DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
9900 SW 107th AVENUE, SUITE 203
MIAMI, FLORIDA 33176-2785

July 30, 2025

Regulatory Division
South Permits Branch
Miami Section
SAJ-2024-00126 (SP-VEK)

City of Hollywood
P.O. Box 229045
Hollywood, FL 33022

Dear Ladies and Gentlemen:

The U.S. Army Corps of Engineers (Corps) has completed the review and evaluation of your Department of the Army permit application, number SAJ-2024-00126 (SP-VEK). Our regulations require you have an opportunity to review the terms and conditions prior to final signature by the Department of the Army. Enclosed is an unsigned Department of the Army permit instrument (permit).

Please read carefully the Special Conditions beginning on page 4 of the permit. These were developed to apply specifically to your project. Water Quality Certification was required prior to issuance of a permit. In accordance with General Condition 5 of the permit, the Water Quality Certification has been attached to the Department of the Army permit.

This letter contains a proffered permit for your proposed project. If you object to this decision, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this decision, you must follow the directions provided in Section 1, Part B of the attached RFA form and submit a completed RFA form to the South Atlantic Division Office at the following address:

U.S. Army Corps of Engineers
South Atlantic Division
Attn: Jonathan Swartz
60 Forsyth Street, SW
Atlanta, Georgia 30303-8801

Mr. Swartz can be reached by telephone at 912-710-1798 or by email at Jonathan.M.Swartz@usace.army.mil.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division office within 60 days of the date of the RFA. Should you decide to submit an RFA form, it must be received at the above address by **September 29, 2025**.

It is not necessary to submit an RFA form to the Division office if you do not object to the decision in this letter. In this case, the permit must be signed by the applicant in the space provided on the signature page of the permit. In the case of corporations, acceptance must be by an officer of that corporation authorized to sign on behalf of the corporation. The party responsible for assuring the work is done in accordance with the permit terms and conditions must sign the permit. Please type or print the name and title of the person signing below the signature and the date signed.

In order to accept the proffered permit and receive a valid Department of the Army permit, you must sign the permit. The District Engineer or his representative will then sign the permit. The Corps will add the permit expiration date to the permit, the permit issuance date on the *Notice of Department of the Army Permit* form and return the valid permit to you. It is important to note that the permit is not valid until the District Engineer or his representative signs it. Please follow the steps below to accept the permit:

a. Sign the signature page of the proffered permit (page 10).

b. Return the entire permit, including all attachments, to the address listed in the last paragraph of this letter or send via email to the Project Manager listed in the last paragraph of this letter. If the file is greater than 20 MB, upload via DOD SAFE (https://safe.apps.mil/).

Thank you for your cooperation with our permit program. The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at https://regulatory.ops.usace.army.mil/customer-service-survey/. Please be aware this Internet address is case sensitive and you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Should you have any questions, please contact Virginia King in writing at the Miami Permits Section at the letterhead address, by email at Virginia.E.King@usace.army.mil

Sincerely,

Alisa Zarbo

for: Shawn H. Zinszer
Chief, Regulatory Division

Enclosures
Attachment 1: Notification of Administrative Appeal Form
Attachment 2: Proffered Permit Documents

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U.S. Army Corps of Engineers (USACE)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

Form Approved - OMB No. 0710-0003 Expires 2027-10-31

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority The authorities for requesting this information are Sections 9, 10, 13, and 14, Rivers and Harbors Act of March 3, 1899; Section 404, Clean Water Act; and Section 103 Marine Protection Research and Sanctuaries Act of 1972.

Principal Purpose This information serves as notification to affected parties regarding the USACE administrative appeal options and process, as well as to facilitate requests for appeal of USACE decisions with which they disagree.

Routine Uses Routine uses will include: (a) To serve as notification to affected parties of the Corps administrative appeal options and process and to facilitate requests for appeal of Corps decisions with which they disagree. (b) Records may be referred to the Department of Justice for possible criminal prosecution. (c) Records may be referred to other Federal, State, and local agencies for evaluation and enforcement purposes.

Disclosure Disclosure of this information is voluntary on your part. However, failure of individual to provide requested information could result in inability to determine all pertinent information regarding a Department of the Army permit matter.

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used to facilitate the initiation of the administrative appeals process. The appeals process allows an affected party to pursue an administrative appeal of certain Corps of Engineers decisions with which they disagree.

Upon release, this form will also be available on the Corps website https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/

Applicant: City of Hollywood	File Number: SAJ-2024-00126 (SP-VEK)	Date: 7/30/25

Documents Attached (*select all that apply*):		Form Reference Section:
☒	INITIAL PROFFERED PERMIT (*Standard Permit or Letter of Permission*)	A
☐	PROFFERED PERMIT (*Standard Permit or Letter of Permission*)	B
☐	PERMIT DENIAL WITHOUT PREJUDICE	C
☐	PERMIT DENIAL WITH PREJUDICE	D
☐	APPROVED JURISDICTIONAL DETERMINATION	E
☐	PRELIMINARY JURISDICTIONAL DETERMINATION	F

SECTION I

The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/ or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: *You may accept or object to the permit*

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

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B: PROFFERED PERMIT: *You may accept or appeal the permit*

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C. PERMIT DENIAL WITHOUT PREJUDICE: *Not appealable*

You received a permit denial without prejudice because a required Federal, state, and/or local authorization and/or certification has been denied for activities which also require a Department of the Army permit before final action has been taken on the Army permit application. The permit denial without prejudice is not appealable. There is no prejudice to the right of the applicant to reinstate processing of the Army permit application if subsequent approval is received from the appropriate Federal, state, and/or local agency on a previously denied authorization and/or certification.

D: PERMIT DENIAL WITH PREJUDICE: *You may appeal the permit denial*

You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: APPROVED JURISDICTIONAL DETERMINATION: *You may accept or appeal the approved JD or provide new information for reconsideration*

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

- RECONSIDERATION: You may request that the district engineer reconsider the approved JD by submitting new information or data to the district engineer within 60 days of the date of this notice. The district will determine whether the information submitted qualifies as new information or data that justifies reconsideration of the approved JD. A reconsideration request does not initiate the appeal process. You may submit a request for appeal to the division engineer to preserve your appeal rights while the district is determining whether the submitted information qualifies for a reconsideration.

F: PRELIMINARY JURISDICTIONAL DETERMINATION: *Not appealable*

You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision you may contact:		If you have questions regarding the appeal process, or to submit your request for appeal, you may contact:	
Name:	Project Manager as noted in the letter.	Name:	Jonathan Swartz
Street Address, City, State:	Project Manager as noted in the letter.	Street Address, City, State:	USACE South Atlantic Division 60 Forsyth Street SW Atlanta, Georgia 30303-8801
Phone:	Project Manager as noted in the letter.	Phone:	912-710-1798
Email:	Project Manager as noted in the letter.	Email:	Jonathan.M.Swartz@usace.army.mil

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SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (*Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. Use additional pages as necessary. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.*)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

Email address of appellant and/or agent	Telephone number
Signature of appellant or agent	Date

DEPARTMENT OF THE ARMY PERMIT

Permittee:
City of Hollywood
P.O. Box 229045
Hollywood, FL 33022

Permit No: SAJ-2024-00126 (SP-VEK)

Issuing Office: U.S. Army Engineer District, Jacksonville

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The applicant seeks authorization to complete the following as part of a tidal flood mitigation and shoreline protection project located along four sites located on segments of shoreline along Hollywood North Lake and Hollywood South Lake:

Site 9: -Installation of an approximately 549 linear ft x 14 inch wide NZ-14 steel sheet pile bulkhead with a 28 inch wide reinforced concrete cap
-Placement of 64 cubic yards of sand fill within a 1,193 square ft area below the MHWL
-Placement of 56 cubic yards of revetment fill within a 2,561 square ft area below the MHWL
-Placement of 239 cubic yards of armor stone within a 2,036 square ft area below the MHWL
-Placement of 62 cubic yards of bedding stone within a 2,229 square ft area below the MHWL
- Planting of red mangrove propagules within a 2,627 square ft area and planting of salt meadow cordgrass within a 447 square ft area
-Excavation of 120 cubic yards of material within a 3,422 square ft area below the MHWL

Site 10: -Removal of 196 ft^2 of access walkways to twelve (12) residential docks to facilitate bulkhead installation
-Installation of an approximately 1,519 linear ft x 14 inch wide NZ-14 steel sheet pile bulkhead with a 28 inch wide reinforced concrete cap
-Installation of an approximately 459 linear ft swale that varies between 5-10 ft wide

-Placement of 3 cubic yards of sand fill with salt meadow cordgrass within an 82 square ft area below the MHWL
-Placement of 9 cubic yards of armor stone within an 82 square ft area below the MHWL
-Excavation of 3 cubic yards of material within an 82 square ft area below the MHWL

The proposed work at Site 10 will result in 18 square feet (0.0004 acre) of seagrass impacts.

Site 17: -Removal of 581 ft^2 of access walkways to twelve (12) residential docks to facilitate bulkhead installation
-Installation of an approximately 886 linear ft x 14 inch wide NZ-14 steel sheet pile bulkhead with a 28 inch wide reinforced concrete cap
-Installation of an 868 linear ft x 10 ft wide swale, which includes the excavation of 154 cubic yards of material within a 3,498 square ft area
-Placement of 114 cubic yards of fill within an 812 square ft area below the MHWL

The proposed work at Site 17 will result in 1,102 ft^2 (0.025 acre) of mangrove wetland impacts.

Site 19: -Removal of 103 ft^2 of access walkways to ten (10) residential docks to facilitate bulkhead installation
- Installation of an approximately 1,350 linear ft x 14 inch wide NZ-14 steel sheet pile bulkhead with a 28 inch wide reinforced concrete cap
- Installation of a 1,272 linear ft x 5 ft wide bioswale, which includes the excavation of 74 cubic yards of material within a 6,358 square ft area

The work described above is to be completed in accordance with the drawings and attachments affixed at the end of this permit instrument.

Project Location: The project would affect waters of the United States associated with Hollywood North Lake and Hollywood South Lake. The project is located at four sites including:
Site 9: The project would affect waters of the United States associated with Hollywood North Lake. The project site is located at the west end of 700 Polk Street, along the southern shoreline of North Lake, west of the Hollywood Marina boat ramp (Parcel #'s 514214026160 and 514214024070), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.
Site 10: The project would affect waters of the United States associated with Hollywood South Lake. The project site is located east of South 9th Avenue and south of N South Lake Drive along the northern shoreline of South Lake (Parcel #'s 514214020000,

514214024900, and 514214026190), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.
Site 17: The project would affect waters of the United States associated with Hollywood South Lake. The project site is located along the southern shoreline of South Lake, between the lake and Adams Street (Parcel #'s 514214024910, 514214024900, and 514214026200) City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.
Site 19: The project would affect waters of the United States associated with Hollywood North Lake. The project site is located along the northern shoreline of North Lake along N Northlake Drive (Parcel #'s 514214026150 and 514214024070), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.

Directions to the sites are as follows:
Site 9: Follow I-95 S to FL-822 E/Sheridan St in Hollywood. Take exit 21 from I-95 S, continue on FL-822 E/Sheridan St. Take US-1 and Johnson St to Polk St.

Site 10: Follow I-95 S to Dania Beach, take exit 22 from I-95 S, then follow FL-848 E/Stirling Rd, US-1 and Hollywood Blvd to N Southlake Dr in Hollywood.

Site 17: Follow I-95 S to State Hwy 824/W Pembroke Rd in Hollywood. Take exit 19 from I-95 S. Continue on State Hwy 824/W Pembroke Rd. Take Washington St to S Southlake Dr.

Site 19: Follow I-95 S to Dania Beach, take exit 12A from I-595 E. Follow US-1 S and Johnson St to N North Lake Dr in Hollywood.

Approximate Central Coordinates:

Site 9:	Latitude	26.014116 North
	Longitude	-80.122861 West
Site 10:	Latitude	26.010127 North
	Longitude	-80.120593 West
Site 17:	Latitude	26.005714 North
	Longitude	-80.120808 West
Site 19:	Latitude	26.01856 North
	Longitude	-80.121022 West

Permit Conditions

General Conditions:

1. The time limit for completing the work authorized ends **five years after permit issuance**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions (Attachment 2).

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. Reporting Address: The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:

a. For electronic mail (preferred): SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).

b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

The Permittee shall reference this permit number, SAJ-2024-00126 (SP-VEK), on all submittals.

2. As-Built Certification: Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a completed "As-Built Certification by Professional Engineer or Surveyor" form (Attachment 3) to the Corps. The as-built drawings shall be signed and sealed by a registered professional engineer or surveyor and include the following:
a. A plan view drawing of the location of the authorized work footprint, as shown on the permit drawings, with an overlay of the work as constructed. The plan view drawing should show all existing water management structures and the completed structures, dredge/fill activities, and wetland impacts.

b. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the attached "As-Built Certification by Professional Engineer" form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or "As-Built Certification by Professional Engineer" form does not constitute approval of any deviations by the Corps.

c. The Department of the Army permit number on all sheets submitted.

3. Cultural Resources/Historic Properties:
a. No structure or work shall adversely affect, impact, or disturb properties listed in the National Register of Historic Places (NRHP), or those eligible for inclusion in the NRHP.
b. If, during permitted activities, items that may have historic or archaeological origin are observed the Permittee shall immediately cease all activities adjacent to the discovery that may result in the destruction of these resources and shall

prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal, prehistoric watercraft (such as log "dugouts"), and other evidence of human activity. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. The Corps shall coordinate with the Florida State Historic Preservation Officer (SHPO) to assess the significance of the discovery and devise appropriate actions. Project activities shall not resume without verbal and/or written authorization from the Corps.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with this Special Condition and, if deemed necessary by the SHPO or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on non-federal lands; they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archaeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the SHPO and from the Corps.

4. Assurance of Navigation and Maintenance: The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim

shall be made against the United States on account of any such removal or alteration.

5. Manatee Conditions: The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011" (Attachment 4). The most recent version of the Manatee Conditions must be utilized.

6. Permit Conditions Prevail: If information in the permit attachments conflict with the special conditions of this permit, the requirements of the permit special conditions shall prevail.

7. Posting of Permit: The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.

8. Jacksonville District Programmatic Biological Opinion (JAXBO): Structures and activities authorized under this permit will be constructed and operated in accordance with all applicable project design criteria's (PDCs) contained in the JAXBO, based on the permitted activity. Johnson's seagrass and its critical habitat were delisted from the Endangered Species Act on May 16, 2022. Therefore, JAXBO PDCs required to minimize adverse effects to Johnson's seagrass and its critical habitat are no longer applicable to any project. Failure to comply with applicable PDCs will constitute noncompliance with this permit. In addition, failure to comply with the applicable PDCs, where a take of listed species occurs, would constitute an unauthorized take. The NMFS is the appropriate authority to determine compliance with the Endangered Species Act. The most current version of JAXBO can be accessed at the Jacksonville District Regulatory Division website in the Endangered Species section of the Sourcebook located at:
http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx

JAXBO may be subject to revision at any time. The most recent version of the JAXBO must be utilized during the design and construction of the permitted work.

9. Turbidity Barriers: Prior to the initiation of any of the work authorized by this permit, the Permittee shall install floating turbidity barriers with weighted skirts that extend within 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained daily until the authorized work has been completed and turbidity within the construction area has returned to ambient levels. Turbidity barriers shall be removed upon stabilization of the work area.

10. Erosion Control: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

11. Fill Material: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance in toxic amounts, in accordance with Section 307 of the Clean Water Act.

12. Mitigation Bank Credit Purchase: Prior to commencement of work, the Permittee shall provide verification to the Corps that 0.03 Estuarine Intertidal federal mitigation bank credits have been purchased from The Everglades Mitigation Bank (SAJ-1995-00155). The required verification shall reference this project's permit number SAJ-2024-00126 (SP-VEK).

13. Commencement Notification: Within 10 days from the date of initiating the work authorized by this permit, the Permittee shall submit a completed "Commencement Notification" form (Attachment 5).

14. Notice of Permit: The Permittee shall complete and record the "Notice of Department of the Army Authorization" form (Attachment 6) with the Clerk of the County Court, Registrar of Deeds or other appropriate official charged with the responsibility of maintaining records of title to or interest in real property within the county of the authorized activity. No later than 90 days from the effective date of this permit, the Permittee shall provide a copy of the recorded Notice of Permit to the Corps clearly showing a stamp from the appropriate official indicating the book and page at which the Notice of Permit is recorded in the official records and the date of recording.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)

(x) Section 404 of the Clean Water Act (33 U.S.C. 1344)

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413)

( ) Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408)

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

_____ _____
(PERMITTEE) (DATE)

_____
(PERMITTEE NAME-PRINTED)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ Date:_____

Brandon L. Bowman
Colonel, U.S. Army
District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____
(TRANSFEREE-SIGNATURE) (DATE)

_____
(NAME-PRINTED)

_____
(ADDRESS)

_____
(CITY, STATE, AND ZIP CODE)

Attachments to Department of the Army Permit Number SAJ-2024-00126 (SP-VEK)

1. LOCATION MAP: 2 pages

2. WATER QUALITY CERTIFICATION: Specific Conditions of the water quality permit/certification in accordance with General Condition number 5 on page 2 of this DA permit. 77 pages.

3. AS-BUILT CERTIFICATION FORM: 2 pages

4. MANATEE CONDITIONS: 2 pages, *Standard Manatee Conditions for In-Water Work – 2011*

5. COMMENCEMENT NOTIFICATION FORM: 1 page

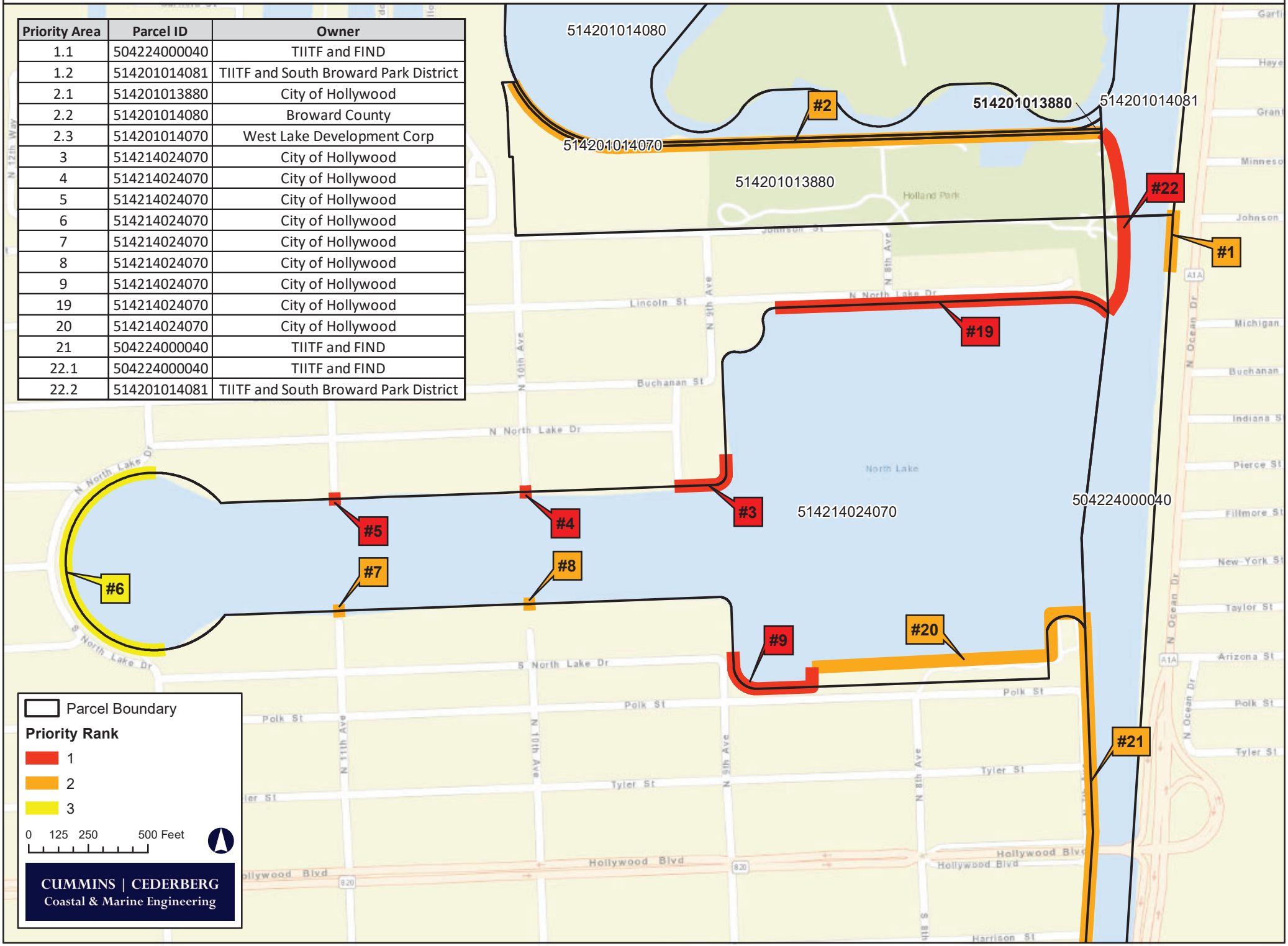
6. NOTICE OF PERMIT FORM: 3 pages

7. PLAN DRAWINGS: 39 pages

Tidal Flooding Mitigation and Shoreline Protection City of Hollywood - DCM-19-001187: Submerged Lands

Fig. 3

Priority Area	Parcel ID	Owner
1.1	504224000040	TIITF and FIND
1.2	514201014081	TIITF and South Broward Park District
2.1	514201013880	City of Hollywood
2.2	514201014080	Broward County
2.3	514201014070	West Lake Development Corp
3	514214024070	City of Hollywood
4	514214024070	City of Hollywood
5	514214024070	City of Hollywood
6	514214024070	City of Hollywood
7	514214024070	City of Hollywood
8	514214024070	City of Hollywood
9	514214024070	City of Hollywood
19	514214024070	City of Hollywood
20	514214024070	City of Hollywood
21	504224000040	TIITF and FIND
22.1	504224000040	TIITF and FIND
22.2	514201014081	TIITF and South Broward Park District



Tidal Flooding Mitigation and Shoreline Protection City of Hollywood - DCM-19-001187: Submerged Lands

Fig. 4

Priority Area	Parcel ID	Owner
10.1	514214024900	City of Hollywood
10.2	514214026190	City of Hollywood
10.3	504224000040	TIITF and FIND
11	514214024900	City of Hollywood
12	514214024900	City of Hollywood
13	514214024900	City of Hollywood
14	514214024900	City of Hollywood
15	514214024900	City of Hollywood
16	514214024900	City of Hollywood
17.1	514214024900	City of Hollywood
17.2	514214026200	City of Hollywood
17.3	504224000040	TIITF and FIND
18	504224000040	TIITF and FIND
21	504224000040	TIITF and FIND

Resilient Environment Department
ENVIRONMENTAL PERMITTING DIVISION
1 North University Drive, Mailbox 201, Plantation, Florida 33324 • 954-519-1483 • FAX 954-519-1412

May 21, 2025

City of Hollywood
c/o Jose Cartes
PO Box 229045
Hollywood, Florida 33022
E-mail: jcortes@hollywoodfl.org

To Whom It May Concern:

This is to notify you of the Resilient Environment Department's (RED) action concerning your applications received January 2, 2024. The applications have been reviewed for Environmental Resource Permit and Broward County Environmental Resource License.

Florida Department of Environmental Protection (DEP) Environmental Resource Permit – Granted

RED has the authority to review the project for compliance with Rule 62-330 and Chapter 373 of the Florida Administrative Code pursuant to an agreement between RED, DEP, and the South Florida Water Management District. The agreement is outlined in a document entitled "Delegation Agreement among the Florida Department of Environmental Protection, the South Florida Water Management District, and Broward County". Based on the information submitted, Environmental Resource Individual Permit No. **06-0454383-002** is hereby issued.

Broward County Environmental Resource License Review – Granted

RED has reviewed the project for compliance with Aquatic and Wetland Resource Protection Ordinance Sec. 27-331 through 27-341 of the Broward County Code. Based on the information submitted, Environmental Resource License No. **DF24-1003** is hereby issued.

The above named permittee/licensee is hereby authorized to perform the work per the approved drawings(s), plans, documents and specifications as submitted by the licensee, and made a part hereof. The above referenced approvals will remain in effect subject to the attached FDEP General Conditions, Broward County General Conditions, combined FDEP and Broward County Specific Conditions, and attached exhibits.

Should you wish to object to the Agency action or file a petition, please provide written objections, petitions and/or waivers within ten (10) days from the rendition of the action (refer to the attached "Variance and Administrative Review Procedures", Chapter 27 -10 through 27-14) to Director, EPD, 1 North University Drive Plantation, FL 33324. The "Notice of Rights" addresses the procedures to be followed if you desire a public hearing or review of the Agency's action.

Sincerely,

Linda Sunderland *May 21, 2025*

Linda Sunderland, PWS Date
Environmental Program Supervisor
Environmental Permitting Division

Enclosures:

County Environmental Resource License/State EI Environmental Resource Permit
One copy of stamped drawings (55 pages)
Broward County RED Variance and Administrative Review Procedures
Standard Manatee Conditions for In-Water Work, 2011, 2 pages
Florida EPPC's 2015 Invasive Plant Species List, 6 pages, can be downloaded at
http://www.fleppc.org/list/2015FLEPPCLIST-LARGEFORMAT-FINAL.pdf

Resilient Environment Department
ENVIRONMENTAL PERMITTING DIVISION
1 North University Drive, Mailbox 201, Plantation, Florida 33324 • 954-519-1483 • FAX 954-519-1412

Permittee/Authorized Entity:
City of Hollywood
c/o Jose Cortes
PO Box 229045
Hollywood, FL 33022
Email: jcortes@hollywoodfl.org

Project Name:
Hollywood Tidal Flood Mitigation and Shoreline Protection (Sites 9, 10, 17, & 19)

Authorized Agent:
Cummins Cederberg
c/o Francesca Fourney
Phone: (954) 859-2921; Email: ffourney@cumminscederberg.com

Compliance Project Manager:
Linda Sunderland, Environmental Program Supervisor
Phone: (954) 591-1454; Email: LSunderland@Broward.org

Environmental Resource Permit (ERP) - Granted
State-owned Submerged Lands Authorization – Not Required
U.S. Army Corps of Engineers Authorization – Separate Corps Authorization Required

State of Florida ERP No.: 06-0454383-002
Broward County ERL No.: DF24-1003

ERP Issuance Date: May 21, 2025

ERP Construction Phase Expiration Date: May 21, 2030

Environmental Resource License Expiration Date: May 21, 2030

STATE ENVIRONMENTAL RESOURCE INDIVIDUAL PERMIT and
COUNTY ENVIRONMENTAL RESOURCE LICENSE

PROJECT DESCRIPTION

This project involves the installation of 4,302-linear feet of new seawall and environmental enhancements at multiple locations.

The scope of work at Site 9 involves: (1) removal of access docks and (2) installation of a new 548.8-linear foot sheet pile seawall; and (3) the creation of a 2600 square foot mangrove planter and 446 square foot cordgrass planter using revetment, fill, Armor Stone, and Bedding Stone. Approximately 103 square feet of mangroves will be altered to conduct the noted work.

The scope of work at Site 10 involves: (1) removal of access docks; (2) installation of a new 1518.8-linear foot sheet pile seawall; (3) the use of riprap in front of a portion of the seawall for scour protection; and (4) the creation of nine cordgrass planters using revetment, fill, Armor Stone, and Bedding Stone. Approximately 56 square feet of mangroves and 17.5 square feet of seagrasses will be altered to conduct the noted work.

The scope of work at Site 17 involves: (1) removal of access docks; and (2) installation of a new 885.3-linear foot sheet pile seawall. Approximately 3717 square feet of mangroves will be altered to conduct the noted work.

The scope of work at Site 19 involves: (1) removal of access docks; and (2) installation of a new 1,349.7-linear foot sheet pile seawall. Approximately 668.4 square feet of mangroves will be altered to conduct the noted work.

Total Mangrove Impacts

SITE	AREA of Proposed Impacts
Site 9	103 sq ft
Site 10	56 sq ft
Site 17	3717 sq ft
Site 19	668.4 sq ft
TOTAL IMPACTS	4542.3

Unavoidable impacts to 4342 square feet of mangrove wetlands shall be offset through the purchase of 0.03 saltwater mitigation credits calculated with WATER scores from the FPL/Everglades Mitigation Bank (EMB). The 17.5 square foot seagrass area impacts will be considered de minimis, therefor not requiring any additional mitigation. This license does not authorize impacts to any surface waters or other natural resources not described herein.

PROJECT LOCATION

This project is located at the following locations in the City of Hollywood – listed from North to South:

Site 19, North Lake Drive: 514214026150, 514214024070
Site 9, S North Lake Drive: 514214026160, 514214024070
Site 10, N South Lake Drive: 514214020000, 514214024900, 514214026190
Site 17, S South Lake Drive: 514214024910, 514214024900, 514214026200

Construction shall be in accordance with the ERL and ERP applications received on January 2, 2024, all additional information submitted, plans stamped by the Department (attached) and with all General and Specific Conditions of this license.

AUTHORIZATIONS

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

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the Department has determined the activity is not on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, F.S., or Rule 18-21, F.A.C.

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 Corps. You must apply separately to the Corps using the appropriate federal application form (ENG 4345). More information about Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook.

Authority for review - an agreement with the USACOE 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

The activities described must be conducted in accordance with:

- **ERP Specific Conditions**
- **ERP General Conditions**
- **RED General Conditions**
- **RED Specific 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, as described.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SPECIFIC CONDITIONS

PROJECT FORMS & ATTACHMENTS

(1) The attached project drawings; the Standard Manatee Conditions for In-Water Work, 2011, which can be downloaded at can be downloaded at https://www.fws.gov/northflorida/Manatee/Manate_Key_Programmatic/20130425_gd_Appendix%20B_2011_Standard%20Manatee%20Construction%20Conditions.pdf; and DEP forms 62-330.310(3), 62-330.310(1); 62-330.310(2); 62-330.340(1); and 62-330.350(1), which may be downloaded at http://www.dep.state.fl.us/water/wetlands/erp/forms.htm become part of this permit. If the permittee does not have access to the Internet, please contact Broward County at (954) 519-1205 to request the aforementioned forms and/or document(s).

(2) If the attached permit drawings conflict with the specific conditions, then the specific conditions shall prevail.

PRIOR TO CONSTRUCTION

(3) After selection of the contractor to perform the authorized activities and prior to the initiation of any work authorized by this permit, the permittee (or authorized agent) and the contractor shall attend a pre-construction conference with a representative of the County; Please contact the aquatic and wetland group at AWRLicense@Broward.org or at (954)519-1454.

(4) The permittee shall ensure that the permit conditions are explained to all construction personnel working on the project and for providing each contractor and subcontractor with a copy of this permit before the authorized work begins.

CONSTRUCTION ACTIVITIES

(5) Prior to the initiation of any work authorized by this permit, floating turbidity curtains with weighted skirts that extend to within one foot of the bottom shall be placed around the project site (i.e. dredge area and return water discharge point), and shall be maintained and remain in place for the duration of the project construction to ensure that turbid discharges do not occur outside the boundaries of the floating turbidity screens.

(6) All areas to be dredged shall be in accordance with the attached permit drawings and shall not exceed the areas and depths indicated on those drawings.

(7) The dredge material shall be mechanically dredged and deposited directly on a fully-contained spoil disposal cell upon a barge, then transported to an approved upland disposal location.

(8) There shall be no storage or stockpiling of tools, debris, and/or materials along the shoreline adjacent to waters of the state. All excess construction related materials and any other type of debris shall be removed from waters of the state within 14 days of completion of the work authorized in this permit. All construction equipment/tools and materials shall be transported to and from the site, as well as stored, on the construction barge.

(9) Riprap shall consist of unconsolidated boulders, rocks, or clean concrete rubble without exposed reinforcing rods or similar protrusions. The riprap shall be free of sediment, debris, and toxic or otherwise deleterious substance. The riprap shall have a diameter of 12 to 36 inches. (7) The slope of the riprap shall

be no steeper than 2H:1V (horizontal:vertical). The riprap shall extend no more than 8 feet waterward from the wetface of the seawall.

MONITORING/REPORTING REQUIREMENTS

(10) Turbidity levels outside the construction area shall not exceed 29 NTU's above background levels. The following measures shall be taken immediately by the permittee whenever turbidity levels within waters of the State surrounding the project site exceed 29 NTUs above background:

(a) Notify the County at (954) 519-1454 at the time the violation is first detected.
(b) Immediately cease all work contributing to the water quality violation.
(c) Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, install more turbidity containment devices, and repair any non-functional turbidity containment devices.
(d) As required, perform turbidity monitoring per Specific Conditions.
(e) Resume construction activities once turbidity levels outside turbidity curtains fall below 29 NTUs

(11) Turbidity Monitoring: Water turbidity levels shall be monitored if a turbidity plume is observed outside the limits of the required turbidity control devices. Samples shall be taken every four hours, one foot above the bottom, mid-depth, and one-foot below the surface at monitoring stations located as follows:

(a) Approximately 100 feet up-current of the work sites and clearly outside the influence of construction activities. (This shall serve as the natural background sample against which other turbidity readings shall be compared.)
(b) Directly outside the turbidity curtains surrounding the work sites and within the densest portion of any visible turbidity plume. (This sample shall serve as the compliance sample.)

(12) Turbidity Monitoring Reports. During dredging activities, the permittee or permittee's contractor shall collect the following turbidity monitoring data at the frequency and water depths directed by Specific Condition 11:

(a) Date and time of sampling event
(b) Turbidity sampling results (background NTUs, compliance NTUs, and the difference between them)
(c) Description of data collection methods
(d) An aerial map indicating the sampling locations
(e) Depth of sample(s)
(f) Weather conditions at times of sampling
(g) Tidal stage and direction of flow

Data shall be collected in a turbidity log and shall include a statement by the individual responsible for implementation of the sampling program attesting to the authenticity, precision, limits of detection, and accuracy of the data. The turbidity log shall be scanned and sent on a weekly basis to the Department's Compliance Project Manager, Linda Sunderland, by email at AWRLicense@broward.org. The subject line of the email shall include the project name, permit number, and the title "Turbidity Monitoring Reports."

MANATEE CONDITIONS

(13) The Standard Manatee Construction Conditions for In-water Work (2011) must be followed for all in-water activity.

LISTED SPECIES

(16) This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the

Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

ERP 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 prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review

Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

(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.

RED GENERAL CONDITIONS:

(1) The terms, conditions, requirements, limitations and restrictions set forth herein are accepted by the licensee and enforceable by RED pursuant to this chapter. RED will review this license periodically and may revoke the license, initiate administrative and/or judicial action for any violation of the conditions by the licensee, its agents, employees, servants or representatives or principals.

(2) This license is valid only for the specific uses set forth in the license application, and any deviation from the approved uses may constitute grounds for revocation and enforcement action by RED.

(3) In the event the licensee is temporarily unable to comply with any of the conditions of the license, the licensee shall notify RED within twelve (12) hours. Within five (5) working days of the event, the licensee shall submit a written report to RED that describes the incident, its cause, the measures being taken to correct the problem and prevent its reoccurrence, the owner's intention toward repair, replacement, and reconstruction of destroyed facilities, and a schedule of action leading toward operation within the license conditions.

(4) The issuance of this license does not convey any vested rights or exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, or any violations of federal, state or local laws or regulations.

(5) This license must be available for inspection on the licensee's premises during the entire life of the license.

(6) By accepting this license, the licensee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, that are submitted to RED, may be used by RED as evidence in any enforcement proceeding arising under Chapter 27, except where such use is prohibited by § 403.111, F.S.

(7) The licensee agrees to comply with Chapter 27, as amended.

(8) Any new owner of a licensed facility shall apply by letter for a transfer of license within thirty (30) days after sale or legal transfer. The transferor shall remain liable for performance in accordance with the license until the

transferee applies for, and is granted the transfer of license. The transferee shall also be liable for performance in accordance with the license.

(9) The licensee, by acceptance of this license, specifically agrees to allow access to the licensed source at reasonable times by RED personnel for the purposes of inspection and testing to determine compliance with this license and this Chapter 27.

(10) This license does not constitute a waiver or approval of any other license that may be required for other aspects of the total project.

(11) If the licensee wishes to renew a license or extend its term, the licensee shall make application sixty (60) days prior to its expiration. Expired licenses are not renewable.

(12) In addition to the general conditions set forth above, each license issued by RED shall contain specific conditions determined by site conditions and requirements pursuant to the regulations as determined by the director of RED. The licensee agrees that specific conditions are enforceable by RED for any violation thereof.

(13) Enforcement of the terms and provisions of this license shall be at the reasonable discretion of RED, and any forbearance on behalf of RED to exercise its rights hereunder in the event of any breach by the licensee, shall not be deemed or construed to be a waiver of RED's rights hereunder.

RED SPECIFIC CONDITIONS:

A. STANDARD CONDITIONS

(1) **Notify the Development and Environmental Regulation Division in writing (Fax: 954/519-1412, or email) a minimum of 48 hours prior to project commencement and a maximum of 48 hours after project completion.** The notification shall include the name of the contractor authorized to perform the licensed activities. Failure to comply with this condition will result in enforcement action.

(2) Any project caused environmental problem(s) shall be reported immediately to the Resilient Environment Department Environmental Response Line at 954-519-1499.

(3) All project generated solid waste and/or spoil material must be disposed of in a suitable approved in accordance with current regulations at an upland location (not including surface waters and wetlands).

(4) All watercraft associated with the construction and use of the permitted structure shall only operate within waters of sufficient depth so as to preclude bottom scouring or prop dredging. Specifically, there shall be a minimum 12-inch clearance between the deepest draft of the vessel (with the motor in the down position) and the top of any submerged resources or canal bottom at mean low water.

(5) Turbidity screens, silt fences, or equivalent shall be properly employed and maintained as necessary to effectively contain suspended sediments during construction activities. **Dredging, filling, excavation, seawall removal, seawall construction, and other projects which result in similar degrees of disturbance to wet sediments shall in all cases employ turbidity control measures designed to effectively enclose the entire work area.**

(6) Turbidity levels shall be monitored and recorded if a visible turbidity plume is observed leaving the site during construction activities. If monitoring reveals that turbidity levels exceed 29 NTUs above natural background 50 feet downstream of the point of discharge, project activities shall immediately cease, and work shall not resume

until turbidity levels drop to within these limits [62-302.530(69) FAC].

(7) Only clean fill shall be placed in the water bodies being filled. Any fill material used shall be free of garbage, rubbish, refuse, asphalt, hazardous materials, organic matter such [as] wood, lumber, tree or tree trimmings, or other contaminants. The disposal of any putrescible or deleterious debris in any water body is prohibited.

B. CONSTRUCTION CONDITIONS

(1) No dredging is authorized by this license.

(2) If the approved license drawings and/or license attachments/plans conflict with the specific conditions, then the specific conditions shall prevail.

(3) Demolition and construction related debris must be disposed of at an approved upland location and may not be left in the waterway.

(4) This license does not eliminate the necessity to obtain any required federal, state, local or special district authorizations prior to the start of any activity approved by this license.

C. SEAGRASS CONDITIONS

(1) To minimize impacts to seagrasses from construction-related activities, pile driving shall be the method used to install all pilings.

(2) No permanent mooring of vessels will occur over seagrasses unless the water depth is three (3) feet or greater at mean low water.

D. MANGROVE CONDITIONS

(1) Adjacent wetland areas shall be protected from construction activities and construction-related runoff through the use of siltation screening and/or haybales around the perimeter of the scrapedown area adjacent to wetlands. The erosion protection devices shall be placed before the initiation of any other ground-disturbing activities and shall remain in place until all ground disturbing activities within the project have concluded, and the site has stabilized, at which time the screening or haybales shall be removed completely from the site.

(2) Spoil generated from the excavation authorized by this license must be placed on the upland portion of the site and must be contained in such a manner as to prevent erosion into the adjacent mangrove wetlands or other surface waters.

E. TURBIDITY CONDITIONS

(1) All watercraft associated with the proposed work and/or use of the permitted structure shall only operate within waters of sufficient depth to preclude bottom scouring or prop dredging.

(2) The contractor shall be responsible to have functional turbidity monitoring equipment on site during all construction activities and shall be responsible for training construction personnel in its calibration, operation, and related license requirements.

(3) Return water containment booms shall not be removed until the turbidity levels in the containment area drop below the above referenced 29 NTU threshold.

(4) If a visible turbidity plume is observed leaving the site at any time, the licensee shall:

(a) Immediately cease all work contributing to the water quality violation. Operations may not resume until the Department gives authorization to do so.

(b) Notify the RED immediately at (954) 519-1499, referencing the license number and project name.

(c) Stabilize all exposed material contributing to the water quality violation. Modify the work procedures that were responsible for the violation, and install more turbidity containment devices and/or repair any non-functioning turbidity containment devices.

(5) Turbidity screens, booms, curtains, or equivalent shall be affixed, anchored, or weighted to the existing seawall (not attached to the barge) shall span from water's surface to the substrate and shall be maintained as necessary during construction activities to minimize migration of turbidity into the adjacent waterway.

(6) Connected turbidity curtain segments shall be overlapped and tied at the top and bottom so as to prevent turbidity from escaping through gaps between segments.

(7) Turbidity curtains shall be deployed to effectively encapsulate the work area without impeding navigation in public waterways.

F. SEAWALL CONDITIONS

(1) No dredging other than that required for proper installation of the proposed seawall paneling is authorized by this license.

(2) Backfill material shall be clean fill as defined by Section 27-332 of Broward County Code of Ordinances.

G. STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

(1) All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The licensee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

(2) All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

(3) Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

(4) All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shut down if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

(5) Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

(6) Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the licensee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut-down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

H. STANDARD SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

(1) The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.

(2) The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.

(3) Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

(4) All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.

(5) If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.

(6) Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824- 5312) and the local authorized sea turtle stranding/rescue organization.

(7) Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

I. A COPY OF THIS LICENSE SHALL BE KEPT ON SITE DURING ALL PHASES OF LICENSED CONSTRUCTION.

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 Rule 28-106.201, 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, any email address, any facsimile number, 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. 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 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. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. 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, before the applicable 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 Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, 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 of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Plantation, Florida.

BROWARD COUNTY RESILIENT ENVIRONMENT DEPARTMENT as delegated by the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Linda Sunderland *May 21, 2025*

Linda Sunderland Date
Environmental Program Supervisor
Environmental Permitting Division

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this determination, including all copies were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

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

Michelle Decker May 21, 2025
Clerk Date

CITY OF HOLLYWOOD FLORIDA
TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT
SITES 9, 10, 17 & 19

CITY OF HOLLYWOOD PROJECT NO. DCM-001187

HOLLYWOOD ON THE GO
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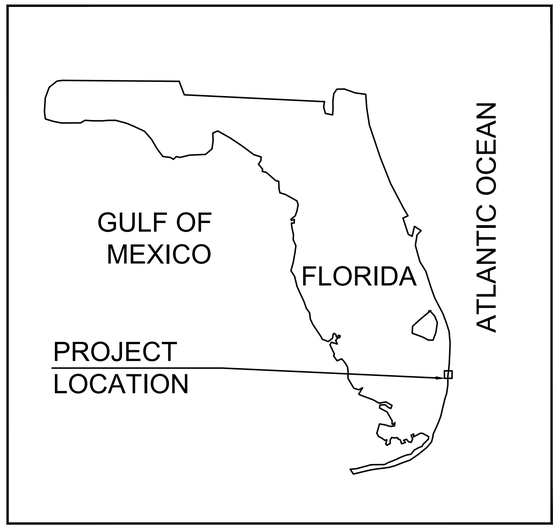
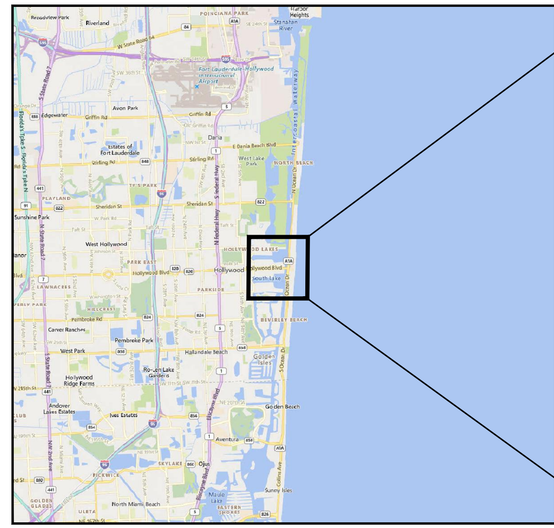
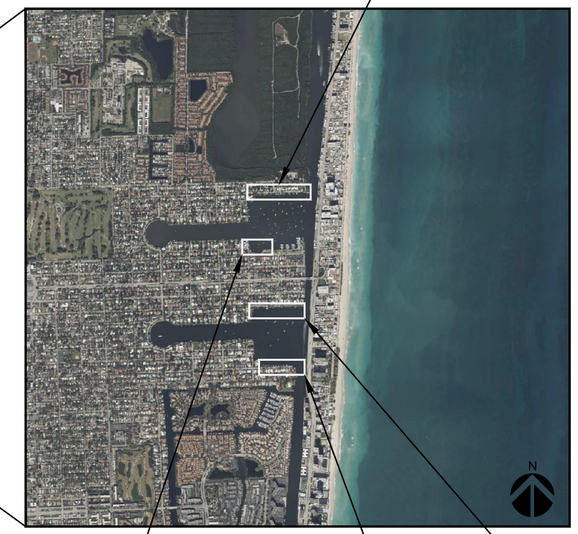
CITY OF Hollywood FLORIDA







SITE 19
PROJECT LOCATION
NORTH LAKE DR.

SITE 10
PROJECT LOCATION
N SOUTH LAKE DR

SITE 9
PROJECT LOCATION
S NORTH LAKE DR

SITE 17
PROJECT LOCATION
S SOUTH LAKE DR

NOT FOR CONSTRUCTION

PERMIT DRAWINGS
FOR REGULATORY REVIEW ONLY
10/01/2024

OWNER:

CITY OF HOLLYWOOD
DEPARTMENT OF DESIGN AND
CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD, FL 33020

ENGINEER:

CUMMINS | CEDERBERG
Coastal & Marine Engineering

MIAMI | FORT LAUDERDALE | JUPITER
SARASOTA | ST. PETERSBURG | TALLAHASSEE
TEL: +1 305-741-6155 FAX: 305-974-1969
WWW.CUMMINSCEDERBERG.COM

SUBCONSULTANT:

KEITH
NV5
BRIZAGA ASSESS. COMMUNICATE. ADAPT.
cma chen moore and associates

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
JORDON P. CHEIFET ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CUMMINS CEDERBERG
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL. 33304

JORDON P. CHEIFET
LICENSE
No. 72876
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE
WITH RULE 61G15-23.004, F.A.C.

	SHEET	DESCRIPTION
	CM-1.0	COVER SHEET
	CM-1.1	GENERAL NOTES
	CM-1.2	SITE 9 GEOTECHNICAL BORINGS
	CM-1.3	SITE 9 EXISTING CONDITIONS
	CM-1.4	SITE 9 DEMOLITION PLAN
	CM-1.5	SITE 9 PROPOSED SITE PLAN
	CM-1.6	SITE 9 CROSS SECTIONS
	CM-1.7	SITE 9 CROSS SECTIONS
	CM-1.8	SITE 9 CROSSECTIONS
	CM-2.0	SITE 10 GEOTECHNICAL BORINGS
	CM-2.1	SITE 10 EXISTING CONDITIONS
	CM-2.2	SITE 10 DEMOLITION PLAN
	CM-2.3	SITE 10 PROPOSED SITE PLAN
	CM-2.4	SITE 10 PROPOSED STE PLAN
	CM-2.5	SITE 10 PROPOSED SITE PLAN
	CM-2.6	SITE 10 CROSS SECTIONS
	CM-2.7	SITE 10 CROSS SECTIONS
	CM-2.8	SITE 10 CROSS SECTIONS
	CM-2.9	SITE 10 PROPOSED OUTFALL WALL
	CM-3.0	SITE 17 GEOTECHNICAL BORINGS
	CM-3.1	SITE 17 EXISTING CONDITIONS
	CM-3.2	SITE 17 DEMOLITION PLAN
	CM-3.3	SITE 17 PROPOSED WALL
	CM-3.4	SITE 17 PROPOSED WALL
	CM-3.5	SITE 17 CROSS SECTIONS
	CM-4.0	SITE 19 GEOTECHNICAL BORINGS
	CM-4.1	SITE 19 EXISTING CONDITIONS
	CM-4.2	SITE 19 EXISTING CONDITIONS
	CM-4.3	SITE 19 EXISTING CONDITIONS
	CM-4.4	SITE 19 DEMOLITION PLAN
	CM-4.5	SITE 19 DEMOLITION PLAN
	CM-4.6	SITE 19 DEMOLITION PLAN
	CM-4.7	SITE 19 PROPOSED WALL
	CM-4.8	SITE 19 PROPOSED WALL
	CM-4.9	SITE 19 PROPOSED WALL
	CM-4.10	SITE 19 CROSS SECTIONS
	CM-4.11	SITE 19 CROSS SECTIONS
	CM-4.12	SITE 19 CROSS SECTIONS
	CM- 5.0	DETAILS

THIS ITEM HAS BEEN DIGITALLY SIGNED AND
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ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT
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CHEN MOORE AND ASSOCIATES
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH
RULE 61G15-23.004, F.A.C.

	SHEET	DESCRIPTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND
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ON THE DATE ADJACENT TO THE SEAL

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CURTIS + ROGERS DESIGN STUDIO, INC.
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021

THE ABOVE NAMED REGISTERED LANDSCAPE ARCHITECT SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH
RULE 61G10-11.011, F.A.C.

	SHEET	DESCRIPTION

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SIGNATURE SHEET

CM-1.1

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 9.dwg

1. GENERAL

1.1. THE WORK CONSISTS OF PROVIDING ALL CONSTRUCTION, LABOR, EQUIPMENT, MATERIAL AND OPERATIONS IN CONNECTION WITH THE MARINE WORKS AND RELATED IMPROVEMENTS AS SHOWN ON THESE DRAWINGS.
1.2. ANY DISCREPANCIES IN THE PLANS WITH THE FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONSTRUCTION SHALL NOT CONTINUE UNTIL THE ENGINEER HAS ADDRESSED THE DISCREPANCIES.
1.3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURES IN THE PROJECT VICINITY. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY WITHIN THE PROJECT VICINITY, INCLUDING STAGING SITES, WORK AND ACCESS AREAS SHALL BE REPAIRED PROMPTLY BY THE CONTRACTOR. ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO COST TO THE OWNER. ALL ACCESS AND STAGING AREAS SHALL BE KEPT NEAT, ORDERLY AND IN A SAFE MANNER. ALL ACCESS AND STAGING AREAS SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION UPON PROJECT COMPLETION AT THE COST OF THE CONTRACTOR. THE SITE SHALL BE RESTORED BY REMOVING AND FINISHING ALL EVIDENCE FOR CONSTRUCTION. IN THE EVENT INFRASTRUCTURE (SUCH AS WALKWAYS, SIDEWALKS, FENCES, VEGETATION, ETC.) IS TEMPORARILY REMOVED OR RELOCATED OR THERE IS UNAUTHORIZED DAMAGE TO VEGETATION AND/OR FACILITIES BY THE CONTRACTOR, THE CONTRACTOR SHALL RESTORE ALL DAMAGE TO STRUCTURES AND NATURAL FEATURES TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
1.4. UTILITIES ARE NOT SHOWN IN THE PLANS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PRESENT UTILITIES PRIOR TO CONSTRUCTION.
1.5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER CLEARANCE AND PROTECTION TO ALL OVERHEAD WIRES AND OBSTRUCTIONS.
1.6. THE CONTRACTOR SHALL EXCLUDE THE PUBLIC FROM THE WORK AREAS IN THE IMMEDIATE VICINITY OF OPERATIONS. CONTRACTOR SHALL PROVIDE APPROPRIATE SAFETY MEASURES TO PROTECT THE PUBLIC.
1.7. ALL NEW STRUCTURAL WORK SHALL BE ACCURATELY FIELD MEASURED AND DIMENSIONS VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL BE PREPARED TO MAKE FIELD ADJUSTMENTS TO ACCURATELY FIT THE NEW WORK TO EXISTING CONDITIONS.
1.8. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR HAS BEEN ISSUED NOTICE TO PROCEED.
1.9. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS SHOULD BE CONSIDERED WHEN OBTAINING SCALED DATA.
1.10. CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL BUILDING CODES AND GOVERNING REGULATIONS INCLUDING FDEP, USACE, AND BROWARD COUNTY. CONTRACTOR SHALL ADHERE TO ALL CONDITIONS OF THE PERMITS AND EXEMPTIONS.

2. DESIGN CRITERIA

2.1. FLORIDA BUILDING CONSTRUCTION 2020
2.2. ASCE 7-22
2.3. COASTAL LOADS ASSOCIATED WITH A 25-YR. STORM.
2.4. 25-YR. STORM WAVES: H_{MAX} = 2.9', T_P = 2.8 SEC
2.5. STORM SURGE = 2.7' NAVD88 BASED ON A 25-YR. STORM FROM THE PRELIMINARY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE STUDY (FIS) OF BROWARD COUNTY DATED 02/25/2021.

3. SURVEY

3.1. SURVEY PERFORMED BY KEITH AND ASSOCIATES DATED JUNE 4, 2021.
3.2. ELEVATIONS ARE IN FEET AND REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

4. GEOTECHNICAL DATA

4.1. GEOTECHNICAL REPORTS PROVIDED BY NV5, INC. DATED 05/18/2022.

5. TIDAL DATA

5.1. CONTRACTOR MAY NEED TO ADJUST HIS WORK PLAN TO ACCOUNT FOR ACTUAL WATER LEVELS AND CHANGING WATER LEVELS. THE SITE MAY BE SUBJECT TO VARIABLE WAVE AND SURGE CONDITIONS AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR MARINE STRUCTURES AND SHORELINE DURING CONSTRUCTION.
5.2. THE TIDAL DATUM WAS ADOPTED FROM NOAA STATION 8722871 AT WHISKEY CREEK, SOUTH ENTRANCE, FL.
5.3. THE HIGHEST ASTRONOMICAL TIDE (HAT) OF +1.77' NAVD88 WAS OBTAINED FROM NOAA STATION 8722956, SOUTH PORT EVERGLADES, FL.

6. LAYOUT AND TESTING

6.1. ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY AND PAID FOR BY THE CONTRACTOR UNDER THE SUPERVISION OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
6.2. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS IN SUFFICIENT DETAIL TO ILLUSTRATE THE HORIZONTAL AND VERTICAL COMPONENTS OF ABOVE AND BELOW-GROUND STRUCTURES RELATIVE TO THE CONSTRUCTION BASELINE. DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA-REGISTERED SURVEYOR.

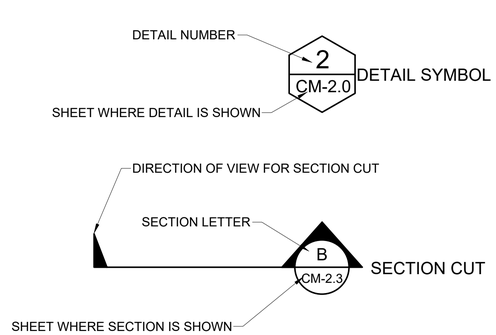
7. DEMOLITION

7.1. CONTRACTOR SHALL VERIFY THE EXTENTS, LOCATION AND QUANTITIES OF EXISTING ELEMENTS TO BE REMOVED.
7.2. ALL DEBRIS WITHIN THE LIMITS OF THE PROJECT SHALL BE HAULED OFF SITE BY THE CONTRACTOR, AS DIRECTED BY THE OWNER, AND DISPOSED OF AT AN APPROPRIATE FACILITY.
7.3. CONTRACTOR SHALL NOT DAMAGE ANY STRUCTURAL COMPONENTS BEYOND THE DEMOLITION REQUIREMENTS DEPICTED IN THESE DRAWINGS. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CONT	CONTINUOUS
CONT'D	CONTINUED
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
KSI	KIPS PER SQUARE INCH
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
PERA	PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS
PSI	POUNDS PER SQUARE INCH
TYP	TYPICAL
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
W/C	WATER/CEMENT RATIO

SYMBOLS LEGEND



INDEX OF DRAWINGS

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CM-1.2	SITE 9 GEOTECHNICAL BORINGS
CM-1.3	SITE 9 EXISTING CONDITIONS
CM-1.4	SITE 9 DEMOLITION PLAN
CM-1.5	SITE 9 PROPOSED SITE PLAN
CM-1.6	SITE 9 CROSS SECTIONS
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CM-2.0	SITE 10 GEOTECHNICAL BORINGS
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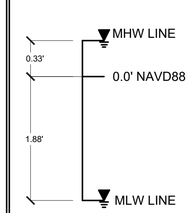
CM-4.10	SITE 19 CROSS SECTIONS
CM-4.11	SITE 19 CROSS SECTIONS
CM-4.12	SITE 19 CROSS SECTIONS
CM- 5.0	DETAILS

VERTICAL DATUM

SEE GENERAL NOTE 5.2



NTS

PROJECT:
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PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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ISSUE	DATE	SUBMISSION / REVISION
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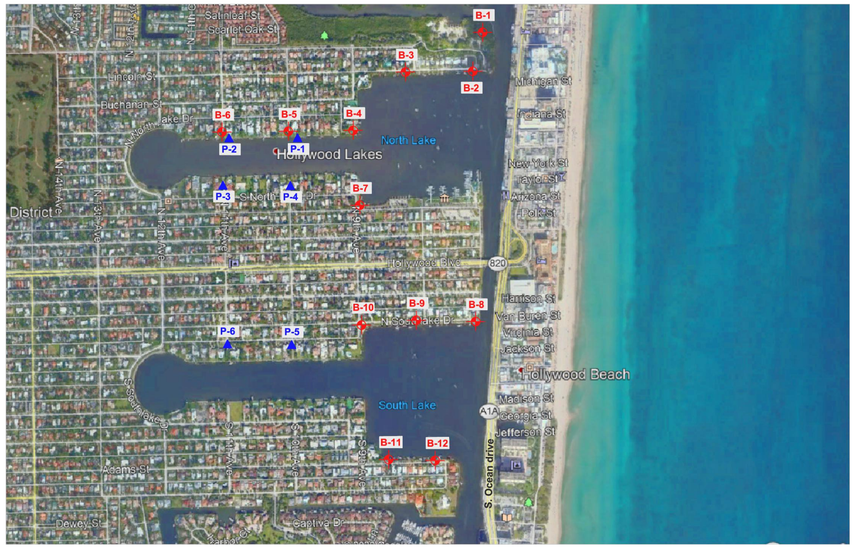
CHECKED	JPC/SRC
SCALE	AS SHOWN

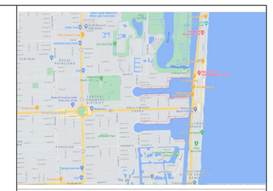
SHEET TITLE

GENERAL NOTES

CM-1.2

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 9.dwg





Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: Site Vicinity Map & Test Location Plan				DWN BY: WVF
	PROJECT NAME: City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1				CKD BY: BLS
	PROJECT LOCATION: City of Hollywood, Hollywood, Florida	PROJECT NO: 16959	DATE: 02/01/2021	DWG NO: 1	APD BY —

N|V|5

BORING NUMBER B-7

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/5/21 **COMPLETED** 2/5/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 2.7 ft / Elev 0.3 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0	SPT	6-5-4-6 (9)	SP		SAND, loose, fine, gray, with a trace limestone fragments and roots	
	SPT	2-3-3-4 (6)			SAND, loose, fine, gray, with a trace of limestone fragments	0
5	SPT	6-5-10-8 (15)			SAND, medium dense, fine, brown to gray, with a trace of limestone fragments	
	SPT	3-5-7-21 (12)			SAND, medium dense, fine, brown to gray, with a trace of limestone fragments	-5 -5.0
	SPT	22-40-12-8 (52)	GP		8.0 LIMESTONE FRAGMENTS, very dense, dark brown, with sand	-7.0
10	SPT	5-8-7-7 (15)	LS		10.0 LIMESTONE, very soft, light brown	
	SPT	19-17-10-10 (27)			LIMESTONE, soft, light brown	-10
15	SPT	15-13-12-12 (25)			LIMESTONE, soft, light brown	
					LIMESTONE, very soft, light brown	-15
20	SPT	10-8-5-7 (13)				
						-20
25	SPT	6-10-9-11 (19)			LIMESTONE, very soft, light brown	
						-25
30	SPT	15-12-10-7 (22)			30.0 LIMESTONE, soft, light brown	-27.0

Boring terminated at 30.0 feet.

