Site Development Plans

for

New Riverside Village Commercial

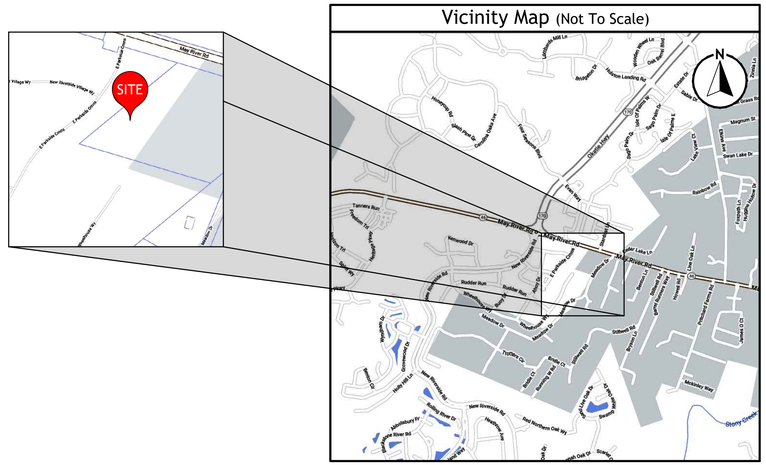
Usage (multi-family)

Town of Bluffton, South Carolina

Tax Map #: R600 036 000 0013 0000

New Riverside Rd & 395 E Parkside Commons

GIS coord: N32° 14' 23", W80° 58' 41"



New Riverside Commercial
BJWSA Project #: 2024-003

Schedule of Drawings

Sheet No.	Description
C001	Cover Sheet
C002	Construction Notes
C003	Sheet Index
C101	Existing Conditions Plans
C201	Initial Erosion Control Plans and Details
C301	Clearing & Demolition Plans and Details
C401	Site Layout Plans
C501	Grading Plans and Details
C601	Drainage Plans and Details
C700	Overall Utility Plan
C701	Utility Plans, Profiles and Details
C801	Intermediate & Final Erosion Control Plans and Details
C901	Paving Plans, Road Profiles and Details
C1001	ADA Accessible Route Plan

Release Schedule

Release No.	Description	Date
A.	Released for Permitting	05-16-23
B.	Released for Permitting	06-28-23
C.	Released for Permitting	06-30-23
D.	Released for Permitting	07-24-23

Design Team

Geotechnical Engineer:	Landscape Architect:	Architect:	Land Surveyor:	Developer:
WSP	Milling Land Design	Architecture 101	Atlas Surveying, Inc.	Steven G. Stowers
319.721.3517	843.290.2623	843.790.4101	843.645.9277	Architecture 101
				23A Market, Suite #1,Beaufort, SC 29906
				843.790.4101
				steve@a101.design

CONTACT 811 BEFORE YOU DIG 811 SAFE DIGGING PARTNER

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 PAUL R. MOORE 11/24/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Cover Sheet

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

C001

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

General Notes:

1. Boundary information provided by An As-Built tree & topographic survey of parcels 3 & 5 New Riverside Village, dated 04-03-23, by Atlas Surveying, Inc.
2. Topographic data provided by Atlas Surveying, Inc., dated 04-03-23.
3. Approximate location of certain existing underground utility lines and structures are shown on the plans for information only additional underground lines or structures may exist that are not shown. Call south carolina 811 at 811 or 1-888-721-7877 between the hours of 7:00 am and 7:00 pm monday thru friday at least three working days before commencing construction. request underground utilities to be located and marked within and near the construction site.
4. Comply with "south carolina underground facility damage prevention act (effective june 7, 2012). notification of intent to excavate may be given by calling the toll free number: 1-800-922-0983.
5. Protect bench marks and property monuments from damage during construction operations. replace any bench marks or monuments damaged or destroyed as a result of contractor's operations, at no cost to the owner, by a licensed surveyor in the state of south carolina.
6. Off-street parking for the contractor's employees and authorized visitors to the site must be provided and maintained throughout construction.
7. The contractor is responsible for adhering to weight limits prescribed for all public roads when hauling equipment and materials to and from the project site. Damages to existing pavement due to the contractor's construction operations or improper transportation of materials and equipment shall be the responsibility of the contractor.
8. At least one driving lane on public roads shall remain open to traffic at all times. traffic lanes will only be closed with the express written consent of the agency having jurisdiction over the roadway. Notify agency having jurisdiction at least 5 days before closing any driving lanes to traffic. provide traffic control devices, signs and flagmen as required to ensure public safety.
9. Contractor shall coordinate demolition, clearing and construction of improvements to minimize interference with vehicular and pedestrian traffic and with operations of existing facilities.

Water and Sewer Line Construction:

1. All water and sewer line construction shall conform to applicable state and beaufort jasper water sewer authority (BJWSA) requirements, standards and specifications.
2. BJWSA will be responsible for inspection and approval of all water and sewer system construction and for acceptance for operation and maintenance.
3. All utilities shown are approximate locations. The contractor is responsible for notification of all utility owners and for field verification of both horizontal and vertical locations prior to commencing construction. any damages to existing utilities due to this construction shall be the responsibility of the contractor.
4. Notify the project engineer, if conflicts with existing structures require that proposed utilities be relocated.
5. The contractor must notify BJWSA forty-eight (48) hours prior to any construction, inspection or testing of the water distribution system.
6. Pipe, fittings, valves and appurtenances for water and sewer lines shall all be in accordance with the requirements contained in the BJWSA technical specifications.
7. Installation of water and sewer lines and appurtenances shall be in accordance with the BJWSA standard construction details and specifications.
8. Contractor shall install mechanical restraints on all bends, plugs and tees, 2" or larger, on waterlines and sanitary sewer force mains.
9. All water mains shall be sterilized and pressure tested in accordance with BJWSA specifications.
10. Separation of water mains and sewers:
    A. parallel installation: unless otherwise specifically shown in a special detail on the plans, install water mains at least 10-ft. Horizontally from any existing or proposed sanitary sewer or sanitary sewer force main, the distance being measured in a horizontal plane between the outside surfaces of the pipes.
    B. Crossings: unless otherwise specifically shown in a special detail on the plans, install water lines crossing sanitary sewers or sanitary sewer force mains to provide a minimum vertical separation of 18-inches between the outside surfaces of the pipes. This shall be the case whether the water line is above or below the sanitary sewer line. Whenever possible locate the water line above the sewer line. Where a new water line crosses a new sewer line, place a full length of ductile iron pipe for water line at the crossing with pipe positioned so that the joints are as far as possible from the point of crossing. Where a new water line crosses an existing sewer line, place one full length of ductile iron pipe water line so that the joints are as far from the point of crossing as possible.
11. The contractor shall cut and patch existing pavement as required for the installation of utility lines.
12. Sanitary manhole rim grades shown are approximate. Adjust rim elevations to be flush with finished grade.
13. The contractor under this contract shall not make any connections to the existing water or sanitary sewer systems unless expressly authorized to do so by the BJWSA. all water and sewer improvements under this contract must be constructed complete, tested, inspected and approved by the BJWSA before any authorization to connect will be given. Coordination of testing, inspection and connections with the BJWSA is the responsibility of the contractor under this contract.
14. All water mains shall be installed with thirty-six inches (36") minimum cover (from finished grade). Maximum depth shall be five feet (5'). Where water mains may conflict with other utilities, the water main crossing shall be constructed with ductile iron pipe, mechanical joint 45-deg. bends and mechanical restraints.

Work on South Carolina Department of Transportation Right-of-Way:

1. Contractor shall review and comply with all conditions and special provisions contained in the SCDOT encroachment permit(s) issued for this project.
2. Contractor to refer to the most current edition of the SCDOT standard drawings.
3. Contractor is responsible for submitting construction notification form (48 hour minimum) and coordination of all work within SCDOT rights-of-way with the local and/or district SCDOT engineering representative.
4. Contractor is responsible for preparing and submitting a traffic control plan to SCDOT for approval minimum 48 hours prior to conducting work in the right-of-way. All traffic control plans shall conform to current MUTCD and current SCDOT guidelines and specifications.
5. All signage, pavement markings, and markers shall conform to current MUTCD guidelines and current SCDOT standard specifications and drawings.
6. All paving and drainage construction shall conform to current SCDOT standard specifications and drawings.
7. All pavement markings in SCDOT right-of-way shall be thermoplastic and conform to current MUTCD guidelines and current SCDOT standard specifications and drawings.
8. Removal of pavement markings shall conform to current SCDOT standard specifications for highway construction section 609.4.1.2.

Tree Protection-Bluffton

1. All trees having a trunk diameter of 8-inches (dbh) or larger, and endangered or valued trees having a trunk diameter of 4-inches (dbh) or larger must be preserved unless specifically approved for removal in accordance with town of bluffton development standards ordinance and indicated on the plans to be removed.
2. The contractor is responsible for marking the trees designated to be preserved in accordance with the requirements contained in the town of bluffton development standards ordinance.
3. Prior to commencing any clearing or construction operations on the site, the contractor shall erect tree protection barriers around each tree or group of trees designated for preservation in accordance with the details on the plans and the requirements contained in the town of bluffton unified ordinance 5.3.3.
4. A tree protection zone shall be established in accordance with the provisions contained in the town of bluffton unified ordinance 5.3.3 for each existing tree designated for preservation. The minimum tree protection zone as defined in the ordinance is a circular area centered on the tree and having a radius of the greater of 10-ft. or one and one-half foot per inch dbh (diameter at breast height). The size or configuration of the tree protection zone may be modified only upon approval by town of bluffton.
5. The area within the tree protection zone must remain open and unpaved. no change of grade will be allowed within the tree protection zone except for a 2-inch cut or 2-inch fill of topsoil, sod or mulch. Any activity within the tree protection zone is subject to approval by town of bluffton. The following activities are prohibited within the tree protection zone:
    A. Placement or storage of any soil, debris, oils, fuel, paints, building materials or any other materials.
    B. Burning
    C. Vehicle parking
    D. Paving
    E. Trenching for utilities
6. Where utility lines must pass thru the tree protection zone, they shall be installed by horizontal boring beneath the roots of the tree.
7. Where it is necessary for machinery and equipment to pass within the tree protection zone, approval must be obtained from town of bluffton. special measures will be required to protect the roots from excessive compaction.
8. The contractor is responsible for obtaining all tree removal permits and for coordinating all inspections required by town of bluffton in connection with tree preservation and removal activities. during construction.

