXXX-XXXX-E1.1

Underground Service Alert of Southern California

Call: TOLL FREE 1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

Project Number: 25059



## MEMORANDUM

**To:** Jade Mason (Project Planner)  
Monterey County

**From:** Samantha Terrell, PE  
Teresa Valentine, PE  
Valentine Environmental Engineers, LLC

**RE:** PLN250272 BIRP Backwash – Stream Setback

**Date:** November 5, 2025

This memorandum is in response to the application checklist, which states the following.

<b>X</b>	<p><b>Stream Setback Plan / Floodplain Report</b> – a stream setback plan, with cross-sections, prepared by a licensed land surveyor or civil engineer, showing that the proposed development is <b>setback at least 200 feet</b> from the watercourse "top of the bank", as defined in Monterey County Code Chapter 16.16. If the setback requirement cannot be met, the applicant shall submit a report, with supporting data and calculations, prepared by a licensed geologist or civil engineer, certifying that the development is compliant with Monterey County Code Chapter 16.16. If the project is within the Carmel Valley River floodplain, it shall also include information necessary to demonstrate consistency with the regulations for land use in the Carmel Valley Flood Plain, Monterey County Code section 21.64.130. The report shall information necessary to demonstrate:</p> <ul style="list-style-type: none"> <li>•The proposed development will not significantly reduce the capacity of existing rivers or watercourses or otherwise adversely affect any other properties by increasing stream velocities or depths, or diverting the flow;</li> <li>•The proposed new development will be safe from flow related erosion and will not cause flow related erosion hazards or otherwise aggravate flow related erosion hazards; and</li> <li>•If the channel is proposed to be altered, that the flood carrying capacity of the altered or relocated portion of the river or watercourse is maintained</li> </ul> <p><b>Required:</b> within the riparian corridor, within two 200 feet of the river bank, or within a floodplain.</p>
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The “Rivers and Waterbodies” County GIS layer was reviewed, which is assumed to represent approximate top of bank Carmel River limits. As shown within the attached figure, the proposed project is located between 370 and 500 feet from the top of the river bank of the Carmel River, but is located within the 100-year floodplain of the Carmel River. The proposed development consists of the installation of above ground water storage tanks and associated water infrastructure, consistent with existing operations of the proposed project site. The proposed development will not reduce the capacity of existing rivers or watercourses or otherwise adversely affect any other

properties by increasing stream velocities or depths, or diverting flow. Additionally, the proposed development will be safe from flow related erosion and will not cause flow related erosion hazards or otherwise aggravate flow related erosion hazards. The proposed project has been designed so that all structures and utilities shall be located and constructed so as to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into the flood waters.

