

# Notice of Appeal - Form 1

## Board of Zoning Appeals

Date Filed: 07/11/2025 Permit Application No. \_\_\_\_\_ Appeal No. \_\_\_\_\_

### Instructions

This form must be completed for a hearing on **appeal** from action of a zoning official, application for a **variance** or application for **special exception**. Entries must be printed or typewritten. If the application is on behalf of the property owner(s), all owners must sign. If the applicant is not an owner, the owner(s) must sign the Designation of Agent. An accurate, legible plot plan showing property dimensions and locations of structures and improvements must be attached to an application for variance or special exception.

**THE APPLICANT HEREBY APPEALS** [indicate one]:

- ☐ from action of a zoning official as stated on attached Form 2
- ☒ for a variance as stated on attached Form 3.
- ☐ for a special exception as stated on attached Form 4.

**APPLICANT(S)** [print] Robert Brandon Aebersold

Address: 1018 Osceola Avenue, Sullivan's Island, SC 29482

Telephone: \_\_\_\_\_ [work] \_\_\_\_\_ [home]

Interest: \_\_\_\_\_ Owner(s): \_\_\_\_\_ Adjacent Owner(s); Other: \_\_\_\_\_

**OWNER(S)** [if other than Applicant(s)]: Robert Brandon Aebersold and Comer Ireland Aebersold

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ [work] \_\_\_\_\_ [home]

[Use reverse side if more space is needed.]

### PROPERTY ADDRESS:

Lot 57 Block \_\_\_\_\_ Subdivision Moultrieville

Tax Map No. 523-06-00-002 Plat Book D Page 189

Lot Dimensions: 188' x 140.98' x 155.29' x 122' Area: 0.41 acres

Zoning District: RS Zoning Map Page: \_\_\_\_\_


**DESIGNATION OF AGENT** [complete only if owner is not applicant]: I (we) hereby appoint the person named as Applicant as my (our) agent to represent me (us) in this application.

Date: \_\_\_\_\_

\_\_\_\_\_  
Owner signature(s)

I (we) certify that the information in this application and the attached Form 2, 3 or 4 is correct.

Date: 7/8/25

  
Applicant signature(s)

## Variance Application - Form 3

### Board of Zoning Appeals

Date Filed: 07/11/2025 Permit Application No. \_\_\_\_\_ Appeal No. \_\_\_\_\_

1. Applicant hereby appeals to the board of zoning appeals for a variance from the strict application to the property described in the Notice of Appeal [Form 1] of the following provisions of the zoning ordinance: Section 21-13 (1): Any importation of materials of any type or re-contouring of a lot's existing contours that increased a lot's existing ground elevation more than one (1) foot above existing grade and results or may result in elevating an existing or proposed structure is strictly prohibited.

so that a zoning permit may be issued to allow use of the property in a manner shown on the attached plot plan, described as follows: 1018 Osceola Avenue

for which a permit has been denied by a zoning official on the grounds that the proposal would be in violation of the cited section(s) of the zoning ordinance.

2. The application of the ordinance will result in unnecessary hardship, and the standards for a variance set by state law and the ordinance are met by the following facts.
- a. There are extraordinary and exceptional conditions pertaining to the particular piece of property as follows: Refer to attached Technical Memorandum
- b. These conditions do not generally apply to other property in the vicinity as shown by: Refer to attached Technical Memorandum
- c. Because of these conditions, the application of the ordinance to the particular piece of property would effectively prohibit or unreasonably restrict the utilization of the property as follows: Refer to attached Technical Memorandum
- d. The authorization of the variance will not be of substantial detriment to adjacent property or to the public good, and the character of the district will not be harmed by the granting of the variance for the following reasons: Refer to attached Technical Memorandum
3. The following documents are submitted in support of this application: Technical Memorandum, Grading and Drainage Plans [A plot plan must be submitted.]

Date: 7/8/25

  
Applicant signature



## BOARD OF ZONING APPEALS

IN ACCORDANCE WITH **ZONING ORDINANCE SECTION 21-175,**

I Robert Brandon Aebersold HAVE SUBMITTED A COMPLETED BOARD OF ZONING  
APPEALS APPLICATION, FOR THE MEETING DATE OF 08/14/2025 , WHICH WILL BE HELD AT  
SULLIVAN'S ISLAND TOWN HALL LOCATED AT **2056 MIDDLE STREET, SULLIVAN'S ISLAND, SOUTH CAROLINA.**

ADDITIONALLY, I UNDERSTAND THAT THE BOARD MAY POSTPONE OR PROCEED TO DISPOSE OF A MATTER ON THE RECORD  
BEFORE IT IN THE ABSENCE OF AN APPEARANCE ON BEHALF OF AN APPLICANT.

Robert Brandon Aebersold

APPLICANT SIGNATURE

7/8/25

DATE



July 11, 2025

**Subject:** Technical Memo for Variance Request: 1018 Osceola Avenue Grading and Drainage Improvements

**From:** Kevin B. Herren, PE and Ryne C. Phillips, PE, PhD  
Seamon, Whiteside & Associates, Inc.

**To:** Charles Drayton  
Director of Planning & Zoning  
Town of Sullivan's Island  
2056 Middle Street, P.O. Box 427  
Sullivan's Island, SC 29482

**Attachments:** 1018 Osceola Avenue Grading and Drainage Plans  
Town of Sullivan's Island Osceola Avenue Project Exhibit  
Landscape Plan / Lot Coverage Plan / Planting Details  
Grading Fill Exhibit

## 1. Executive Summary

- 1018 Osceola Avenue, without interventions, is at severe risk of repetitive tidal flooding. Current recommendations proposed as part of the recently completed (and approved by Town Council) Stormwater Master Plan were limited to flood mitigation projects that could be implemented within the public right-of-way, which may exclude marsh-adjacent properties (such as 1018 Osceola Avenue) from receiving flood mitigation benefits. Therefore, to accommodate these properties, this plan recommended that the Town of Sullivan's Island encourage and allow property owners to fill or protect their property against an appropriate tidal mitigation target.
- Stormwater impacts to adjacent property owners and public rights-of-way will be reduced if the proposed grading and drainage plan is implemented.
  - Existing Conditions: 23% of Property Flows towards Osceola Avenue, 20% of Property Flows towards 1010 Osceola Avenue, 23% of Property Flows towards 1026 Osceola Avenue, 34% of Property Flows towards the marsh
  - Proposed Conditions: 21% of Property Flows towards Osceola Avenue, 3% of Property Flows towards 1010 Osceola Avenue, 3% of Property Flows towards 1026 Osceola Avenue, 73% of Property Flows towards the marsh
- Town Osceola Avenue Project: The proposed grading and drainage improvements of this property should reduce the stormwater operations and maintenance by the Town after the roadway project is complete. The runoff will be routed more efficiently and retained within the property / toward the marsh, making it easier for the Town to manage the stormwater along the road. If the road project is completed without these improvements to the property, additional stormwater management would likely be required by the Town in front of this property.
- Based on the results of our analysis, and the information presented herein, the owner of 1018 Osceola Avenue is requesting a variance of Town Code Section 21-13 to allow implementation of the proposed grading and drainage project.

## 2. Introduction

Seamon, Whiteside & Associates, Inc. has completed a grading and drainage plan to portray the necessary improvements for protecting the property at 1018 Osceola Avenue from tidal-driven flooding within the Town of Sullivan's Island, SC. Figure 1 below depicts the project area for this analysis. This technical memorandum serves to document our analysis and reasoning for requesting variance from current Town code and policy.



*Figure 1 – Project location within the Town of Sullivan's Island, SC.*



### 3. Existing Conditions & Property Risks

The property at 1018 Osceola Avenue is a vulnerable property on Osceola Avenue for tidal-driven flooding. This property has recently been renovated with a new home which sits directly adjacent to the open marsh with no form of flood protection. With recent flooding of Osceola Avenue, rainfall becoming increasingly more intense, and tide elevations in the area expected to continue rising, the risks of flooding associated with this property continue to increase moving forward without any improvements being made. These risks include:

- **Critical Wetland Line Redelineation** - The critical wetland line was voluntarily re-surveyed by the Builder to provide a more accurate understanding of the marsh limits along the back of the property. The latest delineation revealed that the critical line moved inland towards the building by approximately 3 to 6 feet, and also resulted in a large portion of the eastern corner of the lot now falling within the wetland limits. Per direction from the Town, the original lot size calculations that were previously permitted will continue to be used for regulatory purposes. The attached lot coverage plan provides the latest critical line location and associated calculations.
- **Tidal Flooding** - As noted in the "Island-Wide Stormwater Master Plan and Infrastructure Improvement Strategy" by Seamon, Whiteside, & Associates, Inc. Dated February 2025 and approved by Town Council in March 2025 (hereby referred to as the Stormwater Master Plan), the current typical tide elevation on Sullivan's Island is 3.31 feet NAVD88 with extreme tidal elevations exceeding 4.55 feet NAVD88 (Section 4.4.2 of the Stormwater Master Plan). Future sea level rise was also analyzed as a part of the Stormwater Master Plan. The results of this future sea level rise analysis indicated that future (50-year planning horizon) typical tides would exceed 5.39 feet NAVD88, with extreme tides exceeding 6.63 feet NAVD88 (Section 4.4.2.1 of the Stormwater Master Plan). The property elevation currently ranges from approximately 6.5 feet NAVD88 at the building pad and slopes down to 3-4 feet NAVD88 in the back of the property (along the marsh) and down to 4 feet NAVD88 along Osceola Avenue and both neighboring property boundaries. Based on the analysis and results of the Stormwater Master Plan, severe and repetitive tidal flooding will be a systemic problem for this property, that without intervention, may lead to irrevocable damage for this property.
- **Roadway Improvements** – The Stormwater Master Plan outlines high-priority projects for mitigating flooding on Sullivan's Island such as proposed improvements for Osceola Avenue (Section 5.3.1 of the Stormwater Masterplan). Specifically, the Stormwater Master Plan calls for raising Osceola Avenue by 1.5 – 2 feet up to an elevation of 6 feet NAVD88 with suggestions of a future final target elevation of 7 feet NAVD88 (see attached for project exhibit). This is being proposed due to the constant flooding and submergence of the roadway in recent storm events and to combat the projected sea level rise in the future. Figure 2 below shows Osceola Avenue flooded near Station 9 ½ after a storm event, roughly 600 feet from the property, while Figures 3 through 5 show the roadway flooded directly in front of the property. Raising this street will protect the roadway from future floods but will still leave low-lying and marsh-adjacent properties, such as 1018 Osceola Avenue, at risk of tidal floods. It is to be noted that the original design for the property placed the parking area directly adjacent to the street, within the public right-of-way. However, to accommodate the future Town project along Osceola Avenue, the parking area has since been strategically relocated to its current position as shown on the grading and drainage plan. Maintaining the parking in its original location would have necessitated filling the existing roadway drainage swale, which would have directly conflicted with the proposed Osceola improvements that involve the use of piping and regrading of this ditch. This proactive relocation ensures compatibility with and supports the Town's planned infrastructure upgrades.



Figure 2 – Flooded Osceola  
Avenue (near Sta. 9 ½)  
December 2023



Figure 3 – Flooded Osceola Avenue (in  
front of 1018 Osceola Avenue)  
November 2024



Figure 4 – Flooded Osceola Avenue (in  
front of 1018 Osceola Avenue)  
November 2024



Figure 5 – Flooded Osceola Avenue (in  
front of 1018 Osceola Avenue)  
November 2024

#### 4. Proposed Conditions and Code Variance Reasoning

The attached grading and drainage plan proposes the following improvements to 1018 Osceola Avenue:

- **Grading - Raising the Property Elevation** – This includes gently sloping the elevation up to 6.5 feet NAVD88 along the back and sides of the property, raising the front yard to 6 feet NAVD88 stretching from around the eastern side of the property and into the adjacent property to the west. The property will also be graded in the backyard to an elevation of 5.7 feet NAVD to capture runoff and direct it towards the dry wells, which will be the low points at 5.6 feet NAVD. Grading also includes raising the roadside drainage swale from 3 feet to 4 feet NAVD88. A drainage swale is proposed in the southwest corner of the property to ensure drainage toward the roadway. There is also a swale proposed within the pervious pathway along the eastern property boundary to retain runoff within the property and prevent flow to 1026 Osceola Avenue.
- **Critical Wetland Area Landscaping / Slope** – There will be a minimum 1-foot buffer between the new critical wetland line and any proposed grading along the slope up to elevation 6.5 feet NAVD in the back of the property. The slope will be graded at a 2H:1V slope and planted with primarily *Spartina alterniflora* (smooth cordgrass), which is a dominant grass species along tidal marshes, crucial for stabilization and erosion protection. The extensive root system of the vegetation helps retain the soil, while the plant stems attenuate wave energy. Coir logs will be installed at the toe of the slope along the buffer line to provide initial stabilization and promote vegetation growth, working in concert with the native plantings to protect the critical wetland limits from erosion and storm surges.
- **Drainage Infrastructure** – This includes installing yard inlets for gutter tie-ins and surface drainage surrounding the new home layout. The yard inlets will capture the majority of the runoff within the property and drain towards two (2) dry wells in the backyard, preventing excessive runoff to neighboring properties. The dry well will have a gravity discharge for normal runoff events and a sump pump with a discharge pipe that will operate when the water level reaches too high in the dry well. Both pipes will be discharged within the property prior to the marsh. Additionally, a proposed French drain with a 6-inch perforated drain pipe will be installed at the base of the slope along the property line with 1026 Osceola Avenue. This drain is designed to effectively capture any stormwater that will land on the slope and prevent runoff, ensuring proper management of stormwater before it reaches the adjacent property. It will be routed to the dry wells and also has storage capacity.
- **Living Shoreline** – To enhance erosion control and ecological benefits, a living shoreline component is proposed at key locations along the marsh-facing slope. Oyster bags will be strategically installed at the toe of the slope in lieu of the coir logs. Specifically, 25 feet of oyster bags are proposed where the slope meets the existing seawall on the 1026 property and at the sump pump discharge locations. These oyster bags will provide immediate stabilization, attenuate wave energy, and create ideal substrate for natural oyster recruitment, further enhancing shoreline protection over time.

