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#### **COMMENTS - PLANNING COMMISSION REVIEW**

 Comment: Proposed plan has excessive impervious surface. Better Site Design (BSD) should minimize the creation of new impervious cover and reduce a site's impact on the watershed. (UDO Section 5.10).

**Response:** The site's impervious cover is needed to provide the building and required parking areas. The Development Summary table also shows that the site still provides additional open space compared to the required 20% in the UDO.

2. **Comment:** Clarify if the outdoor patio is accounted for in parking calculations.

**Response:** Please see the revised plans for the updated Development Summary. It has been updated to show that the outdoor patio is included in the proposed structures and therefore included in the parking calculations.

3. Comment: Proposed parking provides 61 spaces plus 10 order waiting spaces for a total of 71 spaces. Per Buckwalter PUD, 12 spaces per 1,000 SF are required. Reduce the proposed parking by removing the removing the 14 perimeter parking spaces and incorporating this area into open space.

Response: The Culver's model is a made to order restaurant. With this, the drive through cannot operate similar to a typical drive through because the customers will order at the board, pay at the window, and then pull into an order waiting space for a couple minutes while their food is prepared and then brought to them. Therefore, the 10 order waiting spaces are not considered parking spaces for walk-in guests. These spaces are separated from the parking lot through the drive through and the island adjacent. Based on this, a walk-in customer would not be able to get to the order waiting spaces and they should not be counted as parking spaces. The parking spaces calculations have been updated based on building and patio area to show the requirement of 63 spaces compared to the 61 we have provided. To meet the 63 spaces required, customers can use to two parking spaces located in Innovation Drive directly adjacent to the building entrance.

#### **COMMENTS - PLANNING REVIEW**

 Comment: The dumpster's proposed location would impede the through access drive for adjacent commercial properties and would also require approval from the property owner for the use of the drive lane to access dumpster.

**Response:** Please see the updated Site Plan within the revised plans. Dumpster has been turned to face the drive through lanes. Dumpster pick up will be limited to after the property has closed and should not interfere with day-to-day operations.

 Comment: Relocate the dumpster. Orient the dumpster enclosure gates to face the interior of the lot. If the dumpster is relocated to the southeast corner of the property, employees can still access the dumpster by sidewalk from the service door without entering the parking lot.



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**Response:** Please see the updated Site Plan within the revised plans. Dumpster has been oriented to face the interior of the lot.

#### **COMMENTS - WATERSHED MANAGEMENT REVIEW**

 Comment: Demonstrate the capacity of retaining the 95th percentile storm on-site with approved infiltration/filtering BMPs and meet Water Quality standards by providing the Compliance Calculator.

**Response:** Please see the Compliance Calculator included with this resubmittal. Apologies that this was not included with the previous submittal.

2. **Comment:** Provide more detail for proposed bioretention areas.

**Response:** Please see the updated Grading and Drainage Plan included with the resubmittal. Additional details on the proposed BMPs have been provided.

Comment: Provide additional information for the existing grate inlet located on-site.

**Response:** Please see the updated Grading and Drainage Plan included with the resubmittal. This grate inlet will be converted into a junction box during final construction.

4. **Comment:** Provide additional information on how stormwater will enter the proposed BMPs by showing drainage flow patterns.

**Response:** Please see the updated Grading and Drainage Plan included with the resubmittal. Additional detail has been provided on drainage and how drainage will reach the proposed BMPs.

Comment: Clarify whether there will be any stormwater infrastructure on site.

**Response:** Please see the updated Grading and Drainage Plan included with the resubmittal. Additional detail on stormwater infrastructure has been provided.

#### **COMMENTS - BEAUFORT JASPER WATER AND SEWER**

 Comment: Per the submitted BJWSA Water and Sewer Availability Letter, design drawings, hydraulic loadings, and calculations must be submitted to BJWSA's Engineering Department for review and approval.

**Response:** Final construction drawings will be submitted to BJWSA once ready.

# CULVER'S BLUFFTON

115 INNOVATION DRIVE, BLUFFTON, SC 29910



## FEMA MAP

THE PROJECT SITE <u>DOES NOT</u> LIE WITHIN A FLOOD HAZARD AREA PER FIRM PANEL 45013C0270G DATED 03/23/2021.

## PROJECT CONTACTS

ROLLING DOUGH PROPERTIES, LLC.

