



Florida Department of Environmental Protection

Northwest District Office
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Permittee/Authorized Entity:

City of Panama City
c/o Dale Cronwell
9 Harrison Avenue
Panama City, Florida 32401, Bay County
dcronwell@pcgov.org

City of Panama City Snug Harbor Boat Launch

Authorized Agent:

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Dewberry
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Environmental Resource Permit State-owned Submerged Lands Authorization – Granted

U.S. Army Corps of Engineers Authorization – Separate Corps Authorization Required

Bay County
Permit No.: 0358573-001-EI/03

Permit Issuance Date: May 11, 2018
Permit Construction Phase Expiration Date: May 11, 2023

Consolidated Environmental Resource Permit and Sovereignty Submerged Lands Authorization

Permittee: City of Panama City

Permit No: 0358573-001-EI/03

PROJECT LOCATION

The activities authorized by this permit and sovereignty submerged lands authorization are located at 1800 Highway 98 Business East and 411 Maple Avenue, Panama City, Florida 32401, Parcel IDs [22308-000-000](#) and [22306-000-000](#) in Section 10, Township 04 South, Range 14 West in Bay County, at Latitude 30°09'22.16" / Longitude 85°38'12.82".

PROJECT DESCRIPTION

The permittee is authorized to reconfigure a 43-slip commercial marina into a public boat ramp facility. The project includes the removal of existing marina structures, replacement of an existing dilapidated seawall, new riprap shoreline stabilization along the western shore of the basin, two (2) boat ramps, one dock on either side of the ramps, fixed and floating marginal docks, boat trailer parking spaces, regular parking spaces with two (2) being designated as handicap, trailer wash-down area, and stormwater infrastructure within the landward extent of Watson Bayou, a Class III Florida Waterbody. The project also includes filling approximately 210 square feet of low quality fringe wetlands and dredging approximately 44 cubic yards of material from the project area which will be disposed of at a Class I Lined Landfill.

There are two proposed stormwater management facilities (SWMF), one is a sediment basin and the other is a detention facility with filtration. The sediment basin is being designed as a wet pond and is solely used for the stormwater coming from the FDOT ROW (East Business Highway 98). The detention facility with filtration will capture and treat the stormwater runoff from the entire parking lot. Both SWMFs will discharge directly to Watson Bayou.

Authorized activities are depicted on the attached exhibits.

AUTHORIZATIONS

City of Panama City - Snug Harbor Boat Launch

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

Sovereignty Submerged Lands Authorization

The activity is located on sovereignty submerged lands owned by the State of Florida. It therefore also requires authorization from the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Section 253.77, F.S. and Chapter 258, F.S.

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) under Sections 253.002, F.S., the Department has determined that the activity qualifies for and requires a Letter of Consent, as long as the work performed is located within the boundaries as described and is consistent with the terms and conditions herein.

During the term of this Letter of Consent you shall maintain satisfactory evidence of sufficient upland interest as required by paragraph 18-21.004(3)(b), F.A.C. If such interest is terminated or the Board of Trustees determines that such interest did not exist on the date of issuance of this Letter of Consent, this Letter of Consent may be terminated by the Board of Trustees at its sole option. If the Board of Trustees terminates this Letter of Consent, you agree not to assert a claim or defense against the Board of Trustees arising out of this Letter of Consent.

Federal Authorization

Your proposed activity as outlined on your application and attached drawings **does not qualify** for federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the U.S. Army Corps of Engineers (Corps). You must apply separately to the Corps using the federal application form (ENG 4345). More information about Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook. **Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.**

Authority for review – an agreement with the Corps entitled “Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit,” Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida’s Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT / SOVEREIGNTY SUBMERGED LANDS CONDITIONS

The activities described must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The General Conditions for Sovereignty Submerged Lands Authorization**
- **The Special Consent Conditions**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action. Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit and sovereignty submerged lands authorization, as described.

SPECIFIC CONDITIONS – ADMINISTRATIVE/EMERGENCIES

1. The permittee shall be responsible for keeping records documenting that relevant permit conditions are met. This documentation shall include, at a minimum, the date of each inspection, the name and qualifications of the inspector, any maintenance actions taken, and a determination by the inspector as to whether the system is operating as intended. Inspection documentation must be readily available and shall be provided at the Department's request. Submittal of the inspection documentation to the Department is not required.
2. Within 30 days of any failure of a stormwater management system or deviation from the permit, a report shall be submitted to the Department on Form 62-330.311(1), Operation and Maintenance Inspection Certification, describing the remedial actions taken to resolve the failure of deviation. This report shall be signed and sealed by a registered professional.
3. For emergencies involving a serious threat to the public health, safety, welfare, or environment, the emergency telephone contact number is 800-320-0519 (State Warning Point). The Department telephone number for reporting nonthreatening problems or system malfunctions is (850) 595-0663, day or night.
4. The mailing address for submittal of forms for the "Construction Commencement Notice", "As Built Certification ...", "Request for Conversion of Stormwater Management Permit Construction Phase to Operation and Maintenance Phase", or other correspondence is FDEP, SLERP, 160 W. Government Street, Pensacola, Florida, 32502.

SPECIFIC CONDITIONS – PRIOR TO ANY CONSTRUCTION

5. A double row of floating turbidity curtains with weighted skirts that extend to within 1 ft. of the bottom shall be placed around the dredge/spoil transfer operations location prior to the initiation of work authorized by this permit. The screens shall be maintained and remain in place for the duration of the work to ensure turbidity levels outside the construction area do not exceed 29 NTU's above background levels. The permittee shall be responsible for inspecting and

maintaining turbidity control devices so no violations of state water quality standards outside of the turbidity screens occurs.

6. Best management practices for erosion control shall be implemented prior to construction activities and maintained at all times during construction to prevent siltation and turbid discharges into adjacent wetlands. Methods shall include, but are not limited to the use of staked hay bales, staked filter cloth, sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project site. Erosion control methods shall be implemented as described and shown in the attached permit drawings. The permittee shall be responsible for ensuring that erosion control devices/procedures are inspected and maintained daily during all stages of construction authorized by this permit until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

7. If the approved permit drawings conflict with the specific conditions, then the specific conditions shall prevail.

8. This permit does not authorize the construction of any additional structures or dredging or filling of wetlands not illustrated on the permit drawings.

9. The construction phase expires at 11:59 p.m. on the date indicated on the cover page of this permit, unless an application for extension is received and approved pursuant to Rule 62-330.320, F.A.C. If construction of the stormwater management system authorized by this environmental resource permit has not been completed and continued use of the system formally transferred to the operating phase before the expiration date of the permit, or an authorized extension, then at least 60 days before such expiration date, the permittee shall apply for another individual stormwater permit, using the forms and accompanied by the fee required by rules in effect at that time.

10. Erosion controls shall remain in place until the filled area has sufficient vegetative coverage to ensure stability and prevent erosion into the surrounding wetlands or surface waters. Grass seed and mulch or sod shall be installed and maintained on all exposed slopes and disturbed soil areas within 48 hours of completing final grade, and at any other time as necessary, to prevent erosion, sedimentation, or turbid discharges into adjacent wetlands. A vegetative cover that stabilizes and prevents erosion of the fill material shall be established within 60 days of sodding or seeding. Upon establishment of a substantial vegetative cover, all erosion control devices shall be removed.

11. The seawall shall be fully constructed as shown on the attached permit drawings prior to the placement of backfill material. Fill material used behind the seawall and boat ramp shall be clean fill and free of vegetative matter, trash, garbage, toxic or hazardous waste or other unsuitable materials.

12. The seawall shall be constructed in accordance with the distances from fixed landmarks as shown on the attached permit drawings.

13. "Riprap" shall consist of unconsolidated boulders, rocks, or clean concrete rubble with no exposed reinforcing rods or similar protrusions. The riprap shall be free of sediment, debris and toxins or otherwise deleterious substances. Riprap shall have a diameter of at least 12 inches to 3 feet.

14. The slope of the riprap shall be no steeper than 2:1 (Horizontal/Vertical) and the distance the riprap extends waterward from the MHWL shall be no more than ten (10) feet.
15. Dredging within waters of the State for the purpose of providing backfill is prohibited.
16. The permittee shall be responsible for ensuring that erosion control devices/procedures are inspected and maintained daily during all phases of construction authorized by this permit until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.
17. If any construction de-watering is required, which results in an offsite discharge of groundwater, the permittee and/or the contractor shall ensure that the requirements of pertinent portions of Chapter 62-621, F.A.C. are met. Please contact Bill Evans, P.E., at 850-595-0584, for more information.
18. There shall be no storage or stockpiling of tools, materials (i.e. lumber, pilings, debris) within wetlands or elsewhere within waters of the state.
19. All wetland areas or water bodies which are outside the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring and/or dewatering. Turbidity/erosion controls shall be installed prior to any clearing, excavation or placement of fill material and shall be maintained in an effective condition at all locations until construction is completed and disturbed areas are stabilized. Staked filter cloth shall be positioned at the edge of the permitted fill slopes where they are adjacent to wetlands in order to prevent turbid run-off and erosion. The permittee shall be responsible for ensuring that erosion control devices/procedures are inspected/maintained daily during all phases of construction authorized by this permit. Once these conditions are met, the turbidity and erosion control devices shall be removed within 14 days. At no time shall there be any discharge in violation of the water quality standards in Chapter 62-302, Florida Administrative Code.
20. The following measures shall be taken by the permittee if turbidity levels within waters of the State, exceed 29 NTUs above background:
- a. Immediately cease all work contributing to the water quality violation.
 - b. Stabilize all exposed soils contributing to the violation, modify the work procedures that were responsible for the violation, install more turbidity containment devices and/or repair any non-functioning turbidity containment devices.
 - c. Notify the Submerged Lands and Environmental Resources Program at the time the violation is first detected.
21. The silt-fencing protecting the sand filter preventing migration of native soils into the surface of the filter, as shown on sheet C-6, should not be removed until the drainage basin has been stabilized.
22. The authorized stormwater management system shall be completed prior to or simultaneously with associated upland development.

23. Once project construction has been deemed complete, including the re-stabilization of all side slopes and other disturbed areas, and before the transfer to the Operation and Maintenance phase, all obsolete erosion control materials shall be removed.

SPECIFIC CONDITIONS – DREDGE ACTIVITIES

24. Dredging shall be limited to day light; no dredging activities are authorized to be conducted at night.

25. Areas to be dredged shall be mechanically dredged in accordance with the attached permit drawings and shall not exceed the areas and depths indicated on those drawings.

26. The dredge material shall be mechanically dredged and deposited directly into a water-tight container on the uplands. The spoil will be transferred to water-tight dump trucks for transfer to the disposal facility.

27. All spoil material shall be properly contained during operation within the project area as well as during transportation to the upland disposal facility in a manner that prevents return of the spoil material to wetlands and other surface waters.

28. All dredged material will be removed and disposed of at a Class I, lined landfill.

29. Within 30 days of disposal, weight tickets must be submitted to the Department for all dredged materials disposed of at an off-site municipal solid waste disposal facility.

SPECIFIC CONDITIONS – OPERATION AND MAINTENANCE ACTIVITIES

30. The stormwater management system shall be inspected by a registered professional to evaluate whether the system is functioning as designed and permitted. The registered professional may record his inspection on Form No. 62-330.311(1), Operation and Maintenance Inspection Certification or may provide his evaluation in any other format; how-ever any report must be signed and sealed by the registered professional. Submittal of the inspection report to the Department is not required; but the report shall be made available to the Department upon request. Inspections shall be made by the registered professional in accordance with this schedule:

For dry retention/wet detention:

- a. On the first anniversary of the date of conversion to Operation and Maintenance Phase.
- b. Every fifth year on the anniversary of conversion to Operation and Maintenance phase, after the first year of successful operation.

31. The Stormwater Operation and Maintenance Plan, as approved and enclosed with this permit, shall be implemented.

32. For Dry Retention/Wet Detention systems, Inspections by the Permittee:

- a. The stormwater system shall be inspected periodically for accumulation of debris and trash. Accumulations of debris and trash that negatively affect the function of the system shall be removed upon discovery.
- b. The stormwater system shall be inspected periodically for silt accumulation. Accumulations of silt that negatively affect the function of the system shall be removed.

33. All structures authorized by this permit shall remain in operable condition and shall not be allowed to deteriorate or otherwise contribute to a water quality violation for the life of the facility. All stormwater structures identified by this permit shall be maintained in proper working order for the life of the facility.

GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual* (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:

- a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex – “Construction Completion and Inspection Certification for Activities Associated with a Private Single-Family Dwelling Unit” [Form 62-330.310(3)]; or
 - b. For all other activities – “As-Built Certification and Request for Conversion to Operational Phase” [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
7. If the final operation and maintenance entity is a third party:
- a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as- built certification, the permittee shall submit “Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity” [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
9. This permit does not:
- a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
12. The permittee shall notify the Agency in writing:
- a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer

of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

SPECIAL CONSENT CONDITIONS

1. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

2. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

3. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

4. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

5. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

GENERAL CONDITIONS FOR SOVEREIGNTY SUBMERGED LANDS AUTHORIZATION

Any use of sovereignty submerged lands is subject to the following general conditions, which are binding upon the applicant and are enforceable under Chapter 253, F.S.

1. Sovereignty submerged lands may be used only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use will constitute a violation. Violation of the authorization will result in suspension or revocation of the applicant's use of the sovereignty submerged lands unless cured to the satisfaction of the Board of Trustees.

2. Authorization under Rule 18-21.005, F.A.C., conveys no title to sovereignty submerged lands or water column, nor does it constitute recognition or acknowledgment of any other person's title to such land or water.

3. Authorizations under Rule 18-21.005, F.A.C., may be modified, suspended or revoked in accordance with its terms or the remedies provided in Sections 253.04, F.S. and Chapter 18-14, F.A.C.

4. Structures or activities will be constructed and used to avoid or minimize adverse impacts to resources.

5. Construction, use, or operation of the structure or activity will not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.

6. Structures or activities will not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity will be modified in accordance with the court's decision.
7. Structures or activities will not create a navigational hazard.
8. Structures will be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional.
9. Structures or activities will be constructed, operated, and maintained solely for water dependent purposes.
10. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.
11. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.
12. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.
13. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.
14. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S. before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S. by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Thank you for applying to the Submerged Lands and Environmental Resource Permit Program. If you have any questions regarding this matter, please contact Wade Dandridge at the letterhead address, at 850-595-0655, or at Wade.Dandridge@dep.state.fl.us

EXECUTION AND CLERKING

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



For Kimberly R. Allen
Permitting Program Administrator

KA:wd

Attachments:

Project Construction Drawings, 28 pages
Stormwater Operation and Maintenance Plan, 1 page

Copies of 62-330 forms may be obtained at:
<http://www.dep.state.fl.us/water/wetlands/erp/forms.htm>

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

DEP Division of State Lands, Kathy.griffin@dep.state.fl.us
U.S. Army Corps of Engineers, andrew.a.kizlauskas@usace.army.mil
Bay County, lbrunson@baycountyfl.gov
Dale Cronwell, City of Panama City, dcronwell@pcgov.org
Jonathan Sklarski, Dewberry, jsklarski@dewberry.com
Cameron Morris, Dewberry, cmorris@dewberry.com

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Syed Shabbir A Rizvi, Ph.D.
Clerk

May 11, 2018
Date

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



CHAD HALL, P.E.
ELECTRICAL CONSULTANT
215 BILTMORE PL
PANAMA CITY BEACH, FL 32413
(850)819-4971 hallchad35@gmail.com
FL License # 65846

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JONATHAN SKLARSKI, P.E. 67361
EB 0008794

RELEASE:

PRELIMINARY
DOCUMENTS
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CONSTRUCTION

SCALE:
N.T.S.

DATE:
May 2018

DRAWN:
BWR

CHECKED:
RD

APPROVED:
JMS

NO. REVISION:

DATE

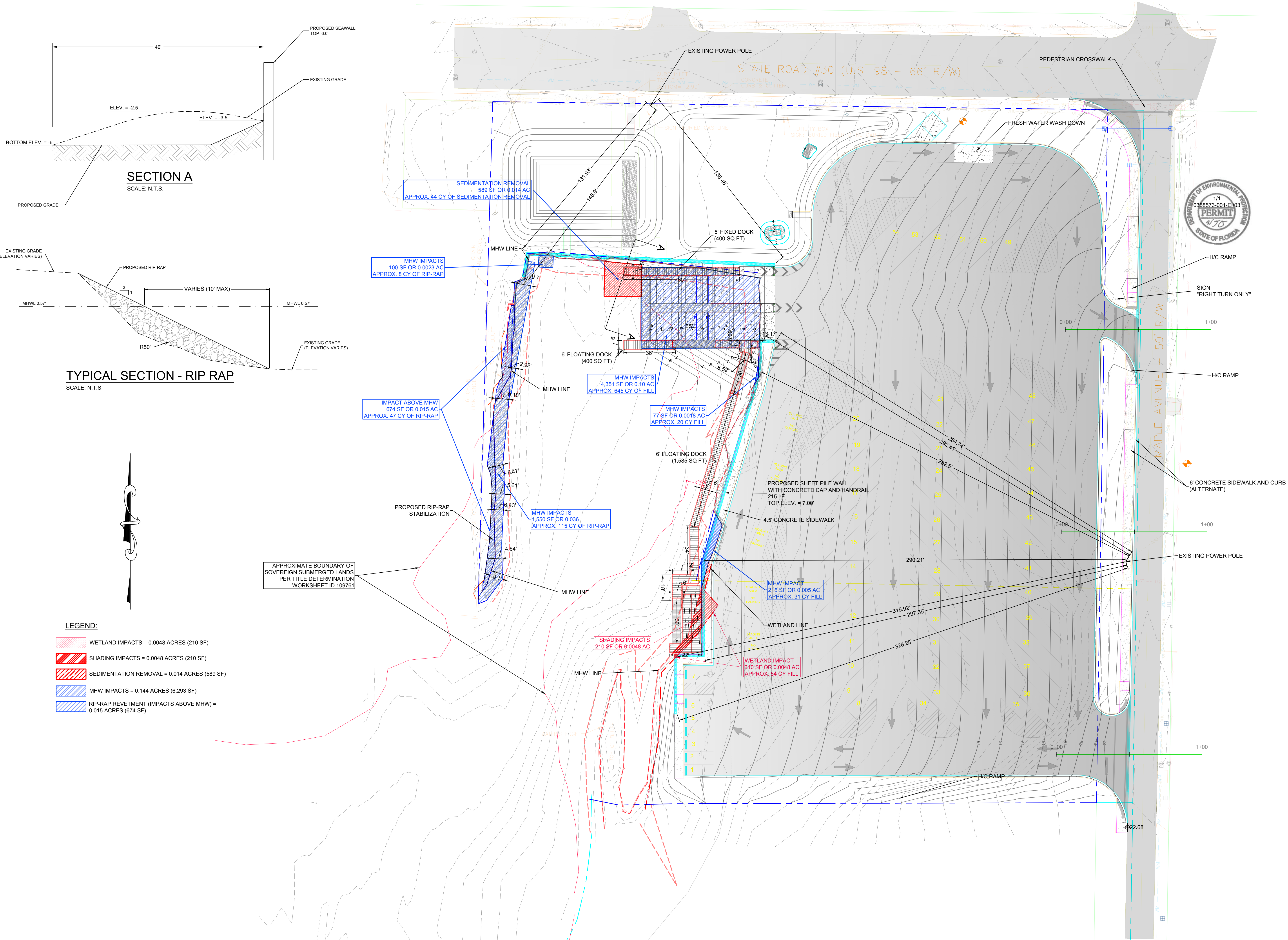
SHEET TITLE:

WETLAND IMPACT
EXHIBIT

PROJECT NO.
50088560

SHEET
1

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SECTION A
SCALE: N.T.S.

TYPICAL SECTION - RIP RAP
SCALE: N.T.S.

LEGEND:

- WETLAND IMPACTS = 0.0048 ACRES (210 SF)
- SHADING IMPACTS = 0.0048 ACRES (210 SF)
- SEDIMENTATION REMOVAL = 0.014 ACRES (589 SF)
- MHW IMPACTS = 0.144 ACRES (6,293 SF)
- RIP-RAP REVETMENT (IMPACTS ABOVE MHW) = 0.015 ACRES (674 SF)

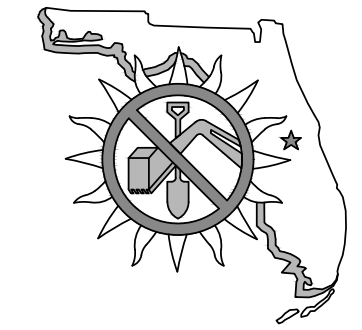


CONSTRUCTION PLANS FOR:

SNUG HARBOR BOAT LAUNCH FACILITY

PREPARED FOR:

CITY OF PANAMA CITY



48 HOURS
BEFORE YOU DIG
CALL SUNSHINE ONE
1-800-432-4770
www.callsunshine.com



PREPARED BY:



203 ABERDEEN PKWY, PANAMA CITY, FL 32405
(850) 522-0644

CITY OF PANAMA CITY

Greg Brudnicki	Mayor
Jenna Haligas	Ward I
Kenneth Brown	Ward II
Billy Rader	Ward III
Mike Nichols	Ward IV
Jeff Brown	City Manager



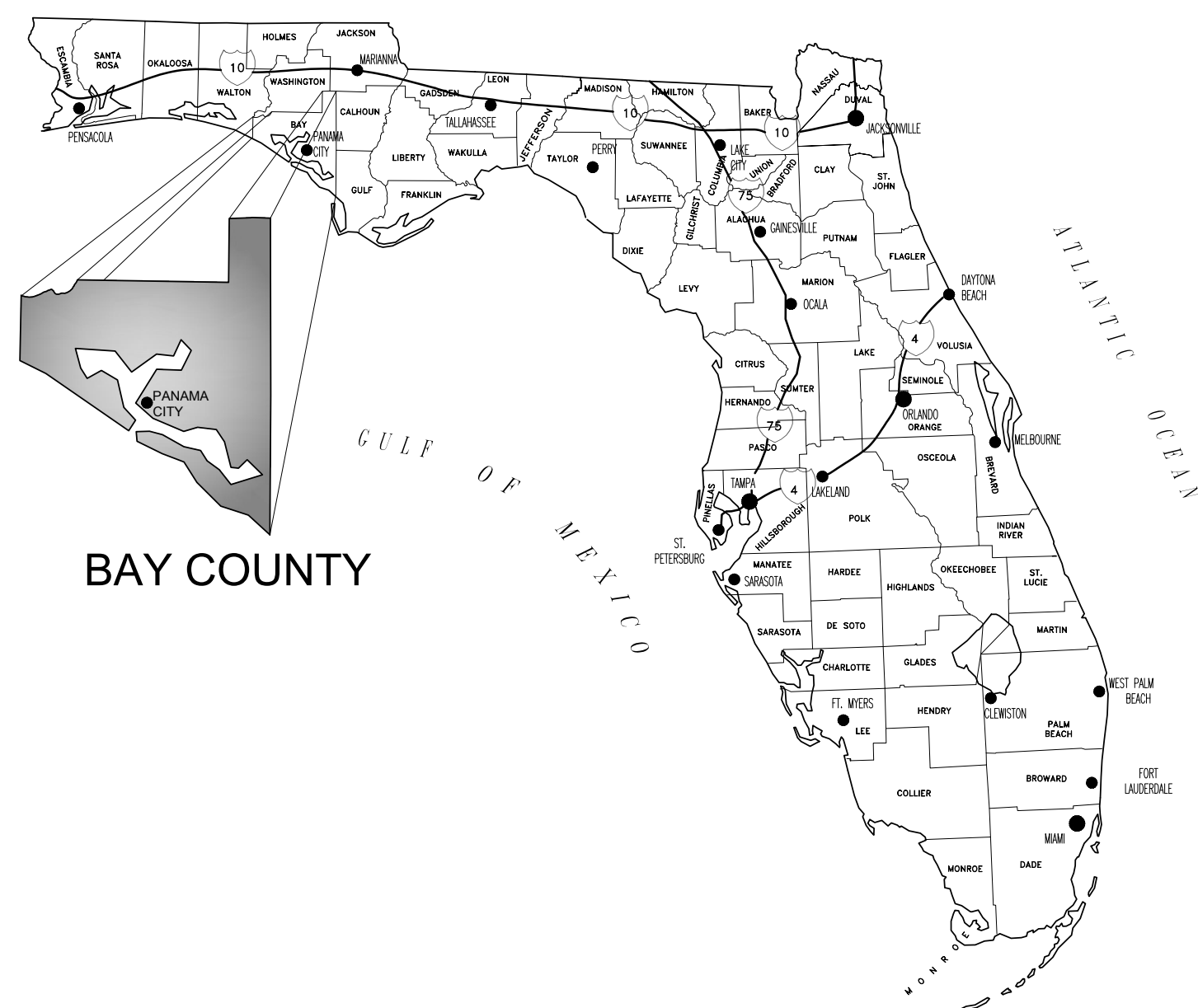
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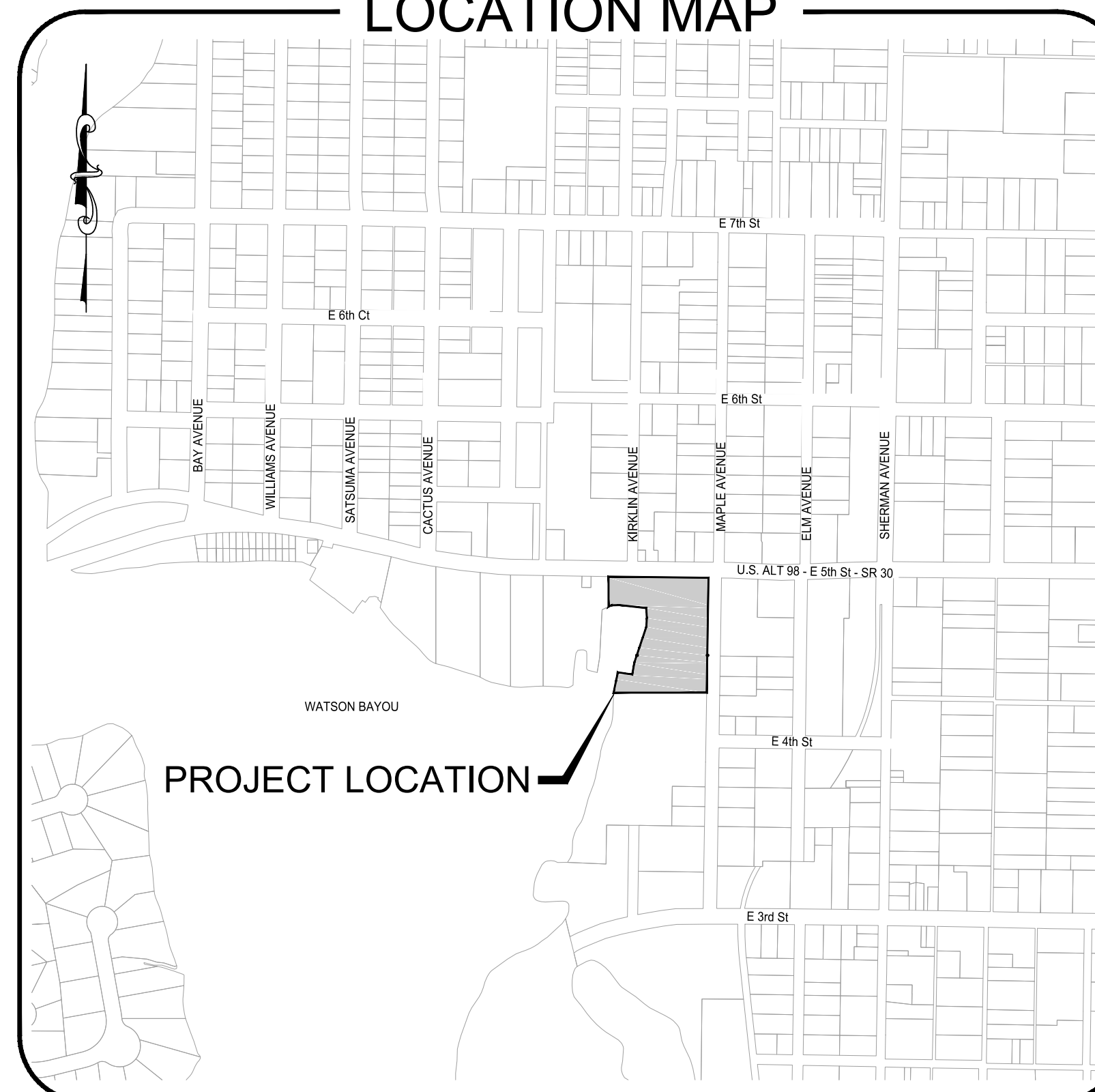
PROJECT NUMBER - 50088560

SEPTEMBER 2017

VICINITY MAP



LOCATION MAP



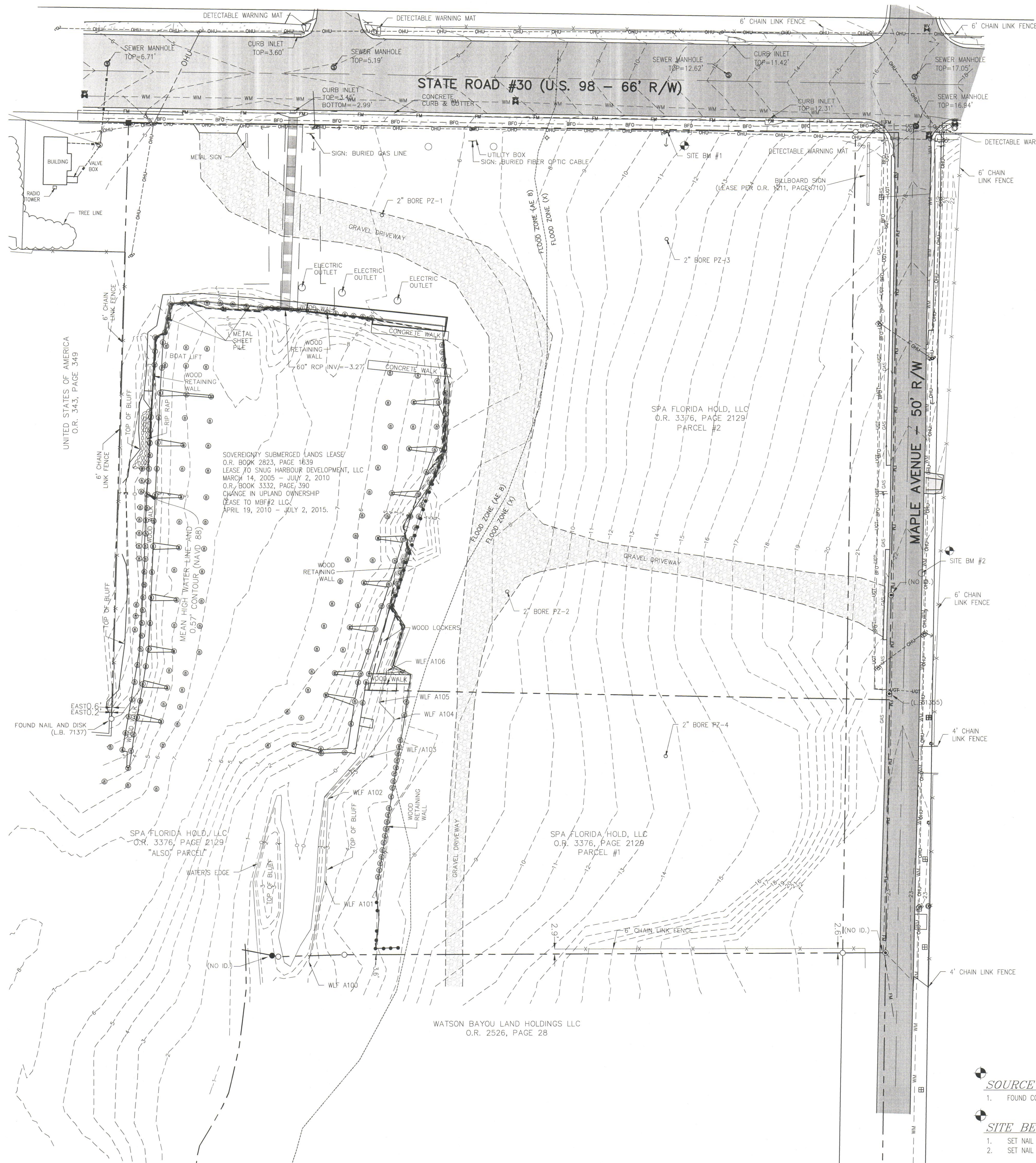
DRAWING INDEX

CIVIL

- C-1 EXISTING CONDITIONS
- C-2 GENERAL NOTES
- C-3 DEMOLITION PLAN
- C-4 SITE PLAN
- C-5 GRADING & DRAINAGE PLAN
- C-6 STORM WATER POND #1 DETAILS
- C-7 STORM WATER POND #2 DETAILS
- C-8 UTILITY PLAN
- C-9 SIGNAGE AND STRIPING PLAN
- C-10 BOAT RAMP LAYOUT PLAN & DETAILS
- C-11 BOAT RAMP AND DOCK DETAILS
- C-12 FLOATING DOCK LAYOUT PLAN & DETAILS
- C-13 FLOATING DOCK LAYOUT PLAN & DETAILS
- C-14 EROSION CONTROL DETAILS
- C-15 UTILITY DETAILS
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- S-1 BULKHEAD SECTION KEY
- S-2 BULKHEAD CROSS SECTIONS PROFILES "A-A" THRU "D-D"
- S-3 BULKHEAD CROSS SECTIONS PROFILE "E-E"
- S-4 NORTH BULKHEAD ANCHOR PLAN
- S-5 EAST BULKHEAD ANCHOR PLAN
- S-6 MISCELLANEOUS DETAILS
- S-7 STORM WATER CUTOUT AND BULKHEAD DETAILS
- S-8 HANDRAIL DETAILS

ELECTRICAL

- E-1 ELECTRICAL DETAILS
- E-2 ELECTRICAL DETAILS



SYMBOLS & ABBREVIATIONS:

No.	=	NUMBER
#	=	NUMBER
---	=	DISTANCE NOT TO SCALE
L.B.	=	LICENSED BUSINESS
L.S.	=	LICENSED SURVEYOR
P.S.M.	=	PROFESSIONAL SURVEYOR AND MAPPER
LLC	=	LIMITED LIABILITY COMPANY
L1-L29	=	LINE TAG (SEE LINE TABLE)
O.R.	=	OFFICIAL RECORDS
(F)	=	FIELD MEASUREMENT
(DS)	=	DESCRIPTION DATA (SUBMERGED LAND LEASE)
(D)	=	DESCRIPTION DATA
(C)	=	CALCULATED DATA
P.O.B.	=	POINT OF BEGINNING
P.O.C.	=	POINT OF COMMENCEMENT
R/W	=	RIGHT OF WAY
F.E.M.A.	=	FEDERAL EMERGENCY MANAGEMENT AGENCY
ID.	=	IDENTIFICATION
INC.	=	INCORPORATED
OHU	=	OVERHEAD UTILITIES
CLF	=	CHAIN LINK FENCE
WLF	=	WETLAND FLAG
●	=	FOUND 1/2" IRON ROD
○	=	FOUND 1/2" CAPPED IRON ROD L.B. #7137
⊙	=	FOUND NAIL AND DISK
■	=	FOUND 4"x4" CONCRETE MONUMENT
+	=	TRAFFIC SIGN
+	=	BILLBOARD SIGN
+	=	WATER VALVE
+	=	WATER METER
+	=	SANITARY SEWER MANHOLE
+	=	IRRIGATION CONTROL VALVE
+	=	MONITORING WELL
+	=	8" WOOD PILING
+	=	MAILBOX
+	=	WOOD POST / PILING
+	=	GUY ANCHOR
+	=	UTILITY POLE
+	=	TELEPHONE BOX
---	=	BURIED FIBER OPTIC CABLE LINE
---	=	BURIED GAS LINE
---	=	BURIED SANITARY SEWER FORCE MAIN
---	=	BURIED TELEPHONE LINE
---	=	BURIED WATER MAIN
---	=	OVERHEAD UTILITY LINE
---	=	EXISTING ASPHALT PAVEMENT
---	=	EXISTING CONCRETE

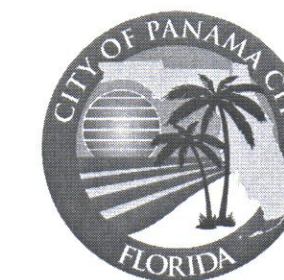
SOURCE BENCHMARKS:

1. FOUND CONCRETE MONUMENT 872 9108 L TIDAL - ELEVATION = 9.10'

SITE BENCHMARKS:

1. SET NAIL & DISK L.B. 8011 IN UTILITY POLE - ELEVATION = 10.84'
2. SET NAIL & DISK L.B. 8011 IN ASPHALT - ELEVATION = 22.15'

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

**SNUG HARBOR
BOAT LAUNCH
FACILITY**

CONSULTANTS:



CHAD HALL, P.E.