These improvements are necessary to protect this property from tidal flooding, as well as the neighboring properties from additional surface runoff. This will require variance from Town Code Section 21-13, which states “Any importation of materials of any type or re-contouring of a lot’s existing contours that increased a lot’s existing ground elevation more than one (1) foot above existing grade and results or may result in elevating an existing or proposed structure is strictly prohibited”.

The improvements and variance are required for the following reasons:

- Provide flood mitigation for repetitive tidal flooding of this property which is severely impacted by today’s extreme tides that are only anticipated to become worse and more frequent in the future. The current extreme tidal elevation (as analyzed within the Stormwater Master Plan) is already above the majority of the property, with future typical and extreme tidal elevations indicative that future tides may frequently exceed the building pad elevation, flooding the entire site, and causing severe and potentially irrevocable damage to this property. The proposed grading, creating a slope up to 6.5 feet NAVD88 along the back and sides, will mitigate against projected extreme tidal events and will protect the Owner’s property and house. This design aligns with the general Lowcountry target elevations for long-term coastal



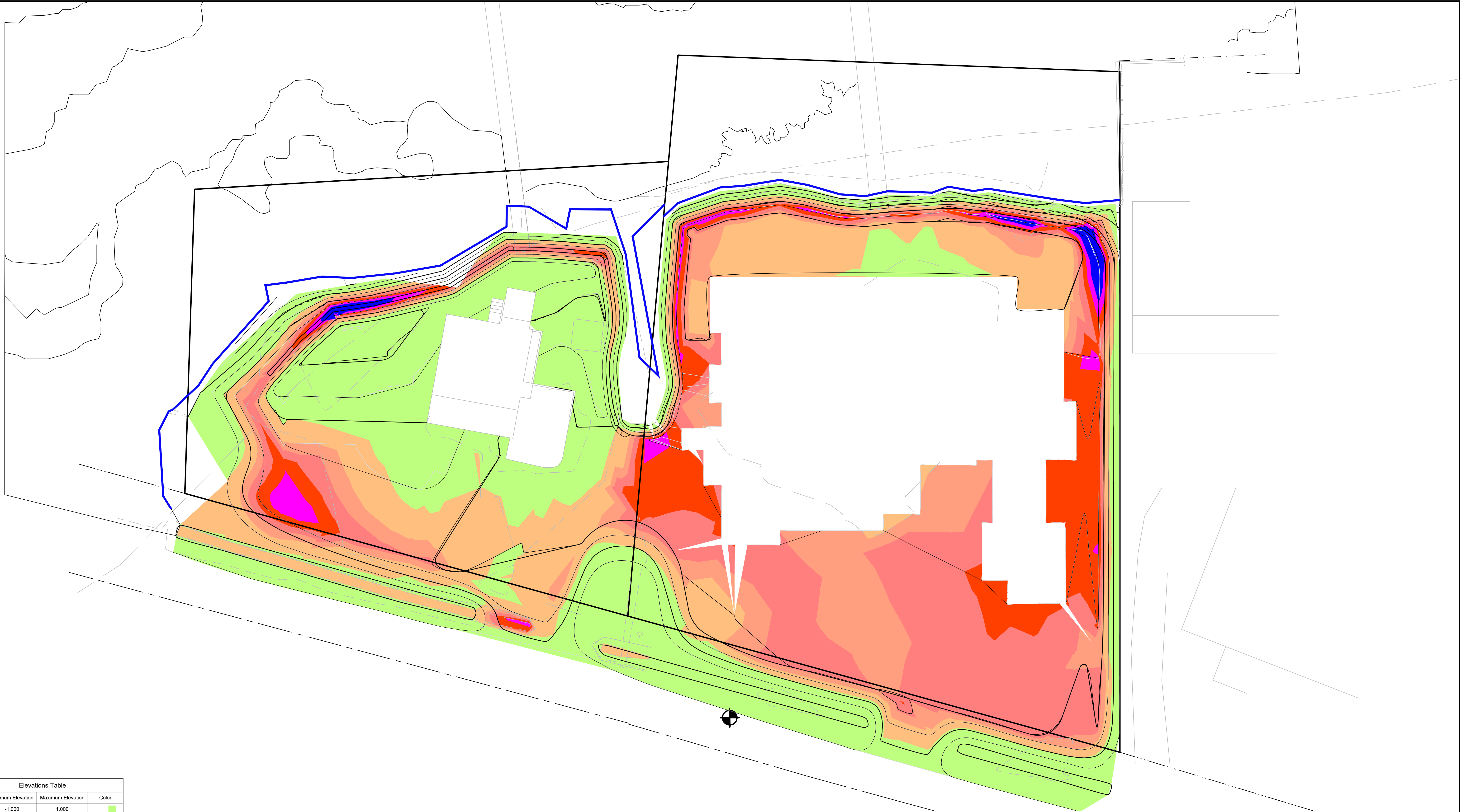
resiliency. This elevation is also referenced in Section 5.3.1 of the Stormwater Master Plan as a recommended target elevation of tidal perimeter protection improvements.

- The pathway swale elevation is required to be 6.5 feet NAVD88 along the eastern property boundary in order to protect 1026 Osceola Avenue from surface runoff. With the building pad around 6.5 feet NAVD88, any ground at or below this would allow for runoff and sediment to sheet flow from the property over the path to the neighboring property during extreme tide or storm events.
- The new building on the property has increased the impervious area on the site. The proposed drainage infrastructure will account for this additional impervious area and prevent surface runoff throughout the property and potentially to neighboring properties. The check valves installed on all discharge pipes will prevent any tidal water from backflowing into the property.
- The grading and necessary fill will create a safe and efficient drainage layout for the site, neighboring properties, and Osceola Avenue. Surface water will be directed away from the house toward the marsh to infiltrate in the backyard and or get captured by the french drain and two dry wells and discharged to the marsh, keeping runoff from entering adjacent properties. There are two drainage swales proposed in the southwest and southeast corners of the property to promote drainage into the roadside drainage swale.
- The northeast corner of the property is currently at risk of continued erosion due to storm tides. The redelineated critical line shows that this corner of the property is susceptible to land loss / erosion. The existing seawall installed along this area within the 1026 property extends along the back of their property at an elevation that appears to be at or above the proposed top of the grading of 6.5 feet NAVD88. By designing the grading to tie into the existing seawall location and the 25 feet of living shoreline, the function of the existing seawall will remain for the neighboring property and this corner will be better protected from continued erosion.
- With the Town proposing raising Osceola Avenue, the additional fill will allow for the property's grading to blend with the new road elevation. This will prevent flooding of the driveway and allow the roadside drainage to operate more efficiently.

## **5. Alignment with Proposed Osceola Town Project**

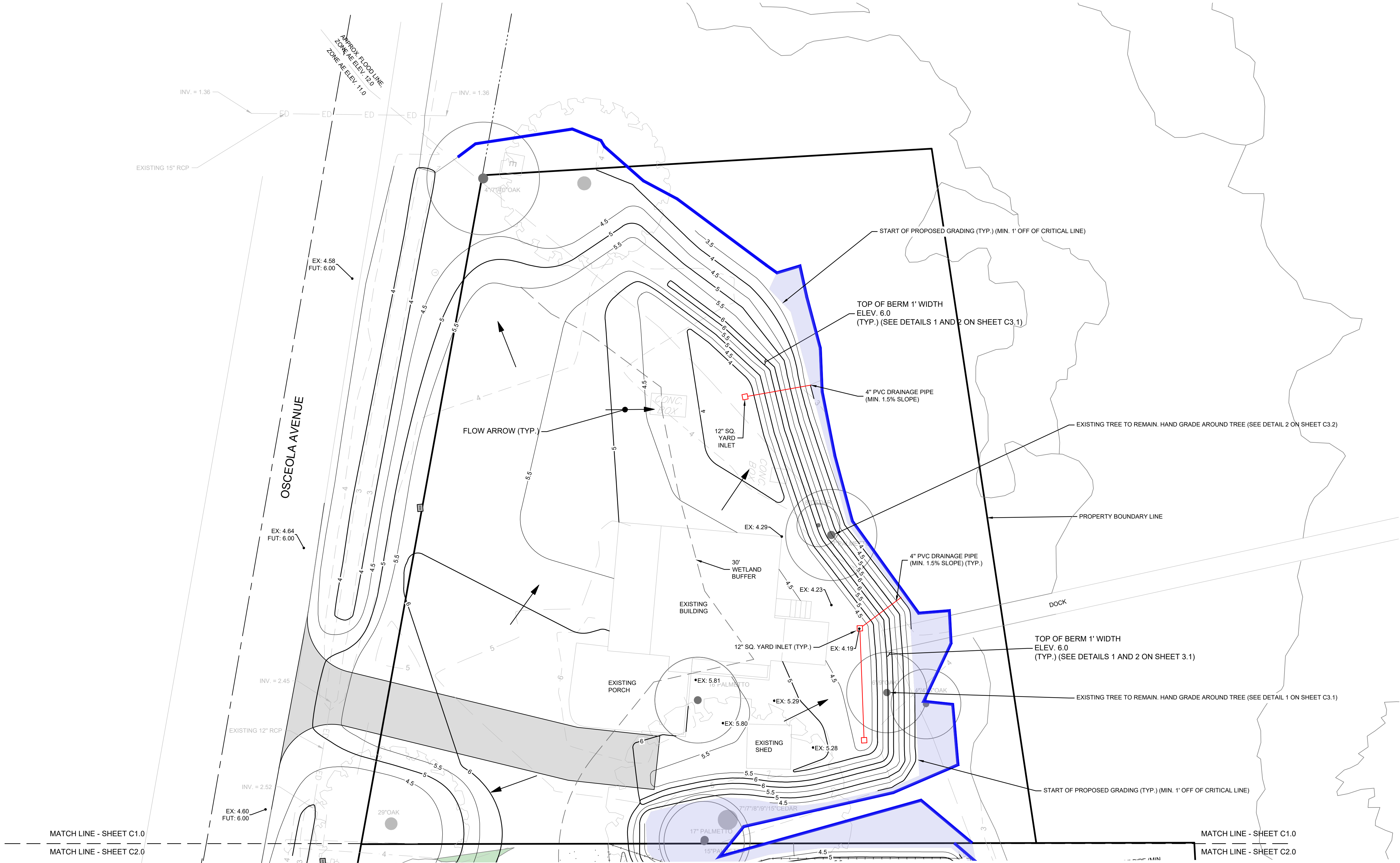
The Stormwater Master Plan identified the proposed improvements along Osceola Avenue (including raising the roadway) as the highest priority project that the Town of Sullivan's Island needs to implement to improve their long-term coastal resiliency. This entire corridor has already experienced severe systemic flooding that will continue to increase and pose risks to the properties adjacent to the roadway.

The improvements proposed in the attached grading and drainage plan will not only preserve the property at 1018 Osceola Avenue but will also safeguard the Town's investment if / when the roadway elevation is raised. With tidal elevations rising and storm events expected to increase in severity, the property would continue to flood if the roadway project was implemented without any of the proposed changes recommended herein. Implementing the proposed grading, creating a slope up to 6.5 feet NAVD88 along the back and sides, in addition to other proposed drainage improvements will protect the property and aligns with the objectives / recommendations of the Town's Stormwater Master Plan. Most importantly, the proposed site improvements do not and will not jeopardize the Town's proposed project.



