

COUNTY OF CURRITUCK Request for Bids Corolla Horse Fence Restoration Project RFB 2020.2

The County of Currituck, North Carolina ("County") requests bids for the Corolla Horse Fence Restoration Project in Corolla, North Carolina.

Bids will be received until 4:00 p.m. on February 28, 2020. Bids received after this deadline will not be accepted.

Bids must be marked "Corolla Horse Fence Restoration Project" and may be emailed, faxed, mailed or hand-delivered to:

Currituck County Engineering Department Attention: Nick Ingold, Engineer Technician Email: <u>nick.ingold@currituckcountync.gov</u> Fax: 252-232-3298 Mailed: 153 Courthouse Road, Suite 302, Currituck, NC 27929 Hand-Delivered: 145 Courthouse Road, Currituck, NC 27929

This is an informal bid. Bids will not be opened publicly and read aloud. The bids will be evaluated and contract will be awarded in accordance with the statutory requirements. All bidders must meet the licensing requirements under Chapter 87 of the N.C. General Statutes. Small Business Entities, Women Owned Businesses and Minority Owned Businesses are encouraged to submit bids.

Instructions to Bidders RFB 2020.2

1.0 Submission of Bids

Bids will be received until 4:00 p.m. on February 28, 2020.

All bids must be made on the required Bid Form. The Bid Form must be fully completed and executed when submitted. Only one copy of the Bid Form is required.

Bids must be marked "Corolla Horse Fence Restoration Project" and may be emailed, faxed, mailed or hand-delivered to:

Currituck County Engineering Department Attention: Nick Ingold, Engineer Technician Email: <u>nick.ingold@currituckcountync.gov</u> Fax: 252-232-3298 Mailed: 153 Courthouse Road, Suite 302, Currituck, NC 27929 Hand-Delivered: 145 Courthouse Road, Currituck, NC 27929

Any bid received after the time and date specified shall not be considered. The County may waive any informalities or minor defects or reject any all bids.

This is an informal bid. Bids will not be publicly opened and read aloud. No Bidder may withdraw a bid within 60 days after the actual date of the opening thereof.

Award will be made to the lowest responsive, responsible bidder.

2.0 **Pre-Bid Meeting**

A Pre-Bid Meeting will be conducted on February 12, 2020 at 10:00 a.m. at the site. Attendance is not mandatory; however, interested contractors are encouraged to attend.

3.0 Questions

Written questions and requests for clarification shall be submitted via e-mail to Nick Ingold at <u>nick.ingold@currituckcountync.gov</u> no later than 2:00 p.m. on February 21, 2020. All questions requiring additional information will be responded to in a final addendum, which will be issued no later than 4:00 p.m. on February 25, 2020. All addenda shall become part of the RFB.

4.0 Additional Instructions

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout.

Each Bidder is responsible for inspecting the site, understanding the scope of work and for reading and being thoroughly familiar with the Bid Documents.

Contractor awarded the project will be required to:

- Execute Agreement included herein;
- Provide a form W-9; and
- Provide Certificate of Insurance verifying required insurance described in General Terms and Conditions.

Scope of Work RFB 2020.2

The Scope of Work for this project includes:

- 1. Restoration of 650 feet of wood fencing along the east side of North Beach Access Road from the existing cattle crossing to the fifth round piling from beach access ramp. This includes removal of existing material, extending the existing fence height to 8 feet above existing grade and removing existing cattle gates and construction fencing.
- 2. Restoration of 20 feet of wood fencing along the west side of North Beach Access Road from the existing post with the 'Coastal Reserve Boundary' tag to the wood post connecting the pedestrian access. This includes removal of existing material, extending the existing fence height to 8 feet above existing grade.
- 3. Restoration of the pedestrian access west of the cattle crossing. This includes removal of existing material and construction of new access to a height of 5 feet above the existing concrete sidewalk grade.
- 4. Removal and replacement of two access gates:
 - a. 10-foot entrance gate immediately east of the cattle crossing; and
 - b. 16-foot beach gate for vehicle traffic.
- 5. Removal and replacement of cables and hardware along bottom two rows of round pilings from the corner piling near beach access ramp to the piling next to the beach gate. The length of this section is 100 feet.

Bid Form RFB 2020.2

The lump sum bid amounts shall be shown in both words and figures. In case of discrepancy, the amount in words shall govern.

The lump sum price shall include labor, materials, overhead, tools, equipment, transportation, profit, insurance, taxes, site repair, clean-up and all other incidentals to cover the finished work.

The Bidder agrees that this bid shall be valid and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

Award will be made to the lowest responsive, responsible bidder.

The undersigned has carefully examined the scope of work and requirements and hereby declares that he/she will the complete the project in the manner prescribed in the specifications for the following lump sum price:

Restoration of 650 feet of wood fencing along east side of North Access Beach Road

(Lump Sum) \$_____

Write out total dollar amount in words

Restoration of 20 feet of wood fencing along west side of North Access Beach Road

(Lump Sum) \$_____

Write out total dollar amount in words

Restoration of pedestrian access

(Lump Sum) \$_____

Write out total dollar amount in words

Removal and replacement of two access gates

(Lump Sum) \$_____

Write out total dollar amount in words

Removal and replacement of cables and hardware along round pilings

(Lump Sum) \$_____

Write out total dollar amount in words

GRAND TOTAL BID AMOUNT

(Lump Sum) \$_____

Write out total dollar amount in word

Bidder has examined all Bid Documents and the following Addenda, receipt of which is hereby acknowledged:

Addendum Date:

Addendum Number:

Respectfully submitted this _____ day of _____, 2020.

Name of Company

Signature of Authorized Representative / Title

Print Name

Address

Email Address

AGREEMENT FOR COROLLA HORSE FENCE RESTORATION PROJECT

This Agreement is made this _____ day of ______ 2020, by and between the COUNTY OF CURRITUCK, NORTH CAROLINA, a body corporate and politic existing pursuant to the laws of the State of North Carolina, (the "Owner") and ______, a North Carolina *corporation* existing and organized pursuant to the laws of the State of North Carolina, (the "Contractor").

WHEREAS, pursuant to Chapter 143, Article 8 of the General Statutes of North Carolina and Currituck County, North Carolina Purchasing and Contracting Policy the County requested bids for the Corolla Horse Fence Restoration Project; and

WHEREAS, Contractor submitted the lowest responsive, responsible bid consistent with the Owner's needs.

NOW THEREFORE, in consideration of the mutual benefits, promises, and undertakings, the sufficiency and receipt of which are acknowledged, the following terms and conditions are agreed to by the parties to this Contract:

- 1. Incorporation by Reference. The following are made a part of this Contract as if the same were fully set forth herein, and if any discrepancies arise between the documents, they will prevail in the following order: (1) this Contract including the General Terms and Conditions, and (2) Request for Bids by Currituck County issued February, _____, 2020 and (3) Contractor's Bid Form dated Month, Day, 2020. This procurement is governed by Chapter 143, Article 8 of the General Statutes of North Carolina and Currituck County, North Carolina Purchasing Policy. All terms and conditions of statutes, policies and procedures are hereby adopted and incorporated by reference herein.
- 2. Contract Term. The contract shall be for a period of 45 consecutive days from the issuance of the Notice to Proceed.
- 3. Contract Cost. The contract shall be for a base bid of (\$_____).
- 4. Changes to Contract. This contract and its references constitute the entire contract and understanding between the parties with respect to the matters contained herein. The contract supersedes any prior contracts, negotiations,

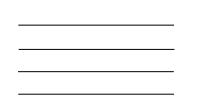
proposals, agreements and/or understandings, whether verbal or written, relating to the subject matter hereof. This contract may be modified, amended or extended only by a written instrument executed by both parties.

- 5. **Termination.** This Agreement may be terminated by either party at any time upon 15 days written notice to the other party. Upon the termination of this Agreement, Contractor shall prepare and provide to County a list of all pending unfinished business involving Contractor.
- 6. Notices. Any notices required shall be in writing, unless otherwise permitted hereunder, and shall be deemed received five (5) days after mailing of same in the U. S. Mail with postage prepaid at the addresses set forth below or upon actual receipt:

Notice to Owner shall be made to:

Ben Stikeleather, County Manager County of Currituck 153 Courthouse Road, Suite 204 Currituck, NC 27929

Notice to Contractor shall be made to:



- 7. General Terms and Conditions. During the term of this Contract, Contractor agrees to procure and maintain insurance which meets all Owner's requirements in the General Terms and Conditions.
- 8. Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Signed signature pages may be transmitted by facsimile or as an attachment to an email, and any such signature shall have the same legal effect as an original.
- **9. Severability.** If any provision of this Agreement is determined to be unenforceable, invalid or illegal, then the enforceability, validity and legality of the remaining provisions will not in any way be affected or impaired, and such provision will be deemed to be restated to reflect the original intentions of the parties as nearly as possible in accordance with applicable law.

10. Indemnity. The Contractor agrees to indemnify and hold harmless the Owner from all loss, liability, claims or expense, including attorney's fees, arising out of or related to the Project and arising from bodily injury including death or property damage to any person or persons caused in whole or in part by the negligence or misconduct of the Contractor except to the extent same are caused by the negligence or misconduct of the Owner. It is the intent of this provision to this provision to require the Contractor to indemnify the Owner to the fullest extent permitted under North Carolina law.

