

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

August 19, 2011

U.S. Fish and Wildlife Service
Pea Island National Wildlife Refuge
PO Box 1969
Manteo, NC 27954

ATTN: Mr. Mike Bryant
Refuge Manager

SUBJECT: **Special Use Permit for Geotechnical Investigation**
Replacement of Bridge 11 over Oregon Inlet on NC 12 in Dare County,
North Carolina; TIP Project B-2500; Federal Aid Project No. BRS-2358(15);
WBS Element: 32635.1.4

Dear Sir,

The North Carolina Department of Transportation (NCDOT) is in the process of planning a limited number of subsurface investigations for the foundation design for the replacement of Bridge No. 11 over Oregon Inlet (TIP Project B-2500) in Dare County, North Carolina. A completed Special Use Permit Application and appropriate site drawings are attached for your review. As portions of the Refuge will be utilized during this work, notification to your office is required.

The design firm, HDR Engineering, Inc. of the Carolinas, and their subconsultants will conduct the geotechnical investigation. Approximately 50 soil test borings will be performed in the corridor shown on the attached site map, with the majority being performed in Oregon Inlet and Pamlico Sound. The mapping shows 46 borings, but additional may need to be added during the field effort depending on site conditions. This is follow-up work to complement final design of the project. A previous National Park Service Special Use Permit was granted to NCDOT on April 20, 2011 for preliminary geotechnical borings. These additional borings are required to finalize structure design and slight shifts in the alignment in an effort to minimize environmental impacts.

Our Application to you focuses on the 7 borings within or in proximity to your Refuge. The borings in the inlet, and most of the borings in the sound, will be performed from a barge. The borings will consist of turning a 4-inch diameter steel casing into the sound bottom, creating minimal disturbance. Other drilling tools will be used to sample the sediments and advance the boring within the steel casing. The steel casing will be removed upon completing the boring.

Borings drilled on land, or in shallow water (up to approximately 3-4 feet deep) in the sound, will be performed with rubber tire drill rigs or low ground pressure tracked drill rigs, depending on the boring location. The land borings will also be 4-inch diameter casings. Any disturbance from the borings should be limited to within a 2-foot radius of the boring location.

Parking/Logistics:

A lowboy/tractor and possibly other vehicles would be parked along NCDOT's SR 1257 at times. Otherwise, vehicles will be parked at the Park Service's boat launch at the Oregon Inlet Fishing Center.

Regulatory Approvals:

The NCDOT anticipates that these activities will also be authorized by Nationwide Permit No.6 by the U.S. Army Corps of Engineers. NCDOT will follow the conditions set by a Nationwide Permit No.6 and by NCDWQ General Water Quality Certification #3687. If you have any questions or would like additional information, please contact Michael Turchy at maturchy@ncdot.gov or (919) 707-6157. A copy of this application will also be posted at <http://www.doh.dot.state.nc.us/preconstruct/pe/>.

Sincerely,



for

Gregory J. Thorpe, Ph.D.
Branch Manager
Project Development and Environmental Analysis Branch

cc:

Ms. Beth Smyre, P.E., PDEA

Mr. Rodger Rochelle, P.E., Alternative Delivery

United States Department of the Interior
U.S. Fish and Wildlife Service
National Wildlife Refuge System
General Special Use
Application and Permit

OMB Control Number 1018-0102
Expiration Date: 06/30/2014

Name of Refuge Pea Island NWR
Address PO Box 1969 Manteo, NC 27954
Attn: (Refuge Official) Mike Bryant
Phone # 252-987-1118 E-mail Mike_Bryant@fws.gov

Application

(To be filled out by applicant. Note: Not all information is required for each use. See instructions at the end of the notice.)