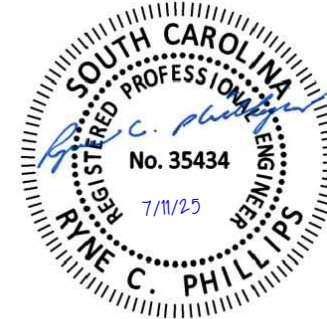
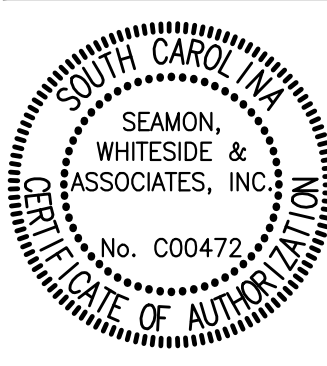
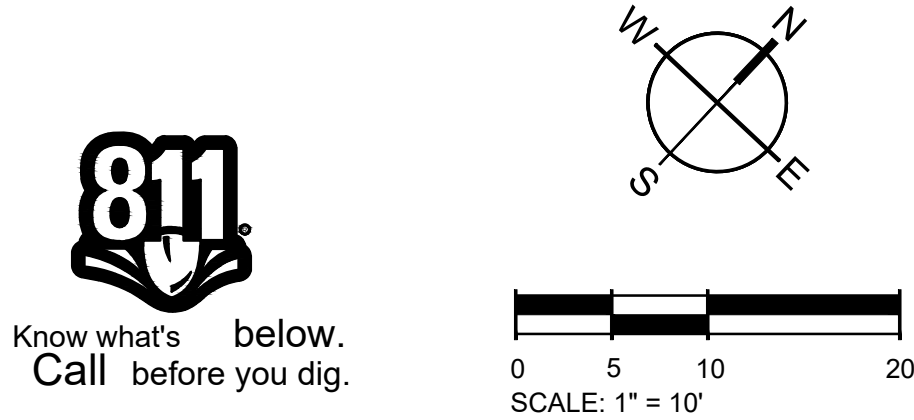
Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1.000	1.000	Light Green
2	1.000	1.500	Orange
3	1.500	1.750	Light Orange
4	1.750	2.000	Light Red
5	2.000	2.250	Red
6	2.250	2.500	Pink
7	2.500	3.000	Blue

501 WINDO PARK BOULEVARD, SUITE 200, MOUNT PLEASANT, SC 29464 | JUDSONVILLE BUILDING 600A, 701 EASLEY BRIDGE RD, SUITE 200A, GREENVILLE, SC 29611 | 200 PETERSON DR, CHARLOTTE, NC 28207 | 1710 N. CEDAR STREET, SUMMERVILLE, SC 29583 | 104 N. DANIEL MORGAN AVENUE, SUITE 300, SPARTANBURG, SC 29306  
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- NOTES:**
- SPOT ELEVATION KEY: "EX" = EXISTING, "FUT" = FUTURE
  - FOR PROJECT SURVEY INFORMATION INCLUDING VERTICAL DATUM AND BENCHMARK LOCATION, SEE SHEET C2.0.
  - PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
  - CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS.
  - YARD INLET LOCATIONS ARE SUBJECT TO CHANGE PRIOR TO CONSTRUCTION BASED ON FIELD CONDITIONS.
  - ALL DRAINAGE PIPE TO BE INSTALLED WITH CHECK VALVES AT THE DISCHARGE LOCATION (TIDEFLEX DUCKBILL CHECK VALVE, OR EQUAL).

LEGEND	
	GRASS YARD / WALKWAY
	PERVIOUS DRIVEWAY
	PERVIOUS WALKWAY
	WETLAND GRADING BUFFER
	LIVING SHORELINE
	CRITICAL WETLAND LIMITS (LOCATED 06/26/2025)
	PROPOSED DRAINAGE INFRASTRUCTURE

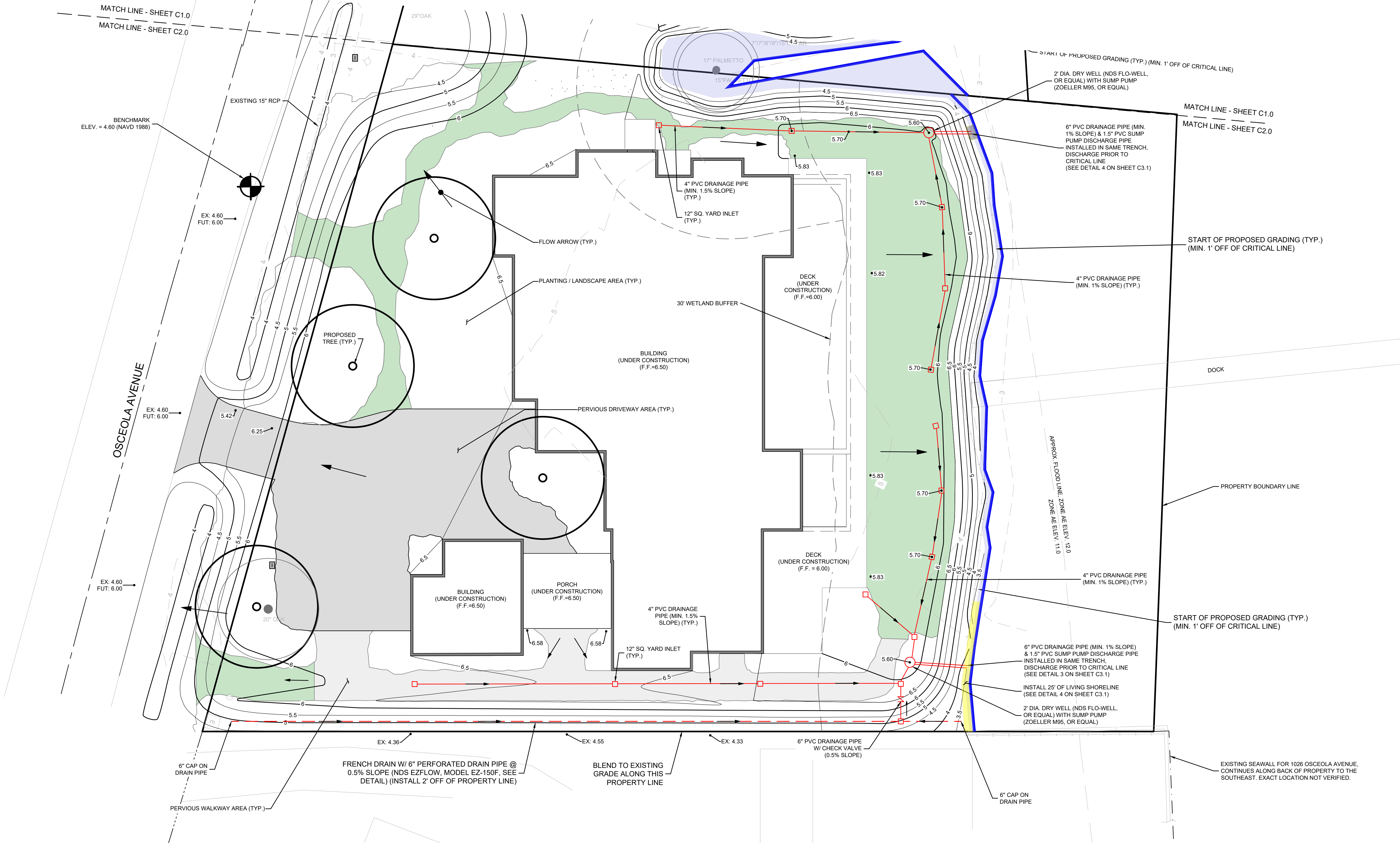


SW+ PROJECT: 12280  
DATE: 5/22/25  
DRAWN BY: KBH  
CHECKED BY: RCP

REVISION HISTORY

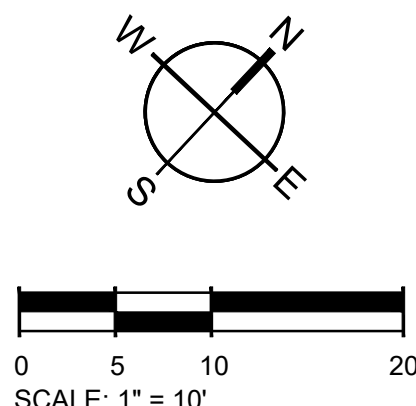
NO.	DESCRIPTION	DATE

501 WINDO PARK BOULEVARD, SUITE 200, MOUNT PLEASANT, SC 29464 | JUDSONVILLE BUILDING 600, 701 EAST F STREET, SUITE 200, GREENVILLE, SC 29611 | 1201 PETERSON DR., SUITE 200, GREENVILLE, SC 29611 | 1711 N. CEDAR STREET, SUMMERVILLE, SC 29583 | 104 N. DANIEL MORGAN AVENUE, SUITE 300, SPARTANBURG, SC 29306  
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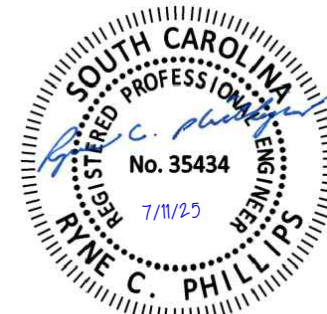
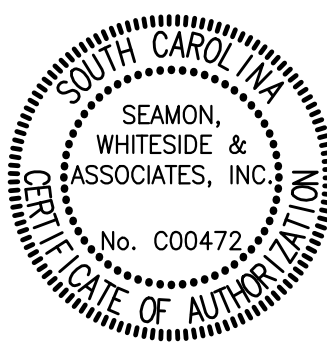


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- SPOT ELEVATION KEY: "EX" = EXISTING, "FUT" = FUTURE
  - PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO TOPOGRAPHIC, TREE, STORM DRAINAGE FACILITIES, AND ALL UTILITIES. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES. ANY DISCREPANCIES OR CONFLICTS IDENTIFIED DURING VERIFICATION OF EXISTING CONDITIONS AND UTILITIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. ANY COSTS ASSOCIATED WITH CORRECTIVE WORK OR DAMAGES THAT ARE A RESULT OF THE CONTRACTOR NOT VERIFYING EXISTING CONDITIONS AND THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
  - CONTRACTOR TO SELF-VERIFY THAT SITE GRADES, DRAINAGE PIPES, AND DRAINAGE STRUCTURES ARE CONSTRUCTED PER THE PLANS PRIOR.
  - GUTTER DESIGN ON THE BUILDING IS TO BE DESIGNED BY OTHERS. GUTTERS ARE TO TIE-IN TO THE YARD INLET DRAINAGE SYSTEM. YARD INLET LOCATIONS ARE SUBJECT TO CHANGE PRIOR TO CONSTRUCTION BASED ON FIELD CONDITIONS.
  - FINAL DESIGN OF DRY WELL AND SUMP PUMP LOCATION, EQUIPMENT, AND PIPE CONNECTIONS SUBJECT TO CHANGE PRIOR TO CONSTRUCTION BASED ON FIELD CONDITIONS.
  - ALL DRAINAGE PIPE AND SUMP PUMP DISCHARGE PIPE TO BE INSTALLED WITH CHECK VALVES AT THE DISCHARGE LOCATION (TIDEFLEX DUCKBILL CHECK VALVE, OR EQUAL).

