



U.S. Department of Housing and Urban
Development
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Washington, DC 20410
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Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Racepath Infrastructure - Phase II

Responsible Entity: Horry County, PO Box 1236 Conway SC, 29528

Grant Recipient (if different than Responsible Entity):

State/Local Identifier:

Preparer: Chris Daves, PWS – S&ME

Certifying Officer Name and Title: Steve Gosnell, Horry County Administrator

Grant Recipient (if different than Responsible Entity):

Consultant (if applicable): Chris Daves, PWS – S&ME

Direct Comments to: Courtney Frappaolo, Community Development Director

Project Location: Racepath St, Myrtle Beach, SC 29577

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina and is comprised of approximately 1.69 acres. Phase II of construction includes two main components: street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet; and construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive, measuring approximately 300 linear feet. The planned street, water, and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), utility relocation (hydrants, etc.), roadside landscaping, and street lighting improvements. The proposed improvements will occur inside the existing ROW, except where new roadway construction will connect Racepath Street and ABC Drive. Racepath Street located within a Low-to-Moderate Income (LMI) neighborhood.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

The purpose of the proposed project is to provide needed street, water, and sewer improvements to the existing Racepath Street as well as to make a new road connection between Racepath Street and ABC Drive improving traffic flow in the area. The overall objectives of the project include: - Improvement of drainage/flooding issues. - Provide a better quality of life by creating a more suitable living environment. - Improve traffic flow in the area. - Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

Existing Conditions and Trends [24 CFR 58.40(a)]:

The project area mainly consists of a private and county-maintained road right-of-way (Racepath Street) in an LMI neighborhood. Residences mainly line Racepath Street. The 300-foot section that will connect Racepath Street to ABC Drive is mainly undeveloped, open land with scattered trees. In the absence of the proposed project, drainage/flooding issues will remain and declining the viewshed of the project area will continue to reduce property values in the vicinity. Traffic issues will not be alleviated.

Funding Information

Grant Number	HUD Program	Funding Amount
B-18-UC-45-0006	CDBG	\$162,030.00
B-19-UC-45-0006	CDBG	\$527,614.00
B-20-UC-45-0006	CDBG	\$58,994.00

Estimated Total HUD Funded Amount: \$748,638.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$748,638.00

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6

<p>Airport Hazards</p> <p>24 CFR Part 51 Subpart D</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project area is not located within Runway Clear Zone (2,500 feet from civil airport runway) or Accident Potential Zone (15,000 feet from military airport runway). See Airport Clear Zones Exhibit. (Appendix A)</p>
<p>Coastal Barrier Resources</p> <p>Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project area is not located within a designated Coastal Barrier Resource Area. See Coastal Barrier Resources System Exhibit. (Appendix B)</p>
<p>Flood Insurance</p> <p>Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. According to FEMA FIRMs #45051C0683H and 45051C0684H, dated August 23, 1999, the project area is located in Zone X and not in a floodplain. One parcel, PIN 44302020054, contains a section of floodplain; however, no work will occur in the floodplain and no impact to the floodplain will occur. A restrictive covenant is currently in place to protect the floodplain area from development. See FEMA FIRMs and County floodplain exhibit. (Appendix C)</p>

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5

<p>Clean Air</p> <p>Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Horry County is currently in attainment with Clean Air Act's NAAQ Standards. See attached Air Quality Exhibit. (Appendix D)</p>
<p>Coastal Zone Management</p> <p>Coastal Zone Management Act, sections 307(c) & (d)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project area located in coastal county (Horry). SCDHEC-OCRM conferred proposed project does not have coastal effects and complies with policies of SCCZM Program. See OCRM Letter (2-24-20) and scoping letter. (Appendix E)</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. No landfills, industrial sites, mines, or hazardous waste disposers near project area. Project area does not contain a UST nor is it listed on EPA NPL/CERCLA databases. See Contamination and Toxic Substance Documentation. (Appendix F)</p>
<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. No habitat for listed species. See Protected Species Assessment by Qualified Biologist and USFWS clearance letter for No Effect determinations. (Appendix G)</p>

<p>Explosive and Flammable Hazards</p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project will not increase the number of people using the project area or make vacant structures habitable. (Appendix H)</p>
<p>Farmlands Protection</p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project area located in the Myrtle Beach-Socastee, SC urbanized area as designated on the U.S. Census Bureau data. FPPA does not apply. See attached Farmlands Protection Policy Act exhibit. (Appendix I)</p>
<p>Floodplain Management</p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. According to FEMA FIRMs #45051C0683H and 45051C0684H, dated August 23, 1999, the project area is located in Zone X and not in a floodplain. One parcel, PIN 44302020054, contains a section of floodplain; however, no work will occur in the floodplain and no impact to the floodplain will occur. A restrictive covenant is currently in place to protect the floodplain area from development. See FEMA FIRMs and County floodplain exhibit. (Appendix C)</p>
<p>Historic Preservation</p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. See attached SHPO (2-21-20) and Catawba Indian Nation THPO (3-6-20) letters and submittals. (Appendix J)</p>
<p>Noise Abatement and Control</p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project does not include new construction or major rehab of noise sensitive uses where quiet is integral to project function. (Appendix K)</p>
<p>Sole Source Aquifers</p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. No sole source aquifers in South Carolina. See Sole Source Aquifer Exhibit. (Appendix L).</p>
<p>Wetlands Protection</p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. No wetlands in project area. See Jurisdictional Determination letter from USACE (3-25-2020) and Jurisdictional Determination Request. (Appendix M)</p>
<p>Wild and Scenic Rivers</p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>No Effect. Project area is not located near the Chattooga River in Oconee Co. or Lumber River in NC. Project will not impact rivers listed on Nationwide Rivers Inventory. See exhibits related to river resources. (Appendix N)</p>

ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> <input type="checkbox"/>	No Effect. Project area is located in a low-income and minority neighborhood. However, based on nature of the proposed project (roadway and drainage improvements), disproportional adverse effects on low-income and minority populations are not anticipated. Project will be beneficial to residents. See EPA EJ Screen information and information in Contamination and Toxic Substances. (Appendices O and F)

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	Site is zoned LM (Light Manufacturing) and MSF-6 (Residential). Roads, drainage/street improvements are allowed. No compatibility issues identified. See zoning documentation. (Appendix P)
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	Original soils (Bladen Fine Sandy Loam, Echaw Sand, Meggett Loam, Wahee Fine Sandy Loam, Yemassee Sand) are considered poorly to moderately suited for urban development due to ponding and wetness. However, these limitations can be alleviated by proper design/grading/construction installation to mitigate adverse effects. Slope is nearly flat (0-2%). Soils are not highly erodible. Stormwater drainage to be improved. A NPDES permit

		will be obtained from SCDHEC prior to site improvements. See S&ME Geotechnical Report and soils information. (Appendix P)
Hazards and Nuisances including Site Safety and Noise	2	No hazards, nuisances, or site safety issues were observed. See Hazards and Nuisances Checklist. (Appendix P)
Energy Consumption	2	Project is not expected to require large, additional consumptions of energy.

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	Project will not negatively affect employment or income patterns in the area.
Demographic Character Changes, Displacement	2	Project will not result in negative demographic or character changes or the displacement of residents.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	Project is not dependent on nor will it affect these services; however, these resources are located in close proximity to site.
Commercial Facilities	2	Project is not dependent on nor will it affect these services; however, these resources are located in close proximity to site
Health Care and Social Services	2	Project is not dependent on nor will it affect these services; however, these resources are located in close proximity to site.
Solid Waste Disposal / Recycling	2	Project is not dependent on nor will it affect these services; however, these resources are located in close proximity to site.
Waste Water / Sanitary Sewers	2	Sewer utilities are currently in place along city streets within project area. Improvements to be made and connected to existing city sewer system. Grand Strand Water and Sewer/Myrtle Beach Public Works provides current service.
Water Supply	2	Municipal water lines are currently in place along city streets within project area. Improvements to be made and connected to existing city water lines. Grand Strand Water and Sewer/Myrtle Beach Public Works provides current service.

Public Safety - Police, Fire and Emergency Medical	2	City of Myrtle Beach/Horry County provide fire, police, and EMS services to site. See attached exhibits. (Appendix Q)
Parks, Open Space and Recreation	2	Parks, open space, and recreation facilities are located nearby. See recreational information. (Appendix Q)
Transportation and Accessibility	1	Public transportation is available surrounding the project area via Coast RTA, Routes 7 and 10 (http://www.coastrta.com/). Project will improve traffic flow in the area by connecting ABC Drive to Racepath Street. See transportation documentation. (Appendix Q)

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	No effect. See Farmland Protection documentation (Appendix I). Project to use municipal water. Water resources (groundwater, streams, etc.) will not be impacted. See Wetlands Protection documentation (Appendix M).
Vegetation, Wildlife	2	No Effect. Project will not affect protected species, cause major habitat disruption, or introduce non-native species. See Endangered Species documentation. (Appendix G)
Other Factors		N/A

Additional Studies Performed:

No additional studies were performed specifically as part of this EA.

Field Inspection (Date and completed by):

Chris Daves, PWS conducted the field inspection of the site on January 22, 2020.

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:

A list of sources consulted is attached.

List of Permits Obtained:

Future permits/certifications needed will include: 1) SCDHEC Notification Form for Sites Disturbing Less Than 1-Acre, Not Located within 0.5 Miles of a Coastal Receiving Water and Automatic NPDES Permit Coverage (Not Part of a Larger Common Plan, Coastal County). 2) SCDHEC Construction Permit Application Water/Wastewater Facilities. 3) Horry County

Engineering - Design Plan Review. 4) City of Myrtle Beach - Design Plan Review. No other permits have been obtained or applied for at the time this EA was prepared.

Public Outreach [24 CFR 50.23 & 58.43]:

No additional public outreach was conducted at the time this EA was prepared.

Cumulative Impact Analysis [24 CFR 58.32]:

Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions. This analysis has revealed the proposed project would not have a significant adverse impacts associated with cumulative effects. Cumulative impacts are not anticipated to endangered species, farmlands, floodplains, cultural resources, sole source aquifers, wetlands, water quality, wild/scenic rivers, or environmental justice. The development is not anticipated to generate future off-site development, large amounts of traffic, or strain existing community resources.

Air Quality/Traffic and Transportation

The project's construction activities would attempt to minimize the emission of criteria air pollutants during construction. The project would also generate minor emissions from additional vehicle traffic after construction. However, the number of vehicle trips associated with this project and the anticipated airborne emissions would be relatively imperceptible within the context of the region's air shed. Public transportation is currently available to the site area. The proposed project would not make a considerable contribution to significant cumulative air quality or transportation impacts.

Noise

The proposed project would have short-term (temporary) construction noise and insignificant long-term operational noise impacts. To reduce noise created by construction activities, limitations on construction hours and the installation of sound attenuation on construction equipment would likely be implemented. Operational noise from automobiles, human voices, and landscape maintenance are considered long-term sources of unwanted noise. These sources would not increase noise to levels that exceed the City's standards. Impacts would be less than significant. Current noise sources exist from nearby roads.

Public Services, Utilities, and Service Systems

Based on research and interviews with community service providers, the proposed project would be adequately serviced by existing public services, utilities, and service systems. The proposed project would not cumulatively result in significant impacts on these systems.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

Based on the linear nature of the project and the need for the street/drainage improvements at proposed location, alternative locations or project modifications were not considered. Additional alternatives were not considered as there were no significant impacts to the human or natural environment based on the current site plans. The project appears to be beneficial to the community for the following reasons: - Improvement of drainage/flooding issues. - Provide a better quality of life by creating a more suitable living environment. - Improve traffic flow in the area. - Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

No Action Alternative [24 CFR 58.40(e)]:

In the absence of the proposed project, the site is likely to remain vacant and will not be used to create value by creating affordable housing for residents and improving the character and neighborhood dynamics of the area, which are of greater benefit to the community than leaving the site vacant. The housing needs identified by community leaders and in the comprehensive plan and will not be recognized if the site remains vacant. Under the No Action Alternative, the site would not be developed with the proposed roadway/drainage improvements. Flooding/drainage issues and potential degradation of the area would continue. This alternative would not satisfy the project purpose and need. The improvement needs identified by community leaders would not be recognized.

Summary of Findings and Conclusions:

Based on the findings of this EA, the proposed project appears to be in compliance with Statutes, Executive Orders, and Regulations without significant impact on the quality of the human environment.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	A NPDES permit will be obtained from SCDHEC prior to site development for land disturbance (sediment and erosion control).
Permits, reviews and approvals	Future permits/certifications needed will include: 1) SCDHEC Notification Form for Sites Disturbing Less Than 1-Acre, Not Located within 0.5 Miles of a Coastal Receiving Water and Automatic NPDES Permit Coverage (Not Part of a Larger Common Plan, Coastal County). 2) SCDHEC Construction Permit Application Water/Wastewater Facilities. 3) Horry County Engineering - Design Plan Review. 4) City of Myrtle Beach - Design Plan Review. No other permits have been obtained or applied for at the time this EA was prepared.

Mitigation Plan

A NPDES permit will be obtained from SCDHEC prior to site development for land disturbance (sediment and erosion control).

Determination:

Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

Finding of Significant Impact [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature: Courtney Frappalo Date: 9.16.2020

Name/Title/Organization: Community Development Director

Certifying Officer Signature: [Signature] Date: 9/16/20

Name/Title: Steve Gosnell, Horry County Administrator

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Racepath Phase II Infrastructure – Sources Utilized

- ESRI World Street Maps
- EPA NEPAAssist: <https://www.epa.gov/nepa/nepassist>.
- Google Earth
- AirNav: <http://airnav.com/>.
- Federal Aviation Administration: <https://www.faa.gov/>.
- South Carolina Aeronautics Commission: <http://www.scaeronautics.com/>.
- Airport IQ 5010 Airport Master Records and Reports: <https://www.gcr1.com/5010web/>.
- Coastal Barrier Resources System: <https://www.fws.gov/cbra/Maps/Mapper.html>
- FEMA Flood Map Service Center: <http://msc.fema.gov/portal>.
- Horry County GIS: <https://www.horrycounty.org/gis/parcels/>.
- United States EPA – Air Quality: <https://www.epa.gov/green-book>.
- United States Environmental Protection Agency – Air Quality:
<https://www3.epa.gov/airquality/greenbook/map/mapnpoll.pdf>.
- SCDHEC-OCRM: <http://www.scdhec.gov/HomeAndEnvironment/Water/CoastalManagement/>
- NOAA: <https://coast.noaa.gov/czm/mystate/#southcarolina>.
- SCDHEC-OCRM Letter (Feb. 24, 2020) from Daniel Burger.
- S&ME site visit (January 22, 2020).
- EPA: NEPAAssist: <https://www.epa.gov/nepa/nepassist>.
- EPA Superfund: <http://www.epa.gov/superfund/sites/npl/sc.htm>
- EPA Superfund: <https://www.epa.gov/superfund>.
- SCDHEC UST: <http://www.scdhec.gov/Apps/Environment/USTRegistry/>.
- SCDHEC GIS Database: <http://scdhec.gov/homeandenvironment/maps/gis/>.
- SCDNR – Bald Eagle locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
- SCDNR – Rare, Threatened, and Endangered Species of South Carolina – by County:
<http://www.dnr.sc.gov/species/county.html>.
- USFWS – Clearance Letter (May 30, 2019).
- USFWS – Information for Planning and Conservation (IPaC): <https://ecos.fws.gov/ipac/>.

- USFWS – South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species for Horry County: <https://www.fws.gov/southeast/pdf/fact-sheet/south-carolina-species-list-by-county.pdf>.
- S&ME Protected Species Assessment.
- USDA – NRCS: Web Soil Survey: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- USDA – Soil Conservation Service: Soil Survey of Horry County, SC (1986).
- USDA – Field Office Technical Guide - https://efotg.sc.egov.usda.gov/references/public/SC/Horry_Soils_eFOTG.pdf.
- U.S. Census Bureau Tigerline Data – https://tigerweb.geo.census.gov/tigerwebmain/tigerweb_main.html
- USGS Topographic Map – Myrtle Beach, SC (1984)
- SC ArchSite: <http://www.scarchsite.org/>
- SCDAH-SHPO: Mr. John Sylvest, Project Review Coordinator, in letter (Feb. 21, 2020)
- THPO – Catawba Indian Nation (March 6, 2020)
- USEPA Region 4: Groundwater Protection, Sole Source Aquifers in the Southeast: <https://archive.epa.gov/pesticides/region4/water/groundwater/web/html/r4ssa.html>
- FEMA Federal Insurance Rate Maps: <https://msc.fema.gov>.
- Google Earth Aerial Photographs (1994-2019).
- Horry County GIS Aerial Photographs.
- Soil Survey for Horry County.
- USDA-NRCS – Web Soil Survey: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- USFWS National Wetlands Inventory (NWI) Wetland Mapper: <http://www.fws.gov/wetlands/Data/Mapper.html>.
- USGS 7.5-Minute Topographic Quadrangle Map – Myrtle Beach, SC (1984).
- USACE Jurisdictional Determination Letter: SAC 2020-00159 (May 14, 2019).
- National Wild and Scenic Rivers System: <https://www.rivers.gov/south-carolina.php>.
- USDOJ – National Park Service – Nationwide Rivers Inventory: <https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm>.
- EPA EJ SCREEN: <https://www.epa.gov/ejscreen>.
- EPA NEPA Assist: <https://nepassisttool.epa.gov/nepassist/analysis.aspx>.

- City of Myrtle Beach Planning Department: <http://www.cityofmyrtlebeach.com/planning.html>

- The Code of Ordinances – City of Myrtle Beach, SC (2020)

<http://cms6.revize.com/revize/myrtlebeachsc/Myrtle%20Beach%20Zoning%20Code%20200428.pdf>

- City of Myrtle Beach Zoning Map (10/1/2019)

<http://cms6.revize.com/revize/myrtlebeachsc/departments/docs/Zoning%20and%20City%20Limits%20Map.pdf>

- Horry County GIS: <http://www.horrycounty.org/gis/parcels/>

- Horry County Zoning Districts:

<https://www.horrycounty.org/portals/0/docs/planningandzoning/zoningdistricts.pdf>



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Airport Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/airport-hazards>

- 1. To ensure compatible land use development, you must determine your site’s proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**
 - No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*
 - Yes → *Continue to Question 2.*
- 2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**
 - Yes, project is in an APZ → *Continue to Question 3.*
 - Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*
 - No, project is not within an APZ or RPZ/CZ
 - *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*
- 3. Is the project in conformance with DOD guidelines for APZ?**
 - Yes, project is consistent with DOD guidelines without further action.
 - *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*
 - No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

→ *Work with the RE/HUD to develop mitigation measures. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project area is not located within Runway Clear Zone (2,500' from civil airport runway) or Accident Potential Zone (15,000' from military airport runway). See Airport Clear Zones Exhibit. (Appendix A)

Sources:

- ESRI World Street Maps
- EPA NEPAAssist: <https://www.epa.gov/nepa/nepassist>.
- Google Earth
- AirNav: <http://airnav.com/>.
- Federal Aviation Administration: <https://www.faa.gov/>.
- South Carolina Aeronautics Commission: <http://www.scaeronautics.com/>.
- Airport IQ 5010 Airport Master Records and Reports: <https://www.gcr1.com/5010web/>.

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.
 THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY
 ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



SCALE: 1 in = 2 miles
 DATE: 4/15/2020
 DRAWN BY: CCH
 PROJECT NO:
 1463-19-014



Airport Clear Zones Exhibit
 Racepath Street Phase II Project +/- 1.89 Ac
 Myrtle Beach, Horry County, South Carolina
 Source: World Street Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Airport Runway Clear Zones (CENST) – PARTNER

<https://www.hudexchange.info/environmental-review/airport-hazards>

1. Does the project involve the sale or acquisition of developed property?

No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 2.*

2. Is the project in the Runway Protection Zone/Clear Zone (RPZ/CZ)¹?

No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

Yes → *Written notice must be provided to prospective buyers to inform them of the potential hazards from airplane accidents as well as the potential for the property to be purchased as part of an airport expansion project. [A sample notice is available through the HUD Exchange.](#)*

Provide a map showing that the site within RPZ/CZ. Work with the RE/HUD to provide written notice to the prospective buyers. Continue to the Worksheet Summary below.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

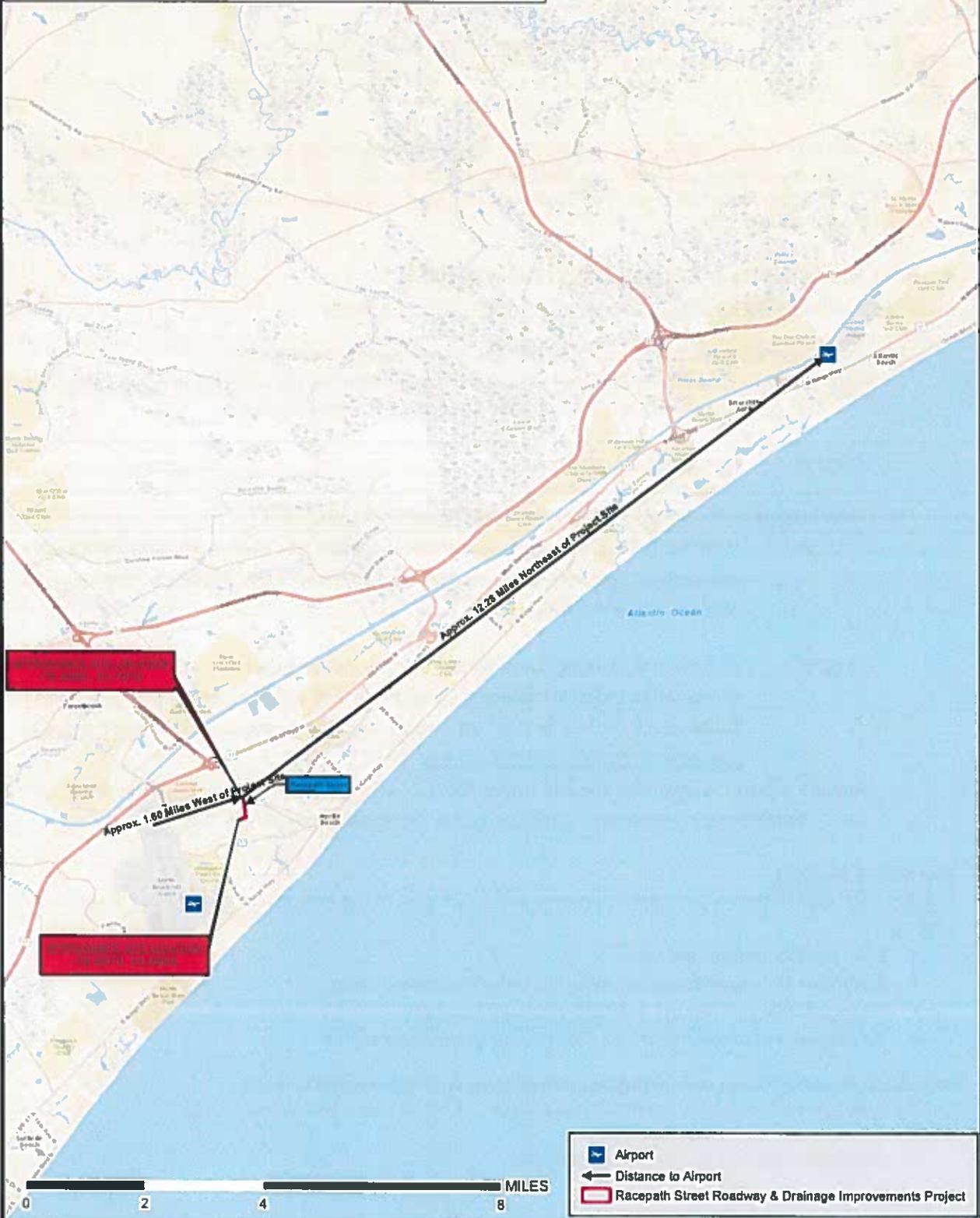
Include all documentation supporting your findings in your submission to HUD.

No Effect. Project area is not located within Runway Clear Zone (2,500' from civil airport runway).

- **See Airport Clear Zones Exhibits. (Appendix A)**

¹ Runway Protection Zone/Clear Zones are defined as areas immediately beyond the ends of runways. The standards are established by FAA regulations. The term in 24 CFR Part 51, Runway Clear Zones, was redefined in FAA's Airport Design Advisory Circular (AC) 150/5300-13 to refer to Runway Protection Zones for civil airports. See link above for additional information.

REFERENCE:
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 ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



SCALE: 1 in = 2 miles
 DATE: 4/15/2020
 DRAWN BY: CCH
 PROJECT NO:
 1463-19-014



Airport Clear Zones Exhibit
 Racepath Street Phase II Project +/- 1.83 Ac
 Myrtle Beach, Horry County, South Carolina
 Source: World Street Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Coastal Barrier Resources (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/coastal-barrier-resources>

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.

Yes → Continue to 2.

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

2. Indicate your recommended course of action for the RE/HUD

Consultation with the FWS

Cancel the project

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

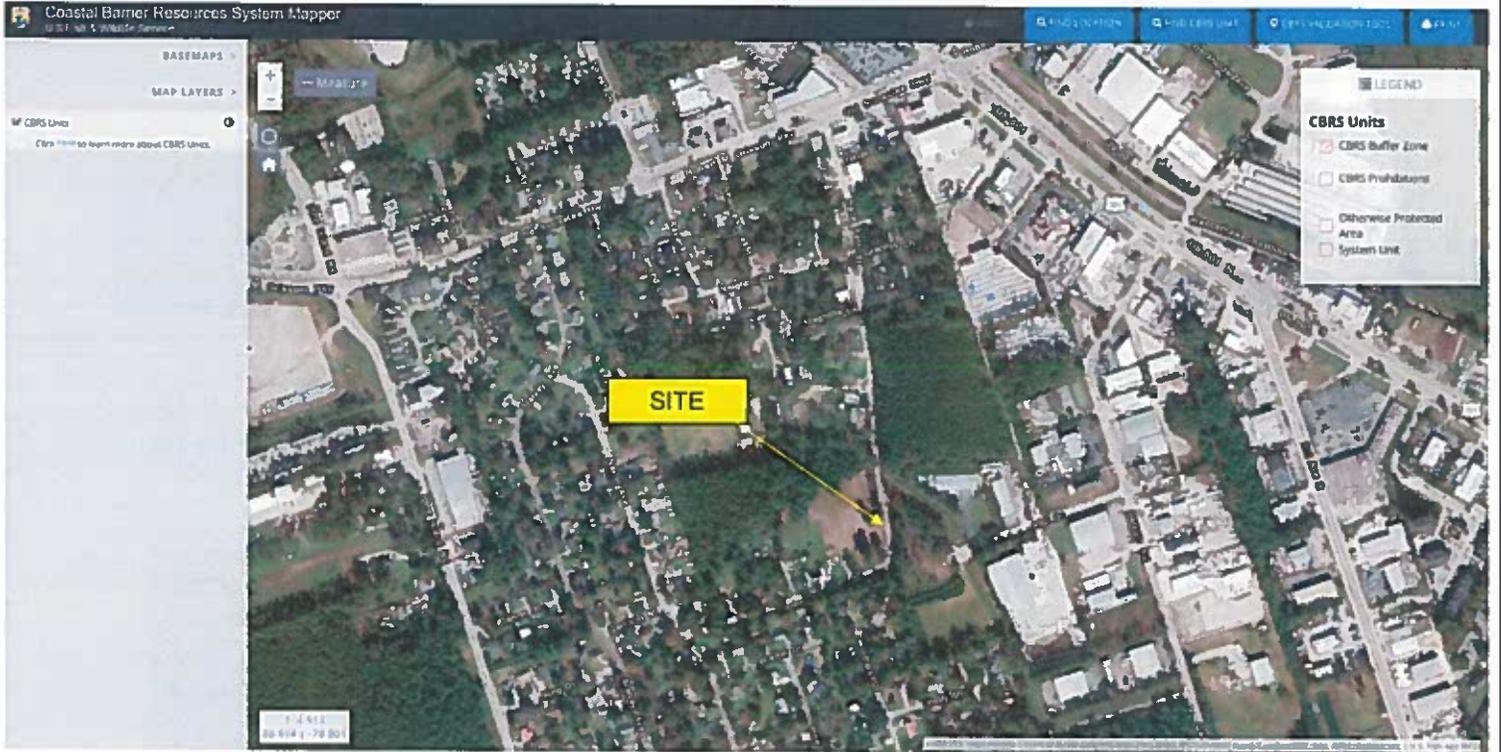
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project area is not located within a designated Coastal Barrier Resource Area.

See Coastal Barrier Resources System Map. (Appendix B)

Sources: USFWS - Coastal Barrier Resources System: <https://www.fws.gov/cbra/Maps/Mapper.html>



<https://www.fws.gov/cbra/Maps/Mapper.html>



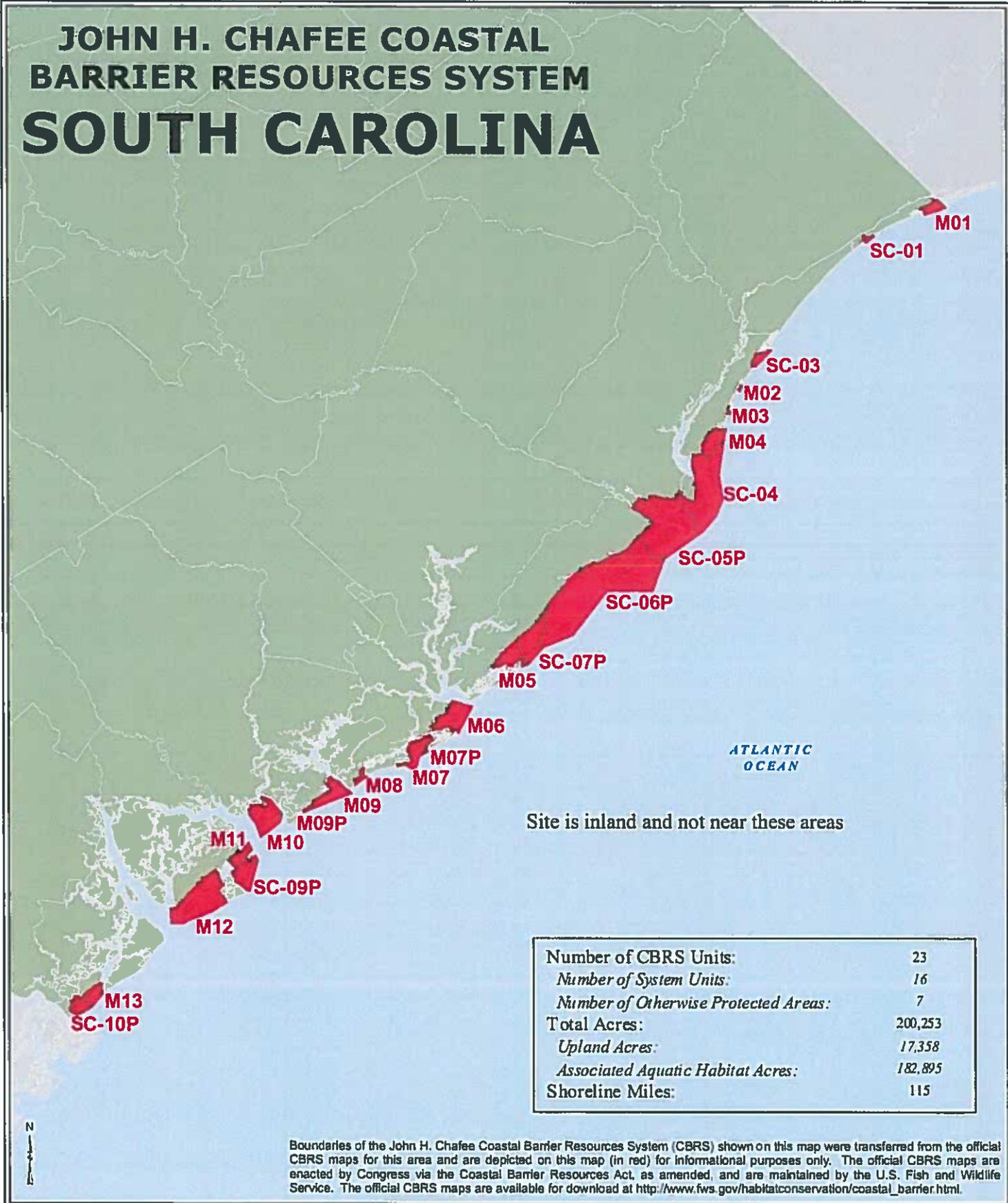
SCALE	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	2-10-2020



COASTAL BARRIERS RACEPATH STREET PHASE II MYRTLE BEACH, HORRY COUNTY, SOUTH CAROLINA	
PROJECT NO:	1463-19-014

EXHIBIT NO.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM SOUTH CAROLINA



Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at http://www.fws.gov/habitatconservation/coastal_barrier.html.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Flood Insurance (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/flood-insurance>

1. Does this project involve mortgage insurance, refinance, acquisition, repairs, rehabilitation, or construction of a structure, mobile home, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.
→ Continue to the Worksheet Summary.

Yes → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

No → Continue to the Worksheet Summary.

Yes → Continue to Question 3.

3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?

Yes, the community is participating in the National Flood Insurance Program.
Flood insurance is required. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.
→ Continue to the Worksheet Summary.

Yes, less than one year has passed since FEMA notification of Special Flood Hazards.
If less than one year has passed since notification of Special Flood Hazards, no flood insurance is required.
→ Continue to the Worksheet Summary.

No. The community is not participating, or its participation has been suspended.
Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

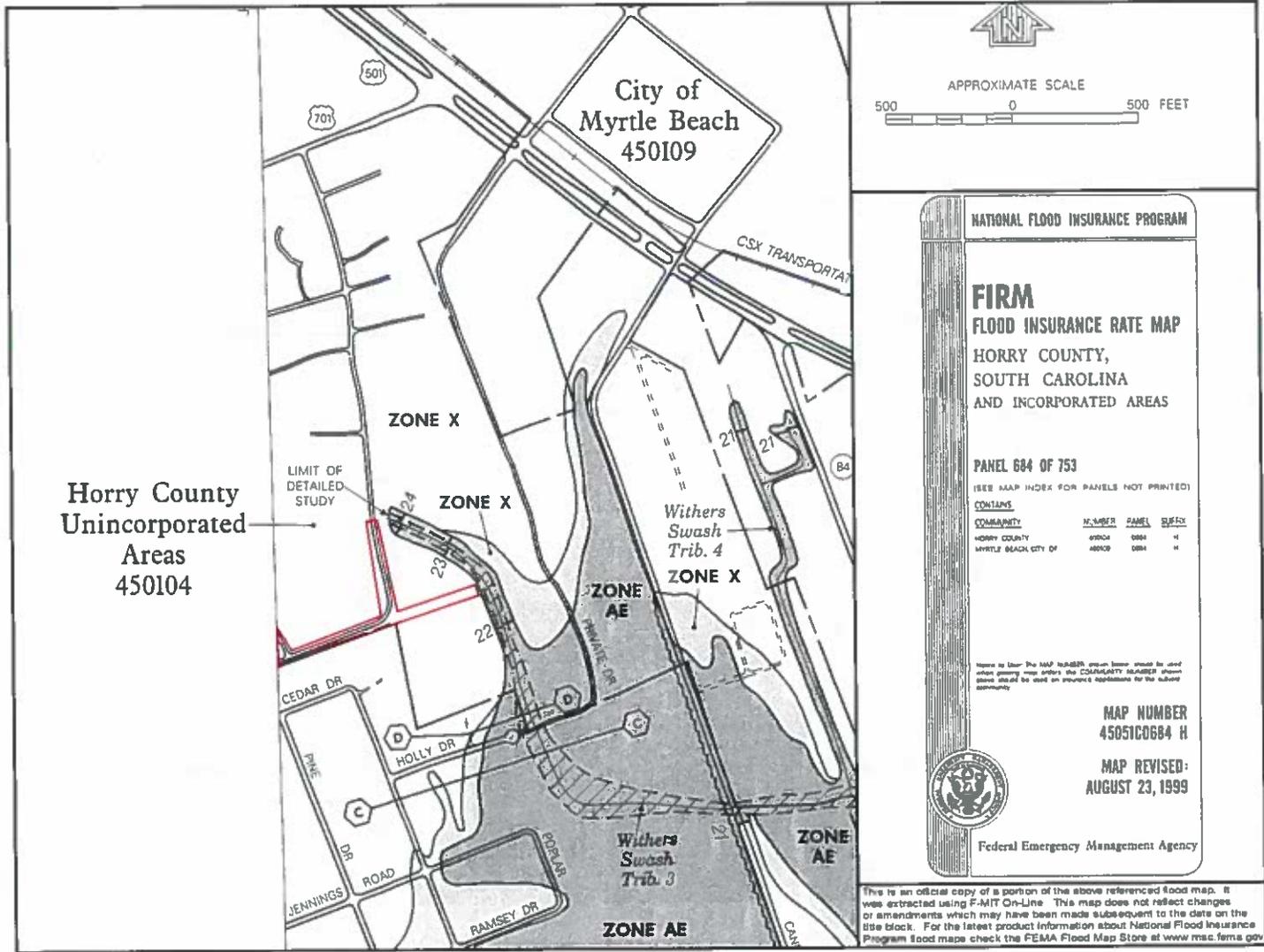
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. According to FEMA FIRM #45051C0683H and 45051C0684H, dated August 23, 1999, the site and proposed development are located in Zone X and not in a floodplain. See FEMA FIRM. (Appendix C)

Sources:

- FEMA Flood Map Service Center: <http://msc.fema.gov/portal>.
- Horry County GIS: <https://www.horrycounty.org/gis/parcels/>.



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP
HORRY COUNTY,
SOUTH CAROLINA
AND INCORPORATED AREAS**

PANEL 684 OF 753
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS

COMMUNITY	NUMBER	PANEL	SHEET
HORRY COUNTY	450104	0884	11
MYRTLE BEACH CITY OF	450109	0884	11

Users of User: The MAP NUMBER shown herein should be used when ordering maps under the COMMUNITY NUMBER shown above should be used in purchase applications for the subject community.

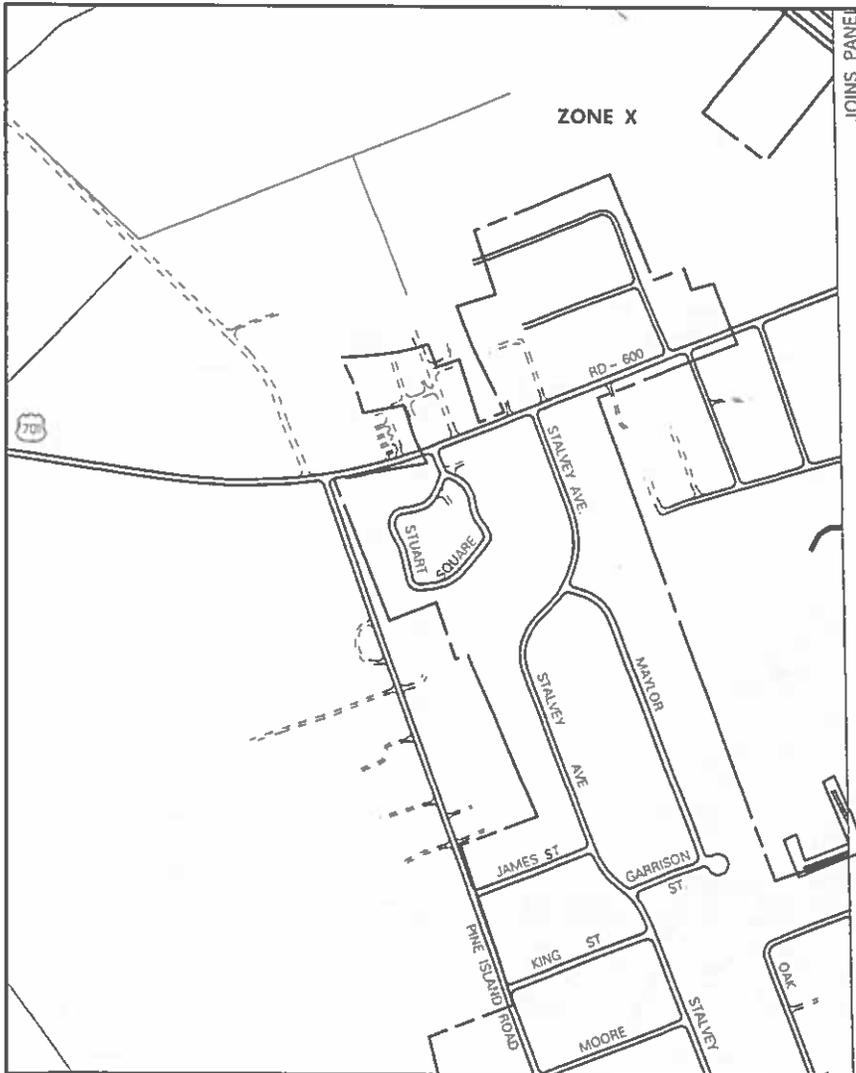
**MAP NUMBER
4501040884 H**

**MAP REVISED:
AUGUST 23, 1999**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
HORRY COUNTY,
SOUTH CAROLINA
AND INCORPORATED AREAS

PANEL 683 OF 753

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS

COMMUNITY	NAME	PANEL	SHEET
HORRY COUNTY	68303	683	11
MYRTLE BEACH CITY OF	68309	683	11

NOTE TO USER: The MAP NUMBER should always be used when filing rate sheets. The COMMUNITY NUMBER should always be used in insurance quotations for the subject community.

MAP NUMBER
45051C0683 N

MAP REVISED:
AUGUST 23, 1999



Federal Emergency Management Agency

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LEGEND

- Layers
- Unimproved Access Highways
- Highways
- Roads
- Use of Zones
- Zip codes
- Hydrography
- Address
- Retired Parcels
- Parcels
- Parcel Line Dimensions
- Building Footprints
- Census Tracts
- Census Block Outlets
- Zones
- Infrastructure
- Spillages
- County Easement
- Polling Places
- HEC District Watersheds
- Future Land Use





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Floodplain Management (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/floodplain-management>

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD’s floodplain management regulations in Part 55?

Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(6) or (8), provide supporting documentation.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary.

No → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Does your project occur in a floodplain?

No → Continue to the Worksheet Summary below.

Yes

Select the applicable floodplain using the FEMA map or the best available information:

Floodway → Continue to Question 3, Floodways

Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas

500-year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains

100-year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

3. **Floodways**

Is this a functionally dependent use?

Yes

The 8-Step Process is required. Work with HUD or the RE to assist with the 8-Step Process.

→ Continue to Worksheet Summary.

No → *Federal assistance may not be used at this location unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

4. **Coastal High Hazard Area**

Is this a critical action such as a hospital, nursing home, fire station, or police station?

Yes → *Critical actions are prohibited in coastal high hazard areas unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

No

Does this action include new construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

Yes, there is new construction of something that is not a functionally dependent use. New construction must be designed to FEMA standards for V Zones at 44 CFR 60.3(e) (24 CFR 55.1(c)(3)(i)).

→ *Continue to Question 6, 8-Step Process*

No, this action concerns only existing construction.

Existing construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

5. **500-year Floodplain**

Is this a critical action?

No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 6, 8-Step Process*

6. **8-Step Process.**

Is this 8-Step Process required? Select one of the following options:

8-Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

5-Step Process is applicable per 55.12(a)(1-3).

Provide the applicable citation at 24 CFR 55.12(a) here.

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. Continue to Worksheet Summary.*

8-Step Process is inapplicable per 55.12(b)(1-4).

Provide the applicable citation at 24 CFR 55.12(b) here.

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

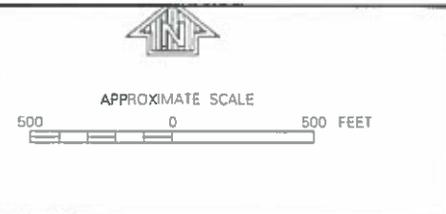
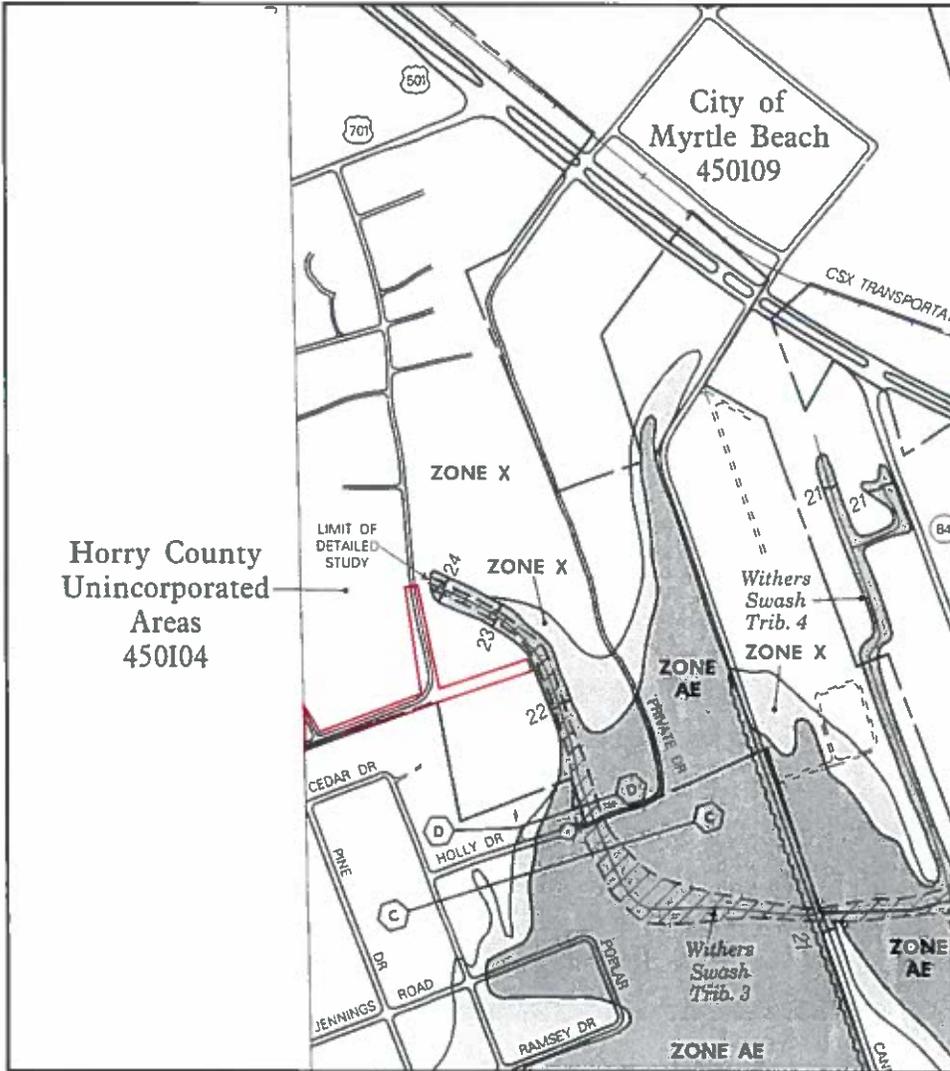
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. According to FEMA FIRM #45051C0683H and 45051C0684H, dated August 23, 1999, the site and proposed development are located in Zone X and not in a floodplain. See FEMA FIRM. (Appendix C)

Sources:

- FEMA Flood Map Service Center: <http://msc.fema.gov/portal/>.
- Horry County GIS: <https://www.horrycounty.org/gis/parcels/>.



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP
HORRY COUNTY,
SOUTH CAROLINA
AND INCORPORATED AREAS**

PANEL 684 OF 753
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
HORRY COUNTY	450104	0884	H
MYRTLE BEACH CITY OF	450109	0884	H

Users of this Map Number should refer to the original source for the most current information. This map should be used in accordance with the National Flood Insurance Program Flood Map Store at www.maf.fema.gov

**MAP NUMBER
4501040884 H**
**MAP REVISED:
AUGUST 23, 1999**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.maf.fema.gov

horrycounty.org

LEGEND

- Parcels
- Level of Access Highways
- Highways
- Roads
- Forest Zones
- Zip codes
- Hydrography
- Addresses
- Retired Parcels
- Parcels
- Parcel Numbers
- Parcel and Dimensions
- Building Footprints
- County Districts
- County Overlays
- Zoning
- Municipalities
- Service
- County Boundary
- Polling Places
- HUC/D Watersheds
- Future Land Use

State of North Carolina DOT, Esri, HERE, Garmin, INCREMENT P, NOAA, USGS



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Air Quality (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/air-quality>

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

Yes → Continue to Question 2.

No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.

2. Is your project’s air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

No, project’s county or air quality management district is in attainment status for all criteria pollutants

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, project’s management district or county is in non-attainment or maintenance status for one or more criteria pollutants. → Continue to Question 3.

3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

- Yes, the project exceeds *de minimis* emissions levels or screening levels.
→ Continue to Question 4. Explain how you determined that the project would not exceed *de minimis* or threshold emissions in the Worksheet Summary.

4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

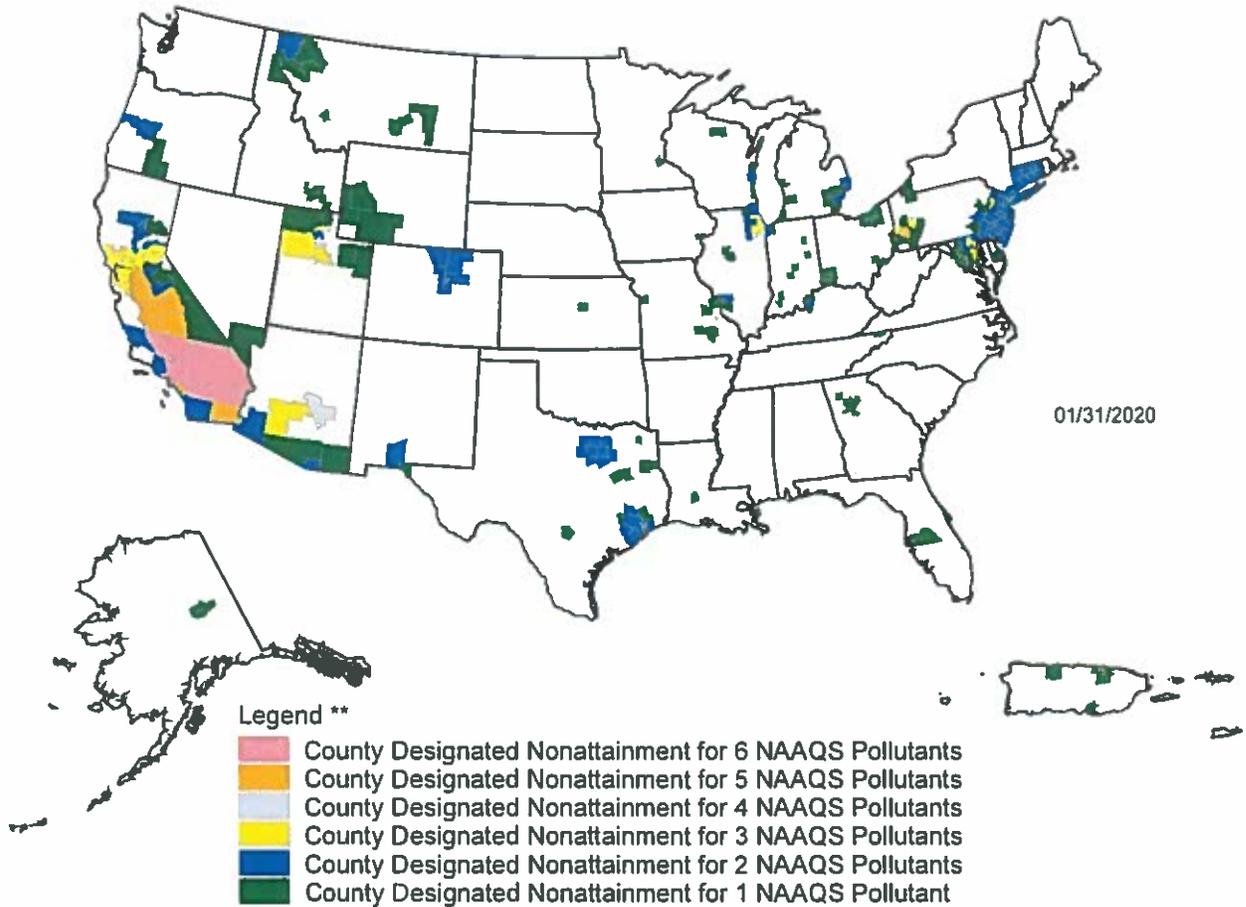
No Effect. County is currently in attainment with Clean Air Act's NAAQ Standards. See attached Air Quality Map. (Appendix D)

Sources:

- United States EPA – Air Quality: <https://www.epa.gov/green-book>.
- United States Environmental Protection Agency – Air Quality: <https://www3.epa.gov/airquality/greenbook/map/mapnpoll.pdf>.

Counties Designated "Nonattainment"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *



Guam - Piti and Tanguisson power stations are designated nonattainment for the SO₂ (1971) NAAQS
Piti and Cabras power stations are designated nonattainment for the SO₂ (2010) NAAQS

* The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

** Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Coastal Zone Management Act (CEST and EA) – PARTNER

<https://www.onecpd.info/environmental-review/coastal-zone-management>

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
Amer. Samoa	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	N. Mariana Islands	South Carolina	

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

- Yes → Continue to Question 2.
- No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

2. Does this project include activities that are subject to state review?

- Yes → Continue to Question 3.
- No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

3. Has this project been determined to be consistent with the State Coastal Management Program?

- Yes, with mitigation. → The RE/HUD must work with the State Coastal Management Program to develop mitigation measures to mitigate the impact or effect of the project.
- Yes, without mitigation. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.
- No → Project cannot proceed at this location.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates

- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project is located in one of the eight coastal counties. However, project is consistent with SCDHEC-OCRM and SCCZMP. See attached submittals (Feb. 7, 2020) and SCDHEC-OCRM letter (Feb. 24, 2020). (Appendix E)

Sources:

- SCDHEC-OCRM:
<http://www.scdhec.gov/HomeAndEnvironment/Water/CoastalManagement/>
- NOAA: <https://coast.noaa.gov/czm/mystate/#southcarolina>.
- SCDHEC-OCRM Letter (Feb. 24, 2020) from Daniel Burger.



February 24, 2020

Chris Daves
S&ME INC
134 Suber Road
Columbia, South Carolina 29210

Re: Racepath Street Phase II HUD; Horry County, SC; HNX-F6JT-DZ10C

Dear Mr. Daves:

This letter is in response to the recent federal Funding Assistance request submitted to the U.S. Department of Housing and Urban Development (US HUD) for Community Development Block Grant funding assistance to perform street, water and sewer improvements along Racepath Street and construct a new roadway connecting Racepath Street to ABC Drive. The review is submitted in accordance with US HUD requirements and is also subject to the Federal Coastal Zone Management Act as a Federal Consistency Funding Assistance. The request was received on February 11, 2020.

After reviewing the Consistency Determination and associated documents, the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management (SCDHEC OCRM) concurs pursuant to that the proposed activities do not have coastal effects and comply with the enforceable policies contained within the S. C. Coastal Zone Management Program (SCCZMP) pursuant to 15 C.F.R. § 930 Subpart F.

This determination shall serve as the DHEC OCRM Federal Coastal Zone Consistency Determination for the work described above. This determination **does not** serve as the final permitting decision and **does not** alleviate the applicant's responsibility to obtain final authorizing State or Federal permit(s). Local government authorizations **may also** be required.

Sincerely,

Daniel J. Burger
SCDHEC OCRM
1362 McMillan Avenue, Suite 400
Charleston, SC 29405
8439530251
BURGERDJ@dhec.sc.gov

Chris Daves

From: Burger, Dan <burgerdj@dhec.sc.gov>
Sent: Monday, February 24, 2020 8:42 AM
To: Chris Daves
Subject: Racepath St. Phase II/ HNX-F6JT-DZ10C
Attachments: HNB-T30S-EAGT5 (Racepath)(CZC).pdf

Mr. Daves: Please see attached.

Thanks,
Dan

Chris Daves

From: ePermitting <ePermitting@dhec.sc.gov>
Sent: Tuesday, February 11, 2020 4:03 PM
To: Chris Daves
Subject: DHEC Online Services - Application/Service Request Receipt Acknowledgement - HNX-F6JT-DZ10C, Racepath Street Phase II HUD

SCDHEC ePermitting User,

This is to notify you that South Carolina DHEC has received your submission. Details of your submission are presented below:

Form Name: OCRM Federal Coastal Zone Consistency Certification Request
Submission Reference Number: HNX-F6JT-DZ10C
System Receipt Date: 02/11/2020 4:00PM

Facility, Site, or Project Name: Racepath Street Phase II HUD

Additional notifications will be sent when key events are recorded or when submission processing milestones are achieved.

You can access ePermitting using the link below if you need to modify your application.

<https://epermweb.dhec.sc.gov/ncore/>

This is an automated email sent by the ePermitting system

Thank you,



SC Department of Health and Environmental Control
Connect: www.scdhec.gov [Facebook](#) [Twitter](#)

PRIVACY NOTICE: The information contained in this message and all attachments transmitted with it may contain legally privileged and/or confidential information intended solely for the use of the individual or entity to whom it is addressed. Access to this information by any other individual is unauthorized and may be unlawful. If the reader of this message is not the intended recipient, you are hereby notified that any reading, dissemination, distribution, copying, or other use of this message or its attachments is strictly prohibited. If you have received this message in error, please notify the sender immediately and delete the information without retaining any copies. Thank you.



SOURCE: SCDHEC-OCRM



SCALE:	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	3-30-2020



COASTAL ZONE MANAGEMENT EXHIBIT
 RACEPATH STREET PHASE II
 MYRTLE BEACH, HORRY CO., SC

EXHIBIT NO.

PROJECT NO: 1463-19-014

LETTER OF TRANSMITTAL



S&ME, Inc., (S&ME)
134 Suber Road
Columbia, South Carolina 29210
803 / 561-9024
Fax 803 / 561-9177

DATE:	2/7/2020
Project#:	1463-19-014
RE:	Racepath Street Phase II
CDBG Funding - HUD Env. Review Request for Comments	

TO:

Ms. Holli Martin, Project Coordinator
South Carolina Department of Health and Environmental Control
Office of Ocean and Coastal Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

CERTIFIED MAIL

WE ARE SENDING YOU:

COPIES	DATE	NO.	DESCRIPTION
1	2/7/2020		Racepath Street Phase II Myrtle Beach, Horry County, SC

THESE ARE TRANSMITTED as checked below:

For your approval For your use As requested For review and comment

REMARKS:

Ms. Martin,

S&ME is currently seeking information necessary for the completion of a HUD Environmental Review for a project in Myrtle Beach, Horry County, SC. The proposed project will be seeking federal CDBG funding. The project was previously reviewed by your office in 2016 and 2018, with letters being issued under OCRM Project No. CZC-16-0885 and HNB-F6F7-Z2QE3. Additional areas have been added to the project area. Please accept this letter as a request for comments from the SCDHEC-OCRM Office.

Thank you for your continued technical assistance. Please contact me at (803) 561-9024 if you have questions concerning this project.

Thank you,
Chris Daves

COPY TO: SHPO/THPO (Catawba)

SIGNED: _____

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

This Letter of Transmittal and the documents accompanying this Letter of Transmittal contain information from S&ME, Inc., which is confidential and legally privileged. The information is intended only for the use of the individual or entity named on this Letter of Transmittal. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on these documents is strictly prohibited.



February 7, 2020

South Carolina Department of Health and Environmental Control
Office of Ocean and Coastal Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

Attention: Ms. Holli Martin, Project Coordinator – Coastal Zone Consistency-OCRM
martinhd@dhec.sc.gov

Reference: **Request for Comments**
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

Dear Ms. Martin:

On behalf of Horry County (recipient), S&ME, Inc. (S&ME) is currently seeking information necessary for the completion of a U.S. Department of Housing and Urban Development (HUD) Environmental Review. Please accept this letter as a request for comments from the South Carolina Department of Health and Environmental Control Office of Ocean and Coastal Resource Management (SCDHEC-OCRM) regarding the above-reference project located in Horry County, South Carolina.

◆ Previous SCDHEC-OCRM Consultations

Portions of this project were previously submitted to the SCDHEC-OCRM in July of 2016 and January of 2018. Your office issued a letter on July 25, 2016 under OCRM Project No. CZC-16-0885 (see attached) and a second letter on March 7, 2018 under OCRM Project No. HNB-F6F7-Z2QE3 indicating the funding assistance request for the proposed project was consistent with OCRM guidelines and no issues were cited.

◆ Project Description

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina and is comprised of approximately 1.69 acres. Phase II of construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive, measuring approximately 300 linear feet.



The planned street, water, and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), utility relocation (hydrants, etc.), roadside landscaping, and street lighting improvements. The proposed improvements will occur inside the existing ROW, except where new roadway construction will connect Racepath Street and ABC Drive. Racepath Street located within a Low-to-Moderate Income (LMI) neighborhood. The objectives of the project include:

- Improvement of drainage/flooding issues.
- Provide a better quality of life by creating a more suitable living environment.
- Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

The location of the proposed project area is shown on **Exhibits 1-3** attached to this letter report.

The address of the funding applicant is as follows:

CD8G Funds are being applied for by Horry County:

Horry County Community Development Office
1515 Fourth Avenue
Conway, South Carolina 29526
843-915-7033

◆ **Wetlands**

The project area was assessed for wetlands by a Professional Wetland Scientist (Chris Daves, P.W.S. #1620) on January 22, 2020. Three non-jurisdictional ditches were observed. No wetlands were observed during the site visit. These findings are being coordinated with the U.S. Army Corps of Engineers (USACE) for concurrence.

A portion of the current site was previously delineated by S&ME in July of 2016 and December 12, 2017. The USACE provided a Jurisdictional Determination (JD) letter, under SAC No. 2016-01233, dated September 29, 2016 and a second JD letter, dated February 28, 2018 under SAC No. 2018-00201 (see attached). The letters indicated no wetlands or other jurisdictional waters of the U.S. (JWOUS) were present on the site.

◆ **Review of Coastal Zone Management Plan**

We have reviewed the Coastal Zone Management Plan and found the project to be consistent with the requirements, objectives, policies, and standards of the Plan. The project will not impact wetlands, streams, protected species, cultural/archaeological sites, or other Geographic Areas of Particular Concern (GPAC) listed in the Plan. Stormwater management plans or Sediment and Erosion Control plans will be submitted to the appropriate agencies at a later date, if necessary.



◆ Enclosures

Included in the Appendix, please find the following information for your review:

Appendix

- ◆ Vicinity Exhibit (Exhibit 1)
- ◆ Topographic Exhibit (Exhibit 2)
- ◆ Aerial Exhibit (Exhibit 3)
- ◆ Site Plan
- ◆ SCDHEC-OCRM Letter, dated July 25, 2016 (CZC-16-0885)
- ◆ SCDHEC-OCRM Letter, dated March 7, 2018 (HN8-F6F7-Z2QE3)
- ◆ JD Letter, dated September 29, 2016 (SAC-2016-01233)
- ◆ JD Letter, dated February 28, 2018 (SAC No. 2018-00201)
- ◆ Site Photographs

◆ Closing

Thank you for your assistance in this project. We look forward to receiving the OCRM comments. If you have questions regarding this submittal, please contact Chris Daves at 803-561-9024.

Sincerely,

S&ME

A handwritten signature in cursive script that reads "Chris Handley".

Chris Handley
Biologist
chandley@smeinc.com

A handwritten signature in cursive script that reads "Chris Daves".

Chris Daves, P.W.S.
Biologist
cdaves@smeinc.com

Enclosures

Vicinity Exhibit (Exhibit 1)

Topographic Exhibit (Exhibit 2)

Aerial Exhibit (Exhibit 3)

Site Plan

SCDHEC-OCRM Letter, dated July 25, 2016 (CZC-16-0885)

SCDHEC-OCRM Letter, dated March 7, 2018 (HNB-F6F7-Z2QE3)

JD Letter, dated September 29, 2016 (SAC-2016-01233)

JD Letter, dated February 28, 2018 (SAC-2018-2018-00201)

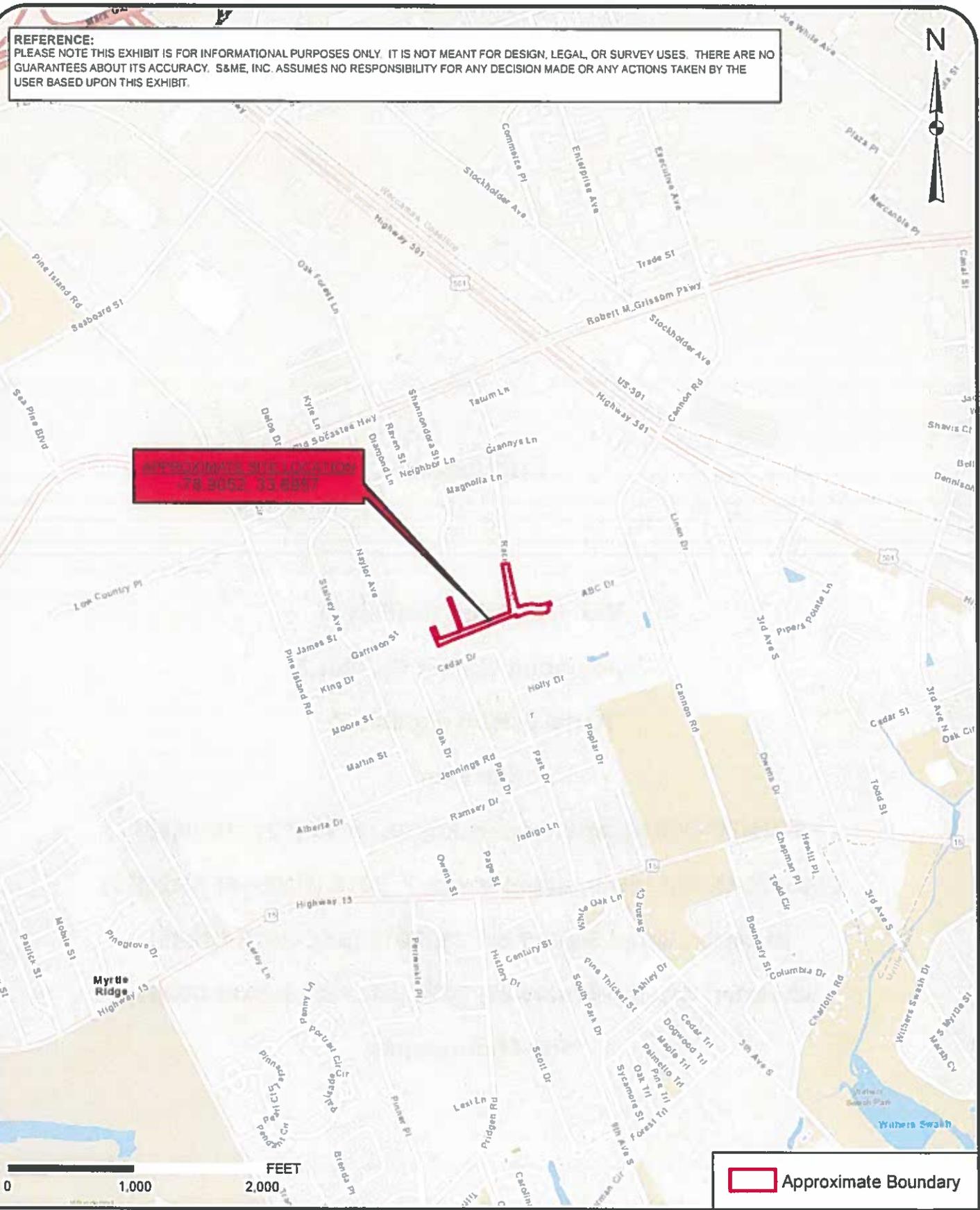
Site Photographs

Drawing Path: T:\Projects\2019\ENR\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxds\Racepath Road Phase II Vicinity Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
 78 9052 33 8857



 Approximate Boundary		EXHIBIT NO
SCALE:	1" = 1,000'	1
DATE:	1-20-20	
PROJECT NUMBER	1463-19-014	



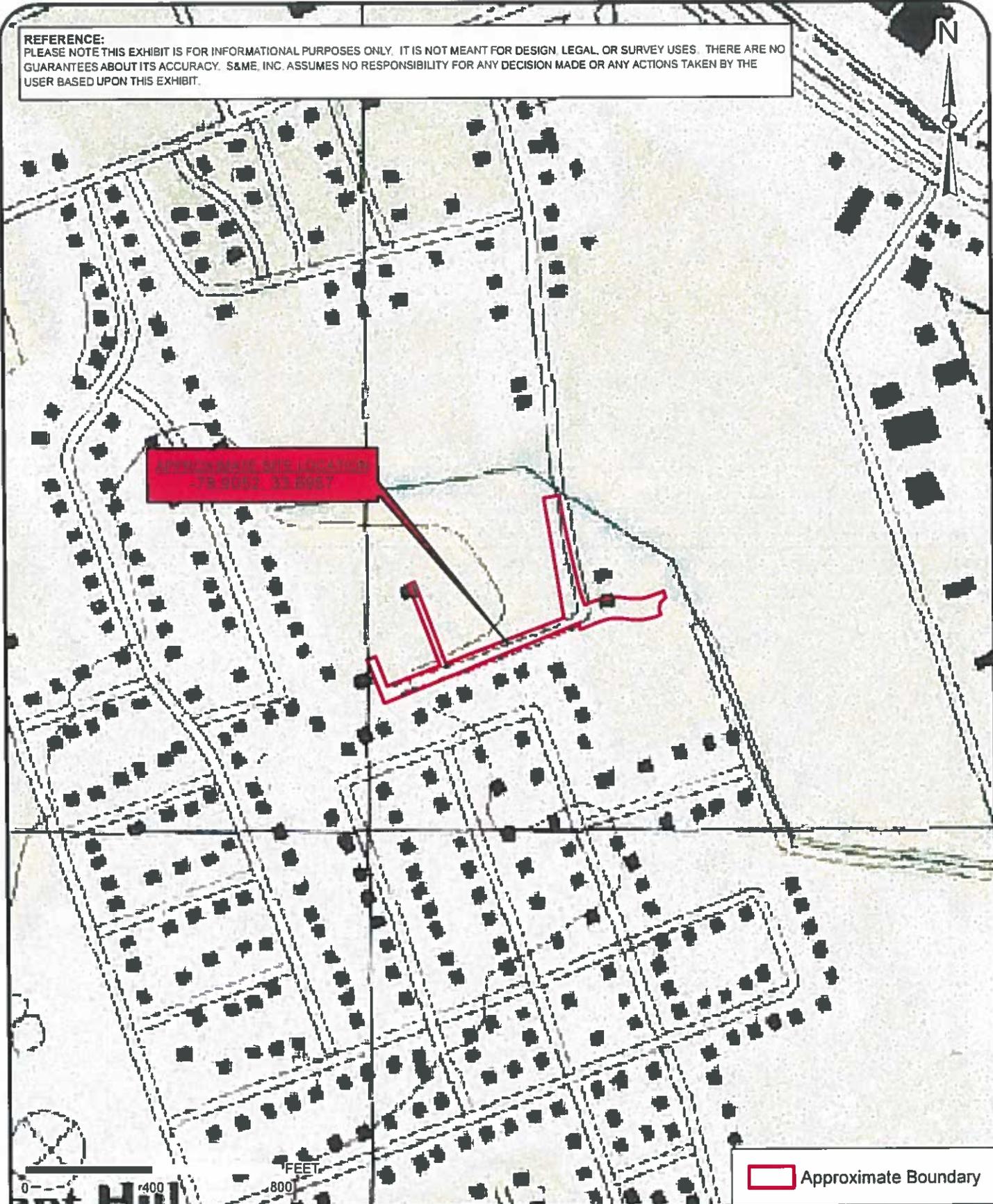
Vicinity Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Street Map

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



 Approximate Boundary



Topographic Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: USGS 7.5-Minute Topo Quad Myrtle Beach, SC 1984

SCALE:
1" = 400'

DATE:
1-20-20

PROJECT NUMBER
1463-19-014

EXHIBIT NO.