Contractor Note:

Contractor to obtain and become familiar with geotechnical report # 6162232464 prepared by WSP .

All work must conform to project technical specifications for New Riverside Commercial prepared by Ward Edwards Engineering. The contractor is responsible for obtaining a copy of the technical specifications if not provided with the drawings.

Permits

Permit	Permit #	Issued	Expires
BJWSA			
Fire Marshal			
SCDHEC/MS4 Stormwater			
SCDHEC Water			
SCDHEC Wastewater			
Municipality Development			

Site Grading and Drainage:

1. All utilities shown are approximate locations. the contractor shall be responsible for providing 72-hour notice to all respective utility companies for field verification of existing utilities prior to construction. Any damages to existing utilities due to this construction shall be the responsibility of the contractor.
2. Temporary control of storm water drainage shall be the responsibility of the contractor. Sequencing and construction techniques shall prevent obstruction of storm sewers, ponding in traffic areas or rising of water levels which would enter adjacent buildings or structures.
3. Full width of street and road rights-of-way must be cleared and graded as shown in the details on the drawings.
4. Subgrade preparation: top soil shall be removed from paved areas to a minimum depth as recommended in the project's geotechnical report. all excavation shall be to subgrade limits.
5. All utility pipe lines, conduits and sleeves under paved areas must be in place prior to completion of the roadway subgrade compaction.
6. Finish grading shall include the placement of topsoil over all unpaved areas not occupied by buildings or structures and fine grading around buildings, adjacent to walks, curbs, gutters and structures to assure positive drainage.

SCDHEC/OCRM Sediment and Erosion Control Standard Notes (Revised Dec-2012):

1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
    A. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
    B. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a bmp has been inappropriately, or incorrectly installed, the permittee must address the necessary replacement or modification required to correct the bmp within 48 hours of identification.
4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. all disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the state.
5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed after construction is complete and the site is stabilized.
6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with s.c reg. 72-300 et seq. and scr100000.
8. TEmporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
9. All waters of the state (WOS), Including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WOS. A 10-foot buffer should be maintained between the last row of silt fence and all WOS.
10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
11. A copy of the swppp, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
12. Initiate stabilization measures on any exposed steep slope (3h:1v or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar days.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. these discharges are to be routed through appropriate bmps (sediment basin, filter bag, etc.).
16. The following discharges from sites are prohibited:
    A. Wastewater from washout of concrete, unless managed by an appropriate control.
    B. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
    C. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
    D. Soaps or solvents used in vehicle and equipment washing.
17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
18. If existing bmps need to be modified or if additional BMPS are necessary to comply with the requirements of this permit and/or sc's water quality standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPS must be implemented as soon as reasonably possible.
19. A pre-construction conference must be held for each construction site with an approved on-site SWPPP Prior to the implementation of construction activities. for non-linear projects that disturb 10 acres or more this conference must be held on-site unless the department has approved otherwise.

Dry Utility Conduits for Electric, Telephone and Cable TV:

1. All dry utility conduit ends shall be capped and marked with a steel rebar stake imbedded one (1) foot below ground surface.
2. 48" Minimum bury depth for all electrical conduits.
3. Maintain minimum 12" vertical clearance when crossing water, sewer, and storm drain lines.
4. Maintain minimum 18" horizontal clearance when paralleling water, sewer and storm drain lines.
5. Extend conduit beyond pavement, curb, and sidewalks.
6. The contractor shall be responsible for coordination of the installation of all utility service connections. Refer to approved building plans for the exact location of all service connections. The contractor must install all conduits, as shown on the plans or as required by respective utility companies. The contractor shall be responsible to ensure strict compliance with all applicable codes and regulations with regards to the installation of utilities and conduit.
7. Locations shown on the plans for proposed dry utility conduits are approximate only. All dimensioning and staking should be based on economical and practical construction. The contractor shall be responsible for coordination with the respective utility representatives, prior to any conduit installation.
8. Transformer pads shall be located as directed by the respective utility representative. The contractor shall be responsible for compliance with applicable code requirements.
9. Notify the engineer if conflicts with existing or proposed structures require proposed utilities be relocated.

Site Clearing and Demolition:

1. No clearing shall occur within designated buffer zones, tree protection zones, outside of the property lines or beyond the clearing limits unless otherwise specifically shown on the plans.
2. Only those trees designated on the drawings for removal are to be removed as part of the site clearing operations.
3. The contractor shall install a continuous line of flagging or fencing along the limits of clearing prior to commencing any clearing, demolition, or construction work on the project.
4. Exercise caution during clearing operations to avoid felling trees into designated tree protection zones.
5. No burning will be allowed within 50 feet of a tree protection zone or tree drip line. contractor shall coordinate any burning operations with local jurisdiction and fire departments.
6. Selective clearing areas shall be cleared of all brush and understory growth.

Sequence of Construction Activities

Estimated Start Date: 11-01-23 Estimated Completion Date: 11-01-24

Items must occur in the order listed; items cannot occur concurrently unless specifically noted.

Phase 1: (Initial)

1. Receive npdes coverage from dhec.
2. Hold pre-construction meeting.
3. Notify dhec eqc regional office or ocrm office 48 hours prior to beginning land-disturbing activities.
4. Installation of construction entrance.
5. Clearing & grubbing only as necessary for installation of perimeter controls.
6. Installation of perimeter controls (e.g. silt fence).
7. Install tree protection.
8. Install inlet protection.
9. Install sediment tubes.
10. Clearing & grubbing only in areas of basin.

Phases 2 & 3: (Intermediate & Final)

11. Installation of basin and installation of diversions to those structures (outlet structures must be completely installed as shown on the details before proceeding to next step: areas draining to these structures cannot be disturbed until the structures & diversions to the structures are completely installed). Install surface dewatering skimmer prior to moving to next step.
12. Clearing & grubbing of site or demolition (sediment & erosion control measures for these areas must already be installed).
13. Rough grading.
14. Installation of storm drain system and placement of inlet protection as each inlet is installed.
15. Install all required utilities and curbing.
16. FINE GRADING, PAVING, ETC.
17. Place topsoil & establish finish grades.
18. Permeable pavers shall be laid when all heavy construction is completed.
19. Clean-out of detention basins that were used as sediment control structures and re-grading of detention pond bottoms; if necessary, modification of sediment basin riser to convert to detention basin outlet structure.
20. Install permanent seeding.
21. Flush any sediment from storm sewer pipes and inlets.
22. Removal of temporary sediment & erosion control measures (including skimmer) after entire area draining to the structure is finally stabilized (the department recommends that the project owner / operator have the swppp preparer or registration equivalent approve the removal of temporary structures).
23. Perform as-built surveys of all detention structures and submit to dhec or ms4 for acceptance.
24. Submit notice of termination (not) to dhec as appropriate.

- NOTE: Perform weekly site inspections during land disturbing activities and make recommendations for additional BMPs or maintenance of existing BMPs
- NOTE: All pumped dewatering shall be performed using an appropriately sized pumped water filter bag.

Project information

Source of Title:
Beaufort county register of deeds,
deed book 4178 page 0075
deed book 4178 page 10

Use:
existing: undeveloped
proposed: Commercial
4 buildings
16,000 sq ft (total)
xx seats, etc.

Required Setbacks:
Front: 00 Feet
Rear: 50 Feet
Side: 0 Feet
Street: 75 Feet Highway

Surface Coverage:
Max impervious allowed: XX %
Min open space required: XX %
Existing impervious: XX,XXX sq. ft. (XX %)
Proposed impervious: XX,XXX sq. ft. (XX %)
Open space provided: XX,XXX sq. ft. (XX %)
Wetlands/nat. resource: XX,XXX sq. ft. (XX %)

Parking Summary:

Lot-1:
Restaurant = 4 spaces/1,000 sq. ft.
Parking required (interior w/ mechanical rooms):
5,125 sq. ft. x 4/1000 sq.ft. = 20.5 spaces
Parking required (outdoor dining & cooler):
875 sq. ft. x 4/1000 sq.ft. = 3.5 spaces
Total Lot-1 Parking Required: 24 spaces
Total Lot-1 Parking Provided: 24 spaces
Accessible parking required: 2 spaces
Accessible parking provided: 2 spaces

Lot-2:
Retail & Restaurant = 4 spaces/1,000 sq. ft.
Parking required:
12,000 sq. ft. x 4/1000 sq. ft. = 48 spaces
Total Lot-2 Parking Required: 48 spaces
Total Lot-2 Parking Provided: 48 spaces
Accessible parking required: 2 spaces
Accessible parking provided: 2 spaces

Total Parking Required: 72 spaces
Total Parking Provided: 72 spaces

Utility Contacts:

Palmetto Electric	843-208-5512	1 Cooperative Way, Hardeeville, SC 29927
Dominion Energy	800-251-7234	PO Box 100255 Columbia, SC 29202
BJWSA	843-987-9200	6 Snake Road, Okatie, SC 29909
Hargray Communications	843-815-1675	PO Box 3380, Bluffton, SC 29910
Century Link	843-525-0044	2127 Boundary ST #16, Beaufort, SC 29902
Santee Cooper	843-761-8000	1 Riverwood Drive, Moncks Corner, SC 29461

Property Owner:
Circle 46 LLC.
PO Box 6133
Hilton Head Island SC 29938

Flood Zone:
"X"

Property Zoning:
Planned Unit Development

Site Area:
Total: 2.766 acres
Disturbed: 2.2 acres

Building Height:
Maximum: xx feet
Proposed: xx feet

Required Buffers:
Rear: 50 Feet
Side: 10 Feet
Street: 60 Feet Highway
0 Feet Internal

SCDHEC-OCRM Certification:

"I 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."