1) New Renewal Modification Other _____

Applicant Information

2) Full Name: North Carolina Department of Transportation 6) Phone #: 919-707-6157
3) Organization: North Carolina Department of Transportation 7) Fax #: 919-212-5785
4) Address: 1020 Birch Ridge Road 8) E-mail: maturchy@ncdot.gov
5) City/State/Zip: Raleigh, NC 27699

9) Assistants/Subcontractors/Subpermittees: (List full names, addresses and phone #'s and specifically describe services provided if subcontractors are used.)

HDR Engineering, 3733 National Dr. Suite 207, Raleigh, NC 27612; Ph: 919-785-1118 (DESIGNERS)
Froehling & Robertson (F&R), 310 Hubert St., Raleigh, NC 27603; Ph: 919-828-3441 (DRILLERS)
S&ME, 3201 Spring Forest Rd., Raleigh, NC 27616; Ph: 919-872-2660 (DRILLERS)
Waff Contracting, PO Box 237, Edenton, NC 27932; Ph: 252-482-7071 (MARINE BARGE/TUG/CRANE OPERATORS)
Mid-Atlantic Drilling, PO Box 315, Carolina Beach, NC 28428; Ph: 910-458-5020 (DRILLERS)
McKim & Creed, 1730 Varsity Dr. Suite 500, Raleigh, NC 27606; Ph: 919-233-8091 (SURVEYORS)

Activity Information

10) Activity type: Event Wood Cutting Group Visit Cabin/Subsistence Cabin Educational Activity
 Other Geotechnical Subsurface Investigation

11) Describe Activity: (Specifically identify timing, frequency, and how the event is expected to proceed.)

Seven borings will be advanced within the refuge boundaries in order to collect the necessary data for final bridge design, with 2 of those in open water adjacent to the existing bridge and the other 5 on high ground in or adjacent to the existing NCDOT right-of-way along NC12. The borings in the inlet will be performed from a barge. The borings will consist of turning a 4-inch diameter steel casing into the inlet bottom, creating minimal disturbance. Other drilling tools will be used to sample the sediments and advance the boring within the steel casing. The steel casing will be removed upon completing the boring. Any borings drilled on land, or in shallow water in the sound, will be performed with rubber tire drill rigs or low ground pressure tracked drill rigs, depending on the boring location. The land borings will also be 4-inches in diameter. Disturbance from the borings should be limited to within a 2-foot radius of the boring location.

12) Activity/site occupancy timeline: (Specifically identify beginning and ending dates, site occupation timeline, hours, clean-up and other major events.)

Our timeline will depend on the timing of the permit approvals; the preferred start date would be between September 15 and October 1. We anticipate the land-based borings to take 2 to 3 weeks. The 2 barge-based in-water borings in/adjacent to the north end of Pea Island will take 1 to 2 weeks. The start/end dates for these 7 borings will be dependent on when the overall borings commence as well as weather conditions. We will gladly notify USFWS Refuge staff in advance of either set of borings (please provide us with a preferred timeframe for advance notification).

(Depending on the activity for which you are requesting a permit, we may ask you for the following activity information.
Please contact the specific refuge where the activity is being conducted to determine what activity information is required.)

13) Expected number of participants:
Children _____ Adults 5-19 Total 5-19

14) Grade level of educational group:
Grade _____ N/A

15) Will staff time/assistance be required?
 Yes No N/A

16a) Plan of Operation required? Yes No N/A

16b) Plan of Operation attached? Yes No

17) Location: (Specifically identify location; GPS location preferred.)

Oregon Inlet/Pamlico Sound and adjacent marsh and uplands; primary location will be across NC12 from the fishing parking lot at the north end of Pea Island. Equipment will be staged on NCDOT's SR1257 nearby. See mapping for boring locations.

18a) Is map of location(s) required?
 Yes No N/A

18b) Is map of location(s) attached?
 Yes No

Insurance Coverage/Certifications/Permits

19a) Is insurance required?
 Yes No N/A

19b) Insurance: (Provided carrier, type and policy number)
all contractors carry NCDOT-required insurance

20) Other licenses/certifications/permits required: (Specifically identify licenses, certifications, and permits.)