126 NORTH FOREST BEACH ST HILTON HEAD ISLAND, SC 29928

DEVELOPER HARRISBURG LAND, LLC.

**461 RIVER CREST COURT** 

MUKWONAGO, WI 53149

PHONE: (262)-436-4760

CONTACT: JAY CAMPBELL EMAIL: JAY@CAMPBELLCONSTRUCTION.COM

ARCHITECT: **OLLMANN ERNEST MARTIN ARCHITECTS** 

200 S STATE ST

BELVIDERE, IL 61008 PHONE: (815)-544-7790

CONTACT: WENDY MARTIN EMAIL: WMARTIN@OAARCH.COM

CIVIL ENGINEER: KIMLEY-HORN & ASSOCIATES, INC.

607 PENDLETON ST, SUITE 100 GREENVILLE, SC 29601

PHONE: (843)-737-6390

CONTACT: WILLIAM HEINTZ, P.E. EMAIL: WILLIAM.HEINTZ@KIMLEY-HORN.COM

SURVEYOR:

OWNER:

ATLAS SURVEYING 168 BOARDWALK DRIVE, SUITE A

RIDGELAND, SC 29936

PHONE: (843)-645-9277 CONTACT: RYAN CHESLAK

EMAIL: RCHESLAK@ALSSURVEYING.COM

## **SWPPP CERTIFICATION:**

HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.

PARCEL NO.: R610 030 000 2002 0000 ZONING: PLANNED UNIT DEVELOPMENT

TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA PROPERTY AREA = 1.52 ACRES TOTAL DISTURBED AREA = 1.52 ACRES IMPERVIOUS AREA = 0.86 ACRES (56.58%) PERVIOUS AREA = 0.66 ACRES (43.42%)

'HIS PROJECT CONSISTS OF A PROPOSED 4,400 SQUARE FOOT QUICK SERVICE RESTAURANT CONTAINING

NEW TWO WAY DRIVEWAYS INTO THE PROJECT SITE. THE OVERALL PROJECT DISTURBED AREA IS 1.52

ATTENTION IS DRAWN TO THE FACT THAT THE SCALE OF THESE DRAWINGS MAY HAVE BEEN DISTORTED

DURING THE REPRODUCTION PROCESS. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC

INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.

PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS

DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES,

2. IF ANY CONFLICTS, DISCREPANCIES, OR ANY OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED,

EITHER ON THE CONSTRUCTION DOCUMENTS OR FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY

THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE FURTHER OPERATION UNTIL THE CONFLICTS,

THE APPROVAL OF THESE PLANS AND THE ISSUANCE OF THIS LAND DISTURBANCE PERMIT DOES NOT IN

FOR THIS ACTIVITY, WHICH MAY REQUIRE ADDITIONAL PERMITTING HAVE BEEN MET. THE ONUS IS ON THE

ANY WAY SUGGEST THAT ALL OTHER REQUIREMENTS FOR THE LEGAL OR APPROPRIATE OPERATIONS

OWNER/DEVELOPER/ BUILDER TO DISCOVER WHAT ADDITIONAL PERMITTING OR APPROVALS MAY BE

OR PERMIT ISSUANCE DOES NOT ABSOLVE THE APPLICANT FROM COMPLYING WITH ALL APPLICABLE

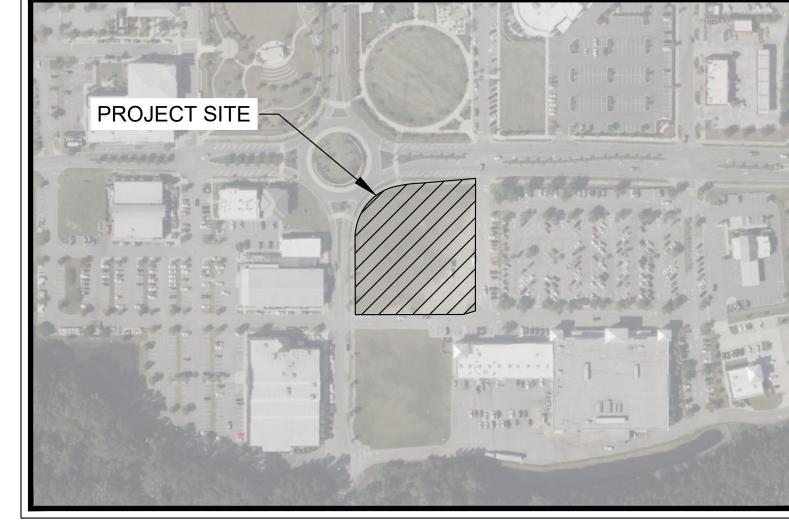
LAWS, STANDARDS, OR OTHER PERMITS WHICH MAY BE REQUIRED FOR THIS PROJECT.