LEGEND	
	GRASS YARD / WALKWAY
	PERVIOUS DRIVEWAY
	PERVIOUS WALKWAY
	WETLAND GRADING BUFFER
	LIVING SHORELINE
	CRITICAL WETLAND LIMITS (LOCATED 06/26/2025)
	PROPOSED DRAINAGE INFRASTRUCTURE



MOUNT PLEASANT, SC  
843.884.1667  
GREENVILLE, SC  
864.298.0534  
SUMMERVILLE, SC  
843.972.0710  
SPARTANBURG, SC  
864.272.1272  
CHARLOTTE, NC  
980.312.5450  
RALEIGH, NC  
980.312.5450  
WWW.SEAMONWHITESIDE.COM



OSCEOLA AVENUE GRADING AND DRAINAGE PLAN  
HARPER BUILDING GROUP  
1018 & 1010 OSCEOLA AVENUE  
SULLIVANS ISLAND, SC

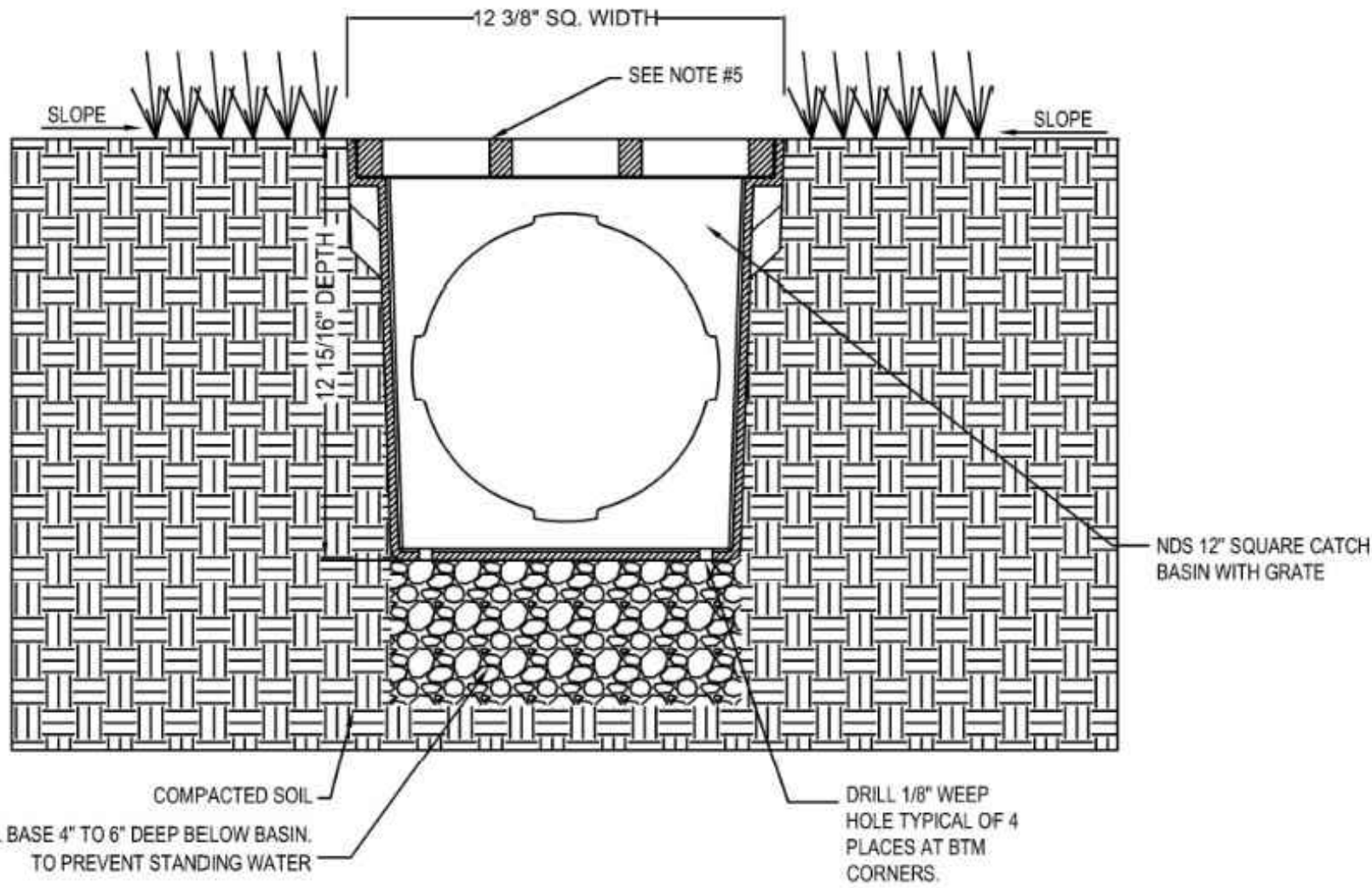
SW+ PROJECT: 12280  
DATE: 5/22/25  
DRAWN BY: KBH  
CHECKED BY: RCP

REVISION HISTORY

NO.	DESCRIPTION	DATE

1018  
OSCEOLA AVE  
GRADING AND  
DRAINAGE  
PLAN

501 WINDY PARK BOULEVARD, SUITE 200, MOUNT PLEASANT, SC 29464 | JUDSONVILLE BUILDING 6000 7TH EASLEY DRIVE RD, SUITE 2000, GREENVILLE, SC 29611 | 1301 PETERSON DR., CHARLOTTE, NC 28207 | 1710 N. CEDAR STREET, SUMMERVILLE, SC 29583 | 1501 N. DANIEL MORGAN AVENUE, SUITE 300, SPARTANBURG, SC 29306  
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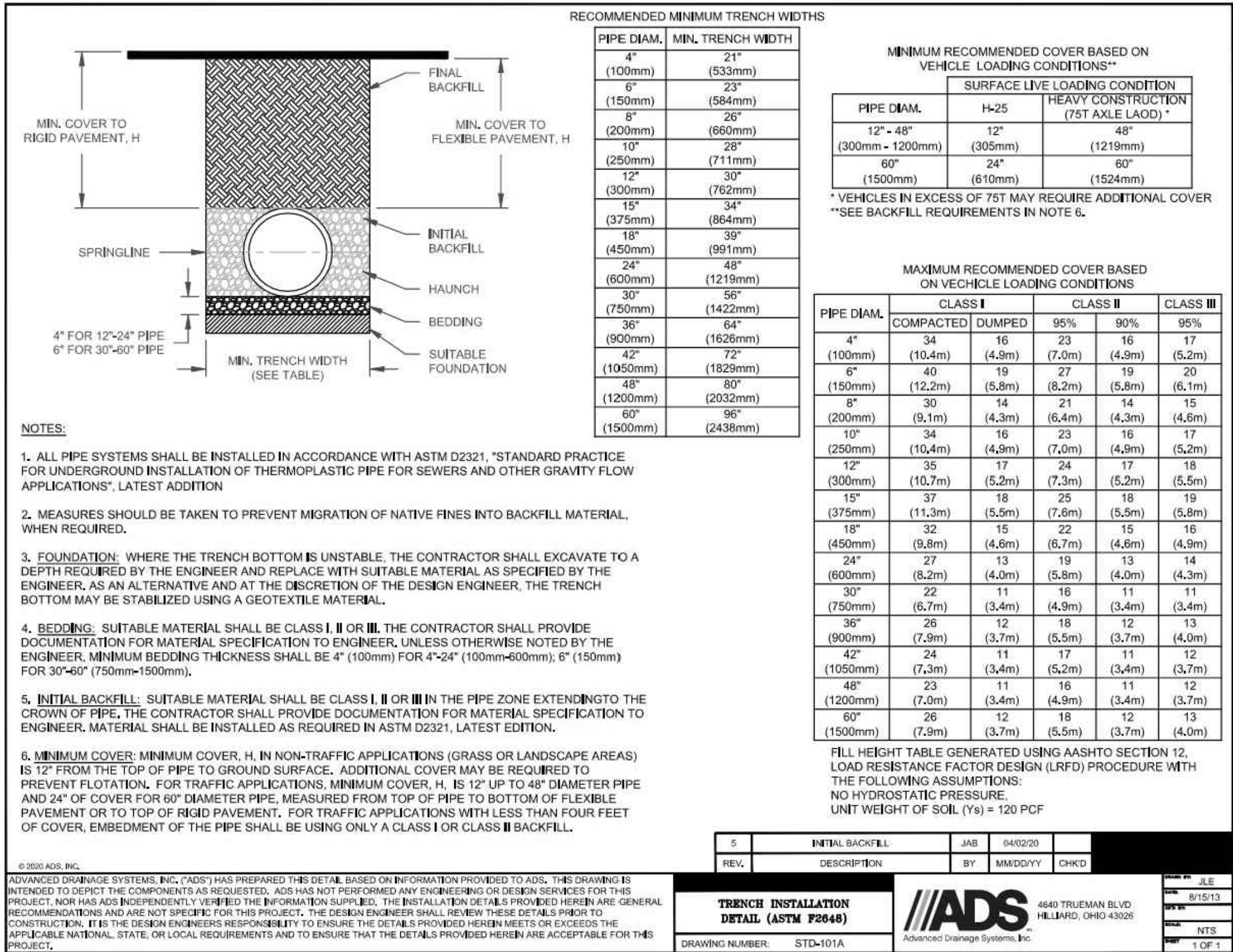


NOTES:

- GRATE TO BE ATTACHED TO CATCH BASIN WITH SCREW PROVIDED AT TIME OF INSTALLATION.
- RISER CAN BE CUT TO ACHIEVE EXACT ELEVATION.
- EXISTING SOILS SHOULD BE EVALUATED TO ENSURE PROPER STRUCTURAL AND PERMEABILITY PROPERTIES.
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- RECESS CHANNEL AND GRATE 1/8" FOR PEDESTRIAN TRAFFIC.
- DO NOT SCALE DRAWING.
- THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY.
- ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

12" Square Yard Inlet Detail

SCALE: NOT TO SCALE

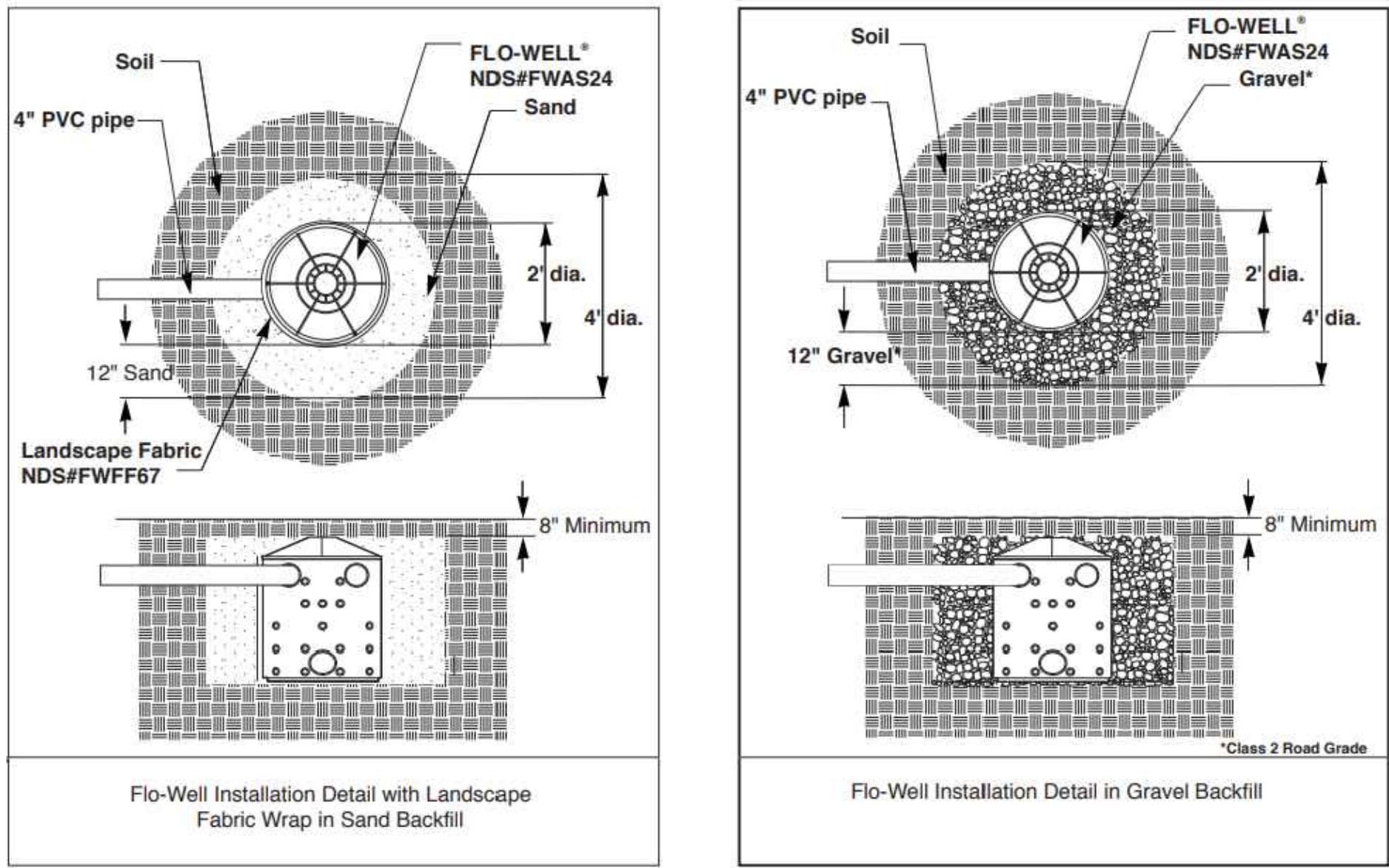


Drainage Pipe Trench Detail

SCALE: NOT TO SCALE

Installation Note: Location and number of ports removed will determine the rate and direction of leaching.

\* Add gravel around outside of Flo-Well® unit to increase leaching capacity.