Paving Hatch Legend

Proposed Concrete Paving	
Proposed Pervious Concrete Paving	
Proposed Sidewalk/Concrete	
Reinforced Grass Fire Lane	
Proposed Aggregate/Stones	
Proposed Asphalt (light duty)	
Proposed Asphalt (heavy duty)	
Mill & Overlay Asphalt	
Proposed Concrete Pavers	

Clearing / Demolition Legend

Demolition	
Milling	
Tree to be Removed	
Tree Protection	

Storm Sewer/Drainage Legend

	Proposed
Drop Inlet	DI: A1
Curb Inlet (with Grate)	CI: A1
Type 16 Curb Inlet	CI: A1
Valley Gutter Inlet	VI: A1
Trench Drain	TD: A1
Weir Inlet	WI: A1
Yard Inlet	YI: A1
Junction Box	JB: A1
Cleanout	CO
Downspout	
Storm Drain	
Underdrain	
Roof Drain Collector	
Flared End Section	
Headwall	
Headwall with Wings	
Outlet Control Structure	
Ditch Centerline	
Direction of Flow	

Sanitary Sewer Legend

	Proposed
Sanitary Sewer Manhole	MH: A1
Sanitary Sewer Cleanout	CO
Sanitary Sewer Wye	
Check Valve in Manhole	
Plug Valve	
Air Release Valve	
Sewer Line	S
Force Main	F
Reuse Main	R
Service Lateral	

Water System Legend

	Proposed
Water Meter	
Water Valve	
Reducer	
Post Indicator Valve	
Fire Hydrant	
Blowoff Hydrant	
Yard Hydrant	
Fire Depart. Connection (FDC)	
Cap	
Plug	
Backflow Preventor	
Butterfly Valve	
Fittings	
Water Line	W
Service Lateral	

Grading Legend

	Proposed
Top of Pavement Elevation	TP: 22.50
Top of Walk Elevation	TW: 22.50
Top of Curb Elevation	TC: 22.50
Finish Grade	FG: 22.5
High Point	HP
Low Point	LP
Contour	19
Ditch Centerline	
Direction of Flow	

Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP / ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

ADA Accessible route

NOTE:
The accessible route shall comply with the current version of the ada standards for accessible design.

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

PAUL R. MOORE — SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 22816 — 07/24/23 — WARD EDWARDS, INC. No. C00152 — CERTIFICATE OF AUTHORIZATION

Ward Edwards ENGINEER
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Construction Notes

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

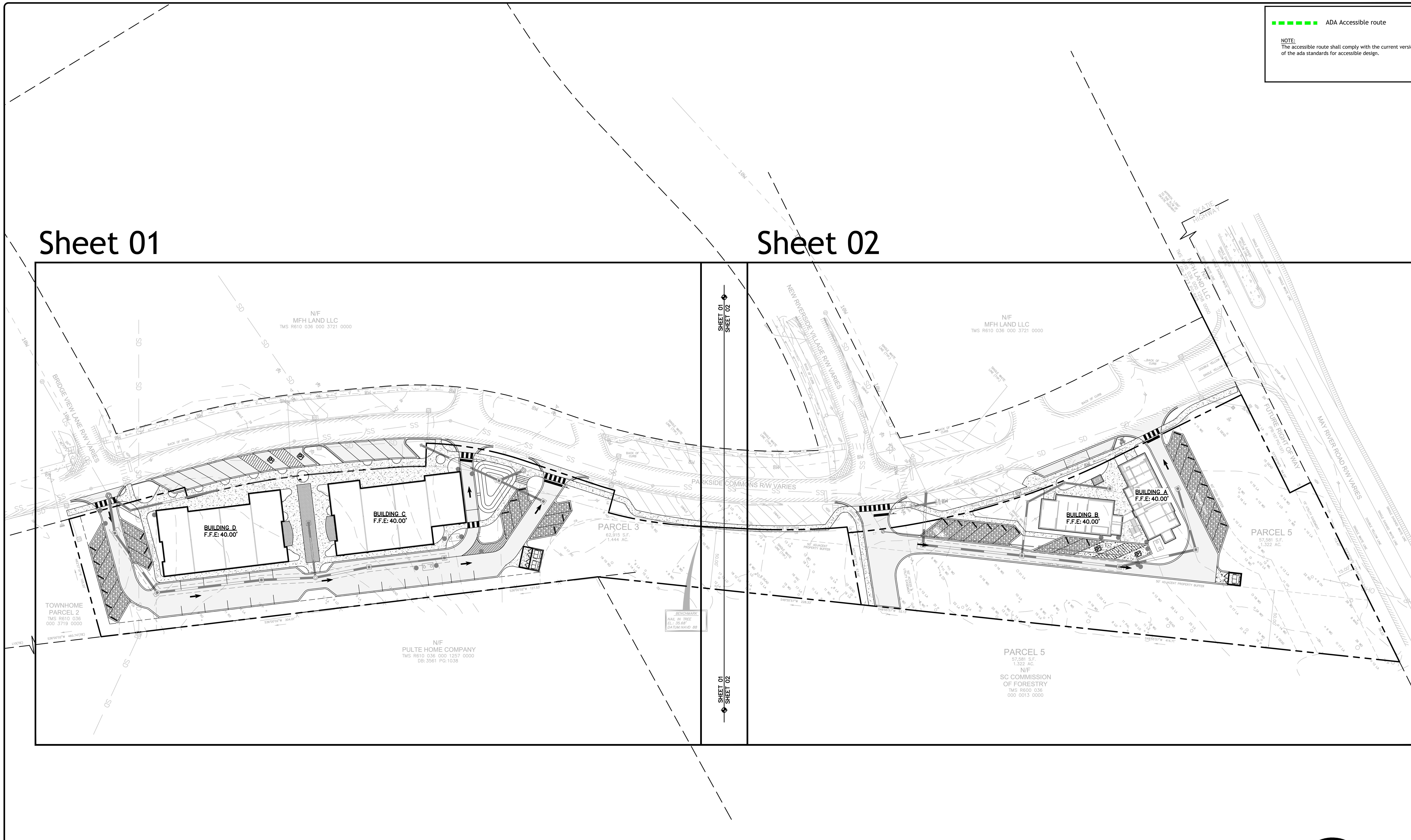
Not to Scale

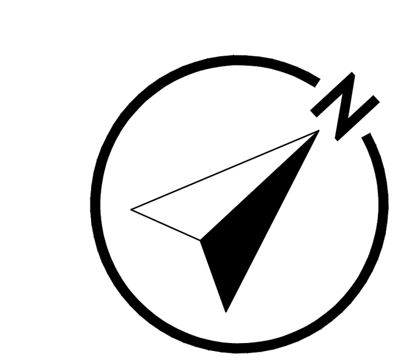
C002

Attachment 6

ADA Accessible route

NOTE:
The accessible route shall comply with the current version of the ada standards for accessible design.





South Carolina Professional Engineer No. 22816 Paul R. Moore 07/24/23

South Carolina Ward Edwards, Inc. No. C00152 Certificate of Authorization

No.	Description	Date
1		
2		
3		
4		
5		
6		
7		

Plan Revisions

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial

Town of Bluffton, South Carolina

Prepared for
Architecture 101

Sheet Index

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 40 80
Scale:1"= 40 ' Feet

C003

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

Sheet 01 | Sheet 02

N/F
MFH LAND LLC
TMS R610 036 000 3721 0000

BRIDGE VIEW LANE RW VARIES

EXISTING FIRE HYDRANT (BL4189)

PARCEL 3
62,915 S.F.
1.444 AC.

TOWNHOME
PARCEL 2
TMS R610 036
000 3719 0000

N/F
PULTE HOME COMPANY
TMS R610 036 000 1257 0000
DB: 3561 PG: 1038

BENCHMARK
NAIL IN TREE
EL.: 35.68'
DATUM: NAVD 88

3X3" CMF
N: 147,888.85
E: 2,006,631.99

S36°00'02"W 460.74'(TIE)

S36°00'02"W 304.01'

S36°00'02"W 127.53'

N62°27'31"W 105.26'

BACK OF CURB

SINGLE WHITE LINE (TYP.)