NECESSARY TO OPERATE FROM THIS POINT IN AN APPROPRIATE AND LEGAL MANNER. PLAN APPROVAL

ALL ELEVATIONS SHOWN ARE BASED ON NAVD 88. SEE PROJECT SURVEY FOR BENCHMARK INFORMATION

PROJECT NARRATIVE:

NOTES:





	SHEET LIST TABLE	
	SHEET NUMBER	SHEET TITLE
	C0-00	COVER SHEET
	C0-01	GENERAL NOTES
	C1-00	SURVEY
	C4-00	SITE PLAN
	C5-00	GRADING AND DRAINAGE PLAN
	06.00	



**⟨imley≫Horn** 



LAND, LLC
461 RIVER CREST CT.
MUKWONAGO, WI 53149

10/14/2024 PROJECT NO. 013210004

**C0-00** 

- 2. ACCESSIBLE PARKING SIGNS WITH A "VAN" MARKING SHALL HAVE ADDITIONAL SIGN MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY SIGN DENOTING VAN ACCESSIBILITY; REFER TO CONSTRUCTION DETAIL SHEETS.
- 3. REFER TO CONSTRUCTION DETAIL SHEETS FOR DETAILS OF ON-SITE SIGNAGE, STRIPING, AND PAVEMENT MARKING. REFER TO SITE PLAN FOR ADDITIONAL DIMENSIONAL INFORMATION.
- 4. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES AND O.S.H.A.
- 5. ALL ISLANDS WITH CURB SHALL BE LANDSCAPED UNLESS OTHERWISE INDICATED.
- 6. EXISTING CONDITIONS SHOWN HEREON ARE FROM A SURVEY FILE PROVIDED BY XXXX. DATED XX/XX/XXXX.
- 7 THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, ELASHING LIGHTS, TRAFFIC MEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY THE STATE DEPT. OF TRANSPORTATION, AND TOWN
- 8. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
- 9. THE CONTRACTOR SHALL REPLACE EXISTING CONCRETE CURBS, SIDEWALK, PAVING, AND GUTTER AS INDICATED ON PLANS AND AS NECESSARY TO CONNECT TO EXISTING INFRASTRUCTURE.
- 10. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS AND TEMPORARY CONSTRUCTION EASEMENTS MAY BE REQUIRED.
- 11. CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF scDOT AND THE TOWN OF BLUFFTON.
- 12. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR.
- 13. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
- 14. ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
- 15. THE CONTRACTOR SHALL CONSTRUCT ACCESSIBLE RAMPS AT ALL INTERSECTIONS IN ACCORDANCE WITH SCDOT AND TOWN OF BLUFFTON STANDARDS.
- 16. SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- 17. ALL OFF-SITE CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH CURRENT SCDOT STANDARD SPECIFICATIONS AND DETAILS. ALL ON-SITE CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH THE TOWN OF BLUFFTON'S STANDARD SPECIFICATIONS AND DETAILS.
- 18. ALL WORK MUST COMPLY WITH SOUTH CAROLINA STATE BUILDING CODE AND SOUTH CAROLINA ACCESSIBILITY CODE AS WELL AS FEDERAL, STATE AND LOCAL ACCESSIBILITY REQUIREMENTS.
- 19. ADJACENT STREETS SHALL BE KEPT CLEAN AT ALL TIMES.
- 20. CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS FROM THE PROJECT GEOTECH REPORT PREPARED BY XXXX DATED XXXXXX