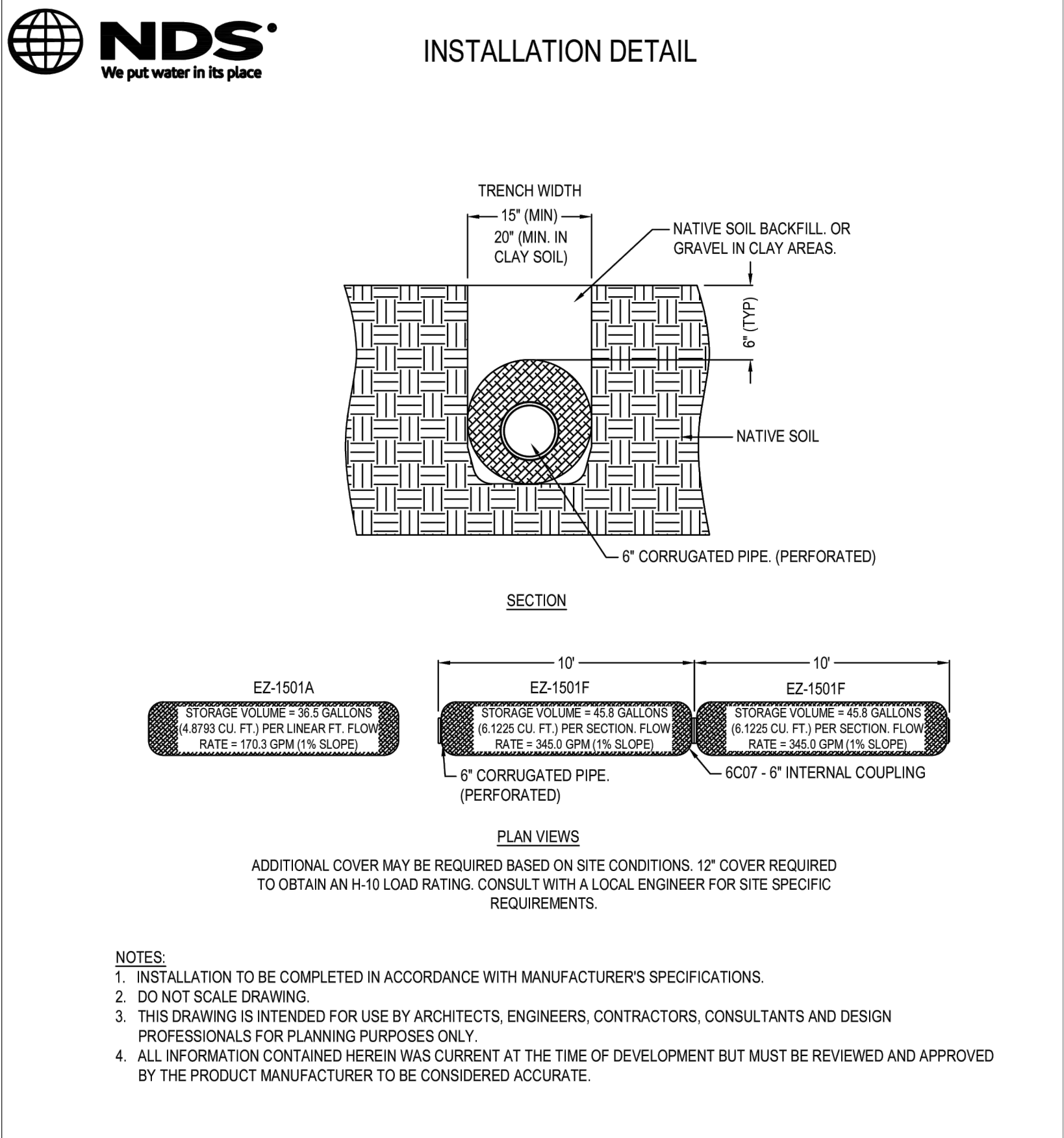


NOTES:

- SUMP PUMP IN DRY WELL TO BE SIZED WITH A MINIMUM PUMP CAPACITY OF 50 GPM AT 3 FEET OF HEAD.
- DISCHARGE WILL OCCUR BY GRAVITY OUT OF THE FLO-WELL UNTIL THE WATER LEVEL REACHES THE PUMP ON ELEVATION. DISCHARGE VELOCITY USING 50 GPM AND 1.5-INCH DISCHARGE PIPE IS 5.9 FEET PER SECOND.

2 Dry Well Detail

SCALE: NOT TO SCALE



CAPACITY NOTES:

25-YEAR STORM (2-HOUR DURATION) = 4.55 INCHES (SULLIVAN'S ISLAND, PER NOAA ATLAS 14)  
STORMWATER RUNOFF ON SLOPE TOWARD 1026 OSCEOLA AVE PROPERTY LINE USING 25-YEAR STORM = 2,400± GALLONS

FRENCH DRAIN CAPACITY (EZ FLOW, MODEL EZ-1501F):  
STORAGE = (45.8 GALLONS / 10 FEET) X 143 LINEAR FEET = 650± GALLONS  
CONVEYANCE (@ 0.5% SLOPE) = 172 GALS/MIN. X 120 MIN. (2-HOUR STORM) = 20,640 GALLONS

TOTAL CAPACITY FOR 2-HOUR STORM = 20,640 + 650 GALS = 21,290 GALS > 2,400 GALS (2-HR 25-YR STORM)