30' DRAINAGE EASEMENT

3" CHAIN LINK

50.00'

0.70

SHEET 01
SHEET 02

PARKSIDE COMMO

PAUL R. MOORE
SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
01/24/24

WARD EDWARDS, INC.
No. C00152
SOUTH CAROLINA
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards
ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

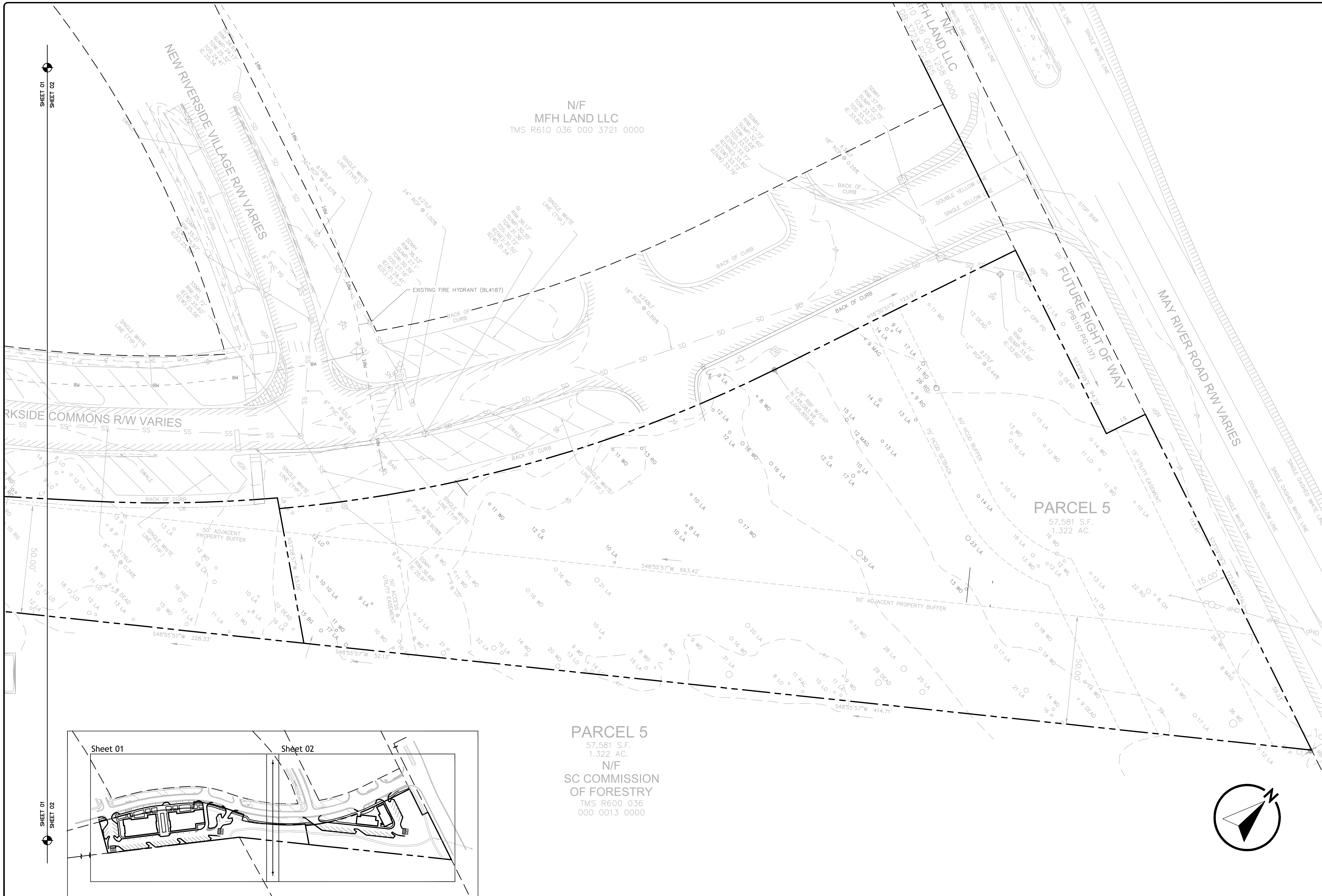
Existing Conditions Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20' Feet

C101



SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 PAUL R. MOORE 07/24/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1		
2		
3		
4		
5		
6		
7		

Plan Revisions

Ward Edwards ENGINEERING

119C Palmetto Way, P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial

Town of Bluffton, South Carolina

Prepared for
Architecture 101

Existing Conditions Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Scale: 1" = 20' (0, 20, 40 Feet)

C102

Permit Set - NOT FOR CONSTRUCTION

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

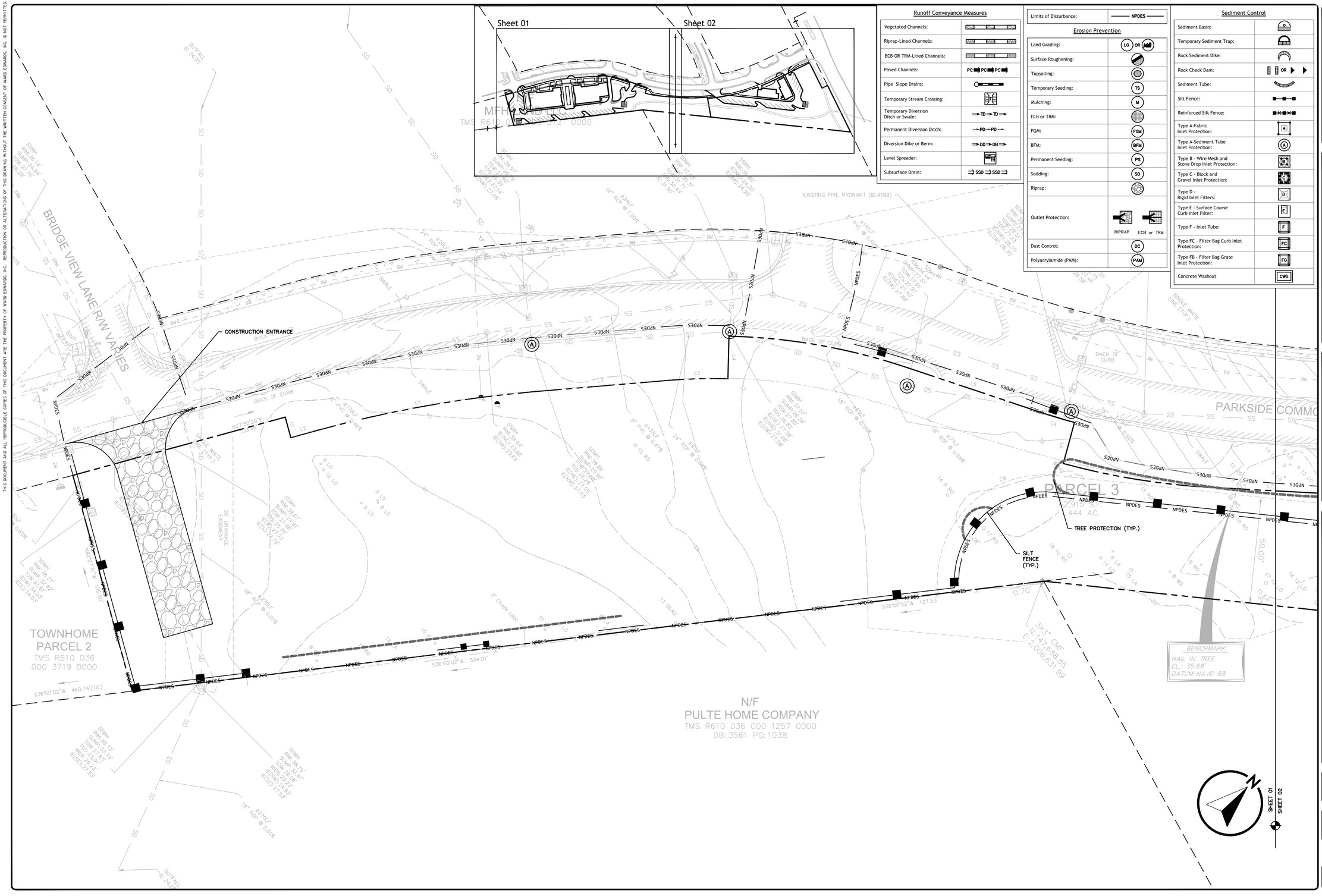
Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	TS
Temporary Seeding:	M
Mulching:	
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS



SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
11/2A/2023
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Initial Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale:1"= 20' Feet

C201

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

Sediment Control

Sediment Basin:	SB
Temporary Sediment Trap:	TST
Rock Sediment Dike:	RSD
Rock Check Dam:	RCD OR
Sediment Tube:	ST
Silt Fence:	SF
Reinforced Silt Fence:	RSF
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	SR
Topsoiling:	TS
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP / ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Runoff Conveyance Measures

Vegetated Channels:	PC1 PC1 PC1
Riprap-Lined Channels:	RW1 RW1 RW1
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

N/F
MFH LAND LLC
TMS R610 036 000 3721 0000

N/F
MFH LAND LLC
TMS R610 036 000 1258 0000

USE DUST CONTROL MEASURES AND SWEEPING AS NEEDED TO KEEP SEDIMENT OFF EXISTING STREETS.

CONSTRUCTION ENTRANCE

NPDES LIMITS OF DISTURBANCE = 2.2 AC

TREE PROTECTION (TYP.)

SILT FENCE (TYP.)

FUTURE RIGHT OF WAY
(PB:157 PG:137)

MAY RIVER ROAD R/W VARIES

RKSIDE COMMONS R/W VARIES

PARCEL 5
57,581 S.F.
1.322 AC.