ELECTRICAL CONSULTANT
215 BILTMORE PL
PANAMA CITY BEACH, FL 32413
(850) 819-4971 hallchad35@gmail.com
FL License # 65846

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RELEASE:

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SCALE:

1"=30'

DATE:

SEPTEMBER 2017

DRAWN:

BWR

CHECKED:

RD

APPROVED:

JMS

NO. REVISION:

DATE:

SHEET TITLE:

EXISTING CONDITIONS

PROJECT NO.

50088560

SHEET

C-1

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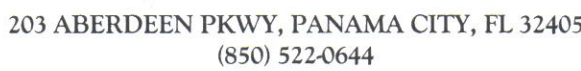
1. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN ADEQUATE TRAFFIC CONTROL AND TO PROVIDE DETOURS AROUND CONSTRUCTION ACTIVITIES. NO STREET SHALL REMAIN CLOSED TO TRAFFIC OVERNIGHT. IN ADDITION, THE CONTRACTOR SHALL COOPERATE WITH LOCAL RESIDENTS IN GAINING ACCESS TO THEIR HOMES AND BUSINESSES DURING WORKING HOURS AND SHALL ASSIST AT ALL TIMES WHEN VEHICLES EXPERIENCE TROUBLE DUE TO CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE PROJECT IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL.
3. ALL DRIVEWAYS SHALL BE COMPACTED AND MAINTAINED DURING CONSTRUCTION TO ALLOW ACCESS TO FACILITIES AT ALL TIMES. ALL TEMPORARY STABILIZATION SHALL BE SMOOTH AND LEVEL.

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT FDOT DESIGN STANDARDS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, UNLESS OTHERWISE STATED OR SHOWN IN THE PLANS.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PANAMA CITY STANDARDS AND SPECIFICATIONS, UNLESS APPROVED BY THE CITY OF PANAMA CITY.
3. WHERE THE FDOT DESIGN STANDARDS DIFFER FROM THE CITY OF PANAMA CITY STANDARDS, THE MORE STRINGENT STANDARD SHALL APPLY, UNLESS APPROVED BY THE CITY OF PANAMA CITY.
4. WHERE EXCAVATIONS ARE IN CLOSE PROXIMITY OF TREES NOT SHOWN AS BEING REMOVED, THE CONTRACTOR SHALL USE EXTREME CARE IN NOT DAMAGING THE ROOT SYSTEM. NO EQUIPMENT, SUPPLIES, OR VEHICLES SHALL BE STORED OR PARKED WITHIN THE DRIP LINE OF TREES TO REMAIN AND BE PRESERVED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ALL EMPLOYEES AND SUBCONTRACTORS OF THIS REQUIREMENT AND TO ENFORCE SAME.
5. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE STATE ONE CALL OF FLORIDA (800-432-4770) AND UTILITY OWNERS LISTED BELOW AT LEAST TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE. THE CONTRACTOR SHALL WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED. THE CONTRACTOR SHALL PROTECT THE MARKS DURING CONSTRUCTION. IF THE MARKS ARE DESTROYED, THE CONTRACTOR SHALL CALL SUNSHINE STATE ONE CALL FLORIDA AGAIN. THE CONTRACTOR SHALL DIG SAFELY, USING EXTREME CAUTION, WHEN DIGGING WITHIN 36 INCHES ON EITHER SIDE OF THE MARKS TO AVOID HITTING THE BURIED UTILITY LINES.
6. ALL INLETS SHALL BE PROTECTED AS PER FDEP BEST MANAGEMENT PRACTICES, AND THE FDEP/FDOT EROSION AND SEDIMENT CONTROL HANDBOOK.
7. THE CONTRACTOR SHALL PROTECT ALL GRASSED AREAS FROM DISCARDED CONCRETE AND EXCESS MATERIALS. ALL DISCARDED CONCRETE AND EXCESS MATERIALS SHALL BE REMOVED FROM THE RIGHT-OF-WAY (OR JOB SITE) ON A DAILY BASIS.
8. THE CONTRACTOR IS TO MAINTAIN AND KEEP STREET NAME IDENTIFICATION (STREET SIGNS) VISIBLE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.
9. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT SHALL IMMEDIATELY BE REPORTED TO THE ENGINEER WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE ENGINEER IS TO NOTIFY THE PROJECT ADMINISTRATOR OF DISCOVERY. THE PROJECT ADMINISTRATOR WILL ARRANGE AN INVESTIGATION, IDENTIFICATION AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER. THE PROJECT ADMINISTRATOR WILL ADVISE THE ENGINEER.
10. THE CONTRACTOR SHALL DISPOSE OF ALL DEBRIS UPON COMPLETION OF THE PROJECT.
11. THE EROSION CONTROL PLAN SHALL BE IN ACCORDANCE WITH THE FDOT/FDEP EROSION & SEDIMENT CONTROL HANDBOOK.
12. ALL FILL MATERIAL SHALL BE SELECT FILL AS DEFINED BY FDOT DESIGN STANDARD INDEX 505..
13. DEWATERING: NECESSARY LOWERING OF GROUNDWATER BE NECESSARY FOR THE INSTALLATION OF CONCRETE STRUCTURES, OR TO PREVENT LATERAL MOVEMENT OF CONCRETE ALREADY PLACED, SUCH LOWERING SHALL BE ACCOMPLISHED BY MEANS OF A WELL POINT SYSTEM OR OTHER APPROVED MEANS, AT CONTRACTOR'S EXPENSE. COMPREHENSIVE PLANS FOR DEWATERING OPERATIONS, IF USED, SHALL BE SUBMITTED BY THE CONTRACTOR PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITTING ASSOCIATED WITH DEWATERING.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING NPDES PERMIT.
15. ALL MAILBOXES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE.
16. CONTRACTOR SHALL PROVIDE SIX (6) SETS OF AS-BUILT DRAWINGS AND ONE (1) DIGITAL COPY IN AUTOCAD FORMAT OF THE COMPLETED PROJECT. THE AS BUILT DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED SURVEYOR.
17. ALL DEMOLISHED MATERIALS SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
18. ALL ABANDONED UTILITIES SHALL BE REMOVED FROM THE GROUND, NOT ABANDONED IN PLACE.
19. ALL EXCAVATED MATERIALS IN ROADWAYS SHALL BE REMOVED FROM THE SITE AND REPLACED WITH CLEAN SELECT BACKFILL. CLEAN SELECT BACKFILL SHALL BE ASTM CLASS I OR II MATERIALS AND APPROVED IN WRITING BY THE ENGINEER AND CITY. NO EXCAVATED MATERIALS SHALL BE USED FOR TEMPORARY BACKFILL IN ANY ROADWAY.
20. COMPACTION TESTING SHALL BE PERFORMED AT EACH ROADWAY CUT FOR SERVICE LATERALS AND PER FDOT SPECIFICATIONS FOR ROAD RECONSTRUCTION AND SHALL BE INCLUDED IN THE BID PRICE.
21. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A MAINTENANCE OF TRAFFIC PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION. SIGNAGE SHALL BE MAINTAINED AT ALL TIMES AND SHALL BE INCLUDED IN THE BID PRICE.
22. CONTRACTOR SHALL PROVIDE DE-WATERING AS NECESSARY FOR THE INSTALLATION OF ALL PROPOSED IMPROVEMENTS. ALL DE-WATERING SHALL BE INCLUDED IN THE BID PRICE.

3. ALL MAINS SHALL BE INSTALLED ACCORDING TO ENGINEERING PLANS AND SPECIFICATIONS.
2. ALL VALVES AND MATERIALS SHALL COMPLY WITH AWWA (AMERICAN WATER WORKS ASSOCIATION) STANDARDS, LATEST EDITION.
3. THE CONTRACTOR WILL BE REQUIRED TO REMOVE & REPLACE ITEMS ENCOUNTERED IN THE FIELD, ie SIGNS, FENCING, POST, etc..
4. ALL MAINS SHALL HAVE A MINIMUM OF 36" COVER FROM FINISHED GRADES, UNLESS APPROVED BY ENGINEER.
5. CONTRACTOR IS TO FURNISH "AS BUILT PLANS" INDICATING LOCATIONS OF ALL FITTINGS, VALVES, AND DEAD END RUNS WITH THREE (3) PHYSICAL FEATURES (LOT CORNERS, TREES, ETC.).
6. BASE AND BACKFILL MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED, OR OF EQUAL OR GREATER STRUCTURAL ADEQUACY. MATERIALS CONTAMINATED WITH DELETERIOUS SUBSTANCES DURING EXCAVATION SHALL NOT BE USED FOR FILL.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF EXISTING UTILITIES, AND TO DETERMINE IF OTHER UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK, AND TAKE WHATEVER STEP NECESSARY TO PROVIDE FOR THEIR PROTECTION.
8. UTILITIES SHOWN ON THE PLAN MAY NOT BE ACCURATE AND ALL UTILITIES MAY NOT BE SHOWN.
9. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.
10. WHERE THERE IS LESS THAN 12" CLEARANCE BETWEEN PVC/DI PIPE AND OTHER PIPE OR SPECIFIED AREAS, THE PIPE SHALL BE ENCASED WITH 6" THICKNESS AROUND THE PIPE AND 6" CLEARANCE EACH WAY IN THE AXIAL DIRECTION.
11. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING. THE SURVEY MAY NOT SHOW ALL OBJECTS WITHIN THE PATH OF THE NEW UTILITIES. IF OBJECTS ARE NOT SHOWN ON THE SURVEY, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN 7 DAYS PRIOR TO THE BID DATE. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ALL OBJECTS NOT SHOWN ON THE SURVEY.
12. ALL CONSTRUCTION AREAS NEAR WETLANDS ARE TO BE MONITORED CLOSELY FOR EROSION. SILT FENCE AND HAY BALES SHALL BE USED IN THESE AREAS. CONTRACTOR SHALL FOLLOW ALL THE FDEP/COE DREDGE AND FILL PERMIT REQUIREMENTS IF APPLICABLE. SEE SPECIFICATIONS.
13. ALL SPOIL MATERIAL SHALL BE PLACED ON THE UPLAND SIDE OF ANY SLOPED CONSTRUCTION AREA.
14. THE CONTRACTOR SHALL TAKE WHATEVER STEPS NECESSARY TO PREVENT EROSION INTO NEARBY WETLANDS.
15. INSULATED 12 GA. LOCATING WIRE SHALL BE INSTALLED ON TOP OF ALL NON-METALIC PIPE, WHICH INCLUDES SERVICE CONNECTIONS. ALL LOCATING WIRE SHALL BE CONNECTED AND SHALL TERMINATE IN VALVE BOXES AND METER BOXES AS SHOWN IN THE DETAILS.
16. ALL PIPE SHALL BE INSTALLED IN DRY CONDITIONS. WELL POINTING MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER. WELL POINTS OR SOCK PIPE MAY BE USED.
17. CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS FOR CONSTRUCTION.
18. THE CONTRACTOR SHALL FOLLOW ALL CONDITIONS OF THE PERMIT REQUIREMENTS. SEE SPECIFICATIONS FOR COPY OF PERMITS.
19. ALL DISTURBED AREAS SHALL BE SODDED.
20. CONTRACTOR SHALL PROVIDE ALL FITTINGS, SLEEVES AND TRANSITION ADAPTERS AS NECESSARY TO COMPLETE THIS PROJECT.

1. COPIES OF TEST REPORTS FOR ASPHALT, SUBGRADE, FILL, AND BACKFILL UNDER ROADWAYS AND STRUCTURES, AND UTILITY TRENCHES SHALL BE PROVIDED DIRECTLY TO THE ENGINEER FOR APPROVAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE TESTING AND INSURE THAT ALL APPLICABLE TESTS HAVE BEEN PERFORMED. FAILURE TO OBTAIN TEST RESULTS AT ANY POINT OF CONSTRUCTION WILL REQUIRE THE REMOVAL OF THE IMPROVEMENT AND REPLACEMENT BY THE CONTRACTOR. IT SHOULD BE NOTED THAT THE ENGINEER WILL REQUIRE COMPACTION TESTING IN ACCORDANCE WITH THE TESTING SCHEDULE FOR UTILITY TRENCH FILL AND BACKFILL.
2. TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
3. CONTRACTOR SHALL COORDINATE WITH CITY'S ENGINEER 15 CALENDAR DAYS PRIOR TO PRESSURE TESTING AND BACTERIOLOGICAL TESTING SO A TESTING PLAN CAN BE ESTABLISHED.

ITEM	DENSITY REQUIREMENT	DENSITY TEST FREQUENCY
UTILITY TRENCH FILL & BACKFILL	95% STANDARD DENSITY (15% PASSING NO. 200)	PER SOIL TYPE ONE PER 500 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS. ALTERNATING LIFTS (12") ONE PER SOIL TYPE
FILL & BACKFILL UNDER ROADWAYS AND STRUCTURES	98% OF STANDARD DENSITY (15% PASSING NO. 200)	PER SOIL TYPE ONE PER 200 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK), ALTERNATING LIFTS (12") ONE PER SOIL TYPE
SUBGRADE UNDER ROADWAYS AND STRUCTURES	98% OF MAXIMUM DENSITY, MODIFIED PROCTOR	ONE PER SITE OR AT MATERIAL CHANGES PER SOIL TYPE ONE PER 200 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK)
LIMEROCK BASE UNDER ROADWAYS AND STRUCTURES	98% OF MAXIMUM DENSITY, MODIFIED PROCTOR	ONE PER SITE OR AT MATERIAL CHANGES ONE PER 200 LF HORIZONTAL OR ONE PER 1200 SY WITH A MINIMUM OF 3 TESTS (PER SECTION OF WORK)
ASPHALT	98% LAB DENSITY	ONE PER DAY FOR GRADATION, ONE PER 500 LF HORIZONTAL OR ONE PER 750 SY WITH A MINIMUM OF 3 TEST



PROJECT:

CONSULTANTS:



Professional Engineer Seal for Jonathan Michael Sklarski, License No. 67361, State of Florida, dated 10/15/17.

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N.T.S

SEPTEMBER 2017

BWR

RD

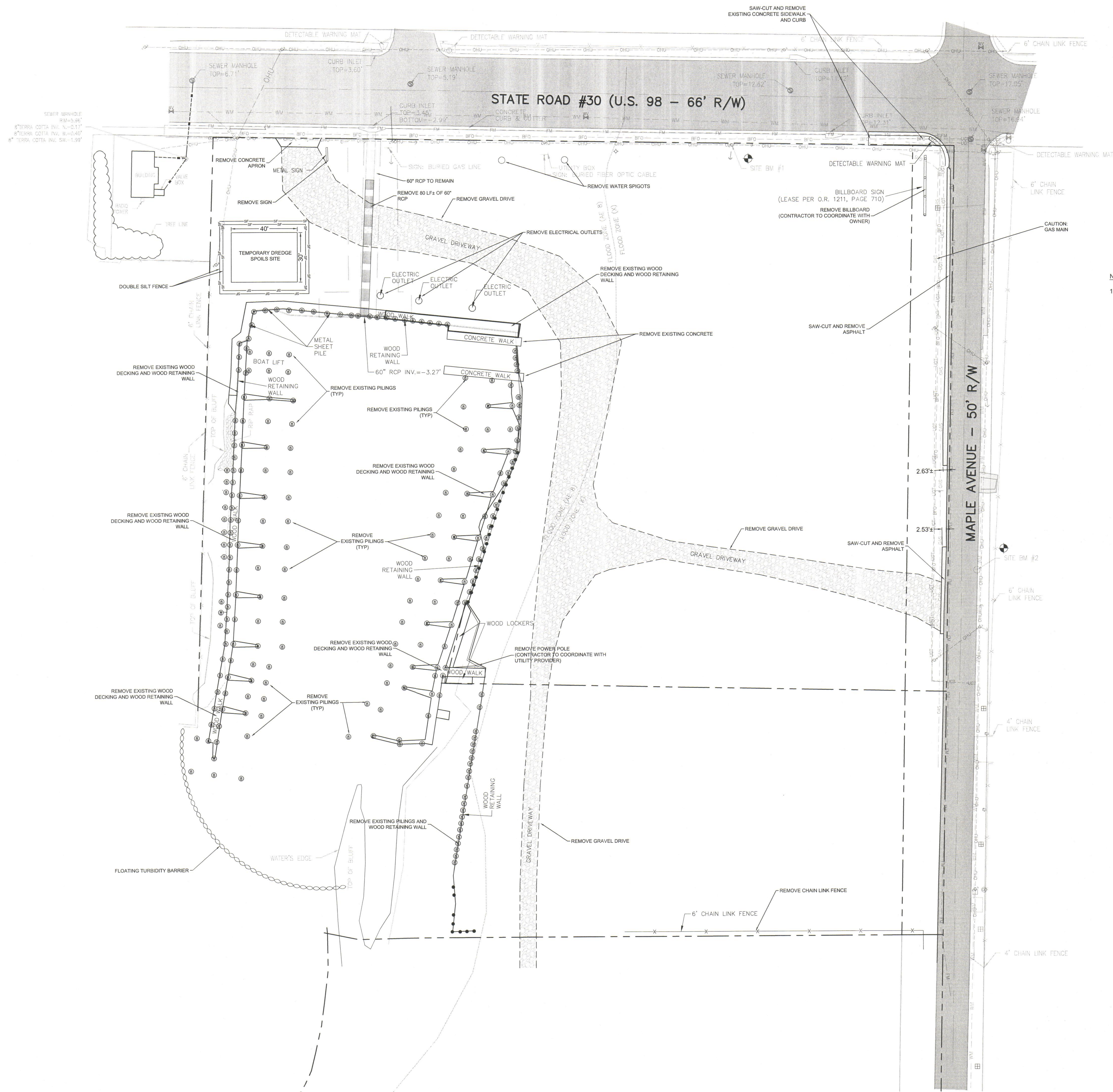
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GENERAL NOTES

SHEET
C-2

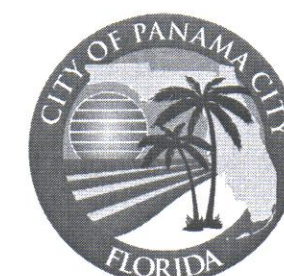
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NOTES:

1. ALL DEMOLISHED/REMOVED MATERIAL SHALL BE DISPOSED OF IN A LEGAL MANNER.

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

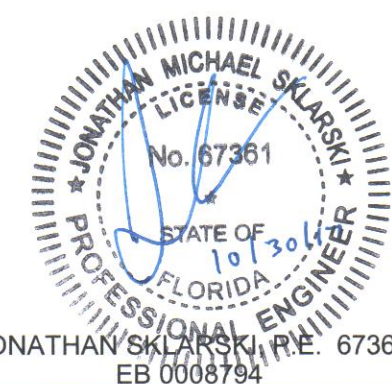
SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



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SCALE: 1"=30' DATE: SEPTEMBER 2017

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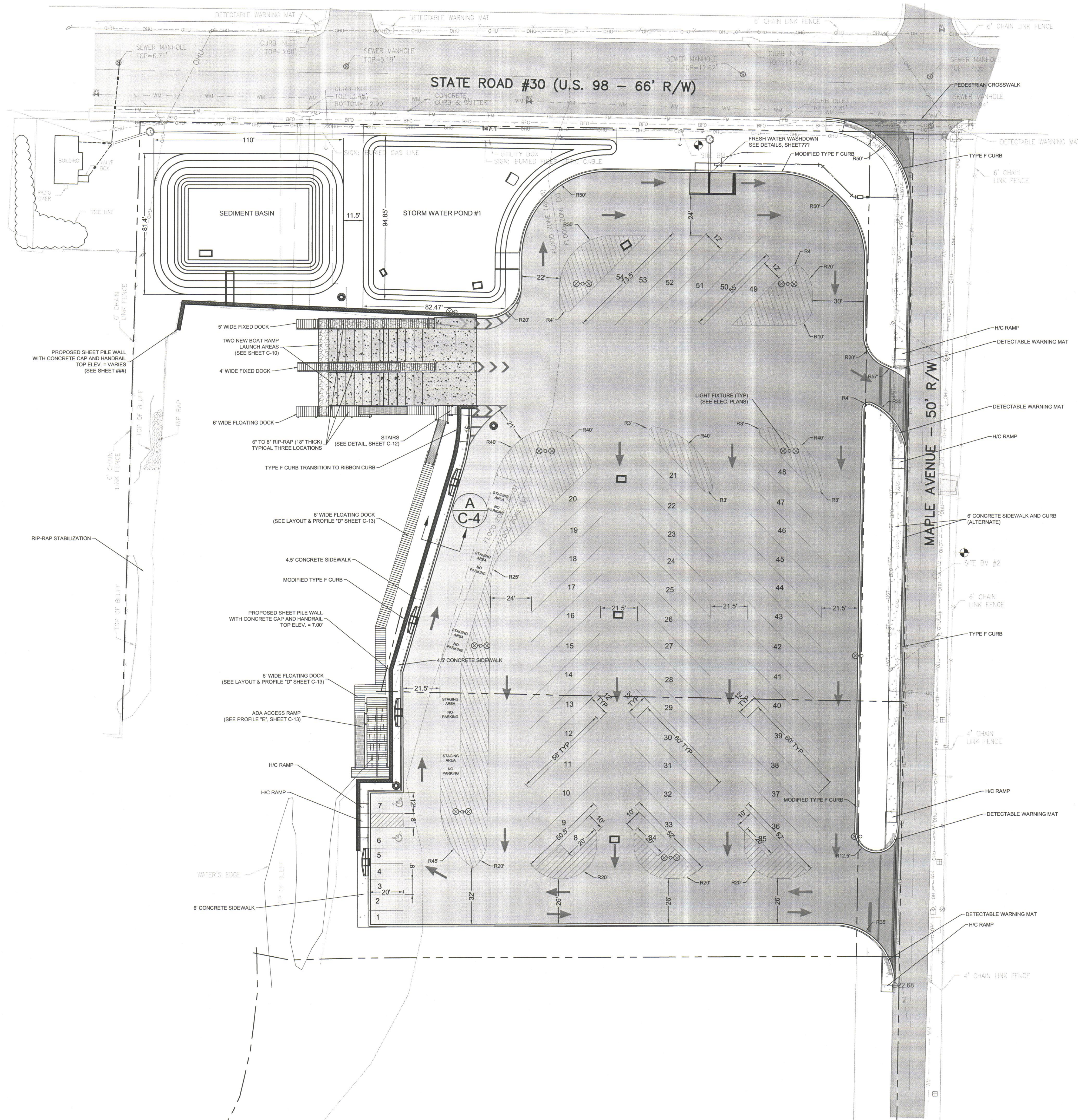
NO.	REVISION	DATE

SHEET TITLE:
DEMO & EROSION
CONTROL PLAN

PROJECT NO. 50088560 SHEET C-3

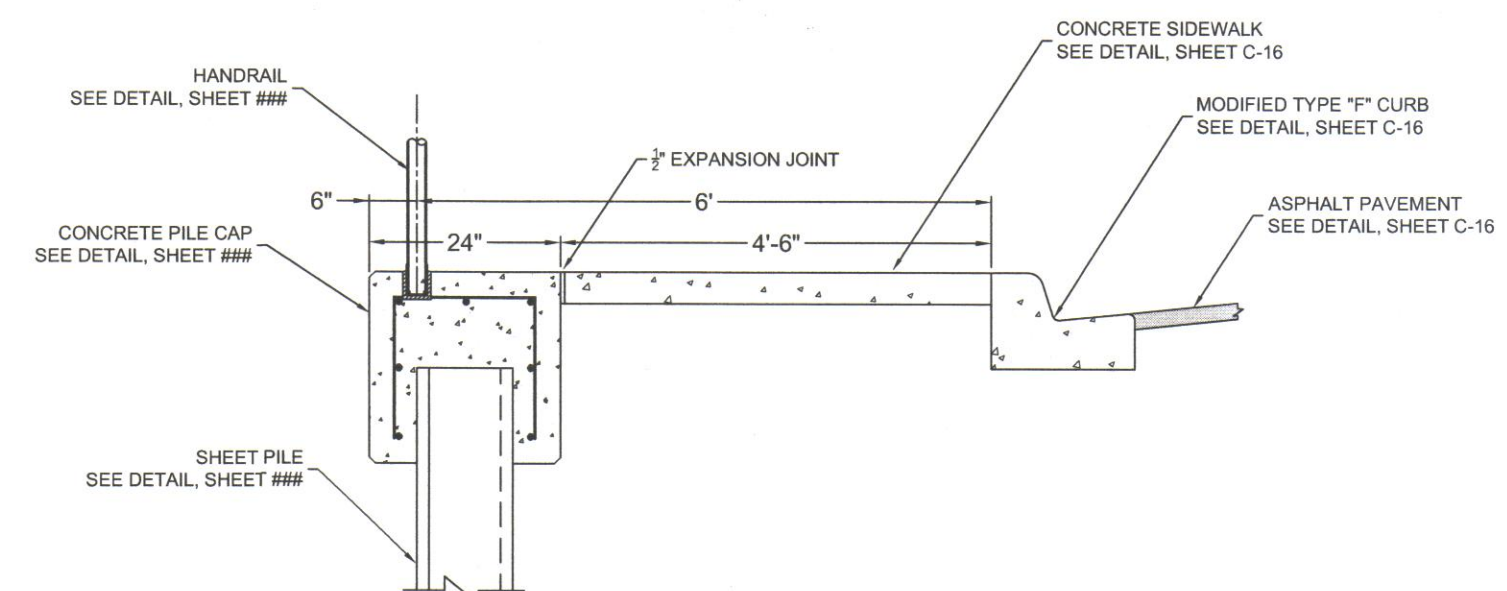
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C:\Users\j0171027\OneDrive\K:\50088560 PC - SNUG HARBOR BOAT LAUNCH FACILITY\CIVIL\3D\FOLDER_1\PRODUCTION\50088560 SITEPLAN.DWG BROCHER



0' 15' 30' 60'
SCALE: 1" = 30'

PARKING DATA:
BOAT TRAILER PARKING = 44 SPACES
PEDESTRIAN PARKING = 11 SPACES
HANDICAPPED PARKING = 2 SPACES



A
C-4 SECTION "A-A" PILE CAP-SIDEWALK SECTION
SCALE: N.T.S.

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

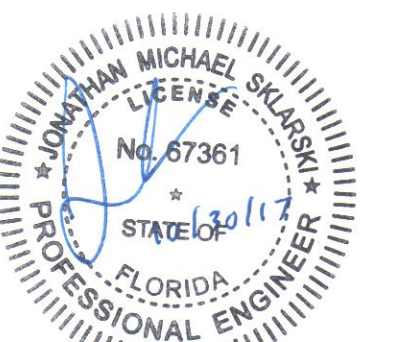
**SNUG HARBOR
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EB 0008794

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NO.	REVISION:	DATE:

SHEET TITLE:
SITE PLAN

PROJECT NO.
50088560

SHEET
C-4

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PROJECT:

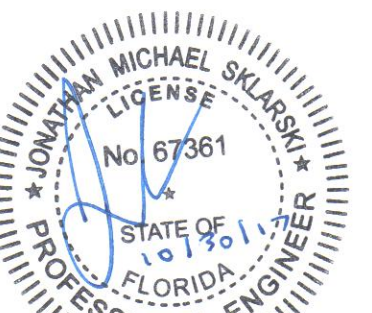
CONSULTANTS:



mrd
mrd associates, inc.
Coastal, Marina & Water Resources Engineering

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SCALE: 1"=30'	DATE: SEPTEMBER 2017
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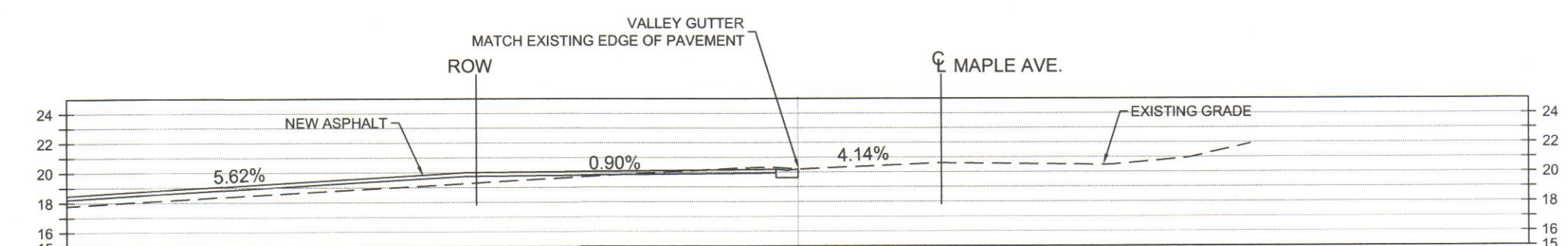
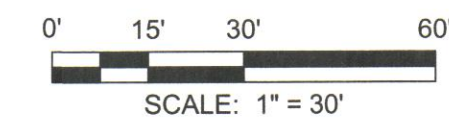
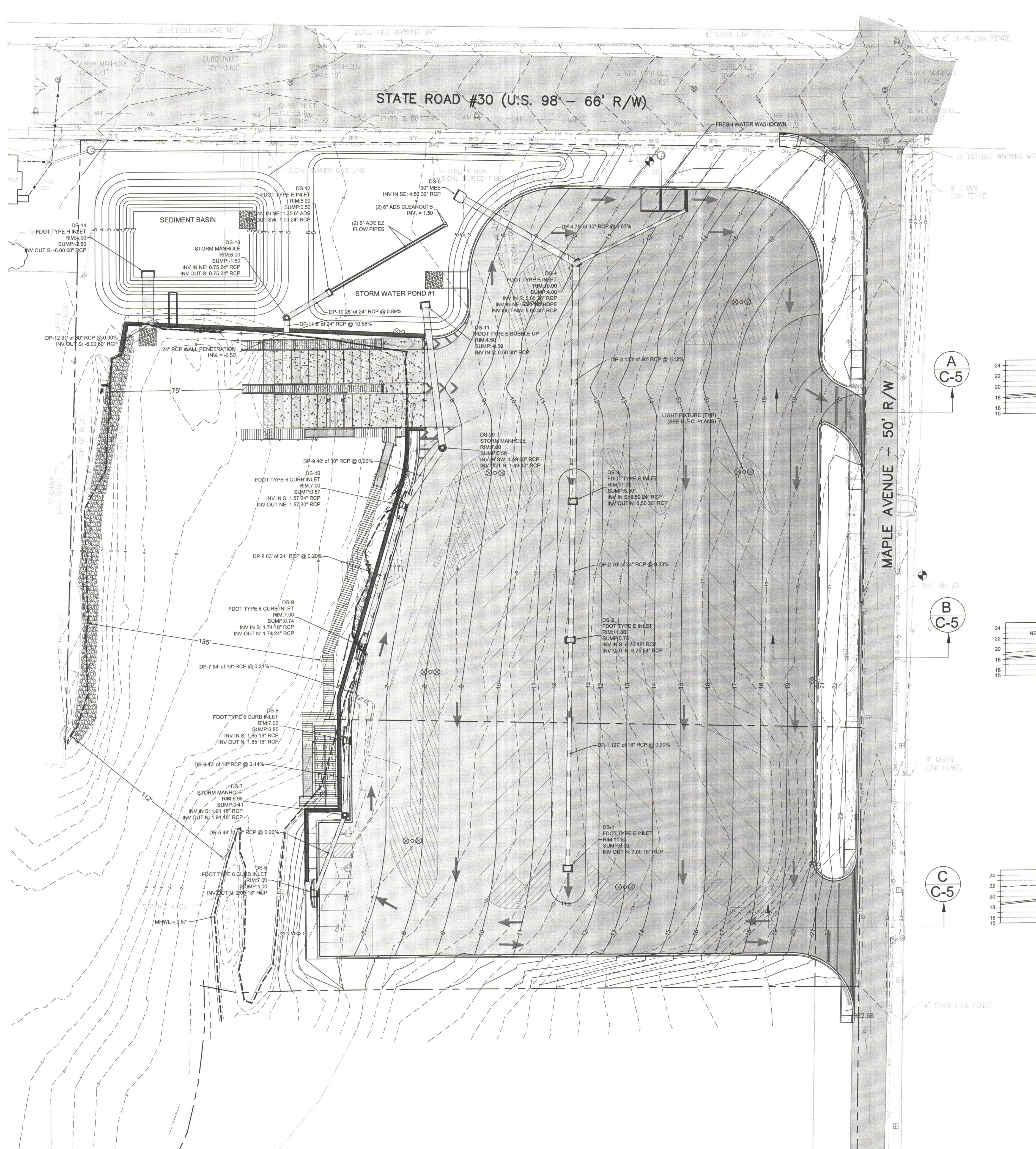
SHEET TITLE:

GRADING AND
DRAINAGE PLAN

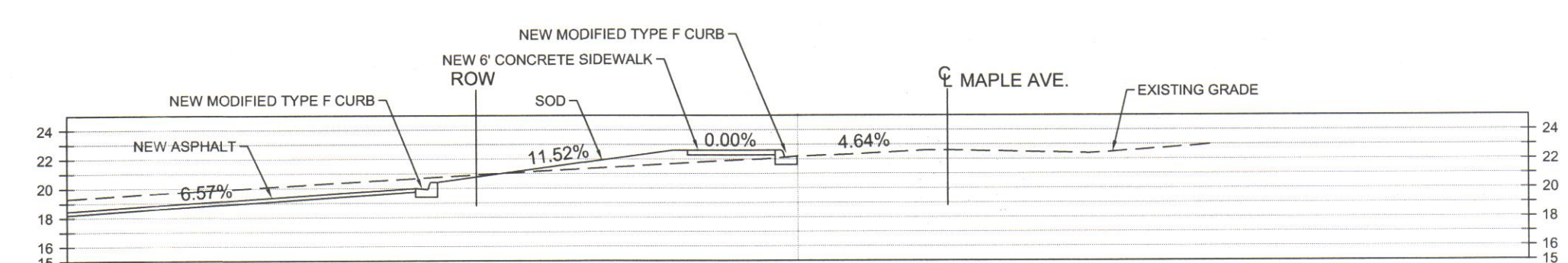
PROJECT NO.
50088560

SHEET
C-5

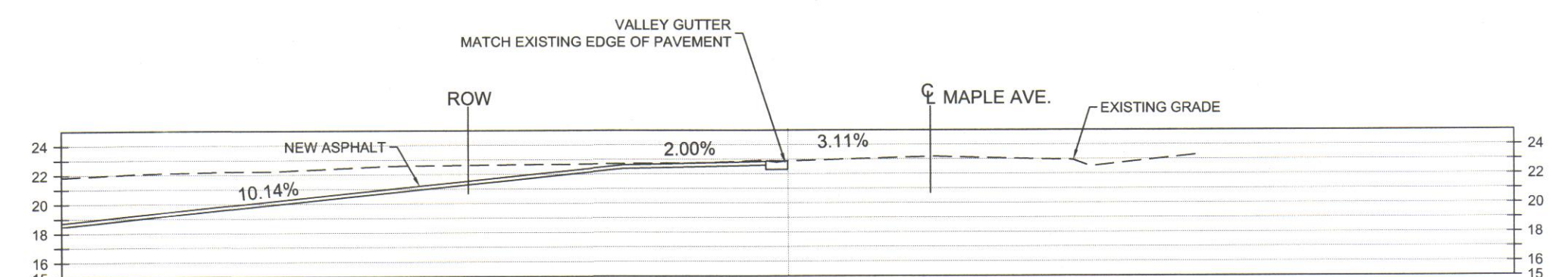
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A SECTION "A-A"
C-5 SCALE: 1"=10'



B SECTION "B-B"
C-5 SCALE: 1"=10'



C SECTION "C-C"
C-5 SCALE: 1"=10'

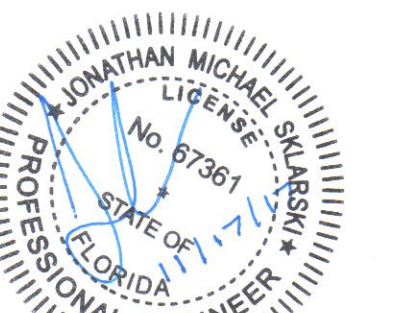
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CONSULTANTS:



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Coastal, Marina & Water Resources Engineering

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AFTER EACH RAINFALL EVENT

1. PAVEMENT AREAS – CLEAN/SWEEP DEBRIS AND DIRT FROM PAVEMENT AREAS.
2. SEDIMENTS IN RETENTION/DETENTION AREAS – REMOVED IMMEDIATELY.
3. DEBRIS IN RETENTION/DETENTION AREAS – ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED IMMEDIATELY.
4. YARD INLETS, CATCH BASINS, ETC. – ALL DEBRIS AND FOREIGN MATERIALS SHALL BE REMOVED IMMEDIATELY.