2

Drawing Path: T:\Projects\2019\ENR\Other Jobs\1463\Myrtle Beach\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Topographic Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:

PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
+78 6052 33 0007



 Approximate Boundary



Aerial Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Imagery 2018

SCALE:
1" = 200'

DATE:
1-20-20

PROJECT NUMBER
1463-19-014

EXHIBIT NO.

3

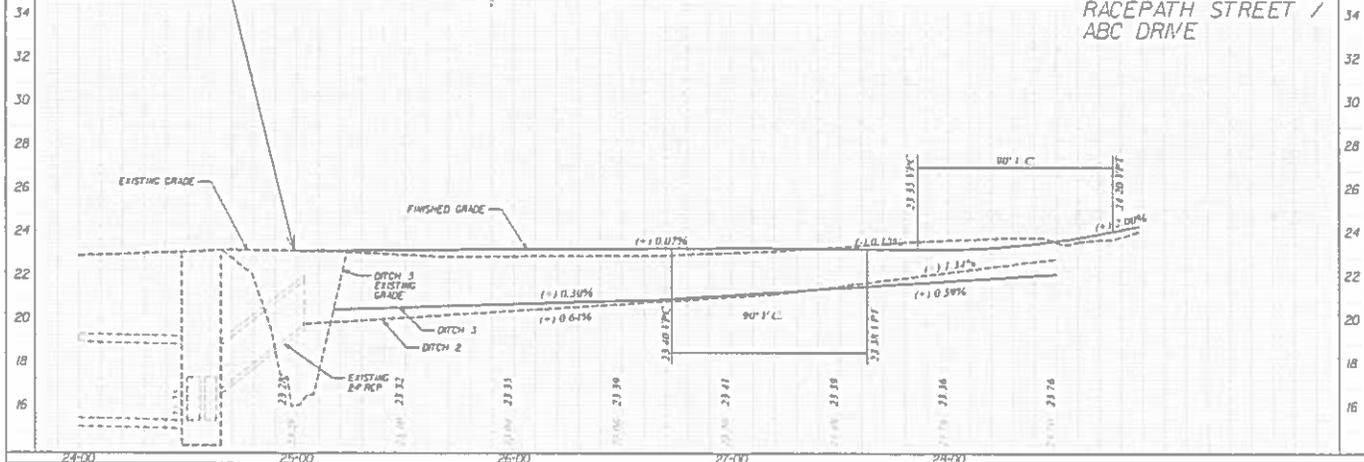
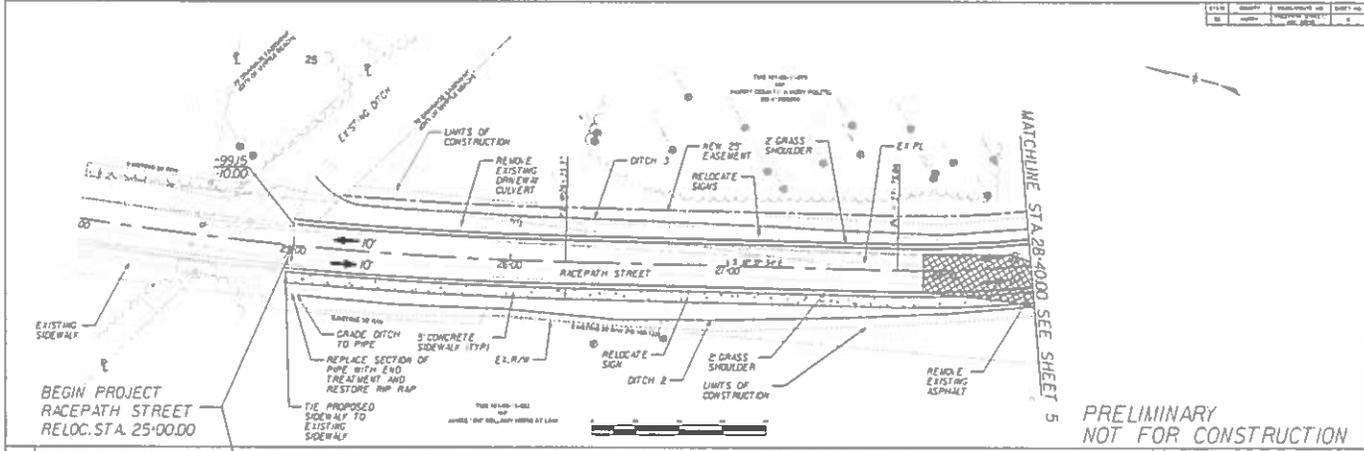
DATE	DESCRIPTION	BY
10/20/11	ISSUED FOR PERMIT	MEAD & LUNT
10/20/11	REVISED	MEAD & LUNT

Mead & Lunt
 ENGINEERS, ARCHITECTS, PLANNERS
 1000 W. HARRIS STREET, SUITE 100
 HARRISVILLE, NC 28731
 PHONE: 828.338.1111
 FAX: 828.338.1112
 WWW.MEADANDLUNT.COM

RACEPATH STREET / ABC DRIVE
 Horry County, South Carolina
 PLAN AND PROFILE SHEET



NO.	DATE	DESCRIPTION
1	10/20/11	ISSUED FOR PERMIT
2	10/20/11	REVISED



PRELIMINARY
 NOT FOR CONSTRUCTION
 RACEPATH STREET /
 ABC DRIVE

BEGIN PROJECT
 RACEPATH STREET
 RELOC. STA. 25+00.00

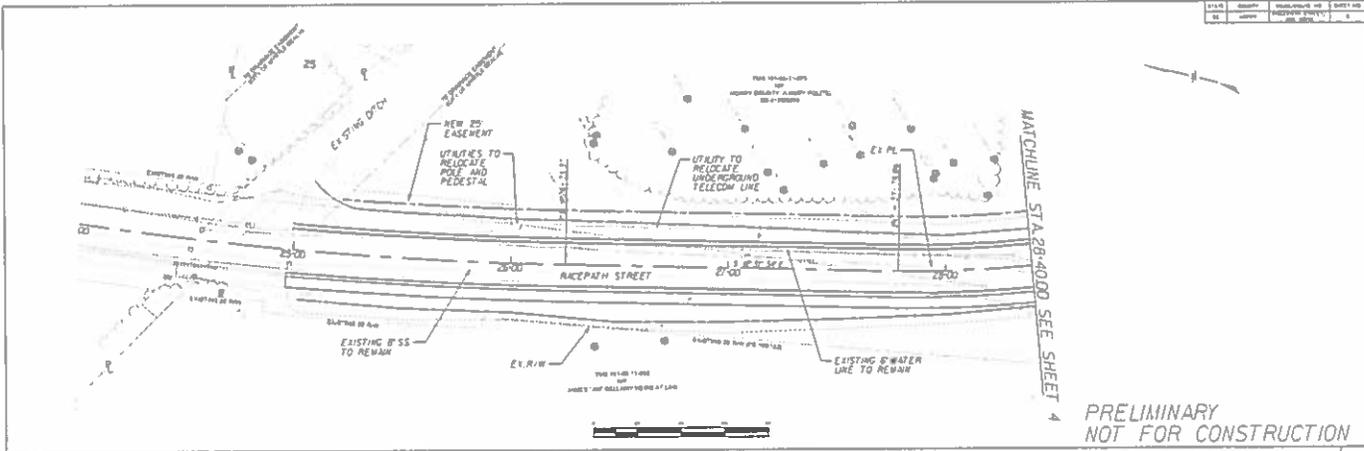
MATCHLINE STA. 28+40.00 SEE SHEET 5

DATE	DESIGN	SCALE	SHEET NO.
08/20/14	PLAN	AS SHOWN	1

Mead & Hunt
 ENGINEERS
 1000 W. 10th St., Suite 100
 Columbia, SC 29201
 (803) 799-1100
 www.mehunt.com

PROJECT NO.	DATE
14-0000	08/20/14

RACEPATH STREET / ABC DRIVE
 HORRY COUNTY, SOUTH CAROLINA
 PLAN AND PROFILE SHEET



PRELIMINARY
 NOT FOR CONSTRUCTION

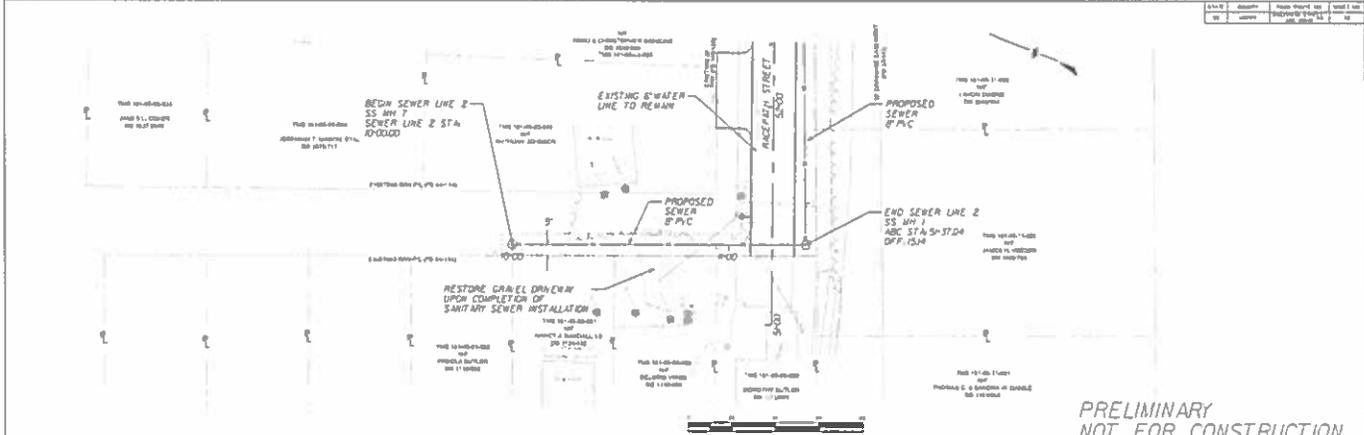


NO.	REVISION
1	ISSUED FOR PERMITS

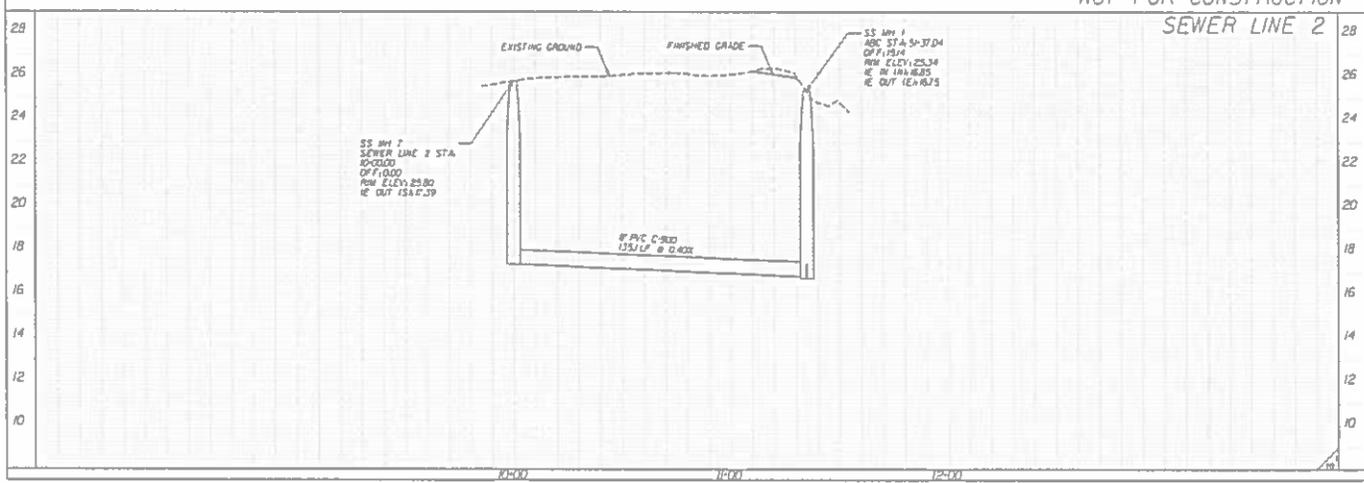
DATE	DESCRIPTION	DESIGNER	CHECKED
10/15/14	ISSUE FOR PERMITS	J. HUNT	J. HUNT

Mead & Hunt
 ENGINEERS & ARCHITECTS
 1000 W. 10th Street, Suite 100
 Myrtle Beach, SC 29577
 Phone: 843.661.1111
 Fax: 843.661.1112
 www.meadandhunt.com

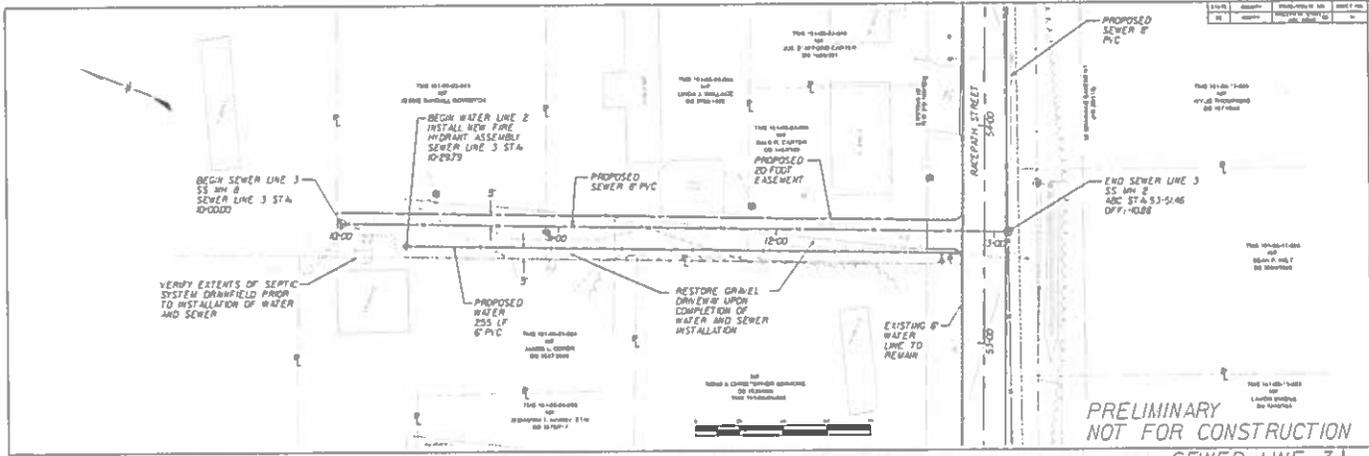
RACEPATH STREET / ABC DRIVE
 Horry County, South Carolina
 PLAN AND PROFILE SHEET



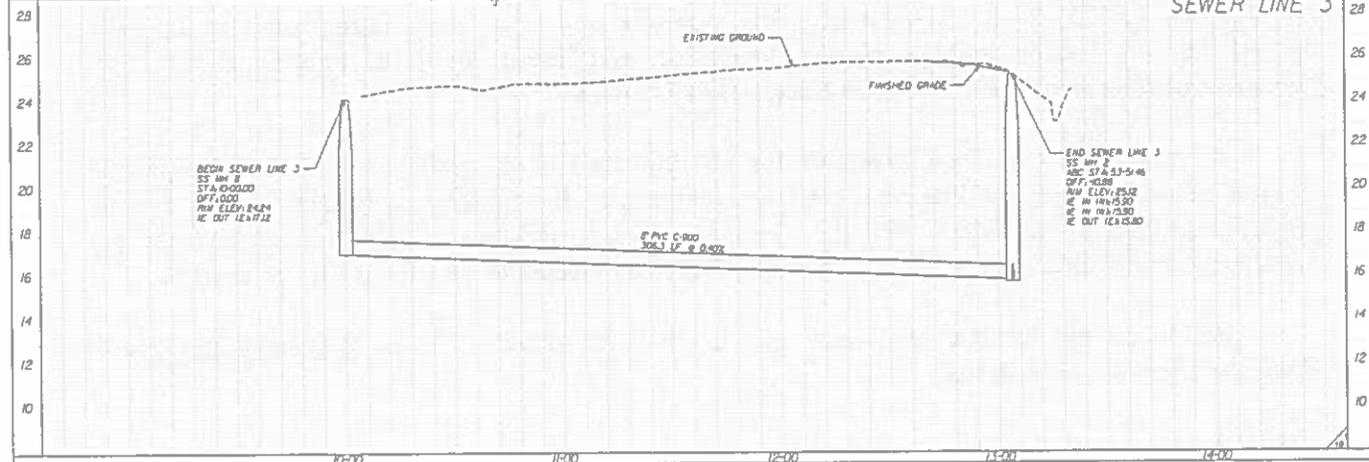
PRELIMINARY
 NOT FOR CONSTRUCTION



SHEET 10



PRELIMINARY
NOT FOR CONSTRUCTION



Mead & Hunt
 1000 W. 10th Street, Suite 100
 Horry County, South Carolina 29501
 Phone: 843.686.1100
 Fax: 843.686.1101
 www.meadandhunt.com

RACEPATH STREET / ABC DRIVE
 HORRY COUNTY, SOUTH CAROLINA
 PLAN AND PROFILE SHEET

PROJECT NO. 15-0000
 SHEET NO. 11

DATE: 08/14/15

DESIGNED BY: J. L. LITTLE
 CHECKED BY: J. L. LITTLE
 IN CHARGE: J. L. LITTLE



Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

July 25, 2016

S&ME

Attn: Mr. Chris Handley
134 Suber Road
Columbia, SC 29210

Re: Racepath Street Roadway & Drainage Improvements Project
Horry County
CZC-16-0885

Dear Mr. Handley,

This Coastal Zone Consistency Funding Assistance Certification is in response to the S&ME CZC Certification request for Funding Assistance dated July 7, 2016, submitted to and received by the South Carolina Department of Health and Environmental Control Office of Ocean and Coastal Resource Management (SCDHEC OCRM) on July 13, 2016. SCDHEC OCRM's review began on July 25, 2016

The proposed funding assistance request is being made for U.S. Housing and Urban Development (HUD) funds to construct a new sidewalk, re-surface the existing roadway, upgrade the existing stormwater drainage system, landscape, and install additional lighting along 2,500 linear feet of Racepath Street in Myrtle Beach, Horry County.

After a review of the Guidelines for all Projects and the policies of the South Carolina Coastal Zone Management Program, staff has determined the funding assistance request for the proposed project is consistent with the Guidelines for Evaluation of All Projects and the (1) Transportation Facilities (*Roads and Highways*) Policies pursuant to 15 CFR § 930, Subpart F.

Please do not hesitate to contact me at either (843) 953-0702 or koczerc@dhec.sc.gov should you have any questions.

Sincerely,

Christine Koczera
Project Manager, Coastal Zone Consistency Section
DHEC OCRM
1362 McMillan Avenue, Suite 400
Charleston, S. C. 29405



March 7, 2018

S&ME

Attn: Mr. Chris Handley
134 Suber Road
Columbia, SC 29210

Re: Racepath Street Roadway & Drainage Improvements Project Modification
Horry County
HNB-F6F7-Z2QE3

Dear Mr. Handley:

This letter is in response to a recent Federal Funding Assistance request submitted by Horry County Community Development for the U.S. Department of Housing and Urban Development (HUD) Community Block Development Grant funding to construct a new sidewalk, re-surface the existing roadway, upgrade the existing stormwater drainage system, landscape, and install additional lighting along 2,500 linear feet of Racepath Street in Myrtle Beach, Horry County. The review is submitted in accordance with HUD requirements and is also subject to the Federal Coastal Zone Management Act as a Federal Consistency Funding Assistance Review with South Carolina's Coastal Zone Management Program (SCCZMP).

After reviewing the Consistency Determination and associated project documents, the South Carolina Department of Health and Environmental Control (SCDHEC) concurs that the proposed activities do not have coastal effects and comply with the enforceable policies contained within the S.C. Coastal Zone Management Program pursuant to 15 C.F.R. § 930 Subpart F. This concurrence is based upon review of the *Guidelines for Evaluation of All Projects* as well as the SCCZMP's.

This letter does not alleviate the applicant's responsibility to obtain other required local, state or federal approvals for the work described above. Please contact me should you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "David J. Thompson".

David J. Thompson
Coastal Zone Consistency Project Manager
SCDHEC- Ocean and Coastal Resource Management
1362 McMillan Avenue, Suite 400
Charleston, SC 29405
(843) 953-0219
thompsdj@dhec.sc.gov

cc: Curtis Joyner, SCDHEC



DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
1949 INDUSTRIAL PARK ROAD, ROOM 140
CONWAY, SOUTH CAROLINA

SEP 29 2016

Regulatory Division

Horry County Community Development
c/o Mr. Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, South Carolina 29210

Dear Mr. Daves:

This letter is in response to your request for an Approved Jurisdictional Determination (SAC-2016-01233) received in our office on **August 10, 2016**, for a 2 -acre site located within the existing road right-of-way of Racepath Street, in Myrtle Beach, Horry County, South Carolina (Latitude: 33.6980 °N, Longitude: -78.9056 °W). The site in question is depicted on the submitted sketch entitled " **SAC # 2016-01233 Raceway Path / Kyle Berry and Andrew Markunas / Horry County, SC** " and dated **July 7, 2016**.

Based on a review of aerial photography, topographic maps, National Wetlands Inventory maps, soil survey information, and Wetland Determination Data Form(s), it has been determined that the referenced property does not contain any wetlands and/or other waters of the United States and, as such, Department of the Army authorization will not be required for mechanized land clearing, excavation, or the placement of dredged or fill material on this site.

Please be advised that this determination is valid for five (5) years from the date of this letter unless new information warrants revision before the expiration date. This Approved Jurisdictional Determination is an appealable action under the Corps of Engineers administrative appeal procedures defined at 33 CFR 331. The administrative appeal options, process and appeals request form is attached for your convenience and use.

This delineation/determination has been conducted to identify the limits of Corps of Engineers Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

Your cooperation in the protection and preservation of our navigable waters and natural resources is appreciated. In all future correspondence concerning this matter, please refer to file number SAC-2016-01233. A copy of this letter is being forwarded to certain State and/or

Federal agencies for their information. If you have any questions concerning this matter, please contact Megan N. Jackson, Project Manager, at 843-365-1739.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Huff', written over a diagonal line.

Rob Huff
Watershed Manager

Enclosures:
Approved Jurisdictional Determination Form
Notification of Appeal Options

Copies Furnished:

Courtney Kain
Horry County Community Development
1515 Suber Road
Columbia, South Carolina 29210

Mr. Blair Williams
South Carolina Department of Health
and Environmental Control
Office of Ocean and Coastal
Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): **SEP 29 2016**

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JD Form 1 of 1: SAC 2016-01233; Raceway Path

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: **Horry** City: **Myrtle Beach**
Center coordinates of site (lat/long in degree decimal format): **Lat. 33.7010° N, Long. -78.9050° W**
Universal Transverse Mercator:

Name of nearest waterbody: **Atlantic Ocean**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **This project was determined to be void of any aquatic resources**

Name of watershed or Hydrologic Unit Code (HUC): **Coastal SC Drainage : HUC0304020803**

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: **September 16, 2016**

Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List, Pick List, Pick List**

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **USGS Topographic map depicts a solid blue line feature which typically represents a tributary with the flow regime of perennial. However, based on the review of the agent's provided site photos this feature was determined to**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months)

³ Supporting documentation is presented in Section III F

nothing more than a stormwater ditch that conveys water after rainfall events. The submitted photos depict a man-made defined excavated channel with no water within the bed and banks. This feature has been determined to be an upland excavated ditch that drains only uplands and therefore not a tributary. .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: _____

Summarize rationale supporting determination: _____

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": _____

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: Pick List ;

Drainage area: Pick List

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through Pick List tributaries before entering TNW.

Project waters are Pick List river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are Pick List aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: _____

Identify flow route to TNW⁵: _____

Tributary stream order, if known: _____

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**.

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film, water quality, general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface, water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
			

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. RPWs that flow directly or indirectly into TNWs.
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.⁹**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see F. below).

Explain: .

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain: .
 Other factors. Explain: .

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): **Upland excavated ditch located within the project area that has been determined to drain only uplands.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **The project area is depicted on a sketch submitted by the agent titled "SAC 2016-01223 Raceway Path / Kyle Berry and Andrew Markunas / Horry County, SC" dated 7/7/2016.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **Myrtle Beach Quad; Topographic map shows an existing roadway in an urban developed area bisected by solid blue feature. Based on aerial photographs and site photos submitted by the agent this feature was determined to be a non jurisdictional ditch.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **Horry County Soil Survey sheet 83; The Horry County Soil Survey information depicts the project area as being comprised of the following soil types: Meggett Loam, Wahee Fine Sandy Loam, Yemassee Loamy Fine Sand, and Echaw Sand. Meggett Loam is a 100% hydric soil.. Echaw sand, Wahee Finde Sadny Loam and Yemassee Loamy Fine Sand soils are all non-hydric soils that contain 2% Hydric inclusions .**
- National wetlands inventory map(s). Cite name: **U11; The NWI depicts this project area as being comprised entirely of residential uplands.**
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **Horry County aerial index 99:11222:179, SC DNR 2006; Aerial photographs submitted by agent depicts the solid blue feature to be a non jurisdictional ditch .**
 - or Other (Name & Date): **Site photo submitted by agent dated 07/01/20016.**
- Previous determination(s). File no. and date of response letter:

- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): **Horry County LiDAR**

B. ADDITIONAL COMMENTS TO SUPPORT JD: The project area addressed in this form contains approximately 2 acres located southwest of the intersection of U.S Highway 501 and U.S Highway 17 in Myrtle Beach, Horry County, South Carolina. The project area is located within the right of way of an existing roadway which was determined to consist entirely of uplands. Aerial photographs depict the project area as being within the right of way of established roadways in a residential area. The USGS topographic survey information located within the Myrtle Beach quad shows an existing roadway in an urban developed area bisected by a solid blue feature. Based on aerial photographs and site photos submitted by the agent this feature was determined to be a non jurisdictional ditch. The NWI depicts this project area as containing residential areas. Due to the consistency in the depiction of uplands throughout the USGS topographic information, NWI maps, and aerial photographs, the project was determined to be void of any aquatic resources .

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.
THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY
ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



Property Corner Coordinates

1	33.8932	-78.0048
2	33.8932	-78.0048
3	33.8946	-78.0047
4	33.8951	-78.0049
5	33.8962	-78.0048
6	33.8976	-78.0048
7	33.8983	-78.0048
8	33.8987	-78.0048
9	33.8995	-78.0048
10	33.7988	-78.0051
11	33.7989	-78.0050
12	33.7919	-78.0054
13	33.7888	-78.0050
14	33.8006	-78.0049
15	33.8006	-78.0049
16	33.8063	-78.0048
17	33.8069	-78.0048
18	33.8062	-78.0048
19	33.8066	-78.0048
20	33.8099	-78.0048

SCALE: 1 inch = 200 feet
 DATE: 7/7/2016
 DRAWN BY: CCH
 PROJECT NO: 1463-16-031



SAC # 2016-01233 Raceway Path
 Kyle Berry and Andrew Markunas
 Horry County, SC

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Horry County Community Development	File Number: SAC-2016-01233	Date: SEP 29 2016
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

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

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer, South Atlantic Division, 60 Forsyth St, SW, Atlanta, GA 30308-8801. This form must be received by the Division Engineer within 60 days of the date of this notice.

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

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

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

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

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact the Corps biologist who signed the letter to which this notification is attached. The name and telephone number of this person is given at the end of the letter.

If you only have questions regarding the appeal process you may also contact the Coordinator for Appeals in our South Atlantic Division Office in Atlanta, Georgia at (404) 562-5136.

Jason W. Steele
60 Forsyth St, SW
Atlanta, GA 30308-8801

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

Signature of appellant or agent.	Date:	Telephone number:
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DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
1949 INDUSTRIAL PARK ROAD, ROOM 140
CONWAY, SOUTH CAROLINA 29526

FEB 28 2018

Regulatory Division

Horry County Community Development
c/o Mr. Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, South Carolina 29210

Dear Mr. Daves:

This letter is in response to your request for an Approved Jurisdictional Determination (AJD) (SAC-2018-00201) received in our office on February 9, 2018, for a 4.20-acre site located primarily within a 70' drainage easement along Race Path Street, in Myrtle Beach, Horry County, South Carolina (Latitude: 33.6972°N, Longitude: -78.9049°W). The site in question is shown on the provided map entitled "Aerial Exhibit / Racepath Street Roadway and Drainage Improvements Project +/- 4.20 Acres" and dated February 5, 2018 prepared by S&ME, Inc. An AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344).

Based on a review of aerial photography, topographic maps, National Wetlands Inventory maps, and soil survey information, and Wetland Determination Data Form(s), previous Jurisdictional Determination SAC- 2016-01233, this office has determined that the referenced site, as shown on the referenced map, does not contain any aquatic resources that are subject to regulatory jurisdiction under Section 404 of the CWA or Section 10 of the RHA and, as such, Department of the Army (DA) authorization will not be required for mechanized land clearing, excavation, or the placement of dredged or fill material on this site.

Enclosed is a form describing the basis of jurisdiction for the area(s) in question. It should also be noted that some or all of these areas may be regulated by other state or local government entities. Specifically, you are encouraged to contact the South Carolina Department of Health and Environmental Control, Bureau of Water or the Department of Ocean and Coastal Management, to determine the limits of their jurisdiction.

Please be advised that this AJD is valid for five (5) years from the date of this letter unless new information warrants revision before the expiration date. This AJD is an appealable action under the Corps of Engineers administrative appeal procedures defined at 33 CFR Part 331. The administrative appeal options, process and appeals request form is attached for your convenience and use.

This AJD has been conducted pursuant to Corps of Engineers' regulatory authority to identify the limits of Corps of Engineers' jurisdiction for the particular site identified in this request. This AJD may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in

USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

In all future correspondence concerning this matter, please refer to file number SAC-2018-00201. A copy of this letter is being forwarded to certain State and/or Federal agencies for their information. If you have any questions concerning this matter, please contact me at (843) 365-4239.

FOR THE DISTRICT ENGINEER

Respectfully,



Bob Huff
Watershed Manager

Enclosures:

Approved Jurisdictional Determination Form
Notification of Appeal Options

Copies Furnished:

Ms. Courtney Kain
Horry County Community Development
1515 4th Avenue
Conway, South Carolina 29526

South Carolina Department of Health
and Environmental Control
Office of Ocean and Coastal
Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): FEB 28 2018

B. DISTRICT OFFICE, FILE NUMBER, FILE NAME: JD Form 1 of 1; SAC-2018-00201 Racepath Street Roadway Drainage Improvements

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Horry County City: Myrtle Beach
Center coordinates of site (lat/long in degree decimal format): Lat. 33.6972° N, Long. -78.9049° W.
Universal Transverse Mercator:

Name of nearest waterbody: Atlantic Intracoastal Waterway

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: The project area was determined to be void of any aquatic resources.

Name of watershed or Hydrologic Unit Code (HUC): AIWW- HUC 03040208

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: February 27, 2018
 Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List, Pick List, Pick List
Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³ [Including potentially jurisdictional features that upon assessment are NOT waters or wetlands]

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: The project area contains several upland excavated road side stormwater ditches.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: Pick List ;

Drainage area: Pick List

Average annual rainfall: _____ inches

Average annual snowfall: _____ inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through Pick List tributaries before entering TNW.

Project waters are Pick List river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are Pick List aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵:
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: Pick/List.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: Pick/List.

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: Pick/List

Estimate average number of flow events in review area/year: Pick/List

Describe flow regime:

Other information on duration and volume:

Surface flow is: Pick/List. Characteristics:

Subsurface flow: Pick/List. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷ Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: _____ acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Pick List. Explain:

Surface flow is: Pick List

Characteristics:

Subsurface flow: Pick List. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are Pick List river miles from TNW.

Project waters are Pick List aerial (straight) miles from TNW.

Flow is from: Pick List.

Estimate approximate location of wetland as within the Pick List floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: Pick List

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

Documentation for the Record only: Significant nexus findings for seasonal RPWs and/or wetlands abutting seasonal RPWs:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), Or, acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial.

- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters:

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.⁹**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

Explain:

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain:
 Other factors. Explain:

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): **Roadside upland excavated stormwater ditches.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **Maps and report submitted by S&ME.**
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **USGS 7.5 MIN Topo Quad-Myrtle Beach Quad. Quad depicts forested uplands..**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **Horry County Soil Survey depicts the following soil types within the project area: Bladen, Echaw, Wahee, Meggett, and Yemassee .**
- National wetlands inventory map(s). Cite name: **Horry NWI depicts the project area as Uplands (U-11 and U42P).**
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): **2006 SCDNR, Google Earth 2017.**
or Other (Name & Date):
- Previous determination(s). File no. and date of response letter: **SAC-2016-01233.**
- Applicable/supporting case-law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: The project area is a linear drainage easement containing approximately 4.20 acres. The project area falls mostly within the road right-of-way of Racepath Street. Onsite are several upland excavated roadside stormwater ditches that drain only uplands and are not considered to be waters of the United States. .

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Courtney Kain Horry County Community Development	File Number: SAC-2018-00201	Date: FEB 28 2018
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/ccwo/reg> or Corps regulations at 33 CFR Part 331.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

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

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer, South Atlantic Division, 60 Forsyth St, SW, Atlanta, GA 30308-8801. This form must be received by the Division Engineer within 60 days of the date of this notice.

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

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

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

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

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

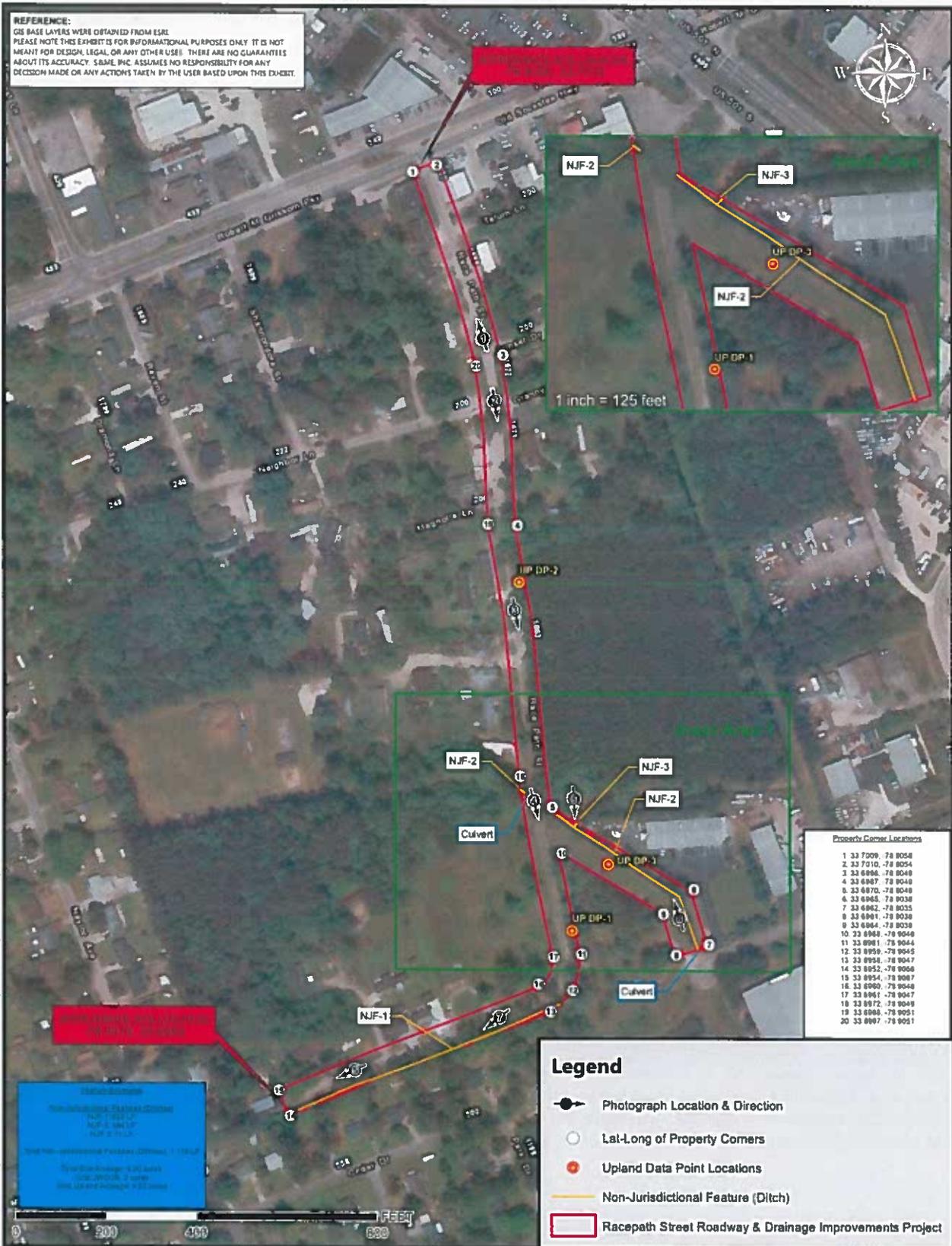
If you have questions regarding this decision and/or the appeal process you may contact the Corps biologist who signed the letter to which this notification is attached. The name and telephone number of this person is given at the end of the letter.

If you only have questions regarding the appeal process you may also contact the Coordinator for Appeals in our South Atlantic Division Office in Atlanta, Georgia at (404) 562-5136.
Jason W. Steele
60 Forsyth St, SW
Atlanta, GA 30308-8801

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

Signature of appellant or agent.	Date:	Telephone number:
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REFERENCE:
 GIS BASE LAYERS WERE OBTAINED FROM ESRI.
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT
 MEANT FOR DESIGN, LEGAL, OR ANY OTHER USE. THERE ARE NO GUARANTEES
 ABOUT ITS ACCURACY. SB&E, INC. ASSUMES NO RESPONSIBILITY FOR ANY
 DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



Drawing Path: Q:\Environment\Projects\31712421\317-220 Racepath Street & Hwy 101\Drawings\Aerial Exhibit.mxd (reopened) 3/15/17 first plotted by: C:\windows\id_05_2018

SCALE: 1 inch = 200 feet
 DATE: 2/5/2018
 DRAWN BY: CCH
 PROJECT NO: 4261-17-220



Aerial Exhibit
 Racepath Street Roadway and Drainage Improvement Project +/- 4.20 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Imagery 2016

EXHIBIT NO.
3



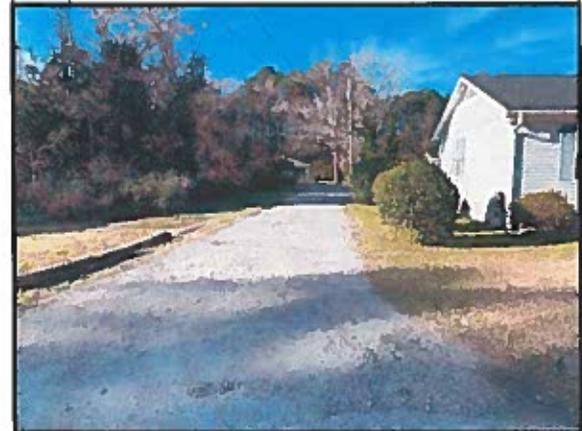
1 Proposed connection of Racepath Street to ABC Dr.
Photograph taken facing west from ABC Dr.



2 Project area facing north along Racepath Street.



3 Project area facing west along Racepath Street.



4 Project area facing north along an un-named drive off of Racepath Street.



Site Photographs
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina

S&ME Project 1463-19-014

Taken by: CO

Date: January 22, 2020



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Contamination and Toxic Substances (Multifamily and Non-Residential Properties) – PARTNER

<https://www.hudexchange.info/programs/environmental-review/site-contamination>

1. How was site contamination evaluated?¹ Select all that apply.

- ASTM Phase I ESA
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- No → Explain below.

No dumps, sanitary landfills, toxic waste landfills, industrial sites, mine waste disposal areas, EPA Superfund/CERCLA/SC equivalent sites, or USTs were identified by SCDHEC, EPA, site visit.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

- Yes → Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

3. Can adverse environmental impacts be mitigated?

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD’s toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

Adverse environmental impacts cannot feasibly be mitigated → HUD assistance may not be used for the project at this site. Project cannot proceed at this location.

Yes, adverse environmental impacts can be eliminated through mitigation.
→ Provide all mitigation requirements² and documents. Continue to Question 4.

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

If a remediation plan or clean-up program was necessary, which standard does it follow?

- Complete removal
 Risk-based corrective action (RBCA)

→ Continue to the Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No dumps, sanitary landfills, toxic waste landfills, industrial sites, mine waste disposal areas, EPA Superfund/CERCLA/SC equivalent sites, or USTs were identified by SCDHEC, EPA, site visit.

Sources:

- S&ME site visit (January 22, 2020).
- EPA: NEPassist: <https://www.epa.gov/nepa/nepassist>.
- EPA Superfund: <http://www.epa.gov/superfund/sites/npl/sc.htm>
- EPA Superfund: <https://www.epa.gov/superfund>.
- SCDHEC UST: <http://www.scdhec.gov/Apps/Environment/USTRegistry/>.
- SCDHEC GIS Database: <http://scdhec.gov/homeandenvironment/maps/gis/>.

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

Hazardous, Toxic or Radioactive Materials & Substances Documentation
Racepath Street Roadway and Drainage Improvements Project
Myrtle Beach, Horry County, SC

According to the SCDHEC GIS database, two regulated facilities are within a 0.25-mile radius of the project area (*See Hazards and Toxics Aerial Map*). Pantry 909, an active UST site, is located approximately 1,390 feet north of the project area. Sailing and Ski Connection, a former UST site, is located approximately 1,350 feet northeast of the project area. Based on USGS topographic map, groundwater flow is away from the project area. Sites or facilities that may potentially contain hazardous substances are listed below.

Facility Name	Regulatory Number	Regulatory Database	Address
Pantry 909	17987	UST	1695 Hwy 501 W
Sailing and Ski Connection	15213	UST	515 Hwy 501 W

In addition:

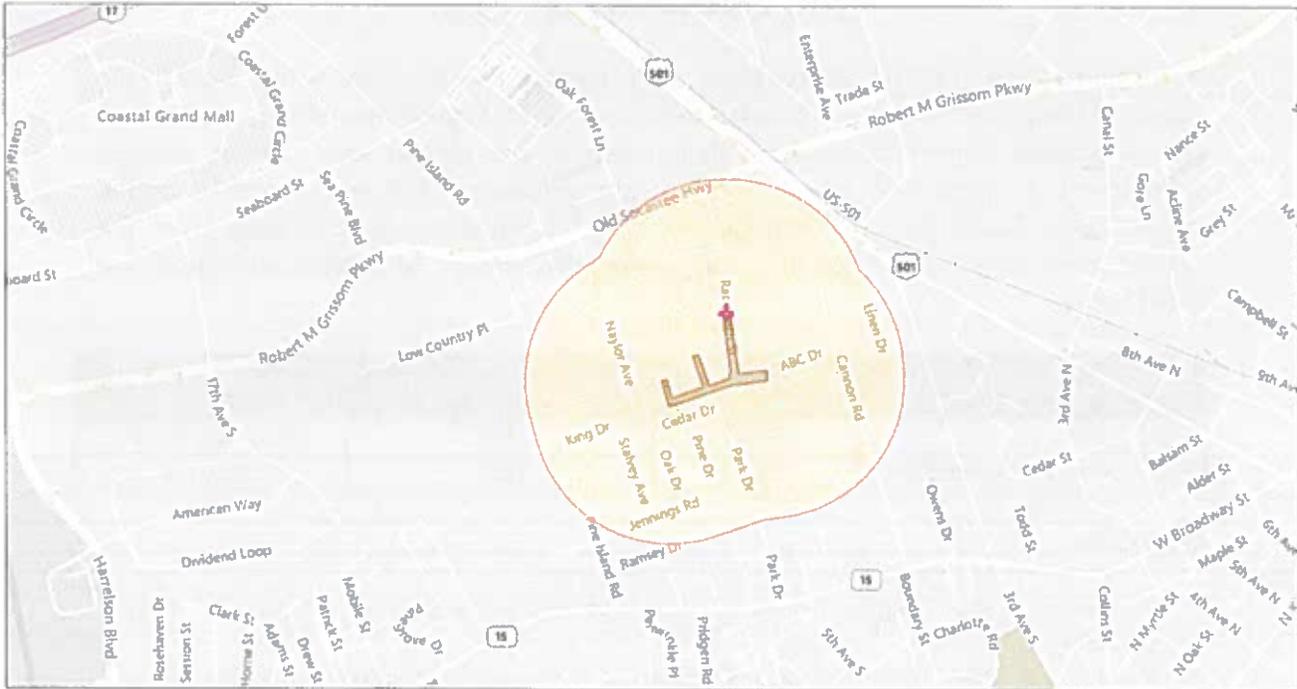
1. No dumps, sanitary landfills, toxic or solid waste landfills are located within 3,000 feet of site boundary.
2. No industrial sites disposing of large quantities of chemicals or hazardous wastes, mine waste disposal areas, and other operations with hazardous wastes on or adjacent to the project area.
3. The project area does not contain sites listed on an EPA Superfund NPL or CERCLA list or SC equivalent list.
4. No USTs were documented within the project area.

The following on-line sources were researched:

EPA Superfund: <http://www.epa.gov/superfund/sites/npl/sc.htm>
EPA Superfund: <https://www.epa.gov/superfund>
EPA NEPAAssist: <https://www.epa.gov/nepa/nepassist>
SCDHEC UST: <http://www.scdhec.gov/Apps/Environment/USTRegistry/>
SCDHEC GIS: <http://scdhec.gov/homeandenvironment/maps/gis/>

NEPAssist Report

Racepath Street



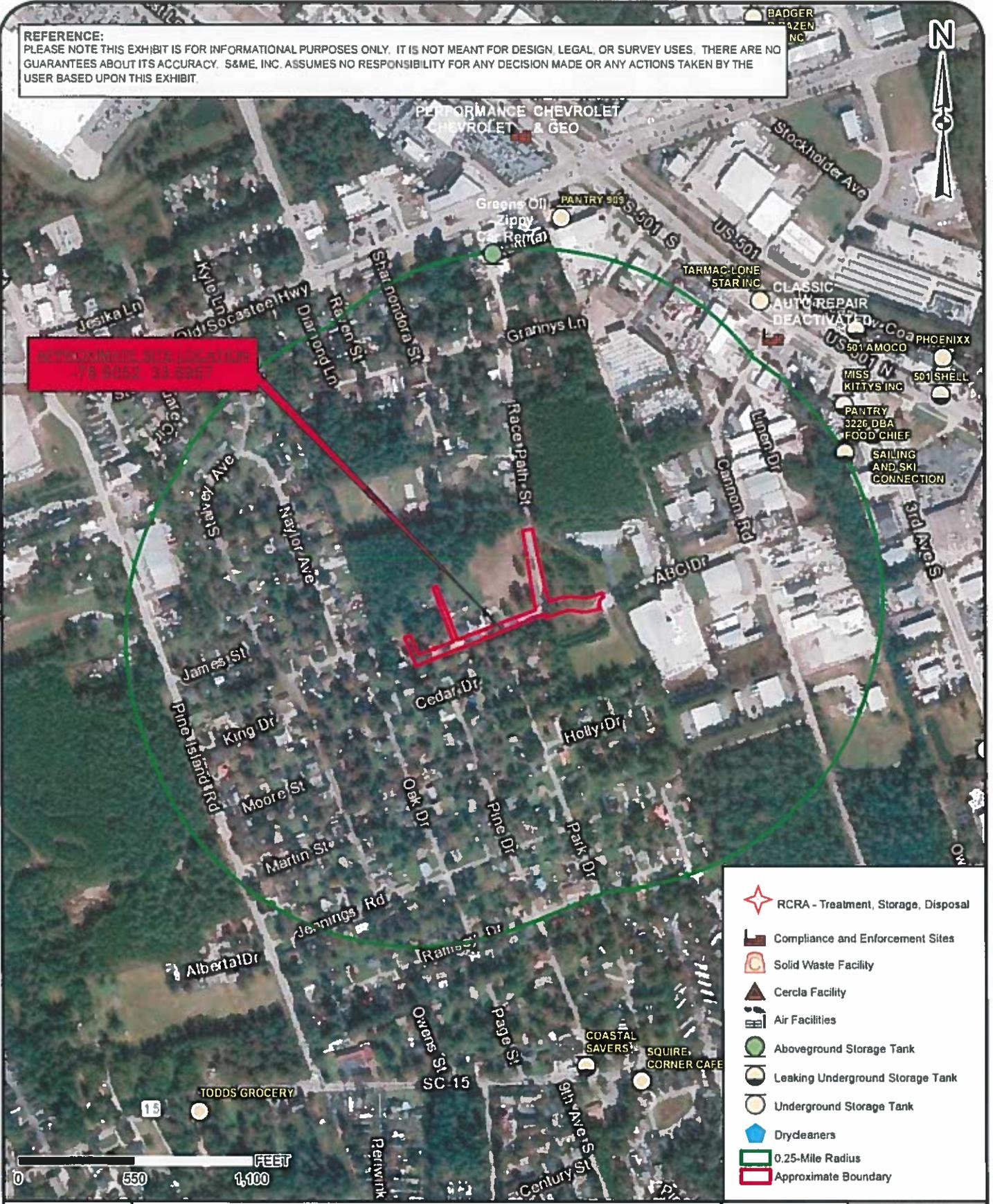
Input Coordinates: 33.696183,-78.903487,33.695924,-78.903465,33.695799,-78.904431,33.695799,-78.904581,33.695219,-78.906577,33.695906,-78.906813,33.695924,-78.906652,33.695433,-78.906502,33.695736,-78.905482,33.696549,-78.905815,33.696584,-78.905654,33.695763,-78.905311,33.695959,-78.904678,33.696174,-78.904635,33.697620,-78.904860,33.697611,-78.904635,33.696084,-78.904388,33.696183,-78.903487

Project Area	0.01 sq mi
Within 0.25 miles of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 0.25 miles of a Federal Land?	no
Within 0.25 miles of an impaired stream?	no
Within 0.25 miles of an impaired waterbody?	no
Within 0.25 miles of a waterbody?	no
Within 0.25 miles of a stream?	yes
Within 0.25 miles of an NWI wetland?	Available Online
Within 0.25 miles of a Brownfields site?	no
Within 0.25 miles of a Superfund site?	no
Within 0.25 miles of a Toxic Release Inventory (TRI) site?	no

Within 0.25 miles of a water discharger (NPDES)?	no
Within 0.25 miles of a hazardous waste (RCRA) facility?	no
Within 0.25 miles of an air emission facility?	no
Within 0.25 miles of a school?	no
Within 0.25 miles of an airport?	no
Within 0.25 miles of a hospital?	no
Within 0.25 miles of a designated sole source aquifer?	no
Within 0.25 miles of a historic property on the National Register of Historic Places?	no
Within 0.25 miles of a Toxic Substances Control Act (TSCA) site?	no
Within 0.25 miles of a Land Cession Boundary?	no
Within 0.25 miles of a tribal area (lower 48 states)?	no

Created on: 4/17/2020 12:28:43 PM

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



- RCRA - Treatment, Storage, Disposal
- Compliance and Enforcement Sites
- Solid Waste Facility
- Cercla Facility
- Air Facilities
- Aboveground Storage Tank
- Leaking Underground Storage Tank
- Underground Storage Tank
- Drycleaners
- 0.25-Mile Radius
- Approximate Boundary



Hazards and Toxics Exhibit

Racepath Road Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Imagery 2018

SCALE:
 1" = 600'
 DATE:
 4-17-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.

Drawing Path: T:\Projects\2019\ENV\Other Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Hazards and Toxics Exhibit.mxd plotted by chandley 04-17-2020



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Endangered Species Act (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/endangered-species>

1. Does the project involve any activities that have the potential to affect species or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

- USFWS Clearance Letter for U.S. Department of Commerce, Department of Housing and Urban Development, and U.S. Department of Agriculture Projects – dated May 30, 2019.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, the activities involved in the project have the potential to affect species and/or habitats. → Continue to Question 2.

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#).

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.

Yes, there are federally listed species or designated critical habitats present in the action area. → Continue to Question 3.

3. Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:

No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat. **See attached Clearance Letter. Informal Consultation not needed.**

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ **Partner entities should not contact the Services directly.** *If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ **Partner entities should not contact the Services directly.** *If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. See Protected Species Assessment by S&ME and USFWS Clearance Letter for No Effect/NLEB determinations. (Appendix G)

Sources:

- SCDNR – Bald Eagle locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
 - SCDNR – Rare, Threatened, and Endangered Species of South Carolina – by County: <http://www.dnr.sc.gov/species/county.html>.
 - USFWS – Clearance Letter (May 30, 2019).
 - USFWS – Information for Planning and Conservation (IPaC): <https://ecos.fws.gov/ipac/>.
 - USFWS – South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species for Horry County: <https://www.fws.gov/southeast/pdf/fact-sheet/south-carolina-species-list-by-county.pdf>.
- S&ME Protected Species Assessment.



February 10, 2020

Reference: **Protected Species Assessment**
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

S&ME, Inc. (S&ME) is pleased to submit our Protected Species Assessment for the above-referenced project located in Horry County, South Carolina. S&ME is currently collecting information necessary for the completion of a U.S. Department of Housing and Urban Development (HUD) Environmental Review. This Protected Species Assessment has been conducted to assess the potential for the presence of protected species in the project area in preparation for roadway, sewer, and water improvements along Racepath Street in Myrtle Beach, South Carolina.

◆ Project Background

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina and is comprised of approximately 1.69 acres. Phase II of construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive, measuring approximately 300 linear feet.

The planned street, water, and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), utility relocation (hydrants, etc.), roadside landscaping, and street lighting improvements. The proposed improvements will occur inside the existing ROW, except where new roadway construction will connect Racepath Street and ABC Drive. Racepath Street located within a Low-to-Moderate Income (LMI) neighborhood. The objectives of the project include:

- Improvement of drainage/flooding issues.
- Provide a better quality of life by creating a more suitable living environment.
- Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

The location of the proposed project area is shown on **Exhibits 1-3** (Attachment A).



Project Area and Habitat Descriptions

The project area is located in the southeastern portion of Horry County within the Middle Atlantic Coastal Plain/Carolina Flatwoods ecoregion of South Carolina. The project area consists of Racepath Street road-right-of-way (ROW), open areas, and residential parcels.

◆ Methodology

S&ME personnel reviewed the South Carolina Department of Natural Resources (SCDNR) and the United States Fish and Wildlife Service (USFWS) websites to determine those species that are currently listed as federally protected (threatened or endangered), a candidate, or proposed in Horry County. The results of this search, including identified protected species and preferred habitat served as the basis of the field review and are presented in **Table 1**.

SCDNR maintains a database of elements of occurrence for protected species in the state of South Carolina. A search of this database did not reveal the known presence of federally protected species (occurrences) on or immediately adjacent to the proposed project area. Supporting information was researched for the purpose of identifying soil types, vegetative communities, and possible drainage features in the project area. The supporting information reviewed included aerial photography, topographic quadrangle maps, soil survey sheets, land use information, and data from the National Wetlands Inventory.

S&ME Biologist, Chris Daves, performed a field review on January 22, 2020. The information obtained from supporting documentation was integrated with the field review to identify potential areas of preferred habitat of protected species. Portions of the project area that matched descriptions of preferred habitat for protected species listed were considered to be potential habitat for the respective protected species. These areas were subsequently field reviewed to confirm the presence/absence of the respective species.

◆ Protected Species

Descriptions of the species and their respective federal status are identified in **Table 1** and on species lists (**Attachment B**). The SCDNR and USFWS websites identified the following federally listed species for Horry County.

Table 1 – Federally Protected Species in Horry County

Species	Federal Status	Habitat Description	Habitat Observed
Bald Eagle <i>Haliaeetus leucocephalus</i>	BGEPA	Coastlines, rivers, large lakes which provide adequate feeding grounds.	No
Red-Cockaded Woodpecker <i>Picoides borealis</i>	E	Open pine stands with minimum age of 60 years; Nests in live pines with red-heart disease.	No
Wood Stork <i>Mycteria americana</i>	E	Primarily feeds in fresh & brackish wetlands & nest in cypress or other wooded swamps.	No



Species	Federal Status	Habitat Description	Habitat Observed
Piping Plover <i>Chadadrius melodus</i>	T	Coast; Expansive sand or mudflats (foraging) in close proximity to a beach (roosting).	No
Kirkland's Warbler <i>Setophaga kirtlandii</i>	E	Nests in young jack pine. Migrate from nesting grounds through the southeastern coast of the U.S. on way to wintering grounds in Bahamas.	No
Red Knot <i>Calidris canutus rufa</i>	T	Intertidal, marine habitats, especially near coastal inlets, estuaries, and bays.	No
West Indian Manatee <i>Trichechus manatus</i>	E	Coastal waters & estuaries.	No
Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i>	E	Inshore waters; Nests on beaches.	No
Leatherback Sea Turtle <i>Dermochelys coriacea</i>	E	Inshore waters; Nests on beaches.	No
Loggerhead Sea Turtle <i>Caretta caretta</i>	T	Inshore waters; Nests on beaches.	No
Green Sea Turtle <i>Chelonia mydas</i>	T	Inshore waters; Nests on beaches.	No
Finback Whale <i>Balaenoptera physalus</i>	E	Ocean waters.	No
Humpback Whale <i>Megaptera novaengliae</i>	E	Ocean waters.	No
Right Whale <i>Balaena glacialis</i>	E	Ocean waters.	No
Shortnose Sturgeon <i>Acipenser brevirostrum</i>	E	Brackish water of large rivers & estuaries; Spawns in freshwater areas.	No
Atlantic Sturgeon <i>Acipenser oxyrinchus</i>	E	Shallow coastal waters and estuaries; Spawns in freshwater areas.	No
Pondberry <i>Lindera melissifolia</i>	E	Swamp & pond margins, sandy sinks, swampy depressions or wet flats.	No
American Chaffseed <i>Schwalbea americana</i>	E	On margins of seasonally wet savannas & cypress ponds.	No
Canby's Dropwort <i>Oxypolis canbyi</i>	E	Wet pineland ponds, savannas, wet meadows, & around edges of open cypress ponds; Prefers habitat with little or no canopy closure.	No

BGEPA = Bald & Golden Eagle Protection Act T = Threatened E = Endangered



◆ Summary and Conclusions

Based on the literature review, habitat assessment, and pedestrian field review of the project area, the following opinions and conclusions are given regarding federally listed species for Horry County:

- ◆ The project area does not provide suitable habitat for the listed federally protected species in Horry County. Our opinion is that the proposed project will have “no effect” on these species.
- ◆ According to USFWS protocol for projects with no effect or impact to federally protected species or designated critical habitat, no further consultation with the USFWS is necessary. Since our assessment indicated there will be no effect or impact to federally protected species, a Clearance Letter (**Attachment C**) issued by the USFWS can be used for documentation.

◆ Qualifications

The field survey was led by Chris Daves of S&ME. Mr. Daves is a biologist and natural resources project manager with over 19 years of experience in environmental consulting. Mr. Daves is proficient in conducting wetland delineations, environmental permitting activities, and habitat assessments, including protected species surveys. He is a Professional Wetland Scientist (PWS) and holds a B.S. degree in Biology from Wofford College and a Master’s degree in Earth and Environmental Resources Management from the University of South Carolina. Mr. Handley holds a B.S. degree in Forest Resource Management and a Master’s in Forest Resources (GIS Emphasis) from Clemson University and has over seven years of experience in environmental consulting.

◆ References Consulted

- ◆ South Carolina Department of Natural Resources - Rare, Threatened, and Endangered Species of South Carolina - by County (Horry): <http://www.dnr.sc.gov/species/county.html>.
- ◆ South Carolina Department of Natural Resources – Bald Eagle Locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
- ◆ United States Fish and Wildlife Service – South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species - Horry County: https://www.fws.gov/charleston/pdf/Endangered/species_by_county/horry_county.pdf.
- ◆ U.S. Fish and Wildlife Service. Information for Planning and Conservation (IPaC). <https://ecos.fws.gov/ipac/>.
- ◆ U.S. Department of Agriculture – National Resources Conservation Service Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/>.



◆ **Closing**

S&ME appreciates the opportunity to perform this Protected Species Assessment for this project. Please contact us at (803) 561-9024 with questions regarding this assessment, or if you require additional information.

Sincerely,

S&ME

A handwritten signature in black ink that reads "Chris Handley".

Chris Handley
Biologist
chandley@smeinc.com

A handwritten signature in black ink that reads "Chris Daves".

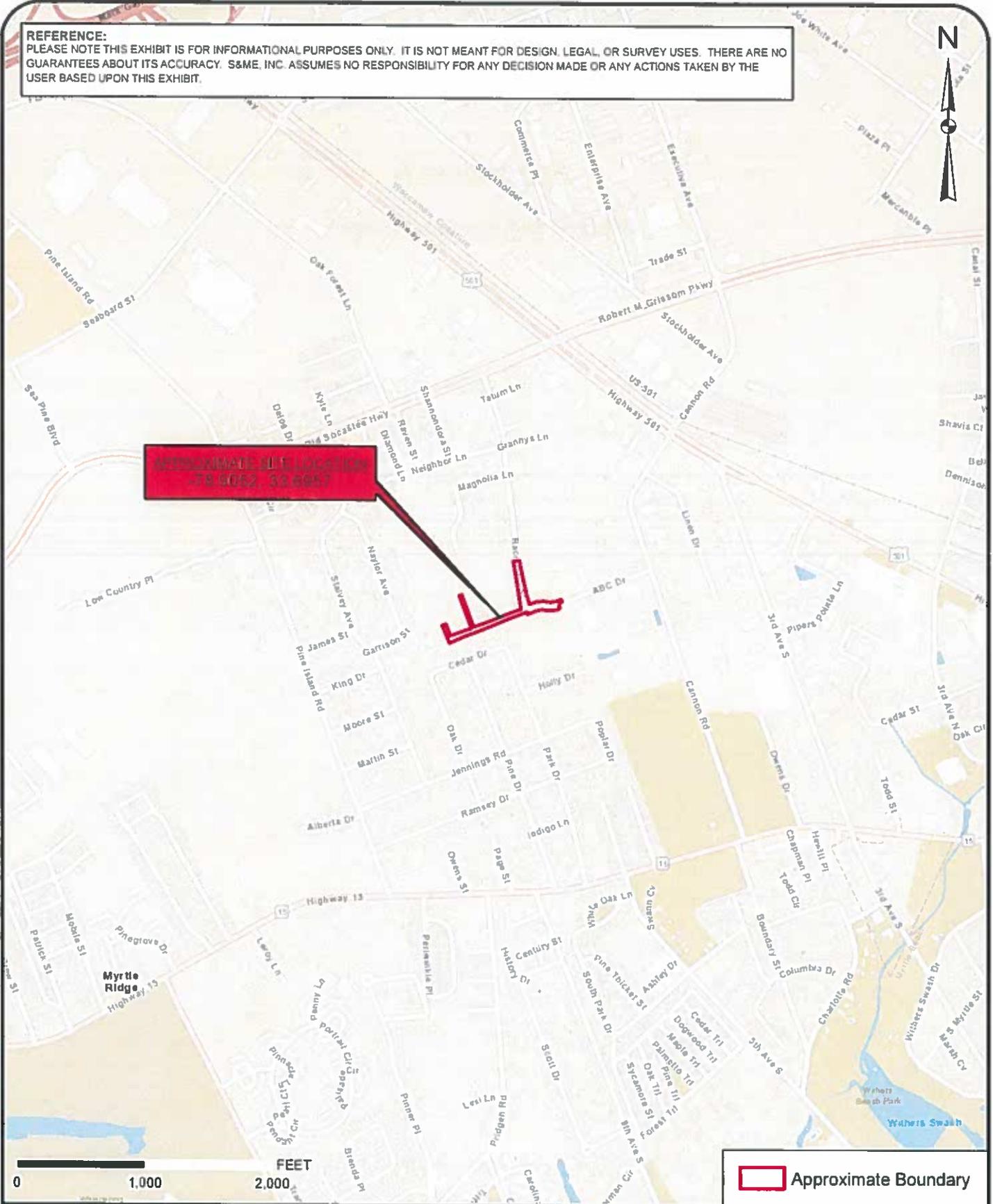
Chris Daves, P.W.S.
Senior Scientist
cdaves@smeinc.com

Attachments

Attachment A

Exhibits and Site Photographs

REFERENCE:
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Approximate Boundary



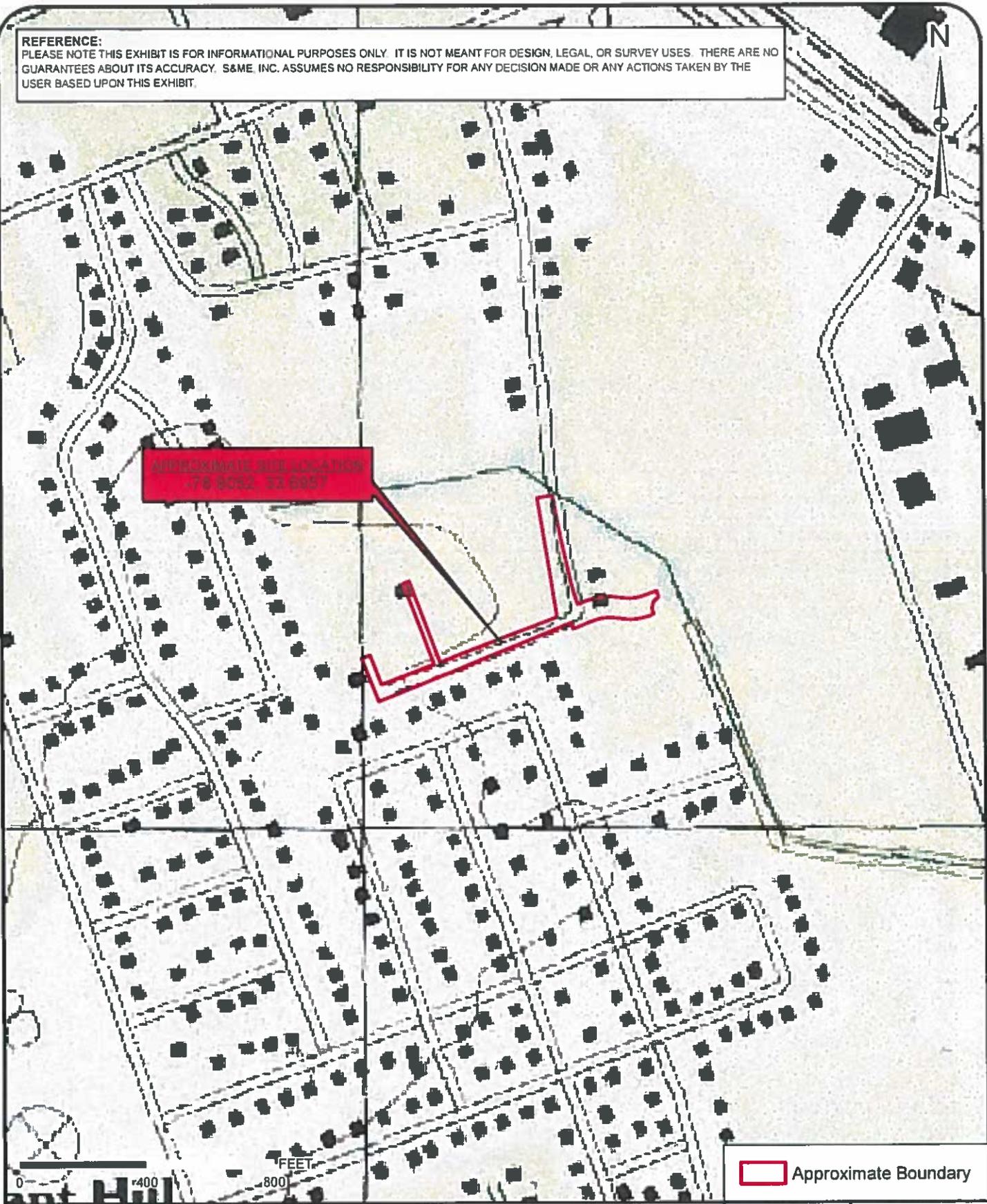
Vicinity Exhibit
 Racepath Street Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Street Map

SCALE:
 1" = 1,000'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.
1

Drawing Path: T:\Projects\2019\EN\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Topographic Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
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APPROXIMATE BOUNDARY
+/- 800' ± 200''

 Approximate Boundary



Topographic Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: USGS 7.5-Minute Topo Quad Myrtle Beach, SC 1984

SCALE:
1" = 400'

DATE:
1-20-20

PROJECT NUMBER
1463-19-014

EXHIBIT NO.

2



REFERENCE:
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APPROXIMATE SITE LOCATION
 -78 9057 -33 4957



 Approximate Boundary



Aerial Exhibit
 Racepath Street Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Imagery 2018

SCALE:
 1" = 200'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.
3

Drawing Path: T:\Projects\2019\ENM\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Aerial Exhibit.mxd plotted by chandley 01-20-2020



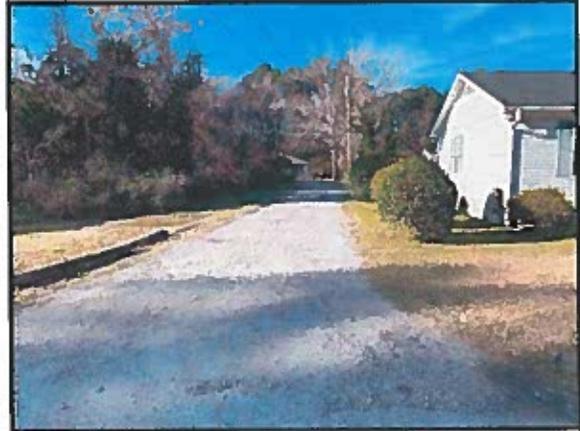
1 Proposed connection of Racepath Street to ABC Dr.
Photograph taken facing west from ABC Dr.