- Nationwide Permit #6 from the U.S. Army Corps of Engineers (with 401 General Certification #3687), applic. date 8/19/11
- Special Use Permit from the National Park Service for boring activities north of the Inlet, applic. dated 8/19/11

Logistics and Transportation

21) Does activity require personnel to stay overnight onsite? Yes No

22) Personnel involved:

Land borings on Pea Island: 3 F&R and 2 McKim & Creed staff, but no one onsite overnight for the land borings. Staff may be staying overnight on the barge operation in the Inlet.

23) Specifically describe **all** equipment/gear and materials used:

Either a rubber tired ATV drill rig or track-mounted drill rig, Steel casings for borings; In-water borings will be from a barge carrying equipment for multiple days of operation

24) Transportation description(s) and license number(s) to access refuge(s): [Provide description of and specific auto license/boat/plane registration number(s).]

Land-based borings (F&R, 3-5 people): 1 lowboy w/tractor (will park on SR1257), 1 support truck with trailer, 1 small truck;
In-water boring vehicles: 1 lowboy with tractor, 2 support trucks w/ trailer, 8 trucks (all parked north of the Inlet);
In-water Boats: barge with crane and drill rig, 2-3 smaller support boats (launched north of the Inlet)

25) Specifically describe onsite work and/or living accommodations:

Equipment will be staged on NCDOT's SR1257 as needed. Staff will be off-site overnight during the land borings.

26) Specifically describe onsite hazardous material storage or other onsite material storage space:

Limited amounts of fuel will be necessary for running the equipment.

27) Signature of Applicant E. L. Lusk for Gregory J. Thorne, PhD Date of Application: 8.19.11

Sign, date, and print this form and return it to the refuge for processing.
Do not fill out information below this page.

PRINT FORM

For Official Use Only (This section to be filled out by refuge personnel only.)

Special Use Permit

Permit #: _____

1) Date: _____ 2) Permit Approved Permit Denied 3) Station #: _____

4) Additional special conditions required: (Special conditions may include activity reports, before and after photographs, and other conditions.)

Yes No N/A

Additional sheets attached:

Yes No

5) Other licenses/permits required:

Yes No N/A

Verification of other licenses/permits, type:

6) Insurance/certifications required:

Yes No N/A

Verification of insurance/certification, type:

7) Record of Payments: Exempt Partial Full

Amount of payment: _____ Record of partial payment: _____

8) Bond posted: Yes No

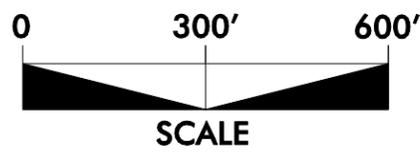
This permit is issued by the U.S. Fish and Wildlife Service and accepted by the applicant signed below, subject to the terms, covenants, obligations, and reservations, expressed or implied herein, and to the notice, conditions, and requirements included or attached. A copy of this permit should be kept on hand so that it may be shown at any time to any refuge staff.

Permit approved and issued by (Signature and title):

_____ Date: _____

Permit accepted by (Signature of applicant):

_____ Date: _____



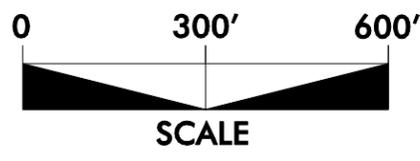
GEOTECHNICAL BORING PLAN LAYOUT



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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-  PROPOSED BORING LOCATION
-  PROPOSED BORING LOCATION IN SAV AREA