PAGE A-7

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SCALE	AS SHOWN

SHEET TITLE
SITE 9 GEOTECHNICAL BORINGS

CM-1.3

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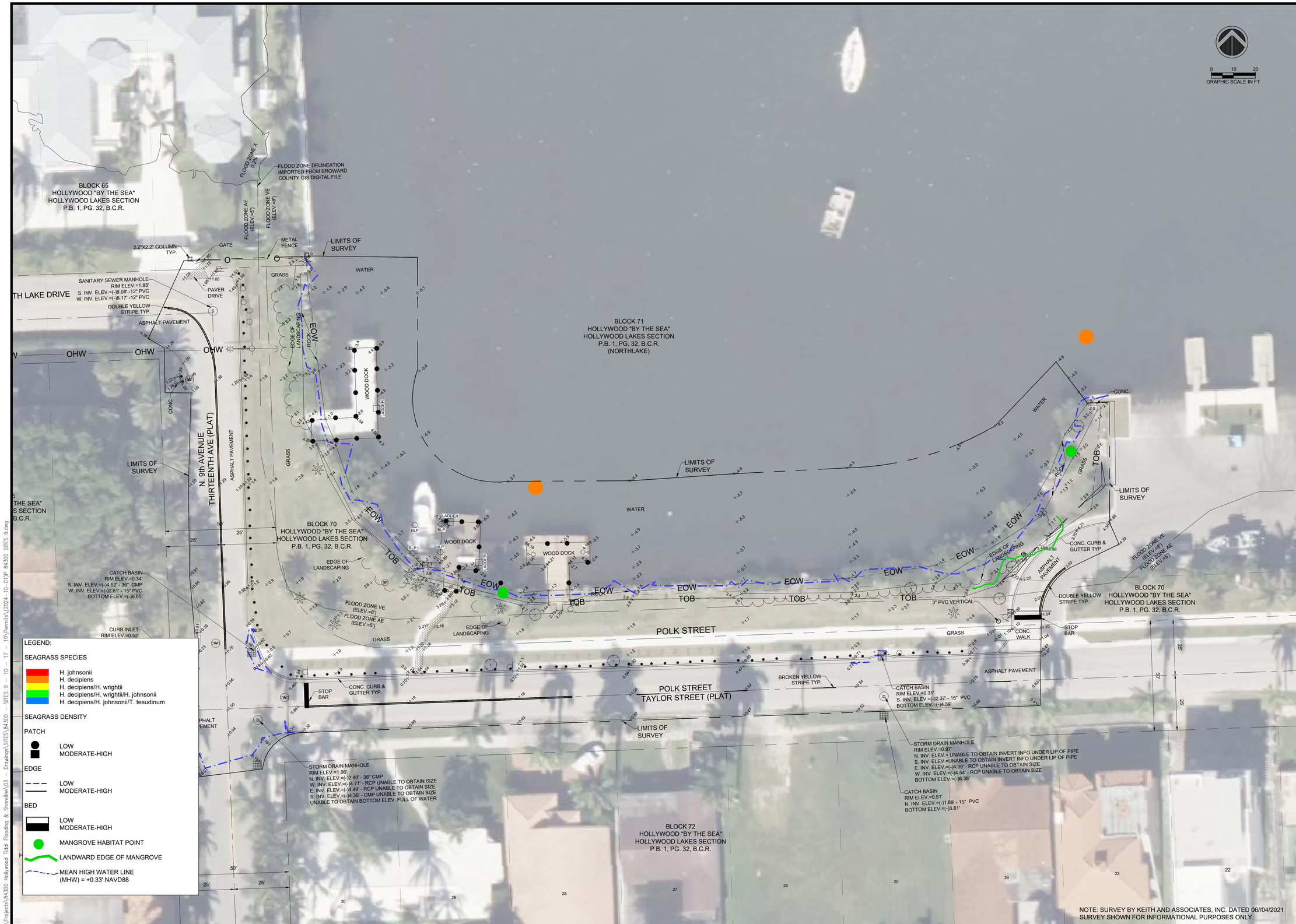

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SCALE	AS SHOWN

SHEET TITLE
SITE 9
EXISTING CONDITIONS

CM-1.4

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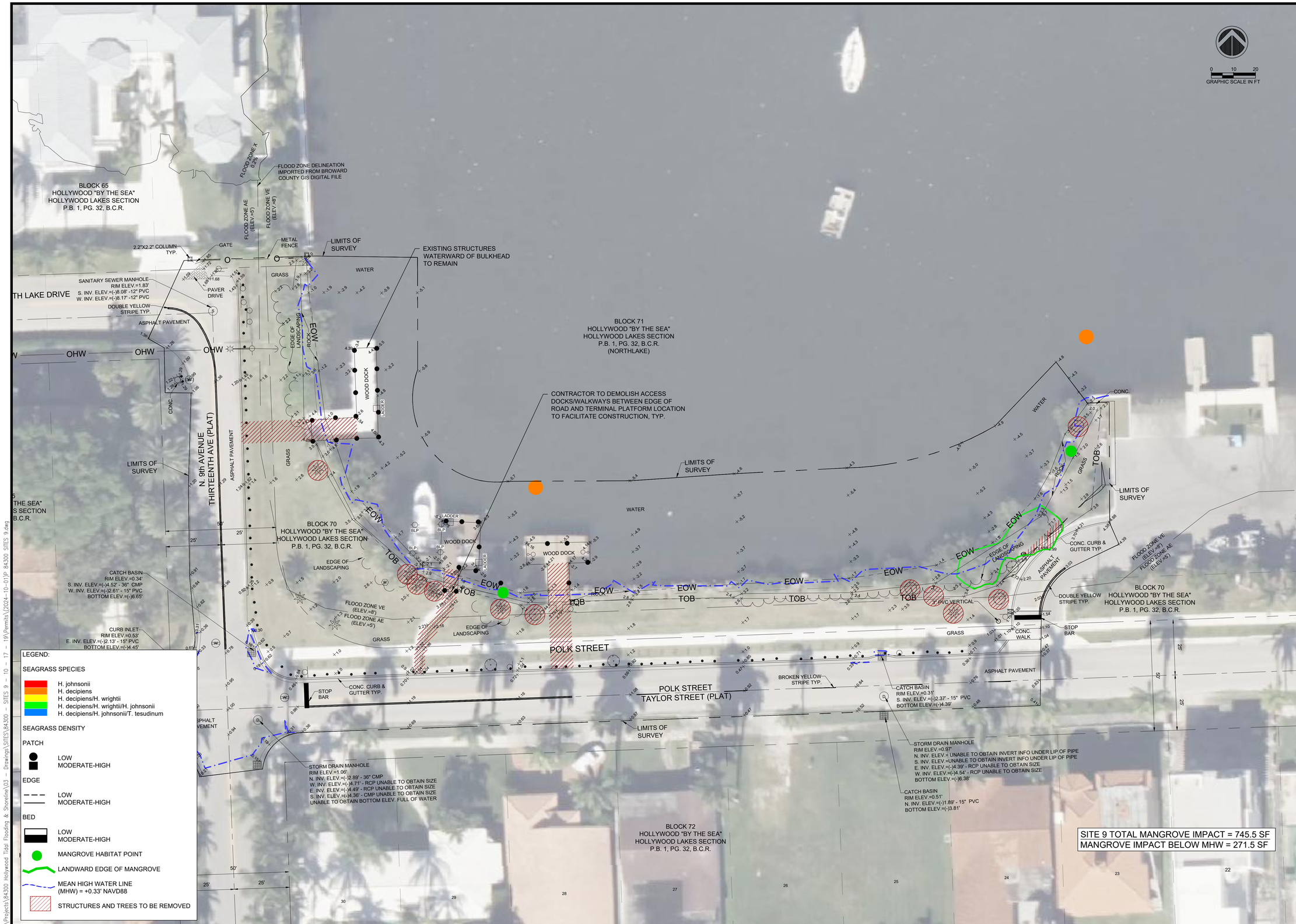

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SCALE	AS SHOWN

SHEET TITLE
SITE 9
DEMOLITION PLAN

CM-1.5

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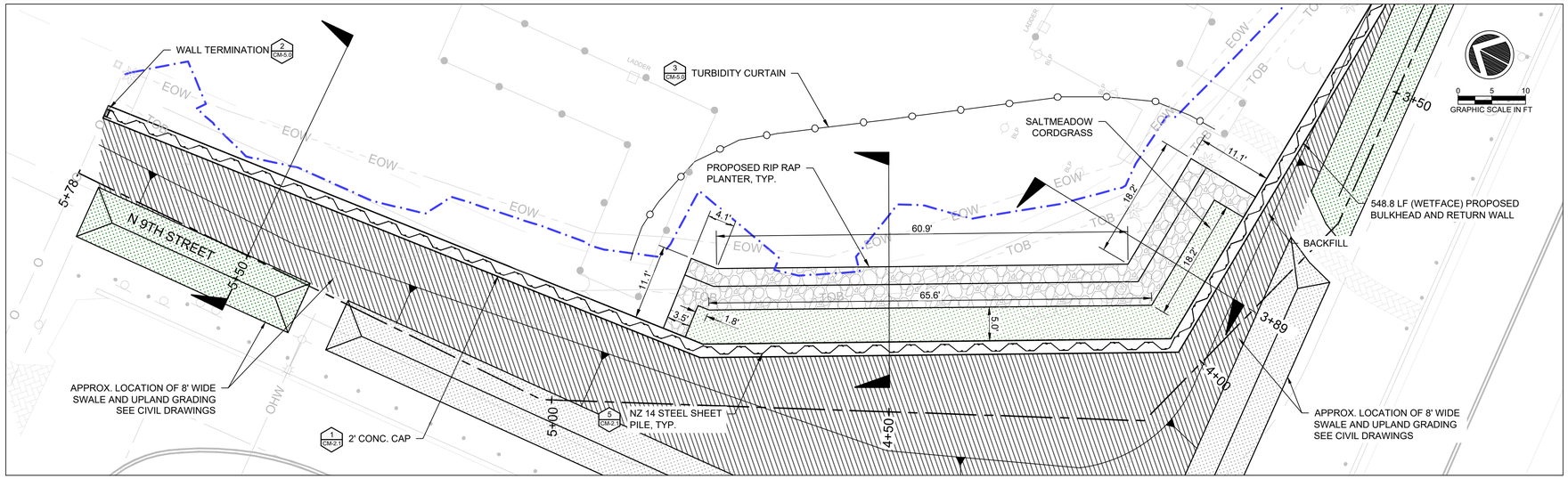


SITE 9 TOTAL MANGROVE IMPACT = 103.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

LEGEND:

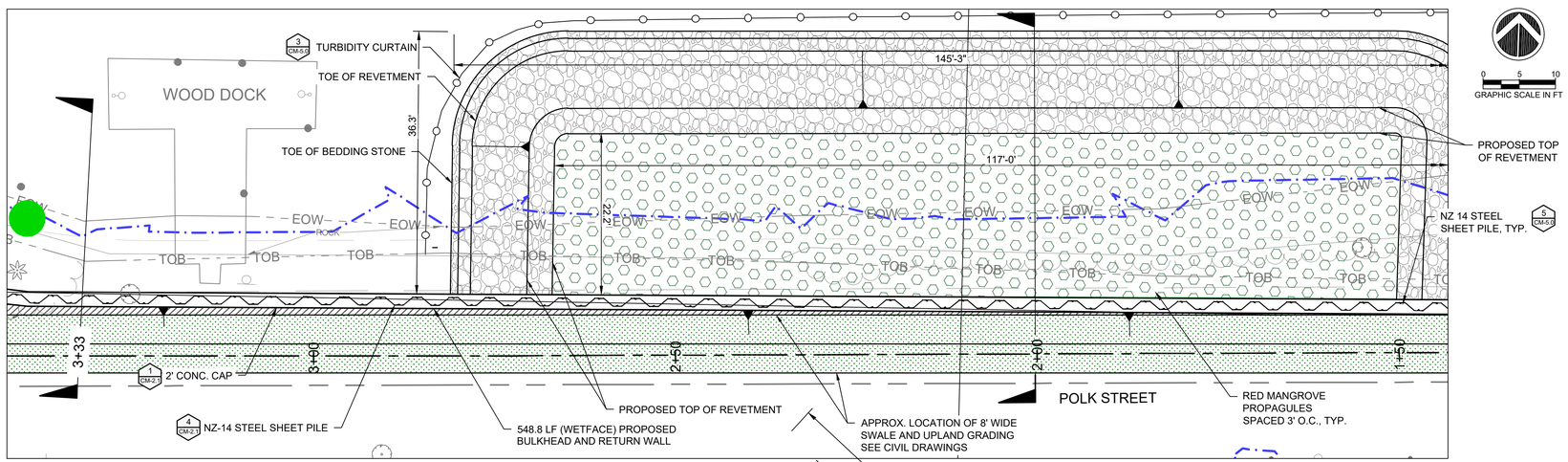
SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

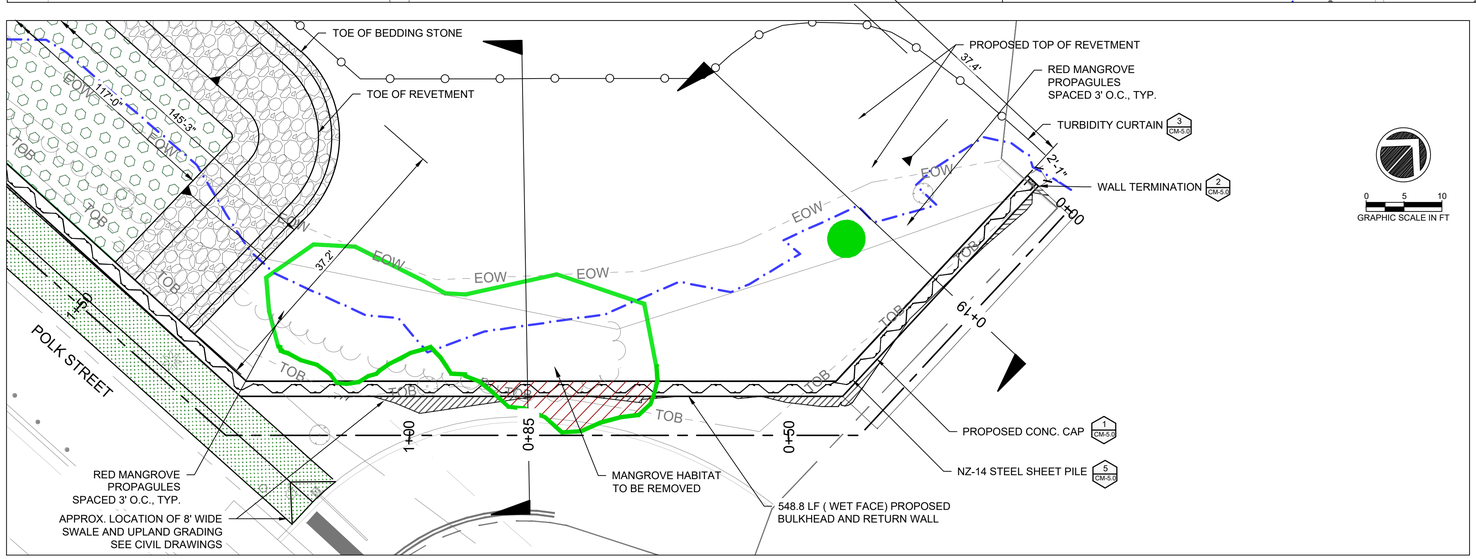
SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88





SHEET PILE QUANTITIES TABLE (SITE 9)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	548.8
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	0.0

QUANTITIES TABLE (SITE 9)		
ITEM	S.F.	CY
TOTAL SAND FILL	2,721.1	63.8
SAND FILL BELOW MHW LINE (+0.33' NAVD)	1,193.0	63.8
TOTAL REVETMENT FILL	2,560.1	130.1
REVETMENT FILL BELOW HAT LINE (+0.33' NAVD)	2,560.1	55.4
BACKFILL LANDWARD OF SHEET PILE WALL BELOW MHE LINE (+0.33' NAVD)	0.0	0
TOTAL ARMOR STONE	2,928.7	336.1
ARMOR STONE BELOW MHW LINE (+0.33' NAVD)	2,035.3	238.5
TOTAL BEDDING STONE	3,328.4	89.6
BEDDING STONE BELOW MHW LINE (+0.33' NAVD)	2,228.8	61.9
MANGROVE PROPAGULES	2,626.9	N/A
CORDGRASS	446.6	N/A
TOTAL EXCAVATION SEAWARD OF BULKHEAD	5,949.5	260.9
EXCAVATION SEAWARD OF BULKHEAD BELOW MHW LINE (+0.33' NAVD)	3,421.8	119.4

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

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SHEET TITLE
SITE 9 PROPOSED CONDITIONS PLAN

CM-1.6

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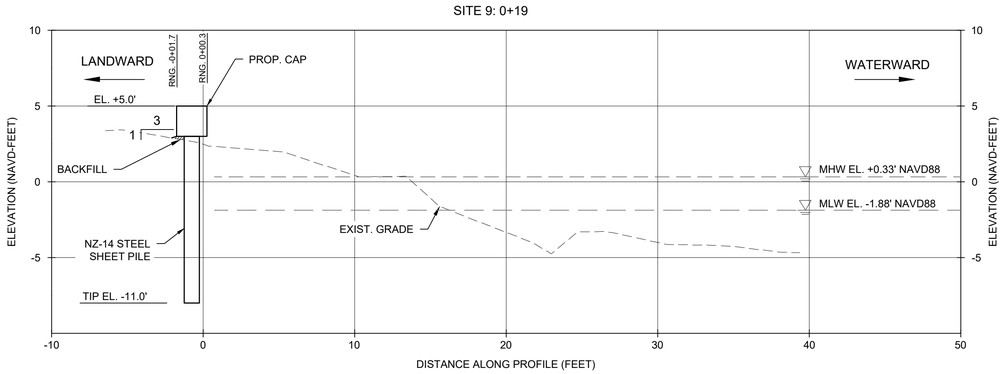

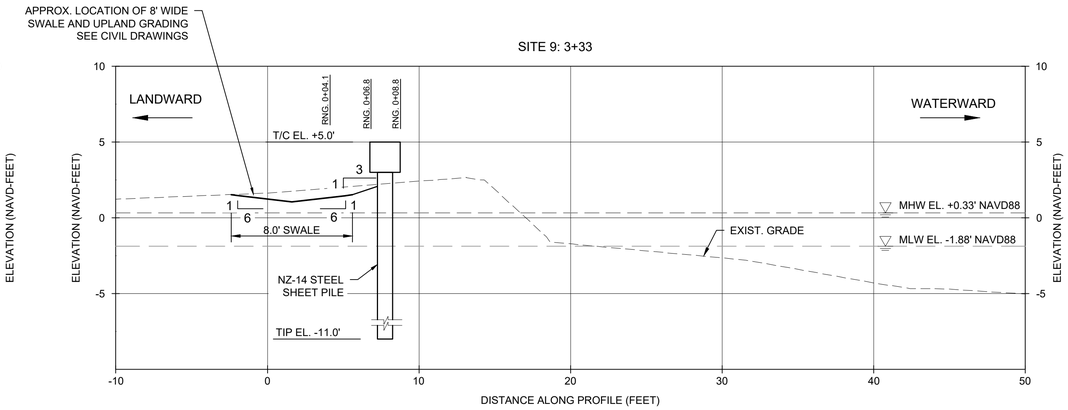

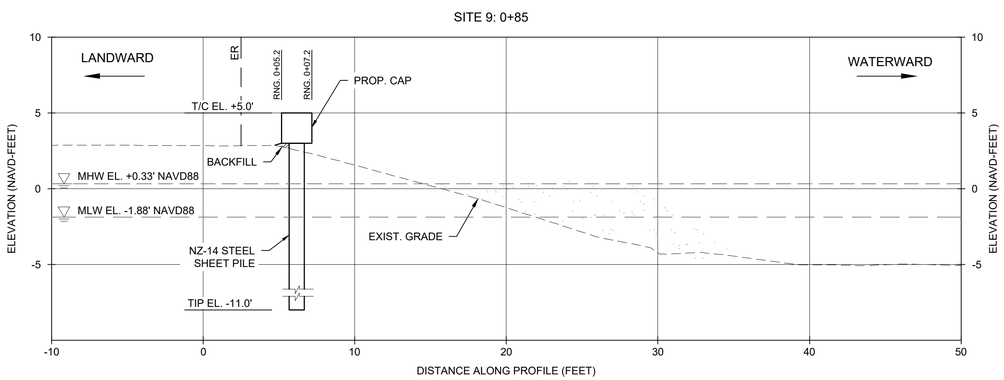

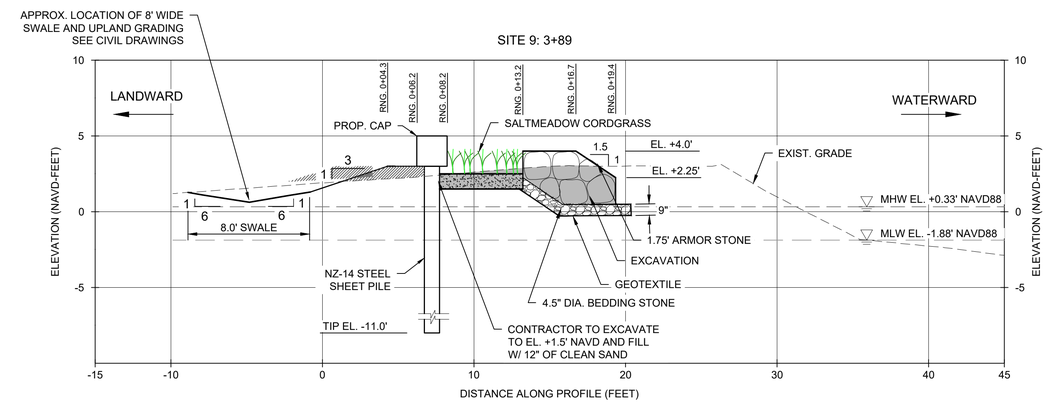

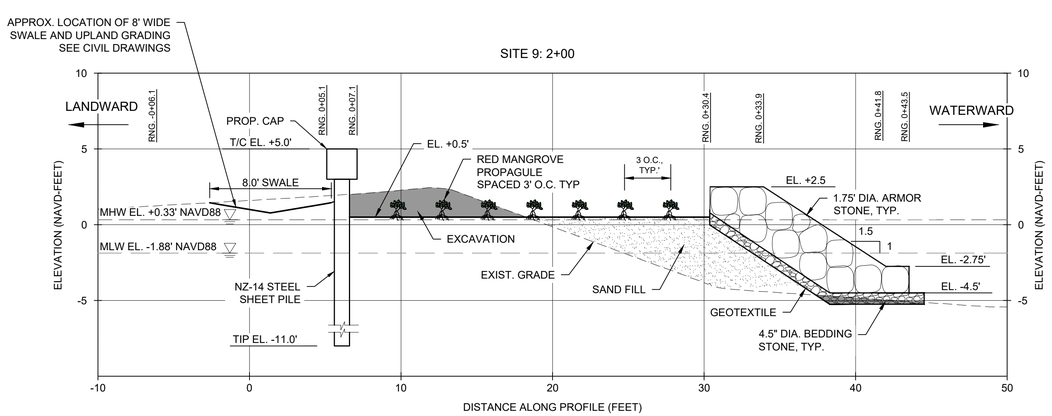

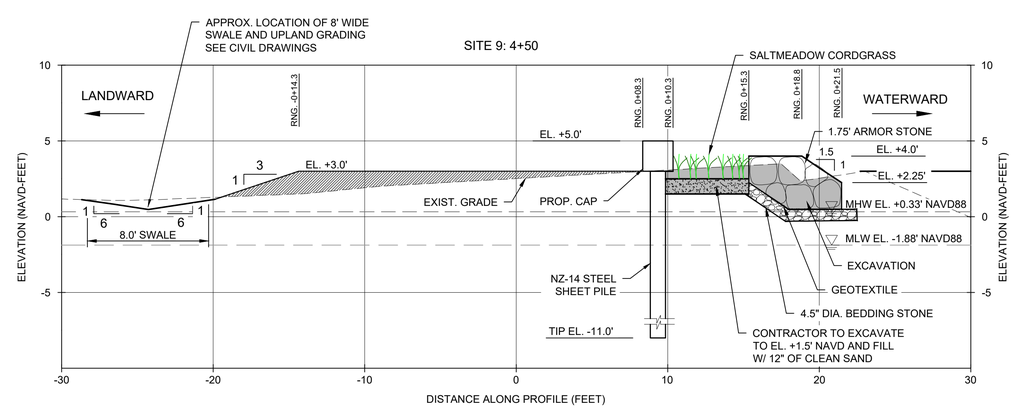

0 5 10
GRAPHIC SCALE IN FT

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HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
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KEITH & ASSOCIATES
SURVEYOR
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TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
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FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

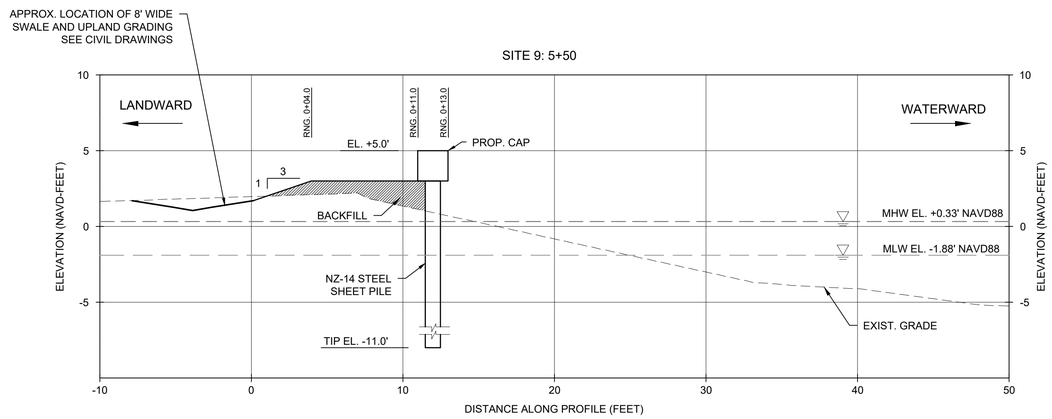
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 9
CROSS SECTIONS

CM-1.7

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 9.dwg



0 5 10
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
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TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
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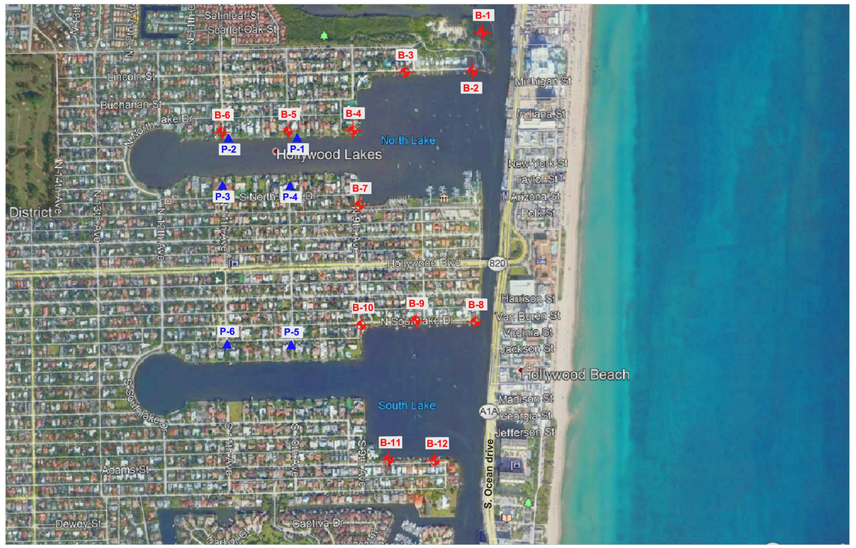
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

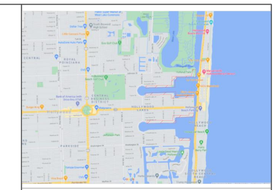
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 9
CROSS SECTIONS

CM-1.8

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 9.dwg





Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: Site Vicinity Map & Test Location Plan				DWN BY: NVF
	PROJECT NAME: City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1				CKD BY: CLG
	PROJECT LOCATION: City of Hollywood, Hollywood, Florida	PROJECT NO: 16959	DATE: 02/01/2021	DWG NO: 1	APD BY —

BORING NUMBER B-8

N|V|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/28/21 **COMPLETED** 1/28/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** --- Not Recorded
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	36-21-21-5 (42)	GP		1" of Asphalt (0.1); LIMESTONE FRAGMENTS, dense, light gray, with sand (1.0)	2.9; 2.0
1	SPT	4-2-1-1 (3)	ML		SILT, hard, dark gray	0
					SILT, soft, dark gray	
5	SPT	1-1-1-1 (2)			SILT, very soft, dark gray	
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
10	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray, with organics	
					SILT, very soft, dark gray (11.0)	-8.0
	SPT	1-10-9-11 (19)	LS		LIMESTONE, very soft, light brown	-10
	SPT	3-4-3-6 (7)			LIMESTONE, very soft, light brown	
15	SPT	8-7-5-6 (12)			LIMESTONE, very soft, light brown	
						-15
20	SPT	11-21-17-14 (38)			LIMESTONE, medium hard, light brown	
						-20
25	SPT	17-28-25-34 (53)			LIMESTONE, moderately hard, light brown	
						-25
30	SPT	13-25-20-28 (45)			LIMESTONE, medium hard, light brown (30.0)	-27.0

Boring terminated at 30.0 feet.

PAGE A-8

BORING NUMBER B-9

N|V|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/2/21 **COMPLETED** 2/2/21 **GROUND ELEVATION** 2 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 1.8 ft / Elev 0.2 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY T. Carson/ R. Jimenez **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	2-2-2-3 (4)	SM / SM		1" of Topsoil (0.1); SILTY SAND, very loose, gray, (2.0)	1.9; 0 0.0
	SPT	3-4-3-2 (7)	GP		LIMESTONE FRAGMENTS, loose, fine, gray, with sand and organics (4.0)	-2.0
5	SPT	WOH-WOH-WOH-WOH (WOH)	SP		SAND, very loose, fine, brown, with limestone fragments	
	SPT	10-14-12-13 (26)			SAND, medium dense, fine, brown, with limestone fragments (8.0)	-5; -6.0
10	SPT	10-8-7-12 (15)	LS		LIMESTONE, very soft, light brown	
	SPT	8-8-10-17 (16)			LIMESTONE, very soft, light brown	-10
	SPT	6-8-10-10 (18)			LIMESTONE, very soft, light brown	
15	SPT	7-9-8-10 (17)			LIMESTONE, very soft, light brown	
						-15
20	SPT	3-4-6-5 (10)			LIMESTONE, very soft, light brown	
						-20
25	SPT	6-5-5-10 (10)			LIMESTONE, very soft, light brown	
						-25
30	SPT	8-5-6-19 (11)			LIMESTONE, very soft, light brown (30.0)	-28.0

Boring terminated at 30.0 feet.

PAGE A-9

BORING NUMBER B-10

N|V|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/1/21 **COMPLETED** 2/1/21 **GROUND ELEVATION** 2 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 1.7 ft / Elev 0.3 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY T. Carson/ R. Jimenez **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	3-2-1-1 (3)	SM / SM		2" of Topsoil (0.1); SILTY SAND, very loose, gray (2.0)	1.9; 0 0.0
1	SPT	WOH-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray	
5	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, soft, dark gray, with a trace of limestone fragments and organics (8.0)	-6.0
10	SPT	WOH-WOH-3-22 (3)	LS		SILTY LIMESTONE, hard, light brown	
	SPT	28-51-53-19 (104)			LIMESTONE, very soft, light brown	-10
	SPT	7-5-8-26 (13)			LIMESTONE, soft, light brown	
15	SPT	7-14-10-15 (24)			LIMESTONE, very soft, light brown	
	SPT	8-7-6-11 (13)			LIMESTONE, very soft, light brown	-15
20	SPT	4-5-4-8 (9)			LIMESTONE, very soft, light brown	
						-20
25	SPT	5-5-4-7 (9)			LIMESTONE, very soft, light brown	
						-25
30	SPT	9-7-5-15 (12)			LIMESTONE, very soft, light brown (30.0)	-28.0

Boring terminated at 30.0 feet.

PAGE A-10

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
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BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 GEOTECHNICAL BORINGS

CM-2.0

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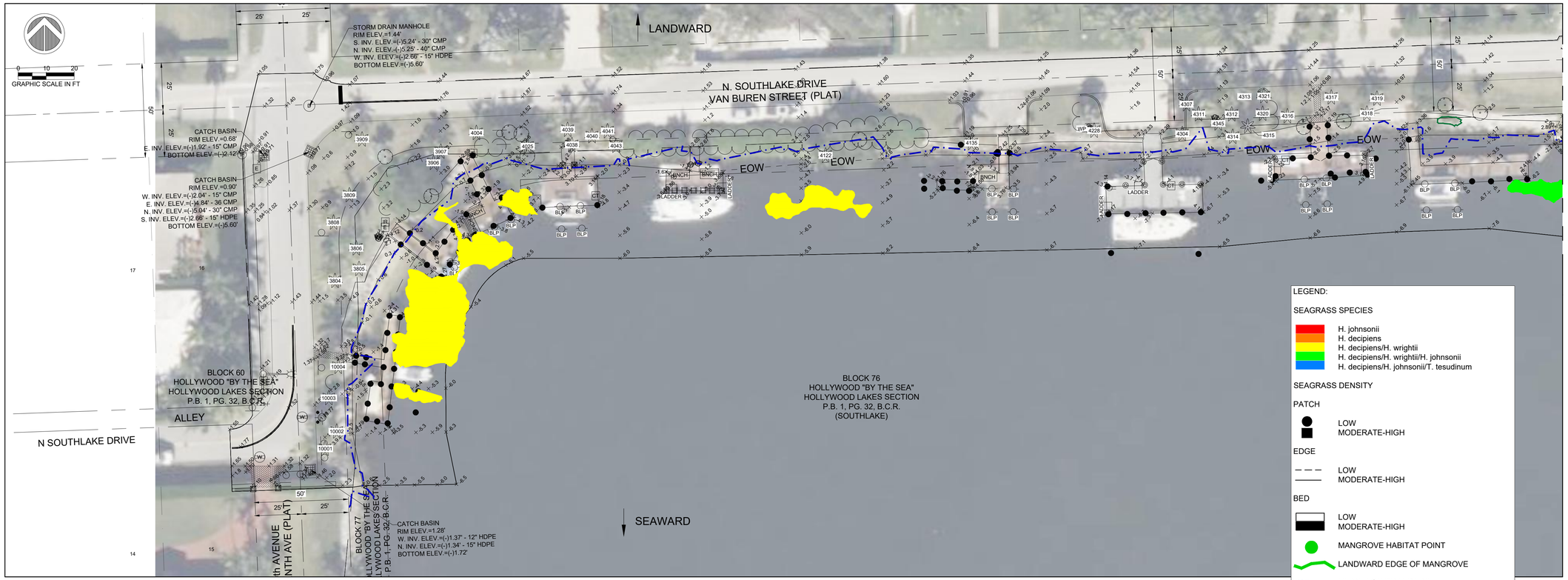

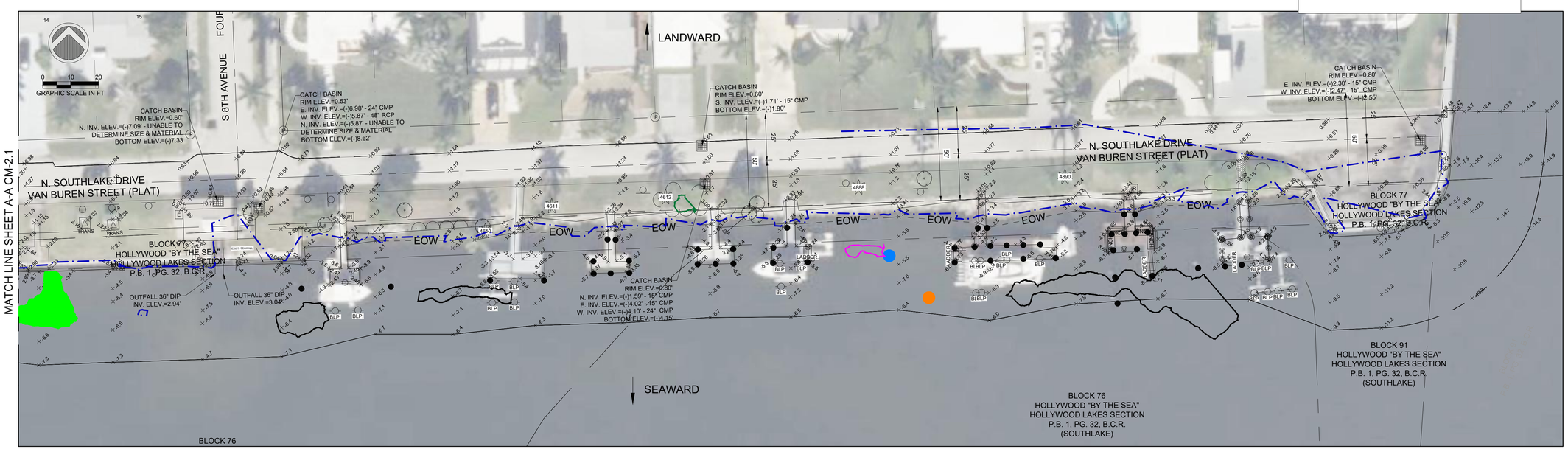

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

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FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
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LANDSCAPE ARCHITECTURE
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HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
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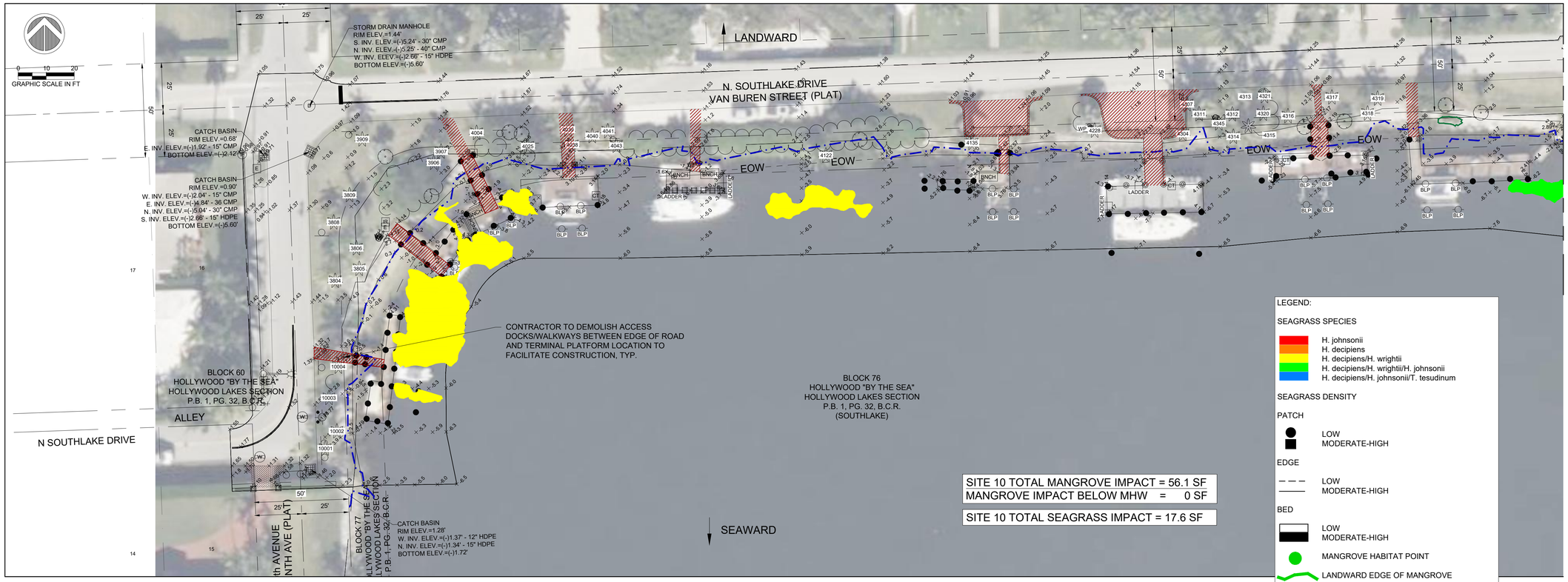
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10
EXISTING
CONDITIONS

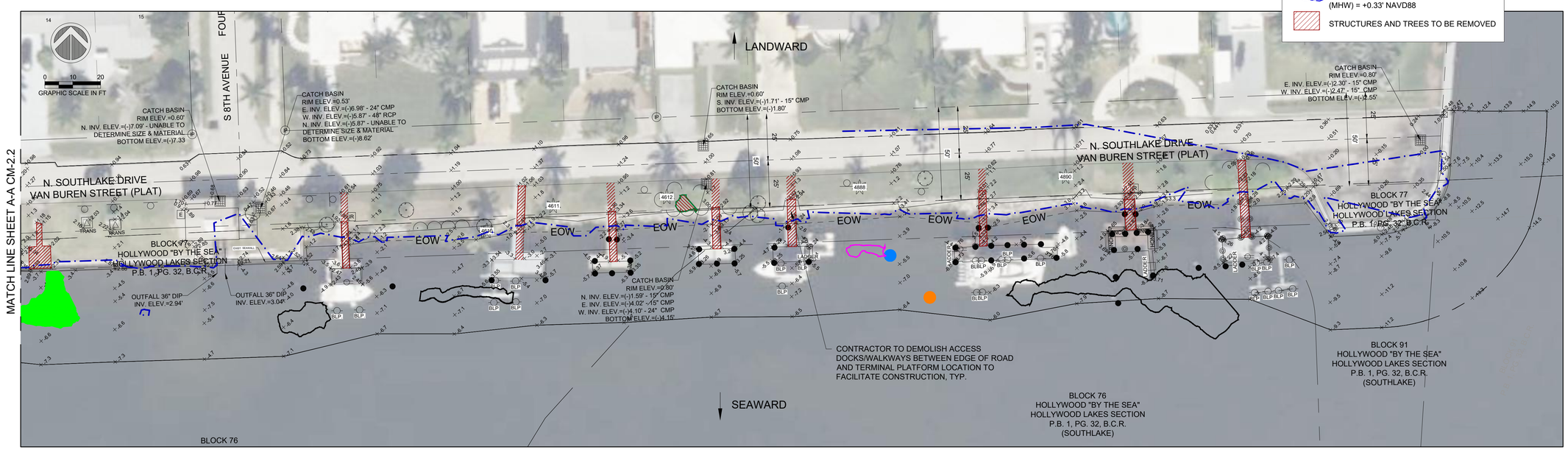
CM-2.1

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01\P 84300 SITES 10a.dwg



SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF



NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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HOLLYWOOD FL. 33020

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ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 DEMOLITION PLAN

CM-2.2

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LEGEND:

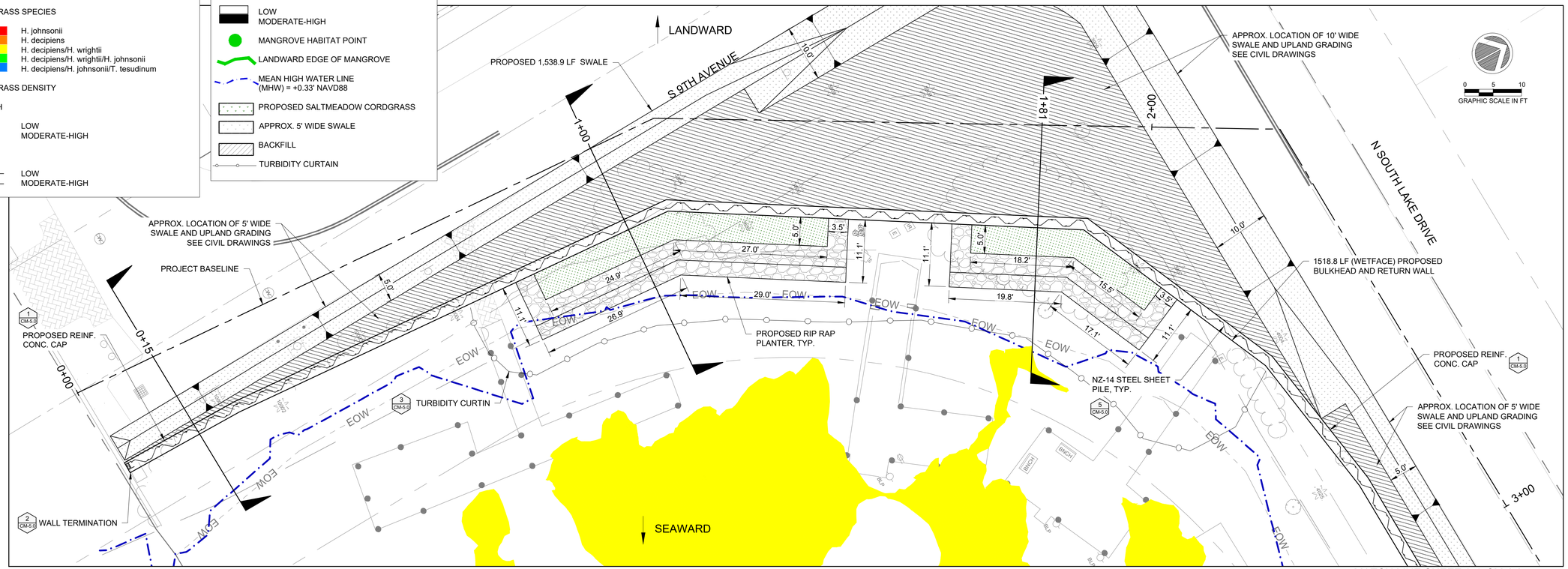
SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

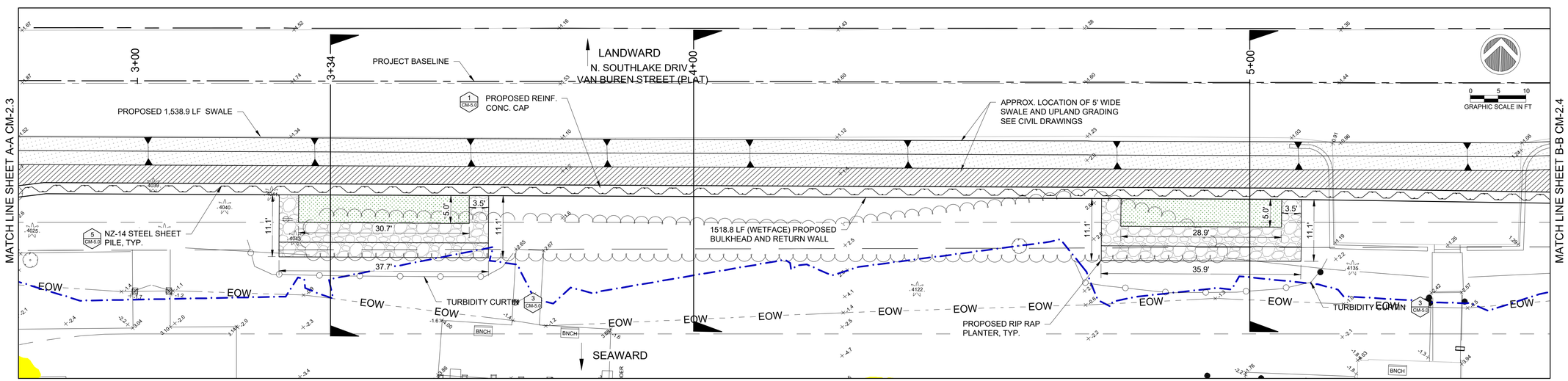
SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN





SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.3

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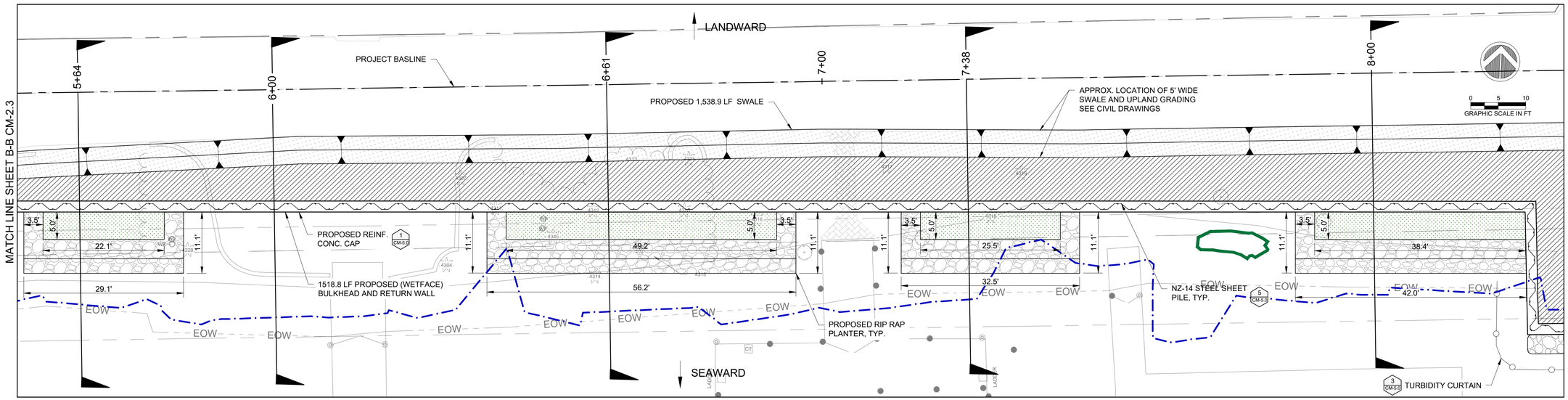

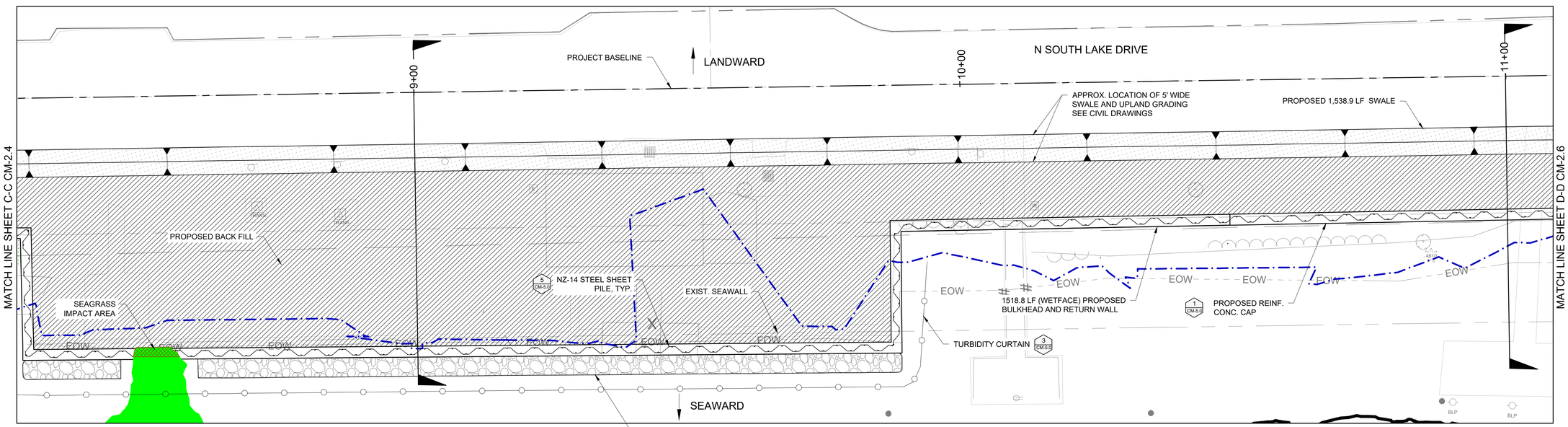

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN
- RIPRAP TOE PROTECTION

SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF	
MANGROVE IMPACT BELOW MHW =	0 SF
SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF	

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
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KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
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CIVIL ENGINEER
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TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

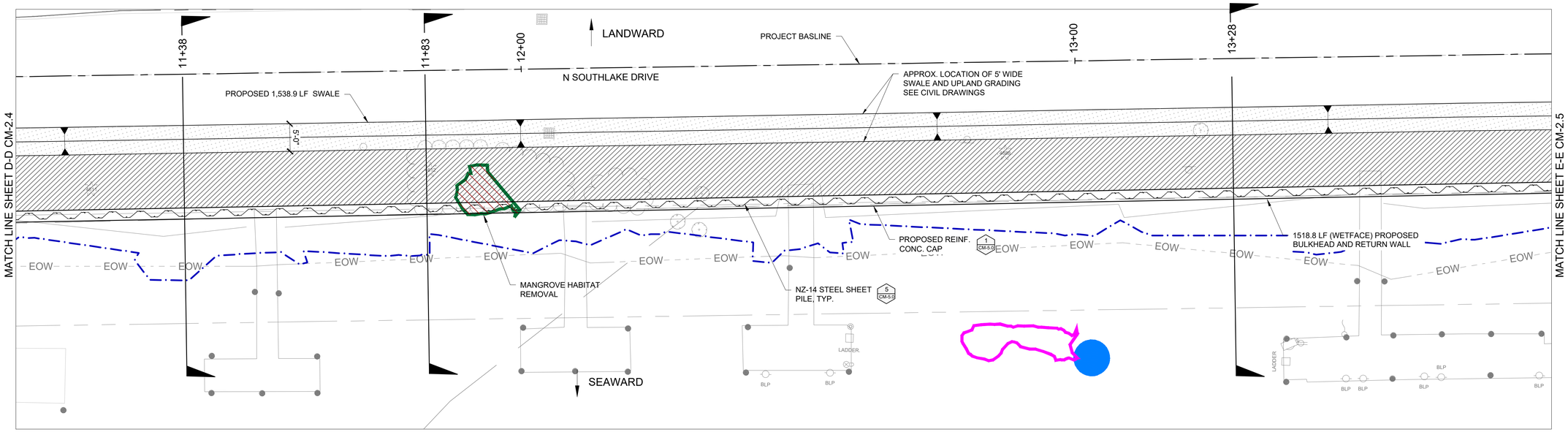
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

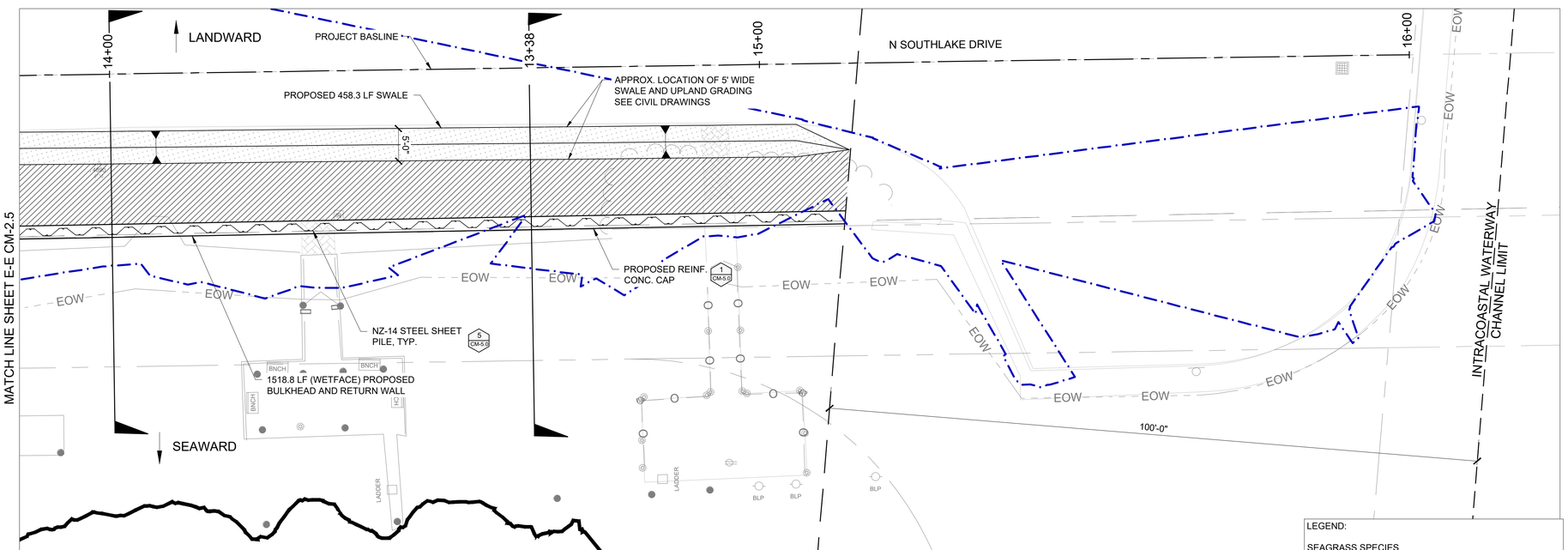
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.4

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01P 84300 SITES 10a.dwg





0 5 10
GRAPHIC SCALE IN FT

SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

SHEET PILE QUANTITIES TABLE (SITE 10)

ITEM	L.F.
TOTAL NZ 14 SHEET PILE	1,518.8
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	215.3

QUANTITIES TABLE (SITE 10)

ITEM	S.F.	CY
TOTAL SAND FILL	2131.9	4.1
SAND FILL BELOW MHW LINE (+0.33' NAVD)	81.4	3.0
BACKFILL LANDWARD OF SHEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	503.3	68.6
TOTAL ARMOR STONE	2,019.8	223.3
ARMOR STONE BELOW MHW LINE (+0.33' NAVD)	81.4	8.6
TOTAL EXCAVATION LANDWARD OF BULKHEAD	3,647.7	4.5
EXCAVATION LANDWARD OF BULKHEAD BELOW MHW LINE (+0.33' NAVD)	81.3	3.0

LEGEND:

SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN
- RIPRAP TOE PROTECTION

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SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.5

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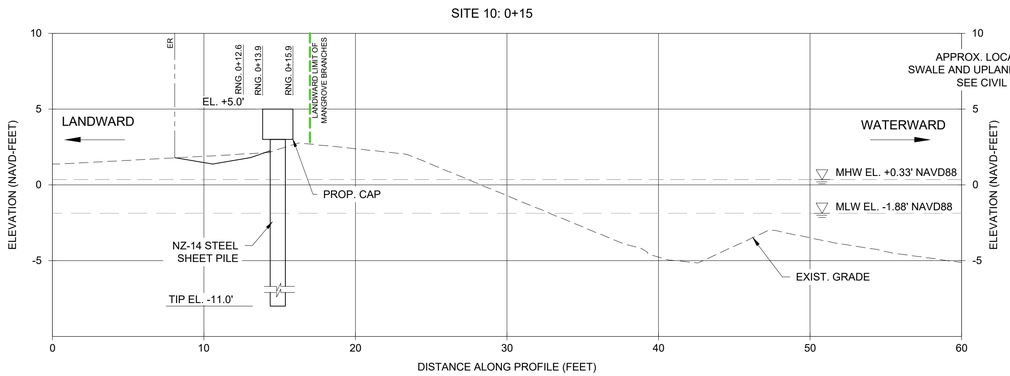

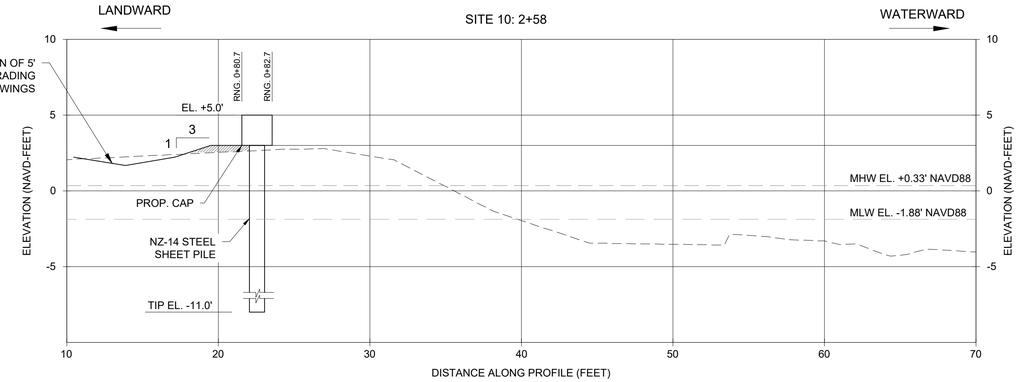

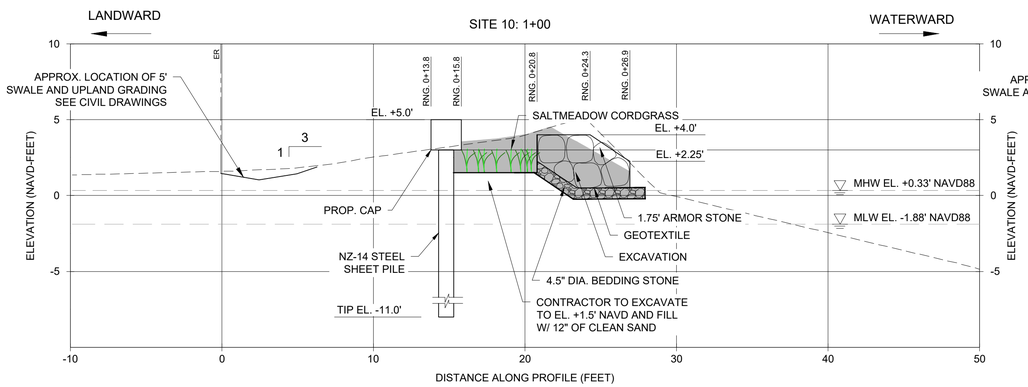

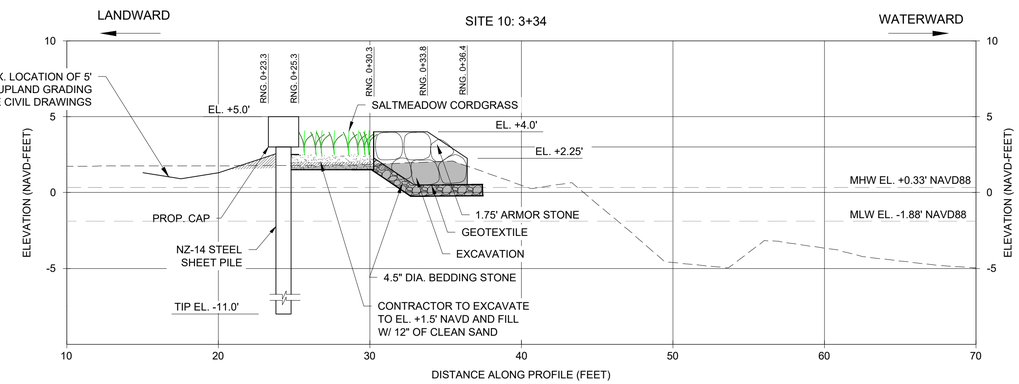

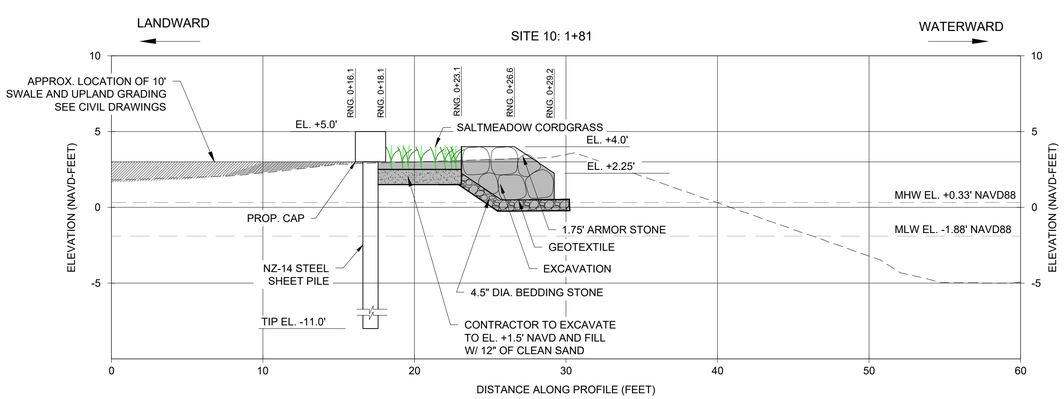

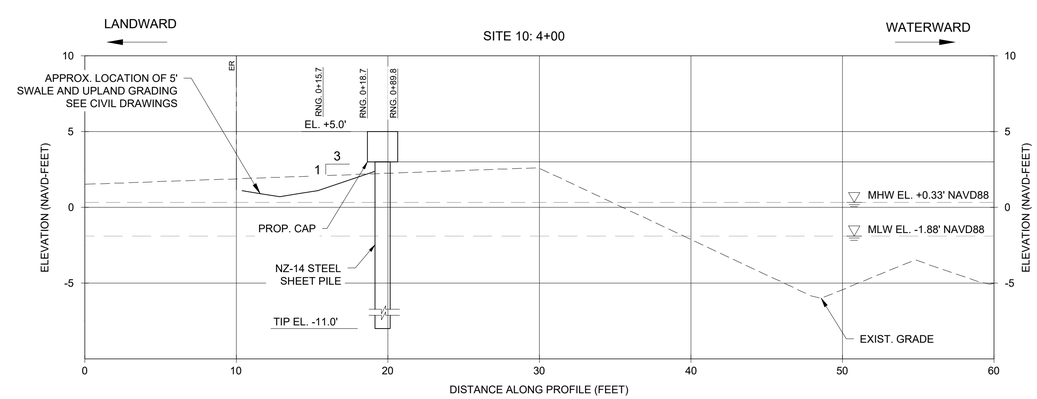

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GRAPHIC SCALE IN FT

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SHEET TITLE
SITE 10
CROSS SECTIONS

CM-2.6

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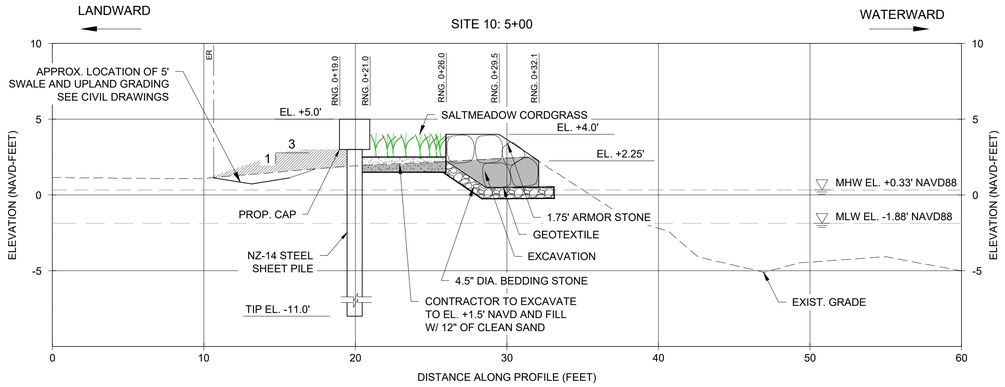

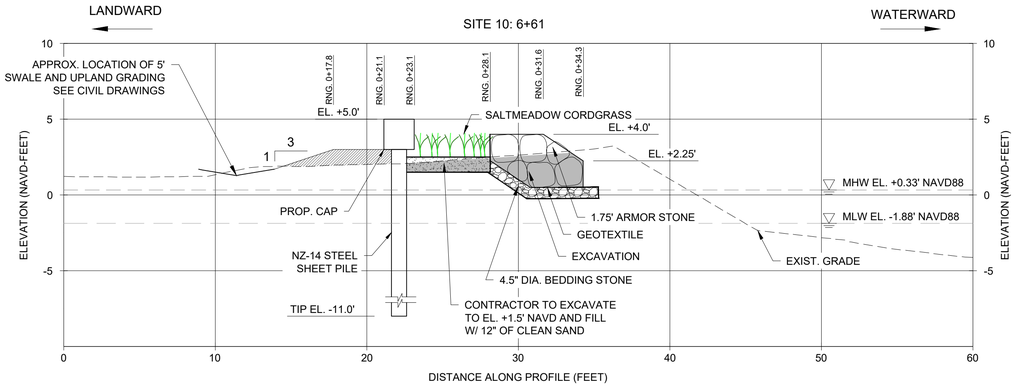

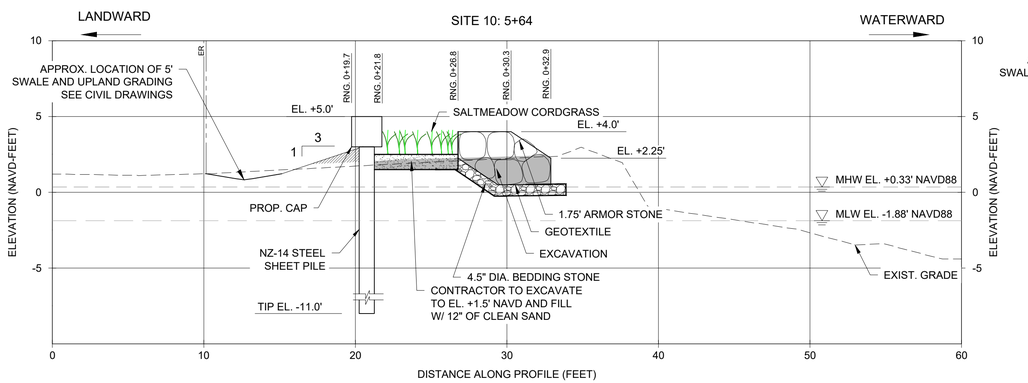

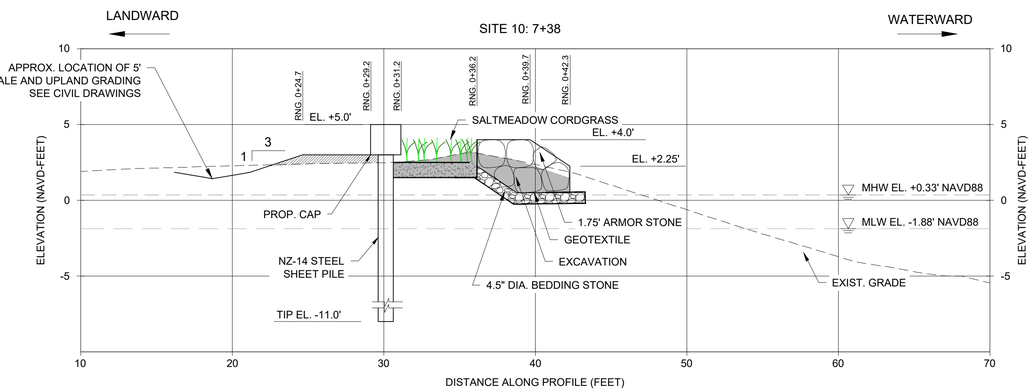

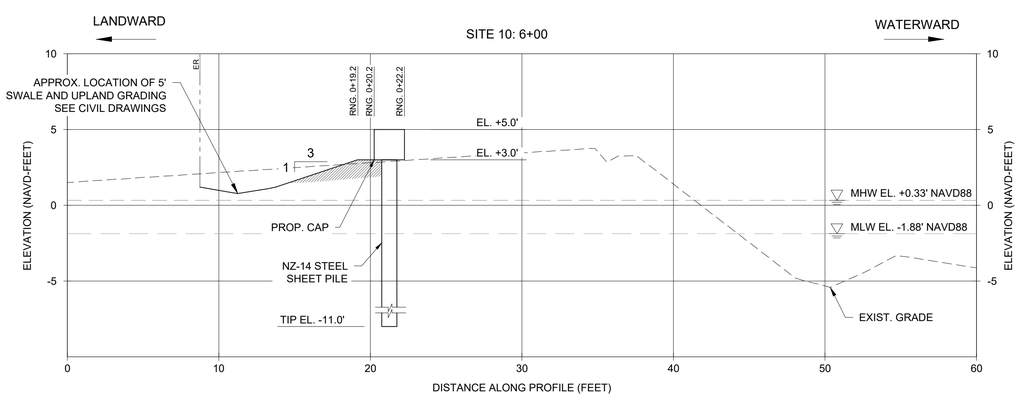

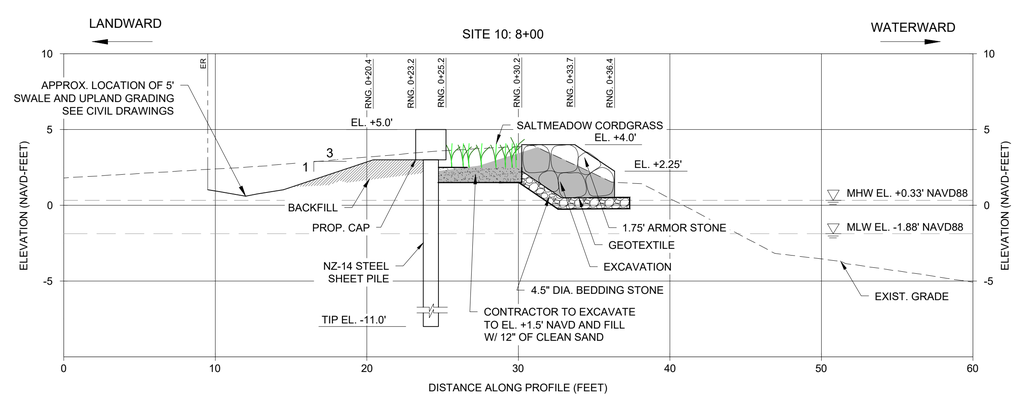

0 5 10
GRAPHIC SCALE IN FT

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SHEET TITLE
SITE 10
CROSS SECTIONS

CM-2.7

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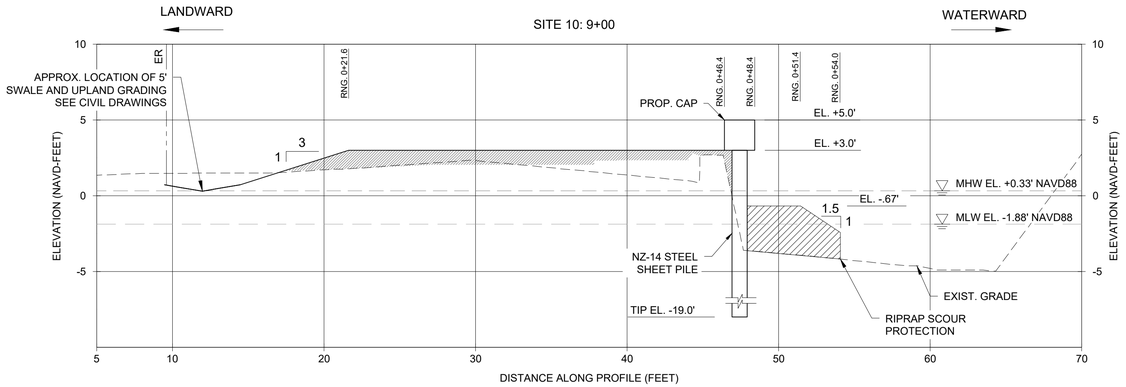

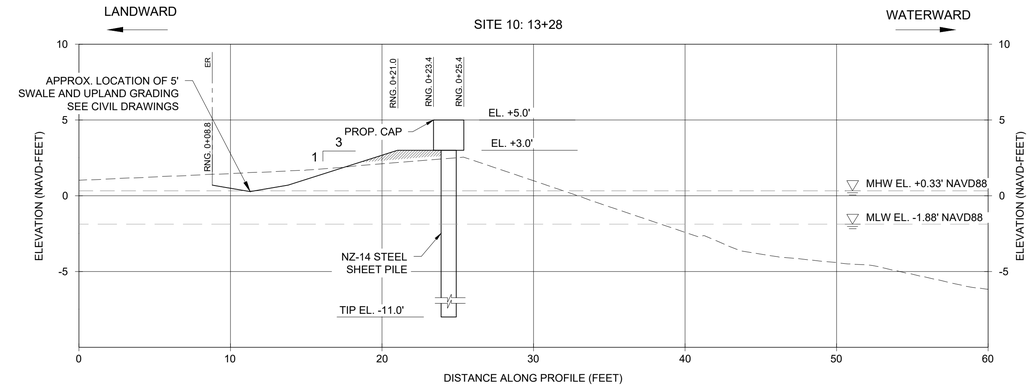

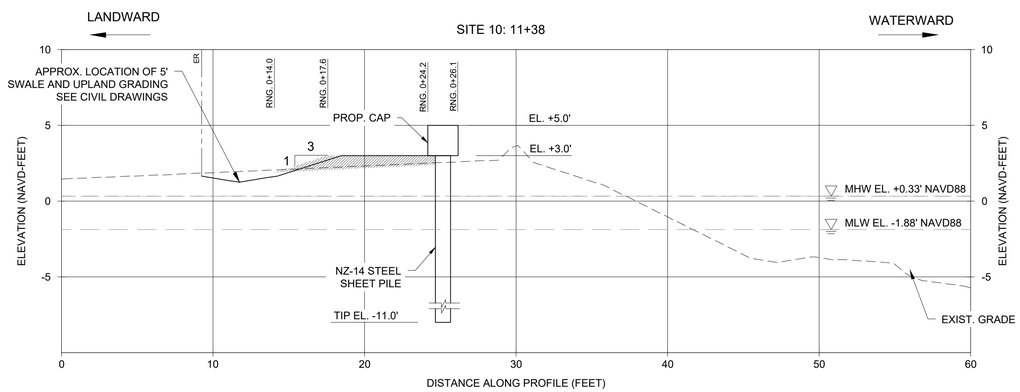

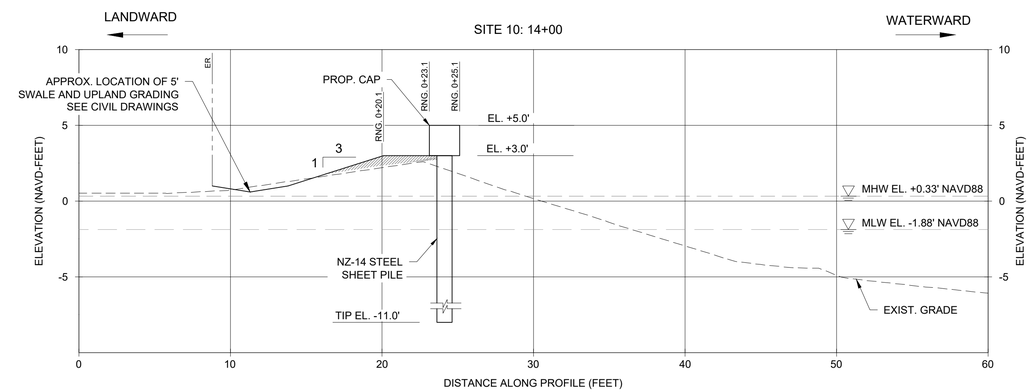

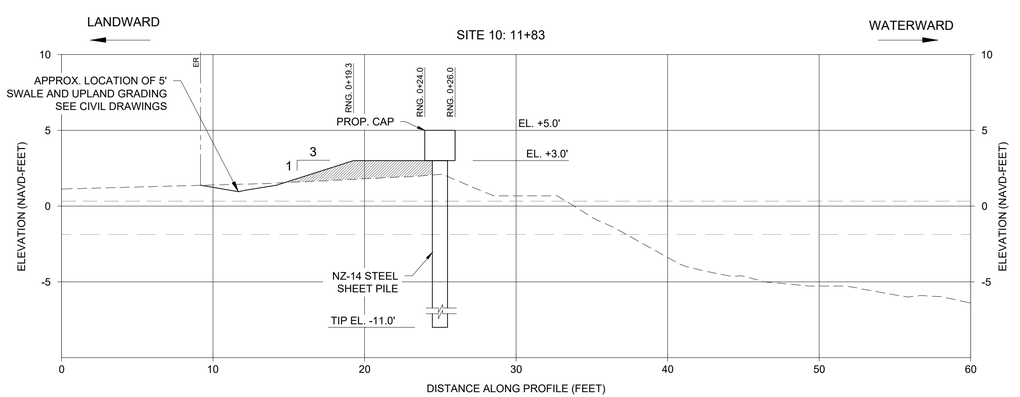

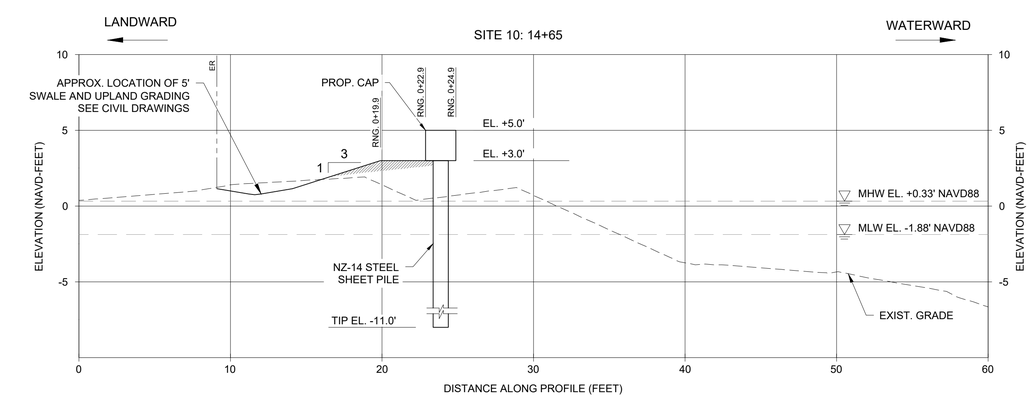

GRAPHIC SCALE IN FT

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SITE 10
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CM-2.8

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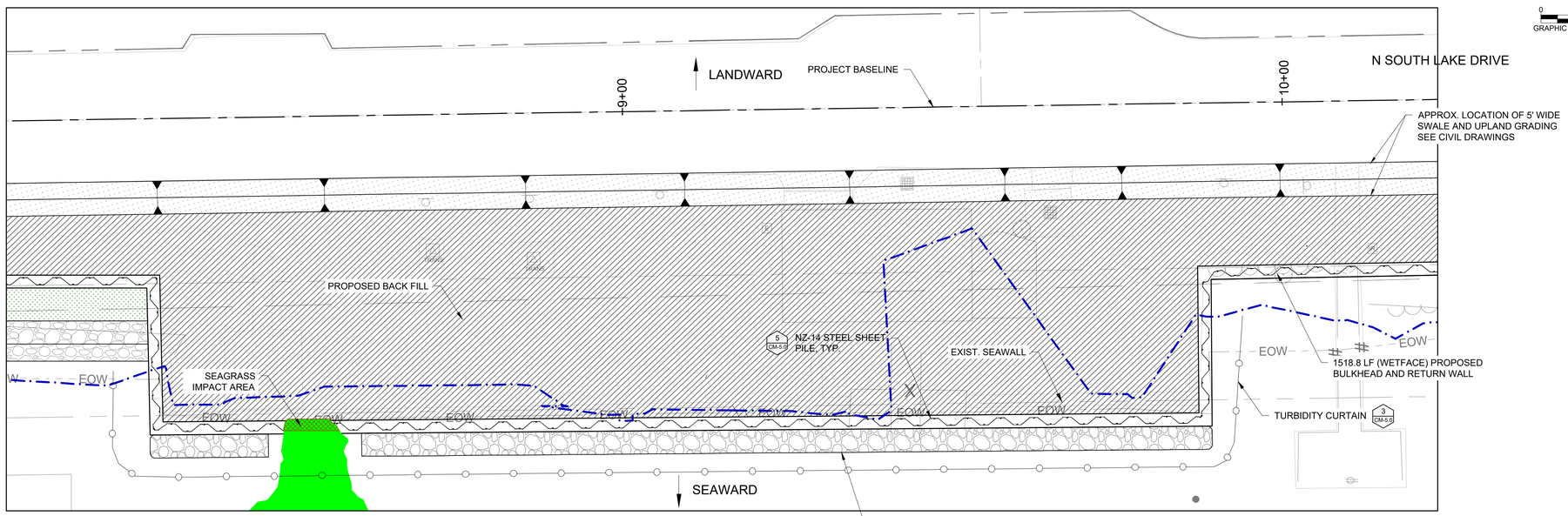
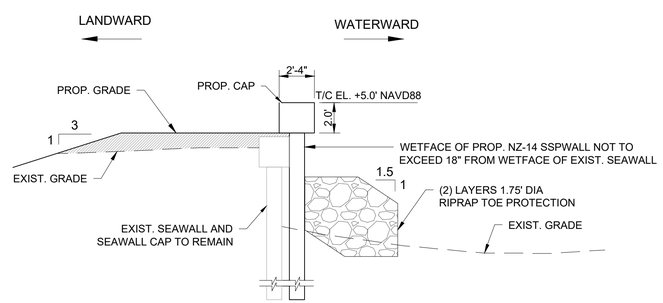


OUTFALL WALL PLAN VIEW



TYPICAL OUTFALL WALL SECTION

SCALE: 1" = 5'

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

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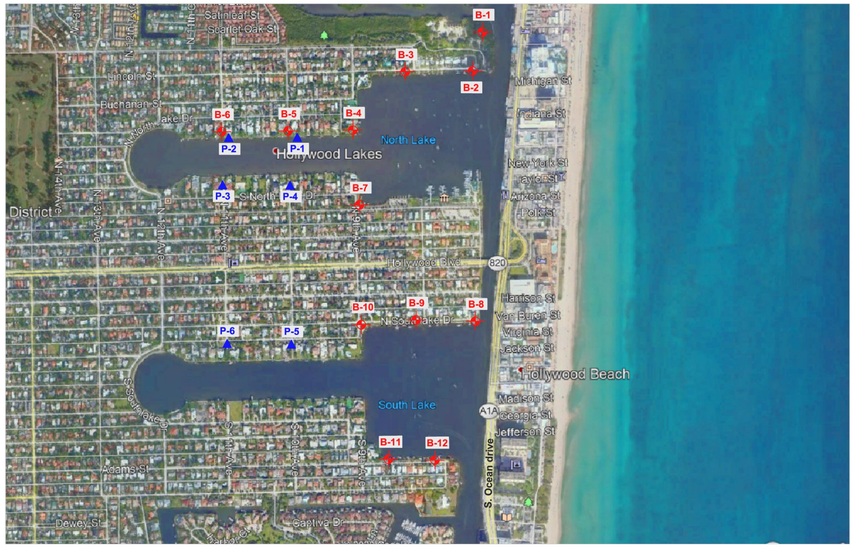
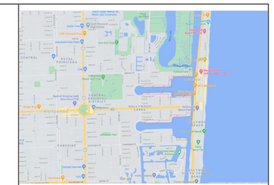
SITE 10 PROPOSED OUTFALL WALL

CM-2.9

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 10a.dwg





Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*			DWN BY: *NVF*
	PROJECT NAME: *City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1*			CKD BY: *CEG*
	PROJECT LOCATION: *City of Hollywood, Hollywood, Florida*	PROJECT NO: *16959*	DATE: *02/01/2021*	DWG NO: *1* / APD BY —

BORING NUMBER B-11

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/27/21 **COMPLETED** 1/27/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 3.0 ft / Elev 0.0 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0	SPT 30-19-11-11 (30)		GP	0.1	1" of Asphalt	2.9
	SPT 1-1-1-1 (2)		PT	2.0	LIMESTONE FRAGMENTS, medium dense, light gray, with a trace of organics	1.0
	SPT 1-1-1-1 (2)				PEAT, very soft, dark brown	0
5	SPT 1-2-1-38 (3)				PEAT, very soft, dark brown	
				7.0	PEAT, soft, dark brown	-4.0
	SPT 10-19-2-5 (21)		LS		LIMESTONE, very soft, light brown	-5
10	SPT 6-8-4-7 (12)				LIMESTONE, soft, light brown	
	SPT 12-14-13-15 (27)				LIMESTONE, very soft, light brown	-10
15	SPT 11-12-12-11 (24)				LIMESTONE, soft, light brown	
20	SPT 6-6-8-7 (14)				LIMESTONE, soft, light brown	-15
25	SPT 3-4-4-5 (8)				LIMESTONE, very soft, light brown	-20
30	SPT 8-10-10-7 (20)			30.0	LIMESTONE, very soft, light brown	-25
						-27.0

Boring terminated at 30.0 feet.