2 Project area facing north along Racepath Street.



3 Project area facing west along Racepath Street.



4 Project area facing north along an un-named drive off of Racepath Street.



Site Photographs
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina

S&ME Project 1463-19-014

Taken by: CO

Date: January 22, 2020

Attachment B

County Species List from USFWS and SCDNR



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

In Reply Refer To:

February 10, 2020

Consultation Code: 04ES1000-2020-SLI-0399

Event Code: 04ES1000-2020-E-00797

Project Name: Racepath Street Phase II

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
(843) 727-4707

Project Summary

Consultation Code: 04ES1000-2020-SLI-0399

Event Code: 04ES1000-2020-E-00797

Project Name: Racepath Street Phase II

Project Type: TRANSPORTATION

Project Description: HUD EA.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.6961269979997N78.90453914257454W>



Counties: Horry, SC

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
West Indian Manatee <i>Trichechus manatus</i> There is final critical habitat for this species. Your location is outside the critical habitat. <i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i> Species profile: https://ecos.fws.gov/ecp/species/4469	Threatened

Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5523	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1110	Threatened

Flowering Plants

NAME	STATUS
American Chaffseed <i>Schwalbea americana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1286	Endangered
Canby's Dropwort <i>Oxypolis canbyi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7738	Endangered
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered
Seabeach Amaranth <i>Amaranthus pumilus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 1 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Common Ground-dove <i>Columbina passerina exigua</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 1 to Dec 31
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Least Tern <i>Sterna antillarum</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Red-throated Loon <i>Gavia stellata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ “Proper Interpretation and Use of Your Migratory Bird Report” before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

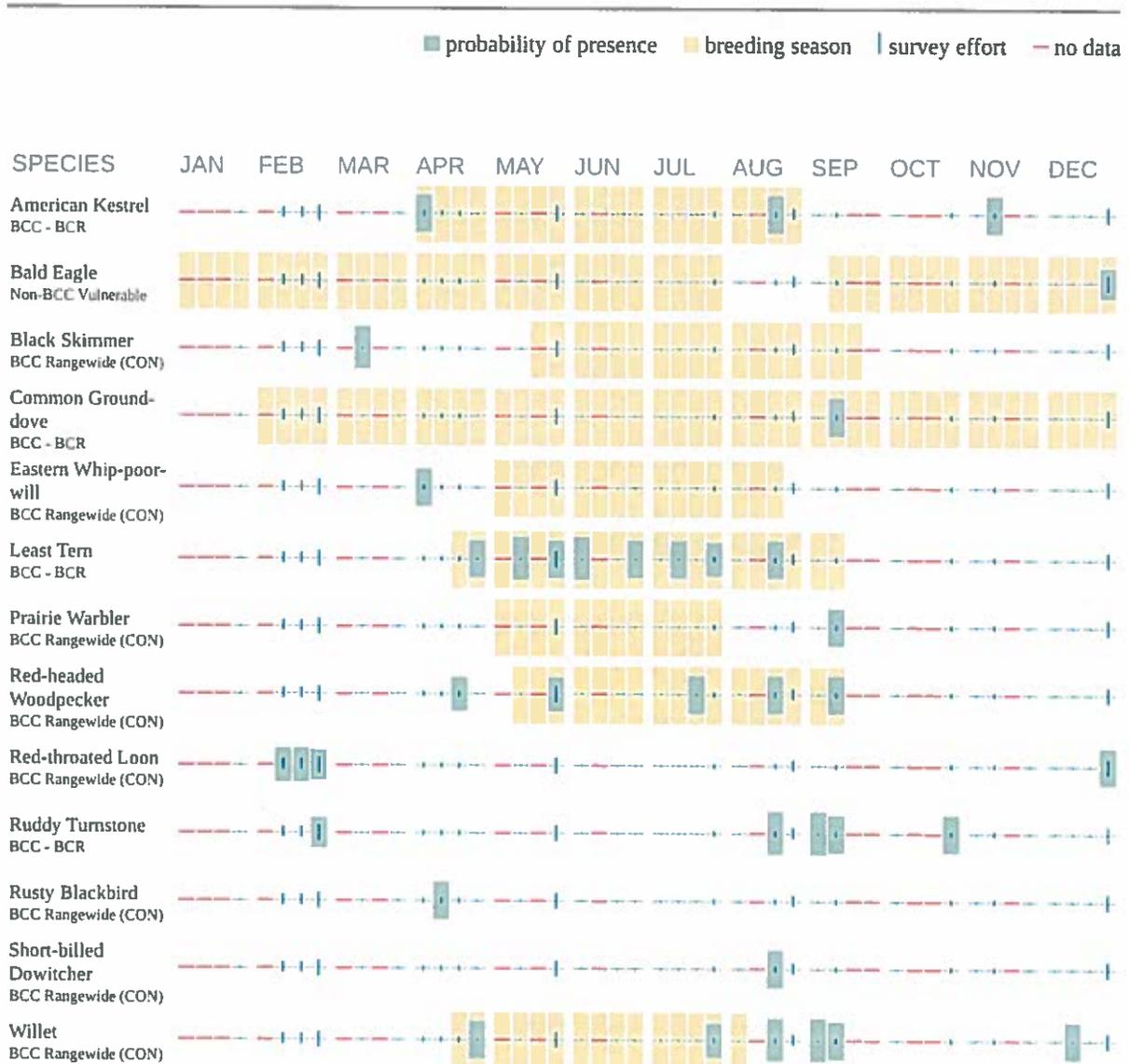
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>

- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

HORRY COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Amphibians	None Found			
Birds	American wood stork (T)	<i>Mycteria americana</i>	February 15-September 1	Nesting season
	Bald eagle (BGEPA)	<i>Haliaeetus leucocephalus</i>	October 1-May 15	Nesting season
	Black-capped petrel (ARS)	<i>Pterodroma hasitata</i>	April-October	Offshore water primarily
	Piping plover (T, CH)	<i>Charadrius melodus</i>	July 15-May 1	Migration and wintering
	Red-cockaded woodpecker (E)	<i>Picoides borealis</i>	March 1-July 31	Nesting season
	Red knot (T)	<i>Calidris canutus rufa</i>	August 1-May 31	Migration and wintering
	Saltmarsh sparrow (ARS)	<i>Ammospiza caudacuta</i>	Fall/winter	Fall/winter surveys
Crustaceans	None Found			
Fishes	Atlantic sturgeon* (E)	<i>Acipenser oxyrinchus*</i>	February 1-April 30	Spawning migration
	Robust redhorse (ARS)	<i>Moxostoma robustum</i>	Late April-early May	Temperature dependent: 16-24°C
	Shortnose sturgeon* (E)	<i>Acipenser brevirostrum*</i>	February 1-April 30	Spawning migration
Insects	Monarch butterfly (ARS)	<i>Danaus plexippus</i>	August-December	Overwinter population departs: March-April
Mammals	Finback whale* (E)	<i>Balaenoptera physalus*</i>	November 1-April 30	Off the coast
	Humpback whale * (E)	<i>Megaptera novaengliae</i>	January 1-March 31	Migration off the coast
	Northern long-eared bat (T)	<i>Myotis septentrionalis</i>	Year round	Winter surveys not as successful
	Right whale* (E)	<i>Balaena glacialis</i>	November 1-April 30	Off the coast
	Sei whale* (E)	<i>Balaenoptera borealis</i>		
	Sperm whale* (E)	<i>Physeter macrocephalus</i>		
	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
	West Indian manatee (T)	<i>Trichechus manatus</i>	May 1-November 15	In coastal waters
Mollusks	None Found			

HORRY COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Plants	American chaffseed (E)	<i>Schwalbea americana</i>	May-August	1-2 months after a fire
	Carolina-birds-in-a-nest (ARS)	<i>Macbridea caroliniana</i>	July-November	
	Ciliate-leaf tickseed (ARS)	<i>Coreopsis integrifolia</i>	August-November	
	Godfrey's stitchwort (ARS)	<i>Minuartia godfreyi</i>	April-June	
	Harper's fimbriatylis (ARS)	<i>Fimbristylis perpuzilla</i>	July-September	
	Seabeach amaranth (T)	<i>Amaranthus pumilus</i>	July-October	
	Venus flytrap (ARS*)	<i>Dionaea muscipula</i>	May-June	
	Wire-leaved dropseed (ARS)	<i>Sporobolus teretifolius</i>	August-September	Following fire
	Yellow pond lily (ARS)	<i>Nuphar lutea ssp. sagittifolia</i>	April-October	
Reptiles	Green sea turtle ** (T)	<i>Chelonia mydas **</i>	May 1-October 31	Nesting and hatching
	Kemp's ridley sea turtle ** (E)	<i>Lepidochelys kempii**</i>	May 1-October 31	In coastal waters
	Leatherback sea turtle ** (E)	<i>Dermochelys coriacea **</i>	May 1-October 31	Nesting and hatching
	Loggerhead sea turtle ** (T, CH)	<i>Caretta caretta **</i>	May 1-October 31	Nesting and hatching
	Southern hognose snake (ARS)	<i>Heterodon simus</i>	Most of the year	
	Spotted turtle (ARS)	<i>Clemmys guttata</i>	February-early April	

- * Contact National Marine Fisheries Service (NMFS) for more information on this species.
- ** The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species.
- ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.
- ARS* Species that are either former Candidate Species or are emerging conservation priority species.
- BGEPA Federally protected under the Bald and Golden Eagle Protection Act
- C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species.
- CH Critical Habitat
- E Federally Endangered
- P or P – CH Proposed for listing or critical habitat in the Federal Register
- S/A Federally protected due to similarity of appearance to a listed species
- T Federally Threatened

These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

For a list of State endangered, threatened, and species of concern, please visit <https://www.dnr.sc.gov/species/index.html>.

Rare, Threatened, and Endangered Species of South Carolina - by County

The lists below indicate what species have been reported to the Heritage Trust Program as occurring in each county. They are not a complete listing of what actually exists, as no complete survey of the state has ever been done.

Horry County

Animals

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	LE: Endangered	SE: Endangered	G3	S3
<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	LE: Endangered	--	G3	S3
<i>Alligator mississippiensis</i>	American Alligator	LT: Threatened	ST: Threatened	G5	S5
<i>Alosa aestivalis</i>	Blueback Herring	ARS*: Risk, priority	--	G3G4	S5
<i>Balaenoptera physalus</i>	Finback Whale	LE: Endangered	SE: Endangered	G3G4	SNR
<i>Calidris canutus rufa</i>	Red Knot	LT: Threatened	--	G4	SNRN
<i>Caretta caretta</i>	Loggerhead	LT: Threatened	ST: Threatened	G3	S3
<i>Charadrius melodus</i>	Piping Plover	LT: Threatened	SE: Endangered	G3	SNRN
<i>Chelonia mydas</i>	Green Sea Turtle	LT: Threatened	ST: Threatened	G3	SNR
<i>Clemmys guttata</i>	Spotted Turtle	ARS*: Risk, priority	ST: Threatened	G5	S5
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	--	SE: Endangered	G3G4	S2
<i>Danaus plexippus</i>	Monarch Butterfly	ARS*: Risk, Priority	--	G4	SNR
<i>Dermochelys coriacea</i>	Leatherback Sea Turtle	LE: Endangered	SE: Endangered	G2	SNA
<i>Elassoma boehlkei</i>	Carolina Pygmy Sunfish	ARS*: Risk, priority	ST: Threatened	G2	S1
<i>Elliptio congareea</i>	Carolina Slabshell	--	--	G3	S3
<i>Eubalaena glacialis</i>	Atlantic Right Whale	LE: Endangered	SE: Endangered	G1	SNA
<i>Fundulus diaphanus</i>	Banded Killifish	--	--	G5	S1
<i>Haliaeetus leucocephalus</i>	Bald Eagle	--	ST: Threatened	G5	S2
<i>Heterodon simus</i>	Southern Hognose Snake	ARS*: Risk, priority	ST: Threatened	G2	SNR
<i>Lampsilis splendida</i>	Rayed Pink Fatmucket	--	--	G3	S2
<i>Laterallus jamaicensis</i>	Black Rail	LT: Threatened (Proposed)	--	G3G4	SNR
<i>Lepidochelys kempi</i>	Kemp's Ridley Sea Turtle	LE: Endangered	SE: Endangered	G1	SNA
<i>Megaptera novaeangliae</i>	Humpback Whale	LE: Endangered	SE: Endangered	G4	S1
<i>Moxostoma robustum</i>	Robust Redhorse	ARS*: Risk, priority	--	G1	SNR
<i>Mycteria americana</i>	Wood Stork	LT: Threatened	SE: Endangered	G4	S1S2
<i>Perimyotis subflavus</i>	Tricolored Bat	ARS*: Risk, priority	--	G2G3	S1S2
<i>Picoides borealis</i>	Red-cockaded Woodpecker	LE: Endangered	SE: Endangered	G3	S2
<i>Pituophis melanoleucus</i>	Pine or Gopher Snake	--	--	G4	S3S4
<i>Pterodroma hasitata</i>	Black-capped Petrel	LT: Threatened (Proposed)	--	G1	SNR
<i>Sterna antillarum</i>	Least Tern	--	ST: Threatened	G4	S3
<i>Trichechus manatus</i>	Florida Manatee	LT: Threatened	SE: Endangered	G2	S1S2
<i>Ursus americanus</i>	Black Bear	--	--	G5	S5
<i>Villosa delumbis</i>	Eastern Creekshell	--	--	G4	S4

Plants

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Agalinis aphylla</i>	Coastal Plain False-foxglove	--	--	G3G4	S1
<i>Agalinis maritima</i>	Salt-marsh False-foxglove	--	--	G5	S1
<i>Amaranthus pumilus</i>	Seabeach Amaranth	LT: Threatened	--	G2	S1

<i>Andropogon mohrli</i>	Broomsedge	--	--	G4?	S2
<i>Anthaenantia rufa</i>	Purple Silkyscale	--	--	G5	S2
<i>Aristida condensata</i>	Piedmont Three-awned Grass	--	--	G4?	S2
<i>Asclepias pedicellata</i>	Savannah Milkweed	--	--	G4	S2
<i>Balduina uniflora</i>	One-flower Balduina	--	--	G4	S2
<i>Calamovilfa brevifolia</i>	Pine-barrens Reed-grass	--	--	G4	S1
<i>Calopogon barbatus</i>	Bearded Grass-pink	--	--	G4?	S2
<i>Ceratiola ericoides</i>	Sandhills Rosemary	--	--	G4	S1
<i>Chamaedaphne calyculata</i>	Leatherleaf	--	--	G5	SNR
<i>Coreopsis gladiata</i>	Southeastern Tickseed	--	--	G4G5	SNR
<i>Coreopsis integrifolia</i>	Ciliate-leaf Tickseed	ARS*: Risk, priority	--	G1G2	S1
<i>Coreopsis rosea</i>	Rose Coreopsis	--	--	G3	S2
<i>Crotonopsis linearis</i>	Narrowleaf Rushfoil	--	--	G5	SNR
<i>Dionaea muscipula</i>	Venus' Fly-trap	ARS*: Risk, priority	--	G3	S3
<i>Echinodorus tenellus</i>	Dwarf Burhead	--	--	G5?	S2
<i>Eupatorium recurvans</i>	Coastal-plain Thorough-wort	--	--	G3G4Q	S1?
<i>Fimbristylis perpusilla</i>	Harper's Fimbry	ARS*: Risk, priority	--	G2	S2
<i>Helenium brevifolium</i>	Shortleaf Sneezeweed	--	--	G4	S1
<i>Hellianthemum georgianum</i>	Georgia Frostweed	--	--	G4	S2
<i>Ilex amelanchier</i>	Sarvis Holly	--	--	G4	S3
<i>Juncus abortivus</i>	Pinebarren Rush	--	--	G4G5	S2
<i>Lachnocaulon beyrichianum</i>	Southern Bog-button	--	--	G4	S2
<i>Lechea torreyi</i>	Piedmont Pinweed	--	--	G4	SNR
<i>Lilaeopsis carolinensis</i>	Carolina Lilaeopsis	--	--	G3G5	S2
<i>Lipocarpa micrantha</i>	Dwarf Bulrush	--	--	G5	S2
<i>Litsea aestivalis</i>	Pondspice	--	--	G3?	S3
<i>Lygodium palmatum</i>	Climbing Fern	--	--	G4	S3
<i>Macbridea caroliniana</i>	Carolina Bird-in-a-nest	ARS*: Risk, priority	--	G2G3	S3
<i>Minuartia godfreyi</i>	Godfrey's Stitchwort	ARS*: Risk, priority	--	G1	SX
<i>Nuphar sagittifolia</i>	Narrowleaf Pondlily	ARS*: Risk, priority	--	G5T2	S2
<i>Oxypolis ternata</i>	Piedmont Cowbane	--	--	G3	S1
<i>Parnassia caroliniana</i>	Carolina Grass-of-parnassus	--	--	G3	S2
<i>Peltandra sagittifolia</i>	Spoon-flower	--	--	G3G4	S2
<i>Physostegia leptophylla</i>	Slender-leaved Dragon-head	--	--	G4?	SNR
<i>Plantago sparsiflora</i>	Pineland Plantain	--	--	G3	S2
<i>Pteroglossaspis ecristata</i>	Crestless Plume Orchid	--	--	G2G3	S2
<i>Pyxidantha barbulata</i>	Well's Pyxie Moss	--	--	G4	S2
<i>Rhynchospora oligantha</i>	Few-flowered Beaked-rush	--	--	G4	S2
<i>Ruellia pedunculata</i> ssp. <i>pinetorum</i>	Stalked Wild Petunia	--	--	G5T3T4	SH
<i>Sabatia bartramii</i>	Bartram's Rose-gentian	--	--	G4G5	S1
<i>Sabatia kennedyana</i>	Plymouth Gentian	--	--	G3	S2
<i>Sarracenia rubra</i>	Sweet Pitcher-plant	--	--	G4	S3S4
<i>Schwalbea americana</i>	Chaffseed	LE: Endangered	--	G2G3	S2
<i>Scleria baldwinii</i>	Baldwin Nutrush	--	--	G4	S2
<i>Solidago pulchra</i>	Carolina Goldenrod	--	--	G3	S1
<i>Sporobolus teretifolius</i>	Wire-leaved Dropseed	ARS*: Risk, priority	--	G2	S1
<i>Stylisma pickeringii</i>	Pickering Morning-glory	--	--	G4	S1
<i>Stylisma pickeringii</i> var. <i>pickeringii</i>	Pickering's Morning-glory	--	--	G4T3	S1
<i>Tofieldia glabra</i>	White False-asphodel	--	--	G4	S1S2
<i>Xyris brevifolia</i>	Short-leaved Yellow-eyed Grass	--	--	G4G5	S1
<i>Xyris flabelliformis</i>	Savannah Yellow-eyed Grass	--	--	G4	S1

For additional information about rare, threatened, and endangered species or questions about these lists, please contact [Anna Smith](#).

Environmental Review

- [Office of Environmental Programs](#)

Attachment C

USFWS Clearance Letter



United States Department of the Interior
FISH AND WILDLIFE SERVICE
176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407
May 30, 2019



**U.S. Fish and Wildlife Service Clearance to Proceed with U.S.
Department of Commerce, U.S. Department of Housing and Urban Development, and U.S.
Department of Agriculture Projects**

The U.S. Fish and Wildlife Service (Service) is one of two lead Federal Agencies mandated with the protection and conservation of Federal trust resources, including threatened and endangered species listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) (ESA). The U.S. Department of Commerce (DOC), U.S. Department of Housing and Urban Development (HUD), as well as the U.S. Department of Agriculture (USDA) allocate grant funds for rural development projects. Accordingly, obligations under the ESA and the National Environmental Policy Act (NEPA) require HUD and USDA to perform an environmental impact review prior to a project's approval. Primarily, these projects involve repair, maintenance, or reconstruction of existing facilities on previously developed land.

Many of the DOC, HUD, and USDA projects result in no adverse impacts to federally protected species. In determining if your project will have an effect on federally protected species or designated critical habitat under the jurisdiction of the Service, we provide this guidance, relative to the criteria listed below, applicable to many DOC, HUD, and USDA project requests. If the project description falls in one of the categories and the Federal agency, or their designee, determines there is no effect or impact to federally protected species or designated critical habitat, no further action is required under section 7 of the ESA. Please note this guidance applies only to projects in South Carolina.

Description of DOC, HUD, and USDA Projects Covered

The following types of projects have been evaluated by the Service in accordance with ESA and NEPA:

1. Purchase machinery, equipment, and supplies for use in existing structures and buildings.
2. Finance or refinance existing structures or properties. Transfer of loans where the original lending or mortgage institutions for existing projects are no longer holding the loans and the properties transfer via back loans.
3. Construct, expand, maintain, remove, replace, or rehabilitate structures on developed or otherwise disturbed areas. Examples of developed or disturbed areas include paved, filled, graveled, routinely mowed vegetated grasses, agricultural fields, and pasturelands. Undeveloped areas are those sites where natural vegetation dominates.
4. New, refurbished, or expanded parking lots and amenities associated with existing or proposed private, commercial, or industrial developments that do not expand into previously undeveloped areas.
5. Implement streetscape beautification projects. Examples of these projects include the removal and replacement of existing sidewalks, curbing, or gutters; demolishing and

disposing of existing curbing; installing irrigation systems for plants; installing or replacing streetlights, benches, or trashcans; and installing handicap sidewalk ramps or new sidewalks within city limits in right of ways.

6. Repair, replace, or renovate existing wastewater treatment facilities, water supply facilities, and storm water facilities (such as drainage ditches and ponds) without expansion of the existing site boundary.
7. Install or replace pipelines or transmission lines using trenchless technology (directional drilling) techniques. Trenchless technology eliminates the need to disturb the environment caused by excavating and backfilling trenches.
8. Install or replace pipelines by trench and back fill within previously disturbed lands such as, but not limited to, maintained easements and transportation right of ways provided a protected species survey is performed and no protected species are found on the site.

The Service recommends that project proponents indicate which of the criteria are applicable to the project when submitting to the appropriate permitting agency.

Northern Long-eared Bat Consideration

The Service issued a nationwide programmatic biological opinion (PBO) for the northern long-eared bat (*Myotis septentrionalis*, NLEB) on January 5, 2016. The PBO was issued pursuant to section 7(a)(2) of the ESA to address impacts that Federal actions may have on this species. In addition, the Service published a final 4(d) rule on January 14, 2016, which details special consultation provisions for Federal actions that may affect the NLEB. Briefly, the PBO and the 4(d) rule allow for "incidental" take of the NLEB throughout its range under certain conditions. Take is defined in section 3 of the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Further, incidental take is defined as take that results from, but is not the purpose of, carrying out an otherwise lawful activity. Under the PBO and 4(d) rule, all incidental take of the NLEB is exempted from the ESA's take prohibitions under certain conditions. However, incidental take is prohibited within one quarter mile from known hibernacula and winter roost, or within 150 feet from a known maternity roost tree during the months of June and July.

In consideration of known hibernacula, winter roosts, and maternity roost tree locations in South Carolina, this letter hereby offers blanket concurrence for a may affect, but is not likely to adversely affect determination for the NLEB if the proposed work occurs more than one quarter mile from known hibernacula, winter roosts, or is further than 150 feet from a known maternity roost trees. If an activity falls within one-quarter mile of hibernacula or winter roost or within 150 feet of a maternity roost tree additional consultation with the Service will be required. As a conservation measure for all projects it is recommended that all tree clearing activities be conducted during the NLEB inactive season of November 15th to March 31st of any given year.

Clearance to Proceed

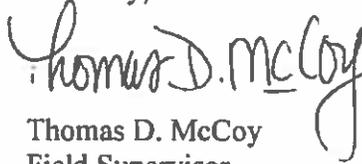
For all of the above listed projects that meet the criteria, have no effect or impact upon federally protected species or designated critical habitat, and, if applicable, meet the requirements of the NLEB 4(d) rule no further coordination with the Service is necessary. This letter may be

downloaded and serve as the Service's concurrence letter for your project. The protected species survey or assessment conducted for the property should be included with this letter when submitting the project to Federal permitting agencies.

Please note that obligations under the ESA must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

The Service recommends that project proponents contact the South Carolina Department of Natural Resources regarding potential impacts to State protected species. If the proposed project will impact streams and/or wetlands, please contact the U.S. Army Corps of Engineers, Charleston District. The Service appreciates your cooperation in the protection of federally listed species and their habitats in South Carolina.

Sincerely,

A handwritten signature in black ink that reads "Thomas D. McCoy". The signature is written in a cursive style with a large, looping "M" and "C".

Thomas D. McCoy
Field Supervisor



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Explosive and Flammable Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities>

1. Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?
 - No
→ Continue to Question 2.
 - Yes
Explain:
Click here to enter text.
→ Continue to Question 5.
2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?
 - No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.
 - Yes → Continue to Question 3.
3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers:
 - Of more than 100-gallon capacity, containing common liquid industrial fuels OR
 - Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?
 - No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.
 - Yes → Continue to Question 4.
4. Is the Separation Distance from the project acceptable based on standards in the Regulation?
Please visit HUD’s website for information on calculating Acceptable Separation Distance.
 - Yes
→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

- 5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

Yes

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

- 6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.**

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Proposed HUD-assisted project does not include a hazardous facility nor does the project include development, construction, rehabilitation that will increase residential densities, or conversion.

Sources: N/A



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Farmlands Protection (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/farmlands-protection>

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

Yes → Continue to Question 2.

No

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site? You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes → Continue to Question 3.

3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

- Complete form [AD-1006, “Farmland Conversion Impact Rating”](#) and contact the state soil scientist before sending it to the local NRCS District Conservationist.
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Work with the RE/HUD to determine how the project will proceed. Document the conclusion:

Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Project will proceed without mitigation.

Explain why mitigation will not be made here:

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project area located in Myrtle Beach/Socastee, SC urbanized area as designated by U.S. Census Tiger Line data (2010). FPPA does not apply. See attached 2010 Census-Urban Cluster Reference Map – Myrtle Beach/Socastee, SC. (Appendix I)

Sources:

- USDA – NRCS: Web Soil Survey:
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- USDA – Soil Conservation Service: Soil Survey of Horry County, SC (1986).
- USDA – Field Office Technical Guide -
[https://efotg.sc.egov.usda.gov/references/public/SC/Horry Soils eFOTG.pdf](https://efotg.sc.egov.usda.gov/references/public/SC/Horry%20Soils_eFOTG.pdf).
- U.S. Census Bureau Tigerline Data –
https://tigerweb.geo.census.gov/tigerwebmain/tigerweb_main.html
- USGS Topographic Map – Myrtle Beach, SC (1984)

Farmlands Protection Act Exhibit



February 10, 2020

2010 Census Urbanized Areas

2010 Census Urban Clusters

States

Counties

2010 Census Urbanized Areas

2010 Census Urban Clusters

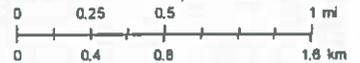


States



Counties

1:30,507



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Created with: TIGERweb
(c) Copyright 2020 - US Census Bureau

REFERENCE:

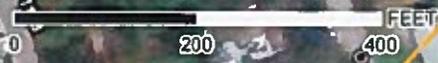
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APPROXIMATE SITE LOCATION
-78.9052, 33.6957

Soils Information
 Bd - Bladen Fine Sandy Loam
 Ec - Echaw Sand
 Wa - Wahee Fine Sandy Loam (0-2% slopes)
 Ye - Yemassee Loamy Fine Sand

 Approximate Boundary
 Soils



Soils Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Imagery 2018 & SCDNR (Soils Data)

SCALE:
1" = 200'
DATE:
1-20-20
PROJECT NUMBER
1463-19-014

EXHIBIT NO.
4

Drawing Path: T:\Projects\2019\ENR\Other Office Jobs\1463\Myrtle Beach\1463-19-014 Racepath Road Phase II\GIS\mxds\Racepath Road Phase II Soils Exhibit.mxd plotted by chandley 01-20-2020

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	K ¹
<i>Bc</i> <i>Beaches</i>				<i>153B Tidewater Area</i>						
Beaches	100	1-5	Not prime farmland	Not highly erodible land	Poorly drained	Yes	D	6w	5	.05
<i>Bd</i> <i>Bladen fine sandy loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Bladen	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	5w	5	.24
<i>BnA</i> <i>Blanton sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Blanton	85	0-6	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	3a	5	.10
<i>Bo</i> <i>Bohicket silty clay loam</i>				<i>153B Tidewater Area</i>						
Bohicket	100	0-1	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	8w	5	.28
<i>Br</i> <i>Brookman loam</i>				<i>153B Tidewater Area</i>						
Brookman	100	0-2	Farmland of statewide importance	Not highly erodible land	Very poorly drained	Yes	D	3w	4	.24
<i>Ce</i> <i>Centenary fine sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Centenary	85	0-2	Not prime farmland	Not highly erodible land	Well drained	No	A	3a	5	.10
<i>ChB</i> <i>Chisolm fine sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Chisolm	80	0-6	Farmland of statewide importance	Not highly erodible land	Well drained	No	A	2a	5	.10
<i>Co</i> <i>Coxville fine sandy loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Coxville	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	3w	5	.24
<i>DuA</i> <i>Duplin loamy fine sand, 0 to 2 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Duplin	100	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	5	.24
<i>Ec</i> <i>Echaw sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Echaw	95	0-2	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	3a	5	.10
<i>EmB</i> <i>Emporia loamy fine sand, 2 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Emporia	100	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	C	2e	5	.15
<i>EuA</i> <i>Eulonla loamy fine sand, 0 to 2 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Eulonla	90	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	5	.15

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	Kf*
<i>EuB Eulonia loamy fine sand, 2 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Eulonia	92	2-6	All areas are prime farmland	Potentially highly erodible land	Moderately well drained	No	C	2e	5	.15
<i>GoA Goldsboro loamy fine sand, 0 to 2 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Goldsboro	96	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	B	2w	5	.17
<i>Ho Hobcaw fine sandy loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Hobcaw	100	0-2	Farmland of statewide importance	Not highly erodible land	Very poorly drained	Yes	D	6w	5	.17
<i>Ht Hobonny muck</i>				<i>153A Atlantic Coast Flatwoods</i>						
Hobonny	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	7w		
<i>Jo Johnston loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Johnston	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	7w	5	.20
<i>KeB Kenansville fine sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Kenansville	100	0-6	Farmland of statewide importance	Not highly erodible land	Well drained	No	A	2e	5	.15
<i>LaB Lakeland sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Lakeland	100	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	4s	5	.10
<i>Le Leon fine sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Leon	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	B/D	4w	5	.10
<i>Lt Lynchburg loamy fine sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Lynchburg	94	0-2	Prime farmland if drained	Not highly erodible land	Somewhat poorly drained	No	C	2w	5	.15
<i>Ly Lynn Haven sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Lynn Haven	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	B/D	4w	5	.10
<i>Me Meggett loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Meggett	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	6w	5	.28
<i>NaB Nankin fine sandy loam, 2 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Nankin	96	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	C	2e	4	.28

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	K _f *
<i>NsA Nansemond loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Nansemond	95	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	3	.15
<i>NhB Newhan fine sand, 0 to 6 percent slopes</i>				153B Tidewater Area						
Newhan	96	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	8s	5	.10
<i>NoA Norfolk loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Norfolk	96	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	5	.17
<i>Og Ogeechee loamy fine sand</i>				153A Atlantic Coast Flatwoods						
Ogeechee	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	B/D	3w	5	.10
<i>Os Osier loamy sand</i>				153A Atlantic Coast Flatwoods						
Osier	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	A/D	5w	5	.10
<i>Po Pocomoke fine sandy loam</i>				153A Atlantic Coast Flatwoods						
Pocomoke	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	B/D	4w	3	.20
<i>RmB Rimini sand, 0 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Rimini	90	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	8s	5	.10
<i>Ru Rutledge loamy sand</i>				153A Atlantic Coast Flatwoods						
Rutledge	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	B/D	7w	5	.17
<i>SfA Suffolk loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Suffolk	100	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	4	.24
<i>SfB Suffolk loamy fine sand, 2 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Suffolk	90	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	B	2e	4	.24
<i>SmA Summerton fine sandy loam, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Summerton	96	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	5	.28
<i>Ud Udorthents and Udipsamments, well drained</i>				153A Atlantic Coast Flatwoods						
Udipsamments	50	0-15	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	6s	5	.10
Udorthents	50	0-6	Not prime farmland	Not highly erodible land	Moderately well drained	No	B	4e	5	.28

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	Kf*
Wa <i>Wahee fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Wahee	90	0-2	Farmland of statewide importance	Not highly erodible land	Somewhat poorly drained	No	D	2w	5	24
We <i>Witherbee sand</i>				153A <i>Atlantic Coast Flatwoods</i>						
Witherbee	90	0-2	Not prime farmland	Not highly erodible land	Somewhat poorly drained	No	A/D	3w	5	10
Wo <i>Woodington fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Woodington	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	B/D	3w	5	20
YaA <i>Yauhannah fine sandy loam, 0 to 2 percent slopes</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yauhannah	90	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	B	2w	5	20
Ye <i>Yemassee loamy fine sand</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yemassee	90	0-2	Prime farmland if drained	Not highly erodible land	Somewhat poorly drained	No	C	2w	5	15
Yo <i>Yonges fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yonges	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	3w	5	20



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Historic Preservation (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/historic-preservation>

Threshold

Is Section 106 review required for your project?

- No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the [PA Database](#) to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

Click here to enter text.

→ Continue to the Worksheet Summary.

- No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

Click here to enter text.

→ Continue to the Worksheet Summary.

- Yes, because the project includes activities with potential to cause effects (direct or indirect). → Continue to Step 1.

The Section 106 Process

After determining the need to do a Section 106 review, HUD or the RE will initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if the RE or HUD should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that only HUD or the RE may initiate consultation with Tribes. Partner entities may prepare a draft letter for the RE or HUD to use to initiate consultation with tribes, but may not send the letter themselves.

List all organizations and individuals that you believe may have an interest in the project here:
SC SCDAH-SHPO and 1 federal Indian Tribe (Catawba Indian Nation) according to TDAT.

→ *Continue to Step 2.*

Step 2 - Identify and Evaluate Historic Properties

Provide a preliminary definition of the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.

APE for archaeological sites is limited to the boundaries of the project area. The APE for other sites is a 0.25-mile radius from the project area boundaries.

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register. Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

See attached Request for Comments (Feb. 7, 2020) for potential historic properties and SHPO letter (Feb. 21, 2020). SHPO (Mr. John Sylvest) concurred with findings that no properties listed in the NRHP will be affect by the proposed project.

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously un-surveyed buildings or structures over 50 years old, or there is a likely presence of previously un-surveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

[Click here to enter text.](#)

No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below to recommend to the RE or HUD.

Please note: this is a recommendation only. It is **not** the official finding, which will be made by the RE or HUD, but only your suggestion as a Partner entity.

No Historic Properties Affected

Document reason for finding:

No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Document reason for finding and provide any comments below.

Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc.

[Click here to enter text.](#)

Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)

[Click here to enter text.](#)

Provide any comments below:

Comments may include recommendations for avoidance, minimization, and/or mitigation.

No mitigation needed. See letters and submittals (Appendix J).

Sources:

- SC ArchSite: <http://www.scarchsite.org/>
- SCDAH-SHPO: Mr. John Sylvest, Project Review Coordinator, in letter (Feb. 21, 2020)
- THPO – Catawba Indian Nation (March 6, 2020)



February 21, 2020

Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

Re: Racepath Street Roadway and Drainage Improvements Project, Phase II
Myrtle Beach, Horry County, South Carolina
SHPO Project No. 20-JS0038 (ref 16-JS0283)

Dear Mr. Daves:

Thank you for your letter of February 7, 2020, which we received on February 1, regarding the above referenced proposed undertaking. We received a Section 106 Project Review Form, photographs, drawings, and maps as supporting documentation. The State Historic Preservation Office is providing comments to the U.S. Department of Housing and Urban Development pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

Based on the description of the undertaking's Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this proposed undertaking.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

Please refer to SHPO Project Number 20-JS0038 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6129 or jsylvest@scdah.sc.gov.

Sincerely,

John D. Sylvest

John D. Sylvest
Project Review Coordinator
State Historic Preservation Office

LETTER OF TRANSMITTAL



S&ME, Inc., (S&ME)
134 Suber Road
Columbia, South Carolina 29210
803 / 561-9024
Fax 803 / 561-9177

DATE:	2/7/2020
Project#:	1463-19-014
RE:	Racepath Street Phase II
CDBG Funding - HUD Env. Review Request for Comments	

TO:

Mr. John Sylvest, Project Review Coordinator
South Carolina Department of Archives & History
State Historic Preservation Office
8301 Parklane Road
Columbia, South Carolina 29223

CERTIFIED MAIL

WE ARE SENDING YOU:

COPIES	DATE	NO.	DESCRIPTION
1	2/7/2020		Racepath Street Phase II Myrtle Beach, Horry County, SC

THESE ARE TRANSMITTED as checked below:

For your approval For your use As requested For review and comment

REMARKS:

Mr. Sylvest,

S&ME is currently seeking information necessary for the completion of a HUD Environmental Review for a project in Myrtle Beach, Horry County, SC. The proposed project will be seeking federal CDBG funding. A previous SHPO review was conducted by your office in July of 2016 and February of 2018. Letters were issued by your office under SHPO Project No. 1 6JS0283. Additional areas have been added to the project area. Please accept this letter as a request for comments from the SHPO.

Thank you for your continued technical assistance. Please contact me at (803) 561-9024 if you have questions concerning this project.

Thank you,
Chris Daves

COPY TO:

Catawba Indian Nation

SIGNED: _____

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

This Letter of Transmittal and the documents accompanying this Letter of Transmittal contain information from S&ME, Inc., which is confidential and legally privileged. The information is intended only for the use of the individual or entity named on this Letter of Transmittal. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on these documents is strictly prohibited.



February 7, 2020

South Carolina Department of Archives & History
State Historic Preservation Office
8301 Parklane Road
Columbia, South Carolina 29223

Attention: Mr. John Sylvest, Project Review Coordinator

Reference: **Request for Comments**
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

Dear Ms. Sylvest:

On behalf of Horry County (recipient), S&ME, Inc. (S&ME) is currently seeking information necessary for the completion of a U.S. Department of Housing and Urban Development (HUD) Environmental Review. Please accept this letter as a request for comments from the South Carolina Department of Archives & History – State Historic Preservation Office (SHPO) regarding the above-referenced project located in Horry County, South Carolina.

◆ Previous SHPO Consultations

Portions of this project were previously submitted to the SHPO in July of 2016 and January of 2018. Your office issued a letter on July 29, 2016 and a second letter on February 15, 2018 under SHPO Project No 16JS0283 (see attached) indicating no properties listed in the National Register of Historic Places would be affected.

◆ Project Description

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina and is comprised of approximately 1.69 acres. Phase II of construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive, measuring approximately 300 linear feet.

The planned street, water, and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), utility relocation (hydrants, etc.), roadside landscaping, and street lighting improvements. The proposed improvements will occur inside the existing ROW, except



where new roadway construction will connect Racepath Street and ABC Drive. Racepath Street located within a Low-to-Moderate Income (LMI) neighborhood. The objectives of the project include:

- Improvement of drainage/flooding issues.
- Provide a better quality of life by creating a more suitable living environment.
- Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

The location of the proposed project area is shown on **Exhibits 1-3** attached to this letter report.

◆ **Background Research**

Based on the consultation of ArchSite, no previously identified eligible historic properties were located within a 0.25-mile Area of Potential Effect (APE). Therefore, no historic properties appear to be affected.

◆ **Enclosures**

Included in the Appendix, please find the following information for your review:

Appendix

- ◆ SHPO Project Review Form
- ◆ Vicinity Exhibit (Exhibit 1)
- ◆ Topographic Exhibit (Exhibit 2)
- ◆ Aerial Exhibit (Exhibit 3)
- ◆ Site Plan
- ◆ ArchSite Printout
- ◆ Site Photographs
- ◆ Previous SHPO Letters 2016 and 2018 (16JS0283)



Request for Comments
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

◆ Closing

Thank you for your assistance in this project. We look forward to receiving the SHPO comments. If you have questions regarding this submittal, please contact Chris Daves at 803-561-9024.

Sincerely,

S&ME

Handwritten signature of Chris Handley in black ink.

Chris Handley
Biologist
chandley@smeinc.com

Handwritten signature of Chris Daves in black ink.

Chris Daves, P.W.S.
Biologist
cdaves@smeinc.com

cc: Catawba Indian Nation

Enclosures

SHPO Project Review Form

Vicinity Exhibit (Exhibit 1)

Topographic Exhibit (Exhibit 2)

Aerial Exhibit (Exhibit 3)

Site Plan

ArchSite Printout

Site Photographs

Previous SHPO Letters 2016 and 2018 (16JS0283)



State Historic Preservation Office

South Carolina Department of Archives and History
8501 Parklane Road | Columbia, SC | 29225
sedah.sc.gov

SECTION 106 PROJECT REVIEW FORM

Section 106 of the National Historic Preservation Act, and the implementing regulations at 36 CFR 800, requires the South Carolina State Historic Preservation Office (SHPO) to review all projects/undertakings that are federally funded, licensed, permitted, or assisted. The responsibility for preparing review documentation pursuant to 36 CFR 800.11, including the identification of historic properties and the assessment of effects resulting from the undertaking, rests with the federal agency or its delegated authority (including applicants). Consultation with the SHPO is NOT a substitution for consultation with appropriate Native American tribes or other participants who are entitled to comment on the Section 106 process (per 36 CFR 800.2). For guidance regarding this Form or the Section 106 review process, please visit our Review and Compliance Program website.

STATUS OF PROJECT (check one)

- Federal Undertaking Anticipated (You are applying for Federal assistance)
- Federal Undertaking Established (You have received Federal assistance)
- Due Diligence Project (No anticipated Federal assistance)
- Additional Information for Previous Project Submission (SHPO Project No. _____)

GENERAL INFORMATION

1. Project Name: Racepath Street Phase II
2. City/Town: Myrtle Beach 3. County: Horry
4. Federal Agency (providing funds, license, permit, or assistance): US Dept. of Housing and Urban Development
5. Agency Contact Name: Lenwood Smith Email: lenwood.e.smith@hud.gov
Address: 1500 Pinecroft Road, Suite 401; Greensboro, NC 27407-3838 Phone: (336)-851-8054
6. Federal Agency Delegated Authority (includes Applicants): Horry County
Delegated Authority Contact Name: Courtney Kain Email: kainc@horrycounty.org
Address: 1515 Fourth Avenue; Conway, SC 29526 Phone: (843) 915-7031
7. Consultant for the Agency/Delegated Authority: S&ME, Inc.
Consultant Contact Name: Chris Daves, PWS/Senior Scientist Email: cdaves@smeinc.com
Address: 134 Suber Rd., Columbia, SC 29210 Phone: 803-561-9024

PROJECT DESCRIPTION

1. Indicate the type of project (new construction, rehabilitation, replacement/repair, demolition, relocation, acquisition, infrastructure, other) and provide a detailed description of the proposed project, including related activities (staging areas, temporary roads, excavations, etc.), which will be carried out in conjunction with the project. Attach additional pages if necessary. If a detailed scope of work is not available yet, please explain and include all preliminary information:

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina. Phase II of the planned construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive (300 linear feet).

2. Describe the length, width, and depth of all proposed ground disturbing activities, as applicable (defined as any construction activity that affects the soil within a project area, including excavating, digging, trenching, drilling, augering, backfilling, clearing, or grading):

Ground disturbance is proposed on the site during construction of new roadway and resurfacing and maintenance along Racepath Street. This will include excavation (< 5 ft.) and grading.

3. Will this project involve phases of construction? If so, please describe the work to be conducted under each phase.

No.

4. How many acres are in the project area? For building rehabilitation projects, list the building's approximate square footage.

1.69 acres.

5. Describe the current land use and conditions within and immediately adjacent to the project area (e.g. farmland, forest, developed, etc.) as well as prior land use and previous disturbances within and immediately adjacent to the project area (e.g. grading, plowing, mining, timbering, housing, commercial, industrial, road or other construction, draining, etc.).

The project area consists of residential parcels along Racepath Street. Immediately surrounding properties consist of residences (N, S,W), forestland and commercial business (E), residences and open land (W). Site use has been cleared land/forestland (1937) and residential (1984). Adjacent properties have been commercial/residential since 1990s.

DETERMINING THE AREA OF POTENTIAL EFFECTS (APE)

All projects/undertakings have an APE. The APE is the geographic area or areas within which a project/undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. These changes can be direct (physical) or indirect (visual, noise, vibration) effects. The APE varies with the project type and should factor in the setting, topography, vegetation, existing and planned development, and orientation of resources to the project. For example, if your project includes:

- Rehabilitation, demolition, or new construction then your APE might be the building or property itself and the surrounding properties with a view of the project.
- Road/Highway construction or improvements, streetscapes, etc., then the APE might be the length of the project corridor and the surrounding properties/setting with a view of the project.
- Above-ground utilities, such as water towers, pump stations, retention ponds, transmission lines, etc., then your APE might be the area of ground disturbance and the surrounding properties/setting with a view of the project.
- Underground utilities, then your APE might be the area of ground disturbance and the setting of the project.

6. Provide a written description of the Area of Potential Effect (APE).

Based on the nature of the project, the APE includes the project boundaries surrounded by a 0.25-mile radius. The APE was determined by considering the current and future site use of the site and surrounding properties.

IDENTIFICATION OF HISTORIC PROPERTIES

A historic property is defined as any prehistoric or historic district, site, building, structure, or object listed in or eligible for listing in the National Register of Historic Places (NRHP).

7. Is the project located within or adjacent to a property or historic district listed in or eligible for listing in the NRHP?

YES NO If yes, provide the name of the property or district:

8. Are there any buildings or structures that are 50 years old or older within the project APE?

YES NO If yes, provide approximate age:

9. Are any of the buildings or structures in Question 8 listed in or eligible for listing in the NRHP?

YES NO If yes, identify the properties by name, address, or SHPO site survey number. If no, provide an explanation as to why the properties are not eligible for the NRHP.

10. List all historical societies, local governments, members of the public, Indian tribes, and any other sources consulted in addition to the SHPO to identify known and potential historic properties and note any comments received.

ArchSite

11. Does the landowner know of any archaeological resources found within the APE?

YES NO DO NOT KNOW If yes, please describe: _____

12. Has a cultural resources and/or a historic properties identification survey been conducted in the APE?

YES NO DO NOT KNOW If yes, provide the title, author, and date of the report(s):

No sites eligible for NRHP noted.

13. Based on the information contained in questions 7 – 12, please check one finding:

- Historic Properties are present in the APE
- Historic Properties are not present in the APE

ASSESSMENT OF PROJECT EFFECT

PLEASE CHOOSE ONE DETERMINATION:

- No Historic Properties Affected (i.e., none are present or they are present but the project will have no effect upon them)
- No Adverse Effect on historic properties (i.e., historic properties are present but will not be adversely effected)
- Adverse Effect on historic properties (i.e., historic properties are present and will be adversely effected)
- Due Diligence Project (An effect determination does not apply due to no federal involvement)

Please explain the basis for your determination. If No Adverse Effect or Adverse Effect, explain why the Criteria of Adverse Effect (found at [36 CFR 800.5\(a\)\(1\)](#)) were found not applicable, or applicable, including any conditions on the project to avoid or minimize potential adverse effects, or efforts taken to avoid or minimize potential adverse effects.

According to ArchSite database, no sites potentially eligible, eligible, or listed on the NRHP are located within APE. Proposed project will not alter the integrity of existing neighborhood. Effects to surrounding properties will be negligible as surrounding area has been previously developed. Project will not change viewshed or create adverse visual effects.

SUBMITTAL CHECKLIST -- Did you provide the following documentation?

A completed Section 106 Project Review Form:

- The Form must be completed in its entirety, as it is not the SHPO's responsibility to identify historic properties or to make a determination of effect of the undertaking on historic properties.
- The appropriate federal agency information must be indicated on the Form. Contact the federal agency requiring consultation with the SHPO for this information. For US Housing and Urban Development projects under 24 CFR 58, the local government is the federal agency/responsible entity.
- Include email contact information for all parties that are to receive our response via email. We no longer respond via mailed hard copy, unless requested.
- One (1) Project Review Form may be utilized for batching undertakings that are duplicative in scope and within geographic areas no larger than a single county.
- The Form is a fillable PDF, but you may also print and complete by hand. A double-sided print is acceptable.

Map(s) indicating:

- The precise location of the project and extent of the Area of Potential Effect (APE), not too zoomed in or out in scale.
- Include a subscriber or public view SC ArchSite (GIS) map indicating the precise location of the project and extent of the APE. SC ArchSite is an online inventory of all known cultural resources in South Carolina. SC ArchSite can be directly accessed at <http://www.scarchsite.org/default.aspx>.
- In urban areas, a detailed city map and/or parcel map.

Current, high resolution color photographs (2 photos max per page) illustrating:

- For all projects, views to and from the overall project location and extent of the Area of Potential Effect (APE), showing the relationship to adjacent buildings, structures, or sites.
- For new construction or projects including ground disturbing activities, ground and/or aerial views documenting previous ground disturbance and existing site conditions.
- For building or structure rehabilitation projects, full views of each side (if possible), views of important architectural details, and views of areas that will be affected by proposed alterations or rehabilitation work to the exterior or interior.
- Photographs must describe or label the views presented, or be keyed to a site map.
- Black and white photocopied, unclear, thumbnail, or obstructed view photographs are not acceptable.

Project plans (if applicable and available) including:

- Scopes of work and/or project narratives
- Site plans or sketches (existing vs proposed)
- Project drawings and specifications for work on a historic building or structure
- Elevations

Our ability to complete a timely project review largely depends on the quality and detail of the documentation submitted. If insufficient documentation is provided we may need to request additional materials, which will prolong the review process. For complex projects, some may find it advantageous to hire a preservation professional with expertise in history, architectural history and/or archaeology.

NOTE: If the project involves the rehabilitation of a building or structure listed in or eligible for listing in the National Register of Historic Places, please complete and submit the Historic Building Supplement in addition to this Form.

When planning to submit a project for review, please remember that our office has 30 calendar days per regulations from the date of receipt to review federal projects and 45 days per SHPO policy to review due diligence projects.

Please **DO NOT** send Project Review Forms by email or fax. We recommend that you use certified mail, FedEx, or UPS to determine if your project has been delivered.

Please send this completed Form along with supporting documentation to:

Review & Compliance Program, SC Department of Archives & History, 8301 Parklane Road, Columbia, SC 29223



REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.

APPROXIMATE SITE LOCATION
 78.0082, 33.6957



 Approximate Boundary



Vicinity Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

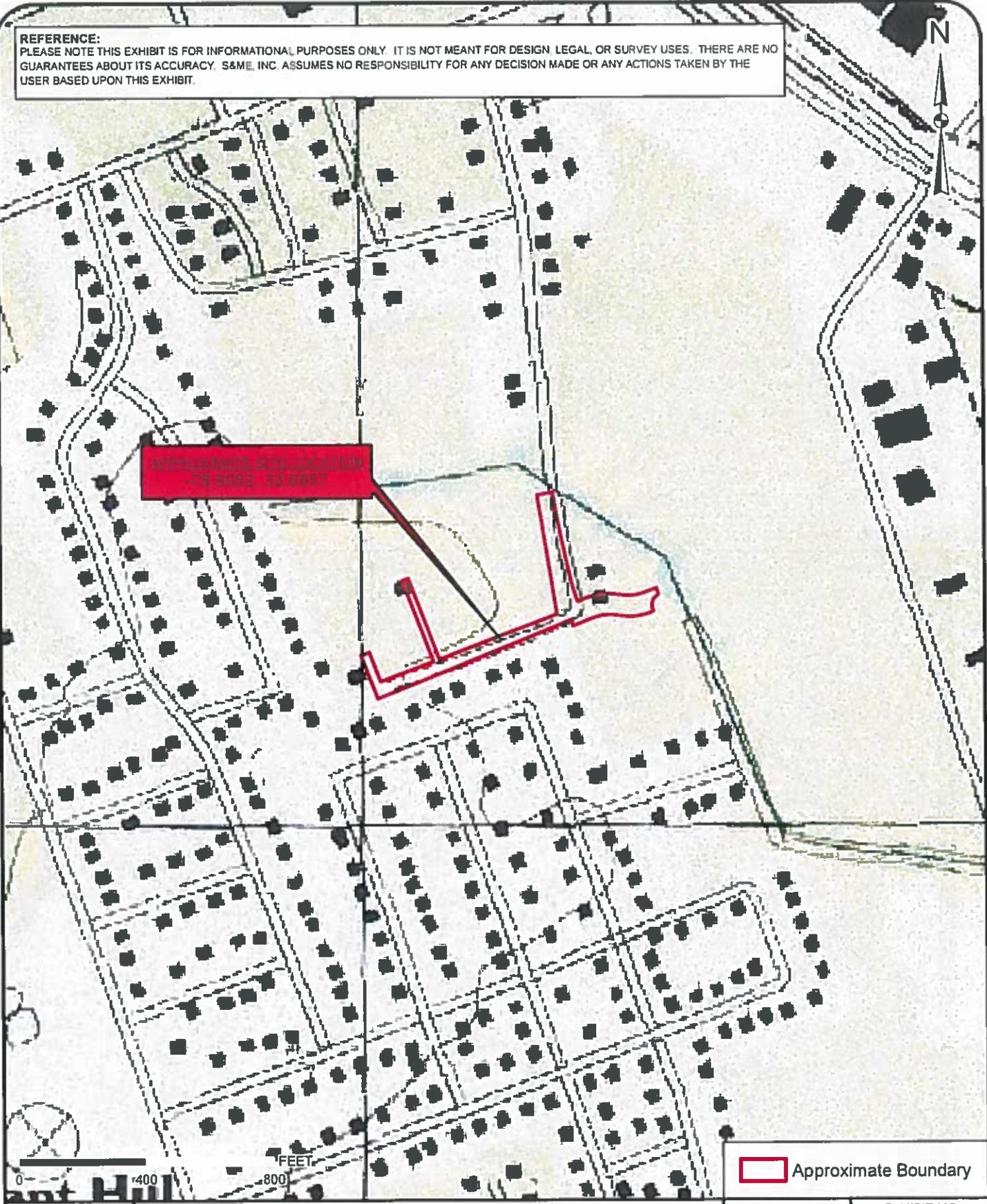
Source: World Street Map

SCALE:
 1" = 1,000'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.
1

Drawing Path: T:\Projects\2019\ENVO\Other Office Jobs\1463\Myrtle Beach\1463-19-014 Racepath Road Phase II (GIS\mxd)\Racepath Road Phase II Topographic Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



 Approximate Boundary



Topographic Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: USGS 7.5-Minute Topo Quad Myrtle Beach, SC 1984

SCALE:
1" = 400'
DATE:
1-20-20
PROJECT NUMBER
1463-19-014

EXHIBIT NO.

2



REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.

APPROXIMATE SITE LOCATION
 +78 9092 33 8957



 Approximate Boundary

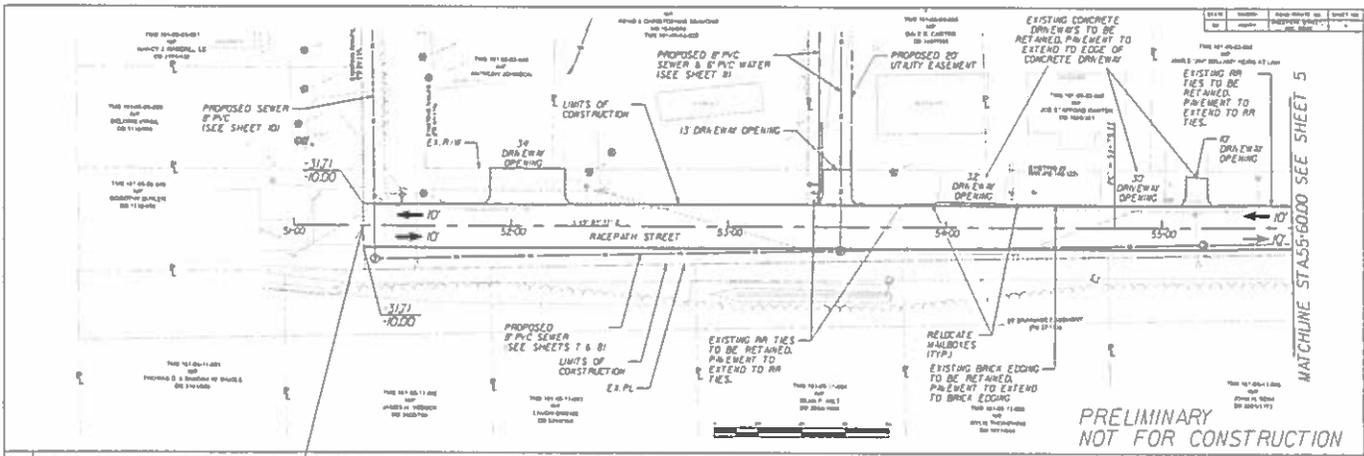


Aerial Exhibit
 Racepath Street Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Imagery 2018

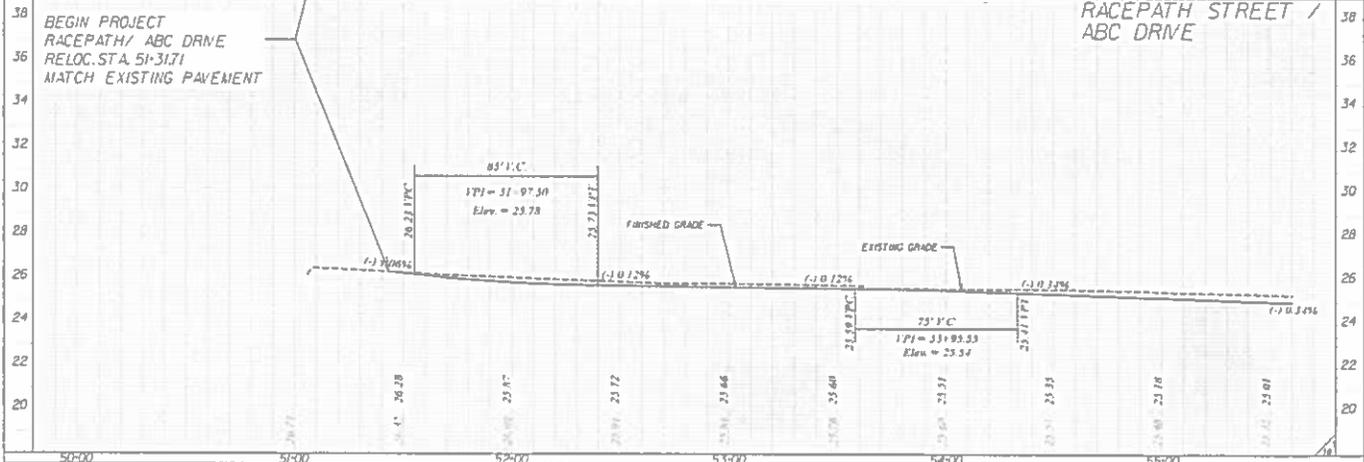
SCALE:
 1" = 200'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.
3

Drawing Path: T:\Projects\2019\ENW\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Aerial Exhibit.mxd plotted by chandley 01-20-2020



PRELIMINARY
NOT FOR CONSTRUCTION
RACEPATH STREET /
ABC DRIVE



Mead & Hunt

RACEPATH STREET / ABC DRIVE
Horry County, South Carolina
PLAN AND PROFILE SHEET

PROJECT NO. 14-000000
SHEET NO. 14-000000-01

DATE: 11/11/14

SCALE: 1" = 40'

PROJECT: RACEPATH STREET / ABC DRIVE

LOCATION: Horry County, South Carolina

DATE: 11/11/14

SCALE: 1" = 40'

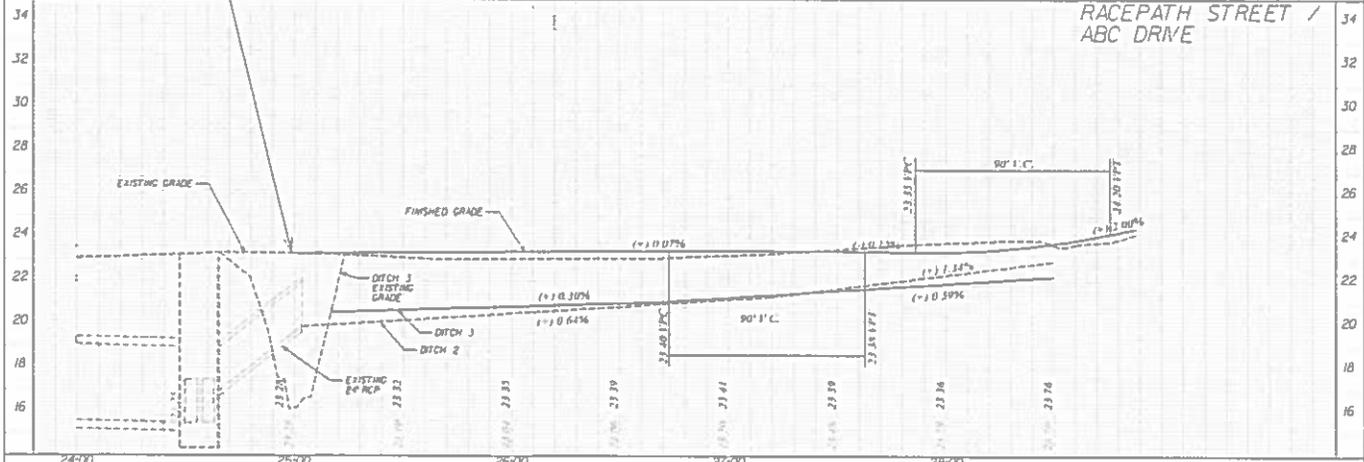
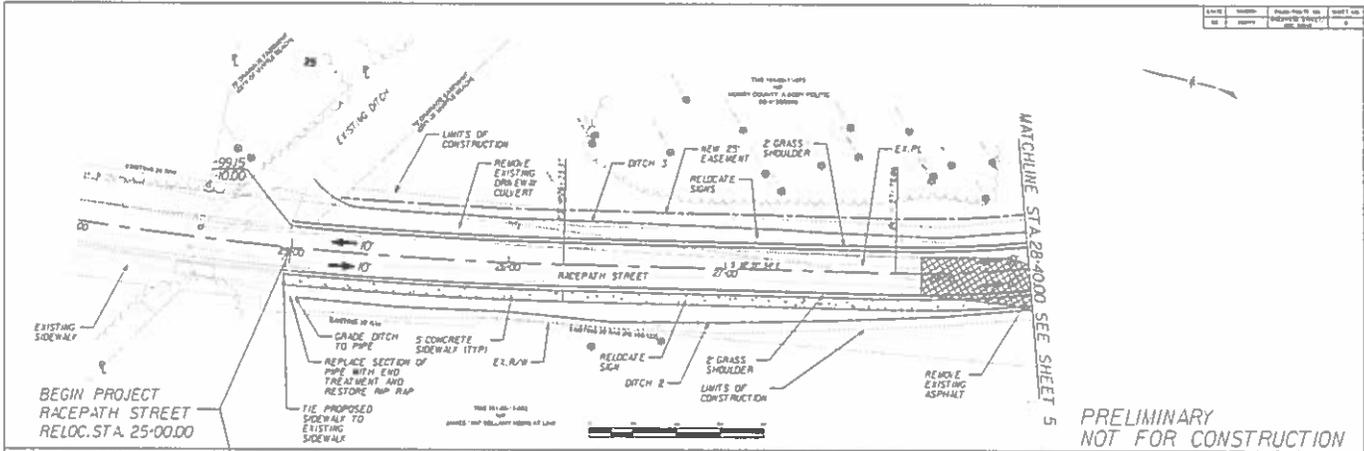
PROJECT: RACEPATH STREET / ABC DRIVE

LOCATION: Horry County, South Carolina

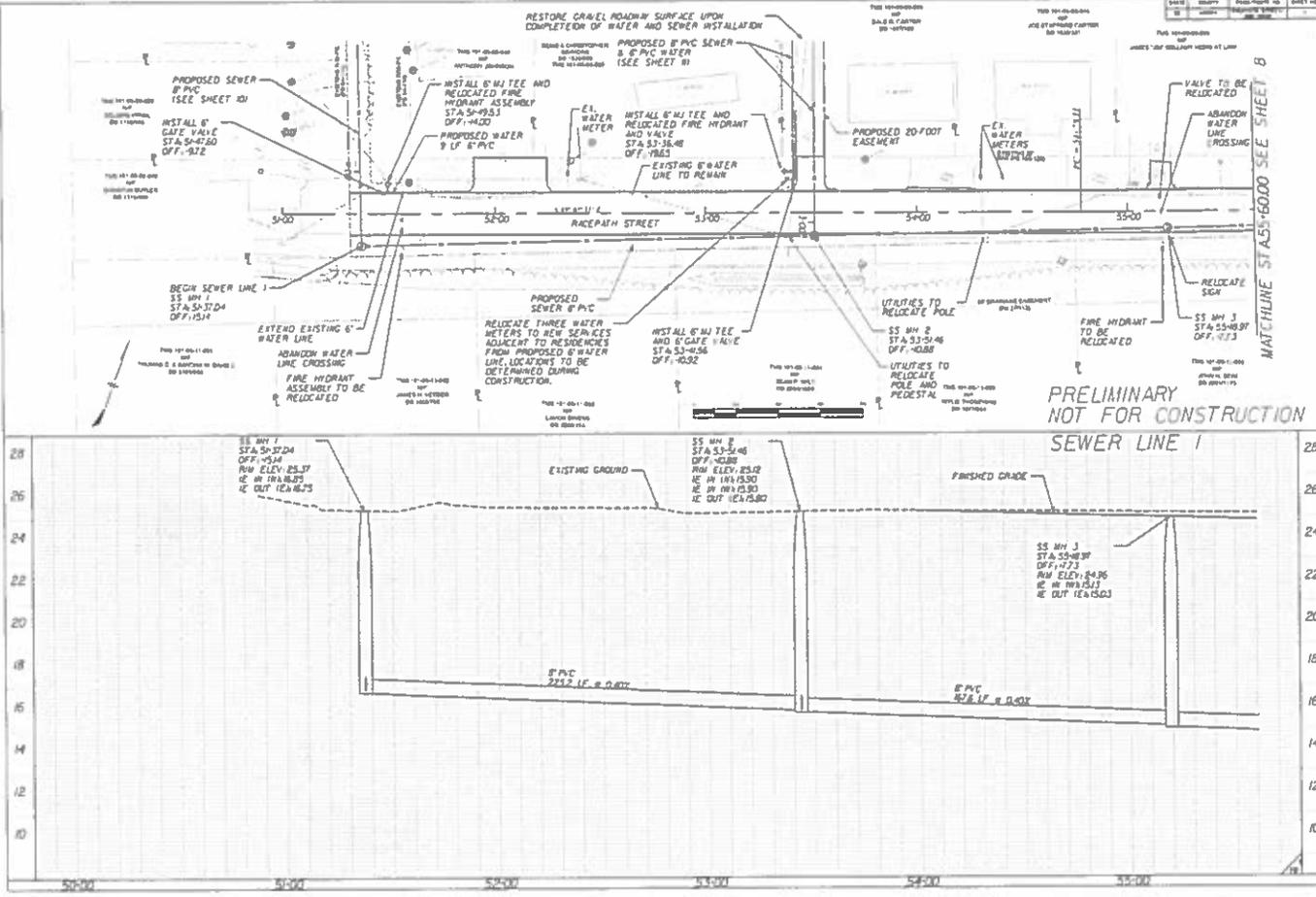
DATE	ISSUED	PROJECT NO.	SHEET NO.
08/20/2014	REVISED	14-00000000	5

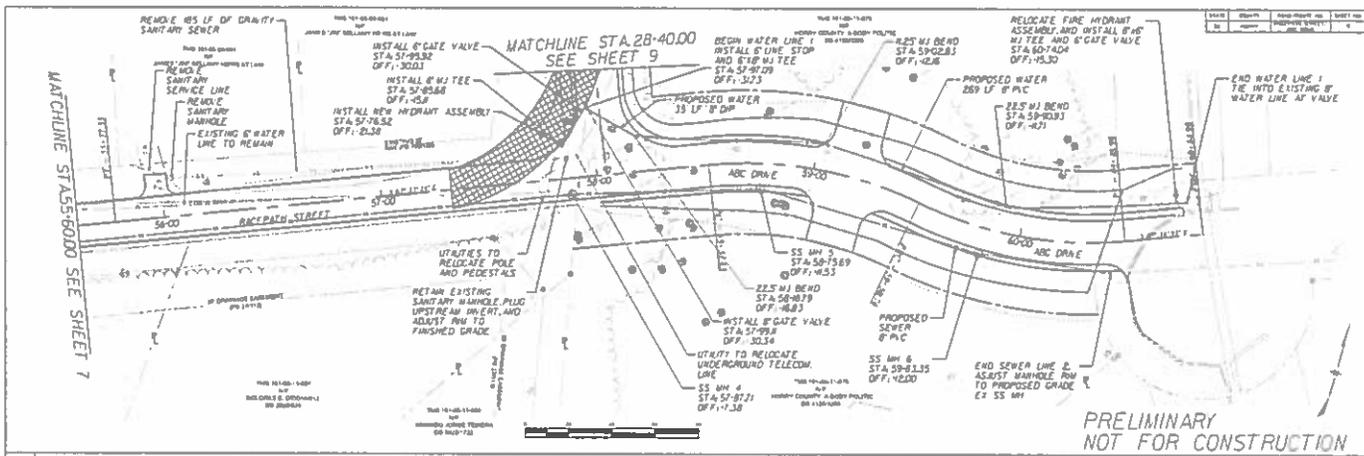
Mead & Hunt
 CIVIL ENGINEERS
 1000 W. HARRIS STREET
 COLUMBIA, SC 29201
 PHONE: 803.733.1100
 FAX: 803.733.1101
 WWW.MEADANDHUNT.COM