#### DEMOLITION NOTES:

- THE CONTRACTOR SHALL COORDINATE ALL REMOVAL EFFORTS WITH THE OWNER. COORDINATION ITEMS ARE ANTICIPATED TO INCLUDE SITE ACCESS, TRAFFIC CONTROL, MAINTENANCE OF ACCESS AND UTILITIES FOR EXISTING BUILDINGS TO REMAIN, AND EROSION CONTROL.
- ALL FEATURES MARKED TO BE ABANDONED IN PLACE SHALL REMAIN IN EXISTING CONDITION UNLESS REMOVED THROUGH EFFORTS FOR OTHER FEATURES.
- SPECIAL CARE SHALL BE TAKEN TO PROTECT AND MAINTAIN ALL EXISTING FEATURES NOT MARKED FOR REMOVAL. IN THE EVENT OF ANY IMPACT TO SUCH FEATURES, THE CONTRACTOR SHALL PERFORM REPAIR AND/OR RESTORATION TO ORIGINAL CONDITION AS OF START OF WORK
- WHERE PAVEMENT REMOVAL AREAS ABUT OTHER PAVEMENT AREAS TO REMAIN, THE EXISTING PAVEMENT SHALL BE SAW CUT TO PROVIDE A BOUNDARY WHICH IS STRAIGHT AND CLEAN IN APPEARANCE.
- ALL SANITARY SEWER MAIN FEATURES WILL GENERALLY BE PROTECTED IN PLACE UNLESS SPECIFICALLY
- THE CONTRACTOR SHALL PROPERLY AND LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS OFF OF THE CONSTRUCTION SITE.

#### TREE PROTECTION NOTES:

- 1. THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES. IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED TO SAVE ALL OTHER EXISTING TREES AND SHRUBS WHERE POSSIBLE
- . WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER AND IMMEDIATELY COVER ALL ROOT CUT SURFACES LARGER THAN TWO INCHES IN DIAMETER WITH TREE WOUND DRESSING. USE PLYWOOD FORMS WHEN TREE ROOTS ARE ADJACENT TO PROPOSED CURB & GUTTER OR SIDEWALK.
- 3. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, GRADING OR CONSTRUCTION BEGINS, AND NOT REMOVED UNTIL FINAL INSPECTION.
- 4. NO GRUBBING WITHIN TREE PROTECTION ZONE. LEAVE SOIL AND LEAF LITTER UNDISTURBED. SUPPLEMENT WITH 1-2 INCHES OF MULCH. RE-SEED WITH GRASS ONLY IN DISTURBED/GRADED AREAS.
- 5. TREE BARRICADES MUST BE INSTALLED BEFORE ANY DEMOLITION, CLEARING, GRADING OR CONSTRUCTION BEGINS AND IS NOT TO BE REMOVED UNTIL AFTER CONSTRUCTION

#### TRAFFIC CONTROL:

REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) AND SCDOT STANDARDS FOR DETAILS OF STANDARD TRAFFIC CONTROL SIGNS AND STANDARDS.

#### WETLAND CONSTRUCTION NOTES:

- CONTRACTOR SHALL BE FAMILIAR WITH THE RULES, REQUIREMENTS, AND REGULATIONS ASSOCIATED WITH THE USACE
- CONTRACTOR TO PROTECT THE WETLANDS TO REMAIN AT ALL TIMES, INCLUDING WRAPPING THE WETLANDS IN A DOUBLE ROW OF SILT FENCE AS INDICATED ON THE EROSION AND SEDIMENTATION CONTROL PLAN.

#### TRAFFIC CONTROL:

REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) AND SCDOT STANDARDS FOR DETAILS OF STANDARD TRAFFIC CONTROL SIGNS AND STANDARDS.

#### RETAINING WALL NOTES

- 1. STRUCTURAL AND SUBSURFACE DRAINAGE DESIGN FOR RETAINING WALLS ARE NOT ADDRESSED IN CIVIL PLANS BY KIMLEY-HORN AND ASSOCIATES.
- 2. BOTTOM OF WALL ("BG") GRADES SHOWN ON THESE PLANS REPRESENT FINISHED GROUND ADJACENT TO WALL. TOP OF WALL ("TG") ELEVATIONS ASSUME FINISHED GROUND ADJACENT TO WALL. REFER TO RETAINING WALL PLANS (BY OTHERS) FOR ALL TG AND BG ELEVATIONS, DRAINAGE AND CONSTRUCTION METHODS.
- 3. RETAINING WALLS WITH ELEVATION DROP EXCEEDING 2'-6" IN HEIGHT SHALL HAVE GUARDRAILS OR FENCING FOR FALL

## FINE GRADING NOTES:

- 1. SIDEWALKS TO HAVE A MAXIMUM 2.00% CROSS SLOPE AND A MAXIMUM 5% LONGITUDINAL SLOPE.
- PEDESTRIAN CROSSWALKS TO HAVE MAXIMUM 2.00% CROSS SLOPE AND MAXIMUM 5.00% LONGITUDINAL SLOPE
- ADA PARKING AREAS AND ACCESSIBLE AREAS TO HAVE A MAXIMUM 2.00% SLOPE IN ALL DIRECTIONS.
- 4. SIDEWALK INTERSECTIONS AND RAMP LANDINGS TO HAVE A MAXIMUM 2.00% SLOPE IN ALL DIRECTIONS.