PAGE A-11

BORING NUMBER B-12

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/27/21 **COMPLETED** 1/27/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 3.0 ft / Elev 0.0 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0	SPT 28-16-11-10 (27)		GP	0.1	1" of Asphalt	2.9
				1.0	LIMESTONE FRAGMENTS, medium dense, light gray, with a trace of organics	2.0
			ML		SILT, very stiff, dark gray	
	SPT 4-2-1-1 (3)			3.0	SILT, soft, dark gray	0 0.0
	SPT 1-1-1-1 (2)		PT		PEAT, soft, dark brown	
5	SPT 1-1-2-70 (3)				PEAT, very soft, dark brown	
				6.7	PEAT, soft, dark brown	-3.7
	SPT 7-22-4-4 (26)		LS		LIMESTONE, very soft, light brown	-5
10	SPT 4-5-8-9 (13)				LIMESTONE, soft, light brown	
	SPT 7-13-13-19 (26)				LIMESTONE, very soft, light brown	-10
15	SPT 10-13-14-10 (27)				LIMESTONE, soft, light brown	
20	SPT 7-8-7-8 (15)				LIMESTONE, very soft, light brown	-15
25	SPT 4-5-5-4 (10)				LIMESTONE, very soft, light brown	-20
30	SPT 10-12-9-8 (21)			30.0	LIMESTONE, soft, light brown	-25
						-27.0

Boring terminated at 30.0 feet.

PAGE A-12

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
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FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
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HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
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TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE
PERMIT DRAWINGS / SUBMISSION / REVISION	10/01/2024

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17 GEOTECHNICAL BORINGS

CM-3.0

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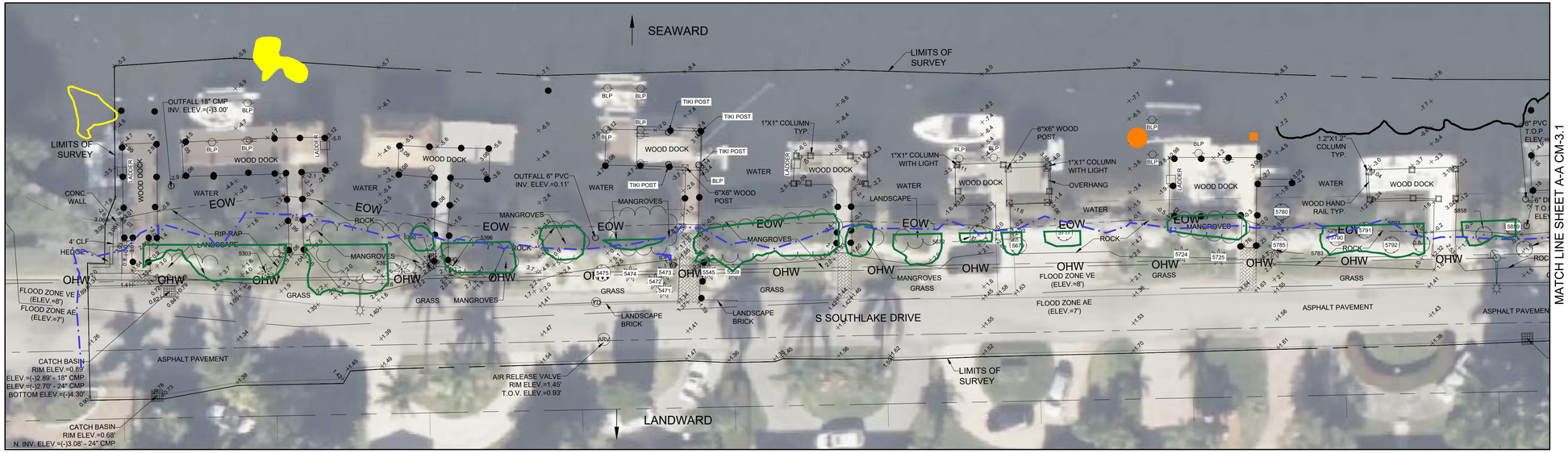

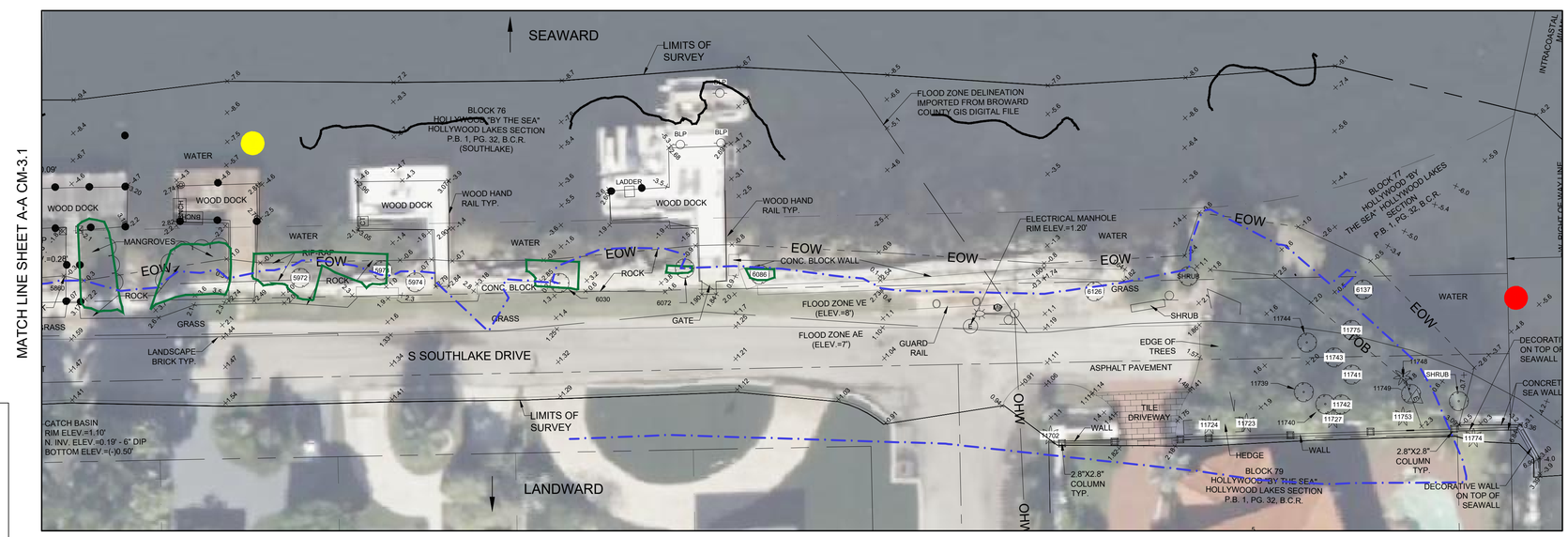

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

GRAPHIC SCALE IN FT: 0 10 20

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CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17 EXISTING CONDITIONS

CM-3.1

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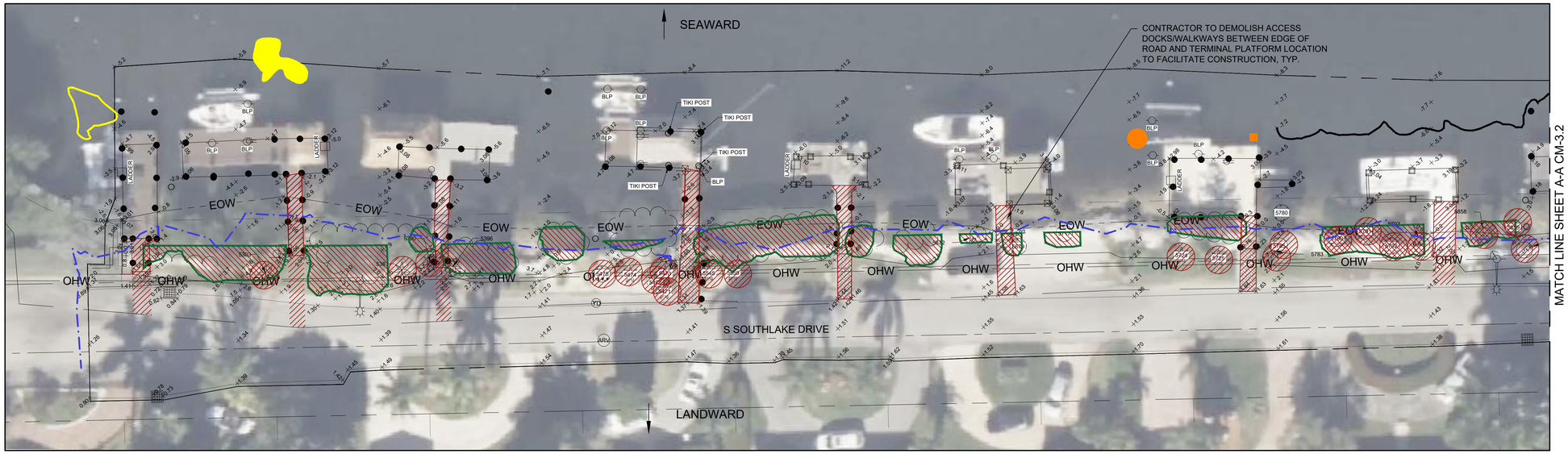

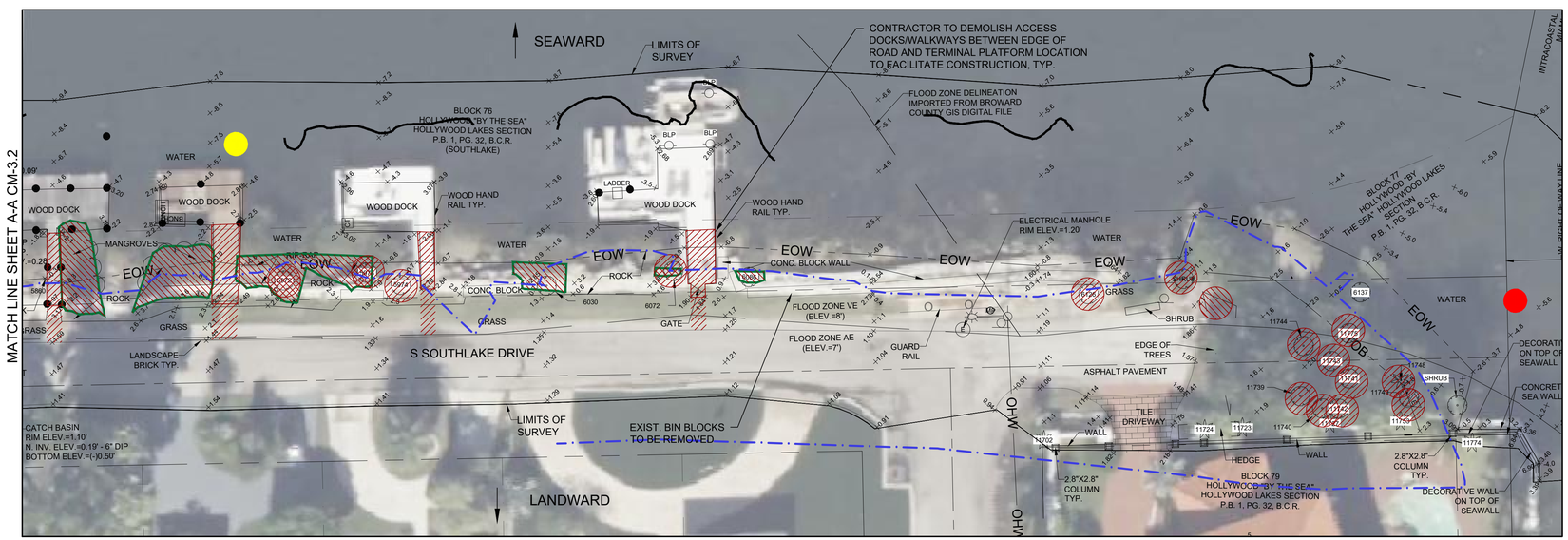

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- STRUCTURES AND TREES TO BE REMOVED

SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

0 10 20
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
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ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
DEMOLITION PLAN

CM-3.2

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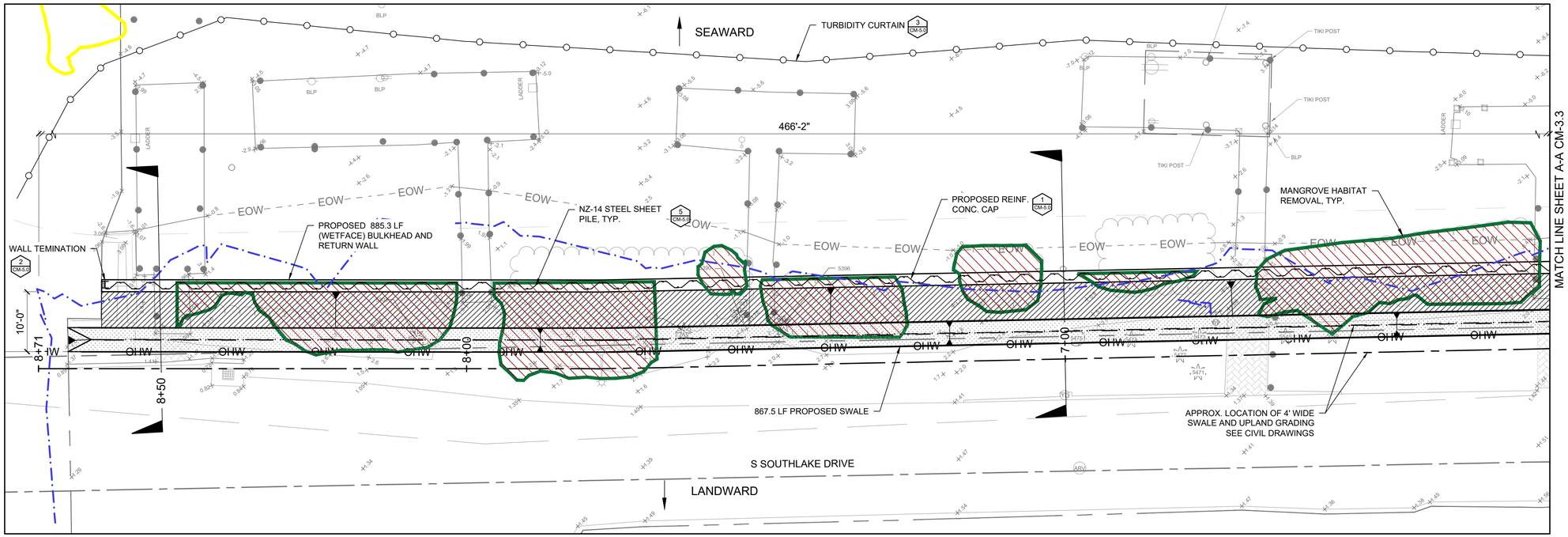

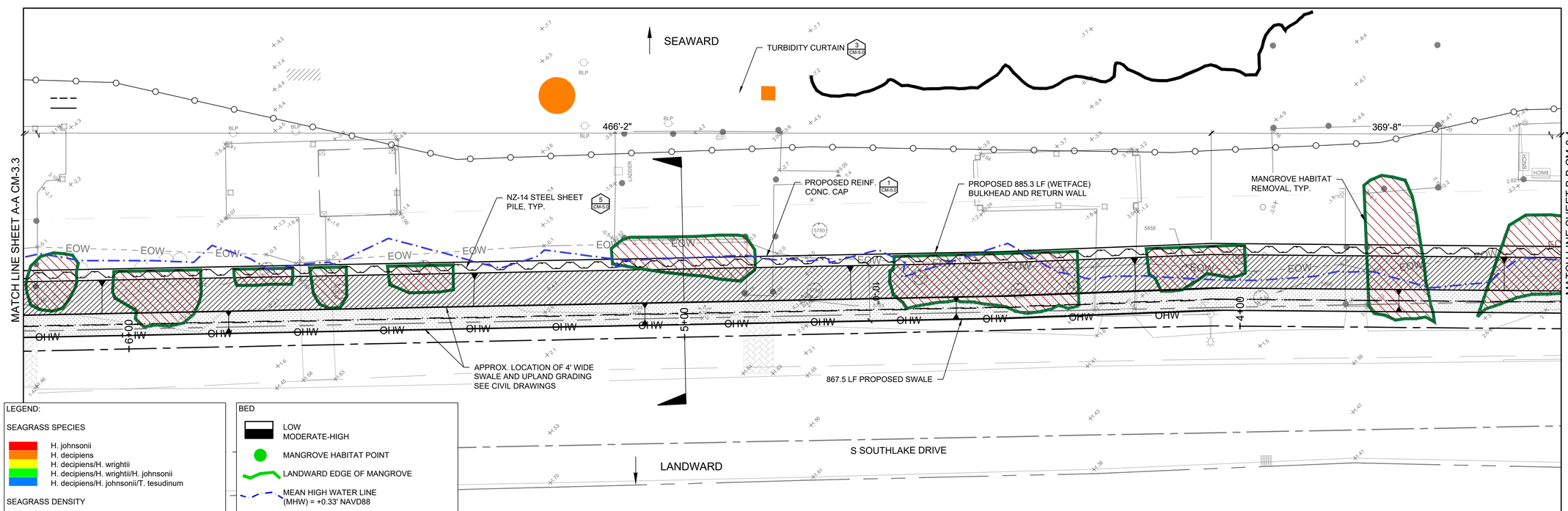

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN

SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

0 5 10
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
PROPOSED WALL

CM-3.3

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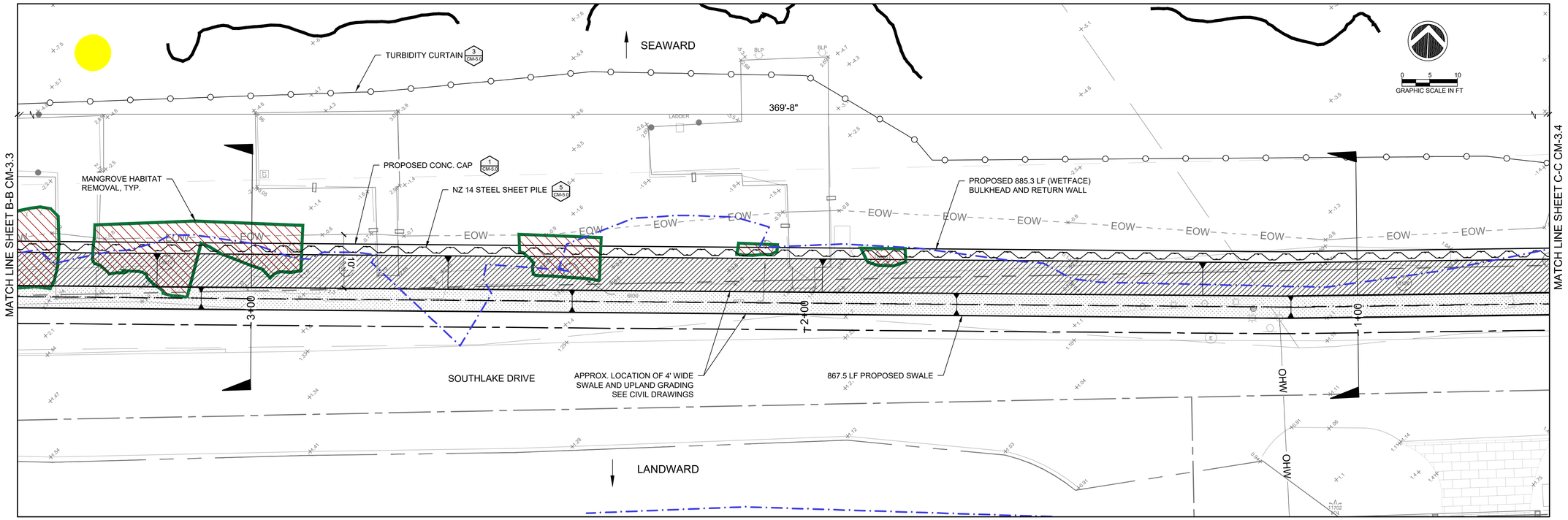

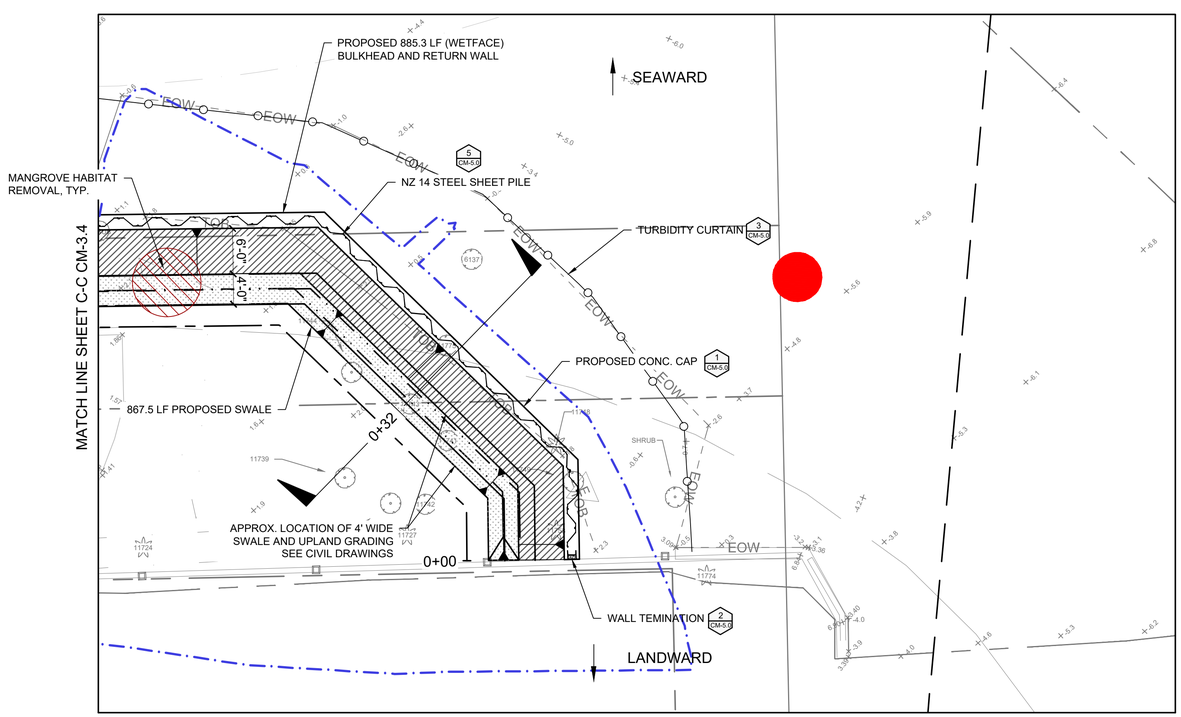

SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

SHEET PILE QUANTITIES TABLE (SITE 17)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	885.3
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	467.7

QUANTITIES TABLE (SITE 17)		
ITEM	S.F.	CY
TOTAL BACKFILL LANDWARD OF SHEET PILE WALL	5,271.7	389.3
BACKFILL LANDWARD OF HEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	811.6	113.4
SWALE EXCAVATION	3,498.0	153.6

LEGEND:

SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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N|V|5
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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
PROPOSED WALL

CM-3.4

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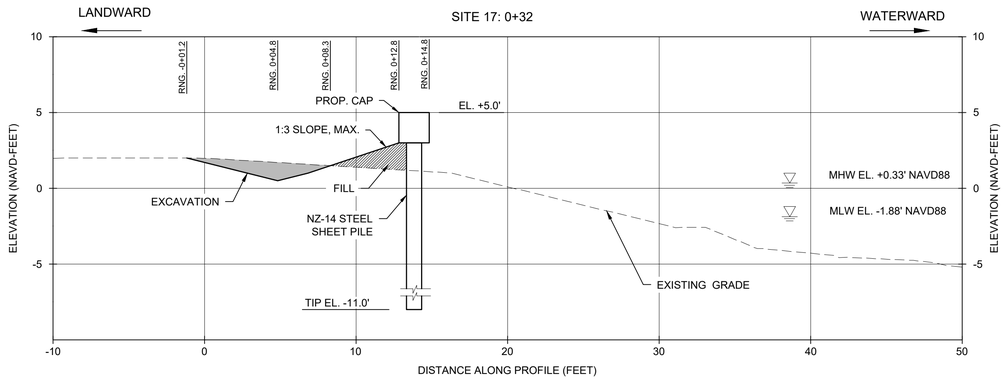

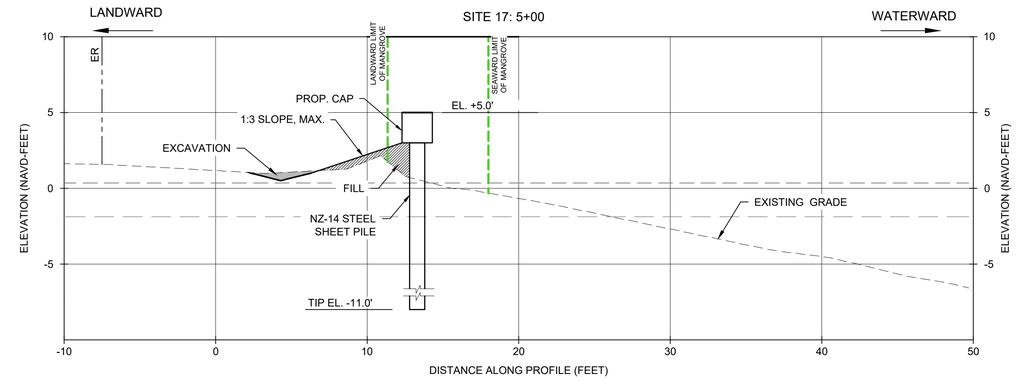

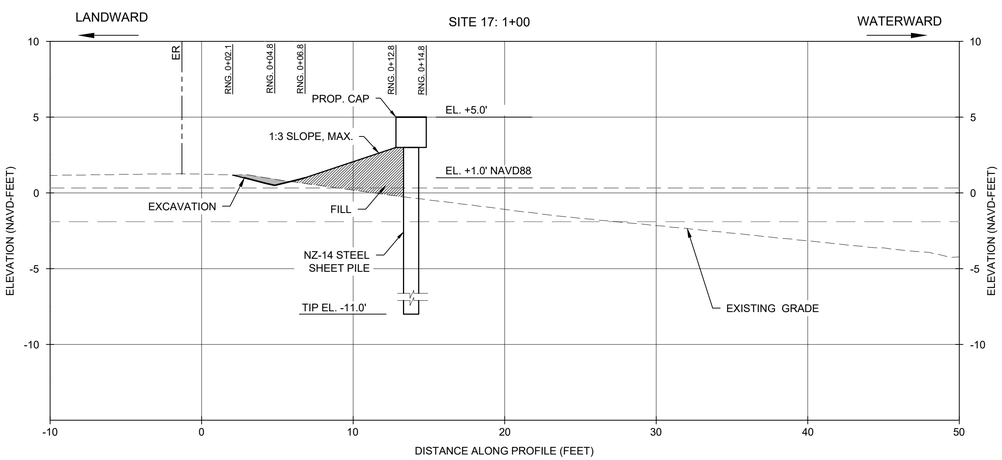

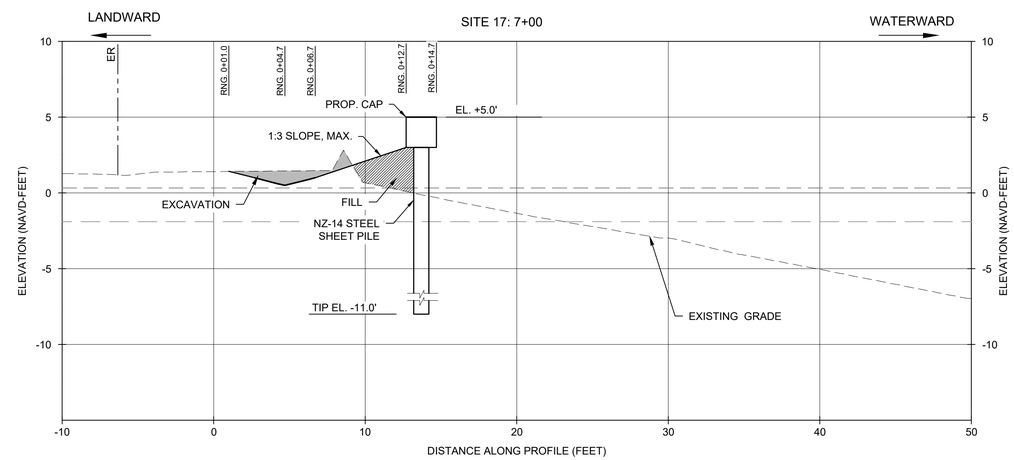

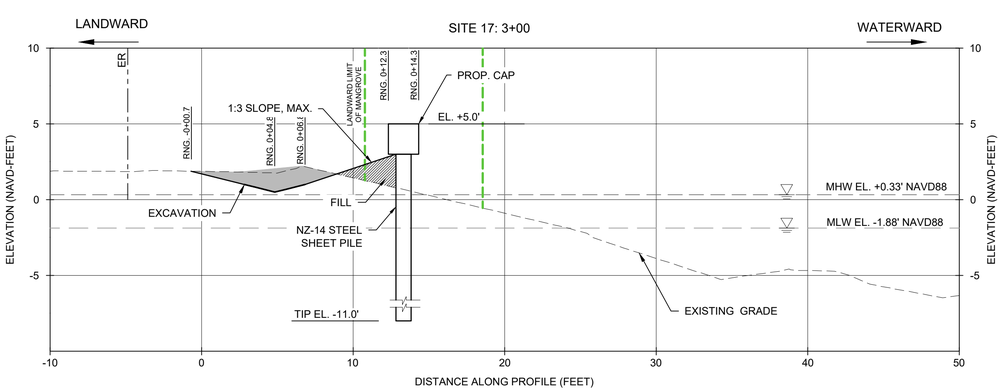

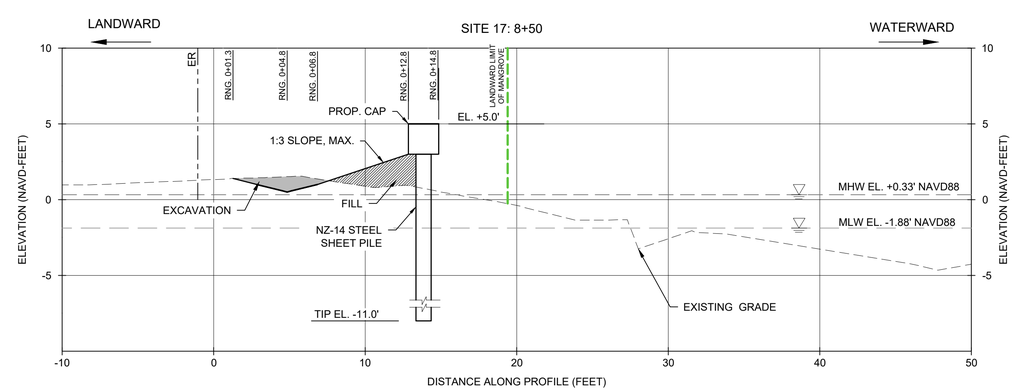

0 5 10
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

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BRIZAGA
PUBLIC OUTREACH
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FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

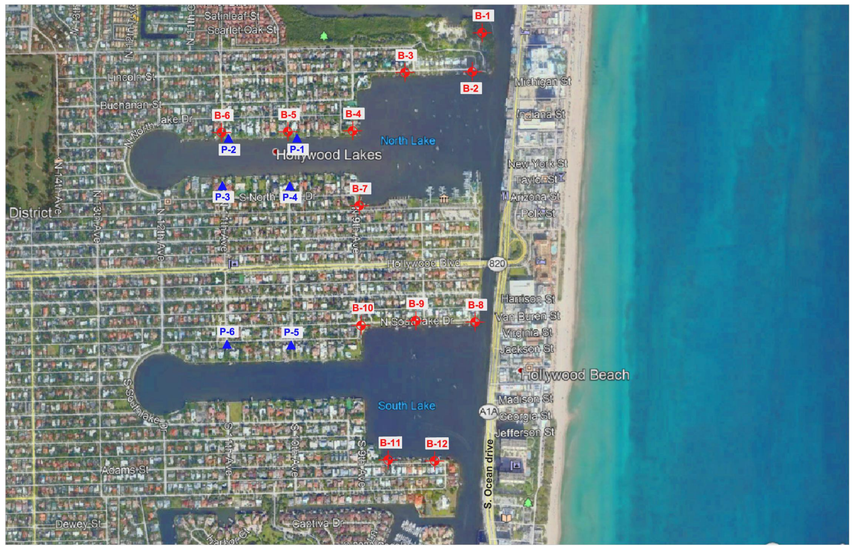
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

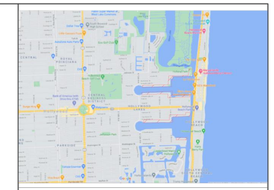
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
CROSS SECTIONS

CM-3.5

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 17.dwg





Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*				DWN BY: *NVF*
	PROJECT NAME: *City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1*				CKD BY: *ELG*
	PROJECT LOCATION: *City of Hollywood, Hollywood, Florida*	PROJECT NO: *16959*	DATE: *02/01/2021*	DWG NO: *1*	APD BY —

BORING NUMBER B-2

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/21/21 **COMPLETED** 1/21/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 2.5 ft / Elev 0.5 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0					0.3 4" of Asphalt	2.7
	SPT	17-11-10 (28)	GP		2.0 LIMESTONE FRAGMENTS, medium dense, light brown, with sand	1.0
	SPT	6-2-1-1 (3)			SILT, soft, dark gray, with organics	0
5	SPT	WOH-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray, with organics	
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
10	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, soft, dark gray	
				10.0		-7.0
	SPT	WOH-1-2-14 (3)	LS		LIMESTONE, medium hard, light brown	
	SPT	20-15-23-27 (38)			LIMESTONE, very soft, light brown	-10
15	SPT	14-8-5-8 (13) 3-5-10-12 (15)			LIMESTONE, very soft, light brown	
					LIMESTONE, very soft, light brown	-15
20	SPT	11-11-7-10 (18)				
						-20
25	SPT	8-12-14-11 (26)			LIMESTONE, soft, light brown	
						-25
30	SPT	10-4-5-7 (9)			LIMESTONE, very soft, light brown	
				30.0		-27.0

Boring terminated at 30.0 feet.

PAGE A-2

BORING NUMBER B-3

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/21/21 **COMPLETED** 1/21/21 **GROUND ELEVATION** 5 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 4.5 ft / Elev 0.5 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0			SM		0.3 4" of Topsoil	5 4.7
	SPT	2-4-4-6 (8)	SP		2.0 SAND, loose, fine, light brown, with sand	3.0
	SPT	5-2-1-1 (3)			SILT, soft, dark gray, with organics	
5	SPT	1-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray, with organics	0
	SPT	WOH-WOH-WOH-1 (WOH)			SILT, very soft, dark gray	
10	SPT	2-7-12-10 (19)			SILT, very stiff, dark gray, with a trace of limestone fragments	-5
				10.0		-5.0
	SPT	3-3-3-6 (6)	LS		SANDY LIMESTONE, very soft, light brown	
	SPT	4-7-10-11 (17)			LIMESTONE, very soft, light brown	
15	SPT	10-13-9-11 (22)			LIMESTONE, soft, light brown	-10
20	SPT	10-8-6-8 (14)			LIMESTONE, very soft, light brown	-15
25	SPT	10-4-4-2 (8)			LIMESTONE, very soft, light brown	-20
30	SPT	3-9-5-3 (14)			LIMESTONE, very soft, light brown	-25
				30.0		-25.0

Boring terminated at 30.0 feet.

PAGE A-3

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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TEL: 954-834-3533

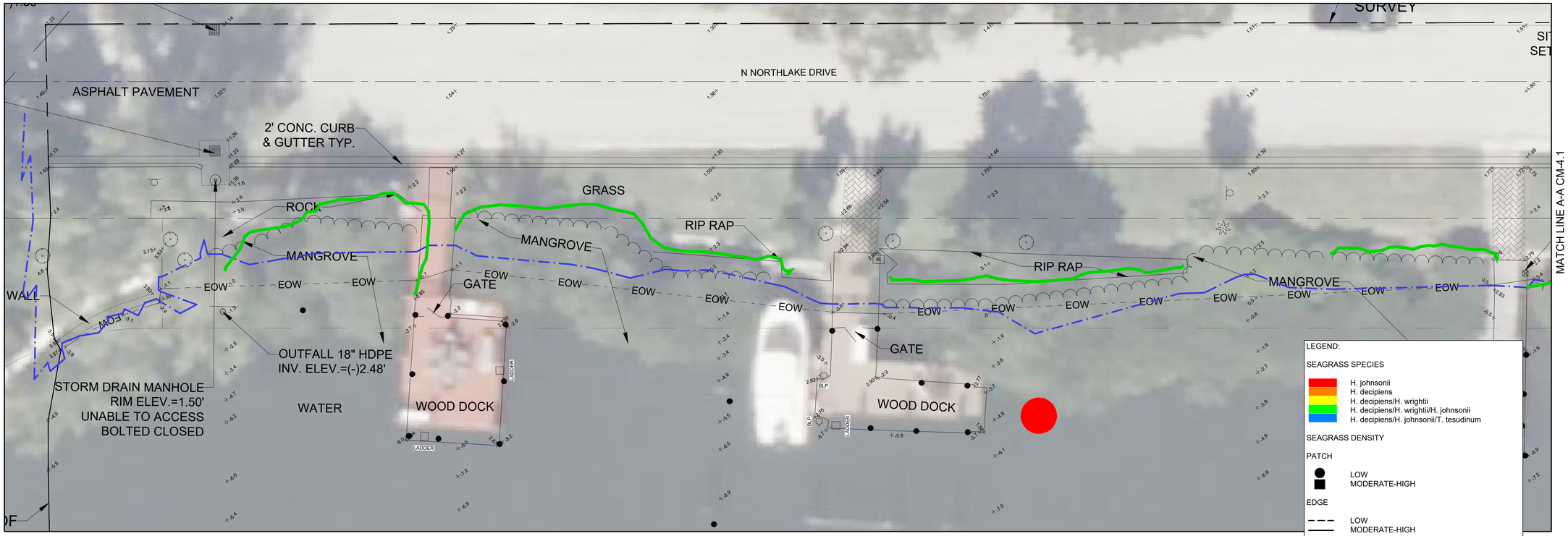
ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

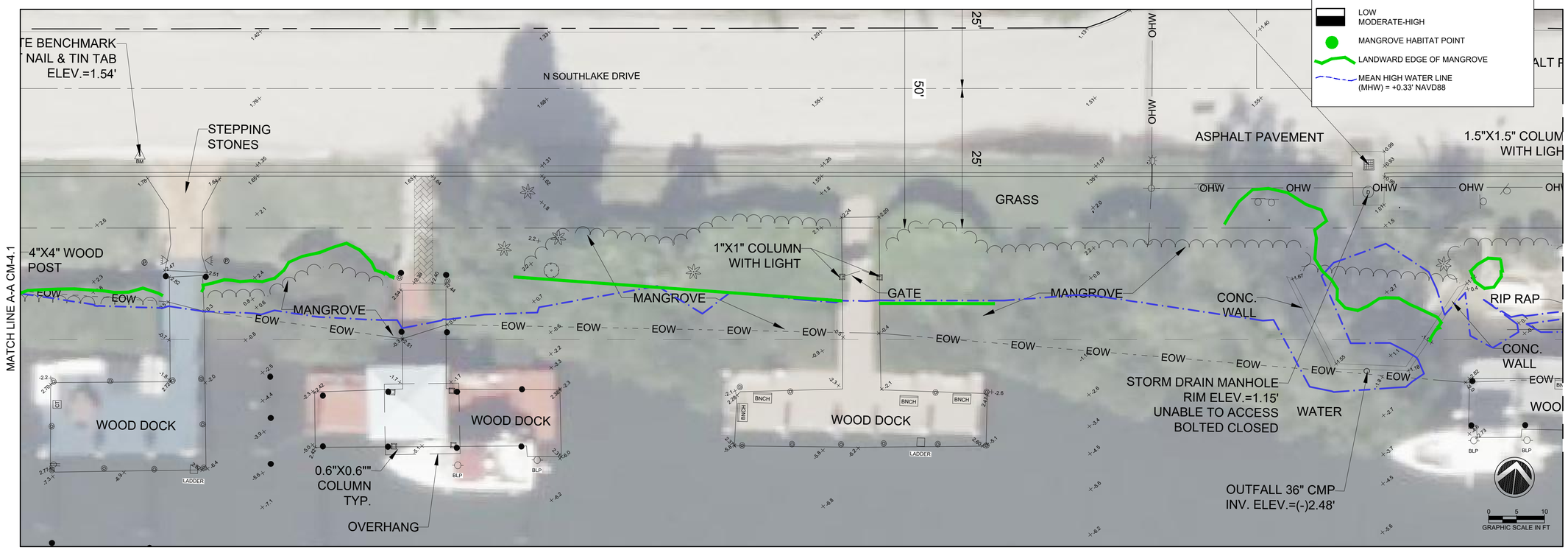
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
GEOTECHNICAL BORINGS SITE 19

CM-4.0

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01\P 84300 SITES 19.dwg





LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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HOLLYWOOD FL. 33020

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ISSUE	DATE	PERMIT DRAWINGS / SUBMISSION / REVISION
	10/01/2024	

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING CONDITIONS

CM-4.1

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01\P 84300 SITES 19.dwg

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
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- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
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SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

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CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING CONDITIONS

CM-4.2

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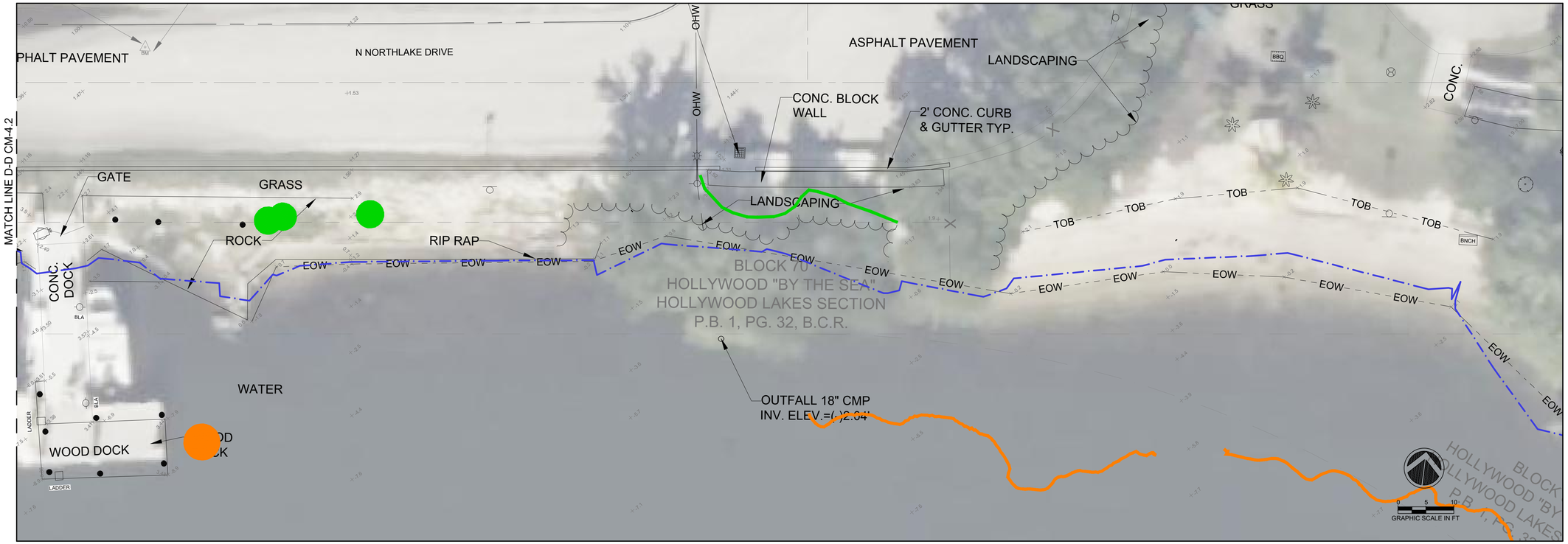

LEGEND:

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SEAGRASS DENSITY

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EDGE

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CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING CONDITIONS

CM-4.3

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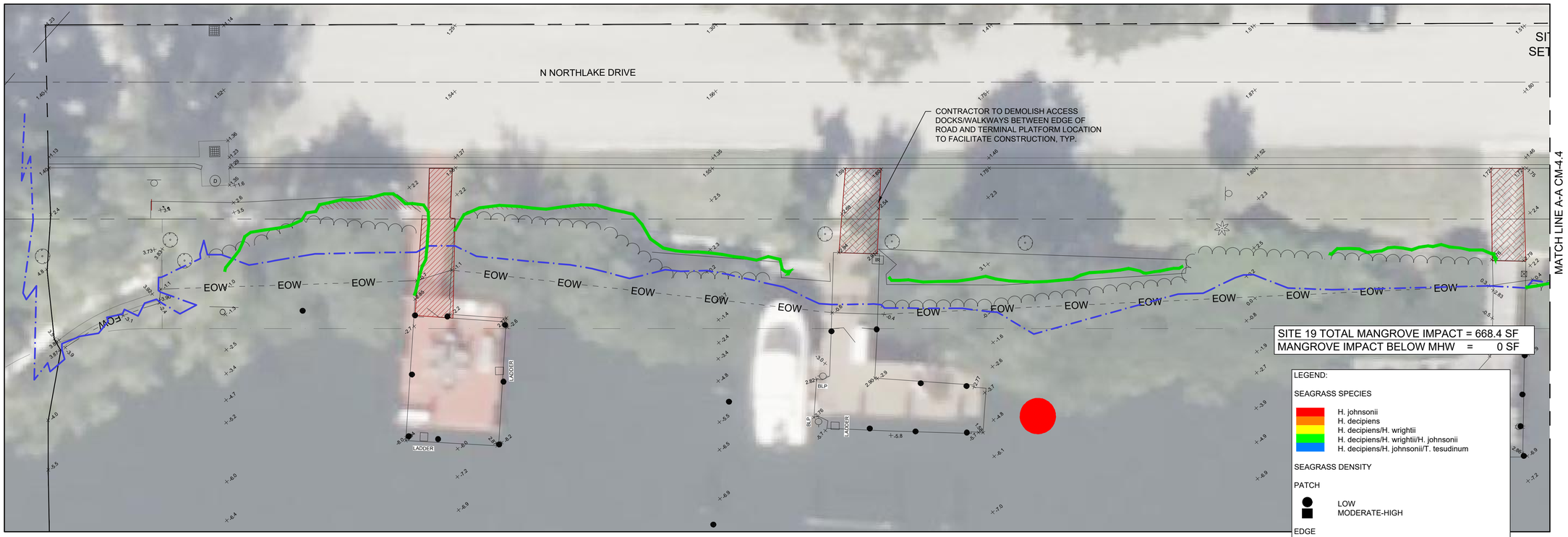

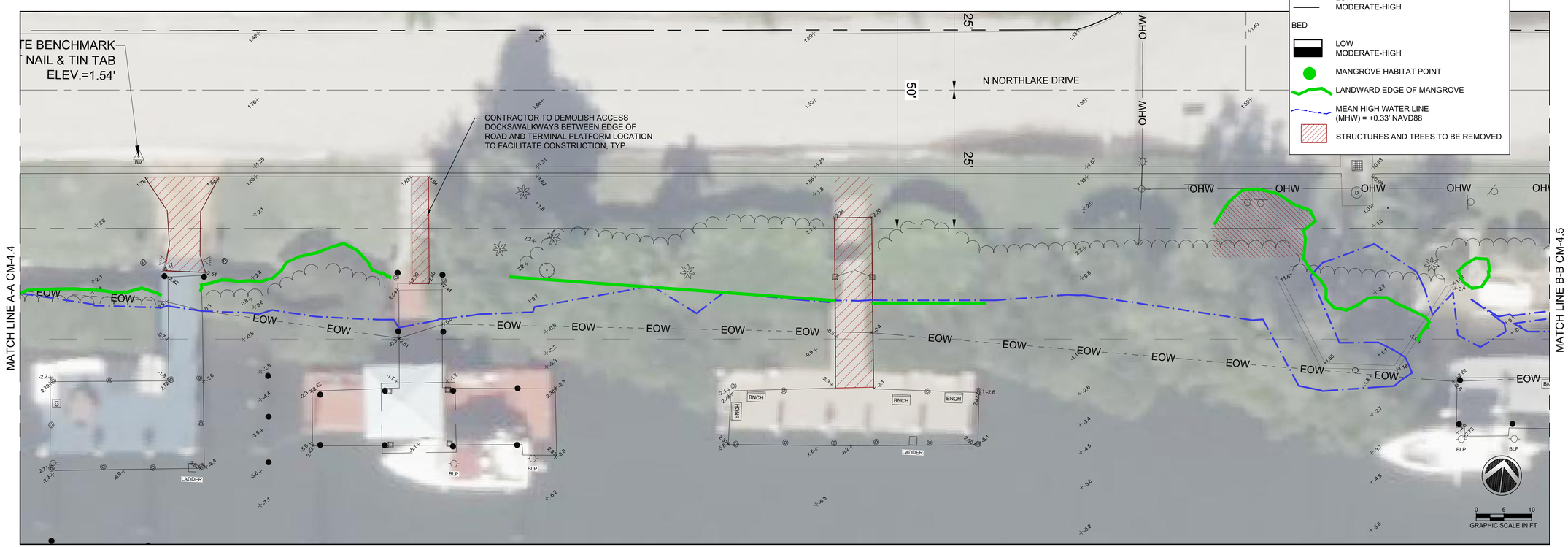

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PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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ISSUE	DATE	PERMIT DRAWINGS SUBMISSION / REVISION
	10/01/2024	

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19 DEMOLITION PLAN

CM-4.4

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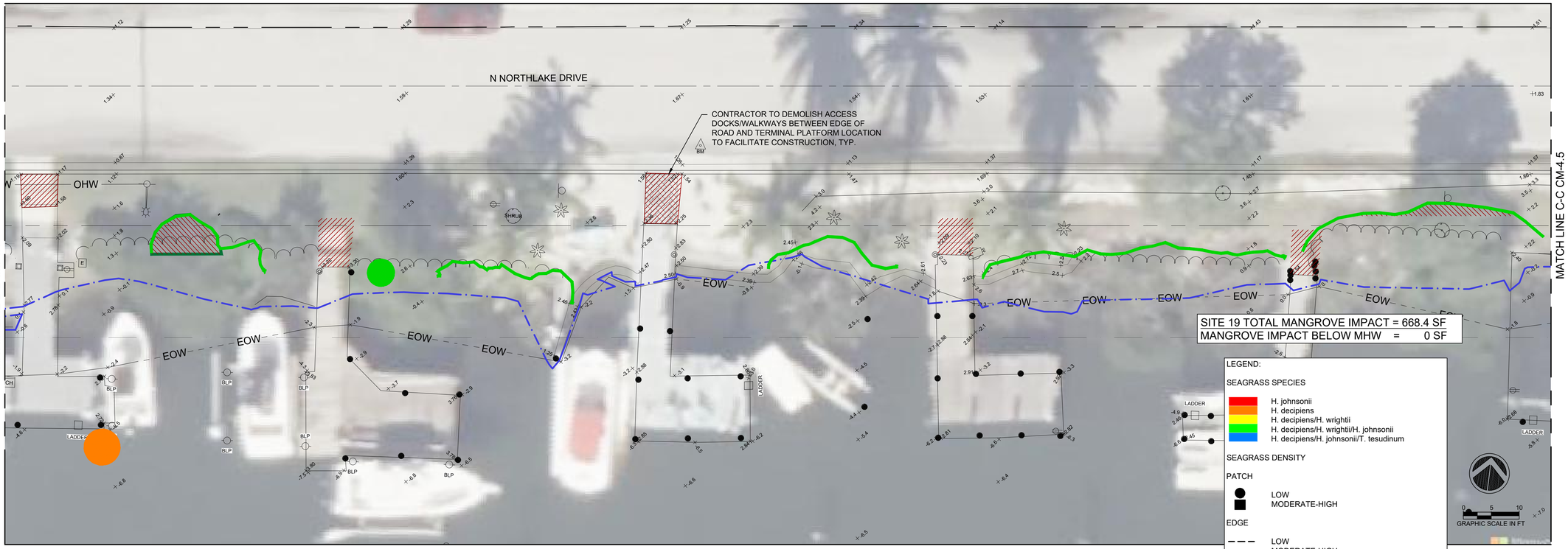

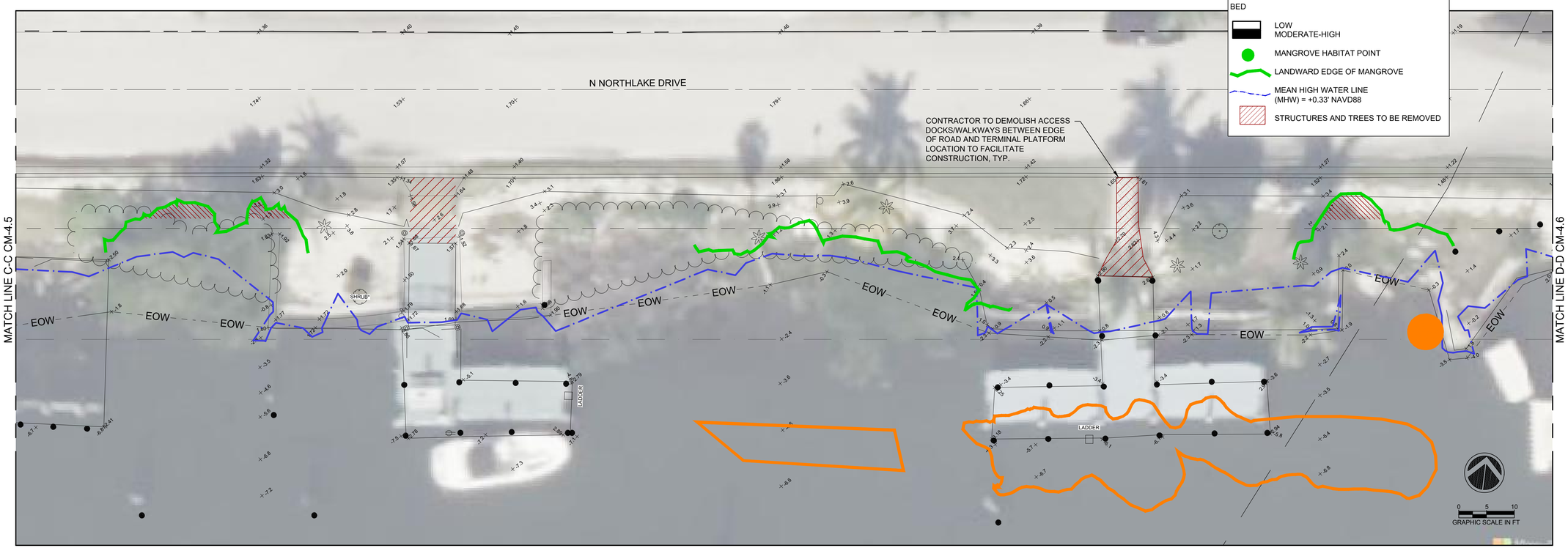

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
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CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
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KEITH & ASSOCIATES
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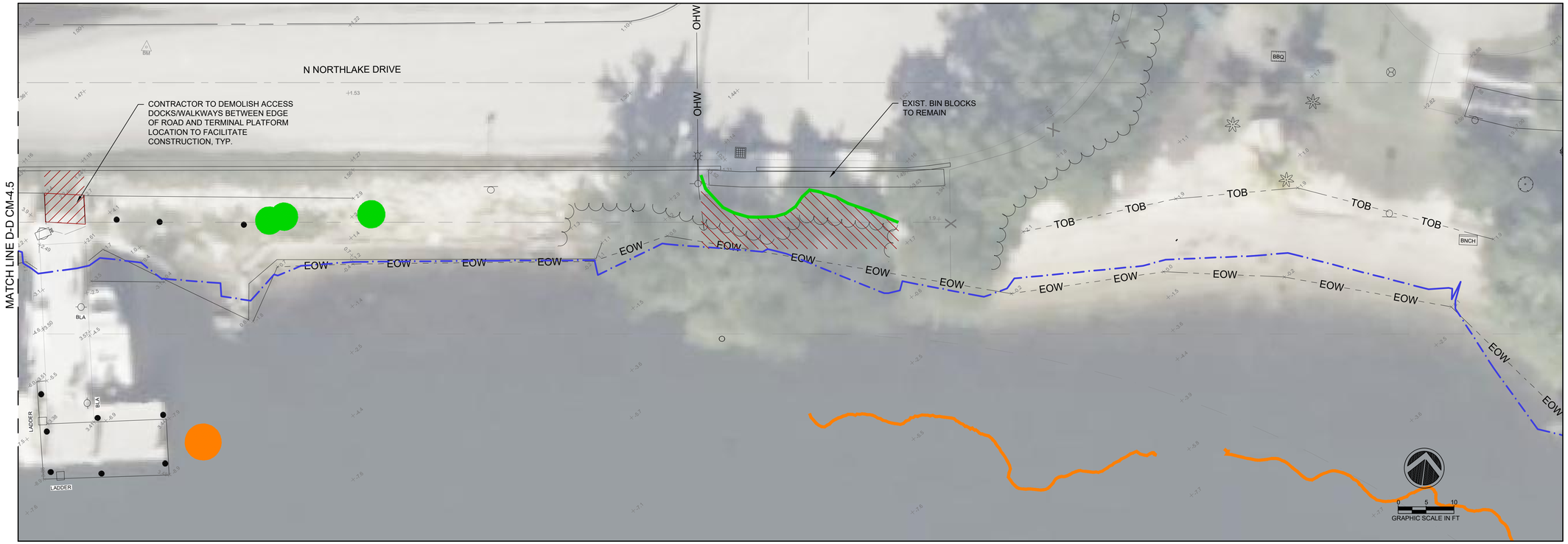
ISSUE	DATE	PERMIT DRAWINGS SUBMISSION / REVISION
	10/01/2024	

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19 DEMOLITION PLAN

CM-4.5

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg



SITE 19 TOTAL MANGROVE IMPACT = 668.4 SF
MANGROVE IMPACT BELOW MHW = 0 SF

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

MANGROVE HABITAT POINT

LANDWARD EDGE OF MANGROVE

MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

STRUCTURES AND TREES TO BE REMOVED

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06/04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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COASTAL, MARINE & ENVIRONMENTAL
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CM-4.6

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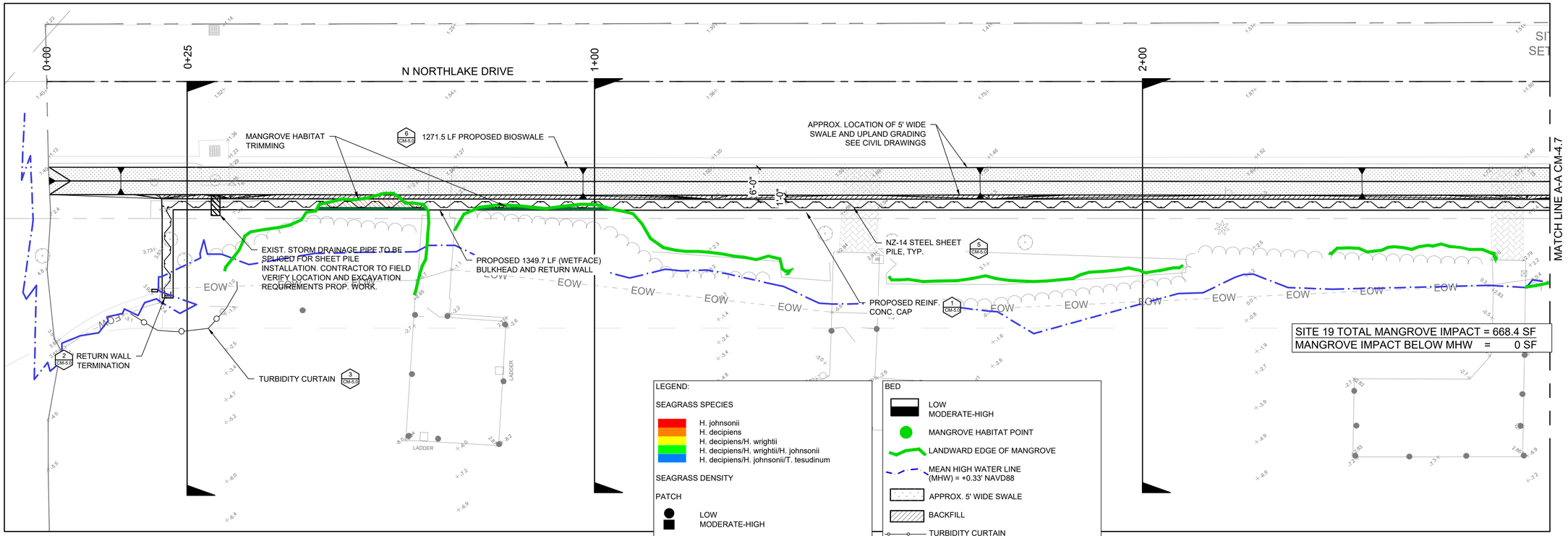

