

WASTEWATER PUMP STATION NO.10 AND BELLE ISLES WATER BOOSTER PUMP STATION

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C-02	PROPOSED BYPASS
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M-03	PROPOSED MECHANICAL PLAN & SECTI
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SWPPP-03	SWPPP
3 - ARCHITECTURAL	
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A-002	EXISTING PICTURES
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SCOPE OF WORK

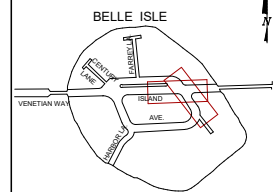
PUMP STATION NO. 10 (WITHIN BUILDING ENCLOSURE)

1. REMOVE EXISTING LOUVERS.
2. CUT SLAB PROJECTIONS AT LOUVER AREA AS INDICATED IN DRAWINGS.
3. REMOVE EXISTING GENERATOR.
4. ADD TEMPORARY GENERATOR
5. REMOVE EXISTING RAILING AND HANDRAIL AT STAIR AS INDICATED IN DRAWINGS.
6. PROVIDE AND INSTALL NEW GENERATOR.
7. PROVIDE AND INSTALL NEW LOUVERS.
8. PROVIDE AND INSTALL NEW RAILINGS AND HANDRAILS AT STAIR.
9. PROVIDE DEMOLITION PLANS.
10. REMOVE EXISTING FUEL TANK & PIPING & FURNISH AND INSTALL NEW TANK.

WATER BOOSTER PUMP STATION (AT GRADE AND BELOW GRADE)

1. REMOVE EXISTING ACCESS METAL HATCH.
2. REPAIR AND WATERPROOF EXISTING SLABS.
3. NEW LIGHTWEIGHT CONCRETE TOPPING SLAB WITH WATERPROOFING AT EXISTING BELOW GRADE CONCRETE SLAB.
4. PROVIDE NEW STEEL ACCESS HATCH.
5. WATERPROOFING AT GRADE SLAB & BELOW GRADE SLAB, ALL WALLS, CEILING, AND ALL PENETRATIONS.
6. PROVIDE NEW MECHANICAL EQUIPMENT AND METAL SUPPORTS ABOVE FLOOD ELEVATION LEVEL.
7. PROVIDE DEMOLITION PLANS.
8. REMOVE EXISTING SUMP PUMP & FURNISH AND INSTALL NEW PUMP WITH ALARM SYSTEM.

KEY PLAN (NOT TO SCALE):



P.E. SEAL:

90% SUBMITTAL - NOT FOR CONSTRUCTION

MIAMI BEACH
PUBLIC WORKS DEPARTMENT
1700 CONVENTION CENTER DRIVE, MIAMI BEACH, FL 33139

CITY MANAGER: ERIC CARPENTER
DIRECTOR: JAY J. FINK, P.E.
CITY ENGINEER: CRISTINA ORTEGA CASTINEIRAS, P.E.

NO.	DATE	REVISION	APPD. BY
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3000 SW 152ND AVE
SUITE 200
MIAMI, FL 33187
TEL: 305-443-8833
WWW.CESCONSULTANTS.COM
CORPORATION OF FLORIDA
REGISTRATION NO. 0011

ENGINEER OF RECORD:
JOSE A. CARABALLO
PROFESSIONAL ENGINEER
P.E. NO. 73064

ENGINEER OF RECORD:
DESIGN ENGINEER:
DRAWN BY:
CHECKER:
SCALE: AS NOTED

NEIGHBORHOOD:

BELLE ISLE

TITLE:

COVER

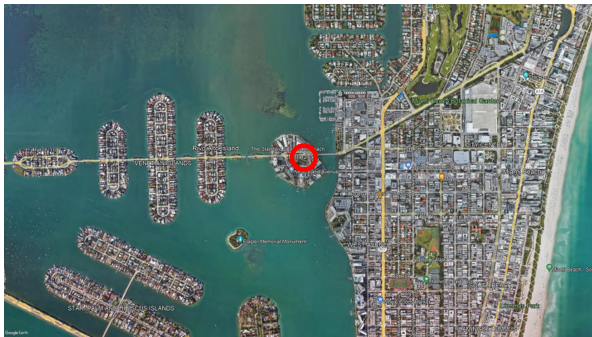
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Survey Reference:

Field Book: *N/A* Page: *N/A* Work Order: *N/A*

Date: 2025.05.07 Sheet: of Drawing: *A-000*

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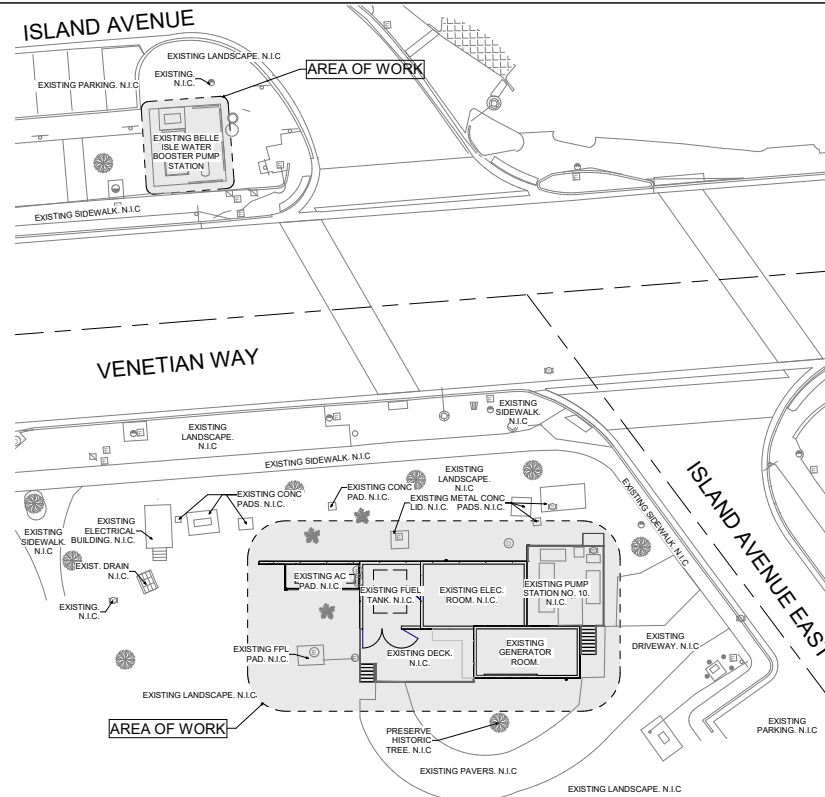
VICINITY MAP



LOCATION



KEYMAP OF EXISTING CONDITIONS



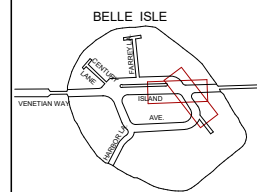
SITE PLAN



90% SUBMITTAL - NOT FOR CONSTRUCTION

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P.E. NO. 73064

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DESIGN ENGINEER:
DRAWN BY:
CHECKER:
SCALE: AS NOTED

NEIGHBORHOOD:
BELLE ISLE
TITLE:
LOCATION & SITE PLAN

File Name:
Survey Reference:
Field Book: *N/A* Page: *N/A* Work Order: *N/A*
Date: 2025.05.07 Sheet: *of* Drawing: *A-001*

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WATER BOOSTER

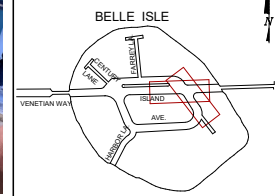


NOTES:

PUMP STATION



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REGISTRATION NO. 00111

ENGINEER OF RECORD:
JOSE A. CARABALLO
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ENGINEER OF RECORD:
DESIGN ENGINEER:
DRAWN BY:
CHECKER:
SCALE: AS NOTED

NEIGHBORHOOD:

BELLE ISLE

TITLE:

EXISTING PICTURES

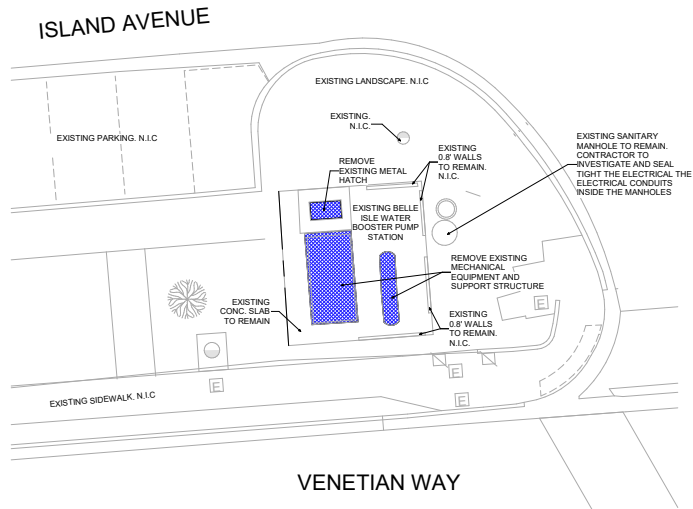
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Field Book: N/A Page: N/A Work Order: N/A

Date: 2025.05.07 Sheet: of Drawing: A-002

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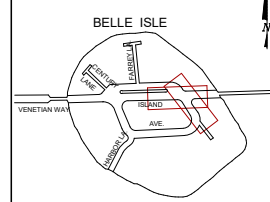
DEMO PLAN - EXISTING BELLE ISLE WATER BOOSTER PUMP STATION
 ① 1/8" = 1'-0"

DEMOLITION NOTES

- CONTRACTOR SHALL SUBMIT A SCHEDULE INDICATING PROPOSED SEQUENCE OF OPERATIONS FOR SELECTIVE DEMOLITION WORK TO OWNER'S REPRESENTATIVE AND ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO START OF WORK, INCLUDING COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES AS REQUIRED, TOGETHER WITH DETAILS FOR DUST CONTROL PROTECTION.
- DAMAGES: PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION WORK.
- MAINTAIN EXISTING BUILDING SYSTEMS/UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION OPERATIONS.
- IF UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE BOTH NATURE AND EXTENT OF THE CONFLICT. SUBMIT REPORT TO OWNER'S REPRESENTATIVE IN WRITTEN, ACCURATE DETAIL. PENDING RECEIPT OF DIRECTIVE FROM OWNER'S REPRESENTATIVE, REARRANGE SELECTIVE DEMOLITION SCHEDULE AS NECESSARY TO CONTINUE OVERALL JOB PROGRESS WITHOUT UNDUE DELAY.
- REMOVE FROM THE PROJECT SITE ON A REGULAR BASIS ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. TRANSPORT AND LEGALLY DISPOSE OFF-SITE.
- ALL DEMOLISHED MATERIAL TO BE REMOVED DAILY FROM CONSTRUCTION AREA IN CLOSED CONTAINERS, OR CLOSED TRASH CHUTES TO DUMPSTER.
- ALL ITEMS NOT MARKED TO BE DEMOLISHED ARE EXISTING TO REMAIN. CONTRACTOR RESPONSIBLE FOR PRESERVING THE EXISTING CONDITIONS OF THESE ITEMS.
- WHERE EXISTING DOORS AND HARDWARE ARE IDENTIFIED TO BE REMOVED, COORDINATE WITH THE CITY FOR DISPOSITION OF THESE ITEMS.
- REFER TO ELECTRICAL, PLUMBING AND FIRE PROTECTION PLANS FOR ADDITIONAL DEMOLITION NOTES.