5/14/99
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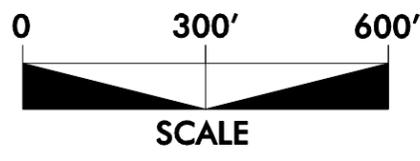
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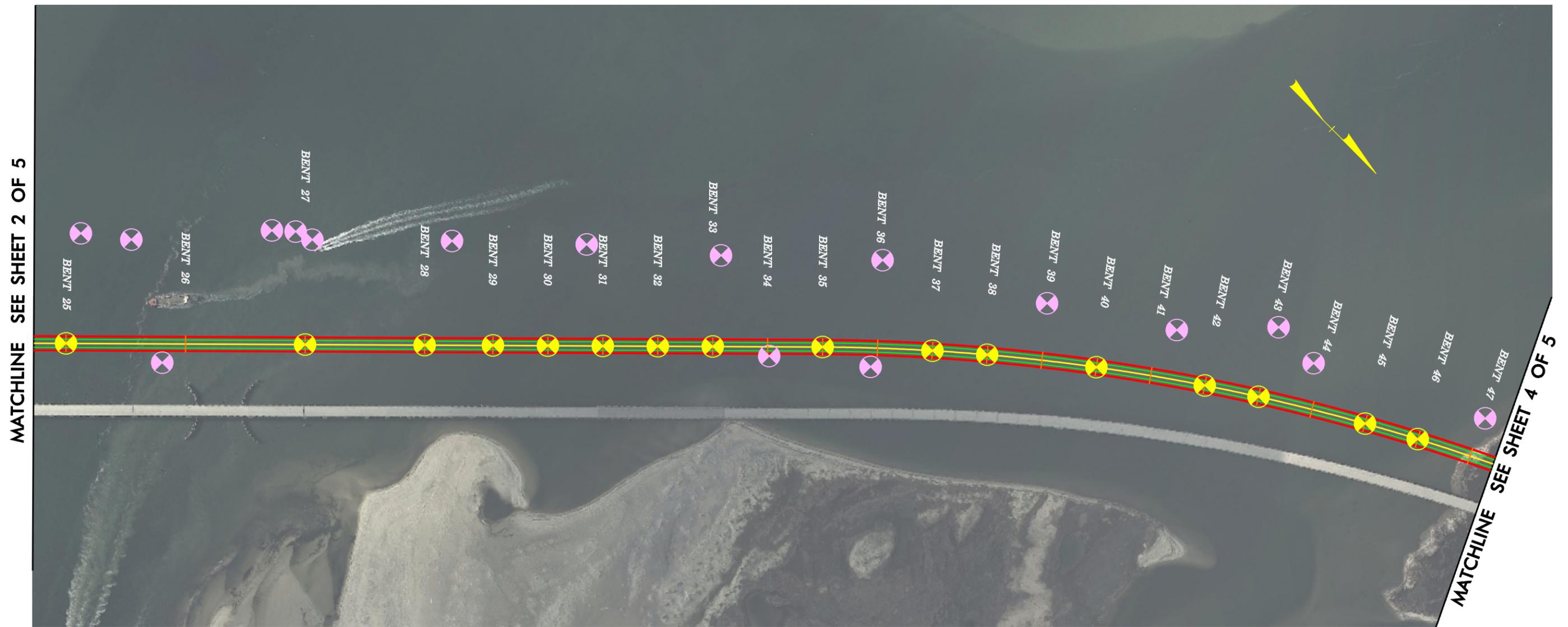
-  EXISTING BORING LOCATION
-  PROPOSED BORING LOCATION
-  PROPOSED BORING LOCATION IN SAV AREA

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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GEOTECHNICAL BORING PLAN LAYOUT



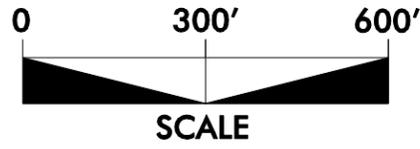
MATCHLINE SEE SHEET 2 OF 5

MATCHLINE SEE SHEET 4 OF 5

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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-  PROPOSED BORING LOCATION
-  PROPOSED BORING LOCATION IN SAV AREA