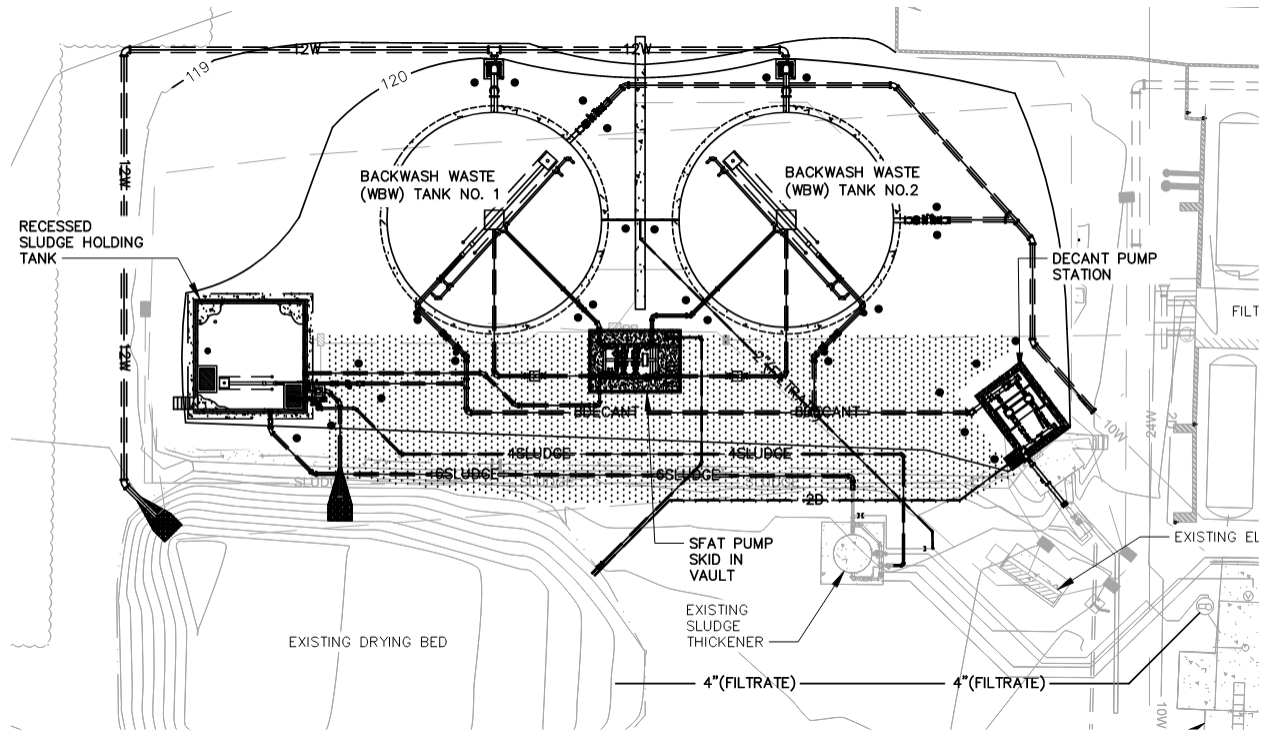


Carmel River (as plotted in Monterey County GIS "Rivers and Waterbodies" - Oct 2025)

Distances from Carmel River  
a > 370 feet  
b > 500 feet

## Construction Management Plan

### BIRP Backwash System Project



**Project Location:** 9210 Carmel Valley Road, Carmel Ca 93923

Prepared By Sean Summers

## **Construction Management Plan**

### **Project Description**

Project scope of work includes equipping the Begonia Iron Removal Plant (BIRP) with an enclosed tank backwash waste system to replace the existing backwash waste pond system. The project will involve removing/filling two of the existing ponds and adding two new backwash waste storage tanks, a sludge holding tank and installing decanting equipment and decant pump station, sludge fluidizing and transfer equipment in a concrete vault and piping to facilitate the backwash waste operations. The Owner for this project is California American Water (CalAm).

### **Site Management**

Covenant Technical Solutions (CTS) will be the onsite contractor responsible for the construction of the new facilities, including direct construction, material procurement, and oversight of specialized subcontractors. CTS will have onsite supervision throughout the project period, and will coordinate all activities with CalAm to minimize operational and public disruptions.

In order to minimize project timeframe and public inconvenience, the project Team will execute early out packages for long lead time items, allowing for a more condensed construction schedule.

### **Key Personnel:**

<b>Personnel</b>	<b>Company</b>	<b>Contact</b>	<b>Email</b>
Owner Representative- Scott Ottmar	California American Water	831-737-5505	Scott.ottmar@amwater.com
Engineer of Record- Teresa Valentine, P.E.	Valentine Engineers	480-283-8991	tvalentine@valentineengineers.com
VP Operations/Project Manager- Sean Summers	Covenant Technical Solutions, Inc.	415-350-3219	ssummers@covenanttechnical.com
Superintendent- Francisco Rodriguez	Covenant Technical Solutions, Inc.	702-217-4615	frodriguez@covenanttechnical.com
Foreman- Danny Andrade	Covenant Technical Solutions, Inc.	831-676-1475	dandrade@covenanttechnical.com

## Construction Management Plan

### **Project Operations**

Excavations	Backfill and Compaction
On and offsite material hauling	Setting/Maintaining BMP's
Aerial Lifting heavy Equipment	Concrete Placement
Pipe positioning	Cutting and Grinding
Minor Traffic Control	Working Around Existing Utilities
Shoring	Electrical
Lockout/tag out	Pressure Testing

### **Anticipated Project Equipment**

<b>Equipment</b>	<b>Activity</b>
305 Excavator	Trenching, Pipe Installation, misc site work
325 Excavator	Settling Pond Earthwork, Structure Excavation
D6 Dozer	Settling Pond Earthwork
CP44 Compactor	Settling Pond Earthwork
420 Backhoe	Pipe Install, above grade equipment install
Foreman Trucks (2500 Diesel)	All Activities

Note: All equipment utilized onsite will be Tier 4 emissions compliant

### **Anticipated Vehicle/ Truck Trips per day:**

During the course of construction, standard vehicle trips per day will be minimized to approximately 2 foreman truck trips (2500 Diesel) and onsite equipment use, with 2 ten-wheeler trucks hauling material for trench/excavation activities once per week. Trenching and excavation for structure activities are anticipated for roughly 3 months of the schedule.

Outside of the trenching activities minimal ten-wheeler truck trips are anticipated, with work confined to the project site.

