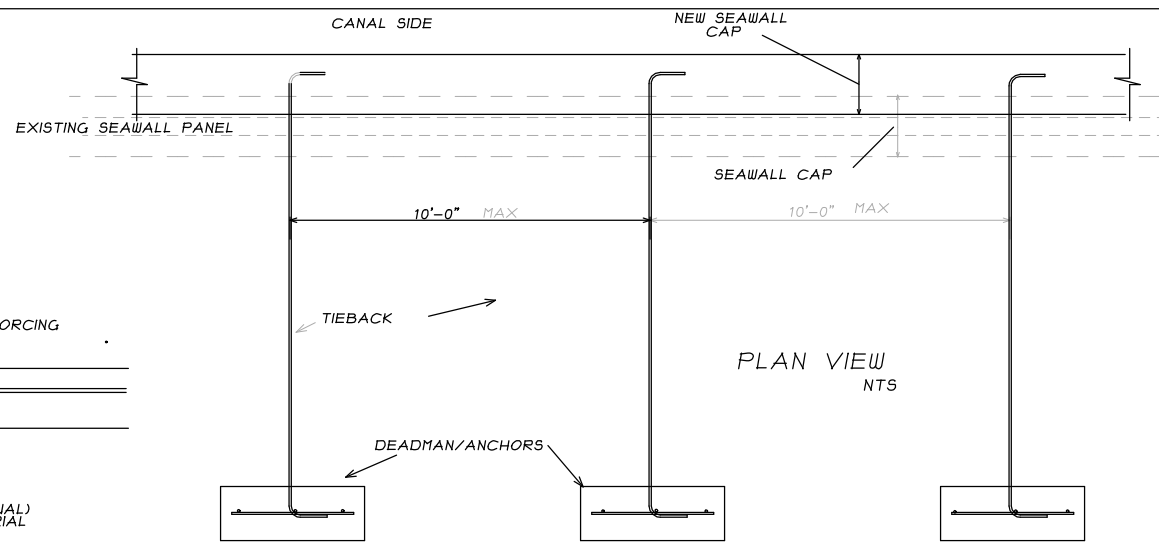
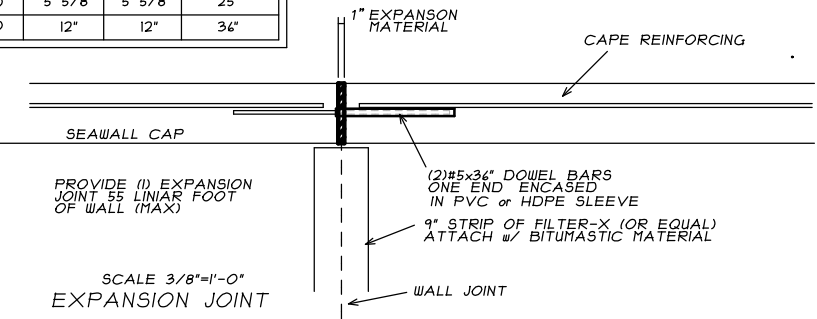


**Required Reinforcing Bend & Splice Lapping Details**

	$L = 30 - 45 d_b$	$L = 90 d_b$	LAP
#3 TIE BAR	3"	NA	NA
#5 BAR GRADE 60	5 5/8"	5 5/8"	25"
#6 BAR GRADE 60	12"	12"	36"



23 EXISTING DOCKS, BOATLIETS AND MOORING PILING ARE NOT BEING RELOCATED. See Sheet 2/2

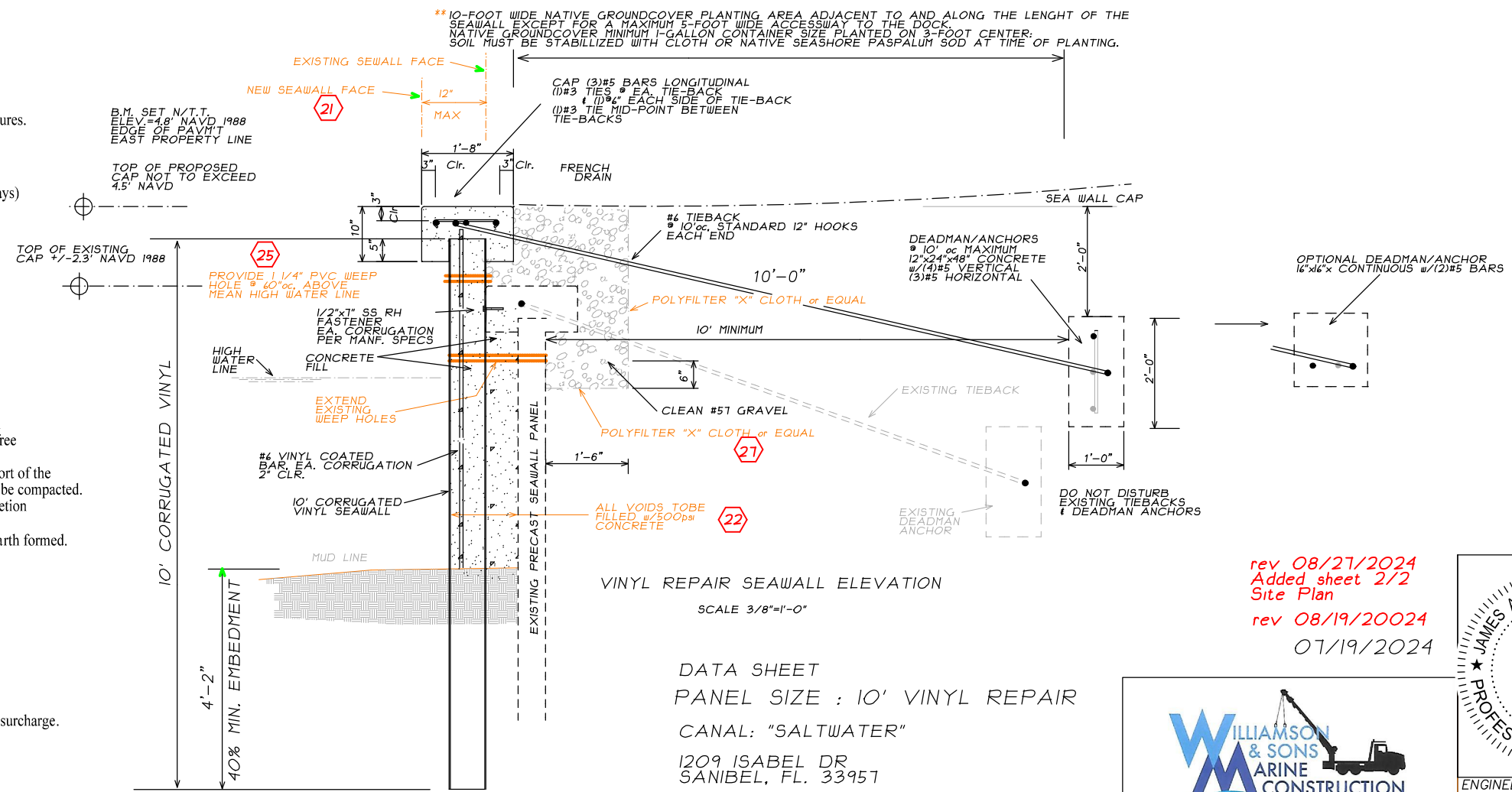
28 \*\* A LANDSCAPING PLAN SHALL BE PROVIDED BY THE OWNER DEMONSTRATING COMPLIANCE OF SECTION 124-101 (20) ENVIRONMENTAL ENHANCEMENT PLAN.