The Owner agrees to indemnify and hold harmless the Contractor from all loss, liability, claims or expense, including attorney's fees, arising out of or related to the Project and arising from bodily injury including death or property damage to any person or persons caused in whole or in part by the negligence or misconduct of the Owner except to the extent same are caused by the negligence or misconduct of the Owner. It is the intent of this provision to this provision to require the Owner to indemnify the Contractor to the fullest extent permitted under North Carolina law.

11. Miscellaneous. This Contract shall be governed by the laws of the State of North Carolina. Jurisdiction and venue for any litigation arising out of or involving this Agreement shall lie in the North Carolina General Court of Justice in Currituck County, North Carolina, and such litigation shall be brought only in such courts. All pronouns used herein shall refer to every gender. Headings or titles in this Contract are only for convenience and shall have no meaning or effect upon the interpretation of the provisions of this Contract. This Contract is the entire agreement between the parties and may not be amended or modified, except by writing, signed by each party. If any provision of this Contract is determined to be unenforceable, then the remaining provisions of this Contract shall be interpreted as in effect as if such unenforceable provision were not included therein. **IN WITNESS WHEREOF,** the parties hereto have executed this Contract as of the day first written above.

County of Currituck, North Carolina

Ben Stikeleather County Manager

ATTEST:

Leeann Walton, Clerk to the Board

[COUNTY SEAL]

[Contractor]

By:_____

Its:_____

GENERAL TERMS AND CONDITIONS

1. GENERAL

It is understood and agreed that by submitting a bid that the Contractor has examined these contract documents and specifications and has visited the site of the Work, and has satisfied himself relative to the Work to be performed. The Contractor agrees to accept the premises in their present condition and agrees to make no additional demands on the County for bringing the premises up to the standards of the specifications.

2. **DEFINTIONS**

Owner: "Owner" shall mean, the County of Currituck, North Carolina.

Contractor: "Contractor" shall mean the entity that will provide the services to the Owner.

Contract Documents: "Contract Documents" shall consist of the Notice to Bidders; General Terms and Conditions of the Contract; special conditions if applicable; the drawings and specifications, including all bulletins, addenda or other modifications of the drawings and specifications incorporated into the documents prior to their execution; the bid; the contract; the performance bond if applicable; and insurance certificates. All of these items together form the contract.

3. INTENT AND EXECUTION OF DOCUMENTS

The drawings and specifications are complementary, one to the other. That which is shown on the drawings or called for in the specifications shall be as binding as if it were both called for and shown. The intent of the drawings and specifications is to establish the scope of all labor, materials, transportation, equipment, and any and all other things necessary to provide a complete job. In case of discrepancy or disagreement in the Contract Documents, the order of precedence shall be: Form of Contract, specifications, large-scale detail drawings, small-scale drawings.

In such cases where the nature of the work requires clarification by the Owner, the Owner shall furnish such clarification. Clarifications and drawings shall be consistent with the intent of the Contract Documents, and shall become a part thereof.

4. WORKING DRAWINGS AND SPECIFICATIONS AT THE SITE

The Contractor shall maintain, in readable condition at his job site one complete set of working drawings and specifications for his work including all shop drawings. Such drawings and specifications shall be available for use by the Owner or his authorized representative.

The Contractor shall maintain at the job site, a day-to-day record of work-in-place that is at variance with the contract documents. Such variations shall be fully noted on project drawings by the Contractor and submitted to the Owner upon project completion and no later than 30 days after acceptance of the project.

5. MATERIALS, EQUIPMENT AND EMPLOYEES

- a. The Contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, fuel, sanitary facilities and incidentals necessary for the completion of his work, and shall install, maintain and remove all equipment of the construction, other utensils or things, and be responsible for the safe, proper and lawful construction, maintenance and use of same, and shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied there from, all in accordance with the Contract Documents.
- b. All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications.
- c. No changes shall be made in the Work except upon written approval and Change Order of the Owner.
- d. Products are generally specified by ASTM or other reference standard and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor has the option of using any product and manufacturer combination listed.
- e. However, the Contractor shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable.

- f. If at any time during the construction and completion of the work covered by these Contract Documents, the language, conduct, or attire of any workman of the various crafts be adjudged a nuisance to the Owner or if any workman be considered detrimental to the work, the Contractor shall order such parties removed immediately from the site.
- g. The Contractor shall cooperate with the Owner in coordinating construction activities.
- h. The Contractor shall maintain qualified personnel and effective supervision at the site at all times during the project, and exercise the appropriate quality control program to ensure compliance with the project drawings and specifications. The Owner is responsible for determining compliance with the drawings and specifications.

6. CODES, PERMITS AND INSPECTIONS

The Contractor shall obtain the required permits, if required, give all notices, and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Owner in writing. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the Owner, he shall bear all cost arising there from.

All work under this contract shall conform to the current North Carolina Building Code and other state and national codes as are applicable

7. PROTECTION OF WORK, PROPERTY, THE PUBLIC SAFETY REQUIREMENTS

- a. The Contractor shall be responsible for the entire site and the construction of the same and provide all the necessary protections as required by laws or ordinances governing such conditions and as required by the Owner. He shall be responsible for any damage to the Owner's property or that of others on the job, by himself, his personnel or his subcontractors, and shall make good such damages. He shall be responsible for and pay for any claims against the Owner arising from such damages.
- b. The Contractor shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry (Title 29, Code of Federal Regulations, Part 1926 published in Volume 39, Number 122, Part 11, June 24, 1974 Federal Register), and revisions thereto as adopted by General Statutes of North Carolina 95-126 through 155.

c. The Contractor shall provide all necessary safety measures for the protection of all persons on the work site and shall fully comply with all state laws or regulations and North Carolina Building Code requirements to prevent accident or injury to persons on or about the location of the work. He shall clearly mark or post signs warning of hazards existing, and shall barricade excavations and similar hazards. He shall protect against damage or injury resulting from falling materials and he shall maintain all protective devices and signs throughout the progress of the work.

8. SUBCONTRACTS AND SUBCONTRACTORS

The Contractor is, and remains fully responsible for, his own acts or omissions as well as those of any subcontractor or of any employee of either. The Contractor agrees that no contractual relationship exists between the subcontractor and the Owner in regard to the contract, and that the subcontractor acts on this work as an agent or employee of the Contractor.

9. CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS

The Contractor agrees that the terms of these Contract Documents shall apply equally to a Subcontractor as to the Contractor, and the Contractor agrees to take such action as may be necessary to bind each Subcontractor to these terms. The Owner reserves the right to limit the amount of portions of work to be subcontracted as hereinafter specified.

10. CHANGES IN THE WORK AND CLAIMS FOR EXTRA COST

- a. The Owner may have changes made in the work covered by the contract. All extra work shall be executed under conditions of the original contract.
- b. Except in an emergency endangering life or property, no change shall be made by the Contractor except upon receipt of approved change order from the Owner authorizing such change. No claim for adjustments of the contract price shall be valid unless this procedure is followed. Should a claim for extra compensation by the Contractor be denied by the Owner, the Contractor may pursue his claim in accordance with G.S. 143-135.3.
- c. In determining the values of changes, either additive or deductive, the contracting parties shall negotiate and agree upon the equitable value of the change prior to issuance of the Change Order, and the Change Order shall stipulate the corresponding lump sum adjustment to the contract price.
- d. Should concealed conditions be encountered in the performance of the work below grade, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract

Documents, the contract sum and time for completion may be equitably adjusted by Change Order upon claim by either party made within thirty (30) days after the condition has been identified.

- e. Change Orders shall be submitted by the Contractor in writing to the Owner for review and approval. The Contractor will provide such proposal and supporting data in suitable format. Delay in the processing of the Change Order due to lack of proper submittal by the Contractor of all required supporting data shall not constitute grounds for a time extension or basis of a claim.
- f. A Change Order, when issued, shall be full compensation, or credit, for the work included, omitted or substituted. It shall show on its face the adjustment in time for completion of the project as a result of the change in the work.

11. TERMINATION FOR CONVENIENCE

Owner may at any time and for any reason terminate Contractor's services and work at Owner's convenience, after notification to the Contractor in writing via certified mail. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.

Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as approved by Owner. There shall be deducted from such sums as provided in this subparagraph the amount of any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against Owner for any additional compensation or damages in the event of such termination and payment.

12. REQUESTS FOR PAYMENT

Requests for payment will be submitted by the Contractor to the Currituck County Engineering Department. Requests may not be submitted for work that is not yet complete.

Final payment will be made within thirty (30) consecutive days after acceptance of the work and receipt of final pay request.

13. MINIMUM INSURANCE REQUIREMENTS

The Contractor shall not commence work until he has obtained all required insurance and verifying certificates of insurance have been approved by the Owner. These certificates shall document that coverages afforded under the policies will not be cancelled, reduced in amount or coverages eliminated until at least thirty (30) days after mailing written notice, by certified mail, return receipt requested, to the insured and/or Owner of such alteration or cancellation. If endorsements are needed to comply with the notification or other requirements of this article copies of the endorsements shall be submitted with the certificates.

- a. Worker's Compensation and Employer's Liability. The Contractor shall provide and maintain, until final acceptance, workmen's compensation insurance, as required by law, as well as employer's liability coverage with minimum limits of \$100,000.
- b. Commercial General Liability Insurance. Combined single limit no less than \$1,000,000 per occurrence and \$2,000,000 aggregate.
- c. Commercial Automobile Liability. Combined single limit no less than \$1,000,000. Coverage shall include liability for owned, non-owned, and hired automobiles.
- d. Additional Insured. Contractor agrees to endorse the County as Additional Insured on Commercial General Liability and Commercial Automobile Liability.

e. Certificate Holder. Certificate Holder shall be listed as: County of Currituck, 153 Courthouse Road, Currituck, NC 27929.