PARCEL 5
57,581 S.F.
1.322 AC.
N/F
SC COMMISSION
OF FORESTRY
TMS R600 036
000 0013 0000

EXISTING FIRE HYDRANT (BL4187)

50' ADJACENT PROPERTY BUFFER

S48°55'57"W 663.42'

S48°55'57"W 414.71'

S48°55'57"W 228.33'

S48°55'57"W 52.13'

Sheet 01 | Sheet 02

SHEET 01
SHEET 02

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
7/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards
ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

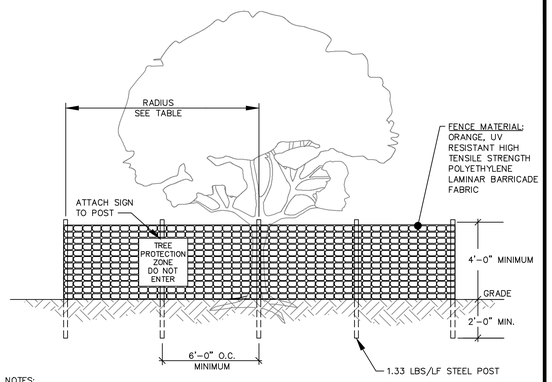
Initial Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20 ' Feet

C202



NOTES:
1. ALL TREES DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING.
2. INSTALL TREE PROTECTION FENCE TO RADIUS INDICATED IN TABLE UNLESS OTHERWISE INDICATED ON PLANS.
3. WARNING SIGNS TO BE MADE OF DURABLE WATERPROOF MATERIAL.
4. ALL WARNING SIGN LETTERS TO BE AT LEAST 3 INCHES HIGH, CLEARLY LEGIBLE AND SPACED A MINIMUM OF ONE EVERY 40 FT. FOR PROTECTION AREAS LESS THAN 40 FT IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER SIDE.
5. THE SIZE OF EACH WARNING SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
8. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. FENCING MUST REMAIN UPRIGHT AND SLACK FREE.

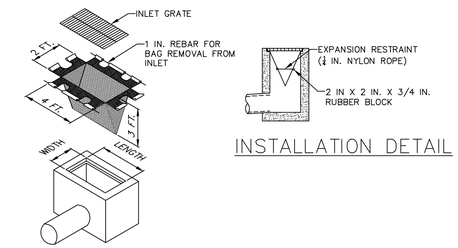
TABLE – RADIUS OF TREE PROTECTION ZONE (TPZ)

JURISDICTION	RADIUS OF CIRCULAR TPZ
BEAUFORT COUNTY BEAUFORT CO. DEV. CODE 5.11.100	1 FOOT PER INCH OF TRUNK DBH
TOWN OF BLUFFTON UDO 5.3.3	1.5 FEET PER INCH OF TRUNK DBH OR 10 FEET WHICHEVER IS GREATER
TOWN OF HILTON HEAD LMO 16-6-104, J-3A	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
CITY OF BEAUFORT BEAUFORT CODE 5.3.3	0.5 FOOT PER INCH OF TRUNK DBH
JASPER COUNTY ZONING ORD. ART. 13.5	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
TOWN OF PORT ROYAL PORT ROYAL CODE 5.7.70	1.5 FEET PER INCH OF TRUNK DBH OR 5 FEET WHICHEVER IS GREATER
CITY OF HARDEEVILLE MZ&DO 4.8, F-3	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED

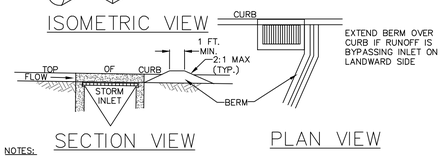
DBH = TRUNK DIAMETER AT BREAST HEIGHT

TREE PROTECTION FENCE

DETAIL #02915-008



INSTALLATION DETAIL



ISOMETRIC VIEW

SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

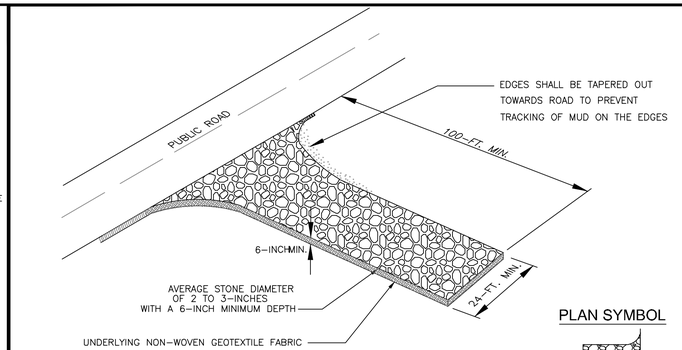
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG GRATE INLET PROTECTION

NO SCALE



SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

PLAN SYMBOL

South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 1 of 2

NOT TO SCALE FEBRUARY 2014 DATE

CONSTRUCTION ENTRANCE – GENERAL NOTES

1. Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
2. Install a non-woven geotextile fabric prior to placing any stone.
3. Install a culvert pipe across the entrance when needed to provide positive drainage.
4. The entrance shall consist of 2-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
5. Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
6. The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
8. Limestone may not be used for the stone pad.

CONSTR. ENTRANCE – INSPECTION & MAINTENANCE

1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
4. Reshape the stone pad as necessary for drainage and runoff control.
5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone pad.
6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
7. During maintenance activities, any broken pavement should be repaired immediately.
8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post-construction.

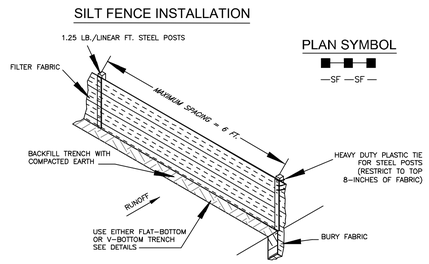
South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014 DATE

SILT FENCE INSTALLATION



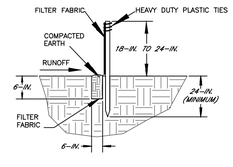
PLAN SYMBOL

—SF—SF—

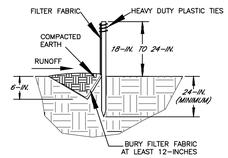
SILT FENCE – GENERAL NOTES

1. Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
2. Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
3. Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
4. Silt fence joints, when necessary, shall be completed by one of the following options:
   - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap;
   - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
   - Overlap entire width of each silt fence roll from one support post to the next support post.
5. Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
6. Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
7. Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 Page 1 of 2

NOT TO SCALE FEBRUARY 2014 DATE

SILT FENCE – POST REQUIREMENTS

1. Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics.
   - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
   - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
   - Weigh 1.25 pounds per foot (± 8%)
2. Posts shall be equipped with projections to aid in fastening of filter fabric.
3. Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
4. Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
5. Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE – FABRIC REQUIREMENTS

1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
   - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
   - Free of any treatment or coating which might adversely alter its physical properties after installation;
   - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
   - Have a minimum width of 36-inches.
2. Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
3. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
5. Filter Fabric shall be installed at a minimum of 24-inches above the ground.

SILT FENCE – INSPECTION & MAINTENANCE

1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
8. Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014 DATE

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1*	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE.

MAINTENANCE:
- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.

INSTALLATION:
- APPLY ACCORDING TO APPROVED PLAN.
- MULCH DISTURBED AREAS AMD TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.
- IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET.
- COVER SURFACES WITH CRUSHED STONE OR GRAVEL.
- APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST.
- APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS) AS DESCRIBED IN TABLE 1.

(DC) DUST CONTROL ON DISTURBED AREAS

PAUL R. MOORE — SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 — 07/24/23 — DATE — PAUL R. MOORE

WARD EDWARDS, INC. No. C00152 — SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
(843) 837-5250
www.WardEdwards.com
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Initial Erosion Control Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

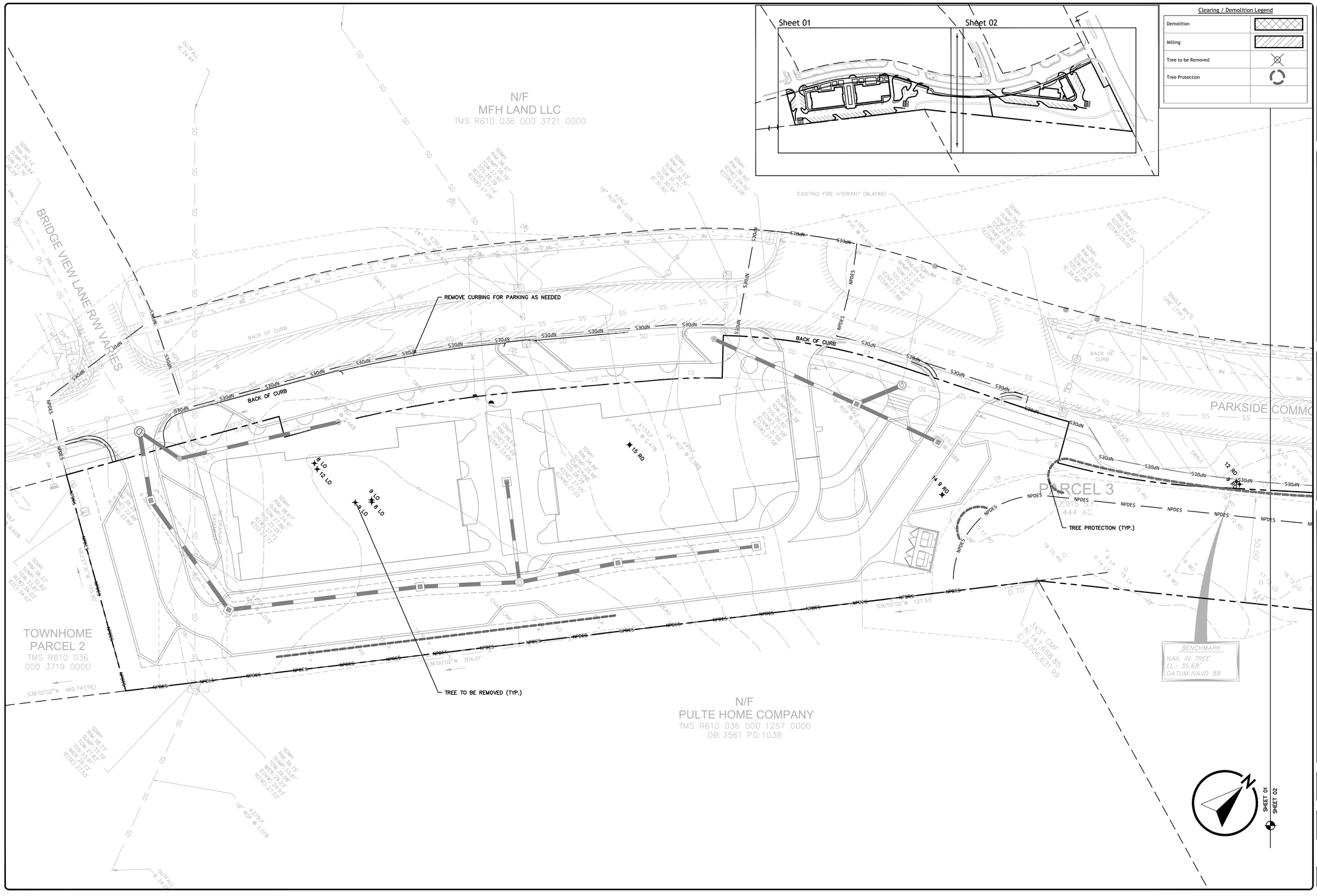
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