#### BACKFLOW PREVENTION NOTES

- THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS TOWN OF BLUFFTON REQUIRED BACKFLOW PREVENTER.
- 2. EACH SCDES / TOWN OF BLUFFTON UTILITY DEPARTMENT REQUIRED BACKFLOW PREVENTER ASSEMBLY IS REQUIRED TO BE TESTED BY AN APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM INTO SERVICE.
- THE DOMESTIC BACKFLOW PREVENTER SHALL BE INSTALLED PER SCDES / TOWN OF BLUFFTON REGULATIONS AT THE PROPERTY LINE AND AS SHOWN IN THE LOCATION OF THE UTILITY PLAN
- THE FIRE BACKFLOW PREVENTER FOR THE FIRE SPRINKLER SYSTEM SHALL BE INSTALLED PER SCDES / TOWN OF BLUFFTON REGULATIONS AT THE PROPERTY LINE AND AS SHOWN IN THE LOCATION OF THE UTILITY PLAN.

#### DRAINAGE:

1. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

15" DIAMETER AND LARGER: RCP, CLASS III PER ASTM C-76, WITH FLEXIBLE PLASTIC BITUMEN GASKETS AT JOINTS.

LESS THAN 15" DIAMETER: PVC SCHEDULE 40 OR HDPE - AASHTO DESIGNATION M252 TYPE S, M294 TYPE S AND MP7-97 TYPE S, SMOOTH INTERIOR/ANNULAR EXTERIOR. ONLY PERMITTED WHEN SPECIFICALLY INDICATED ON THE CONSTRUCTION DRAWINGS. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER'S INSTALLATION GUIDELINES OR SCDOT SPECIFICATION, WHICHEVER IS MORE STRINGENT. PIPE JOINTS AND FITTINGS SHALL CONFORM TO AASHTO M252 AND M294.

- 2. ALL STORM DRAINAGE WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE CLASS III REINFORCED CONCRETE PIPE UNLESS OTHERWISE SPECIFIED AS CLASS IV.
- 3. ALL PIPE LENGTHS AND SLOPES ARE APPROXIMATE.
- 4. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE
- 5. ADDITIONAL SUBSURFACE DRAINAGE MAY RE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE
- 6. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
  - A. NO MORE THAN 500 LF OF TRENCH MAY BE OPENED AT ONE TIME.
  - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
  - C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
  - D. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
  - E. DESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL REGULATIONS
  - F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- 7. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- 8. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- 9. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- 10. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION. CATCH BASINS, MANHOLES, FRAMES, GRATES, ETC. SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE SCDOT STANDARD DETAILS AND SPECIFICATIONS.
- 11. THIS PLAN DETAILS PIPES UP TO 5FT FROM THE BUILDING FACE. REFER TO DRAWINGS BY OTHERS FOR BUILDING CONNECTIONS. CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY
- 12. ALL STORM SEWER MANHOLES IN PAVED AND UNPAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. LIDS SHALL BE LABELED "STORM SEWER".
- 13. STRUCTURE TOP ELEVATIONS SHOWN HERE IN ARE APPROXIMATE. CONTRACTOR SHALL ADJUST AS NECESSARY.
- 14. RIM ELEVATIONS AS SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO THE GUTTER FLOW LINE.
- 15. DRAINAGE AS-BUILTS WILL BE REQUIRED FOR FINAL INSPECTION
- 16. ALL STORM CONNECTIONS SHALL BE WATERTIGHT