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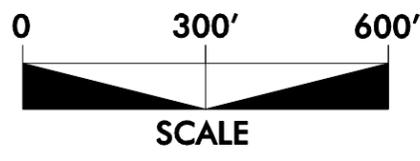
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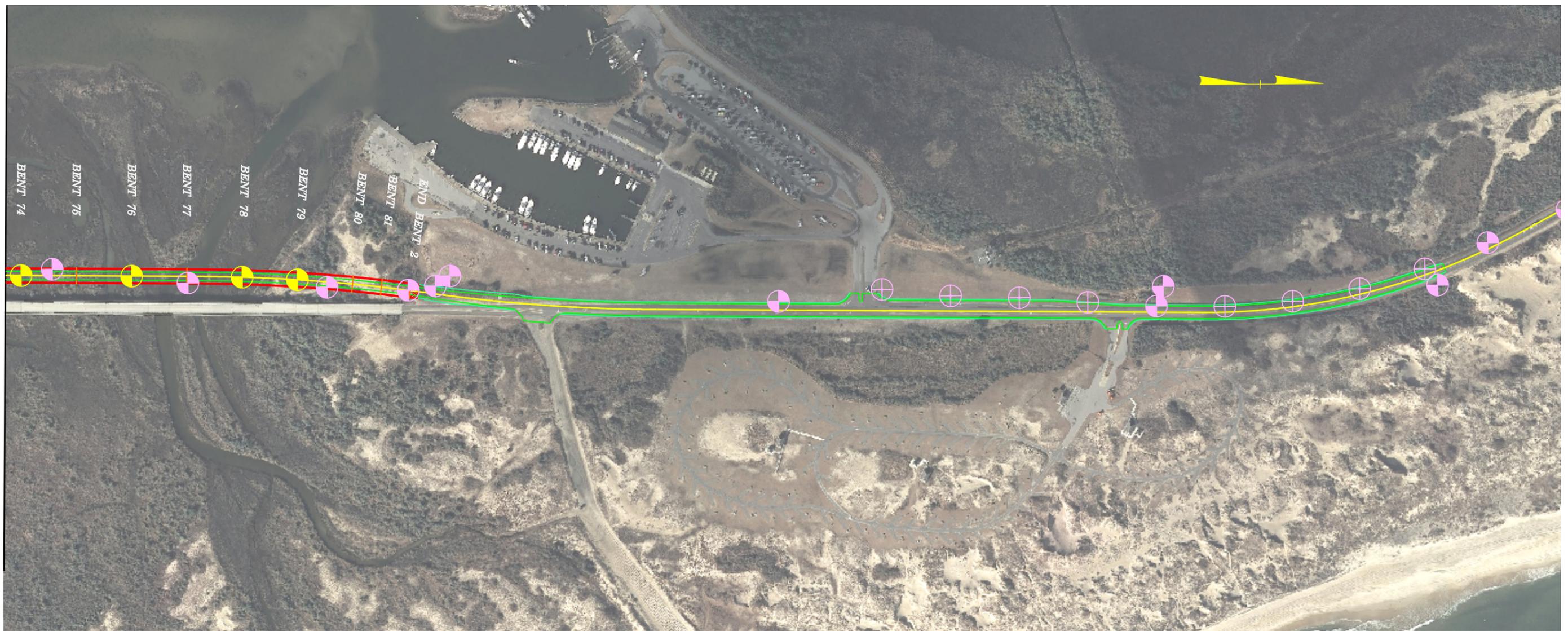
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-  EXISTING BORING LOCATION
-  PROPOSED BORING LOCATION
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GEOTECHNICAL BORING PLAN LAYOUT



MATCHLINE SEE SHEET 4 OF 5

-  EXISTING BORING LOCATION
-  PROPOSED BORING LOCATION
-  PROPOSED BORING LOCATION IN SAV AREA

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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