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ENGINEER OF RECORD: JOSE A. CARABALLO
 PROFESSIONAL ENGINEER
 P.E. NO. 73064

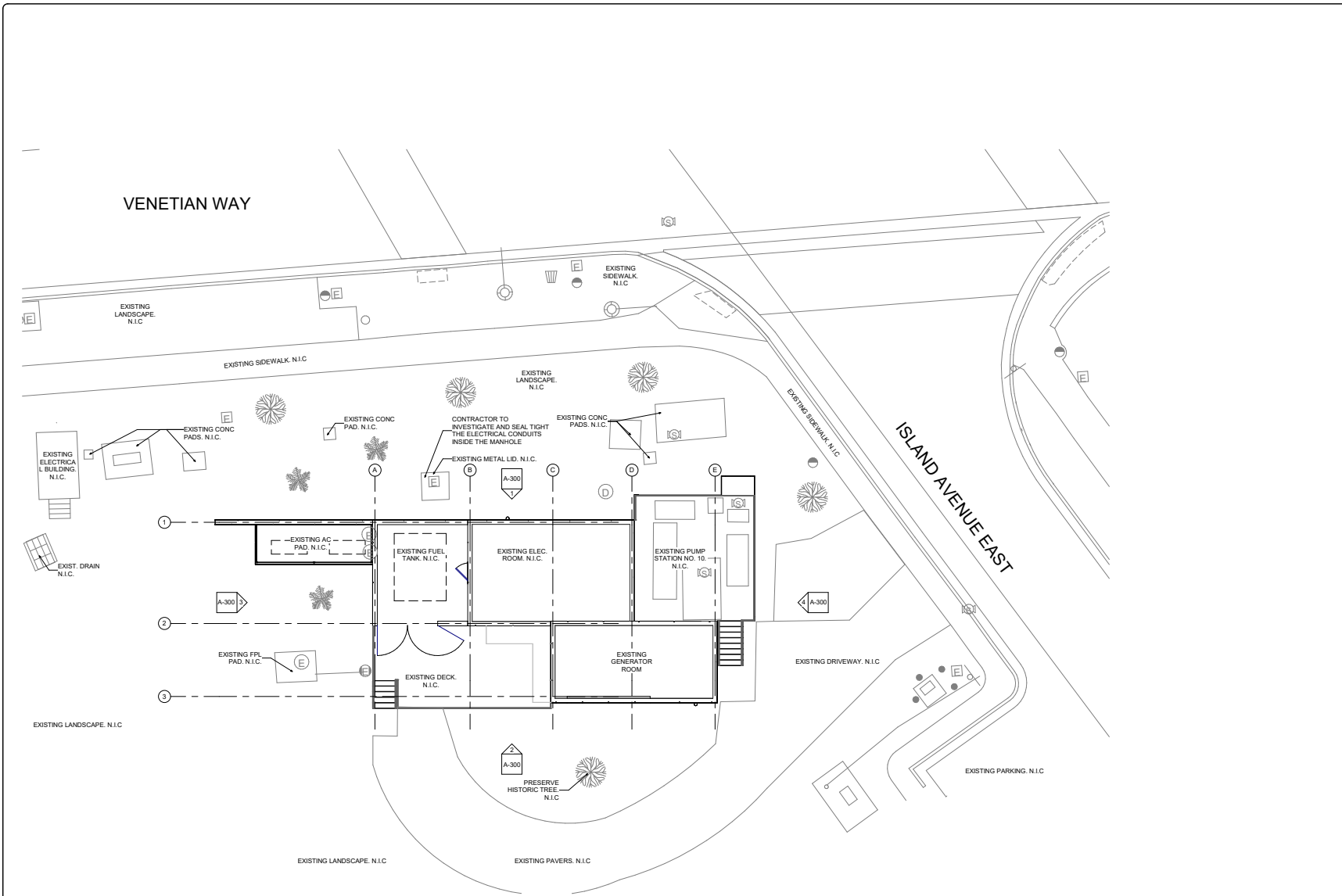
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 DESIGN ENGINEER: _____
 DRAWN BY: _____
 CHECKER: _____
 SCALE: AS NOTED