#### UTILITY NOTES

- 1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- 2. CONTRACTOR SHALL NOTIFY THE TOWN OF BLUFFTON'S UTILITY INSPECTORS 72-HOURS BEFORE CONNECTING TO ANY
- 3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
  - 8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAN 12' DEEP 8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP 6" PVC SCHEDULE 40 4" PVC SCHEDULE 40
- DUCTILE IRON PIPE PER AWWA C150 AND AWWA C151 4. WATER LINES SHALL BE AS FOLLOWS:
  - 4" AND LARGER DUCTILE IRON PIPE PER AWWA C150
- 5. MINIMUM TRENCH WIDTH SHALL BE 3 FEET
- 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT ON UTILITY DETAILS.
- 7. WATER AND SEWER MAINS SHALL BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
- 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3.0' COVER ON ALL WATERLINES.
- 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED). THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING, MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- 10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- 11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- 12. THE AUTHORITY HAVE JURISDICTION HAS THE RIGHT TO INSPECT ALL PRIVATE WATER SYSTEMS. 13. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
- 14. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- 15. REFER TO ARCHITECTURAL DRAWINGS FOR TIE-IN LOCATION AND ELEVATION OF ALL UTILITIES.
- 16. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE TOWN OF BLUFFTON WITH REGARDS TO MATERIALS, INSTALLATION, AND TESTING OF THE WATER AND SEWER LINES.
- 17. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- 18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES CHARTED OR UNCHARTED WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 19. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS AND/OR TESTING REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL
- 20. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- 21. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE
- 22. ALL EXISTING UTILITIES PROPOSED TO BE RELOCATED ON THESE PLANS SHALL BE PLACED UNDERGROUND.
- 23. ALL SANITARY SEWER AND WATER DISTRIBUTION SYSTEM WORK TO BE INSTALLED BY A LICENSED UTILITY
- 24. THE CONTRACTOR SHALL COORDINATE AS REQUIRED WITH THE UTILITY PROVIDER FOR INSTALLATION OF PRIMARY ELECTRIC SERVICE AND TELEPHONE SERVICE TO THE PROPOSED BUILDINGS.
- 25. WHEN A WATER MAIN CROSSES OVER A SEWER MAIN, THERE MUST BE EIGHTEEN INCHES OF VERTICAL SEPARATION. IF THE WATER MAIN MUST GO UNDER THE SEWER MAIN. BOTH THESE LINES MUST BE OF DUCTILE IRON FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE CROSSING WITH A TWELVE INCH VERTICAL SEPARATION. THE CROSSING OF OTHER UNDERGROUND PIPE REQUIRES A MINIMUM OF TWELVE INCHES OF VERTICAL SEPARATION. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
- 26. WHEN A WATER LINE PASSES OVER OR UNDER A STORM SEWER, VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED UNLESS WATER LINES ARE OF DUCTILE IRON OR ENCASED IN CONCRETE. A MINIMUM 6" CONCRETE PAD SHALL BE POURED BETWEEN THE TWO. DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
- 27. A FIRE INSPECTOR SHALL INSPECT THE UNDERGROUND FIRE LINE PIPING FROM THE PIV TO THE BUILDING. FOR YARD FIRE DEPARTMENT CONNECTIONS (FDCS), THE UNDERGROUND FDC PIPING MUST BE INSPECTED BEFORE IT IS COVERED
- 28. GREASE INTERCEPTOR SIZING AND DETAILS ARE TO BE INCLUDED WITH BUILDING CONSTRUCTION PLUMBING PLANS.

### **GRADING:**

AND O.S.H.A. STANDARDS.