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- H. decipiens/H. wrightii/H. johnsonii
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- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
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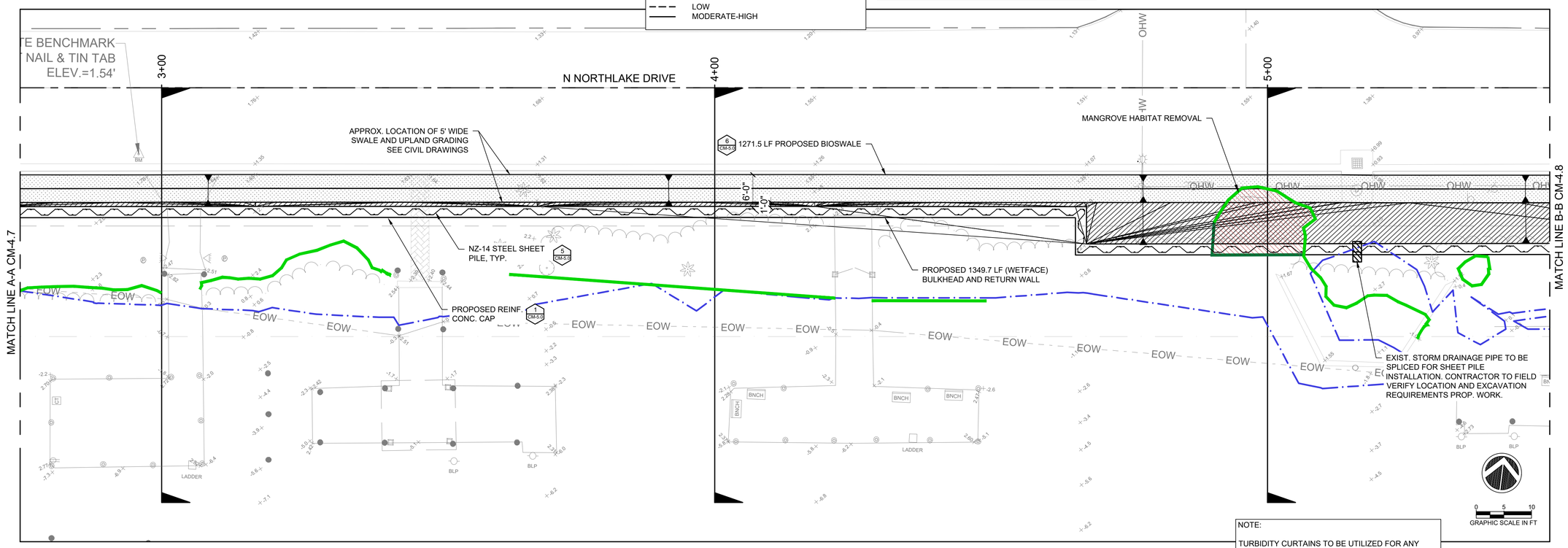
- TURBIDITY CURTAIN



NOTE:

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SITE 19
PROPOSED WALL

CM-4.7

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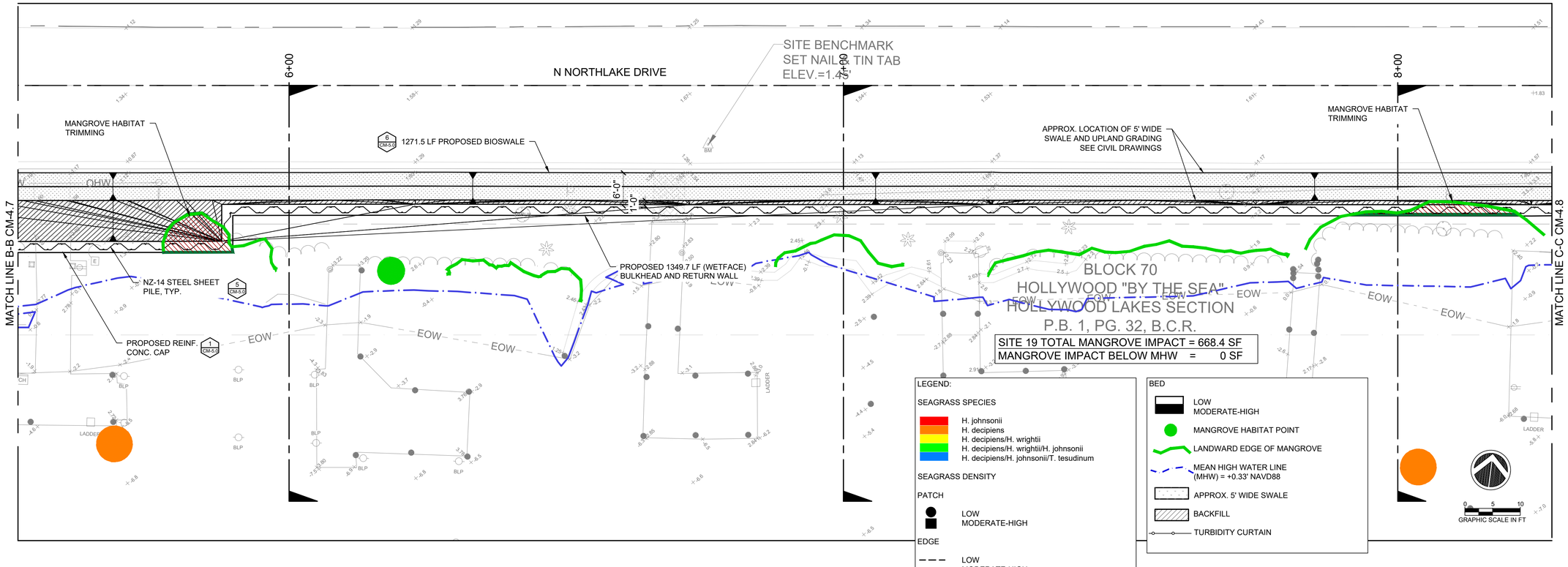

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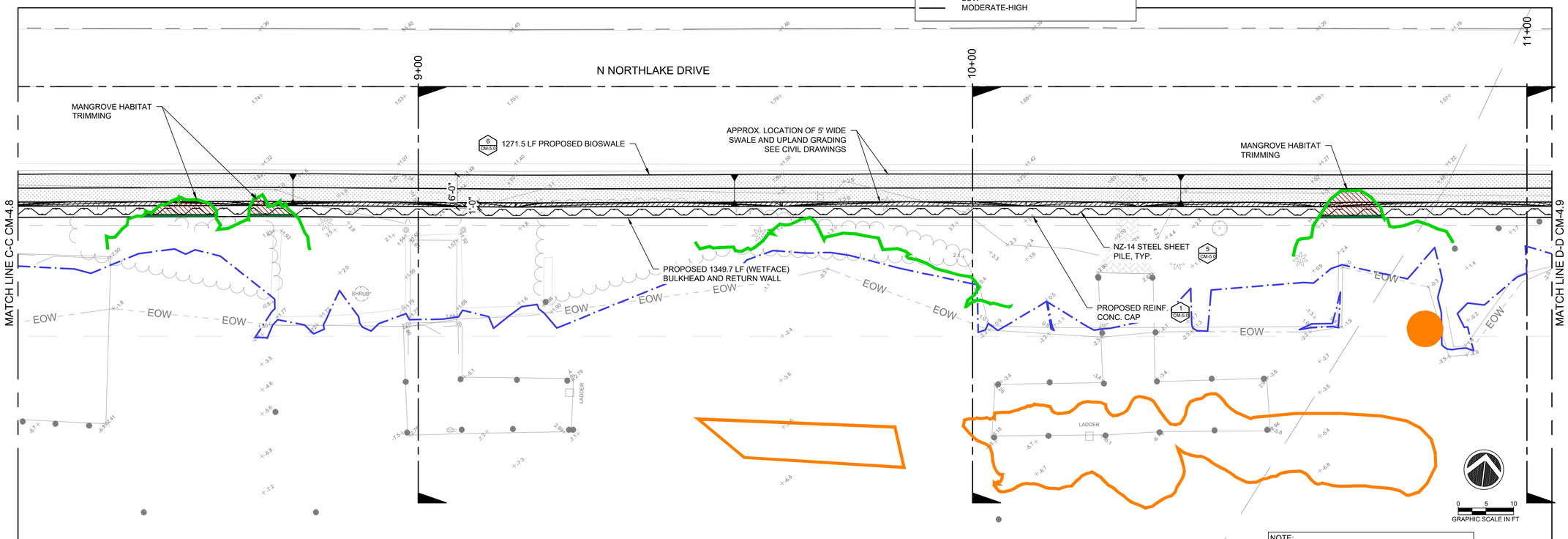

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PROPOSED WALL

CM-4.8

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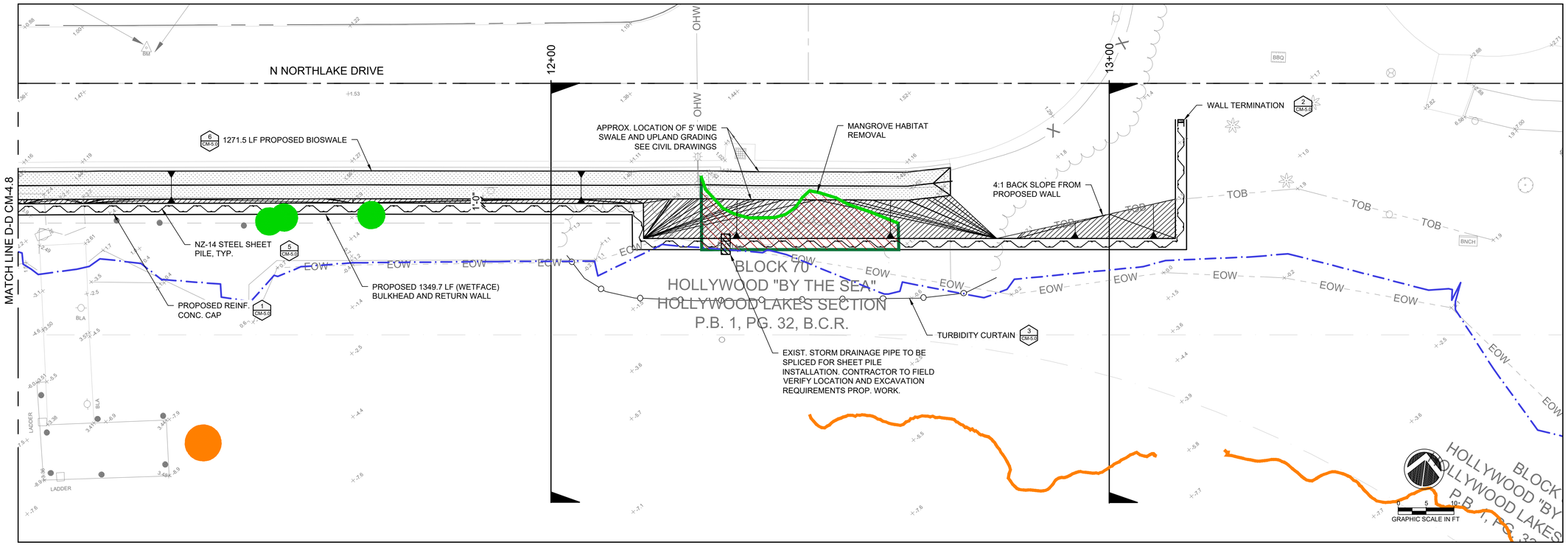

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SHEET PILE QUANTITIES TABLE (SITE 19)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	1349.7
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	27.8

QUANTITIES TABLE (SITE 19)		
ITEM	S.F.	CY
TOTAL BACKFILL LANDWARD OF SHEET PILE WALL	2,900.2	201.6
BACKFILL LANDWARD OF HEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	0.0	0
BIOSWALE EXCAVATION	6,357.9	73.7

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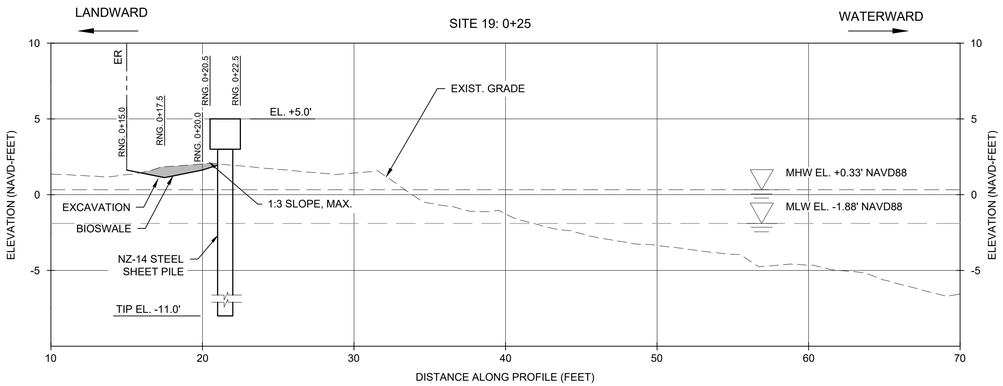

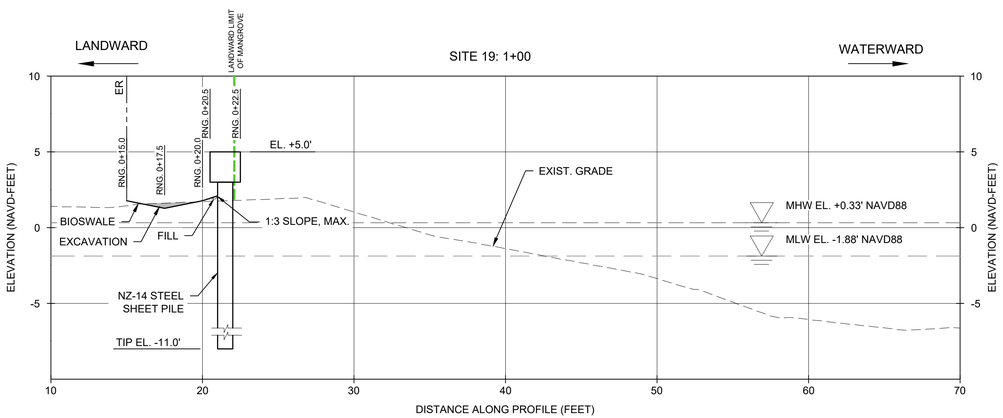

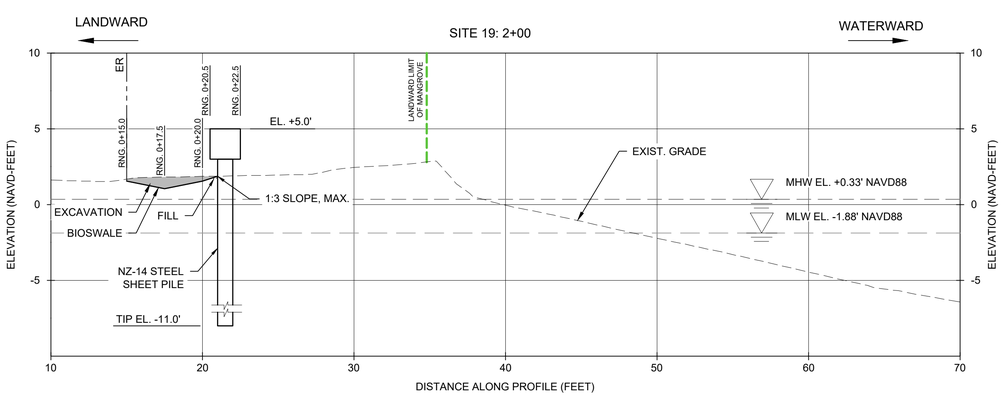

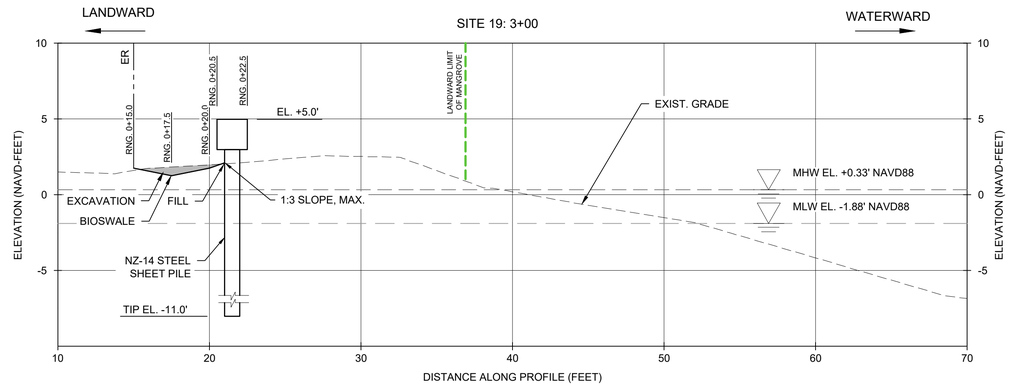

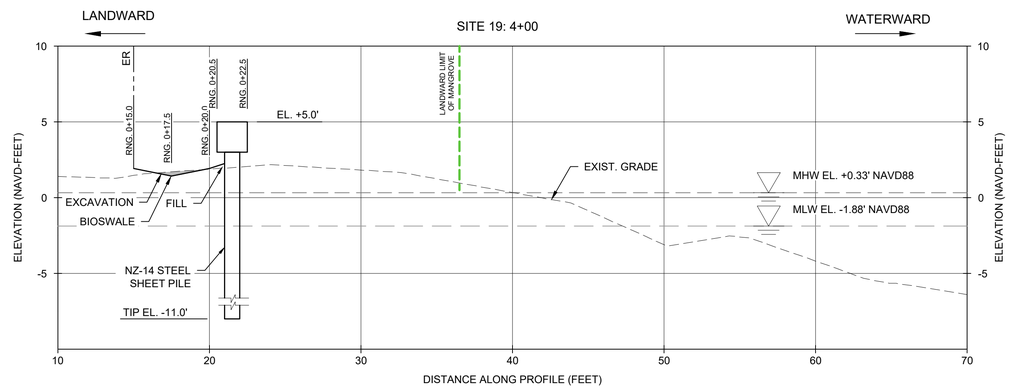

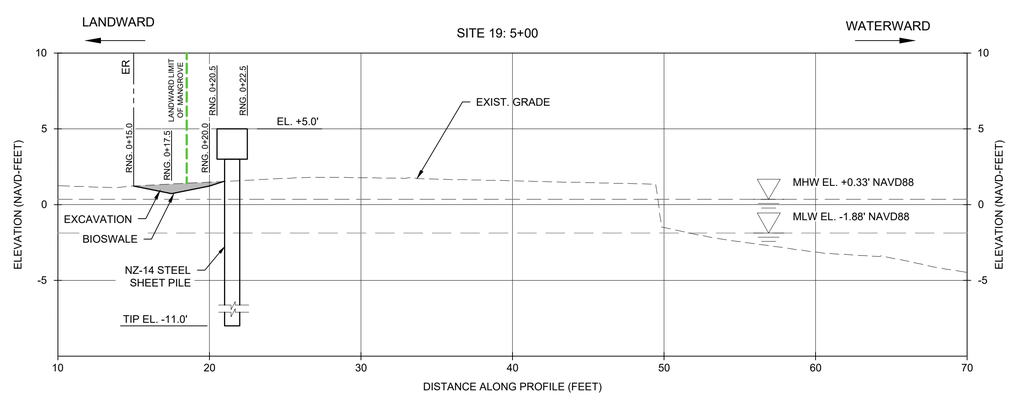

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GRAPHIC SCALE IN FT

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CM-4.10

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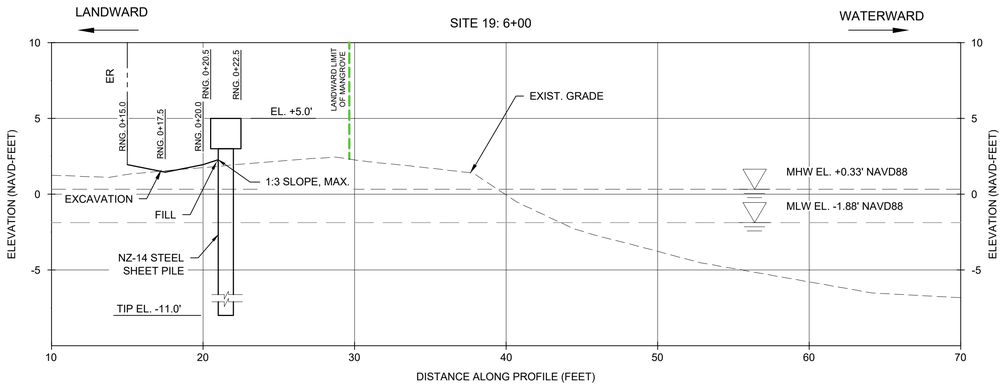

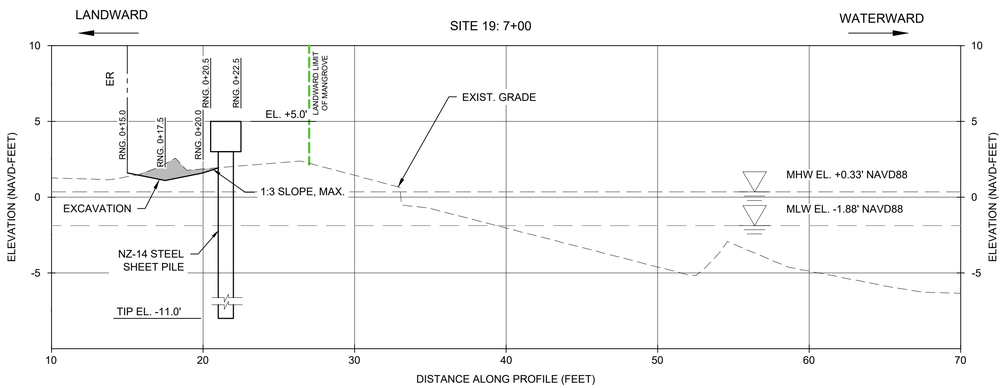

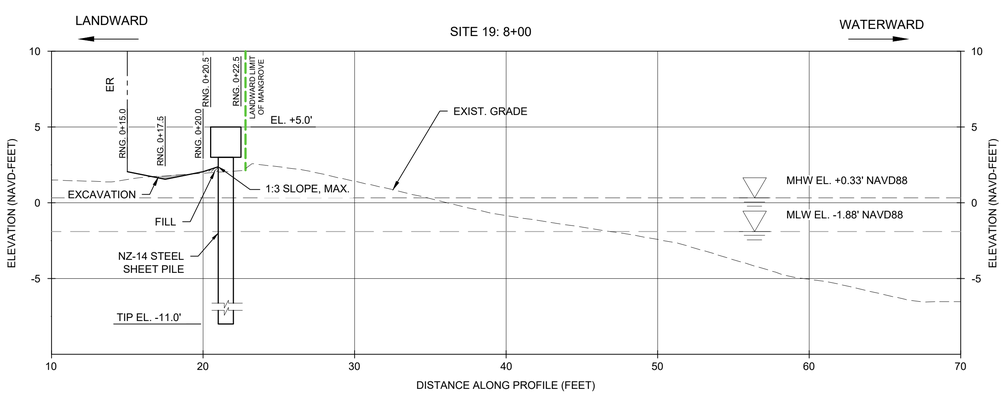

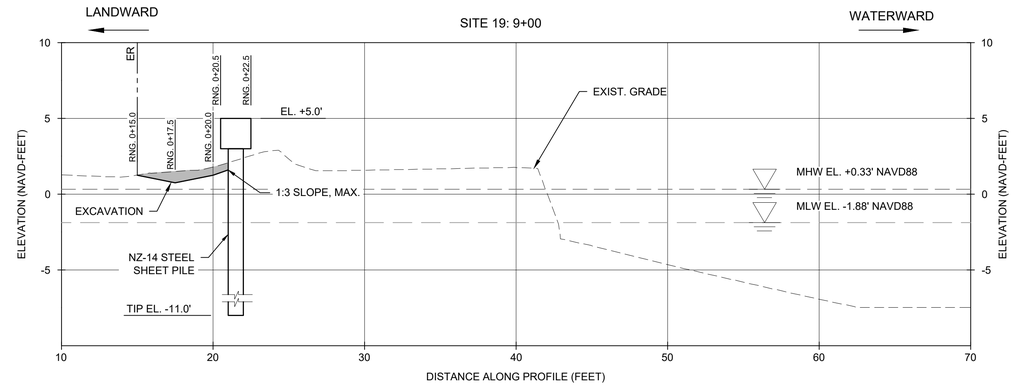

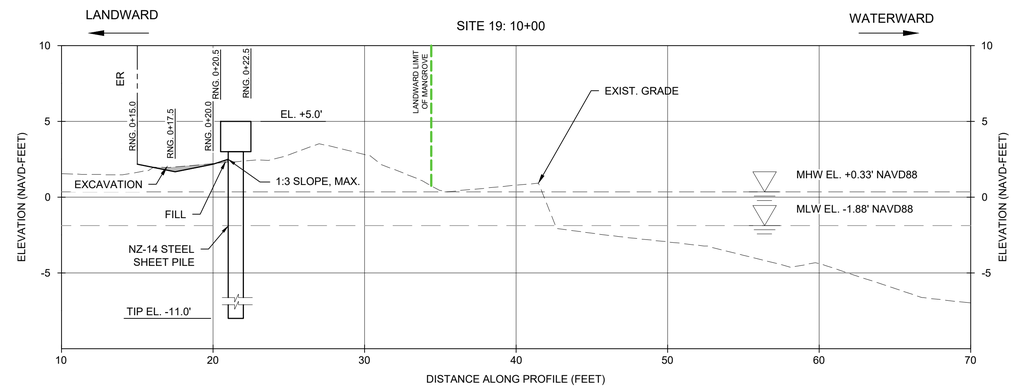

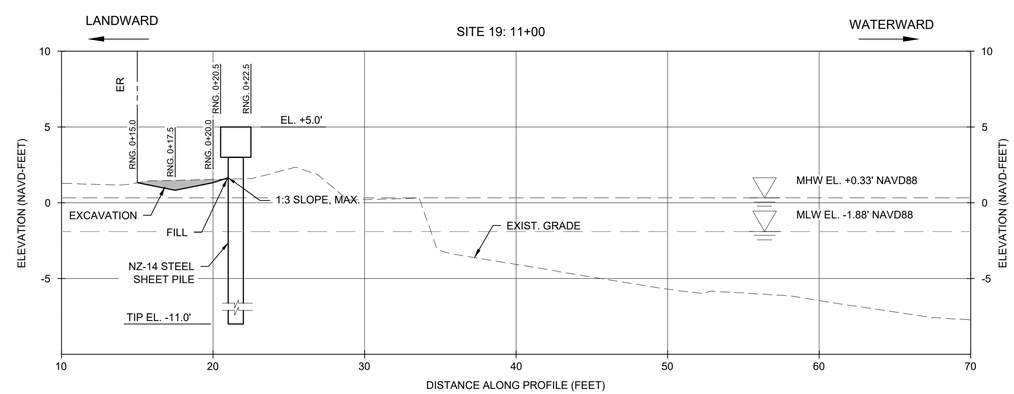

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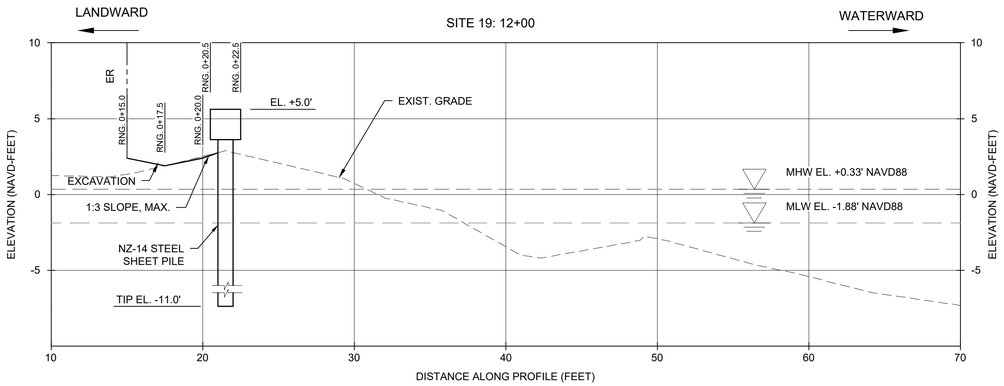
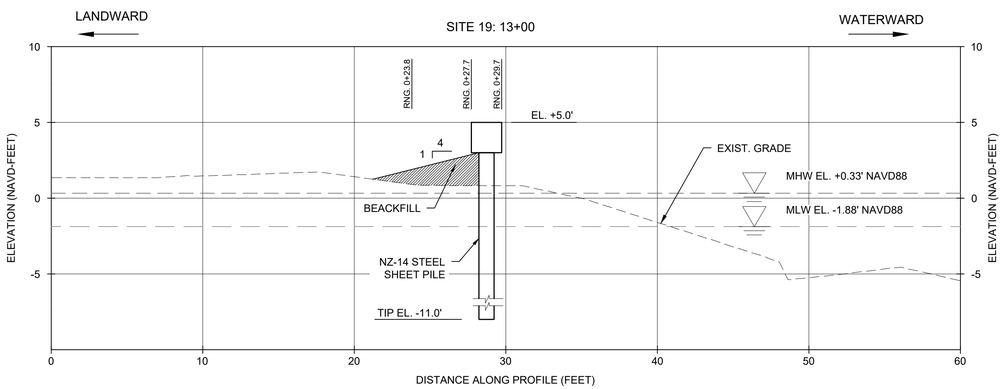
CM-4.11

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg





0 2.5 5
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
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TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
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3440 HOLLYWOOD BLVD. STE. 415
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GEOTECHNICAL ENGINEER
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2101 W. COMMERCIAL BLVD. STE. 4600
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TEL: 954-834-3533

ISSUE	DATE	SUBMISSION / REVISION
	10.01.2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
CROSS SECTIONS

CM-4.12

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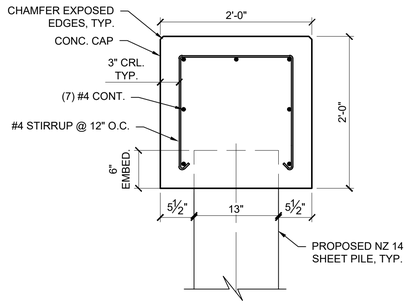
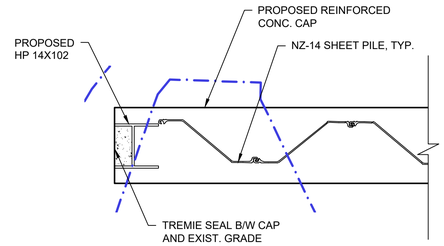


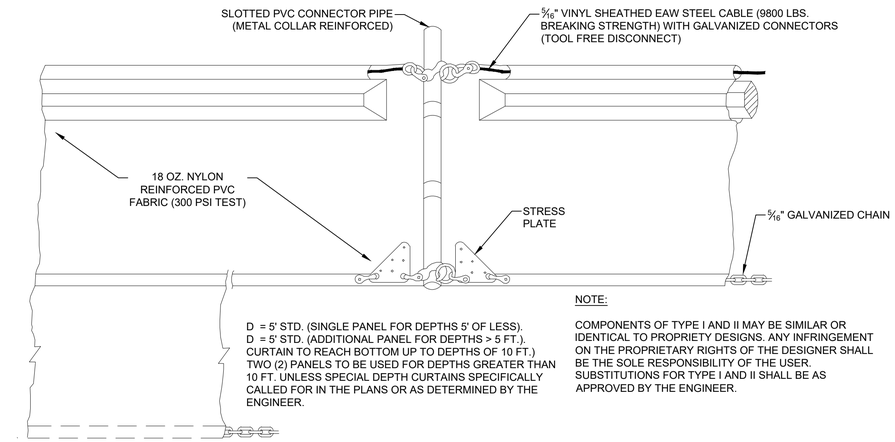
1 TYPICAL CONC. CAP REINF. DETAIL

SCALE: 1"=1" (22X34)



2 TYPICAL TERMINATION DETAIL

SCALE: 1"=2" (22X34)



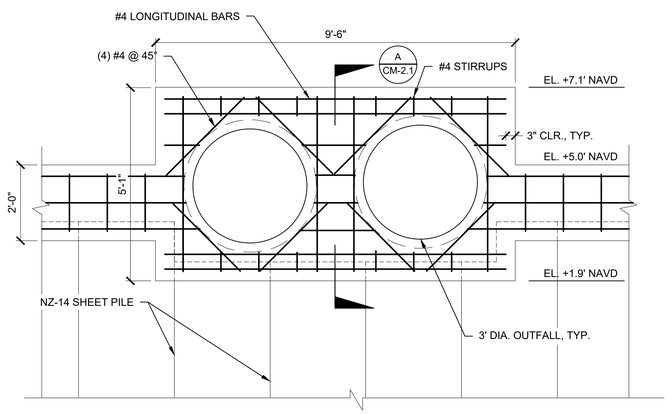
D = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OF LESS).
D = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5 FT.).
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FT.)
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FT. UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTE:

COMPONENTS OF TYPE I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE I AND II SHALL BE AS APPROVED BY THE ENGINEER.

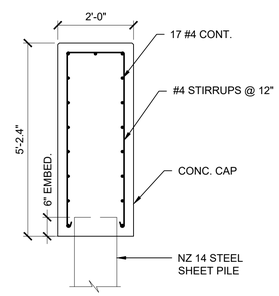
3 FLOATING TURBIDITY CURTAIN DETAIL

N.T.S.



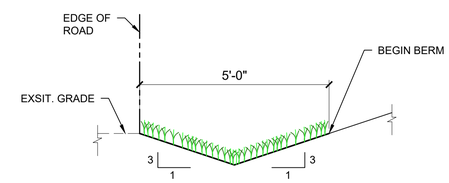
4 TYPICAL OUTFALL COLLAR DETAIL

SCALE: 1"=2" (22X34)



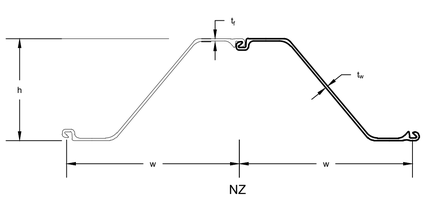
A CM-2.1 TYPICAL OUTFALL COLLAR SECTION

SCALE: 1"=2" (22X34)



6 TYPICAL VEGETATED BIOSWALE DETAIL

N.T.S.



SECTION	Width (w) in mm	Height (h) in mm	THICKNESS Flange (t_f) in mm	THICKNESS Web (t_w) in mm	Cross Sectional area (w) in mm	WEIGHT Pile lb/ft kg/m	WEIGHT Wall lb/ft² kg/m²	SECTION MODULUS Elastic in³/ft cm³/m	SECTION MODULUS Plastic in³/ft cm³/m	Moment of Inertia in⁴/ft cm⁴/m	COATING AREA Both Sides ft²/ft of single m²/m	COATING AREA Wall Surface ft²/ft m²/m²
NZ 14	30.31 770	13.39 340	0.375 9.5	0.375 9.5	6.40 135.4	55 81.26	21.77 106.3	25.65 1379	30.50 1640	171.7 23447	6.10 1.86	1.20 1.20

5 NZ-14 STEEL SHEET PILE

SCALE: N.T.S.

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SHEET TITLE

DETAILS

CM-5.0

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GENERAL NOTES

1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES WERE OBTAINED FROM AVAILABLE RECORDS. NEITHER THE CITY NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT LOCATED WHERE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION WORK. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR. CONTRACTOR SHALL ALSO PROVIDE THE ENGINEER WITH RECORD INFORMATION ON ALL FIELD VERIFICATION MEASUREMENTS AS SPECIFIED. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE THE CONSULTANT INFORMATION ON ALL FIELD VERIFICATION MEASUREMENTS AS SPECIFIED. IF AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION UPON EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY SO THAT APPROPRIATE MEASURES CAN BE TAKEN. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT EXISTING UTILITIES WHETHER SHOWN OR NOT.
3. THE CONTRACTOR SHALL NOTIFY THE CITY IN ADVANCE OF MAKING ANY CONNECTION TO AN ACTIVE PIPELINE OR UTILITY SYSTEM.
4. ALL EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS APPROVED OTHERWISE IN WRITING BY THE UTILITY OWNERS.
5. CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS TWO (2) BUSINESS DAYS PRIOR TO COMMENCING ANY PORTION OF THE WORK TO BE PERFORMED DURING OFF-PEAK HOURS (NIGHTS AND SUNDAYS).
6. ALL ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE BASED ON NAVD 1988 DATUM.
7. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER PROPERTY AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING CONSTRUCTION AND SHALL REPAIR SAID DAMAGES AT THE CONTRACTOR EXPENSE.
8. THE CONTRACTOR WILL HOLD A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF ANY CONSTRUCTION INCLUDING A REPRESENTATIVE FROM THE RESPECTIVE ENGINEERING AND UTILITY DEPARTMENTS, OWNER AND OTHER APPLICABLE AGENCIES.
9. ALL DEVIATIONS FROM PLANS ARE TO BE APPROVED IN WRITING PRIOR TO CONSTRUCTION AND FOR ALL INSPECTIONS AND TESTING.
10. THE CITY MUST BE GIVEN A MINIMUM 48 HOURS NOTICE FOR ALL INSPECTIONS UNLESS OTHERWISE AGREED UPON.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGES, DISRUPTION OF SERVICE OR DESTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
12. EXISTING SECTION CORNERS AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE MAINTAINED BY THE CONTRACTOR AND/OR RESET AFTER CONSTRUCTION UNDER CERTIFICATION BY A FLORIDA REGISTERED SURVEYOR.
13. THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE USED AS THE STANDARD FOR ANY SIGNAGE AND PAVEMENT MARKING REQUIREMENTS OF THE PROJECT.
14. THE EXISTING ELEVATIONS SHOWN HEREIN ARE FOR THE PURPOSE OF INDICATING THE GROUND ELEVATION ONLY AT THE POSITION SHOWN AND IN NO WAY SHOULD INDICATE ELEVATION AT ANY OTHER POINT OTHER THAN THAT SHOWN.
15. THE CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC (M .O.T.) FOR ANY WORK PERFORMED ON PUBLIC RIGHT-OF-WAY. NOTIFY THE CITY 48 HOURS PRIOR TO BEGIN WORK. ALL M.O.T. WORK SHALL BE AS PER FDOT INDEX NO. 600S SERIES.
16. EXISTING CONDITIONS PRESENTED ARE BASED ON A TOPOGRAPHIC SURVEY PROVIDED BY CUMMINS CEDERBERG. ADDITIONAL INFORMATION WAS OBTAINED FROM AS-BUILTS AND RECORD DRAWINGS PROVIDED BY UTILITY COMPANIES, G.I.S. INFORMATION AND FIELD VISITS.
17. ALL WATER BOX, COMMUNICATION BOX, CABLE TV BOX, ETC, DAMAGED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS SHALL BE REPLACED WITH IDENTICAL OR BETTER AT UTILITY OWNER SATISFACTION.
18. THE WORDS 'NEW', 'PROPOSED', 'INSTALL', 'PROVIDE', OR WORDS WITH SIMILAR MEANING, ON ANY PART OF THESE CONSTRUCTION DOCUMENTS, SHALL BE INTERPRETED, UNLESS OTHERWISE SPECIFICALLY STATED, TO MEAN 'FURNISHING AND INSTALL COMPLETE IN PLACE AND READY FOR SERVICE'.
19. THESE CONSTRUCTION DOCUMENTS ARE COMPLEMENTARY. WORK DEPICTED UNDER A PARTICULAR DISCIPLINE MAY TRIGGER WORK UNDER A DIFFERENT DISCIPLINE. SUCH WORK REQUIRED FOR THE INTENDED AND PROPER FUNCTION OF THE IMPROVEMENTS, SHALL BE CONSIDERED INCIDENTAL AND PART OF THE CONTRACTOR'S BID PRICE. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH ITEMS.
20. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES, AND UTILITIES WHICH MAY NOT BE SHOWN ON PLANS. ANY EXISTING STRUCTURE, PAVEMENT, TREES OR OTHER EXISTING IMPROVEMENT NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARILY DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED UNDER THIS CONTRACT, SHALL BE REPAIRED, PATCHED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
21. CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 811 LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.
22. EXISTING GRADES WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH CURRENT SITE CONDITIONS, AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
23. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
24. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL ITEMS LISTED IN PROJECT SPECIFICATION.
25. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PORTIONS OF WORK, EXPOSED OR OPEN AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES. WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DETERMINED, ANY TRENCH SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN TRAFFIC.
26. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
27. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
28. CAST IRON PRODUCTS: HEAVY DUTY CLASSIFICATION SUITABLE FOR HIGHWAY TRAFFIC LOADS, OR 16,000 LB. WHEEL LOADS.
29. STEEL GRATING AND COVERS: TRAFFIC CLASSIFICATION H-20 AASHTO H20: 16,000 LBS OVER 8" X 20" AREA.
30. ALL STRUCTURES MUST BE CAPABLE OF SUSTAINING HEAVY TRAFFIC LOADS.
31. ALL GRASS AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED AND MATCH EXISTING ADJACENT SOD.
32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC CONTROL AND INFORMATION SIGNING REMOVED DURING CONSTRUCTION PERIOD.
33. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.
34. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE INSPECTOR WILL SHUT THE JOB DOWN.
35. CONTRACTOR SHALL MAINTAIN TRAFFIC ACCORDING TO CORRESPONDING TYPICAL CONTROL DETAIL AS OUTLINED IN FLORIDA DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
36. CONTRACTOR SHALL NOTIFY LAW ENFORCEMENT AND FIRE PROTECTION SERVICES TWENTY-FOUR (24) HOURS IN ADVANCE OF THE DETOUR IN ACCORDANCE WITH SECTION 336.048 OF FLORIDA STATUTES.
37. COMPLETE AS-BUILT INFORMATION RELATIVE TO LOCATION AND DEPTH OF PIPES, MANHOLES, ETC. SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND PROVIDED TO THE CITY PRIOR TO FINAL ACCEPTANCE OF THE WORK.
38. ALL WORK TO BE IN COMPLIANCE WITH CITY OF DANIA BEACH DESIGN STANDARDS AND SPECIFICATIONS (LATEST VERSION), MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION), AND FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS AND SPECIFICATIONS (LATEST EDITION).
39. DURING CONSTRUCTION IF SOIL OR GROUNDWATER CONTAMINATION IS ENCOUNTERED OR A SPILL OF A HAZARDOUS MATERIAL OR OIL/GASOLINE OCCURS PLEASE STOP WORK IN THAT AREA AND IMMEDIATELY CONTACT ERMD AT 954-965-4380 OR 963-763-4128.
40. UPON DEVELOPMENT OF A SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP), CONTRACTORS/OPERATORS MUST COMPLETE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA FOR STORMWATER DISCHARGES FROM CONSTRUCTION SITES OVER ONE ACRE. THE EPA REQUIRES 14 DAY NOTICE PRIOR TO COMMENCEMENT OF ANY WORK ON THE PROJECT. THE NOI MUST BE SUBMITTED ONLINE AND INFORMATION ON THIS SUBMITTAL IS AVAILABLE AT http://water.epa.gov/polwaste/npdes/stormwater/EPAs-Electronic-Construction-General-Permit-Notice-of-Intent-eNOI-Home-Page.cfm. PLEASE COPY THE CITY OF DANIA BEACH ON YOUR SUBMITTAL SO THIS OFFICE IS AWARE THAT YOU HAVE APPLIED FOR THE PERMIT AND THAT CONSTRUCTION IS BEGINNING SOON.
41. THE CONTRACTOR SHALL COORDINATE SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH THE CITY OF DANIA BEACH.
42. NO STAGING OF EQUIPMENT/VEHICLES OR MATERIALS WILL BE ALLOWED WITHIN OR ADJACENT TO PRIVATE PROPERTY OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.
43. IF SUSPECTED CONTAMINATION OR HAZARDOUS MATERIAL IS FOUND ON THE PROJECT OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR SHALL CEASE OPERATIONS IN THAT AREA. IMMEDIATELY NOTIFY THE CITY ENGINEER, AND PROTECT THE IMMEDIATE AREA OF SUSPECT CONTAMINATED OR HAZARDOUS MATERIAL FROM FURTHER ACCESS. THE CITY ENGINEER, ALESSANDRA DELFICO, WILL ARRANGE FOR THE INVESTIGATION, IDENTIFICATION AND/OR REMOVAL/REMEDIATION OF THE MATERIAL IN QUESTION AS NEEDED.
44. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, WRITTEN PERMISSION FROM THE PROJECT ENGINEER. THE CONTRACTOR SHALL PROVIDE A COPY OF THE REQUEST TO THE CITY ENGINEER, WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE, AND PROVIDE A DESCRIPTION OF THE SPECIFIC MANNER IN WHICH THE MATERIAL WILL BE USED. THE PROJECT ENGINEER SHALL COORDINATE WITH THE CITY ENGINEER, PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR. BECAUSE STATE LAW DOES NOT TREAT PETROLEUM PRODUCTS THAT ARE PROPERLY CONTAINERIZED AS HAZARDOUS MATERIALS, SUCH PRODUCTS DO NOT REQUIRE AN MSDS SUBMITTAL. ALL BULK PETROLEUM PRODUCTS STORED ON SITE SHALL REQUIRE PROPER STORAGE WHICH INCLUDES SECONDARY CONTAINMENT.
45. WORK SHALL BE PERFORMED ENTIRELY WITHIN THE EXISTING RIGHT-OF-WAY.
46. ALL EXISTING SIGNALIZATION EQUIPMENT IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS BCTED IS NOTIFIED IN WRITING PRIOR TO THE START OF CONSTRUCTION. ANY SUBSEQUENT DAMAGE TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR.

DEMOLITION NOTES

1. DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH DEMOLITION OPERATIONS.
2. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
3. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR IN-USE FACILITIES WITHOUT PERMISSION FROM OWNER, THE CITY AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS AS REQUIRED BY GOVERNING REGULATIONS.
4. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA.
5. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, BARRIERS, RAILINGS, ETC. WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION.
6. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
7. ADJACENT IMPROVEMENTS SHALL BE CLEANED OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF DEMOLITION.
8. FOR SELECTIVE DEMOLITION, USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES, USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERING OR CHOPPING. TEMPORARILY COVER OPENINGS TO REMAIN.
9. DEMOLISH CONCRETE IN SMALL SECTIONS. CUT CONCRETE AT JUNCTURES WITH CONSTRUCTION TO REMAIN, USING POWER-DRIVEN MASONRY SAW OR HAND TOOLS; DO NOT USE POWER-DRIVEN IMPACT TOOLS.
10. INFORMATION SHOWN ON THE DRAWINGS AS TO THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE DATA AVAILABLE TO THE ENGINEER; HOWEVER, THIS INFORMATION IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION, CHARACTER, AND DEPTH OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES, BY EVERY MEANS POSSIBLE, TO DETERMINE SAID LOCATIONS AND THE LOCATIONS OF RECENT ADDITIONS TO THE SYSTEMS NOT SHOWN.
11. REMOVAL, DEMOLITION, HAULING, AND DISPOSAL SHALL COMPLY WITH REGULATIONS BY F.D.E.P., E.P.A., AND ANY OTHER AUTHORITY HAVING JURISDICTION.
12. ALL EXISTING UTILITY MH COVERS, ELECTRICAL BOXES, METER BOXES, METERS, DRAINAGE STRUCTURES, ETC. WITHIN PROPOSED AREAS OF IMPROVEMENTS SHALL BE ADJUSTED TO GRADE ELEVATION, UNLESS OTHERWISE NOTED.
13. ALL EXISTING STREET LIGHTING WILL REMAIN IN PLACE AND REMAIN IN SERVICE DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL USE CARE TO ENSURE EXISTING CONDUIT, PULLBOXES, AND CONTROL ARE NOT DAMAGED DURING DEMOLITION OPERATIONS.

EARTHWORK NOTES

1. THE CONTRACTOR'S BID FOR EARTHWORK SHALL INCLUDE THE EXCAVATION, REMOVAL AND DISPOSAL OF ALL MATERIALS, OF WHATEVER CHARACTER, WITHIN THE LIMITS OF CONSTRUCTION.
2. ALL TOPSOIL THAT IS SUITABLE FOR LANDSCAPING OR SODDING OPERATIONS MAY BE STOCKPILED NEARBY FOR SUCH USE IF APPROVED BY THE CITY.
3. WHERE MUCK, ROCK, CLAY, OR OTHER MATERIAL WITHIN THE LIMITS OF CONSTRUCTION IS UNSUITABLE IN ITS ORIGINAL POSITION THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL IN ITS ENTIRETY AND BACKFILL WITH SUITABLE MATERIAL WHICH SHALL BE COMPACTED IN PLACE TO CONFORM TO THE REQUIRED GRADES AND SECTIONS AS SHOWN ON THE PLANS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE UNSUITABLE MATERIAL PRESENT ON-SITE AND INCLUDE THE REMOVAL AND REPLACEMENT OF SAME IN HIS BID PRICE.
5. THE CONTRACTOR SHALL MAKE HIS OWN ESTIMATE ON THE VOLUME OF MATERIAL ACTUALLY REQUIRED TO OBTAIN THE CROSS SECTIONS OR GRADES AS SHOWN ON THE PLANS.
6. THE CONTRACTOR SHALL REMOVE ALL MUCK, YIELDING MATERIAL ROOTS, VEGETATION AND OTHER DEGRADABLE MATERIAL IN ITS ENTIRETY, WITHIN THE PAVEMENT UNITS AND BELOW ALL STRUCTURES AND UTILITIES TO FULL EXCAVATED TRENCH WIDTH. SAID MATERIAL SHALL BE REPLACED WITH CLEAN ORGANIC FREE MATERIAL WITH ROCKS SMALLER THAN ONE INCH IN DIAMETER COMPACTED TO NOT LESS THAN 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE. AASHTO T-180 METHOD "D" WITH MAXIMUM LIFTS OF TWELVE INCHES COMPACTED THICKNESS.
7. TRENCH BACKFILL AND COMPACTION SHALL FOLLOW THE CONTRACT SPECIFICATIONS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING APPROPRIATE SAFETY PRECAUTIONS DURING EXCAVATION AND TRENCHING OPERATIONS AS REQUIRED BY THE "TRENCH SAFETY ACT".
9. THIS WORK SHALL INCLUDE THE EXCAVATION OF WHATEVER SUBSTANCES THAT SHALL BE ENCOUNTERED TO THE DEPTHS AS SHOWN ON THE PLANS. EXCAVATED MATERIALS NOT REQUIRED FOR FILL OR BACKFILL SHALL BE REMOVED FROM THE WORK SITE AS DIRECTED BY THE ENGINEER AND SHALL BE CONSIDERED TO BE A PART OF THE BID PRICE OF THE UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED.
10. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN THE EXCAVATED AREA. IT SHALL BE REMOVED BY PUMPING OR OTHER MEANS AS APPROVED BY THE ENGINEER. THE REMOVAL OF WATER SHALL BE CONSIDERED TO BE A PART OF THE BID PRICE OF THE UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED. CONTRACTOR TO OBTAIN DEWATERING PERMITS FROM APPLICABLE JURISDICTIONAL AGENCIES (SFWMD, ETC.) IF REQUIRED.
11. IF THE BOTTOM OF THE TRENCH IS ROCK, THE EXCAVATION SHALL BE CARRIED EIGHT INCHES BELOW THE INVERT OF THE PIPE AND BACKFILLED WITH THOROUGHLY COMPACTED SAND, GRAVEL, OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER.
12. ROCK EXCAVATION SHALL INCLUDE ANY ROCK ENCOUNTERED WHICH CANNOT BE REMOVED WITH A 3/4 YARD BACKHOE UNDER NORMAL OPERATING CONDITIONS. ROCK EXCAVATION SHALL BE INCIDENTAL TO CONSTRUCTION OF ALL PIPING SYSTEMS AND NO SEPARATE PAYMENT WILL BE MADE.
13. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE OR SHORE THE SIDES OF THE TRENCH, SUCH BRACING OR SHORING SHALL BE CONSIDERED TO BE PART OF THE BID PRICE OF UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED.
14. THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING, BRACING, AS MAY BE REQUIRED TO SUPPORT THE SIDE OF THE EXCAVATION, AND TO PREVENT ANY MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES.
15. IF FIELD CONDITIONS, TYPE OF SHEETING OR CONSTRUCTION METHODS MAKE REMOVAL OF SHEETING IMPRACTICABLE, AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR MAY LEAVE ALL SHEETING IN PLACE. THE ENGINEER MAY REQUIRE SHEETING TO BE CUT OFF AT ANY SPECIFIED ELEVATION BUT IN NO CASE WILL ANY SHEETING BE LEFT CLOSER THAN TWO (2) FEET BELOW THE NATURAL SURFACE, NOR CUT OFF BELOW THE ELEVATION OF THE TOP OF THE PIPE.
16. AFTER PIPES, STRUCTURES, AND OTHER APPURTENANCES HAVE BEEN INSTALLED, THE TRENCH OR OPENING SHALL BE BACKFILLED WITH MATERIAL IN CONFORMANCE WITH THE SPECIFICATION.
17. IN AREAS WHERE PAVEMENTS ARE TO BE CONSTRUCTED OVER THE PIPE. THE REMAINDER OF THE TRENCH SHALL BE PLACED IN SIX INCH LAYERS (COMPACTED THICKNESS) AND SHALL BE COMPACTED TO 98 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING DAMAGE FROM SETTLEMENT IN THE BACKFILLED AREAS WHETHER UNDER THE PAVEMENT OR OTHERWISE.
18. IN AREAS WHERE NO PAVEMENT IS TO BE CONSTRUCTED, THE BACKFILL ABOVE THE TWELVE INCH LINE ABOVE THE PIPE SHALL BE COMPACTED TO A FIRMNESS APPROXIMATELY EQUAL TO THAT OF THE SOIL ADJACENT TO THE PIPE TRENCH.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SAFETY BARRIER AND PROTECTIVE STEEL PLATE COVERINGS FOR OPEN TRENCHES.
20. SOIL BORING INFORMATION WILL BE PROVIDED TO THE CONTRACTOR. THE SOIL BORING DATA PROVIDED IS FOR THE CONTRACTOR'S INFORMATION. THE ENGINEER DOES NOT MAKE ANY REPRESENTATION REGARDING EXISTING SUBSOIL CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ADDITIONAL SOIL BORINGS TO VERIFY THE LIMITS OF UNSUITABLE MATERIAL ON-SITE.
21. SEE SOILS EVALUATION OF THE PROJECT AREA ON GEOTECHNICAL INVESTIGATION REPORT PERFORMED BY NUTTING ENGINEERS OF FLORIDA, INC., MARCH 2019. ORDER NO. 786.22 (PHONE 954-941-8700)

STORMWATER NOTES

1. LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED.
2. ALL CEMENT USED ON DRAINAGE STRUCTURES SHALL BE A TYPE II PORTLAND CEMENT, CONFORMING TO ASTM SPECIFICATION C-150 AASHTO DESIGNATION M-85.
3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, STRUCTURES SHALL BE PRECAST CONCRETE SECTIONS.
4. MORTAR FOR USE IN CONSTRUCTION AND PLASTERING STRUCTURES SHALL CONFORM TO ASTM C-270 SPECIFICATIONS FOR MORTAR FOR UNIT MASONRY. A PORTLAND CEMENT HYDRATED LIME MIXTURE OR A MASONRY CEMENT MAY BE USED PROVIDED THAT THE SAME MATERIALS ARE USED THROUGHOUT THE PROJECT.
5. MORTAR MATERIALS SHALL BE PROPORTIONED BY VOLUME AND SHALL CONSIST OF ONE PART TYPE II PORTLAND CEMENT TO TWO PARTS AGGREGATE (SAND). PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, "SPECIFICATIONS FOR PORTLAND CEMENT", AGGREGATE SHALL CONFORM TO ASTM C-144 "SPECIFICATIONS FOR AGGREGATE FOR MASONRY UNITS",
6. PRECAST MANHOLE SECTIONS SHALL CONFORM TO ASTM C-478, SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS AS MODIFIED THERETO. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. MINIMUM WALL THICKNESS SHALL BE 8 INCHES AND MINIMUM INSIDE DIAMETER SHALL BE 48 INCHES. THE INSIDE OF ALL STRUCTURES SHALL BEAR THE APPROVAL OF A CERTIFIED TESTING LABORATORY WHEN DELIVERED TO THE JOB SITE.
7. ALL PIPE SHALL BE CAREFULLY LAID, TRUE TO THE LINES AND GRADES GIVEN. ANY PIPE THAT IS NOT IN TRUE ALIGNMENT OR WHICH SHOWS ANY SETTLEMENT AFTER INSTALLATION SHALL BE RE-INSTALLED AT NO ADDITIONAL COST TO THE CITY.
8. THE BASE AND WALLS THAT COMPOSE THE BOTTOM SECTION OF THE PRECAST STRUCTURES SHALL BE OF MONOLITHIC CONSTRUCTION, 8 INCHES THICK AND THE EDGE OF THE BASE SLAB SHALL PROJECT A MINIMUM 4 INCHES BEYOND THE OUTSIDE DIAMETER OF THE WALL.
9. HOLES FOR PIPING SHALL BE MIN. 6 INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE RESPECTIVE PIPES. AFTER THE PIPE IS SET, THE VOID SPACE BETWEEN THE PIPE AND THE HOLE PERIMETER SHALL BE COMPLETELY FILLED WITH NON-SHRINKING, QUICK-SETTING, WATERPROOF CEMENT MORTAR AND STRUCK SMOOTH.
10. THE MINIMUM HEIGHT OF PRECAST BASE SECTION SHALL BE 36 INCHES FROM THE BOTTOM OF THE BASE SLAB; HOWEVER, NO HOLES FOR PIPING SHALL BE CAST LESS THAN 8 INCHES FROM THE TOP OF THE BASE SECTION OR LESS THAN 2 INCHES ABOVE THE TOP OF THE BASE SLAB.
11. THE CONTRACTOR SHALL FURNISH THE ENGINEER SHOP DRAWINGS OF THE PRECAST STRUCTURES (AND CERTIFICATION FROM A TESTING LABORATORY) FOR APPROVAL. SHOP DRAWINGS SHOULD ILLUSTRATE ALL DIMENSIONS, REINFORCEMENT, AND SPECIFICATIONS FOR THE COMPLETE STRUCTURE.
12. ALL CASTING SHALL BE TRUE TO PATTERN AND DIMENSIONS, FREE FROM FAULTS OR DEFECTS AND WELL CLEANED.
13. BEARING SURFACES BETWEEN CAST FRAMES, COVERS AND GRATES SHALL BE MACHINED AND FITTED TOGETHER TO ASSURE A TRUE AND EVEN FIT. WITHIN AREAS OF VEHICULAR TRAFFIC THE FRAMES, COVERS AND GRATING SHALL BE MACHINE-GROUND SO THAT IRREGULARITY OF CONTACT WILL BE REDUCED TO A MINIMUM AND WILL BE RATTLE PROOF.
14. CONTRACTOR IS TO PREVENT INTRODUCTION OF DEBRIS OR DIRT INTO EXISTING STORM DRAINAGE AND/OR SANITARY SEWER SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES. ALL LINES AND STRUCTURES SHALL BE CLEANED PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
15. LOCATION OF DRAINAGE STRUCTURES GOVERN. ADJUST PIPE LENGTHS AS REQUIRED.
16. WALL REINFORCEMENT AND THICKNESS FOR PRECAST STRUCTURES SHALL BE IN ACCORDANCE WITH ASTM C-478.
17. MORTAR USED TO SEAL THE PIPE INTO THE WALLS OF THE PRECAST STRUCTURES WILL BE OF SUCH A MIX THAT SHRINKAGE WILL NOT CAUSE LEAKAGE IN OR OUT OF THE STRUCTURES. THE MAXIMUM OPENING THROUGH WALLS FOR PIPE SHALL BE THE MAXIMUM REQUIRED OUTSIDE DIAMETER PLUS 6".
18. ALL STRUCTURES SHALL BE SET PLUMB TO LINE AND GRADE AND SHALL REST ON A FIRM CAREFULLY GRADED SUB GRADE WHICH SHALL PROVIDE UNIFORM BEARING UNDER BASE.
19. ALL MUCK OR OTHER UNSTABLE MATERIAL ENCOUNTERED IN TRENCH BOTTOM SHALL BE REMOVED AND BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180, METHOD 'D'. GRANULAR BACKFILL TO BE TYPE D (COURSE ROCK BACKFILL): CRUSHED ROCK OR GRAVEL WITH 100% PASSING A 1-INCH SIEVE AND NOT MORE THAN 10% PASSING A NUMBER 4 SIEVE; OR BETTER.
20. PIPE BEDDING SHALL BE SAND, GRAVELLY SAND, OR 1-INCH MINUS CRUSHED LIMESTONE, NOT MORE THAN 10% OF WHICH PASSES A NO. 200 SIEVE.
21. CONTRACTOR TO WRAP ALL PIPE JOINTS AND PIPE CONNECTIONS TO STRUCTURES WITH APPROVED FILTER FABRIC.
22. SHOP DRAWINGS FOR ALL STRUCTURES AND MATERIALS TO BE USED ON THE PROJECT SHALL BE SUBMITTED TO THE RESPECTIVE ENGINEERING AND UTILITY DEPARTMENTS FOR APPROVAL PRIOR TO CONSTRUCTION OR INSTALLATION.
23. PROTECT COMPLETED DRAINAGE STRUCTURES FROM CONTAMINATION BY SILT AND CONSTRUCTION DEBRIS. PLACE FILTER FABRIC BETWEEN THE FRAME AND INLET GRATE UNTIL SITE CONSTRUCTION OPERATIONS ARE FINISHED.
24. CONTRACTOR SHALL INSPECT AND CLEAN ALL EXISTING STRUCTURES AND PIPES WITHIN THE PROJECT LIMITS. IF EXISTING STRUCTURES AND PIPES ARE DAMAGED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONNECTION WITH THE NEW PIPE OR STRUCTURE. CONTRACTOR TO ENSURE ALL STORM WATER PIPING AND STRUCTURES ARE CLEANED PRIOR TO PROJECT CLOSEOUT.
25. ADJUST ALL EXISTING STRUCTURES TO NEW GRADE ELEVATIONS.
26. ALL DRAINAGE CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF DANIA BEACH.
27. CATCH BASINS, SEEPAGE DRAINS, PAVEMENT RESTORATION AND PAVEMENT AROUND CATCH BASINS TO BE ACCORDING TO THE DETAILS AND APPLICABLE REQUIREMENTS OF THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT.

AS-BUILT DRAWINGS

1. CONTRACTOR TO SUBMIT AS-BUILT DRAWINGS TO THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL .
2. FINAL AS-BUILT DRAWINGS TO BE SUBMITTED TO THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT IN THE FOLLOWING FORMAT:
   - SIX (6) SIGNED AND SEALED HARD COPIES
   - ONE (1) ELECTRONIC FILE (PDF)

PAVING AND GRADING NOTES

1. UNDERGROUND UTILITIES SHALL BE COMPLETED OR SLEEVING PROVIDED BEFORE ANY PAVEMENT CONSTRUCTION BEGINS.
2. ALL PAVEMENT SUBGRADE MATERIAL SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE, AASHTO T-180, METHOD "D" AND SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. SPECIFICATIONS, SECTION 120. THE TEST RESULTS SHALL BE ACCEPTED BY THE CITY PRIOR TO PLACEMENT OF BASE MATERIAL.
3. IF THE PLANS INDICATE A LIMEROCK BASE, THE CONSTRUCTION AND THE MATERIAL FOR THE SHELLROCK BASE SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. SPECIFICATIONS, SECTION 230. THE SHELLROCK BASE SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE. AASHTO T-180, METHOD "D", THE ENGINEER SHALL SPECIFY THE LOCATION AND NUMBER OF DENSITY TESTS REQUIRED. CITY PUBLIC WORKS DEPARTMENT STANDARDS REQUIRE DENSITY TESTS AT 25' O.C. THE TEST RESULTS SHALL BE ACCEPTED BY THE CITY AND ENGINEER PRIOR TO APPLICATION OF THE PRIME AND TACK COATS.
4. THE PRIME AND TACK COAT CONSTRUCTION AND MATERIALS FOR THE PRIME AND TACK COATS SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS, SECTION 300. THE PRIME AND TACK COATS SHALL BE APPLIED PRIOR TO CONSTRUCTION OF THE ASPHALT SURFACE COURSE AND SHALL BE SANDED AND ROLLED IN ACCORDANCE WITH SECTION 300. APPLICATION RATES SHALL BE 0.15 GAL/SY FOR LIMEROCK BASE AND 0.25 GAL/SY FOR SHELLROCK BASE.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE AS SHOWN ON THE PLANS. THE MATERIALS FOR THE ASPHALT CONCRETE SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS, SECTION 331.
6. THE MATERIAL TO BE USED AS A STABILIZER SHALL BE SOIL OF HIGH BEARING VALUE SUCH AS, SAND-CLAY, GROUND LIMESTONE, CRUSHED LIMEROCK, OYSTER SHELL, COQUINA SHELL, ROCK SCREENINGS, OR ANY OTHER MATERIAL WHICH IS SUITABLE FOR STABILIZATION. MUCK SHALL NOT BE USED AS STABILIZING MATERIAL.
7. ALL GRADES SHOWN REFER TO FINISHED ASPHALT PAVEMENT UNLESS OTHERWISE NOTED.
8. MATERIAL HAVING A PLASTICITY INDEX AT MORE THAN 10 OR A LIQUID LIMIT GREATER THAN 40 SHALL NOT BE USED. ALL MATERIAL USED FOR STABILIZING THE ROADBED SHALL PASS A 3-1/2 INCH RING.
9. WHERE THE BEARING VALUE OF THE EXISTING SUBGRADE IS ADEQUATE WITHOUT ADDITION OF STABILIZING MATERIAL,
10. THE SUBGRADE SHALL BE SCARIFIED AND DICED, HARROWED, BLADED, OR TILLED FOR REMOVAL OF BOULDERS, ROOTS, ETC. TO ASSURE UNIFORMITY AND THOROUGH MIXING OF MATERIAL TO THE FULL WIDTH AND DEPTH OF REQUIRED STABILIZATION. THE COMPACTED SUBGRADE SHALL CONFORM TO THE LINES, GRADES AND CROSS-SECTION SHOWN ON THE PLANS.
10. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT AT THE LIMITS OF REMOVAL OF EXISTING PAVEMENT AND WHEN NEW PAVEMENT CONSTRUCTION MEETS EXISTING PAVEMENT. MEET AND MATCH SHALL ALSO MEAN SAW CUT AND MATCH.
11. THE SUBGRADE TO BE STABILIZED MAY BE PROCESSED IN ONE COURSE, UNLESS THE EQUIPMENT AND METHODS BEING USED DO NOT PROVIDE THE REQUIRED UNIFORMITY, PARTICLE SIZE LIMITATION, COMPACTION AND OTHER DESIGNED RESULTS IN WHICH CASE, THE CITY WILL DIRECT THAT THE PROCESSING BE DONE IN MORE THAN ONE COURSE.
12. PRIOR TO THE BEGINNING OF STABILIZING OPERATIONS, THE AREA TO BE STABILIZED SHALL HAVE BEEN CONSTRUCTED TO AN ELEVATION SUCH THAT UPON COMPLETION OF STABILIZING OPERATIONS, THE COMPLETED STABILIZED SUBGRADE SHALL CONFORM TO THE LINES, GRADES AND CROSS-SECTION SHOWN IN THE PLANS, PRIOR TO THE SPREADING OF ANY ADDITIVE STABILIZING MATERIAL THE SURFACE OF THE ROADBED SHALL BE BROUGHT TO A PLACE APPROXIMATELY PARALLEL TO THE PLANE OF THE PROPOSED FINISHED SURFACE.
13. THE STABILIZING MATERIAL SHALL BE APPLIED IN SUCH QUANTITY AS IS NECESSARY TO PRODUCE THE REQUIRED BEARING VALUE. IT SHALL BE INCORPORATED WITH THE SUBGRADE BY FLOWING, DICING, HARROWING, BLADING OR MIXING WITH ROTARY TILLERS UNTIL THE MIXED MATERIALS ARE OF A UNIFORM BEARING VALUE FOR THE FULL WIDTH AND DEPTH OF THE COURSE BEFORE COMPACTION, REGARDLESS OF THE CHARACTER OR BEARING VALUE. ALL MATERIALS IN THE STABILIZING COURSE THAT WILL NOT PASS A 3-1/2" RING SHALL BE REMOVED OR BROKEN DOWN TO A SIZE NOT LARGER THAN 3-1/2 INCHES
14. COMPACTION SHALL BE ACCOMPLISHED BY ROLLING WITH ANY TYPE OF EQUIPMENT WHICH WILL PRODUCE THE REQUIRED DENSITY. COMPACTION SHALL CONTINUE UNTIL THE ENTIRE DEPTH TO BE STABILIZED HAS A DENSITY OF NOT LESS THAN 98 PERCENT OF THE MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180, FIELD DENSITY TESTS SHALL BE MADE AT INTERVALS NOT GREATER THAN 50 FEET IN EACH COURSE OR LAYER.
15. THE LIMEROCK SHALL BE TRANSPORTED TO THE POINT WHERE IT IS TO BE USED OVER BASE PREVIOUSLY PLACED, IF PRACTICABLE, AND DUMPED ON THE END OF THE PROCEEDING SPREAD, HAULING OVER THE SUBGRADE AND DUMPING ON THE SUB GRADE WILL BE PERMITTED ONLY WHEN IN THE CITYS OPINION THESE OPERATIONS WILL NOT BE DETRIMENTAL TO THE BASE.
16. THE LIMEROCK SHALL BE SPREAD UNIFORMLY, WITH EQUIPMENT ACCEPTABLE TO THE ENGINEER, ALL SEGREGATED OR OTHERWISE UNACCEPTABLE AREAS SHALL BE REMOVED AND REPLACED WITH PROPERLY GRADED ROCK, AFTER SPREADING IS COMPLETED, THE ENTIRE SURFACE SHALL BE SCARIFIED AND THEN SHAPED SO AS TO PRODUCE THE REQUIRED GRADE, THICKNESS AND CROSS-SECTION AFTER COMPACTION. LIFTS SHALL HAVE A MAXIMUM COMPACTED THICKNESS OF SIX INCHES.
17. COMPACTION SHALL BE ACCOMPLISHED AT OPTIMUM MOISTURE. WHEN THE MATERIAL DOES NOT HAVE THE PROPER MOISTURE CONTENT TO INSURE THE REQUIRED DENSITY, WETTING OR DRYING WILL BE REQUIRED. ADDED WATER SHALL BE UNIFORMLY MIXED TO THE FULL DEPTH OF THE COURSE WHICH IS BEING COMPACTED.
18. BEFORE ANY BITUMINOUS MATERIAL IS APPLIED, ALL LOOSE MATERIAL, DUST, DIRT, CAKED SLAY AND FOREIGN MATERIAL WHICH MIGHT PREVENT PROPER BOND WITH EXISTING SURFACE SHALL BE REMOVED FOR THE FULL WIDTH OF THE APPLICATION, PARTICULAR CARE SHALL BE TAKEN TO CLEAN THE OUTER EDGE OF THE STRIP TO BE TREATED IN ORDER TO ENSURE THAT THE PRIMER WILL ADHERE, WHERE THE PRIMER IS APPLIED ADJACENT TO CURB & GUTTER OR VALLEY GUTTER, SUCH CONCRETE SURFACES ARE TO BE PROTECTED AND KEPT FREE OF BITUMINOUS MATERIAL.
19. NO BITUMINOUS MATERIAL SHALL BE APPLIED WHEN THE TEMPERATURE OF THE AIR IS LESS THAN 40 DEGREES F IN THE SHADE AND FALLING, OR WHEN IN THE OPINION OF THE CITY, THE WEATHER CONDITIONS OR THE CONDITION OF THE EXISTING SURFACE IS UNSUITABLE.
20. THE SURFACE TO BE PRIMED SHALL BE CLEAN AND DRY FOR LIMEROCK BASES. THE GLAZED FINISH SHALL BE REMOVED BEFORE THE APPLICATION OF PRIME COAT.
21. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH EXISTING PAVEMENT.

