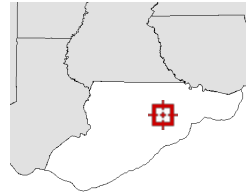


Overview



Legend

-  Parcels
-  Roads
-  City Labels

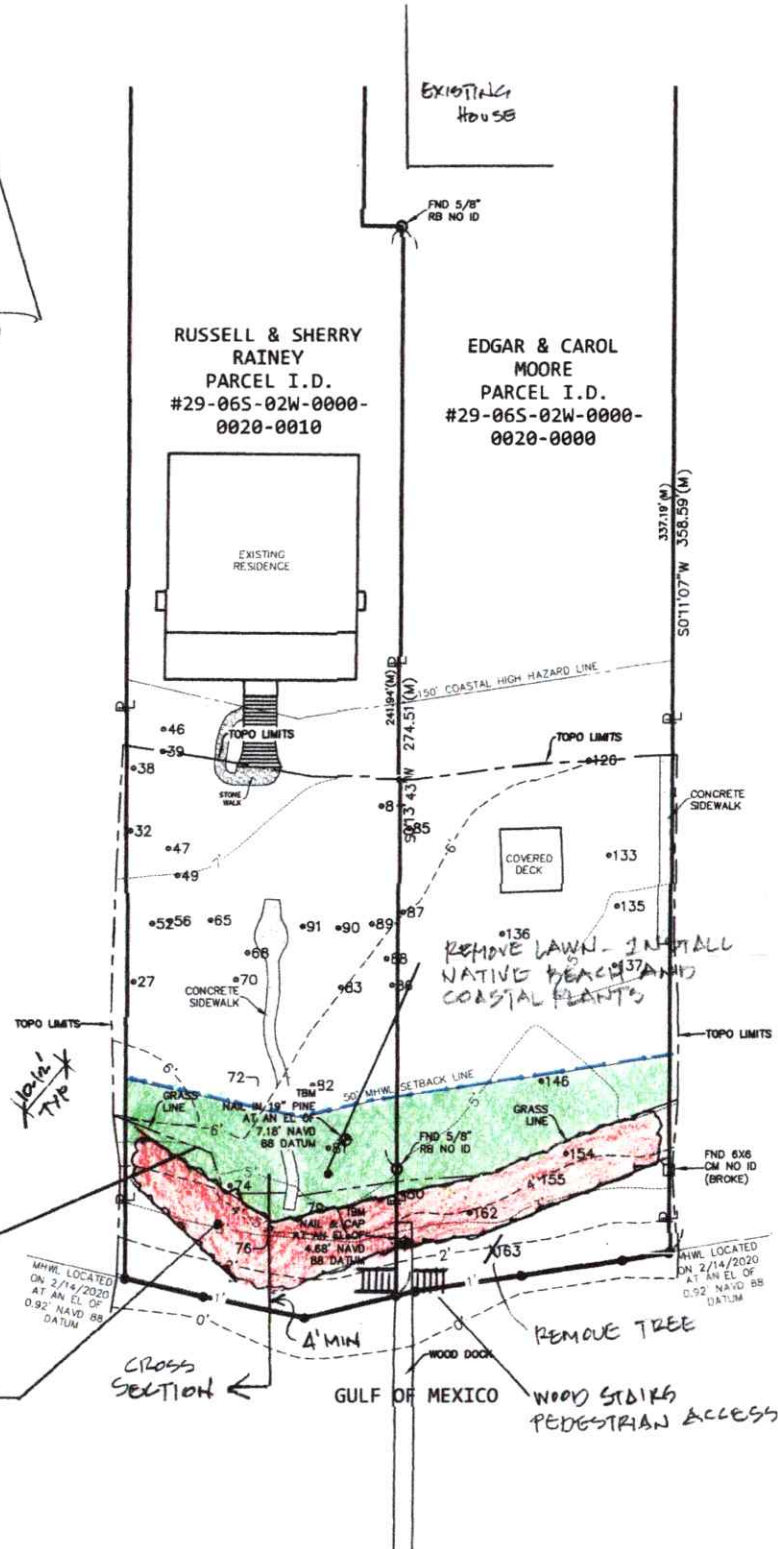
| | | | | | |
|------------------------------|--|---------------------|----------------------|----------------------|------------------------------|
| Parcel ID | 29-06S-02W-0000-0020-0000 | Alternate ID | 02W06S29000000200000 | Owner Address | MOORE EDGAR M & CAROL H |
| Sec/Twp/Rng | 29-6S-2W | Class | SINGLE FAM | | 3871 WEST MILLER'S BRIDGE RD |
| Property Address | 4376 ST. TERESA AVE | Acreage | 3.29 | | TALLAHASSEE, FL 32312 |
| District | 1 | | | | |
| Brief Tax Description | A PARCEL FROM ROSE | | | | |
| | <i>(Note: Not to be used on legal documents)</i> | | | | |