4 French Drain Detail

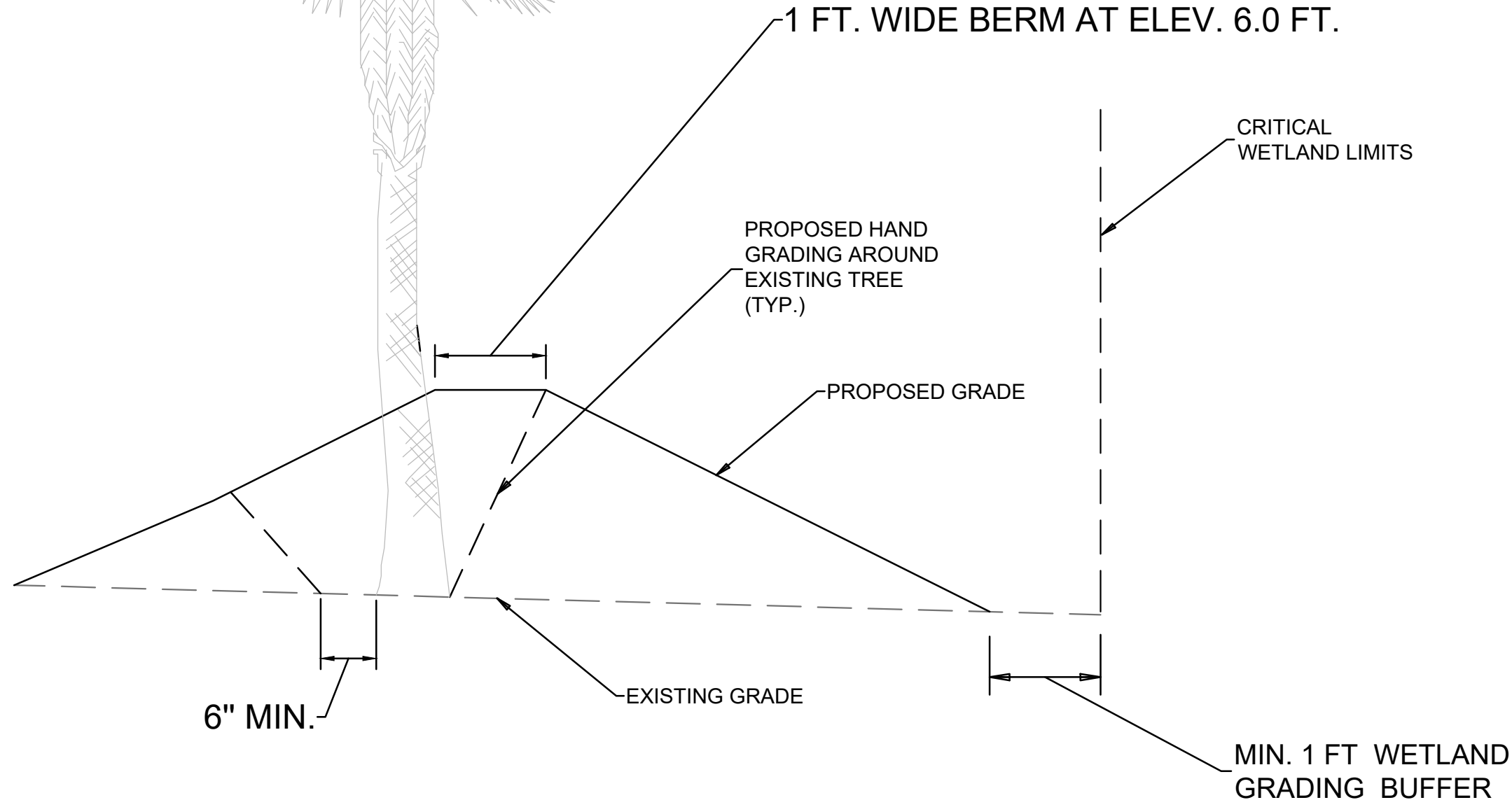
SCALE: NOT TO SCALE

REVISION HISTORY

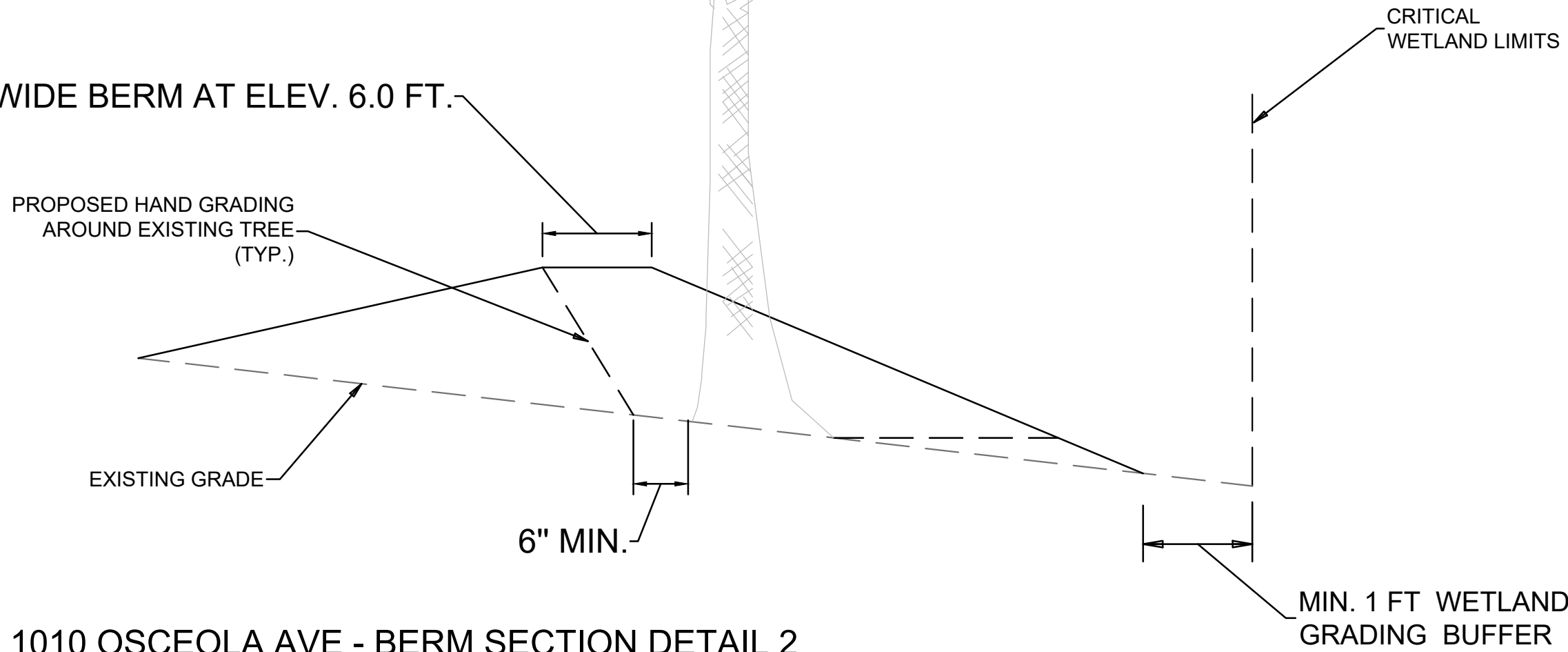
NO.	DESCRIPTION	DATE

DRAINAGE DETAILS

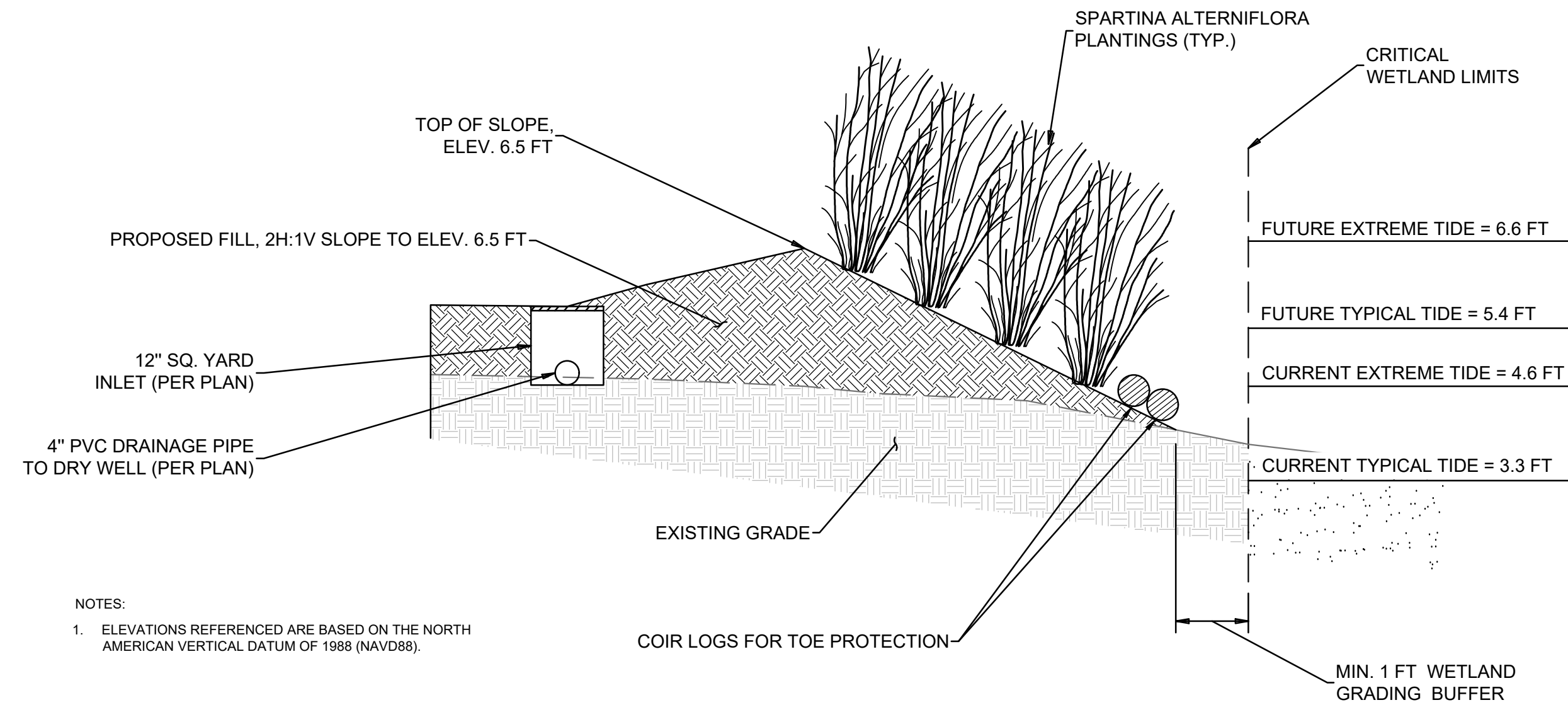
501 WINDO PARK BOULEVARD, SUITE 200, MOUNT PLEASANT, SC 29464 | JUDSON HILL BUILDING GROUP, 111 E. 1ST STREET, GREENVILLE, SC 29601 | 201 PETERSON DR., CHARLOTTE, NC 28207 | 1101 N. CEDAR STREET, SUMMERVILLE, SC 29583 | 150 N. DANIEL MORGAN AVENUE, SUITE 300, SPARTANBURG, SC 29306  
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1 1010 OSCEOLA AVE - BERM SECTION DETAIL 1  
SCALE: NOT TO SCALE

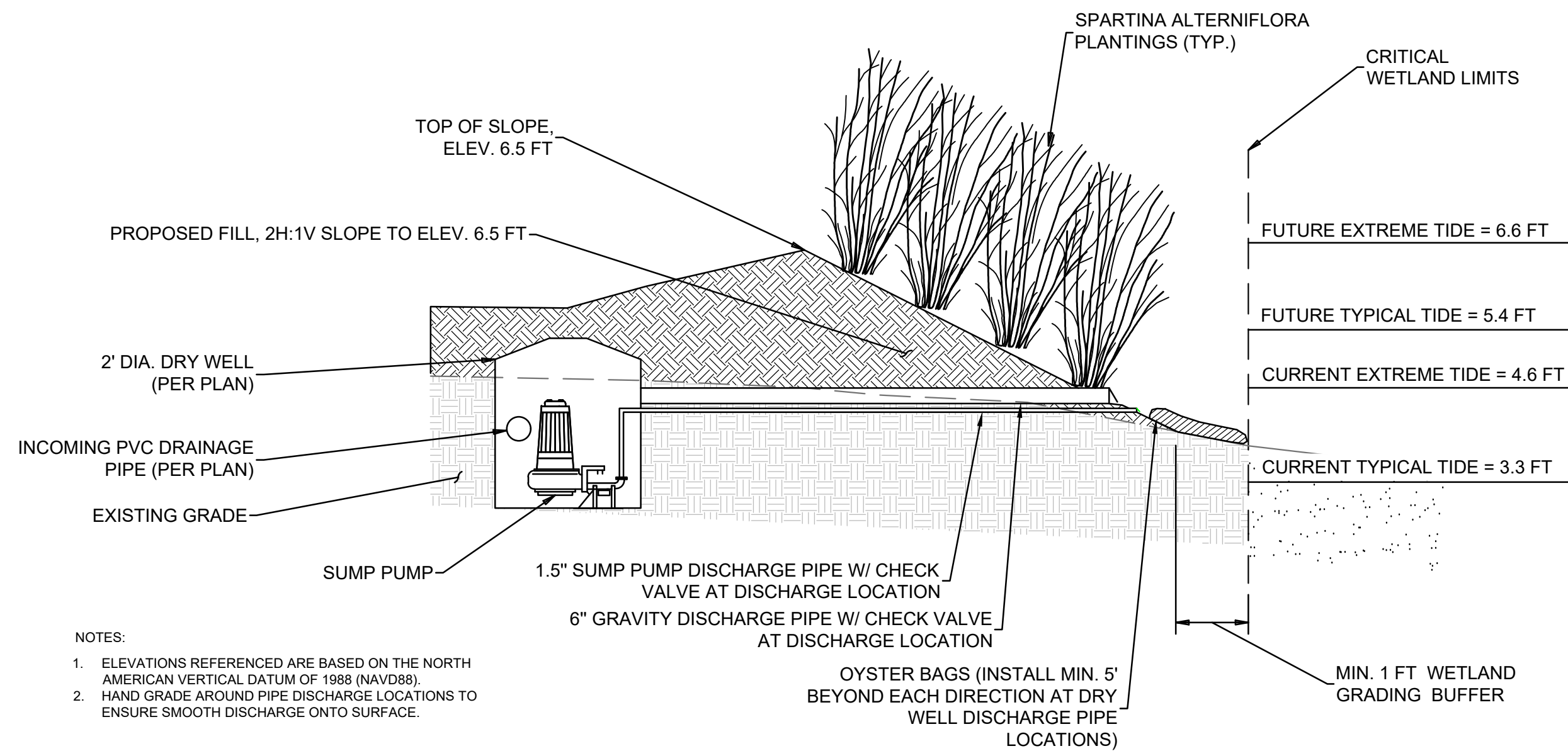


2 1010 OSCEOLA AVE - BERM SECTION DETAIL 2  
SCALE: NOT TO SCALE



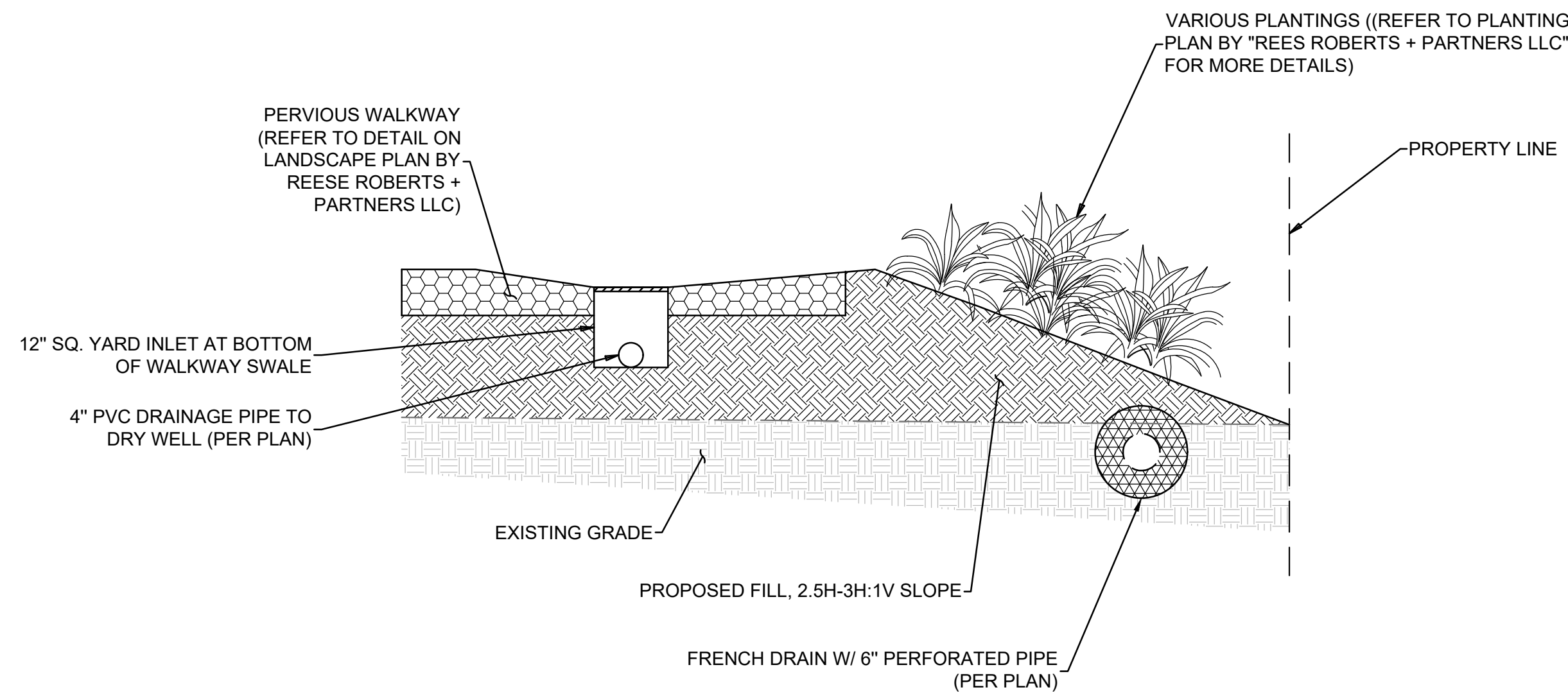
NOTES:  
1. ELEVATIONS REFERENCED ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

3 1018 OSCEOLA AVE - BACK OF PROPERTY SLOPE SECTION DETAIL  
SCALE: NOT TO SCALE



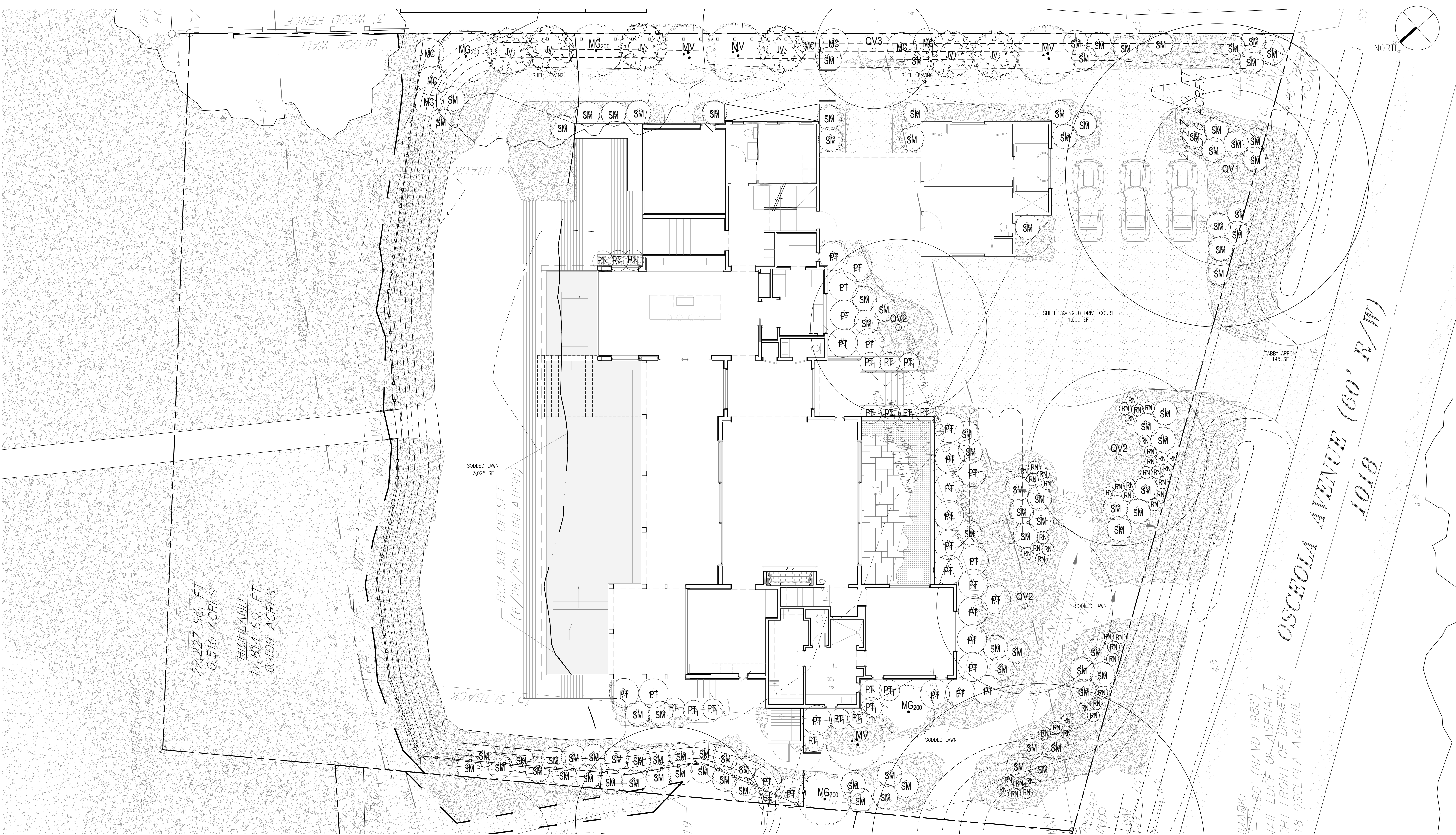
NOTES:  
1. ELEVATIONS REFERENCED ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).  
2. HAND GRADE AROUND PIPE DISCHARGE LOCATIONS TO ENSURE SMOOTH DISCHARGE ONTO SURFACE.