PROJECT:

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

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ISSUE	DATE	SUBMISSION / REVISION
1	07/10/2023	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	DC
CHECKED	JM
SCALE	AS SHOWN

SHEET TITLE

GENERAL NOTES

SHEET 01 OF 00

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Broward County and State ERP
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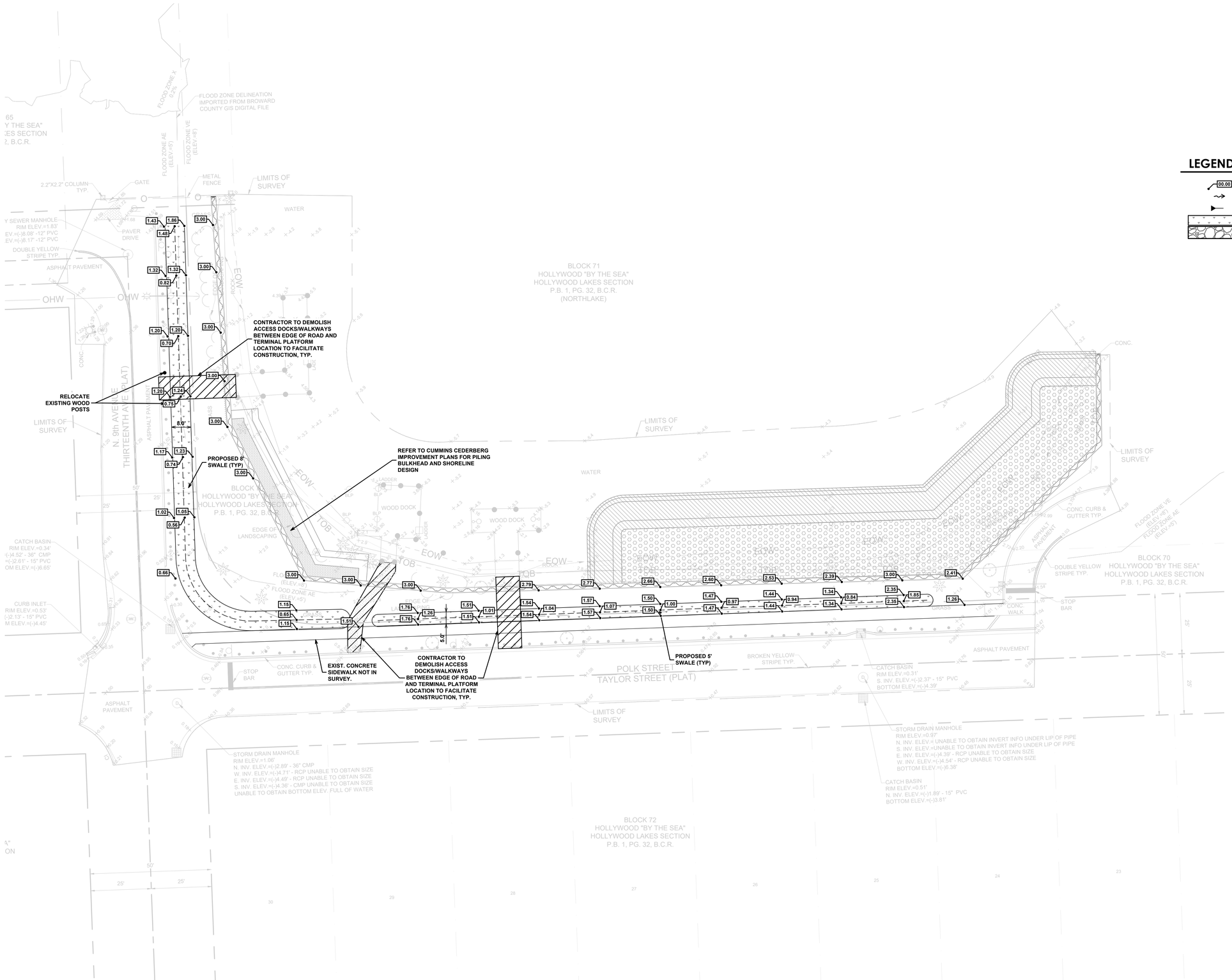
05/21/2025



GRAPHIC SCALE

0 10 20 40

1 INCH = 20 FEET (22"x34")
1 INCH = 40 FEET (11"x17")

LEGEND

- 00.00 — PROPOSED ELEVATION
- PROPOSED SURFACE FLOW ARROW
- PROPOSED SIDE SLOPE
- PROPOSED GRASS
- PROPOSED STORM DRAIN PIPE WITH EXFILTRATION TRENCH

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DRAWN	DC
CHECKED	JM
SCALE	########

SHEET TITLE
SITE 9 PAVING, GRADING & DRAINAGE PLAN

SHEET 02 OF 00

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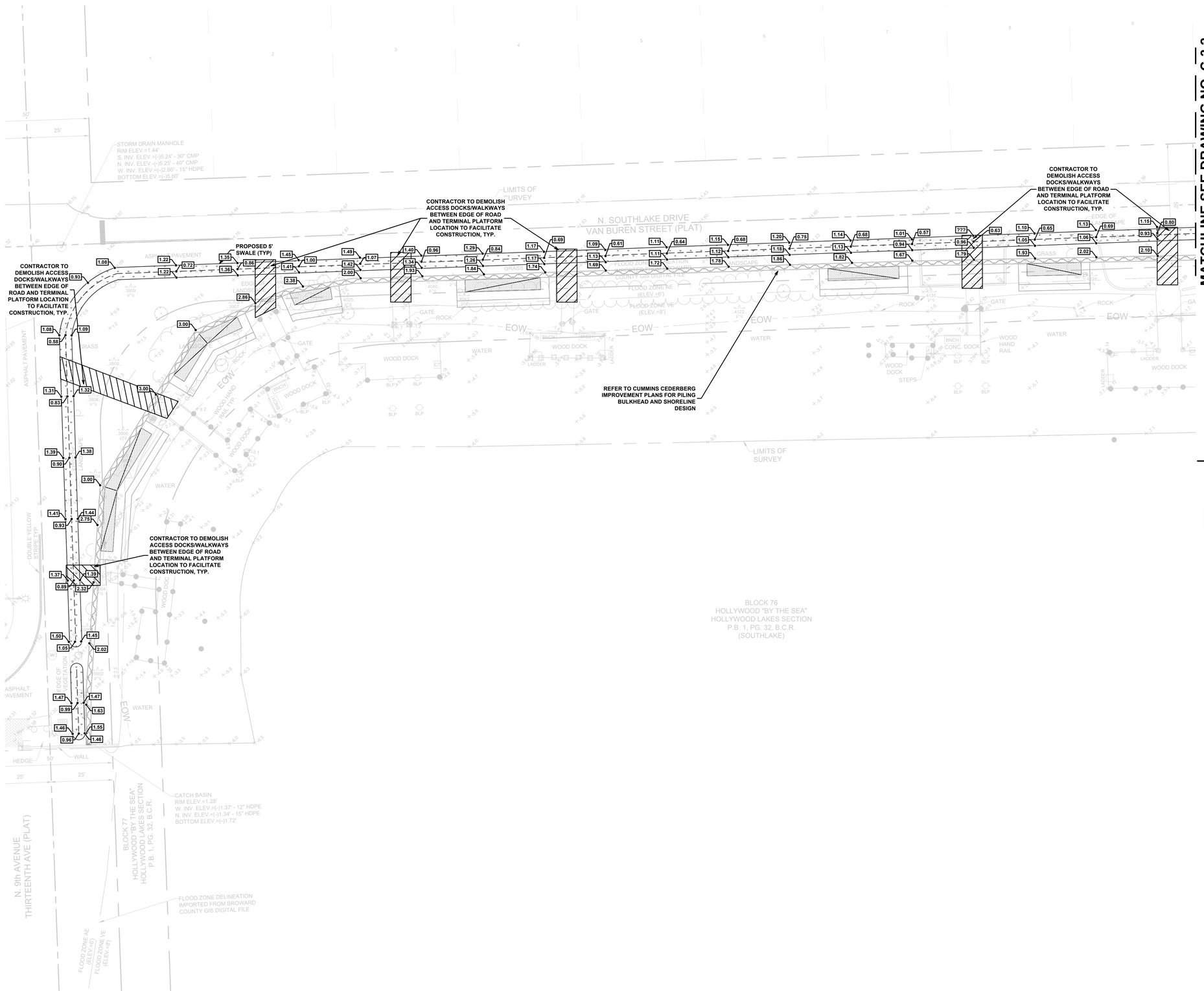
V:\Projects\2023\23-0457.00010 - Tidal Flooding Mitigation & Shoreline\Design\Site 9_10_17_19\CAD\Sheets\23-0457.00010 Paving Grading & Drainage Plan.dwg



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301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC.
CIVIL ENGINEER
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TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

DAVID EDGARDO CASTRO FELIU, PE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
LICENSE NO. 85558

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SCALE	########

SHEET TITLE
SITE 10 PAVING, GRADING & DRAINAGE PLAN

SHEET 03 OF 00

C-3.1

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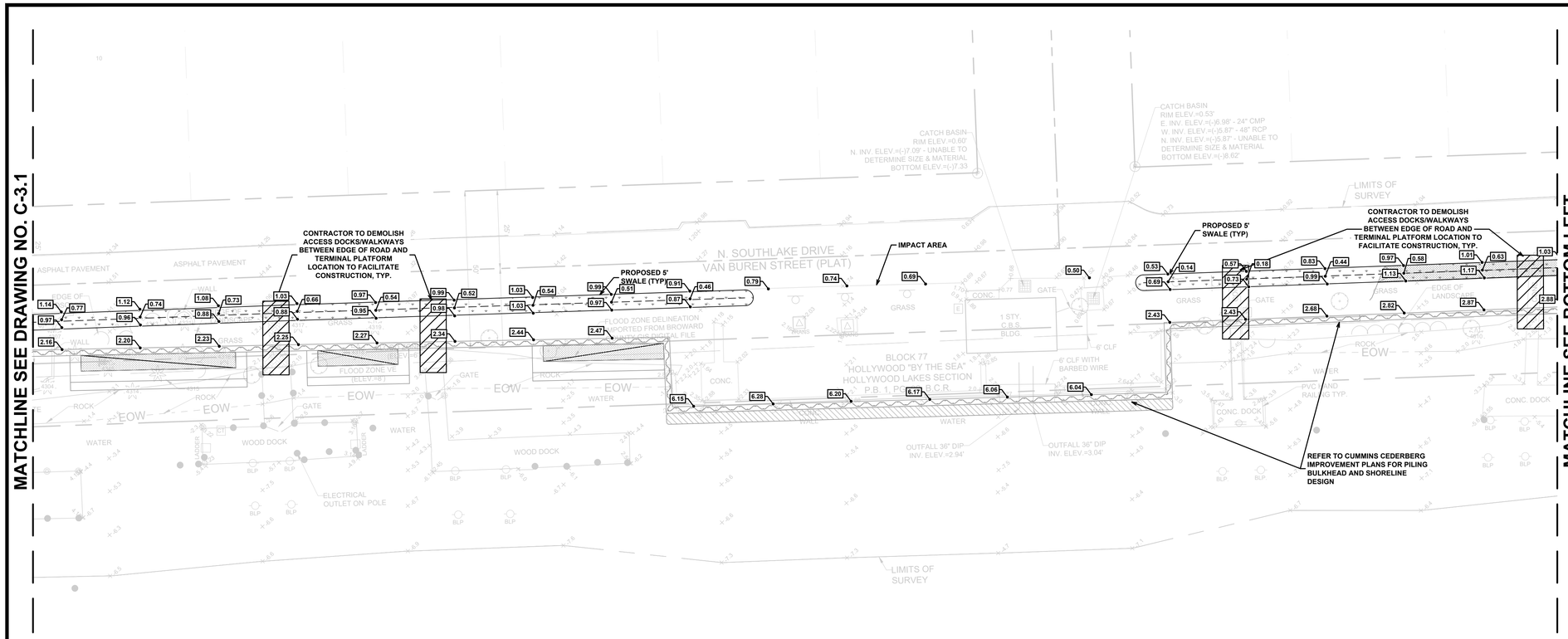

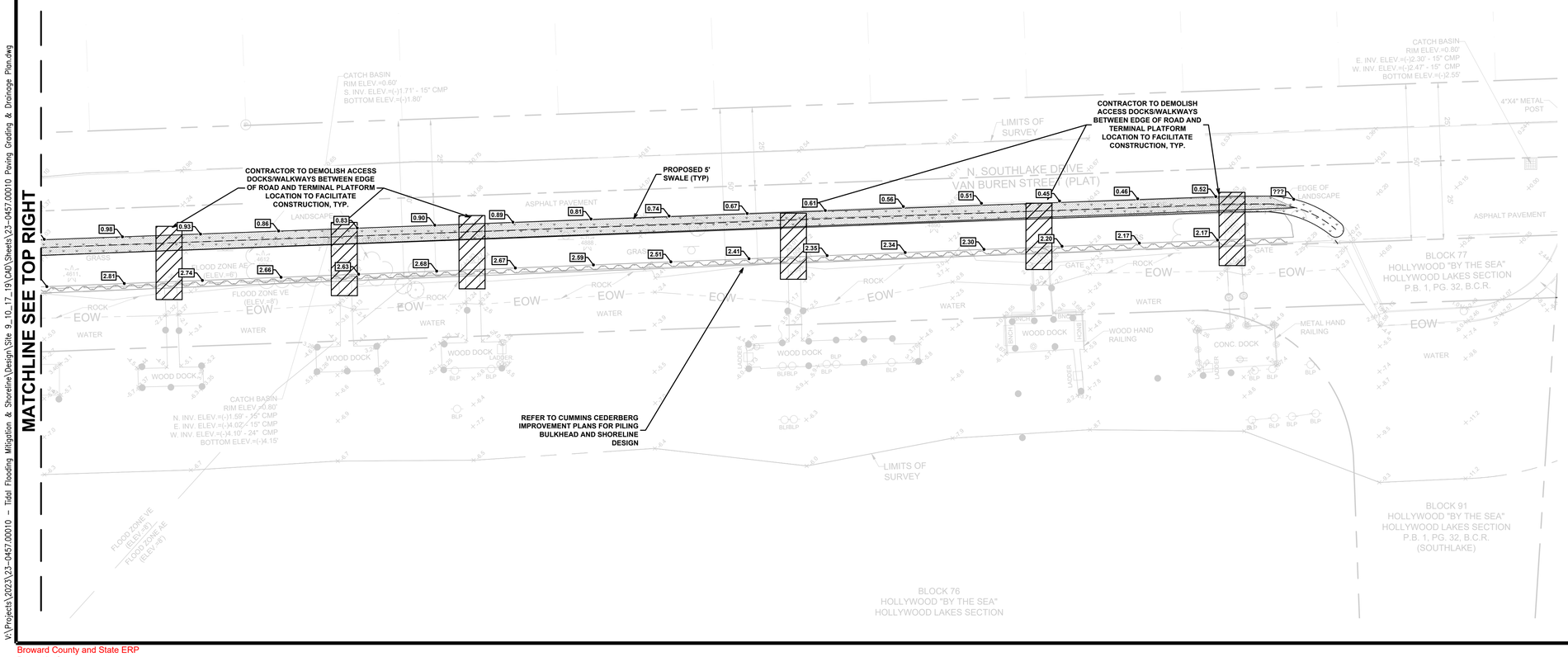

GRAPHIC SCALE

0 10 20 40

1 INCH = 20 FEET (22"x34")
1 INCH = 40 FEET (11"x17")

LEGEND

- 00.00 — PROPOSED ELEVATION
- PROPOSED SURFACE FLOW ARROW
- PROPOSED SIDE SLOPE
- PROPOSED GRASS
- PROPOSED STORM DRAIN PIPE WITH EXFILTRATION TRENCH

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021
TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

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SHEET TITLE
SITE 10 PAVING, GRADING & DRAINAGE PLAN

SHEET 04 OF 00

C-3.2

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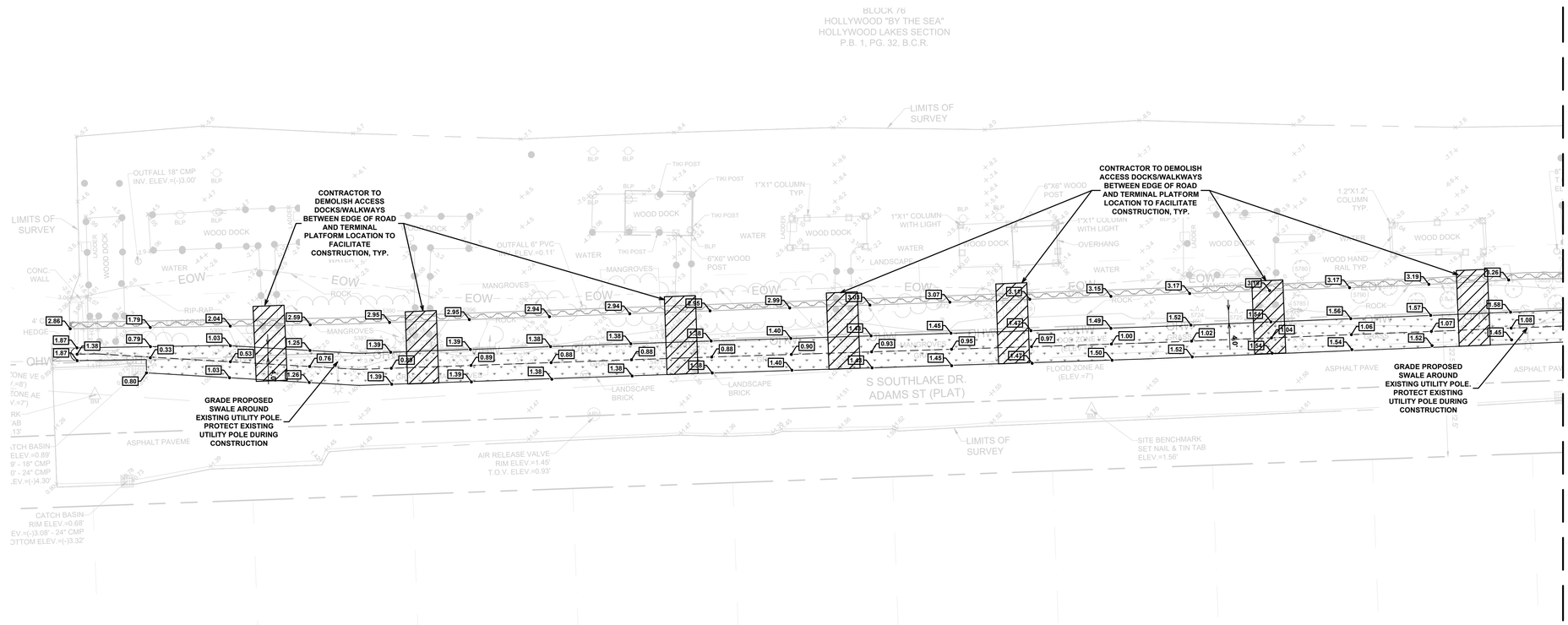

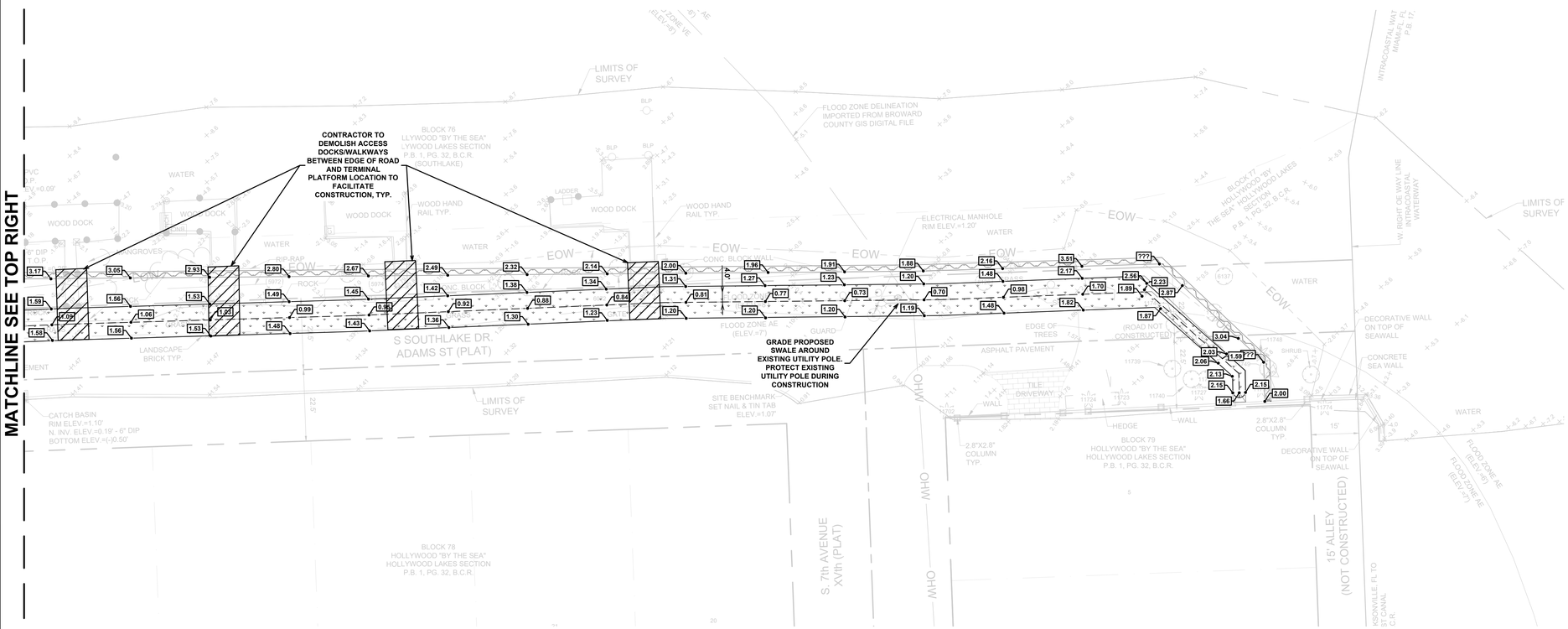

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SHEET TITLE
SITE 17 PAVING, GRADING & DRAINAGE PLAN

SHEET 05 OF 00

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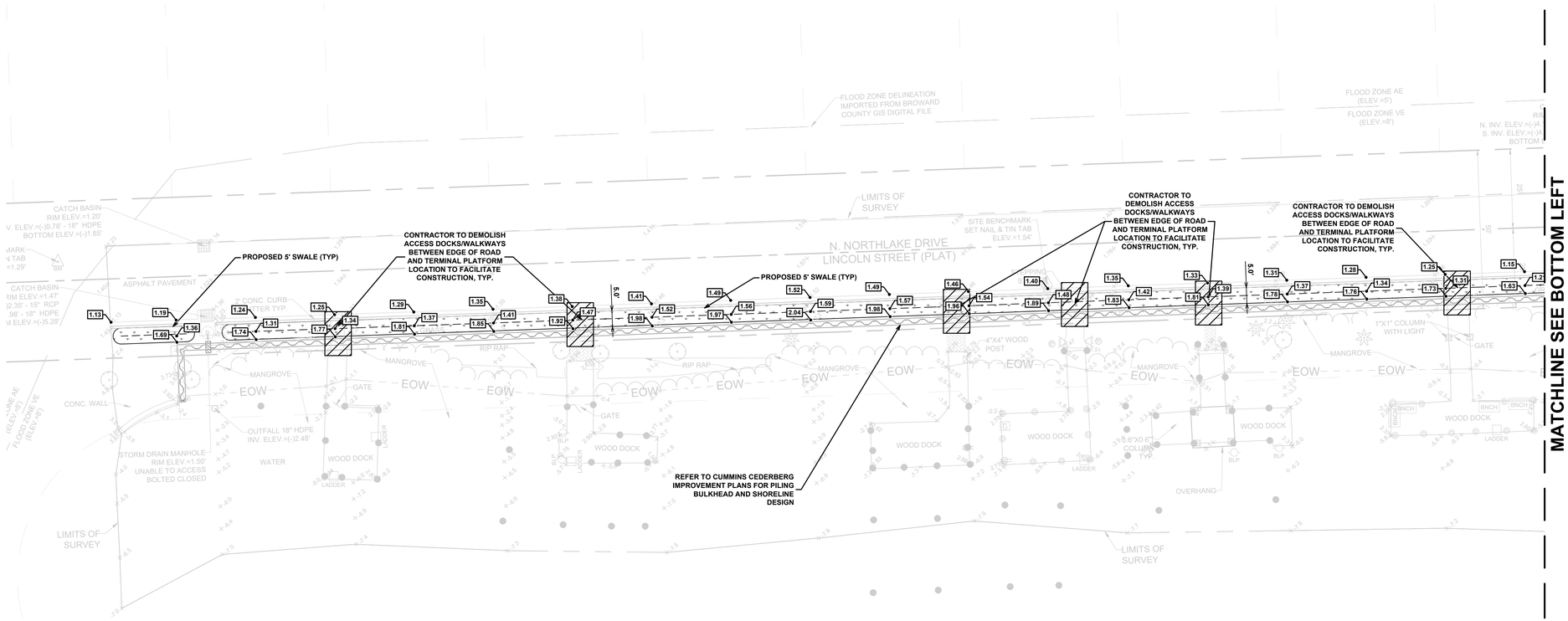

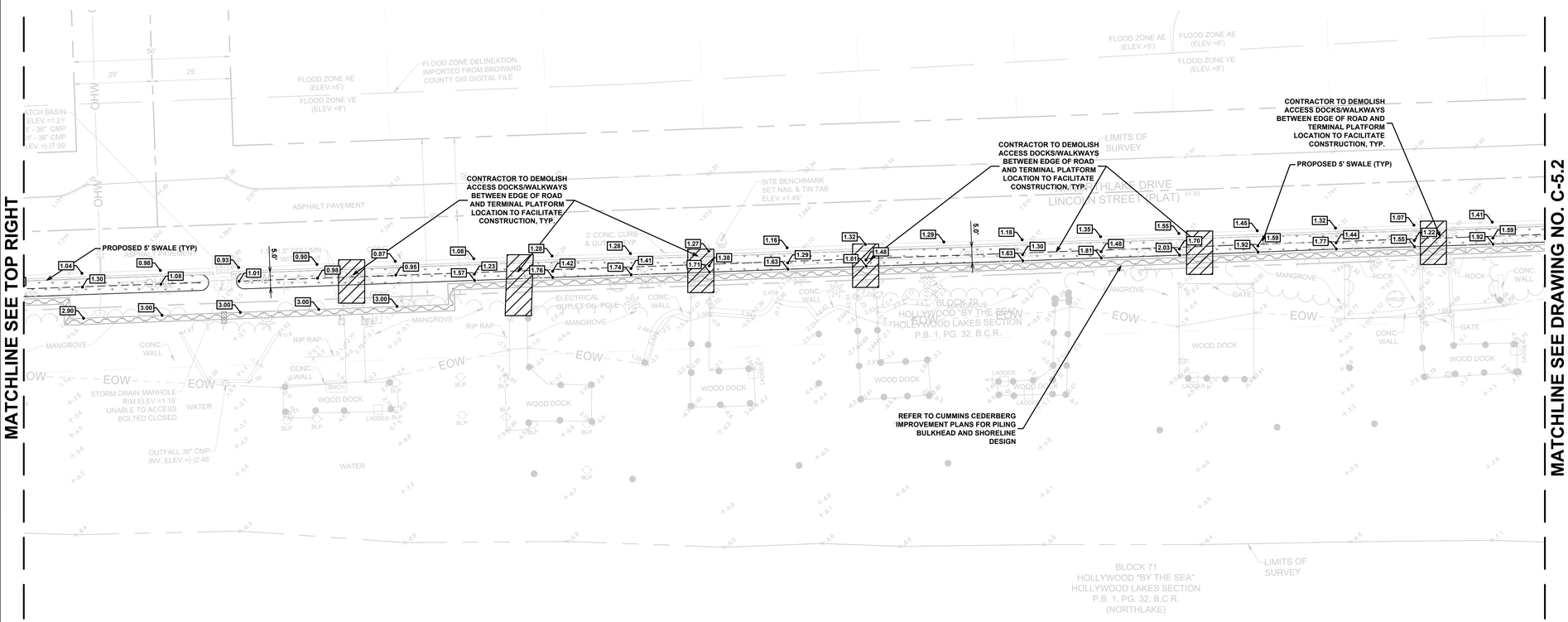

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PROJECT NO. DCM-001187

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SHEET TITLE
SITE 19 PAVING, GRADING & DRAINAGE PLAN

SHEET 06 OF 00

C-5.1

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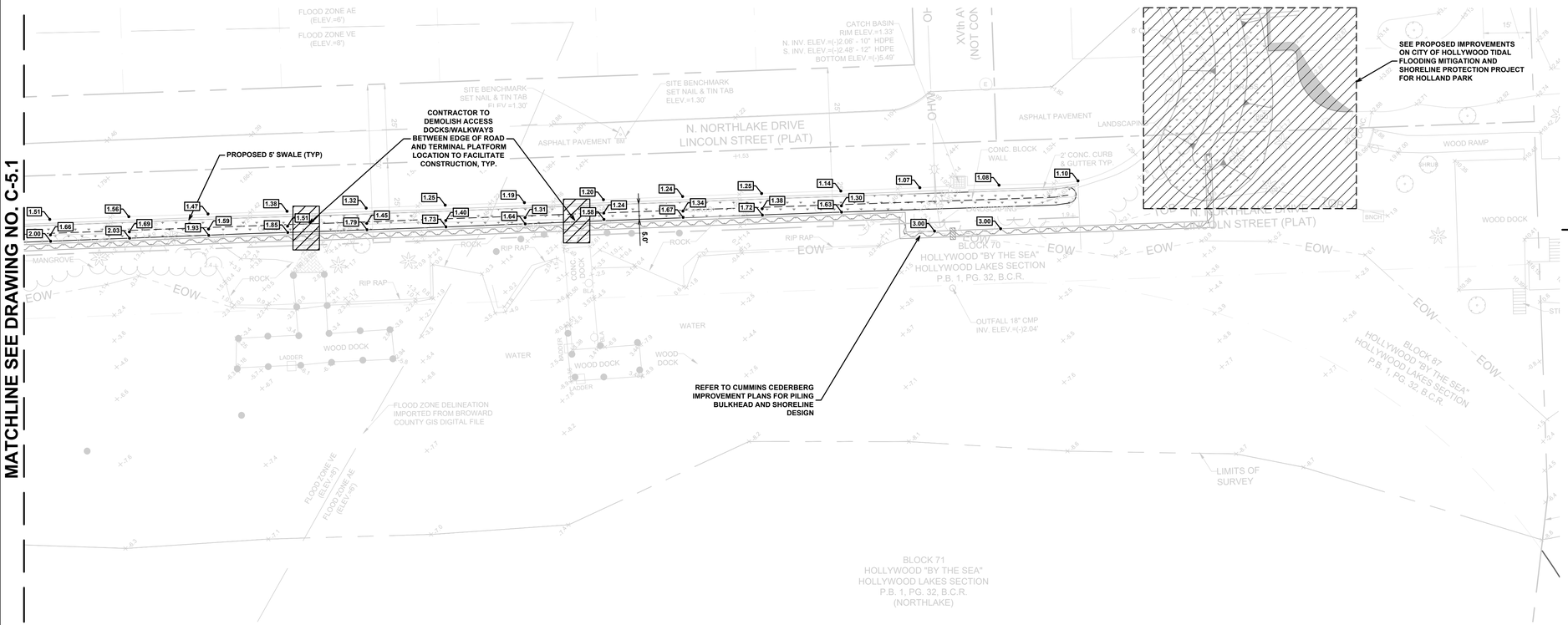
MATCHLINE SEE DRAWING NO. C-5.1



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PROJECT NO. DCM-001187

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HOLLYWOOD FL. 33020

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SHEET TITLE
SITE 19 PAVING, GRADING & DRAINAGE PLAN

SHEET 07 OF 00

C-5.2

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GENERAL NOTES:

1. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF HOLLYWOOD DEPARTMENT OF DEVELOPMENT SERVICES, ENGINEERING, TRANSPORTATION & MOBILITY DIVISION, AND ALL OTHER LOCAL, STATE AND NATIONAL CODES, WHERE APPLICABLE.

3. LOCATIONS, ELEVATIONS, SIZES, MATERIALS, ALIGNMENTS, AND DIMENSIONS OF EXISTING FACILITIES, UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS; AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. ALSO, THERE MAY HAVE BEEN OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS AND/OR THE ORIGINAL SITE SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY FACILITIES SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE RESPECTIVE UTILITY OWNER.

4. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION AND ENVIRONMENTAL PERMITS PRIOR TO THE START OF CONSTRUCTION.

5. THE CONTRACTOR SHALL NOTIFY PUBLIC UTILITIES AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY OTHER AGENCY SHOP DRAWING APPROVAL, IF REQUIRED.

7. ELEVATIONS SHALL BE IN FEET AND REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

8. CITY OF HOLLYWOOD SHALL NOT PROVIDE STAGING/STORAGE AREA. CONTRACTOR SHALL SECURE STAGING/STORAGE AREA AS NECESSARY FOR CONSTRUCTION WORK.

9. CONTRACTOR SHALL HAUL AWAY EXCESSIVE STOCKPILE OF SOIL FOR DISPOSAL EVERY DAY. NO STOCKPILE SOIL IS ALLOWED TO BE LEFT ON THE CONSTRUCTION SITE OVER NIGHT.

10. CONTRACTOR SHALL CLEAN/SWEEP THE ROAD AT LEAST ONCE A DAY OR AS REQUIRED BY THE ENGINEER.

11. CONTRACTOR SHALL PROTECT CATCH BASINS WITHIN/ADJACENT TO THE CONSTRUCTION SITE AS REQUIRED BY NPDES REGULATIONS.

12. CITY OF HOLLYWOOD HAS A NOISE ORDINANCE (CHAPTER 100) WHICH PROHIBITS EXCAVATION AND CONSTRUCTION BEFORE 8:00 A.M. AND AFTER 6:00 P.M., MONDAY THROUGH SATURDAY AND ALL DAY SUNDAY.

13. SUITABLE EXCAVATED MATERIAL SHALL BE USED IN FILL AREAS. NO SEPARATE PAY ITEM FOR THIS WORK, INCLUDE COST IN OTHER ITEMS.

14. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, PARKING LOTS, SIDEWALKS, ETC. TO SATISFY THE INSTALLATION OF THE PROPOSED IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION.

15. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT. IN CASE WORK ON PRIVATE PROPERTY IS NEEDED, A CITY OF HOLLYWOOD "RIGHT OF ENTRY" FORM MUST BE SIGNED BY PROPERTY OWNER AND THE DIRECTOR OF DEVELOPMENT SERVICES. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ACCESS AT ALL TIMES TO PRIVATE HOMES/BUSINESSES.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, CAUSED TO ANY IRRIGATION SYSTEM (PRIVATE OR PUBLIC) ACCIDENTALLY OR PURPOSELY. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES TO MATCH OR EXCEED EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE CITY.

17. MAIL BOXES, FENCES OR OTHER PRIVATE PROPERTY DAMAGED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLACED TO MATCH OR EXCEED EXISTING CONDITION.

	ISSUED: MAY 2023	DEPARTMENT OF DEVELOPMENT SERVICES ENGINEERING, TRANSPORTATION & MOBILITY DIVISION	REVISED: –
	DRAWN: EG	GENERAL NOTES (1 OF 2)	DRAWING NO.:
	APPROVED: JG		C–01

18. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX, LATEST EDITION, AND CITY OF HOLLYWOOD DEPARTMENT OF DEVELOPMENT SERVICES STANDARDS.

19. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.

20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY TREE REMOVAL OR RELOCATION PERMITS FROM THE CITY OF HOLLYWOOD BUILDING DEPARTMENT FOR TREES LOCATED IN THE PUBLIC RIGHT OF WAY.

21. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE REGULATORY STANDARDS/REQUIREMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF CITY ENGINEER.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS TO EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY AREA.

23. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH EXISTING PAVEMENT TO MATCH EXISTING CONDITIONS.

24. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PARTS OF, EXPOSED OR OPENED AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES, WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DIRECTED. ALL TRENCHES SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN/VEHICULAR TRAFFIC.

25. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF OFF THE PROPERTY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

26. ALL RAMPS, SIDEWALK CURB RAMPS, AND, ACCESSIBLE ROUTES SHALL BE ADA COMPLIANT AND SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX, LATEST EDITION.

27. ALL GRASSED AREAS AFFECTED BY CONSTRUCTION SHALL BE RE–SODDED.

28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH SPECIFICATIONS OF THE LATEST REVISION OF FDOT DESIGN STANDARDS. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC CONTROL AND INFORMATION SIGNAGE REMOVED DURING THE CONSTRUCTION PERIOD.

29. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.

30. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE CITY'S INSPECTOR WILL SHUT THE JOB DOWN.

31. CONTRACTOR MUST PROVIDE FLASHER ARROW SIGNAL FOR ANY LANE THAT IS CLOSED OR DIVERTED.

32. THE CITY PREFERS THAT IT'S OWN POLICE OFFICERS PROVIDE TRAFFIC CONTROL TO ENSURE SAFE AND EFFICIENT INTERSECTION OPERATIONS IS MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION, THEREFORE, PLEASE CONTACT MR. JANEL DIXON TO ARRANGE FOR A DETAIL TO PROVIDE THIS SERVICE. HE MAY BE REACHED AT 954–967–4500 OR VIA EMAIL AT jdixon@hollywoodfl.org.

33. CONTRACTOR TO RESTORE PAVEMENT TO ORIGINAL CONDITION AS REQUIRED, REFER TO BCTED, PAVING MARKINGS AND SIGNS DETAILS PLAN, LATEST EDITION.

34. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 811 OR 1–800–432–4770 (SUNSHINE ONE–CALL OF FLORIDA).

Sunshine 811

	ISSUED: MAY 2023	DEPARTMENT OF DEVELOPMENT SERVICES ENGINEERING, TRANSPORTATION & MOBILITY DIVISION	REVISED: –
	DRAWN: EG	GENERAL NOTES (2 OF 2)	DRAWING NO.:
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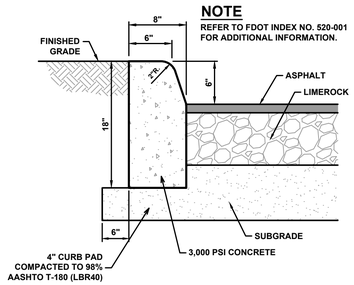
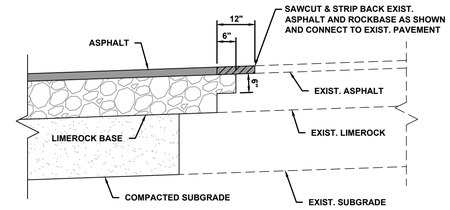
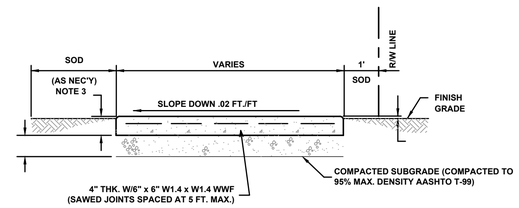


NOTE
REFER TO FDOT INDEX NO. 520-001 FOR ADDITIONAL INFORMATION.

TYPE 'D' CONCRETE CURB
N.T.S.



CONNECTION TO EXISTING PAVEMENT DETAIL
N.T.S.

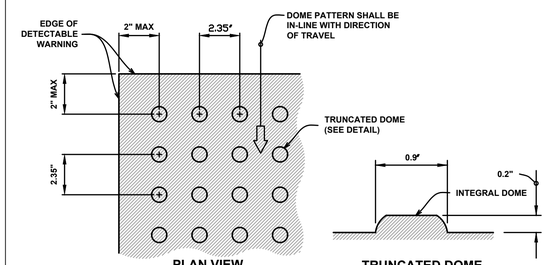


SECTION

NOTES
1. CONCRETE TO BE CLASS 1, 2,500 PSI IN 28 DAYS.
2. USE OF FIBER REINFORCED CONCRETE IS PROHIBITED.
3. 4" THICK MIN. (TYP.); 6" THICK AT DRIVEWAYS, EXTENDED TWO-FEET BEYOND DRIVE, ON BOTH SIDES.
4. SIDEWALK SLOPES SHALL MEET THE REQUIREMENTS OF THE AMERICAN WITH DISABILITIES ACT.
5. INCLUDES ANY CUT AND/OR FILL TO ACHIEVE DESIGN SLOPES.
6. PROVIDE 1/8" CONSTRUCTION JOINTS AT 5' c.c., MINIMUM DEPTH 1/2".
7. PROVIDE 1/2" EXPANSION JOINTS W/ NON-RISING FILLER AT 30'c.c.
8. CURE ALL CONCRETE WITH CLEAN SAND, PLASTIC MEMBRANE, OR OTHER APPROVED METHOD.

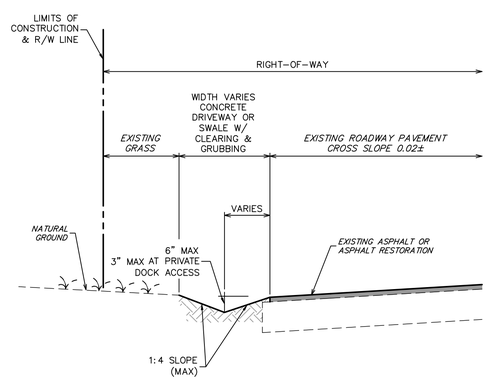
CONCRETE SIDEWALK SECTION
N.T.S.

NOTES
1. DETECTABLE WARNING SURFACE AS REQUIRED PER AMERICAN WITH DISABILITIES ACT DESIGN STANDARDS REQUIRED AT ALL CONCRETE SIDEWALK LANDINGS WITHIN PROJECT LIMITS.
2. STAMPED CONCRETE IS NOT PERMITTED FOR DETECTABLE WARNING SURFACES. ARMOR TILE OR AN APPROVED EQUAL SHALL BE USED.
3. WHEN NOT PLACED ON CURB RAMPS, DETECTABLE WARNINGS SHALL BE PLACED ON THE WALKING SURFACES ADJOINING A VEHICULAR WAY. THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A CONTINUOUS DETECTABLE WARNING WHICH IS 36" WIDE.
4. UNLESS NOT PLACED DIRECTLY ON A RAMP, DETECTABLE WARNING SURFACE MUST NOT EXCEED 2% SLOPE IN ANY DIRECTION.
5. WHEN PLACED ON CURB RAMPS, DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL LENGTH AND WIDTH OF THE RAMP. FOR RAMPS WITHIN FDOT RIGHT-OF-WAY, REFER TO THE LATEST VERSION OF THE FDOT DESIGN STANDARDS INDEX #304.
6. CONSTRUCTION OF DETECTABLE WARNING SURFACE IS NOT LIMITED TO CONCRETE MATERIAL, HOWEVER, PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST INFORM TO THE ENGINEER OF RECORD THE PROPOSED MATERIAL FOR THE DETECTABLE WARNING SURFACE. CONTRACTOR MUST ENSURE THAT THE FOLLOWING TRUNCATED DOME CRITERIA IS MET:
   A. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%
   B. 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE SPECIFIED DIMENSIONS AND DESIGN CRITERIA.
   C. NO TWO ADJACENT DOMES MAY BE NON-COMPLIANT.
   D. SURFACE MAY NOT DEVIATE MORE THAN 0.1" FROM A TRUE PLAN.



PLAN VIEW TRUNCATED DOME

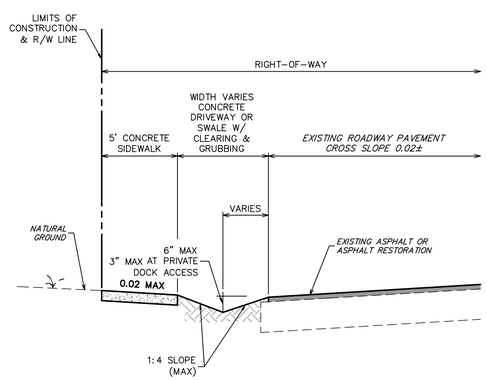
DETECTABLE WARNING
N.T.S.



NOTE:

THE ROOT SYSTEM FOR ALL EXISTING TREES TO REMAIN SHALL NOT BE IMPACTED BY ANY EARTHWORK ACTIVITIES RELATED TO SWALE REGRADING. SWALE REGRADING SHALL NOT BE COMPLETED WITHIN THE CRITICAL PROTECTION ZONE IS THE AREA SURROUNDING AN EXISTING TREE WITHIN A CIRCLE DEFINED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54 INCHES ABOVE FINISHED GRADE. THE CRITICAL PROTECTION ZONE SHALL HAVE A 4 FOOT MINIMUM RADIUS AND 8 FOOT MAXIMUM RADIUS FROM THE CENTER OF THE TREE TRUNK.

TYPICAL SWALE REGRADING WITHOUT SIDEWALK
N.T.S.



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TYPICAL SWALE REGRADING WITH SIDEWALK
N.T.S.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021
TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC.
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

DAVID EDGARDO CASTRO FELIU, PE
STATE OF FLORIDA
PROFESSIONAL ENGINEER
LICENSE NO. 85558

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ISSUE	DATE	PERMIT DRAWINGS SUBMISSION / REVISION
1	07/10/2023	

CC PROJECT NO:	84300
DRAWN	DC
CHECKED	JM
SCALE	AS SHOWN

SHEET TITLE
DETAILS

SHEET 08 OF 00
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FPL Everglades Mitigation Bank

Mitigation Bank Site Suitability Evaluation (MBSE) Matrix

Parameters

Parameter	Scoring Criteria	Ratings	Score
1. Adjacent to lands or waters of regional Importance and results in identifiable ecological benefits to adjacent lands or waters.	State Park, OFW, AP, and including but not limited to Special Waters on at least 1 boundary	0	
	Adjacent lands contain no special designation or undesignated special value	1	0
2. Property is within boundary of an acknowledged state, local or regional acquisition program	Property is within boundary of an acquisition program	1	
	Property is not within boundary of an acquisition program	0	0
3. Property contains ecological or geological features consistently considered by regional Scientist, or federal and state agencies to be unusual, unique or rare in the region and is of sufficient size	Property qualifies	1	1
	Property does not qualify	0	
4. Property designated as being of critical state or federal concern and/or contains special designations,	Property contains at least 1 special designation.	1	1
	Property contains no special designations.	0	0
5. Property important to acknowledged restoration efforts	Property is important.	1	
	Property is not important.	0	0
6. Ownership and control of the property.	Property is privately owned.	1	
	Property is publicly owned.	0	0
7. Threatened , Endangered & Species of Special Concern Presence of animal species (faunal) found on site	Documented Presence of Species on site	1	
	No documented Presence of species on site.	0	0
8. Threatened , Endangered & Listed Species Presence of plant species (floral) found on site	Documented Presence of Species on site	1	
	No documented Presence of species on site.	0	0
9. Threat of loss or destruction from development activities. *(Development Pressure)*	High probability of development.	1	1
	Low probability of development.	0	
10. Extent to which lands are subject to Local, State, and Federal dredge and fill/ ERP Regulations	Property is not regulated.	1	
	Property is regulated.	0	0
	Value Cumulative Score (CS)		**3**

The Mitigation Bank Site Suitability Evaluation Matrix is designed to provide a quantifiable means of determining the number of mitigation credits that should be assigned to a bank for **"value"** related parameters. Value related parameters are human values determined to be important to society; and therefore are not measurable in a purely functional analysis. Functional analysis will only measure the degree of functional ecological improvement (degree of ecological improvement) resulting from mitigation activities. The SS Evaluation measures and provides credit for societal values that separate one mitigation bank from another as required by Ch. 62-342 .470 (a) (b) (e) (f) (g) (h) (i) F.A.C.. The SS evaluation is not to be utilized in conjunction with a functional analysis methodology which also utilizes value related parameters in its analysis.

Evaluation Scale

Site Suitability	
1.0	1.10
.9	1.09
.8	1.08
.7	1.07
.6	1.06
.5	1.05
.4	1.04
.3	1.03
.2	1.02
.1	1.01
0	0

Site Suitability Matrix		
Maximum Possible Score (MPS)		10
Cumulative Score (CS)		**3**

0.3

EPA, USACOE, USF & W, FDEP, NMFS, SFWMD, Dade DERM, FPL, CH

3-Apr-96

After Calculating the Site Suitability Score determine the Site Suitability Multiplier by utilizing the Evaluation Scale to the left. The Site Suitability Multiplier is to be multiplied times the number of the Functional Mitigation Credits, resulting from the **(W.A.T.E.R.)** Functional Assessment of the Mitigation Bank, to determine the number of Site Suitability Credits to be assigned to the Mitigation Bank.

Prepared By:
Cotleur Hearing
11/6/2024

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

Data collected on **Wetland Delineation 12/5/2023, Agency Site Visit 3/22/2023**

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from

EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Site 2 MG	Site 9 10 17 19 MG	Site 10 SG
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1. Fish & Wildlife Functions *Apply to freshwater, saltwater, brackish and mitigation systems*					
a. Waterfowl, wading birds, wetland dependent, or aquatic birds of prey. (Mit. Bank - High specie count w/ low pop. #'s score 1	7 or more species commonly observed	3	1	1	0
	3-6 species commonly observed	2			
	1-2 species commonly observed	1			
	0 species commonly observed	0			
b. Fish (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	0	0	1
	3-6 species commonly observed	2			
	1-2 species commonly observed	1			
	0 species commonly observed	0			
c. Mammals (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Top predator (carnivore) &/or large mammals	3	1	0	N/A
	Medium sized mammals , (adult weight > 6 ibs.)	2			
	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1			
	0 species present	0			
d. Aquatic macroinvertebrates, amphibians (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	1	1	1
	3-6 species commonly observed	2			
	1-2 species commonly observed	1			
	0 species commonly observed	0			
e. Aquatic reptiles (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Large species observed	3	1	1	N/A
	Aquatic turtles	2			
	Snakes & lizards	1			
	No evidence of species present	0			

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2. Vegetative Functions *Apply to freshwater, saltwater, brackish and mitigation systems*					
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3	1	1	N/A
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2			
	Inappropriate trees/shrubs shading or overcoming desirable tree/shrubs	1			
	Very little or no desirable tree/shrubs present (evidence suggests there should be)	0			
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3	0	N/A	N/A
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2			
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1			
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0			
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3	0	0	0
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2			
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1			
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0			
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3	1	1	N/A
	>1 % to 10 % exotic plant cover	2			
	>10 % to 65 % exotic plant cover	1			
	> 65 % exotic plant cover	0			
e. Habitat diversity (vegetative) *(within assessment area)*	>3 native species communities on site within assesssment area	3	1	1	1
	2 or 3 native specie communities on site within assessment area	2			
	1 native species community with 75 % to 90 % coverage within assessment area	1			
	1 native species community has > 90 % coverage within assessment area	0			
f. Biological diversity within 3000 feet *(approximately 1/2 mile from edge of assessment area)*	> 3 alternative habitats available (including upland)	3	0	1	1
	2 to 3 alternative habitats	2			
	1 alternative habitat	1			
	Same habitat type, or inappropriate / impacted	0			

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

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3. Hydrologic Functions					
a. Surface water hydrology / sheet flow *Apply to freshwater, saltwater, brackish and mitigation systems*	Major connection *(Flowing water/ river or floodplain/ uniform flow through natural systems)*	3	1	1	2
	Moderate connection *(Natural restriction of flow or Flowing water due to hydrologic engineering)*	2			
	Minor connection *(Runoff collection point, or uneven flow due to berms, ditches, roadways etc,)*	1			
	Hydrologically isolated, no net lateral movement	0			
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3	N/A	N/A	N/A
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2			
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1			
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0			
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3	N/A	N/A	N/A
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2			
	>2 weeks but <6 weeks of inudation, including soil saturation	1			
	<2 weeks of continuos inundation	0			
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides	3	1	1	N/A
	Inundated by "spring" high tides (bi-monthly)	2			
	Inundated by "extreme high" tides only (biannually)	1			
	Inundated by storm surges only	0			
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3	N/A	N/A	N/A
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2			
	Inundated by high "spring" tides (monthly)and exposed to rain only	1			
	Inundated by >50% high tides and exposed to rain only	0			
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3	N/A	N/A	N/A
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2			
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1			
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0			

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

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Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

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3. Hydrologic Functions continued					
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3	N/A	N/A	N/A
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2			
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1			
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0			
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3	0	1	N/A
	> 6 in. water depth <1 ft. on >50% high tides	2			
	< 6 in. water depth , but > than saturated	1			
	Saturated by saline water table only	0			
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3	N/A	N/A	N/A
	>5 in. to 10in. water depth on regular basis during growing season	2			
	>1 in. to 5 in. water depth on regular basis during growing season	1			
	>0.0 in. to 1 in. water depth sporadically during growing season	0			
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3	N/A	N/A	N/A
	>2 ft. water depth (main channel) <4 ft. for 6 months	2			
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1			
	<1 ft. water depth, but dry for >4 weeks (dry season)	0			

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3. Hydrologic Functions continued					
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	N/A	N/A	1
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2			
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1			
	Visual indicators of poor water quailty observed or lab verified (values are out of acceptable range)	0			
e. Intactness of historic topography (soil disturbance)	Unaltered	3	0	0	0
	Slightly altered soil disturbance, < 10% of assessment area	2			
	Moderately altered soil disturbance, < 25% of assessment area	1			
	Extremely altered soil disturbance, may exceed 50% of assessment area	0			
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3	N/A	N/A	N/A
	Organic soil classified hydric soil >6 in. but <12 in. and covering >90% of surface area	2			
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1			
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0			
f-1 Alternate to f. for *Freshwater, saltwater systems*	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3	N/A	N/A	N/A
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2			
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1			
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0			
f-2 Alternate to f. for *Freshwater, saltwater, brackish (tidal) systems*	Calcareous loam >12 in. and >90 % of surface area	3	N/A	N/A	N/A
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2			
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1			
	Calcareous loam <1 in. for >50% of surface area	0			

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Parameter/ Function	Scoring Criteria	Ratings	Site 2 MG	Site 9 10 17 19 MG	Site 10 SG
			0.105 AC (4,552 SF) impact	Total Mangrove Impacts= 0.10 (4,542.3 SF) Impact above MHWL = 0.079 AC (3,440.8 SF) Impact below MHWL = 0.025 AC (1,101.5 SF)	0.0004 AC (17.6 SF) impact
4. Salinity Parameters *Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems -* ***Choose 1***					
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year. *Apply to freshwater systems within 5 miles of the coast*	<2 parts per thousand (ppt)	3	N/A	N/A	N/A
	2 to 3 parts per thousand (ppt)	2			
	4 to 5 parts per thousand (ppt)	1			
	>5 parts per thousand (ppt)	0			
a-1. Alternate to a. Optimum salinity for brackish systems during growing season based on mean high salinity for a normal year. *Apply to brackish (tidal) systems only*	6 to 8 parts per thousand (ppt)	3	N/A	N/A	N/A
	9 to 13 parts per thousand (ppt)	2			
	14 to 16 parts per thousand (ppt)	1			
	>16 parts per thousand (ppt)	0			
a-2. Alternate to a. Optimum salinity for saline systems during growing season based on mean high salinity for a normal year. *Apply to saline marsh (tidal) systems only*	17 to 19 parts per thousand (ppt)	3	N/A	N/A	N/A
	20 to 22 parts per thousand (ppt)	2			
	23 to 25 parts per thousand (ppt)	1			
	>25 parts per thousand (ppt)	0			
a-3. Alternate to a. Optimum salinity for hypersaline systems during growing season based on mean high salinity for a normal year. *Apply to hypersaline (tidal) systems only*	26 to 41 parts per thousand (ppt)	3	N/A	N/A	N/A
	42 to 46 parts per thousand (ppt)	2			
	47 to 51 parts per thousand (ppt)	1			
	>51 parts per thousand (ppt)	0			
a-4 Alternate to a. Optimum salinity for riverine/tidal creek system during growing season based on mean high slainity for a normal year. *Apply to riverine systems only*	bottom (lower) third between 12 to 25 ppt middle third between 5 to 11 ppt. upper (top) third betweem 0 to 4 ppt.	3	N/A	N/A	N/A
	bottom (lower) third between 25 to 32 ppt middle third between 6 to 24 ppt. upper (top) third betweem 0 to 5 ppt.	2			
	bottom (lower) third between 30 to 40 ppt middle third between 8 to 29 ppt. upper (top) third betweem 0 to 7 ppt.	1			
	bottom (lower) third between 35 to 50 ppt middle third between 10 to 34 ppt. upper (top) third betweem 0 to 9 ppt.	0			
		Cumulative Score (SC)	9	10	7
		Maximum Possible Score (MPS)	45.00	43.00	27.00
		W.A.T.E.R. = Cumulative Score/Maximum Possible Score	**0.20**	**0.23**	**0.26**

W.A.T.E.R. created by: Bill L. Maus

11/1/1998

EVERGLADES
MITIGATION BANK

April 23, 2025

City of Hollywood
P.O. Box 229045
Hollywood, FL 33022
Attn: George R. Keller, Jr.

Re: Everglades Mitigation Bank Credit Reservation: Anticipated Permit from Army Corps of Engineers, Application No. SAJ-2024-00126; and Broward County Environmental Protection and Growth Management Department, Application No. DF24-1003

Please be advised that the Everglades Mitigation Bank (the "EMB") has reserved 0.03 Joint Saltwater mitigation credits necessary to offset the unavoidable wetland impact for the above referenced project. Phase I of the EMB has a signed Mitigation Banking Instrument acknowledged by both FDEP and USACE and sufficient credits are currently available on the EMB ledger to offset the proposed impacts. **The EMB acknowledges receiving payment in full for the above referenced credits.**

Please contact me at 561-691-7060 for any additional information or questions regarding this matter.

Regards,

Brian Yates
Everglades Mitigation Bank

Sec. 27-14. Administrative review of RED determinations.

(a) A person with a substantial interest may file a petition to request review of or to intervene in a review of a final administrative determination made pursuant to this chapter concerning:

(1) The requirement that a facility or activity obtain a license or environmental review approval.

(2) Interpretations of license or environmental review approval conditions.

(3) Interpretations of variance conditions.

(4) The decision to suspend or revoke a license or environmental review approval.

(5) The requirement of certain license conditions.

(6) The issuance of a license or environmental review approval.

(7) The denial of a license or environmental review approval.

(8) The scope of a license or environmental review approval, geographic or otherwise.

(9) The scope of a variance, geographic or otherwise.

(10) The issuance of a stop work order.

(11) Similar final administrative determinations.

This administrative review procedure shall be the only means of review available for the above final administrative determinations by either the petitioner or the intervenor (the parties).

(b) person may not obtain review by this procedure of:

(1) The issuance or adjudication of or other matters involving a notice of violation or a citation.

(2) Internal policy decisions

(c) A person desiring a review of a staff determination made pursuant to this Chapter shall first bring the determination to the attention of the appropriate section supervisor to attempt to resolve the matter. If a resolution cannot be reached, then the decision shall be reviewed by successive supervisory levels until the issue is resolved or reaches the level of the director or his or her designee for the final determination.

(d) A person desiring administrative review of a final determination made by the director or the designee shall file a petition with the director for review by the hearing examiner. The petition shall be filed within ten (10) days from the rendition of the action taken or of the decision made by the director. An entity whose license or approval is being challenged shall be a party to the action.

(e) The review shall not be heard until the provisions of subsection (f) are met. Upon motion to the hearing examiner, an insufficient petition shall be dismissed with or without leave to refile. If a petition is determined to be insufficient by the hearing examiner and the petitioner has been given leave to refile by the hearing examiner, unless otherwise ordered by the hearing examiner, the petitioner must refile within ten (10) days of the rendition of the order of dismissal or the petition will be dismissed with prejudice.

(f) A sufficient petition for review or petition for intervention in the review shall, at a minimum, contain the following information:

(1) The nature of the determination sought to be reviewed.

(2) A short, plain statement of the facts which form the subject matter upon which the determination was made as asserted by all parties of record at the time that the petition is filed; a statement of the material facts in dispute, if any. If any party is unable to state the matters in sufficient detail at the time initial petition is filed, the petition may be limited to a statement of the issues involved; and thereafter, upon timely written motion, a more definite and detailed statement shall be furnished not less than seven (7) days prior to the date set for the hearing.

(3) The specific determination for which the review is sought.

(4) The specific legal grounds upon which the parties seek review of the determination.

(5) A short statement of the petitioner's or the intervenor's substantial interest in the matter to be reviewed.

(6) The specific section of this chapter on which the decision is based, if known, and the specific section that the parties allege should control the decision, if known.

(7) A copy of the director's or the designee's written final determination.

(8) A statement of the relief requested stating precisely the action that the petitioner wants RED to take with respect to the final determination.

(g) All pleadings or other documents filed in the proceeding must be signed by a party, the party's attorney, or the party's qualified representative. The signature of a party, the party's attorney or a party's qualified representative constitutes a certificate that he or she has read the pleading or other document and that to the best of his or her knowledge, information, and belief formed after reasonable inquiry, it is not brought for any improper purposes, such as to harass or to cause unnecessary delay or for frivolous purpose or needless increase in the cost of litigation. If a pleading or other document is signed in violation of these requirements, the hearing examiner, upon motion or his or her own initiative, shall dismiss the matter.

(h) A petitioner or intervenor may request an emergency hearing to stay all activities or work conducted pursuant to the challenged license or approval. Such petitioner or intervenor has the burden of proof to show by a preponderance of the evidence that the continued activities would cause substantial pollution or degradation to the environment. An emergency hearing shall be scheduled by RED and be held within five (5) days of said request or as soon thereafter as possible subject to the availability of the hearing examiner. The petitioner or intervenor shall comply with the notice provisions of section 27-14(j)(2)a. and c. and section 27-14(j)(3) and (4) of this chapter.

(i) The petition for review will not stay environmental protection activities required for the remediation or mitigation of a site or facility, the protection of the environment or the health, safety and welfare of the citizens of Broward County, or the prevention of further environmental degradation. The person responsible for these activities must take all necessary steps to prevent environmental degradation and must conduct the remediation or mitigation activities required by this chapter. The director may allow these activities to be delayed until after the hearing examiner's decision by certifying to

the hearing examiner that, by reason of facts stated in the certificate, a delay in the initiation or completion of these activities would not cause substantial environmental degradation or peril to life or property. The delay for conducting these activities may be subject to appropriate terms to ensure protection of the environment. The person responsible for these activities shall be responsible for any environmental damage or any violation of this chapter caused by the delay.

(j) Notice and Scheduling Requirements:

(1) The hearing on the review shall be scheduled within a reasonable time. It shall be the responsibility of the petitioner to request through RED that the hearing date be scheduled. It shall also be the responsibility of the petitioner to give notice in accordance with this section at least ten (10) days prior to the hearing.

(2) The petitioner shall give notice of the hearing by:

a. Giving personal notice to all proper parties; and

b. Publishing notice on two (2) days in a newspaper of general circulation in the county; and

c. Posting notice at a location determined by the Broward County Administrator's Office.

(3) The petitioner shall bear the cost of giving notice.

(4) The notice shall contain, at a minimum:

a. A description and location of the facility or the activity to be conducted by the petitioner; and

b. The time and place of the hearing.

(k) The petitioner shall bear the cost of accurately and completely preserving all testimony and providing full or partial transcripts to all parties.

(l) The hearing shall be a quasi-judicial hearing.

(1) The applicant/petitioner requesting the administrative review, any intervenor/petitioner and RED shall have an opportunity to respond to and to present witnesses, other evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of facts and orders, and to be represented by counsel. Members of the general public who are not intervenors as set forth in Section 27-14 of this chapter are not parties to the proceeding.

(2) When appropriate, the general public may be given an opportunity to present oral or written communications. If the hearing examiner proposes to consider such material, then all parties shall be given an opportunity to cross-examine, challenge or rebut it.

(m) Denial, protest of, revocation, or suspension of a license, environmental review approval, or any other approval:

(1) In regard to denial or protest of approval of a license and any other review of an administrative decision, notwithstanding (2) below, the petitioner shall have the burden of showing, by a preponderance of the evidence, that the determination of the director was an arbitrary and/or capricious abuse of discretion, not supported by competent, substantial evidence or not in conformance with the

essential requirements of this chapter. The hearing examiner shall not substitute his or her judgment for that of RED on an issue of discretion even though the hearing examiner may have reached a different conclusion based on the same facts.

(2) In an action to revoke or suspend a valid license or approval, the burden shall be upon RED to prove, by a preponderance of the evidence in an administrative hearing, the grounds for revocation or suspension. The license holder or approval recipient shall be provided notice of the hearing and a copy of the petition stating the grounds for revocation or suspension as provided in section 27-63 of this chapter. The petition shall state with specificity the acts complained of in order to allow the license holder or approval recipient an opportunity to prepare a defense. The hearing shall be conducted in accordance with the provisions of Section 27-37 of this chapter.

(n) Findings of fact shall be based exclusively on the evidence of record and on matters officially recognized.

(o) If the hearing examiner finds that the director or his or her designee has erroneously interpreted a provision and that a correct interpretation compels a particular action, he or she shall remand the case to the director or his or her designee for further action under a correct interpretation of the provision.

(p) The hearing examiner shall complete and submit to the director and all parties a final order consisting of his or her findings of fact and conclusions of law.

(q) A party to the hearing may obtain appellate review of the final order as provided by section 27-42 of this chapter.

(r) A petitioner or intervenor shall pay a filing fee at the time the application for review is filed. The amount of the filing fee shall be set by resolution of the Board.

(Ord. No. 2003-34, § 1, 9-23-03; Ord. No. 2005-08, § 2.03, 4-26-05)

Secs. 27-15--27-19. Reserved.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used (see MyFWC.com/manatee). One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 81/2" by 11" explaining the requirements for “Idle Speed/No Wake” and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019. For electronic mail saj-rd-enforcement@usace.army.mil *(not to exceed 15 MB).*

1. Department of the Army Permit Number: SAJ-2024-00126 (SP-VEK)

2. Permittee Information:

Name: _____

Address: _____

_____

3. Project Site Identification (physical location/address):

_____

_____

_____

4. As-Built Certification: I hereby certify that the authorized work, including any mitigation required by Special Conditions to the permit, has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled, and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

_____	_____
Signature of Engineer	Name (*Please type*)
_____	_____
(FL, PR, or VI) Reg. Number	Company Name

_____	_____	_____
City	State	ZIP

(Affix Seal)

_____	_____
Date	Telephone Number

Date Work Started:_____ Date Work Completed:_____

Identify any deviations from the approved permit drawings and/or special conditions (attach additional pages if necessary):

_____

_____

_____

_____

_____

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_____

_____

_____

_____

_____

_____

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2011

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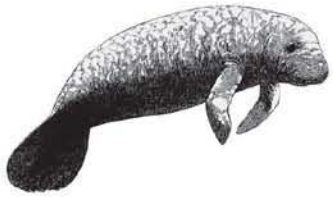


Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

COMMENCEMENT NOTIFICATION

Within ten (10) days of initiating the authorized work, submit this form to via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15 MB) ***or*** *by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.*

1. **Department of the Army Permit Number**: SAJ-2024-00126 (SP-VEK)

2. **Permittee Information**:

   Name: _____

   Email: _____

   Address: _____

   _____

   Phone: _____

3. **Construction Start Date**: _____

4. **Contact to Schedule Inspection**:

   Name: _____

   Email: _____

   Phone: _____

_____
Signature of Permittee

_____
Printed Name of Permittee

_____
Date

Prepared by:

Permittee: _____

Address: _____

_____

Phone:_____

NOTICE OF DEPARTMENT OF THE ARMY PERMIT

TAKE NOTICE the United States Army Corps of Engineers (Corps) has issued a permit or verification SAJ-2024-00126 to the City of Hollywood (Permittee) on , , authorizing work in navigable waters of the United States in accordance with Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) on four sites including:

Site 9: The project site is located at the west end of 700 Polk Street, along the southern shoreline of North Lake, west of the Hollywood Marina boat ramp (Parcel #'s 514214026160 and 514214024070), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.