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL THE TOWN OF BLUFFTON AND SCDOT REGULATIONS AND CODES
- ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. SPOT ELEVATIONS AT CURB LOCATIONS ARE TO
- THE BOTTOM FACE OF CURB (FLOWLINE), UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL
- CONTRACTOR PRIOR TO GROUND BREAKING
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION.
- 6. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- 7. ALL FILL TO BE COMPACTED PER THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER.
- LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
- THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE FINISHED ELEVATIONS INCLUDING ASPHALT. REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
- 10. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW ACROSS NEW PAVEMENT AREAS TO NEW OR EXISTING DRAINAGE INLETS OR SHEET OVERLAND.
- ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN IS CONSIDERED A VIOLATION OF THE GRADING PERMIT AND SUBJECT TO A FINE.
- 12. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM THE SURVEY REFERENCED IN THIS PLAN SET.
- 13. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND ALL TERMS AND CONDITIONS IN THE STATE OR MUNICIPAL GRADING AND EROSION CONTROL PERMIT ISSUED FOR THIS PROJECT.
- 14. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL
- 15. CONTRACTOR SHALL STABILIZE AND WATER DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. 16. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO THE SAME
- 17. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE DESIGN(S) TO INSTALL SAID ITEMS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS, DOOR LOCATIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND ELEVATIONS.
- ALL FILL MATERIALS, EXISTING BUILDING FOUNDATIONS, PAVEMENT AND UTILITY STRUCTURES, TOPSOIL AND ANY OTHER DELETERIOUS MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE
- ALL FOUNDATION AND UTILITY EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNIAL REPRESENTATIVE TO DETERMINE WHETHER UNSUITABLE MATERIAL MUST BE REMOVED. ALL UNDESIRABLE MATTER SHALL BE REMOVED, BACKFILLED AND COMPACTED WITH SUITABLE MATERIAL AS REQUIRED BY THE GEOTECHNICAL REPRESENTATIVE AT CONTRACTOR'S EXPENSE.
- 21. GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE. AS DIRECTED BY THE ENGINEER, THEY MAY BE ADJUSTED TO ACCOMMODATE UNFORESEEN CONDITIONS. STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS.
- 22. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 23. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- 24. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY OR ABANDONED AT MAIN AS REFERENCED IN THE PLANS.
- 25. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- 26. ALL AREAS WITH 2:1 SLOPE OR ERODABLE SLOPES SHALL BE COVERED WITH ERONET MATTING OR APPROVED EQUAL INSTALL PER MANUFACTURER'S INSTRUCTIONS
- 27. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- CONTRACTOR TO BE RESPONSIBLE FOR DEWATERING AS NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL DEWATERING RECOMMENDATIONS.

## **EROSION CONTROL NOTES:**

- 1. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OF EXCESS MATERIAL OFF-SITE
- 2. CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE CONSTRUCTION PROJECT ALL EROSION CONTROL COUNTER MEASURES SHOWN ON THIS SHEET IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS FROM THE SOUTH CAROLINA DEPARTMENT OF ENVIRONMENTAL SERVICES (SCDES).
- GROUND COVER SHALL BE ESTABLISHED PER "SEEDBED PREPARATION NOTES" PROVIDED IN THE EROSION CONTROL DETAILS.
- THE CONTRACTOR SHALL PROVIDE GROUND COVER ON DESIGNATED AREAS AND SLOPES GREATER THAN 3:1 WITHIN 7 DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. CONTRACTOR SHALL PROVIDE GROUND COVER IN 14 DAYS ON ALL OTHER AREAS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 14 WORKING DAYS FOLLOWING THE COMPLETION OF CONSTRUCTION.
- DURING CONSTRUCTION OF THE PROJECT. SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- SEDIMENT BASINS AND TRAPS. PERIMETER DIKES. SEDIMENT BARRIERS AND OTHER MEASURES. INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURE SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED AND APPROVAL HAS BEEN OBTAINED FROM THE TOWN OF BLUFFTON INSPECTOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SCDES EROSION AND SEDIMENT CONTROL REGULATIONS, U.S. DEPT. OF AGRICULTURE, AND U.S. SOIL CONSERVATION SERVICE.

STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

THE SITE AT ALL TIMES.

MMEDIATELY AFTER INSTALLATION.

- 10. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON
- STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE SCDES REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE
- CONTRACTOR TO ENSURE THAT SEDIMENT LADEN RUNOFF DOES NOT LEAVE SITE LIMITS OR ENTER PROTECTED AREAS. ANY SEDIMENT DEPOSITED BEYOND DISTURBED AREA WITHIN SITE LIMITS SHALL BE
- OF THE ORIGINAL APPLICATION. ALL DRAINAGE INLETS SHALL BE PROTECTED FROM SILTATION. INEFFECTIVE PROTECTION DEVICES SHALL BE

WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED

INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT

IMMEDIATELY REPLACED AND THE INLET CLEANED. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.

16. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.

17. STABILIZATION MEASURES SHALL BE APPLIED TO STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS

#### TOWN OF BLUFFTON STORMWATER MANAGEMENT

STANDARDS

1. ALL STORMWATER MANAGEMENT DESIGN SHALL COMPLY WITH ALL THE BLUFFTON STORMWATER DESIGN MANUAL

0 KIMLEY-HORI ASSOCIATES.

PRELIMINAR

NOT FOR CONSTRUCTION

DATE

10/14/2024

(7) 

PROJECT NO. 013210004 SHEET NUMBER