C203

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



PAUL R. MOORE
SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
7/24/23
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards
ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Clearing & Demolition Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

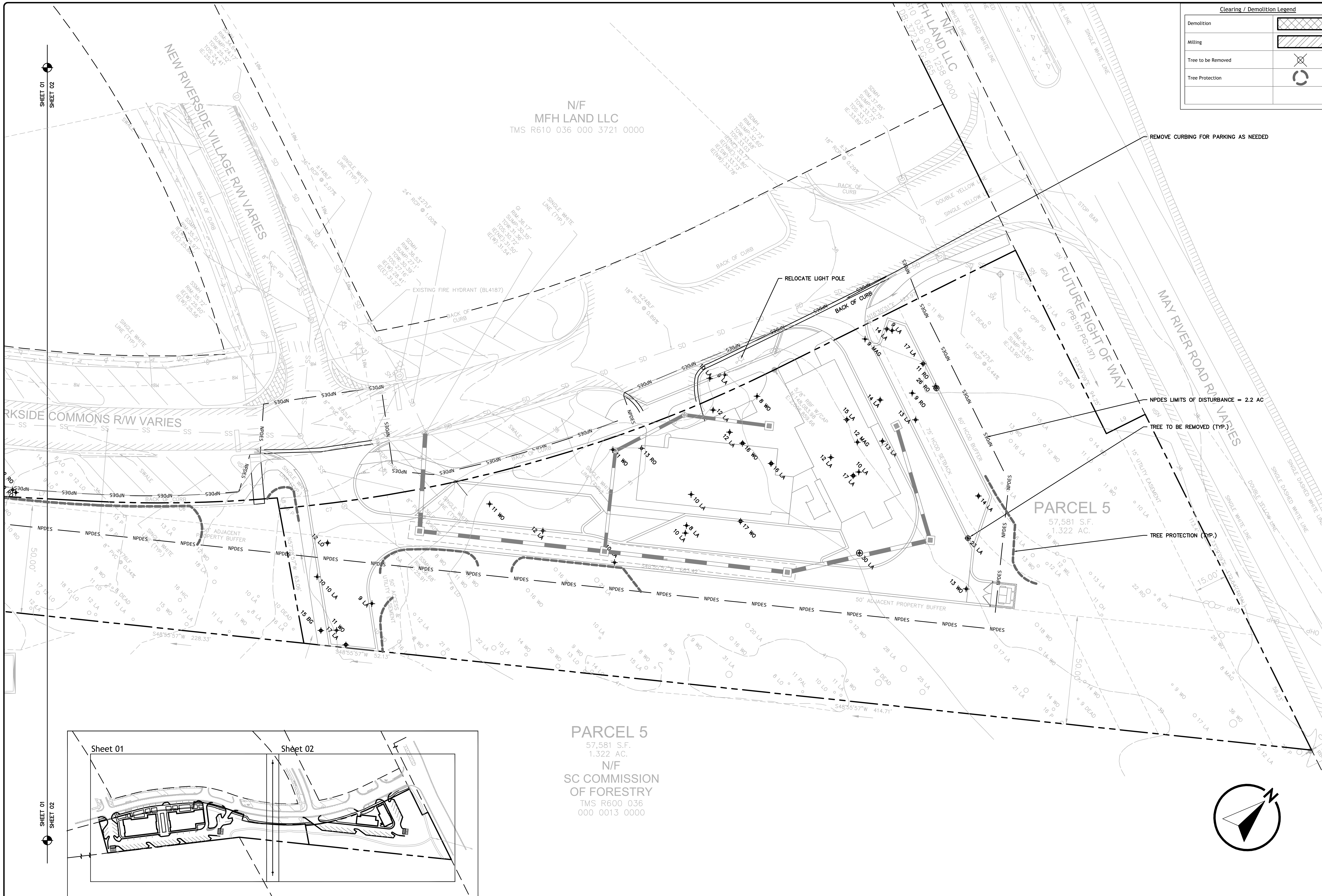
0 20 40
Scale: 1" = 20 ' Feet

C301

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

THIS DOCUMENT AND ALL REPRODUCIBLE COPIES OF THIS DOCUMENT ARE THE PROPERTY OF WARD EDWARDS, INC. REPRODUCTION OR ALTERATIONS OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF WARD EDWARDS, INC. IS NOT PERMITTED.



Clearing / Demolition Legend

Demolition	
Milling	
Tree to be Removed	
Tree Protection	

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 PAUL R. MOORE 07/24/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1		
2		
3		
4		
5		
6		
7		

Plan Revisions

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Clearing & Demolition Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

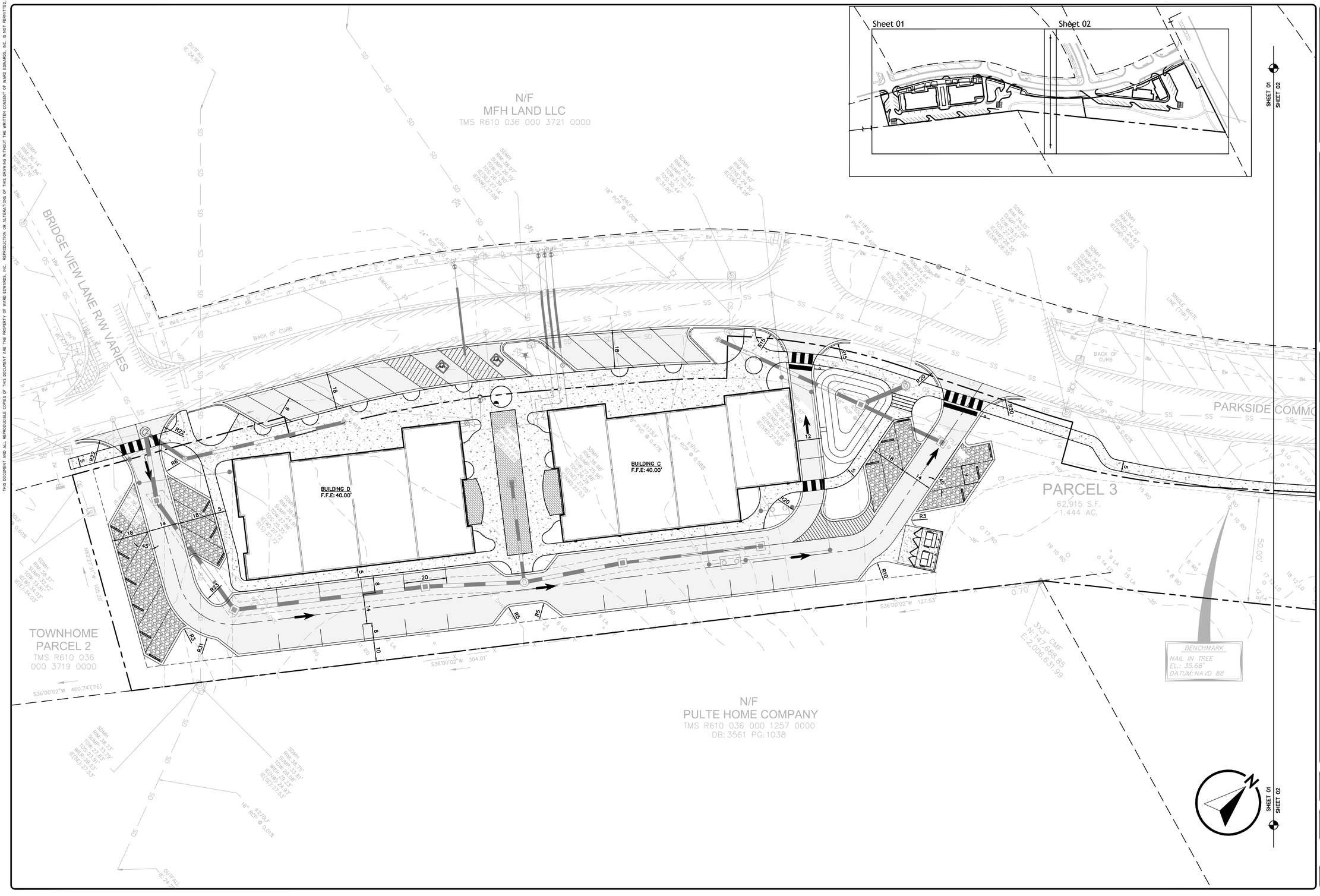
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1" = 20' Feet

C302

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
7/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards
ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