PERIODIC POND/SYSTEM MAINTENANCE

1. CLEANING/SWEEPING OF PAVEMENT AREAS SHALL BE ACCOMPLISHED WEEKLY OR AS REQUIRED.
2. INSPECT POND PERIODICALLY FOR ACCUMULATION OF TRASH AND DEBRIS AND REMOVE IT UPON DISCOVERY.
3. MOWING AND LANDSCAPING MAINTENANCE SHOULD BE DONE ON A MONTHLY BASIS DURING THE ACTIVE GROWING SEASON FOR THE AREA. INSPECT AND MAINTAIN AS REQUIRED DURING THE GROWING SEASON.
4. WEEDS OR UNDESIRABLE GROWTH SHALL BE REMOVED UPON DISCOVERY.
5. CATCH BASINS SHALL BE FLUSHED AS NECESSARY (IF ANY).
6. THE OWNER SHALL RE-GRADE AND RE-STABILIZE SWALE/RETENTION/DETENTION AREAS AS REQUIRED TO MEET OR EXCEED THE APPROVED DESIGN, CROSS-SECTION LINE, AND GRADE.
7. REMOVE SEDIMENT FROM POND WHEN ACCUMULATION REACHES FOUR (4) INCHES. MEASURE ACCUMULATION ONCE A YEAR.

INSPECTIONS

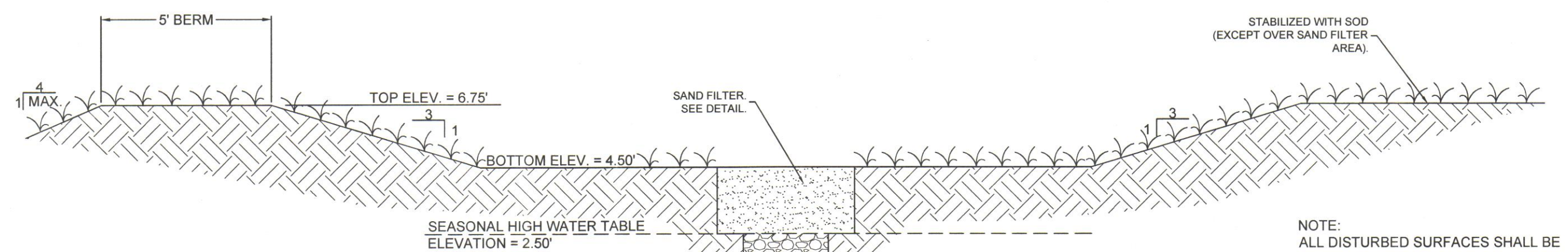
1. A MAINTENANCE INSPECTION MUST BE PERFORMED ONE YEAR AFTER BEGINNING OPERATION AND EVERY SECOND YEAR AFTER THE FIRST YEAR OF SUCCESSFUL OPERATION BY A REGISTERED PROFESSIONAL.
2. THE MAINTENANCE INSPECTION MUST BE DOCUMENTED ON THE FDEP AND/OR NWFWMD STANDARD INSPECTION FORM 62.330.311(1).
3. THE INSPECTION MUST BE SIGNED, SEALED, AND DATED BY THE REGISTERED PROFESSIONAL.
4. THE INSPECTION MUST BE CONDUCTED USING THE PLANS, CALCULATIONS AND SPECIFICATIONS APPROVED BY THE FDEP AND/OR NWFWMD.



SECTION VIEW

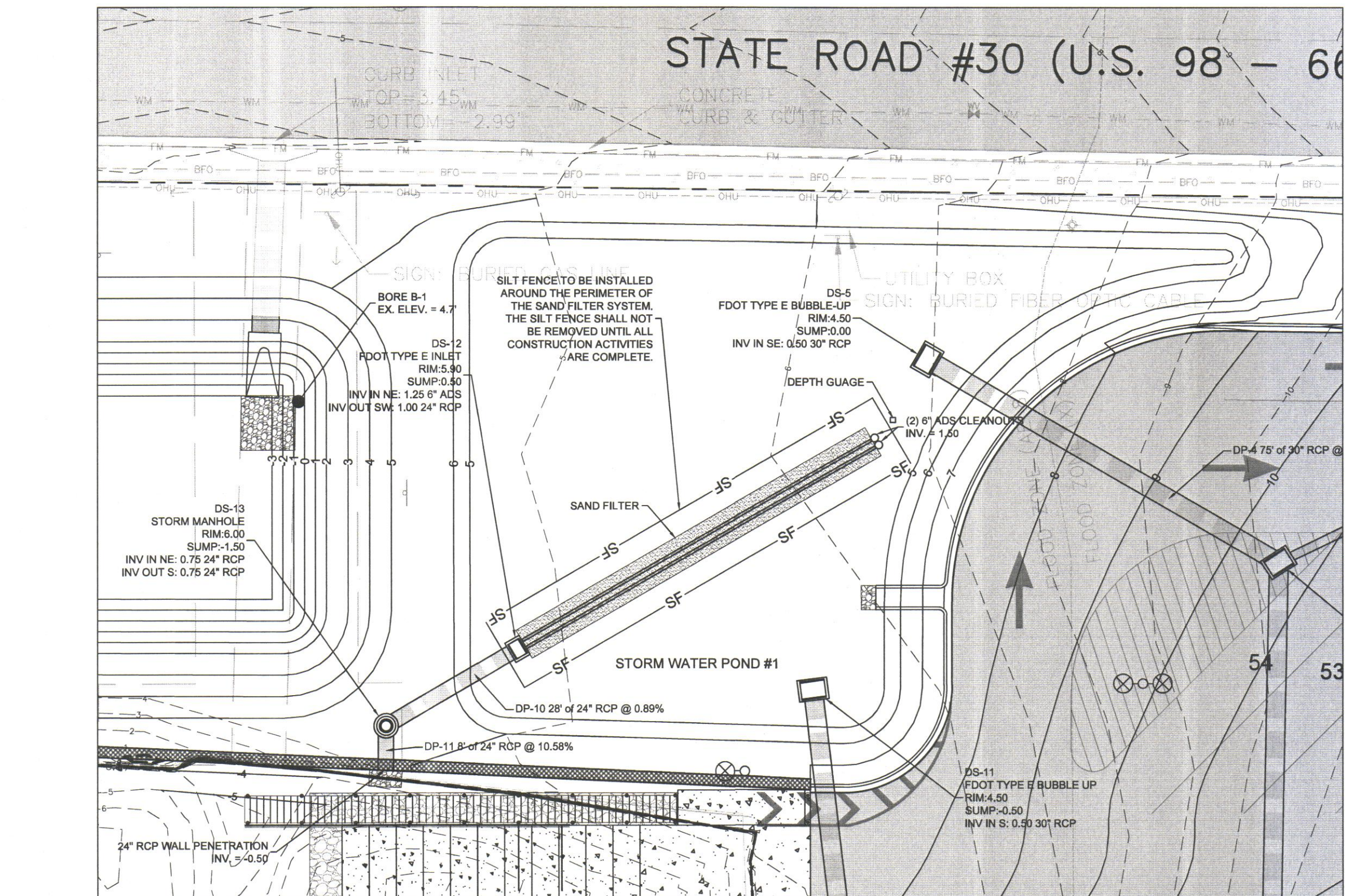
DETAIL CONCRETE DISCHARGE STRUCTURE (DS-12) (TYPE E)

SCALE: N.T.S.



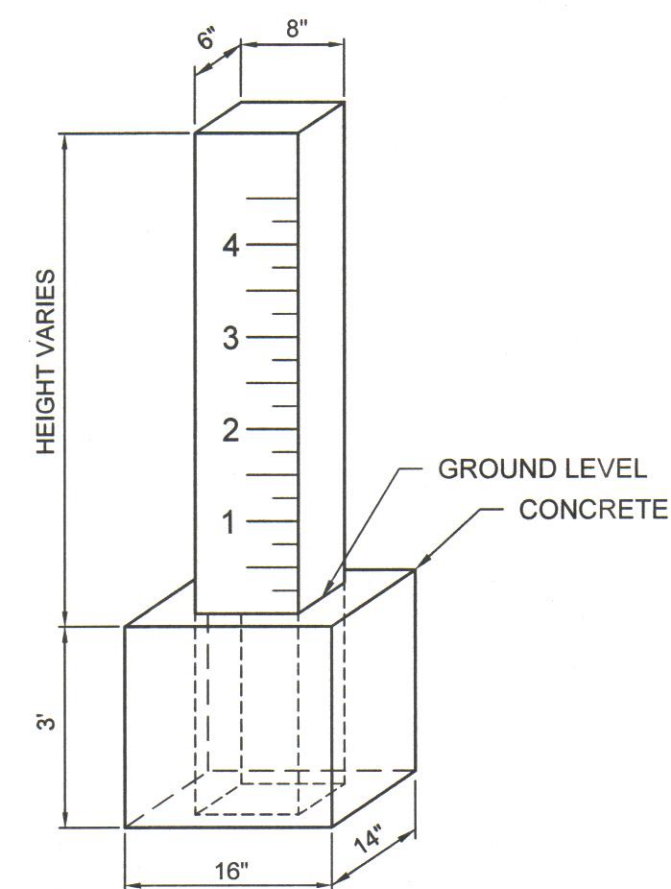
SECTION TYPICAL POND SECTION

SCALE: N.T.S.



PLAN STORM WATER POND #1

SCALE: 1"=20'

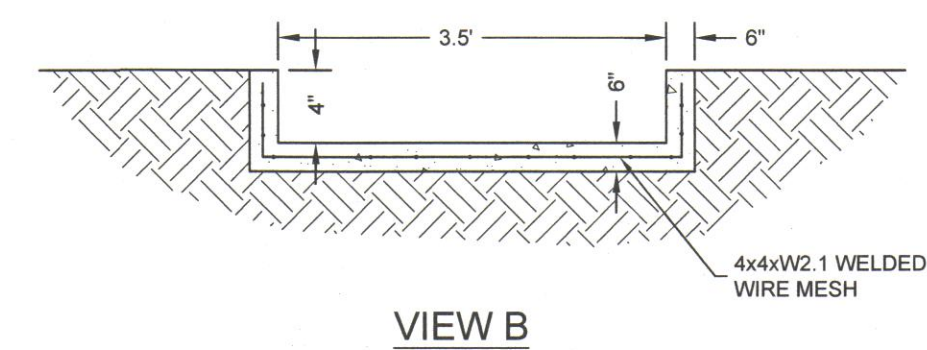


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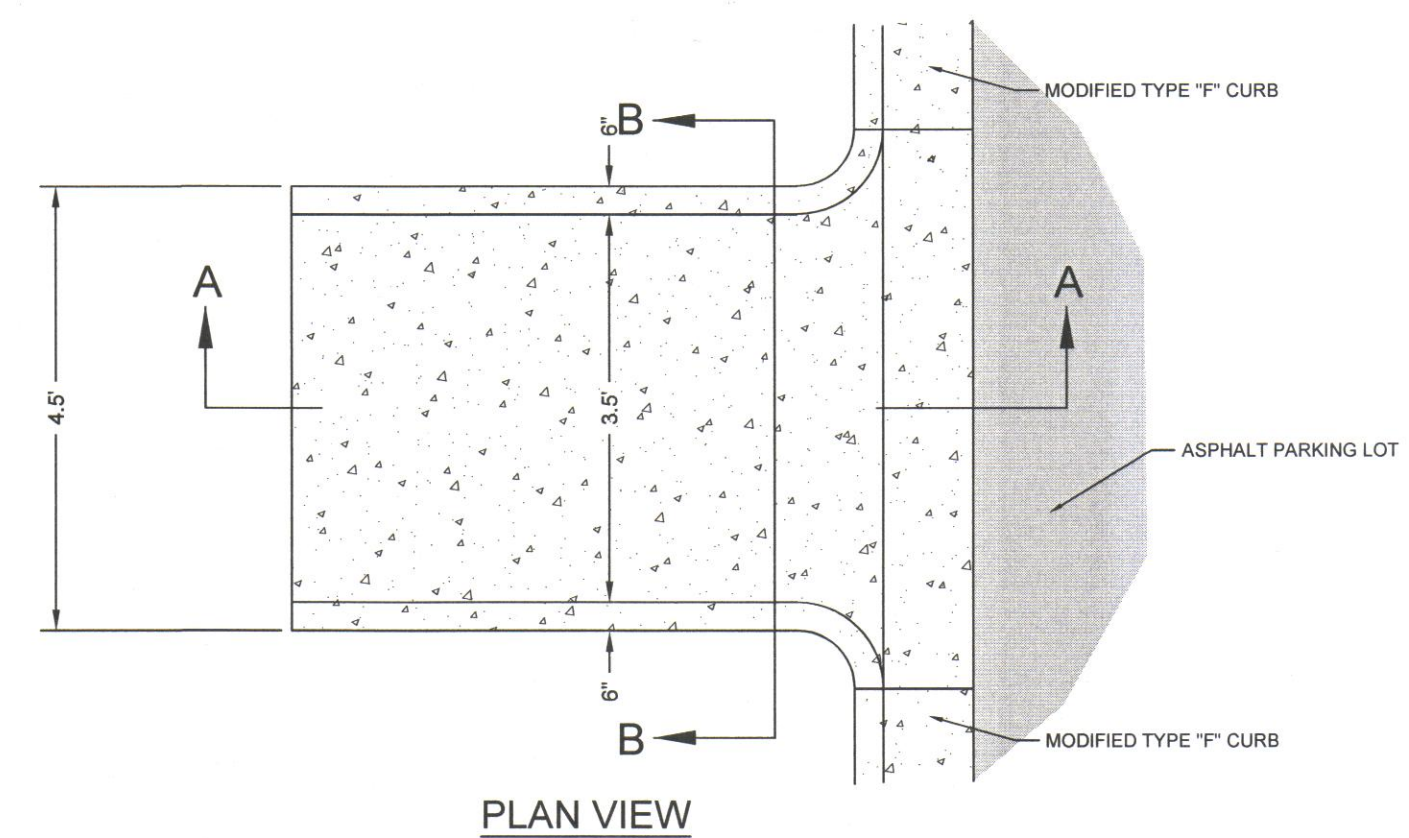
THE GAUGE SHALL BE CONSTRUCTED OF PRESSURE TREATED SQUARE POSTS MEASURING 6"x8" WITH BOTH 8" SIDES ROUTED WITH 6" NUMBERS AND GAUGING MARKS. THE ROUTED MARKINGS AND NUMBERS SHALL BE PAINTED WITH WHITE WATERPROOF PAINT. THE POST SHALL BE ONE FOOT TALLER THAN THE MAXIMUM DEPTH OF THE POND. THE POST SHALL BE EMBEDDED IN CONCRETE WITH A DIMENSION OF 16"14"x3" IN DEPTH. THE GAUGE SHALL BE PLACED NEAR THE DEEPEST AREA OF THE POND, AND SHALL BE POSITIONED SO THAT IT CAN BE READ FROM THE NEAREST POINT OF PUBLIC ACCESS. THE PONDING DEPTH SHALL BE REFERENCED TO THE DEEPEST POINT OF THE POND.

DETAIL DETENTION POND DEPTH GAUGE

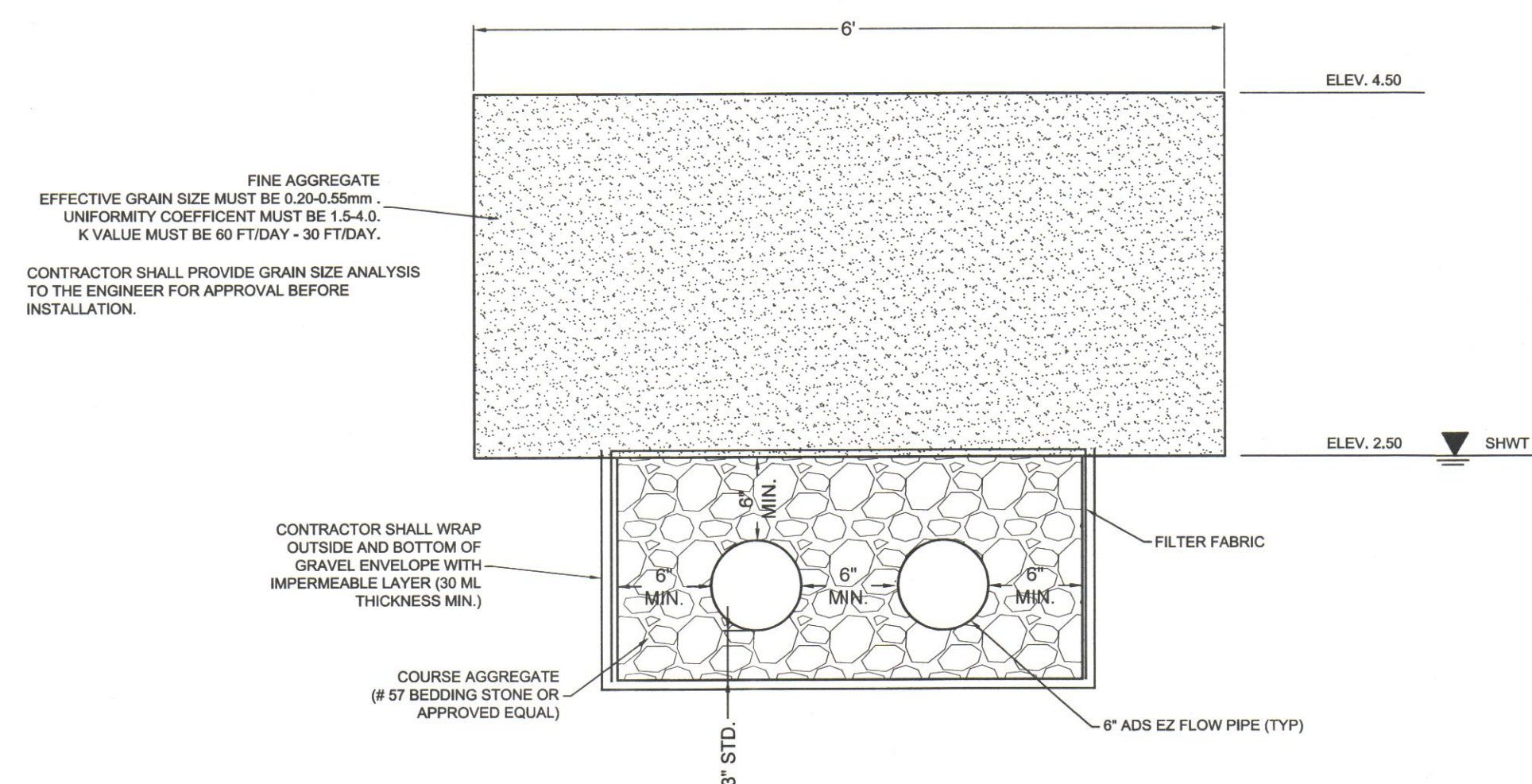
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VIEW B

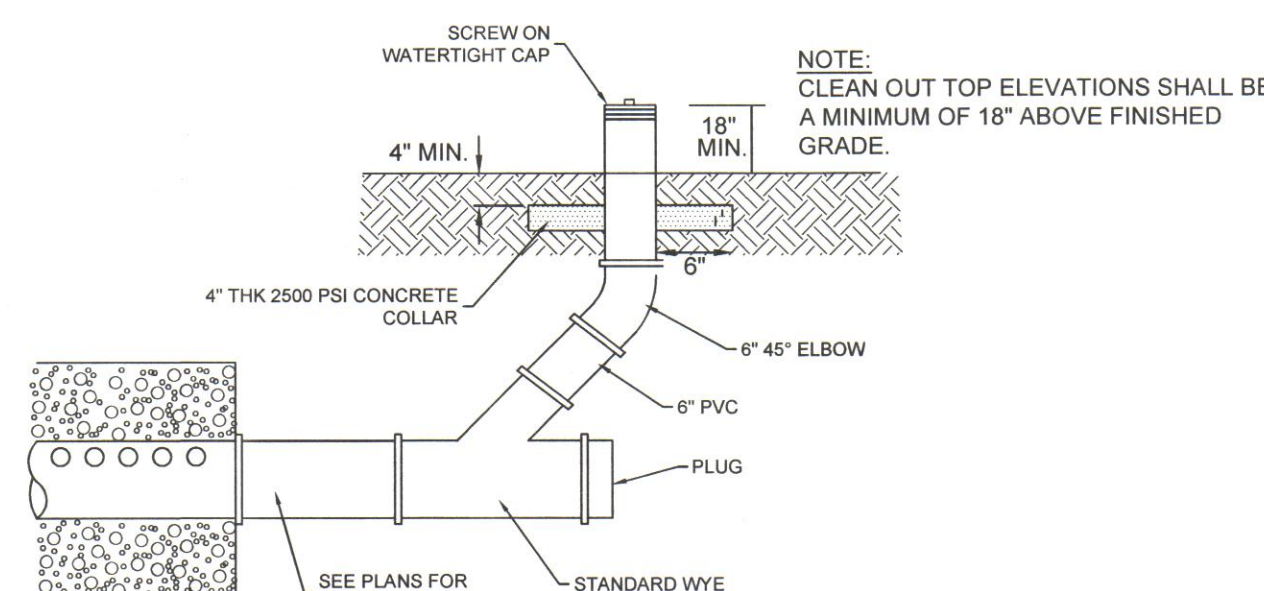


PLAN VIEW



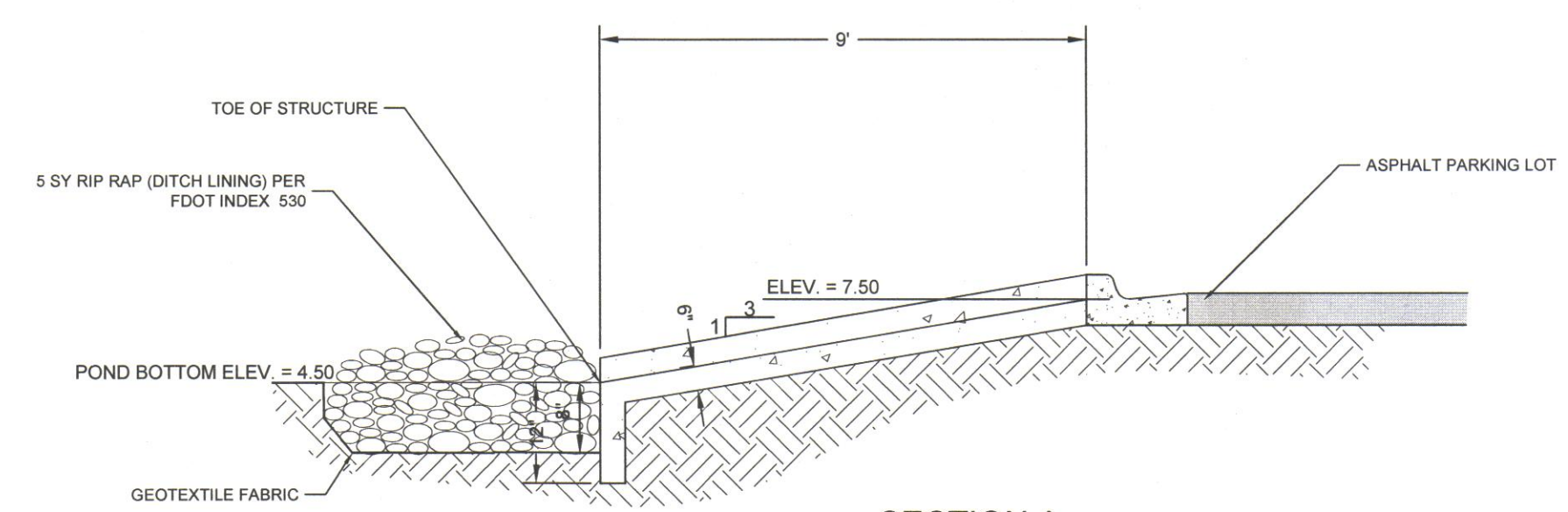
DETAIL SAND FILTER

SCALE: N.T.S.



DETAIL SAND FILTER CLEANOUT

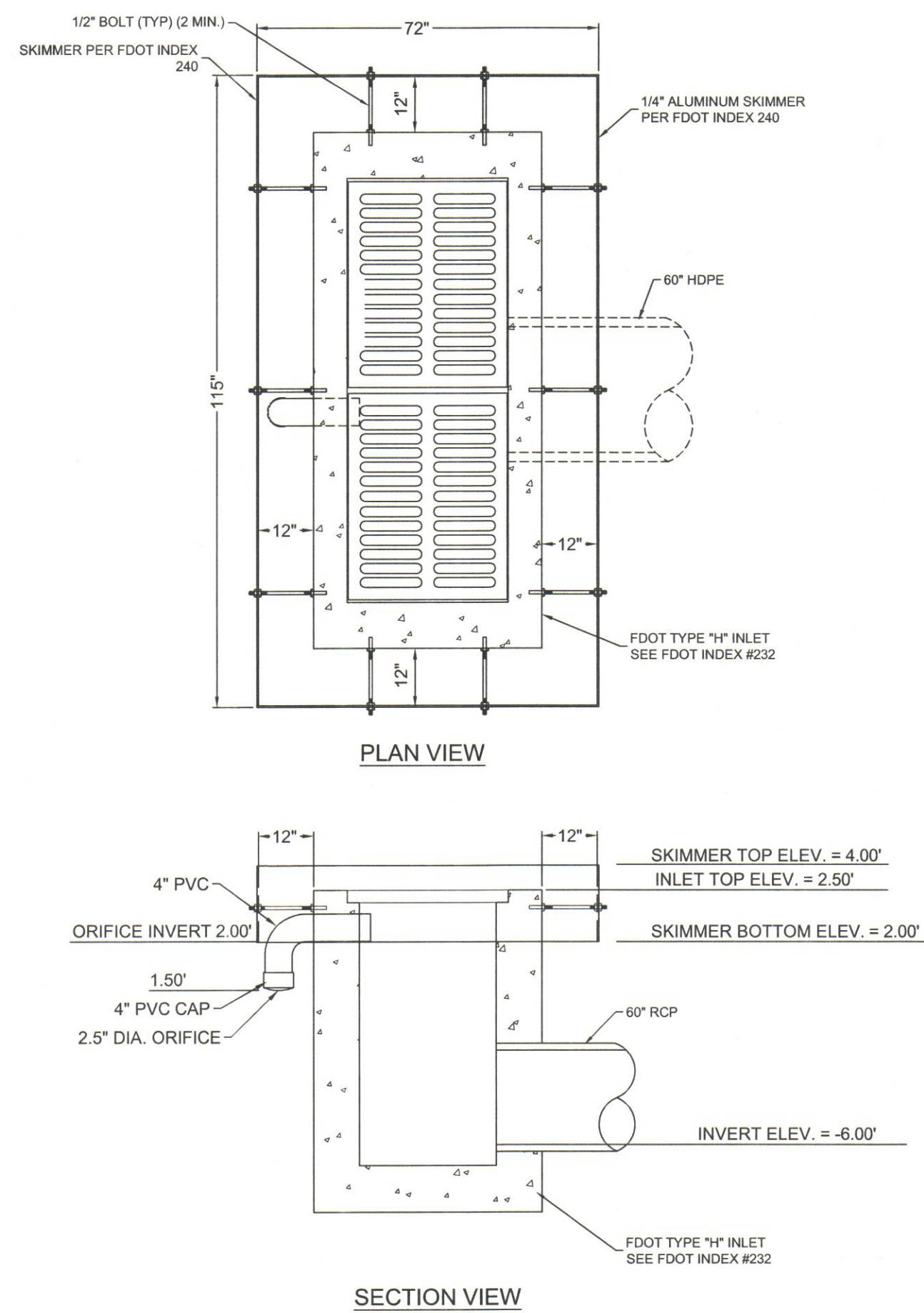
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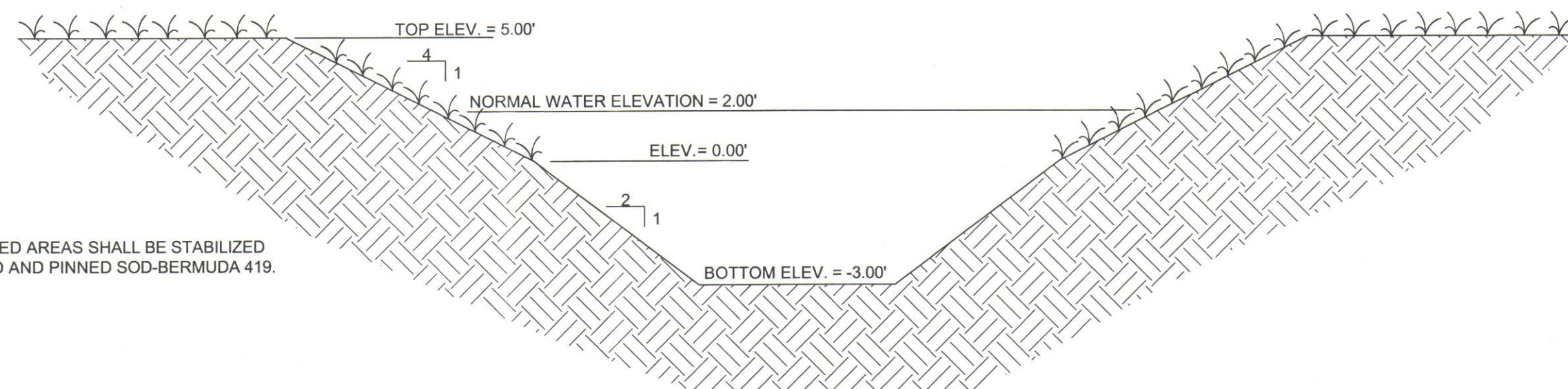
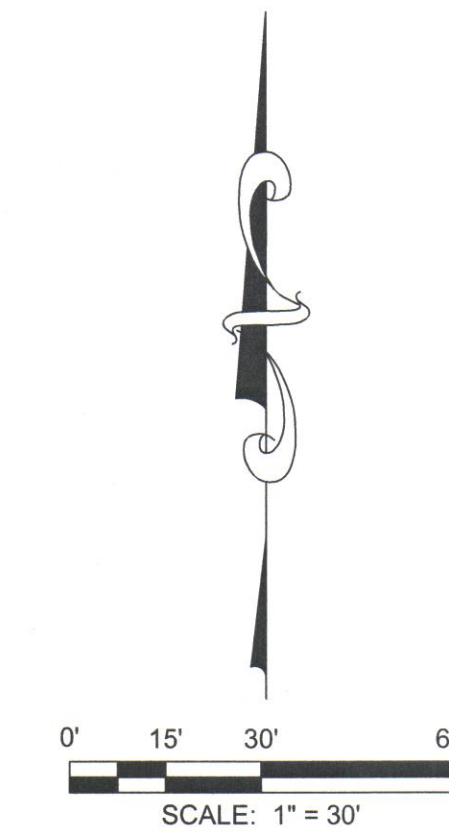
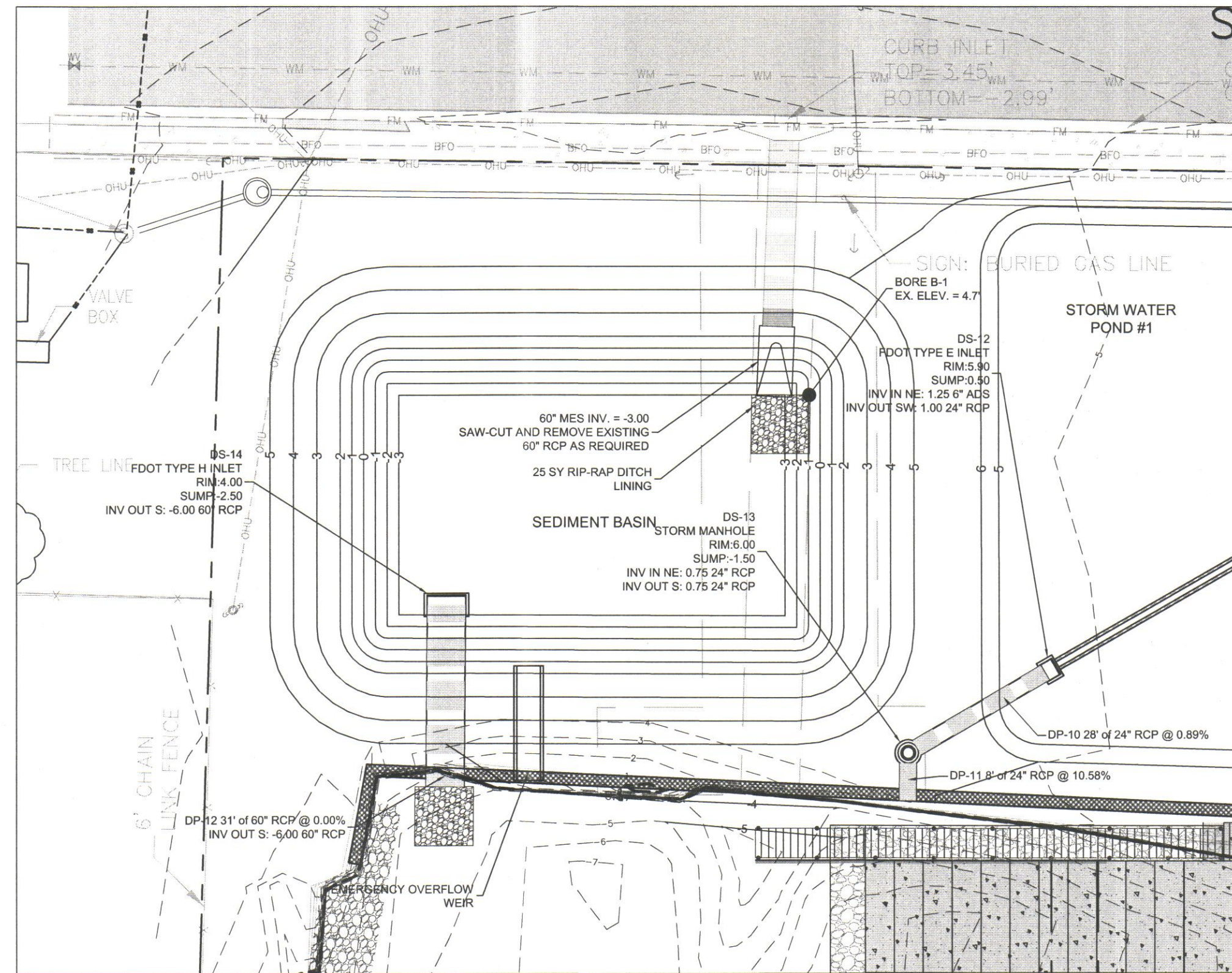
SECTION A

DETAIL CONCRETE FLUME

SCALE: N.T.S.



DETAIL CONCRETE DISCHARGE STRUCTURE (DS-8) (TYPE H)
SCALE: N.T.S.