Date created: 3/12/2020
 Last Data Uploaded: 3/12/2020 7:40:48 AM

Developed by  **Schneider**
 GEOSPATIAL

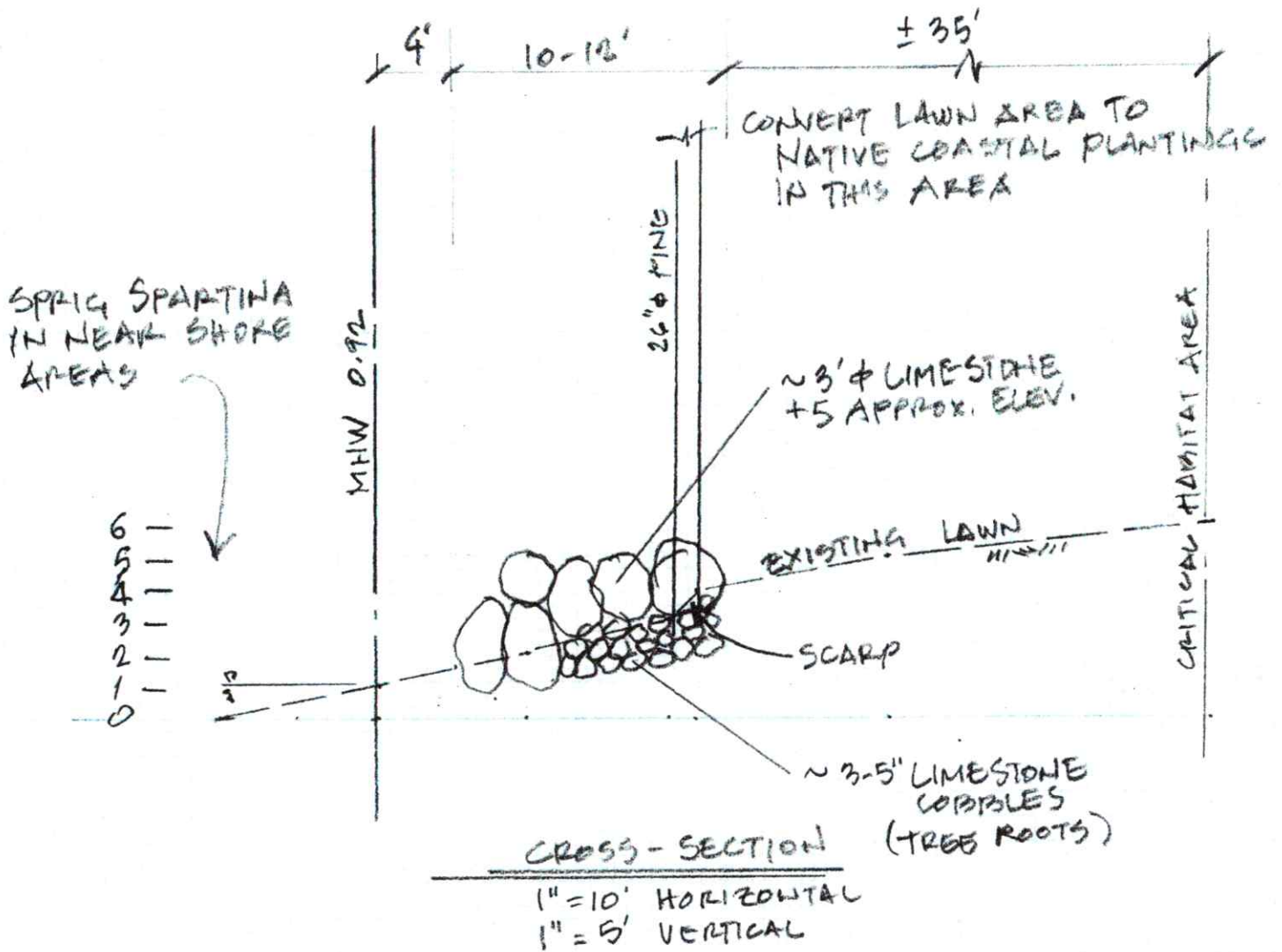
1" = 30'