RACEPATH STREET / ABC DRIVE
 HORRY COUNTY, SOUTH CAROLINA
 PLAN AND PROFILE SHEET

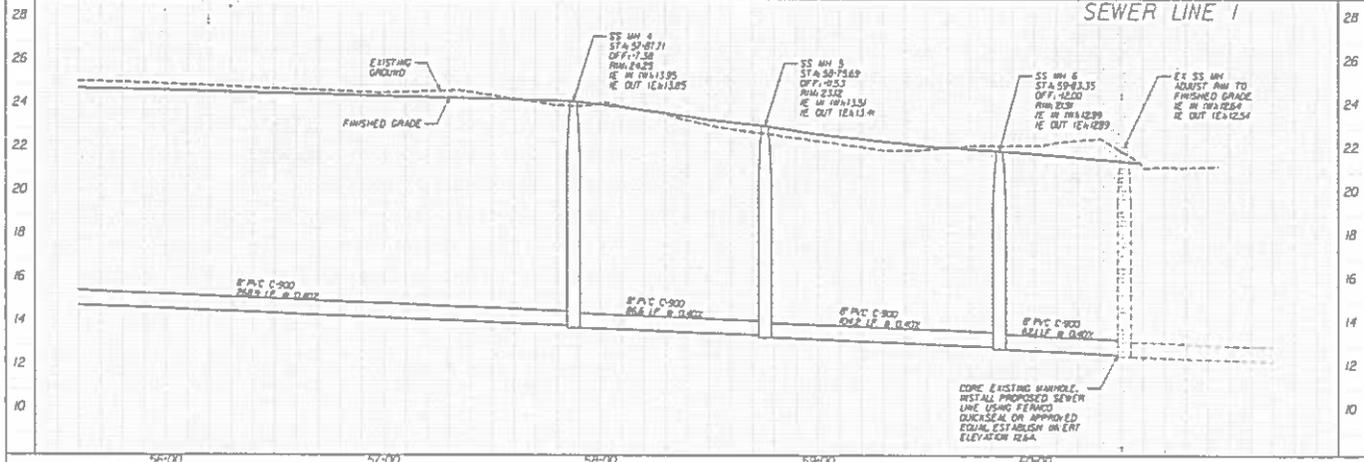


PRELIMINARY
 NOT FOR CONSTRUCTION
 RACEPATH STREET /
 ABC DRIVE





PRELIMINARY
NOT FOR CONSTRUCTION
SEWER LINE 1



Mead & Hunt

PLAN AND PROFILE SHEET

RACEPATH STREET / ABC DRIVE
Horry County, South Carolina

DATE: 11/11/11
PROJECT NO: 11-0001
SHEET NO: 4

SCALE: 1" = 40'

DESIGNED BY: J. H. HUNT
CHECKED BY: J. H. HUNT
DATE: 11/11/11

PROJECT: RACEPATH STREET / ABC DRIVE
SHEET NO: 4

DATE: 11/11/11

PROJECT NO: 11-0001

SCALE: 1" = 40'

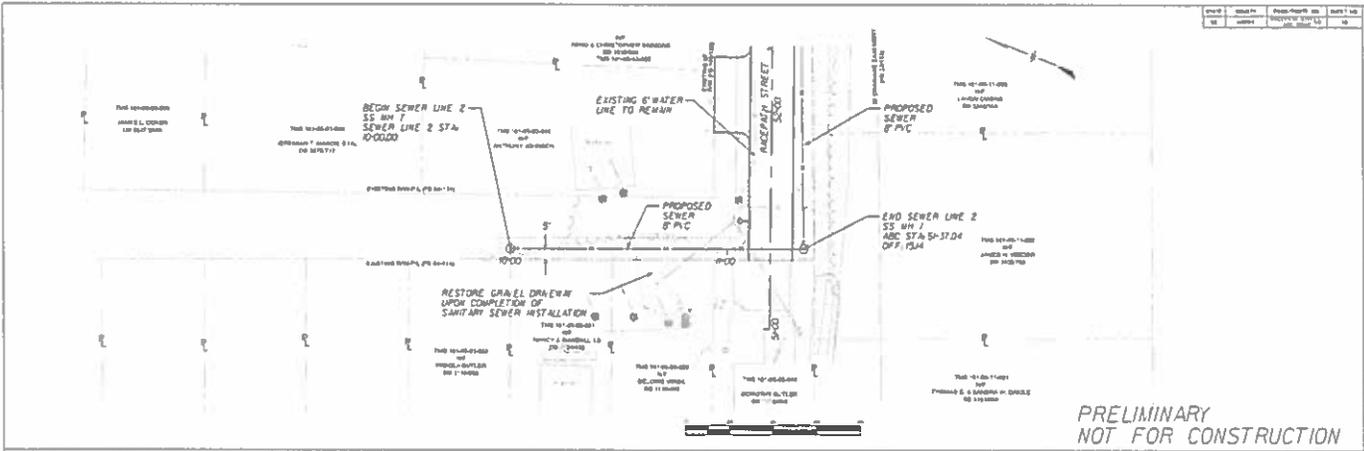
DESIGNED BY: J. H. HUNT

CHECKED BY: J. H. HUNT

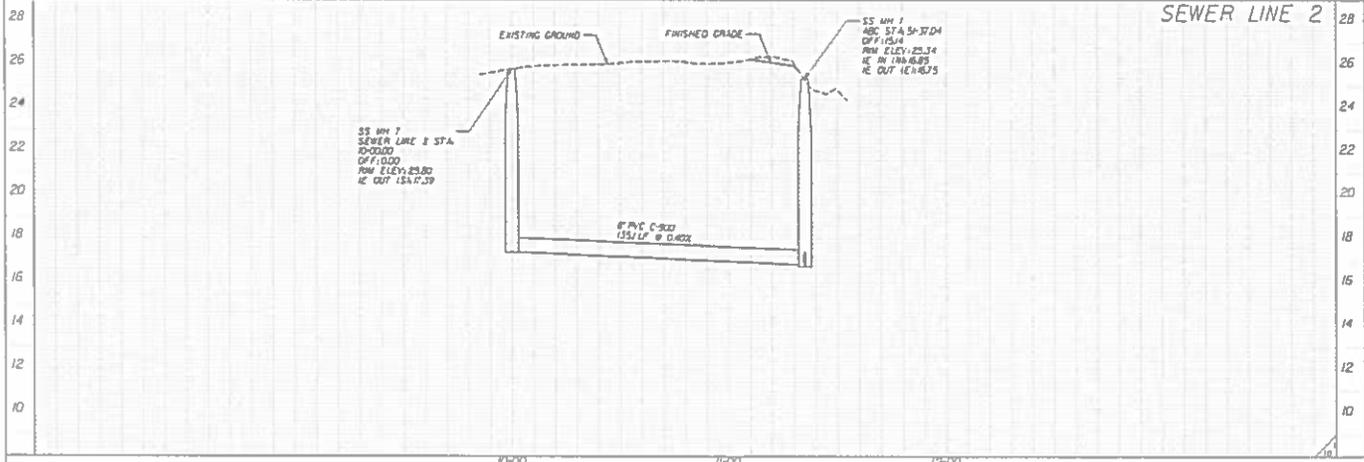
DATE: 11/11/11

DATE	DESCRIPTION	BY
10/15/11	ISSUED FOR PERMITS	JLH
10/15/11	ISSUED FOR CONSTRUCTION	JLH

Mead & Hunt
 1000 W. 10th Street
 Suite 100
 Wilmington, NC 28401
 Phone: 910.343.7000
 Fax: 910.343.7001
 www.mh-engineers.com



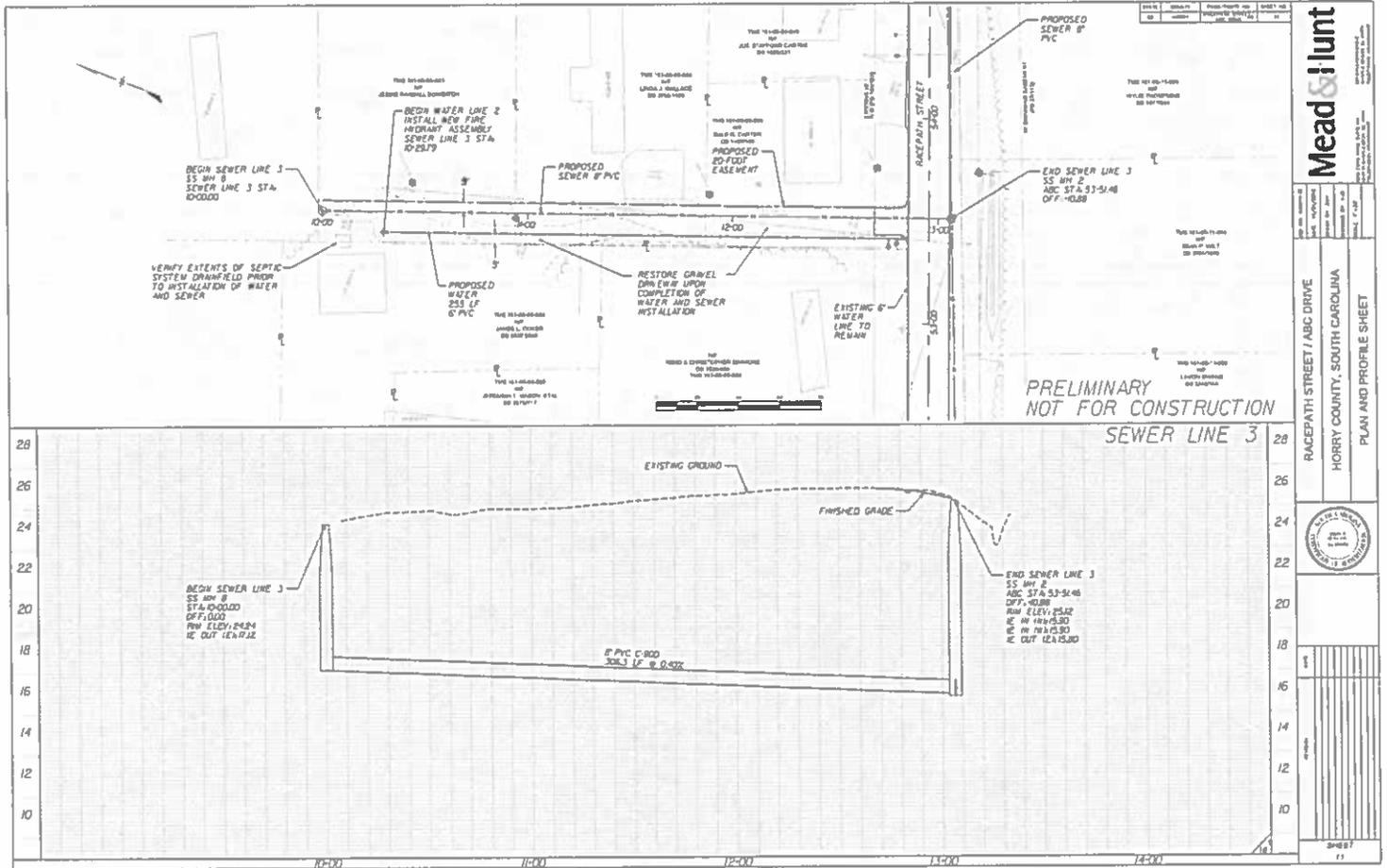
PRELIMINARY
 NOT FOR CONSTRUCTION



RACEPATH STREET / ABC DRIVE
 Horry County, South Carolina
 PLAN AND PROFILE SHEET



DATE	DESCRIPTION	BY
10/15/11	ISSUED FOR PERMITS	JLH
10/15/11	ISSUED FOR CONSTRUCTION	JLH



PRELIMINARY
NOT FOR CONSTRUCTION

SEWER LINE 3

Mead & Hunt

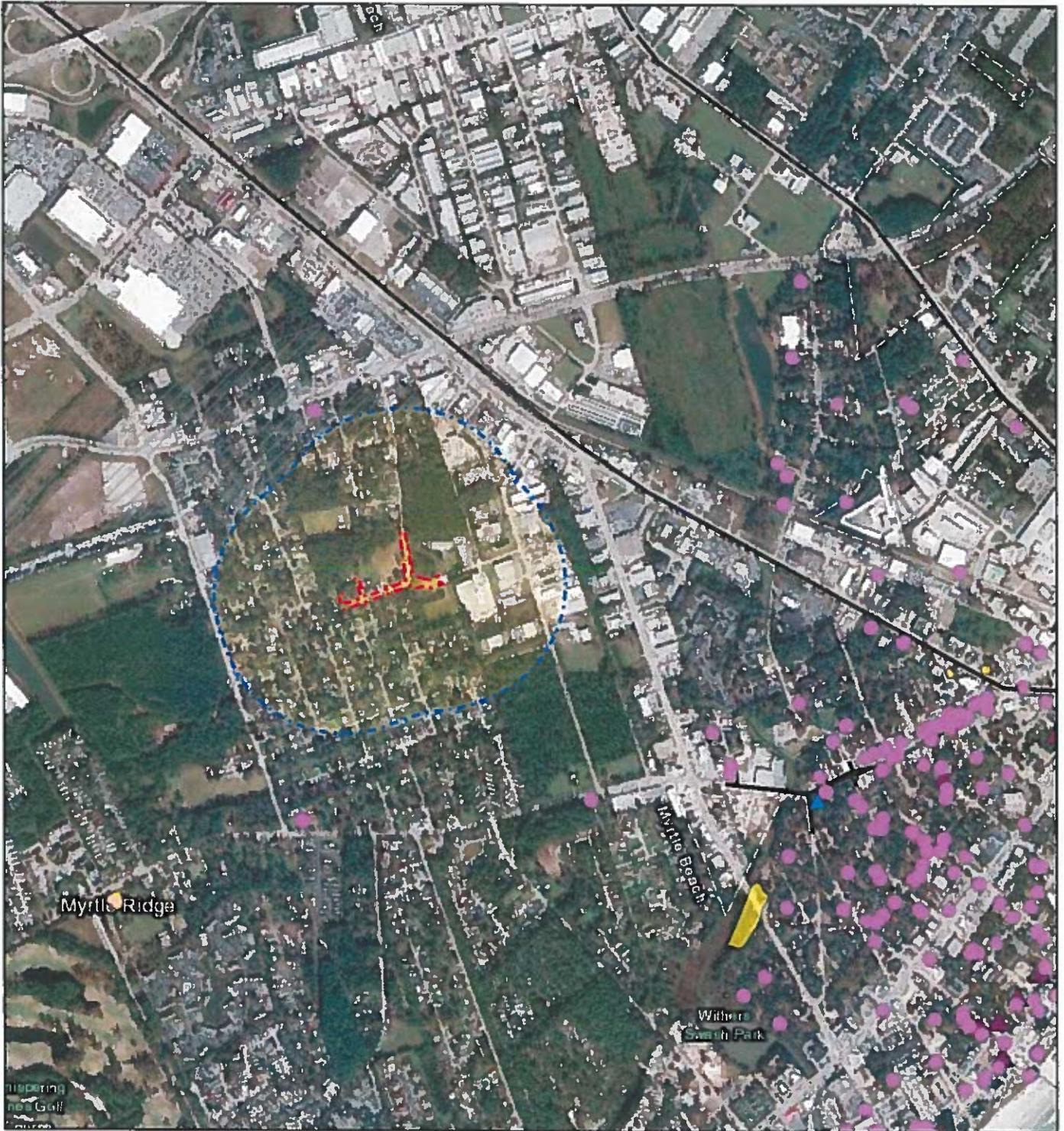
RACEPATH STREET / ABC DRIVE
HOBBS COUNTY, SOUTH CAROLINA
PLAN AND PROFILE SHEET

DATE: 11/15/2011
PROJECT NO: 11-0000
SHEET NO: 11

SCALE: 1" = 40'

PROJECTED: 11/15/2011
DESIGNED: 11/15/2011
CHECKED: 11/15/2011
APPROVED: 11/15/2011

Racepath Street Phase II



February 7, 2020

 ArchSite_Prod_1215

 ArchSite_Prod_6282

ArchSite_Prod_7423

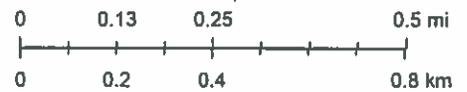
 Not Eligible or Requires Evaluation

 Eligible

 ArchSite_Prod_9966

 ArchSite_Prod_4897

1:18,056



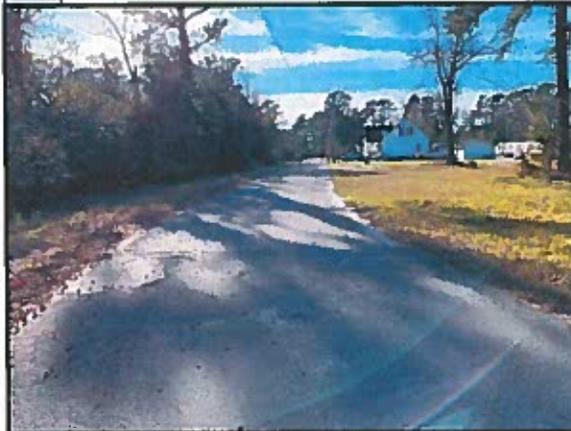
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



1 Proposed connection of Racepath Street to ABC Dr.
 Photograph taken facing west from ABC Dr.



2 Project area facing north along Racepath Street.



3 Project area facing west along Racepath Street.



4 Project area facing north along an un-named drive off of Racepath Street.

	Site Photographs Racepath Street Phase II Myrtle Beach, Horry County, South Carolina		S&ME Project 1463-19-014	
			Taken by: CO	Date: January 22, 2020



SOUTH CAROLINA DEPARTMENT OF
ARCHIVES & HISTORY

July 29, 2016

Chris Daves
S&ME
134 Suber Road
Columbia, SC 29210

Re: Racepath Street Roadway and Drainage Improvements Project
Myrtle Beach, Horry County, South Carolina
SHPO Project No. 16JS0283

Dear Mr. Daves:

Thank you for your letter of July 6, 2016, which we received on July 8, regarding the above-referenced proposed undertaking. We also received a Section 106 Project Review Form with required attachments as supporting documentation for this undertaking. The State Historic Preservation Office is providing comments to U.S. HUD pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

Based on the description of the Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this undertaking.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

If you have any questions, please contact me at (803) 896-6129 or jsylvest@scdah.sc.gov.

Sincerely,

John D. Sylvest
Project Review Coordinator
State Historic Preservation Office



February 15, 2018

Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

Re: Racepath Street Roadway and Drainage Improvements Project, Amended Project Area
Myrtle Beach, Horry County, South Carolina
SHPO Project No. 16-JS0283

Dear Mr. Daves:

Thank you for your letter of January 31, 2018, which we received on February 5, regarding the amended project area for the above referenced proposed undertaking previously reviewed by this office. We received a Section 106 Project Review Form, photographs, drawings, and maps as supporting documentation. The State Historic Preservation Office is providing comments to the U.S. Department of Housing and Urban Development pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

Based on the amended Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this proposed undertaking.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

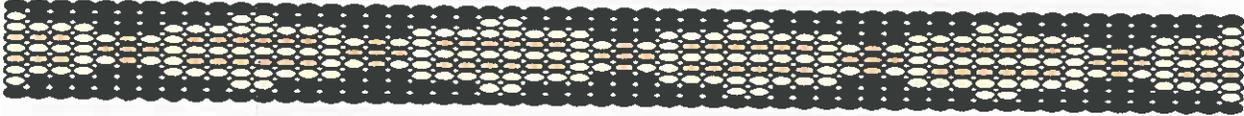
Please refer to SHPO Project Number 16-JS0283 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6129 or jsylvest@scdah.sc.gov.

Sincerely,

John D. Sylvest
John D. Sylvest
Project Review Coordinator
State Historic Preservation Office

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



March 6, 2020

Attention: Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

Re. THPO #	TCNS #	Project Description
2020-8-6		Racepath Street Phase II – Myrtle Beach, Horry County, SC

Dear Mr. Daves,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

Chris Daves

From: Caitlin Rogers <caitlinh@ccppcrafts.com>
Sent: Friday, March 6, 2020 3:10 PM
To: Chris Daves
Subject: Racepath Street Phase II
Attachments: 2020-8-6.jpg

Mr. Daves,

Attached is the concurrence letter for your project. Thanks

Caitlin

--

Caitlin Rogers
Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, SC 29730

803-328-2427 ext. 226
Caitlinh@ccppcrafts.com

Please Note: We CANNOT accept Section 106 forms via e-mail, unless requested. Please send us hard copies. Thank you for your understanding



Tribal Directory Assessment Information



Contact Information for Tribes with Interests in Horry County, South Carolina

Tribal Name				County Name			
- Catawba Indian Nation				Horry			
Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Bill Harris	Chief	996 Avenue of the Nations Rock Hill, SC 29730	(803) 366-4792	(803) 366-0629		bill.harris@catawbaindian.net	http://www.catawbaindian.net/
Dr. Wenonah G. Haire	Tribal Historic Preservation Officer	1536 Tom Steven Road Rock Hill, SC 29730	(803) 328-2427 ext. 224	(803) 328-5791		wenonahh@ccppcrafts.com	http://www.catawbaindian.net/

1 - 1 of 1 results « < 1 > » 10

LETTER OF TRANSMITTAL



S&ME, Inc., (S&ME)
134 Suber Road
Columbia, South Carolina 29210
803 / 561-9024
Fax 803 / 561-9177

DATE:	2/7/2020
Project#:	1463-19-014
RE:	Racepath Street Phase II
CDBG Funding - HUD Env. Review Request for Comments	

TO:

Ms. Caitlin Rogers
Catawba Indian Nation
THPO Archaeology Department
1536 Tom Steven Road
Rock Hill, South Carolina 29730

CERTIFIED MAIL

WE ARE SENDING YOU:

COPIES	DATE	NO.	DESCRIPTION
1	2/7/2020		Racepath Street Phase II Myrtle Beach, Horry County, SC

THESE ARE TRANSMITTED as checked below:

For your approval For your use As requested For review and comment

REMARKS:

Dear Ms. Rogers,

S&ME is currently seeking information necessary for the completion of a HUD Environmental Review for a project in Myrtle Beach, Horry County, SC. The proposed project will be seeking federal CDBG funding. Previous THPO reviews were conducted by your office in 2016 and 2018, with a letter being issued under THPO Project No. 2016-342-3 in October 2016 and THPO Project No. 2018-8-27 in February 2018. Additional areas have been added to the project area. Please accept this letter as a request for comments from the THPO.

Thank you for your continued technical assistance. Please contact me at (803) 561-9024 if you have questions concerning this project.

**Thank you,
Chris Daves**

COPY TO:

SHPO

SIGNED: _____

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

This Letter of Transmittal and the documents accompanying this Letter of Transmittal contain information from S&ME, Inc., which is confidential and legally privileged. The information is intended only for the use of the individual or entity named on this Letter of Transmittal. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on these documents is strictly prohibited.



February 7, 2020

Catawba Indian Nation
THPO Archaeology Department
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Attention: Ms. Caitlin Rogers

Reference: **Request for Comments**
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

Dear Ms. Rogers:

On behalf of Horry County (recipient), S&ME, Inc. (S&ME) is currently seeking information necessary for the completion of a U.S. Department of Housing and Urban Development (HUD) Environmental Review. Please accept this letter as a request for comments from the Catawba Indian Nation – Tribal Historic Preservation Office (THPO) regarding the above-referenced project located in Horry County, South Carolina.

◆ Previous THPO Consultations

Portions of the project were previously submitted to the THPO in October 2016 and January 2018. Your office issued a letter on October 5, 2016 under THPO Project No. 2016-342-3 (see attached) and a second letter on February 27, 2018 under THPO Project No. 2018-8-27 indicating the Catawba had no immediate concerns with regard to the traditional cultural properties, sacred sites, or Native American archaeological sites within the boundaries of the proposed project areas..

◆ Project Description

Horry County is seeking federal Community Block Development Grant (CD8G) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina and is comprised of approximately 1.69 acres. Phase II of construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing A8C Drive, measuring approximately 300 linear feet.

The planned street, water, and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), utility relocation (hydrants, etc.), roadside landscaping, and street lighting improvements. The proposed improvements will occur inside the existing ROW, except



where new roadway construction will connect Racepath Street and ABC Drive. Racepath Street located within a Low-to-Moderate Income (LMI) neighborhood. The objectives of the project include:

- Improvement of drainage/flooding issues.
- Provide a better quality of life by creating a more suitable living environment.
- Complete HUD strategic goals of strengthening communities and Horry County priorities of providing public infrastructure.

The location of the proposed project area is shown on **Exhibits 1-3** attached to this letter report.

◆ **Background Research**

Based on the consultation of ArchSite, no previously identified eligible historic properties were located within a 0.25-mile Area of Potential Effect (APE). Therefore, no historic properties appear to be affected.

◆ **Enclosures**

Included in the Appendix, please find the following information for your review:

Appendix

- ◆ SHPO Project Review Form
- ◆ Vicinity Exhibit (Exhibit 1)
- ◆ Topographic Exhibit (Exhibit 2)
- ◆ Aerial Exhibit (Exhibit 3)
- ◆ Site Plan
- ◆ ArchSite Printout
- ◆ Site Photographs
- ◆ Previous THPO Letters (2016-342-3) and (2018-8-27)



Request for Comments
Racepath Street Phase II
Myrtle Beach, Horry County, South Carolina
S&ME Project No. 1463-19-014

◆ **Closing**

Thank you for your assistance in this project. We look forward to receiving the THPO comments. If you have questions regarding this submittal, please contact Chris Daves at 803-561-9024.

Sincerely,

S&ME

A handwritten signature in cursive script that reads "Chris Handley".

Chris Handley
Biologist
chandley@smeinc.com

A handwritten signature in cursive script that reads "Chris Daves".

Chris Daves, P.W.S.
Biologist
cdaves@smeinc.com

cc: SC SHPO

Enclosures

SHPO Project Review Form

Vicinity Exhibit (Exhibit 1)

Topographic Exhibit (Exhibit 2)

Aerial Exhibit (Exhibit 3)

Site Plan

ArchSite Printout

Site Photographs

Previous THPO Letters (2016-342-3) and (2018-8-27)



State Historic Preservation Office

South Carolina Department of Archives and History
8501 Parklane Road | Columbia, SC | 29225
scdah.sc.gov

SECTION 106 PROJECT REVIEW FORM

Section 106 of the National Historic Preservation Act, and the implementing regulations at 36 CFR 800, requires the South Carolina State Historic Preservation Office (SHPO) to review all projects/undertakings that are federally funded, licensed, permitted, or assisted. The responsibility for preparing review documentation pursuant to 36 CFR 800.11, including the identification of historic properties and the assessment of effects resulting from the undertaking, rests with the federal agency or its delegated authority (including applicants). Consultation with the SHPO is NOT a substitution for consultation with appropriate Native American tribes or other participants who are entitled to comment on the Section 106 process (per 36 CFR 800.2). For guidance regarding this Form or the Section 106 review process, please visit our [Review and Compliance Program website](#).

STATUS OF PROJECT (check one)

- Federal Undertaking Anticipated (You are applying for Federal assistance)
- Federal Undertaking Established (You have received Federal assistance)
- Due Diligence Project (No anticipated Federal assistance)
- Additional Information for Previous Project Submission (SHPO Project No. _____)

GENERAL INFORMATION

1. Project Name: Racepath Street Phase II
2. City/Town: Myrtle Beach 3. County: Horry
4. Federal Agency (providing funds, license, permit, or assistance): US Dept. of Housing and Urban Development
5. Agency Contact Name: Lenwood Smith Email: lenwood.e.smith@hud.gov
Address: 1500 Pinecroft Road, Suite 401; Greensboro, NC 27407-3838 Phone: (336)-851-8054
6. Federal Agency Delegated Authority (includes Applicants): Horry County
Delegated Authority Contact Name: Courtney Kain Email: kainc@horrycounty.org
Address: 1515 Fourth Avenue; Conway, SC 29526 Phone: (843) 915-7031
7. Consultant for the Agency/Delegated Authority: S&ME, Inc.
Consultant Contact Name: Chris Daves, PWS/Senior Scientist Email: cdaves@smeinc.com
Address: 134 Suber Rd., Columbia, SC 29210 Phone: 803-561-9024

PROJECT DESCRIPTION

1. Indicate the type of project (new construction, rehabilitation, replacement/repair, demolition, relocation, acquisition, infrastructure, other) and provide a detailed description of the proposed project, including related activities (staging areas, temporary roads, excavations, etc.), which will be carried out in conjunction with the project. Attach additional pages if necessary. If a detailed scope of work is not available yet, please explain and include all preliminary information:

Horry County is seeking federal Community Block Development Grant (CDBG) funding to complete the project. The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina. Phase II of the planned construction includes two main components:

1. Street, water, and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new roadway connecting the existing Racepath Street with the existing ABC Drive (300 linear feet).

2. Describe the length, width, and depth of all proposed ground disturbing activities, as applicable (defined as any construction activity that affects the soil within a project area, including excavating, digging, trenching, drilling, augering, backfilling, clearing, or grading):

Ground disturbance is proposed on the site during construction of new roadway and resurfacing and maintenance along Racepath Street. This will include excavation (< 5 ft.) and grading.

3. Will this project involve phases of construction? If so, please describe the work to be conducted under each phase.

No.

4. How many acres are in the project area? For building rehabilitation projects, list the building's approximate square footage.

1.69 acres.

5. Describe the current land use and conditions within and immediately adjacent to the project area (e.g. farmland, forest, developed, etc.) as well as prior land use and previous disturbances within and immediately adjacent to the project area (e.g. grading, plowing, mining, timbering, housing, commercial, industrial, road or other construction, draining, etc.).

The project area consists of residential parcels along Racepath Street. Immediately surrounding properties consist of residences (N, S,W), forestland and commercial business (E), residences and open land (W). Site use has been cleared land/forestland (1937) and residential (1984). Adjacent properties have been commercial/residential since 1990s.

DETERMINING THE AREA OF POTENTIAL EFFECTS (APE)

All projects/undertakings have an APE. The APE is the geographic area or areas within which a project/undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. These changes can be direct (physical) or indirect (visual, noise, vibration) effects. The APE varies with the project type and should factor in the setting, topography, vegetation, existing and planned development, and orientation of resources to the project. For example, if your project includes:

- Rehabilitation, demolition, or new construction then your APE might be the building or property itself and the surrounding properties with a view of the project.
- Road/Highway construction or improvements, streetscapes, etc., then the APE might be the length of the project corridor and the surrounding properties/setting with a view of the project.
- Above-ground utilities, such as water towers, pump stations, retention ponds, transmission lines, etc., then your APE might be the area of ground disturbance and the surrounding properties/setting with a view of the project.
- Underground utilities, then your APE might be the area of ground disturbance and the setting of the project.

6. Provide a written description of the Area of Potential Effect (APE).

Based on the nature of the project, the APE includes the project boundaries surrounded by a 0.25-mile radius. The APE was determined by considering the current and future site use of the site and surrounding properties.

IDENTIFICATION OF HISTORIC PROPERTIES

A historic property is defined as any prehistoric or historic district, site, building, structure, or object listed in or eligible for listing in the National Register of Historic Places (NRHP).

7. Is the project located within or adjacent to a property or historic district listed in or eligible for listing in the NRHP?

YES NO If yes, provide the name of the property or district:

8. Are there any buildings or structures that are 50 years old or older within the project APE?

YES NO If yes, provide approximate age:

9. Are any of the buildings or structures in Question 8 listed in or eligible for listing in the NRHP?

YES NO If yes, identify the properties by name, address, or SHPO site survey number. If no, provide an explanation as to why the properties are not eligible for the NRHP.

10. List all historical societies, local governments, members of the public, Indian tribes, and any other sources consulted in addition to the SHPO to identify known and potential historic properties and note any comments received.

ArchSite

11. Does the landowner know of any archaeological resources found within the APE?

YES NO DO NOT KNOW If yes, please describe: _____

12. Has a cultural resources and/or a historic properties identification survey been conducted in the APE?

YES NO DO NOT KNOW If yes, provide the title, author, and date of the report(s):

No sites eligible for NRHP noted.

13. Based on the information contained in questions 7 - 12, please check one finding:

- Historic Properties are present in the APE
- Historic Properties are not present in the APE

ASSESSMENT OF PROJECT EFFECT

PLEASE CHOOSE ONE DETERMINATION:

- No Historic Properties Affected (i.e., none are present or they are present but the project will have no effect upon them)
- No Adverse Effect on historic properties (i.e., historic properties are present but will not be adversely effected)
- Adverse Effect on historic properties (i.e., historic properties are present and will be adversely effected)
- Due Diligence Project (An effect determination does not apply due to no federal involvement)

Please explain the basis for you determination. If No Adverse Effect or Adverse Effect, explain why the Criteria of Adverse Effect (found at [36 CFR 800 5\(a\)\(1\)](#)) were found not applicable, or applicable, including any conditions on the project to avoid or minimize potential adverse effects, or efforts taken to avoid or minimize potential adverse effects.

According to ArchSite database, no sites potentially eligible, eligible, or listed on the NRHP are located within APE. Proposed project will not alter the integrity of existing neighborhood. Effects to surrounding properties will be negligible as surrounding area has been previously developed. Project will not change viewshed or create adverse visual effects.

SUBMITTAL CHECKLIST -- Did you provide the following documentation?

- A completed Section 106 Project Review Form:
- The Form must be completed in its entirety, as it is not the SHPD's responsibility to identify historic properties or to make a determination of effect of the undertaking on historic properties.
 - The appropriate federal agency information must be indicated on the Form. Contact the federal agency requiring consultation with the SHPD for this information. For US Housing and Urban Development projects under 24 CFR 58, the local government is the federal agency/responsible entity.
 - Include email contact information for all parties that are to receive our response via email. We no longer respond via mailed hard copy, unless requested.
 - One (1) Project Review Form may be utilized for batching undertakings that are duplicative in scope and within geographic areas no larger than a single county.
 - The Form is a fillable PDF, but you may also print and complete by hand. A double-sided print is acceptable.
- Map(s) indicating:
- The precise location of the project and extent of the Area of Potential Effect (APE), not too zoomed in or out in scale.
 - Include a subscriber or public view SC ArchSite (GIS) map indicating the precise location of the project and extent of the APE. SC ArchSite is an online inventory of all known cultural resources in South Carolina. SC ArchSite can be directly accessed at <http://www.scarchsite.org/default.aspx>.
 - In urban areas, a detailed city map and/or parcel map.
- Current, high resolution color photographs (2 photos max per page) illustrating:
- For all projects, views to and from the overall project location and extent of the Area of Potential Effect (APE), showing the relationship to adjacent buildings, structures, or sites.
 - For new construction or projects including ground disturbing activities, ground and/or aerial views documenting previous ground disturbance and existing site conditions.
 - For building or structure rehabilitation projects, full views of each side (if possible), views of important architectural details, and views of areas that will be affected by proposed alterations or rehabilitation work to the exterior or interior.
 - Photographs must describe or label the views presented, or be keyed to a site map.
 - Black and white photocopied, unclear, thumbnail, or obstructed view photographs are not acceptable.
- Project plans (if applicable and available) including:
- Scopes of work and/or project narratives
 - Site plans or sketches (existing vs proposed)
 - Project drawings and specifications for work on a historic building or structure
 - Elevations

Our ability to complete a timely project review largely depends on the quality and detail of the documentation submitted. If insufficient documentation is provided we may need to request additional materials, which will prolong the review process. For complex projects, some may find it advantageous to hire a preservation professional with expertise in history, architectural history and/or archaeology.

NOTE: If the project involves the rehabilitation of a building or structure listed in or eligible for listing in the National Register of Historic Places, please complete and submit the Historic Building Supplement in addition to this Form.

When planning to submit a project for review, please remember that our office has 30 calendar days per regulations from the date of receipt to review federal projects and 45 days per SHPD policy to review due diligence projects.

Please **DO NOT** send Project Review Forms by email or fax. We recommend that you use certified mail, FedEx, or UPS to determine if your project has been delivered.

Please send this completed Form along with supporting documentation to:

Review & Compliance Program, SC Department of Archives & History, 8301 Parklane Road, Columbia, SC 29223

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&M, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



**APPROXIMATE SITE LOCATION
 +/- 0.052, 0.057**



 **Approximate Boundary**



Vicinity Exhibit
 Racepath Street Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Street Map

SCALE:
 1" = 1,000'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

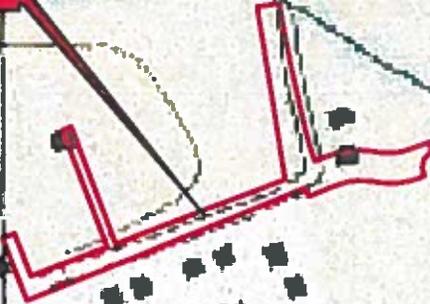
EXHIBIT NO.
1

REFERENCE:

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APPROXIMATE BOUNDARY
1463-19-014



 Approximate Boundary



Topographic Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina
Source: USGS 7.5-Minute Topo Quad Myrtle Beach, SC 1984

SCALE:
1" = 400'
DATE:
1-20-20
PROJECT NUMBER
1463-19-014

EXHIBIT NO.
2

Drawing Path: T:\Projects\2019\EN\Other Office Jobs\1463\15-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Aerial Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
+/- 1.69 ACRES

 Approximate Boundary

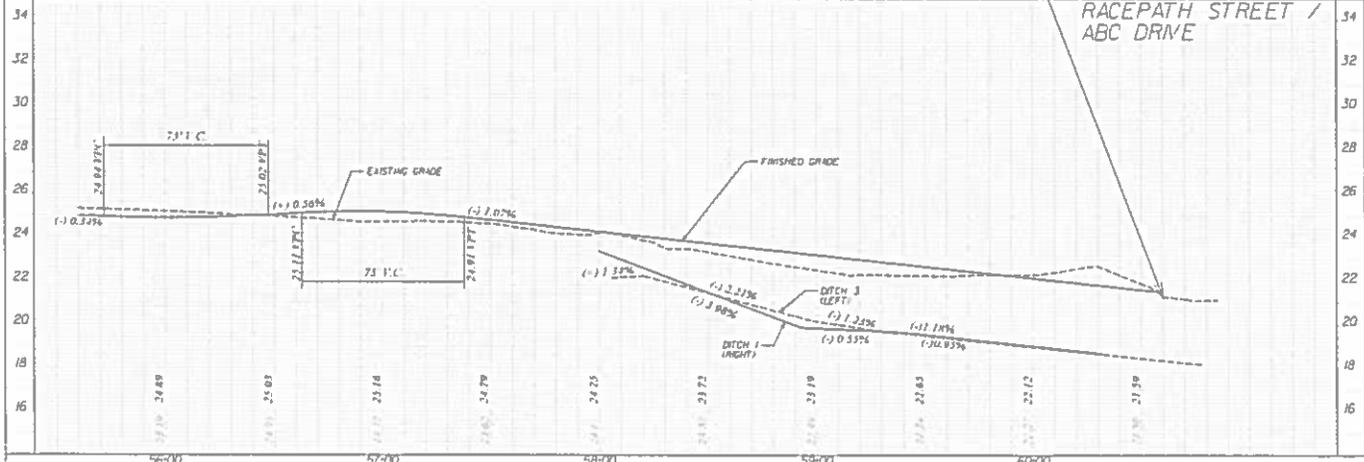
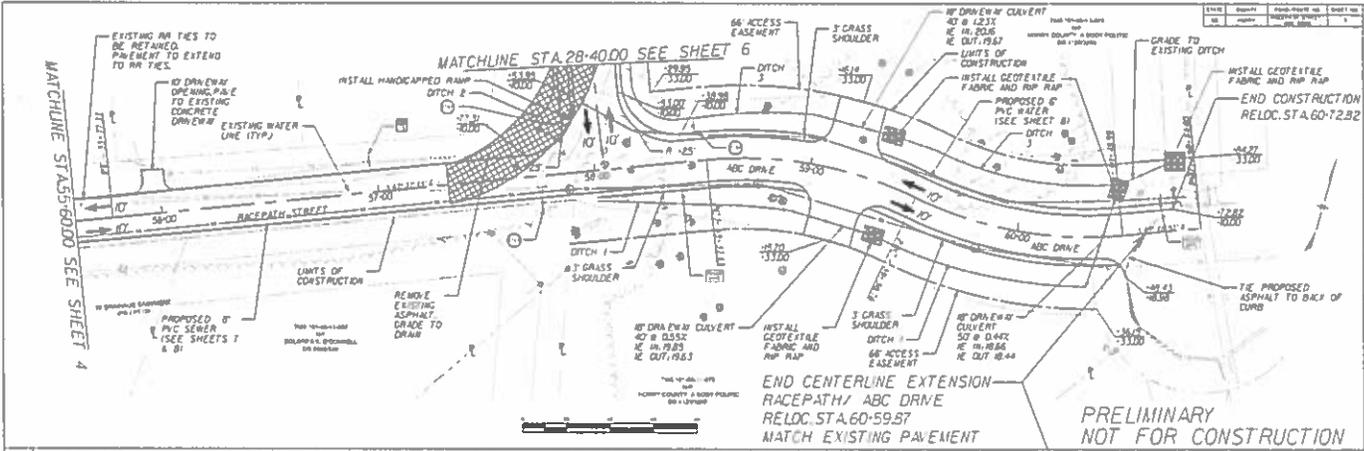
SCALE:
1" = 200'
DATE:
1-20-20
PROJECT NUMBER
1463-19-014

EXHIBIT NO.

3



Aerial Exhibit
Racepath Street Phase II +/- 1.69 Acres
Myrtle Beach, Horry County, South Carolina
Source: World Imagery 2018



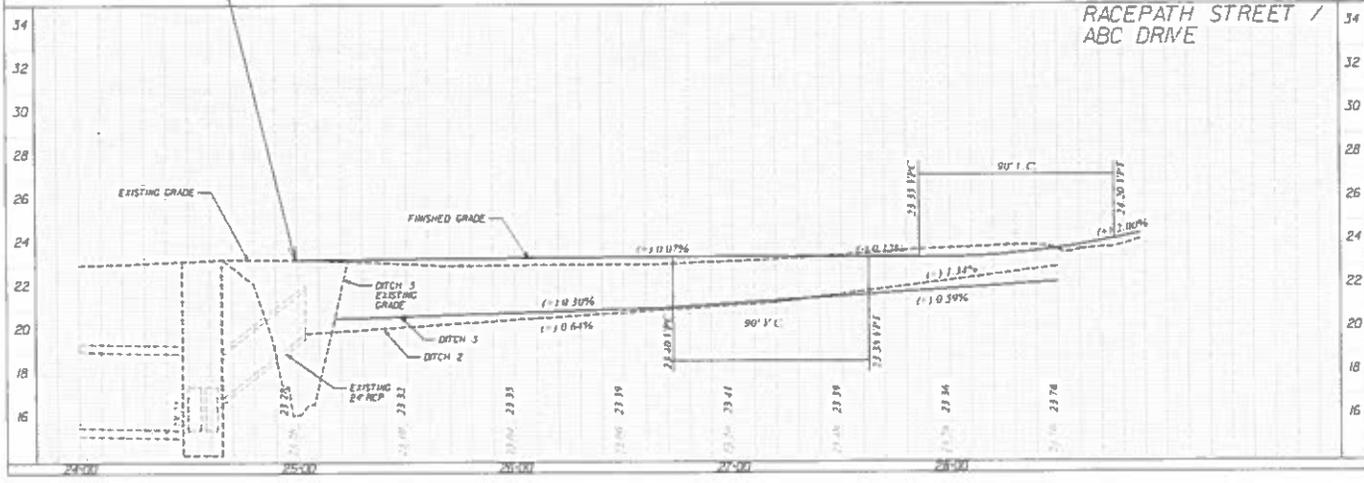
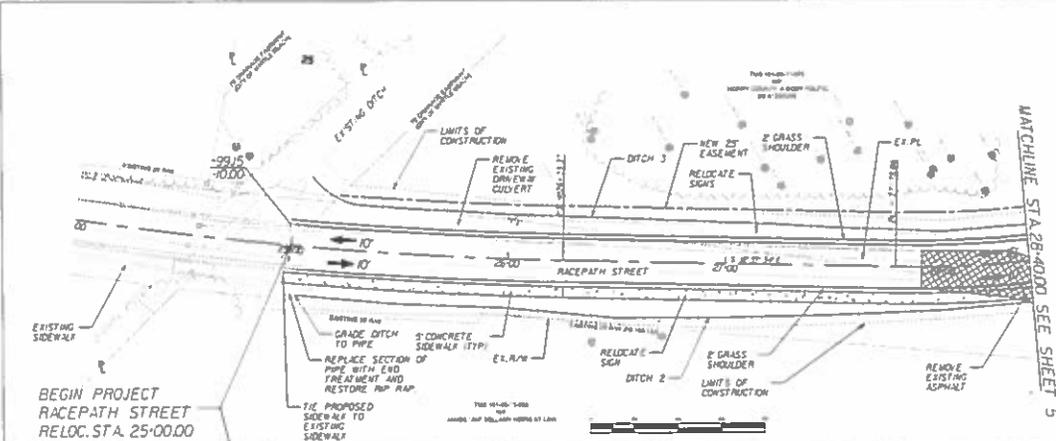
DATE	DESCRIPTION	BY	CHECKED BY
08/20/2014	ISSUE FOR PERMITS	JLH	ML
08/20/2014	ISSUE FOR CONSTRUCTION	JLH	ML

Mead & Hunt

RACEPATH STREET / ABC DRIVE
Horry County, South Carolina
PLAN AND PROFILE SHEET



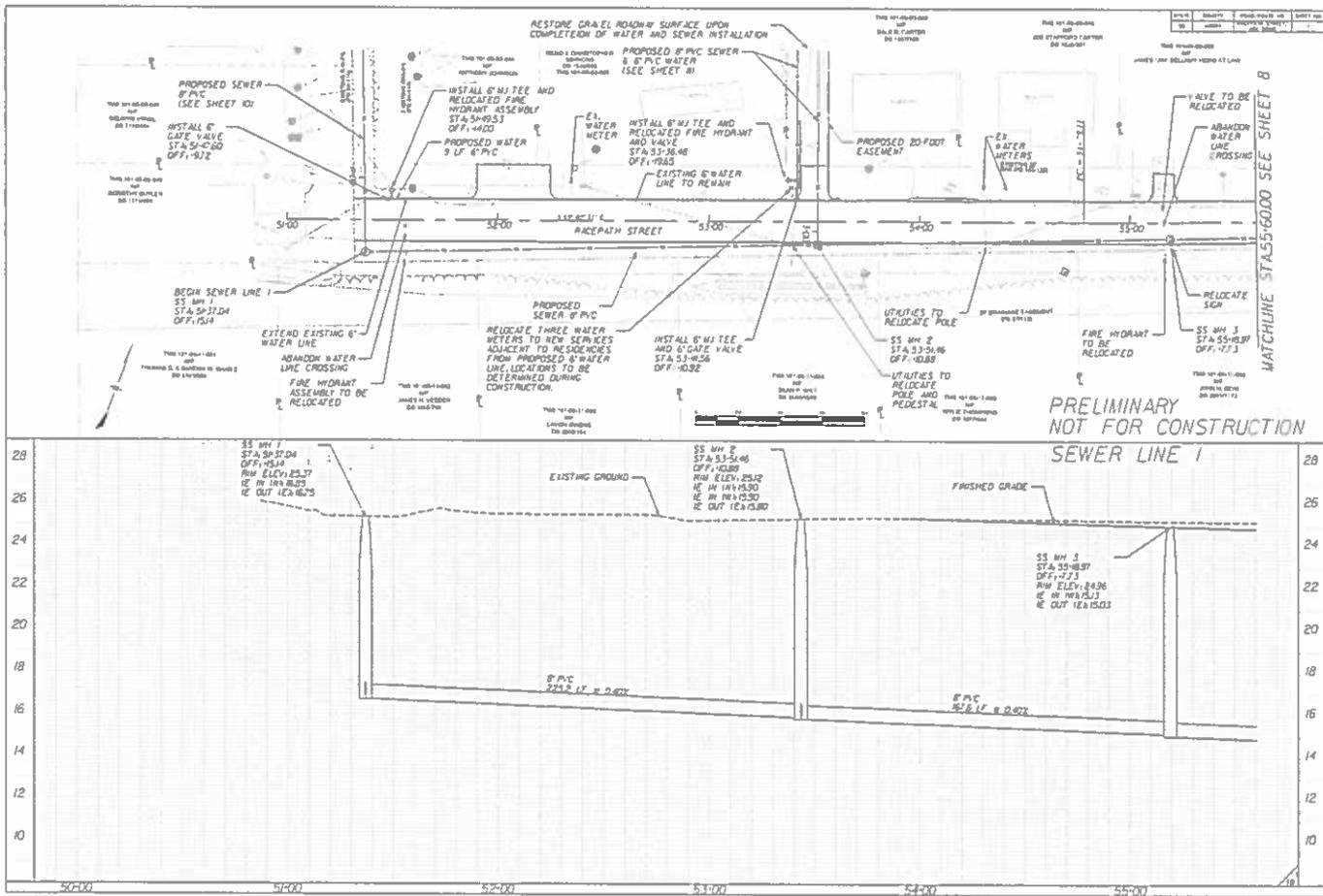
SHEET 6



PRELIMINARY
NOT FOR CONSTRUCTION
RACEPATH STREET /
ABC DRIVE

MATCHLINE STA 28+40.00 SEE SHEET 5

BEGIN PROJECT
RACEPATH STREET
RELOC. STA. 25+00.00



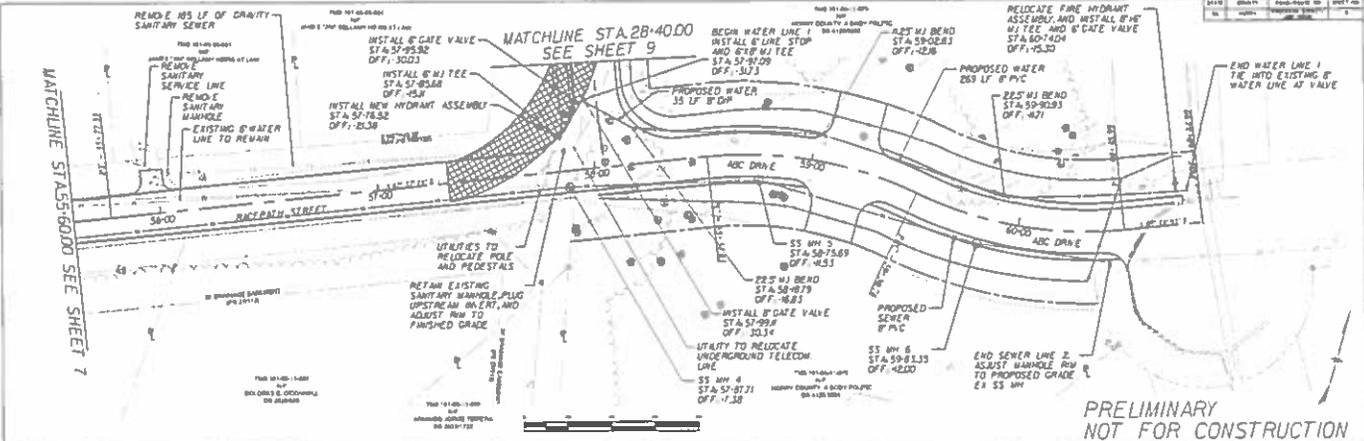
Mead & Hunt

RACEPATH STREET / ABC DRIVE
Horry County, South Carolina
PLAN AND PROFILE SHEET

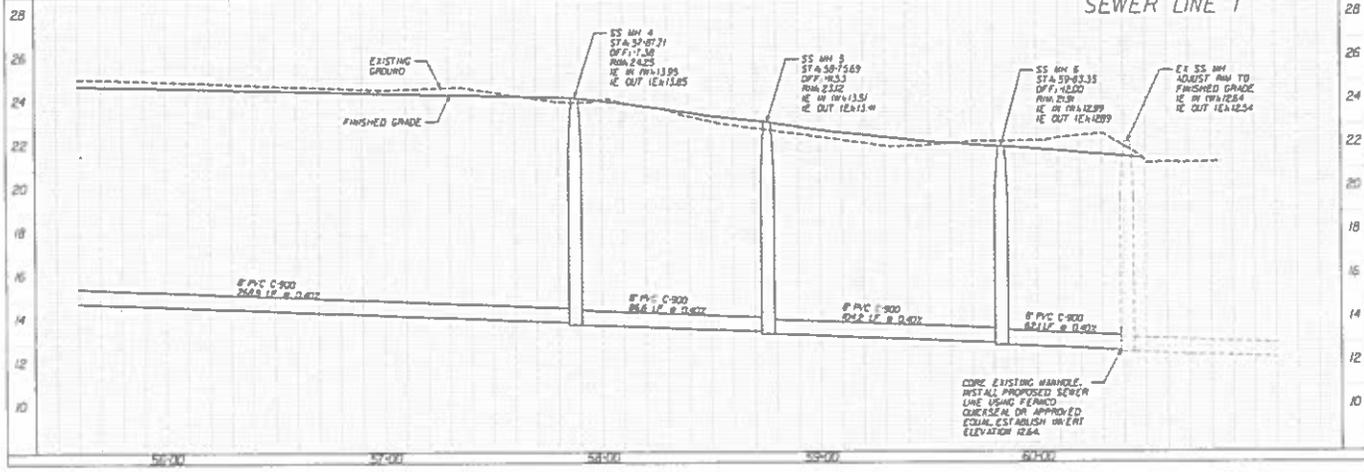
MATCHLINE STA 55+60.00 SEE SHEET B

MATCHLINE STA 55+60.00 SEE SHEET B

SHEET 7



PRELIMINARY
 NOT FOR CONSTRUCTION
 SEWER LINE 1

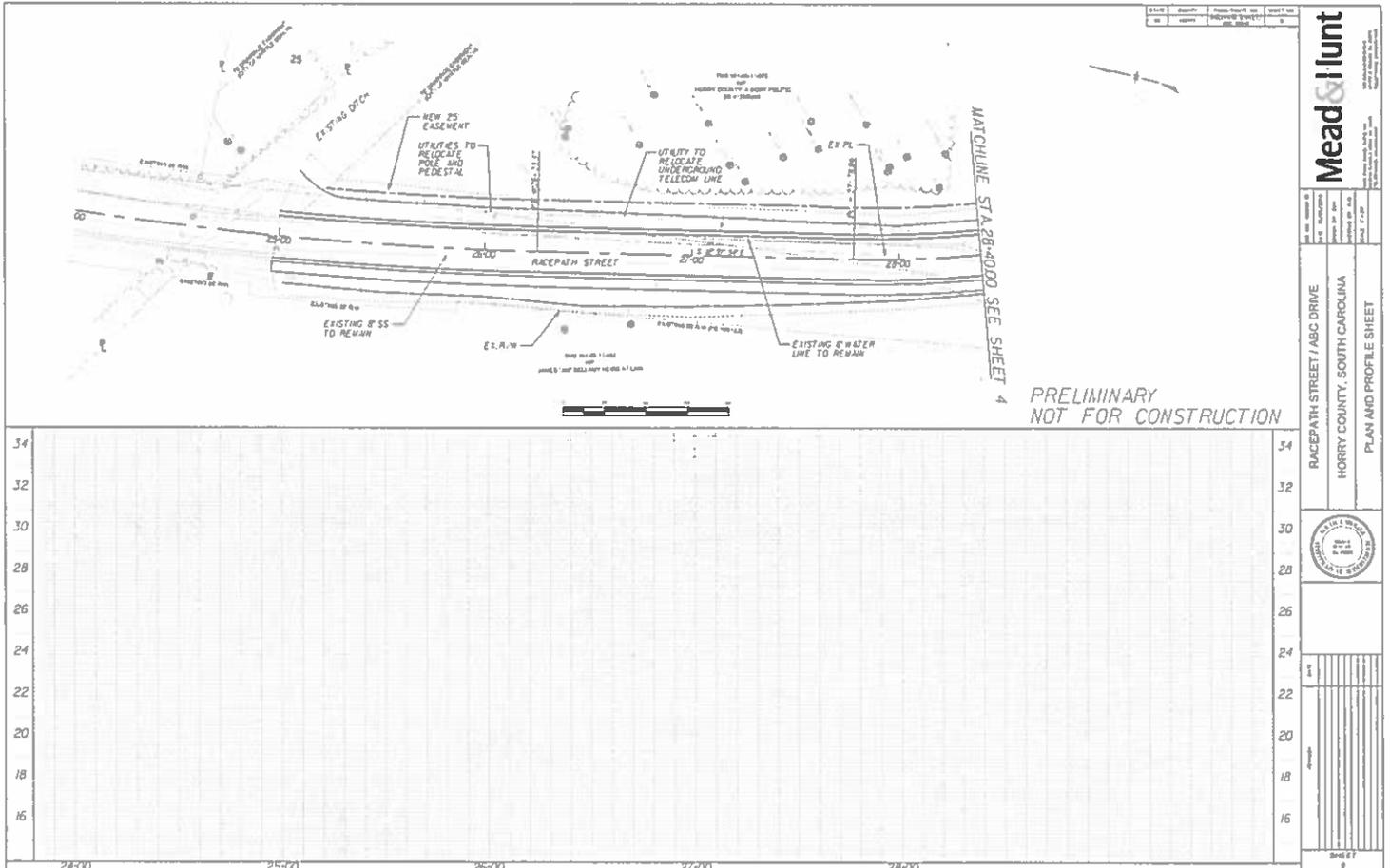


DATE	DESIGN	PROJECT NO.	SHEET NO.
08-20-20	UTILITY	25-100	4

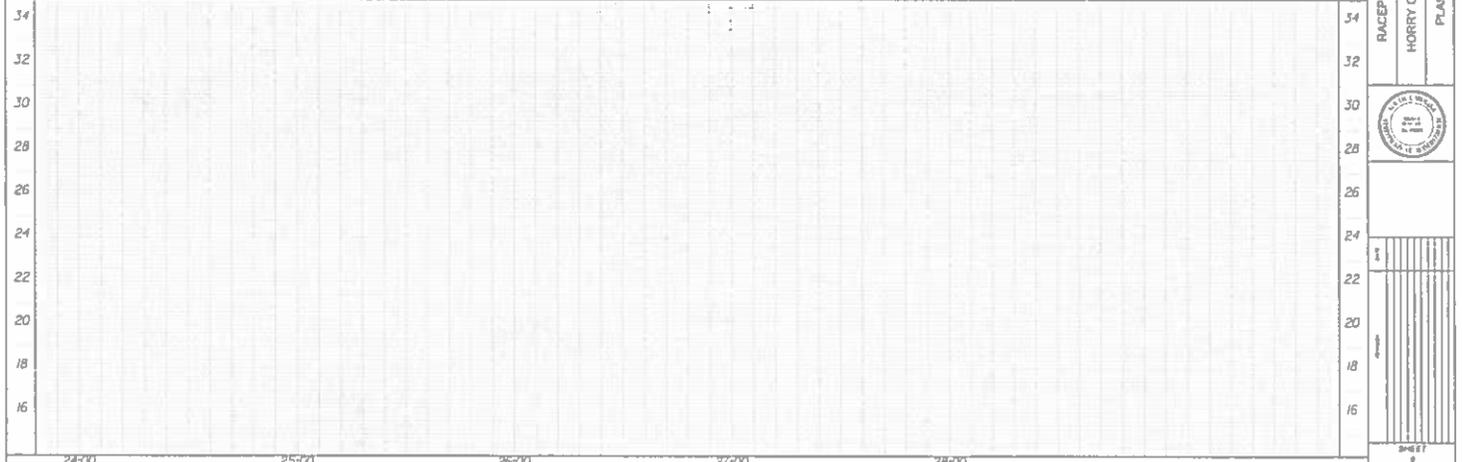
Mead & Hunt
 1000 W. 10th Street, Suite 100
 Columbia, SC 29201
 (803) 799-1111
 www.meadandhunt.com

PROJECT NO. 25-100
 SHEET NO. 4
 DATE 8-20-20

RACEPATH STREET / ABC DRIVE
 Horry County, South Carolina
 PLAN AND PROFILE SHEET



PRELIMINARY
 NOT FOR CONSTRUCTION



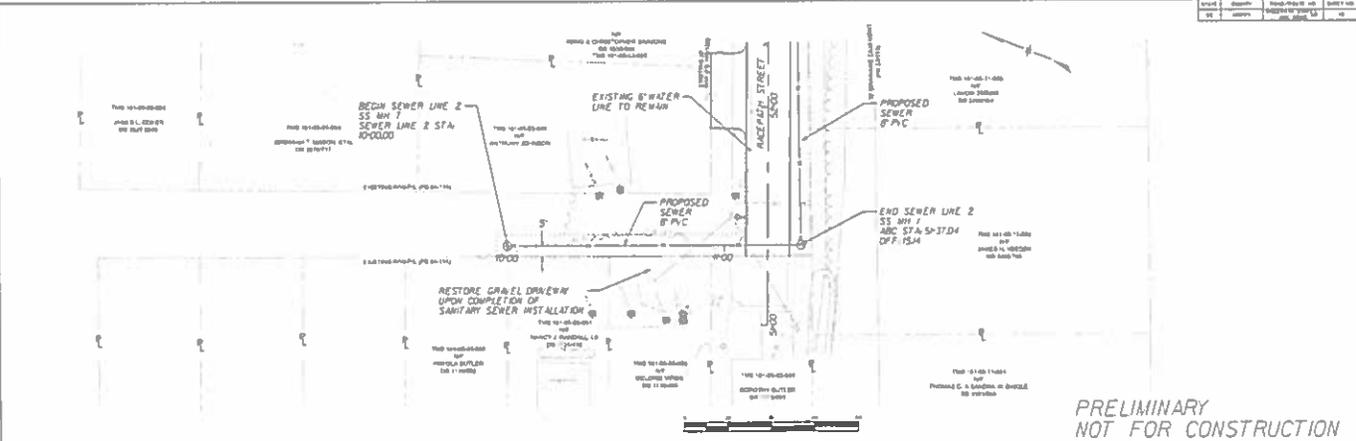
SHEET 4

DATE	DESIGN	PROJ. NO.	SHEET NO.
08/15/2017	08/15/2017	17-000	10

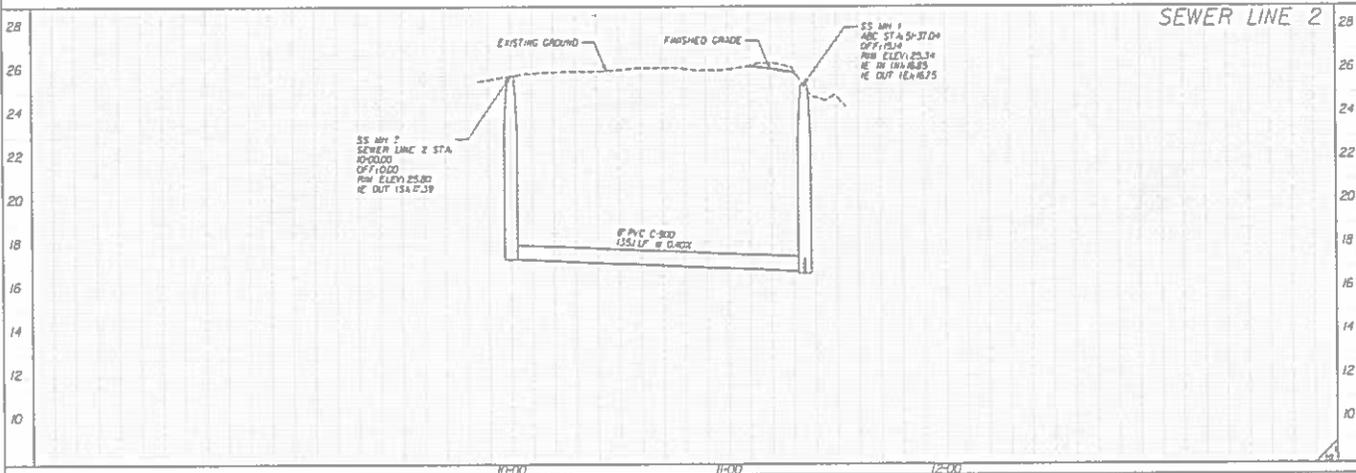
Mead & Hunt
 ENGINEERS & ARCHITECTS
 1000 W. BROAD ST.
 FAYETTEVILLE, NC 28404
 PHONE: 704.336.1100
 FAX: 704.336.1101
 WWW.MEADANDHUNT.COM

RACEPATH STREET / ABC DRIVE
 HOBBS COUNTY, SOUTH CAROLINA
 PLAN AND PROFILE SHEET

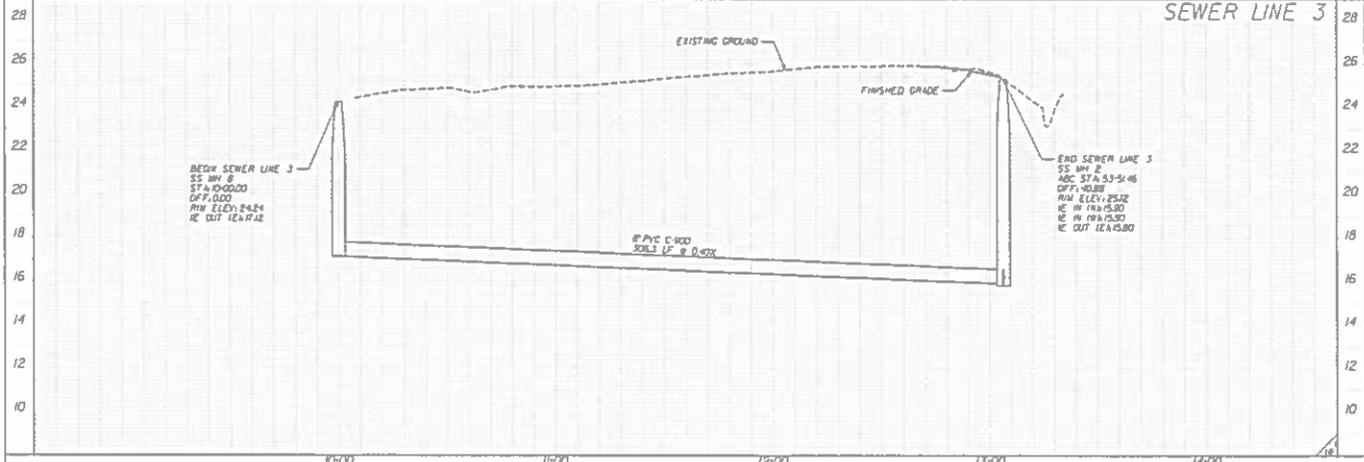
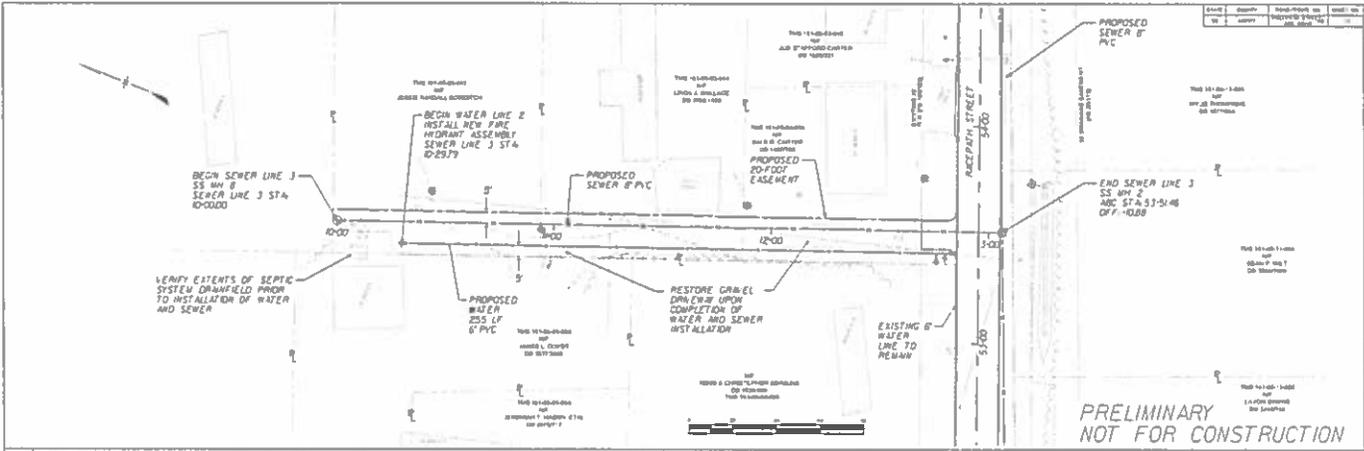
NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12	NO. 13	NO. 14	NO. 15	NO. 16	NO. 17	NO. 18	NO. 19	NO. 20	NO. 21	NO. 22	NO. 23	NO. 24	NO. 25	NO. 26	NO. 27	NO. 28
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PRELIMINARY
 NOT FOR CONSTRUCTION



SHEET 10



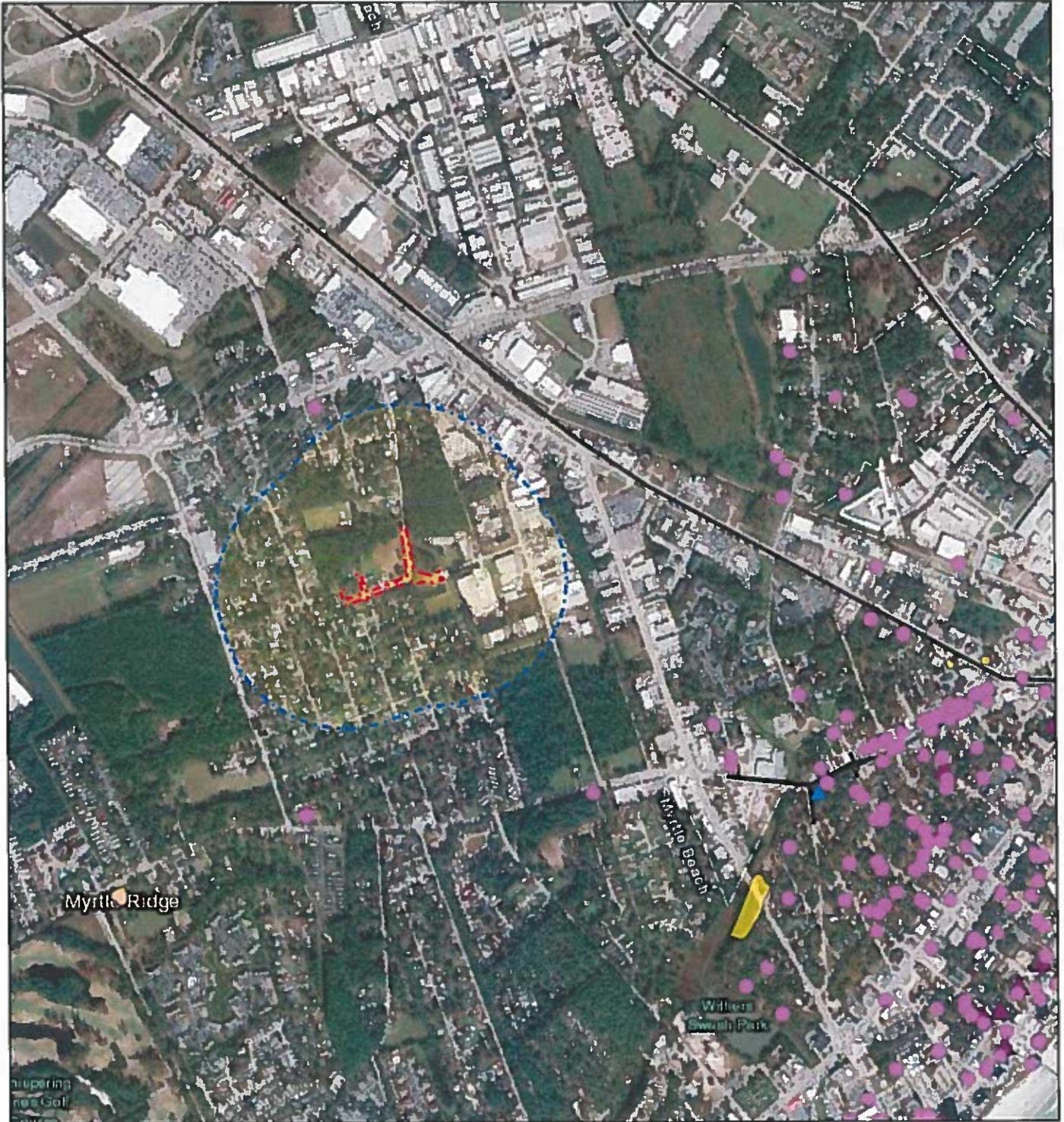
Mead & Hunt
 ENGINEERS, ARCHITECTS, PLANNERS
 1000 W. 10th Street, Suite 100
 Horry County, South Carolina 29526
 Phone: 843.686.1111
 Fax: 843.686.1112
 Website: www.mh-engineers.com

PROJECT: RACEPATH STREET / ABC DRIVE
 COUNTY: HORRY COUNTY, SOUTH CAROLINA
 SHEET: PLAN AND PROFILE SHEET

DATE: 11/15/2011
 DRAWN BY: J. HUNT
 CHECKED BY: J. HUNT
 SCALE: AS SHOWN

11

Racepath Street Phase II



February 7, 2020

 ArchSite_Prod_1215

 ArchSite_Prod_6282

ArchSite_Prod_7423

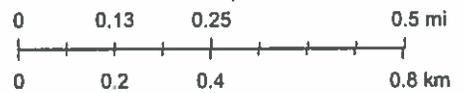
 Not Eligible or Requires Evaluation

 Eligible

 ArchSite_Prod_9966

 ArchSite_Prod_4897

1:18,056



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



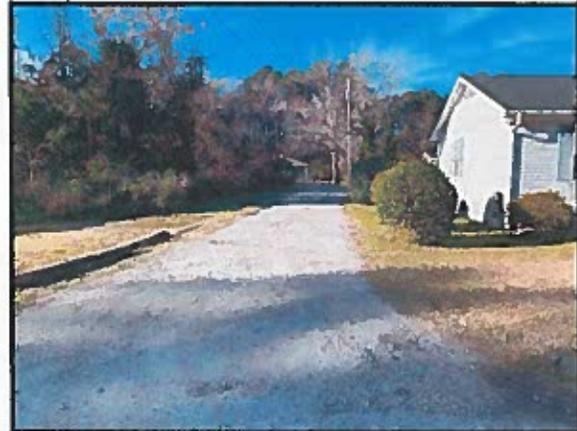
1 Proposed connection of Racepath Street to ABC Dr.
 Photograph taken facing west from ABC Dr.