Site 10: The project site is located east of South 9th Avenue and south of N South Lake Drive along the northern shoreline of South Lake (Parcel #'s 514214020000, 514214024900, and 514214026190), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.

Site 17: The project site is located along the southern shoreline of South Lake, between the lake and Adams Street (Parcel #'s 514214024910, 514214024900, and 514214026200) City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.

Site 19: The project site is located along the northern shoreline of North Lake along N Northlake Drive (Parcel #'s 514214026150 and 514214024070), City of Hollywood (Section 14, Township 51 South, Range 42 East) in Broward County, Florida.

Within 30 days of any transfer of interest or control of said property, the Permittee must notify the Corps in writing of the property transfer by submitting the completed permit transfer page included with the issued permit or verification. Notification of the transfer does not by itself constitute a permit transfer. Therefore, purchasers of that portion of the premises containing the area authorized to be filled (or any portion thereof) are notified that it is unlawful for any person to construct, alter, operate, maintain, remove or abandon any works, including dredging or filling, or any other work within, over, or under waters of the United States (including wetlands) without first having obtained a permit from the Corps in the purchaser's name.

The subject Permit concerns only that portion of the property determined to fall within the jurisdiction of the Corps and this notice is applicable only to those portions of the subject property containing areas authorized to be filled subject to the Permit.

Conditions of the Permit/Verification: The permit or verification is subject to General Conditions and Special Conditions which may affect the use of the work authorized in Hollywood North Lake, Hollywood South Lake and onsite wetlands. Accordingly, interested parties should closely examine the entire permit or verification, all associated applications, and any subsequent modifications.

To obtain a copy of the authorization in its entirety submit a written request to:
U.S. Army Corps of Engineers
Regulatory Division - Special Projects & Enforcement Branch
Post Office Box 4970
Jacksonville, Florida 32232-0019

Questions regarding compliance with these conditions should be directed to:
U.S. Army Corps of Engineers
Enforcement Section Post Office Box 4970
Jacksonville, Florida 32232-0019

Conflict Between Notice and Permit
This Notice of Authorization is not a complete summary of the issued permit or verification. Provisions in this Notice of Permit shall not be used in interpreting the permit or verification provisions. In the event of conflict between this Notice of Permit and the permit or verification, the permit or verification shall control.

This Notice is Not an Encumbrance
This Notice is for informational purposes only. It is not intended to be a lien, encumbrance, or cloud on the title of the premises.

Release
This Notice may not be released or removed from the public records without the prior written consent of the Corps.

This Notice of Authorization is executed on this _____ day of _____, _____. This document is being submitted for recordation in the Public Records of Broward County, Florida as part of the requirement imposed by the authorization SAJ-2024-00126 issued by Corps.

Permittee:

_____

Address:

_____

_____

Phone:_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____day of _____, 20____, by _____, who is personally known to me or has produced _____ as identification.

_____
Notary Public

(seal)

_____
Print

My Commission Expires_____

CITY OF HOLLYWOOD FLORIDA

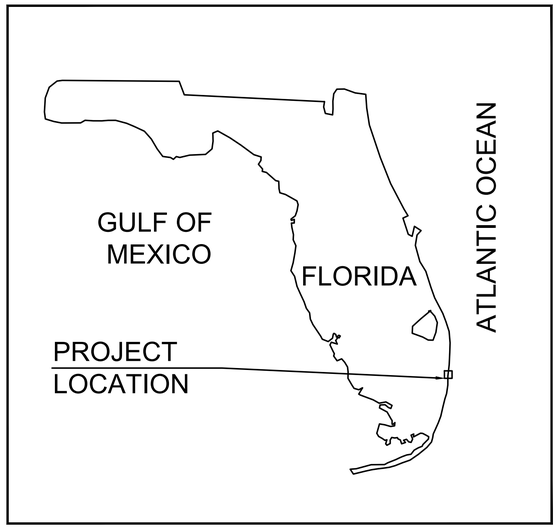
TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

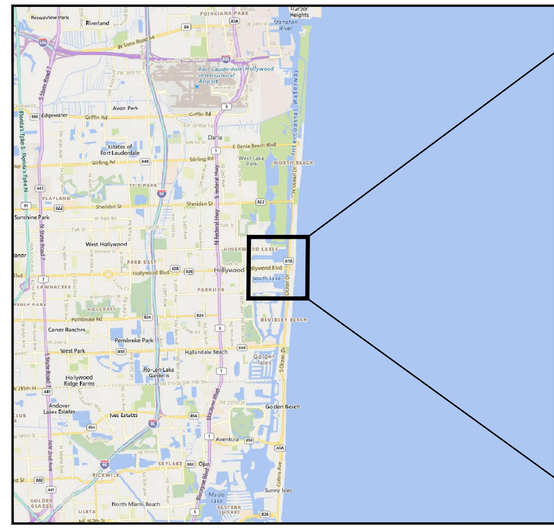
SITES 9, 10, 17 & 19

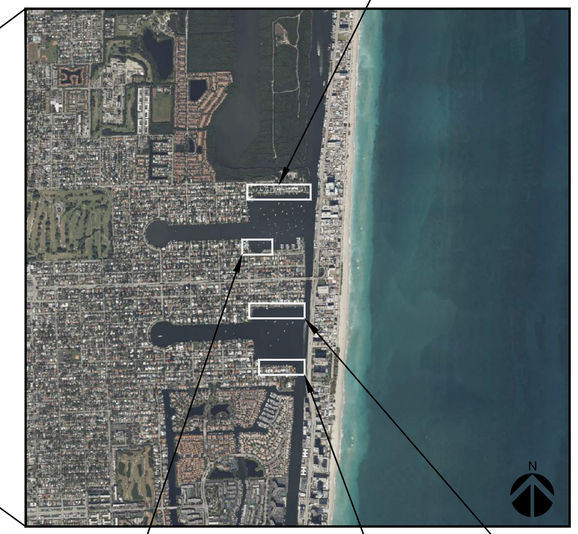
CITY OF HOLLYWOOD PROJECT NO. DCM-001187

HOLLYWOOD ON THE GO
YOUR BOND DOLLARS AT WORK!

CITY OF Hollywood FLORIDA







SITE 19
PROJECT LOCATION
NORTH LAKE DR.

SITE 10
PROJECT LOCATION
N SOUTH LAKE DR

SITE 9
PROJECT LOCATION
S NORTH LAKE DR

SITE 17
PROJECT LOCATION
S SOUTH LAKE DR

NOT FOR CONSTRUCTION

PERMIT DRAWINGS
FOR REGULATORY REVIEW ONLY
10/01/2024

OWNER:

CITY OF HOLLYWOOD
DEPARTMENT OF DESIGN AND
CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD, FL 33020

ENGINEER:

CUMMINS | CEDERBERG
Coastal & Marine Engineering

MIAMI | FORT LAUDERDALE | JUPITER
SARASOTA | ST. PETERSBURG | TALLAHASSEE
TEL: +1 305-741-6155 FAX: 305-974-1969
WWW.CUMMINSCEDERBERG.COM

SUBCONSULTANT:

KEITH
NV5
BRIZAGA ASSESS. COMMUNICATE. ADAPT.
cma chen moore and associates

811
KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 9.dwg

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
JORDON P. CHEIFET ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CUMMINS CEDERBERG
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL. 33304

JORDON P. CHEIFET
LICENSE
No. 72876
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE
WITH RULE 61G15-23.004, F.A.C.

	SHEET	DESCRIPTION
	CM-1.0	COVER SHEET
	CM-1.1	GENERAL NOTES
	CM-1.2	SITE 9 GEOTECHNICAL BORINGS
	CM-1.3	SITE 9 EXISTING CONDITIONS
	CM-1.4	SITE 9 DEMOLITION PLAN
	CM-1.5	SITE 9 PROPOSED SITE PLAN
	CM-1.6	SITE 9 CROSS SECTIONS
	CM-1.7	SITE 9 CROSS SECTIONS
	CM-1.8	SITE 9 CROSSECTIONS
	CM-2.0	SITE 10 GEOTECHNICAL BORINGS
	CM-2.1	SITE 10 EXISTING CONDITIONS
	CM-2.2	SITE 10 DEMOLITION PLAN
	CM-2.3	SITE 10 PROPOSED SITE PLAN
	CM-2.4	SITE 10 PROPOSED STE PLAN
	CM-2.5	SITE 10 PROPOSED SITE PLAN
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	CM- 5.0	DETAILS

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CHEN MOORE AND ASSOCIATES
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH
RULE 61G15-23.004, F.A.C.

	SHEET	DESCRIPTION

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CURTIS + ROGERS DESIGN STUDIO, INC.
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021

THE ABOVE NAMED REGISTERED LANDSCAPE ARCHITECT SHALL BE
RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH
RULE 61G10-11.011, F.A.C.

	SHEET	DESCRIPTION

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
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BRIZAGA
PUBLIC OUTREACH
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TEL: 954-834-3533

ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

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SHEET TITLE
SIGNATURE SHEET

CM-1.1

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1. GENERAL

1.1. THE WORK CONSISTS OF PROVIDING ALL CONSTRUCTION, LABOR, EQUIPMENT, MATERIAL AND OPERATIONS IN CONNECTION WITH THE MARINE WORKS AND RELATED IMPROVEMENTS AS SHOWN ON THESE DRAWINGS.
1.2. ANY DISCREPANCIES IN THE PLANS WITH THE FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONSTRUCTION SHALL NOT CONTINUE UNTIL THE ENGINEER HAS ADDRESSED THE DISCREPANCIES.
1.3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURES IN THE PROJECT VICINITY. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY WITHIN THE PROJECT VICINITY, INCLUDING STAGING SITES, WORK AND ACCESS AREAS SHALL BE REPAIRED PROMPTLY BY THE CONTRACTOR. ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO COST TO THE OWNER. ALL ACCESS AND STAGING AREAS SHALL BE KEPT NEAT, ORDERLY AND IN A SAFE MANNER. ALL ACCESS AND STAGING AREAS SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION UPON PROJECT COMPLETION AT THE COST OF THE CONTRACTOR. THE SITE SHALL BE RESTORED BY REMOVING AND FINISHING ALL EVIDENCE FOR CONSTRUCTION. IN THE EVENT INFRASTRUCTURE (SUCH AS WALKWAYS, SIDEWALKS, FENCES, VEGETATION, ETC.) IS TEMPORARILY REMOVED OR RELOCATED OR THERE IS UNAUTHORIZED DAMAGE TO VEGETATION AND/OR FACILITIES BY THE CONTRACTOR, THE CONTRACTOR SHALL RESTORE ALL DAMAGE TO STRUCTURES AND NATURAL FEATURES TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
1.4. UTILITIES ARE NOT SHOWN IN THE PLANS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PRESENT UTILITIES PRIOR TO CONSTRUCTION.
1.5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER CLEARANCE AND PROTECTION TO ALL OVERHEAD WIRES AND OBSTRUCTIONS.
1.6. THE CONTRACTOR SHALL EXCLUDE THE PUBLIC FROM THE WORK AREAS IN THE IMMEDIATE VICINITY OF OPERATIONS. CONTRACTOR SHALL PROVIDE APPROPRIATE SAFETY MEASURES TO PROTECT THE PUBLIC.
1.7. ALL NEW STRUCTURAL WORK SHALL BE ACCURATELY FIELD MEASURED AND DIMENSIONS VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL BE PREPARED TO MAKE FIELD ADJUSTMENTS TO ACCURATELY FIT THE NEW WORK TO EXISTING CONDITIONS.
1.8. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR HAS BEEN ISSUED NOTICE TO PROCEED.
1.9. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS SHOULD BE CONSIDERED WHEN OBTAINING SCALED DATA.
1.10. CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL BUILDING CODES AND GOVERNING REGULATIONS INCLUDING FDEP, USACE, AND BROWARD COUNTY. CONTRACTOR SHALL ADHERE TO ALL CONDITIONS OF THE PERMITS AND EXEMPTIONS.

2. DESIGN CRITERIA

2.1. FLORIDA BUILDING CONSTRUCTION 2020
2.2. ASCE 7-22
2.3. COASTAL LOADS ASSOCIATED WITH A 25-YR. STORM.
2.4. 25-YR. STORM WAVES: H_{MAX} = 2.9', T_P = 2.8 SEC
2.5. STORM SURGE = 2.7' NAVD88 BASED ON A 25-YR. STORM FROM THE PRELIMINARY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE STUDY (FIS) OF BROWARD COUNTY DATED 02/25/2021.

3. SURVEY

3.1. SURVEY PERFORMED BY KEITH AND ASSOCIATES DATED JUNE 4, 2021.
3.2. ELEVATIONS ARE IN FEET AND REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

4. GEOTECHNICAL DATA

4.1. GEOTECHNICAL REPORTS PROVIDED BY NV5, INC. DATED 05/18/2022.

5. TIDAL DATA

5.1. CONTRACTOR MAY NEED TO ADJUST HIS WORK PLAN TO ACCOUNT FOR ACTUAL WATER LEVELS AND CHANGING WATER LEVELS. THE SITE MAY BE SUBJECT TO VARIABLE WAVE AND SURGE CONDITIONS AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR MARINE STRUCTURES AND SHORELINE DURING CONSTRUCTION.
5.2. THE TIDAL DATUM WAS ADOPTED FROM NOAA STATION 8722871 AT WHISKEY CREEK, SOUTH ENTRANCE, FL.
5.3. THE HIGHEST ASTRONOMICAL TIDE (HAT) OF +1.77' NAVD88 WAS OBTAINED FROM NOAA STATION 8722956, SOUTH PORT EVERGLADES, FL.

6. LAYOUT AND TESTING

6.1. ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY AND PAID FOR BY THE CONTRACTOR UNDER THE SUPERVISION OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
6.2. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS IN SUFFICIENT DETAIL TO ILLUSTRATE THE HORIZONTAL AND VERTICAL COMPONENTS OF ABOVE AND BELOW-GROUND STRUCTURES RELATIVE TO THE CONSTRUCTION BASELINE. DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA-REGISTERED SURVEYOR.

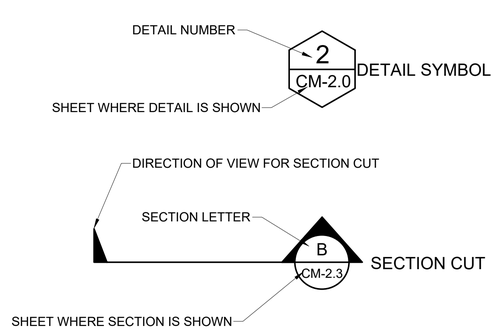
7. DEMOLITION

7.1. CONTRACTOR SHALL VERIFY THE EXTENTS, LOCATION AND QUANTITIES OF EXISTING ELEMENTS TO BE REMOVED.
7.2. ALL DEBRIS WITHIN THE LIMITS OF THE PROJECT SHALL BE HAULED OFF SITE BY THE CONTRACTOR, AS DIRECTED BY THE OWNER, AND DISPOSED OF AT AN APPROPRIATE FACILITY.
7.3. CONTRACTOR SHALL NOT DAMAGE ANY STRUCTURAL COMPONENTS BEYOND THE DEMOLITION REQUIREMENTS DEPICTED IN THESE DRAWINGS. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CONT	CONTINUOUS
CONT'D	CONTINUED
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
KSI	KIPS PER SQUARE INCH
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
PERA	PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS
PSI	POUNDS PER SQUARE INCH
TYP	TYPICAL
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
W/C	WATER/CEMENT RATIO

SYMBOLS LEGEND



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CM-1.1	GENERAL NOTES
CM-1.2	SITE 9 GEOTECHNICAL BORINGS
CM-1.3	SITE 9 EXISTING CONDITIONS
CM-1.4	SITE 9 DEMOLITION PLAN
CM-1.5	SITE 9 PROPOSED SITE PLAN
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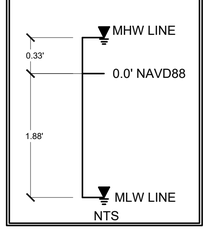
CM-4.11	SITE 19 CROSS SECTIONS
CM-4.12	SITE 19 CROSS SECTIONS
CM- 5.0	DETAILS

VERTICAL DATUM

SEE GENERAL NOTE 5.2



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HOLLYWOOD FL. 33020

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SHEET TITLE

GENERAL NOTES

CM-1.2

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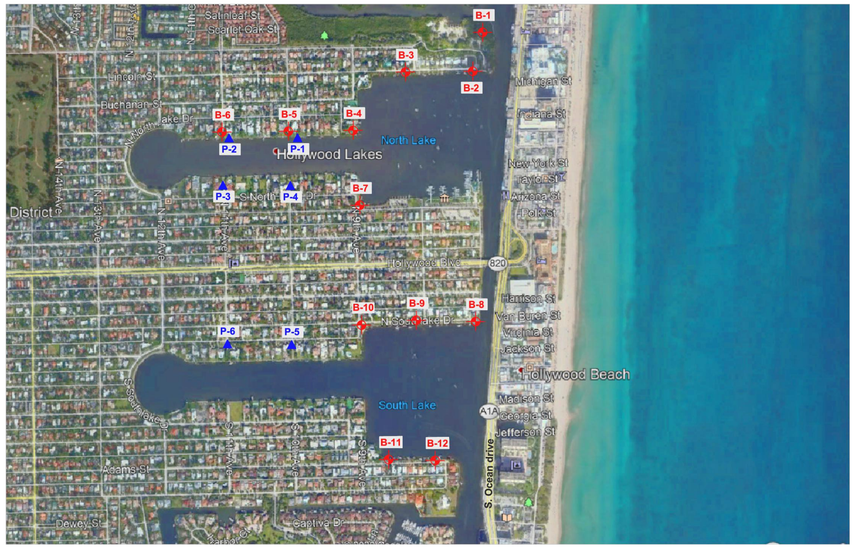

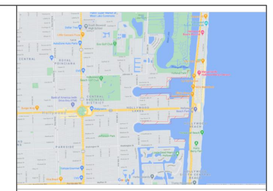

Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*				DWN BY: *WVF*
	PROJECT NAME: *City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1*				CKD BY: *BLS*
	PROJECT LOCATION: *City of Hollywood, Hollywood, Florida*	PROJECT NO: *16959*	DATE: *02/01/2021*	DWG NO: *1*	APD BY —

BORING NUMBER B-7

N|V|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/5/21 **COMPLETED** 2/5/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 2.7 ft / Elev 0.3 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0	SPT	6-5-4-6 (9)	SP		SAND, loose, fine, gray, with a trace limestone fragments and roots	
	SPT	2-3-3-4 (6)			SAND, loose, fine, gray, with a trace of limestone fragments	0
5	SPT	6-5-10-8 (15)			SAND, medium dense, fine, brown to gray, with a trace of limestone fragments	
	SPT	3-5-7-21 (12)			SAND, medium dense, fine, brown to gray, with a trace of limestone fragments	-5
			GP	8.0		-5.0
10	SPT	22-40-12-8 (52)			LIMESTONE FRAGMENTS, very dense, dark brown, with sand	
				10.0		-7.0
	SPT	5-8-7-7 (15)	LS		LIMESTONE, very soft, light brown	
	SPT	19-17-10-10 (27)			LIMESTONE, soft, light brown	-10
15	SPT	15-13-12-12 (25)			LIMESTONE, soft, light brown	
					LIMESTONE, very soft, light brown	-15
20	SPT	10-8-5-7 (13)				
						-20
25	SPT	6-10-9-11 (19)			LIMESTONE, very soft, light brown	
						-25
30	SPT	15-12-10-7 (22)			LIMESTONE, soft, light brown	
				30.0		-27.0

Boring terminated at 30.0 feet.

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SHEET TITLE
SITE 9 GEOTECHNICAL BORINGS

CM-1.3

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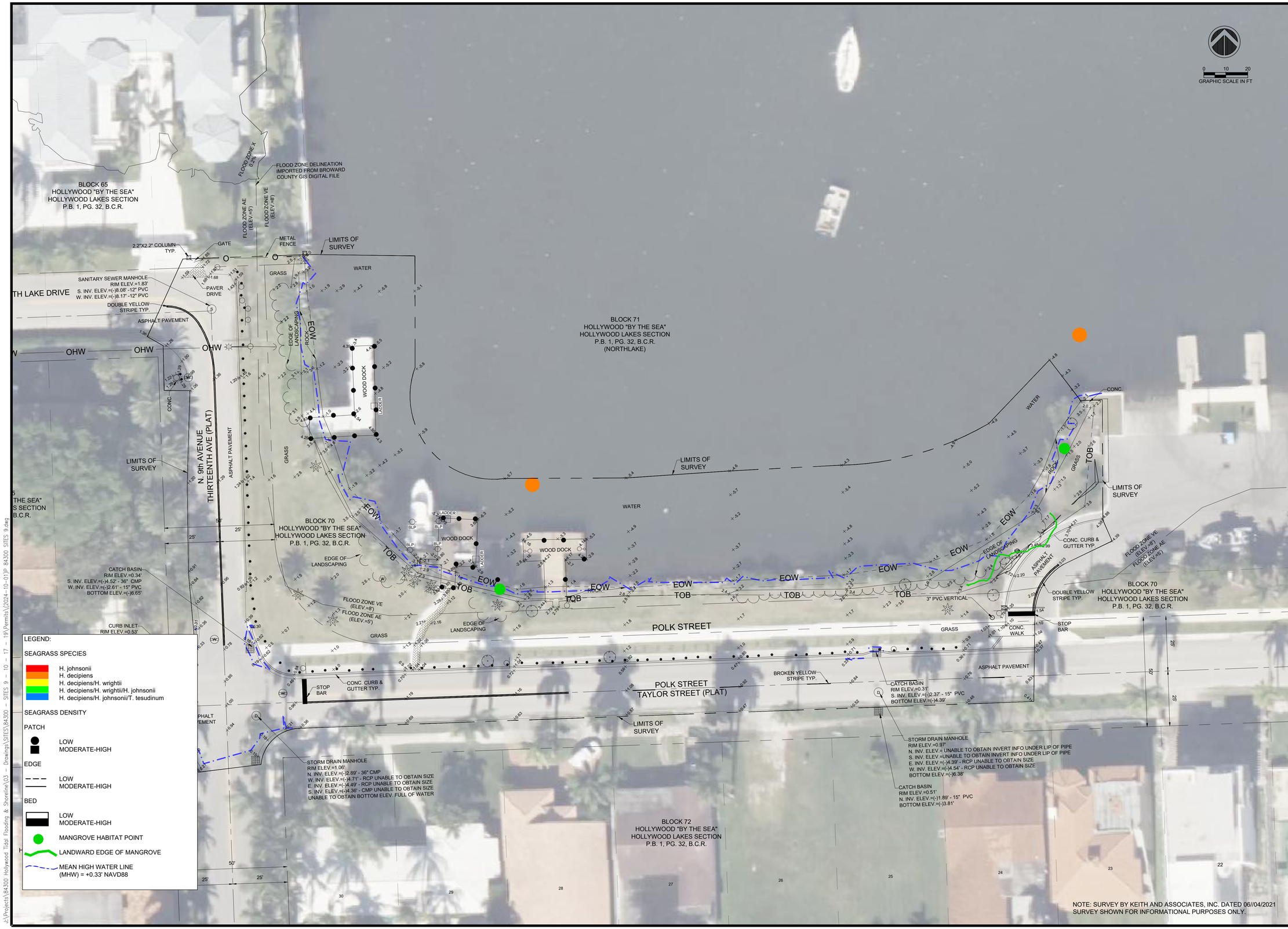

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SHEET TITLE
SITE 9
EXISTING CONDITIONS

CM-1.4

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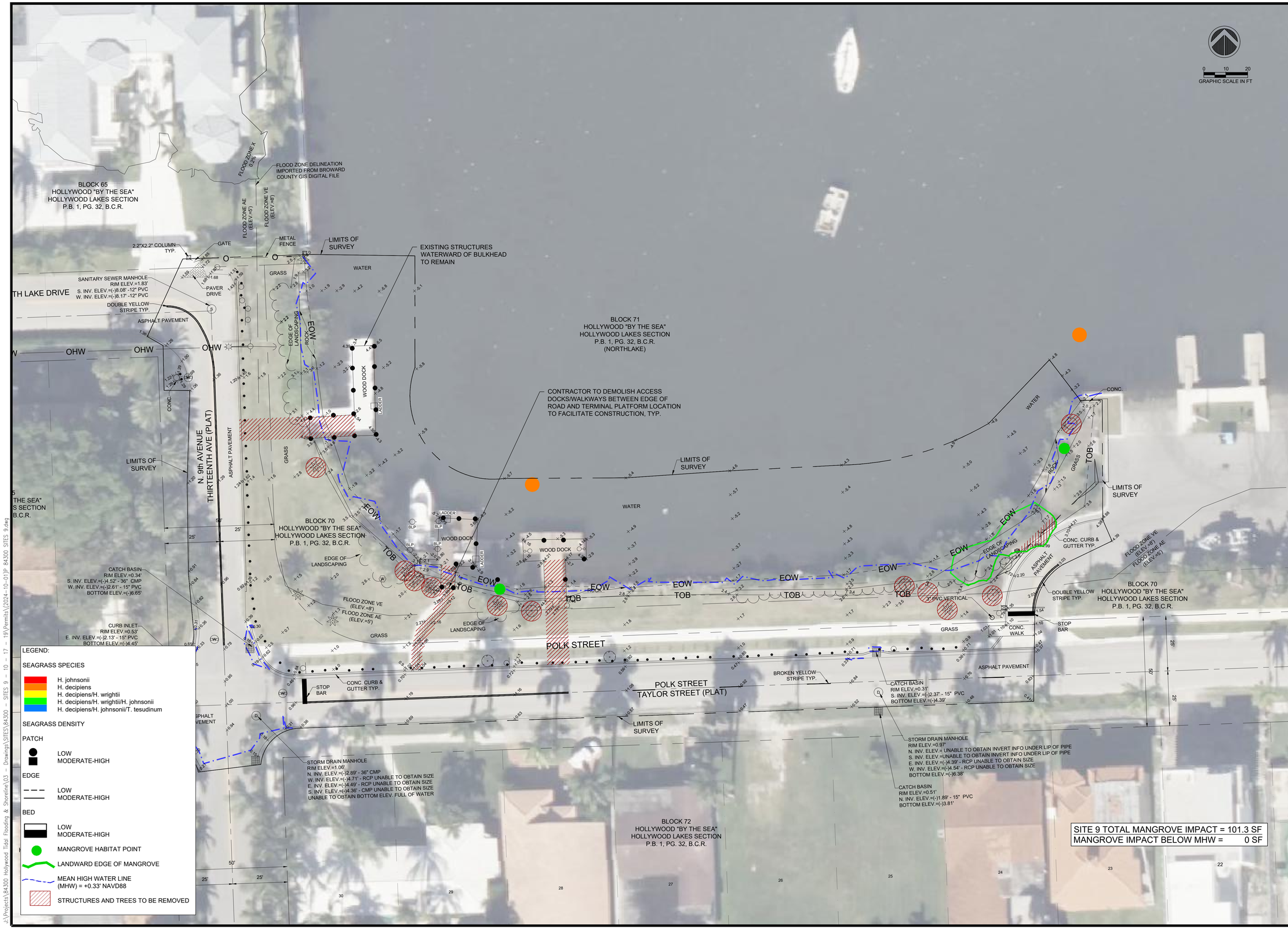

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SHEET TITLE
SITE 9
DEMOLITION PLAN

CM-1.5

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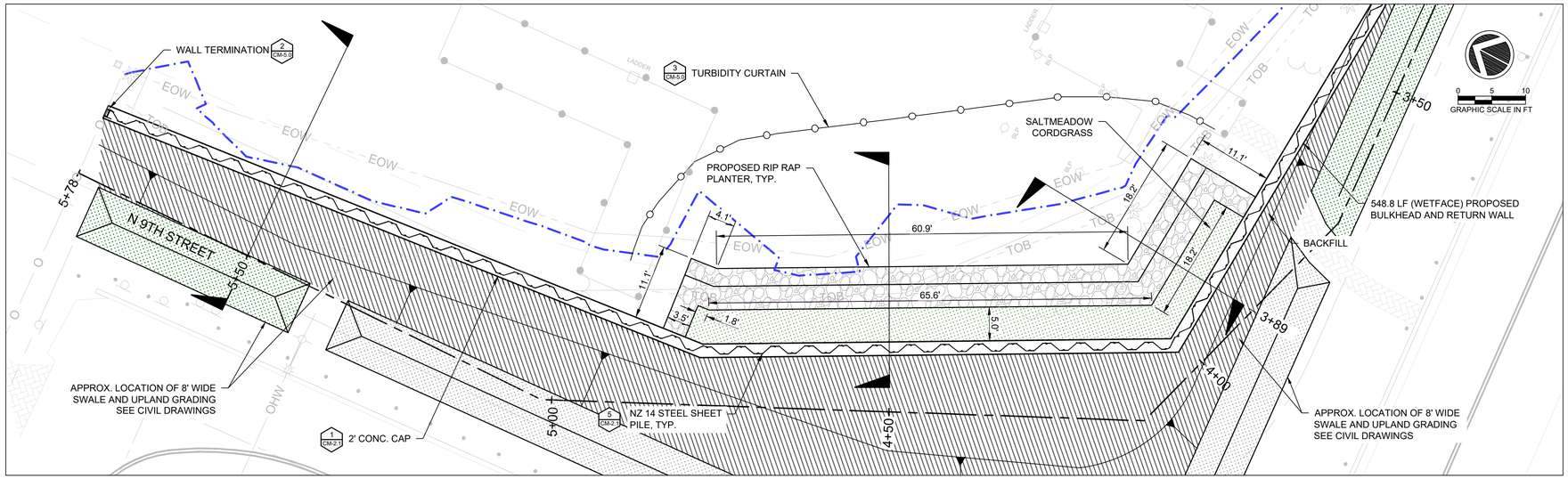


SITE 9 TOTAL MANGROVE IMPACT = 103.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

LEGEND:

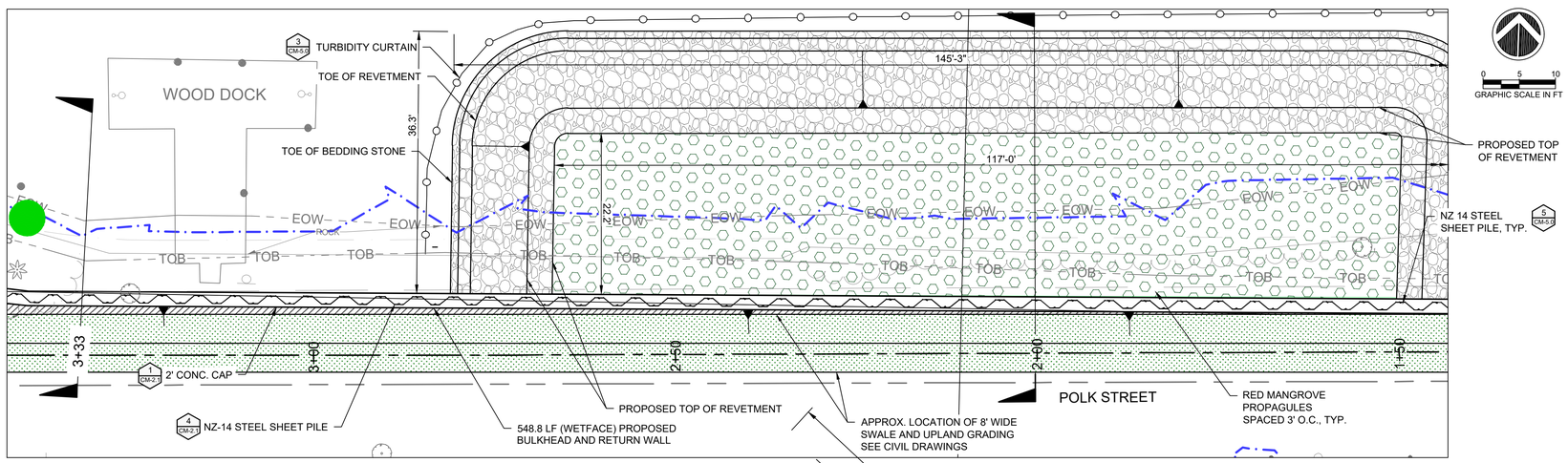
SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

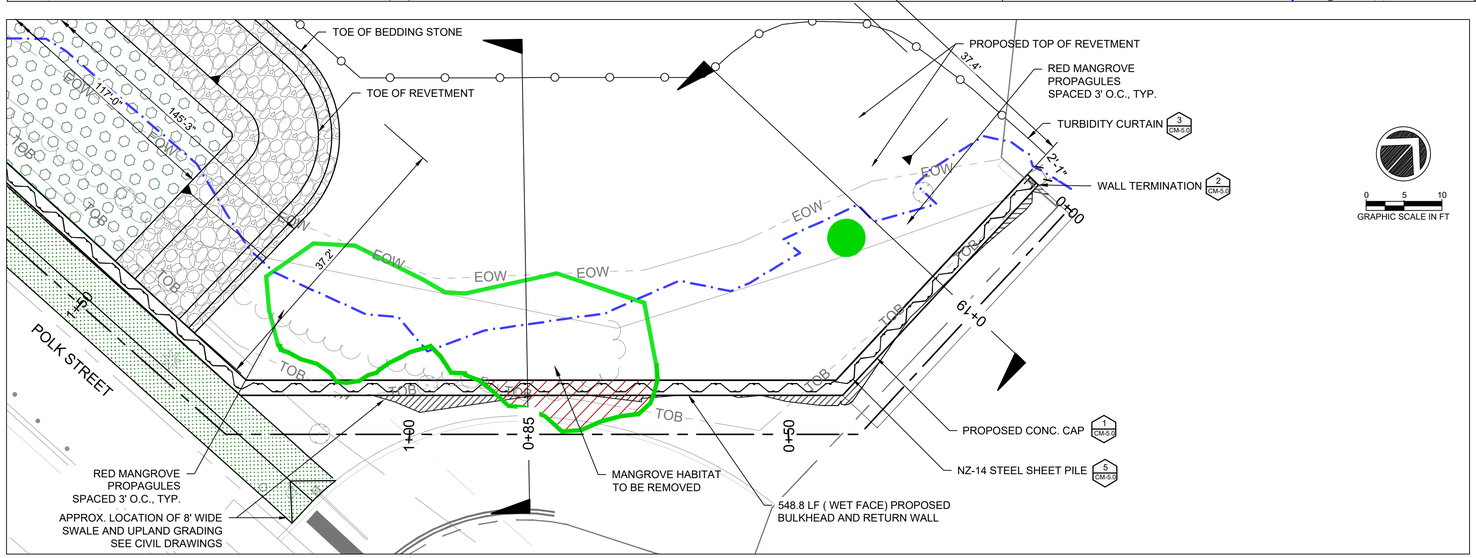
SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88





SHEET PILE QUANTITIES TABLE (SITE 9)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	548.8
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	0.0

QUANTITIES TABLE (SITE 9)		
ITEM	S.F.	CY
TOTAL SAND FILL	2,721.1	63.8
SAND FILL BELOW MHW LINE (+0.33' NAVD)	1,193.0	63.8
TOTAL REVETMENT FILL	2,560.1	130.1
REVETMENT FILL BELOW HAT LINE (+0.33' NAVD)	2,560.1	55.4
BACKFILL LANDWARD OF SHEET PILE WALL BELOW MHE LINE (+0.33' NAVD)	0.0	0
TOTAL ARMOR STONE	2,928.7	336.1
ARMOR STONE BELOW MHW LINE (+0.33' NAVD)	2,035.3	238.5
TOTAL BEDDING STONE	3,328.4	89.6
BEDDING STONE BELOW MHW LINE (+0.33' NAVD)	2,228.8	61.9
MANGROVE PROPAGULES	2,626.9	N/A
CORDGRASS	446.6	N/A
TOTAL EXCAVATION SEAWARD OF BULKHEAD	5,949.5	260.9
EXCAVATION SEAWARD OF BULKHEAD BELOW MHW LINE (+0.33' NAVD)	3,421.8	119.4

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

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GEOTECHNICAL ENGINEER
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KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
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BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 9 PROPOSED CONDITIONS PLAN

CM-1.6

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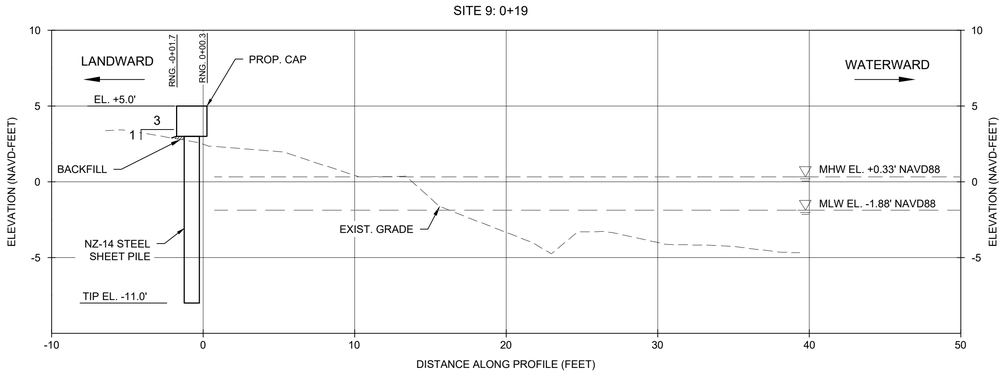

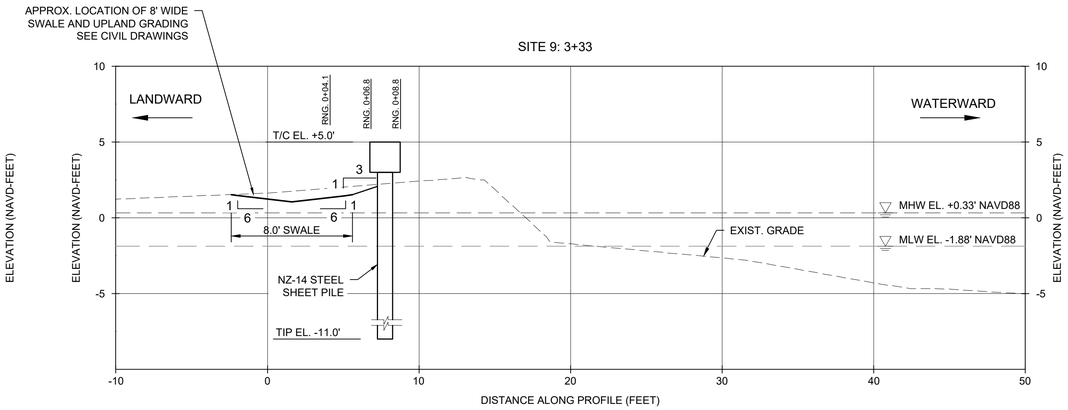

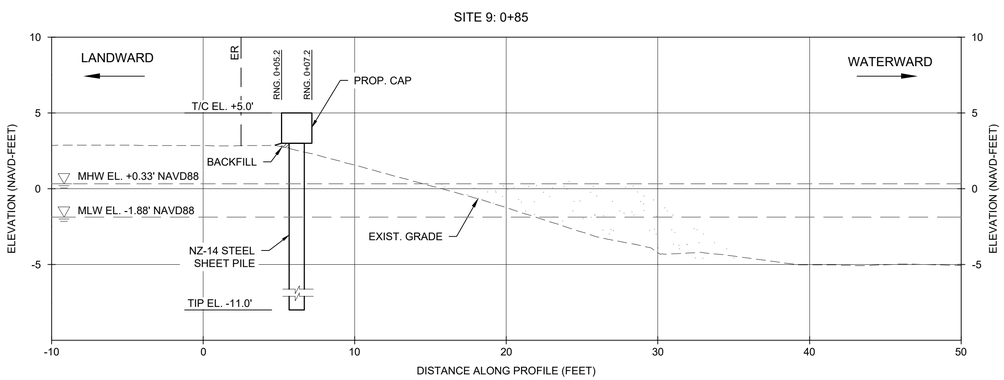

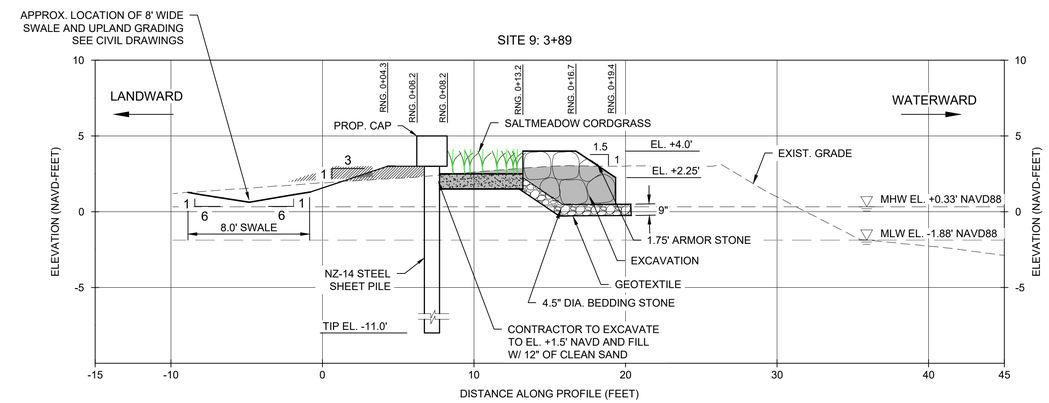

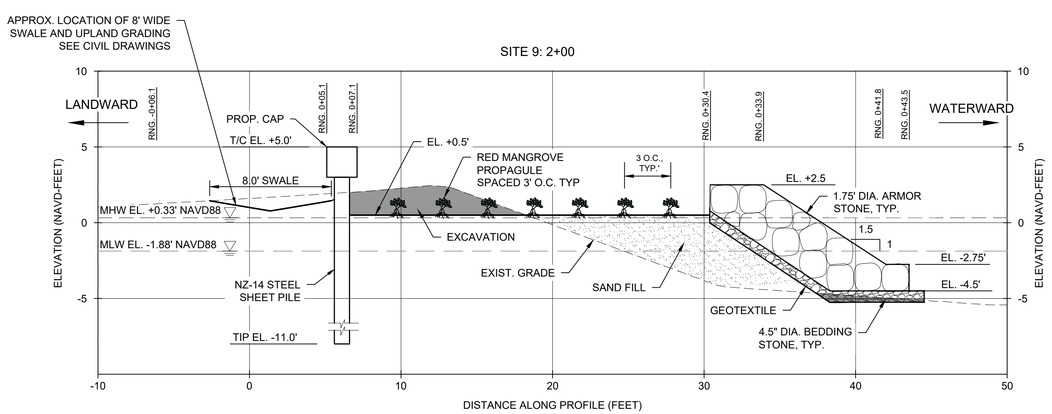

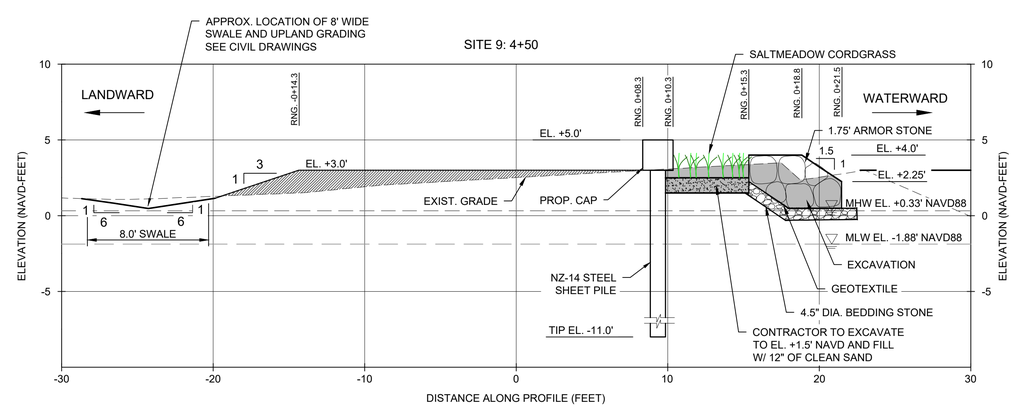

0 5 10
GRAPHIC SCALE IN FT

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
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CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 9
CROSS SECTIONS

CM-1.7

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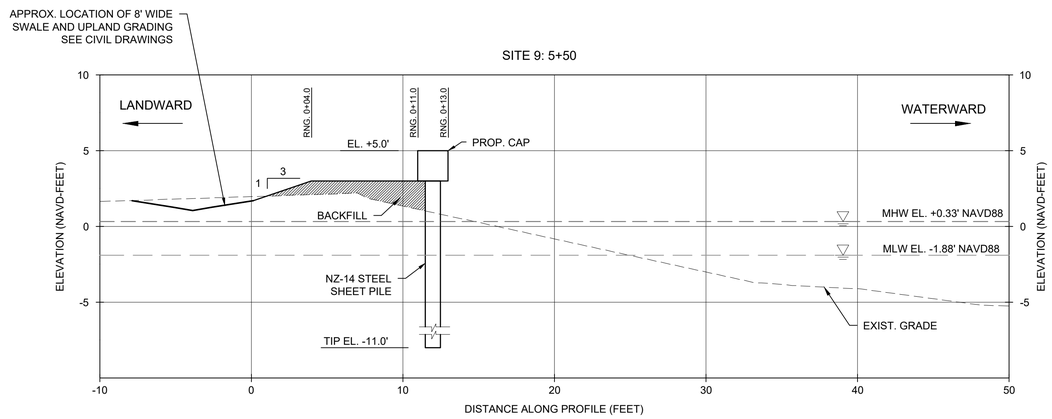

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GRAPHIC SCALE IN FT

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CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 9
CROSS SECTIONS

CM-1.8

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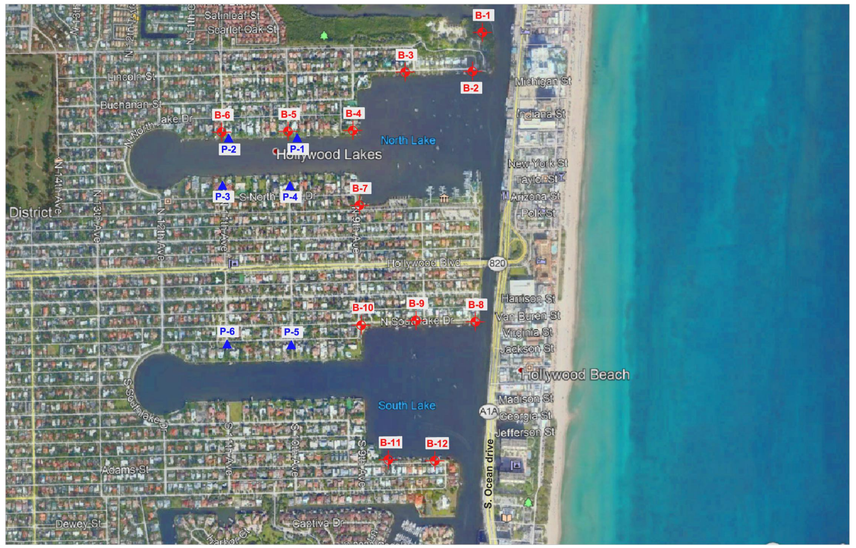

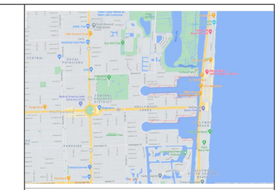

Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: Site Vicinity Map & Test Location Plan				DWN BY: NVF
	PROJECT NAME: City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1				CKD BY: CLG
	PROJECT LOCATION: City of Hollywood, Hollywood, Florida	PROJECT NO: 16959	DATE: 02/01/2021	DWG NO: 1	APD BY ___

BORING NUMBER B-8

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/28/21 **COMPLETED** 1/28/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** --- Not Recorded
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	36-21-21-5 (42)	GP		1" of Asphalt (0.1)	2.9
					LIMESTONE FRAGMENTS, dense, light gray, with sand (1.0)	2.0
	SPT	4-2-1-1 (3)	ML		SILT, hard, dark gray	0
					SILT, soft, dark gray	
5	SPT	1-1-1-1 (2)			SILT, very soft, dark gray	
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
10	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray, with organics	
					SILT, very soft, dark gray (11.0)	-8.0
	SPT	1-10-9-11 (19)	LS		LIMESTONE, very soft, light brown	-10
	SPT	3-4-3-6 (7)			LIMESTONE, very soft, light brown	
15	SPT	8-7-5-6 (12)			LIMESTONE, very soft, light brown	
						-15
20	SPT	11-21-17-14 (38)			LIMESTONE, medium hard, light brown	
						-20
25	SPT	17-28-25-34 (53)			LIMESTONE, moderately hard, light brown	
						-25
30	SPT	13-25-20-28 (45)			LIMESTONE, medium hard, light brown (30.0)	-27.0

Boring terminated at 30.0 feet.

PAGE A-8

BORING NUMBER B-9

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/2/21 **COMPLETED** 2/2/21 **GROUND ELEVATION** 2 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 1.8 ft / Elev 0.2 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY T. Carson/ R. Jimenez **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	2-2-2-3 (4)	SM		1" of Topsoil (0.1)	1.9
			SM		SILTY SAND, very loose, gray, (2.0)	0 0.0
	SPT	3-4-3-2 (7)	GP		LIMESTONE FRAGMENTS, loose, fine, gray, with sand and organics (4.0)	-2.0
5	SPT	WOH-WOH-WOH-WOH (WOH)	SP		SAND, very loose, fine, brown, with limestone fragments	
	SPT	10-14-12-13 (26)			SAND, medium dense, fine, brown, with limestone fragments (8.0)	-5 -6.0
10	SPT	10-8-7-12 (15)	LS		LIMESTONE, very soft, light brown	
	SPT	8-6-10-17 (16)			LIMESTONE, very soft, light brown	-10
	SPT	6-8-10-10 (18)			LIMESTONE, very soft, light brown	
15	SPT	7-9-8-10 (17)			LIMESTONE, very soft, light brown	
						-15
20	SPT	3-4-6-5 (10)			LIMESTONE, very soft, light brown	
						-20
25	SPT	6-5-5-10 (10)			LIMESTONE, very soft, light brown	
						-25
30	SPT	8-5-6-19 (11)			LIMESTONE, very soft, light brown (30.0)	-28.0

Boring terminated at 30.0 feet.

PAGE A-9

BORING NUMBER B-10

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 2/1/21 **COMPLETED** 2/1/21 **GROUND ELEVATION** 2 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 1.7 ft / Elev 0.3 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY T. Carson/ R. Jimenez **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft, NAVD)
0	SPT	3-2-1-1 (3)	SM		2" of Topsoil (0.1)	1.9
			SM		SILTY SAND, very loose, gray (2.0)	0 0.0
	SPT	WOH-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray	
5	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, soft, dark gray, with a trace of limestone fragments and organics (8.0)	-6.0
10	SPT	WOH-WOH-3-22 (3)	LS		SILTY LIMESTONE, hard, light brown	
	SPT	28-51-53-19 (104)			LIMESTONE, very soft, light brown	-10
	SPT	7-5-8-26 (13)			LIMESTONE, soft, light brown	
15	SPT	7-14-10-15 (24)			LIMESTONE, very soft, light brown	
	SPT	8-7-6-11 (13)			LIMESTONE, very soft, light brown	-15
20	SPT	4-5-4-8 (9)			LIMESTONE, very soft, light brown	-20
25	SPT	5-5-4-7 (9)			LIMESTONE, very soft, light brown	-25
30	SPT	9-7-5-15 (12)			LIMESTONE, very soft, light brown (30.0)	-28.0

Boring terminated at 30.0 feet.

PAGE A-10

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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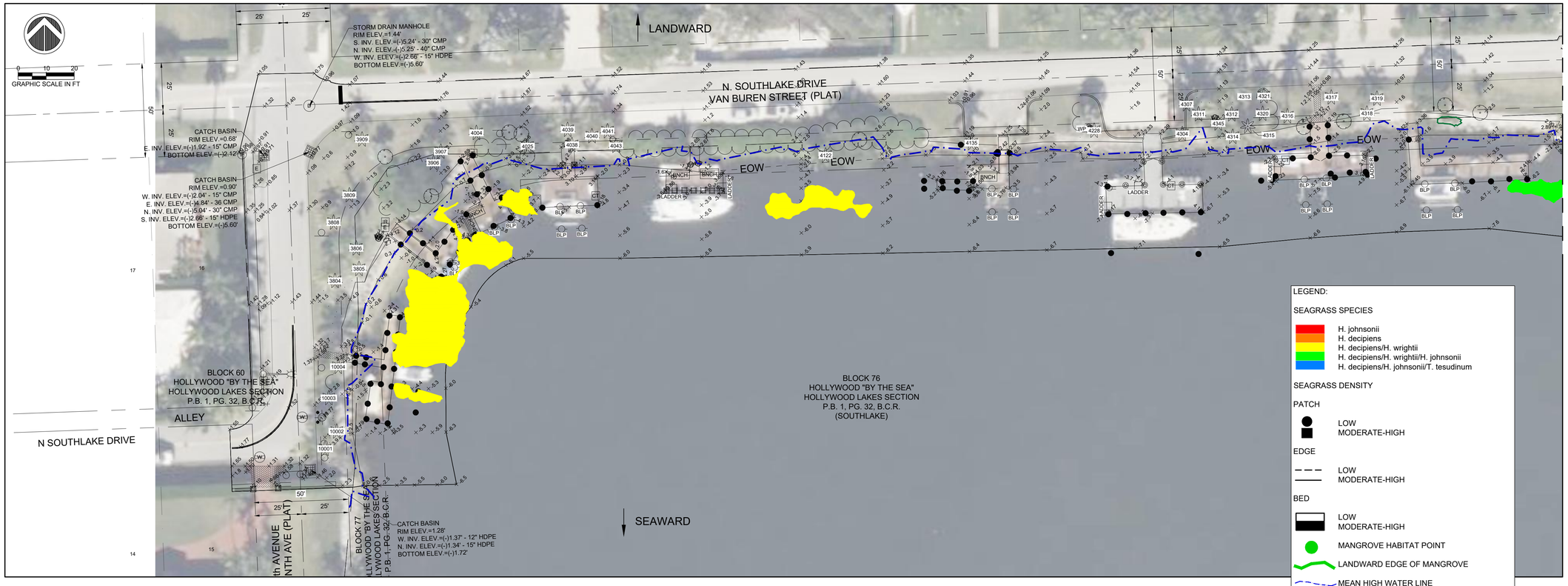
ISSUE	DATE	PERMIT DRAWINGS / SUBMISSION / REVISION
	10/01/2024	

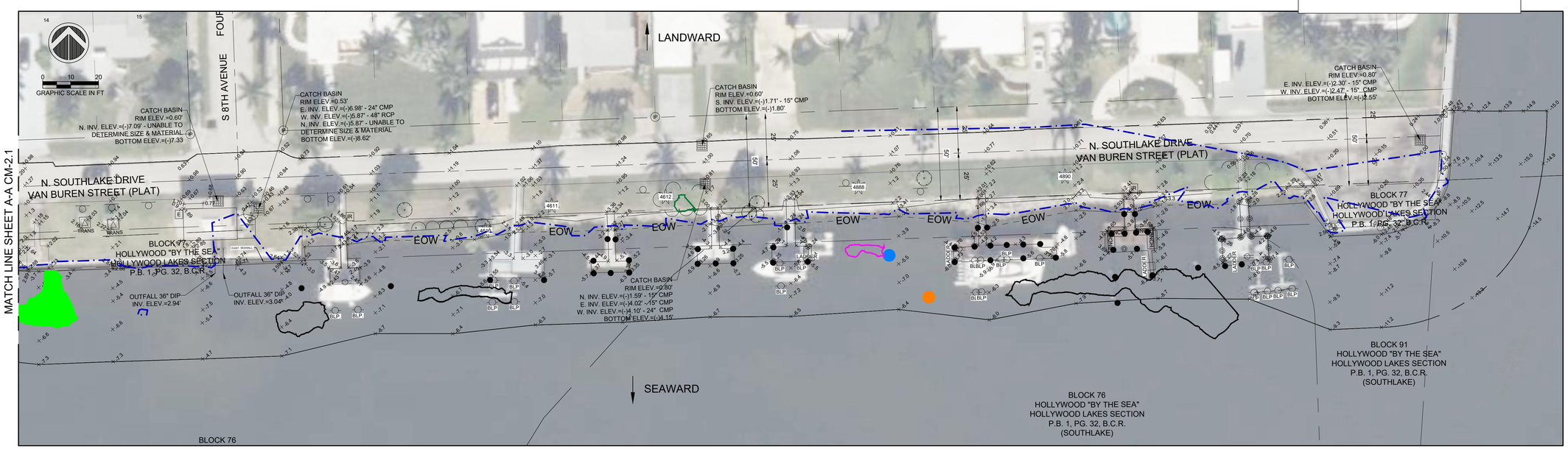
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 GEOTECHNICAL BORINGS

CM-2.0

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01\P 84300 SITES 10.dwg





NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

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SCALE	AS SHOWN

SHEET TITLE
SITE 10
EXISTING CONDITIONS

CM-2.1

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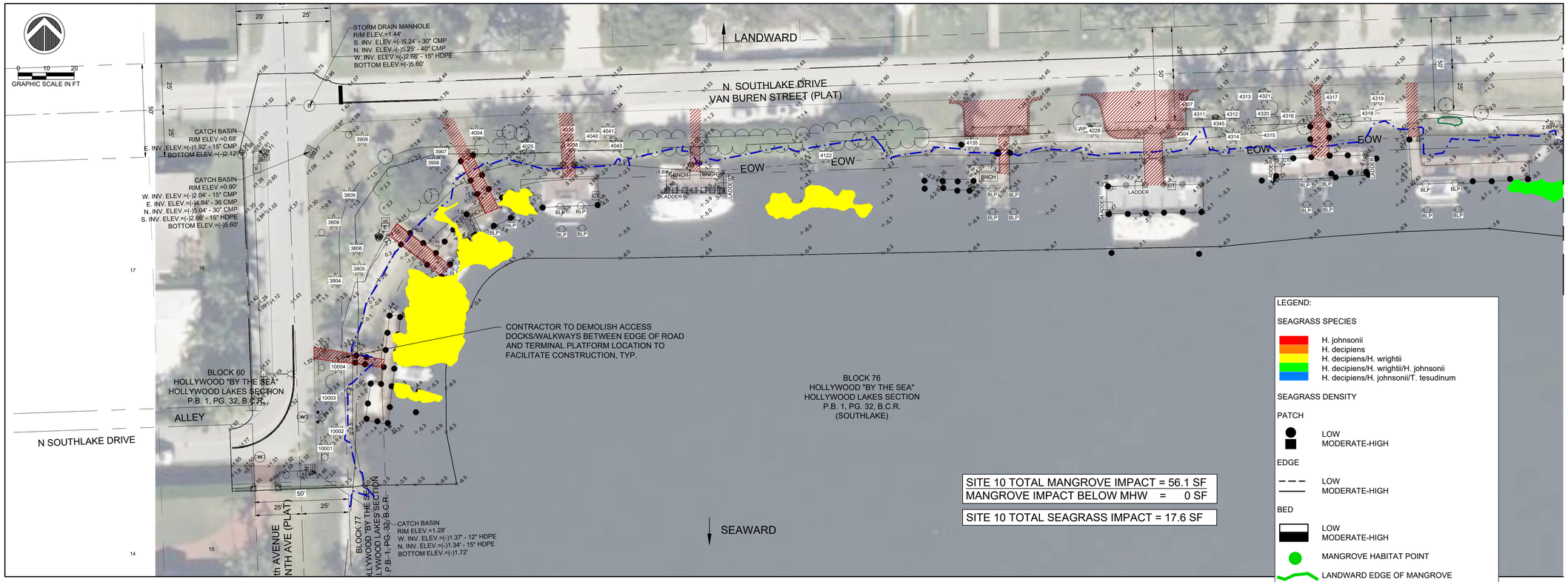


SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

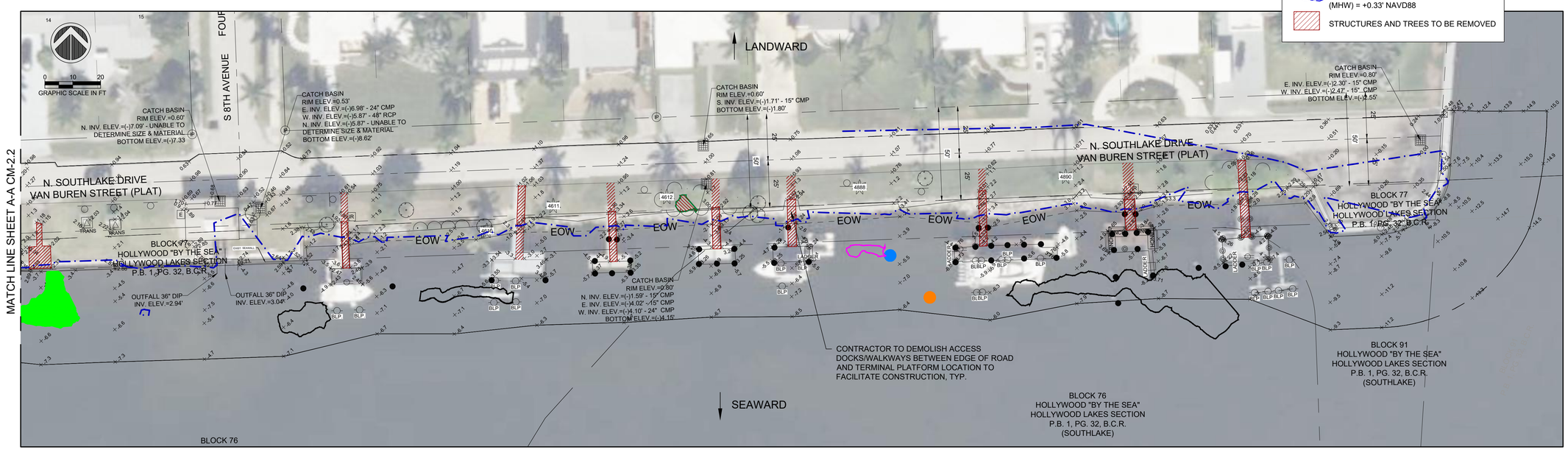
SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- STRUCTURES AND TREES TO BE REMOVED



NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
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KEITH & ASSOCIATES
SURVEYOR
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POMPANO BEACH, FL 33060
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CIVIL ENGINEER
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TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 DEMOLITION PLAN

CM-2.2

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 10.dwg

LEGEND:

SEAGRASS SPECIES

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- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

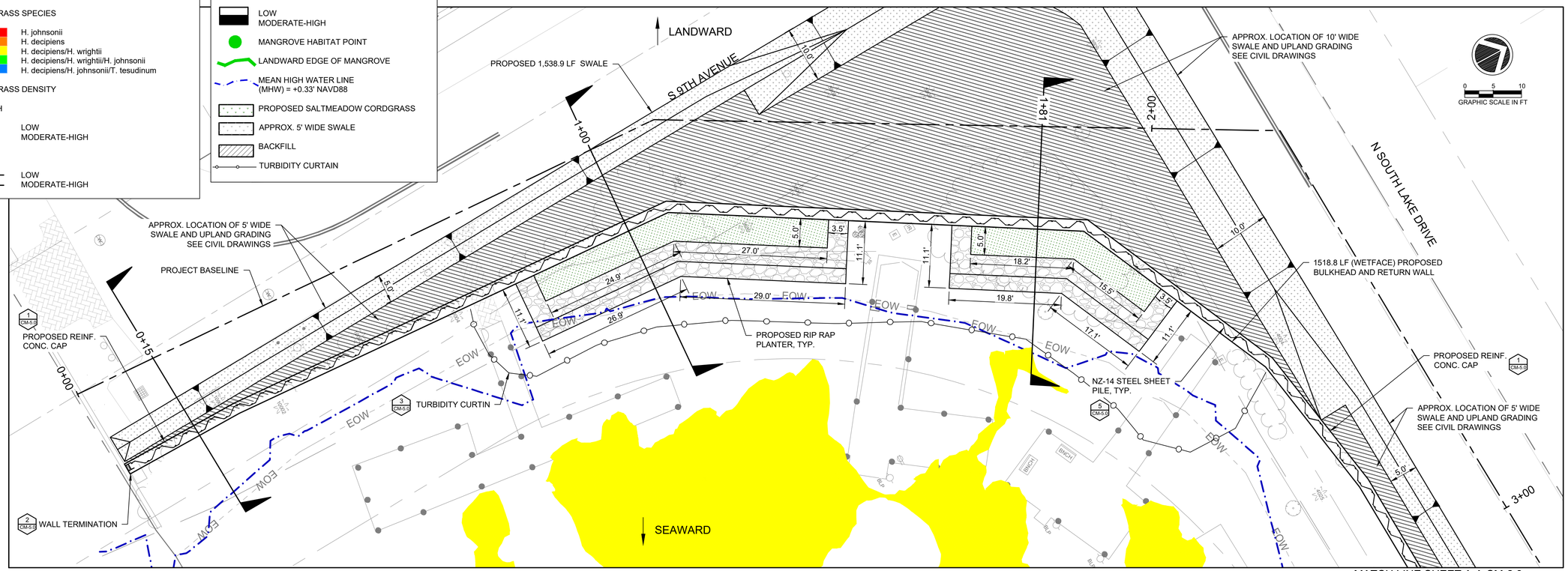
- LOW
- MODERATE-HIGH

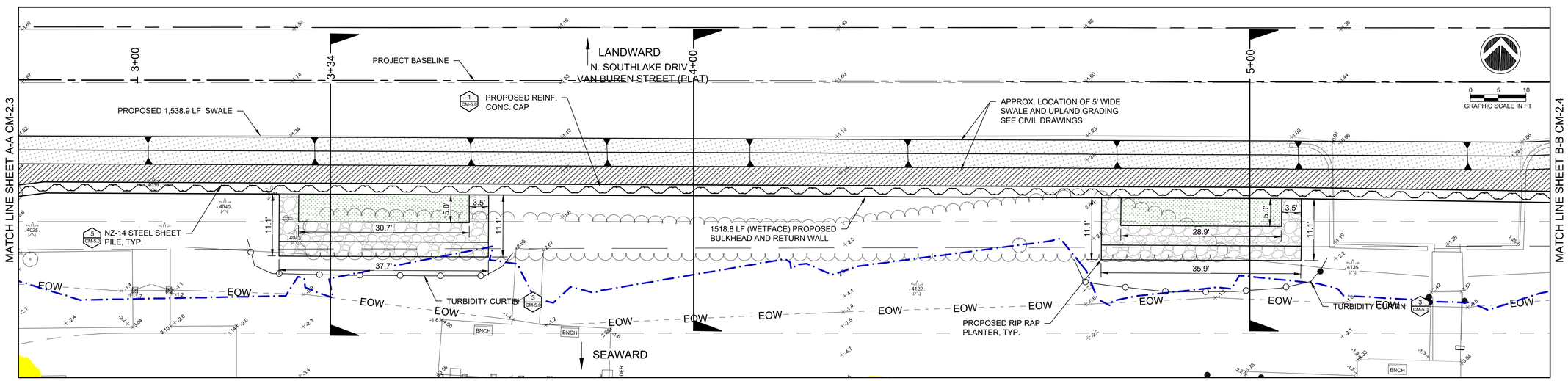
EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN





SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

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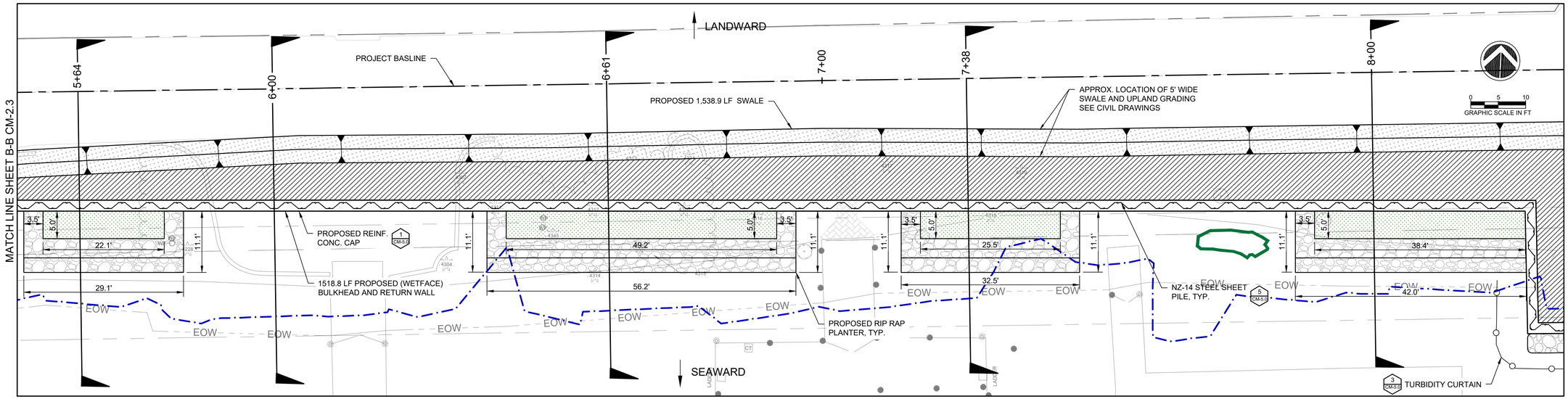
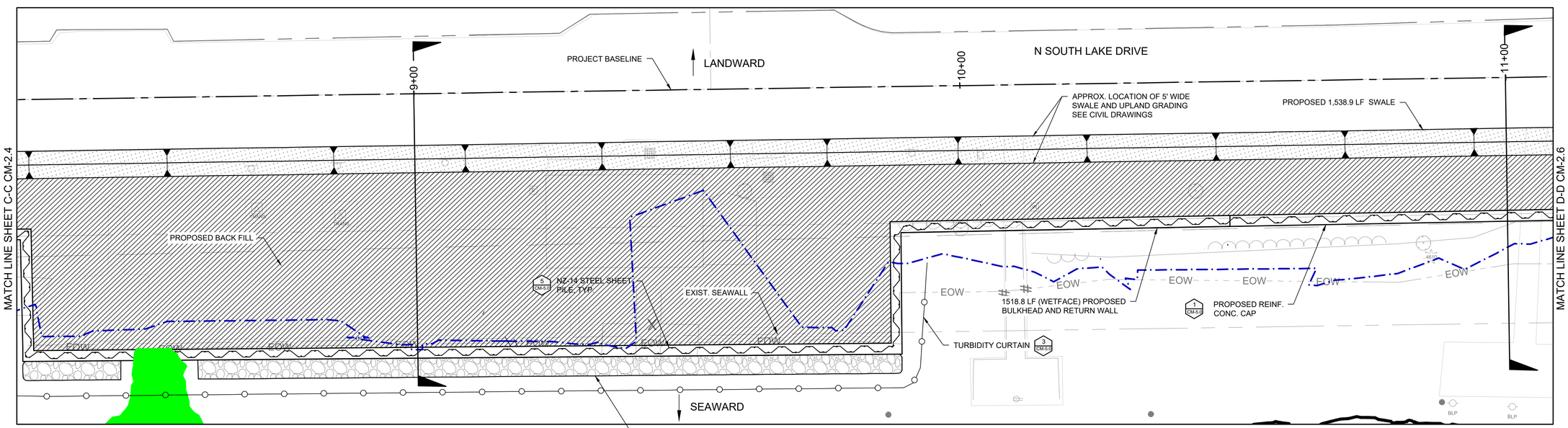
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.3