| Tree Table | | Tree Table | |
|------------|-------------|------------|-------------|
| Point # | Description | Point # | Description |
| 27 | 28" SAYGO | 83 | 11" PINE |
| 32 | 12" PALM | 84 | 36" PINE |
| 38 | 20" PINE | 85 | 18" PALM |
| 39 | 26" PALM | 86 | 28" PALM |
| 46 | 16" PALM | 87 | 12" PALM |
| 47 | 16" PALM | 88 | 14" PINE |
| 49 | 16" PINE | 89 | 14" PINE |
| 52 | 10" OAK | 90 | 11" PALM |
| 56 | 14" PALM | 91 | 10" PALM |
| 65 | 12" PALM | 126 | 24" PINE |
| 68 | 10" PALM | 133 | 19" PINE |
| 70 | 20" PINE | 135 | 19" PINE |
| 72 | 16" PINE | 136 | 16" OAK |
| 74 | 10" PINE | 137 | 16" PINE |
| 76 | 26" PINE | 146 | 24" PINE |
| 79 | 19" PINE | 154 | 19" PINE |
| 80 | 13" PINE | 155 | 21" PINE |
| 81 | 19" PINE | 162 | 12" PINE |
| 82 | 20" PINE | 163 | 12" PINE |



Notes:

1. Survey conducted 2/14/20 by Edwin Brown and Associates
2. Construction to be conducted on both lots by the same contractor at the same time
3. No sand will be removed from the beach
4. Minimal sand will be provided for fill behind the revetment and will be compatible with the local sands



NOTES.

PROFILE FROM SURVEYED DATA

COBBLES TO BE USED AROUND TREE ROOTS.

BOULDERS TO BE FULL DEPTH EVERYWHERE ELSE

Rhumblin Consultants PLLC

Tel 850.545.9436
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1700 N. Monroe St Ste 11-285
Tallahassee, FL 32303

William K. Jones PE
FL Registration No. 39523

Rhumblin
Consultants

Request:

The property owners, Dr. Rainey and Mr. Moore request the approval of the Franklin County Planning and Zoning Board of Adjustment and Appeals to construct a low-elevation limerock stone revetment above the mean high water line and within the Critical Habitat Zone on their properties. In addition, the owners will include the planting of appropriate beach appropriate vegetation replacing the existing St. Augustine lawn within the remainder of the 50-foot habitat conservation zone to restore this area with native vegetation. These planting will improve the habitat quality of this areas as well as add additional erosion protection. The owners will plant *Spartina* (Sp) sprigs within the inter-tidal zone (see graphics to follow).

Existing Condition:

Stingray Point is a prominent geographical feature of the St. Teresa waterfront. This headland is offset by Grasseypoint to the east (Figure 1). These two points form the eastern and western bounds of the long crescent beach inside Alligator Harbor. Stingray Point is also the eastern headland bounded by Turkey Point which forms the crescent

beach of St. Teresa. As the headland, Stingray Point has anchored the two crescent shaped beaches for the recordable time frame.

Stingray Point is situated across the terminus of Alligator Point. Over the last few decades Alligator Point has continually extended and narrowed the opening between Stingray Point at the entrance of Alligator Harbor.



Figure 1 : Stingray point geomorpholgy

This area is particularly vulnerable to winds from the southwest. The shoreline is open to the Gulf here.

Dog Island reef provides some general protection from large waves however that feature is miles to the south. This part of the beach is or could be impacted by the closing of Alligator Harbor channel and increasing marginal currents created by tides running into and out of this embayment. Under certain wind and tide conditions these currents could increase dramatically, potentially causing greater beach erosion. As the tip of Alligator Point grows towards the north the northermost tip is migrating to the west of the point where these parcels are located. The aerial photograph shows the underwater bar. Sand moving north along the point is apparently being directed to the beaches to the west and not to the point as in the past. This may be part of the changing geomorphology that impacts a long-term sand supply to the beach around the Rainey parcel.

The result is the documented increased erosion of Stingray Point causing a loss of trees and submerged aquatic vegetation in the inter-tidal zone which has created a scarp above the mean high water mark at the tree line.