14. CLEANING AND RESTORATION OF SITE

The Contractor shall keep the site and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the Owner. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the site, and completely prepare the project and site for use by the Owner.

At the end of construction, the Contractor shall oversee and implement the restoration of the construction site to its original state.

15. GUARANTEE

The Contractor shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the final acceptance of the work and shall replace such defective materials or workmanship without cost to the Owner.

Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The Contractor shall replace such defective equipment or materials, without cost to the Owner, within the manufacturer's warranty period.

Additionally, the Owner may bring an action for latent defects caused by the negligence of the Contractor, which is hidden or not readily apparent to the Owner at the time of final acceptance, in accordance with applicable law.

16. TAXES

North Carolina Sales Taxes and Use Tax do apply to materials entering into the Work (N.C. Sales and Use Tax Regulation No. 42, Paragraph A), and such costs shall be included in the bid proposal and contract sum.

Local Option Sales and Use Taxes do apply to materials entering into the Work as applicable (Local Option Sales and Use Tax Act, Regulation No. 57), and such cost shall be included in the bid proposal and contract sum.

17. EQUAL OPPORTUNITY CLAUSE

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein. The Contractors agree not to discriminate against any employees or applicant for employment because of physical or mental handicap in regard to any position for which the employees or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

Project Specifications RFB 2020.2

1.0 Restoration of wood fencing along the east and west side of North Beach Access Road.

- a. Total length for the fence section along the east side is 650 feet. Restoration will begin at the existing entrance gate adjacent to the cattle crossing and end at the fifth round piling from beach access ramp along beach dune.
- b. Total length for the fence section along the west side is 20 feet. Restoration will begin at the existing post with the 'Coastal Reserve Boundary' tag and end at the pedestrian access adjacent to the cattle crossing.
- c. All existing horizontal rails and vertical fascia boards shall be removed and properly disposed. Metal cattle gates and construction fencing secured along various areas of the horse fence shall be removed. Cattle gates will be retained by the County and shall be staged on road shoulder but not to impede traffic.
- d. Overgrown vegetation adjacent to the cattle grate shall be removed (e.g. cut, trim, etc.) to a point in which it is no longer covering the fence.
- e. Most existing fence posts (not all) are extended with half joints. Of these existing posts, the upper post shall be removed. The top 1' of the existing lower post shall then be cut and discarded. The existing lower post shall be joined with new material to extend the fence post to a height of 8' above existing grade. Joining the existing lower post and new post shall be with a half joint.
- f. Half joints shall be fastened with four 3/4" x 10" galvanized steel thru bolts, ogee washers, and nuts. Bolts shall be ASTM A 307, Grade A or B, hot-dip galvanized. Heads of bolt shall face the road. Bolt thread shall extended no more than 1" past nut. Recoat exposed portion of bolt with two coats of high zinc dust oxide paint.
- g. Pilot holes shall be drilled for each thru bolt and shall be 1/16" larger than the diameter of the bolt shank.
- h. Slope of fence shall follow the average surface grade to ensure a general, uniform slope. Overall fence height of ± 8 feet is acceptable in order to achieve desired fence slope. High sand areas may be cut and filled in lower areas. Length of fence following the average grade shall be broken into increments to follow different existing grades along fence route. Stair-step design is not authorized.
- i. Bottom row of horizontal rails should be placed 8" above existing grade and shall not exceed 16" (due to varying grade difference along fence route).

- j. There shall be five (5) rows of horizontal rails. Spacing above bottom-most rail (rail #1) to the next rail (rail #2) shall be 1'-10" (center-to-center). Spacing for the next two rails (rails #3 and #4) shall be 1'-6" (center-to-center). Spacing to the top-most rail from rail #4 shall be 1'-10" (center-to-center).
- k. Wood fascia boards shall be placed vertically on the road-side of all posts and cover from existing grade to top of post with one continuous piece. Fascia boards shall be fastened to horizontal rails with a minimum of two screws per row.
- 1. Where necessary, thru bolts shall run through horizontal rails and fascia boards.
- m. All wood material shall be treated in accordance with American Wood Protection Association (AWPA) Standard U1 - Use Category 5 (UC5 - Marine Use), preservation retention shall be 2.50 pcf.
- n. #10 x 2" 316 stainless steel screws shall be used to fasten horizontal rails and vertical fascia. 1/16" pilot hole shall be drilled for all screws to prevent wood cracking.
- o. Material dimensions:
 - i. Posts: 6" x 6" x 8'
 - ii. Horizontal rails: 1" x 8" x 10'
 - iii. Fascia board: 1" x 8" x 8'
- p. To prevent wild horses from accessing south of fence, Contractor shall secure the area during construction with construction fencing or restore fence one section at a time.
- q. Staging material and equipment is authorized on road shoulder or on the beach but shall not impede traffic at any time. Staging is not authorized on State property. Contractor is responsible for material and equipment staged on site.
- r. Contractor may shut down one lane of traffic during construction but shall implement proper traffic controls, to include signage and flaggers.

2.0 Restoration of the pedestrian access west of the cattle crossing.

- a. All existing posts and horizontal rails for the pedestrian access section shall be removed and properly disposed.
- b. 6" x 6" wood post located between the cattle crossing and concrete sidewalk shall be removed and replaced with 6" x 6" x 8' wood post. New post shall be set in concrete 3' below existing grade. One 3" diameter red reflector shall be fastened on north and south side of post 1' from top of post.
- c. Construction of new pedestrian access shall be the same as existing design. Height of pedestrian access shall be 5 feet above existing concrete sidewalk grade.

- d. Concrete work is required to remove existing posts located on sidewalk and to accommodate new 6" x 6" x 8' wood posts (e.g. cutting, drilling, chiseling, etc.). New posts shall be set in concrete 3' below existing grade. Concrete finish around post shall be smooth and flush with existing concrete sidewalk.
- e. All wood material shall be treated in accordance with American Wood Protection Association (AWPA) Standard U1 - Use Category 5 (UC5 - Marine Use), preservation retention shall be 2.50 pcf.
- f. #10 x 2" 316 stainless steel screws shall be used to fasten horizontal rails and vertical fascia. 1/16" pilot hole shall be drilled to prevent cracking.
- g. Material dimensions:
 - i. Posts: 6" x 6" x 8'
 - ii. Horizontal rails: 1" x 8"

3.0 Removal and replacement of two access gates.

- a. The two gates include:
 - 1) Entrance gate immediately east of the cattle crossing; and
 - 2) Beach gate for vehicle traffic.
- b. Entrance gate next to cattle crossing shall be 10' wide galvanized steel cattle gate and fastened to wood post with stainless steel hardware. Gate will be fastened to existing 6" x 6"post in same fashion as existing gate.
- c. 4"x 4" post located immediately east of cattle crossing shall be removed and replaced with 6" x 6" x 8' wood post. New post shall be set in concrete 3' below existing grade. One 3" diameter red reflector shall be fastened on north and south side of post 1' from top of post.
- d. Beach gate shall be 16' wide galvanized steel cattle gate and fastened to wood piling with stainless steel hardware. Gate will be fastened to existing round piling in same fashion as existing gate.
- e. 3/16" x 3' stainless steel chain shall be used on each gate to prevent from swinging open (if chain does not come with new cattle gate).