CLIENT:



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PROJECT:

**SNUG HARBOR
BOAT LAUNCH
FACILITY**

CONSULTANTS:



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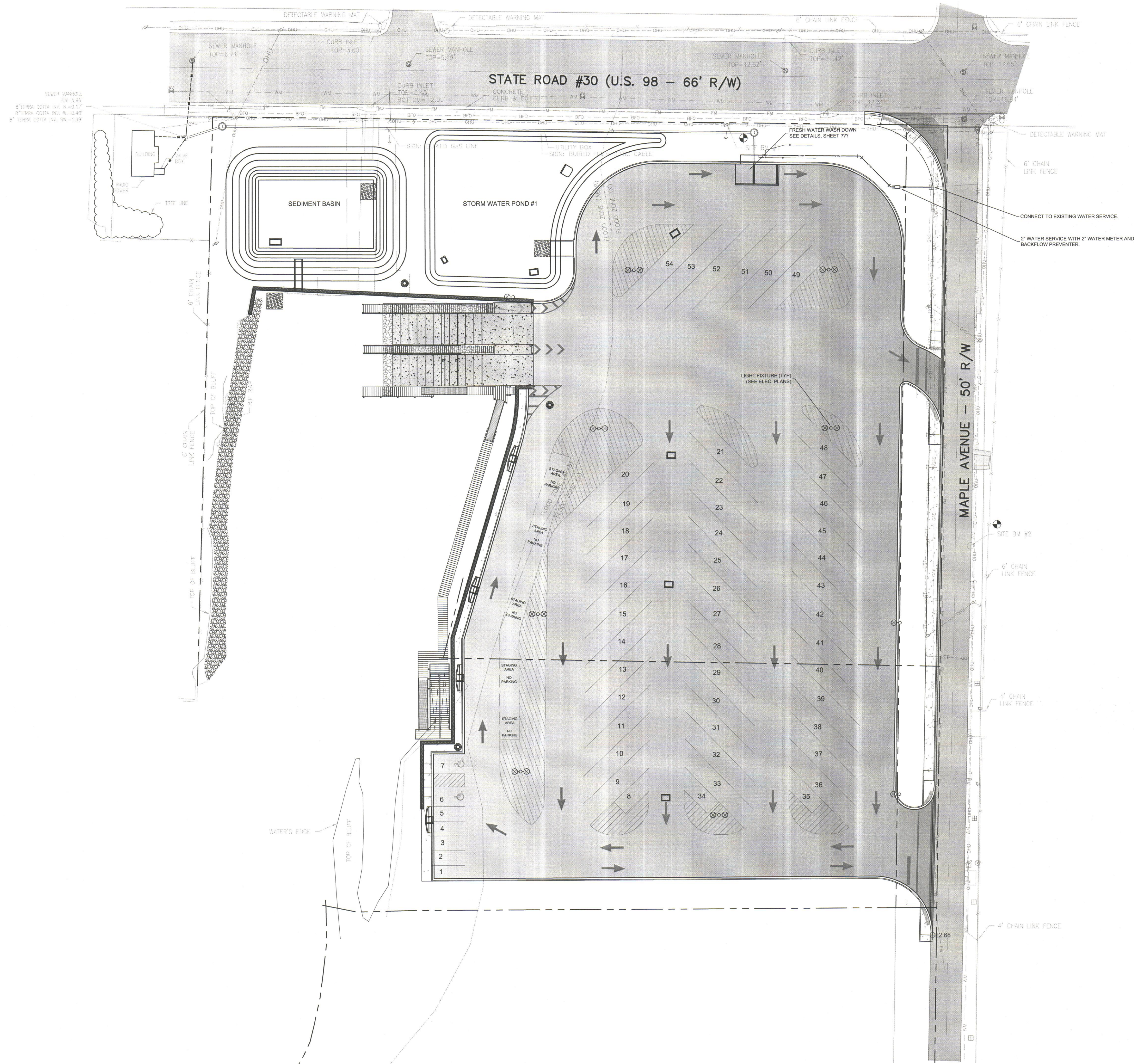
NO.	REVISION	DATE

SHEET TITLE:

**SEDIMENT BASIN
DETAILS**

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PROJECT:

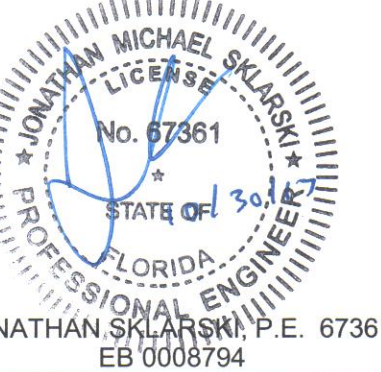
SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



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SCALE:
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NO.	REVISION	DATE

SHEET TITLE:
UTILITY PLAN

PROJECT NO.
50088560 SHEET
C-8

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PROJECT:

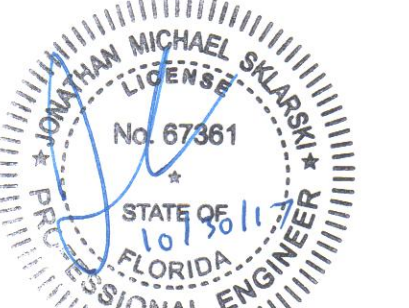
**SNUG HARBOR
BOAT LAUNCH
FACILITY**

CONSULTANTS:



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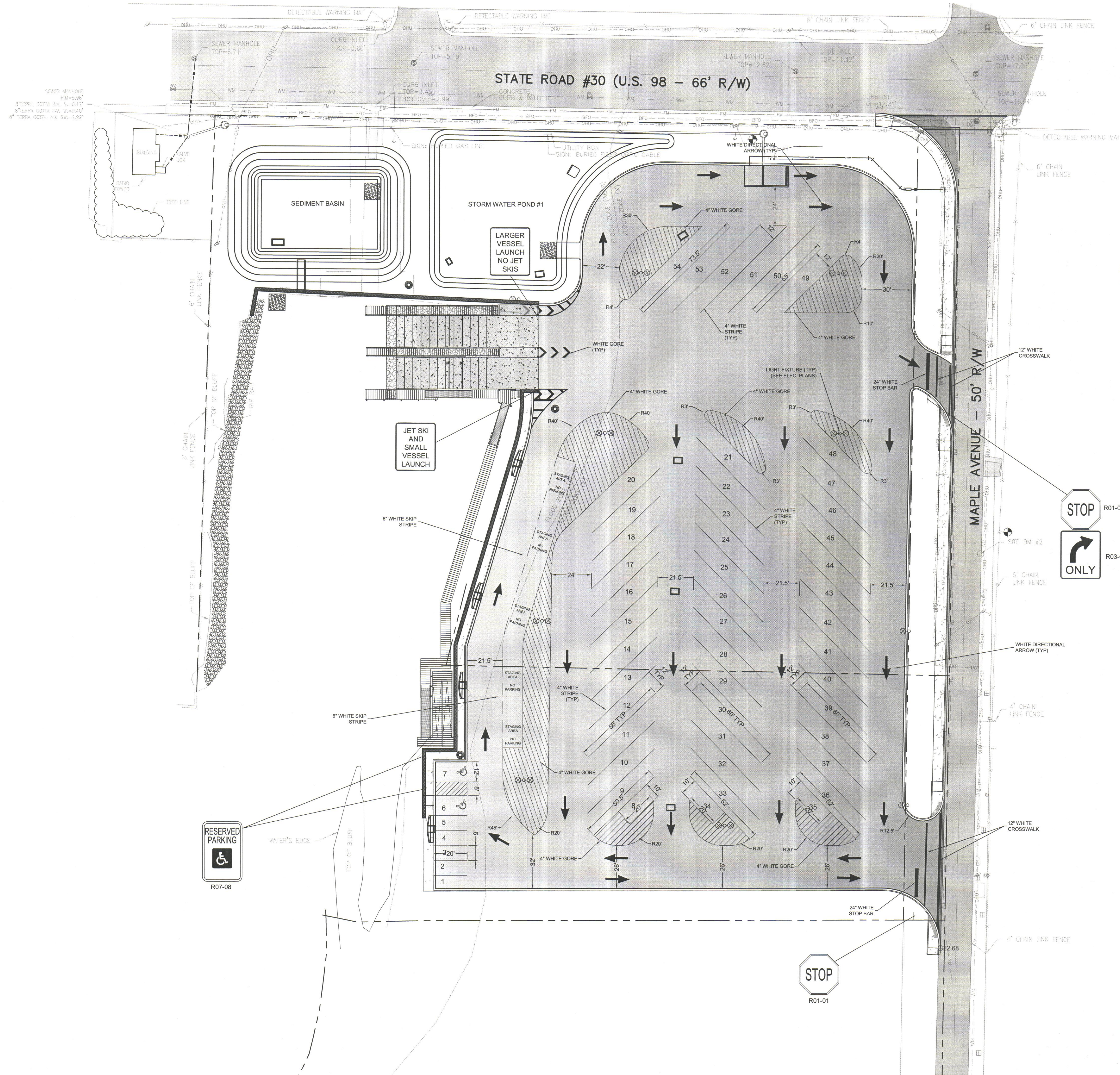
NO.	REVISION	DATE

SHEET TITLE:

**SIGNAGE AND
STRIPING PLAN**

PROJECT NO. 50088560 SHEET C-9

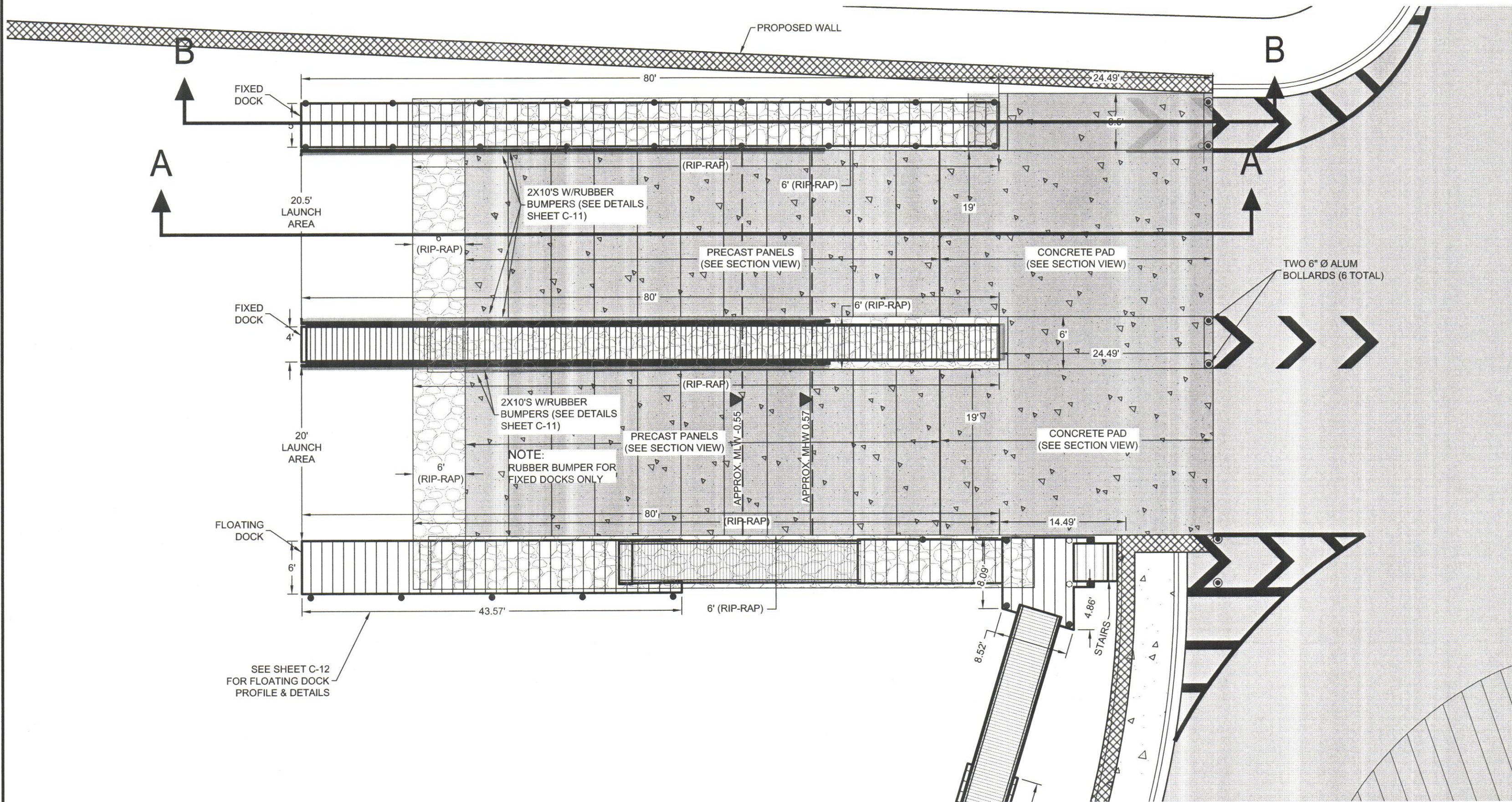
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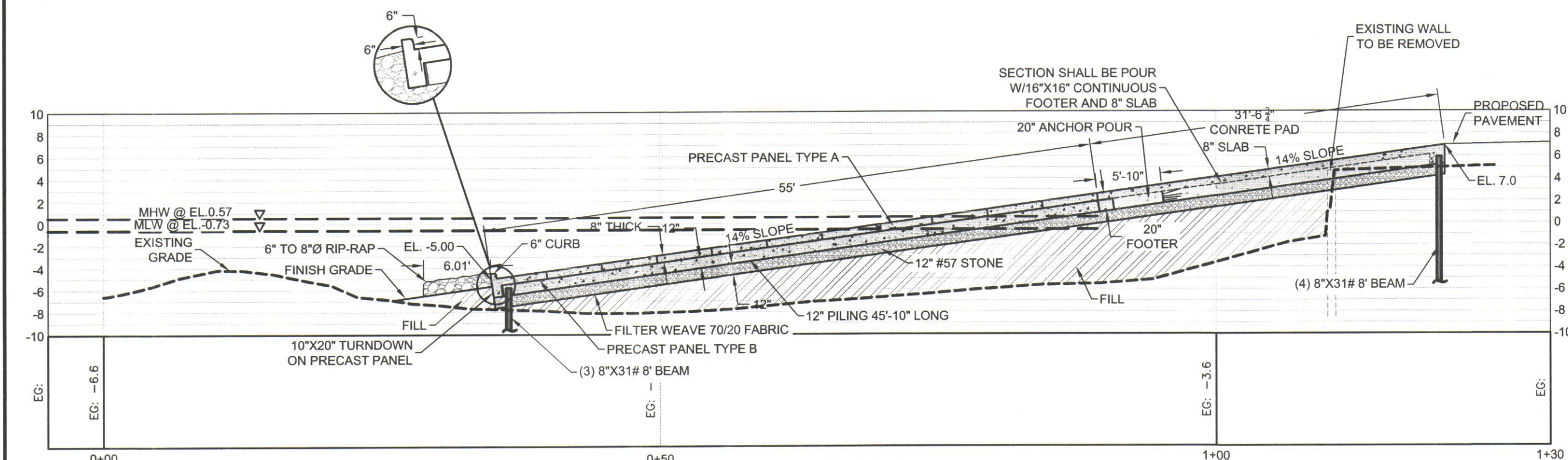
NOTES:

1. ALL STRIPING SHALL BE THERMOPLASTIC.

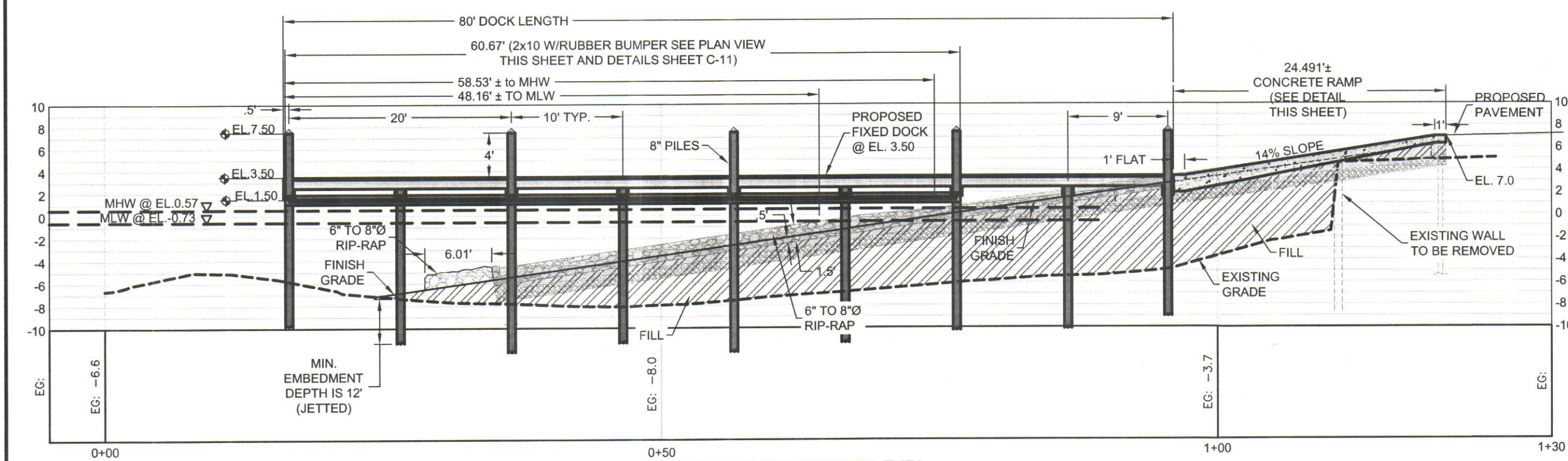
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SCALE: 1" = 30'



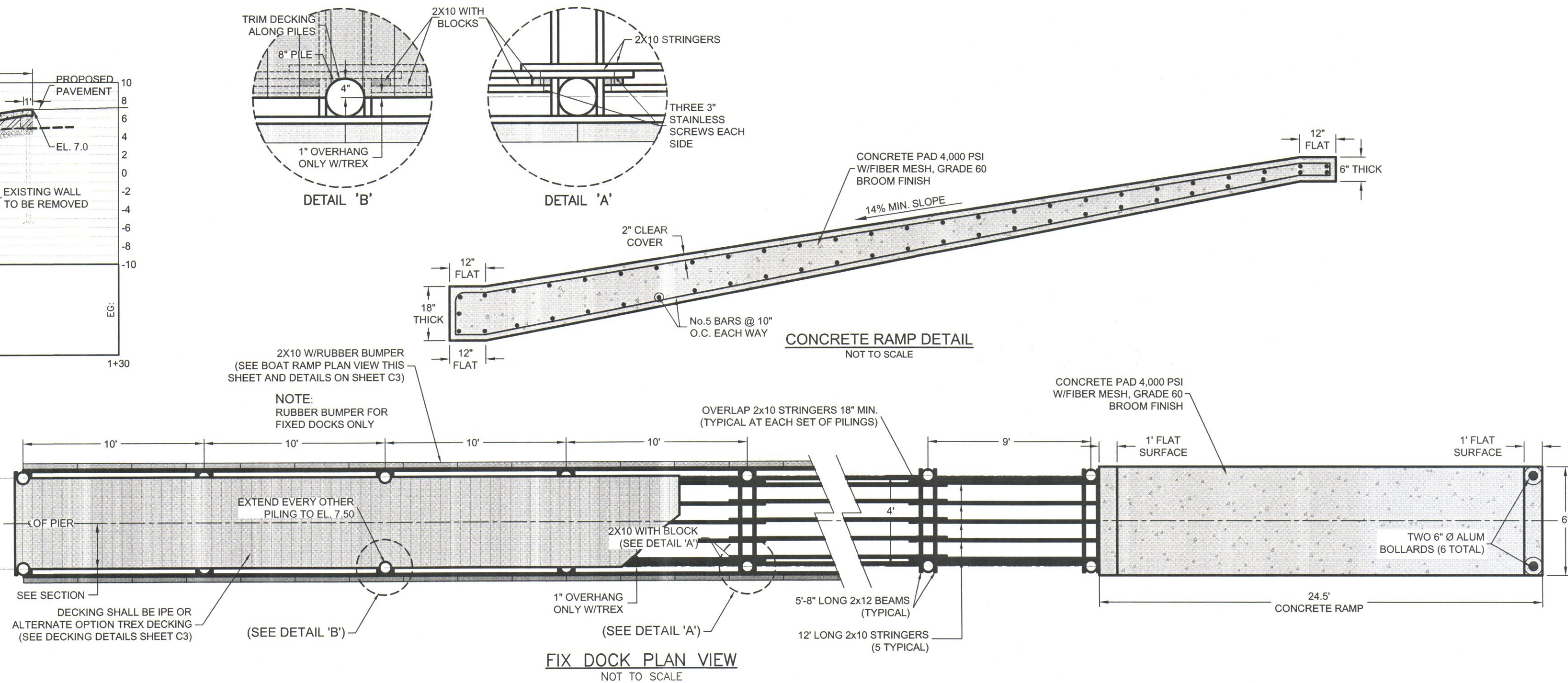
BOAT RAMP PLAN VIEW
SCALE 1"=10'



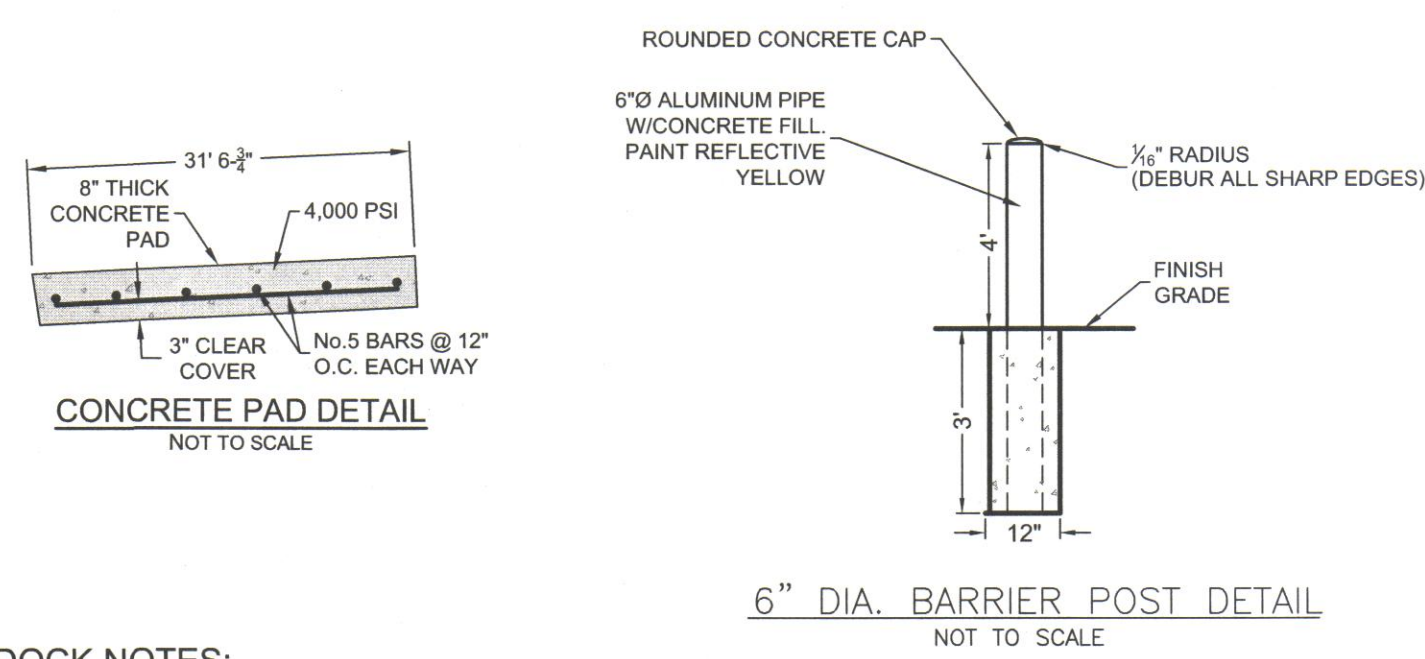
BOAT RAMP PROFILE 'A'
SCALE: HORZ 1"=10'
VERT. 1"=10'



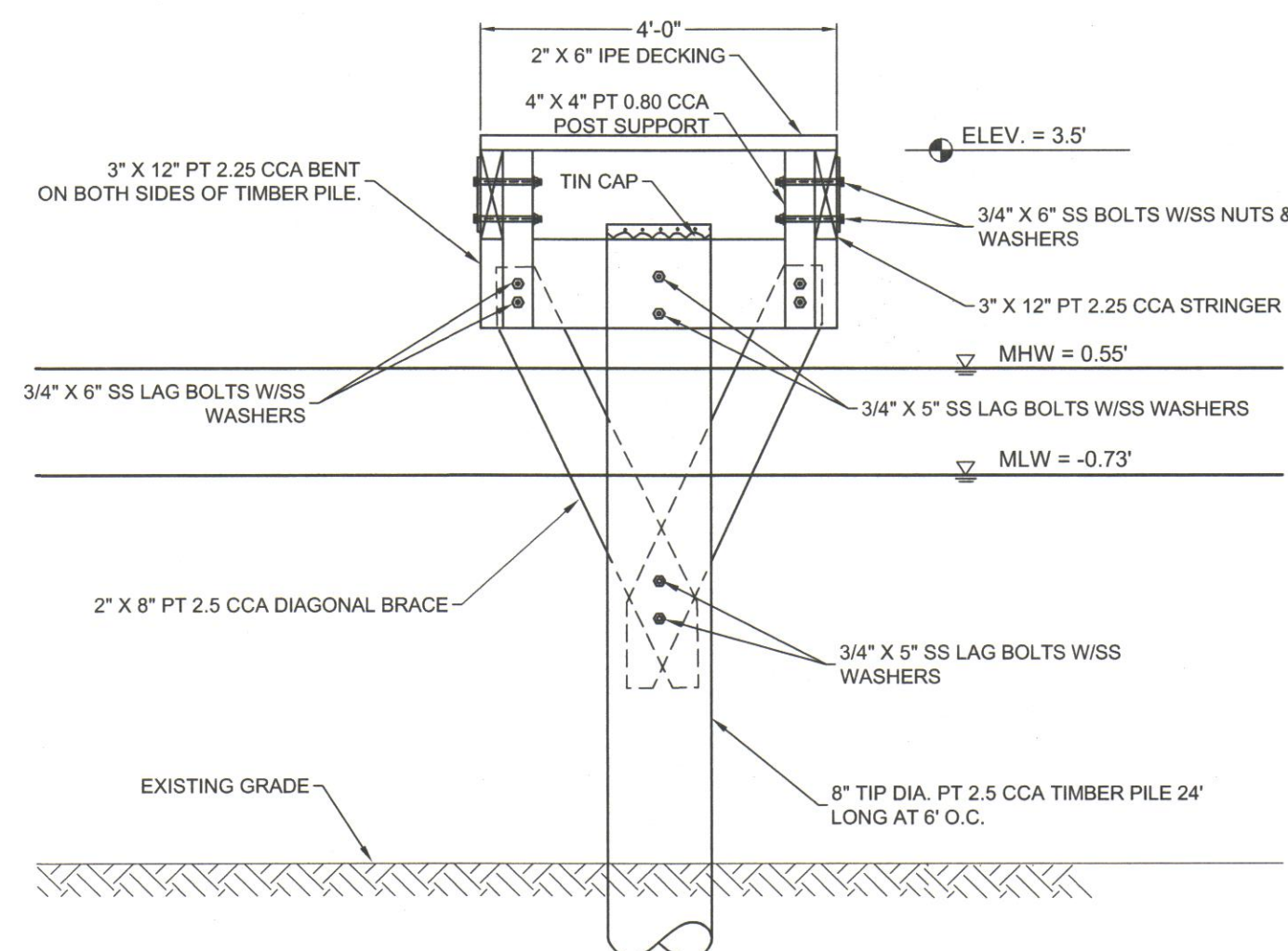
FIXED DOCK PROFILE 'B'
SCALE: HORZ 1"=10'
VERT. 1"=10'



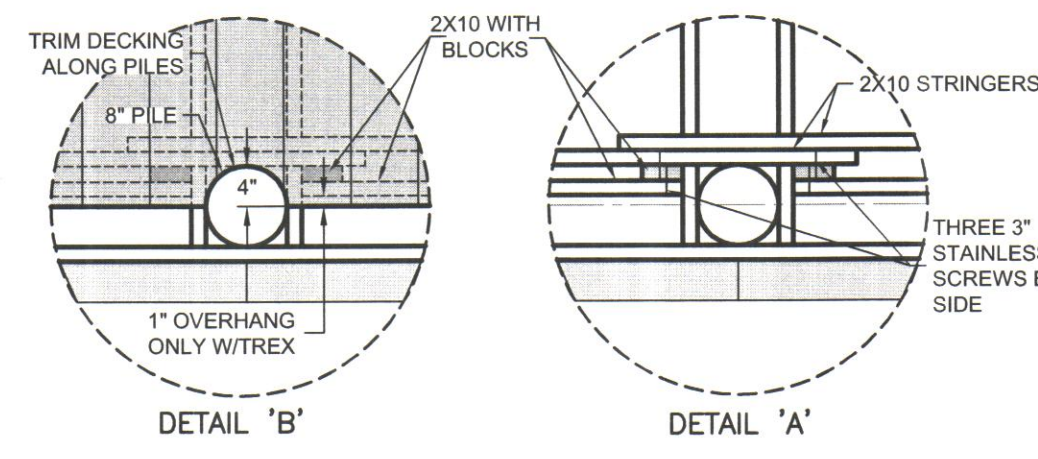
FIX DOCK PLAN VIEW
NOT TO SCALE



- DOCK NOTES:**
1. ALL WOOD FOR DOCKS SHALL BE PRESSURE TREATED (PT) 2.5 CCA.
 2. ALL TIMBER PILES SHALL BE (PT) 2.5 CCA W/8" TIP 28" LONG @ 10' O.C. FOR LONGER PILES AND 26" LONG FOR SHORT PILES.
 3. ALL DECK MATERIAL SHALL BE IPE (2"X6") BROWN OR APPROVED EQUAL.
 4. ALL DECK SCREWS SHALL BE SS #10X3" GRADE 304.
 5. ALL BOLTS, NUTS, AND WASHERS SHALL BE 7"X14" SS GRADE 304.
 6. ALL PILING SHALL HAVE A MIN. JETTED DEPTH OF 12' BELOW THE MUD LINE.
 7. ALL PILING SHALL HAVE PVC CONE CAPS.
 8. ALL CONCRETE SHALL BE 4000 PSI W/FIBER MESH AND GRADE 60 STEEL.
 9. RUBBER BUMPER: VENDOR NAME: GLOBAL
- PRODUCT INFORMATION:**
- VESTIL EXTRUDED BUMPER M-4-36 - 36"LX4-1/4"WX4"H
LENGTH INCHES: 36 - WIDTH INCHES: 4-1/4 - HEIGHT INCHES: 4
BRAND: VESTIL - CONSTRUCTION: RUBBER - MFG PART NO. M-4-36
MOUNT TYPE: 3/4" MOUNTING HOLES: 1-1/4" FASTENER ACCESS HOLES
TYPE: HALF-OVAL EXTRUDED BUMPER
CONTRACTOR TO PROVIDE SHOP DRAWING FOR ENGINEERS APPROVAL PRIOR TO ORDERING.

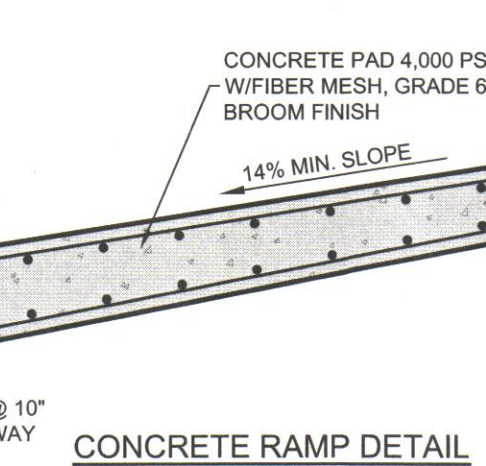


DETAIL FIXED TIMBER PIER
SCALE: 1/2" = 1'-0"



DETAIL 'B'

DETAIL 'A'



CONCRETE RAMP DETAIL
NOT TO SCALE

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

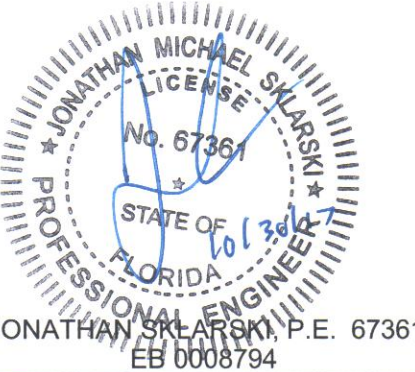
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NO.	REVISION:	DATE:

SHEET TITLE:
BOAT RAMP
LAYOUT PLAN &
DETAILS

PROJECT NO. 50088560 SHEET C-10

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SNUG HARBOR BOAT LAUNCH FACILITY



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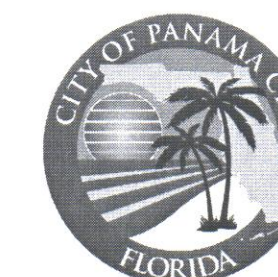
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SHEET
C-11

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PROJECT

SNUG HARBOR
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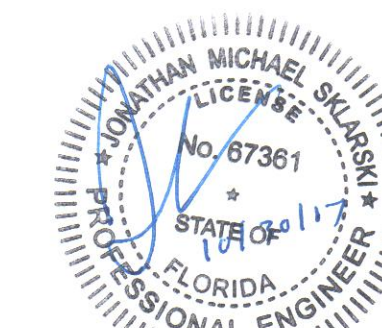
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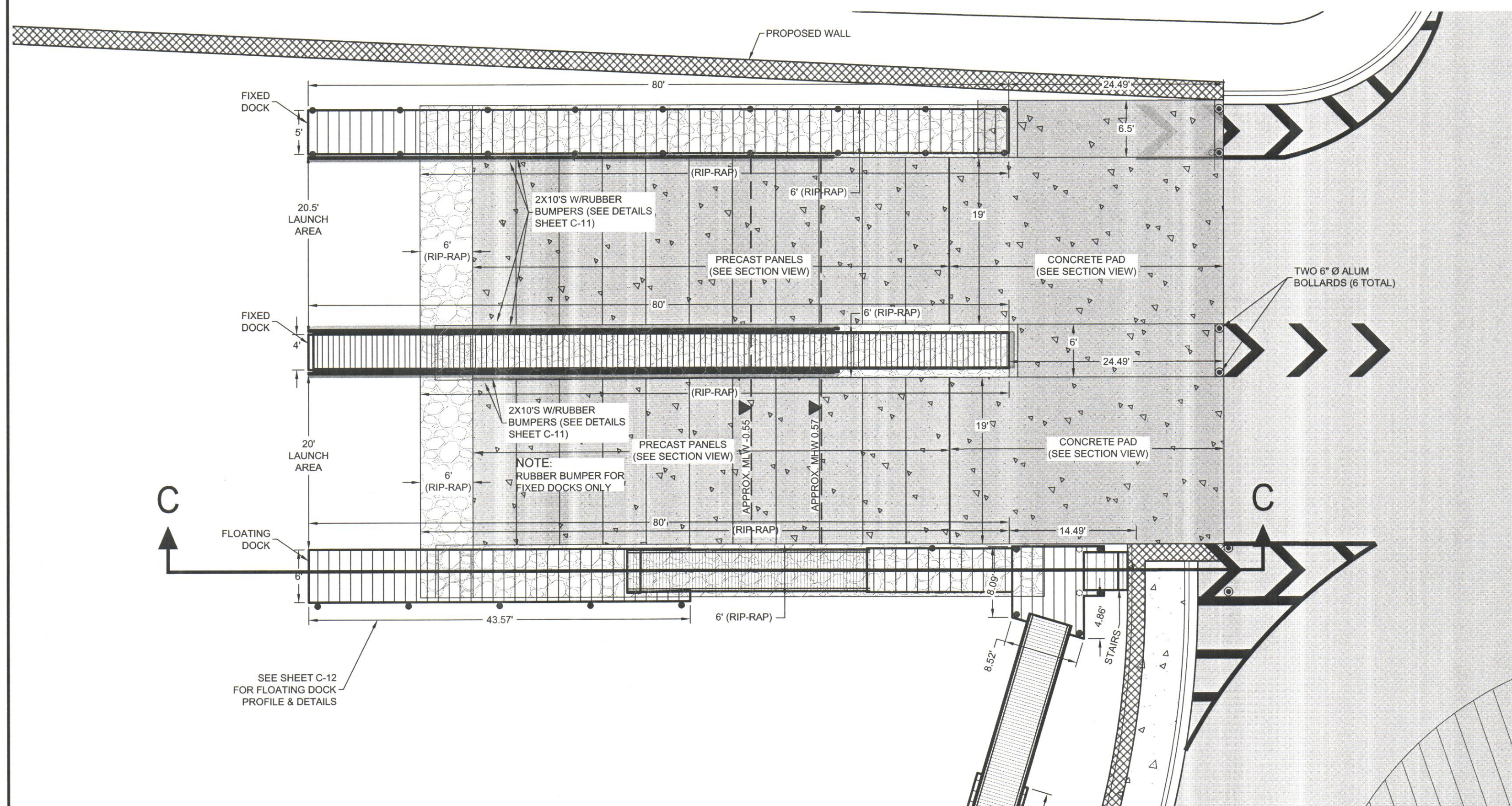
SHEET TITLE:		