2 Project area facing north along Racepath Street.



3 Project area facing west along Racepath Street.

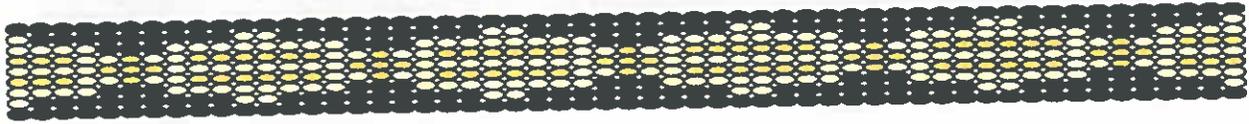


4 Project area facing north along an un-named drive off of Racepath Street.

	Site Photographs Racepath Street Phase II Myrtle Beach, Horry County, South Carolina		S&ME Project 1463-19-014	
			Taken by: CO	Date: January 22, 2020

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



October 5, 2016

Attention: Maria Smith
Horry County Government
1515 4th Avenue
Conway, SC 29526

Re. THPO #	TCNS #	Project Description
2016-342-3		Racepath Street Improvements CDBG in Myrtle Beach, SC

Dear Ms. Smith,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

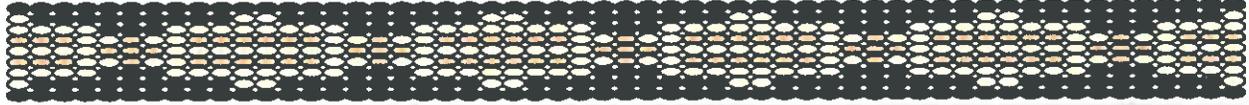
If you have questions please contact Caitlin Totherow at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



February 27, 2018

Attention: Chris Daves
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

Re. THPO #	TCNS #	Project Description
2018-8-27		Racepath Street Roadway & Drainage Improvements Project – Myrtle Beach, Horry Co., SC

Dear Mr. Daves,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those "Partners" (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Noise (CEST Level Reviews) – PARTNER

<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control>

1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.
→ Continue to Question 4.

- Rehabilitation of an existing residential property

NOTE: For modernization projects in all noise zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.
→ Continue to Question 2.

- None of the above

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

2. Do you have standardized noise attenuation measures that apply to all modernization and/or minor rehabilitation projects, such as the use of double glazed windows or extra insulation?

- Yes

Indicate the type of measures that will apply (check all that apply):

- Improved building envelope components (better windows and doors, strengthened sheathing, insulation, sealed gaps, etc.)
 Redesigned building envelope (more durable or substantial materials, increased air gap, resilient channels, staggered wall studs, etc.)
 Other (explain below)

Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below and provide any documentation.

- No

→ Continue to Question 3.

3. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).

Describe findings of the Preliminary Screening:

[Click here to enter text.](#)

→ Continue to Question 6.

4. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).

Indicate the findings of the Preliminary Screening below:

- There are no noise generators found within the threshold distances above.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.

- Noise generators were found within the threshold distances.

→ Continue to Question 5.

5. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:

- Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: [Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.

- Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

Indicate noise level here: [Click here to enter text.](#)

Is the project in a largely undeveloped area¹?

- No → The project requires completion of an Environmental Assessment (EA) pursuant to 51.104(b)(1)(i).

- Yes → The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i).

→ Work with the RE/HUD to elevate the level of review. Provide noise analysis, including noise level and data used to complete the analysis.
Continue to Question 6.

- Unacceptable: (Above 75 decibels)

Indicate noise level here: [Click here to enter text.](#)

¹ A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses and does not have water and sewer capacity to serve the project.

The project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Work with HUD or the RE to either complete an EIS or obtain a waiver signed by the appropriate authority.

→ Continue to Question 6.

6. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Work with the RE/HUD on the development of the mitigation measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

- Mitigation as follows will be implemented:

[Click here to enter text.](#)

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures.

Continue to the Worksheet Summary.

- No mitigation is necessary.

Explain why mitigation will not be made here:

[Click here to enter text.](#)

→ Continue to the Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project does not include new construction or major rehab of noise sensitive uses where quiet is integral to project function.

Sources: N/A



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Sole Source Aquifers (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/sole-source-aquifers>

1. **Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?**
 Yes → *The review is in compliance with this section. Continue to the Worksheet Summary below.*
 No → *Continue to Question 2.*
2. **Is the project located on a sole source aquifer (SSA)¹?**
 No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.*
 Yes → *Continue to Question 3.*
3. **Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?**
Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.
 Yes → *Continue to Question 4.*
 No → *Continue to Question 5.*
4. **Does your MOU or working agreement exclude your project from further review?**
 Yes → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*
 No → *Continue to Question 5.*
5. **Will the proposed project contaminate the aquifer and create a significant hazard to public health?**
Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*

Yes → *The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. No sole source aquifers in South Carolina. See Sole Source Aquifer Exhibit. (Appendix L).

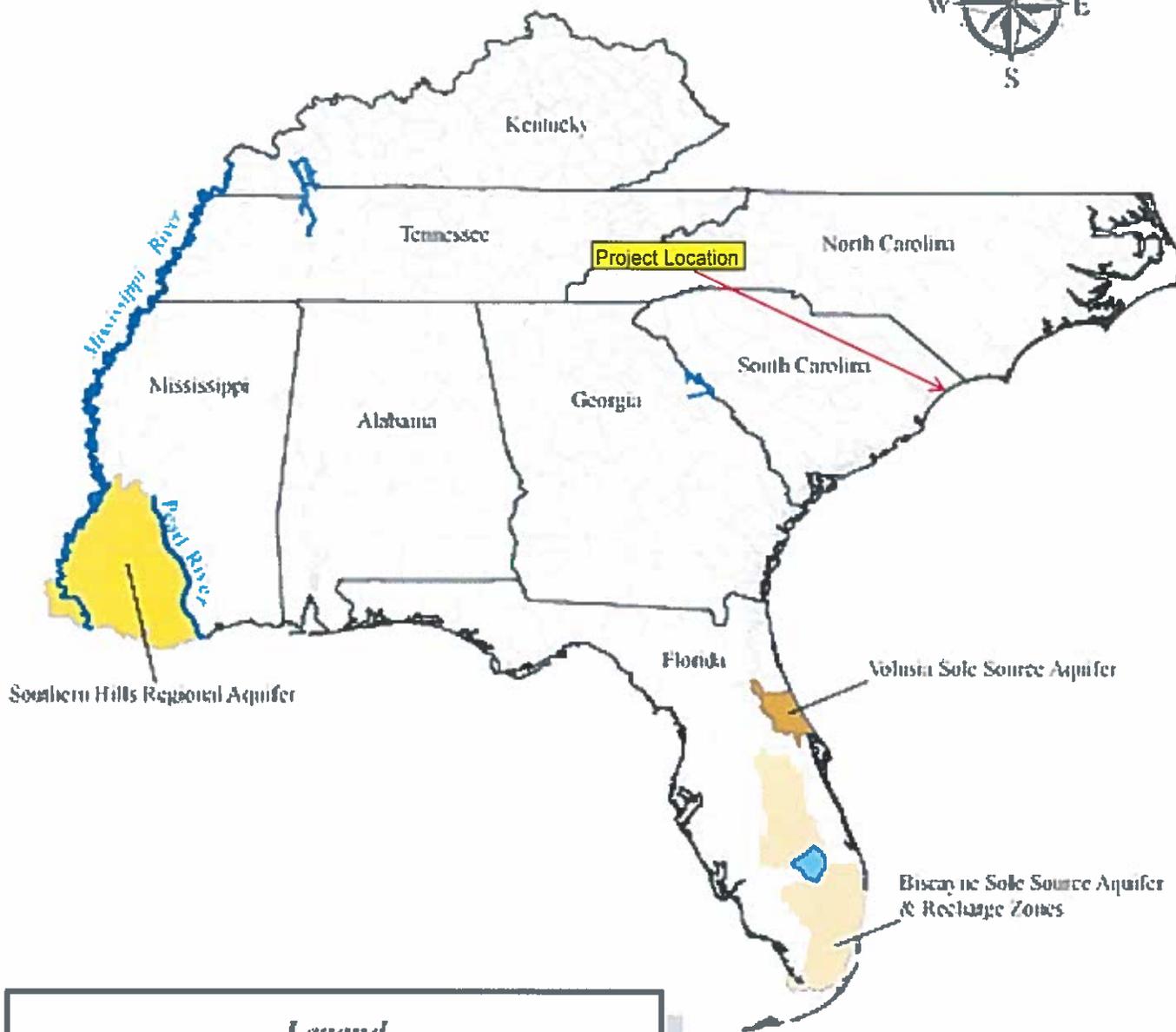
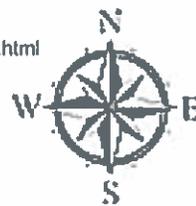
Sources:

USEPA Region 4: Groundwater Protection, Sole Source Aquifers in the Southeast:

<https://archive.epa.gov/pesticides/region4/water/groundwater/web/html/r4ssa.html>

SOLE SOURCE AQUIFERS (40 CFR 149)

SOURCE: <https://archive.epa.gov/pesticides/region4/water/groundwater/web/html/r4ssa.html>



Legend

- Biscayne Sole Source Aquifer & Recharge Zones
- Southern Hills Regional Aquifer System
- Volusia Sole Source Aquifer
- Rivers
- Lake Okeechobee
- Counties
- State Boundary

0 50 100 200 300 400 Miles

*Sole Source Aquifers and Recharge Zones are approximate



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Wetlands (CEST and EA) – Partner

<https://www.hudexchange.info/environmental-review/wetlands-protection>

- 1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building’s footprint, or ground disturbance?**
The term “new construction” includes draining, dredging, channelizing, filling, diking, impounding, and related activities and construction of any structures or facilities.
 - No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*
 - Yes → *Continue to Question 2.*
- 2. Will the new construction or other ground disturbance impact a wetland as defined in E.O. 11990?**
 - No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*
 - Yes → *Work with HUD or the RE to assist with the 8-Step Process. Continue to Question 3.*
- 3. Does Section 55.12 state that the 8-Step Process is not required?**
 - No, the 8-Step Process applies.
This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD’s elevation requirements.
→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*
 - 5-Step Process is applicable per 55.12(a).
Provide the applicable citation at 24 CFR 55.12(a) here.
Click here to enter text.
→ *Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.*
 - 8-Step Process is inapplicable per 55.12(b).
Provide the applicable citation at 24 CFR 55.12(b) here.
Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

8-Step Process is inapplicable per 55.12(c).

Provide the applicable citation at 24 CFR 55.12(c) here.

Click here to enter text.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. No wetlands on site. See attached USACE Jurisdictional Determination Letter and other supporting documentation (Appendix M).

Sources:

- FEMA Federal Insurance Rate Maps: <https://msc.fema.gov>.
- Google Earth Aerial Photographs (1994-2019).
- Horry County GIS Aerial Photographs.
- Soil Survey for Horry County.
- USDA-NRCS – Web Soil Survey: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- USFWS National Wetlands Inventory (NWI) Wetland Mapper: <http://www.fws.gov/wetlands/Data/Mapper.html>.
- USGS 7.5-Minute Topographic Quadrangle Map – Myrtle Beach, SC (1984).
- USACE Jurisdictional Determination Letter: SAC 2020-00159 (May 14, 2019).



DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
1949 INDUSTRIAL PARK ROAD ROOM 140
CONWAY, SOUTH CAROLINA 29526

March 25, 2020

Regulatory Division

Mr. Charles Oates, Jr.
S&ME, Inc.
1330 Highway 501 Business
Conway, South Carolina 29526
coates@smeinc.com

Dear Mr. Oates:

This is in response to your request for an Approved Jurisdictional Determination (AJD) (SAC-2020-00159) received in our office on January 28, 2020, for a 1.69-acre site located adjacent to and in the right-of-way of Racepath Street, Myrtle Beach, Horry County, South Carolina (Latitude: 33.6961°, Longitude: -78.9051°). An AJD is used to indicate the Corps has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344) and/or navigable waters of the United States pursuant to Section 10 of the Rivers and Harbors Act of 1899 (RHA) (33 U.S.C. § 403).

The site is shown on the attached depiction entitled "Aerial Exhibit/ Racepath Road Phase II +/- 1.69 Acres/ Myrtle Beach, Horry County, South Carolina" and dated January 23, 2020 prepared by your office. Based on a review of aerial photography, topographic maps, National Wetlands Inventory maps, soil survey information, Wetland Determination Data Form(s), and previous determination (SAC-2016-01233 letter dated September 29, 2016), we conclude the site, as shown on the referenced depiction, does not contain any aquatic resources, including aquatic resources that would be subject to regulatory jurisdiction under Section 404 of the CWA or Section 10 of the RHA.

Attached is a form describing the basis of jurisdiction for the delineated area(s). Note that some or all of these areas may be regulated by other state or local government agencies and you should contact the South Carolina Department of Health and Environmental Control, Bureau of Water, or Department of Ocean and Coastal Resource Management, to determine the limits of their jurisdiction.

This AJD is valid for five (5) years from the date of this letter unless new information warrants revision before the expiration date. This AJD is an appealable action under the Corps of Engineers administrative appeal procedures defined at 33 CFR Part 331. The administrative appeal options, process and appeals request form is attached for your convenience and use.

This AJD was conducted pursuant to Corps of Engineers' regulatory authority to identify the limits of Corps of Engineers' jurisdiction for the particular site identified in this request. This AJD may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

In all future correspondence, please refer to file number SAC-2020-00159. A copy of this letter is forwarded to State and/or Federal agencies for their information. If you have any questions, please contact Megan N. Jackson, Project Manager, at (843) 365-1739, or by email at Megan.N.Jackson@usace.army.mil.

Sincerely,  Digitally signed by
JACKSON.MEGAN,
NICOLE.10329931
05
Date: 2020.03.26
10:19:39 -04'00'
Megan N. Jackson
Project Manager

Attachments:

Dry Land Approved Jurisdictional Determination Form

Notification of Appeal Options

Depiction "Aerial Exhibit/ Racepath Road Phase II +/- 1.69 Acres/ Myrtle Beach, Horry County, South Carolina"

Copies Furnished:

Mr. Kevin Barnes
Mead and Hunt
333 Wellness Drive
Myrtle Beach, South Carolina 29579
kevin.barnes@meadhunt.com

SCDHEC - OCRM
1362 McMillan Avenue, Suite 400
North Charleston, South Carolina 29405
OCRMPermitting@dhec.sc.gov

DRY LAND APPROVED JURISDICTIONAL DETERMINATION FORM¹
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20MAR2020

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: SAC-2020-00159 Racepath Street Phase II

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: South Carolina County/parish/borough: Horry County City: Myrtle Beach
Center coordinates of site (lat/long in degree decimal format): Lat. 33.6961 °, Long. -78.9051 °
Universal Transverse Mercator:

Name of nearest waterbody: Atlantic Ocean

Name of watershed or Hydrologic Unit Code (HUC): Withers Swash HUC 030402080306

- Check if map/diagram of review area is available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: March 19, 2020
 Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

SECTION III: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Project area is depicted on a map submitted by the agent titled "Aerial Exhibit/ Racepath Road Phase II +/- 1.69 Acres/ Myrtle Beach, Horry County, South Carolina" dated January 23, 2020
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Office concurs with data sheets/delineation report.
 Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- U.S. Geological Survey Hydrologic Atlas:
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Myrtle Beach Quad; USGS topographic survey information depicts the project as a developed roadway
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil survey information depicts the project boundary as the mostly partially hydric (1-25%) Echaw sand, and the hydric soil Bladen find sandy loam.
- National wetlands inventory map(s). Cite name: NWIs map the project boundary as uplands.
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): SAC Regulatory Viewer, Google Earth 2019
 Other (Name & Date): Site photos submitted by the agent
- Previous determination(s). File no. and date of response letter: AJD SAC-2016-01233 letter dated September 29, 2016
- Applicable/supporting case law:
 Applicable/supporting scientific literature:
 Other information (please specify):

B. REQUIRED ADDITIONAL COMMENTS TO SUPPORT JD. EXPLAIN RATIONALE FOR DETERMINATION THAT THE REVIEW AREA ONLY INCLUDES DRY LAND: This form addresses 1.69 acres of uplands in Myrtle Beach, SC. The majority of the project boundary is a paved exiting road right-of-way. A data point taken in the unpaved portion of the project boundary shows the area did not meet the

¹ This form is for use only in recording approved JDs involving dry land. It extracts the relevant elements of the longer approved JD form in use since 2007 for aquatic areas and adds no new fields.

criteria set forth in the 1987 manual. Specifically, the area did not meet the hydric soil or hydrology indicators. Based on the consistency in the depiction of uplands the project area was determined to be void of aquatic resources.

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Kevin Barnes Mead and Hunt		File Number: SAC-2020-00159	Date: March 25, 2020
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

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

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

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

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer, South Atlantic Division, 60 Forsyth St, SW, Atlanta, GA 30308-8801. This form must be received by the Division Engineer within 60 days of the date of this notice.

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

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

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

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

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact the Corps biologist who signed the letter to which this notification is attached. The name and telephone number of this person is given at the end of the letter.

If you only have questions regarding the appeal process you may also contact the Coordinator for Appeals in our South Atlantic Division Office in Atlanta, Georgia at (404) 562-5136.
Jason W. Steele
60 Forsyth St, SW
Atlanta, GA 30308-8801

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

Signature of appellant or agent.

Date: _____

Telephone number: _____

Drawing Path: T:\Projects\2020\ENV\Other Offices\1463-19-014 (Racepath Road Phase II Aerial Exhibit.mxd) plotted by COates 01-23-2020

State Plane NAD83 (Feet)

FID	LAT	LONG
0	33.695627	-78.90666
1	33.695655	-78.906569
2	33.6954	-78.906458
3	33.695564	-78.905912
4	33.696266	-78.906209
5	33.696285	-78.906147
6	33.695583	-78.90585
7	33.69595	-78.904626
8	33.696982	-78.904798
9	33.697001	-78.904639
10	33.696055	-78.904405
11	33.696156	-78.903587
12	33.6961	-78.903566
13	33.695959	-78.903623
14	33.695843	-78.904461
15	33.695898	-78.904472
16	33.695253	-78.906493



Data Point 1
33.696 / -78.904

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY



Esri, HERE, Garmin, © OpenStreetMap contributors, GeoEye, Earthstar Geographics, CNES/Airbus DS, AeroGRID, IGN, and the GIS User Community

○ Corners
 Approximate Boundary



Aerial Exhibit
 Racepath Road Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Imagery 2018

SCALE:
1" = 200'
 DATE:
1-23-20
 PROJECT NUMBER
1463-19-014

EXHIBIT NO.
3

Chris Daves

From: Charles Oates
Sent: Friday, January 31, 2020 3:50 PM
To: Chris Daves
Subject: FW: SAC-2020-00159 & SAC-2020-00158

Please see the email below. Megan is pretty fast with letters.

Charles C. Oates, Jr.

S&ME
1330 Highway 501 Business
Conway, SC 29526 map
O: 843.347.7800
M: 843.450.1331
www.smeinc.com
LinkedIn | Twitter | Facebook

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-----Original Message-----

From: Jackson, Megan N CIV USARMY CESAC (USA) <Megan.N.Jackson@usace.army.mil>
Sent: Friday, January 31, 2020 3:32 PM
To: Charles Oates <COates@smeinc.com>
Subject: SAC-2020-00159 & SAC-2020-00158

Mr. Oates,

This is to notify you that we received your project(s), Racepath Street II and 552 South Causeway Road, in the Conway Field Office. The assigned project numbers are SAC-2020-00159 (Racepath) and SAC-2020-00158 (Causeway) and I am the project manager. If you have any questions, please contact me via e-mail or at the number below.

Megan N. Jackson
Project Manager
U.S Army Corps of Engineers
Charleston District, Northeast Branch
843-365-1739

U.S. Army Corps of Engineers – Charleston District - Regulatory Division
REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) / DELINEATION
(For Jurisdictional Status and Identifying Wetlands and Other Aquatic Resources)

I. PROPERTY AND AGENT INFORMATION

A. Site Details/Location:

Site Name: Racepath Street Phase II Date: 1-23-2020
City/Township/Parish: Myrtle Beach County: Horry
Latitude/Longitude: 33.6957N, -78.9052W Acreage: +/- 1.69 acres
Tax Map Sequence (TMS) #(s): Maintained Road ROW along Racepath St./portions of TMS# 44302020054 & 44302010100
Property Address(es): Racepath Street (please see attached exhibits for project location)

Please attach a survey/plat map and vicinity map identifying location and review area for the JD/delineation. An accurate depiction of the review area must be provided (survey, tax map, or GPS coordinates). Tax maps may only be used if the site includes the entire tax map parcel.

B. Requestor of Jurisdictional Determination/Delineation (if there are multiple property owners, please attach additional pages)

Name: Kevin Barnes, P.E., Senior Project Manager
Company Name (if applicable): Mead and Hunt
Address: 333 Wellness Drive, Myrtle Beach, South Carolina 29579
Phone: 843-213-3268 Email: kevin.barnes@meadhunt.com
Check one: I currently own this property
 I plan to purchase this property
 Other, please explain Engineer working on behalf of Horry County

C. Agent/Environmental Consultant Acting on Behalf of the Requestor (if applicable):

Consultant/Agent Name: Charles Coates
Company Name: S&ME, Inc.
Address: 1330 Highway 501 Business, Conway, SC 29526 Phone: 843.347.7800
Email: coates@smeinc.com

II. REASON FOR REQUEST (check all that apply)

- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all aquatic resources.
- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps, and the Jurisdictional Determination would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps; this request is accompanied by my permit application and the jurisdictional determination is to be used in the permitting process.
- I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is subject to the ebb and flow of the tide.
- A Corps jurisdictional determination is required in order to obtain my local/state authorization.
- I intend to contest jurisdiction over a particular aquatic resource and the request the Corps to confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- I believe that the site may be comprised entirely of dry land.
- Other: _____

*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

III. TYPE OF REQUEST:

- Approved¹ Jurisdictional Determination (AJD) Only
- Preliminary² Jurisdictional Determination (PJD) Only
- Approved Jurisdictional Determination (AJD) with submittal of a Pre-Construction Notification or Department of the Army permit application
- Preliminary Jurisdictional Determination (PJD) with submittal of a Pre-Construction Notification or Department of the Army permit application
- Delineation of Wetlands and/or Other Aquatic Resources Only Conducted By Agent/Environmental Consultant with submittal of a Pre-Construction Notification or Department of the Army permit application (No jurisdictional determination requested)
- I request that the Corps delineate the wetlands and/or other aquatic resources that may be present on my property with the attached Pre-Construction Notification or Department of the Army permit application
- I request that the Corps delineate the wetlands and/or other aquatic resources that may be present on my property with an AJD or PJD
- "No Permit Required" (NPR) Letter as I believe my proposed activity is not regulated³
- Unclear as to which jurisdictional determination I would like to request and require additional information to inform my decision

¹Approved – An AJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, an AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status. AJDs are valid for 5 years.

²Preliminary – A PJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, a PJD is used to indicate that this office has identified the approximate location(s) and boundaries of wetlands and/or other aquatic resources on a site that are presumed to be subject to regulatory jurisdiction of the Corps of Engineers. Unlike an AJD, a PJD does not represent a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a site, and does not have an expiration date.

³ "No Permit Required" (NPR) Letter- A NPR letter may be provided by the Corps to notify the requestor that an activity will not require a permit (authorization) from the Corps; this letter can only be used if the proposed activity is not a regulated activity, regardless of where the activity may occur. A NPR letter cannot be used to indicate the presence or absence of wetlands and/or other aquatic resources, nor can it be used to determine their jurisdictional status.

IV. LEGAL RIGHT OF ENTRY

By signing below, I am indicating that I have the authority, or am acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant U.S. Army Corps of Engineers personnel right of entry to legally access the property(ies) subject to this request for the purposes of conducting on-site investigations (e.g., digging and refilling shallow holes) and Issuing a jurisdictional determination. I acknowledge that my signature is an affirmation that I possess the requisite property rights to request a jurisdictional determination on the properties subject to this request.

1330 Highway 501 Business, Conway, SC 29526

Road ROW; p/o TMS# 44302020054/44302010100

Mailing Address

Property Address / TMS #(s)

coates@smeinc.com

843.347.7800

Email Address

Daytime Phone Number



Charles Oates / January 23, 2020

*Signature:

Printed Name and Date

<p>Charleston Office: US Army Corps of Engineers Regulatory Division 69A Hagoood Avenue Charleston, SC 29403 (ph) 843-329-8044</p>	<p>Columbia Office: US Army Corps of Engineers Regulatory Office 1835 Assembly Street, Room 865 B-1 Columbia, SC 29201 (ph) 803-253-3444</p>	<p>Conway Office: US Army Corps of Engineers Regulatory Office 1949 Industrial Park Road, Room 140 Conway, SC 29526 (ph) 843-365-4239</p>
--	--	---

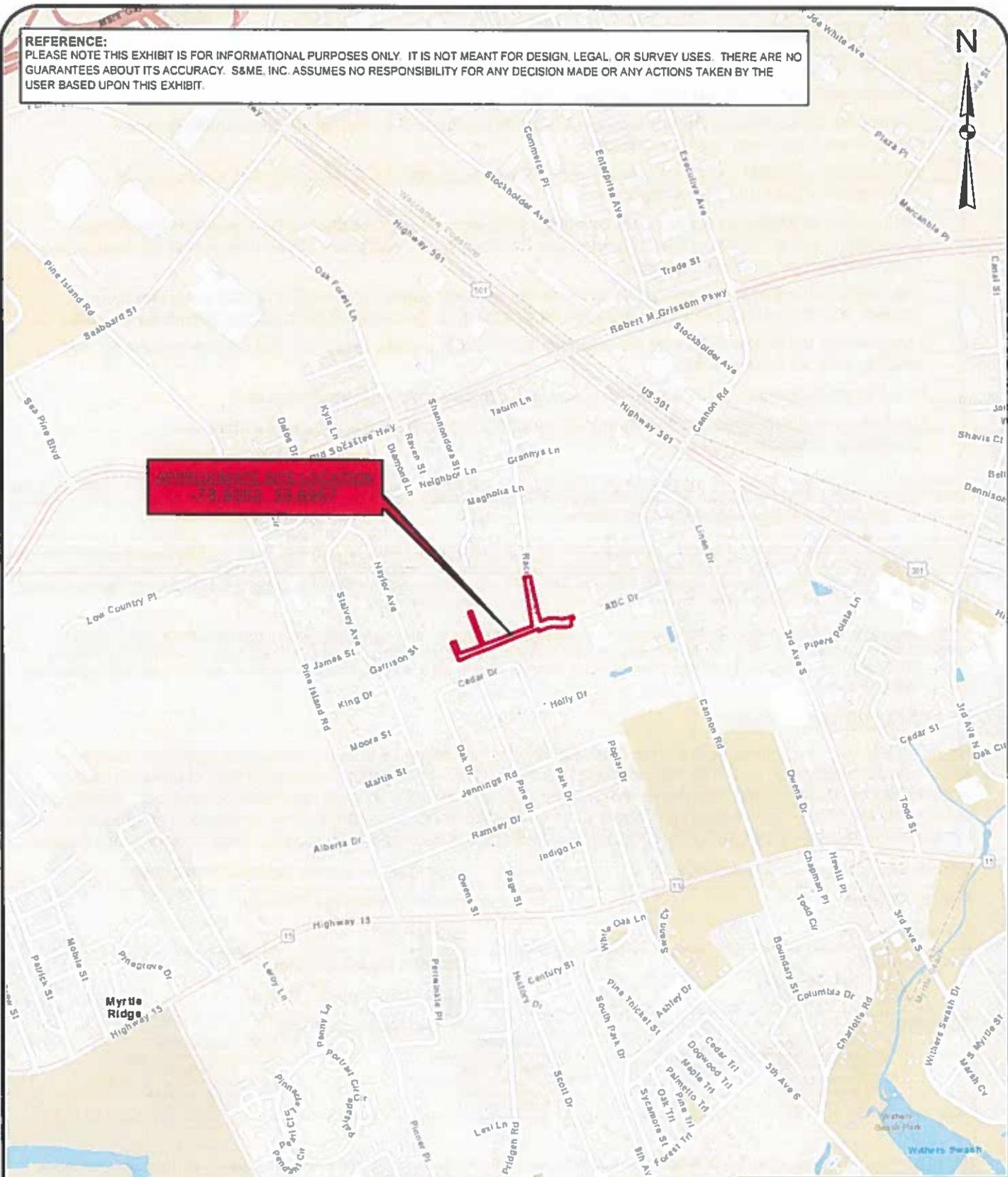
***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
 - 79,9059 39,6967

Approximate Boundary

SCALE:
 1" = 1,000'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.
1

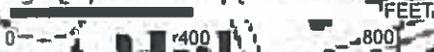
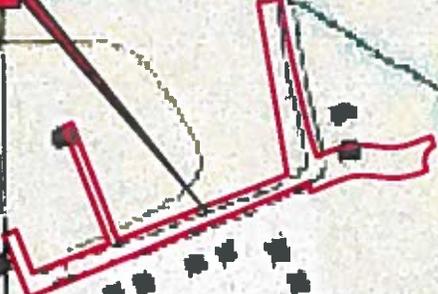


Vicinity Exhibit
 Racepath Road Phase II +/- 1.69 Acres
 Myrtle Beach, Horry County, South Carolina
 Source: World Street Map

REFERENCE:
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APPROXIMATE BOUNDARY
 +/- 1.69 ACRES



 **Approximate Boundary**



Topographic Exhibit

Racepath Road Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: USGS 7.5-Minute Topo Quad Myrtle Beach, SC 1984

SCALE:
1" = 400'

DATE:
1-20-20

PROJECT NUMBER
1463-19-014

EXHIBIT NO.

2

Drawing Path: T:\Projects\2020\ENVO\Other Offices\1463-19-014 (Racepath Road Phase II)\GIS\mxd\Racepath Road Phase II Aerial Exhibit.mxd plotted by COates 01-23-2020

State Plane NAD83 (Feet)

FID	LAT	LONG
0	33.695627	-78.90666
1	33.695655	-78.906569
2	33.6954	-78.906458
3	33.695564	-78.905912
4	33.696266	-78.906209
5	33.696285	-78.906147
6	33.695583	-78.90585
7	33.69595	-78.904626
8	33.696982	-78.904798
9	33.697001	-78.904639
10	33.696055	-78.904405
11	33.696156	-78.903587
12	33.6961	-78.903566
13	33.695959	-78.903623
14	33.695843	-78.904461
15	33.695898	-78.904472
16	33.695253	-78.906493

Data Point 1
33.696 / -78.904

REFERENCE:
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Esri, HERE, Garmin, © OpenStreetMap contributors, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, AeroGRID, IGN, and the GIS User Community

Corners
Approximate Boundary

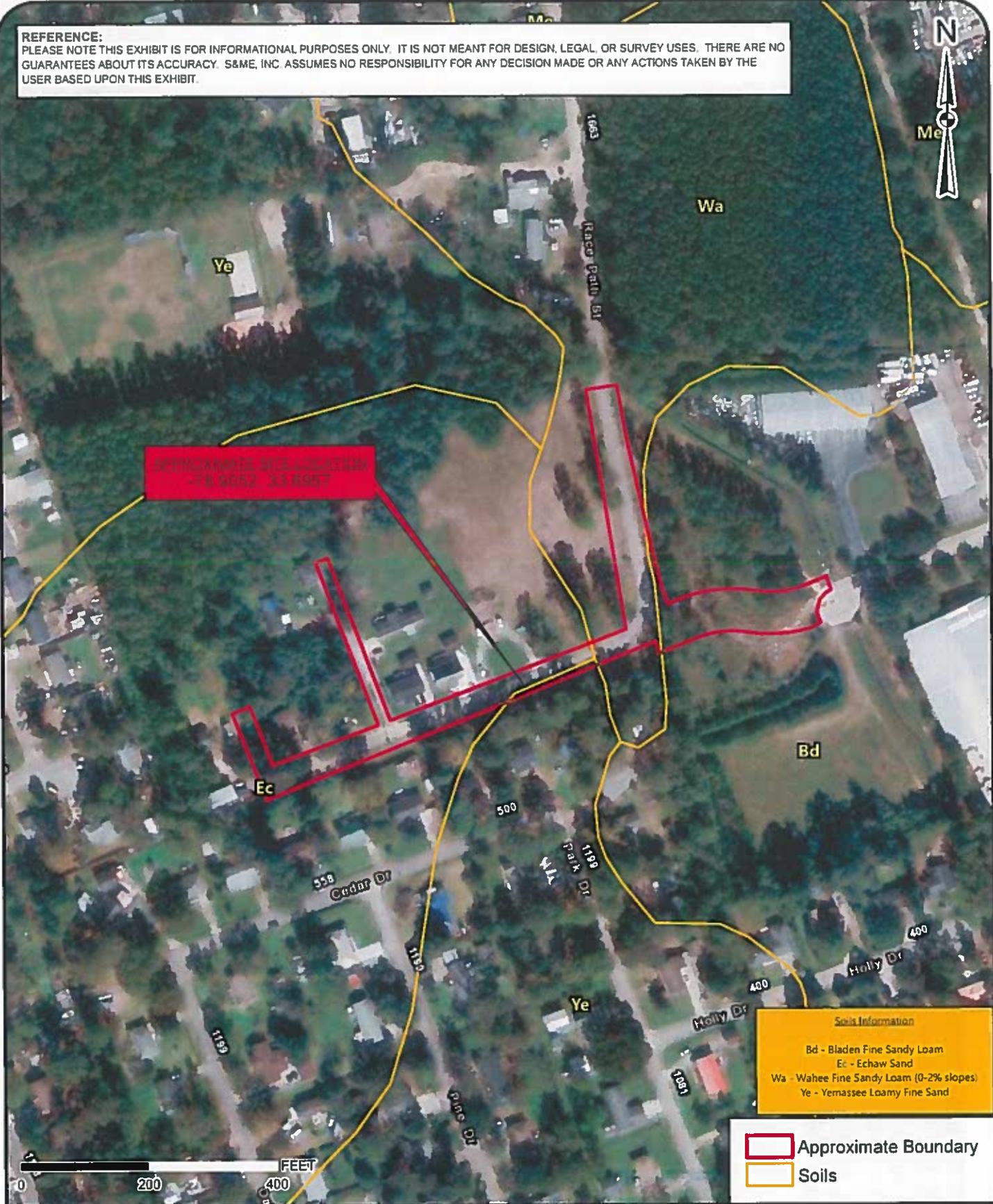


Aerial Exhibit
Racepath Road Phase II +/- 1.69 Acres
Myrtle Beach, Horry County, South Carolina
Source: World Imagery 2018

SCALE:
1" = 200'
DATE:
1-23-20
PROJECT NUMBER
1463-19-014

EXHIBIT NO.
3

REFERENCE:
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Soils Information

Bd - Bladen Fine Sandy Loam
 Ec - Echaw Sand
 Wa - Wahee Fine Sandy Loam (0-2% slopes)
 Ye - Yemassee Loamy Fine Sand

Approximate Boundary
Soils



Soils Exhibit

Racepath Road Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Imagery 2018 & SCDNR (Soils Data)

SCALE:
1" = 200'

DATE:
1-20-20

PROJECT NUMBER
1463-19-014

EXHIBIT NO.
4

Drawing Path: T:\Projects\2019\NEW\Other Office Jobs\1463\Myrtle Beach\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II Soils Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
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NWI Information
 PFO4/SS3B - Forested Wetland
 PFO4B - Forested Wetland
 U11 - Residential
 U42P - Upland Planted Pine

National Wetlands Inventory (NWI)
 Approximate Boundary

Drawing Path: T:\Projects\2019\ENW\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II NWI Exhibit.mxd plotted by chandley 01-20-2020



NWI Exhibit

Racepath Road Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina
 Source: World Imagery 2018 & SCDNR (NWI Data)

SCALE:
 1" = 200'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.

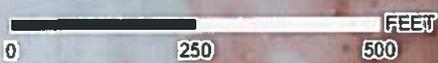
5

Drawing Path: T:\Projects\2019\EN\Other Office Jobs\1463-19-014 Racepath Road Phase II\GIS\mxd\Racepath Road Phase II LIDAR Exhibit.mxd plotted by chandley 01-20-2020

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
-78.9032, 33.6957



 Approximate Boundary
Elevation
 High : 29
Low : 13



LIDAR Exhibit
Racepath Road Phase II +/- 1.69 Acres
Myrtle Beach, Horry County, South Carolina
Source: World Imagery 2018 & SCDNR (LIDAR Data)

SCALE:
1" = 250'
DATE:
1-20-20
PROJECT NUMBER
1463-19-014

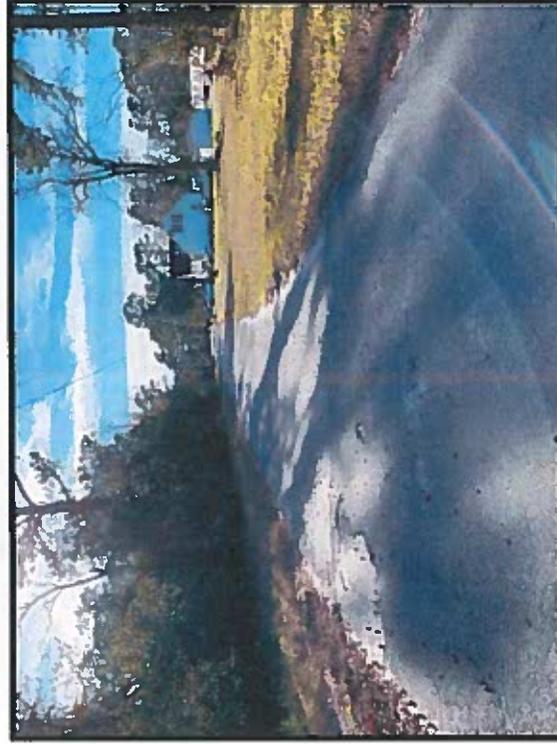
EXHIBIT NO.
6



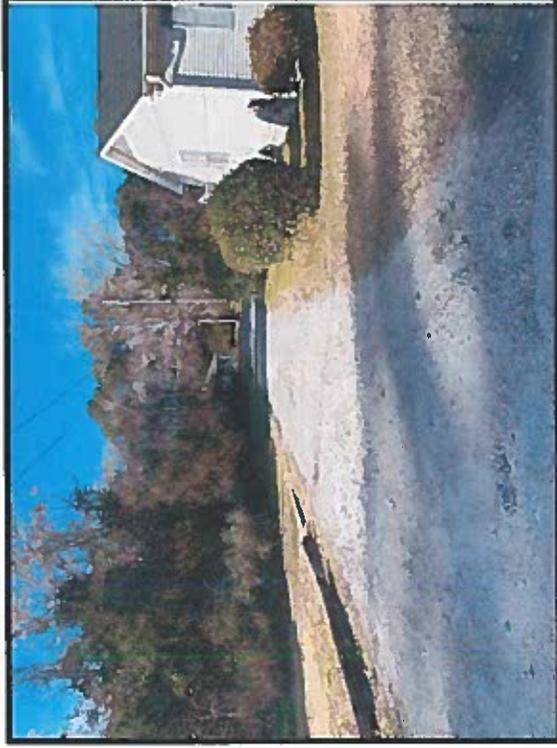
1 Proposed connection of Racepath Rd to ABC Dr.
Photograph taken facing west from ABC Dr.



2 Project area facing north along Racepath Road.



3 Project area facing west along Racepath Road.



4 Project area facing north along an un-named drive off of Racepath Road.

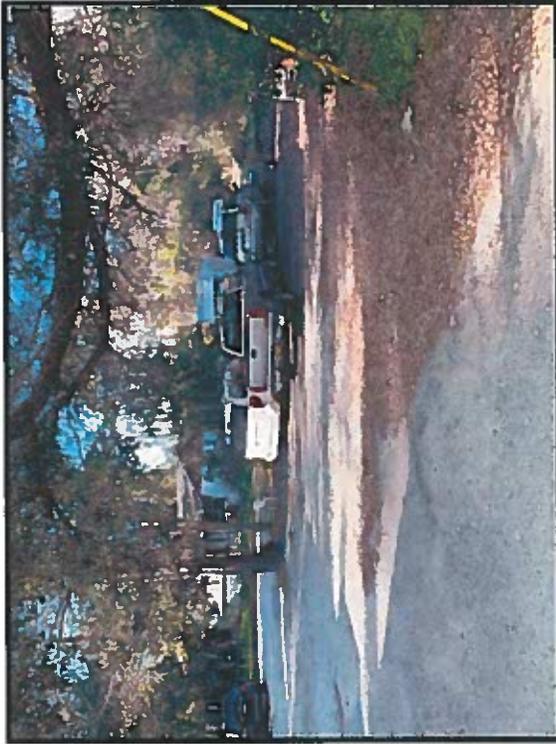


Site Photographs
Racepath Road Phase II
Myrtle Beach, Georgetown County, South Carolina

S&ME Project No.: 1463-19-014

Taken by: CO

Date Taken: 1/22/20



5 Project area facing north at the western end of the project.



6 Non-hydric soil sample taken at Data Point 1.



7 Close up of living roots from soil sample in Photograph 6 with no oxidation present on living roots.



8 Data Point 1 facing east towards ABC Drive.



&

Site Photographs

Racepath Road Phase II

Myrtle Beach, Georgetown County, South Carolina

S&ME Project No.: 1463-19-014

Taken by: CO

Date Taken: 1/22/20

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Racepath Road Phase II City/County: Myrtle Beach / Horry Sampling Date: 22-Jan-20
 Applicant/Owner: Mead & Hunt State: SC Sampling Point: DP1
 Investigator(s): S&ME, Inc. (Mr. Charles Oates) Section, Township, Range: S T R
 Landform (hillslope, terrace, etc.): Upland Local relief (concave, convex, none): undulating Slope: 1.0 % / 0.6 °
 Subregion (LRR or MLRA): LRR T Lat.: 33.696 Long.: -78.904 Datum: NAD83
 Soil Map Unit Name: USDA SCS has the soils mapped as Bladen NWI classification: PFO4B mapped

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of 2 required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
---	---

Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (Inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (Inches): _____ Saturation Present? (Includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (Inches): _____	Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Hydrological indicators were not present at this location.

VEGETATION (Five/Four Strata) - Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size: <u>30' Radius</u>)	Absolute % Cover	Dominant Species? <input type="checkbox"/>	Rel.Strat. Cover	Indicator Status
1. <u>Quercus nigra</u>	10	<input checked="" type="checkbox"/>	100.0%	FAC
2. _____	0	<input type="checkbox"/>	0.0%	
3. _____	0	<input type="checkbox"/>	0.0%	
4. _____	0	<input type="checkbox"/>	0.0%	
5. _____	0	<input type="checkbox"/>	0.0%	
6. _____	0	<input type="checkbox"/>	0.0%	
7. _____	0	<input type="checkbox"/>	0.0%	
8. _____	0	<input type="checkbox"/>	0.0%	

50% of Total Cover: 5 20% of Total Cover: 2 10 = Total Cover

Sapling or Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? <input type="checkbox"/>	Rel.Strat. Cover	Indicator Status
1. _____	0	<input type="checkbox"/>	0.0%	
2. _____	0	<input type="checkbox"/>	0.0%	
3. _____	0	<input type="checkbox"/>	0.0%	
4. _____	0	<input type="checkbox"/>	0.0%	
5. _____	0	<input type="checkbox"/>	0.0%	
6. _____	0	<input type="checkbox"/>	0.0%	
7. _____	0	<input type="checkbox"/>	0.0%	
8. _____	0	<input type="checkbox"/>	0.0%	

50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? <input type="checkbox"/>	Rel.Strat. Cover	Indicator Status
1. _____	0	<input type="checkbox"/>	0.0%	
2. _____	0	<input type="checkbox"/>	0.0%	
3. _____	0	<input type="checkbox"/>	0.0%	
4. _____	0	<input type="checkbox"/>	0.0%	
5. _____	0	<input type="checkbox"/>	0.0%	
6. _____	0	<input type="checkbox"/>	0.0%	

50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover

Herb Stratum (Plot size: <u>30' Radius</u>)	Absolute % Cover	Dominant Species? <input type="checkbox"/>	Rel.Strat. Cover	Indicator Status
1. <u>Andropogon virginicus</u>	90	<input checked="" type="checkbox"/>	90.0%	FAC
2. <u>Eupatorium capillifolium</u>	10	<input type="checkbox"/>	10.0%	FACU
3. _____	0	<input type="checkbox"/>	0.0%	
4. _____	0	<input type="checkbox"/>	0.0%	
5. _____	0	<input type="checkbox"/>	0.0%	
6. _____	0	<input type="checkbox"/>	0.0%	
7. _____	0	<input type="checkbox"/>	0.0%	
8. _____	0	<input type="checkbox"/>	0.0%	
9. _____	0	<input type="checkbox"/>	0.0%	
10. _____	0	<input type="checkbox"/>	0.0%	
11. _____	0	<input type="checkbox"/>	0.0%	
12. _____	0	<input type="checkbox"/>	0.0%	

50% of Total Cover: 50 20% of Total Cover: 20 100 = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? <input type="checkbox"/>	Rel.Strat. Cover	Indicator Status
1. _____	0	<input type="checkbox"/>	0.0%	
2. _____	0	<input type="checkbox"/>	0.0%	
3. _____	0	<input type="checkbox"/>	0.0%	
4. _____	0	<input type="checkbox"/>	0.0%	
5. _____	0	<input type="checkbox"/>	0.0%	

50% of Total Cover: 0 20% of Total Cover: 0 0 = Total Cover

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of: 110 Multiply by: _____

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 100 x 3 = 300

FACU species 10 x 4 = 40

UPL species 0 x 5 = 0

Column Totals: 110 (A) 340 (B)

Prevalence Index = B/A = 3.091

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is > 50%

3 - Prevalence Index is ≤ 3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definition of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1m) tall.

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below).

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix			Redox Features				Texture	Remarks
	Color (moist)		%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR	3/3	100					Clay	
6-25	10YR	5/3	100					Clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Muck Presence (AB) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)		
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)		
<input type="checkbox"/> Sandy Muck Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydric soil criteria was not met at this location.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Wild and Scenic Rivers (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers>

1. Is your project within proximity of a Wild and Scenic River, Study River, or Nationwide Rivers Inventory River?

No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation used to make your determination.*

Yes → *Continue to Question 2.*

2. Could the project do any of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild & Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consult with the appropriate federal/state/local/tribal Managing Agency(s), pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Select one:

The Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency’s concurrence) and any other documentation used to make your determination.*

The Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate the impact or effect of the project on the river.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

No Effect. Project area is not located near the Chattooga River (Oconee Co.) or Lumber River in NC or other rivers listed in the Nationwide Rivers Inventory. See Wild and Scenic Rivers Exhibit and National Rivers Inventory Exhibit. (Appendix N)

Sources:

- National Wild and Scenic Rivers System: <https://www.rivers.gov/south-carolina.php>.
- USDOJ – National Park Service – Nationwide Rivers Inventory: <https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm>.

Nationwide Rivers Inventory

This is a listing of more than 3,281 free-flowing river segments in the U.S. that are believed to possess one or more traits and qualities that make them

National Park Service
U.S. Department of the Interior



SOURCE: NATIONWIDE RIVERS INVENTORY
<http://www.nps.gov/nrcr/programs/rtca/nri/index.html>



SCALE:	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	2-10-2020



NATIONWIDE RIVERS INVENTORY RACEPATH STREET PHASE II MYRTLE BEACH, Horry CO., SOUTH CAROLINA	
PROJECT NO:	1463-19-014

EXHIBIT NO.	
-------------	--

CHATTOOGA RIVER, GEORGIA, N. CAROLINA, S. CAROLINA



Source: <https://www.rivers.gov/south-carolina.php>

SCALE:	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	3-22-2020



NATIONAL WILD & SCENIC RIVERS RACEPATH ROAD PHASE II MYRTLE BEACH, HORRY CO., SOUTH CAROLINA	
PROJECT NO:	1483-19-014

EXHIBIT NO.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Environmental Justice (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/environmental-justice>

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project’s total environmental review?

Yes → Continue to Question 2.

No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

Yes

Explain:

Click here to enter text.

→ The RE/HUD must work with the affected low-income or minority community to decide what mitigation actions, if any, will be taken. Provide any supporting documentation.

No

Explain:

No Effect. The project area is located in a minority and low-income neighborhood. However, based on nature of the proposed project (roadway and drainage improvements), disproportional adverse effects on low-income and minority populations are not anticipated. See EJ Screen information. (Appendix O).

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

Sources:

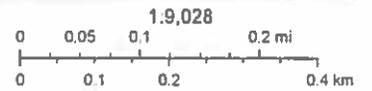
- EPA EJ SCREEN: <https://www.epa.gov/eiscreen>.
- EPA NEPA Assist: <https://nepassisttool.epa.gov/nepassist/analysis.aspx>.

Racepath Street Phase II



February 10, 2020

- | | | |
|------------------|---------------------|-------------------------|
| □ Superfund | ■ Water dischargers | □ Brownfields |
| □ Toxic releases | ■ Air pollution | + Search Result (point) |



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



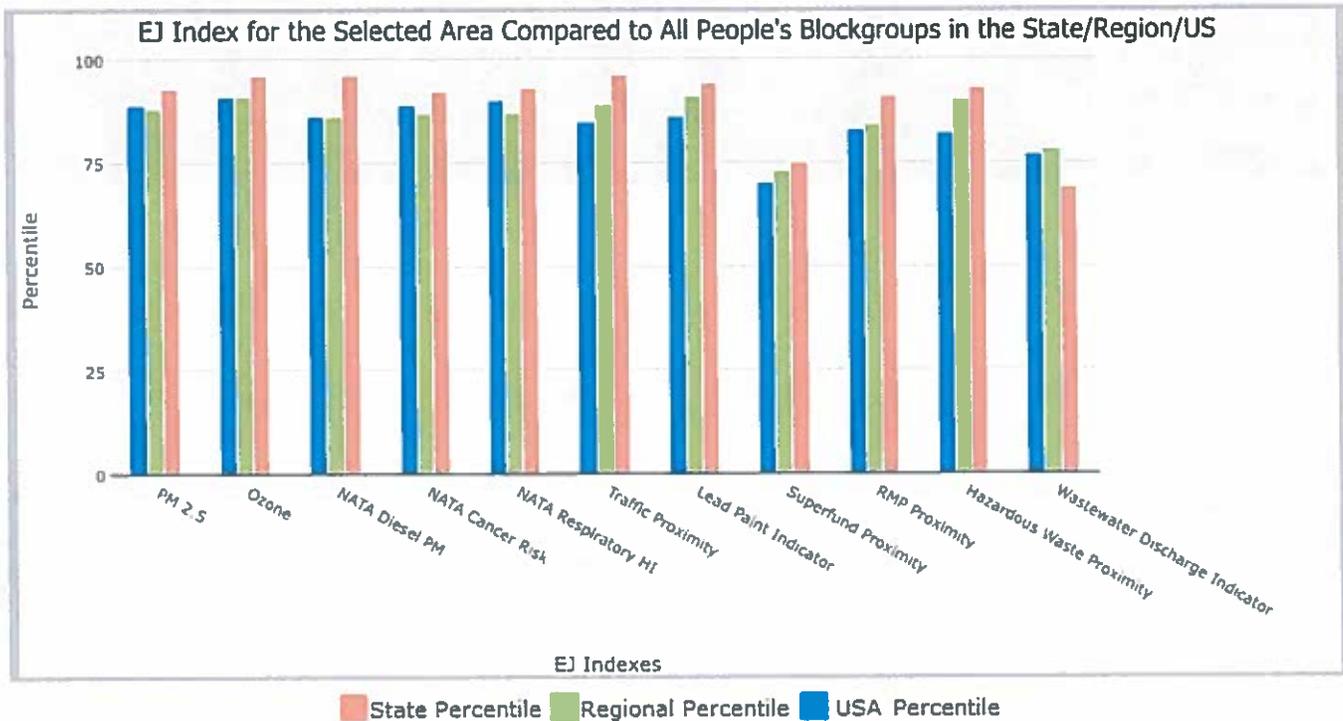
Blockgroup: 450510509003, SOUTH CAROLINA, EPA Region 4

Approximate Population: 3,028

Input Area (sq. miles): 0.73

Racepath Street Phase II

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	93	88	89
EJ Index for Ozone	96	91	91
EJ Index for NATA [*] Diesel PM	96	86	86
EJ Index for NATA [*] Air Toxics Cancer Risk	92	87	89
EJ Index for NATA [*] Respiratory Hazard Index	93	87	90
EJ Index for Traffic Proximity and Volume	96	89	85
EJ Index for Lead Paint Indicator	94	91	86
EJ Index for Superfund Proximity	75	73	70
EJ Index for RMP Proximity	91	84	83
EJ Index for Hazardous Waste Proximity	93	90	82
EJ Index for Wastewater Discharge Indicator	69	78	77



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

Blockgroup: 450510509003, SOUTH CAROLINA, EPA Region 4

Approximate Population: 3,028

Input Area (sq. miles): 0.73

Racepath Street Phase II



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2019)



Blockgroup: 450510509003, SOUTH CAROLINA, EPA Region 4

Approximate Population: 3,028

Input Area (sq. miles): 0.73

Racepath Street Phase II

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	7.12	8.84	3	8.59	11	8.3	20
Ozone (ppb)	37.9	40.8	32	40	37	43	21
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.382	0.308	73	0.417	50-60th	0.479	<50th
NATA* Cancer Risk (lifetime risk per million)	29	38	4	36	<50th	32	<50th
NATA* Respiratory Hazard Index	0.42	0.53	6	0.52	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	350	180	85	350	73	750	60
Lead Paint Indicator (% Pre-1960 Housing)	0.17	0.14	70	0.15	69	0.28	48
Superfund Proximity (site count/km distance)	0.011	0.092	4	0.083	8	0.13	5
RMP Proximity (facility count/km distance)	0.34	0.45	65	0.6	59	0.74	52
Hazardous Waste Proximity (facility count/km distance)	0.54	0.56	69	0.52	74	4	53
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	7.3E-07	0.24	30	0.45	48	14	41
Demographic Indicators							
Demographic Index	62%	37%	86	38%	82	36%	83
Minority Population	63%	36%	83	38%	77	39%	75
Low Income Population	60%	37%	85	37%	85	33%	87
Linguistically Isolated Population	12%	2%	97	3%	90	4%	86
Population With Less Than High School Education	47%	13%	99	13%	99	13%	97
Population Under 5 years of age	13%	6%	96	6%	95	6%	95
Population over 64 years of age	8%	16%	13	16%	17	15%	21

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: Racepath Street Phase II

Summary of ACS Estimates		2013 - 2017		
Population				3,028
Population Density (per sq. mile)				4,151
Minority Population				1,911
% Minority				63%
Households				822
Housing Units				1,099
Housing Units Built Before 1950				55
Per Capita Income				14,573
Land Area (sq. miles) (Source: SF1)				0.73
% Land Area				100%
Water Area (sq. miles) (Source: SF1)				0.00
% Water Area				0%
		2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race				
Total		3,028	100%	710
Population Reporting One Race		2,977	98%	1,336
White		1,997	66%	689
Black		793	26%	346
American Indian		0	0%	12
Asian		53	2%	96
Pacific Islander		0	0%	12
Some Other Race		134	4%	181
Population Reporting Two or More Races		51	2%	61
Total Hispanic Population		1,008	33%	534
Total Non-Hispanic Population		2,020		
White Alone		1,117	37%	445
Black Alone		679	22%	298
American Indian Alone		0	0%	12
Non-Hispanic Asian Alone		53	2%	96
Pacific Islander Alone		0	0%	12
Other Race Alone		134	4%	181
Two or More Races Alone		37	1%	58
Population by Sex				
Male		1,590	53%	495
Female		1,438	47%	366
Population by Age				
Age 0-4		401	13%	222
Age 0-17		935	31%	295
Age 18+		2,093	69%	468
Age 65+		243	8%	107

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
 N/A means not available. Source: U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: Racepath Street Phase II

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	1,844	100%	534
Less than 9th Grade	192	10%	118
9th - 12th Grade, No Diploma	666	36%	262
High School Graduate	602	33%	226
Some College, No Degree	286	16%	159
Associate Degree	130	7%	126
Bachelor's Degree or more	98	5%	79
Population Age 5+ Years by Ability to Speak English			
Total	2,627	100%	603
Speak only English	1,835	70%	457
Non-English at Home ¹⁺²⁺³⁺⁴	792	30%	424
¹ Speak English "very well"	392	15%	204
² Speak English "well"	250	10%	217
³ Speak English "not well"	150	6%	108
⁴ Speak English "not at all"	0	0%	12
³⁺⁴ Speak English "less than well"	150	6%	108
²⁺³⁺⁴ Speak English "less than very well"	400	15%	242
Linguistically Isolated Households*			
Total	95	100%	88
Speak Spanish	81	85%	83
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	14	15%	26
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	822	100%	162
< \$15,000	223	27%	107
\$15,000 - \$25,000	223	27%	126
\$25,000 - \$50,000	162	20%	96
\$50,000 - \$75,000	114	14%	76
\$75,000 +	100	12%	71
Occupied Housing Units by Tenure			
Total	822	100%	162
Owner Occupied	336	41%	105
Renter Occupied	486	59%	148
Employed Population Age 16+ Years			
Total	2,168	100%	556
In Labor Force	1,421	66%	470
Civilian Unemployed in Labor Force	238	11%	160
Not In Labor Force	747	34%	293

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. Source: U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.



Location: User-specified polygonal location

Ring (buffer): 0-mile radius

Description: Racepath Street Phase II

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	2,448	100%	702
English	1,858	76%	534
Spanish	461	19%	534
French	0	0%	17
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	20	1%	85
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	40	2%	166
Chinese	0	0%	17
Japanese	N/A	N/A	N/A
Korean	0	0%	17
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	55	2%	152
Other Asian	0	0%	17
Tagalog	0	0%	17
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	0	0%	17
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	14	1%	55
Total Non-English	590	24%	882

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. Source: U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.

*Population by Language Spoken at Home is available at the census tract summary level and up.



Location: User-specified polygonal location
 Ring (buffer): 0-mile radius
 Description: Racepath Street Phase II

Summary	Census 2010
Population	2,522
Population Density (per sq. mile)	3,457
Minority Population	1,493
% Minority	59%
Households	828
Housing Units	980
Land Area (sq. miles)	0.73
% Land Area	100%
Water Area (sq. miles)	0.00
% Water Area	0%

Population by Race	Number	Percent
Total	2,522	-----
Population Reporting One Race	2,446	97%
White	1,209	48%
Black	598	24%
American Indian	19	1%
Asian	40	2%
Pacific Islander	16	1%
Some Other Race	564	22%
Population Reporting Two or More Races	76	3%
Total Hispanic Population	783	31%
Total Non-Hispanic Population	1,739	69%
White Alone	1,029	41%
Black Alone	589	23%
American Indian Alone	8	0%
Non-Hispanic Asian Alone	40	2%
Pacific Islander Alone	5	0%
Other Race Alone	12	0%
Two or More Races Alone	56	2%

Population by Sex	Number	Percent
Male	1,341	53%
Female	1,181	47%

Population by Age	Number	Percent
Age 0-4	212	8%
Age 0-17	649	26%
Age 18+	1,873	74%
Age 65+	197	8%

Households by Tenure	Number	Percent
Total	828	
Owner Occupied	377	46%
Renter Occupied	451	54%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
 Source: U.S. Census Bureau, Census 2010 Summary File 1

Conformance with Plans & Zoning/Site Compatibility

Project Name	Investigator(s)	Site Visit Date
Racepath St. Phase II	C. Daves, S&ME	1/22/2020

ZONING

Is the project in compliance or conformance with local zoning?

Yes No (explain)

Site has one zoning designation:

LM – Light Manufacturing
MSF-6 (Residential)

Not applicable (explain) _____

SITE COMPATIBILITY

Check all items that apply

Is the project incompatible with surrounding:			
	Land uses		Building type (low/high-rise)
	Building height, bulk, mass		Building density
Will the project be unduly influenced by:			
	Building deterioration		Transition of land uses
	Postponed maintenance		Incompatible land uses
	Obsolete public facilities		Inadequate off-street parking
Will the project be influenced by air pollution generators such as:			
	Heavy industry		Large parking facilities (1000 or more cars)
	Incinerators		Heavily traveled highway (6 or more lanes)
	Power generation plants		Oil refineries
	Cement plants		Other (specify)

Were there any compatibility issues identified?

Yes No

If Yes, list mitigation strategies below:

Chris Daves

Lead Investigator's Signature

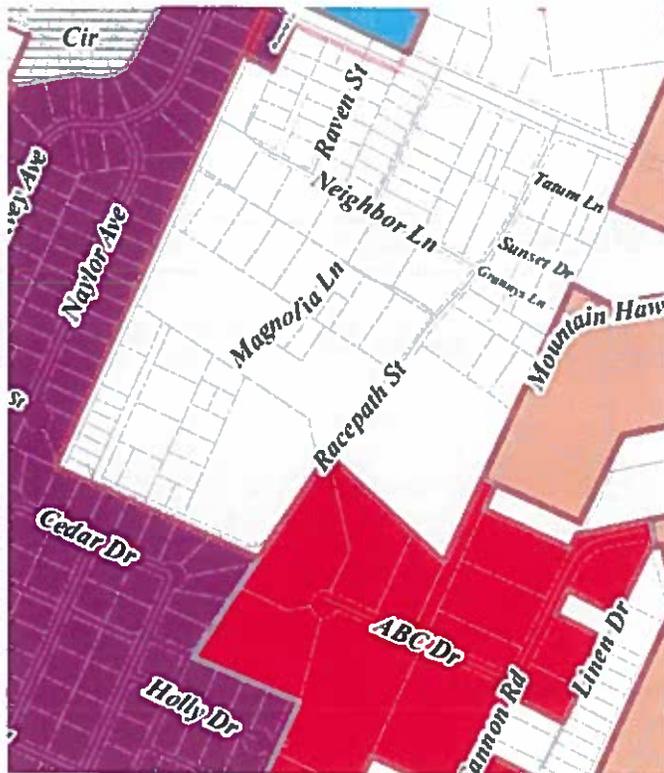
5/18/20

Date

Zoning

The current zoning designations associated with the site include LM (Light Manufacturing) and MSF-6 (Residential). This designation is assigned by the City of Myrtle Beach Planning Department in their Zoning Ordinance, dated April 28, 2020, and Horry County.

Zoning Designation	Project Compliance?
LM	Yes
MSF-6	Yes



Zoning Map

City of Myrtle Beach
Horry County, South Carolina



Current through: Ordinance # 2019-47

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Map Prepared By:
The City of Myrtle Beach - Public Works Department
Date of Print: 10/01/2019

Zoning



LM zoning designation allows for roads, street, and drainage improvements.
MSF 6 zoning designation allows for roads, street, and drainage improvements

Sources

City of Myrtle Beach Planning Department

<http://www.cityofmyrtlebeach.com/planning.html>

The Code of Ordinances – City of Myrtle Beach, SC (2020)

<http://cms6.revize.com/revize/myrtlebeachsc/Myrtle%20Beach%20Zoning%20Code%20200428.pdf>

City of Myrtle Beach Zoning Map (10/1/2019)

<http://cms6.revize.com/revize/myrtlebeachsc/departments/docs/Zoning%20and%20City%20Limits%20Map.pdf>

Horry County GIS

<http://www.horrycounty.org/gis/parcels/>

Horry County Zoning Districts

<https://www.horrycounty.org/portals/0/docs/planningandzoning/zoningdistricts.pdf>

Zoning Districts

(Highlighted districts are no longer available for use in the rezoning of property)

AG1	Agriculture	Businesses for the raising, care and harvesting of trees, plants, animals and crops
AG2	Commercial Agriculture	Farm related businesses characterized as agriculture-commercial in nature
AG3	Agricultural Community Services	Intended for businesses that meet the needs of the rural community
AG4	Agricultural Estate	Residential development of five acres or greater with non-commercial farming activities, horses and limited farm animals
AG5	Agricultural Manufactured Estate	Residential development of five acres or greater including manufactured, modular and mobile homes with non-commercial farming activities, horses & limited farm animals
AG6	Agricultural Ranchettes	Residential on two acres or greater with non-commercial farming activities & horses
AG7	Manufactured Agricultural Ranchettes	Residential development of two acres or greater including manufactured, modular and mobile homes with non-commercial farming activities
LFA	Limited Forest Agriculture	Agriculture, low-density residential, forestry uses as well as limited commercial (agriculturally related), social, cultural, recreational, and religious uses
FA	Forest Agriculture	Agriculture, forestry, low-density residential, limited commercial (maximum size of 4,500 sq.ft.), social, cultural, recreational, and religious uses
CFA	Commercial Forest Agriculture	Agriculture, forestry, low-density residential, commercial, social cultural, recreational and religious uses
CP	Conservation/Preservation	Preserves environmentally sensitive or scenic lands
CO1	Conservation/Preservation	Preserves environmentally sensitive areas, such as wetlands, bays, creeks etc.
BO1	Boating/Marine Commercial	Businesses reliant on the ocean, rivers and streams
RE	Rural Estates	Rural family farms with minimum 1-acre lots excluding mobile home and including livestock and limited commercial
SF40	Residential, no mobile homes allowed	Minimum lot size - 40,000 sq. ft.
SF20	Residential, no mobile homes allowed	Minimum lot size - 20,000 sq. ft.
SF14.5	Residential, no mobile homes allowed	Minimum lot size - 14,500 sq. ft.
SF10	Residential, no mobile homes allowed	Minimum lot size - 10,000 sq. ft.
SF8.5	Residential, no mobile homes allowed	Minimum lot size - 8,500 sq. ft.
SF7	Residential, no mobile homes allowed	Minimum lot size - 7,000 sq. ft.
SF6	Residential, no mobile homes allowed	Minimum lot size - 6,000 sq. ft.(SF) or 8,000 sq. ft. (duplex)
MSF40	Residential, including mobile homes	Minimum lot size - 40,000 sq. ft.
MSF20	Residential, including mobile homes	Minimum lot size - 20,000 sq. ft.
MSF14.5	Residential, including mobile homes	Minimum lot size - 14,500 sq. ft.
MSF10	Residential, including mobile homes	Minimum lot size - 10,000 sq. ft.
MSF8.5	Residential, including mobile homes	Minimum lot size - 8,500 sq. ft.
MSF7	Residential, including mobile homes	Minimum lot size - 7,000 sq. ft.
MSF6	Residential, including mobile homes	Minimum lot size - 6,000 sq. ft.(SF) or 8,000 sq. ft. (duplex)
MHP	Mobile Home Park	Mobile home developments in which lots are leased
MRD 1	Multi-Residential One	Allows for mixed residential development in the <i>rural</i> areas of the county as identified on the future land use map.
MRD 2	Multi-Residential Two	Allows for mixed residential development in the <i>suburban</i> areas of the county as identified on the future land use map
MRD 3	Multi-Residential Three	Allows for mixed residential development in the <i>urban</i> areas of the county as identified on the future land use map
GR	General Residential	High density development including apartments and condominiums
GRn	General Residential "n"	One, two, multi-family, apartment and condominiums at a specified density per acre. No mobile homes are allowed.