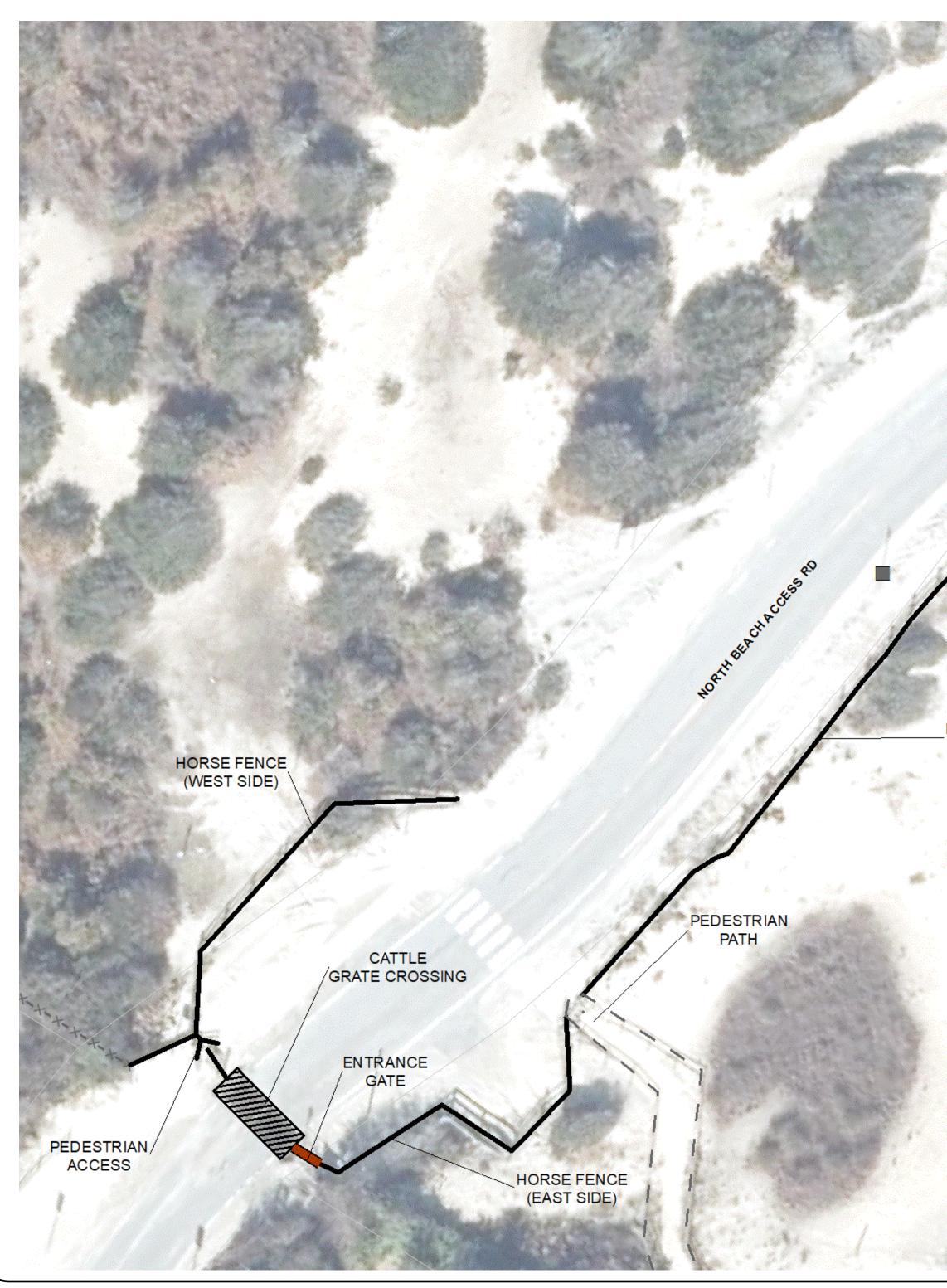
4.0 Removal and replacement of cables and hardware along bottom two rows of round piling.

- a. The length of this section is 100 feet from the corner piling near the beach access ramp to the piling next to beach gate.
- b. Existing cable and hardware on the bottom two rows shall be removed and properly disposed.

- c. Replace bottom two rows with 5/8" 316 stainless steel cables and hardware.
- d. Drilling of wood pilling may be required to accommodate 5/8" cable and shall not be larger than 1" diameter.
- e. Removal of existing sand is required in areas to access bottom two rows and shall not be deeper than 1' below bottom row. Sand that has been removed may be spread evenly along the beach in the immediate area.
- f. Cables shall be tightened with no slack or sunken sections between pilings.
- g. Existing rows of cables along this section shall be retightened to ensure no slack or sunken sections between pilings.

COROLLA HORSE FENCE RESTORATION PROJECT

Corolla – Currituck County – North Carolina



DEED BOOK 1031, PG 705

HORSE FENCE (EAST SIDE)

HORSE FENCE (EAST SIDE)

> PIN: 0113000008A0000 OWNER: STATE OF NORTH CAROLINA DEED BOOK 1031, PG 705



PROJECT NARRATIVE

The Corolla Horse Fence Restoration Project consists of restoring 650' of wood fencing along the east side of North Beach Access Rd, 20' of wood fencing along the west side of North Beach Access Rd, a pedestrian access ways, replacing two metal gates, and removing and replacing cables and hardware along the bottom two rows of round pilings

The existing fence east and west of North Access Beach Rd consist of 6" x 6" pressure-treated wood posts, 1" x 8" pressure-treated horizontal rails, and 1" x 6" vertical fascia boards. Some of the existing posts along the fence are extended with half joints. The pedestrian access west of the cattle crossing consist of 4" x 4" pressure-treated wood posts and 2" x 6" horizontal rails. The existing gates east of the cattle crossing and on the beach are 10' and 16' wide, respectively, steel cattle gates. The existing cables and hardware along the round pilings are stainless steel and range from 3/8" to 5/8" diameter.

- 1) RESTORATION OF WOOD FENCING ALONG EAST AND WEST SIDE OF NORTH BEACH ACCESS RD
 - a. Total length for the fence section along the east side is 650 '. Restoration will begin at the existing entrance gate adjacent to the cattle crossing and end at the fifth round piling from beach access ramp along beach dune.
 - b. Total length for the fence section along the west side is 20'. Restoration will begin at the existing post with the 'Coastal Reserve Boundary' tag and end at the pedestrian access adjacent to the cattle crossing.
 - c. All existing horizontal rails and vertical fascia boards shall be removed and properly disposed. Metal cattle gates and construction fencing secured along various areas of the horse fence shall be removed. Cattle gates will be retained by the County and shall be staged on road shoulder but not to impede traffic.
 - d. Overgrown vegetation adjacent to the cattle grate shall be removed (e.g. cut, trim, etc.) to a point in which it is no longer covering the fence.
 - e. Most existing fence posts (not all) are extended with half joints. Of these existing posts, the upper post shall be removed. The top 1' of the existing lower post shall then be cut and discarded. The existing lower post shall be joined with new material to extend the fence post to a height of 8' above existing grade. Joining the existing lower post and new post shall be with a half joint.
 - f. Half joints shall be fastened with four 3/4" x 10" galvanized steel thru bolts, ogee washers, and nuts. Bolts shall be ASTM A 307, Grade A or B, hot-dip galvanized. Heads of bolt shall face the road. Bolt thread shall extended no more than 1" past nut. Recoat exposed portion of bolt with two coats of high zinc dust oxide paint.
 - g. Pilot holes shall be drilled for each thru bolt and shall be 1/16" larger than the diameter of the bolt shank.
 - h. Slope of fence shall follow the average surface grade to ensure a general, uniform slope. Overall fence height $\pm 8'$ is acceptable in order to achieve desired fence slope. High sand areas may be cut and filled in lower areas. Length of fence following the average grade shall be broken into increments to follow different existing grades along fence route. Stair-step design is not authorized.
 - Bottom row of horizontal rails should be placed 8" above existing grade and shall not exceed 16" (due to varying grade difference along fence route).
 - There shall be 5 rows of horizontal rails. Spacing above bottom-most rail (rail #1) to the next rail (rail #2) shall be 1'-10" (center-to-center). Spacing for the next two rails (rails #3 and #4) shall be 1'-6" (center-to-center). Spacing to the top-most rail from rail #4 shall be 1'-10" (center-to-center).
 - k. Wood fascia boards shall be placed vertically on the road-side of all posts and cover from existing grade to top of post with one continuous piece. Fascia boards shall be fastened to horizontal rails with a minimum of two screws per row.

Where necessary, thru bolts shall run through horizontal rails and fascia boards.

- m. All wood material shall be treated in accordance with American Wood Protection Association (AWPA) Standard U1 - Use Category 5 (UC5 - Marine Use), preservation retention shall be 2.50 pcf.
- n. #10 x 2" 316 stainless steel screws shall be used to fasten horizontal rails and vertical fascia. 1/16" pilot hole shall be drilled for all screws to prevent wood cracking.
- o. Material dimensions:
 - Posts: 6" x 6" x 8'
 - Horizontal rails: 1" x 8" x 10'
 - Fascia board: 1" x 8" x 8'
- p. To prevent wild horses from accessing south of fence, Contractor shall secure the area during construction with construction fencing or restore fence one section at a time.
- q. Staging material and equipment is authorized on road shoulder or on the beach but shall not impede traffic at any time. Staging is not authorized on State property. Contractor is responsible for material and equipment staged on site.
- r. Contractor may shut down one lane of traffic during construction but shall implement proper traffic controls, to include signage and flaggers.

4) REMOVAL AND REPLACEMENT OF CABLES AND HARDWARE ALONG BOTTOM TWO ROWS **OF ROUND PILINGS.**

2) RESTORATION OF PEDESTRIAN ACCESS WEST OF CATTLE CROSSING

a. All existing posts and horizontal rails for the pedestrian access section shall be removed and properly disposed.

b. 6" x 6" wood post located between the cattle crossing and concrete sidewalk shall be removed and replaced with 6" x 6" x 8' wood post. New post shall be set in concrete 3' below existing grade. One 3" diameter red reflector shall be fastened on north and south side of post 1' from top of post.

c. Construction of new pedestrian access shall be the same as existing design. Height of pedestrian access shall be 5' above existing concrete sidewalk grade.

d. Concrete work is required to remove existing posts located on sidewalk and to

accommodate new 6" x 6" x 8' wood posts (e.g. cutting, drilling, chiseling, etc.). New posts shall be set in concrete 3' below existing grade. Concrete finish around post shall be smooth and flush with existing concrete sidewalk.

e. All wood material shall be treated in accordance with American Wood Protection Association (AWPA) Standard U1 - Use Category 5 (UC5 - Marine Use), preservation retention shall be 2.50 pcf

#10 x 2" 316 stainless steel screws shall be used to fasten horizontal rails and vertical fascia. 1/16" pilot hole shall be drilled to prevent cracking.

g. Material dimensions:

• Posts: 6" x 6" x 8'

• Horizontal rails: 1" x 8"

3) REMOVAL AND REPLACEMENT OF TWO ACCESS GATE

a. The two gates include: 1) Entrance gate immediately east of the cattle crossing and 2) beach gate for vehicle traffic.

b. Entrance gate next to cattle crossing shall be 10' wide galvanized steel cattle gate and fastened to wood post with stainless steel hardware. Gate will be fastened to existing 6" x 6" post in same fashion as existing gate.

c. 4"x 4" post located immediately east of cattle crossing shall be removed and replaced with 6" x 6" x 8' wood post. New post shall be set in concrete 3' below existing grade. One 3" diameter red reflector shall be fastened on north and south side of post 1' from top of post.

d. Beach gate shall be 16' wide galvanized steel cattle gate and fastened to wood piling with stainless steel hardware. Gate will be fastened to existing round piling in same fashion as existing gate.

e. 3/16" x 3' stainless steel chain shall be used on each gate to prevent from swinging open (if chain does not come with new cattle gate).

a. This length of this section is 100' from the corner piling near the beach access ramp to the piling next to beach gate.

b. Existing cable and hardware on the bottom two rows shall be removed and properly disposed.