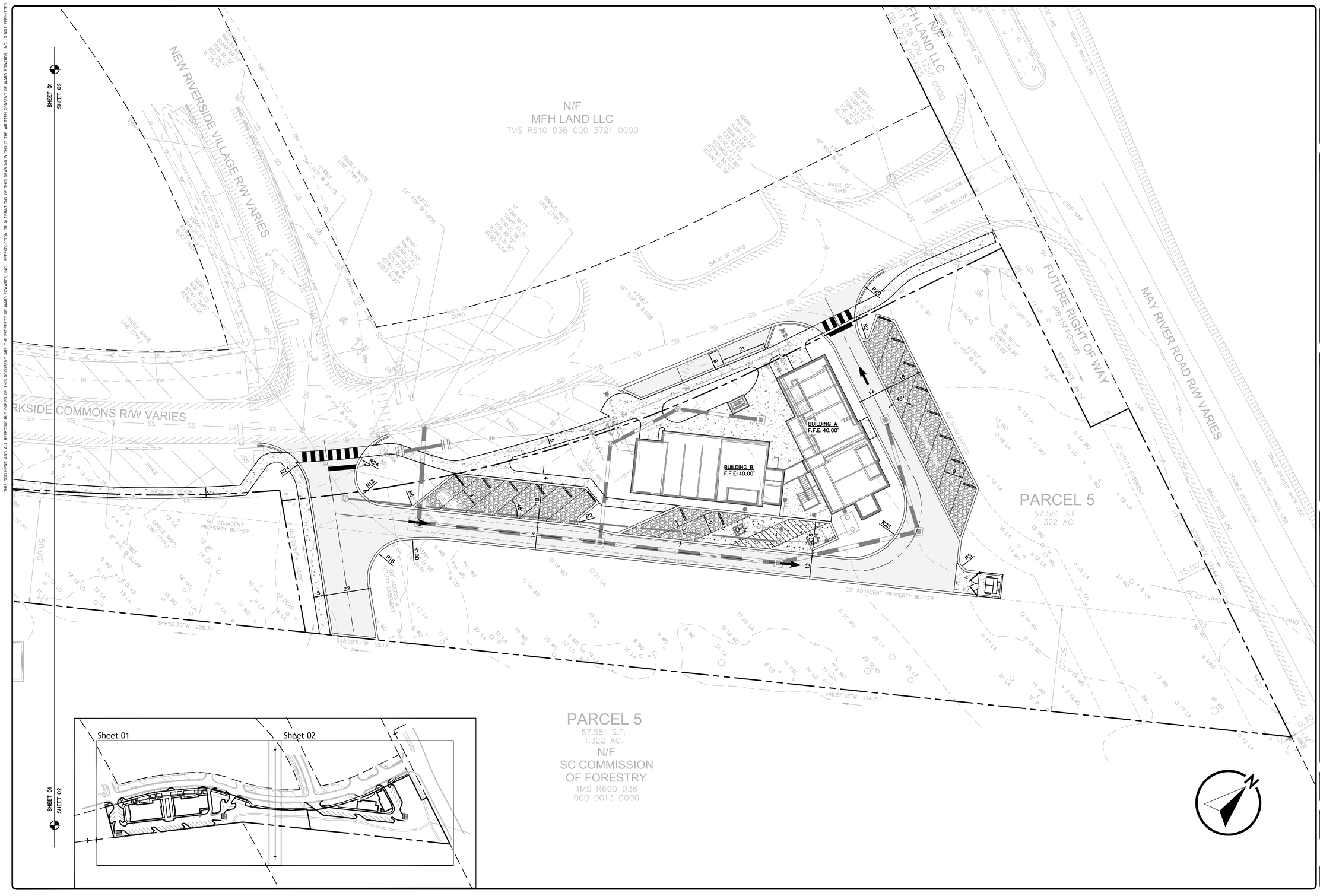
Site Layout Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20' Feet

C401



No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

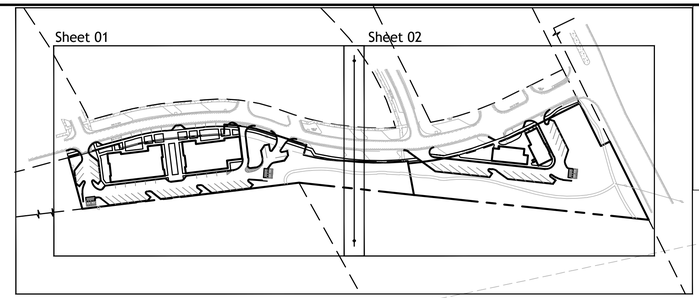
Prepared for
Architecture 101

Site Layout Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20' Feet

C402



Grading Legend

	Proposed
Top of Pavement Elevation	⊗ TP: 22.50
Top of Walk Elevation	⊗ TW: 22.50
Top of Curb Elevation	⊗ TC: 22.50
Finish Grade	⊗ FG: 22.5
High Point	⊗ HP
Low Point	⊗ LP
Contour	19
Ditch Centerline	
Direction of Flow	

N/F
MFH LAND LLC
TMS R610 036 000 3721 0000

BRIDGE VIEW LANE R/W VARIES

BUILDING C
F.F.E: 40.00'

BUILDING D
F.F.E: 40.00'

TOWNHOME
PARCEL 2
TMS R610 03
000 3719 0000

PARCEL 3
2.915 S.F.
.444 AC

TREE PROTECTION (TYP.)

PARKSIDE COMMO

BENCHMARK
NAIL IN TREE
EL.: 35.68'
DATUM: NAVD 88

3X3" CMF
N:147,488.55
E:2,006,631.99

N/F
PULTE HOME COMPANY
TMS R610 036 000 1257 0000
DB: 3561 PG:1038

S36°00'02"W 460.74'(TIE)
S36°00'02"W 304.01'
S36°00'02"W 127.53'

SHEET 01
SHEET 02

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
(843) 837-5250
www.WardEdwards.com
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Grading Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

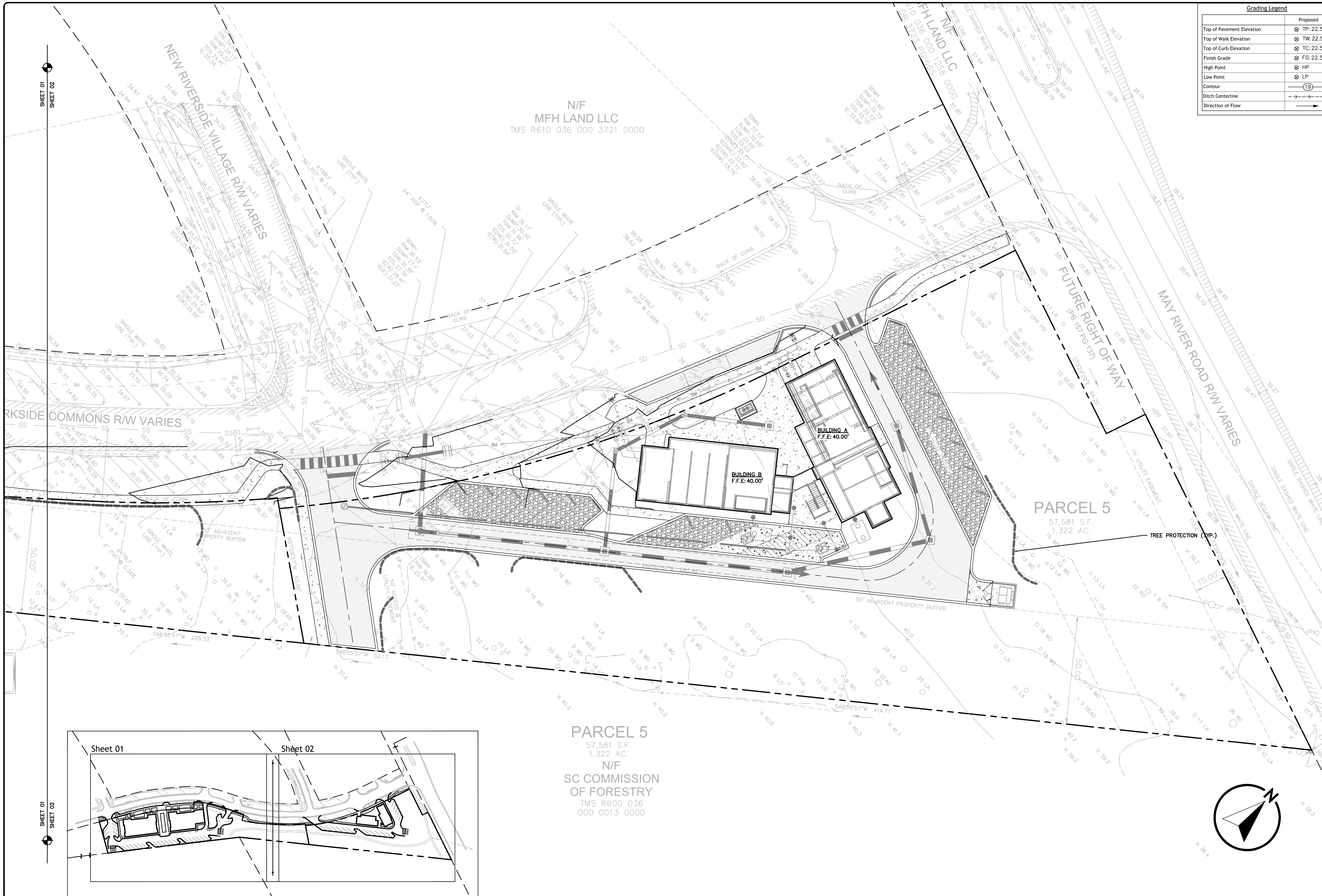
0 20 40
Scale: 1" = 20 ' Feet

C501

Permit Set - NOT FOR CONSTRUCTION

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



THIS DOCUMENT AND ALL REPRODUCIBLE COPIES OF THIS DOCUMENT ARE THE PROPERTY OF WARD EDWARDS, INC. REPRODUCTION OR ALTERATIONS OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF WARD EDWARDS, INC. IS NOT PERMITTED.