NEIGHBORHOOD: BELLE ISLE

TITLE: DEMOLITION PLAN

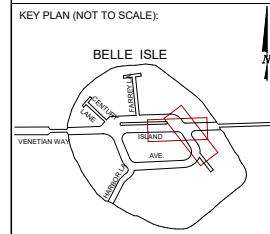
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 Survey Reference: _____
 Field Book: N/A Page: N/A Work Order: N/A
 Date: 2025.05.07 Sheet: _____ of _____ Drawing: A-004

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① SITE PLAN - PUMP STATION 10
1/8" = 1'-0"

NOTES:



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GES
CONSULTANTS
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CORPORATE ID:
AUTHORIZATION NO. 9811

ENGINEER OF RECORD:
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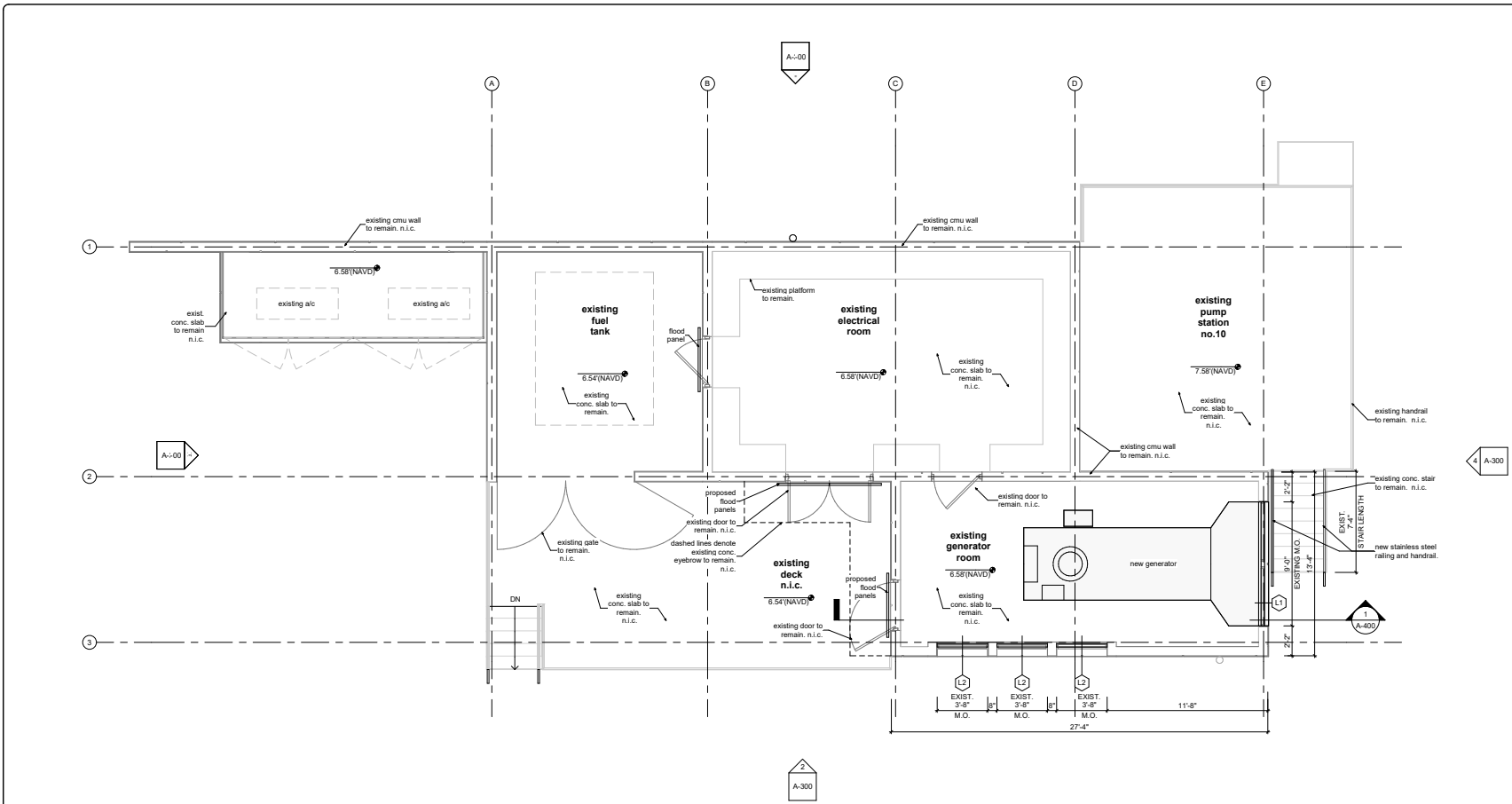
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DESIGN ENGINEER:
DRAWN BY:
CHECKER:
SCALE: AS NOTED

NEIGHBORHOOD: BELLE ISLE

TITLE: PUMP STATION NO. 10 - SITE PLAN

File Name:
Survey Reference:
Field Book: N/A Page: N/A Work Order: N/A
Date: 2025.05.07 Sheet: of Drawing: A-008

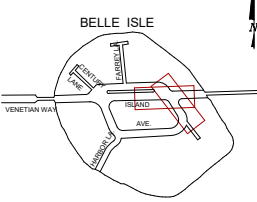
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1 FLOOR PLAN
1/4" = 1'-0"

NOTES:

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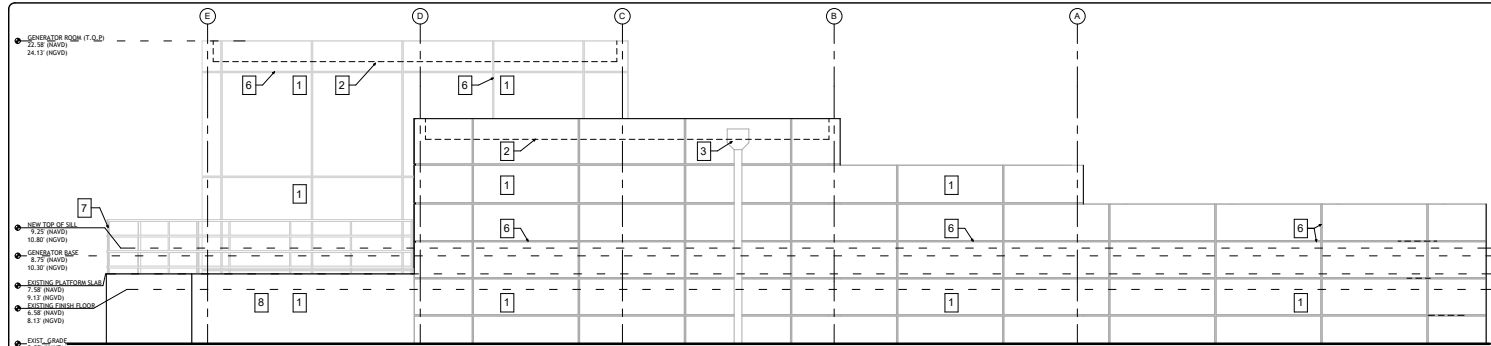
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DESIGN ENGINEER: _____
DRAWN BY: _____
CHECKER: _____
SCALE: AS NOTED

NEIGHBORHOOD: BELLE ISLE

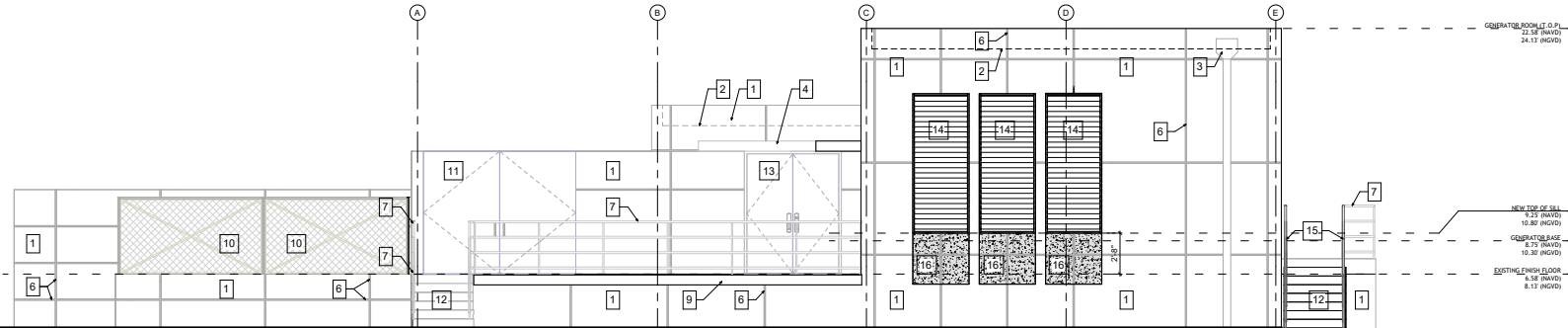
TITLE: PUMP STATION NO. 10 - FLOOR PLAN

File Name: _____
Survey Reference: _____
Field Book: N/A Page: N/A Work Order: N/A
Date: 2025.05.07 Sheet: _____ of _____ Drawing: A-101

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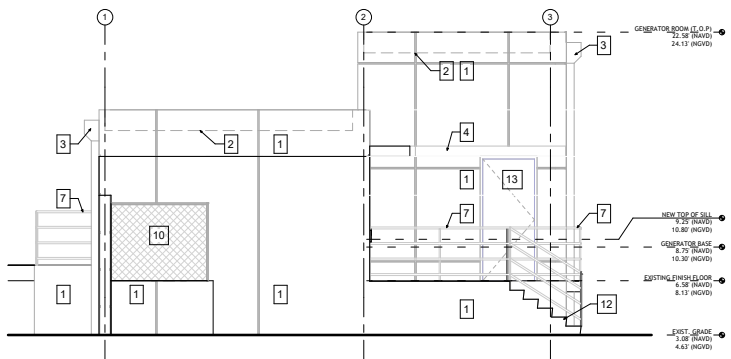