FLOATING DOCK LAYOUT PLANS &

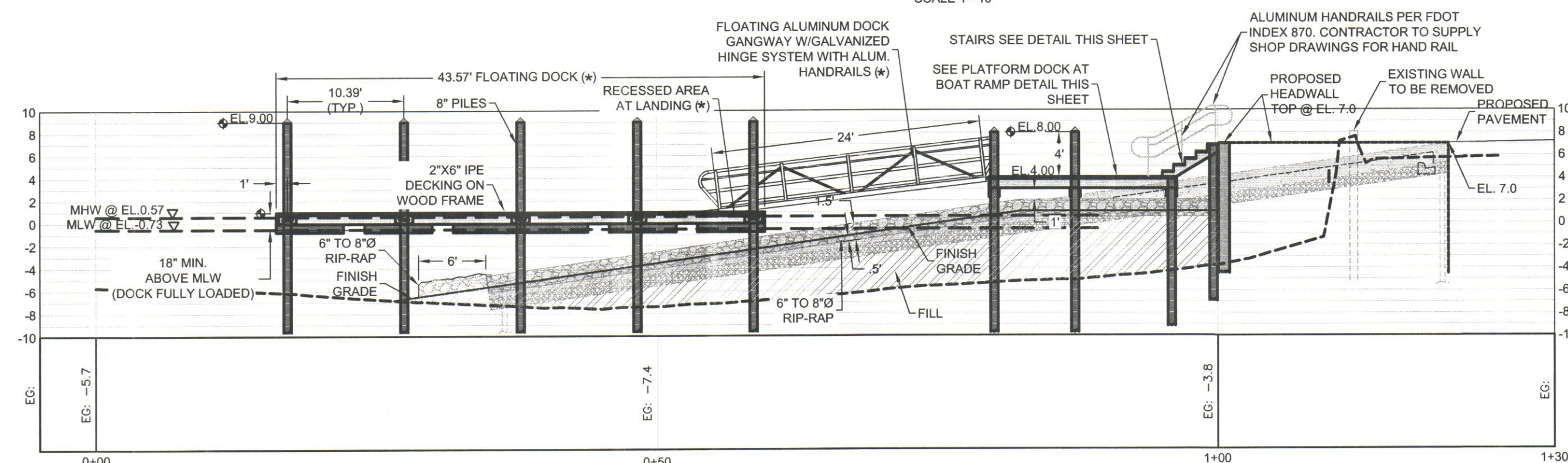
EXHIBIT PLANS & DETAILS

PROJECT NO. 50088560	SHEET C-12
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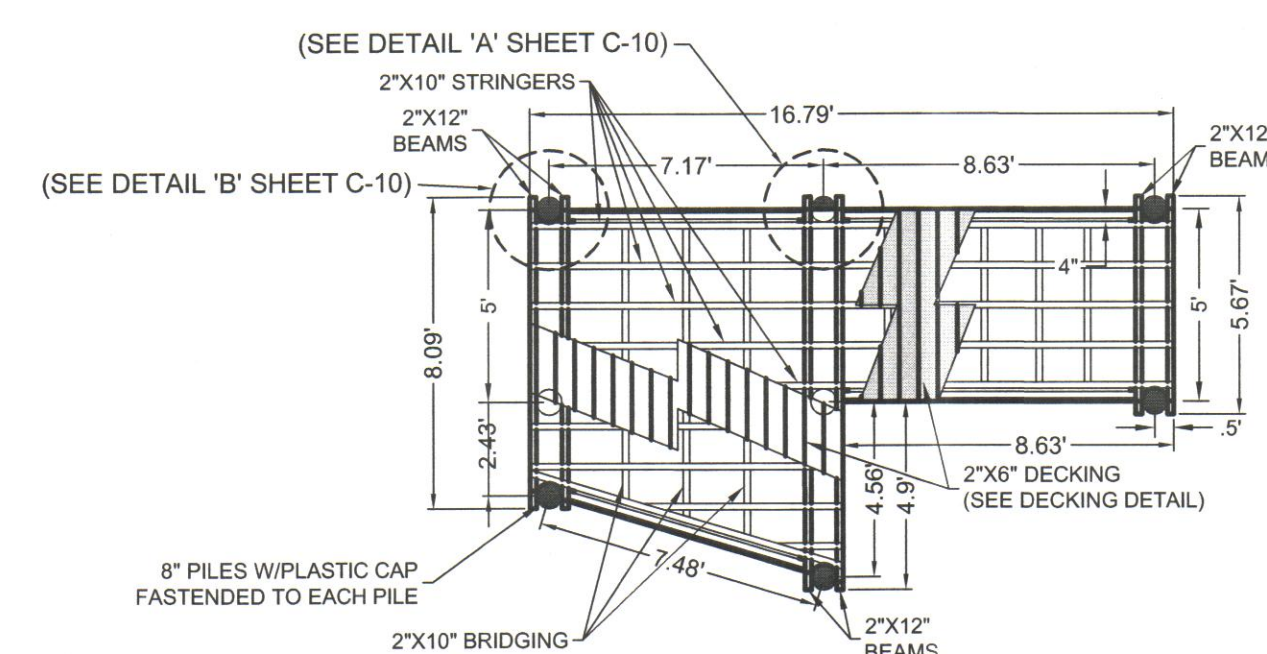
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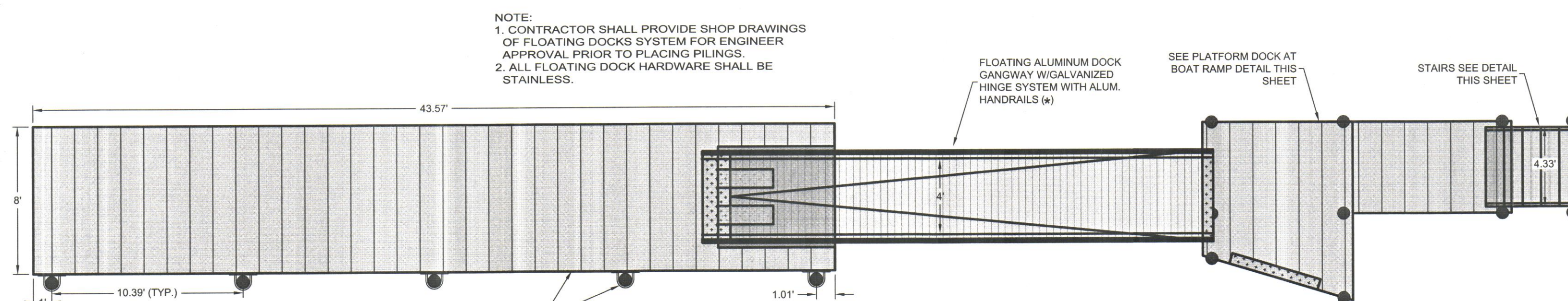
BOAT RAMP PLAN VIEW
SCALE 1"=10'



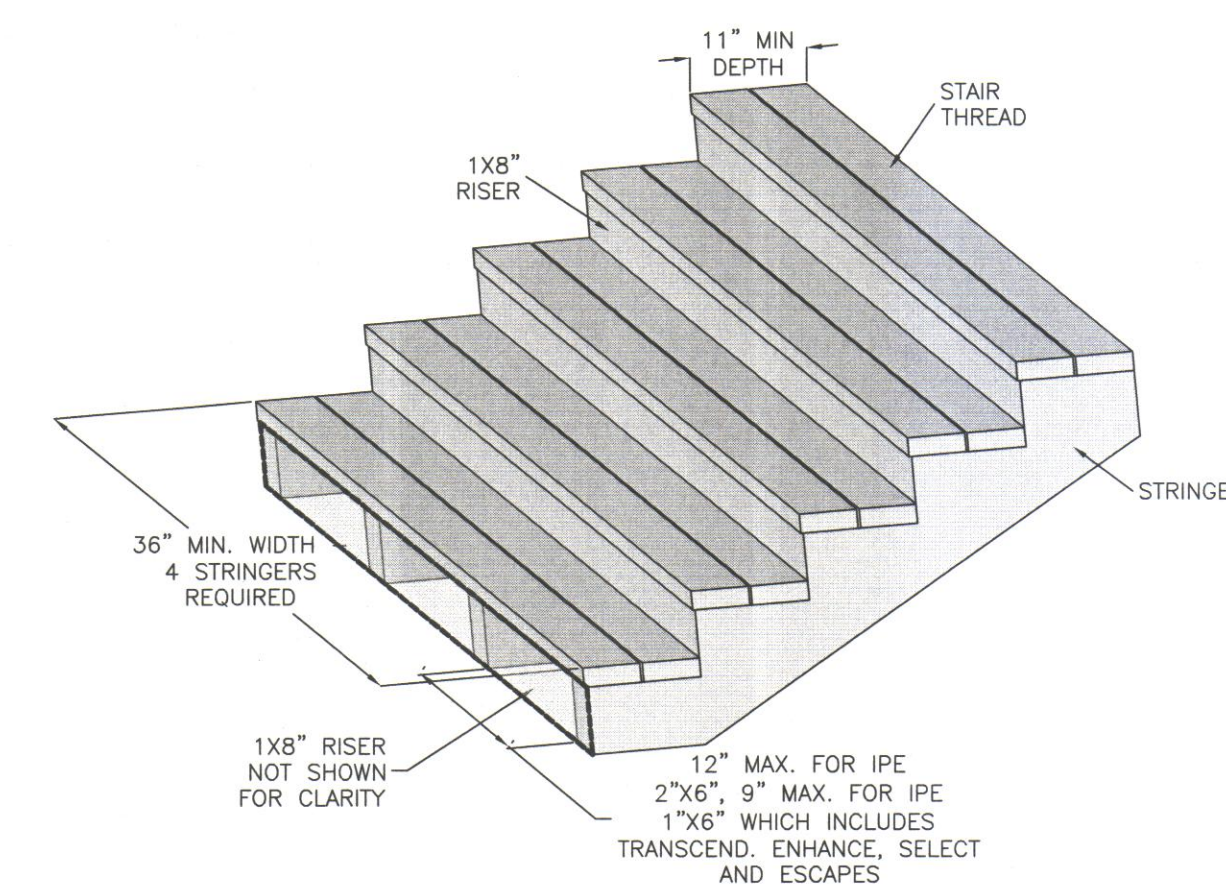
0+50
FLOATING DOCK PROFILE 'C'
SCALE: HORIZ. 1"=10'
VERT. 1"=10'



PLATFORM DOCK AT BOAT
RAMP PLAN VIEW
NOT TO SCALE



FLOATING DOCK PLAN VIEW
NOT TO SCALE



NOTE: 4 STRINGERS ARE REQUIRED IF 12" SPAN
5 STRINGERS ARE REQUIRED IF 9" SPAN.

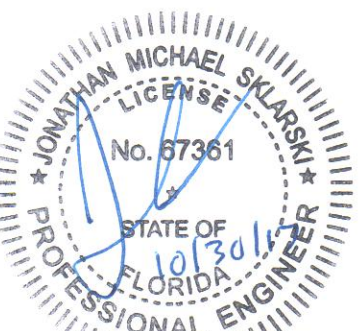
STAIRS DETAIL
NOT TO SCALE

SNUG HARBOR BOAT LAUNCH FACILITY



mrd associates, inc.
Coastal, Marina & Water Resources Engineering

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JONATHAN SKLARSKI, P.E. 67361
EB 0008794

SCALE: AS SHOWN	DATE: SEPTEMBER 2017
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DRAWN:	CHECKED: RD	APPROVED: JMS
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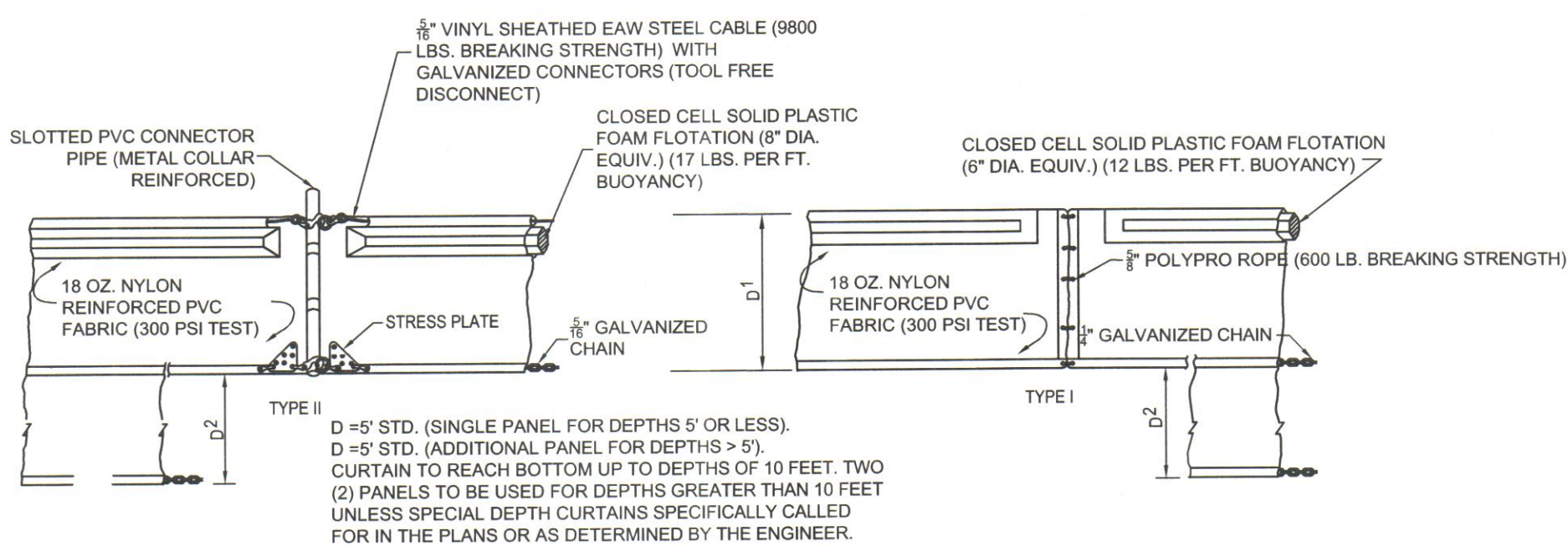
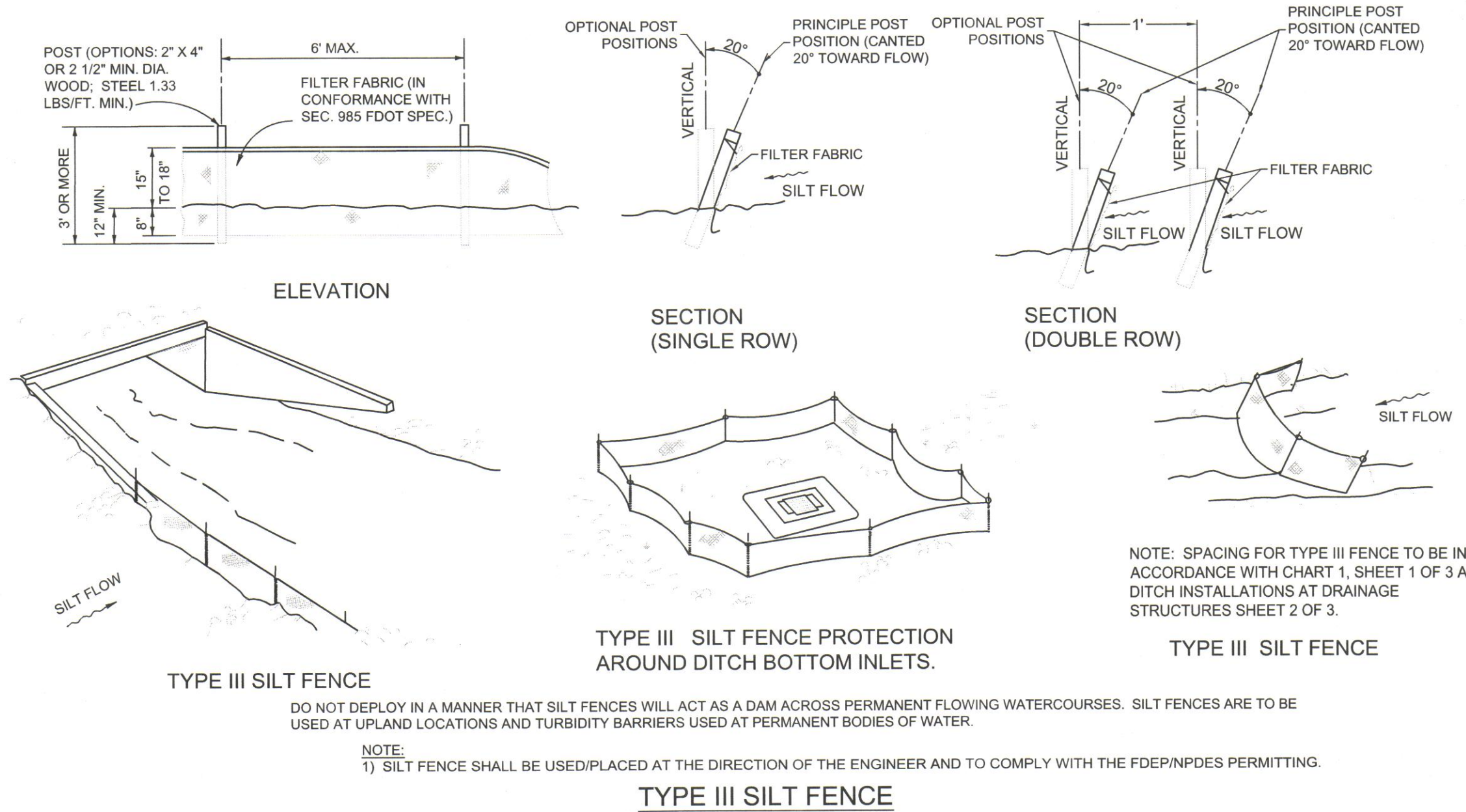
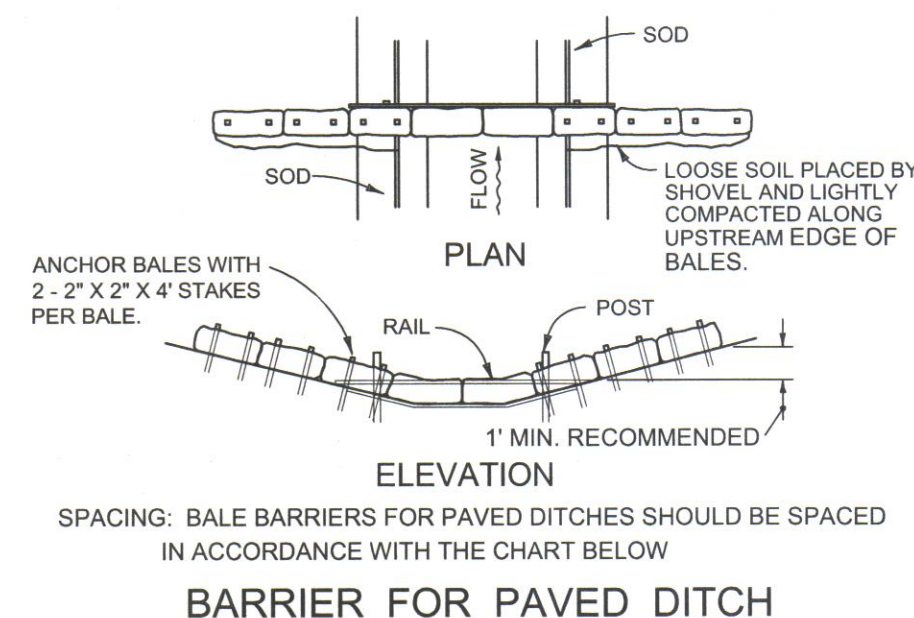
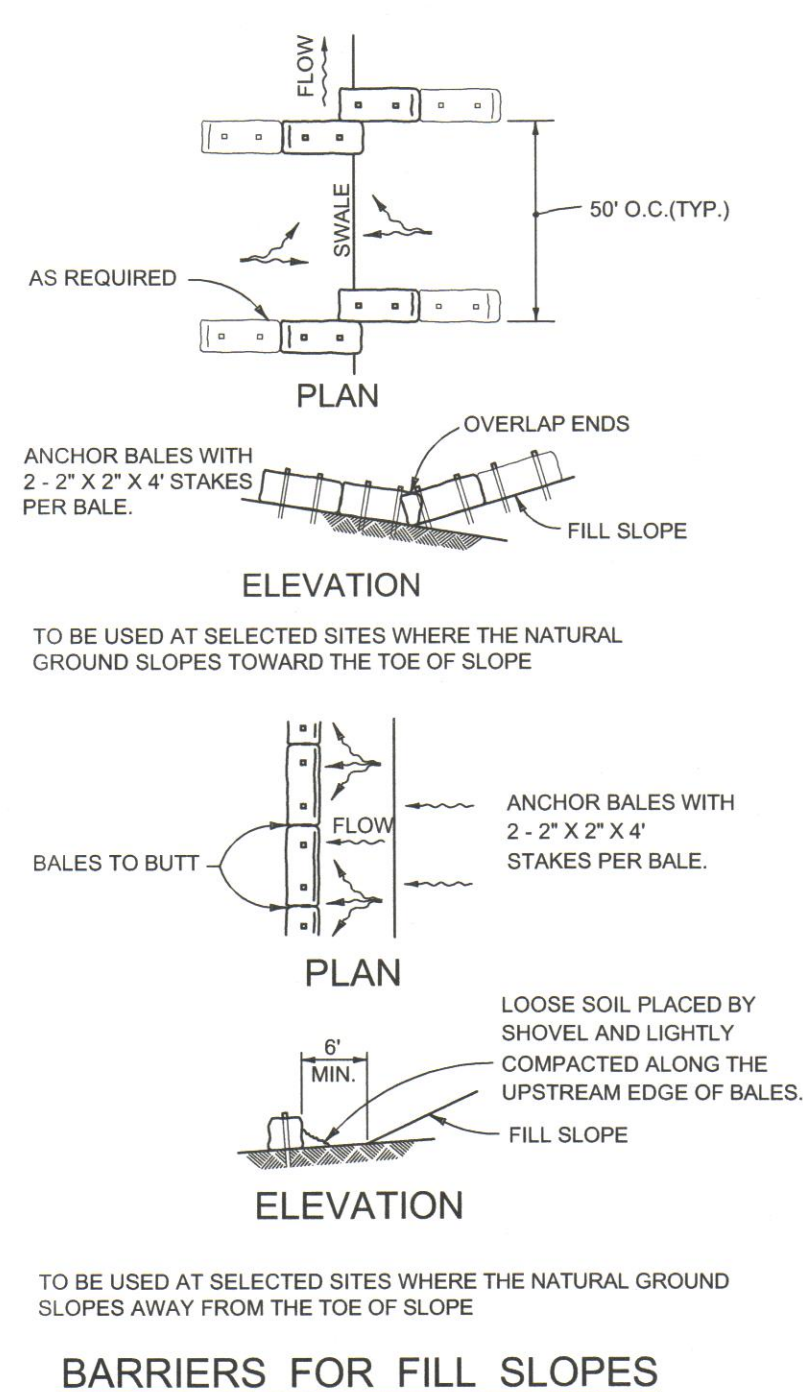
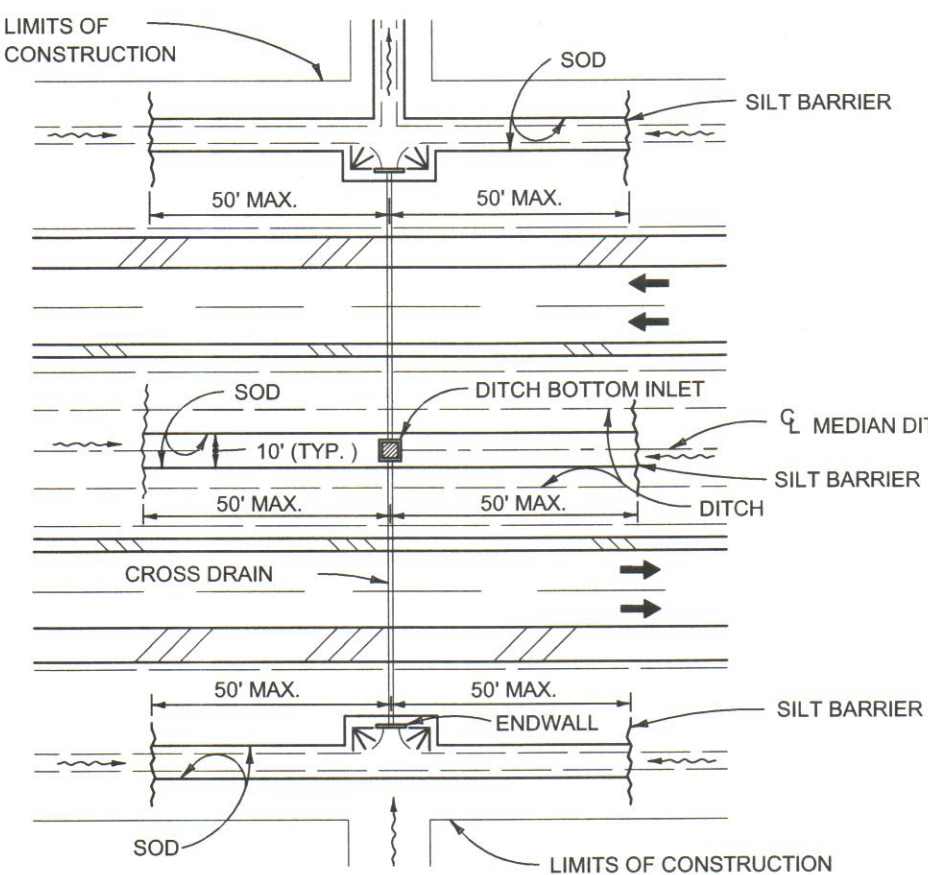
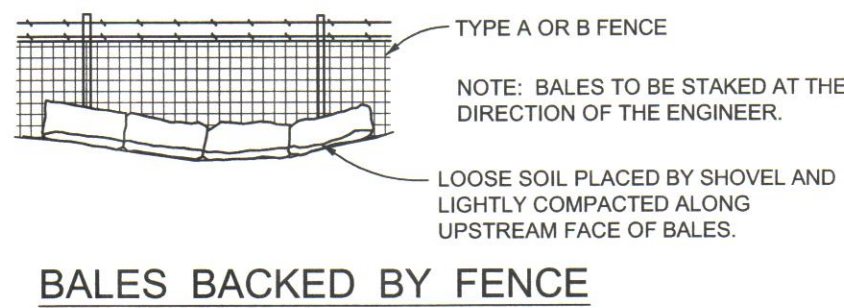
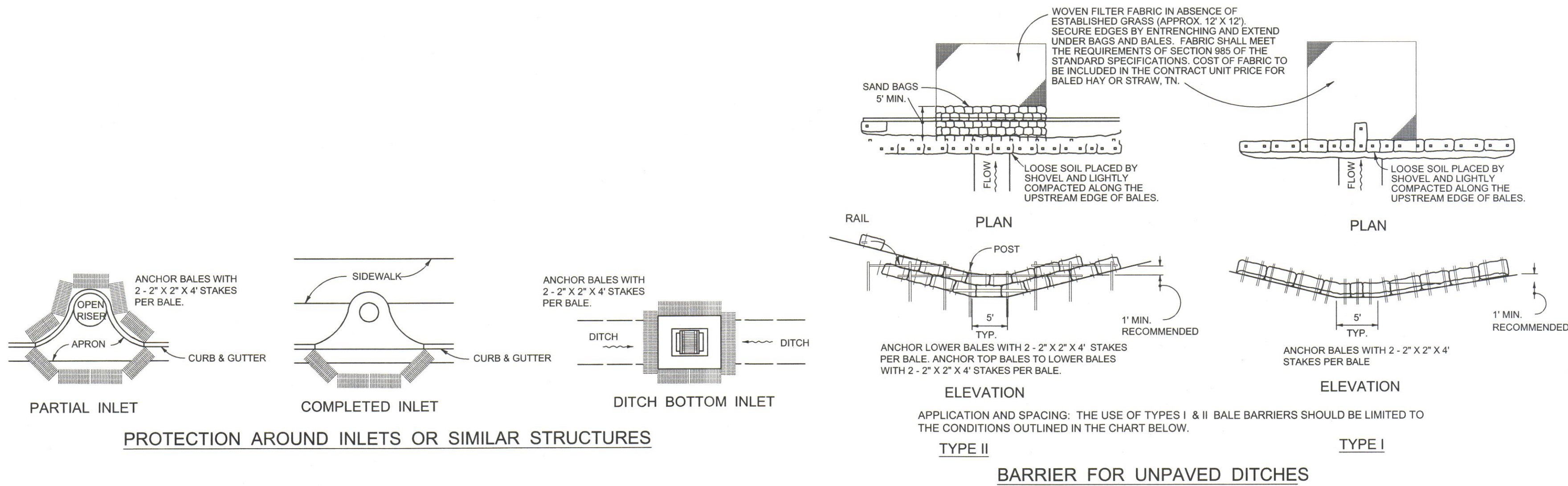
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PROJECT NO. 50088560	SHEET C-13
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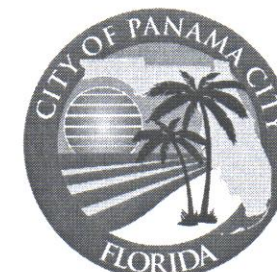
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K:\50085650 PC - SNUG HARBOR BOAT LAUNCH FACILITY_CIVIL\BOLDER_PRODUCTION\50085650 SITEPLAN DWG BROCHER



CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

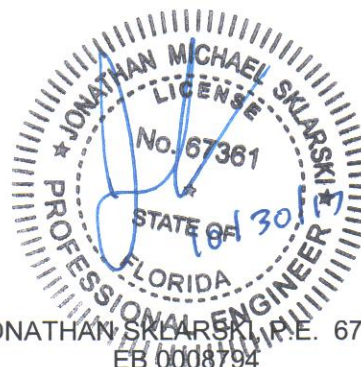
SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



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SCALE: 1"=30' DATE: SEPTEMBER 2017

DRAWN: BWR CHECKED: RD APPROVED: JMS

NO.	REVISION:	DATE:

SHEET TITLE:

**EROSION CONTROL
DETAILS**

PROJECT NO.
50088560

SHEET
C-14

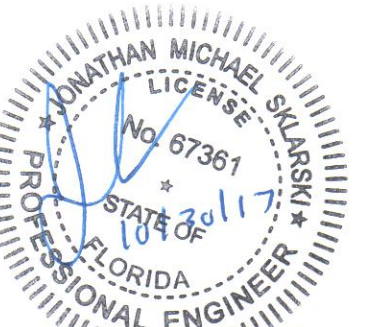


PROJECT:

CONSULTANTS:

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EB 0008794

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SCALE: 1"=30'	DATE: SEPTEMBER 2017
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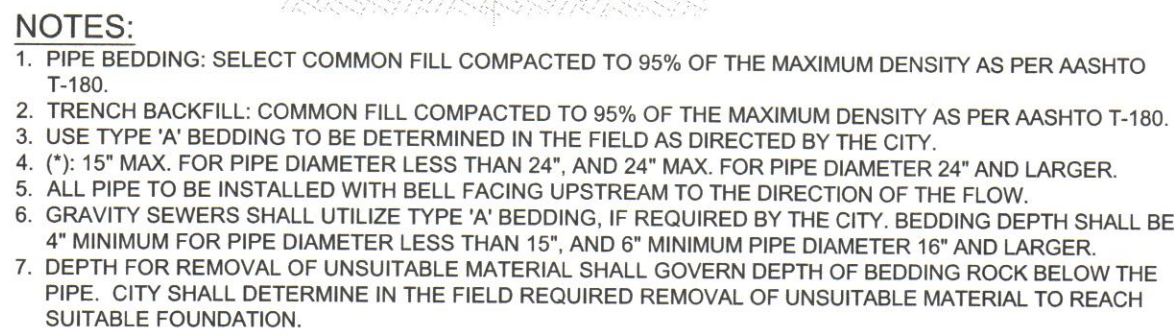
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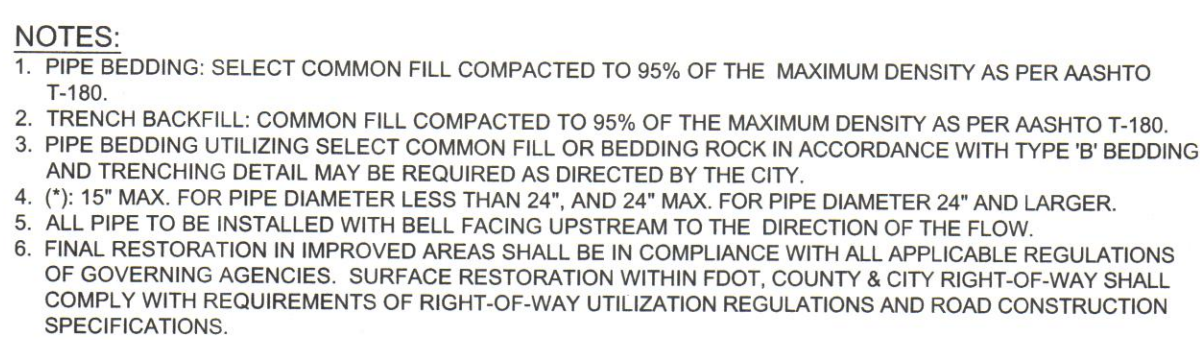
MISCELLANEOUS DETAILS

PROJECT NO. 50088560	SHEET C-16
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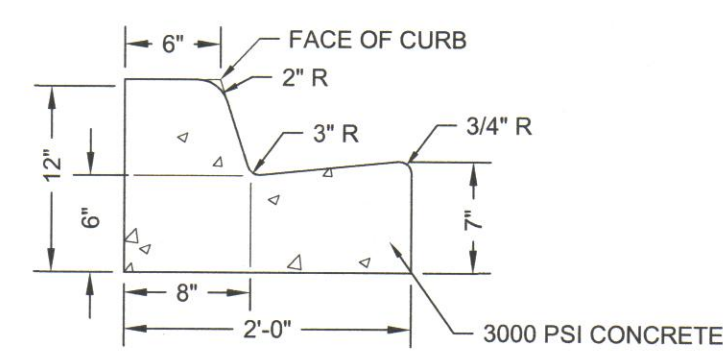
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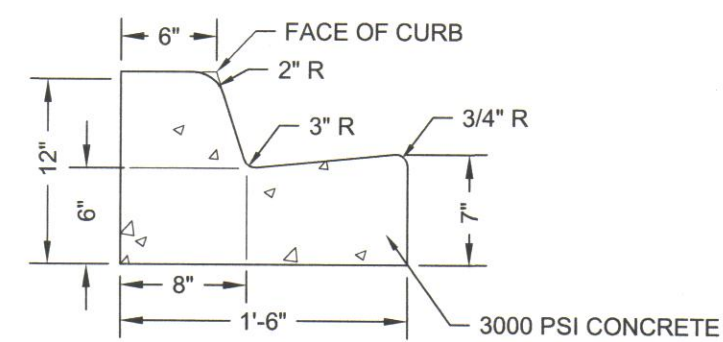
DETAIL TYPICAL FORCE MAIN, REUSE AND WATER MAIN BEDDING
SCALE: N.T.S.