4 1018 OSCEOLA AVE - LIVING SHORELINE SECTION DETAIL  
SCALE: NOT TO SCALE



5 1018 OSCEOLA AVE - SLOPE ON SOUTHEAST PROPERTY LINE SECTION DETAIL  
SCALE: NOT TO SCALE

NO.	DESCRIPTION	DATE



PLANT SCHEDULE

Trees					
Quantity	Key	Botanical Name	Common Name	Size	Notes
6	JV	Juniperus virginiana	eastern redcedar	16' ht, 8" w	heavy, branched to ground, not sheared
4	MC200	Magnolia grandiflora 'DD Blanchard'	southern magnolia	16'-17' ht, 200 gal.	Heavily branched, tall and narrow habit
4	MV	Magnolia virginiana	sweetbay magnolia	Multi-stem 16' ht	3-4 well developed trunks, full heavy canopy
4	QV1	Quercus virginiana	live oak	13'-15" cal; 36' ht	spreading habit
4	QV2	Quercus virginiana	live oak	10" cal; 30' ht	spreading habit
1	QV3	Quercus virginiana	live oak	8" cal; 24' ht	spreading habit
Shrubs					
Quantity	Key	Botanical Name	Common Name	Size	Notes
16	MC	Myrica cerifera	bayberry / wax myrtle	15 Gal, 48" ht x 48" w.	Heavy, branched to ground
27	PT	Pittosporum tobira	mockorange	15 Gal, 48" ht x 48" w.	Heavy, branched to ground, dense, rounded
20	PT1	Pittosporum tobira	mockorange	10 Gal, 48" ht x 48" w.	Heavy, branched to ground, upright habit
101	SM	Sabal minor	Dwarf Palmetto	15 Gal.	Heavy, spaced as shown
60	FC	Rosa x 'Noaschnee'	Flower Carpet white rose	5 Gal.	Heavy, spaced as shown
Grasses - 4,500 SF					
Quantity	Key		Common Name	Size	Notes
1,000					
1,200	LB	Lomandra longifolia 'Breeze'	breeze grass	1 Gal	18" O.C. spacing
Terrace Plantings - 36" Shrub & Perennial Mix - 150 SF					
Quantity	Key	Botanical Name	Common Name	Size	Notes
TBD	TBD	TBD	TBD	TBD	TBD

PLANTING PLAN

1/8"=1'-0"

Rees Roberts + Partners LLC  
50 WARREN STREET NYC 10007  
t: 212.587.3371 f: 212.385.2932

1018 OSCEOLA AVE.  
SULLIVAN'S ISLAND SC

ISSUES AND REVISIONS	
DATE	ISSUE
1/16/2024	GRADING UPDATE
02/06/2024	GRADES + PLANT UPDATE
03/14/2025	GRADES + PLANT UPDATE
05/20/2025	GRADES + PLANT UPDATE
06/19/2025	GRADES + PLANT UPDATE
07/10/2025	GRADES + PLANT UPDATE

SCALE: AS NOTED

DRAWN BY: MJ

CHECKED BY: DK

PLANTING PLAN

LA-101

t: 212.587.3371 f: 212.385.2932

LOT SIZE:	22,226 SF
EXISTING BUILDINGS 1ST FLOOR:	2,685 SF
CONCRETE DRIVE:	1,554 SF
TOTAL IMPERVIOUS COVERAGE:	4,239 SF (19.07%)

LOT SIZE:	22,226 SF
BUILDINGS, PORCHES + LANDINGS:	4,684 SF
POOL:	906 SF
TOTAL IMPERVIOUS COVERAGE:	5,590 SF (25.2%)

TOTAL IMPERVIOUS COVERAGE ALLOWED BY ZONING BASED ON 6/26/25 CRITICAL LINE:  
30% HIGHLAND AREA (17,814 SF X 0.3 = 5,344 SF) 5.344 SF

TOTAL IMPERVIOUS + PERVIOUS COVERAGE:	9,186 SF (41.3%)
TOTAL VEGETATED COVERAGE:	13,140 SF (58.7%)

CRITICAL LINE LOCATED 5/26/2022

WOOD DECK 709.8 SF (PERVIOUS).

SWIMMING POOL + SPA 906 SF (IMPERVIOUS)

— EXISTING BOARDWALK TO DOCK 190 SF (PERVIOUS

— LOWER LANDING 27 SF (PERVIOUS

— 1SF FLOOR OF HOUSE, PORCHES + LANDINGS 4,759 SF (IMPERVIOUS

WOOD DECKS 68 SF (PERVIOUS

NORTH

PLAN  
1/8"=1'-0"

— CRUSHED SHELL PATH 869 SF. (PERVIOUS)

— CANTILEVERED PORTION OF BUILDING OVER PLANTING BED

~~7~~ CRUSHED SHELL DRIVE 1,732 SF (PERVIOUS

— PROPERTY LINE

OSCEOLA AVENUE (CENTERLINE)

## ISSUES AND REVISIONS

DATE	ISSUE
1/16/2024	GRADING UPDATE
02/06/2024	GRADES + PLANT UPDATE
03/14/2025	GRADES + PLANT UPDATE
05/20/2025	GRADES + PLANT UPDATE
06/19/2025	GRADES + PLANT UPDATE
07/10/2025	GRADES + PLANT UPDATE