1 NORTH ELEVATION NOTE: BASE FLOOD ELEVATION - AE 7 NAVD
1/4" = 1'-0"

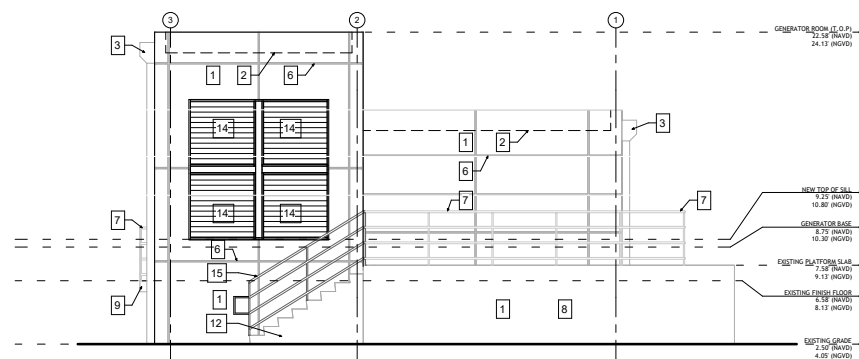


2 SOUTH ELEVATION
1/4" = 1'-0"

NOTE: BASE FLOOD ELEVATION - AE 7 NAVD



3 WEST ELEVATION NOTE: BASE FLOOD ELEVATION - AE 7 NAVD
1/4" = 1'-0"

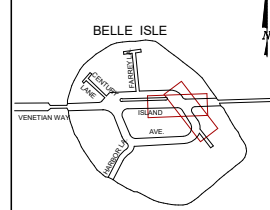


4 EAST ELEVATION NOTE: BASE FLOOD ELEVATION - AE 7 NAVD
1/4" = 1'-0"

- KEYNOTES**
- Existing Wall w/ Stucco finish to remain, N.I.C.
 - Existing roof line beyond to remain, N.I.C.
 - Existing overflow scupper/diverter head and downspout to remain, N.I.C.
 - Existing cantilever eyebrow to remain, N.I.C.
 - Not in use—
 - Existing Stucco control joints to remain, N.I.C.
 - Existing metal handrail to remain, N.I.C.
 - Existing pump station, N.I.C.
 - Not in use.
 - Existing chain link fence w/ gate & top enclosure to remain, N.I.C.
 - Existing metal gate to remain, N.I.C.
 - Existing conc. steps to remain, N.I.C.
 - Existing door to remain, N.I.C.
 - New Louver color to match existing, V.I.F.
 - New steel metal handrail to match existing.
 - 8" concrete with stucco and paint to match existing adjacent.

NOTES:

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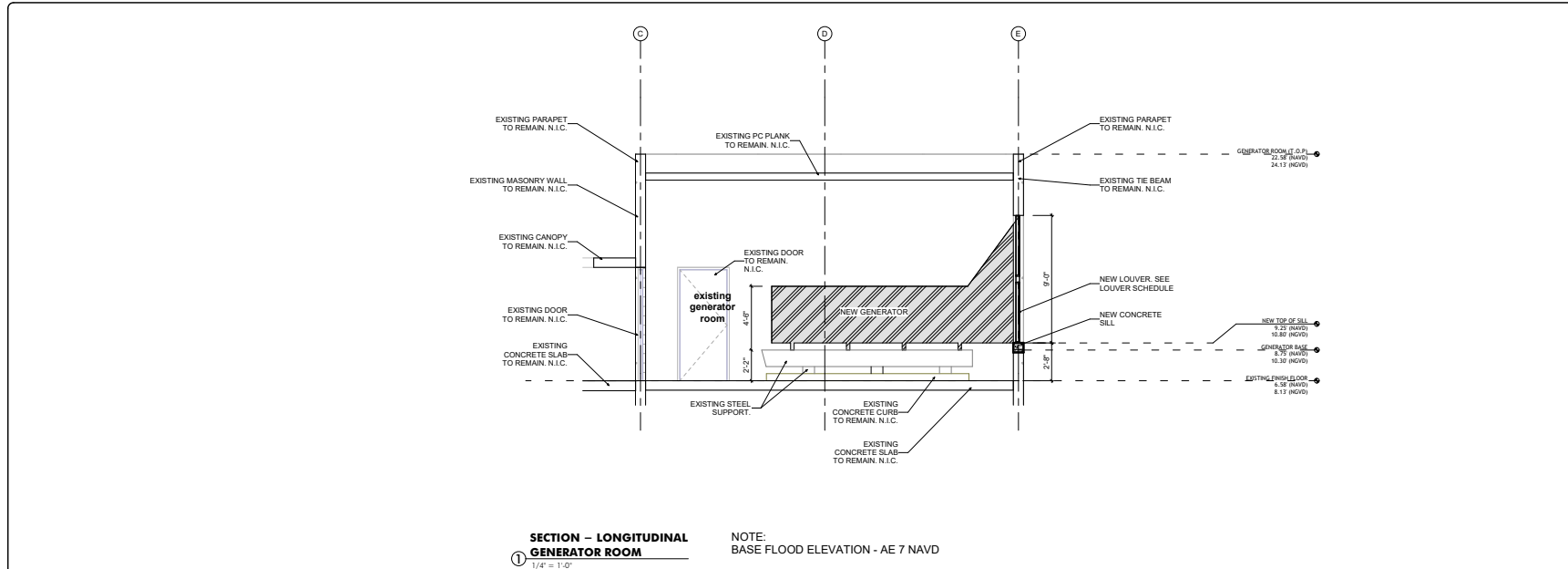
ENGINEER OF RECORD:
JOSE A. CARABALLO
PROFESSIONAL ENGINEER
P.E. NO. 73064

ENGINEER OF RECORD:
DESIGN ENGINEER:
DRAWN BY:
CHECKER:
SCALE: AS NOTED

NEIGHBORHOOD: BELLE ISLE
TITLE: PUMP STATION NO. 10 - ELEVATIONS

File Name:
Survey Reference:
Field Book: N/A Page: N/A Work Order: N/A
Date: 2025.05.07 Sheet: of Drawing: A-300