SECTION 122-144 EXISTING SITE VEGETATION (2) WILD OLIVE & SMALL BOTTLE BRUSH SHALL BE REPLACED (OR) EQUIVALENT AND IDENTIFIED IN THE PROPOSED LANDSCAPING PLAN.

ALL EXOTIC VEGETATION SHALL BE REMOVED FROM THE SITE.

- Specifications are minimum requirements for new seawall construction only.
- The ECR (Engineer of Record) shall certify that the following elements are constructed in accordance with the permitted plans and specifications.
  - A) Alignment of the seawall.
  - B) Penetration of the seawall into the seabed.
  - C) Seawall cap reinforcing & placement.
  - D) Deadman anchors, reinforcing & tie-back placement.
- Design elements are in compliance with:
  - A) 2023 Edition of the Florida Building Code
  - B) ASCE/SEI 24 Flood Resistant Design and Construction.
  - C) ASCE7-22 Minimum Design Loads for Buildings and Other Structures.
  - D) ACI 318 Building Code Requirements for Structural Concrete
  - E) U.S. Army Corps of Engineers Engineering and Design Manual EM 1110-2-2504 Design of Sheet Pile Walls.

- CONCRETE, all concrete shall be 5000psi (compressive strength at 28 days)
- REINFORCING STEEL:
  - PANELS, Grade 60
  - CAPS, Grade 60, epoxy coated.
  - TIE-BACKS, Grade 60, epoxy coated & pvc sleeved.
  - DEADMAN ANCHORS, Grade 40 minimum.
- CORRUGATED VINYL SHEETING: LIGHT GREY COLOR.
  - A) Depth = AS SHOWN
  - B) Modulus of Elasticity = 380,000 psi (min)
  - C) Moment of Inertia = 57 in 4/ft (min)
  - D) Section Modulus = 14.3 in 3/ft (min)
  - E) Allowable Design Stress = 3200 psi (min)
  - D) Vertical Alignment Tolerance = 1/4" per foot
- Panel Embedment, a minimum of 50% of the total height of the wall.
- Exposed Concrete surfaces, shall have a class 3 finish in accordance with FDOT specification finishing concrete, all unexposed surfaces are to be free of honeycombing and major imperfections.
- Back Fill Below Tie-Rods, shall be hand compacted to provide full support of the tie-rods to prevent bending or fracture during compaction. Back fill is to be compacted to a stable density such that no appreciable settlement occurs after completion of the walls.
- Deadman Anchors, shall be placed in undisturbed ground and may be earth formed.
- Seawall Placement per survey at property lines.
- Backfill, rock 6" nominal diameter may be left in backfill, all other rock is to be removed.
- Seed all disturbed areas, unless a building permit is posted on site.
- Post Seawall Permits.
- Turbidity Screens required during all clearing, excavation, jetting and backfill operations.
- N.A.
- Design Loads:
  - Assumed as loose fine sand, saturated lateral load of 200psf (+) 2.00psf surcharge.
- Assumed grades:
  - Seabed sloping down and away from wall @ 1:5 (V:H) maximum.
  - Finish Grade sloping up and away from wall @ 1:4 (V:H) maximum.
- None seawalled adjacent lots require minimum 5' returns.
- Elevated seawall caps, may require non-structural returns due to on-site drainage concerns



rev 08/27/2024  
Added sheet 2/2  
Site Plan

rev 08/19/2024  
07/19/2024

**WILLIAMSON & SONS**  
MARINE CONSTRUCTION

**SEAWALLS**  
NEW CONSTRUCTION, REPLACEMENTS, AND REPAIRS  
COMMERCIAL AND RESIDENTIAL

ENGINEERING PLAN

Digitally signed by James Andrew Schivinski PE  
Date: 2024.08.27 12:33:13 -04'00'

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