SCALE: AS NOTED

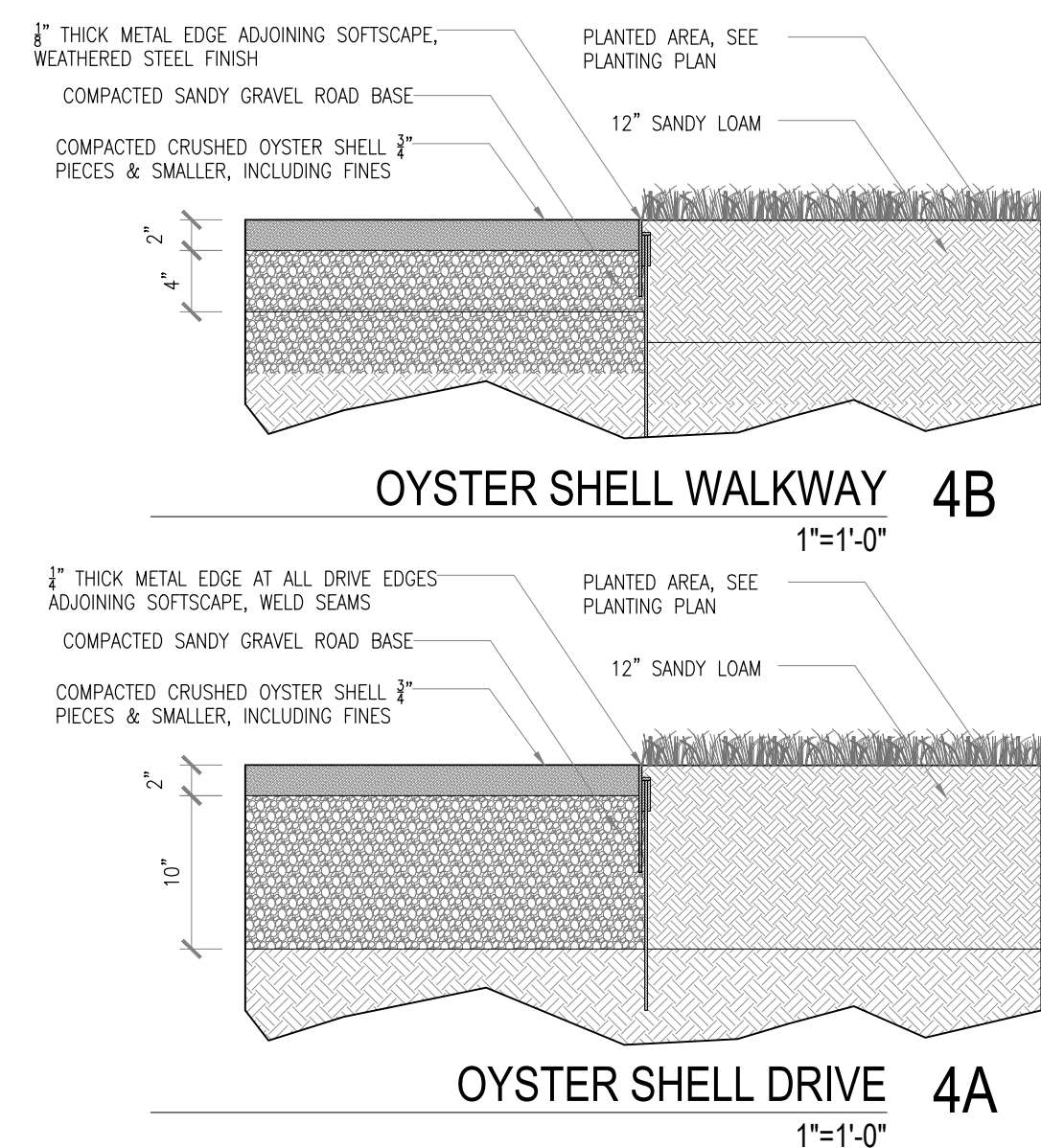
DRAWN BY: MJ

CHECKED BY: DK

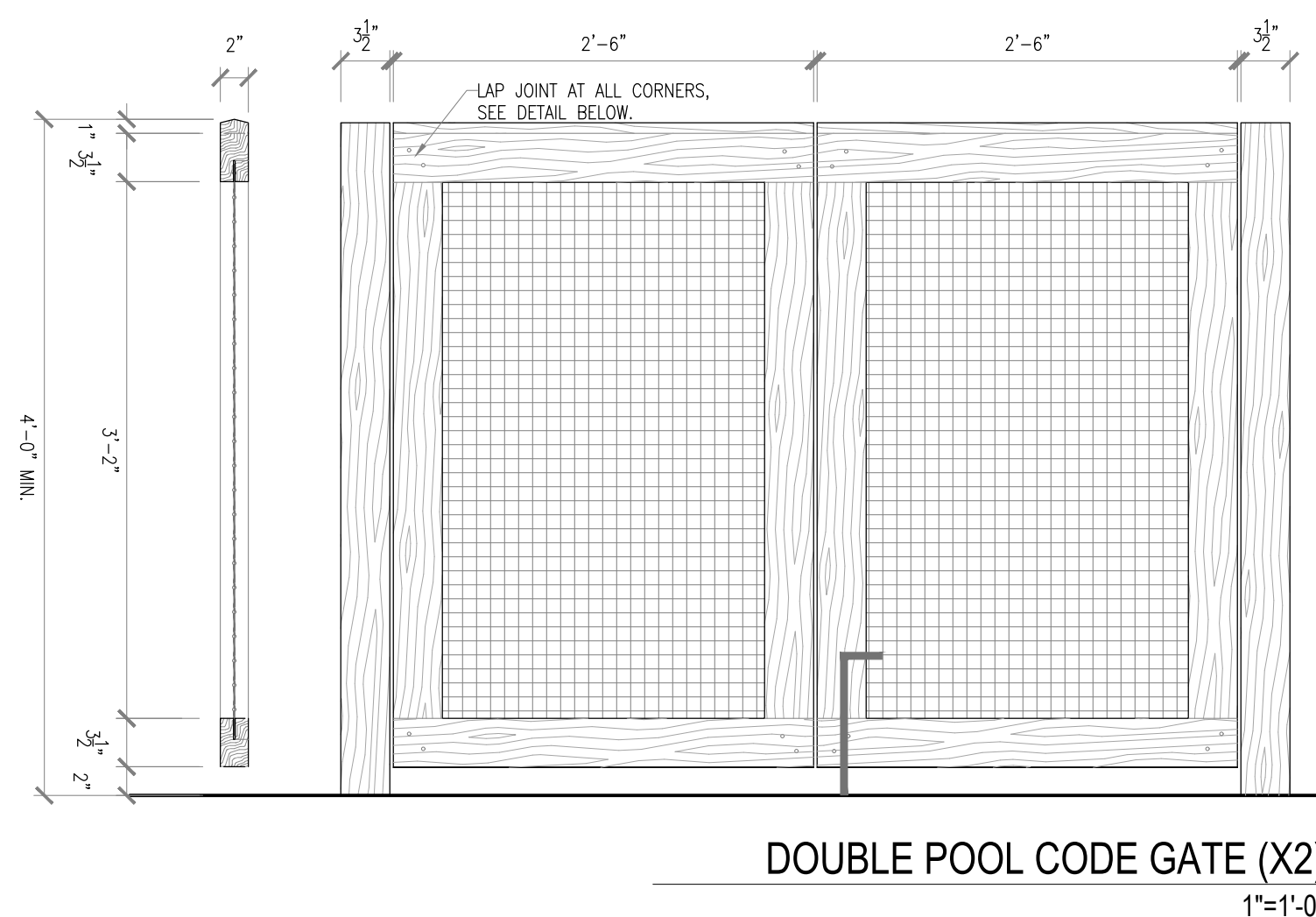
## LOT COVERAGE

LA-103

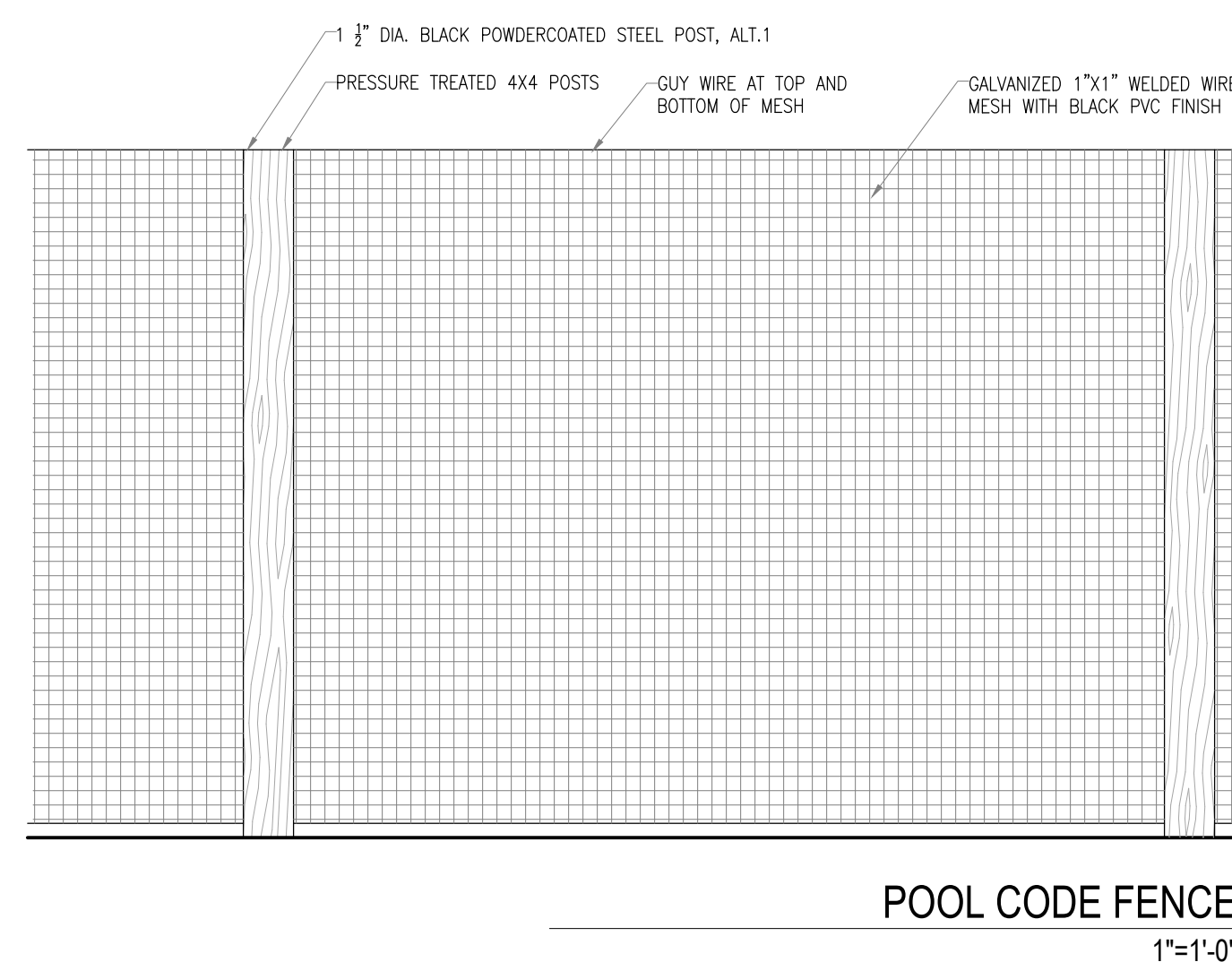
© COPYRIGHT STEVEN HARRIS ARCHITECTS



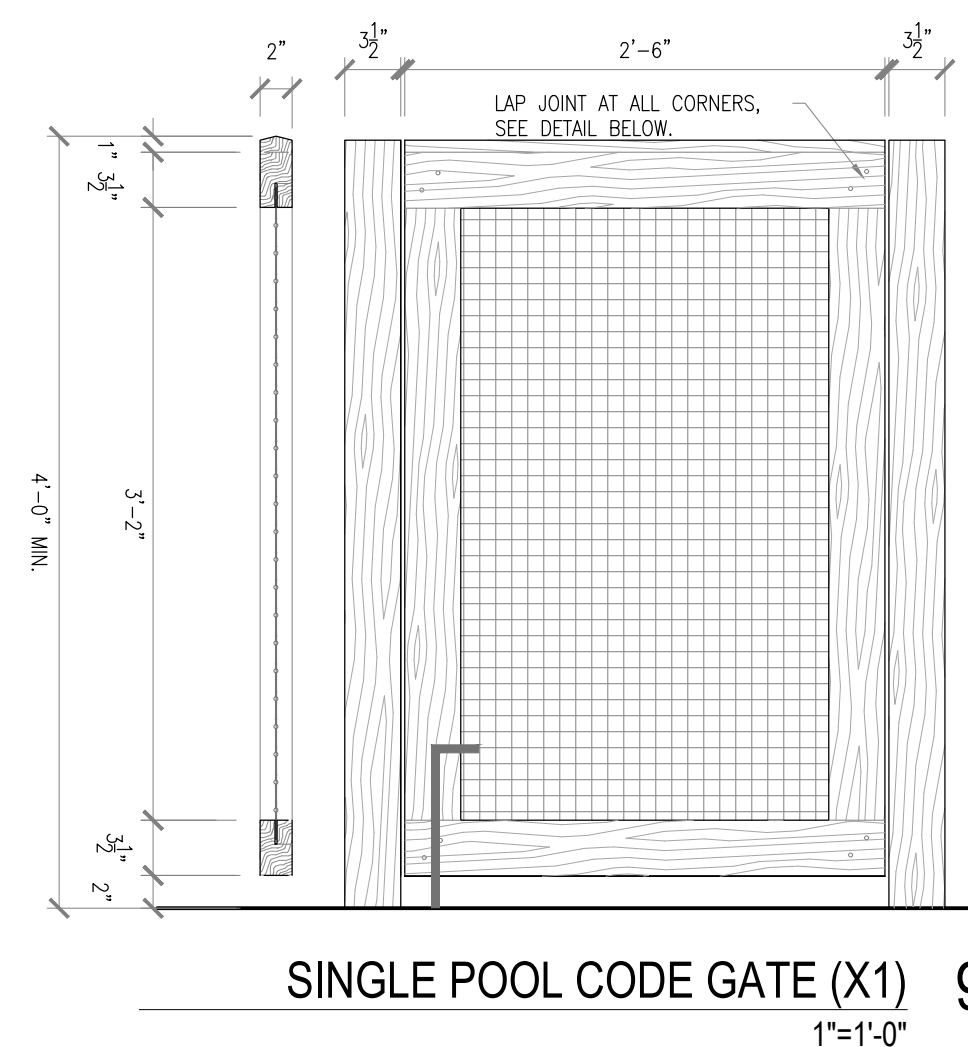
TYPICAL LAWN/PLANTING EDGE 3  
1"=1'-0"



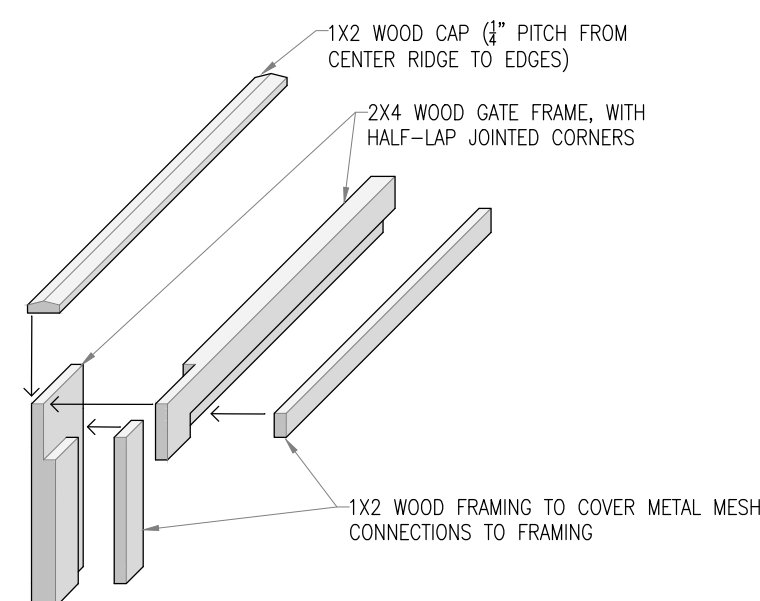
DOUBLE POOL CODE GATE (X2) 7  
1"=1'-0"



POOL CODE FENCE 8  
1"=1'-0"



SINGLE POOL CODE GATE (X1)	9
1"=1'-0"	



NOTES:

1. GATE FRAMING AND POSTS TO BE PRESSURE TREATED PINE.
2. MAGNALATCH® SIDE PULL GATE LATCH BY D&D TECHNOLOGIES
3. HINGES TO BE STAINLESS STEEL SELF-CLOSING SPRING HINGES
4. INFILL MESH TO BE 1"x1" SQUARE, GALVANIZED WELDED WIRE MESH WITH BLACK PVC FINISH
5. CANE BOLT TO BE GALVANIZED STEEL

TYPICAL GATE CONER JOINERY 10  
1"=1'-0"

1018 OSCEOLA AVE.  
SULLIVAN'S ISLAND SC

SCALE: AS NOTED

DRAWN BY: MJ

CHECKED BY: DK

# LA-200

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- Notes:**
1. Background 2020 aerial imagery collected by Kucera International. Imagery is managed by Adam DeMars, South Carolina State GIS Coordinator and hosted by ESRI.
  2. Drainage infrastructure locations are approximate. Final placement of proposed infrastructure will occur during design. Inlet placement was not considered in this study.
  3. Proposed improvements along the marsh-front (northeastern) side of Osceola Avenue (between approximately Station 10 and Station 12) and their associated impacts are not included in **Appendix D**.
  4. If additional collection systems are deemed necessary to provide drainage infrastructure for the project area then the system's inverts will need to be adjusted to provide standard cover for stormwater pipes.
  5. 24" tide gate to be installed at the end of pipe on Sea Breeze Ln with approximately 425 LF of ditch excavation required at the outfall.
  6. Pump station to discharge directly to tidal marsh at end of Station 10. No force main required.
  7. Pump station currently proposed as a triplex pump station consisting of two high flow rate pumps and one jockey pump for smaller storm events.
  8. Road centerline is proposed to be elevated to 6 ft NAVD88. Proper grading within right-of-way will be required to ensure runoff is routed to proposed infrastructure.