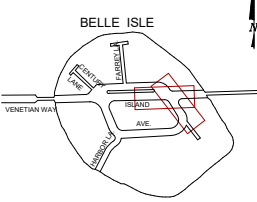
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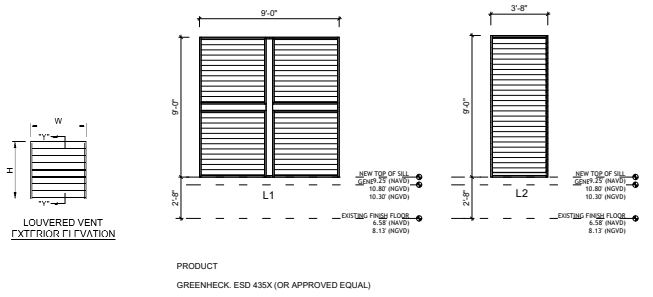
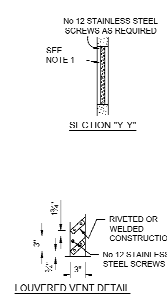
SECTION - LONGITUDINAL GENERATOR ROOM
 1/4" = 1'-0"
 NOTE: BASE FLOOD ELEVATION - AE 7 NAVD

NOTES:

KEY PLAN (NOT TO SCALE):



P.E. SEAL:



LOUVER SCHEDULE					
LOUVER NO.	SASH OPERATION	WIDTH	HEIGHT	FRAME MATERIAL	REMARKS
L1	FIXED	9'-0"	9'-0"	EXTRUDED ALUMINUM	REMOVE EXISTING LOUVER AND REPLACE WITH IMPACT RESISTANT LOUVER
L2	FIXED	3'-8"	9'-0"	EXTRUDED ALUMINUM	REMOVE EXISTING LOUVER AND REPLACE WITH IMPACT RESISTANT LOUVER

- LOUVER NOTES**
- LOUVERS SHALL BE FABRICATE WITH MINIMUM GAUGE NO 14 ALUMINUM OR NO 22 GALVANIZED STEEL, PAINTED AFTER FABRICATION.
 - ISOLATE ALUMINUM FROM CONCRETE AND OTHER METAL WITH SUITABLE INSULATING COMPOUND.
 - ADD A SUITABLE CENTER BRACE WHEN LOUVER VENT WIDTH IS GREATER THAN 3 FT.
 - LOUVERS SHALL INCLUDE AN AUTOMATIC CLOSING FIRE DAMPER THAT OPERATES IN RESPONSE TO A VAULT FIRE. DAMPERS SHALL PROVIDE MINIMUM 11 2 HOUR RATING. SEE ANSUIUL 555.

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 P.E. NO. 73064

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 DESIGN ENGINEER: _____
 DRAWN BY: _____
 CHECKER: _____
 SCALE: AS NOTED

NEIGHBORHOOD: BELLE ISLE
 TITLE: PUMP STATION NO.10 - SECTION & LOUVER SCHEDULE

File Name: _____
 Survey Reference: _____
 Field Book: N/A Page: N/A Work Order: N/A
 Date: 2025.05.07 Sheet: _____ of _____ Drawing: A-400

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TECHNICAL DATA SHEET **Permaquik® 200**
Crystalline Waterproofing
Capillary Waterproofing Formulation

PRODUCT DESCRIPTION

Permaquik® 200 Crystalline Waterproofing is a capillary waterproofing formulation of proprietary blends of chemicals, quartz sand, and cement. The chemicals contained in the crystalline waterproofing materials require the presence of moisture to set off a chemical reaction from within the matrix of the concrete. When combined with "free lime", these chemicals form long chained compounds, which crystallize and penetrate deeply into the capillaries of the concrete, eliminating the migration of water. Independent tests show penetration of up to 2" (51 mm) in 28 days.

The crystalline process is continuous as long as moisture is present in the concrete, significantly reducing the concrete's natural porosity by filling small voids and cracks caused by shrinkage. The concrete is still able to breathe as the crystalline does not create a vapor barrier. If no moisture is present, the crystals will lie dormant until moisture reappears and then will reactivate to seal the cause of the leakage. Permaquik 200 is applied as a slurry coat on vertical interior (CIP) concrete or (CMU) block structures to create a waterproofing barrier from within the substrate. It can be applied by "broadcasting" the dry powder onto horizontal concrete surfaces at the time of initial set and power - or hand - floating the powder to into the green concrete.

Once the reaction has taken place and the formulation has crystallized, these coatings are highly resistant to salts (chloride penetration), alkalis, and seawater. Because of the density of the crystalline chain, the concrete is able to withstand mildly acidic conditions to provide protection in wastewater treatment plants as well as superior protection against frost damage and may also be used in sealing the joint between new and existing concrete.

BASIC USES

Few products in the waterproofing industry offer the total protection to the concrete itself that Permaquik 200 provides. Where moisture is present, there is always the danger of damage not only to the concrete but also to the steel as well as interior finishes. No special below-grade protection is necessary.

Permaquik 200 is used for negative side waterproofing in conjunction with a positive side membrane. For positive side waterproofing, consult your local Tremco Sales Representative.

Permaquik 200 provides fast, economical waterproofing for foundation walls and floor slabs, suspended or in-ground pools, and protects against spalling due to oil, salt, and freeze/thaw action in parking garage floor applications.