RR	Resort Residential	Hotels, motels and resort condominiums
RC	Resort Commercial	Hotels, motels, condominiums, and marinas
RH	Resort Housing	Medium to high-density housing for transient population
AC	Amusement Commercial	Businesses providing entertainment as its primary activity
AM1	Indoor Amusement Commercial	Amusement related uses within buildings or facilities
AM2	Outdoor Amusement Commercial	Amusement related uses generally located outside buildings or facilities
NC	Neighborhood Commercial	Businesses intended to serve the surrounding neighborhood
CC	Community Commercial	Pedestrian-oriented commercial centers
HC	Highway Commercial	Automobile-oriented commercial development
CR	Commercial Recreation	Allows uses focused on commercially operated recreational activities
EIO	Education, Institution, Office	Allows uses focused on providing services that meet the education, medical, personal, professional, religious, and social needs of the community
RCS	Retail Consumer Services	Allows uses focused on commercially operated recreational activities public consumes, purchases or participates in as part of their day-to-day activities
TRS	Transportation Related Services	Allows uses that are auto reliant or focused on providing services for autos, public or private transportation facilities, services and communication facilities
RE1	Neighborhood Retail Services	Retail business or services with limited impacts intended to serve immediate neighborhood
RE2	Community Retail Services	Retail Business uses near communities or along transportation corridors
RE3	Convenience & Auto-related Services	Retail and service uses located adjacent to arterials or collector streets
RE4	High Bulk Retail	Retail or services businesses requiring outdoor storage areas
PA1	Passenger & Product Transportation	Intended for businesses that move people or goods within Horry County or to other destinations
OPI	Office/Professional/Institutional	Office developments, hospitals, and nursing homes
PR1	Office-Professional	Office or institutional uses
PR2	Campus Institution, Office & Research	Research, institutional & light industrial uses that are developed in "park" settings
ME1	Inpatient Medical Services	Inpatient and outpatient medical services (doctor's office, clinics etc.)
ME2	Outpatient Medical Services	Intense outpatient medical services (drug treatment centers, counseling facilities etc.)
LI	Limited Industrial	Industries not considered objectionable in terms of smoke noise, etc.
HI	Heavy Industrial	Large scale manufacturing, processing, and assembling operations
MA1	Limited Manufacturing and Industrial	Industries that do not pose potential environmental or safety hazards
MA2	General Manufacturing and Industrial	Industrial and manufacturing uses that may require outdoor storage
MA3	Heavy/Intense Manufacturing and Industrial	Intense manufacturing and industrial uses not appropriate in proximity to commercial or residential uses
PDD	Planned Development District	Allows for mixture of residential, commercial, office, industrial uses on a single site provided a written narrative and conceptual plan are submitted (PDD replaces the PUD district)
DP	Destination Park	Recreational sites for travel trailers and campers

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



Soils Information

Bd - Bladen Fine Sandy Loam
 Ec - Echaw Sand
 Wa - Wahee Fine Sandy Loam (0-2% slopes)
 Ye - Yemassee Loamy Fine Sand

Approximate Boundary
 Soils



Soils Exhibit

Racepath Street Phase II +/- 1.69 Acres

Myrtle Beach, Horry County, South Carolina

Source: World Imagery 2018 & SCDNR (Soils Data)

SCALE:
 1" = 200'
 DATE:
 1-20-20
 PROJECT NUMBER
 1463-19-014

EXHIBIT NO.

4

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	KP*
Bc <i>Beeches</i>				<i>153B Tidewater Area</i>						
Beeches	100	1-5	Not prime farmland	Not highly erodible land	Poorly drained	Yes	D	8w	5	.05
Bd <i>Bladen fine sandy loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Bladen	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	5w	5	.24
BnA <i>Blanton sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Blanton	85	0-6	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	3a	5	.10
Bo <i>Bohicket silty clay loam</i>				<i>153B Tidewater Area</i>						
Bohicket	100	0-1	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	8w	5	.28
Br <i>Brookman loam</i>				<i>153B Tidewater Area</i>						
Brookman	100	0-2	Farmland of statewide importance	Not highly erodible land	Very poorly drained	Yes	D	3w	4	.24
Ce <i>Centenary fine sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Centenary	85	0-2	Not prime farmland	Not highly erodible land	Well drained	No	A	3a	5	.10
ChB <i>Chisolm fine sand, 0 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Chisolm	80	0-6	Farmland of statewide importance	Not highly erodible land	Well drained	No	A	2s	5	.10
Co <i>Coxville fine sandy loam</i>				<i>153A Atlantic Coast Flatwoods</i>						
Coxville	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	3w	5	.24
DuA <i>Duplin loamy fine sand, 0 to 2 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Duplin	100	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	5	.24
Ec <i>Echaw sand</i>				<i>153A Atlantic Coast Flatwoods</i>						
Echaw	95	0-2	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	3a	5	.10
EmB <i>Emporia loamy fine sand, 2 to 6 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Emporia	100	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	C	2e	5	.15
EuA <i>Eulonia loamy fine sand, 0 to 2 percent slopes</i>				<i>153A Atlantic Coast Flatwoods</i>						
Eulonia	90	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	5	.15

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	K _r *
<i>EuB Eulonia loamy fine sand, 2 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Eulonia	92	2-6	All areas are prime farmland	Potentially highly erodible land	Moderately well drained	No	C	2e	5	.15
<i>GoA Goldsboro loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Goldsboro	96	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	B	2w	5	.17
<i>Ho Hobcaw fine sandy loam</i>				153A Atlantic Coast Flatwoods						
Hobcaw	100	0-2	Farmland of statewide importance	Not highly erodible land	Very poorly drained	Yes	D	6w	5	.17
<i>Hy Hobonny muck</i>				153A Atlantic Coast Flatwoods						
Hobonny	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	7w		
<i>Jo Johnston loam</i>				153A Atlantic Coast Flatwoods						
Johnston	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	D	7w	5	.20
<i>KeB Kenansville fine sand, 0 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Kenansville	100	0-6	Farmland of statewide importance	Not highly erodible land	Well drained	No	A	2a	5	.15
<i>LaB Lakeland sand, 0 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Lakeland	100	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	4a	5	.10
<i>Le Leon fine sand</i>				153A Atlantic Coast Flatwoods						
Leon	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	B/D	4w	5	.10
<i>Ln Lynchburg loamy fine sand</i>				153A Atlantic Coast Flatwoods						
Lynchburg	94	0-2	Prime farmland if drained	Not highly erodible land	Somewhat poorly drained	No	C	2w	5	.15
<i>Ly Lynn Haven sand</i>				153A Atlantic Coast Flatwoods						
Lynn Haven	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	B/D	4w	5	.10
<i>Me Meggett loam</i>				153A Atlantic Coast Flatwoods						
Meggett	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	6w	5	.28
<i>NaB Nankin fine sandy loam, 2 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Nankin	96	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	C	2e	4	.28

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	Kf*
<i>NeA Nansemond loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Nansemond	95	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	C	2w	3	.15
<i>NhB Newhan fine sand, 0 to 6 percent slopes</i>				153B Tidewater Area						
Newhan	96	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	6a	5	.10
<i>NoA Norfolk loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Norfolk	96	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	5	.17
<i>Og Ogeechee loamy fine sand</i>				153A Atlantic Coast Flatwoods						
Ogeechee	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	B/D	3w	5	.10
<i>Os Osier loamy sand</i>				153A Atlantic Coast Flatwoods						
Osier	100	0-2	Not prime farmland	Not highly erodible land	Poorly drained	Yes	A/D	5w	5	.10
<i>Po Pocomoke fine sandy loam</i>				153A Atlantic Coast Flatwoods						
Pocomoke	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	B/D	4w	3	.20
<i>RmB Rimini sand, 0 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Rimini	90	0-6	Not prime farmland	Not highly erodible land	Excessively drained	No	A	6a	5	.10
<i>Ru Rutlege loamy sand</i>				153A Atlantic Coast Flatwoods						
Rutlege	100	0-2	Not prime farmland	Not highly erodible land	Very poorly drained	Yes	B/D	7w	5	.17
<i>SfA Suffolk loamy fine sand, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Suffolk	100	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	4	.24
<i>SfB Suffolk loamy fine sand, 2 to 6 percent slopes</i>				153A Atlantic Coast Flatwoods						
Suffolk	90	2-6	All areas are prime farmland	Potentially highly erodible land	Well drained	No	B	2e	4	.24
<i>SmA Summerton fine sandy loam, 0 to 2 percent slopes</i>				153A Atlantic Coast Flatwoods						
Summerton	96	0-2	All areas are prime farmland	Not highly erodible land	Well drained	No	B	1	5	.28
<i>Ud Udorthents and Udipsamments, well drained</i>				153A Atlantic Coast Flatwoods						
Udipsamments	50	0-15	Not prime farmland	Not highly erodible land	Moderately well drained	No	A	6a	5	.10
Udorthents	50	0-6	Not prime farmland	Not highly erodible land	Moderately well drained	No	B	4e	5	.28

Field Office Technical Guide Soils Information (SC)

Horry County, South Carolina

Mapunit Symbol and Soil Name	% of Unit	Slope %	Important Farmland Class	Highly Erodible Land*	Drainage Class	Hydric Rating	Hydrologic Soil Group	Land Capability Class	T factor*	K1*
Wa <i>Wahee fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Wahee	90	0-2	Farmland of statewide importance	Not highly erodible land	Somewhat poorly drained	No	D	2w	5	.24
We <i>Witherbee sand</i>				153A <i>Atlantic Coast Flatwoods</i>						
Witherbee	90	0-2	Not prime farmland	Not highly erodible land	Somewhat poorly drained	No	A/D	3w	5	.10
Wo <i>Woodington fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Woodington	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	B/D	3w	5	.20
YaA <i>Yauhannah fine sandy loam, 0 to 2 percent slopes</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yauhannah	90	0-2	All areas are prime farmland	Not highly erodible land	Moderately well drained	No	B	2w	5	.20
Ye <i>Yemassee loamy fine sand</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yemassee	90	0-2	Prime farmland if drained	Not highly erodible land	Somewhat poorly drained	No	C	2w	5	.15
Yo <i>Yongee fine sandy loam</i>				153A <i>Atlantic Coast Flatwoods</i>						
Yongee	100	0-2	Farmland of statewide importance	Not highly erodible land	Poorly drained	Yes	D	3w	5	.20

Horry County, South Carolina

Bd—Bladen fine sandy loam

Map Unit Setting

National map unit symbol: 4cdx

Elevation: 10 to 60 feet

Mean annual precipitation: 48 to 50 inches

Mean annual air temperature: 64 to 70 degrees F

Frost-free period: 250 to 285 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Bladen and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bladen

Setting

Landform: Depressions, flats

Landform position (three-dimensional): Talf, dip

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Clayey marine deposits

Typical profile

A - 0 to 6 inches: fine sandy loam

Btg - 6 to 62 inches: clay

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: CID

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Horry County, South Carolina
Survey Area Data: Version 22, Sep 16, 2019

Horry County, South Carolina

Ec—Echaw sand

Map Unit Setting

National map unit symbol: 4cf5
Elevation: 10 to 110 feet
Mean annual precipitation: 48 to 50 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 250 to 285 days
Farmland classification: Not prime farmland

Map Unit Composition

Echaw and similar soils: 95 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Echaw

Setting

Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: sand
E - 4 to 36 inches: sand
Bh - 36 to 72 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: About 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Leon

Percent of map unit: 2 percent
Landform: Flats, depressions
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Rutlege

Percent of map unit: 2 percent
Landform: Depressions, drainageways, flood plains, carolina bays
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Horry County, South Carolina
Survey Area Data: Version 22, Sep 16, 2019

Horry County, South Carolina

Wa—Wahee fine sandy loam

Map Unit Setting

National map unit symbol: 4cg2
Elevation: 10 to 100 feet
Mean annual precipitation: 48 to 50 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 250 to 285 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Wahee and similar soils: 90 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wahee

Setting

Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey marine deposits

Typical profile

A - 0 to 7 inches: fine sandy loam
E - 7 to 11 inches: loam
Bt - 11 to 15 inches: clay loam
Btg - 15 to 56 inches: clay
BCg - 56 to 65 inches: sandy clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Bladen

Percent of map unit: 2 percent
Landform: Depressions, flats
Landform position (three-dimensional): Talf, dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Ogeechee

Percent of map unit: 2 percent
Landform: Depressions, flats
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Meggett

Percent of map unit: 2 percent
Landform: Drainageways, flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Horry County, South Carolina
Survey Area Data: Version 22, Sep 16, 2019

Horry County, South Carolina

Ye—Yemassee loamy fine sand

Map Unit Setting

National map unit symbol: 4cg6
Elevation: 10 to 100 feet
Mean annual precipitation: 48 to 50 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 250 to 285 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Yemassee and similar soils: 90 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yemassee

Setting

Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy marine deposits

Typical profile

A - 0 to 7 inches: loamy fine sand
E - 7 to 14 inches: loamy fine sand
Btg - 14 to 46 inches: sandy clay loam
BCg - 46 to 56 inches: sandy loam
Cg - 56 to 72 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: BID
Hydric soil rating: No

Minor Components

Bladen

Percent of map unit: 2 percent
Landform: Flats, depressions
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Ogeechee

Percent of map unit: 2 percent
Landform: Depressions, flats
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Horry County, South Carolina
Survey Area Data: Version 22, Sep 16, 2019



Report of Geotechnical Exploration
Racepath Street – Phase II
Horry County, South Carolina
S&ME Project No. 1463-19-014

PREPARED FOR
Mead & Hunt
333 Wellness Drive
Myrtle Beach, South Carolina 29579

PREPARED BY:
S&ME, Inc.
1330 Highway 501 Business
Conway, SC 29526

April 9, 2019



April 9, 2019

Mead & Hunt
333 Wellness Drive
Myrtle Beach, South Carolina 29579

Attention: Kevin Barnes, P.E.

Reference: **Report of Geotechnical Exploration
Racepath Street – Phase II**
Myrtle Beach County, South Carolina
S&ME Project No. 1463-19-014

Dear Mr. Barnes:

We have completed our geotechnical exploration for the referenced project in Myrtle Beach, South Carolina. Our exploration was performed pursuant to S&ME Proposal No. 14-1800665.R1, dated January 17, 2019, and the contract between Mead & Hunt and S&ME, dated February 21, 2019, which was authorized by Kevin Barnes of Mead & Hunt on February 21, 2019.

The purpose of our services was to evaluate subsurface conditions as they relate to pavement support. This report presents a brief discussion of our understanding of the project, the results of our exploration program, and our geotechnical conclusions and recommendations.

◆ Project Information

Project information was initially provided via email correspondence between Kevin Barnes (Mead & Hunt) and Melvin Williams (S&ME) on November 7, 2018. The email correspondence included a Request for Qualifications (RFQ) document, the Report of Geotechnical Exploration for Phase I of Racepath Street (S&ME Report No. 1463-16-031, dated July 28, 2016), and an Environmental Review report (S&ME Project No. 4261-17-220, dated March 20, 2018).

The site is located along and adjacent to the existing Racepath Street in Myrtle Beach, South Carolina. We understand that the planned construction for Phase II will include two components:

1. Street and sewer improvements to the existing Racepath Street along a section measuring approximately 1,000 linear feet.
2. Construction of a new ABC Drive extension connecting the existing ABC Drive to the existing Racepath Street, measuring approximately 300 linear feet.

According to the RFQ, planned street and sewer improvements include a new sidewalk, roadway resurfacing, storm drainage upgrades (catch basins, piping, and gutters), roadside landscaping, and street lighting improvements. We assume the proposed improvements will occur inside the existing right-of-way (ROW), except



where new roadway construction will connect Racepath Street and ABC Drive. We have assumed that typical cuts or fills of two feet or less will be required to achieve design grade elevations. Traffic load information was not provided. If actual traffic loads or fill thicknesses are greater than our assumptions, our recommendations may require revision.

◆ Exploration Procedures

Field Exploration

Our exploration included a site reconnaissance by a geotechnical professional and the performance of twelve (12) standard penetration test (SPT) borings, which were performed in general accordance with ASTM D 1586 procedures. The borings were performed within the existing roadway and along the ROW at Racepath Street, and along the ABC Drive extension. We originally proposed to perform eleven borings, but the client requested that we include one additional boring in the edge of the pavement near the intersection of Racepath Street with Robert M. Grissom Parkway. Each boring was advanced to a depth of 10 feet below the existing ground/pavement surface.

Test locations were established in the field by S&ME personnel utilizing landmark features of the existing neighborhood. Approximate test locations are shown on the test location sketch (Figure 1) in the appendix. The borings were labeled B-9 through B-20, so as not to conflict with the boring numbers assigned in the *Report of Geotechnical Exploration* for Phase I of this same roadway, which included borings B-1 through B-8. More detailed descriptions of our field testing procedures, the SPT logs, and the boring logs are also included in the appendix.

We also collected bulk material samples from the existing Racepath Street roadway to perform a cement modified recycled base (CMR8) laboratory mix design, in general accordance with SCDOT procedures (SC-T-26). Samples in existing paved areas were collected using our drill rig, and the underlying materials were then extracted using a shovel. The recovered materials were sampled to a depth of approximately 10 inches below the existing surface. The recovered asphalt, base materials, and soil materials were transported to our Conway, SC laboratory for testing.

Laboratory Testing

Soil samples that we obtained were transported to our laboratory, and some of the recovered samples were subjected to the following laboratory testing:

- ◆ Natural Moisture Content (ASTM D 2216)
- ◆ Grain-Size Distribution (ASTM D 6913)
- ◆ Atterberg Limits Testing (ASTM D 4318)
- ◆ Modified Proctor Testing (ASTM D 1557)
- ◆ California Bearing Ratio (CBR) (ASTM D 1883)

A summary of the laboratory procedures used to perform these tests is presented in the appendix. The individual test results are also included in the appendix.



One composite sample (Composite #3) was formulated for CMRB testing in the laboratory. Holcim Type I Portland cement was mixed in the amounts of 2.0, 4.0 and 6.0 percent by dry weight. Moisture-density relationship (“Proctor”) testing was performed in accordance with AASHTO T 99 at the median rate of cement (4%). The composite sample was tested for gradation (sieve analysis) in general accordance with AASHTO T 88 procedures.

Compressive strength specimens were then compacted within 1% of the optimum moisture content to within plus or minus 2 pounds per cubic foot (pcf) of the AASHTO T 99 maximum dry density, and were tested according to SC-T-26. Two strength specimens were molded at each trial cement content, and compression tested at 7 days age to evaluate strength gain as it correlates with cement content.

◆ Site and Subsurface Conditions

Site Conditions

At the time of our exploration, site cover consisted of asphalt pavements within the roadway alignment and grasses up to a few inches in height within the unpaved areas. Coquina base course was observed beneath the asphalt at most of the test locations. Asphalt, coquina, and topsoil thicknesses are described below in Table 1. The borings in the existing Racepath Street were typically performed in groups of three, with one boring located near the centerline, one located near the pavement edge, and one located along the existing shoulder. The borings that are associated with each other at similar stations are combined into the same Group No. in Table 1.

Table 1: Summary of Asphalt, Coquina, and Topsoil Thicknesses

Group No.	Boring No.	Location	Asphalt Thickness (inches)	Coquina Base Thickness (inches)	Topsoil Thickness (inches)
1	B-9	Racepath Street (Near Centerline)	3	6 ¾	---
	B-10	Racepath Street (Near Pavement Edge)	1 ½	7	---
	B-11	Racepath Street (Along Existing Shoulder)	---	---	4
2	B-12	Racepath Street (Near Centerline)	3 ¼	6 ¾	---
	B-13	Racepath Street (Near Pavement Edge)	1 ½	7	---
	B-14	Racepath Street (Along Existing Shoulder)	---	---	4



Group No.	Boring No.	Location	Asphalt Thickness (inches)	Coquina Base Thickness (inches)	Topsoil Thickness (inches)
3	B-15	Racepath Street (Near Centerline)	3 ¼	5 ¾	---
	B-16	Racepath Street (Near Pavement Edge)	5 ½	2	---
	B-17	Racepath Street (Along Existing Shoulder)	---	---	6
4	B-18	Racepath Street near Robert Grissom Pkwy (Near Pavement Edge)	3	0	---
5	B-19	ABC Drive (Future Alignment)	---	---	6
	B-20	ABC Drive (Future Alignment)	---	---	6

For Groups 1 and 2, the asphalt near the centerline was significantly thicker than at the pavement edge, while the base layer thickness remained roughly similar. This was not the case for Group 3, where the asphalt pavement was significantly thicker along the edge than at the centerline; however, the base layer was significantly thinner along the edge. This could indicate a place where built-up asphalt was used to either adjust grade elevations or to provide additional stability over the subgrade.

Topographic information was not provided to us; however, based on visual observation, elevation change across the site appeared to be less than about 5 feet.

Subsurface Conditions

Details of the subsurface conditions encountered at our test locations are shown on the logs attached in the appendix. These logs represent our interpretation of the subsurface conditions based upon field data. Stratification lines on the logs represent approximate boundaries between soil behavior types; however, the actual transition may be gradual. The general subsurface conditions and their pertinent characteristics are discussed in the following paragraphs.

Stratum I: Upper Cohesive Soils

Below the topsoil or asphalt and/or Coquina base, each boring except B-15 and B-16 initially encountered sandy lean clays (CL), sandy fat clays (CH), and clayey sands (SC) to a depth of about 3 to 6 feet. The standard penetration test resistance N-values within this stratum ranged from sufficiently soft to be penetrated by the static weight of the hammer (WOH) to 12 blows per foot (bpf), indicating very soft to firm consistency within the



cohesive soils and loose to medium dense relative density within the granular soils. The weakest resistance (WOH) was observed at test location B-17. At most of the test locations, the penetration resistance was about 4 to 7 bpf.

A bulk sample was collected from boring B-19, in the alignment of the new ABC Drive, at a depth range of 1 to 2 feet within the Stratum I soils. The sample was classified as sandy lean clay (CL) with a fines content of 50.9% passing the No. 200 sieve. Atterberg limits testing indicated a liquid limit of 46 percent and a corresponding plasticity index of 29 percent. This sample was brown in color. The natural moisture content was measured to be 21.4%. Modified Proctor testing indicated a maximum dry density of 121.4 pounds per cubic foot (pcf) at an optimum moisture content for compaction of 10.8 percent. This indicates that the soil in-situ is about 10.6 percent wet of its optimum moisture content for compaction. The CBR value measured for this soil when a sample was remolded to 95 percent compaction near its optimum moisture content was 20.0 percent.

Stratum II: Lower Sands

Underlying the Coquina base in borings B-15 and B-16, and underlying the Stratum I cohesive soils in the remaining borings, poorly graded sands (SP), poorly graded sands with clay (SP-SC), and silty sands (SM) were encountered to the termination depth of 10 feet within each boring. The SPT N-values in these sands ranged from 2 to 20 bpf, and typically ranged from 11 to 20 bpf, indicating typically medium dense conditions with some loose to very loose zones.

Subsurface Water

Subsurface water was measured within the borings at the time of exploration at depths ranging from 3.1 to 6.8 feet below the existing ground surface. The potential for shallow “perched” ground water conditions to develop was observed, where water becomes trapped within and on top of seams of subsurface clays. Subsurface water levels at the site will fluctuate during the year due to such things as seasonal and climatic variations, tidal influence, and construction activity in the area.

◆ Conclusions and Recommendations

The exploration indicates the site is adaptable for the proposed construction. The primary geotechnical considerations will be site preparation, controlled fill placement and compaction, full-depth pavement reclamation with cement stabilization, and new pavement section construction.

The following presents our geotechnical recommendations regarding site grading and pavement section construction. When reviewing these recommendations, it must be recognized that unexpected subsurface conditions may be encountered between test locations. Unexpected conditions can normally be handled during construction by on-site engineering evaluation.

Surface Preparation

Site preparation should begin with the establishment of positive site drainage and the removal of unsuitable surface materials and demolition debris. This should include removal of topsoil, rootmat, and any other unsuitable surface materials that may be encountered, particularly in shoulders and new alignment areas. In the event that



any areas with a significant percentage (i.e. 5% or greater) of organic material are encountered, those materials should be removed from the construction area.

After stripping of the surface is complete but prior to any new fill placement, the exposed subgrade should be thoroughly evaluated for stability by the Geotechnical Engineer by having the contractor proofroll it under the observation of the Geotechnical Engineer with a fully-loaded tandem-axle dump truck or similar equipment. Areas that pump or rut excessively under proofrolling should be undercut to stable materials and replaced with controlled fill. This should be a field decision made at the time of construction in consultation with the engineer based upon the actual conditions observed. Undercutting should be observed by the Geotechnical Engineer to confirm that all unsuitable materials are removed and that suitable materials are not over-excavated.

- Because the natural moisture content of the near-surface clay along the new ABC Drive alignment was well above the optimum moisture content for compaction at the time of our exploration, it should be expected that some areas of the exposed subgrade may not be stable once exposed and proofrolled.

Controlled Fill

Controlled fill material should be cohesionless, non-plastic, imported, sandy soil containing no more than 15 percent fines (material passing the No. 200 sieve) by weight and having a maximum dry density of at least 105 pounds per cubic foot (pcf) as determined by a laboratory modified Proctor moisture density relationship test (ASTM D1557). The soil should be relatively free of organics or other deleterious matter. All fill should be placed in uniform lifts of 10 in. or less (loose measure) and compacted to at least 95 percent of the modified Proctor maximum dry density.

Fill placement should be observed by a qualified Materials Technician working under the direction of the Geotechnical Engineer. In addition to this visual evaluation, the Technician should perform a sufficient number of in-place field density tests to confirm that the required degree of compaction is being attained.

Pavement Section Design and Construction Recommendations

Existing Pavement Areas

We recommend that cement-modified recycled base (CMRB) be utilized on the existing Racepath Street pavements. We have set the target average compressive strength for the in-place CMRB at a range of 400 to 450 psi. Please note that SCDOT may set targets of up to 600 psi for CMRB; however, since this is a Horry County road not under SCDOT jurisdiction, we did not use the State strength target. The reason for this is that, in our experience, CMRB with a target strength of 600 psi may be subject to significantly greater instances of shrinkage cracking, which can reflect up through the asphalt surface. At 400 to 450 psi, sufficient strength is typically provided to stabilize the CMRB roadbed for paving purposes, but the shrinkage potential may be significantly reduced.

It must be recognized by the client and owner that there is always some shrinkage with any cement stabilized product, so the risk of shrinkage cracking can never be fully eliminated, but it can be mitigated by implementing proper construction practices, including proper cement blending, and proper curing techniques. When it comes



to cement stabilization, *more is not better*. It is just as unfavorable to include too much cement as it is to include too little cement. We have attached to this report SCDOT Supplemental Technical Specification 306 (SC-M-306), which we recommend as a guidance document for the design civil engineer when specifying this process.

- *We recommend one variation to SC-M-306, as follows:* We recommend “wet curing with milling” as an alternative to “surface treatment with milling” that is described in Section 13.1 of SC-M-306. “Wet curing with milling” is defined as follows: “After the CMRB has been finished as specified, protect the surface from rapid drying by keeping the base *continuously moist* for 3 days. Prior to placement of the hot mix asphalt course, the CMRB surface shall be milled to obtain a true and level finish for the asphalt placement.” In the 2010 version of SC-M-306, this method is called “Curing Method 3”; however, this curing method does not appear in the 201B version of SC-M-306 attached. Note: If wet curing methods are used, it is critical to prevent the surface from drying out throughout the curing period.

Reclaimed Material Properties

The reclaimed material properties that we measured are presented in Table 2 below. Please see the attached laboratory data worksheets for additional information. Please note that the compressive strengths presented in Table 2 represent the *average* of the two individual specimens from each cement content tested, and should not be construed as a *minimum* strength.

Table 2: Summary of CMRB Material Properties and Strength Test Results

Pavement Area	Proctor Maximum Dry Density (pcf)	Optimum Moisture Content (%)	Moist Unit Density of CMRB at 100% Compaction (pcf)	7-Day Compressive Strength, avg. (psi)		
				2% cement	4% cement	6% cement
Composite #3, obtained from existing paved sections of Phase II of Racepath Street	121.3	9.9	133.3	190	500	750

Evaluating the information presented in Table 2 above, we estimate that an average 7-day compressive strength in the 400 psi to 450 psi range would be achieved at approximately 3 ½ percent cement by weight.

Regarding stabilization thickness, we considered that this road is a low volume urban street, rather than a State Highway, so the traffic demand is expected to be relatively modest. Our analysis of the pavement section recommended in Table 3 below indicates support for roughly 2 million Equivalent 18-kip Single Axle Loads (ESALs) over the pavement service life; we anticipate that this should provide sufficient capacity to accommodate the normal service load plus the future construction traffic associated with Phase II of the Racepath Street project.



Table 3: Recommended Portland Cement Spread Rate

Roadway Section	Maximum Dry Density (pcf)	Optimum Moisture Content (%)	Moist Unit Density of CMRB at 100% Compaction (pcf)	Stabilized Base Layer Thickness (inches)	Cement Content (% by weight)	Portland Cement Spread Rate (Lbs./Sq.Yd.)	HMA Type C Surface Course (inches)
All Reclaimed Sections in Phase II	121.3	9.9	133.3	10*	3.5	35	2

*De-conflict all buried utilities within the reclamation zone prior to starting work.

Widening Areas on Racepath Street

In areas where the road is being widened adjacent to zones being treated by full-depth reclamation, there are two acceptable options.

One option would be to remove the upper 8 inches of existing soils (as measured from final base grade elevation) and replace these soils with GABC, then include the widened section as part of the full-depth reclamation process (reclaiming 10 inches deep) in order to create a cement-stabilized base that is ten inches thick. If this option is used, the cement-treated base would then be overlaid with 2 inches of HMA Type C Surface along with the rest of the full-depth reclaimed section, as described in the preceding section of this report. We know from previous laboratory testing performed during Phase I of Racepath Street that this option will provide the necessary strength of support using the same cement content (3 ½ percent) and dosage. This recommendation is based upon the results of “Composite Sample No. 2”, as reported in our letter *Cement Modified Recycled Base Laboratory Mix Design Results*, Project No. 1463-16-031-120, dated February 13, 2019.

Another acceptable approach would be to construct the widened areas in the same manner as entirely new pavements, as described in the following section of this report for ABC Drive. However, if this approach is taken, the designer should consider increasing the HMA surface course thickness in the widened area to 2 inches, in order to prevent a ½ inch differential from occurring between the overlay course in the full-depth reclamation zone (which is recommended to be 2 inches thick), and the surface course in the new construction area (which only has a 1 ½ inch minimum thickness requirement). Also, this option is not the preferred solution where the widening area is narrow, because of the difficulty of properly constructing the new pavement section in a narrow excavation.

New Pavement Areas (ABC Drive)

Because of the wet, clayey native subgrade materials, we recommend that new pavement subgrades consist of at least 24 inches of imported, select, sandy fill soils. We used a CBR value of 10 percent to represent these imported soils in our pavement capacity calculations and assumed that the sand will be compacted to at least 95 percent of the modified laboratory maximum density. If materials having lesser subgrade support values are to be



considered for use, the pavement design should be reevaluated, and required pavement thicknesses may need to be increased as a result.

Traffic volumes for the proposed development were not provided to us in preparation for our exploration and pavement section analysis; therefore, we have performed our calculations based on typical pavement section thicknesses. The recommended pavement section components are provided in Table 2 below.

For flexible pavements, the pavement thickness computations were made using the AASHTO method, assuming an initial serviceability of 4.2 and a terminal serviceability index of 2.0, and a reliability factor of 80 percent. Assuming that only SCDOT approved source materials will be used in flexible pavement section construction, we used a structural layer coefficient of 0.44 for the new HMA section. The minimum pavement section thickness recommendations presented in Table 4 assume that Racepath Street is considered a subcollector roadway.

Table 4: Recommended Minimum Pavement Sections^(a)

Pavement Area	Theoretical Available Traffic Load Capacity (ESALs)	HMA Surface Course Type C (inches)	HMA Intermediate Course Type C (inches)	Compacted Graded Aggregate Base Course ^(b) [GABC] (inches)	Select, Imported, Sandy Subbase Fill (inches)
New ABC Drive (Subcollector)	178,000	1.5	1.5	6	24

(a) Single-stage construction and soil compaction as recommended is assumed, S&ME, Inc. must observe pavement subgrade preparation and pavement installation operations.

(b) Do not substitute Coquina for Graded Aggregate Base Course (GABC).

The following recommendations are provided regarding new pavement section construction:

1. Fill placed in pavement areas should be compacted as recommended previously in this report. Prior to pavement section installation, all exposed pavement area subgrades should be methodically proofrolled at final subgrade elevation under the observation of S&ME, Inc., and any identified unstable areas should be repaired as directed.
2. Any new stone base course underlying pavements should consist of a graded aggregate base course (GABC) as specified by the SCDOT 2007 Standard Specifications for Highway Construction, Section 305. Proposed materials for use should be provided by a SCDOT-approved source.
 - ♦ It is not recommended to substitute Coquina base course for GABC on this project, due to the conditions observed.
3. As stated in the SCDOT Section 305 specification, we recommend that all new base course should be compacted to at least 100 percent of the modified Proctor maximum dry density (SC T-140). Completed base courses should be methodically proofrolled at final base grade elevation under the observation of S&ME, Inc., and any identified unstable areas should be repaired as directed prior to paving, which may



require removal and replacement of some of the subgrade soils, particularly in areas where cohesive soils were observed beneath the topsoil. Base courses should not exhibit pumping or rutting under equipment traffic. Heavy compaction equipment is likely to be required in order to achieve the required base course compaction, and the moisture content of the material will likely need to be maintained very near the optimum moisture content in order to facilitate proper compaction. S&ME, Inc. should be contacted to perform field density and thickness testing of the base course prior to paving.

4. Experience indicates that a thin surface overlay of asphalt pavement may be required in about 7 to 10 years due to normal wear and weathering of the surface. Such wear is typically visible in several forms of pavement distress, such as aggregate exposure and polishing, aggregate stripping, asphalt bleeding, and various types of cracking. There are means to methodically estimate the remaining pavement life based on a systematic statistical evaluation of pavement distress density and mode of failure. We recommend the pavement be evaluated in about 7 years to assess the pavement condition and remaining life.
5. Construct the HMA surface course in accordance with the specifications of Section 403 of the South Carolina Department of Transportation Standard Specifications for Highway Construction (2007 edition). Construct HMA intermediate courses in accordance with the specifications of Section 402 of this same specification.
6. It is very important for this project that the asphaltic concrete be properly compacted, as specified in Section 401.4 of the SCDOT specification. Asphaltic concrete that is insufficiently compacted will show wear much more rapidly than if it were properly compacted.
7. Sufficient testing should be performed during flexible pavement installation to confirm that the required thickness, density, and quality requirements of the pavement specifications are followed.

Permanent Underdrains

To provide permanent stabilization for new pavements on the ABC Drive extension, a system of underdrains should be designed for the pavement area subgrades. Underdrains are required by the Horry County, South Carolina "Code of Ordinances", Chapter 1B "Land Development Regulations", Article 9, Appendix G.

1. The site civil engineer should be consulted regarding the type and location of the underdrains. Our experience is that two types of underdrain systems are commonly used in this locality, depending upon the traffic application and the preferences of the civil engineer. One commonly used system is a gravel-filled, fabric-wrapped trench containing an embedded perforated plastic HDPE pipe. Another type of system that we see used is an edge drain product such as AdvanEdge by ADS, Inc. This is a fabric-wrapped, perforated HDPE slot style drain. Some engineers have used a combination of these two systems. Typically, the underdrains are tied into the storm water system to maintain positive gravity flow.
2. If there are any landscaped islands in the roadway, do not fill the islands with clayey or silty (impermeable) spoils that may impede the movement of water into the underdrains.

◆ **Limitations of Report**

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other representation or warranty either express or implied, is made.



We relied on project information given to us to develop our conclusions and recommendations. If project information described in this report is not accurate, or if it changes during project development, we should be notified of the changes so that we can modify our recommendations based on this additional information if necessary.

Our conclusions and recommendations are based on limited data from a field exploration program. Subsurface conditions can vary widely between explored areas. Some variations may not become evident until construction. If conditions are encountered which appear different than those described in our report, we should be notified. This report should not be construed to represent subsurface conditions for the entire site.

Unless specifically noted otherwise, our field exploration program did not include an assessment of regulatory compliance, environmental conditions or pollutants or presence of any biological materials (mold, fungi, bacteria). If there is a concern about these items, other studies should be performed. S&ME can provide a proposal and perform these services if requested.

S&ME should be retained to review the final plans and specifications to confirm that earthwork, foundation, and other recommendations are properly interpreted and implemented. The recommendations in this report are contingent on S&ME’s review of final plans and specifications followed by our observation and monitoring of earthwork and pavement construction activities.

◆ Closure

S&ME, Inc. appreciates the opportunity to be of service to you on this project. Please call if you have questions concerning this report or any of our services.

Sincerely,

S&ME, Inc.

W. Worth King, P.E.
Project Engineer



Ronald P. Forest, Jr., P.E.
Senior Engineer



Attachments: Appendix

Appendix

Test Location Sketch

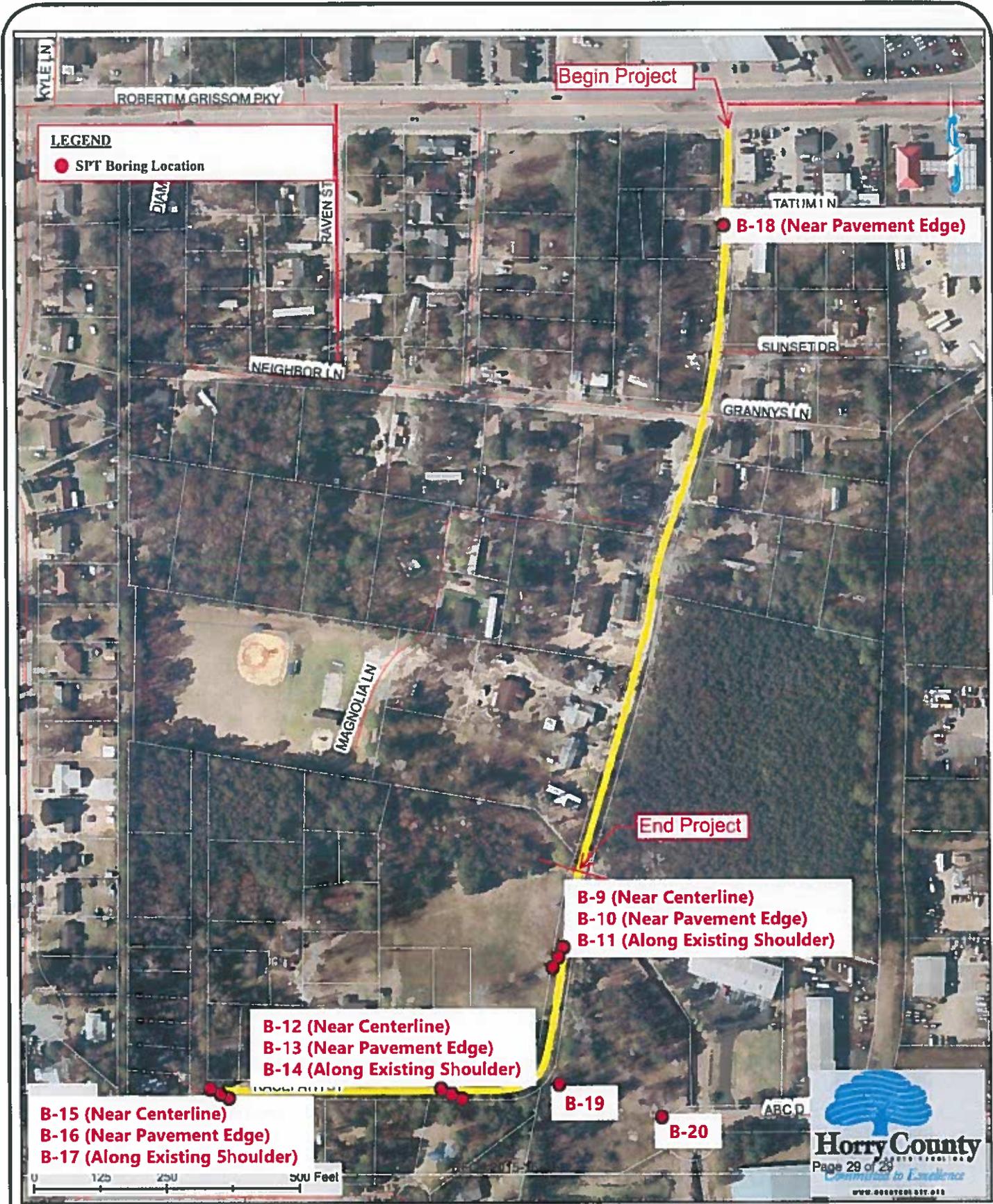
Summary of Exploration Procedures

Soil Classification Chart

Boring Logs

Summary of Laboratory Procedures

Laboratory Test Results



LEGEND
 ● SPT Boring Location

Begin Project

B-18 (Near Pavement Edge)

End Project

B-9 (Near Centerline)
 B-10 (Near Pavement Edge)
 B-11 (Along Existing Shoulder)

B-12 (Near Centerline)
 B-13 (Near Pavement Edge)
 B-14 (Along Existing Shoulder)

B-15 (Near Centerline)
 B-16 (Near Pavement Edge)
 B-17 (Along Existing Shoulder)

B-19

B-20

0 125 250 500 Feet



Test Location Sketch

Racepath Street – Phase 2
 Myrtle Beach, South Carolina

SCALE
 AS SHOWN
 DATE
 2-27-19
 PROJECT NUMBER
 1463-19-014

FIGURE NO.

1

◆ Summary of Exploration Procedures

The American Society for Testing and Materials (ASTM) publishes standard methods to explore soil, rock and ground water conditions in Practice D-420-9B, "*Standard Guide to Site Characterization for Engineering Design and Construction Purposes.*" The boring and sampling plan must consider the geologic or topographic setting. It must consider the proposed construction. It must also allow for the background, training, and experience of the geotechnical engineer. While the scope and extent of the exploration may vary with the objectives of the client, each exploration includes the following key tasks:

- Reconnaissance of the Project Area
- Preparation of Exploration Plan
- Layout and Access to Field Sampling Locations
- Field Sampling and Testing of Earth Materials
- Laboratory Evaluation of Recovered Field Samples
- Evaluation of Subsurface Conditions

The standard methods do not apply to all conditions or to every site. Nor do they replace education and experience, which together make up engineering judgment. Finally, ASTM D 420 does not apply to environmental investigations.

◆ Reconnaissance of the Project Area

We walked over the site to note land use, topography, ground cover, and surface drainage. We observed general access to proposed sampling points and noted any existing structures.

Checks for Hazardous Conditions - State law requires that we notify SC-B11 before we drill or excavate at any site. SC-B11 is operated by the major water, sewer, electrical, telephone, CATV, and natural gas suppliers of South Carolina. SC-B11 forwarded our location request to the participating utilities. Location crews then marked buried lines with colored flags within 72 hours. They did not mark utility lines beyond junction boxes or meters. We checked proposed sampling points for conflicts with marked utilities, overhead power lines, tree limbs, or man-made structures during the site walkover.

◆ Boring and Sampling

Soil Test Boring with Hollow Stem Auger

Soil sampling and penetration testing were performed in general accordance with ASTM D1586, "*Standard Test Method for Penetration Test and Split Barrel Sampling of Soils.*" Borings were made by mechanically twisting a continuous steel hollow stem auger into the soil. At regular intervals, soil samples were obtained with a standard 1.4 inch I. D., two-inch O. D., split barrel sampler. The sampler was first seated six inches to penetrate any loose cuttings, then driven an additional 12 inches with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler through the two final six inch increments was recorded as the penetration resistance (SPT N) value. The N-value, when properly interpreted by qualified professional staff, is an index of the soil strength and foundation support capability.

Water Level Determination

Subsurface water levels in the boreholes were measured during the onsite exploration by measuring depths from the existing grade to the current water level using a tape. These measurements were performed at time of drilling and at least 24 hours after drilling.

Borehole Closure

Boreholes were closed approximately 24 hours after drilling. Boreholes were filled by slowly pouring sand into the open hole such that minimal "bridging" of the material occurred in the hole. Backfilling of the upper two feet of each hole was tamped as heavily as possible with a shovel handle or other hand held equipment.

Patching of Asphalt Surface

Penetrations of asphalt surfaces made during the drilling process were patched using compacted asphalt cold patch material. Cold patch asphalt was placed to provide a surface flush with existing pavement adjacent to the boring. Cold patch asphalt was compacted by tamping it into the boring with a shovel handle or similar hand held equipment.

LEGEND TO SOIL CLASSIFICATION AND SYMBOLS

SOIL TYPES

(Shown in Graphic Log)

	Fill
	Asphalt
	Concrete
	Topsoil
	Gravel
	Sand
	Silt
	Clay
	Organic
	Silty Sand
	Clayey Sand
	Sandy Silt
	Clayey Silt
	Sandy Clay
	Silty Clay
	Partially Weathered Rock
	Cored Rock

WATER LEVELS

(Shown in Water Level Column)

-  = Water Level At Termination of Boring
-  = Water Level Taken After 24 Hours
-  = Loss of Drilling Water
- HC** = Hole Cave

CONSISTENCY OF COHESIVE SOILS

<u>CONSISTENCY</u>	<u>STD. PENETRATION RESISTANCE BLOWS/FOOT</u>
Very Soft	0 to 2
Soft	3 to 4
Firm	5 to 8
Stiff	9 to 15
Very Stiff	16 to 30
Hard	31 to 50
Very Hard	Over 50

RELATIVE DENSITY OF COHESIONLESS SOILS

<u>RELATIVE DENSITY</u>	<u>STD. PENETRATION RESISTANCE BLOWS/FOOT</u>
Very Loose	0 to 4
Loose	5 to 10
Medium Dense	11 to 30
Dense	31 to 50
Very Dense	Over 50

SAMPLER TYPES

(Shown in Samples Column)

- Shelby Tube
-  Split Spoon
-  Rock Core
-  No Recovery

TERMS

Standard Penetration Resistance - The Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in. I.D. Split Spoon Sampler 1 Foot. As Specified in ASTM D-1586.

REC - Total Length of Rock Recovered in the Core Barrel Divided by the Total Length of the Core Run Times 100%.

RQD - Total Length of Sound Rock Segments Recovered that are Longer Than or Equal to 4" (mechanical breaks excluded) Divided by the Total Length of the Core Run Times 100%.



PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-9											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Near Centerline. Elevation unknown.											
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft													
DRILLER: M. Radford		WATER LEVEL: 6.0 ft. at TOB.													
HAMMER TYPE: Automatic		LOGGED BY: W. King													
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:									
DRILLING METHOD: 2 1/2" H.S.A.															
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
										10	20	30	60	80	
		ASPHALT - APPROXIMATELY 3 INCHES COQUINA - APPROXIMATELY 6 3/4 INCHES SANDY LEAN CLAY (CL) - Mostly low to medium plasticity fines, some fine to medium sand, tan/gray, moist to saturated, firm to very soft.					1	2	3						5
5					2		2	1	1						2
		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, brown, saturated, loose to very loose.			3		1	2	3						5
10					4		1	1	1						2
		Boring terminated at 10 ft													

S&ME BORING LOG \ 1463-19-014.GPJ \ LIBRARY 2011_06_28.GDT \ 4/1/19

NOTES:

1. THIS LOG IS ONLY A PORTION OF A REPORT PREPARED FOR THE NAMED PROJECT AND MUST ONLY BE USED TOGETHER WITH THAT REPORT.
2. BORING, SAMPLING AND PENETRATION TEST DATA IN GENERAL ACCORDANCE WITH ASTM D-1586.
3. STRATIFICATION AND GROUNDWATER DEPTHS ARE NOT EXACT.
4. WATER LEVEL IS AT TIME OF EXPLORATION AND WILL VARY.



PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-10											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Near Pavement Edge. Elevation unknown.											
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft													
DRILLER: M. Radford		WATER LEVEL: 6.8 ft. at TOB.													
HAMMER TYPE: Automatic		LOGGED BY: W. King													
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:									
DRILLING METHOD: 2 1/4" H.S.A.															
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
										10	20	30	60	80	
		ASPHALT - APPROXIMATELY 1 1/2 INCHES COQUINA - APPROXIMATELY 7 INCHES													
		SANDY LEAN CLAY (CL) - Mostly low to medium plasticity fines, some fine to medium sand, brown/tan, moist, soft.			1		2	2	2						4
		SANDY FAT CLAY (CH) - Mostly medium to high plasticity fines, some fine to medium sand, gray, wet, soft.			2		3	1	2						3
5															
		POORLY GRADED SAND (SP) - Mostly fine to medium sand, gray, saturated, very loose.			3		1	2	2						4
					4		1	1	1						2
10		Boring terminated at 10 ft													

S&ME BORING LOG 1463-19-014.GPJ \ LIBRARY 2011_06_28.GDT 14/1/19

NOTES:

1. THIS LOG IS ONLY A PORTION OF A REPORT PREPARED FOR THE NAMED PROJECT AND MUST ONLY BE USED TOGETHER WITH THAT REPORT.
2. BORING, SAMPLING AND PENETRATION TEST DATA IN GENERAL ACCORDANCE WITH ASTM D-1586.
3. STRATIFICATION AND GROUNDWATER DEPTHS ARE NOT EXACT.
4. WATER LEVEL IS AT TIME OF EXPLORATION AND WILL VARY.

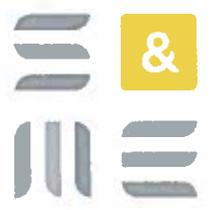


PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-11										
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Along Existing Shoulder. Elevation unknown.										
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft												
DRILLER: M. Radford		WATER LEVEL: 6.4 ft. at TOB.												
HAMMER TYPE: Automatic		LOGGED BY: W. King												
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:								
DRILLING METHOD: 2 1/2" H.S.A.														
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW/COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE
							1st 6in/ RUN #	2nd 6in/ REC	3rd 6in/ ROD	REMARKS				
		TOPSOIL - APPROXIMATELY 4 INCHES												
		SANDY FAT CLAY (CH) - Mostly medium to high plasticity fines, some fine to medium sand, tan/brown, moist, soft.			1	CH	1	1	2					3
5		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, gray, wet, loose.			2	SC	1	3	2					5
		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown, saturated, very loose to loose.	▽		3	SP	1	1	2					3
10		Boring terminated at 10 ft			4		2	2	3					5

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014		BORING LOG B-12												
DATE DRILLED: 3/14/19	ELEVATION:	NOTES: Racepath Street - Near Centerline. Elevation unknown.												
DRILL RIG: CME 45-B	BORING DEPTH: 10.0 ft													
DRILLER: M. Radford	WATER LEVEL: 4.9 ft. at TOB.													
HAMMER TYPE: Automatic	LOGGED BY: W. King													
SAMPLING METHOD: Split spoon		NORTHING:	EASTING:											
DRILLING METHOD: 2 1/2" H.S.A.														
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
						1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
									10	20	30	60	80	
0 - 1.25		ASPHALT - APPROXIMATELY 3 1/4 INCHES												
1.25 - 1.875		COQUINA - APPROXIMATELY 6 3/4 INCHES												
1.875 - 3.75		CLAYEY SAND (SC) - Mostly fine to medium sand, some low to medium plasticity fines, tan, moist, loose.		1	SC	3	3	2						5
3.75 - 5.625		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, tan, wet to saturated, medium dense.	4.9	2	SP-SC	3	5	6						11
5.625 - 7.5		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown/gray, saturated, very loose.		3	SP	1	1	2						3
7.5 - 10.0				4	SP	3	2	2						4
10.0		Boring terminated at 10 ft												

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014		BORING LOG B-13	
DATE DRILLED: 3/14/19	ELEVATION:	NOTES: Racepath Street - Near Pavement Edge. Elevation unknown.	
DRILL RIG: CME 45-B	BORING DEPTH: 10.0 ft		
DRILLER: M. Radford	WATER LEVEL: 3.1 ft. at TOB.		
HAMMER TYPE: Automatic	LOGGED BY: W. King		
SAMPLING METHOD: Split spoon		NORTHING:	EASTING:

DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS				
										10	20	30	6080	
0 - 1.5		ASPHALT - APPROXIMATELY 1 1/2 INCHES COQUINA - APPROXIMATELY 7 INCHES												
1.5 - 6.5		SANDY LEAN CLAY (CL) - Mostly low to medium plasticity fines, some fine to medium sand, brown/tan, moist to wet, firm.			1	CL	3	3	3					6
6.5 - 8.5		SANDY FAT CLAY (CH) - Mostly medium to high plasticity fines, some fine to medium sand, gray, saturated, firm.	▽		2	CH	2	3	4					7
8.5 - 10.0		POORLY GRADED SAND (SP) - Mostly fine to medium sand, gray, saturated, very loose to loose.			3	SP	1	1	1					2
10.0		Boring terminated at 10 ft			4		1	2	3					5

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014		BORING LOG B-14											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Along Existing Shoulder. Elevation unknown.									
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft											
DRILLER: M. Radford		WATER LEVEL: 4.2 ft. at TOB.											
HAMMER TYPE: Automatic		LOGGED BY: W. King											
SAMPLING METHOD: Split spoon				NORTHING:	EASTING:								
DRILLING METHOD: 2 1/4" H.S.A.													
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL ELEVATION (feet)	SAMPLE NO.	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
					1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
		TOPSOIL - APPROXIMATELY 4 INCHES											
		CLAYEY SAND (SC) - Mostly fine to medium sand, some low to medium plasticity fines, tan, moist, loose.		1	2	3	2						5
5		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, tan, wet to saturated, loose.	4.2	2	2	4	5						9
		POORLY GRADED SAND (SP) - Mostly fine to medium sand, tan/gray, saturated, loose.		3	5	4	4						8
10		Boring terminated at 10 ft		4	4	4	3						7

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-15										
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Near Centerline. Elevation unknown.										
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft												
DRILLER: M. Radford		WATER LEVEL: 3.9 ft. at TOB.												
HAMMER TYPE: Automatic		LOGGED BY: W. King												
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:								
DRILLING METHOD: 2 1/4" H.S.A.														
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
						1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
									10	20	30	60	80	
		ASPHALT - APPROXIMATELY 3 1/4 INCHES COQUINA - APPROXIMATELY 5 3/4 INCHES												
1		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, brown, moist to saturated, loose.		1	6	5	4							9
2		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown, saturated, loose.		2	1	3	3							6
3		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown, saturated, loose.		3	1	2	3							5
4		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown, saturated, loose.		4	2	4	3							7
10		Boring terminated at 10 ft												

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-16											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: Racepath Street - Near Pavement Edge. Elevation unknown.											
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft													
DRILLER: M. Radford		WATER LEVEL: 4.2 ft. at TOB.													
HAMMER TYPE: Automatic		LOGGED BY: W. King													
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:									
DRILLING METHOD: 2 1/4" H.S.A.															
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
										10	20	30	60	80	
0		ASPHALT - APPROXIMATELY 5 1/2 INCHES													
0		COQUINA - APPROXIMATELY 2 INCHES													
1		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, tan, moist, loose.			1		4	5	3						8
2		SILTY SAND (SM) - Mostly fine to medium sand, some low to medium plasticity fines, brown, wet to saturated, loose.	▽		2		2	3	3						6
3		POORLY GRADED SAND (SP) - Mostly fine to medium sand, gray/gray, saturated, loose.			3		3	4	3						7
4					4		3	3	6						9
10		Boring terminated at 10 ft													

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014		BORING LOG B-17												
DATE DRILLED: 3/14/19	ELEVATION:	NOTES: Racepath Street - Along Existing Shoulder. Elevation unknown.												
DRILL RIG: CME 45-B	BORING DEPTH: 10.0 ft													
DRILLER: M. Radford	WATER LEVEL: 3.7 ft. at TOB.													
HAMMER TYPE: Automatic	LOGGED BY: W. King													
SAMPLING METHOD: Split spoon		NORTHING:	EASTING:											
DRILLING METHOD: 2 1/4" H.S.A.														
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOWCOUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS				
										10	20	30	6080	
		TOPSOIL - APPROXIMATELY 6 INCHES												
		CLAYEY SAND (SC) - Mostly fine to medium sand, some low to medium plasticity fines, tan, moist, very loose.			1	WOH	WOH	WOH						WOH
		POORLY GRADED SAND (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, brown, wet to saturated, loose.	▽		2				2	3	4			7
5		--- Organics (possible root) at 5 feet.												
		SILTY SAND (SM) - Mostly fine to medium sand, some low to medium plasticity fines, brown, saturated, loose.			3				3	4	5			9
		POORLY GRADED SAND (SP) - Mostly fine to medium sand, brown, saturated, loose.			4				2	4	5			9
10		Boring terminated at 10 ft												

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PROJECT:		Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014			BORING LOG B-18									
DATE DRILLED: 3/14/19		ELEVATION:			NOTES: Racepath Street - Near Pavement Edge. Elevation unknown.									
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft												
DRILLER: M. Radford		WATER LEVEL: 5.1 ft. at TOB.												
HAMMER TYPE: Automatic		LOGGED BY: W. King												
SAMPLING METHOD: Split spoon					NORTHING:		EASTING:							
DRILLING METHOD: 2 1/2" H.S.A.														
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOWCOUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS				
										10	20	30	6080	
0 - 3		ASPHALT - APPROXIMATELY 3 INCHES												
3 - 5		CLAYEY SAND (SC) - Mostly fine to medium sand, some low to medium plasticity fines, brown, moist, medium dense.			1	7	6	6						12
5 - 7		SANDY LEAN CLAY (CL) - Mostly low to medium plasticity fines, some fine to medium sand, brown/tan, wet to saturated, soft.		5.1	2	2	1	2						3
7 - 10		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, brown, saturated, very loose.			3	2	1	2						3
10		Boring terminated at 10 ft			4	0	1	2						3

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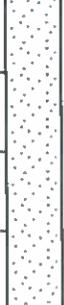
PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-19											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: ABC Drive - Future Alignment. Elevation unknown.											
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft													
DRILLER: M. Radford		WATER LEVEL: 6.2 ft. at TOB.													
HAMMER TYPE: Automatic		LOGGED BY: W. King													
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:									
DRILLING METHOD: 2 1/2" H.S.A.															
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW/COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
							1st 6in/ RUN #	2nd 6in/ REC	3rd 6in/ ROD	REMARKS					
										10	20	30	60	80	
		TOPSOIL - APPROXIMATELY 6 INCHES													
		SANDY LEAN CLAY (CL) - Mostly low to medium plasticity fines, some fine to medium sand, tan/gray, moist, firm.			1		2	3	4						7
		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, tan, moist to wet, medium dense.			2		2	7	8						15
		SILTY SAND (SM) - Mostly fine to medium sand, some low to medium plasticity fines, brown, saturated, medium dense.	▽		3		9	10	10						20
		POORLY GRADED SAND WITH CLAY (SP-SC) - Mostly fine to medium sand, few low to medium plasticity fines, gray, saturated, medium dense.			4		5	7	6						13
		Boring terminated at 10 ft													

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PROJECT: Racepath Street - Phase II Myrtle Beach, South Carolina S&ME Project No. 1463-19-014				BORING LOG B-20											
DATE DRILLED: 3/14/19		ELEVATION:		NOTES: ABC Drive - Future Alignment. Elevation unknown.											
DRILL RIG: CME 45-B		BORING DEPTH: 10.0 ft													
DRILLER: M. Radford		WATER LEVEL: 5.8 ft. at TOB.													
HAMMER TYPE: Automatic		LOGGED BY: W. King													
SAMPLING METHOD: Split spoon				NORTHING:		EASTING:									
DRILLING METHOD: 2 1/2" H.S.A.															
DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	WATER LEVEL	ELEVATION (feet)	SAMPLE NO.	SAMPLE TYPE	BLOW COUNT / CORE DATA			STANDARD PENETRATION TEST DATA (blows/ft)				N VALUE	
							1st 6in / RUN #	2nd 6in / REC	3rd 6in / ROD	REMARKS					
		TOPSOIL - APPROXIMATELY 6 INCHES													
		SANDY FAT CLAY (CH) - Mostly medium to high plasticity fines, some fine to medium sand, tan/gray, moist to saturated, firm to soft.			1		2	3	3						6
5					2		2	2	2						4
		POORLY GRADED SAND (SP) - Mostly fine to medium sand, gray, saturated, medium dense.			3		4	5	7						12
10		Boring terminated at 10 ft			4		3	7	9						16

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◆ Summary of Laboratory Procedures

Examination of Recovered Soil Samples

Soil and field records were reviewed in the laboratory by the geotechnical professional. Soils were classified in general accordance with the visual-manual method described in ASTM D 2488, "*Standard Practice for Description and Identification of Soils (Visual-Manual Method)*". Representative soil samples were selected for classification testing to provide grain size and plasticity data to allow classification of the samples in general accordance with the Unified Soil Classification System method described in ASTM D 2487, "*Standard Practice for Classification of Soils for Engineering Purposes*". The geotechnical professional also prepared the final boring and sounding records enclosed with this report.

Moisture Content Testing of Soil Samples by Oven Drying

Moisture content was determined in general conformance with the methods outlined in ASTM D 2216, "*Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil or Rock by Mass*." This method is limited in scope to Group B, C, or D samples of earth materials which do not contain appreciable amounts of organic material, soluble solids such as salt or reactive solids such as cement. This method is also limited to samples which do not contain contamination.

A representative portion of the soil was divided from the sample using one of the methods described in Section 9 of ASTM D 2216. The split portion was then placed in a drying oven and heated to approximately 110 degrees C overnight or until a constant mass was achieved after repetitive weighing. The moisture content of the soil was then computed as the mass of water removed from the sample by drying, divided by the mass of the sample dry, times 100 percent. No attempt was made to exclude any particular particle size from the portion split from the sample.

Liquid and Plastic Limits Testing

Atterberg limits of the soils was determined generally following the methods described by ASTM D 4318, "*Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*." Albert Atterberg originally defined "limits of consistency" of fine grained soils in terms of their relative ease of deformation at various moisture contents. In current engineering usage, the *liquid limit* of a soil is defined as the moisture content, in percent, marking the upper limit of viscous flow and the boundary with a semi-liquid state. The *plastic limit* defines the lower limit of plastic behavior, above which a soil behaves plastically below which it retains its shape upon drying. The *plasticity index (PI)* is the range of water content over which a soil behaves plastically. Numerically, the PI is the difference between liquid limit and plastic limit values.

Representative portions of fine grained Group A, B, C, or D samples were prepared using the wet method described in Section 10.1 of ASTM D 4318. The liquid limit of each sample was determined using the multipoint method (Method A) described in Section 11. The liquid limit is by definition the moisture content where 25 drops of a hand operated liquid limit device are required to close a standard width groove cut in a soil sample placed in the device. After each test, the moisture content of the sample was adjusted and the sample replaced in the device. The test was repeated to provide a minimum of three widely spaced combinations of N versus moisture

content. When plotted on semi-log paper, the liquid limit moisture content was determined by straight line interpolation between the data points at N equals 25 blows.

The plastic limit was determined using the procedure described in Section 17 of ASTM D 4318. A selected portion of the soil used in the liquid limit test was kneaded and rolled by hand until it could no longer be rolled to a 3.2 mm thread on a glass plate. This procedure was repeated until at least 6 grams of material was accumulated, at which point the moisture content was determined using the methods described in ASTM D 2216.

Grain Size Analysis of Samples

The distribution of particle sizes greater than 75 mm was determined in general accordance with the procedures described by ASTM D 421, "*Standard Practice for Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants*", and D 6913, "*Standard Test Method for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis*". During preparation samples were divided into two portions. The material coarser than the No. 30 U.S. sieve size fraction was dry sieved through a nest of standard sieves as described in Article 6. Material passing the No. 30 sieve was independently passed through a nest of sieves down to the No. 200 size.

Percent Fines Determination of Samples

A selected specimen of soils was washed over a No. 200 sieve after being thoroughly mixed and dried. This test was conducted in general accordance with ASTM D 1140, "*Standard Test Method for Amount of Material Finer Than the No. 200 Sieve*." Method A, using water to wash the sample through the sieve without soaking the sample for a prescribed period of time, was used and the percentage by weight of material washing through the sieve was deemed the "percent fines" or percent clay and silt fraction.

Compaction Tests of Soils Using Modified Effort

Soil placed as engineering fill is compacted to a dense state to obtain satisfactory engineering properties. Laboratory compaction tests provide the basis for determining the percent compaction and water content needed to achieve the required engineering properties, and for controlling construction to assure the required compaction and water contents are achieved. Test procedures generally followed those described by ASTM D 1557, "*Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 lbf/ft³)*."

The relationship between water content and the dry unit weight is determined for soils compacted in either 4 or 6 inch diameter molds with a 10 lbf rammer dropped from a height of 18 inches, producing a compactive effort of 56,000 lbf/ft³. ASTM D 1557 provides three alternative procedures depending on material gradation:

Method A

- All material passes No. 4 sieve size
- 4 inch diameter mold
- Shall be used if 20 percent or less by weight is retained on No. 4 sieve
- Soil in 5 layers with 25 blows per layer

Method B

- All material passes 3/8 inch sieve
- 4 inch diameter mold

Shall be used if 20 percent by weight is retained on the No. 4 sieve and 20 percent or less by weight is retained on the 3/8 Inch sieve.

Soil in 5 layers with 25 blows per layer

Method C

All material passes 3/4 inch sieve

6-inch diameter mold

Shall be used if more than 20 percent by weight is retained on the 3/8 inch sieve and less than 30 percent is retained on the 3/4 inch sieve.

Soil in 5 layers with 56 blows per layer

Soil was compacted in the mold in five layers of approximately equal thickness, each compacted with either 25 or 56 blows of the rammer. After compaction of the sample in the mold, the resulting dry density and moisture content was determined and the procedure repeated. Separate soils were used for each sample point, adjusting the moisture content of the soil as described in Section 10.2 (Moist Preparation Method). The procedure was repeated for a sufficient number of water content values to allow the dry density vs. water content values to be plotted and the *maximum dry density* and *optimum moisture content* to be determined from the resulting curvilinear relationship.

Laboratory California Bearing Ratio Tests of Compacted Samples

This method is used to evaluate the potential strength of subgrade, subbase, and base course material, including recycled materials, for use in road and airfield pavements. Laboratory CBR tests were run in general accordance with the procedures laid out in ASTM D 1883, "*Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils.*" Specimens were prepared in standard molds using two different levels of compactive effort within plus or minus 0.5 percent of the optimum moisture content value. While embedded in the compaction mold, each sample was inundated for a minimum period of 96 hours to achieve saturation. During inundation the specimen was surcharged by a weight approximating the anticipated weight of the pavement and base course layers. After removing the sample from the soaking bath, the soil was then sheared by jacking a piston having a cross sectional area of 3 square inches into the end surface of the specimen. The piston was jacked 0.5 inches into the specimen at a constant rate of 0.05 inches per minute.

The CBR is defined as the load required to penetrate a material to a predetermined depth, compared to the load required to penetrate a standard sample of crushed stone to the same depth. The CBR value was usually based on the load ratio for a penetration of 0.10 inches, after correcting the load-deflection curves for surface irregularities or upward concavity. However, where the calculated CBR for a penetration of 0.20 inches was greater than the result obtained for a penetration of 0.10 inches, the test was repeated by reversing the specimen and shearing the opposite end surface. Where the second test indicated a greater CBR at 0.20 inches penetration, the CBR for 0.20 inches penetration was used.

Compaction Tests of Soils/Millings Blends Using Standard Effort

Soil placed as engineering fill is compacted to a dense state to obtain satisfactory engineering properties. Laboratory compaction tests provide the basis for determining the percent compaction and water content needed to achieve the required engineering properties, and for controlling construction to assure the required compaction and water contents are achieved. Test procedures generally followed those described by

AASHTO T 99, "Standard Method of Test for Moisture–Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop."

The relationship between water content and the dry unit weight is determined for soils compacted in a 4 inch diameter molds with a 5.5-lb rammer dropped from a height of 12 inches, producing a compactive effort of 12,400 lbf/ft³. Because of the inclusion of asphalt millings in the blend, "Method C" of the test procedure was used. Method C includes materials passing the 3/4-inch sieve, and uses a 4-inch mold.

Soil was compacted in the mold in three layers of approximately equal thickness, each compacted with 25 blows of the rammer. After compaction of the sample in the mold, the resulting dry density and moisture content was determined and the procedure repeated. Separate soils were used for each sample point, adjusting the moisture content of the soil as described in the Moist Preparation Method. The procedure was repeated for a sufficient number of water content values to allow the dry density vs. water content values to be plotted and the maximum dry density and optimum moisture content to be determined from the resulting curvilinear relationship.

Unconfined Compressive Strength of Compacted Soil-Cement Mixtures (SC-T-26)

The compressive strength of the soil-cement mixture pills was determined generally following the procedures described by AASHTO T 99 in conjunction with the addition of Portland cement. Following this procedure, two sets of specimens are cast, each set with different cement content added, by weight. For this test regimen, we cement contents of 2, 4, and 6 percent were used. After molding, the samples are placed in a moist curing room maintaining 23 +/- 2 degree celcius, and a relative humidity of not less than 95%. The specimens are to remain undisturbed for seven days. Upon removing from the curing room, the specimens are soaked overnight in water and tested for unconfined compressive strength. The unconfined compressive strength shall be determined using the following pattern. From 0 lbf to 100 lbf a rate of 500 lbf/min. After reaching 100 lbf the rate is increased to 1,000 lbf/min until a force of 6,000 plbf is reached. The rate is then decreased back to 500 lbf/min after the load is greater than 6,000 lbf and should remain at the specified rate until specimen failure is reached. The average unconfined compressive strength of the material vs. the cement content of the set of specimens shall be plotted. From this graph the cement content to determine the desired compressive strength is selected.