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 10.dwg





LEGEND:

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- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
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SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

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- MODERATE-HIGH

BED

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- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
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- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN
- RIPRAP TOE PROTECTION

SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF	
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SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF	

NOTE:

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SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.4

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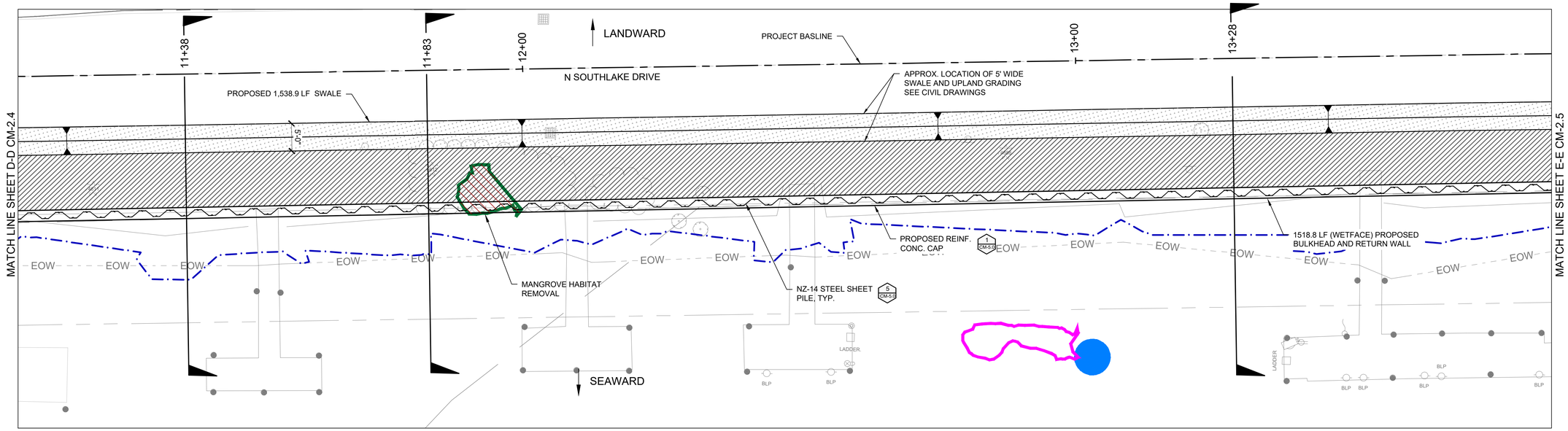

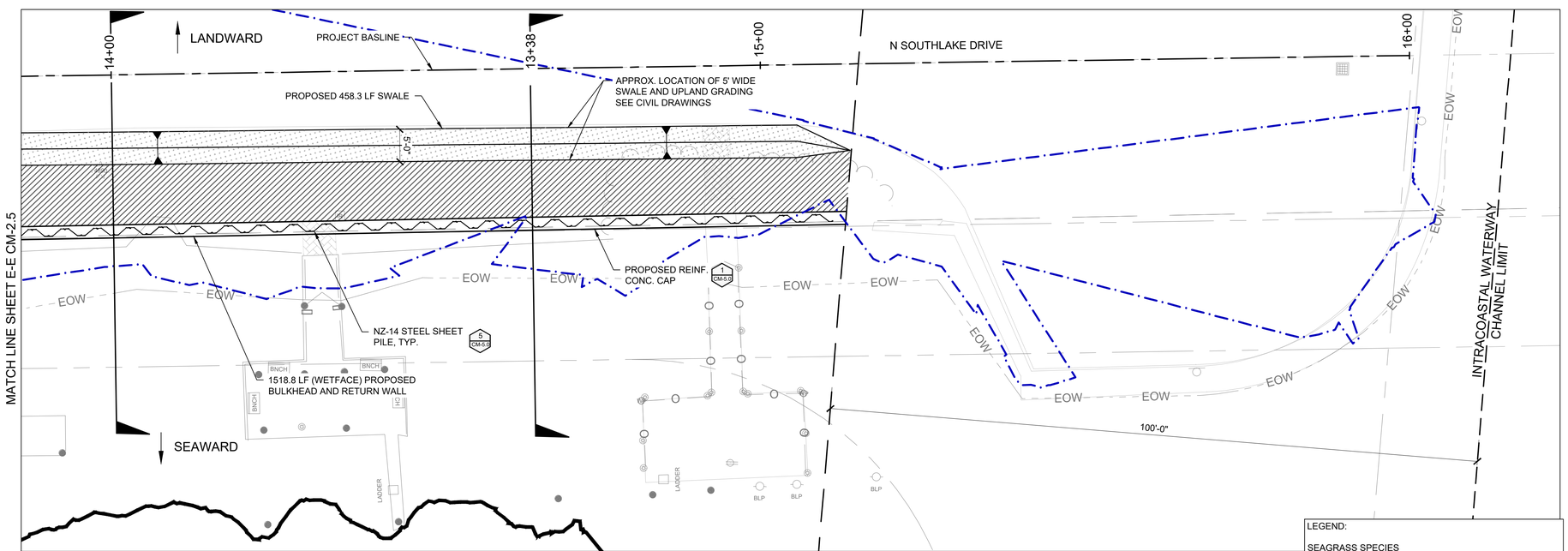

0 5 10
GRAPHIC SCALE IN FT

SITE 10 TOTAL MANGROVE IMPACT = 56.1 SF
MANGROVE IMPACT BELOW MHW = 0 SF

SITE 10 TOTAL SEAGRASS IMPACT = 17.6 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

SHEET PILE QUANTITIES TABLE (SITE 10)

ITEM	L.F.
TOTAL NZ 14 SHEET PILE	1,518.8
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	215.3

QUANTITIES TABLE (SITE 10)

ITEM	S.F.	CY
TOTAL SAND FILL	2131.9	4.1
SAND FILL BELOW MHW LINE (+0.33' NAVD)	81.4	3.0
BACKFILL LANDWARD OF SHEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	503.3	68.6
TOTAL ARMOR STONE	2,019.8	223.3
ARMOR STONE BELOW MHW LINE (+0.33' NAVD)	81.4	8.6
TOTAL EXCAVATION LANDWARD OF BULKHEAD	3,647.7	4.5
EXCAVATION LANDWARD OF BULKHEAD BELOW MHW LINE (+0.33' NAVD)	81.3	3.0

LEGEND:

SEAGRASS SPECIES
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- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
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SEAGRASS DENSITY

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EDGE
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CC PROJECT NO:	84300
DRAWN	GK
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SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED CONDITIONS

CM-2.5

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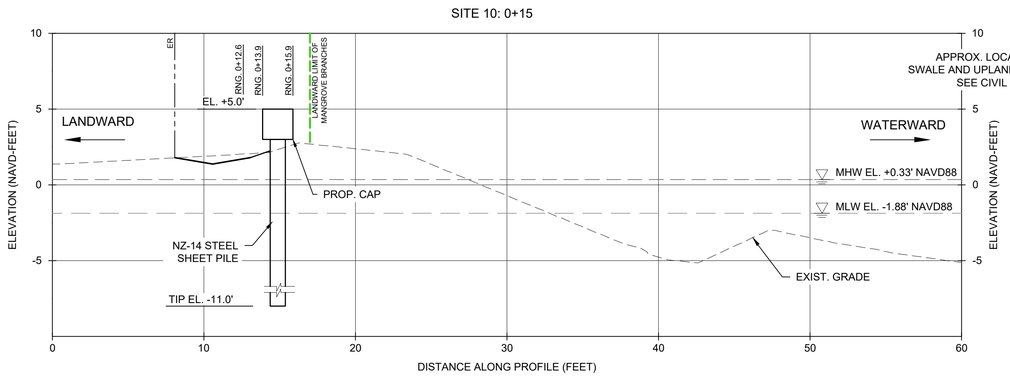

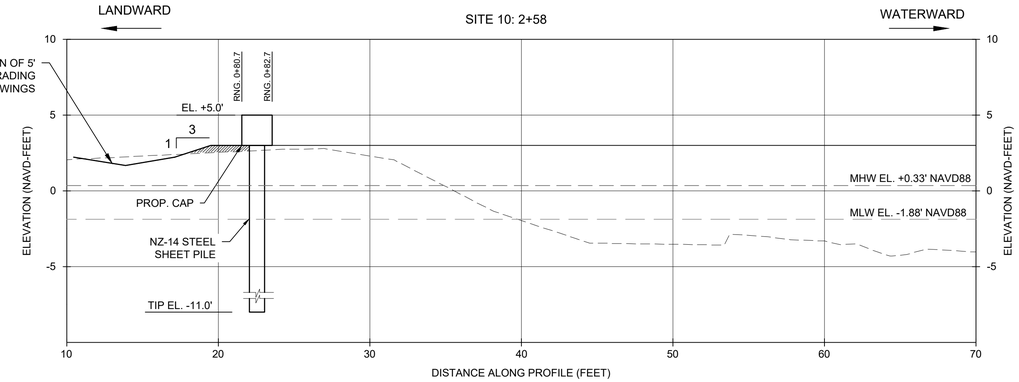

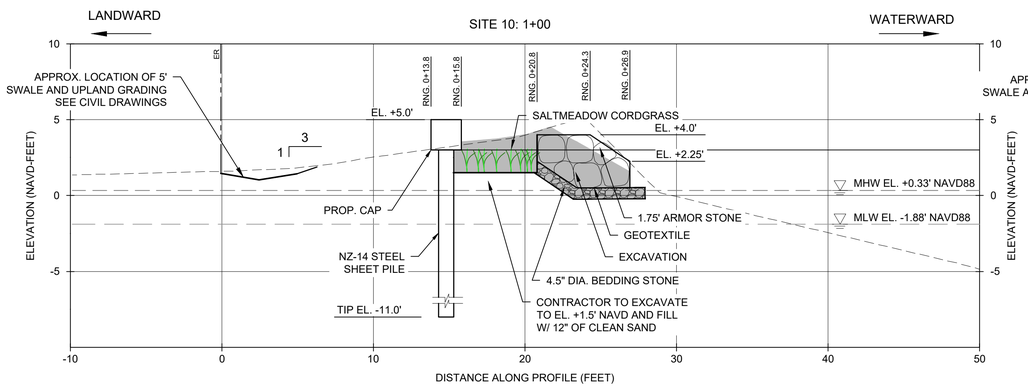

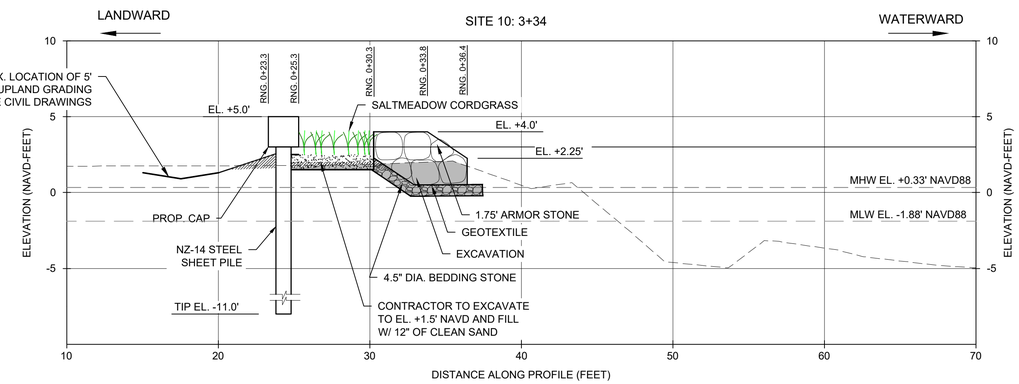

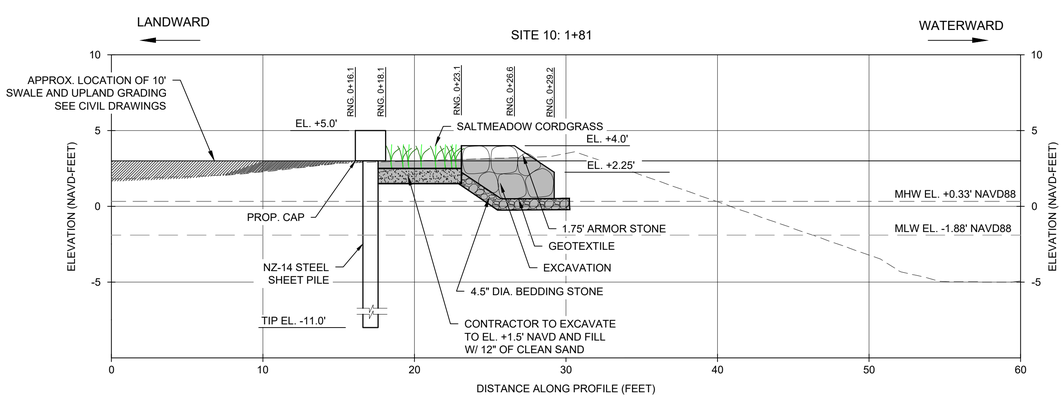

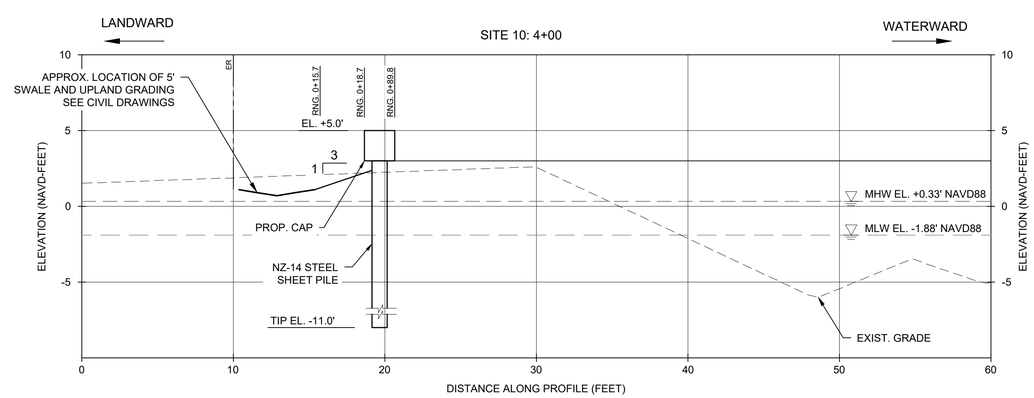

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GRAPHIC SCALE IN FT

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CC PROJECT NO:	84300
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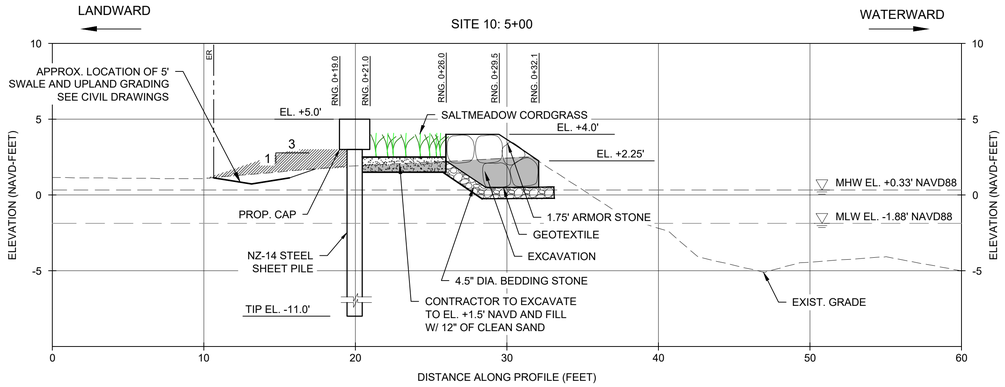
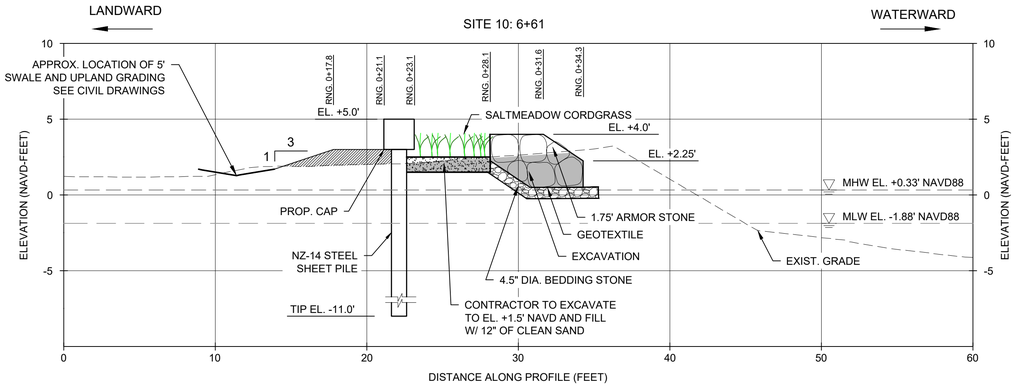
SCALE	AS SHOWN

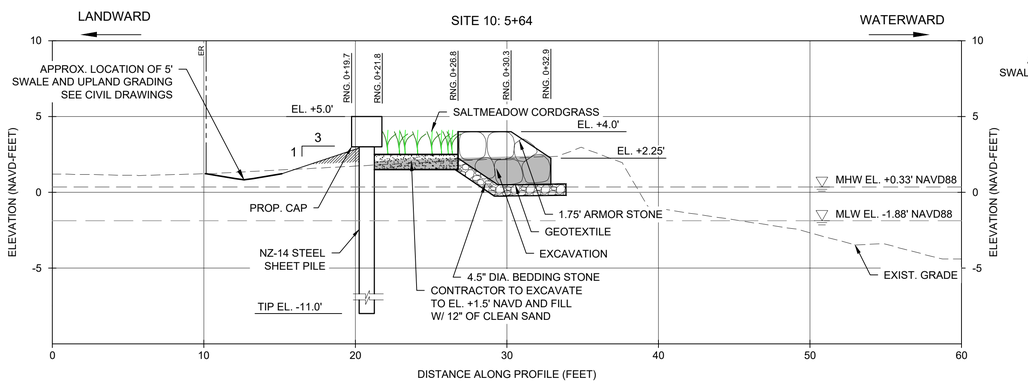
SHEET TITLE
SITE 10
CROSS SECTIONS

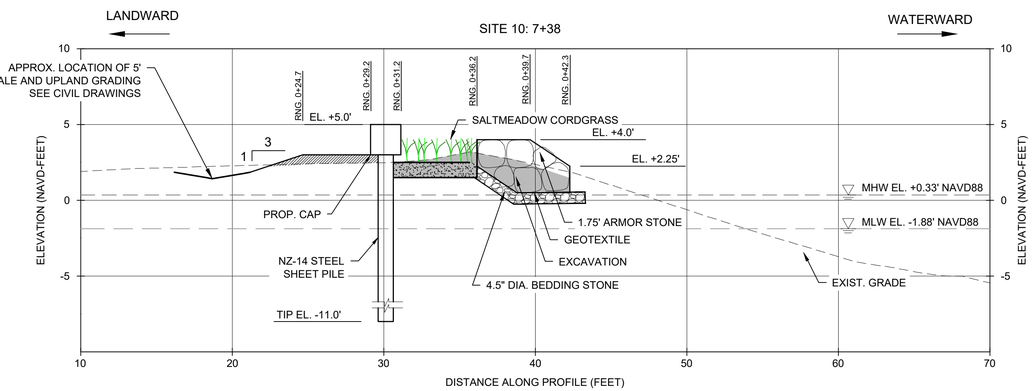
CM-2.6

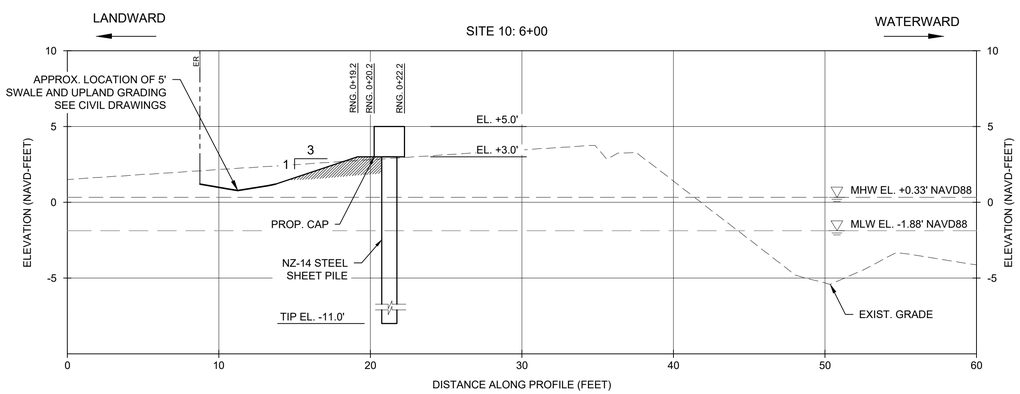
J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 10.dwg

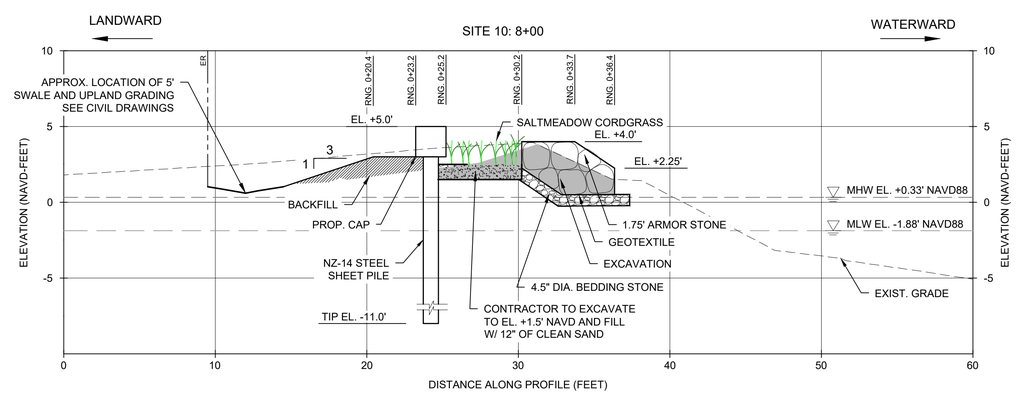












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CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10
CROSS SECTIONS

CM-2.7

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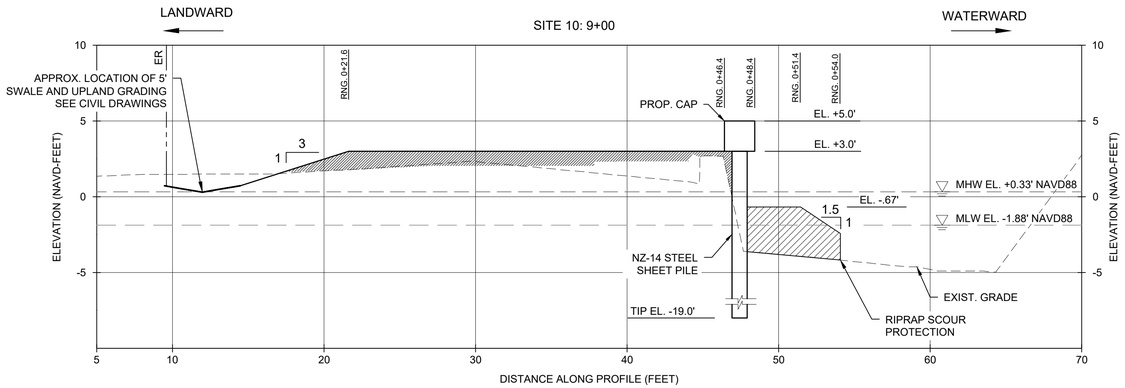
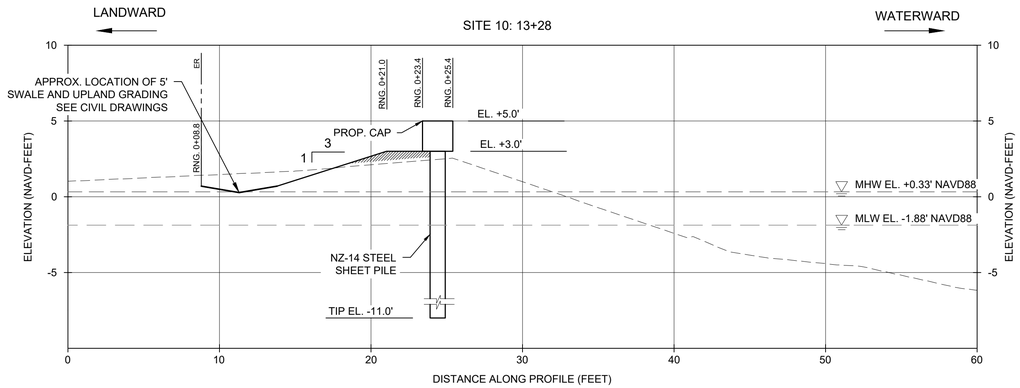
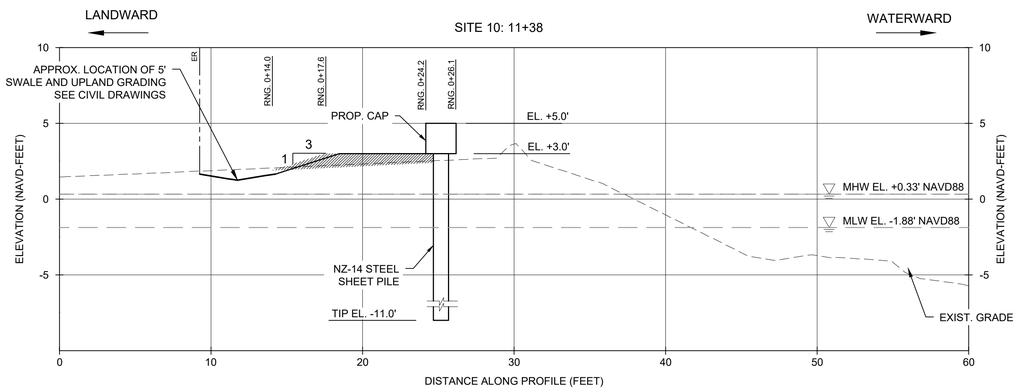
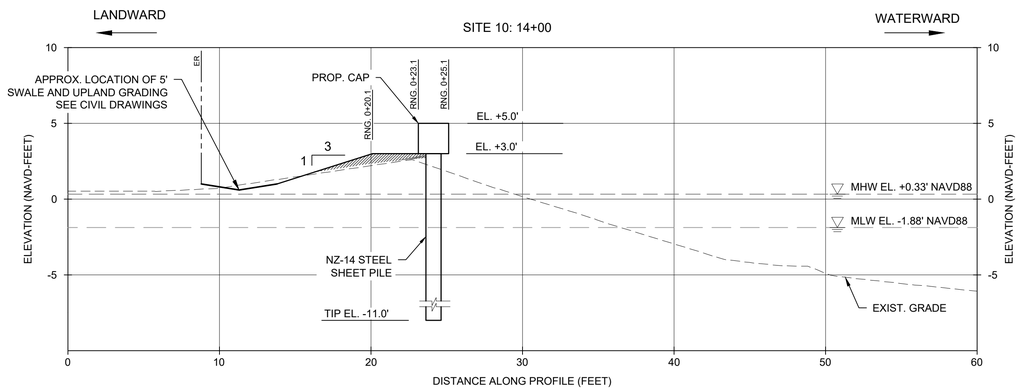
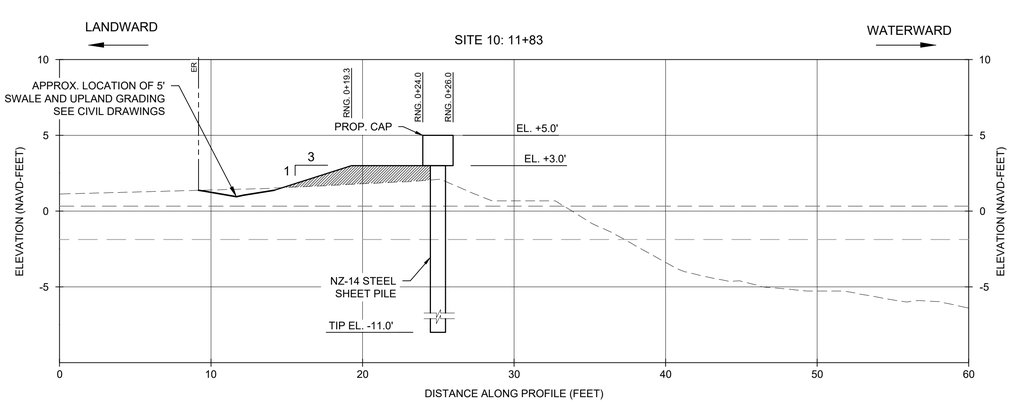
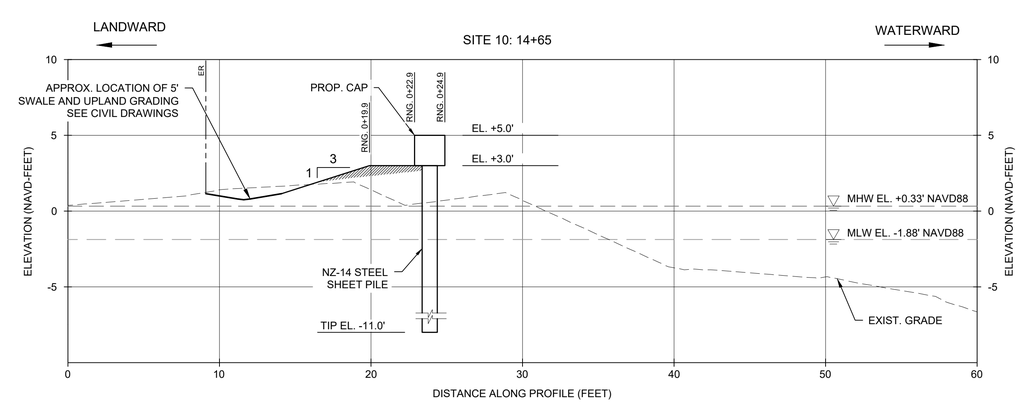












0 5 10
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

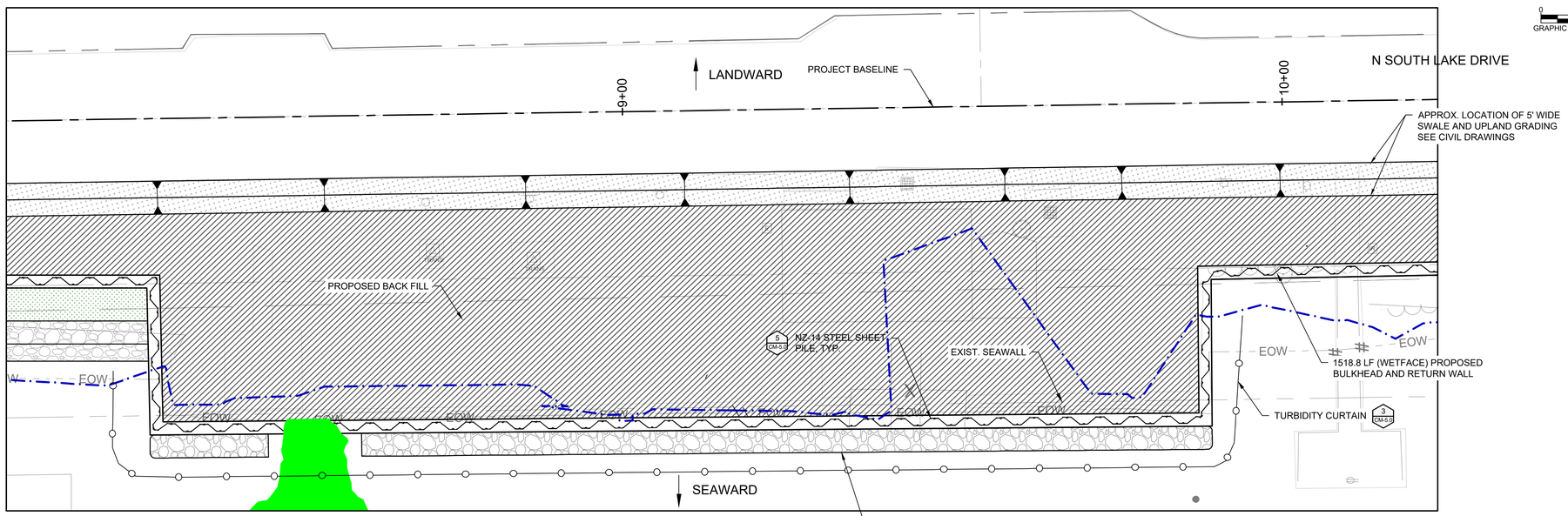
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

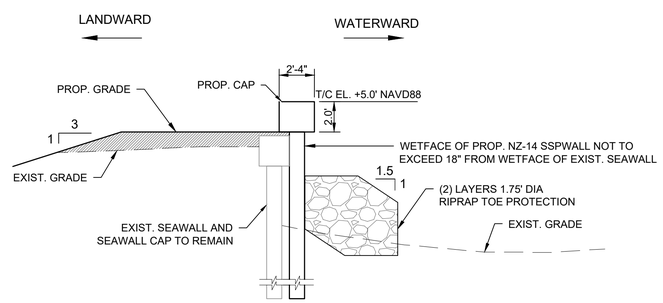
SHEET TITLE
SITE 10
CROSS SECTIONS

CM-2.8

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 10.dwg



OUTFALL WALL PLAN VIEW



TYPICAL OUTFALL WALL SECTION

SCALE: 1" = 5'

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN
- RIPRAP TOE PROTECTION

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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ISSUE	DATE	SUBMISSION / REVISION
	10.01.2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 10 PROPOSED OUTFALL WALL

CM-2.9

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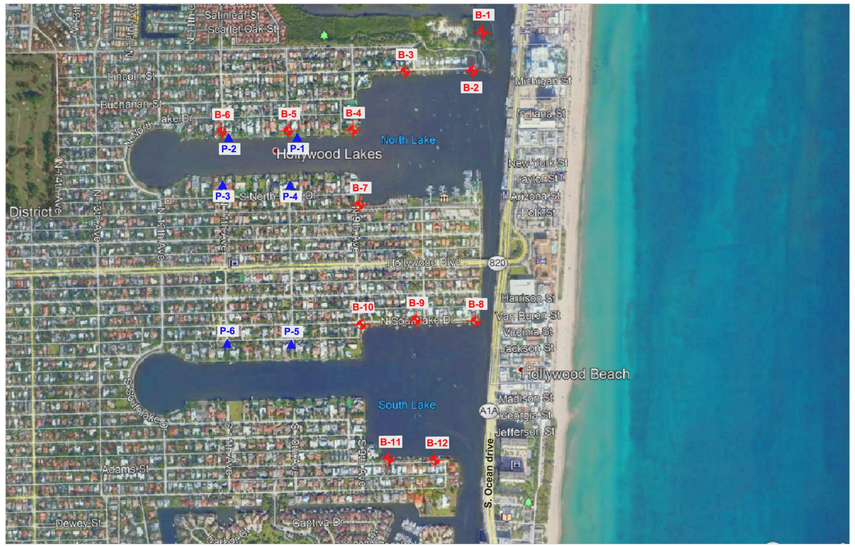

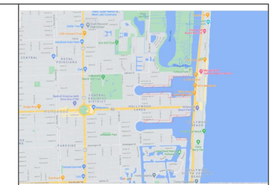

Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: *Site Vicinity Map & Test Location Plan*			DWN BY: *NVF*
	PROJECT NAME: *City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1*			CKD BY: *CLG*
	PROJECT LOCATION: *City of Hollywood, Hollywood, Florida*	PROJECT NO: *16959*	DATE: *02/01/2021*	DWG NO: *1* / APD BY —

BORING NUMBER B-11

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/27/21 **COMPLETED** 1/27/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 3.0 ft / Elev 0.0 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0					1" of Asphalt (0.1)	2.9
	SPT	30-19-11-11 (30)	GP		LIMESTONE FRAGMENTS, medium dense, light gray, with a trace of organics (2.0)	1.0
	SPT	1-1-1-1 (2)	PT		PEAT, very soft, dark brown	0
5	SPT	1-1-1-1 (2)			PEAT, very soft, dark brown	
	SPT	1-2-1-38 (3)			PEAT, soft, dark brown (7.0)	-4.0
	SPT	10-19-2-5 (21)	LS		LIMESTONE, very soft, light brown	-5
10	SPT	6-8-4-7 (12)			LIMESTONE, soft, light brown	
	SPT	12-14-13-15 (27)			LIMESTONE, very soft, light brown	-10
15	SPT	11-12-12-11 (24)			LIMESTONE, soft, light brown	
20	SPT	6-6-8-7 (14)			LIMESTONE, very soft, light brown	-15
25	SPT	3-4-4-5 (8)			LIMESTONE, very soft, light brown	-20
30	SPT	8-10-10-7 (20)			LIMESTONE, very soft, light brown (30.0)	-25
						-27.0

Boring terminated at 30.0 feet.

PAGE A-11

BORING NUMBER B-12

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/27/21 **COMPLETED** 1/27/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 3.0 ft / Elev 0.0 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0					1" of Asphalt (0.1)	2.9
	SPT	28-16-11-10 (27)	GP		LIMESTONE FRAGMENTS, medium dense, light gray, with a trace of organics (1.0)	2.0
			ML		SILT, very stiff, dark gray	
	SPT	4-2-1-1 (3)			SILT, soft, dark gray (3.0)	0 0.0
5	SPT	1-1-1-1 (2)	PT		PEAT, soft, dark brown	
					PEAT, very soft, dark brown	
	SPT	1-1-2-70 (3)			PEAT, soft, dark brown (6.7)	-3.7
			LS		LIMESTONE, very soft, light brown	-5
10	SPT	7-22-4-4 (26)			LIMESTONE, soft, light brown	
	SPT	4-5-8-9 (13)			LIMESTONE, very soft, light brown	
	SPT	7-13-13-19 (26)			LIMESTONE, soft, light brown	-10
15	SPT	10-13-14-10 (27)			LIMESTONE, soft, light brown	
20	SPT	7-8-7-8 (15)			LIMESTONE, very soft, light brown	-15
						-20
25	SPT	4-5-5-4 (10)			LIMESTONE, very soft, light brown	
						-25
30	SPT	10-12-9-8 (21)			LIMESTONE, soft, light brown (30.0)	-27.0

Boring terminated at 30.0 feet.

PAGE A-12

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

ISSUE	DATE	
	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17 GEOTECHNICAL BORINGS

CM-3.0

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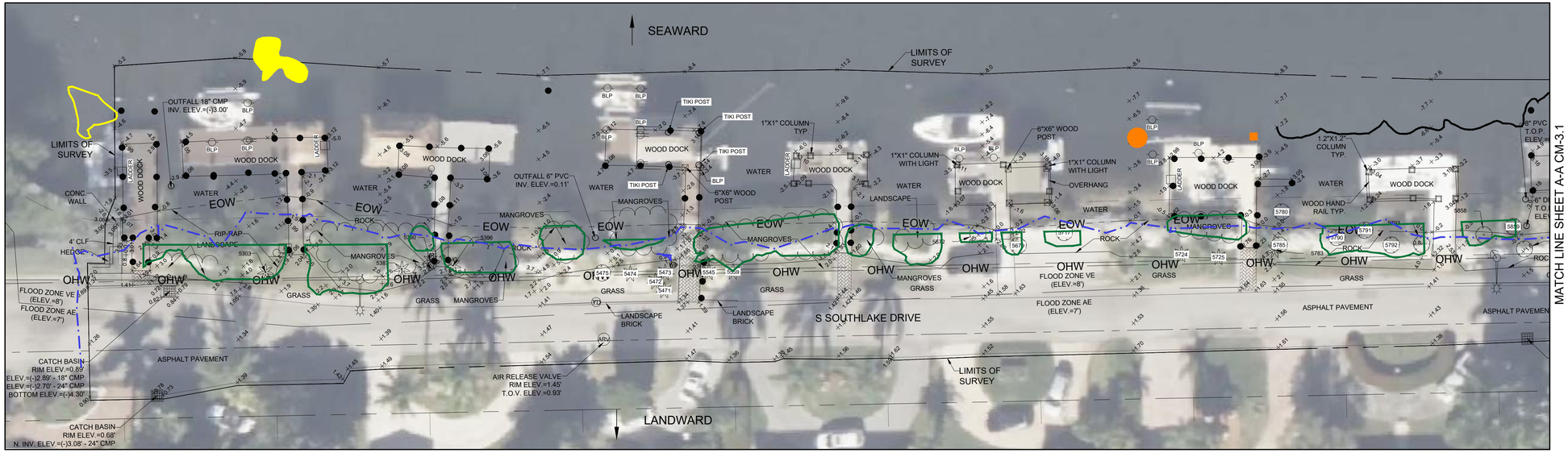

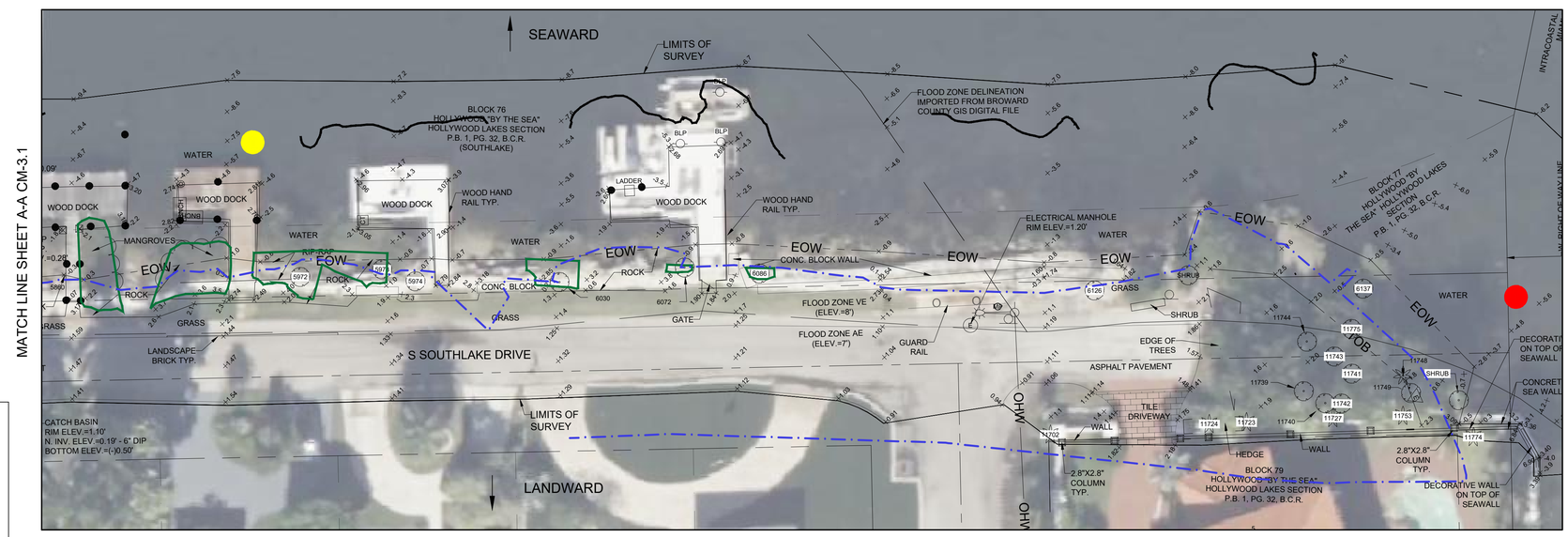

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

0 10 20
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

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N|V|5
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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
EXISTING CONDITIONS

CM-3.1

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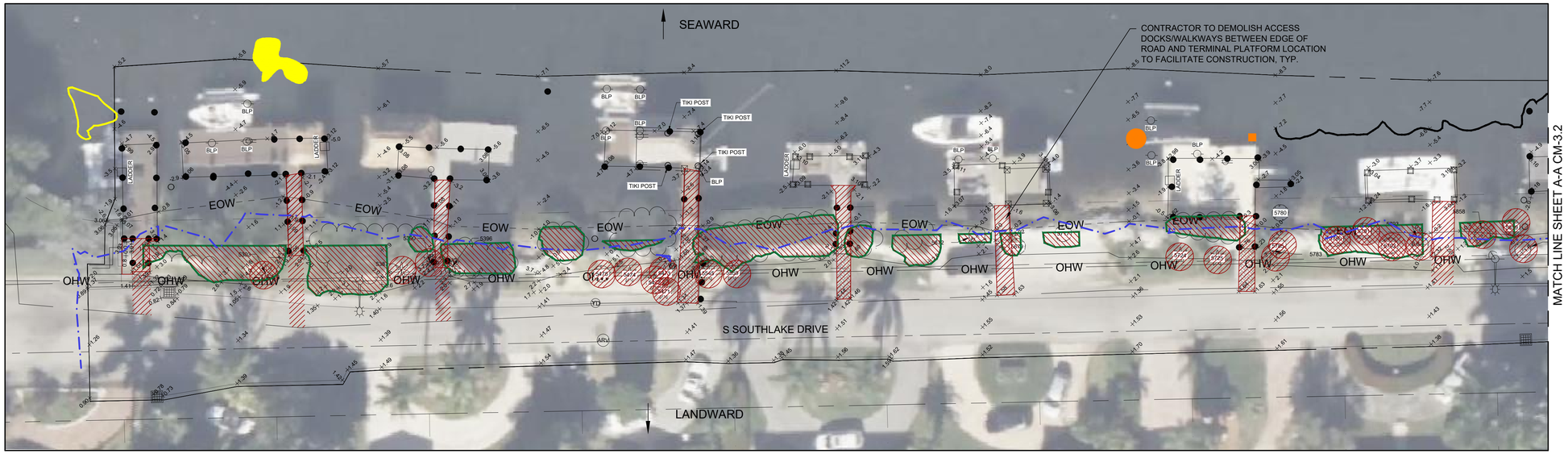

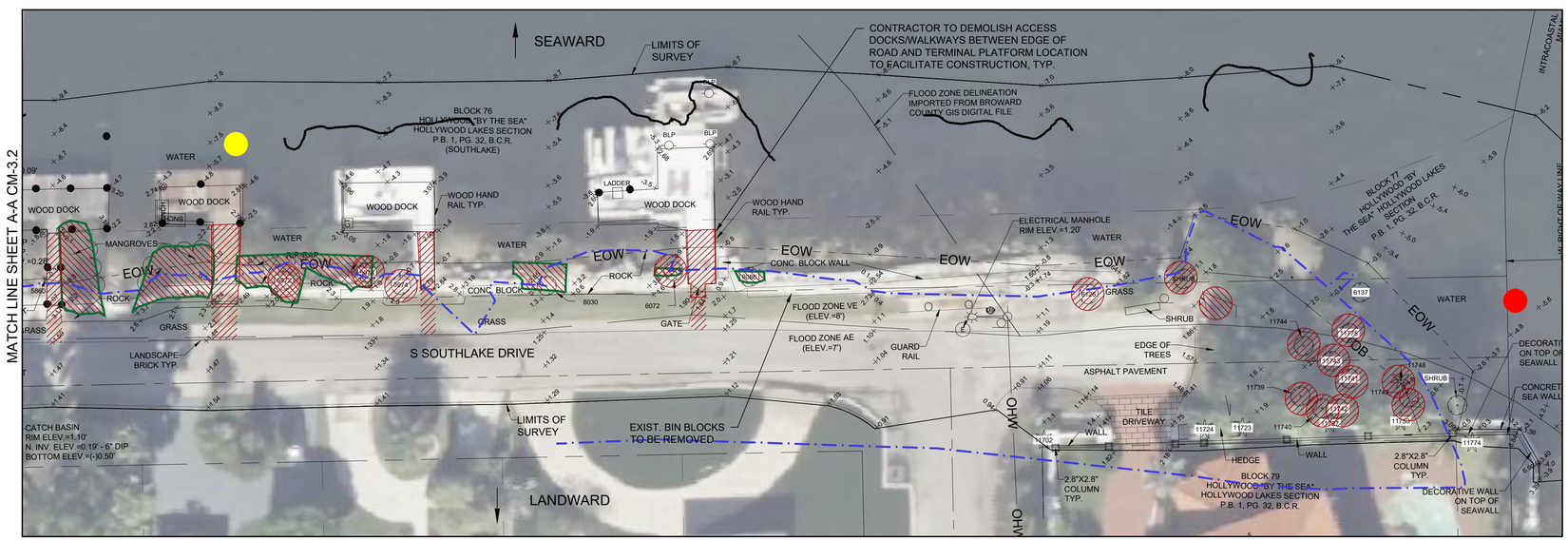

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- STRUCTURES AND TREES TO BE REMOVED

SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

0 10 20
GRAPHIC SCALE IN FT

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
DEMOLITION PLAN

CM-3.2

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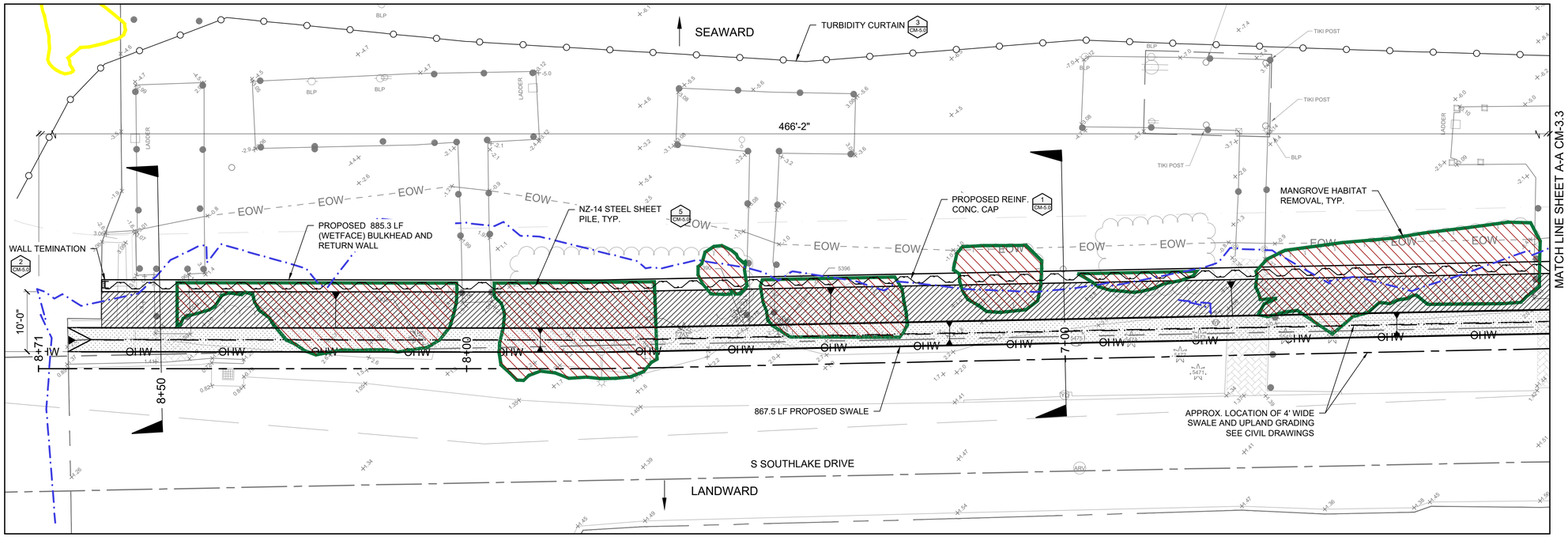

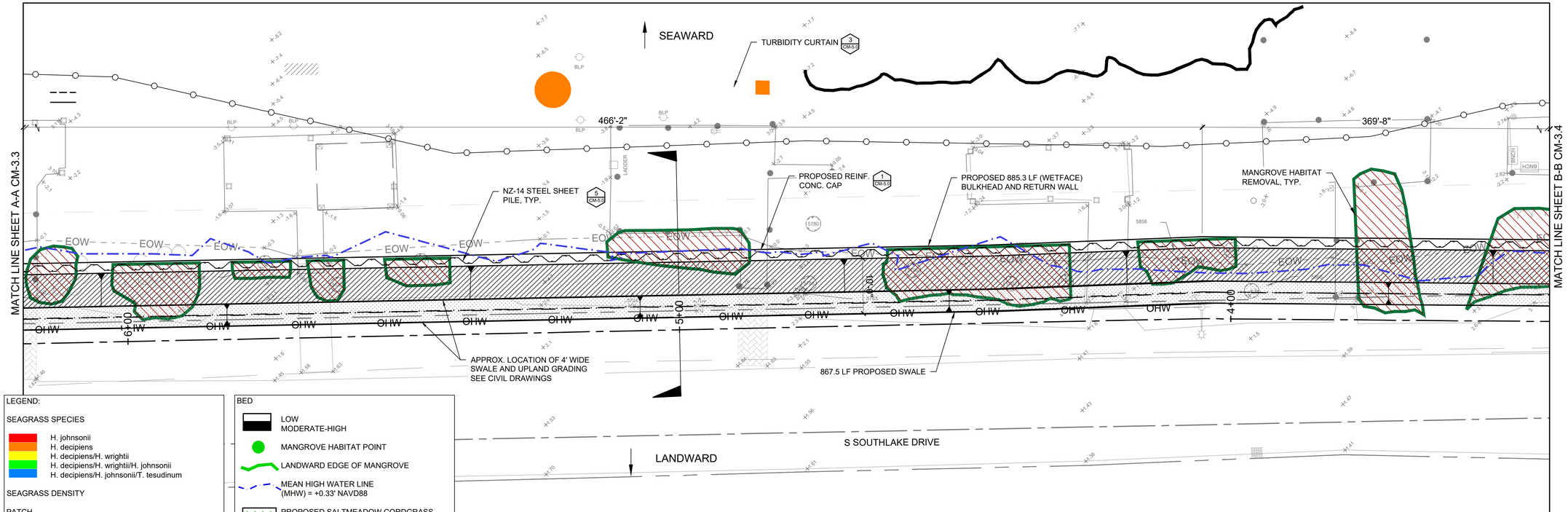

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- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
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- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN

SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

0 5 10
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

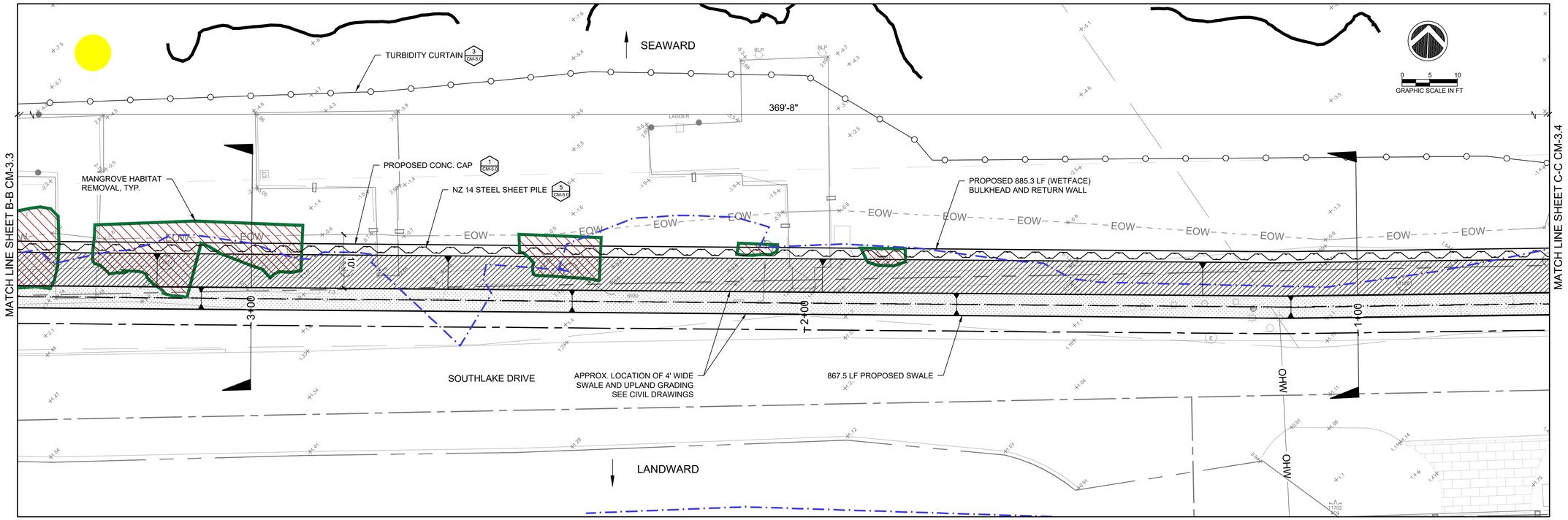
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

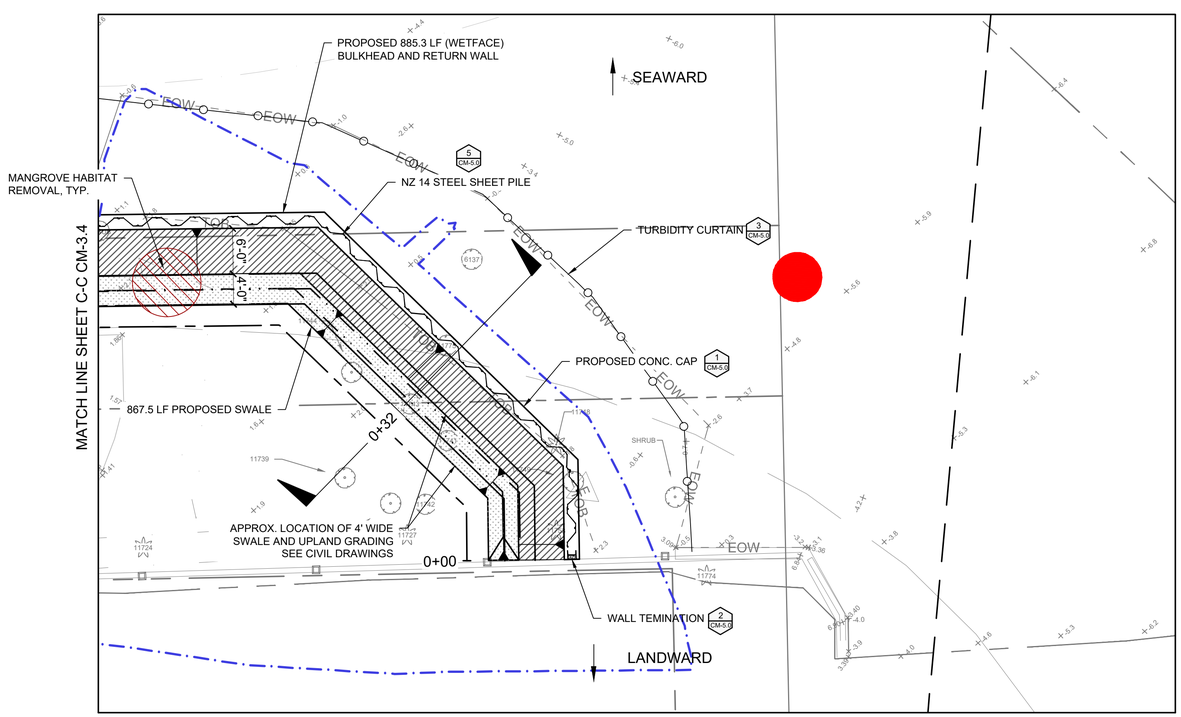
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

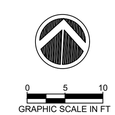
SHEET TITLE
SITE 17
PROPOSED WALL

CM-3.3

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 17.dwg







SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF
MANGROVE IMPACT BELOW MHW = 1,101.5 SF

SHEET PILE QUANTITIES TABLE (SITE 17)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	885.3
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	467.7

QUANTITIES TABLE (SITE 17)		
ITEM	S.F.	CY
TOTAL BACKFILL LANDWARD OF SHEET PILE WALL	5,271.7	389.3
BACKFILL LANDWARD OF HEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	811.6	113.4
SWALE EXCAVATION	3,498.0	153.6

LEGEND:

SEAGRASS SPECIES
- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH
- LOW
- MODERATE-HIGH

EDGE
- LOW
- MODERATE-HIGH

BED
- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- PROPOSED SALTMEADOW CORDGRASS
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

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HOLLYWOOD FL. 33020

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ISSUE	DATE	SUBMISSION / REVISION
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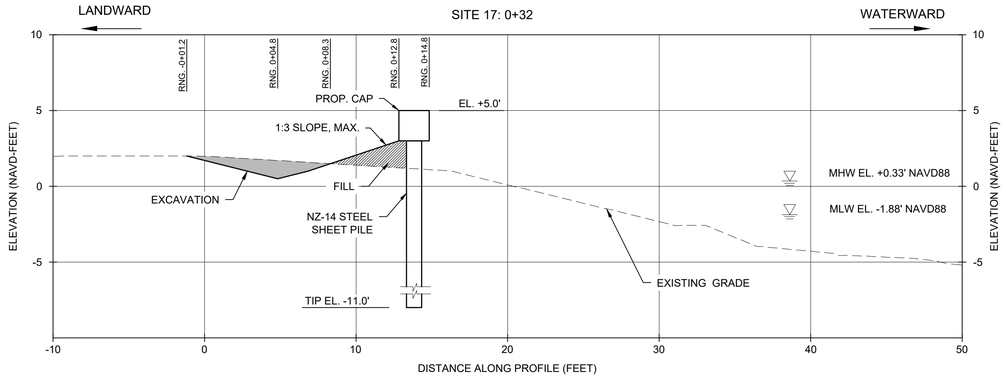
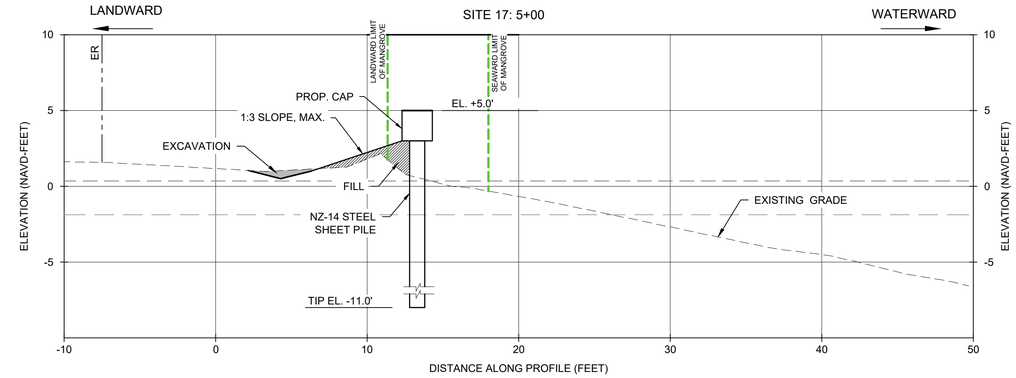
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

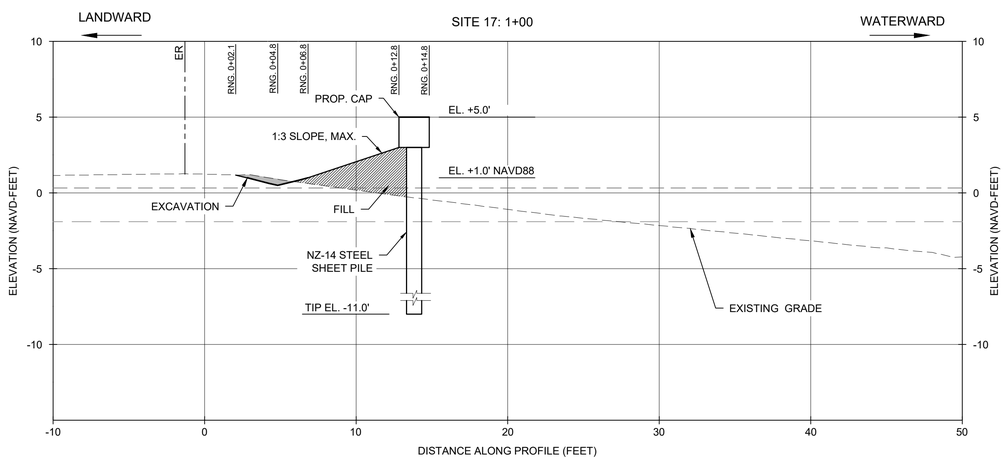
SHEET TITLE
SITE 17
PROPOSED WALL

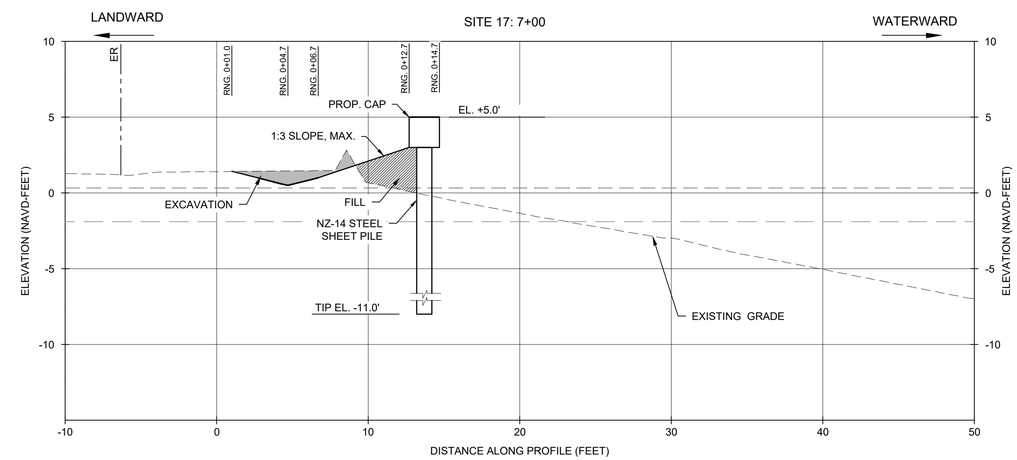
CM-3.4

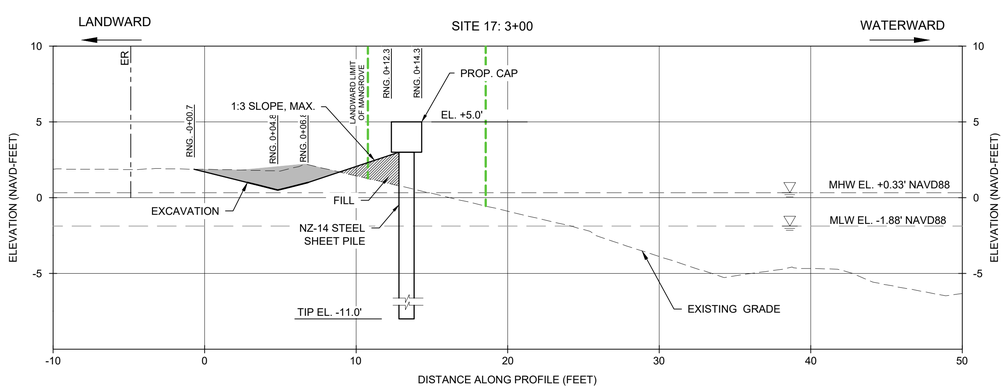
J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 17.dwg

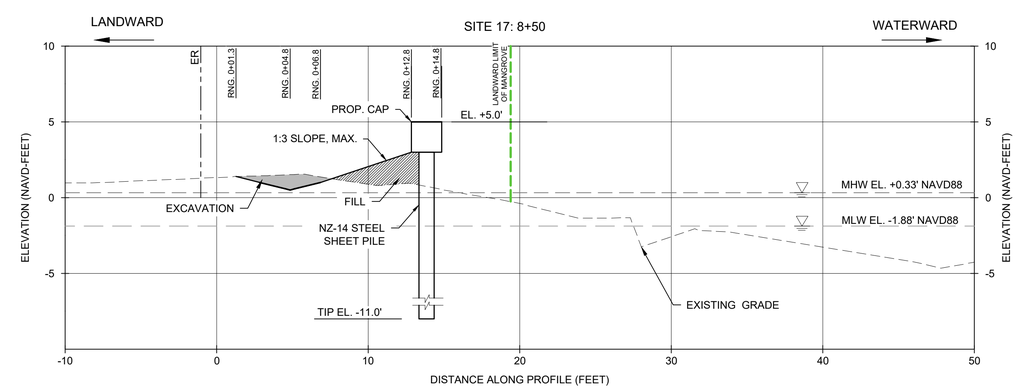












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GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 17
CROSS SECTIONS

CM-3.5

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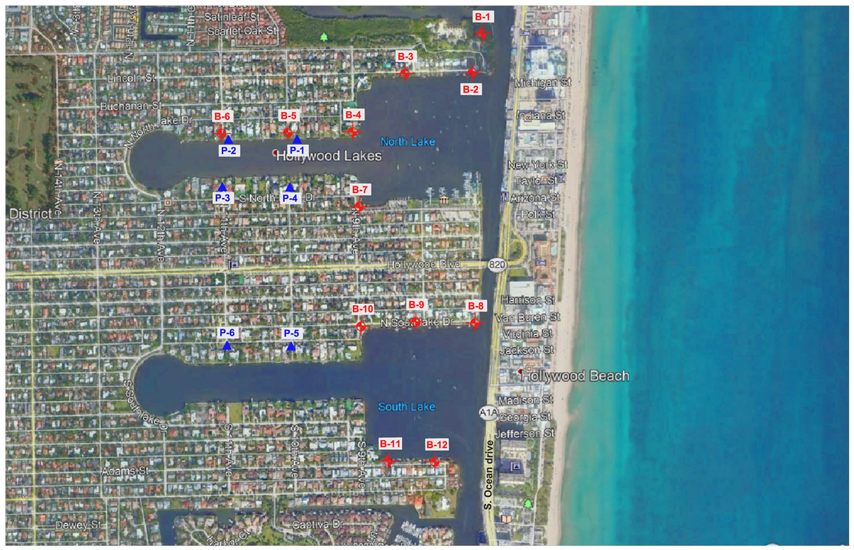

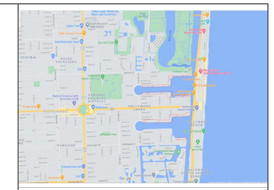

Site Vicinity Map

0 890

Approximate Scale in Feet

LEGEND:

B-1 - Number & Approximate Location of Test Boring.