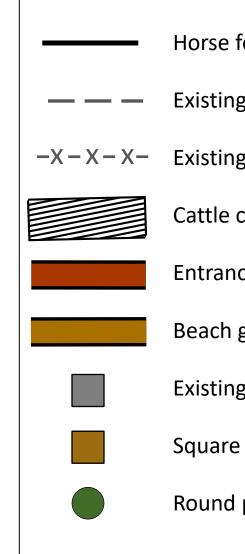
c. Replace bottom two rows with 5/8'' 316 stainless steel cables and hardware.

d. Drilling of wood pilling may be required to accommodate 5/8" cable and shall not be larger than 1" diameter.

e. Removal of existing sand is required in areas to access bottom two rows and shall not be deeper than 1' below bottom row. Sand that has been removed may be spread evenly along the beach in the immediate area.

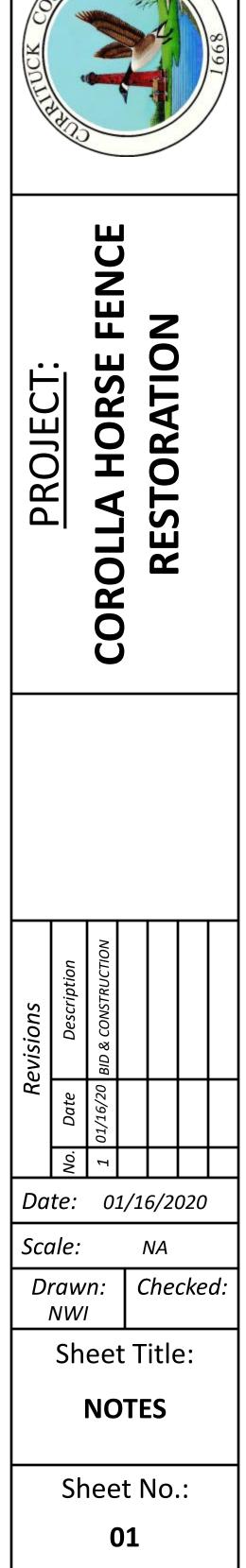
f. Cables shall be tightened with no slack or sunken sections between pilings.

g. Existing rows of cables along this section shall be retightened to ensure no slack or sunken sections between pilings.



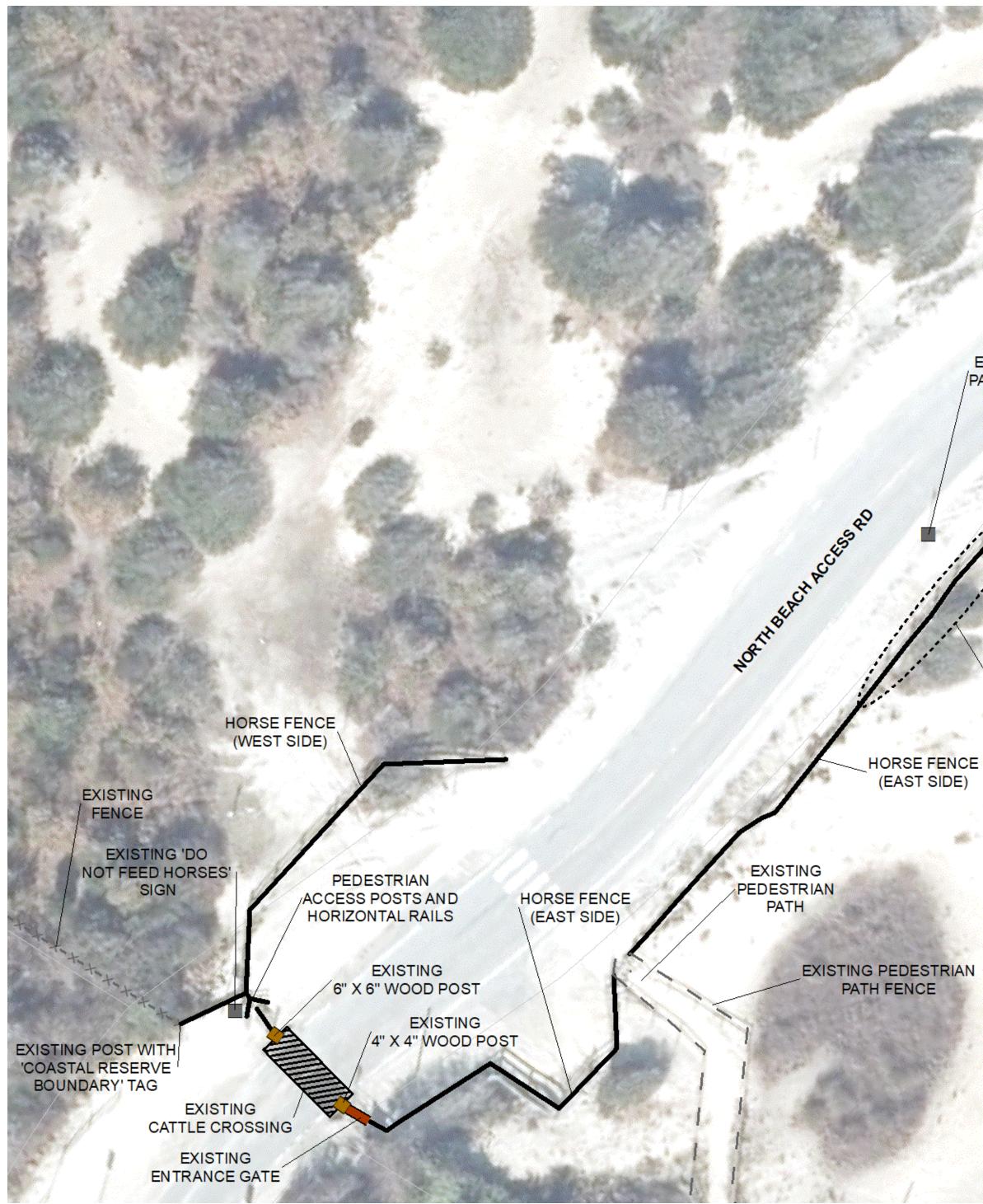
Lege

end	Sheet	No.	
fence	Cover	-	
	Notes	01	
ng pedestrian fence	Existing Conditions	02	art 929
ng fence	Demolition	03	Dep 27
	Construction	04	
crossing	Details	05 - 09	ck, brthere
nce gate			Currituck County Engineering Department 153 Courthouse Rd Suite 302 Currituck, NC 27929
n gate			C C H H C
ng street sign			WIY
e post (wood)			
d piling (wood)			



EXISTING CONDITIONS NOTES

- 1. Existing grade is considered the grade at the time before starting any construction.
- 2. Some wood posts have existing half joints.
- 3. The two square posts by round piling near beach access ramp are in good condition and do not need extending.
- 4. Round pilings are in good condition and do not need extending
- 5. Horse fence west of North Beach Access Rd and north of cattle crossing is not part of project.
- 6. Existing pedestrian path fence east of North Beach Access Rd is not part of project.