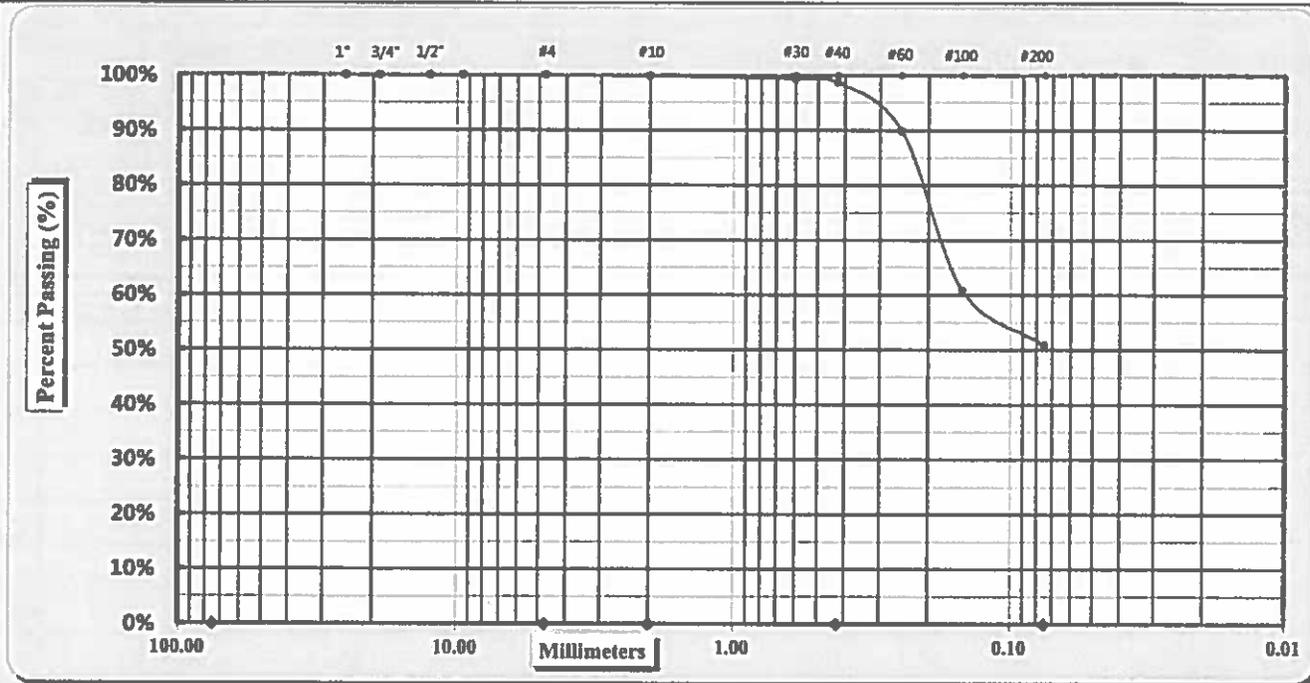


Single sieve set

ASTM D6913

S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

Project #:	1463-19-014-110	Report Date:	3/27/2019
Project Name:	Racepath Street - Phase II	Lab #:	4941
Client Name:	Mead & Hunt, Inc.	Test Date:	3/26/2019
Client Address:	333 Wellness Dr; Myrtle Beach, SC 29579	Date Sampled:	3/14/2019
Boring #:	B-19	Sample #:	Bulk
Location:	Borings	Depth:	1'-2'
Sample Description: Brown Sandy Lean Clay (CL)			



Cobbles	< 300 mm (12") and > 75 mm (3")	Fine Sand	< 0.425 mm and > 0.075 mm (#200)
Gravel	< 75 mm and > 4.75 mm (#4)	Silt	< 0.075 and > 0.005 mm
Coarse Sand	< 4.75 mm and > 2.00 mm (#10)	Clay	< 0.005 mm
Medium Sand	< 2.00 mm and > 0.425 mm (#40)	Colloids	< 0.001 mm

Method: A Procedure for obtaining Specimen: Moist

Maximum Particle Size	#4	Coarse Sand	0%	Fine Sand	48%
Gravel	0%	Medium Sand	1%	Silt & Clay	51%
Liquid Limit	46	Plastic Limit	17	Plastic Index	29

Notes / Deviations / References:

W. King, P.E.
Technical Responsibility

WK
Signature

Project Engineer
Position

3/28/19
Date

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SOIL SIEVE ANALYSIS USING SINGLE SIEVE-SET SIEVING



Single Portion

ASTM D6913

S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

Project No: 1463-19-014-110	Report Date: 3/27/2019
Project Name: Racepath Street - Phase II	Lab #: 4941
Client Name: Mead & Hunt, Inc.	Test Date: 3/26/2019
Client Address: 333 Wellness Dr, Myrtle Beach, SC 29579	Date Sampled: 3/14/2019
Boring #: B-19	Sample#: Bulk
Location: Borings	Depth: 1'-2'

Sample Description: Brown Sandy Lean Clay (CL)

Estimate Max. Particle Size (99% Passing):	#4	Testing Dates:	3/26/19
Method A (1%)	<input type="checkbox"/>	Method B (0.1%)	<input checked="" type="checkbox"/>
Material Excluded?	None		
Procedure for obtaining Specimen:	Moist	<input checked="" type="checkbox"/>	Air-Dried
		<input type="checkbox"/>	Oven-Dried
		<input checked="" type="checkbox"/>	
Sampling Method	Stockpile:	<input checked="" type="checkbox"/>	Mechanically Split:
		<input type="checkbox"/>	Quartered:
		<input type="checkbox"/>	<input type="checkbox"/>
Dispersion Process?	Soaked without Dispersant	<input type="checkbox"/>	Soaked with Dispersant
		<input type="checkbox"/>	<input checked="" type="checkbox"/>
			Ultrasonic Bath
			<input type="checkbox"/>
Estimated Wet Mass of specimen required:	500	Shaking Apparatus	<input checked="" type="checkbox"/>

Specimen: Pan No. I B) Tare Wt. 84.3 Method B of ASTM D1140 or D6913 Sec. 11.4.3

A) Total Specimen Wet Wt. + Tare Wt. (g.)	240.0	Pan No. I	Tare Wt.	84.3
C) Total Specimen Dry Wt. + Tare Wt. (g.)	212.6	Dry Mass of Washed Sample + Tare Wt.	147.3	
D = (C-B) Total Specimen Dry Weight (S _w M _d)	128.3	Dry Mass of Washed Sample (S _w M _d)	63.0	
E = (A-B) Moist Specimen Mass (S _w M _m)	155.7	Dry Mass passing #200	65.3	
F=(E-D)/D) Water Content of Specimen	21.4%	% Passing #200	50.9%	

Sieve Size		Cumulative Mass Retained	Increment Mass Retained	SPECS	% Retained	% Passing
Standard	mm.	CMR _N	MR _N	SCDOT	Total Sample Cumulative Percentages	
					CPR _N	PP _N (Method A)
1.0"	25.00	0.0	0.00		0.0%	100.0%
3/4"	19.00	0.0	0.00		0.0%	100.0%
1/2"	12.50	0.0	0.00		0.0%	100.0%
3/8"	9.50	0.0	0.00		0.0%	100.0%
#4	4.750	0.0	0.00		0.0%	100.0%
#10	2.000	0.2	0.20		0.2%	99.8%
#30	0.600	0.8	0.60		0.6%	99.4%
#40	0.425	1.6	0.80		1.2%	98.8%
#60	0.250	13.0	11.40		10.1%	89.9%
#100	0.150	50.3	37.30		39.2%	60.8%
#200	0.075	63.0	12.70		49.1%	50.9%
Pan	<0.075	63.0	0.0			

Notes/Deviations/References: PP_N = 100 (1-(CMR_N / S_wM_d))

<u>W. King, P.E.</u> Technical Responsibility	 Signature	Project Engineer Position	<u>3/28/19</u> Date
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LIQUID LIMIT, PLASTIC LIMIT, & PLASTIC INDEX



ASTM D 4318 AASHTO T 89 AASHTO T 90

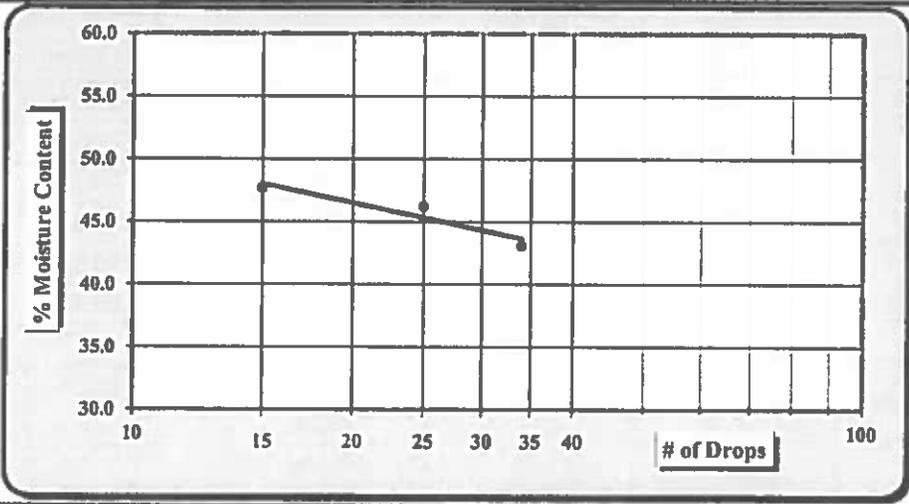
S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

Project #: 1463-19-014-110 Report Date: 3/27/2019
 Project Name: Racepath Street - Phase II Test Date(s): 3/22/2019
 Client Name: Mead & Hunt, Inc.
 Client Address: 333 Wellness Dr, Myrtle Beach, SC 29579

Boring #: B-19 Sample #: Bulk Sample Date: 3/14/2019
 Location: Borings LAB #: 4941 Depth: 1'-2'

Sample Description: Brown Sandy Lean Clay (CL)
 Type and Specification S&ME ID # Cal Date: Type and Specification S&ME ID # Cal Date:
 Balance (0.01 g) 00401 2/28/2018 Grooving tool 11368 9/1/2017
 LL Apparatus 18801 9/1/2017
 Oven 17745 4/8/2017

Pan #	Tare #:	Liquid Limit			Plastic Limit	
		58	69	38	104	119
A	Tare Weight	14.85	14.66	14.72	14.87	14.92
B	Wet Soil Weight + A	31.66	31.79	31.71	21.25	21.30
C	Dry Soil Weight + A	26.60	26.38	26.22	20.33	20.38
D	Water Weight (B-C)	5.06	5.41	5.49	0.92	0.92
E	Dry Soil Weight (C-A)	11.75	11.72	11.50	5.46	5.46
F	% Moisture (D/E)*100	43.1%	46.2%	47.7%	16.8%	16.8%
N	# OF DROPS	34	25	15	Moisture Contents determined by ASTM D 2216	
LL	LL = F * FACTOR					
Ave.	Average				16.8%	



One Point Liquid Limit			
N	Factor	N	Factor
20	0.974	26	1.005
21	0.979	27	1.009
22	0.985	28	1.014
23	0.99	29	1.018
24	0.995	30	1.022
25	1.000		

NP, Non-Plastic
 Liquid Limit 46
 Plastic Limit 17
 Plastic Index 29
 Group Symbol CL
 Multipoint Method
 One-point Method

Wet Preparation Dry Preparation Air Dried

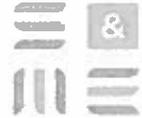
Notes / Deviations / References:

ASTM D 4318: Liquid Limit, Plastic Limit, & Plastic Index of Soils

W. King, P.E.
Technical Responsibility
W.K.
Signature
Project Engineer
Position
4/1/19
Date

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MOISTURE - DENSITY REPORT

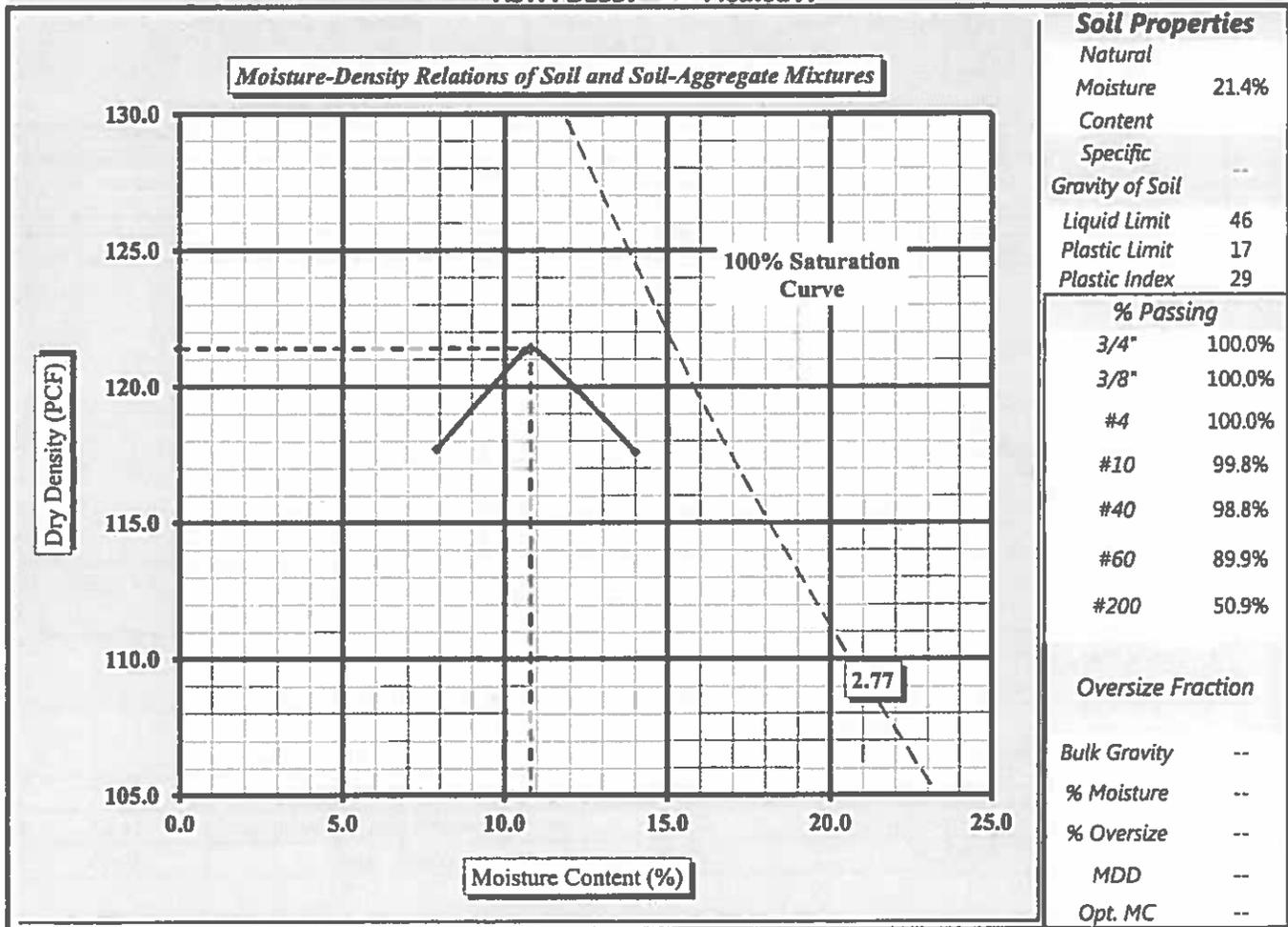


Quality Assurance

S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

S&ME Project #:	1463-19-014-110	Report Date:	3/27/2019
Project Name:	Racepath Street - Phase II	Test Date(s):	3/21/2019
Client Name:	Mead & Hunt, Inc.		
Client Address:	333 Wellness Dr, Myrtle Beach, SC 29579		
Boring #:	B-19	Sample #:	Bulk
		Sample Date:	3/14/2019
Location:	Borings	Lab #:	4941
		Depth:	1'-2'
Sample Description:	Brown Sandy Lean Clay (CL)		

Maximum Dry Density 121.4 PCF. Optimum Moisture Content 10.8%
ASTM D1557 -- Method A



Moisture-Density Curve Displayed: Fine Fraction Corrected for Overflow Fraction (ASTM D 4718)
 Sieve Size used to separate the Overflow Fraction: #4 Sieve 3/8 inch Sieve 3/4 inch Sieve
 Mechanical Rammer Manual Rammer Moist Preparation Dry Preparation

References / Comments / Deviations:

ASTM D 2216: Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
 ASTM D 1557: Laboratory Compaction Characteristics of Soil Using Modified Effort

W. King, P.E.
 Technical Responsibility

WK
 Signature

Project Engineer
 Position

3/28/19
 Date

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**CBR (CALIFORNIA BEARING RATIO)
OF LABORATORY COMPACTED SOIL**



ASTM D 1883

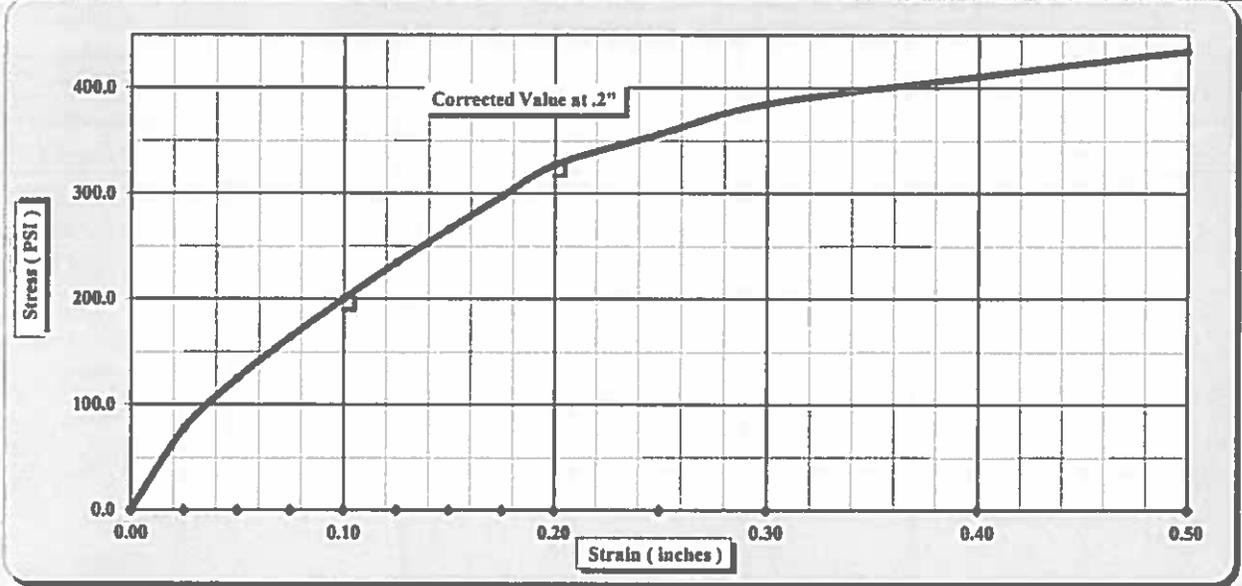
S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

Project #:	1463-19-014-110	Report Date:	3/27/2019
Project Name:	Racepath Street - Phase II	Test Date(s)	3/21/2019
Client Name:	Mead & Hunt, Inc.	Amended Report	
Client Address:	333 Wellness Dr, Myrtle Beach, SC 29579	Original Report 2/31/07	
Boring #:	B-19	Sample #:	Bulk
		Sample Date:	3/14/2019
Location:	Borings	LAB #:	4941
		Depth:	1'-2'

Sample Description: Brown Sandy Lean Clay (CL)

ASTM D1557 Method A	Maximum Dry Density:	121.4 PCF	Optimum Moisture Content:	10.8%
Compaction Test performed on grading complying with CBR spec.			% Retained on the 3/4" sieve:	1.0%

Uncorrected CBR Values		Corrected CBR Values	
CBR at 0.1 in.	20.0	CBR at 0.1 in.	20.0
CBR at 0.2 in.	21.8	CBR at 0.2 in.	21.8



CBR Sample Preparation:

The entire gradation was used and compacted in a 6" CBR mold in accordance with ASTM D1883, Section 6.1.1

Before Soaking		After Soaking	
Compactive Effort (Blows per Layer)	25	Final Dry Density (PCF)	114.5
Initial Dry Density (PCF)	115.5	Moisture Content (top 1" after soaking)	13.6%
Moisture Content of the Compacted Specimen	11.3%	Percent Swell	0.8%
Percent Compaction	95.1%		

Soak Time:	96 hrs.	Surcharge Weight	20.0	Surcharge Wt. per sq. Ft.	101.9
Liquid Limit	46	Plastic Index	17	Apparent Relative Density	--

Notes/Deviations/References: Liquid Limit: ASTM D 4318, Specific Gravity: ASTM D 854, Classification: ASTM D 2487

W. King, P.E.
Technical Responsibility

WK
Signature

Project Engineer
Position

3/28/19
Date

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SOIL SIEVE ANALYSIS USING SINGLE SIEVE-SET SIEVING



Single Portion

AASHTO T-88

S&ME, Inc. - Myrtle Beach: 1330 Highway 501 Business, Conway, SC 29526

Project No: 1463-19-014-110	Report Date: 3/27/2019
Project Name: Racepath Street - Phase II	Lab #: 4941
Client Name: Mead & Hunt, Inc.	Test Date: 3/27/2019
Client Address: 333 Wellness Dr, Myrtle Beach, SC 29579	Date Sampled: 3/14/2019
Boring #: Composite #3	Sample#: Bulk
Location: Borings	Depth: 0"-10"

Sample Description: Coquina Shell Base Course w/ Brown Silty Sand w/ Asphalt Millings (SM)

Estimate Max. Particle Size (99% Passing):	3/4"	Testing Dates:	3/27/19
Method A (1%) <input type="checkbox"/>	Method B (0.1%) <input checked="" type="checkbox"/>	Material Excluded?	None
Procedure for obtaining Specimen:	Moist <input checked="" type="checkbox"/>	Air-Dried <input type="checkbox"/>	Oven-Dried <input checked="" type="checkbox"/>
Sampling Method	Stockpile: <input checked="" type="checkbox"/>	Mechanically Split: <input type="checkbox"/>	Quartered: <input type="checkbox"/>
Dispersion Process?	Soaked without Dispersant <input type="checkbox"/>	Soaked with Dispersant <input checked="" type="checkbox"/>	Ultrasonic Bath <input type="checkbox"/>
Estimated Wet Mass of specimen required:	500	Shaking Apparatus	<input checked="" type="checkbox"/>

Specimen:	Pan No.	Fe	B) Tare Wt.	468.3	Method B of ASTM D1140 or D6913 Sec. 11.4.3			
A) Total Specimen Wet Wt. + Tare Wt. (g.)				1542.3	Pan No.	FE	Tare Wt.	468.6
C) Total Specimen Dry Wt. + Tare Wt. (g.)				1542.3	Dry Mass of Washed Sample +Tare Wt.			1375.2
D = (C-B) Total Specimen Dry Weight (S _w M _d)				1074.0	Dry Mass of Washed Sample (S _w M _d)			906.6
E = (A-B) Moist Specimen Mass (S _w M _m)				1074.0	Dry Mass passing #200			167.4
F=(E-D)/D Water Content of Specimen				0.0%	% Passing #200			15.6%

Sieve Size		Cumulative Mass Retained	Increment Mass Retained	SPECS	% Retained	% Passing
Standard	mm.	CMR _N	MR _N	SCDOT	Total Sample Cumulative Percentages	
					CPR _N	PP _N (Method A)
1.0"	25.00	0.0	0.00		0.0%	100.0%
3/4"	19.00	0.0	0.00		0.0%	100.0%
1/2"	12.50	86.7	86.70		8.1%	91.9%
3/8"	9.50	188.9	102.20		17.6%	82.4%
#4	4.750	338.2	149.30		31.5%	68.5%
#10	2.000	456.2	118.00		42.5%	57.5%
#30	0.600	609.9	153.70		56.8%	43.2%
#40	0.425	655.9	46.00		61.1%	38.9%
#60	0.250	737.3	81.40		68.6%	31.4%
#100	0.150	858.3	121.00		79.9%	20.1%
#200	0.075	900.0	41.70		83.8%	16.2%
Pan	<0.075	906.6	6.6			

Notes/Deviations/References: PP_N = 100 (1-(CMR_N / S_wM_d))

W. King, P.E.
Technical Responsibility

WK
Signature

Project Engineer
Position

3/28/19
Date

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Project: Racepath Street - Phase II

S&ME Project No: 1463-19-014

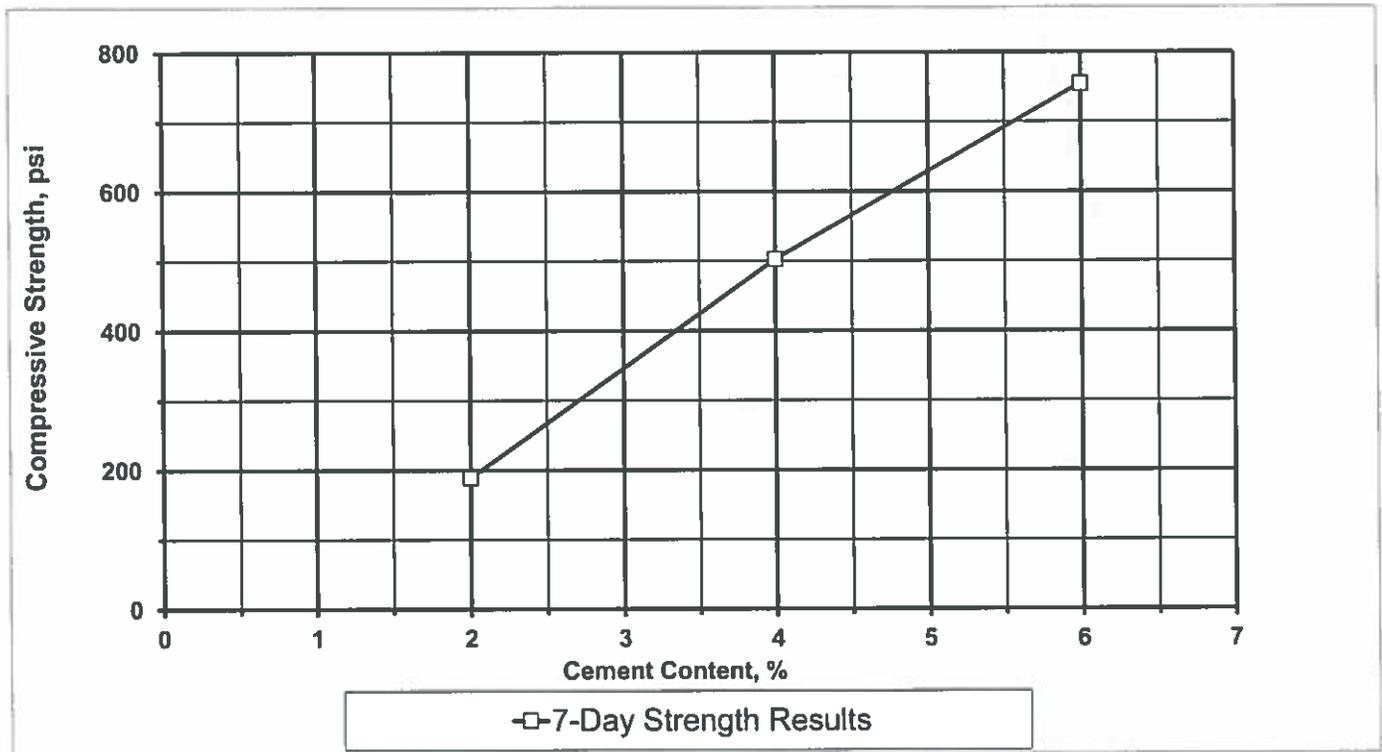
Client: Mead & Hunt

Batch Date: 3/20/2019

Location: Composite 3

Break Date: 3/27/2019

Compressive Strength of Molded Soil Cement
SC-T-26



Cement Modified Recycled Base

SCDOT Designation: SC-M-306 (01/18)

1.0 DESCRIPTION

- 1.1 This section contains specifications for the materials, equipment, construction, measurement, and payment for the modification of an existing paved roadway or shoulder by scarifying the existing pavement structure, mixing it with Portland cement, and constructing the base course in conformance with the lines, grades, dimensions, and cross-sections shown on the Plans or as directed by the RCE.

2.0 MATERIALS

- 2.1 Portland Cement - Use Portland cement that conforms to the requirements of **Subsection 301.2.1**.
- 2.2 Water - Use water conforming to the requirements of **Subsection 701.2.11**.
- 2.3 Asphalt Material – Use asphalt material conforming to the requirements of **Subsection 301.2.4**.

3.0 EQUIPMENT

- 3.1 Ensure that the equipment necessary for the proper construction of the work is on site and in acceptable working condition. Provide sufficient equipment to enable prosecution of the work in accordance with the project schedule and completion of the work in the specified time.
- 3.2 Construct the base with self-propelled rotary mixer(s)/reclaimer(s) capable of mixing in place to the required depth. The mixer(s)/reclaimer(s) shall have a mechanism for controlling the reclaimed material gradation via breaker bar and/or a door opening on the mixer(s)/reclaimer(s). Mixer(s)/reclaimer(s) shall be fitted with an integrated liquid injection system capable of introducing liquid into the cutting drum during the mixing process.
- 3.3 Provide a sufficient number of water trucks on the jobsite at all times of operation to maintain the moisture requirements listed in **Subsection 9**. Ensure that the water truck used in conjunction with the reclaimer uses a direct injection system, and additional trucks maintain surface moisture during grading and compaction work and until the curing treatment is applied in accordance with **Subsection 13**. Accomplish this using a controlled and uniform application of water without eroding or otherwise damaging the CMRB surface.
- 3.4 Provide a spreader/distributor capable of achieving consistent, accurate and uniform distribution across the entire length and width of the roadway while minimizing dust. Ensure that the spreader has adjustable openings or gate headers and is not solely dependent on vehicle speed to obtain the required spread rate.
- 3.5 Provide a combination of sheepsfoot rollers, smooth wheel tandem rollers, and/or pneumatic-tired rollers that have the ability to adequately compact reclaimed material throughout the entire specified CMRB thickness. Ensure the necessary weight, size and number of rollers to achieve the requirements of **Subsection 10**.

4.0 CONSTRUCTION

- 4.1 Regulate the sequence of work to process the necessary quantity of material to provide the full depth of modification as shown on the Plans:
 - 4.1.1 Ensure structural integrity of reclaimed material is consistent throughout the depth of the modification.
 - 4.1.2 Ensure surface quality is sufficient to provide durable temporary pavement structure surface and supports permanent pavement structure performance.
 - 4.1.3 Incorporate appropriate material as specified in the plans for drainage correction, cross slope correction or roadway strengthening.

5.0 QUALITY CONTROL PLAN, TEST STRIP & CORRECTIVE ACTION REQUIREMENTS

- 5.1 Prepare an annual Quality Control Plan that ensures that operational techniques and activities provide integral and finished material of acceptable quality for each Cement Modified Recycled Base project. Submit a Quality Control Plan for acceptance to the Chemical Stabilization Engineer (CSE) in writing a minimum of two weeks before work begins for the year.
- 5.2 The Quality Control Plan should include, but not be limited to addressing the following items;
 - 5.2.1 Contingency plans for pulverization, mixing and compaction when specifications criteria are not met. Consider the specific roadway conditions of various project sites.
 - 5.2.2 Plan for identifying in-situ moisture conditions, adjusting the moisture content to meet specifications, and maintaining moisture content through the time of curing. Include a description of the methods and minimum contractor testing for moisture. Consider specific environmental conditions of various project sites and schedules.
- 5.3 Test Strips
 - 5.3.1 The first load of cement on the roadway will be used as a test strip to determine if the contractor is capable of producing a mixture according to specifications. Particular attention will be paid to the moisture and compaction requirements set in **Subsection 10**, mixing and processing requirements set in **Subsection 9**, pulverization requirements set in **Subsection 7**, depth requirements in **Subsection 17**, and cement tolerances in **Subsection 8**. Cease production after the first load if any of the requirements of the specification are outside of the tolerances and change procedures to contingency plans approved in the QC Plan to continue work. Continue production as normal on the same day when the test strip meets the specification requirements.
 - 5.3.2 The first load applied with the contingency plans will be used as a test strip to evaluate the corrective action plan. Cease production after this initial load of cement if the requirements of this specification are still not being met and submit a revised corrective action plan to the RCE for acceptance prior to continuing work.
 - 5.3.3 If the requirements of this specification are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

6.0 SHOULDERS & ROADWAY PREPARATION

- 6.1 Remove all excess vegetation generated from the clipping and cleaning of shoulders from the roadway and any other debris, including Reflective Pavement Markers, prior to performing the mixing operations. Remove material from the shoulders as necessary to ensure proper drainage at all times.

7.0 PULVERIZATION

- 7.1 Provide means, methods, and equipment necessary to obtain satisfactory pulverization of the pavement so that at the completion of pulverization and mixing (prior to compactive efforts), a uniform mixture is created in which 100% of the reclaimed material mixture (by weight) passes a 3 inch sieve and 95% of the reclaimed material mixture (by weight) passes a 2 inch sieve. When necessary, SC-T-1 Section 6.6 will be used for sampling to run gradation tests. Rework areas not meeting this gradation control measure as necessary, adhering to the time limitations in **Subsection 11**. The pulverization pass is defined as at least one pass of the mixer prior to the application of cement. Additional passes are allowed. Lightly compact following each pass of the mixer to produce a uniform layer. Carefully control the depth of pulverization and conduct operations in a manner to ensure that the surface of the roadbed below the pulverized material remains undisturbed and conforms to the required cross-section. Means, methods and equipment including but not limited to additional passes of the reclaimer, milling in place or the use of supplementary equipment to achieve pulverization is the responsibility of the contractor and incidental to the process.
- 7.2 If the requirements of pulverization are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the [RCE](#) for acceptance prior to continuing work.

8.0 APPLICATION OF CEMENT

- 8.1 The [CSE](#) will determine the rate of cement based on test results supplied in writing by the Contractor. Do not commence construction until an approved rate has been determined by the [CSE](#). Allow two weeks from the date of submittal for the results and selection of appropriate cement rate. The test results will be conducted according to SC-T-26 by an AASHTO-accredited laboratory with material obtained from the roadway in which construction is to occur. Ensure that the roadway sampling and mix design testing is representative of the entire area and depth to be treated, several samples and/or designs may be necessary.
- 8.2 Spread Portland Cement uniformly on the pulverized material at the rate established by the [CSE](#), taking care to minimize fugitive dust and minimize overlapping of the passes (maximum 6 inches). Apply cement only when the temperature is 40°F in the shade and rising, and no freezing temperatures are predicted for at least 48 hours. Do not perform work on frozen or excessively wet subgrade. A tolerance of 5% (of the rate) is allowed in the spread rate for individual sections (load of cement) of roadway; however, adjustments should be made in order to keep the actual spread rate as close to that established by the CSE. Only apply cement to such an area that all the operations (including final compaction) can be continuous and completed in daylight, unless adequate artificial light is provided. Ensure that all operations (including final compaction) can be completed within 3 hours of application of cement.

- 8.3 Do not allow the percentage of moisture in the reclaimed material mixture at the time of cement application to exceed the quantity that permits uniform and thorough mixture of reclaimed material or that creates instability of the roadway. Do not allow equipment, except that used in spreading and mixing, to pass over the freshly spread cement until it is mixed with the reclaimed material mixture.
- 8.4 If the requirements of cement application are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

9.0 MIXING & PROCESSING

- 9.1 Pulverize material as necessary to meet the requirements given in **Subsection 7**. The pulverization pass is defined as at least one pass of the mixer prior to the application of cement. Lightly compact following each pass of the mixer to produce a uniform layer.
- 9.2 After the cement has been applied per **Subsection 8**, mix and uniformly add necessary moisture to the reclaimed material to ensure that the moisture content is above the optimum value as set in the approved mix design when tested within 30 minutes of final compaction. Mix with at least one pass of the reclaimer after cement application at minimum. Additional passes are allowed, adhering to time limitations set forth within this specification. Ensure full width pulverizing and mixing by overlapping a minimum of 6 inches with each longitudinal pass, including at the longitudinal joint of each lane, and a minimum of 2 feet with each transverse joint. Additional mixing passes may be required in the contract documents. Lightly compact following each pass of the mixer to produce a uniform layer.
- 9.3 Immediately begin final compaction after the mixing process has been completed so that the requirements of **Subsection 10** are met.
- 9.4 Remove excess material generated from the mixing process after final grading operations have been completed.
- 9.5 If the requirements of mixing and processing are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

10.0 COMPACTION

- 10.1 Before beginning compaction, ensure that the mixture is free from excessive fluff and overly compacted areas to allow for uniform compaction of the layer. Continue compaction until the entire depth of the base course mixture is uniformly compacted to not less than 95% of the maximum density. SC-T-23, SC-T-26, SC-T-27, or SC-T-29 will be used at the discretion of the RCE to determine the maximum density of the composite mix. If tests show that 95.0% requirement is not being met, adjust construction operations to obtain the required density. Complete the compaction work within 1 hour of the final mixing pass.
- 10.2 After the mixture is compacted, reshape the surface of the base course as necessary to conform to the required lines, grades, and cross-section. Perform light scarifying to a depth which removes the sheepfoot imprints at minimum. Continue as required to obtain a uniform surface and to prevent scaling and delamination.

- 10.3 Perform compacting and finishing in a manner that produces a smooth, closely knit surface, free from equipment imprints, cracks, ridges, or loose material. Maintain the moisture content of the mixture and surface above optimum moisture as determined by the pre-approved mix design, to the time of final curing coat being applied. The moisture content and density requirements for compaction will be tested for acceptance within 30 minutes of final compaction. Additional moisture contents tests will be randomly performed for acceptance through the curing application to ensure that the surface moisture is maintained above optimum moisture.
- 10.4 If the requirements of compaction are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the RCE for acceptance prior to continuing work.

11.0 CONSTRUCTION LIMITATIONS

- 11.1 Perform work in daylight hours unless adequate artificial light is provided. Limit the area over which the cement-pavement mixture is spread so that all operations specified in **Subsections 7, 8, 9, 10 and 13** are performed continuously until completion of a section (load of cement). Complete all grading and compaction work on a section (load of cement) within 2 hours after the initial mixing pass of the reclaimer unless the RCE approves a longer period.
- 11.2 If operations are interrupted for a continuous period of greater than 1 hour after the cement has been mixed with the reclaimed material, reconstruct the entire affected section (area of interruption) in accordance with these specifications. When the un-compacted reclaimed material mixture and cement is wetted so that the moisture content exceeds that specified, manipulate and aerate the mixture to reduce the moisture to the specified content provided the base course is completed within the time limits of these specifications.
- 11.3 Begin subsequent lifts of asphalt or chip seals which cover the Cement Modified Recycled Base curing methods and act as a final riding surface within 7 calendar days of completion of the CMRB section unless the RCE approves a longer period. Begin these subsequent lifts so that no more than 4 miles have temporary surface treatment on them at any time. A section is defined as the contract section of roadway receiving CMRB treatment. When using Curing Methods B or C, ensure that a milled surface is not left open to the public for more than 72 hours.

12.0 WEATHER LIMITATIONS

- 12.1 Apply cement only when the temperature is 40°F in the shade and rising, and no freezing temperatures are predicted for at least 48 hours. Do not perform work on frozen or excessively wet subgrade. The temperature restrictions for single treatment, when used as a curing option, shall meet the requirements of this reclamation specification. If the successive course is a final riding course, the seasonal restrictions of December, January and February apply unless otherwise approved by the DOC.

13.0 CURING

13.1 After the Cement Modified Recycled Base has been finished as specified, cure the surface using the specified method in the plans or contract. Dampen and sweep the CMRB immediately prior to the application of the surface treatment.

Curing Method A: Surface (Single) Treatment

Curing Method B: Surface (Single) Treatment with Milling

Curing Method C: Surface (Double) Treatment with Milling

13.2 After the Cement Modified Recycled Base has been finished as specified, protect the base from rapid drying and traffic by placing Asphalt Surface Treatment as specified in **Section 406 or 407**, with the exception that lightweight aggregate is not required and CRS-2 may be used in place of CRS-2P. Perform this operation daily to protect the newly constructed Cement Modified Recycled Base, unless otherwise directed by the **RCE**.

13.3 Prior to placement of the HMA course in Methods B & C, mill the Cement Modified Recycled Base course surface to obtain a true and level finish for the asphalt placement. Ensure that a diamond milling pattern with a double or triple strike is clearly visible in the finished surface. Consider the final thickness during construction, leaving the specified depth of treatment after the milling has occurred. Ensure that the surface is left in a condition ready for paving, free from scabbing, scaling and other defects. Ensure that any structure lost to additional, deeper milling to remove these defects is replaced with asphalt. Include this cost in the Cement Modified Recycled Base price.

14.0 CONSTRUCTION JOINTS

14.1 At the end of each day's construction, form a straight construction joint as specified in **Subsection 301.4.9**.

15.0 SURFACE SMOOTHNESS

15.1 Ensure that the finished surface of the recycled base meets the requirements of **Subsection 301.4.10**. The grade of the road will be based on existing conditions of the roadway. Grade the cross slope to obtain positive drainage as well as smooth transitions from crown to superelevated sections of the roadway, re-grade roads with a pre-existing cross slope of 2% or greater to the same cross slope. On roads with a pre-existing cross slope of less than 2%, the Contractor and **RCE** will determine the measures required to obtain positive drainage and the final cross slope.

16.0 RIDEABILITY

16.1 Ensure that the final asphalt surface placed on Cement Modified Recycled Base course meets the Rideability requirements of SC-M-403 for either New Construction or Resurfacing, whichever is applicable based on the specified pavement structure.

17.0 THICKNESS TOLERANCE

17.1 The thickness of the completed Cement Modified Recycled Base will be measured at random intervals not to exceed 1,000 feet in length. The average job thickness will be measured daily using the average value of all measurements taken by the inspector each day. Where the measured thickness is more than 1 inch greater than the specified thickness, the thickness of that location will be considered the specified thickness plus 1 inch. If the average job thickness varies from the specified job thickness by more than ½ inch, an adjusted unit price is used for calculating payment. The pay factor will be calculated as below and applied;

$$\text{Pay Factor} = 1 - \frac{|\text{Average Job Thickness} - \text{Specified Job Thickness}|}{\text{Specified Job Thickness}}$$

$$\text{Adjusted Contract Unit Price} = \text{Pay Factor} * \text{Contract Unit Price}$$

17.2 If the requirements of thickness (any single test value greater than 1 inch different from the specified depth) are not being met in a section not defined as a test strip (a section is defined as one load of cement) then one additional load of cement will be allowed. Cease production after this additional load of cement if the requirements are still not being met and submit a corrective action plan to the [RCE](#) for acceptance prior to continuing work.

18.0 OPENING TO TRAFFIC

18.1 Local traffic may use completed portions of the Cement Modified Recycled Base provided the base has hardened sufficiently to prevent marring, damaging or visible rutting of the surface by such usage. Ensure that no damage occurs to the curing coat. With approval of the District Office, temporary detours may be utilized during the reclamation process to reduce the traffic on the reclaimed roadway. Use the subgrade shoulders or completed pavement, when available, for transporting materials, workers, and equipment throughout the project. Do not place construction equipment on the base without the approval of the [RCE](#) unless it is being used in the subsequent construction operation.

19.0 MAINTENANCE

19.1 Maintain the Cement Modified Recycled Base in accordance with **Subsection 301.4.13.**

20.0 MEASUREMENT

20.1 The quantity for the pay item Cement Modified Recycled Base (of the uniform thickness required) is the surface area of a uniform base constructed by applying and mixing cement with the subgrade as specified and is measured by the square yard (SY) of the modified base in-place, complete and accepted. Cement Modified Recycled Base constructed outside the designated area is not measured for payment.

20.2 The quantity for the pay item Portland Cement for Cement Modified Recycled Base is the weight of cement incorporated into the base at the rate established by the [CSE](#) and is measured by the ton (TON), complete and accepted. Portland cement incorporated in excess of 5% of the amount established by the [CSE](#) is not included in the measurement. Furnish the [RCE](#) with invoices of all cement received to verify weight.

21.0 PAYMENT

- 21.1 Payment for the accepted quantity of Cement Modified Recycled Base (of the uniform required thickness) or Portland Cement for Cement Modified Recycled Base, measured in accordance with **Subsection 20** is determined using the contract unit bid price for the applicable item.
- 21.2 Payment for Cement Modified Recycled Base (of the uniform required thickness) is full compensation for constructing the Cement Modified Recycled Base course as specified or directed and includes pulverizing and scarifying the existing pavement, applying and spreading cement, processing and mixing base course material, watering and maintaining proper moisture content, compacting, finishing, curing, hauling and disposing of excess shoulder material and curing base course, forming construction joints, and all other materials, labor, equipment, tools, transportation, and incidentals necessary to complete the work in accordance with the Plans, the Specifications, and other terms of the Contract.
- 21.3 Base course that is deficient in thickness is paid for at the adjusted unit price specified in **Subsection 20**.
- 21.4 Payment for Portland Cement for Cement Modified Recycled Base is full compensation for furnishing and weighing the cement as specified or directed and includes all other materials, labor, equipment, tools, supplies, transportation, and incidentals necessary to complete the work in accordance with the Plans, the Specifications, and other terms of the Contract.
- 21.5 Payment for excess reclaimed material generated from the roadway (excluding shoulder material) is paid for as unclassified excavation.
- 21.6 Payment for each item includes all direct and indirect costs or expenses required to complete the work.
- 21.7 Pay items under this section include the following:

Item No.	Pay Item	Unit
3063306	Cement Modified Recycled Base (6" Uniform)	SY
3063308	Cement Modified Recycled Base (8" Uniform)	SY
3063310	Cement Modified Recycled Base (10" Uniform)	SY
3063312	Cement Modified Recycled Base (12" Uniform)	SY
3064000	Portland Cement for Cement Modified Recycled Base	TON

Nuisance and Hazard Checklist

Project Name	Investigator(s)	Site Visit Date
Racepath Street Phase II	C. Daves – S&ME, Inc.	1/22/20

Check those features that were observed on or adjacent to the property at the time of the visit.

NATURAL HAZARDS		
	Faults, fractures	Fire hazard materials
	Cliffs, bluffs, crevices	Wind/sandstorm concerns
	Slope-failures from rains	Poisonous plants, insects, animals
	Unprotected water bodies	Hazardous terrain features
BUILT HAZARDS & NUISANCES		
	Hazardous street	Inadequate screened drainage catchments
	Dangerous intersection	Hazards in vacant lots
	Through traffic	Chemical tank-car terminal
	Inadequate separation of pedestrian/vehicle traffic	Other hazardous chemical storage
	Play areas next to freeway or other highway traffic	High pressure gas or liquid petroleum transmission lines on site
	Inadequate street lighting	Overhead transmission lines
	Quarries or other excavations	Hazardous cargo transportation routes
	Dumps/sanitary landfills or mining	Oil or gas wells
	Railroad crossing	Industrial operations
NUISANCES		
	Gas, smoke, fumes	Unsightly land uses
	Odors	Front lawn parking
	Vibration	Abandoned vehicle
	Glare from parking area	Vermin infestation
	Vacant/boarded up buildings	Industrial nuisances
	Other (Specify)	Other (Specify)

Were any nuisances or hazards observed?

Yes No

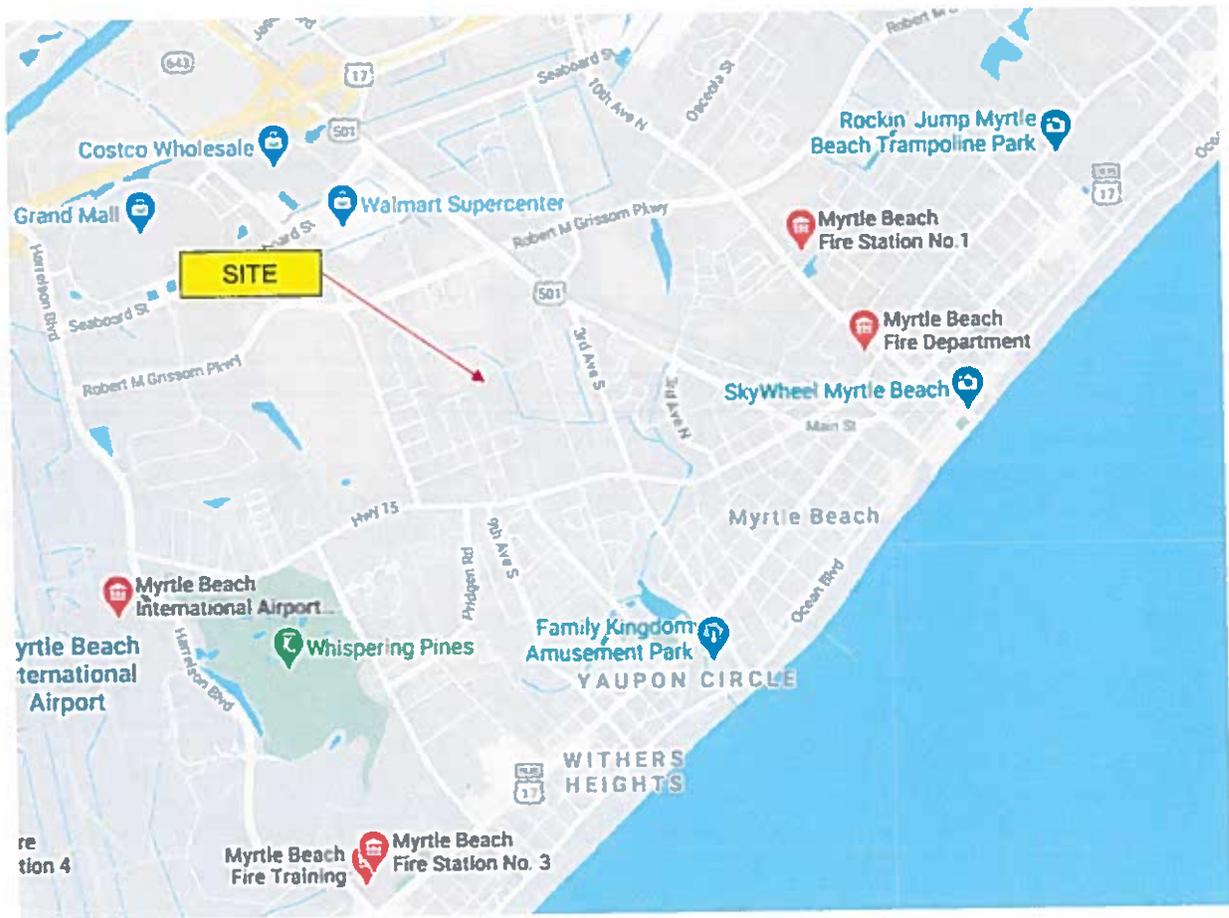
If yes, list mitigation strategies below.

Chris Daves

Lead Investigator's Signature

1/22/20

Date



www.google.com/maps

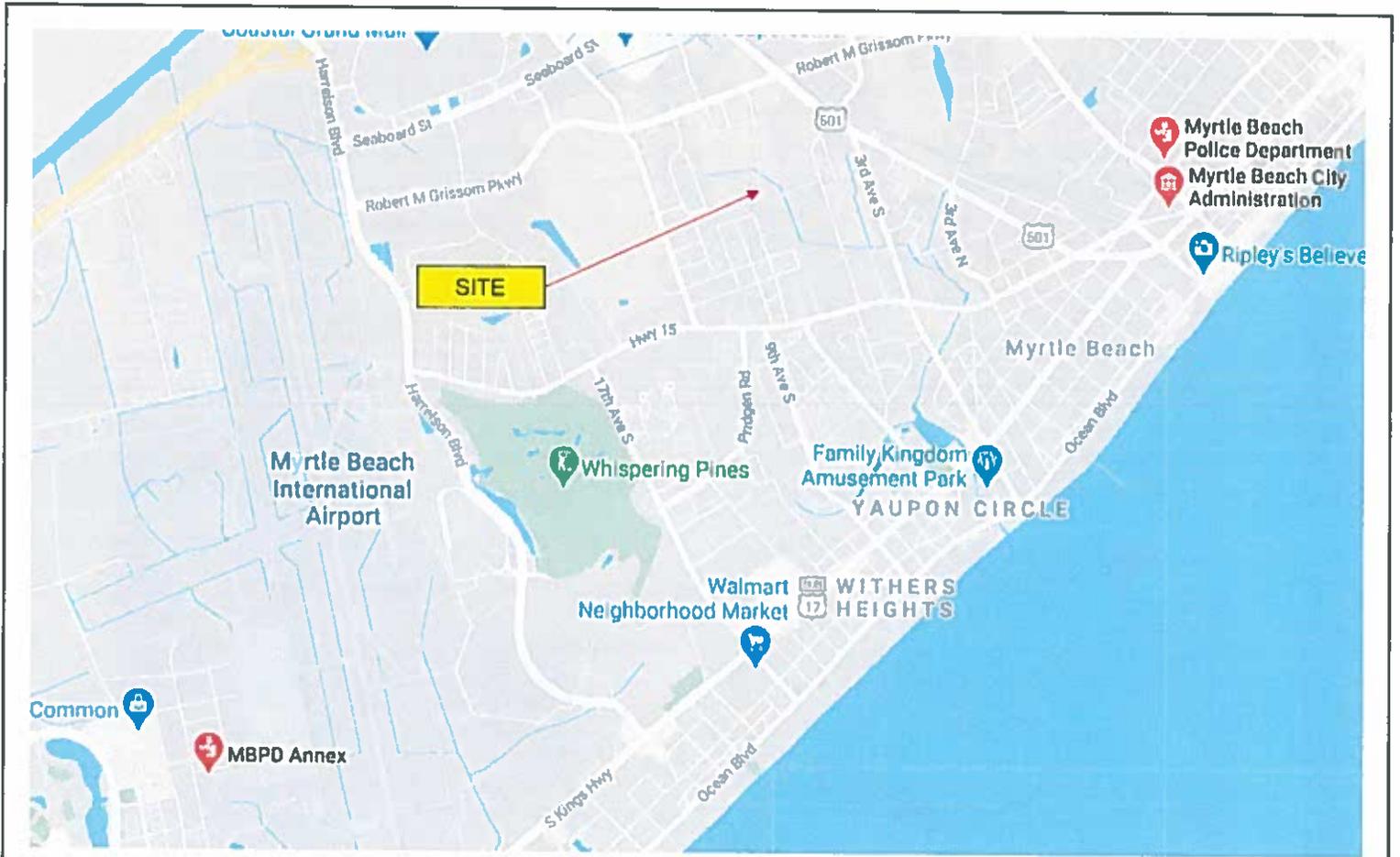


SCALE:	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	5-20-2020



FIRE SERVICE	
RACEPATH STREET PHASE II	
MYRTLE BEACH, Horry COUNTY, SOUTH CAROLINA	
PROJECT NO:	1463-19-014

EXHIBIT NO.



www.google.com/maps

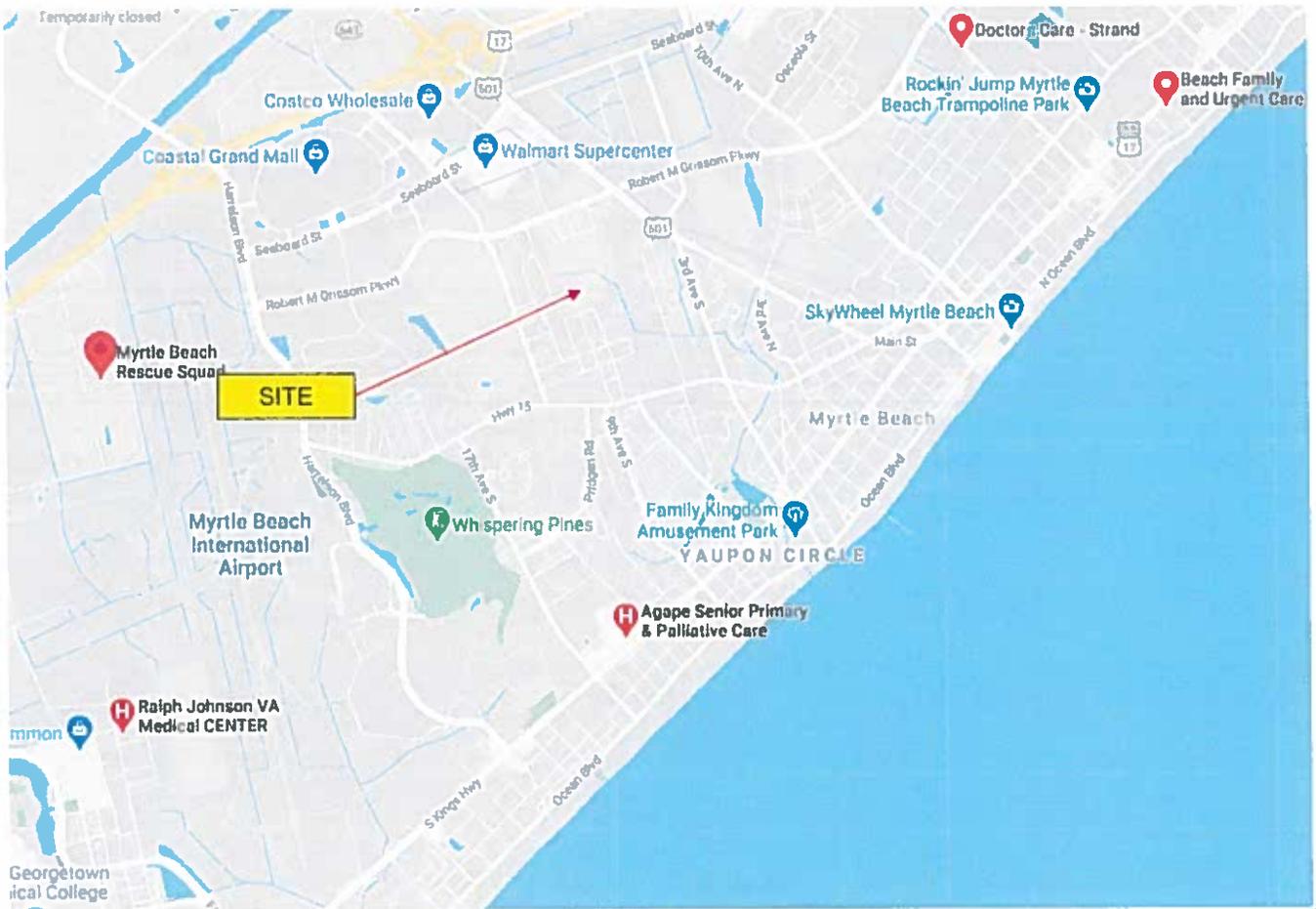


SCALE:	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	5-20-2020



POLICE SERVICE RACEPATH STREET PHASE II MYRTLE BEACH, HORRY COUNTY, SOUTH CAROLINA	
PROJECT NO:	1463-19-014

EXHIBIT NO



www.google.com/maps



SCALE	NTS
DRAWN BY:	CH
CHECKED BY:	CD
DATE:	5-20-2020



**EMERGENCY MEDICAL SERVICE
RACEPATH STREET PHASE II
MYRTLE BEACH, HORRY COUNTY, SOUTH CAROLINA**

PROJECT NO: 1483-19-014

EXHIBIT NO

PARKS, RECREATION & SPORTS TOURISM DEPARTMENT

(843) 918-1188

Chapin Memorial Library, 400 14th Avenue North
Crabtree Memorial Gymnasium, 1004 Crabtree Lane
General Robert H. Reed Recreation Center, 800 Gabreski Lane
Mary C. Canty Recreation Center, 971 Canal Street
Pepper Geddings Recreation Center, 3205 North Oak Street
[Department Facebook Page](#)

Dustin Jordan, Department Director

Wanda Bodine, Department Administration

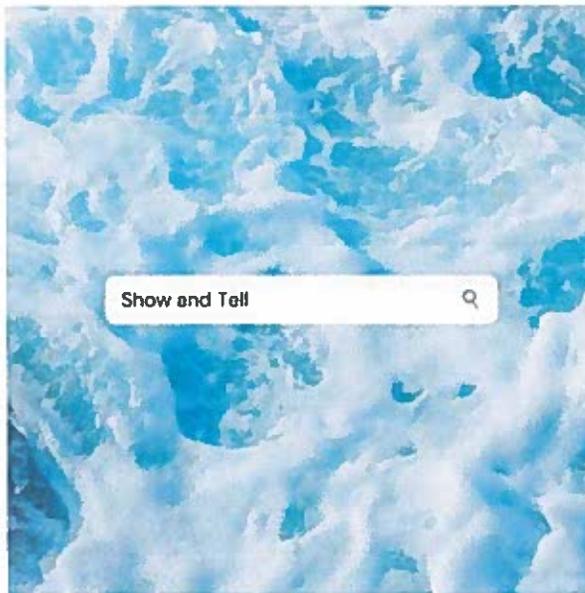
OVERVIEW

The **Parks, Recreation & Sports Tourism Department** includes a variety of functions and responsibilities. To report a service request, see the [Customer Request Center](#) webpage. The following divisions are housed within the department....

- [Adult Sports Programs](#)
- [All Park Maintenance](#)
- [Aquatic Programs](#)
- [City Barc Parcs](#)
- Department Administration
- [Facility Rentals](#)



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- Field Maintenance
- Historic Myrtle Beach Colored School & Education Center
- Historic Myrtle Beach Train Depot
- Myrtle Beach Tennis Center
- Myrtle's Market (Farmers Market)
- Ocean Woods Cemetery
- Recreation Center Memberships
- Recreation Division Administration
- Special Events
- Sports Tourism
- Sports Facility Maintenance
 - 1. Ashley Booth Field
 - 2. Doug Shaw Memorial Stadium
 - 3. Grand Park Athletic Complex
 - 4. Ned Donkle Field Complex
- Youth Programs (Summer Camps and After-School Programs)
- Youth Sports Programs
- Library and Recreation Centers
 - 1. Chapin Memorial Library, 400 14th Avenue North
 - 2. Crabtree Memorial Gymnasium, 1004 Crabtree Lane
 - 3. General Robert H. Reed Recreation Center, 800 Gabreski Lane
 - 4. Mary C. Canty Recreation Center, 971 Canal Street
 - 5. Pepper Geddings Recreation Center, 2280 North Oak Street

ADMINISTRATION & RECREATION DIVISION

The **Recreation Division** oversees the successful operations of the city's recreation centers and programs. Three Recreation District Managers supervise various recreation centers and programs.

Holly Lee, Recreation District Manager

- Aquatic Programs and Pools
- Pepper Geddings Recreation Center
- Youth Sports Programs

Lisa Ibbetson, Recreation District Manager

- Adult Sports Programs
- Crabtree Memorial Gymnasium
- General Robert H. Reed Recreation Center
- Mary C. Canty Recreation Center

Tony Payne, Recreation District Manager

- Facility Maintenance
- Myrtle Beach Tennis Center
- Special Events Division
- Youth Programs

CHAPIN MEMORIAL LIBRARY & RECREATION CENTERS

Jennifer Nassar, Chapin Memorial Library Director

Rob Cardella, Crabtree Memorial Gymnasium Supervisor

Kevin Morris, General Robert H. Reed Recreation Center Supervisor

Docshee Moore, Mary C. Canty Recreation Center Supervisor

Samantha Vititoe, Pepper Geddings Recreation Center Supervisor

HISTORIC MYRTLE BEACH TRAIN DEPOT

Blake Goss, Special Events Coordinator

The **Myrtle Beach Train Depot** is listed on the National Register of Historic Places. Built in 1937, the Depot was restored and re-opened in 2004 and is available for events and gatherings. To learn more, visit the [Myrtle Beach Train Depot](#) webpage.

MYRTLE BEACH TENNIS CENTER

Tony Payne, Recreation District Manager

The **Myrtle Beach Tennis Center** is a tennis-specific facility located next to Myrtle Beach High School. The facility is accessible via Grissom Parkway and offers a Pro Shop. For more, visit the [Myrtle Beach Tennis Center](#) webpage.

MYRTLE'S MARKET (CITY FARMERS MARKET)

Blake Goss, Special Events Coordinator

The city's farmers market, called **Myrtle's Market**, is located on the corner of Mr. Joe White Avenue, near the intersection of Oak Street. Market hours are 9:00 a.m. to 3:00 p.m., every Wednesday, Friday and Saturday, during the market season. The market features an excellent selection of seasonal fresh fruits and vegetables, brought to you by local growers and providers. To learn more, visit the Myrtle's Market webpage.

PARKS DIVISION

Richard Kirby, Parks Maintenance Superintendent

The **Parks Division** is responsible for maintaining the city's landscaping, especially in the constantly-growing network of public, city-owned parks and fields. This division also maintains Ocean Woods Cemetery. The Parks Division team preserves the grass, trees and shrubs in the highway medians and rights-of-ways, cleans the beach each day during the early morning hours, and provides litter control services on Kings Highway and other heavily traveled areas. For assistance, call 843-918-2330. To report a service request, see the Customer Request Center webpage.

SPECIAL EVENTS DIVISION

Troy Marron, Special Events Supervisor

Blake Goss, Special Events Coordinator

Mallory Holmes, Special Events Coordinator

The **Special Events Division** coordinates facility rentals and provides guidance through the special event permit process. The division also hosts the Special Events Technical Review board to facilitate the strategic planning for special events. The board coordinates the needs and services related to special events among a variety of city departments and divisions, including Emergency Management, Fire, Police, Public Works and Parks Division.

To learn more about renting a park or facility, see our Facility Rentals webpage. To learn more about what constitutes a "special event" and the permitting process, see our Special Events webpage.

SPORTS TOURISM

Tim Huber, Sports Tourism Supervisor

The **Sports Tourism Division** serves event organizers and owners who are interested in bringing event participants to the Grand Strand for a memorable experience, both on and off the playing field. Our Sports Tourism staff is responsible for contracts and reservations for the city's fields, stadiums, roads, gyms, beaches and more. To learn more, visit the Sports Tourism Division webpage.

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For a printable .pdf of Recreation, visit www.cityofmyrtlebeach.com/recreation.pdf.
For a text version of Recreation, visit www.cityofmyrtlebeach.com/mbrecreation.html.



Thursday, March 30, 2017

To join or be removed from this mailing list, please reply to info@cityofmyrtlebeach.com.

New and updated items in blue!

Five-Week Weight Loss Challenge
Sunday, April 2, through Saturday, May 6
Crabtree Memorial Gymnasium

Are you looking for motivation to shed some extra pounds? Don't miss the **Five-Week Weight Loss Challenge at Crabtree Gym**. The challenge begins Sunday, April 2, and continues through Saturday, May 6. Each week, participants focus on a different challenge to help them establish a healthier lifestyle. Each participant will be given \$20 (in fake money) at the beginning of the challenge. The person who loses the highest percentage of weight will win the pot. The fake money can be used to purchase items at Crabtree gym or towards gym membership. Registration is free and underway. For more information, 843-918-2355.

"Camp Cool Out" Registration Begins
9:00 a.m., to 1:00 p.m., Monday, April 3
Camp begins Monday, June 5
Mary C. Canty Recreation Center

Hey, parents! Let's get ready for "Camp Cool Out" at Mary C. Canty Recreation Center. This full-time, Monday-through-Friday summer day camp is on a first-come, first-served basis. Registration is 9:00 a.m. to 1:00 p.m., beginning Monday, April 3. The camp begins Monday, June 5. Activities include: arts and crafts, games, sports, swimming (every day) and field trips. Registration forms are available at www.cityofmyrtlebeach.com/youthprograms.html. Print the completed registration form and return it to Mary C. Canty Recreation Center. Registration Fee: \$20 City Resident / \$50 Non City Resident. Weekly Fee: \$75 / week, per child. Reduced fees are available. For more information, call 843-918-1468.

LEGO Building Session
1:00 to 2:15 p.m., Saturday, April 8
Chapin Memorial Library, 400 14th Avenue North

Chapin Memorial Library offers a LEGO building session to keep kids' engineering and problem-solving skills sharp, strengthen STEM muscles and spark imagination with LEGO bricks from 1:00 to 2:15 p.m., Saturday, April 8. An inspiration topic will be selected for participants, and a countdown clock measuring LEGO build time begins! Ages four to 14 are invited to attend. Participants under eight years of age must be accompanied by an adult. For more information or to register, call 843-918-1293 or email youthservices@chapinlibrary.org.

Pool Closure – Pepper Geddings Recreation Center
Monday, April 10, through Friday, April 21
Monday, May 29, through Wednesday, June 14

The pool at the Pepper Geddings Recreation Center will be closed Monday, April 10, through Friday, April 21, due to pool renovations. A second phase of renovations will begin Monday, May 29 through Wednesday, June 14, with the pool closed during that period, too.

Easter Egg Plunge 2017

1:00 and 1:30 p.m., Friday, April 14

Mary C. Canty Recreation Center, 971 Canal Street

Registration is underway for the popular Easter Egg Plunge event set for Friday, April 14, at the Mary C. Canty Recreation Center, 971 Canal Street. The free family event is for children, age three to 12. Activities begin at 1:00 p.m. for small children, ages three and four. Parents must be in the water for small children to participate. The fun continues at 1:30 p.m. for ages five to 12. The afternoon event includes a meet-and-greet with the Easter Bunny, diving for eggs in the pool and playing games, along with candy and prizes. *Registration is required by Thursday, April 13.* To register, call 843-918-1476 or 843-918-1463.

World Tai Chi and QiGong Day

9:00 a.m. to 12:00 p.m., Saturday, April 29

Chapin Park, 16th Avenue North at Kings Highway

Chapin Memorial Library invites all to participate in World Tai Chi Day at Chapin Park from 9:00 a.m. to 12:00 p.m. on Saturday, April 29. The official Tai Chi event occurs at 10:00 a.m. worldwide! The event is free and open to anyone who wishes to participate, learn or experience the event as an observer. Tai Chi beginners and pros alike are encouraged to attend and take part in this unique event. For more details, contact Deb at 843-918-1281.

Boys & Girls Lacrosse (Ages 7 to 15)

5:00 to 6:15 p.m., Tuesdays and Thursdays, beginning April 25 (Girls Practice)

6:30 to 7:45 p.m., Tuesdays and Thursdays, beginning April 25 (Boys Practice)

Field 12, Grand Park in Market Common

Stop by the front desk at Pepper Geddings Recreation Center to register your child for Youth Lacrosse, for ages seven to 15. Practices will take place at Market Common weeknights starting April 25 with home and away weekend tournaments in May and June. Fees: \$15 for city residents and \$50 for non-city residents. Pre-registration required. Call 918-2280 for more information. Here are the lacrosse age groups.

- 7-10 year old boys
- 7-10 year old girls
- 11-12 year old boys
- 11-12 year old girls
- 13-15 year old boys
- 13-15 year old girls

Spring Youth Baseball and Softball, Ages 4 to 15

Registration continues – a few spots remain!

Pepper Geddings Recreation Center and Crabtree Memorial Gymnasium

Registration for youth baseball and softball leagues (boys and girls) is underway. Sign up your young star at Pepper Geddings Recreation Center or Crabtree Memorial Gymnasium. Below is information for available slots at each recreation center. Call 918-2295 or 918-2360 for more.

Crabtree Memorial Gymnasium

9-10 Softball (girls)	3 spots
11-12 Softball (girls)	5 spots

Pepper Geddings Recreation Center

4-6 (Rookie League)	1 slot
9-10 Softball (girls)	8 slots
13-16 Softball (girls)	2 spots

Celebrate National Library Week
Monday through Saturday, April 10-15
Chapin Memorial Library, 400 14th Avenue North

Chapin Memorial Library celebrates National Library Week, April 10-15, to highlight the changing role of libraries and library staff. Today, libraries offer more than books. They help bridge the digital divide, providing free access to information, technology and online resources. For more information, contact Deb at 843-918-1281 or warrington@chapinlibrary.org.

Monday, April 10

Reading Buddies... Chapin Library invites kids to practice reading with a canine buddy at 1:00 p.m. Pre-Registration is required.

Genealogy 101... The library hosts "Genealogy 101," a fun and educational class for those who want to begin researching family history from 5:00 to 7:00 p.m. Pre-Registration is required.