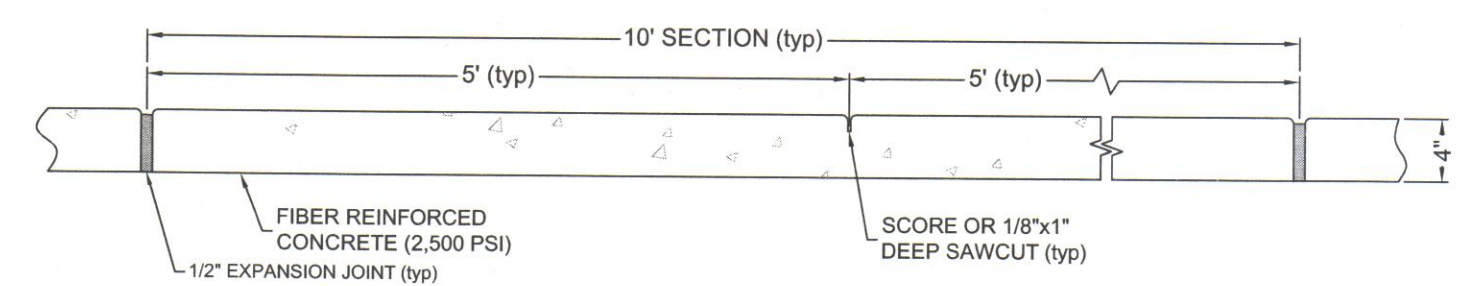
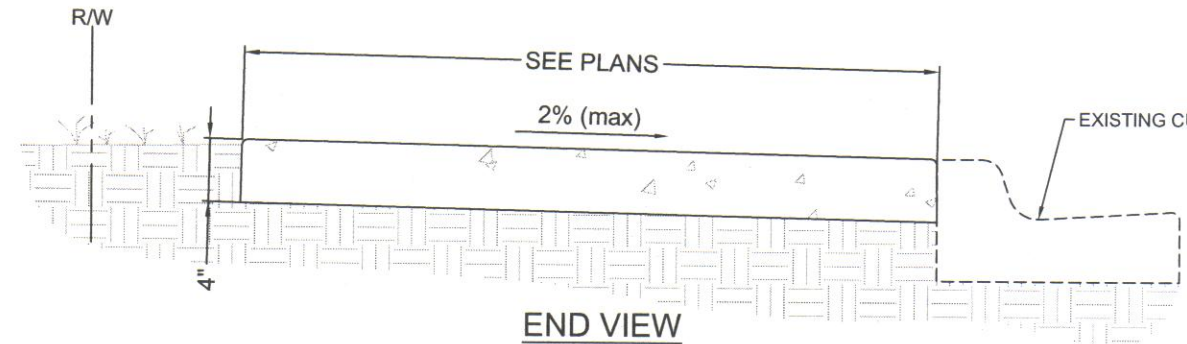
TYPE 'B' BEDDING AND TRENCHING



SCALE: N.T.S.



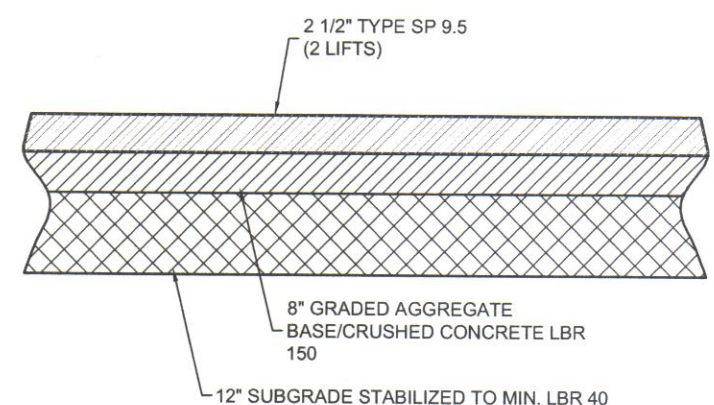
SCALE: N.T.S.



NOTES:

1. SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION SECTION 522.
2. DETECTABLE WARNINGS SHALL CONFORM TO THE REQUIREMENTS IN FDOT INDEX NO. 304.
3. FOR TURNOUTS SEE FDOT INDEX NO. 515
4. CONSTRUCT SIDEWALKS WITH A 1'-0" THICK EDGE BEAM THROUGH THE LIMITS OF ANY SURFACE MOUNTED PEDESTRIAN/BICYCLE PICKET RAILING OR PIPE GUARDRAIL SHOWN IN PLANS.
5. WHEN DRIVEWAYS ARE NEWLY CONSTRUCTED, RECONSTRUCTED, OR ALTERED, CROSS SLOPES FOR DISCONTINUOUS SIDEWALKS SHALL NOT EXCEED 2%.

SCALE: N.T.S.

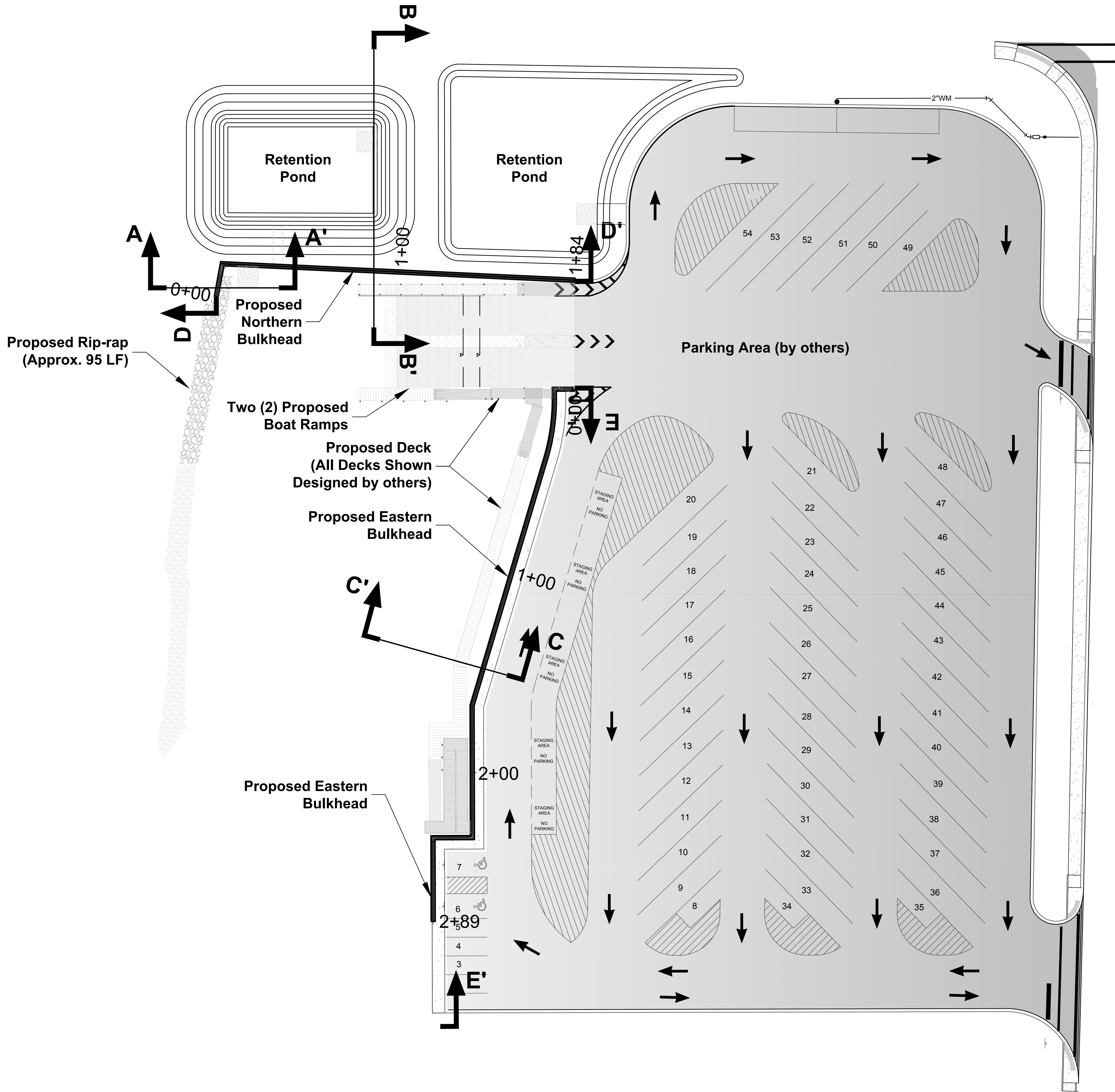


NOTE:

1. FINAL 1" LIFT OF ASPHALT SHALL BE PLACED AFTER MAJOR CONSTRUCTION TRAFFIC.
2. SUBGRADE AND BASE SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR.

SCALE: N.T.S.

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CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



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FL License # 65846

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SCALE: 1"=25' DATE: SEPTEMBER 2017

DRAWN: CHECKED: APPROVED:

NO.	REVISION	DATE

SHEET TITLE:

BULKHEAD SECTION
KEY

PROJECT NO. 50088560 SHEET S-1

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PROJECT:

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FACILITY

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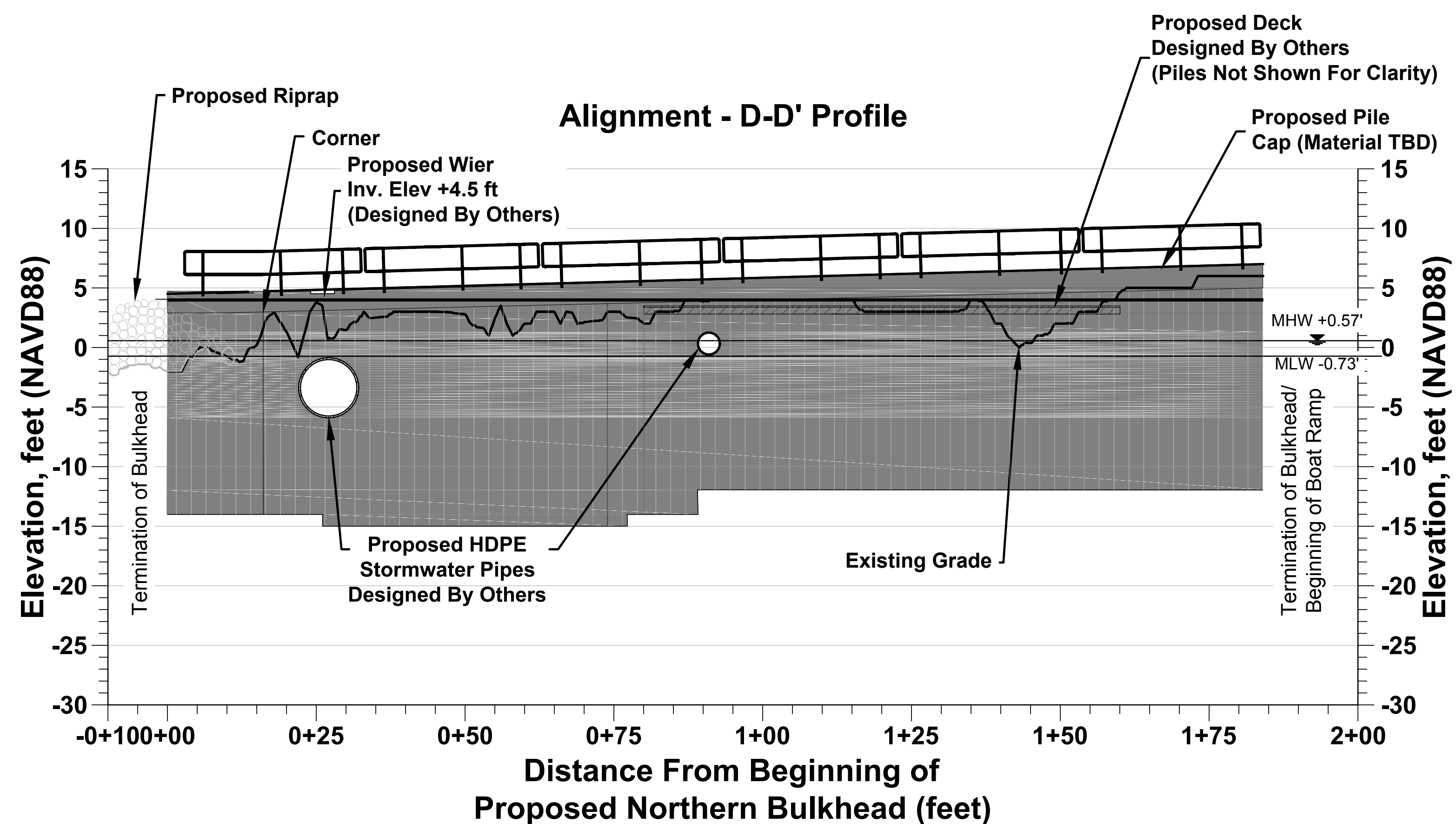
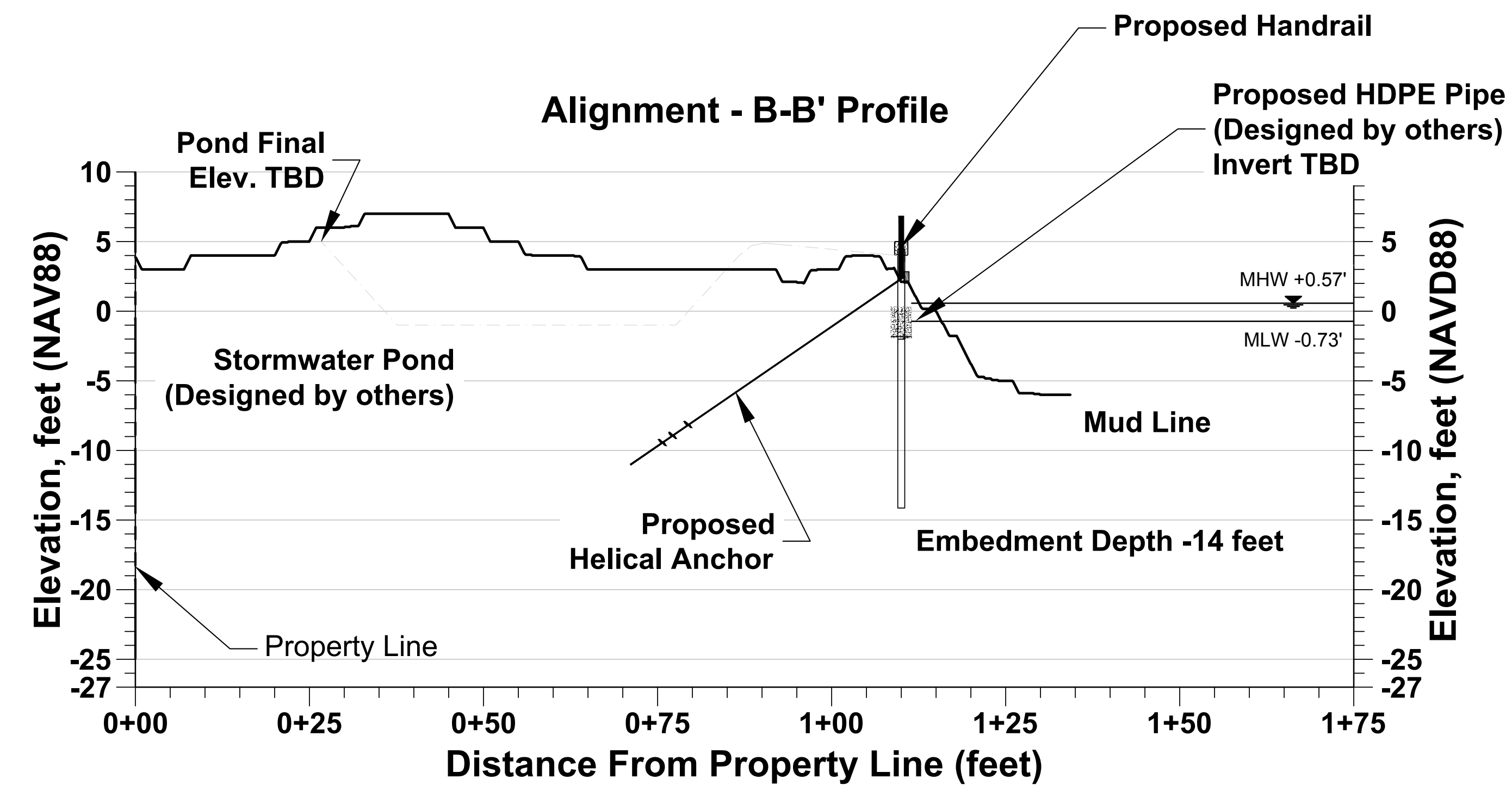
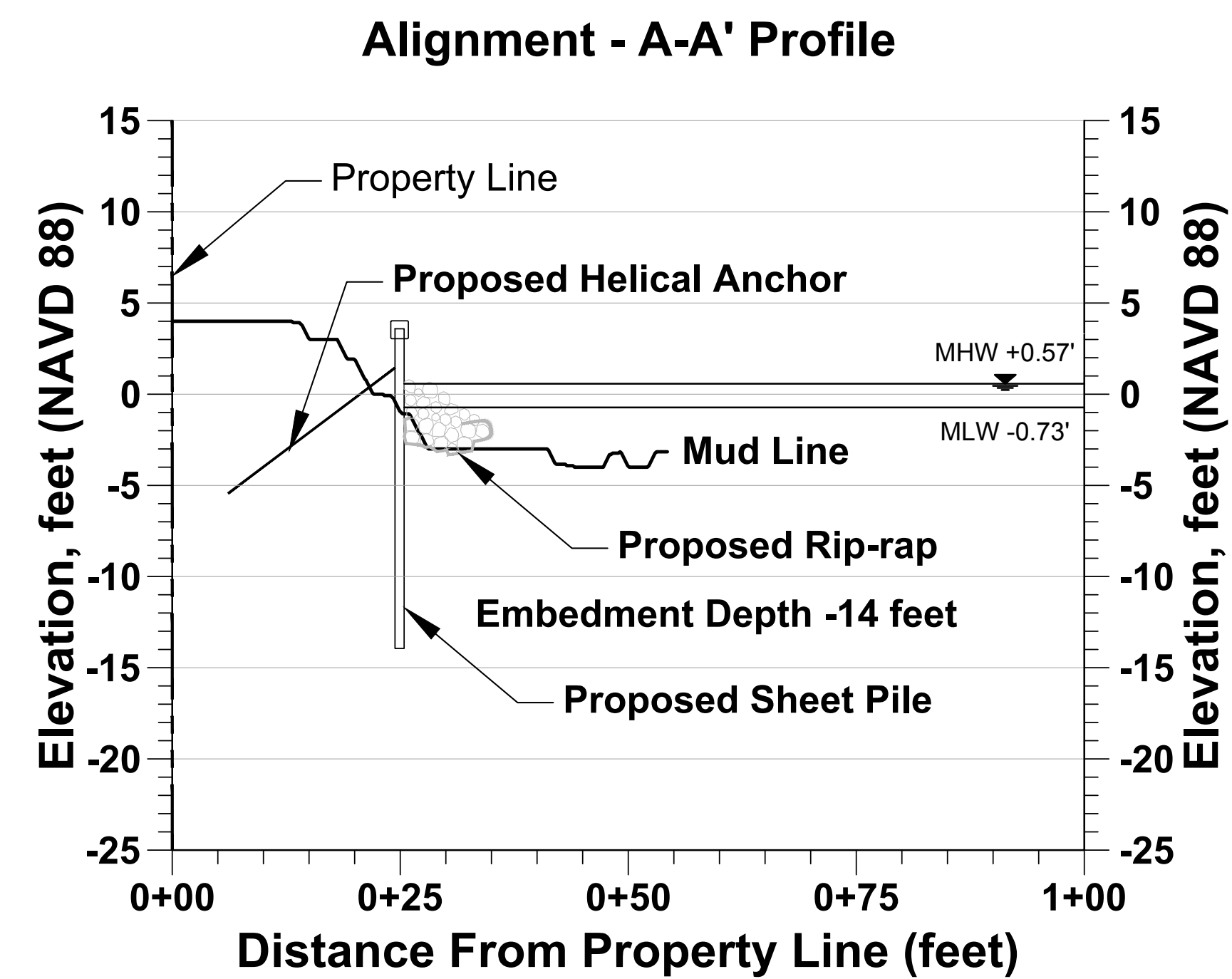
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DRAWN:	CHECKED:	APPROVED:	

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SHEET TITLE:	
BULKHEAD PROFILES A-A	
THRU D-D	

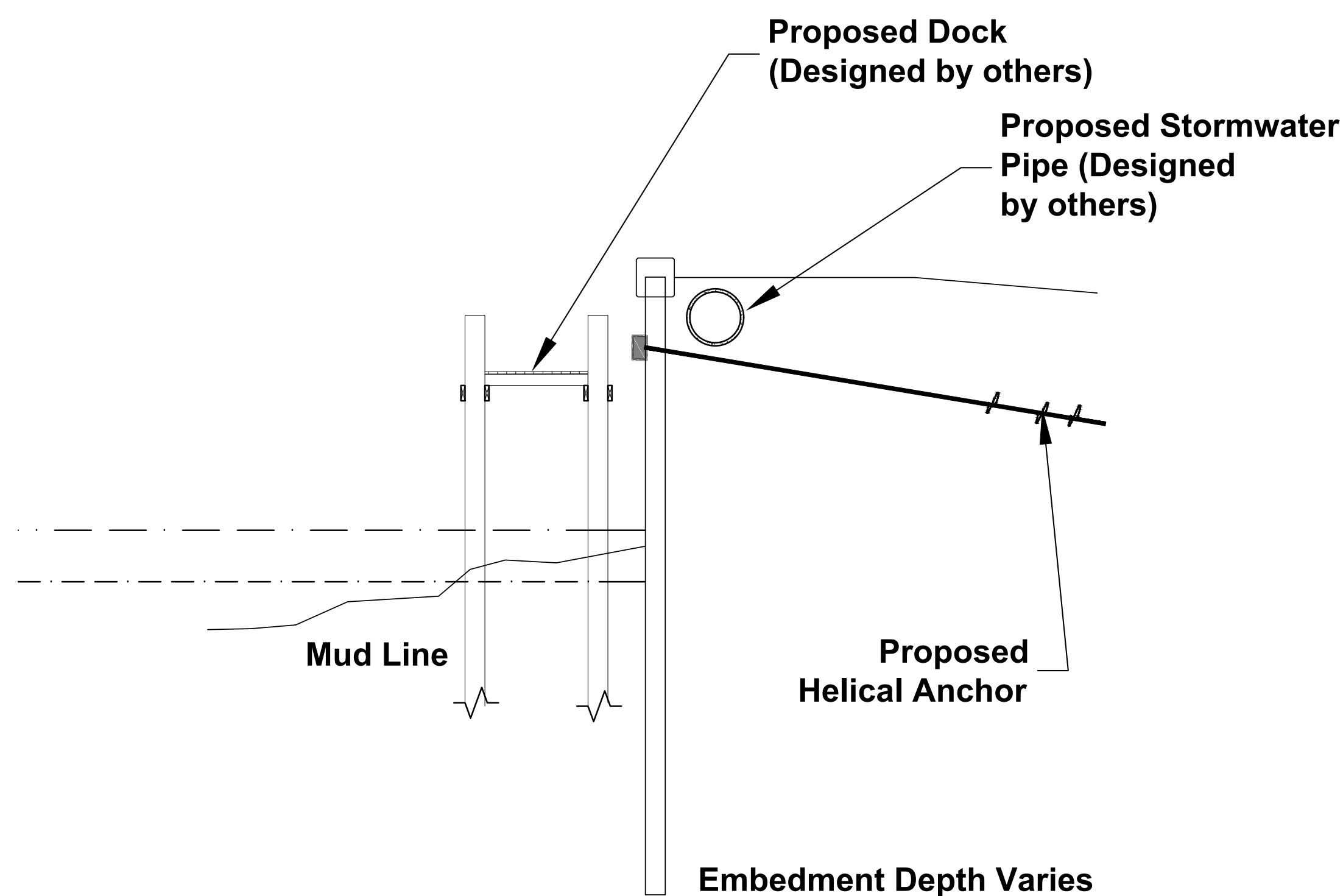
PROJECT NO. 50088560	SHEET S-2
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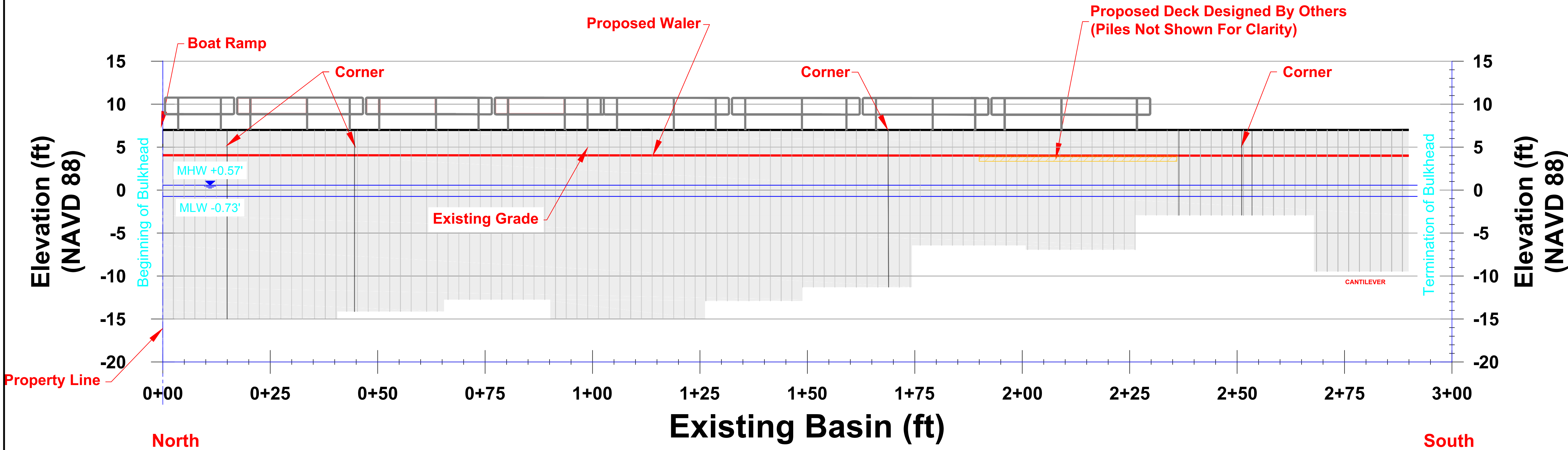
West

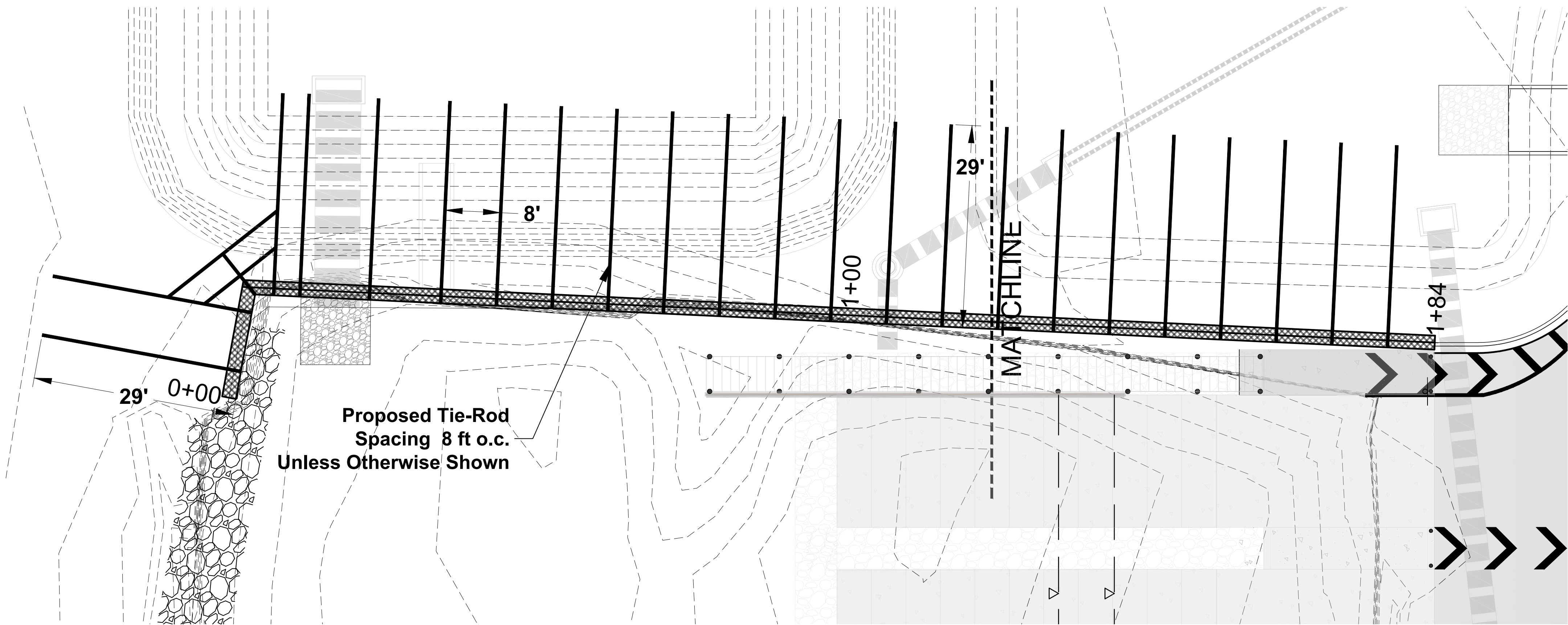
East



October 30, 2017 (12:20:11 EST)
 I50088560.PC - SNUG HARBOR BOAT LAUNCH FACILITY_CIVIL3D\FOLDER1_PRODUCTION\20171016_75_PERCENT_RV2_DRAFT_SNUG_HARBOR_17.434.DWG BROCHER

Profile Section E-E'





NORTH BULKHEAD ANCHOR PLAN

SCALE: 1" = 10'

HELICAL ANCHOR DESIGN PARAMETERS*					
Station	Anchor Rod Spacing (ft)	Minimum Depth of Embedment (ft)	Helical Anchor Angle (Degrees)	Actual Load (kips/ft)	Factored Minimum Load Capacity (kips/ft)
NORTH BULKHEAD					
0+00 to 1+15	1.75	TBD	27	3.4	4.1
1+15 to 1+90	1.75	TBD	27	4.8	5.7
EAST BULKHEAD					
0+00 to 1+30	1.5	TBD	15	2.2	2.6
1+30 to 3+00	1.5	TBD	25	4.0	4.8
3+00 to 3+60	1.5	TBD	16	1.4	1.7

CLIENT:



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9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:



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NO.	REVISION:	DATE:

SHEET TITLE:
NORTH BULKHEAD
ANCHOR PLAN

PROJECT NO.
50088560 SHEET
S-4

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(850) 522-0644

CLIENT:



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9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

SNUG HARBOR BOAT LAUNCH FACILITY

CONSULTANTS:



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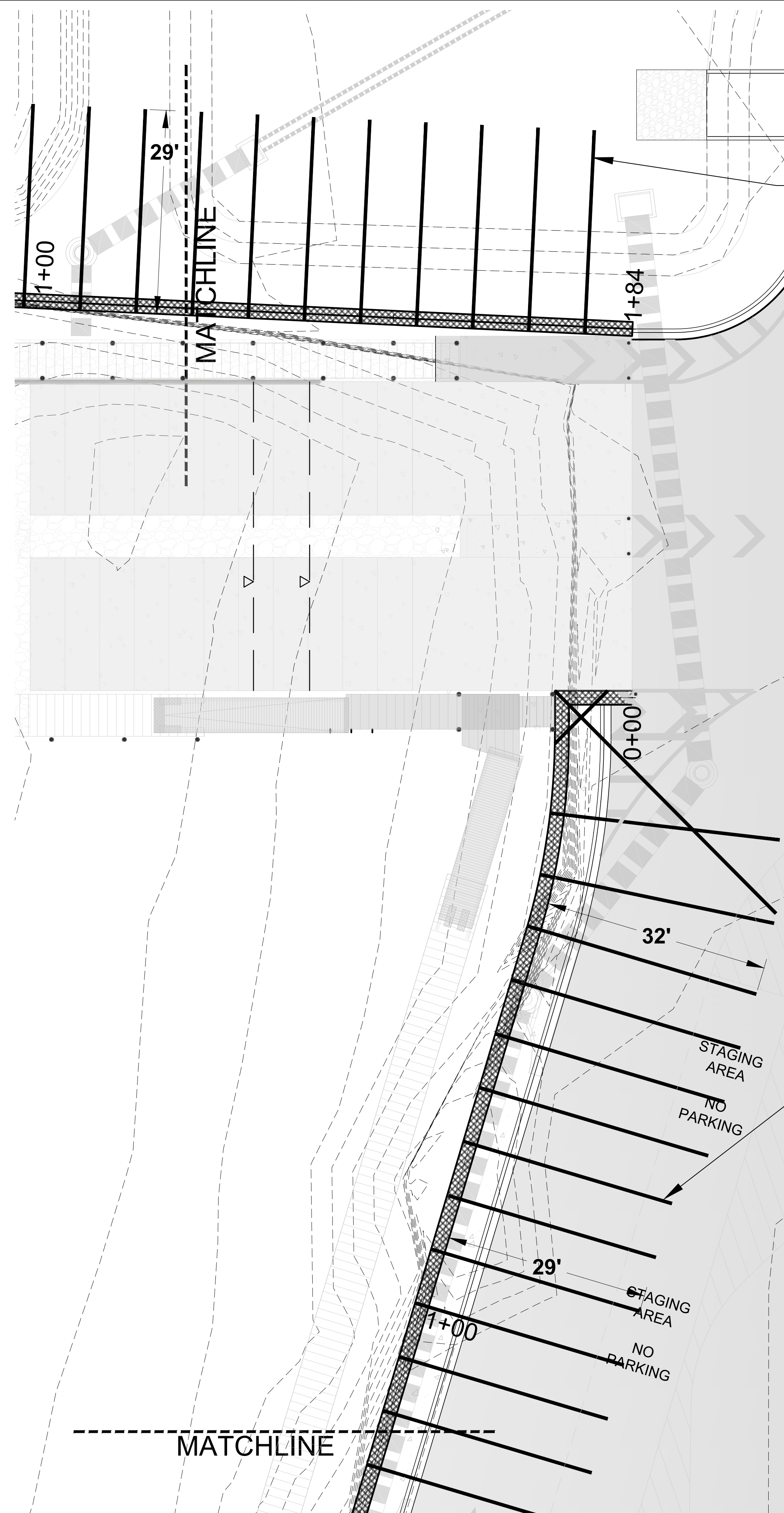
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SHEET TITLE:
EAST BULKHEAD
ANCHOR PLAN

PROJECT NO.
50088560

SHEET
S-5

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**Proposed
Tie-Rod Spacing
6 ft o.c. (STA 1+15 to 1+90)**

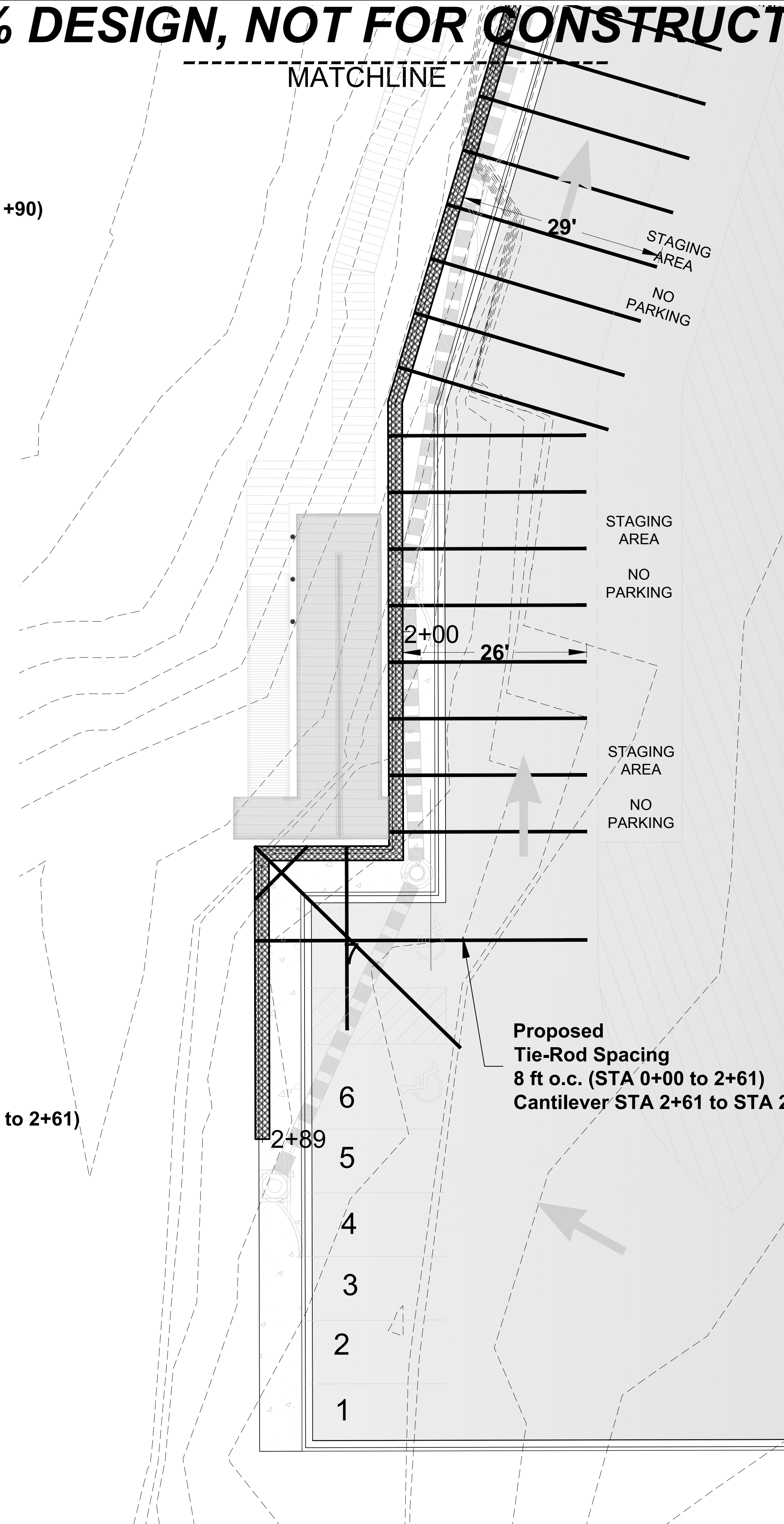
**Proposed
Tie-Rod Spacing
8 ft o.c. (STA 0+00 to 2+61)**

**Proposed
Tie-Rod Spacing
8 ft o.c. (STA 0+00 to 2+61)
Cantilever STA 2+61 to STA 2+89**

NOTE: CONTRACTOR TO ENSURE ALL TIE-RODS AVOID PROPOSED STORMWATER MANAGEMENT SYSTEM
See Soil Anchor Designed Table Sheet (XX) For Unfactored Horizontal Loads At Specified Angles.