PIN: 0113000008A0000 STATE OF NORTH CAROLINA OK 1031 PG 70

EXISTING 'NO PARKING' SIGN

EXISTING 'NO PARKING' SIGN

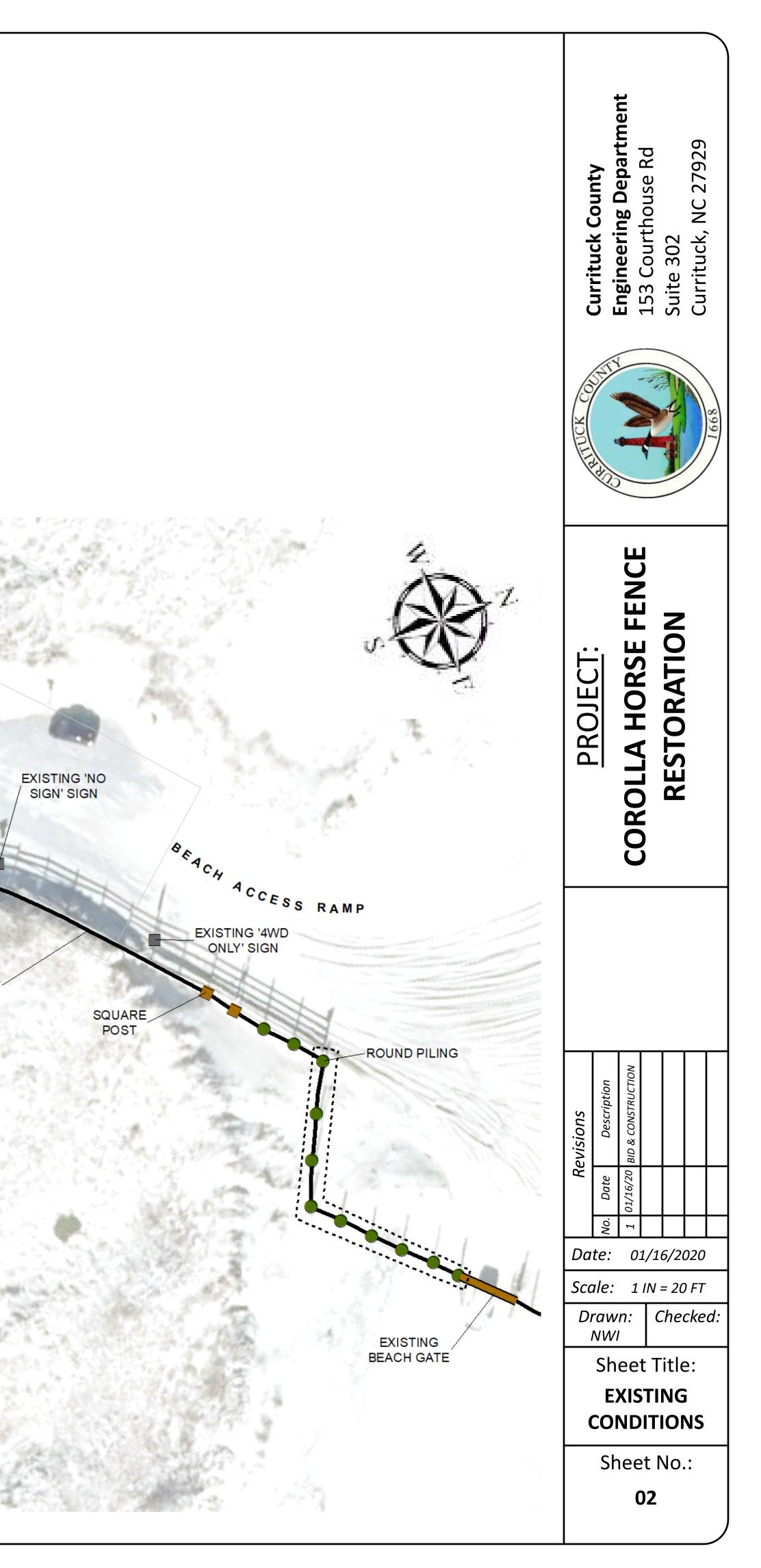
> EXISTING CATTLE GATES AND CONSTRUCTION FENCING

> > HORSE FENCE (EAST SIDE)

EXISTING CATTLE GATES AND CONSTRUCTION FENCING

.....

PIN: 0113000008A0000 OWNER: STATE OF NORTH CAROLINA DEED BOOK 1031, PG 705



DEMOLITION NOTES

- 1. Remove and properly dispose all overgrown vegetation along the east and west side of North Beach Access Rd covering existing fence.
- 2. Remove existing cattle gates and construction fencing along fence, to include all securing hardware. Do not damage cattle gates. Cattle gates will be retained by County and shall be staged on road shoulder but not to impede traffic.
- 3. Remove all horizontal rails and vertical fascia boards along fence, to include rows of 9. horizontal rails on the round pilings.
- 4. Remove upper post from posts with existing half joints
- 5. Remove and properly dispose entrance gate adjacent to cattle crossing and beach gate, to include all securing hardware. Remove and properly dispose bottom two rows of cables and hardware from round wood piling from beach access ramp to beach gate. Removal of existing sand pile required to access rows.

- access.



DEMOLITION NOTES (CONTINUE)

6. Remove and properly dispose existing posts and horizontal rails at pedestrian

7. Remove and properly dispose wood posts on both sides of cattle crossing. 8. Existing signs may be temporarily removed for ease of demolition but shall be reinstalled in same or better condition before completion of project. Disposal is responsibility of Contractor.

> REMOVE CATTLE GATES AND CONSTRUCTION FENCING

> > **REMOVE UPPER POST** FROM POSTS WITH EXISTING HALF JOINTS

> > > **REMOVE ALL** HORIZONTAL RAILS AND VERTICAL FASCIA BOARDS

PIN: 0113000008A0000 WNER: STATE OF NORTH CAROLIN DEED BOOK 1031, PG 705

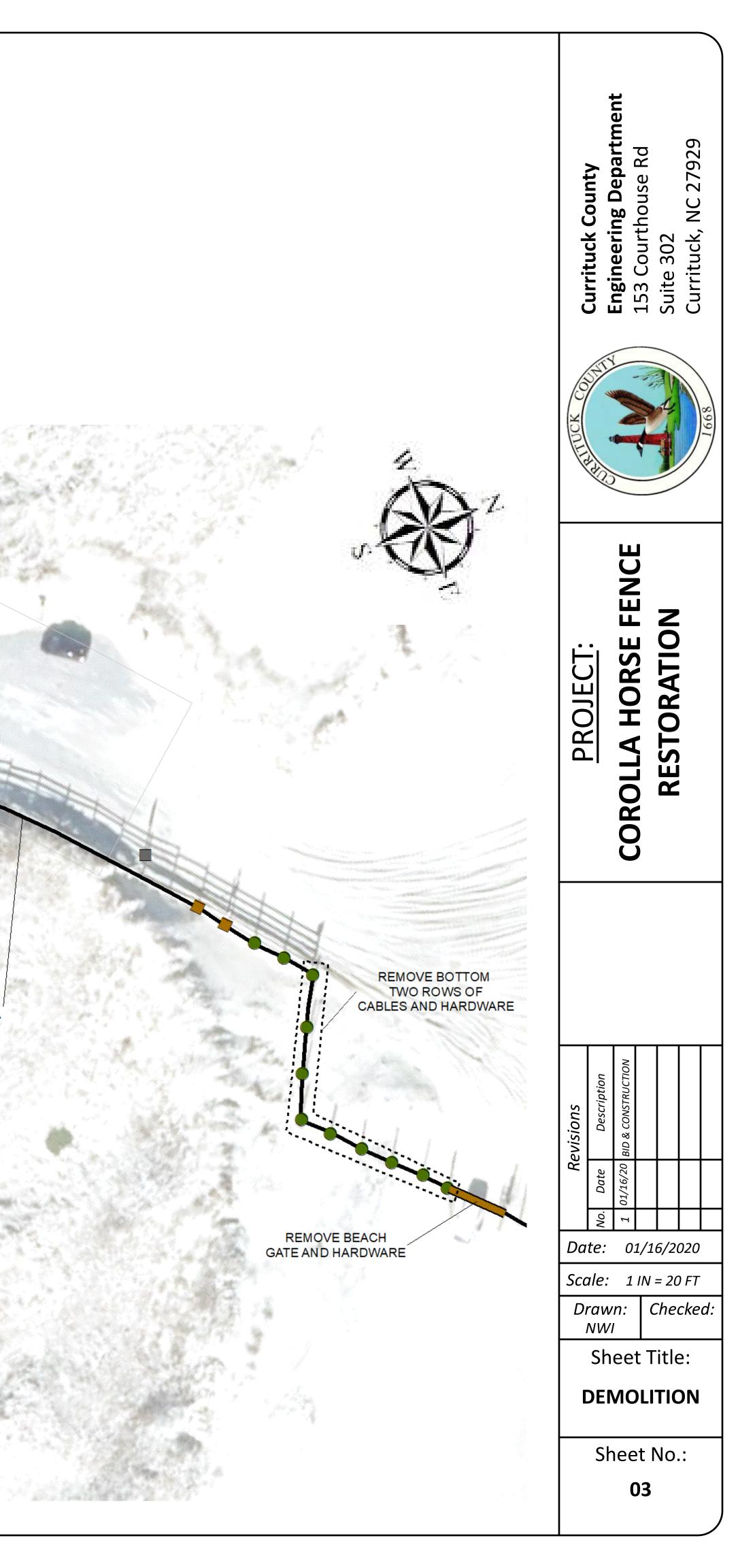
REMOVE UPPER POST FROM POSTS WITH EXISTING HALF JOINTS

REMOVE CATTLE

GATES AND

CONSTRUCTION FENCING

REMOVE ALL HORIZONTAL RAILS AND VERTICAL FASCIA BOARDS



CONSTRUCTION NOTES

- 1. Existing grade is considered the grade at the time before starting any construction.
- 2. To prevent wild horses from access south of fence, Contractor shall secure the area with construction fencing or restore fence one section at a time.
- 3. Staging material and equipment is authorized on road shoulder or on the beach but shall not impede traffic at any time. Staging is not authorized on State property. Contractor is responsible for material and equipment staged on site.
- 4. Contractor may shut down one lane of traffic during construction but shall implement proper traffic controls, to include signage and flagger
- 5. Sand may need to be removed in areas (around posts, along existing sidewalk, etc.) for better access during construction. Spoils shall be spread/graded evenly in surrounding vicinity.
- 6. Existing signs may be temporarily removed during construction but shall be replaced in the same or better condition upon completion.
- 7. Restoration of the fence east of North Beach Access Rd will begin at the existing entrance gate adjacent to the cattle crossing and end at the fifth round piling from beach access ramp.
- 8. Restoration of the fence west of North Beach Access Rd will begin at the existing post with the 'Coastal Reserve Boundary' tag and end at the pedestrian access adjacent to the cattle crossing.

CONSTRUCTION NOTES (CONTINUE)

- Detail Sheet)

- Sheet).