During earthwork operations for backfilling of existing ponds, approximately 12 ten-wheeler trucks will be used per day to import 4,125CY of structural backfill material. This would be performed over roughly 12 days of work for filling of pond 1 and 3 in.

## **Construction Management Plan**

### **Site Work Hours:**

Monday through Friday, 8am-5pm

### **Anticipated Project Schedule**

Please see attached overview schedule for the project in Exhibit D. Start of Construction is anticipated in January of 2026, with Completion in April of 2027.

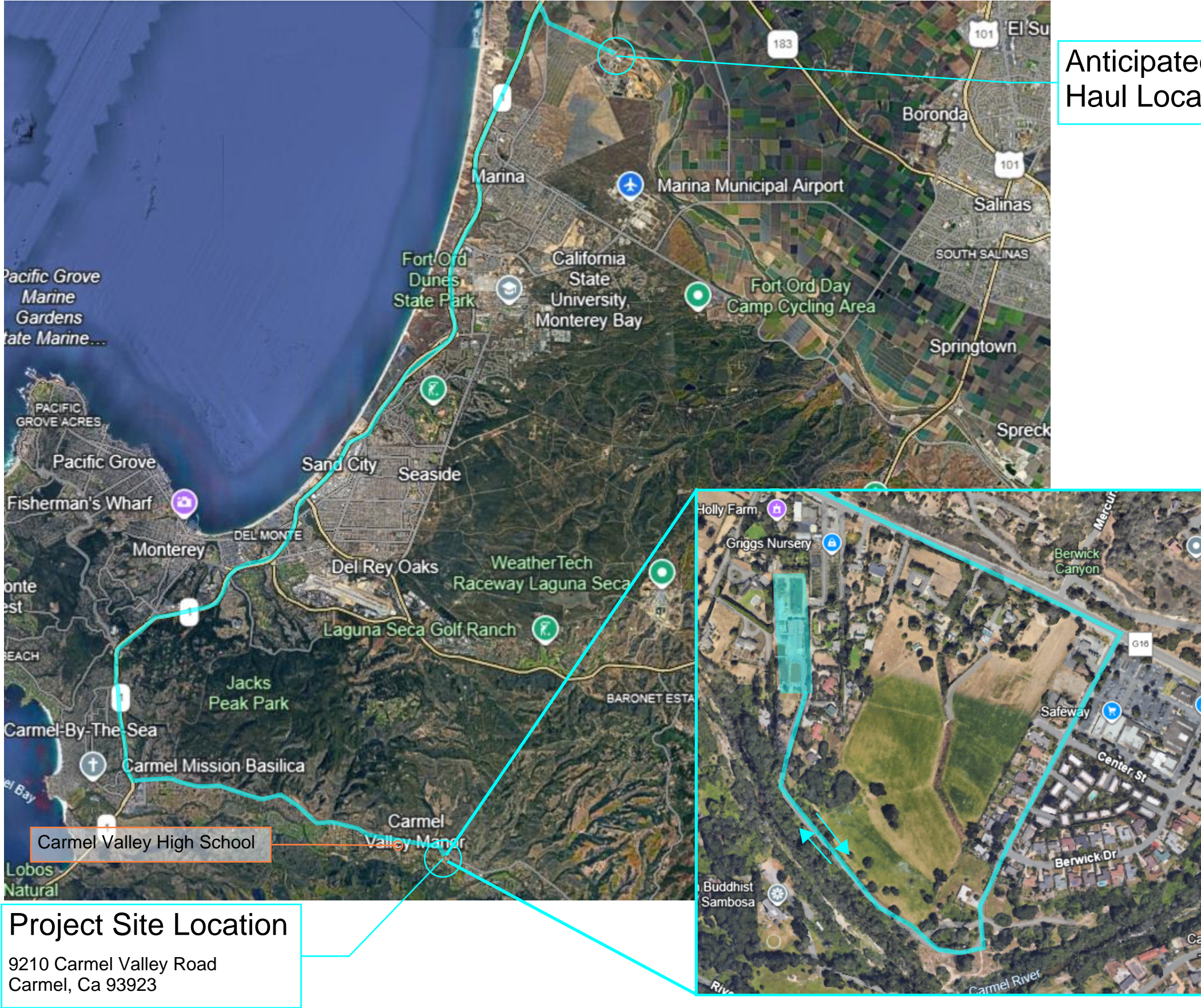
### **Site Details**

Please see attached Exhibits for Location Map (Exhibit A), Haul Route and Sensitive Receptors (Exhibit B), and project stockpiles and parking (Exhibit C).