Proposed Solution:

The construction of a stone structure set above the mean high water and on the waterside of the large, mature trees will increase the ability of this point to continue to act as a headland reduce the potential for erosion at this location as well as in the near reaches either side of this point. The proposed design includes a row of larger guard stone (approximately 3-foot diameter stone) set to hold smaller (3-inch diameter cobbles) which will be placed within and among the root system pines (Figure 3). The smaller rock would then be covered with the larger guard stone. In areas where there are no tree roots the large stone will extend the full depth of the revetment, about 10'. The height of the stone revetment would be approximately one foot above the existing scarp or about 5' (see plan and profile sketches provided).

The critical habitat zone, behind the rock revetment would be reworked to transition the existing lawn to a zone planted with plants more associated with those that are typically found in the coastal habitat zone. Transitional plantings of *Spartina* (Sp) will be incorporated into the inter-tidal zone in-front of the two properties to re-establish the protective vegetative buffer waterward of the stone structure.

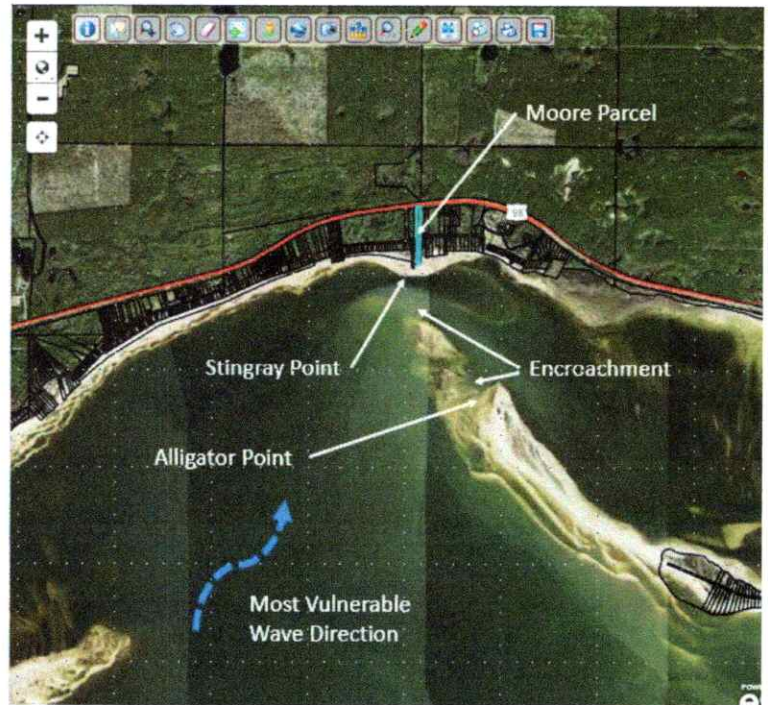


Figure 2 Coastal issues at Stingray Point

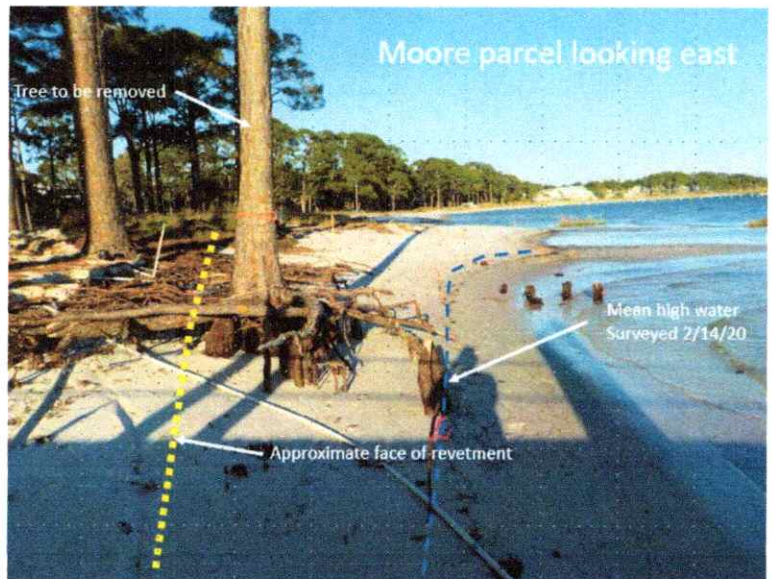


Figure 3 Proposed face of revetment and mean high water on Moore's Property