EXTEND POSTS 8 ABOVE EXISTING GRADE AND ADD EW HORIZONTAL RAILS

INSTALL NEW POSTS AND HORIZONTAL RAILS FOR PEDESTRIAN ACCESS **INSTALL NEW**

6" X 6" WOOD POST W/ REFLECTOR

> **INSTALL NEW** 6" X 6" WOOD POST W/ REFLECTOR

INSTALL NEW 10' ENTRANCE GATE AND HARDWARE

START OF EXTENDING POSTS 8' ABOVE EXISTING GRADE AND ADD NEW HORIZONTAL RAILS

EXTEND POSTS 8' ABOVE EXISTING GRADE AND ADD NEW HORIZONTAL RAILS

9. Existing fence posts are approximately spaced 10' on center.

10. The top 1' will be cut from all posts (lower post with existing half joints) prior to extending (see Detail Sheet). Sand may need to be removed from around existing lower post to achieve the required 1' cut.

11. Extend existing posts using half joint (see Detail Sheet)

12. Half joints shall be secured with galvanized steel thru bolts, ogee washers, and nuts (see

13. Bolts shall be ASTM A 307, Grade A or B, hot-dip galvanized

14. Where necessary, thru bolts shall run through horizontal rails and fascia boards.

15. #10 x 2" 316 stainless steel screws shall be used to fasten horizontal rails and vertical fascia.

1/16" pilot hole shall be drilled for all screws to prevent wood cracking.

16. Install new 6" x 6" wood post on both sides of cattle crossing. Secure in concrete (see Detail

17. Height of pedestrian access shall be 5' above existing concrete sidewalk grade.

18. Finish concrete work along existing sidewalk shall be smooth and flush.

19. New entrance gate shall be fastened to existing 6" x 6" post.

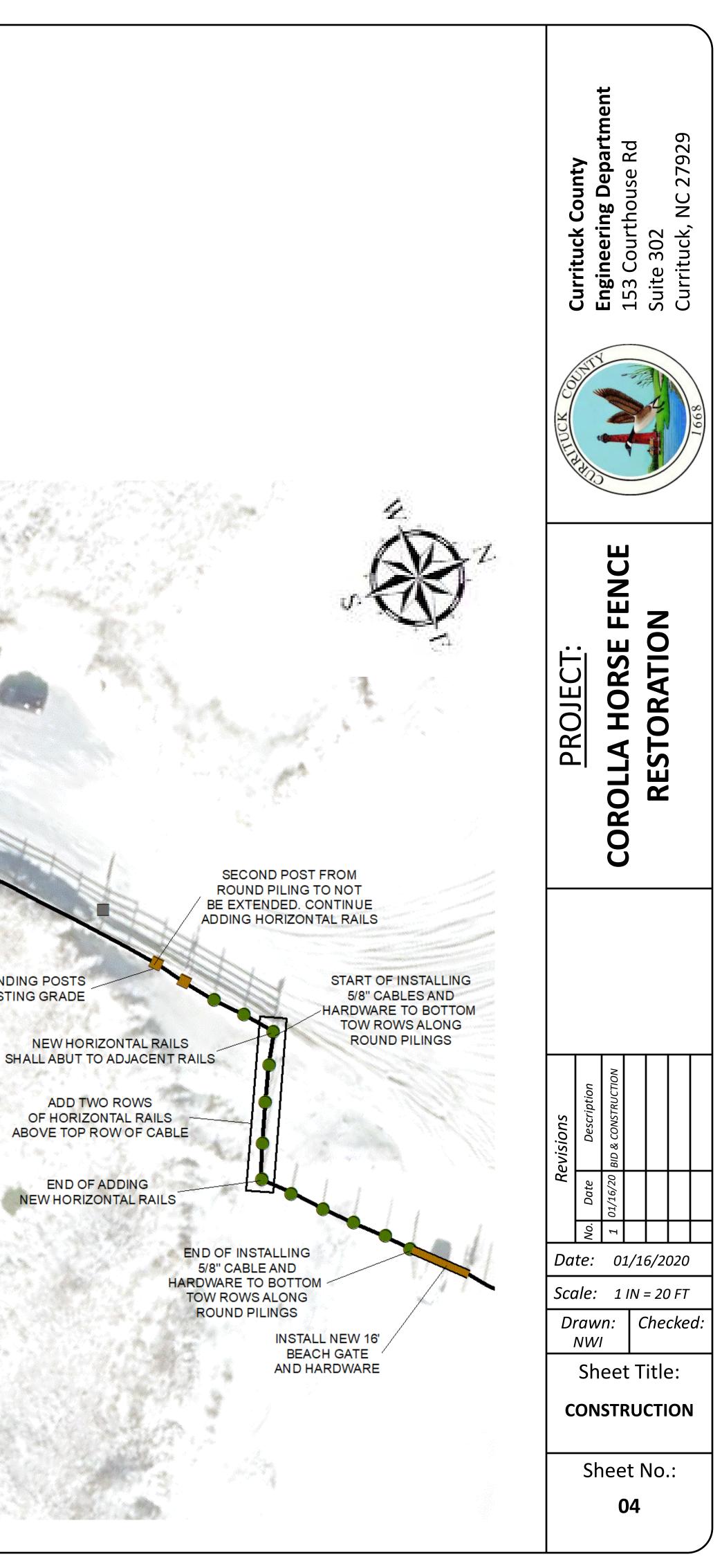
20. New beach gate shall be fastened to existing round piling.

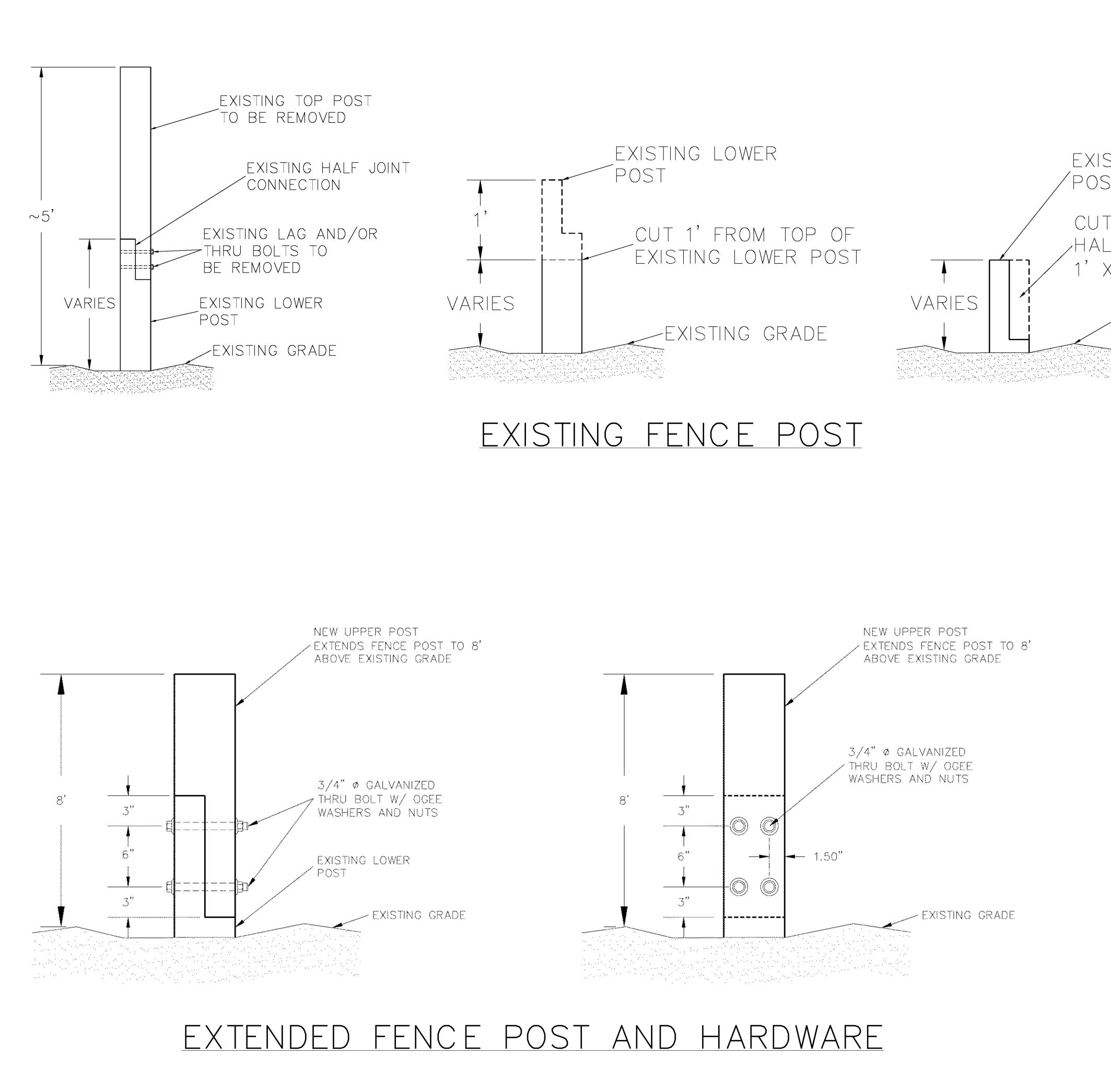
21. Cable along round piling shall be tightened to ensure no slack or sunken sections.