# Exhibit A Project Location Map



# Exhibit B Haul Route and Sensitive Receptors



Anticipated Material Haul Location

Carmel Valley High School

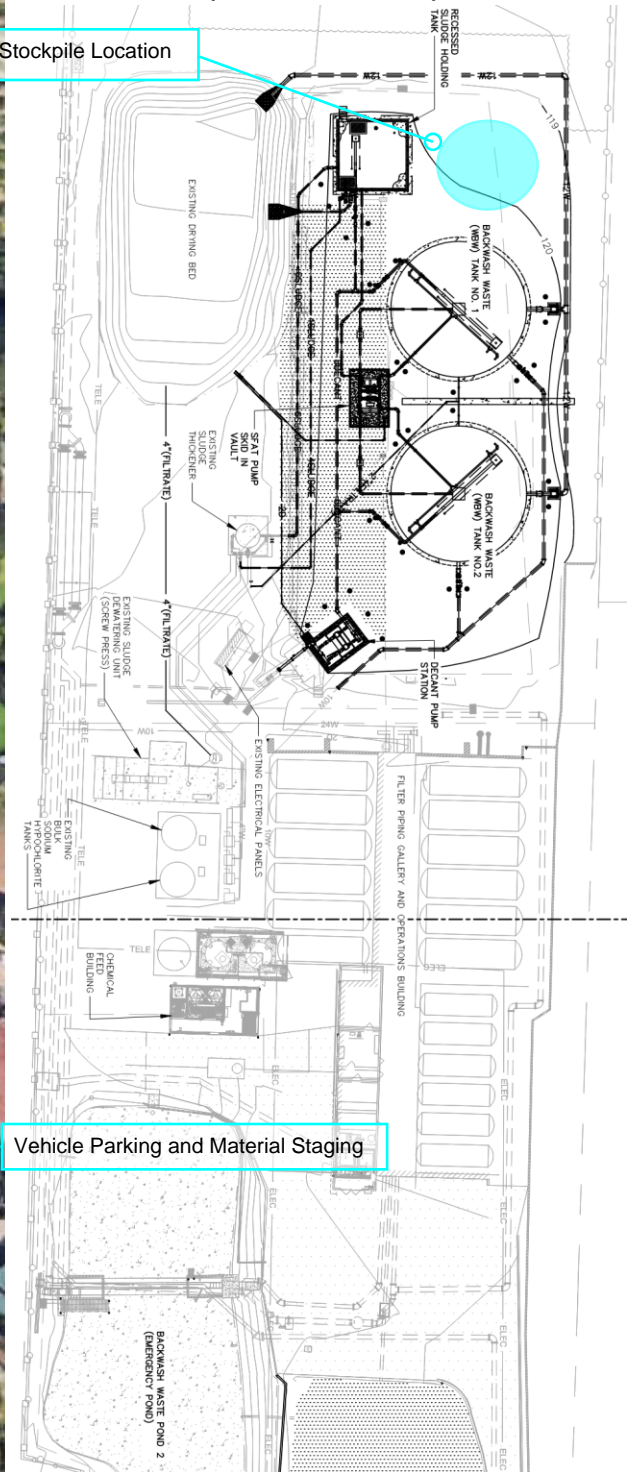
**Project Site Location**  
9210 Carmel Valley Road  
Carmel, Ca 93923

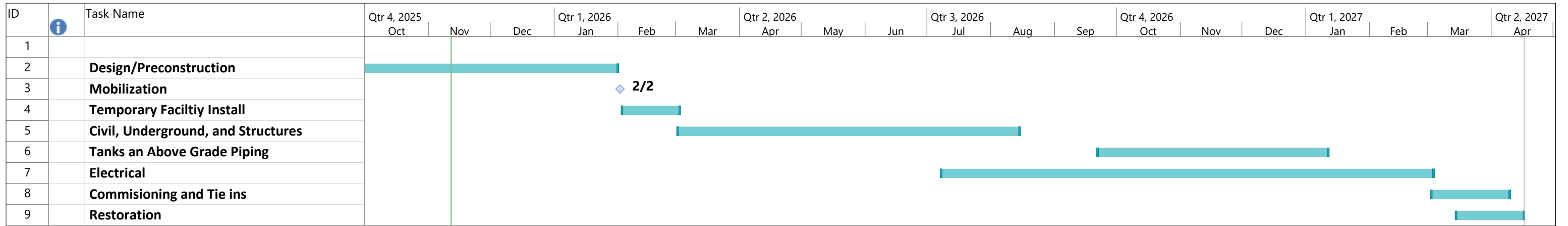
# Exhibit C Parking and Stockpile Locations

Existing Condition Map



Improvements Map





## Exhibit D High Level Project Schedule

Project: High Level Schedule Date: Wed 11/12/25	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

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