FEATURES & BENEFITS

- When applied to inside surfaces, Permaquik 200 integrates and combines with the concrete from within, thus forming a barrier which cannot easily be damaged.
- The crystalline products tolerate water so there is no need to continually dry the surface before application, unlike most asphaltic, bitumen, or solvent based resin systems.

AVAILABILITY

Immediately available from your local Tremco Sales Representative or Tremco Distributor. For distributor locations, visit www.tremcocelements.com

COVERAGE RATES

1.3 kg/M² or 0.4 lb/yd²
200 ft² (18.6 M²) per pail in 2 passes
Horizontal dry shake method: 1 kg/M² or 1.85 lb/yd²

PACKAGING

Permaquik 200: 55 lb (25 kg) packed in 5 gal (20-L) pails. Also available in drums.



TECHNICAL DATA SHEET **VULKEM EWS® WITH PUMA TECHNOLOGY**
Waterproof Traffic Coating System
Pedestrian System

PRODUCT DESCRIPTION

Vulkem® EWS with PUMA Technology is designed to have tenacious adhesion and extreme abrasion resistance. It can be walked on in one hour, which will minimize operation disruption. Vulkem Extreme Wearing System (EWS) is a waterproof traffic deck coating system that utilizes polyurethane-methacrylate (PUMA) technology. Vulkem EWS pedestrian system is composed of a primer (Tremco PUMA Primer or TREMPRIME VB Plus Primer), a base coat (Tremco PUMA BC or BC LM), and a top coat (Tremco PUMA TC). All system components, except TREMPRIME VB Plus, are cured using Tremco PUMA Initiator.

Tremco PUMA Primer is a polymethyl-methacrylate (PMMA), two-component primer for porous and non-porous substrates.

TREMPRIME VB Plus Primer is a two component, modified epoxy primer designed to seal concrete and reduce moisture vapor transmission on concrete slabs with elevated levels of moisture.

Tremco PUMA BC is a polyurethane-methacrylate (PUMA) base coat. Tremco PUMA BC bonds firmly to Tremco PUMA Primer. It retains its integrity even if substrate movement causes hair-line cracks of up to 1/16" (1.5 mm). If cut or damaged, Tremco PUMA BC will prevent water migration between itself and the substrate.

Tremco PUMA BC LM is a low-modulus version of Tremco PUMA BC waterproofing membrane that is used when dynamic movement and extreme service temperature ranges are anticipated.

Tremco PUMA TC is a polymethyl-methacrylate (PMMA) top coat. Interlaminar adhesion to Tremco PUMA BC is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete the Vulkem EWS pedestrian system.

Tremco PUMA Initiator is a reactive catalyst in the form of a white powder used to cure all PUMA/PMMA resins.

BASIC USES

Vulkem EWS is a cold-applied traffic deck coating system designed for waterproofing concrete slabs and protecting occupied areas underneath from water damage. Additionally, the system will protect the concrete from the damaging effects of chloride, deicing salts, chemicals, gasoline, oils and anti-freeze. The Pedestrian System is ideal for stadiums, balconies, pedestrian walkways, roof terraces, mechanical rooms, recreation decks, and similar applications requiring a waterproof coating system.

FEATURES & BENEFITS

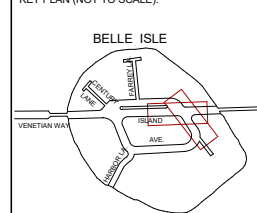
- PUMA technology delivers extreme durability while maintaining its crack-bridging characteristics, eliminating the need for reinforcing fabric.
- Rapid set-up times allow for quick overall installation, as well as the ability to open up to traffic one hour later.
- Can be applied at temperatures as low as 14°F (-10°C), which allows for continuation of projects in the colder months.
- Initiator adjustments allow for 30 to 45 min cure time between applications, even at temperatures below freezing.
- Extremely forgiving application allows users to apply additional coats long after the previous coat has cured.
- Unique chemistry allows for easy repair.
- Compatible with Tremco sealants, coatings and expansion joints, which is essential for tie-ins, detailing and penetrations.

AVAILABILITY

Immediately available from your local Tremco Sales Representative.

NOTES:

KEY PLAN (NOT TO SCALE):



P.E. SEAL:

90% SUBMITTAL - NOT FOR CONSTRUCTION

MIAMI BEACH

PUBLIC WORKS DEPARTMENT
1700 CONVENTION CENTER DRIVE, MIAMI BEACH, FL 33139

CITY MANAGER: ERIC CARPENTER
DIRECTOR: JAY J. FINK, P.E.
CITY ENGINEER: CRISTINA ORTEGA CASTINEIRAS, P.E.

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NO.	DATE	REVISION	APPD. BY



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CERTIFICATION NO. 0011

ENGINEER OF RECORD:
JOSE A. CARABALLO
PROFESSIONAL ENGINEER
P.E. NO. 73064

ENGINEER OF RECORD: _____
DESIGN ENGINEER: _____
DRAWN BY: _____
CHECKER: _____
SCALE: _____ AS NOTED

NEIGHBORHOOD:

BELLE ISLE

TITLE:

WATERPROOFING

File Name:

Survey Reference:

Field Book: N/A Page: N/A Work Order: N/A

Date: 2025.05.07 Sheet: of Drawing: A-800

THIS SPACE RESERVED FOR PROJECT MILESTONE