EXTEND POSTS 8' ABOVE EXISTING GRADE AND ADD NEW HORIZONTAL RAILS

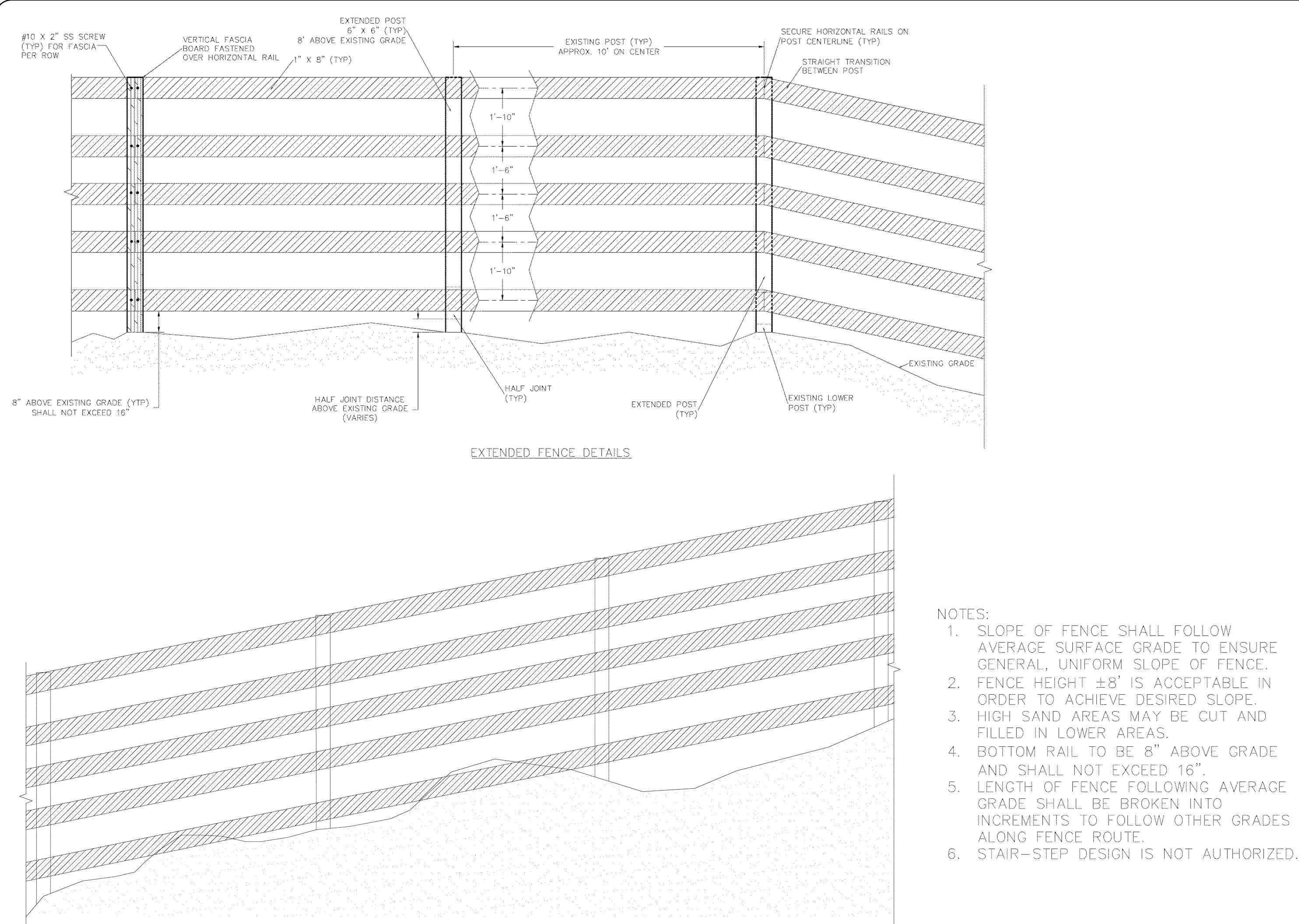
> END OF EXTENDING POSTS 8' ABOVE EXISTING GRADE

PIN: 0113000008A0000 OWNER: STATE OF NORTH CAROLINA DEED BOOK 1031, PG 705





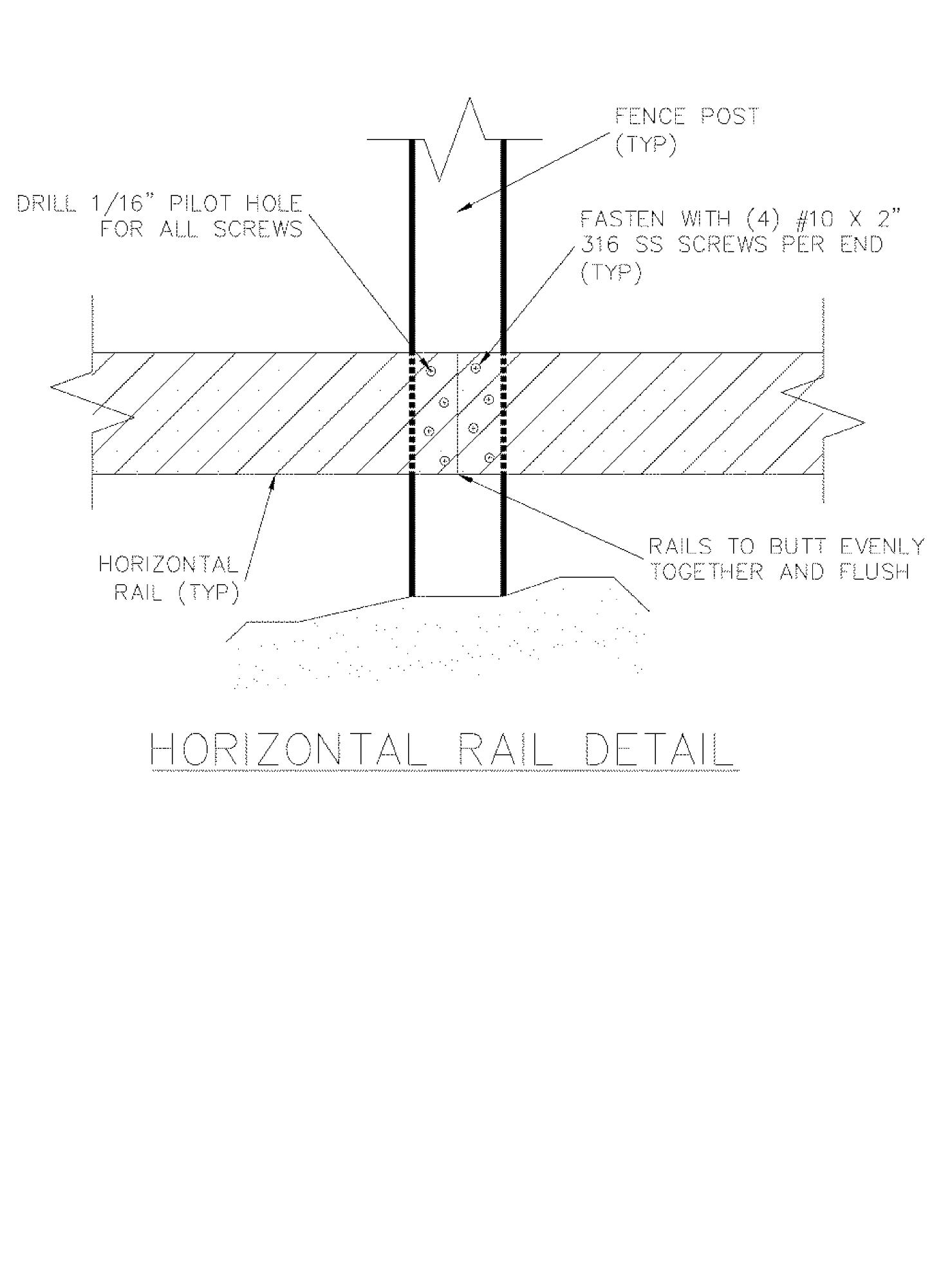
EXISTING LOWER Post	Currituck County Engineering Department 153 Courthouse Rd Suite 302 Currituck, NC 27929
CUT NEW HALF JOINT 1' X 3" EXISTING GRADE	Country (199)
	PROJECT: COROLLA HORSE FENCE RESTORATION
	Image: black state



<u>Fence grade example</u>

			T23 COURTNOUSE KO	Suite 302	Currituck. NC 27929	
attuck con						1668
PROIFCT.		COROLLA HORSE FENCE		RESTORATION		
Revisions	No. Date Description	1 01/16/20 BID & CONSTRUCTION				
Da Sco	te: Ile:		/	VA	020	
			L t T	itle	cke	d:
Sheet No.: 06						

AVERAGE SURFACE GRADE TO ENSURE GENERAL, UNIFORM SLOPE OF FENCE. 2. FENCE HEIGHT $\pm 8'$ is acceptable in ORDER TO ACHIEVE DESIRED SLOPE. 3. HIGH SAND AREAS MAY BE CUT AND FILLED IN LOWER AREAS. 4. BOTTOM RAIL TO BE 8" ABOVE GRADE AND SHALL NOT EXCEED 16". 5. LENGTH OF FENCE FOLLOWING AVERAGE GRADE SHALL BE BROKEN INTO INCREMENTS TO FOLLOW OTHER GRADES



6" MINIMUM CONCRETE FILL AROUND POST

 \mathcal{L}_{-}

 \triangleleft