EAST BULKHEAD ANCHOR PLAN

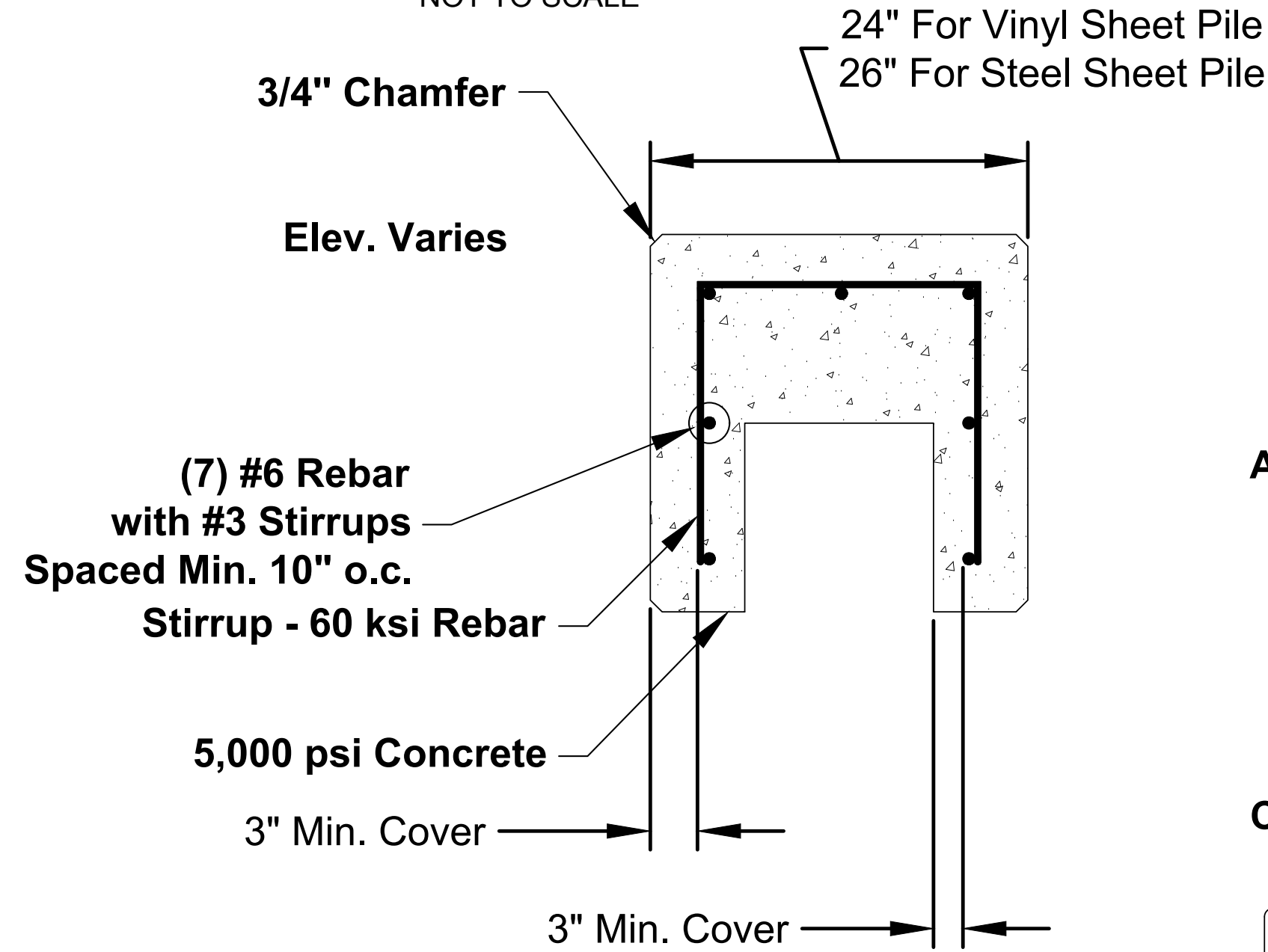
SCALE: 1" = 10'



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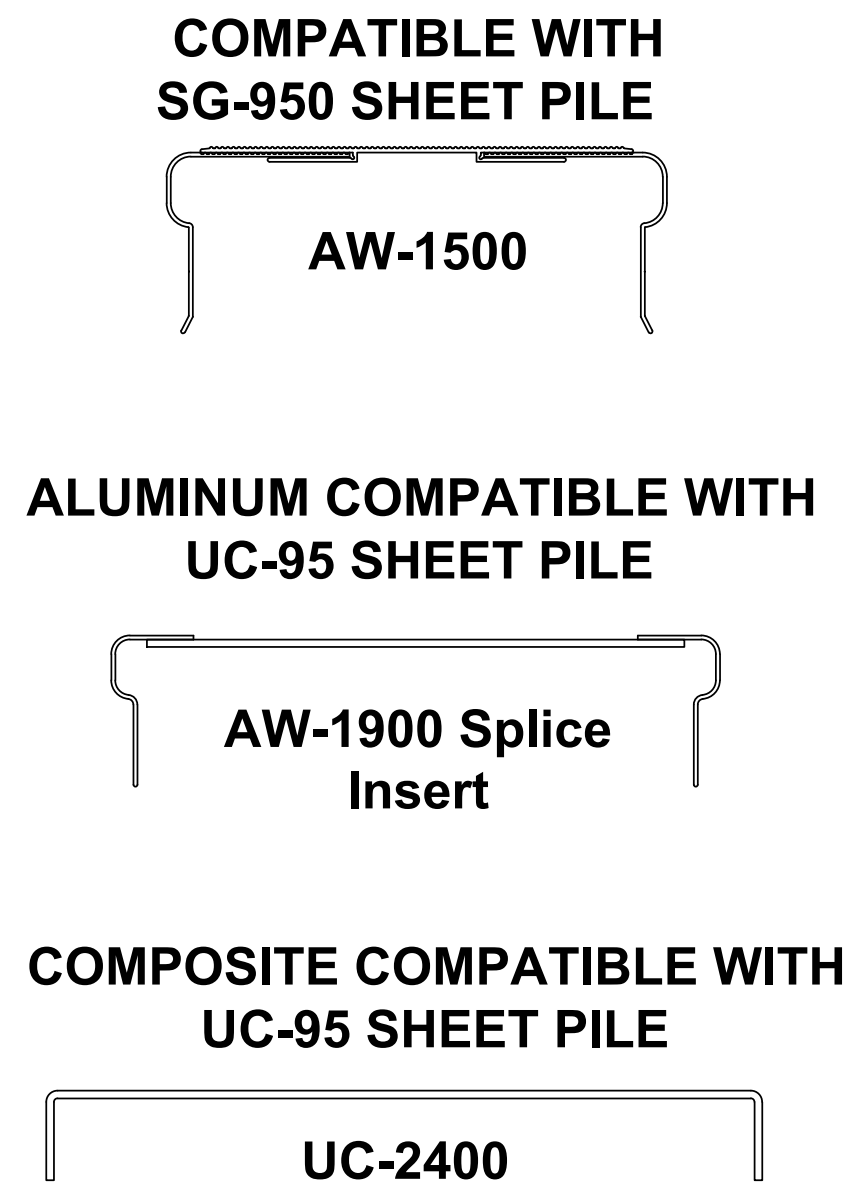
TYPICAL CONCRETE PILE CAP

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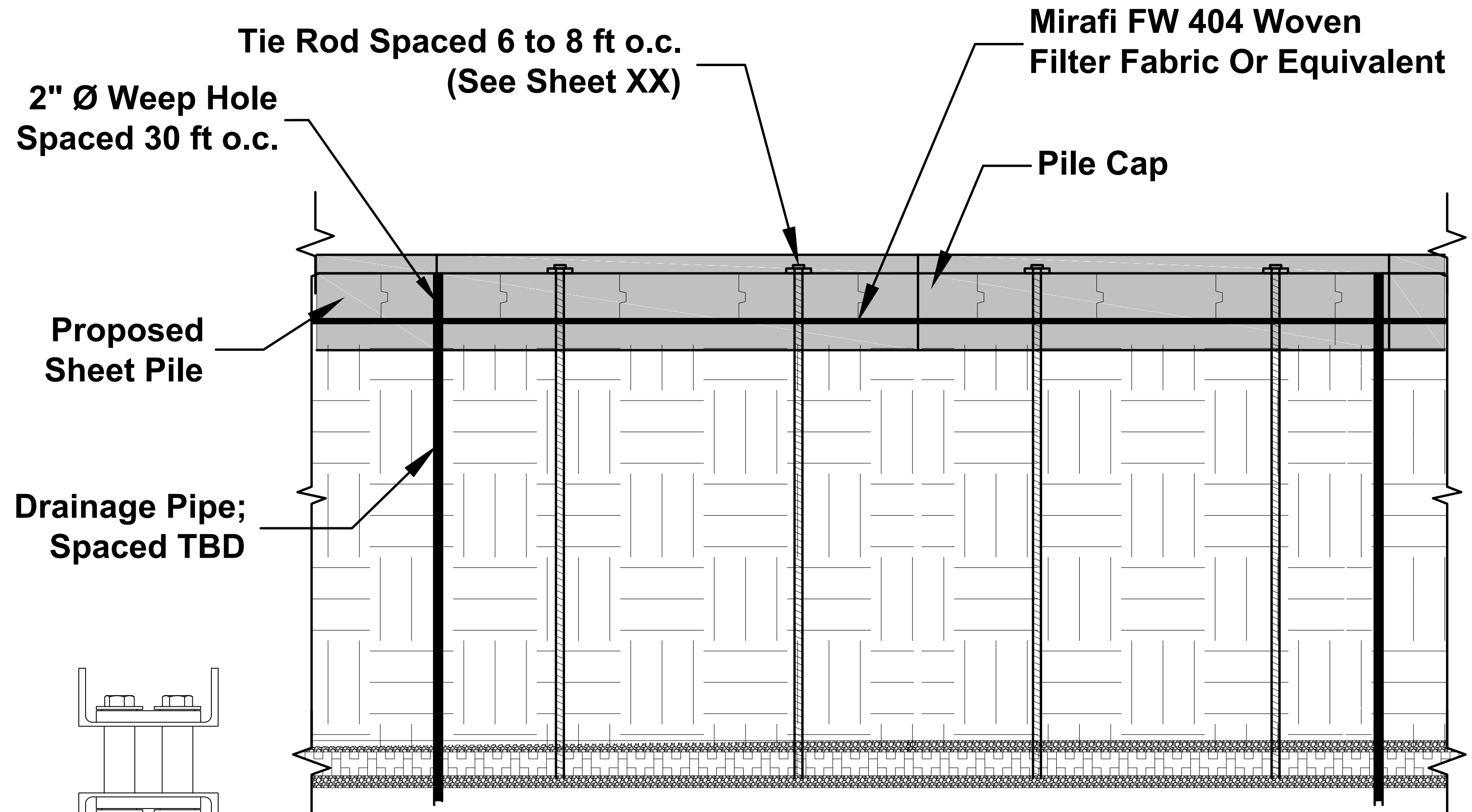


ALTERNATIVE PILE CAP OPTIONS

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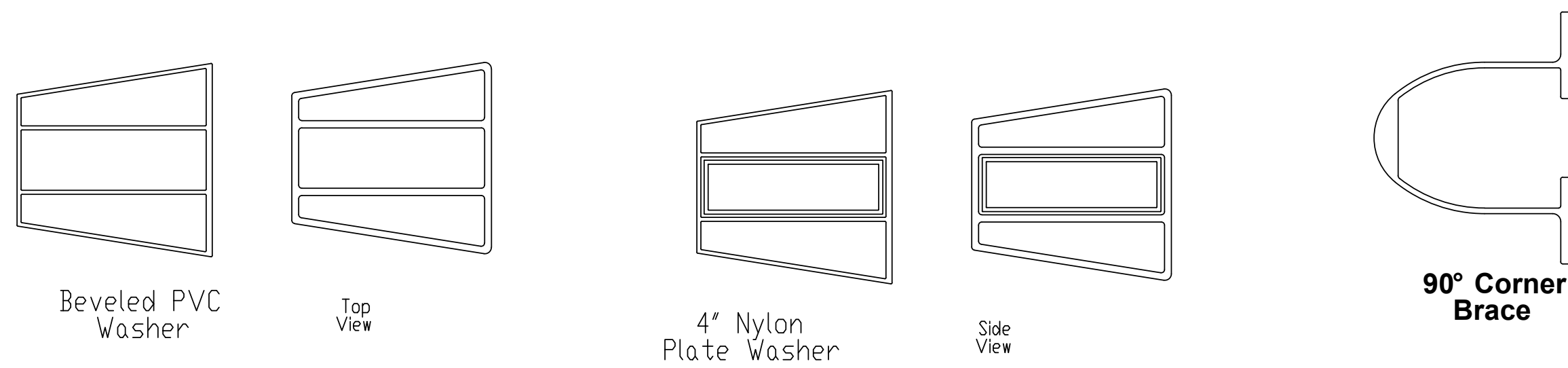


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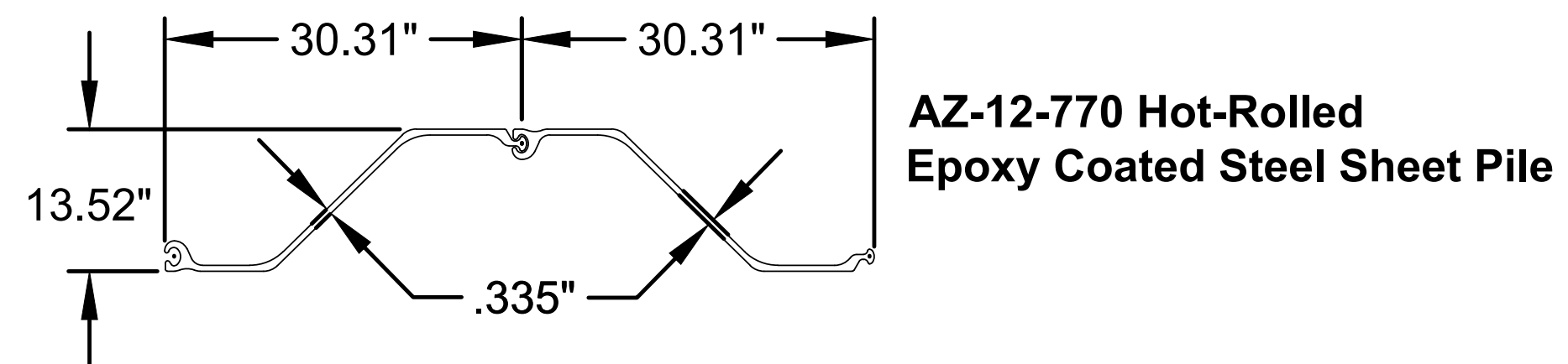
ALTERNATIVE WALER OPTIONS

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TIE-ROD AND WEEP HOLE SPACING

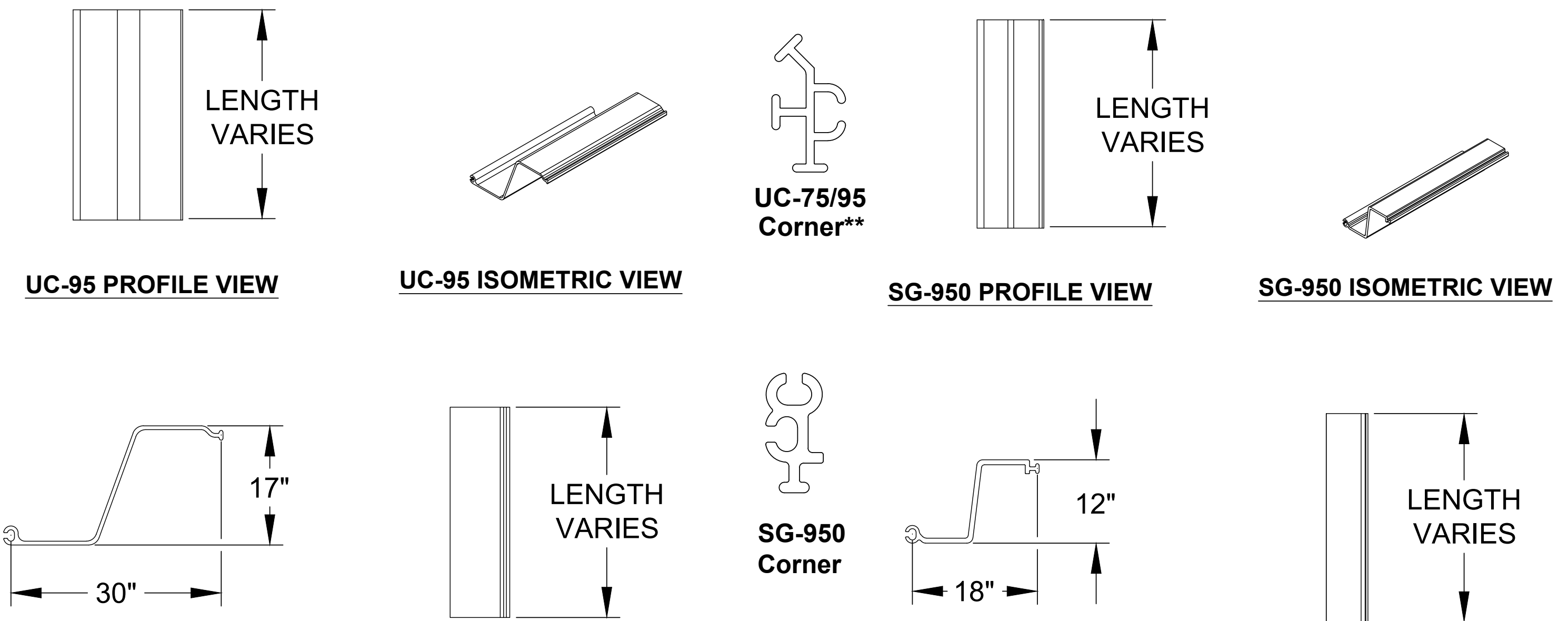
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TYPICAL STEEL SHEET PILE

DETAIL

NOT TO SCALE



TYPICAL COMPOSITE SHEET PILE

DETAIL

NOT TO SCALE

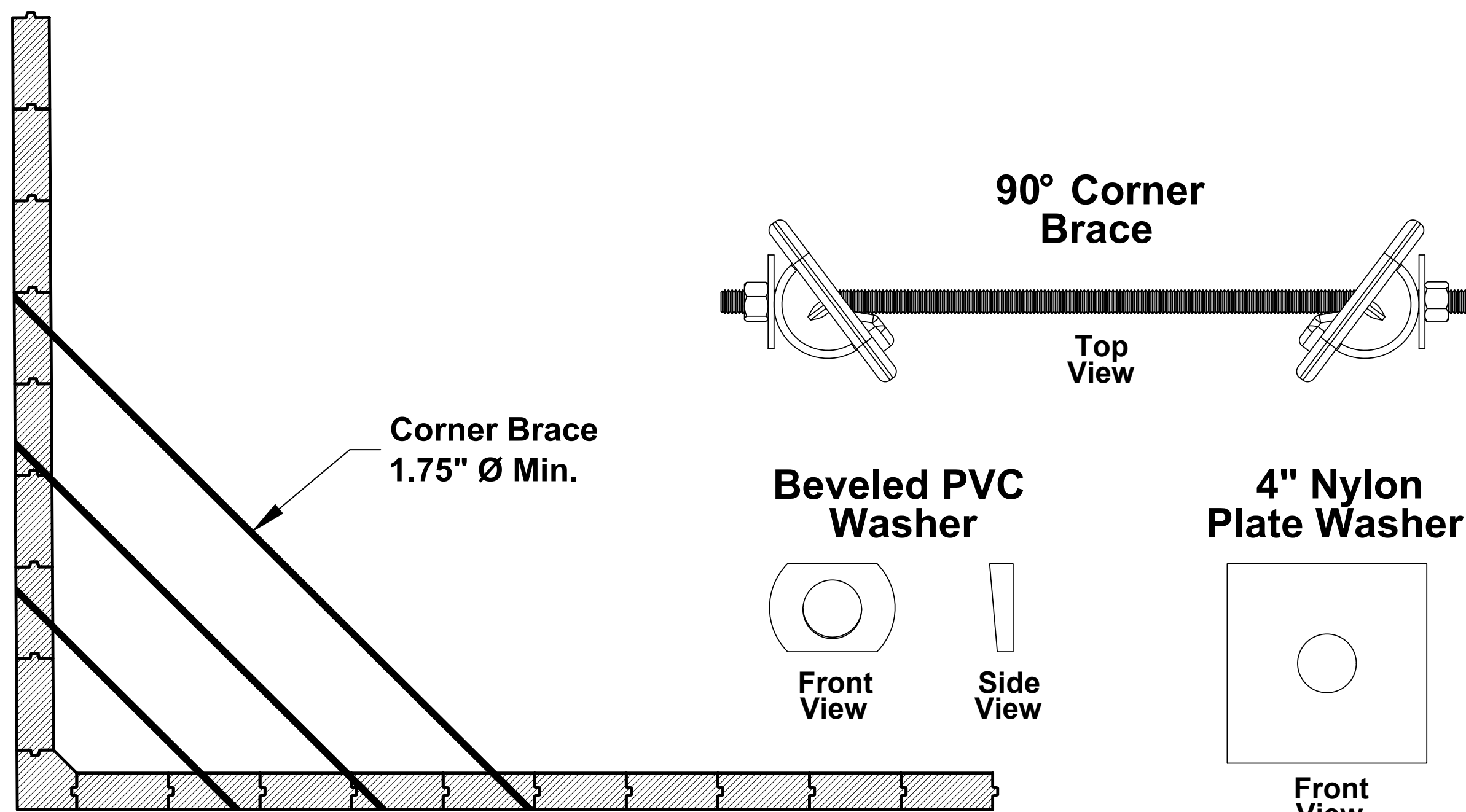
TYPICAL VINYL SHEET PILE

DETAIL

NOT TO SCALE

TYPICAL CORNER CONNECTION DETAIL

NOT TO SCALE



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PROJECT:

SNUG HARBOR
BOAT LAUNCH
FACILITY

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SCALE: NOT TO SCALE DATE: SEPTEMBER 2017

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NO.	REVISION	DATE

SHEET TITLE:

MISCELLANEOUS
DETAILS

PROJECT NO.
50088560

SHEET
S-6

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(850) 872-3000 tel

PROJECT:
SNUG HARBOR
BOAT LAUNCH
FACILITY

CONSULTANTS:

mrd associates, inc.
Coastal, Marina & Water Resources Engineering

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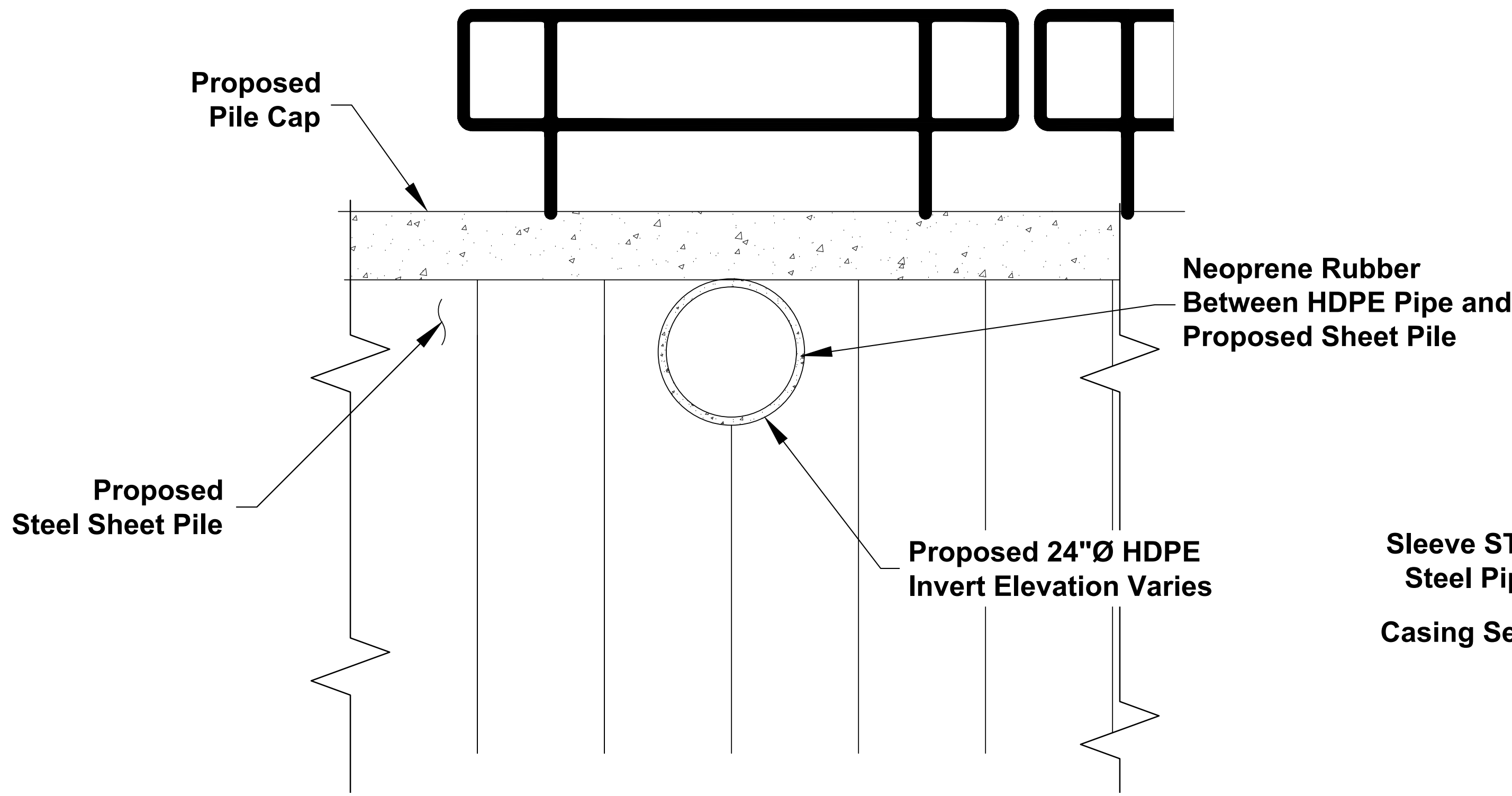
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DRAWN:	CHECKED:	APPROVED:	
NO.	REVISION:	DATE:	

SHEET TITLE:
STORMWATER CUTOUT
AND BULKHEAD DETAILS

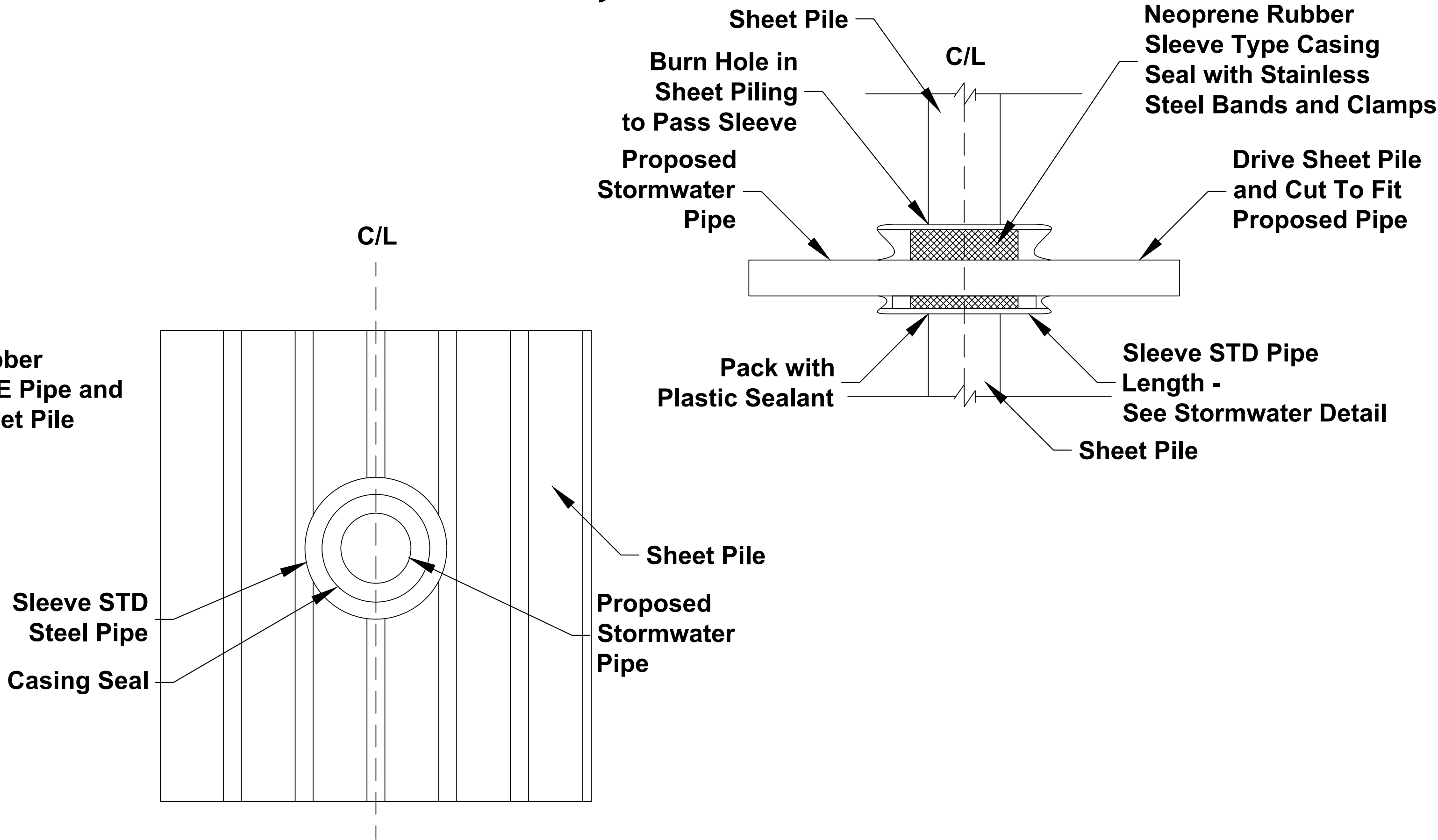
PROJECT NO.
50088560

SHEET
S-7

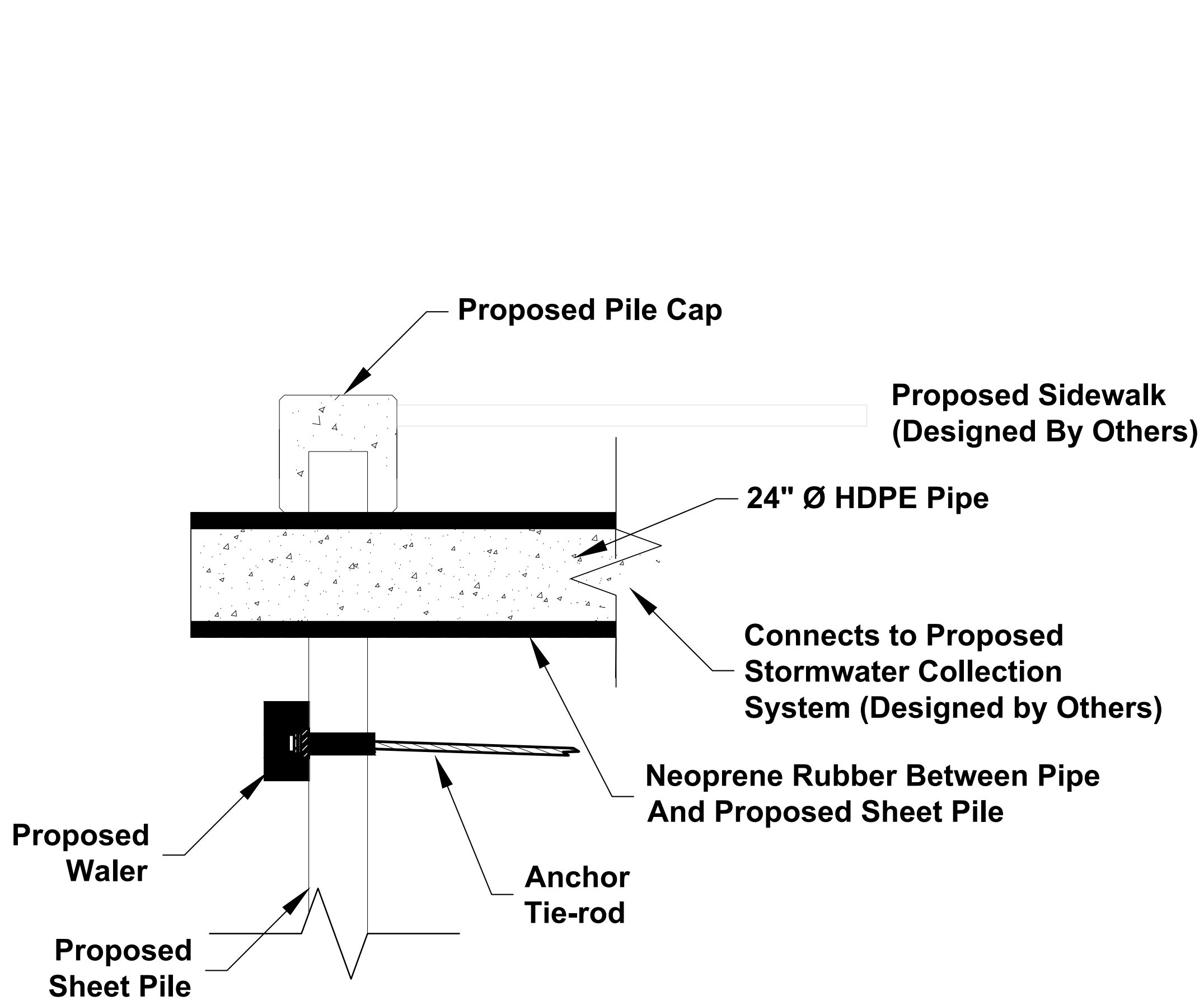
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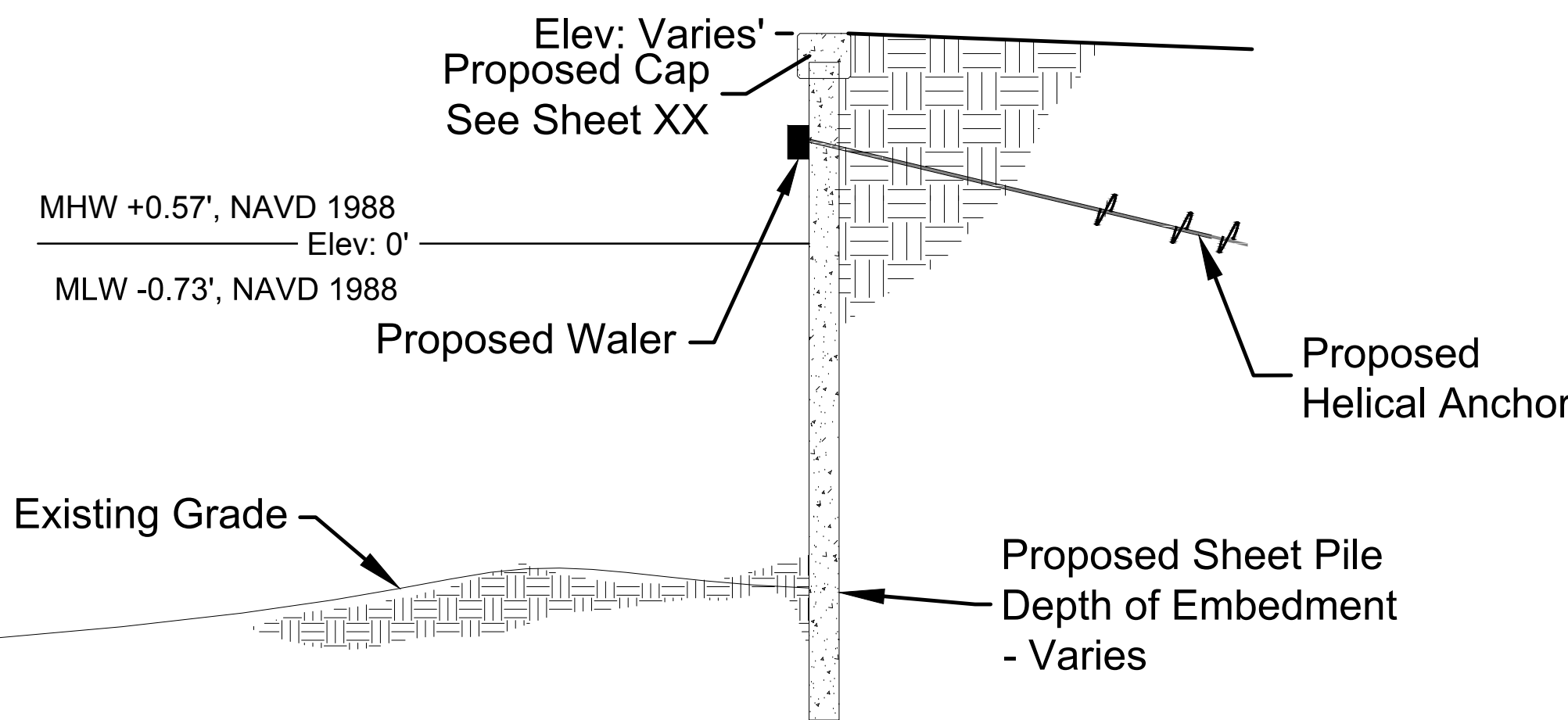
TYPICAL DETAIL - OUTFALL PIPE THRU STEEL SHEET PILING
NOT TO SCALE