P-1 - Number & Approximate Location of Percolation Test.

NOTES:

1. Test locations shown are approximate.
2. Test location symbols are not to scale.
3. Base drawing was taken from Aerial View, Google Earth, 2021.

N|V|5	DRAWING TITLE: Site Vicinity Map & Test Location Plan				DWN BY: NVF
	PROJECT NAME: City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1				CKD BY: GLG
	PROJECT LOCATION: City of Hollywood, Hollywood, Florida	PROJECT NO: 16959	DATE: 02/01/2021	DWG NO: 1	APD BY —

BORING NUMBER B-2

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/21/21 **COMPLETED** 1/21/21 **GROUND ELEVATION** 3 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 2.5 ft / Elev 0.5 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0					0.3 4" of Asphalt	2.7
	SPT	17-11-10 (28)	GP		2.0 LIMESTONE FRAGMENTS, medium dense, light brown, with sand	1.0
	SPT	6-2-1-1 (3)			SILT, soft, dark gray, with organics	0
5	SPT	WOH-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray, with organics	
	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, very soft, dark gray	-5
10	SPT	WOH-WOH-WOH-WOH (WOH)			SILT, soft, dark gray 10.0	-7.0
	SPT	WOH-1-2-14 (3)	LS		LIMESTONE, medium hard, light brown	
	SPT	20-15-23-27 (38)			LIMESTONE, very soft, light brown	-10
15	SPT	14-8-5-8 (13) 3-8-10-12 (15)			LIMESTONE, very soft, light brown	
20	SPT	11-11-7-10 (18)			LIMESTONE, very soft, light brown	-15
25	SPT	8-12-14-11 (26)			LIMESTONE, soft, light brown	-20
30	SPT	10-4-5-7 (9)			LIMESTONE, very soft, light brown 30.0	-25 -27.0

Boring terminated at 30.0 feet.

PAGE A-2

BORING NUMBER B-3

N\|V\|5

PROJECT NAME City of Hollywood Tidal Flooding Mitigation - Phase 1_Priority 1
PROJECT NUMBER 16959 **PROJECT LOCATION** City of Hollywood, Hollywood, Florida
DATE STARTED 1/21/21 **COMPLETED** 1/21/21 **GROUND ELEVATION** 5 ft NAVD, est. **HOLE SIZE** 3 inches
DRILLING CONTRACTOR NV5 **GROUND WATER LEVELS:** 4.5 ft / Elev 0.5 ft
DRILLING METHOD Rotary drill with mud, wash & casing
LOGGED BY D. Correa/ Y. Parada **CHECKED BY** N.Vieira
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION (ft., NAVD)
0			SM		0.3 4" of Topsoil	5 4.7
	SPT	2-4-4-6 (8)	SP		2.0 SAND, loose, fine, light brown, with sand	3.0
	SPT	5-2-1-1 (3)			SILT, soft, dark gray, with organics	
5	SPT	1-WOH-WOH-WOH (WOH)	ML		SILT, very soft, dark gray, with organics	0
	SPT	WOH-WOH-WOH-1 (WOH)			SILT, very soft, dark gray	
10	SPT	2-7-12-10 (19)			SILT, very stiff, dark gray, with a trace of limestone fragments 10.0	-5 -5.0
	SPT	3-3-3-6 (6)	LS		SANDY LIMESTONE, very soft, light brown	
	SPT	4-7-10-11 (17)			LIMESTONE, very soft, light brown	
15	SPT	10-13-9-11 (22)			LIMESTONE, soft, light brown	-10
20	SPT	10-8-6-8 (14)			LIMESTONE, very soft, light brown	-15
25	SPT	10-4-4-2 (8)			LIMESTONE, very soft, light brown	-20
30	SPT	3-9-5-3 (14)			LIMESTONE, very soft, light brown 30.0	-25 -25.0

Boring terminated at 30.0 feet.

PAGE A-3

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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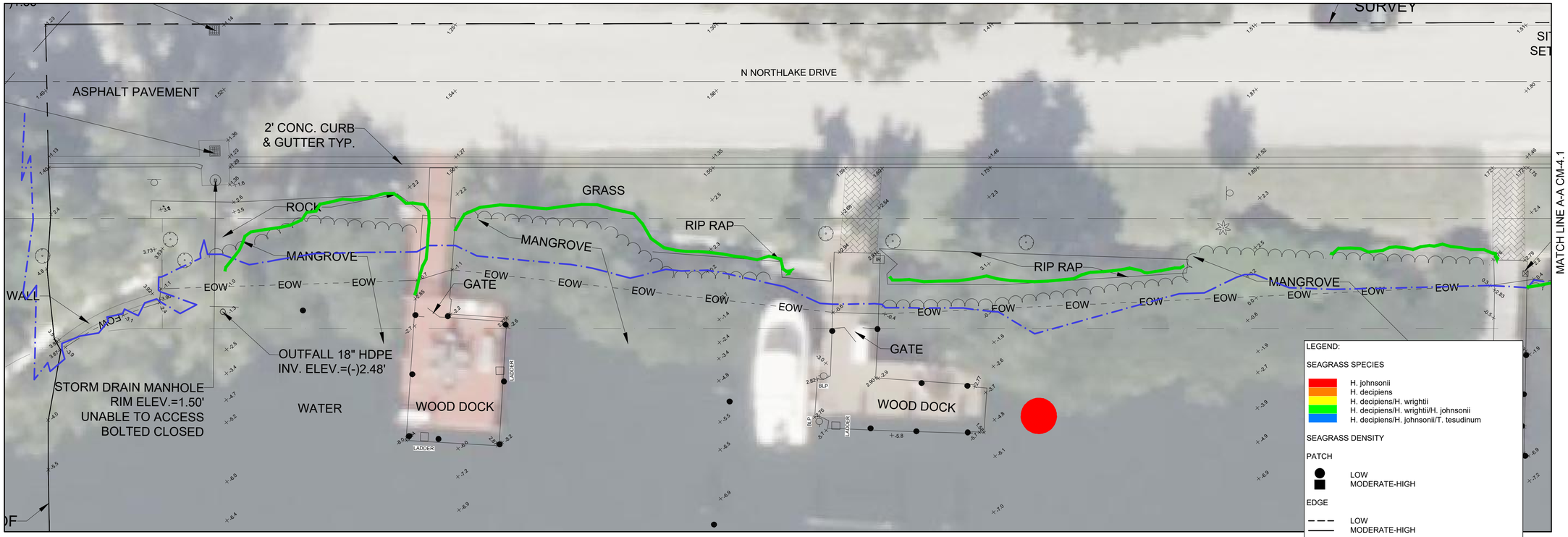
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
GEOTECHNICAL BORINGS SITE 19

CM-4.0

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\2024-10-01\P 84300 SITES 19.dwg



LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightiii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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ISSUE	DATE	PERMIT DRAWINGS SUBMISSION / REVISION
	10/01/2024	

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING
CONDITIONS

CM-4.1

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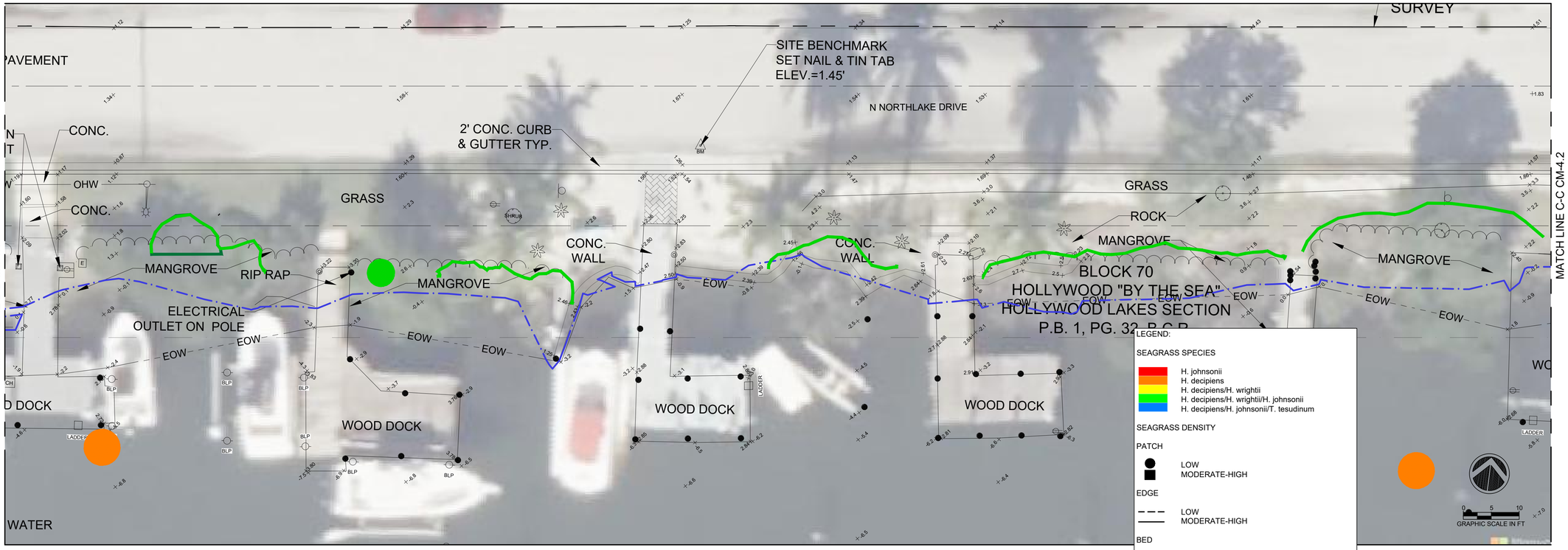

LEGEND:

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- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

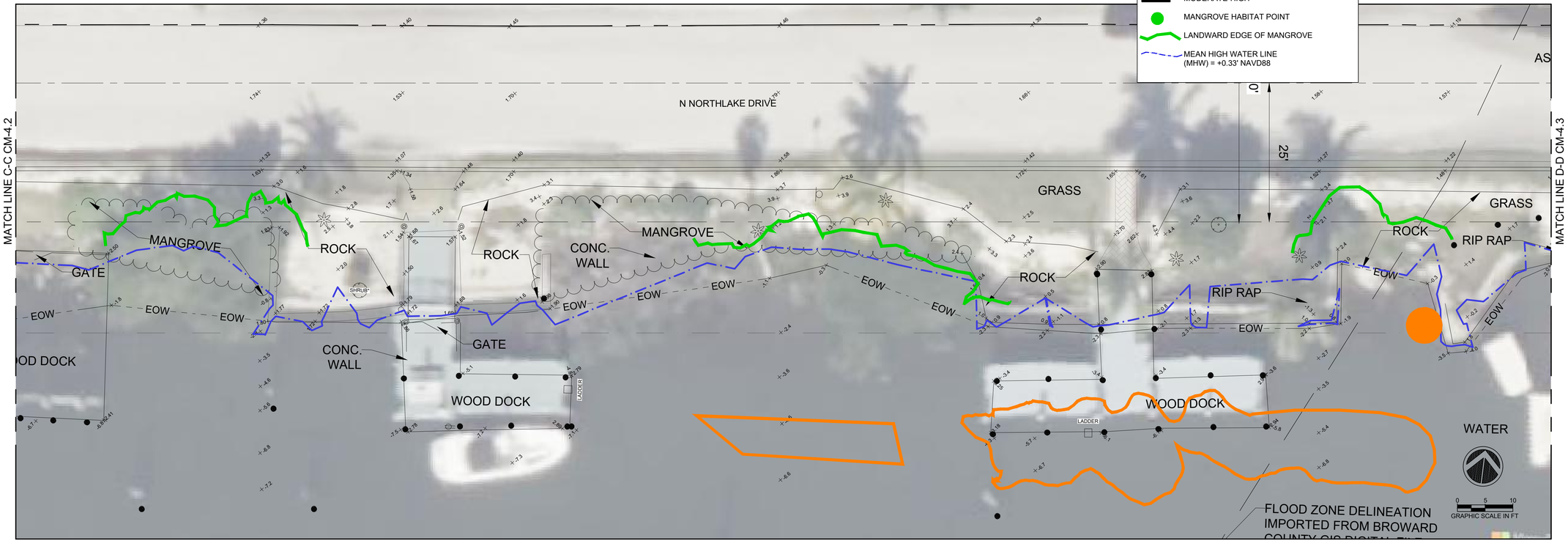
EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88



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FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

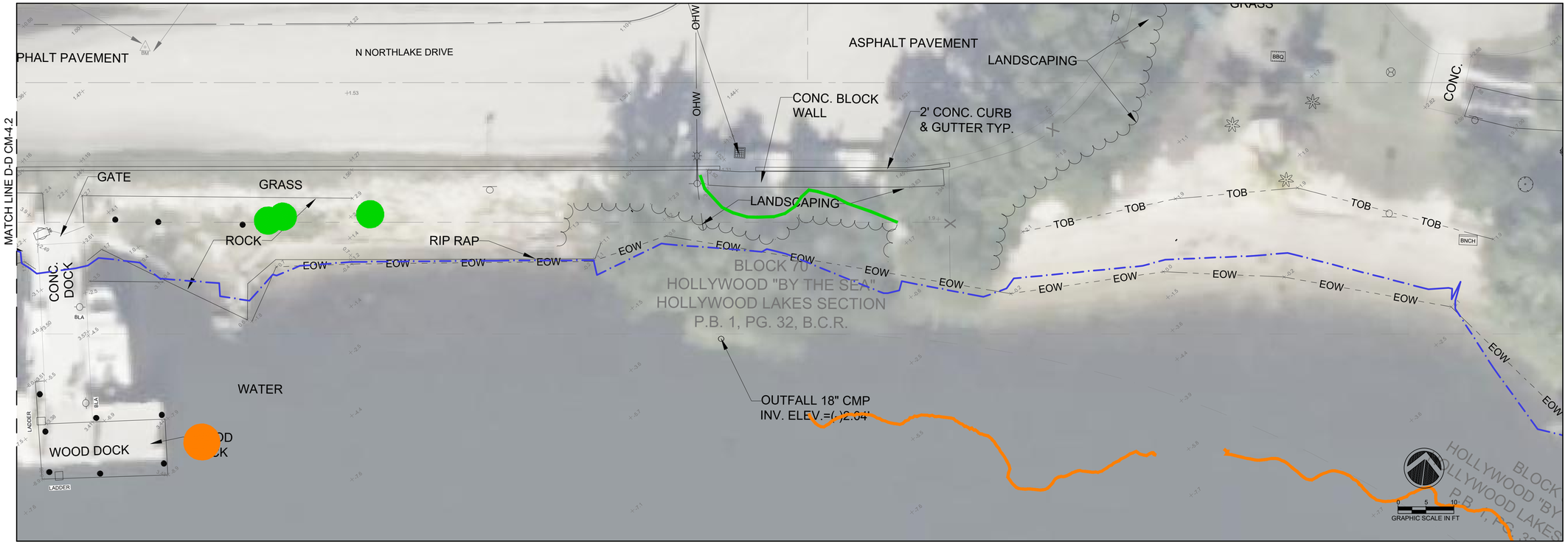
ISSUE	DATE	SUBMISSION / REVISION
	10/01/2024	PERMIT DRAWINGS

CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING CONDITIONS

CM-4.2

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg



LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
- H. decipiens/H. johnsonii/T. tesudinum

SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021
SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206
FORT LAUDERDALE, FL 33304
TEL: 954-880-1646
C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5
GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC
CIVIL ENGINEER
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ISSUE	DATE	SUBMISSION / REVISION
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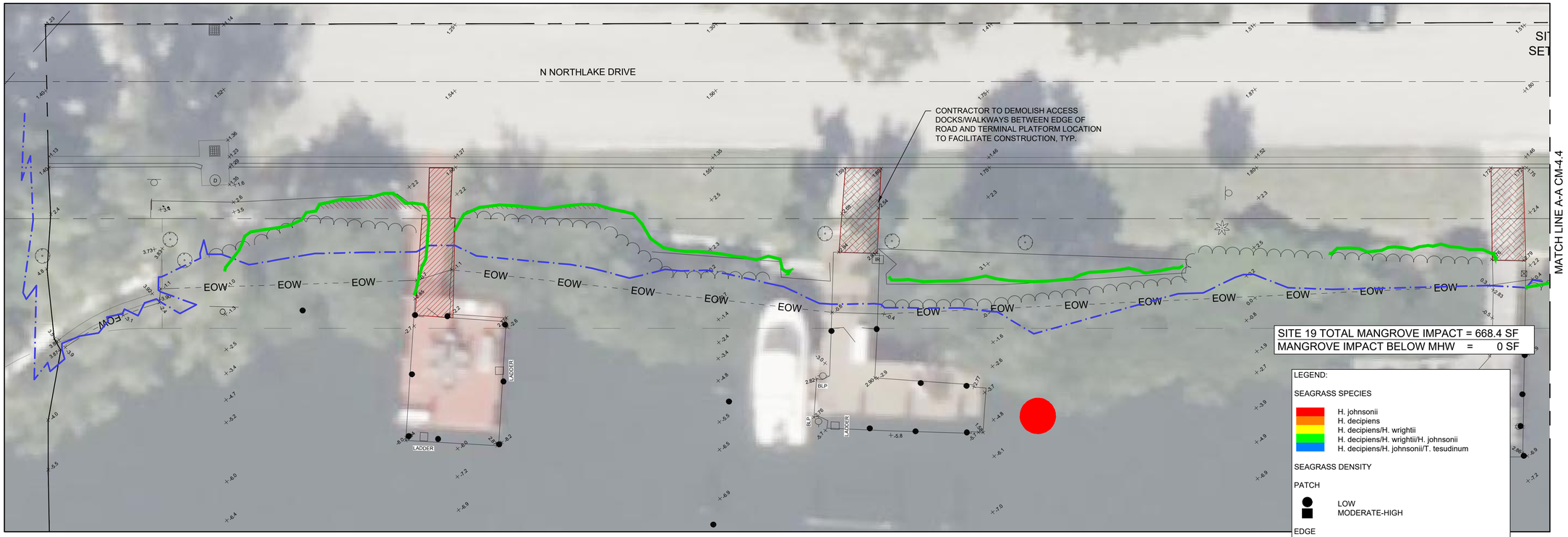
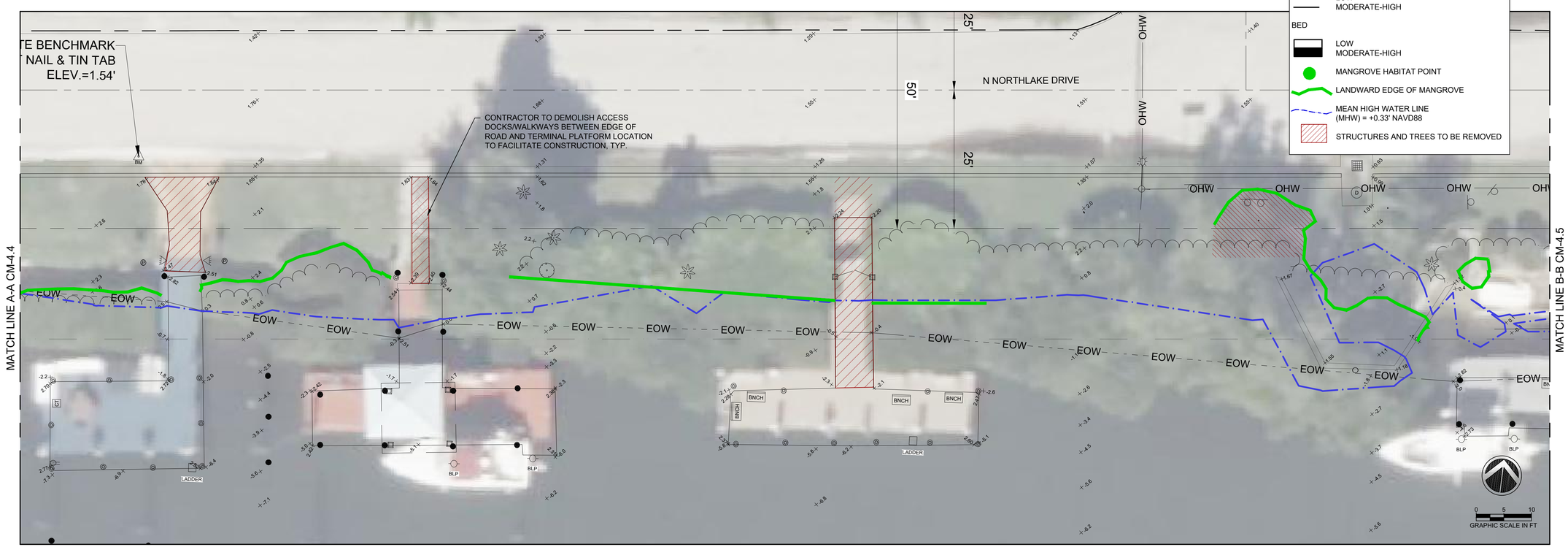
CC PROJECT NO:	84300
DRAWN	GK
CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
EXISTING CONDITIONS

CM-4.3

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg





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CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19 DEMOLITION PLAN

CM-4.4

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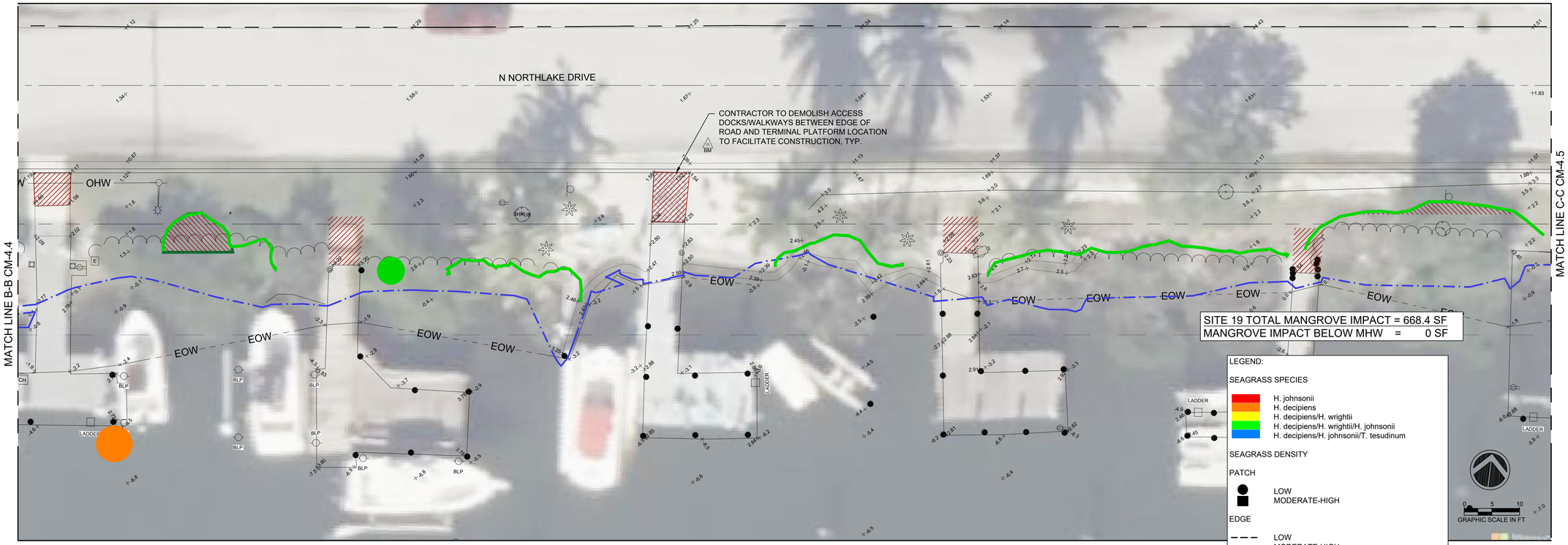

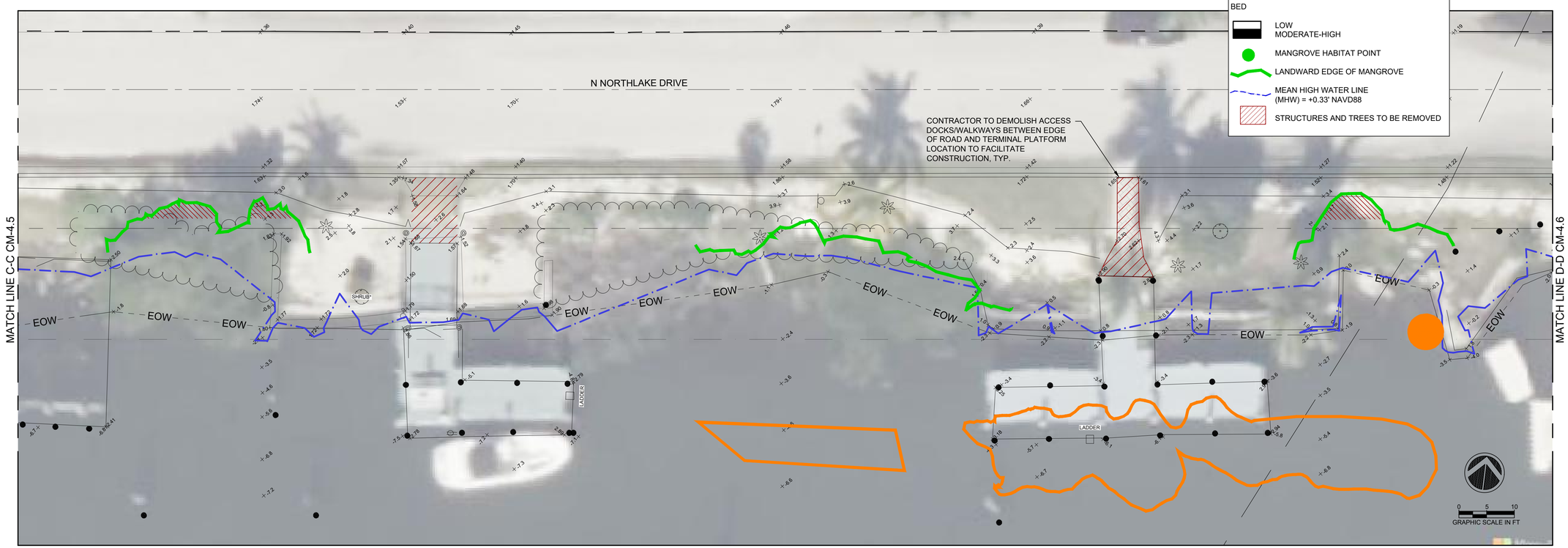

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PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

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	10/01/2024	PERMIT DRAWINGS SUBMISSION / REVISION

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CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19 DEMOLITION PLAN

CM-4.5

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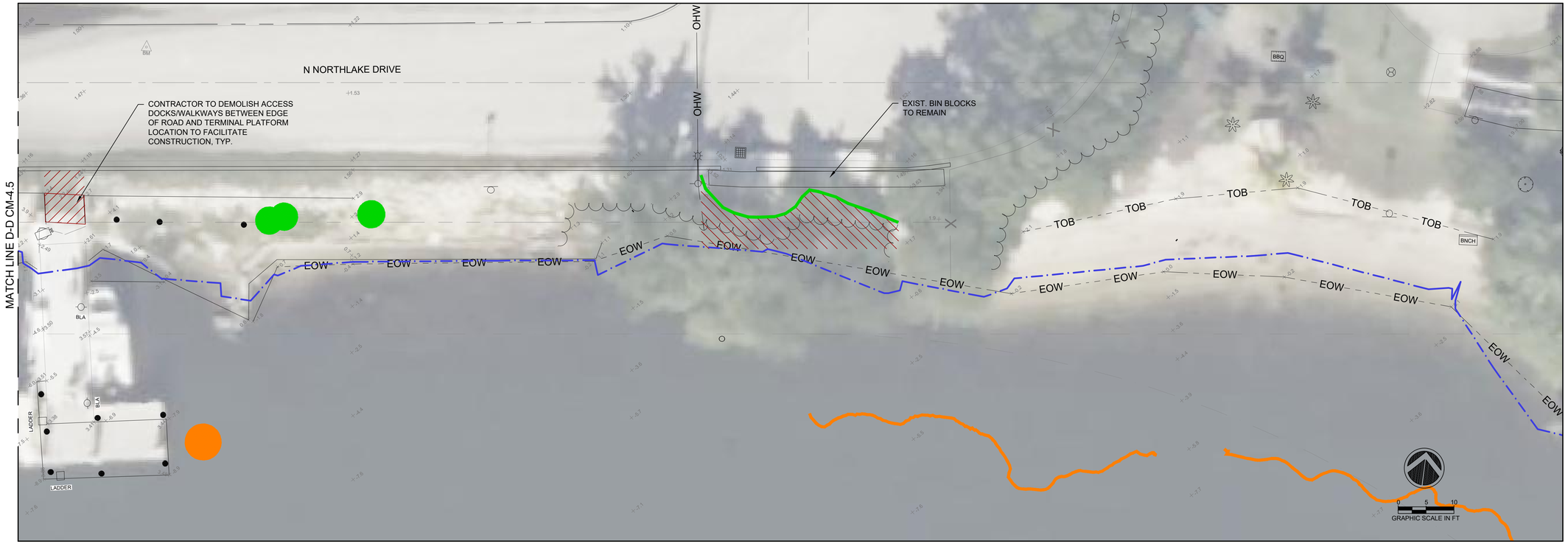

SITE 19 TOTAL MANGROVE IMPACT = 668.4 SF
MANGROVE IMPACT BELOW MHW = 0 SF

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
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SEAGRASS DENSITY

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- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH

MANGROVE HABITAT POINT

LANDWARD EDGE OF MANGROVE

MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

STRUCTURES AND TREES TO BE REMOVED

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06/04/2021
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CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

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C.O.A. #29062

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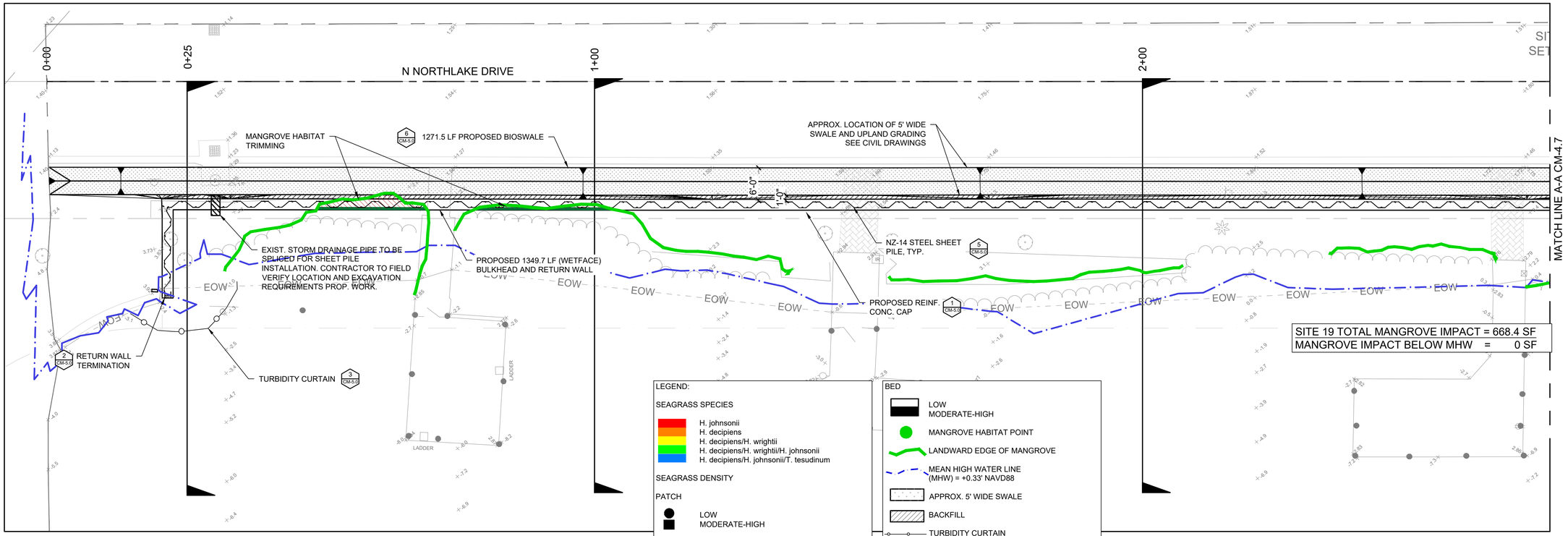
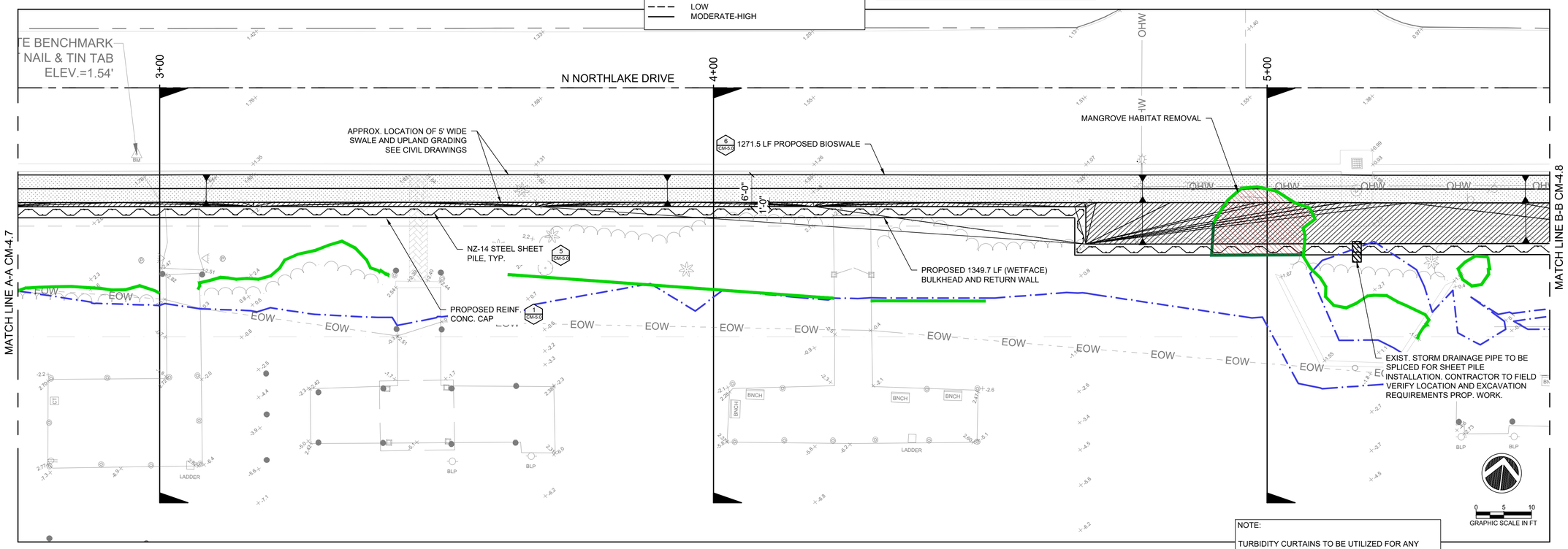
SHEET TITLE
SITE 19 DEMOLITION PLAN

CM-4.6

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg





NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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CC PROJECT NO:	84300
DRAWN	GK
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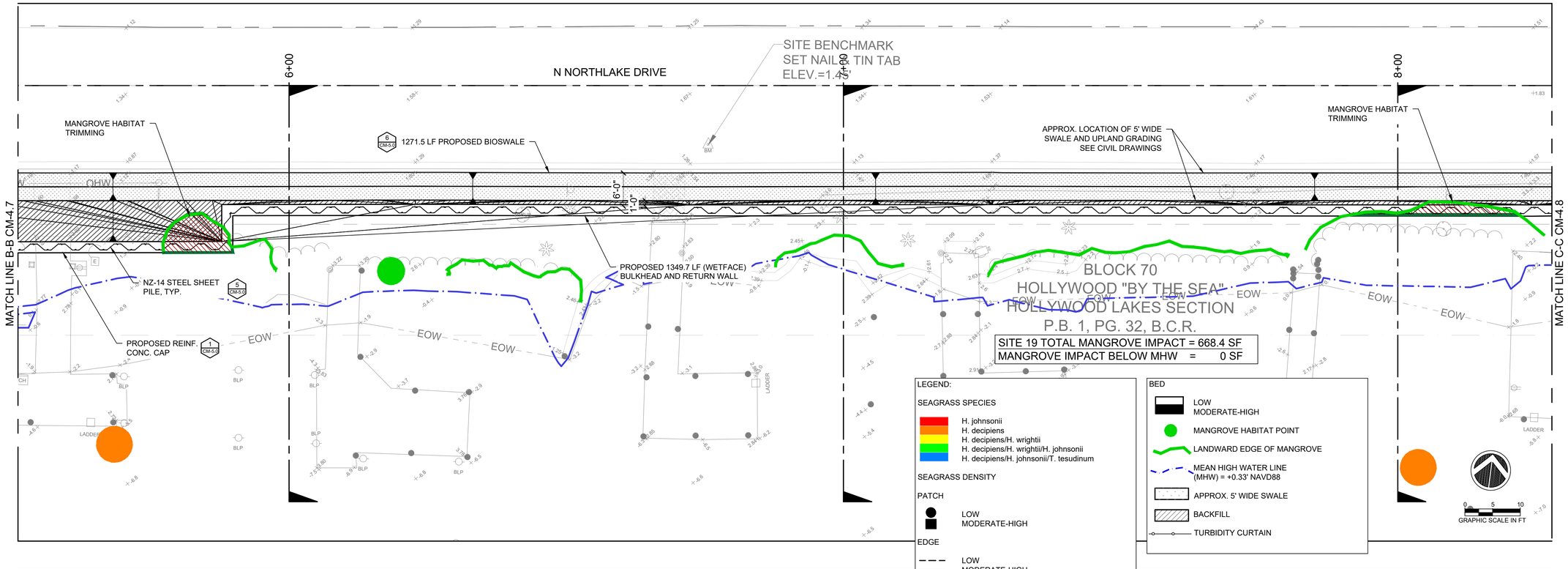
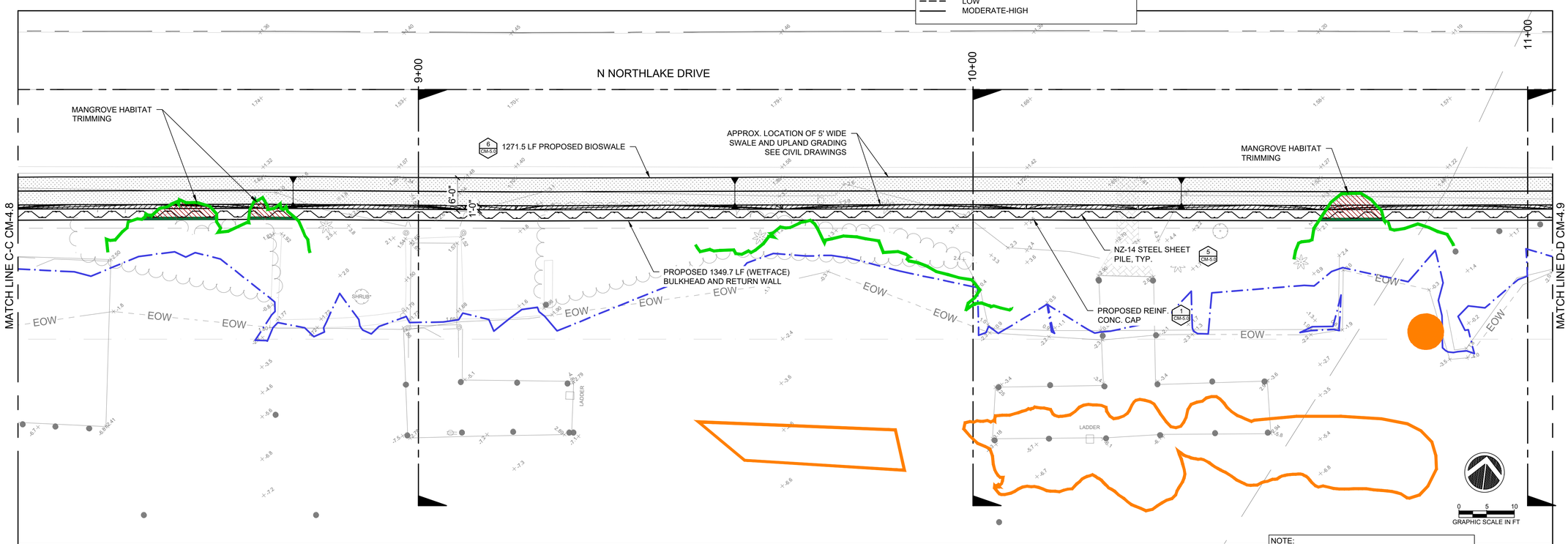
SCALE	AS SHOWN

SHEET TITLE
SITE 19
PROPOSED WALL

CM-4.7

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg





NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT
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HOLLYWOOD FL. 33020

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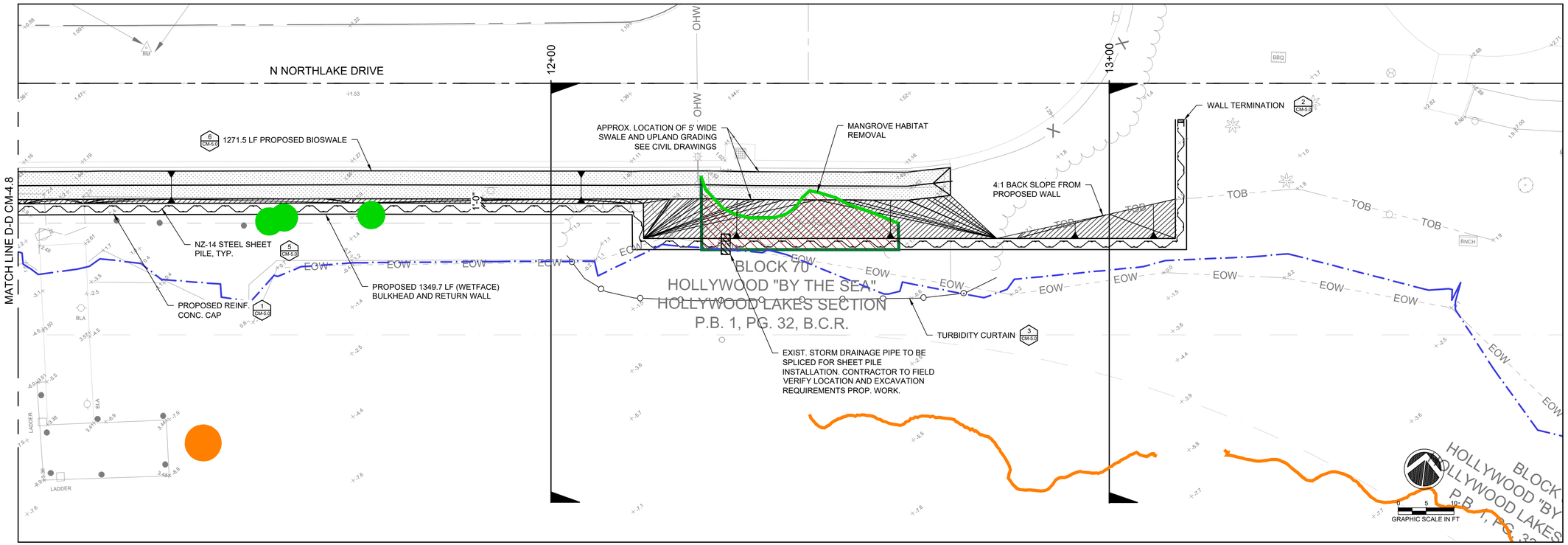
SCALE	AS SHOWN

SHEET TITLE
SITE 19
PROPOSED WALL

CM-4.8

J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg



SHEET PILE QUANTITIES TABLE (SITE 19)	
ITEM	L.F.
TOTAL NZ 14 SHEET PILE	1349.7
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)	27.8

QUANTITIES TABLE (SITE 19)		
ITEM	S.F.	CY
TOTAL BACKFILL LANDWARD OF SHEET PILE WALL	2,900.2	201.6
BACKFILL LANDWARD OF HEET PILE WALL BELOW MHW LINE (+0.33' NAVD)	0.0	0
BIOSWALE EXCAVATION	6,357.9	73.7

SITE 19 TOTAL MANGROVE IMPACT = 668.4 SF
MANGROVE IMPACT BELOW MHW = 0 SF

LEGEND:

SEAGRASS SPECIES

- H. johnsonii
- H. decipiens
- H. decipiens/H. wrightii
- H. decipiens/H. wrightii/H. johnsonii
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SEAGRASS DENSITY

PATCH

- LOW
- MODERATE-HIGH

EDGE

- LOW
- MODERATE-HIGH

BED

- LOW
- MODERATE-HIGH
- MANGROVE HABITAT POINT
- LANDWARD EDGE OF MANGROVE
- MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
- APPROX. 5' WIDE SWALE
- BACKFILL
- TURBIDITY CURTAIN

NOTE:

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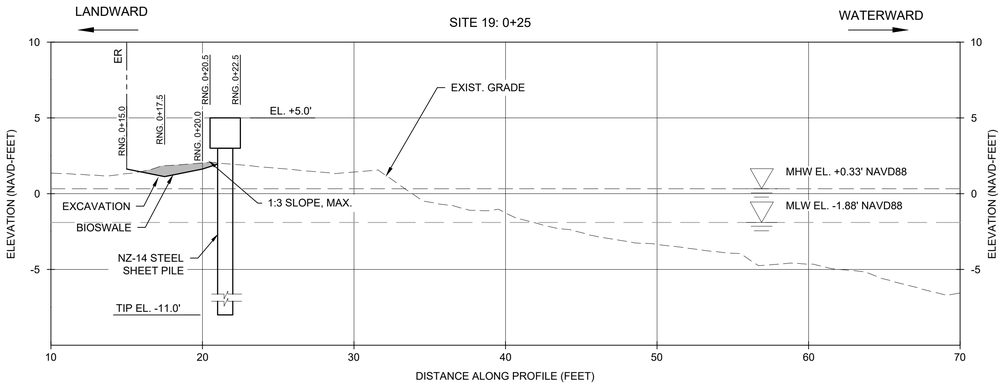
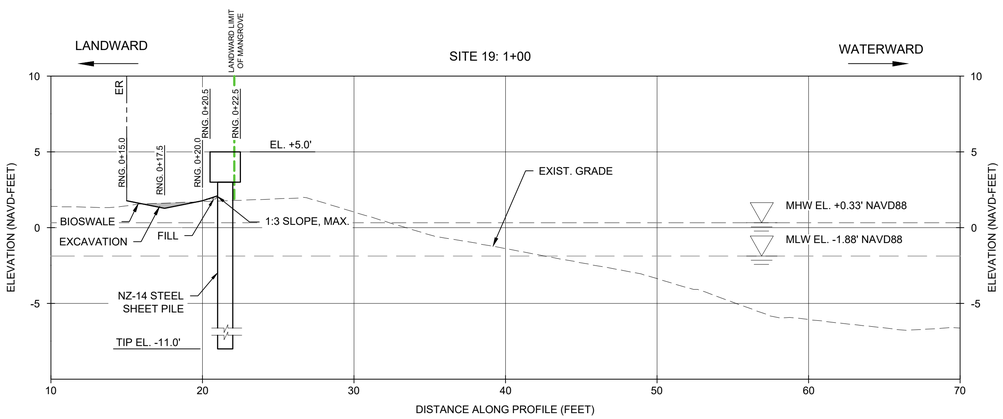
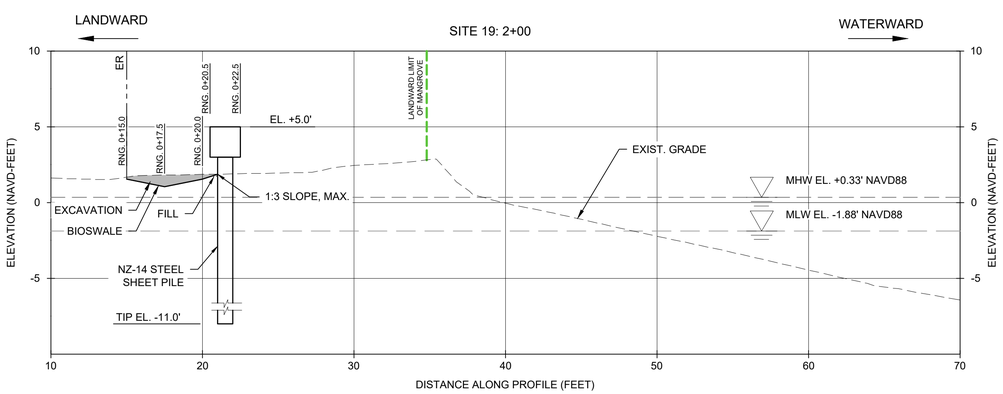
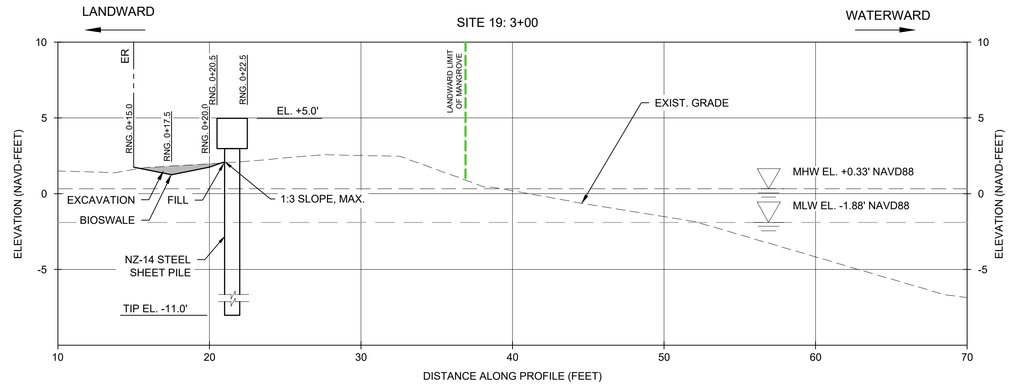
CM-4.9

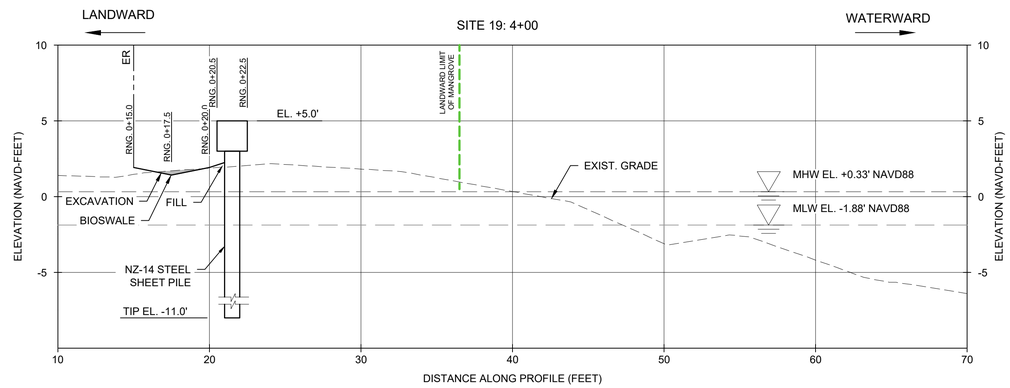
J:\Projects\84300 Hollywood Tidal Flooding & Shoreline\03 - Drawings\SITES\84300 - SITES 9 - 10 - 17 - 19\Permits\(2024-10-01)P 84300 SITES 19.dwg

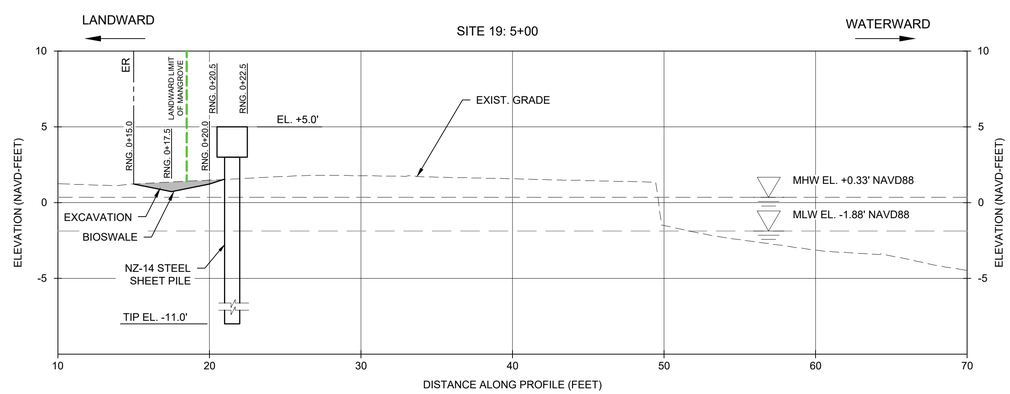












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GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
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2600 HOLLYWOOD BLVD.
HOLLYWOOD FL. 33020

PRIME CONSULTANT:
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CC PROJECT NO:	84300
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CHECKED	JPC/SRC
SCALE	AS SHOWN

SHEET TITLE
SITE 19
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CM-4.10

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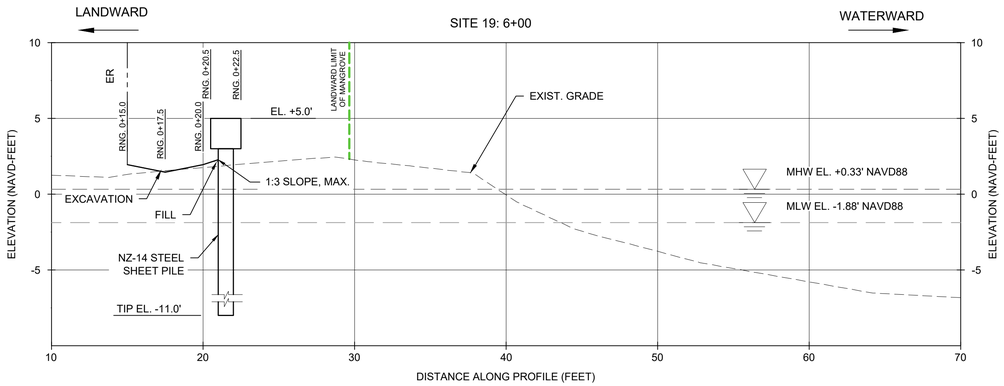

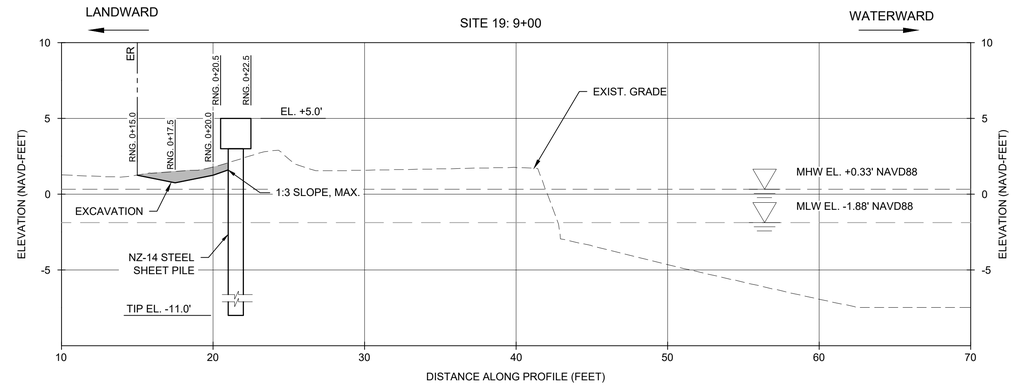

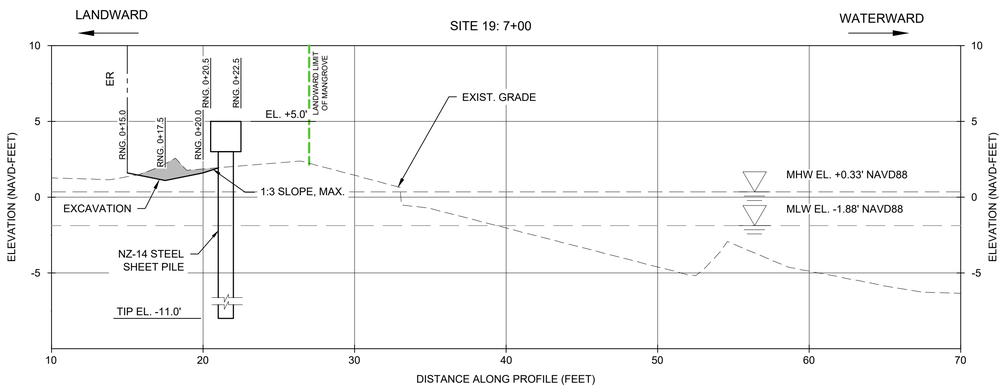

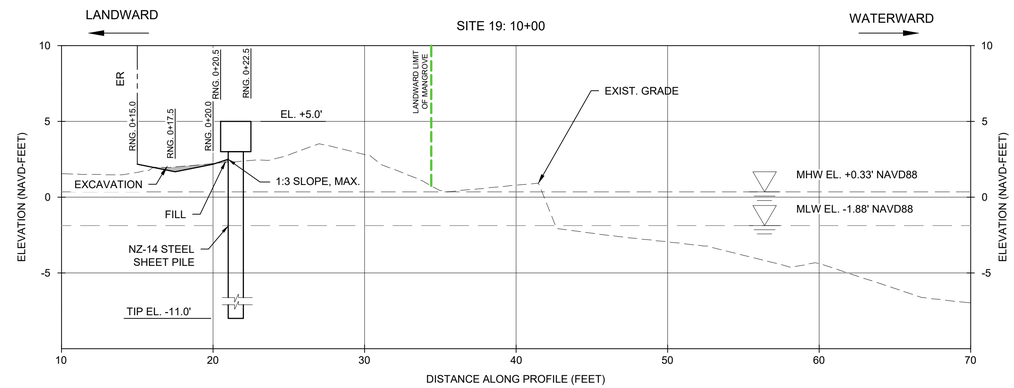

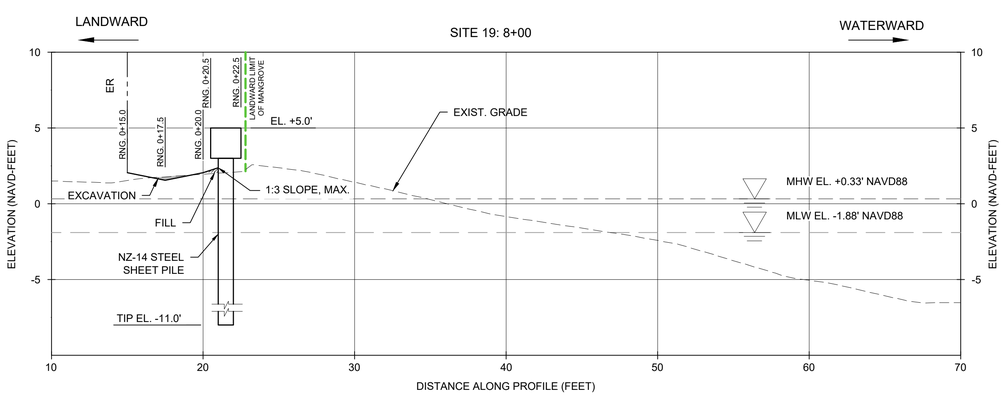

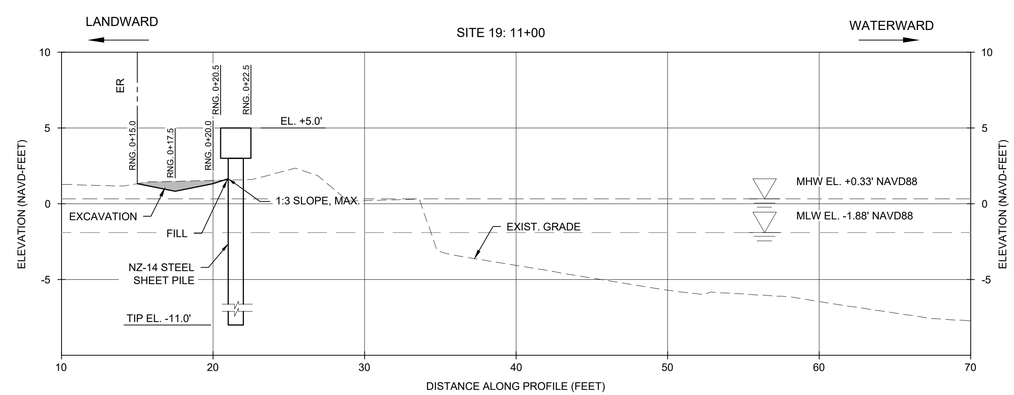

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GRAPHIC SCALE IN FT

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SITE 19
CROSS SECTIONS

CM-4.11

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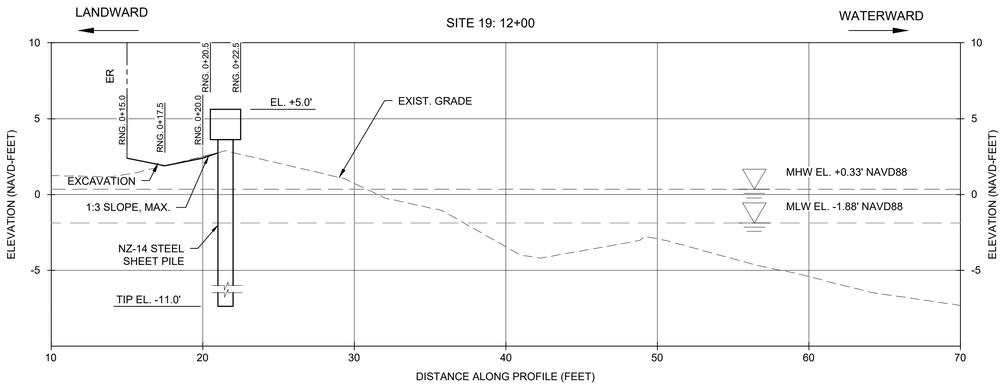

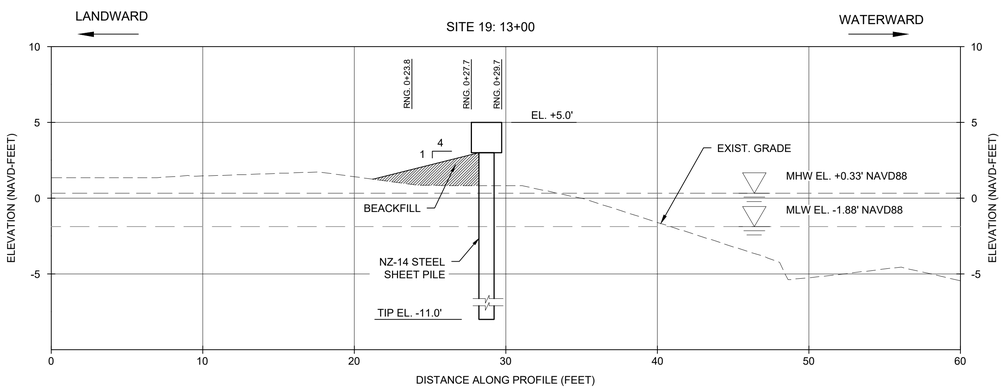

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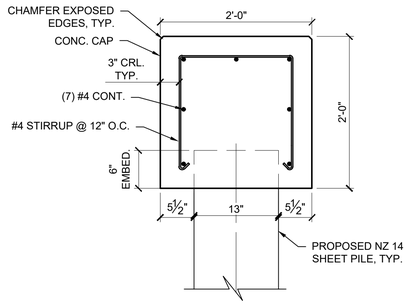
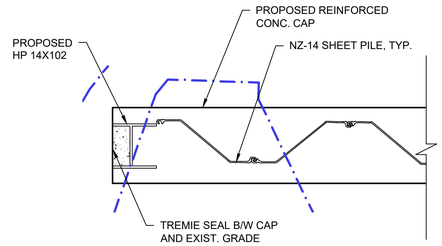


1 TYPICAL CONC. CAP REINF. DETAIL

SCALE: 1"=1" (22X34)



2 TYPICAL TERMINATION DETAIL

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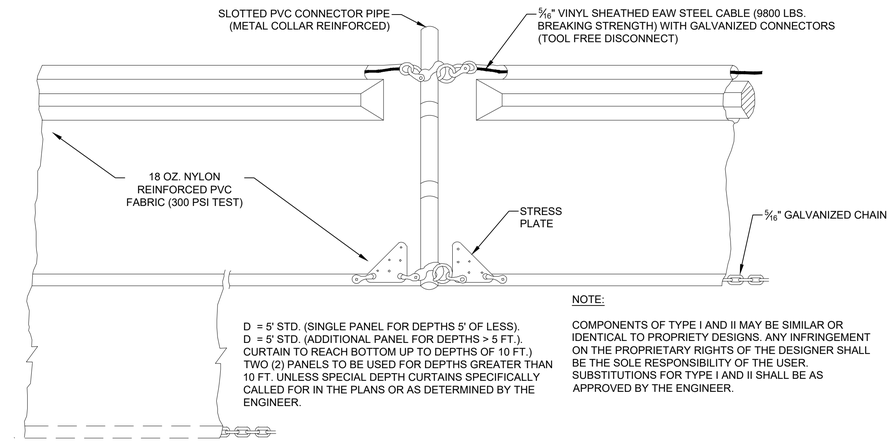
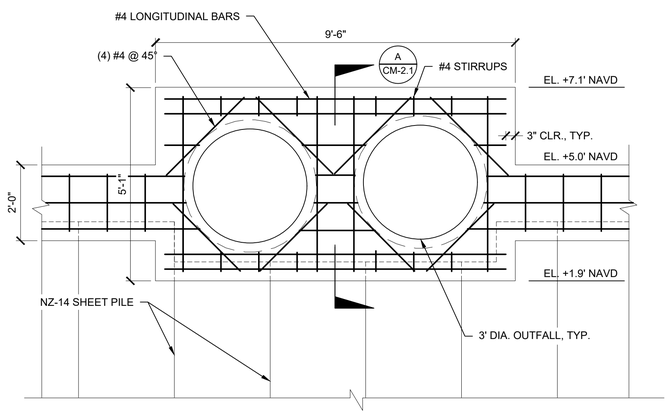


NOTE:

COMPONENTS OF TYPE I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE I AND II SHALL BE AS APPROVED BY THE ENGINEER.

3 FLOATING TURBIDITY CURTAIN DETAIL

N.T.S.



4 TYPICAL OUTFALL COLLAR DETAIL

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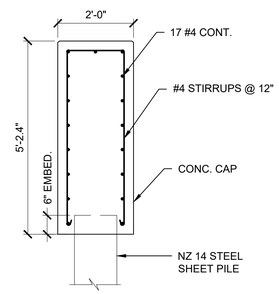

A CM-2.1 TYPICAL OUTFALL COLLAR SECTION

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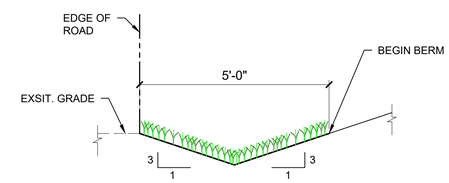
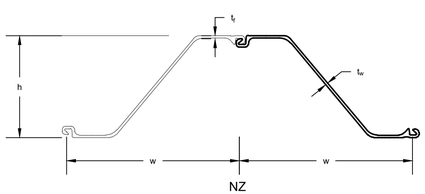


6 TYPICAL VEGETATED BIOSWALE DETAIL

N.T.S.



SECTION	Width (w) in mm	Height (h) in mm	THICKNESS Flange (t_f) in mm	THICKNESS Web (t_w) in mm	Cross Sectional area (w) in mm	WEIGHT Pile lb/ft kg/m	WEIGHT Wall lb/ft² kg/m²	SECTION MODULUS Elastic in³/ft cm³/m	SECTION MODULUS Plastic in³/ft cm³/m	Moment of Inertia in⁴/ft cm⁴/m	COATING AREA Both Sides ft²/ft of single m²/m	COATING AREA Wall Surface ft²/ft m²/m²
NZ 14	30.31 770	13.39 340	0.375 9.5	0.375 9.5	6.40 135.4	55 81.26	21.77 106.3	25.65 1379	30.50 1640	171.7 23447	6.10 1.86	1.20 1.20

5 NZ-14 STEEL SHEET PILE

SCALE: N.T.S.

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DETAILS

CM-5.0

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