Tuesday, April 11

Puppet Show: Mother Goose and Friends, by Becky's Box of Puppets... Kids, ages three and older, will have a blast seeing this puppet show at 10:00 a.m.

Picnic in Chapin Park... Chapin Library invites families to join in on the picnic fun from 12:00 to 2:00 p.m. at Chapin Park, located at 1400 North Kings Highway. Bring blankets, a picnic lunch and family members to enjoy free music performed by Shamrocks in the Wind. Lemonade and water will be provided. (If the weather does not permit the outdoor event, the picnic will be held in the Adult Non-Fiction Room.)

Wednesday, April 12

Puppet Show: Why Mosquitoes Buzz in People's Ears, by Becky's Box of Puppets... At 11:00 a.m., kids, ages five and older, will enjoy a host of colorful animals as they bring this popular African folktale to life.

Kids' Book Craft... The library invites kids to attend and create crafts based on a classic book at 1:00 p.m.

Teens' Game Night... At 4:00 p.m., teens are welcome to participate in Teens' Game Night! Board games, video games and snacks galore make this event fun for everyone.

Thursday, April 13

Family Storytime... Children of all ages enjoy stories, songs, fingerplays and a craft at 10:00 a.m. Literacy toys are available for parent/child use after storytime.

Genealogy 102... 10:00 a.m. to 12:00 p.m., the library hosts "Genealogy 102," the second educational class for those who want to continue researching family history. Pre-Registration and completion of Genealogy 101 is required.

Chapin's Craft Corner: Mini Book Charm... Adults join Wanda from 2:00 to 4:00 p.m. to make a book charm that attaches to keychains and necklaces to celebrate National Library Week 2017. Registration is required by Monday, April 10.

Friday, April 14

Family Dance Party... Parents and small children have a Family Dance Party at 11:00 a.m. The event includes a story, movement and music! The party is especially fun for toddlers and preschool-aged children, but all families are welcome.

Teens' Fandom Wars... Teens who love books, movies or TV shows will have a blast at 4:30 p.m. playing games and meeting other teens who share the same interests.

Saturday, April 15

Teen Movie: *Fantastic Beasts and Where to Find Them...* Teens, come and see the newest movie in the Harry Potter universe at 2:00 p.m.

Water Safety Instructor Training Courses

Class Two begins April 10

Mary C. Canty Recreation Center

Water Safety Instructor Course work will include physical exercise, online, classroom and take home assignments require attentiveness to reading and lectures. *This course is being relocated to Mary C. Canty Recreation Center due to planned construction at the Pepper Geddings Recreation Center's swimming pool.* The course fee is \$115 city residents/\$195 non-city residents. The pre-course consists of strokes consistent with the American Red Cross' requirements including 25 yard front crawls; 25 yard back crawls; 25 yard breaststrokes; 25 yard elementary backstroke; 25 yard sidestroke; 15 yard butterfly; maintain floating or sculling position for one minute; tread for 1 minute. Call 843-918-2286 for more information.

Class 2: 9:00 a.m. to 4:00 p.m., Monday through Friday, April 10 through April 14

Second Annual Open House

10:00 a.m. to 2:00 p.m., Saturday, April 22

Crabtree Memorial Gymnasium, 1004 Crabtree Lane

Crabtree Memorial Gymnasium and the Market Common Community are hosting the Second Annual Open House from 10:00 a.m. to 2:00 p.m., Saturday, April 22. Come out and get to know your neighbors and community members! The event features good music, vendors, food, competition, fellowship, informative workshops, community appreciation and more. For more information, contact Crabtree Memorial Gymnasium at 843-918-2355.

Lifeguard Course Training

Class is May 2-23, 2017

Pepper Geddings Recreation Center

If you're 15 or older and looking for a great summer job or challenging career, the Red Cross Lifeguarding program is the place to start. Through online practices, videos, group discussion and hands-on practice, you'll learn patron rescue and surveillance skills, first aid and CPR/AED. Pre-registration is strongly recommended. A \$20 non-refundable deposit is due at the time of registration. This deposit will be applied to course fees upon successful completion of the Pre-Course Session and includes pool use from registration through the end of class. The course fee is \$110 for City Residents/\$185 for non-city residents and includes certification, if all course work is completed satisfactorily. Please make checks payable to the City of Myrtle Beach. To qualify for the course you will need proof that you will be at least 15 years old by the scheduled course completion

date; ability to swim 300 yards continuously, face in the water, using rhythmic breathing and a stabilizing, propellant kick; ability to swim 20 yards using front crawl or breaststroke, surface dive to a depth of 7-10 feet, retrieve a 10-pound object, return with the object to the surface and swim 20 yards back to the starting point with both hands holding the object and exit the water without using a ladder or steps within one minute, 40 seconds, without goggles; ability to tread water continuously for two minutes using only your legs. (*Note... The previously announced April session has been cancelled, due to planned construction at the Pepper Geddings pool during that time.*)

Class 4: Blended Learning Course

May 2 through 23, 2017

Pre-swim is May 2

Class Dates and Times: 5:00 to 9:00 p.m., May 2, 4, 9, 11, 16, 18, 23

Myrtle Beach Tennis Center

3302 Grissom Parkway, adjacent to Myrtle Beach High School

Call 843-918-2440 or visit www.cityofmyrtlebeach.com/tennis.html

Myrtle Beach Tennis Center memberships include access to the 10 courts (eight lighted), no court fees, reserved court time, league play and adult clinics at member price. A youth membership is required to participate in the 40 LUV Junior Development Pathway. Annual memberships are available for everyone: \$50 for youth (under 18), \$125 for adults (19 and older), \$175 for a family (husband, wife and children under 21 living at home or full time students under 25 living at home who qualify with student status verification) and \$60 for seniors (55 and older). There are NO court time fees with membership.

Myrtle Beach Tennis Center Facility Hours (Summer Hours)

8:00 a.m. to 9:00 p.m., Monday through Friday

8:00 a.m. to 1:00 p.m. and 2:30 to 6:30 p.m., Saturday

Adult Clinic 3.5 – 4.0: Clinic times are 10:00 to 11:30 a.m., every Monday, Wednesday and Friday for adult 3.5 - 4.0 only. Each clinic will have a "theme of the day," with instruction and strategic tips for competitive play. Two participants needed for a one hour clinic, three or more for the entire clinic. Fees are \$13 for members and \$16 for non-members. Contact Brad Anderson at 843-918-2440 for more information.

Adult Clinic 2.5 – 3.0: This exciting program is offered to adult 2.5 – 3.0 only who want to improve their tennis game in a short amount of time. The program is ongoing, with players attending twice a week for one hour sessions. Classes are offered from 7:00 to 8:00 p.m., on Tuesday and Thursday evenings. Participants have the option to pay \$50 in advance for six classes or pay \$10 "as you go" per person, per individual session. Contact Brad Anderson at 843-918-2440 for information.

Adult Clinic 1.5 -2.5 Clinic: Clinic times are 7:00 to 8:00 p.m., every Monday and Wednesday, for adults 1.5 - 2.5. Participants have the option to pay \$50 in advance for six classes or pay \$10 "as you go" per person, per individual session.

Teen 101: Clinic times are 6:00 to 7:30 p.m., Monday through Thursday. Contact the Tennis Center for pricing for the eight week session 843-918-2440.

Chapin Memorial Library

Classes and Activities

Call 843-918-1275

Adult Coloring Club... Do you miss coloring? If so, then come and join the Chapin Memorial Library Coloring Club! Participants must be 18 years of age or older, and the club will meet from 11:00 a.m. to 1:00 p.m. on the first and third Thursday of each month in the large conference room on the second floor at Chapin Memorial Library. We will supply a few sample pages, coloring pencils and

relaxing music. Or, bring your own coloring book and pencils. Questions? Contact 843-918-1275 or reference@chapinlibrary.org.

11:00 a.m. to 1:00 p.m., Thursday, April 6 and 20

Art Classes at the Library... Chapin Memorial Library offers art classes from 3:30 to 5:30 p.m. on the second Thursday of each month, taught by F.G. Burroughs-S.B. Chapin Art Museum's Arielle Fatuova. Ms. Arielle leads, inspires and guides the group to create their own works of art! The art programs are open to students, ages 10 to 14, and pre-registration is required. Contact 843-918-1293 or nassar@chapinlibrary.org for information.

April 13 – Yarn Paintings

Earth Day 2017... Celebrate Earth Day, April 22, with Chapin Memorial Library! Everyone is invited to drop in from 1:00 to 3:00 p.m., Saturday, April 22, at Chapin Library, 400 14th Avenue North, to create a fun craft to celebrate our amazing planet. For more information and to RSVP, contact 843-918-1293 or youthservices@chapinlibrary.org.

Family Dance Party... For the little ones, Chapin Memorial Library hosts the Family Dance Party from 11:00 a.m. to 12:00 p.m. on various Fridays. The next party date is March 24. The party consists of a story, fingerplays, movement and music. This event is geared towards toddlers and pre-schoolers, but all families are welcome.

11:00 a.m. to 12:00 p.m., Friday, April 14 and 22

Family Movie at the Library... Chapin Memorial Library invites the entire family to join the cinematic fun at 2:00 p.m. on Saturday, April 29, at Chapin Library. Popcorn will be served. Questions? Call 843-918-1275 for details. Here are the movie titles and times...

2:00 p.m., Saturday, April 29 – *Moana* (PG)

Knitting and Crochet Group... Chapin Memorial Library offers knitting and crochet classes in the first floor meeting room every Friday afternoon. Learn basic knitting and crochet skills or get help with an existing project. Please bring your own supplies. Volunteers are needed to teach and assist with programs, creating displays, and other library activities. Please call 843-918-1275 for information.

Lip Sync Battle... Chapin Library hosts a lip sync battle, and sixth through 12th graders are invited to participate in the fun at 5:00 p.m., Thursday, April 27. Participants pick a song, deliver a stellar performance, and the best wins the prize! Attendees can team up with a friend or perform as a solo act. The library is located at 400 14th Avenue North. Registration is required. For more details and to RSVP, contact 843-918-1293 or youthservices@chapinlibrary.org.

Teen Event: Game Night... At 4:00 p.m. on Wednesday, April 12, Chapin Memorial hosts Teen Game Night, an activity for game lovers! Sixth through 12th graders are invited to attend and play video games and board games. Snacks galore will be served. For more information or to RSVP, contact 843-918-1293 or youthservices@chapinlibrary.org.

Teen Movie: *Fantastic Beasts and Where to Find Them*... Attention, teen Harry Potter fans! Join us at 2:00 p.m. on Saturday, April 15, at Chapin Library for *Fantastic Beasts and Where to Find Them*! Sixth through 12th graders are invited to attend. Popcorn will be served. For more information or to RSVP, contact 843-918-1293 or youthservices@chapinlibrary.org.

**Pepper Geddings Recreation Center
Classes and Activities
Call 843-918-2280 for more information**

Pepper Geddings Recreation Center features a well-equipped weight room with free weights and machines; a cardio room with treadmills, ellipticals, bikes, stair climbers and more; an indoor track; a 25 meter pool with six lanes and diving boards; a shallow pool; and two gymnasiums equipped with eight basketball goals, pickleball and volleyball equipment. **Pre-registration is required for classes.** We reserve the right to cancel any class that does not meet minimum enrollment.

Pepper Geddings Recreation Center Facility Hours

6:00 a.m. to 9:00 p.m., Monday through Thursday

6:00 a.m. to 7:00 p.m., Friday

8:30 a.m. to 5:00 p.m., Saturday

KIDS SPORTS AND FITNESS PROGRAMS

Registration for After-School Sports and Fitness Classes: Stop by the front desk of Pepper Geddings Recreation Center to register your child for after-school sports, fitness and cultural classes.

City Spikers Girls Volleyball League (Ages 8 to 16): League matches begin in April with practices and clinics ongoing now at the Myrtle Beach Sports Center. Fees: \$35/City Resident and \$60/Non-City Resident. Pre-registration required at Pepper Geddings. Open enrollment closes March 31. For more information, call 918-2280.

Ages 8-11 Girls: Monday and Wednesday, 4:30 to 5:45 p.m.

Ages 12-16 Girls: Monday and Wednesday, 5:45 to 7:00 p.m.

Start Smart Sports: This is a proven instructional program that prepares children, ages three to six, for the world of organized sports without the threat of competition or the fear of getting hurt. Children work on learning all the fundamentals of sport including catching, passing, kicking and running in a fun atmosphere. Start Smart activities are held once a week for six weeks. Each week the exercises become increasingly more difficult as the class progresses and children show improvement. Classes meet from 6:00 – 7:00 p.m. for six weeks. Fees: \$25 City Resident / \$45 Non-City Resident. Pre-registration is required.

Level 1

Designed to introduce sports and basic athletic skills to pre-schoolers, ages three to four-and-a-half years old.

Spring:

Baseball: Tuesdays, March 28 through May 9

Tennis: Tuesdays, May 16 through June 20

Summer:

Golf: Tuesdays, June 27 through August 1

Level 2

Designed for returning Start Smart participants and older pre-schoolers age four and a half to six years old as preparation for organized sports.

Spring:

Baseball: Thursdays, March 30 through May 11

Tennis: Thursdays, May 18 through June 22

Summer:

Golf – Thursdays, June 29 through August 3

Skate Safe: Beginner and intermediate skaters, age five to 12, will learn skateboarding skills for street, ramp and flat ground. This eight-week session takes place at Matt Hughes Skate Park.

Pre-registration is required at Pepper Geddings. Helmet, safety gear and skateboard are required.
Fees: \$15 City Resident / \$30 Non-City Resident.

March 22 through May 17: Wednesdays, from 3:00 to 3:45 and 4:00 to 4:45, for ages five to 12

Re-Creation Art: Kids, age five to 12, will develop a variety of art skills through group instruction and creative individual projects. Fees: \$25 City Resident / \$45 Non-City Resident.

March 22 through May 17: Wednesdays, from 6:00 - 7:00 p.m., for ages five to 12

Kids Zumba: Join the party! Now kids can get in on this incredibly popular exercise dance routine that's a total blast! This cardio fitness program designed just for kids is a fusion of salsa, cumbia, Reggaeton, hip-hop and more. These high energy workouts for kids max out on fun and fitness all at the same time. It's safe and effective, and kids can't wait to get into the Zumba groove.
Fees: \$25 City Resident / \$45 Non-City Resident

March 21 through May 16: Tuesdays, from 4:00 - 5:00 p.m., for ages five to 11

Kids Ballet, Tap, & Jazz: Boys and girls in grades K through 5th will have a blast and get moving learning basic introductions to ballet, tap, and jazz. It's all about feeling fearless on the dance floor, reinforcing the idea that it's okay to just be yourself and dance like no one's watching. Dance shoe recommendations will be provided at first class. Session takes place March 23 through May 18.
Fees: \$25 City Resident / \$45 Non-City Resident

Grades K through 2nd Thursdays, from 3:00 to 4:00 p.m.

Grades 3rd through 5th Thursdays, from 4:00 to 5:00 p.m.

ADULT AND SENIOR FITNESS PROGRAMS & CLASSES

Beginner Pickle Ball: Experience the fastest growing sport in the USA! This game combines tennis and badminton for a game that is high on fun and fitness. Free for members; \$3.00 drop-in fee for Seniors (55-plus); or \$5.00 drop-in fee for Adults (18-54).

8:00 a.m. - 10:00 a.m., Tuesday and Thursday

Volleyball: Come join us for open play volleyball. Free for members; \$3.00 drop-in fee for Seniors (55-plus); or \$5.00 drop-in fee for Adults (18-54).

12:30 - 3:00 p.m., Monday

12:30 - 3:00 p.m., Wednesday

The following classes are part of our fitness schedule! Get your 24-visit punch card at the front desk. It's \$28 for city residents or \$50 for non-city residents and allows you 24 visits to any of the following classes listed below. The Fitness Punch Cards can be used at all city recreation facilities and do not expire. Daily guests may pay \$4 (city resident) or \$10 (non-city resident) per class. All classes are held at the Pepper Geddings Recreation Center, 3205 Oak Street.

Ab Blast: This 30 minute class will work your abdominal muscles and make you sweat

6:15 to 6:45pm, every Tuesday, with Sam, SBI Gym

"B" Fit: This fun and creative strength training class combines balls, bars, kettle "bells", bands and BOSU's (class level scale – moderate intensity).

8:00 to 8:45 a.m., every Tuesday, with Joanne, Aerobics Room

9:00 to 9:45 a.m., every Saturday with Joanne, Aerobics Room

Ball Body Sculpt: Strengthen and tone your body, improve your balance, and coordination while working multiple muscle groups at once!

5:30-6:15pm every Friday, with Wendy, Aerobics Room

Ballet Stretch: Enjoy a gentle flow of ballet techniques that combines balance, stretching and muscle toning.

11:00-11:45 a.m., each Tuesday, with Sandee

10:00-10:45 a.m., every Thursday with Sandee

Ballet, Tap, and Jazz: Join this 10 week adult dance to learn new dance techniques, to experience something new, to progressively improve with the group, and to have fun! No experience necessary. Fees: Choose one class format \$25 city residents and \$45 non-city residents. 3 class combo \$45 city residents and \$75 non-city residents.

Ballet - Monday 10:00 a.m. and 7:30p.m.

Jazz - Monday 6:30 p.m. and Friday 10:00 a.m.

Tap – Monday 5:30 p.m. and Wednesday 10:00 a.m.

Ballet Fusion: This class is for beginners or those with some experience. Join us for a blend of ballet, modern, and lyrical dance techniques.

10:00 to 11:00 a.m., each Monday

7:30 to 8:30 p.m., each Monday

Body Boot Camp: Challenge yourself in this high intensity, full body, calorie-blasting class. Some fitness experience is suggested to attend this class. This class will end March 16.

5:30 to 6:15 p.m., each Monday, with Sam, MBI Gym

Body Circuit: Get a full body workout in this interval training class. This class uses several pieces of equipment to work your body's muscles.

5:30 to 6:15 p.m., every Friday, with Michael, Weight Room

Body Sculpting: Focus on gentle strength training for the whole body. You will improve muscle strength and stability.

10:00-10:45 a.m., every Tuesday, with Sandee

8:00-8:45 a.m., every Thursday, with Sandee

Beginner Weight Training: This class is designed for those who are new to using the weight room equipment or if you are new to designing a weight training routine.

9:00 to 9:45 a.m., every Wednesday, with Nick, Weight Room

Cardio Intervals: Try this new fitness class! This class will be broken up into four, 10-minute cardio segments. Each segment will be a different cardio exercise; some equipment will be used.

8:00 to 8:45 a.m., every Wednesday, with Kathy, Aerobics Room

Cardio Pump: Enjoy this fun, easy-to-learn cardio class that alternates between cardio aerobics and strength intervals (class level scale – high intensity).

9:00 to 9:45 a.m., every Tuesday, with Kathy, Aerobics Room

Cardio & Strength: This class combines cardio exercises and weight lifting for a full body workout (class level scale – high intensity).

6:45 to 7:30 a.m., every Monday, Wednesday, and Friday with Nick, Aerobics Room
11:00 to 11:45 a.m., every Saturday, with Nick, Aerobics Room

Core Training: Improve core strength, stability, and flexibility through body resistance, posture alignment, balance and weights.

5:30 to 6:15 p.m., every Monday, with Margaret, Room 3

Dance Explosion: A little bit of everything; social dance, party dances, basic ballet, jazz and tap. No previous experience required.

9:00 to 9:45 a.m., every Monday, with Sandee, Aerobics Room
8:00 to 8:45 a.m., every Thursday with Sandee, Aerobics Room
10:00 to 10:45 a.m., every Friday, with Sandee, Aerobics Room

Dance Aerobics: This is a fun, upbeat cardio class using basic dance moves from many genres.

8:00 to 8:45 a.m., every Tuesday and Friday, with Sandee, Jr. Gym
11:00 to 11:45 a.m., every Wednesday, with Sandee, Aerobics Room

Fitness Over 50: Fit Over 50 is designed for individuals over the age of 50. This class combines cardio moves, strength exercises, flexibility, and friendship. If you are looking for some fun while staying active then this is the class for you! **"Fit Over 50" is now part of the regular class punch card. There is no separate fee!**

9:00-10:00 a.m., every Monday, Wednesday, and Friday, with Carol, Aerobics Room

Foam Roll & Stretch: Get the benefits of foam rolling to ease muscle pain and soreness and relax your body with stretching.

9:00-9:45am every Tuesday, with Joanne, Aerobics Room

Full Body Fitness: This class will combine cardio, strength, and flexibility. Enjoy a variety of functional training exercises and relaxation.

5:30-6:15pm every Wednesday, with Wendy, Aerobics Room

Gold-N-Fit: Keep active and stay young at heart as you work on cardio, strength, flexibility, and balance. Work at your own pace and the instructor will provide modifications. Most exercises can be done with the assistance of a chair.

11:00 a.m. to 12:00 p.m., every Monday, Wednesday and Friday, with Linda, Jr. Gym

Hatha Yoga: This challenging yoga class will enhance your stability, improve balance and strength, and help to increase dynamic movements for a full body workout. Please bring your own mat (class level scale – high intensity).

9:00 to 10:00 a.m., every Monday and Wednesday, with Kathy, Room 3
5:30 to 6:15 p.m., every Wednesday, with Margaret, Room 3

Intro to Yoga: This introductory yoga class uses different tools, including yoga blocks and chairs, to help improve your balance and to learn the proper forms of yoga. Please bring your own mat (class level scale – beginner, low intensity).

10:00 to 11:00 a.m., every Thursday, with Kathy, Room 3

Jump Into Jazz: Everyone is welcome into this fun, active class that will incorporate jazz dance movements, combinations, and choreography.

6:30 to 7:30 p.m., every Monday
10:00 to 11:00 a.m., every Friday

Kickboxing: This is a fun aerobic workout using kickboxing bags to add resistance while you kick and punch.

8:00 to 8:45 a.m., every Thursday with Joanne, Senior Gym

Line Dancing: Learn popular line dances through the decades, including country and soul line dancing. This is a fun and fabulous way to get moving.

9:00 to 9:45 a.m., every Tuesday and Thursday, with Sandee, Jr. Gym

Pilates: This is a core-centric strength and flexibility class that combines fitness and core training with a mind-body connection designed by Joseph Pilates. Please bring your own mat (class level scale – moderate intensity).

10:00 to 10:45 p.m., every Thursday with Linda, Aerobics Room

Piloxing: A core-centric cardio class that combines the stability exercises of standing Pilates and the calorie blasting movements of Boxing!

5:30 to 6:15 p.m., every Thursday, with Sam, Aerobics Room

Pure Strength: This exercise is a challenging weight class with dumbbells, bar bells and strength training moves to condition the entire body.

8:00 to 8:45 a.m., every Monday, with Kathy, Aerobics Room

QiGong: Pronounced (CHEE-GONG), this is a gentle form of exercise that helps improve health and overall well-being. The main elements of QiGong include fluid movement, deep breathing and meditation. Designed for all fitness levels (class level scale – beginner, low impact).

10:00 to 10:45 a.m., every Monday, Wednesday and Friday, with Linda, Jr. Gym

Total Abs: This class concentrates on exercises that work your abdominal area, obliques and back.

8:00 to 8:45 a.m., every Friday, with Nick, Aerobics Room

Totally Tap: Have a blast in this upbeat and energetic dance class. This percussive style of dance explores sounds and rhythmic pattern that you can see and hear!

5:30 to 6:30 p.m., every Monday
10:00 to 11:00 a.m., every Wednesday

Triple Play: This all-in-one class will combine all of your favorite exercise formats. Triple Play includes cardio aerobics, strength training and flexibility practices. Please bring your own mat (class level scale – moderate intensity).

9:00 to 9:45 a.m., every Thursday, with Kathy, Aerobics Room

Walk the Plank: Ahoy, Matey! Pirate Michael will lead this fun workout that incorporates cardio intervals and abdominal training.

5:30 to 6:15 p.m., every Tuesday, With Michael, Aerobics Room

Weight Training: Learn proper techniques and exercises using resistance machines located in the Weight Room. Weight Training improves overall muscle strength and tone (class level scale – moderate intensity).

9:00 to 9:45 a.m., every Monday and Friday, with Nick, Weight Room
10 to 10:45 a.m., every Saturday, with Nick, Weight Room

Yoga Release: This relaxing yoga class combines strength, flexibility and balance exercises to release tension in your body.

9:00 to 9:45 a.m., every Thursday, with Joanne, Room 3
10:00 to 10:45 a.m., every Saturday, with Joanne, Aerobics Room

Zumba: A mix of cardio aerobics, dance, and Latin themed music brings together a fun, easy-to-learn workout!

5:30 to 6:15 p.m., every Tuesday, with Sam, MBI Gym
9:00 to 9:45 a.m., every Saturday, with Sam, Jr. Gym

POOL SCHEDULE – Pepper Geddings Recreation Center

LAP SWIM SCHEDULE

Monday through Friday 6:00 a.m. – 10:00 a.m., 2 Lap Lanes
Monday through Friday 12:00 p.m. – 2:30 p.m., 4 Lap Lanes
Monday through Thursday 5:30 p.m. – 8:45 p.m., 2 Lap Lanes
Friday 5:30 p.m. – 6:30 p.m. Lap Lanes
Saturday 12:00 p.m. – 4:45 p.m., 3 Lap Lanes

ADULT EXERCISE OR FAMILIES

Monday through Friday 6:00 a.m. – 9:00 a.m., Shallow End
Monday through Friday 10:30 a.m. – 2:30 p.m., Shallow End
Monday, Wednesday and Friday 3:30 p.m. – 5:30 p.m., Shallow End
Tuesday and Thursday 7:30 p.m. – 8:45 p.m., Shallow End and Diving Board Upon Request
Saturday 12:00 p.m. – 4:45 p.m., Shallow End and Diving Board Upon Request

OPEN SWIM

Monday through Friday 10:30 a.m. – 2:30 p.m., 3 Lap Lanes

Saturday, the pool may be used for pool rentals. Lane usage may be adjusted accordingly.

AQUA FITNESS CLASSES

Hydroaerobics: The perfect blend of water and workout! This is a low impact, fast paced aerobic program designed to improve heart-lung capacity, flexibility and muscular strength. The class is held in the shallow end of the pool, so no swimming skills are needed. Class meets from 9:00 to 9:45 a.m. every Monday, Wednesday and Friday. Drop-in fees are \$5 for city residents and \$10 for non-city residents or get an 18-visit punch card for \$32 (city resident) or \$55 for (non-city resident).

Off the Deep End: Jump into the deep end for a challenging water workout. This is a high-intensity, non-impact aerobic exercise class. Off the Deep End is an excellent cross-training and rehabilitative opportunity. The water workout helps build core muscular strength, flexibility and cardiovascular fitness. Class members wear buoyancy belts for added flotation, but should be comfortable in deep water. Classes meet 9:00 to 9:45 a.m. every Tuesday and Thursday. Drop-in fees are \$5 for city residents and \$10 for non-city residents or get an 18-visit punch card for \$32 (city resident) or \$55 for (non-city resident).

Youth Martial Arts Program
5:00 to 6:00 p.m., each Tuesday and Thursday
Crabtree Memorial Gym

For children ages seven to 14, this Youth Martial Arts class promotes fitness, discipline, improves focus and self-confidence. Classes are held every Tuesday and Thursday from 5:00 p.m. to 6:00 p.m. at Crabtree Gymnasium. The fee is a punch card system: \$15 for eight classes for city residents or \$25 for eight classes for non-city residents. Instructor Marilyn Del Gaizo is a third degree black belt in Taekwondo and has been instructing both youth and adults for more than 20 years. Contact Marilyn at 843-918-2355 for more information.

Base Recreation Center
Classes and Activities
Call 843-918-2380 for information

The Base Recreation Center is again open Monday through Friday, from 8:30 a.m. until 9:00 p.m. The center is available on the weekend by reservation.

Free Wi-Fi... Free Wi-Fi services are available Monday through Friday from 8:30 a.m. until 9:00 p.m. Just bring your own laptop, enjoy some coffee, catch up on the world news and surf the web.

Bridge... Bridge is a trick-taking game using a standard 52-card deck. It is played by four players in two competing partnerships, with partners sitting opposite each other. Millions of people play bridge worldwide in clubs, tournaments, online and with friends at home, making it one of the most popular card games, particularly among seniors. Join us for bridge from 9:00 a.m. to 1:00 p.m., each Monday.

Hand and Foot... This game is a variation of Canasta. The Hand and Foot card game is played with four to six standard decks, and was ideally designed for two players, but four to six players can also play in teams of two or three. Usually, the number of decks is one more than the number of players, but it is not standard. This game is widely famous in North America. Each player is dealt two hands; the first set of cards is Hand, while the other set is Foot. The game will be played each Friday from 1:00 to 5:00 p.m., beginning February 17.

Senior Dances... This popular dance series at the Base Recreation Center Ballroom has become a year-round event. Doors open at 6:30 p.m. Tickets are just \$7 per person and may be purchased at the door. All dances are from 7:00 to 10:00 p.m. Please contact Rosalie at 570-881-0244 or rosaliejack1566@gmail.com for information or to reserve a table. This dance series is sponsored by the City of Myrtle Beach

- **Saturday, March 25, 2017**
- **Saturday, April 1, 2017**
- **Saturday, May 20, 2017**

- Saturday, June 3, 2017
- Friday, June 16, 2017 (City-Sponsored)
- Saturday, June 24, 2017
- Friday, July 14, 2017 (City-Sponsored)
- Saturday, July 22, 2017
- Saturday, August 5, 2017
- Friday, August 18, 2017 (City-Sponsored)
- Saturday, August 26, 2017
- Friday, September 8, 2017 (City-Sponsored)
- Saturday, September 30, 2017
- Saturday, October 28, 2017
- Saturday, November 4, 2017
- Friday, November 17, 2017
- Saturday, December 2, 2017

Senior Movie Schedule... Enjoy a free movie for adults and seniors every Friday at 3:00 p.m. at the recreation center, located at 800 Gabreski Lane. Soft drinks and popcorn are available for \$1 each.

- **March 31 – *Ben-Hur* (PG-13), Jack Houston, Toby Kebbell**
- April 7 – *The Sea of Trees* (PG-13), Matthew McConaughey, Naomi Watts
- April 14 – *Independence Day: Resurgence* (PG-13), Liam Hemsworth, Jeff Goldblum
- April 21 – *Mr. Church* (PG-13), Eddie Murphy
- April 28 – *The Legend of Tarzan* (PG-13), Alexander Skarsgard, Sam Jackson

If you are interested in teaching a class or workshop, or want to lead a group at the Base Recreation Center, call 843-918-2380. Program suggestions are welcome!

Absolute Beginners' Dance Lessons... This is an easy way to learn some simple dance moves. You can learn low impact line dance steps. Variations of the Electric Slide, Cupid Shuffle and Mambo Number Five will be linked into various dance moves. The class is held each Tuesday at 5:30 p.m. An additional advanced beginner class is held each Tuesday at 5:30 p.m. This class requires some experience. The fee for one class is \$3. You can take both classes for \$5.

Ballroom Dance Lessons... Grab a dance partner and get ready to Ballroom dance. The core elements of ballroom dancing are control and cohesiveness. You can learn both techniques each Wednesday from 6:30 to 7:30 p.m., at the Base Recreation Center. Practice is held from 7:30 to 8:00 p.m. The cost is \$10 per class which includes the practice session. For more information, call Sandra Lucas-Hyde at 843-602-7197 or visit <http://www.themusicmachine.dance/>.

Novice Dance Lessons... This class requires some dance experience. With that experience, you can enhance your moves in record time. You will have the opportunity to combine your experience with various line dance steps. The class is held at 6:30 p.m., each Tuesday.

Shag Dance Lessons... Learn the basic steps for South Carolina's official dance, The Shag. The Shag is a type of swing dance that developed during the 1930's and 40's combining nimble footwork with upbeat rhythm and blues known as beach music. You can learn the various Shag steps each Wednesday at the Base Recreation Center. Sandra Lucas-Hyde teaches a Shag class from 5:00 to 6:00 p.m. Shag practice is held 6:00 to 6:30 p.m. The cost is \$10 per class which includes the practice session. For more information, call Hyde at 843-602-7197 or visit <http://www.themusicmachine.dance/>.

Senior Bingo at the Base Recreation Center... Come play every Wednesday and Friday from 10:00 a.m. to 12:00 p.m. at Base Recreation Center. There's no charge for bingo, but please bring a prize for the prize table!

Gametime: Come enjoy free Pinochle, Chess and Checkers... In addition to Bridge and Hand and Foot, listed above, Pinochle is played Tuesday nights, starting at 6:00 p.m., at the Base Recreation Center. Or try your hand at Chess and Checkers, Mondays at 6:00 p.m.

Improved Beginners' Classes... This class is designed for dancers who have mastered the simple dance moves from the low impact line dance steps. The class is held at 2:30 p.m., each Wednesday. Each class is \$3. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Intermediate Dance Classes... This class allows you to show off your moves you learned in Beginners' and Improved Beginners' classes. You will learn how to incorporate various line dance moves and add some additional complex routines. Each class is \$3. You can pair the Improved Beginners' and Intermediate Classes for \$5. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Line Dance Class... Learn the latest line dance moves. Beginners and experienced dancers are welcome. Classes are held from 10:00 a.m., to 12:00 p.m., each Thursday. Each class is \$4 for city residents/ Non-city residents is \$10 per class.

Line Dance Lessons... The Base Recreation Center now offers line dancing classes on Wednesdays. The beginner's class starts at 2:30 p.m. The intermediate class begins at 3:30 p.m. You can learn all the latest party dances. Each class is \$3 per person or \$5 for two classes. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Low-Impact Line Dance Classes... The Base Recreation Center offers the new, Low Impact Line Dance Classes on Tuesdays, beginning August 2. The beginners' class starts at 5:30 p.m. The intermediate class begins at 6:30 p.m. Each class is \$3 per person. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Low-Impact Line Dance Classes for seniors... Seniors can learn the latest line dance routines at the Base Recreation Center. The class is held each Tuesday at 5:30 and 6:30. Additionally, a beginner class is held each Wednesday at 2:30 p.m. The intermediate class begins at 3:30 p.m. Each class is \$3 per person. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Partners Choreographed Class... Seniors can learn the latest moves with a dance partner at the Base Recreation Center. The class is held from 6:30 to 8:30 p.m., each Wednesday evening. Each class is \$3 per person. For more information contact Rosalie at rosaliejack1566@gmail.com or call 570-881-0244.

Open Studio with Jackie Stacharowski... This "open" class is being held Thursdays from 9:00 a.m. to 12:00 p.m. Available options for artwork projects are oil paints, acrylics, watercolors and color pencils. The cost is \$5 per visit for city residents and \$10 per visit for non-city residents.

Myrtle Beach Table Tennis Club... If you enjoy the game of table tennis, come join this competitive group! All are welcome to play. The club meets from 6:00 to 9:00 p.m. on Mondays and Thursdays, with free lessons offered from 6:00 to 7:00 p.m. on Wednesday evenings. It costs just \$2 to play! Annual memberships are \$10 per year for city residents and \$20 for non-city residents.

Quilting... Come join the Grand Strand Quilters from 10:00 a.m. to 1:30 p.m. on Thursdays at Base Recreation Center. Learn how to make your very own quilt or show off your skills to others. All are welcome to join this fun and exciting group. It costs just \$12 per year to join the Quilt Guild, and annual memberships are available for \$10 per year for city residents (\$20 for non-city residents).

Guitar Lessons... Base Recreation Center offers lessons with Steve Marino every Wednesday and Thursday and Friday by appointment. Steve offers quick and easy instructions for the beginner

student and theory and technique for the developed guitarist. Classes are in one hour sessions beginning at 4:30 p.m. to 8:30 p.m. Students must have their own guitar and call to schedule a time, with a maximum of four students per time slot. Fees are \$5 a class for residents; \$10 a class for non-city residents.

**Mary C. Canty Recreation Center
Classes and Activities
Call 843-918-1465 for information**

Senior Bingo... Have fun and win a prize playing Senior Bingo at Mary C. Canty Recreation Center from 10:00 a.m. to 12:00 p.m., every Tuesday through April 25. Participants are asked to bring a \$1 gift for the prize table. Call 843-918-1465 for more information.

Circuits in the City... This high-intensity circuit training class makes you sweat and pushes you to new limits! Classes consist of weights, plyometric, cardio and resistance training. Classes meet 1:00 to 1:45 p.m., every Tuesday and Thursday, at Mary C. Canty Recreation Center. Drop-In Fees are \$4 per city resident and \$10 per non-city resident. Punch Cards may also be used, with a fee of \$28 for city residents and \$50 for non-city residents. For more information, contact Jonah Lanham at 843-918-1469 or janham@cityofmyrtlebeach.com.

League of Champions... This basketball program is offered to individuals with disabilities and special needs. The league is designed for young men and women ages 13 and up. The program focuses on participation, learning and having fun. Classes meet 6:00 to 7:00 p.m., every Wednesday. The program runs through May 10, 2017. Fees are \$8 City Resident/ \$15 Non City Resident. For more information, contact Jonah Lanham at 843-918-1469 or janham@cityofmyrtlebeach.com.

Ship into Shape... This high-intensity running class will teach participants how to run properly. The program will consist of plyometric drills, cardio equipment workouts and running. Classes meet 1:00 to 1:45 p.m., every Monday and Wednesday, at Mary C. Canty Recreation Center. Drop-In Fees are \$4 for city residents and \$10 for non-city residents. Punch Cards may also be used, with a \$28 fee for city residents and a \$50 fee for non-city residents. For more information, contact Jonah Lanham at 843-918-1469 or janham@cityofmyrtlebeach.com.

POOL SCHEDULE – Mary C. Canty Recreation Center

LAP SWIM SCHEDULE

Monday through Thursday 8:00 a.m. to 2:00 p.m. and 4:00 to 7:30 p.m.
Friday 8:00 a.m. to 2:00 p.m. and 3:00 p.m. to 6:15 p.m.
Saturday 1:00 to 4:30 p.m.
Sunday 1:00 to 5:30 p.m.

ADULT EXERCISE

Monday through Friday (May use any open lane during regular lap hours.)
Saturday 1:00 to 4:30 p.m.
Sunday 1:00 to 5:30 p.m.

Open Swim

Monday through Thursday (May use any open lane during regular lap hours.)
Friday 3:00 to 4:00 p.m.
Saturday 1:00 to 4:30 p.m.
Sunday 1:00 to 5:30 p.m.

On Saturday and Sunday, the pool may be used for pool rentals. Lane usage adjusted accordingly.

AQUA FITNESS CLASSES

Water exercise is an excellent way to a fit and healthy body! The added resistance of the water offers the opportunity to improve flexibility and muscle strength without joint stress. Our certified water exercise instructors will take you through exercise in the water often using buoyant equipment for balance, stabilization and added resistance. Whatever an individual's fitness goals or therapeutic needs, they can be met with the right mix of classes. *All classes are taught by Aquatic Instructors certified through the Aquatic Exercise Association.*

Aqua Power: This class is a great, low-impact way to focus on improving your muscle tone and cardio. Class is held in the shallow end of the pool, so no swimming skills are necessary. This class is designed for all levels. Class meets Monday, Wednesday, and Friday from 12:00 – 12:45 p.m. Water shoes strongly recommended, but not required. Drop-in fees are \$5 for city residents and \$10 for non-city residents or an 18-visit punch card is \$32 for city residents and \$55 for non-residents.

Jivin' Joints: This water exercise class is for individual with a form of arthritis or related condition. It offers a gentle range of motion and endurance activities under the guidance of an Arthritis Foundation-trained instructor. The class is suitable for "pre-hab" or "re-hab" of hips and knees. This is a beginner's class with a slower pace. Class meets Mondays and Wednesdays from 10:15 – 11:00 a.m. Drop-in fees are \$5 for city residents, \$10 for non-city residents or get an 18-visit punch card for \$32 for city residents or \$55 for non-city residents.

WEEKEND OPEN BASKETBALL GYM SCHEDULE – Mary C. Cnty Recreation Center

Saturday 10:00 a.m. to 2:00 p.m.; all youth ages 12 and under

Saturday 2:00 to 5:00 p.m.; ages 13 and older

Sunday 1:00 to 3:00 p.m.; ages 12 and under

Sunday 3:00 to 6:00 p.m.; ages 13 and older

Adult Martial Arts

7:30 to 8:30 p.m., each Tuesday and Thursday

Crabtree Memorial Gymnasium

Want to learn a martial art for fitness, self-defense or self-confidence? The Martial Arts are a great way to practice strength and endurance. The new program will be held each Tuesday and Thursday evening from 7:30 to 8:30. The city resident fee is \$28; the non-city resident fee is \$50 for 10 sessions. Call 843-918-2355 for more information.

Crabtree Memorial Gymnasium

Classes and Activities

Call 843-918-2355 for information

Crabtree Memorial Gymnasium offers classes and activities throughout the year and is located at 1004 Crabtree Lane. Call 843-918-2355 for more information.

Crabtree Memorial Gymnasium Facility Hours

6:00 a.m. to 9:00 p.m., Monday through Thursday

6:00 a.m. to 6:30 p.m., Friday

8:30 a.m. to 5:00 p.m., Saturday

Active Aging Fitness Class: This class is designed for our senior population, combining strength, balance and cardio elements to keep you fit.

9:00 to 10:00 a.m., every Tuesday and Thursday
\$2 per person, per class for city residents
\$5 per person, per class for non-city residents
24-visit punch card - \$28 for city residents or \$50 for non-city residents

Arm-ageddon: Strengthen your upper body with the Arm-ageddon class at Crabtree Memorial Gymnasium every Monday and Wednesday at 5:30 p.m. The 45-minute class focuses on upper body training using weights, bands and whatever your instructor Shawn can find. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

Adult Volleyball: Come join us for Senior Volleyball on Monday and Wednesday afternoons in our basketball gym.

12:00 to 4:00 p.m., every Monday, Wednesday and Friday
Walk-in-fee: \$3 for Seniors (55 and older) and \$5 for Adults (ages 18 to 54)
Free for members

A.M. Body Blast: This is a total body exercise program to build strength and endurance, geared to all ages and fitness levels.

10:15 to 11:00 a.m., every Monday and Wednesday
\$4 per person, per class for city residents
\$10 per person, per class for non-city residents
24-visit punch card – \$28 for city residents or \$50 for non-city residents

Beginners' Yoga: Is a full body fitness program in a very casual setting that moves slowly through a series of yoga poses to develop strength, flexibility and balance. Yoga is for everyone. You don't have to be a certain body type or super flexible. Bring your own mat, thick towel and water bottle.

10:15 to 11:00 a.m., every Tuesday, Thursday and Friday
\$4 per person, per class for city residents
\$10 per person, per class for non-city residents
24-visit punch card – \$28 for city residents or \$50 for non-city residents

Cardio Circuits: This is a great boredom buster. It offers more cardio benefits, and it will help you burn 30 percent more calories. Sculpt every muscle and blast fat with this step-by-step workout. This class is offered each Monday and Wednesday at 12:00 p.m. and each Tuesday and Thursday from 8:00 to 8:30 a.m. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

Cycling Classes: Challenge and improve your endurance, strength and speed during cycling class! Experience a ride full of hills, sprints and endurance intervals while riding to energizing music. Cycling will enhance your speed, strength and stamina, improve your overall physical health and increase your caloric burn. Bring a towel and water because you will sweat.

7:00 to 7:45 a.m., every Tuesday, Wednesday and Thursday
5:30 to 6:15 p.m., every Tuesday and Thursday
9:00 to 9:45 a.m., every Saturday

Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-residents
24-visit punch card available: \$28 for city residents or \$50 for non-city residents

Cardio Interval Kickboxing: This cardio class includes kickboxing moves in intervals. No hard combos or bags needed. Just moves that keep your heart rate up! Plan on jumping jacks, pushups,

and light hand weights getting thrown into the mix. You will have an endurance loving full body challenge. Come have fun from 5:30 to 6:15 p.m., each Monday and Wednesday. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

Express Cardio: Get your heart pumping with Express Cardio. This 30-minute class focuses on building strength and helping with weight loss over time. The class is Tuesday and Thursday from 8:00 to 8:30 a.m. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

Full Body Workout Fitness: Experience a full body workout utilizing all of the major muscle groups, with emphasis on stretching for both flexibility and balance. The class will allow you to use a variety of equipment; including weights, BOSU balls, resistance bands and more. This workout class is in a group setting to promote camaraderie and social support.

9:00 to 10:00 a.m., every Monday, Wednesday and Friday
\$4 per person, per class for city residents
\$10 per person, per class for non-city residents
24-visit punch card – \$28 for city residents or \$50 for non-city residents

Fusion Movement: Enjoy mobility exercises that enables full body strength. This class will teach you how to find full use of flexion and extension of muscles throughout the body. The class is each Monday from 9:00 to 10:00 a.m. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

Gentle Yoga: Take this class as you transition into from Intro to Yoga to Hatha Yoga. This class will progressively include more floor work and focuses on alignment and form in specific yoga poses. You will also learn how to properly do and correct your posture.

11:30 a.m. to 12:30 p.m., every Monday and Wednesday, with Gail
6:30 to 7:15 p.m., every Monday and Wednesday, with Gail

H.E.C.T.I.C. (High Energy Circuits Tabatas Isometrics Core): This is an intermediate to advanced class which includes high intensity interval training with muscle and cardiovascular conditioning. The class uses mostly body weight and dumbbells for resistance, but other fitness equipment may be used. Bring a mat and bring WATER. Come prepared to work hard and be pushed out of your comfort zone! Come join the ranks, from 4:15 to 5:00 p.m., each Monday and Wednesday at Crabtree. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. A 24-visit punch card is available: \$28 for city residents or \$50 for non-city residents. Call 843-918-2355 for more.

On The Ball: This class uses an exercise ball to help maintain correct posture to target all muscle groups. The class is offered 5:30 to 6:15 p.m., each Monday and Wednesday. Fees: \$4 per person, per class for city residents; \$10 per person, per class for non-city residents. 24-visit punch card available: \$28 for city residents or \$50 for non-city residents

Muscle Pump: This is a great full body workout using dumbbells, bands and body weight to define and sculpt your muscles. Build strength and muscle, helping you burn more calories during the day.

12:00 to 12:45 p.m., every Tuesday and Thursday
5:30 to 6:15 p.m., every Tuesday and Thursday
\$4 per person, per class for city residents
\$10 per person, per class for non-city residents
24-visit punch card – \$28 for city residents or \$50 for non-city residents

Super Crunch: This class an intense core workout set to upbeat music. The workout is designed to help you strengthen your core and sculpt your body. All fitness levels are welcomed. The class is from 4:15 to 5:00 p.m., each Tuesday and Thursday.

Lean and Mean: This is a 45 minute class that includes strength training and cardiovascular conditioning. It will be intense from start to finish. This class supports muscle toning, fat loss, endurance and abdominal training. Bring water, a yoga mat, and bring your best! Classes are every Tuesday and Thursdays from 6:30 to 7:15 p.m. Call 843-918-2359 for more information.

Pickleball: Experience the fastest growing sport in the USA! This game combines tennis and badminton for a game that is high on fun and fitness.

12:00 to 4:00 p.m., every Monday and Wednesday
6:00 to 8:00 p.m., every Tuesday and Thursday
Walk-in-fee: \$3 for Seniors (55 and older) and \$5 for Adults (ages 18 to 54)
Free for members

10:00 a.m. to 1:00 p.m., every Tuesday, Thursday and Friday
Walk-in-fee: \$3 for Seniors (55 and older) and \$5 for Adults (ages 18 to 54)

Zumba: Using Latin and World music, dance your way to a fitter body. With interval training sessions you tone and sculpt the body while burning fat; great for building a strong core. No dance experience needed, just bring a smile!

10:15 to 11:00 a.m., every Monday and Wednesday
9:00 to 9:45 a.m., every Thursday
6:15 to 6:45 p.m., every Tuesday and Thursday
8:45 to 9:30 a.m., every Saturday
\$4 per person, per class for city residents
\$10 per person, per class for non-city residents
24-visit punch card – \$28 for city residents or \$50 for non-city residents

GYM SCHEDULE – Crabtree Memorial Gym

Open Play Basketball

Monday, Wednesday and Friday, 8:00 to 10:00 a.m.
Tuesday and Thursday, 12:00 to 4:00
Saturday, 1:00 to 4:30 p.m.

Open Gym

Monday through Friday, 7:00 a.m. to 8:00 a.m.
Tuesday, 4:00 to 4:45 p.m. and 7:00 to 8:45 p.m.
Monday and Wednesday, 4:00 to 8:45 p.m.
Thursday, 7:00 to 8:45
Friday, 4:00 to 6:15 p.m.

The Miracle League Spring 2017 Schedule James C. Benton Miracle League Field Miracle League Field, 33rd Avenue North

The Grand Strand Miracle League gives children with mental and physical disabilities the opportunity to play baseball, golf and soccer. They use a specialized field that's ideal for wheelchairs and walkers, and volunteers serve as "buddies" to help the players with each

game. Everyone plays, everyone hits, everyone crosses home plate, and everyone wins! Participate in the fun, play alongside local celebrities and have lunch to show your support. For more information, contact Isabel at 843-448-7712 or visit www.gsmiracleleagues.com.

Baseball League

- 6:00 p.m., Friday, March 31, Miracle League Field
- 12:00 to 8:00 p.m., Tuesday, April 4, Ben & Jerry's Free Cone Day
- 10:00 a.m., Saturday, April 8, Miracle League Field D
- 6:00 p.m., Friday, April 21, Miracle League Field
- 10:00 a.m., Saturday, April 29, Miracle League Field D
- 10:00 a.m., Saturday, May 6, Miracle League Field
- 10:00 a.m., Saturday, May 13, Miracle League Field
- 1:30 p.m., Friday, June 2, Miracle League Field

Soccer League

- 6:00 to 7:00 p.m., Wednesday, April 12, Miracle League Field
- 6:00 to 7:00 p.m., Wednesday, April 19, Miracle League Field

Myrtle Beach Marlins Swim Team

Year-round recreational swimming

Grand Strand Recreational Swim League

The Myrtle Beach Marlins Swim Team is a great way to continue to improve your swimming skills. The Marlins are a year-round recreational swim team focusing on the fundamentals of swimming, training and building friendships, all while having fun. Swimmers are placed into groups based on ability, age and practice attendance. A variety of practice times will be available to meet your schedule. The Marlins compete in the Grand Strand Recreational Swim League (GSSL). Fees range from \$30 to \$60 per month, plus an annual registration fee. *Please note that all swimmers pay annual registration fee of \$14 for city residents or \$25 for non-city residents.* For more information or questions regarding tryouts, please contact head coach Jeanne McDonald at 843-918-2279 or jmcdonald@cityofmyrtlebeach.com.

Groups and Practice Schedule...

Sea Monkeys

Fee: \$29 per month for city residents and \$50 per month for non-city residents

Schedule: Monday through Friday 3:30 to 4:15 p.m.

Saturday 9:30 to 10:30 a.m.

Clownfish

Fee: \$35 per month for city residents and \$60 per month for non-city residents

Schedule: Monday through Friday 3:30 to 4:30 p.m.

Saturday 9:30 to 10:30 a.m.

Piranhas

Fee: \$35 per month for city residents and \$60 per month for non-city residents

Schedule: Monday through Friday 4:30 to 5:30 p.m.

Saturday 9:30 to 10:30 a.m.

Barracudas

Fee: \$35 per month for city residents and \$60 per month for non-city residents

Schedule: Monday through Friday 4:30 to 5:30 pm

Saturday 9:30 to 10:30 a.m.

*All practices are held at Pepper Geddings Recreation Center

** Saturday practices will not be held on weekends that meets are scheduled.

Grab Bag—All Skill Levels... Tuesday and Thursday 7:30 to 8:30 p.m.

*For more information about Myrtle Beach and our recreational offerings,
visit <http://www.cityofmyrtlebeach.com/recreation.html>.*



Track Your Bus with Coast RTA's Ride Tracker APP!

Coast RTA's transit tracking tool provides passengers the ability to find their buses in real time. Coast RTA's Ride System's App integrates location, route and bus information with schedules aiding passengers in determining the most accurate of arrivals possible.

Coast RTA Ride Tracker App users can opt to receive push notifications of bus arrival times, emergency delays, call in text or track buses in real time.

Coast RTA's Ride Tracker APP accesses accurate location data via a GPS device mounted inside each Coast RTA bus. Passengers can access the Next Bus data through the Coast RTA App.

Tracker Map

Passengers can follow all active buses in the Coast RTA service area by using the Shuttle Tracker. One may view ALL or only ACTIVE buses within the Coast RTA system using the tracking map.

Text Messages

Passengers may opt to receive SMS text messages** using the text stop feature of the Coast RTA APP.

1. Passengers will find their stop ID number at RideCoastRTA.com under schedules or on the back side of this map for select routes.
2. Dial 41411, then text NXTBUS Stop ID#. Text the word NXTBUS a space and the actual bus stop ID number. NXTBUS 21.
3. Passengers will receive a return text with the estimated arrival time.

**Texting and data rates may apply. Check with your wireless carrier for fees associated with this service.

For more information about the Coast RTA APP or view a short tutorial, visit RideCoastRTA.com

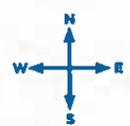


DOWNLOAD THE FREE COAST RTA APP TO STAY CONNECTED!
COASTRTARIDETRACKER.COM



SEARCH COAST RTA IN THE APPLE STORE OR GOOGLE PLAY STORE

Features include push notifications, schedules, bus tracking in real time and text options.



- SEE INSET for closer view
- ROUTE 1** For more information on this route, visit RideCoastRTA.com
 - ROUTE 2** For more information on this route, visit RideCoastRTA.com
 - ROUTE 3** For more information on this route, visit RideCoastRTA.com
 - ROUTE 7**
 - ROUTE 7X** LIMITED TURNS DURING THE DAY. FOR MORE INFORMATION ON THIS ROUTE, VISIT RideCoastRTA.com
 - ROUTE 10**
 - ROUTE 15N** (Mondays - Saturdays 7:00 am - 7:25 pm) (Sundays) 7:30 am - 7:55 pm
 - ROUTE 15S** (Saturdays - Sundays 7:30 am - 7:55 pm) (Mondays - Saturdays) 7:30 am - 7:55 pm
 - ROUTE 16** For more information on this route, visit RideCoastRTA.com
 - ROUTE 16X** (Mondays - Saturdays) 7:30 am - 7:55 pm (Sundays) 7:30 am - 7:55 pm For more information on this route, visit RideCoastRTA.com

ROUTE 16 service to Surfside Beach, Murrell's Inlet, and Georgetown
ROUTE 16X service to Georgetown & Andrews



Coast RTA Route & Scheduling Information

Waiting for the Bus

When waiting for the bus, stand along the Coast RTA designated route or by the bus stop, if available, and be certain the driver can see you. The bus may stop yards away from the designated stop in response to traffic and pedestrians. Be certain to allow adequate time to arrive at your destination, especially when traveling to the airport and during peak tourist season.

Boarding and Riding the Bus

Please have the exact fare or ticket/fare card ready before boarding the bus. Bus drivers do not carry cash and cannot make change. However, the farebox can issue a change card, which stores the amount for use on your next trip with Coast RTA.

Please leave front seats available for elderly and disabled passengers. After paying your fare, take your seat as quickly as possible to allow the driver to stay on schedule. When boarding, standing and walking on the bus, hold on to the grab rails or seat backs. Do not move around on a moving bus. Wait until the bus has stopped completely before moving out of your seat.

Please refrain from eating, drinking, smoking, vaping (using) profanity, or listening to electronic equipment without earphones/earbuds on the bus. Use care and courtesy when carrying items on the bus. Help keep the bus clean and take your trash with you!

Exiting the Bus

When you wish to exit the bus, please give your driver adequate notice. Pull the bell cord or press the window strips (wherever is available) at least one block prior to your stop. After you exit, NEVER cross the street in front of the bus. Stand away from the bus and wait until it has pulled away before attempting to cross the street.

Carry-On Items

Coast RTA drivers will assist with luggage and carry on items, if needed. Neither Coast RTA nor its drivers are responsible for any damages or mishandling of any items.

Bike Racks

Coast RTA bike racks are available at no extra charge on buses and trolleys. If the bike rack is full, customers will have to wait for the next bus. Coast RTA is not equipped to transport motorized bikes or scooters. Bicycles CANNOT be stored inside the bus during travel. Coast RTA passengers must secure their own bikes in the racks. Coast RTA is not responsible for damages to or caused by bikes on board.

Coast RTA Customer Service Information

Customer Service: 843-486-0865
(Translation services for transportation questions are available by calling this number.)
Special Needs Toll Free: 1-877-225-8337 (voice) and 1-877-889-8337 (TTY)

RideCoastRTA.com

Coast RTA provides daily bus service with the exception of the following national holidays: New Year's Day, Thanksgiving Day and Christmas Day.

Ready, your ride. Thank you for choosing Coast RTA!

MONDAY - SUNDAY

MONDAY - SUNDAY

MONDAY - SUNDAY

ROUTE 16N

OUTBOUND - North 7:00 am - 7:25 pm	TEXT ID #
10th Avenue @ Ivory Wilson Transit Station	1
Kings Hwy 17 @ 14th Avenue North (Library)	102
Kings Hwy 17 @ 17th Avenue North (Piggly Wiggly)	103
Kings Hwy 17 @ 21st Avenue North	104
Kings Hwy 17 @ 30th Avenue North	159
Kings Hwy 17 @ 61st Avenue North	663
Kings Hwy 17 @ 79th Avenue North	363
Grand Strand Medical Center	126

ROUTE 16S

INBOUND - SOUTH 7:30 am - 7:55 pm	TEXT ID #
Grand Strand Medical Center	126
Kings Hwy 17 @ 14th Avenue North (Taco Bell)	149
10th Avenue N @ Ivory Wilson Transit Station	1

ROUTE 10

OUTBOUND - 8:00 am - 7:33 pm	TEXT ID #
10th Avenue N @ Ivory Wilson Transit Station	1
Oak Street @ Chamber of Commerce	2
Myrtle Beach Convention Center @ RTA Stop #23, 21st Ave North	3
21st Avenue North @ Horry County Health Dept/Pea Dee Speech	107
21st Avenue North between Stadium & Courtyard Market	96
Broadway At The Beach @ Guest Services	7
Seaboard Street @ Sams Club/Sonic	333
Seaboard Street @ Home Depot/Walmart	11
Seaboard Street @ Coastal Grand Mall	12

ROUTE 10

INBOUND - 8:34 am - 7:56 pm	TEXT ID #
Pine Island and Stuart Square	326
Seaboard Street @ Mr. Joe White Ave.	10
Broadway At The Beach @ Visitors Center	7
21st Avenue North between Stadium & Courtyard Market	96
Myrtle Beach Convention Center	300
21st Ave North	332
Oak Street @ Chamber of Commerce	332
10th Avenue N @ Ivory Wilson Transit Station	1

**VISIT RideCoastRTA.com
FOR MORE INFORMATION
ON THESE ROUTES:
1, 2, 3, 16, and 16x!**

ROUTE 7 Myrtle Beach-Conway

OUTBOUND 7:00 am - 7:56 pm	TEXT ID #
10th Avenue North @ Ivory Wilson Transit Station	1
7th Avenue North @ Greyhound Bus Station	236
Waccamaw Blvd @ entrance to Waccamaw Bowling Center	297
Factory Stores Blvd @ Levi's	48
Dakheart Street @ Midway (Dile's)	49
Myrtle Ridge Drive @ Middle Ridge Ave (CVS/Walmart Entrance)	242
Cypress Circle @ Conway Medical Center	53
Technology Blvd @ AVX Tech Building	385
Hwy 544 @ Founders Drive	378
Hwy 544 @ before West Cox Ferry Road (Crossroads Apartments)	176
Hwy 501 @ Causey Rd	391
Coast RTA Terminal Conway	20

ROUTE 7 Conway - Myrtle Beach

INBOUND 6:00 am - 6:56 pm	TEXT ID #
Coast RTA Terminal Conway	20
Amber Ln / Causey Rd	390
University Blvd @ between Chickadee Drive West & Chickadee Drive East	61
Technology Blvd @ AVX Tech Building	246
Technology Blvd @ Employment Services	62
Technology Blvd @ Singleton Ridge Road (Jiffy Lube)	389
Cypress Circle @ Conway Medical Center	53
Myrtle Ridge Drive @ Middle Ridge Ave (CVS/Walmart Entrance)	66
Dakheart Street @ Midway (Dile's)	249
Factory Stores Blvd @ Levi's	48
Hwy 501 @ after Seaboard Street (Detrick's Car Wash)	250
10th Avenue North @ Ivory Wilson Transit Station	1

ROUTE 7X

INBOUND	
Conway Terminal	20
Hwy 501 @ University Plaza Dr (MMTC)	72
Hwy 501 Carolina Forest	70
Hwy 501 (Across Detrick's Car Wash)	250
Hwy 501 and 3rd Ave S	74

ROUTE 7X

OUTBOUND	
Hwy 501 @ University Plaza Dr (MMTC)	71
Hwy 501 Walgreen's	73
Hwy 501 at Detrick's Car Wash	250
Hwy 501 and 3rd Ave S	74
Cannon Rd	63
10th Avenue N @ Ivory Wilson Transit Station	1

MONDAY - SUNDAY

MONDAY - SUNDAY

MONDAY - SUNDAY

ROUTE 15S

OUTBOUND - North 7:00 am - 7:27 pm	TEXT ID #
10th Avenue N @ Ivory Wilson Transit Station	1
Kings Hwy 17 @ between 6th & 5th Ave N (US Postal Service)	150
Kings Hwy 17 @ 9th Avenue South	153
Kings Hwy 17 @ 19th Avenue South (Tennis Courts)	168
Myrtle Beach International Airport	13
Pampas Dr @ HGTC	402
Phyllis Blvd near Barnes and Nobles	162

ROUTE 15S

INBOUND - North 7:29 am - 7:58 pm	TEXT ID #
Phyllis Blvd near Barnes and Nobles	162
Thunderbolt Street @ VA Clinic	163
Pampas Dr @ HGTC	402
Myrtle Beach International Airport	13
Kings Hwy 17 @ Yalson Drive (Family Kingdom)	171
Kings Hwy 17 @ 3rd Avenue South	276
Kings Hwy 17 @ between 5th & 6th Avenue North (US Postal Service)	277
10th Avenue N @ Ivory Wilson Transit Station	1

ROUTE 16

10th Avenue N @ Ivory Wilson Transit Station	
Surfside Beach	279
Inlet Square Mall	175
Tidelands Waccamaw Hospital	282
Murrells Inlet	278
Sandy Island Landing	177
Pawleys Island / Waverly Rd	195
Tidelands Georgetown Hospital	181
Georgetown Transfer Station	182

FOR MORE INFORMATION ON THIS ROUTE, VISIT RideCoastRTA.com

BUS FARES

Routes 1, 2, 3, 7, 7X, 10, 15M, 15S and 16x

Students	\$1.25
Adults	\$1.50
Seniors (55+)/Disabled/Veterans/Med. care	\$1.75
Transfers (All routes except 16x)	\$2.25
Route 16x	\$2.00
Route 21/Entertainment Shuttle (Seasonal)	FREE

Value (\$10 and \$25 value) passes may be purchased at the Coast RTA Terminal, 3418 Third Avenue, Conway, HGTC, Conway Campus Bookstore, HGTC-Grand Strand Campus Bookstore, Piggly Wiggly locations in Andrews, Georgetown and Surfside Beach.

*For complete route schedule and fare pricing, visit RideCoastRTA.com, download the Coast RTA APP, or call Customer Service at 843.486.0865 during regular business hours.

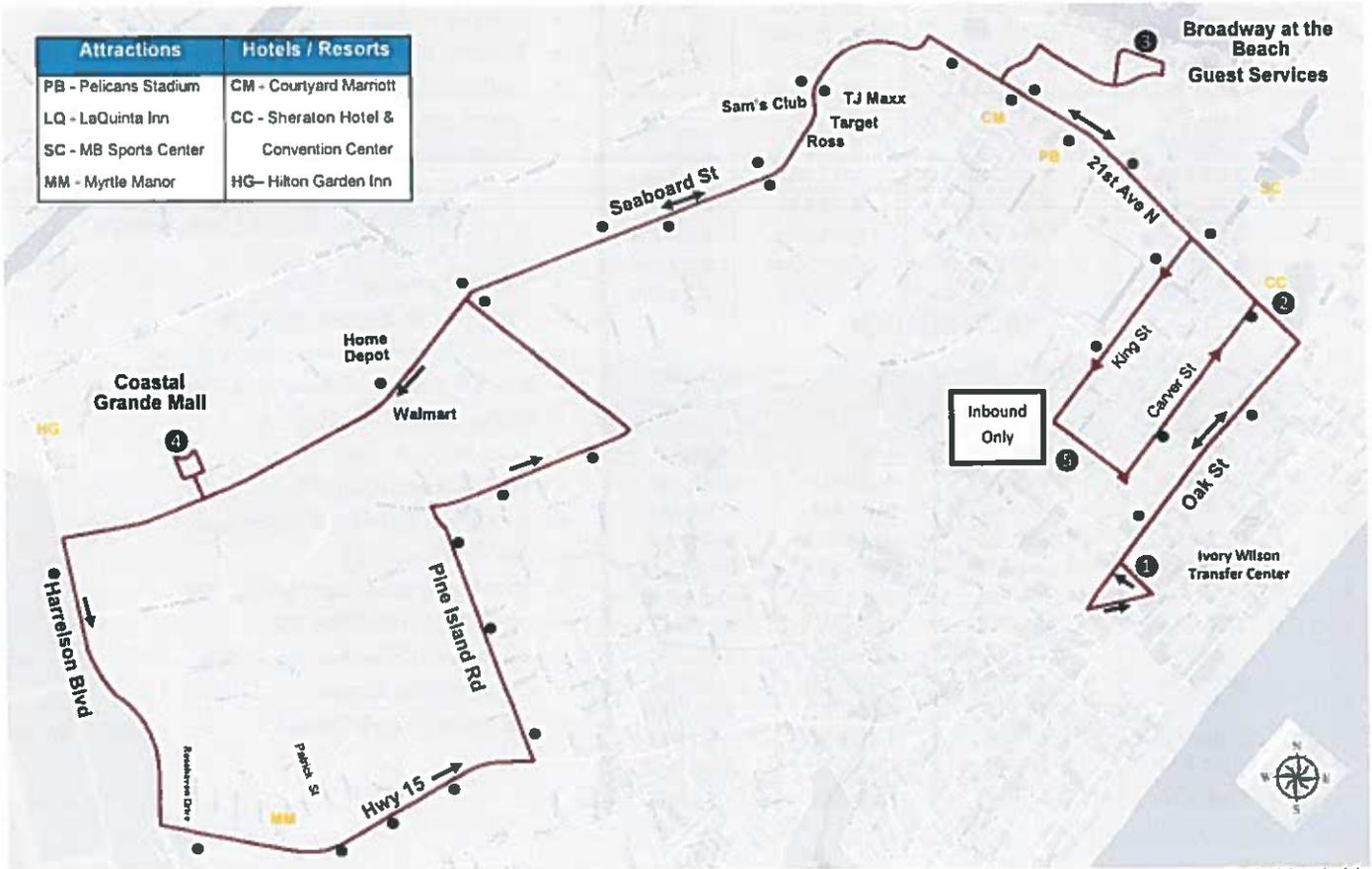
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ROUTE 10 Myrtle Beach Local



Operating daily from 8:00AM - 8:00PM

Questions? Call Customer Service @ 843-488-



1418 Third Avenue, Conway, SC 29526 • 843-488-0865 • RideCoastRTA.com

See back for schedule.

Rev. 04 2018

10 OUTBOUND

10th Ave N. Ivory Wilson Transfer Center ①	21st Ave N. Sheraton Convention Center ②	Broadway at the Beach Guest Services ③	Coastal Grande Mall Cinemark ④
8:00 AM	8:04 AM	8:11 AM	8:24 AM
9:00 AM	9:04 AM	9:11 AM	9:24 AM
10:00 AM	10:04 AM	10:11 AM	10:24 AM
11:00 AM	11:04 AM	11:11 AM	11:24 AM
12:00 PM	12:04 PM	12:11 PM	12:24 PM
1:00 PM	1:04 PM	1:11 PM	1:24 PM
2:00 PM	2:04 PM	2:11 PM	2:24 PM
3:00 PM	3:04 PM	3:11 PM	3:24 PM
4:00 PM	4:04 PM	4:11 PM	4:24 PM
5:00 PM	5:04 PM	5:11 PM	5:24 PM
6:00 PM	6:04 PM	6:11 PM	6:24 PM
7:00 PM	7:04 PM	7:11 PM	7:24 PM

10 INBOUND

Coastal Grande Mall Cinemark ④	Broadway at the Beach Guest Services ③	Spivey Ave Dunbar St. ⑤	10th Ave N. Ivory Wilson Transfer Center ①
8:24 AM	8:44 AM	8:49 AM	8:56 AM
9:24 AM	9:44 AM	9:49 AM	9:56 AM
10:24 AM	10:44 AM	10:49 AM	10:56 AM
11:24 AM	11:44 AM	11:49 AM	11:56 AM
12:24 PM	12:44 PM	12:49 PM	12:56 PM
1:24 PM	1:44 PM	1:49 PM	1:56 PM
2:24 PM	2:44 PM	2:49 PM	2:56 PM
3:24 PM	3:44 PM	3:49 PM	3:56 PM
4:24 PM	4:44 PM	4:49 PM	4:56 PM
5:24 PM	5:44 PM	5:49 PM	5:56 PM
6:24 PM	6:44 PM	6:49 PM	6:56 PM
7:24 PM	7:44 PM	7:49 PM	7:56 PM

10 Outbound Stops / Text Codes:

- Myrtle Beach Chamber of Commerce / 2
- Myrtle Beach Convention Center / 3
- Horry County Health Department / 307
- South Carolina DMV / 4
- Grand Strand Senior Center / 5
- Broadway at the Beach Guest Services / 7
- Seaboard St. (Planet Fitness) / 94
- Home Depot / Wal-Mart / 11
- Coastal Grande Mall (Cinemark) / 12

10 Inbound Stops / Text Codes:

- Coastal Grande Mall (Cinemark) / 12
- Hwy 15 and Patrick Street / 83
- Pine Island Rd. and Ramsey Dr. / 86
- Robert Grissom Pkwy and Racepath St. / 90
- Hwy 501 Across from Detrick's Car Wash / 91
- Seaboard St. at Toys R Us / 10
- Seaboard St. at Lowe's / 9
- 21st Ave N. at La Quinta / 8
- Broadway at the Beach Guest Services / 7
- Pelican's Stadium / 96
- Horry County Government Building / 310
- Spivey Ave at Futrell Park / 99
- Myrtle Beach Convention Center / 300
- Oak St. (Santee Cooper) / 312
- Ivory Wilson Transfer Center / 1