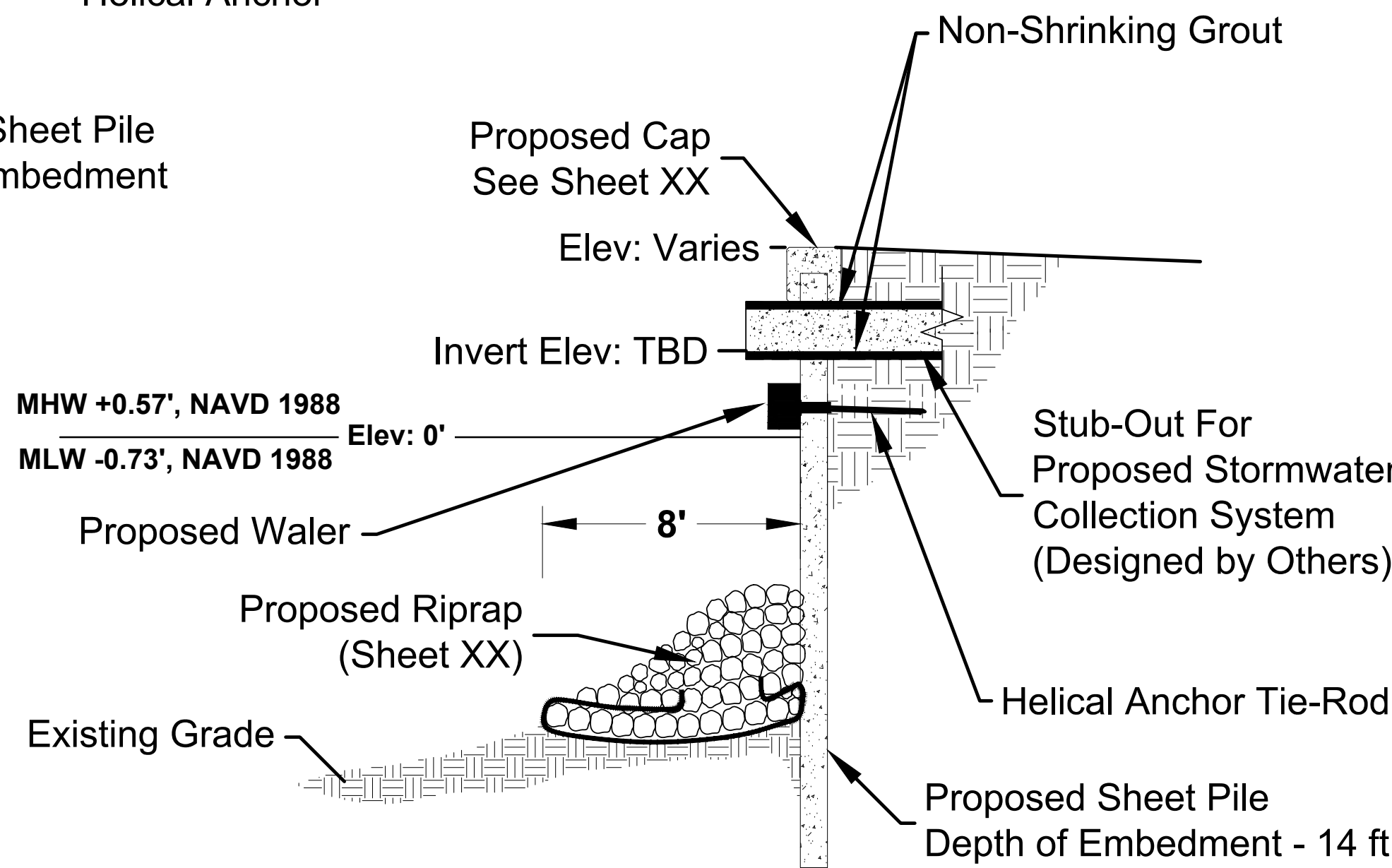
TYPICAL DETAIL - PIPE THRU STEEL SHEET PILING
NOT TO SCALE



TYPICAL PIPE THRU STEEL SHEET PILING PROFILE
NOT TO SCALE



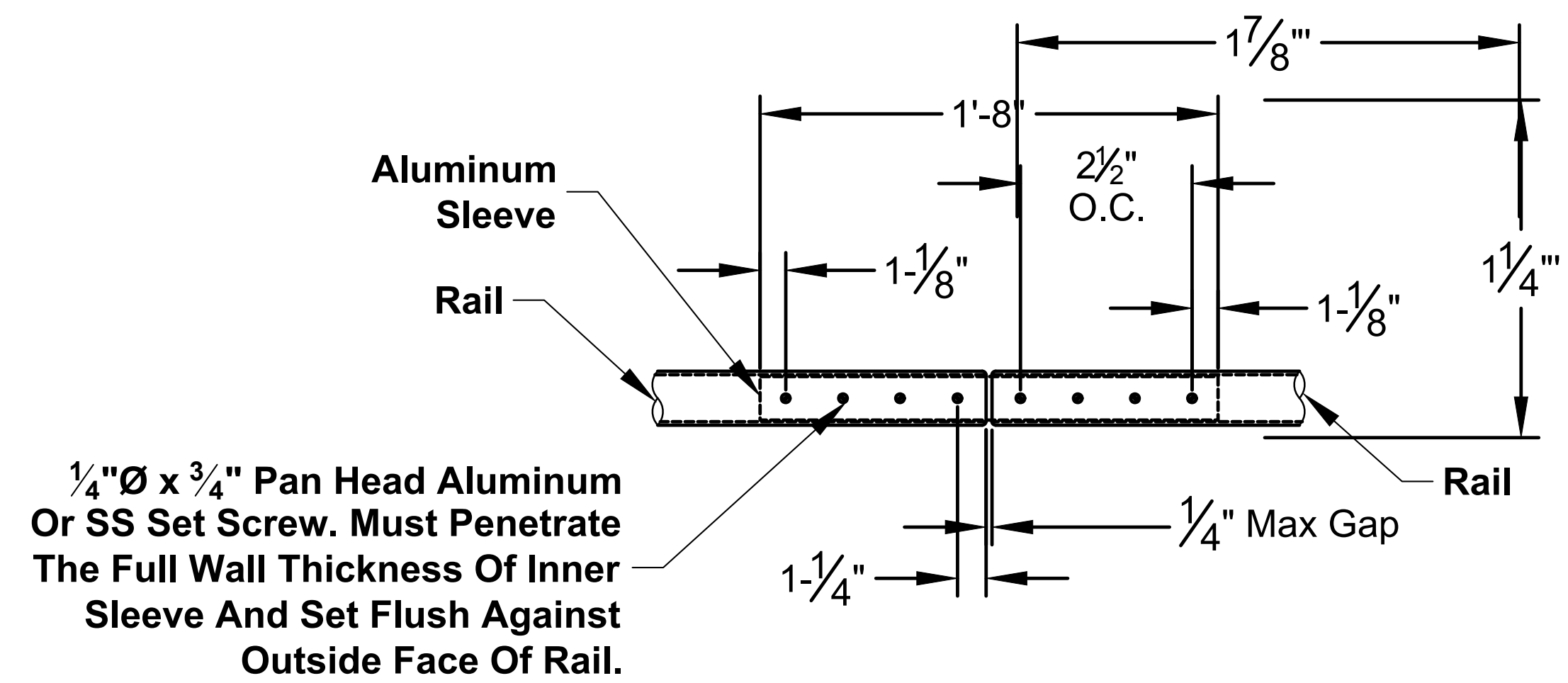
TYPICAL BULKHEAD DETAIL
WITHOUT STORMWATER PIPE
NOT TO SCALE



TYPICAL BULKHEAD DETAIL
WITH STORMWATER PIPE
NOT TO SCALE

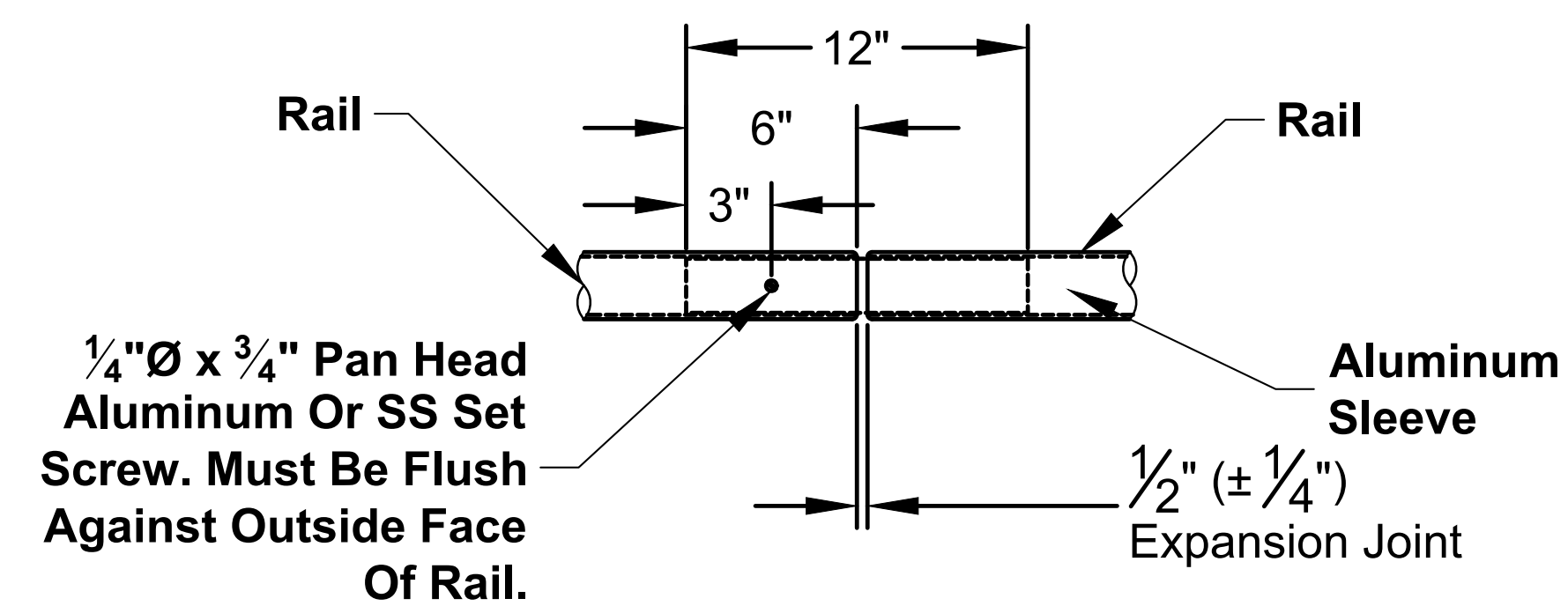
October 30, 2017 (12:20:11 EST)
K:\0088560\PC - SNUG HARBOR BOAT LAUNCH FACILITY\CIVIL\3D\FOLDER_PRODUCTION\2017\1016_75_PERCENT_RV2_DRAFT_SNUG_HARBOR_17-431.DWG BROCHER

75% DESIGN, NOT FOR CONSTRUCTION



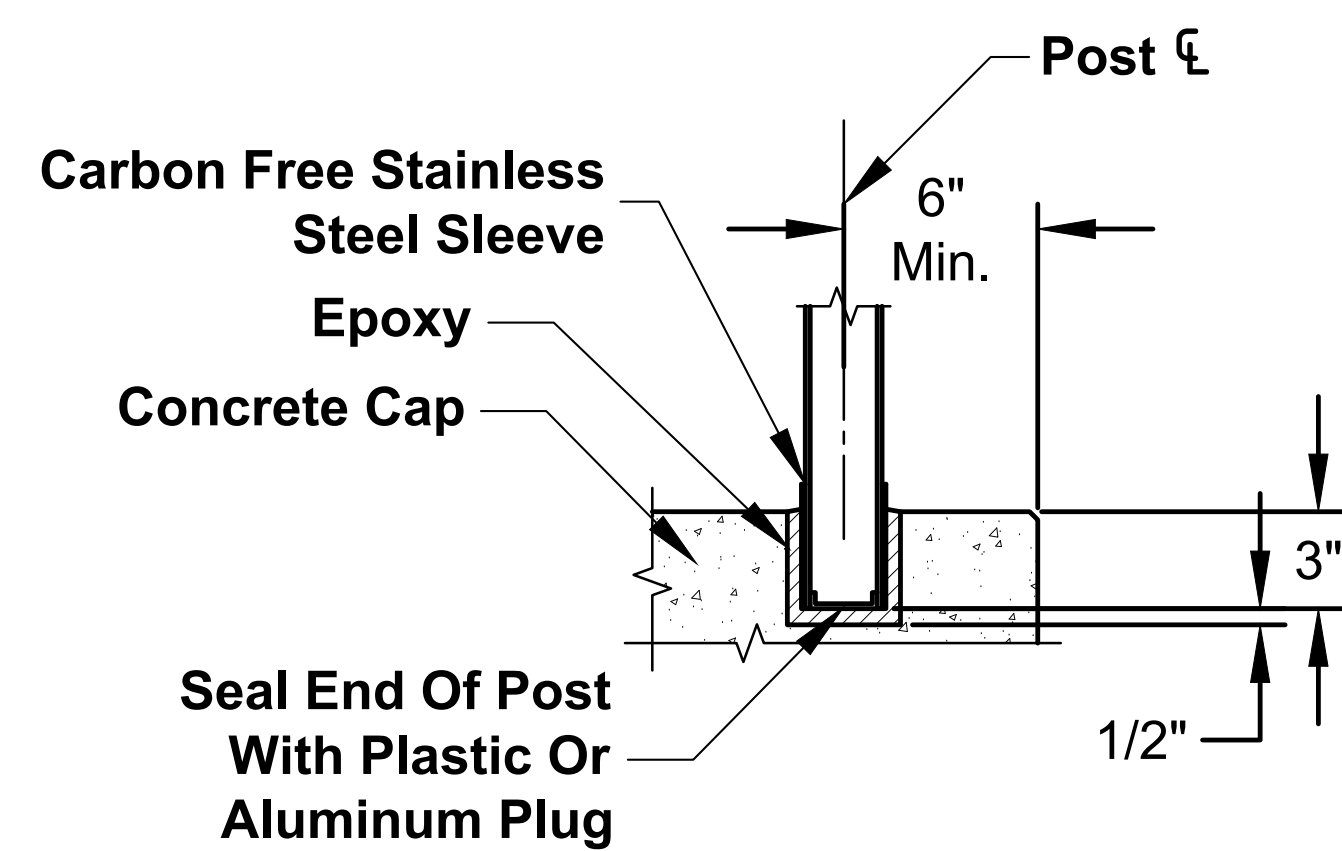
HANDRAIL DETAIL X-X

NOT TO SCALE



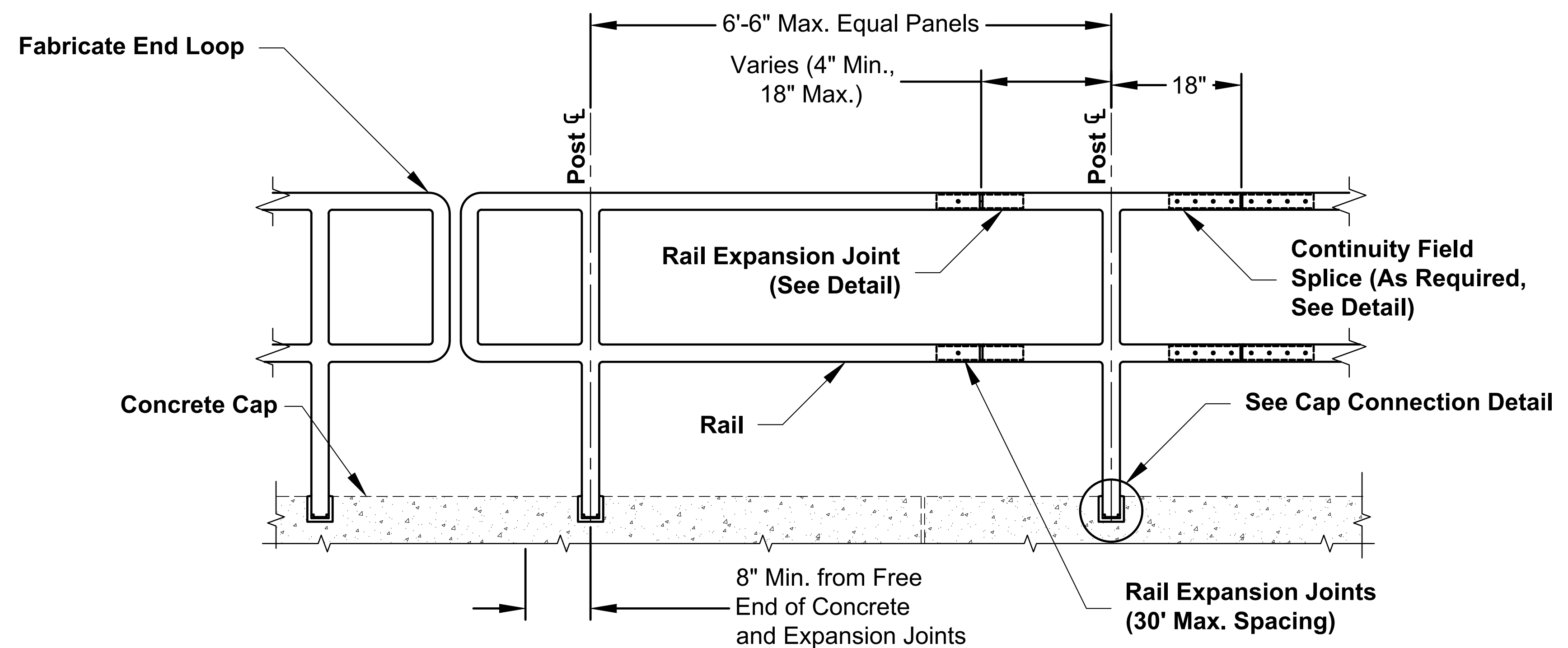
HANDRAIL DETAIL X-X

NOT TO SCALE



HANDRAIL DETAIL X-X

NOT TO SCALE

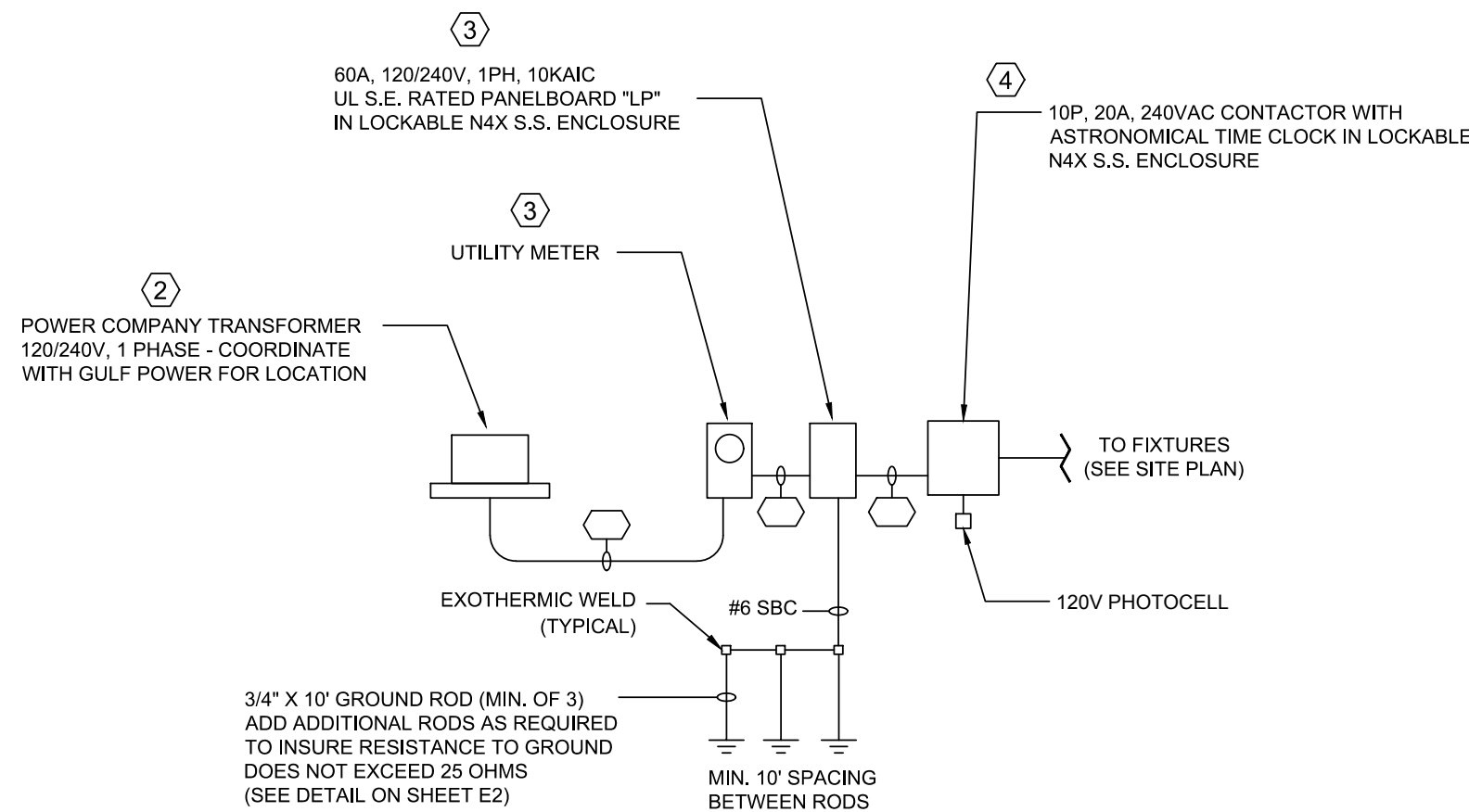


TYPICAL HANDRAIL CONNECTION

NOT TO SCALE

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH 2011 NEC AND ALL APPLICABLE LOCAL CODES.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES, PIPING, ETC. AND ROUTE NEW CONDUITS AS REQUIRED TO AVOID INTERFERENCE. VOLTAGE DROP SHALL NOT EXCEED 3% AT ANY LOAD.
- CONDUCTORS SHALL BE STRANDED COPPER THIN/THWN, SUITABLE FOR THE INSTALLED CONDITIONS. FIXTURE POLE RISER CONDUCTORS SHALL BE #10 AWG, THIN/THWN STRANDED COPPER.
- CONTRACTOR MAY INSTALL PULLBOXES IF DESIRED TO EASE IN INSTALLATION, HOWEVER PULLBOXES SHALL BE TRAFFIC RATED QUARTZITE COMPOSITE WITH LID LOGO "ELECTRICAL" SIZED PER THE 2011 NEC. PULLBOXES SHALL BE REQUIRED FOR ANY CONTINUOUS RUN OF CONDUIT THAT EXCEEDS 200'. PULL BOXES SHALL NOT BE LOCATED IN PAVED AREAS OF PARKING LOT.
- ALL CONDUITS SHALL HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED PER TABLE 250.122 OF THE NEC (UNLESS OTHERWISE NOTED).
- ABOVE GRADE CONDUIT SHALL BE RMC/IMC AND/OR LIQUIDTIGHT METAL FLEX; BELOW GRADE CONDUIT SHALL BE SCHEDULE 40 RIGID PVC. MINIMUM BURIAL DEPTH SHALL BE PER TABLE 300.5 OF THE 2011 NATIONAL ELECTRICAL CODE.



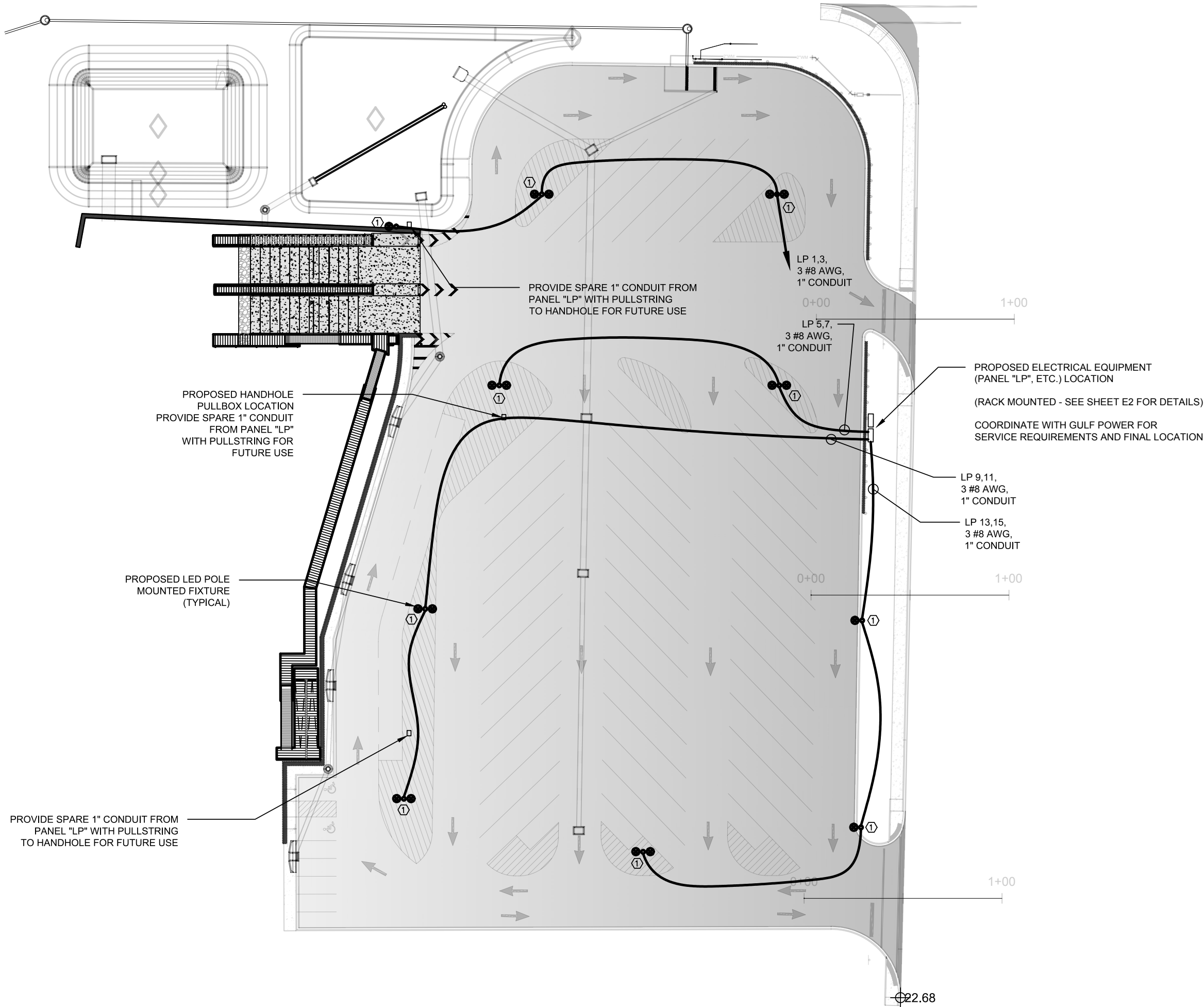
RISER DIAGRAM

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)	
NO.	DESCRIPTION
①	COORDINATE WITH GULF POWER FOR REQUIREMENTS.
②	3-#6 1" C
③	12-#8 & 3-#12 1.5" C

LIGHTING FIXTURE SCHEDULE			
SYMBOL	DESCRIPTION	LUMINAIRE WATTS	NOTES
⊗-⊗	GARDCO #ECF-L-96L-1A-NW-G2-AR-5-UNV-FP2-SP1 BACK TO BACK	313.8 EACH	LED FIXTURE WITH POLE RATED FOR 150MPH WIND LOADING
⊗	GARDCO #ECF-L-96L-1A-NW-G2-AR-4-UNV-FP2-SP1 SINGLE	313.8	LED FIXTURE WITH POLE RATED FOR 150MPH WIND LOADING

LIGHTING FIXTURE NOTES

- FIXTURE MOUNTING HEIGHT SHALL BE 25'.
- FURNISH WITH SURGE PROTECTION OPTION (10KA).
- SEE POLE BASE DETAIL ON SHEET E2.
- PROVIDE WITH POLE MOUNT FUSING OPTION (POLE MOUNTED NEAR POLE HANDHOLE) FOR 240VAC.



SITE PLAN

KEY NOTES:

- PROVIDE QUARTZITE HANDHOLES MARKED "ELECTRICAL" SIZED PER NEC FOR PARKING LOT LIGHTING POLE TERMINATIONS. THESE HANDHOLES CAN ALSO BE USED FOR THE FUTURE SPARE CONDUIT ROUTING. ALL SPLICES, ETC. SHALL UTILIZE SPLICES UL LISTED FOR WET LOCATIONS.
- COORDINATE WITH GULF POWER COMPANY FOR SERVICE & METERING REQUIREMENTS. PROVIDE AND INSTALL RISER POLE IF REQUIRED FOR OVERHEAD SERVICE DROP. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, ETC. FOR THE ELECTRICAL SERVICE. SERVICE EQUIPMENT LOCATION CAN VARY IF NECESSARY FOR SETBACKS, AESTHETICS, ETC., BUT CARE SHOULD BE TAKEN TO INSURE VOLTAGE DROPS DO NOT EXCEED 3%.
- RACK MOUNT METER & PANEL "LP" ON GULF POWER APPROVED RACK (SEE DETAIL ON SHEET E2). COORDINATE FINAL RACK LOCATION WITH GULF POWER COMPANY. LABEL SERVICE EQUIPMENT (PER NEC110.24) WITH MAXIMUM AVAILABLE FAULT CURRENT AS PROVIDED BY GULF POWER COMPANY.
- FURNISH 120V PHOTOCELL AND PROGRAMMABLE ELECTRONIC TIME CLOCK FOR NEW PARKING LOT LIGHTING CONTROL. LOCATE CONTACTOR AND TIME CLOCK IN N4X S.S. LOCKABLE ENCLOSURE.

CLIENT:



CITY OF PANAMA CITY
9 HARRISON AVENUE
PANAMA CITY, FLORIDA 32401
(850) 872-3000 tel

PROJECT:

**SNUG HARBOR
BOAT LAUNCH
FACILITY**

CONSULTANTS:



CHAD HALL, P.E.
ELECTRICAL CONSULTANT
215 BILTMORE PL
PANAMA CITY BEACH, FL 32413
(850)819-4971 hallchad35@gmail.com
FL License # 65846

NOT APPROVED UNLESS STAMPED WITH
PROFESSIONAL ENGINEERS SEAL

RELEASE:

**PERMITTING PURPOSES
ONLY
NOT FOR
CONSTRUCTION**

SCALE: N.T.S.		DATE: SEPTEMBER 2017	
DRAWN: CEH	CHECKED: CEH		APPROVED: CEH

NO.	REVISION:	DATE

SHEET TITLE:
ELECTRICAL DETAILS



STORMWATER OPERATION/MAINTENANCE PLAN

AFTER EACH RAINFALL EVENT

1. Pavement Areas - Clean/sweep debris and dirt from pavement areas.
2. Sediments in retention/detention areas - Removed immediately
3. Debris in retention/detention areas - All debris and foreign material shall be removed immediately
4. Yard Inlets, Catch Basins, etc. - All debris and foreign materials shall be removed immediately

PERIODIC POND/SYSTEM MAINTENANCE

1. Cleaning/ Sweeping of pavement areas shall be accomplished weekly or as required.
2. Inspect pond periodically for accumulation of trash and debris and remove it upon discovery.
3. Mowing and landscaping maintenance should be done on a monthly basis during the active growing season for this area. Inspect and maintain as required during the growing season.
4. Weeds or undesirable growth shall be removed upon discovery.
5. Catch basins shall be flushed as necessary (if any).
6. The Owner shall re-grade and re-stabilize swale/ retention/ detention areas as required to maintain the approved design, cross-section, liner and grade.
7. Remove sediment from pond when accumulation reaches four (4) inches. Measure accumulation once a year.
8. Routine cleaning of the sand filter system by pressure back-washing to ensure full functionality as designed.

INSPECTIONS

1. A maintenance inspection must be performed every year by a registered professional.
2. The maintenance inspection must be documented on the FDEP and/ or NFWFMD standard inspection form 62-330.311(1).
3. The inspection must be signed, sealed and dated by the registered professional and submitted to either the FDEP or NFWFMD within 30 days of the inspection.
4. The inspection must be conducted using the plans, calculations and specifications approved by the FDEP and/or NFWFMD.

COSTS

1. The estimated O&M costs associated with the sand filter system over a 10-year period, including an inspection by a registered professional every year and replacement of the sand filter system, is \$40,000.