Grading Legend

	Proposed
Top of Pavement Elevation	⊗ TP: 22.50
Top of Walk Elevation	⊗ TW: 22.50
Top of Curb Elevation	⊗ TC: 22.50
Finish Grade	⊗ FG: 22.5
High Point	⊗ HP
Low Point	⊗ LP
Contour	(19)
Ditch Centerline	‒ → ‒ → ‒ →
Direction of Flow	→

South Carolina Professional Engineer No. 22816 Paul R. Moore 07/24/23

South Carolina Ward Edwards, Inc. No. C00152 Certificate of Authorization

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards
ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Grading Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale:1"= 20' Feet

C502

AS-BUILT SURVEY REQUIREMENTS

Contractor is responsible for providing an as-built topographic survey of the constructed project site. the survey shall conform to scdhec and local government as-built requirements including, but not necessarily limited to the following:

The survey shall be prepared and signed by a south carolina licensed land surveyor.

A signed hard copy and autocad file shall be provided to the engineer.

Elevations shall be based upon the same vertical datum used in the engineering plans.

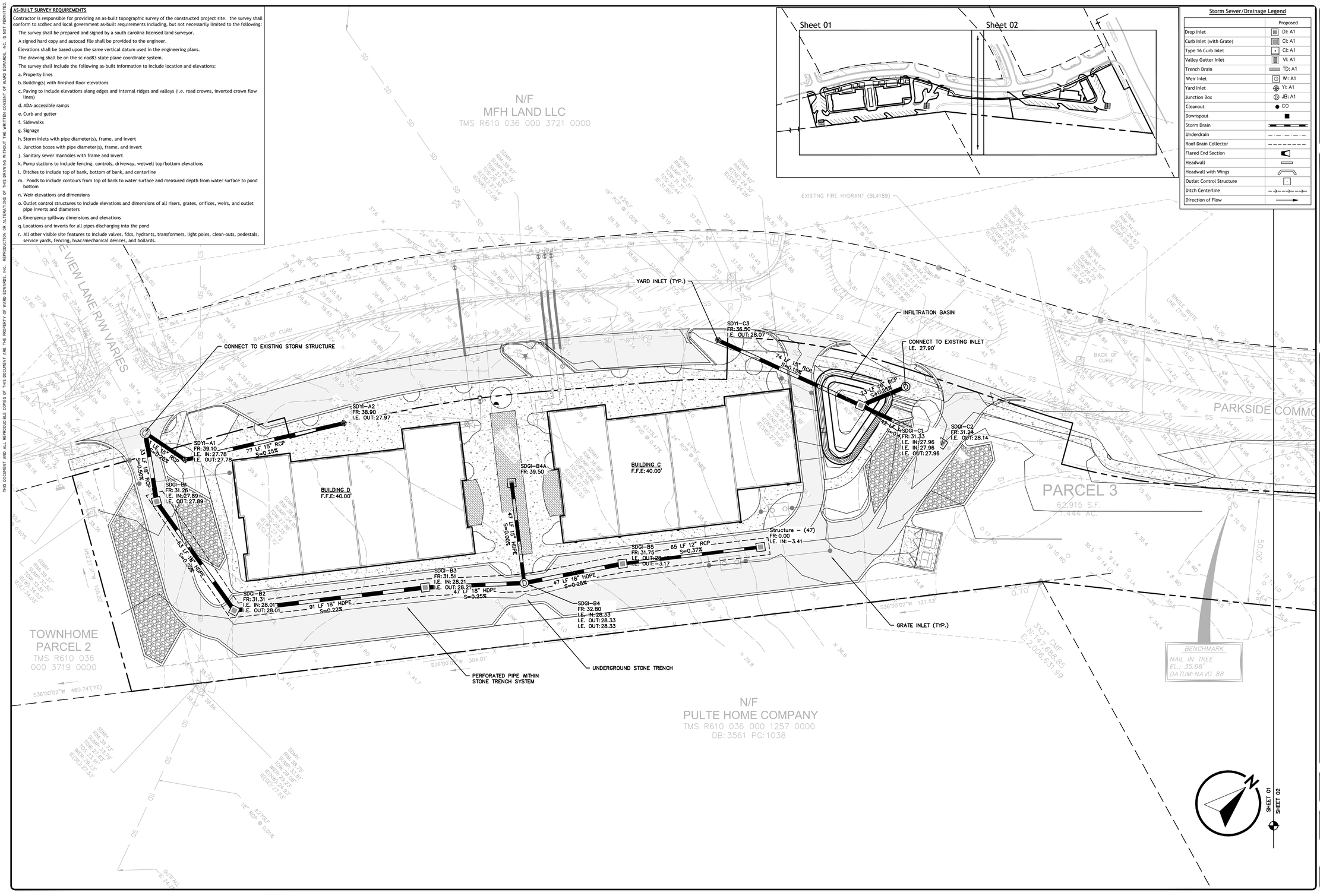
The drawing shall be on the sc nad83 state plane coordinate system.

The survey shall include the following as-built information to include location and elevations:

a. Property lines
b. Building(s) with finished floor elevations
c. Paving to include elevations along edges and internal ridges and valleys (i.e. road crowns, inverted crown flow lines)
d. ADA-accessible ramps
e. Curb and gutter
f. Sidewalks
g. Signage
h. Storm inlets with pipe diameter(s), frame, and invert
i. Junction boxes with pipe diameter(s), frame, and invert
j. Sanitary sewer manholes with frame and invert
k. Pump stations to include fencing, controls, driveway, wetwell top/bottom elevations
l. Ditches to include top of bank, bottom of bank, and centerline
m. Ponds to include contours from top of bank to water surface and measured depth from water surface to pond bottom
n. Weir elevations and dimensions
o. Outlet control structures to include elevations and dimensions of all risers, grates, orifices, weirs, and outlet pipe inverts and diameters
p. Emergency spillway dimensions and elevations
q. Locations and inverts for all pipes discharging into the pond
r. All other visible site features to include valves, fdcs, hydrants, transformers, light poles, clean-outs, pedestals, service yards, fencing, hvac/mechanical devices, and bollards.

Storm Sewer/Drainage Legend

	Proposed
Drop Inlet	DI: A1
Curb Inlet (with Grate)	CI: A1
Type 16 Curb Inlet	CI: A1
Valley Gutter Inlet	VI: A1
Trench Drain	TD: A1
Weir Inlet	WI: A1
Yard Inlet	YI: A1
Junction Box	JB: A1
Cleanout	CO
Downspout	
Storm Drain	
Underdrain	
Roof Drain Collector	
Flared End Section	
Headwall	
Headwall with Wings	
Outlet Control Structure	
Ditch Centerline	
Direction of Flow	



No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Drainage Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1" = 20 ' Feet

C601

Permit Set - NOT FOR CONSTRUCTION

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

AS-BUILT SURVEY REQUIREMENTS

Contractor is responsible for providing an as-built topographic survey of the constructed project site. the survey shall conform to scdhec and local government as-built requirements including, but not necessarily limited to the following:

The survey shall be prepared and signed by a south carolina licensed land surveyor.

A signed hard copy and autocad file shall be provided to the engineer.

Elevations shall be based upon the same vertical datum used in the engineering plans.

The drawing shall be on the sc nad83 state plane coordinate system.

The survey shall include the following as-built information to include location and elevations:

a. Property lines
b. Building(s) with finished floor elevations
c. Paving to include elevations along edges and internal ridges and valleys (i.e. road crowns, inverted crown flow lines)
d. ADA-accessible ramps
e. Curb and gutter
f. Sidewalks
g. Signage
h. Storm inlets with pipe diameter(s), frame, and invert
i. Junction boxes with pipe diameter(s), frame, and invert
j. Sanitary sewer manholes with frame and invert
k. Pump stations to include fencing, controls, driveway, wetwell top/bottom elevations
l. Ditches to include top of bank, bottom of bank, and centerline
m. Ponds to include contours from top of bank to water surface and measured depth from water surface to pond bottom
n. Weir elevations and dimensions
o. Outlet control structures to include elevations and dimensions of all risers, grates, orifices, weirs, and outlet pipe inverts and diameters
p. Emergency spillway dimensions and elevations
q. Locations and inverts for all pipes discharging into the pond
r. All other visible site features to include valves, fdcs, hydrants, transformers, light poles, clean-outs, pedestals, service yards, fencing, hvac/mechanical devices, and bollards.

Storm Sewer/Drainage Legend

	Proposed
Drop Inlet	DI: A1
Curb Inlet (with Grate)	CI: A1
Type 16 Curb Inlet	CI: A1
Valley Gutter Inlet	VI: A1
Trench Drain	TD: A1
Weir Inlet	WI: A1
Yard Inlet	YI: A1
Junction Box	JB: A1
Cleanout	CO
Downspout	
Storm Drain	
Underdrain	
Roof Drain Collector	
Flared End Section	
Headwall	
Headwall with Wings	
Outlet Control Structure	
Ditch Centerline	
Direction of Flow	

N/F
MFH LAND LLC
TMS R610 036 000 3721 0000

CONNECT TO EXISTING GRATE INLET
I.E. 31.54'

YARD INLET (TYP.)

GRATE INLET (TYP.)

SDYI-D2B
FR: 39.55
I.E. IN: 32.00
I.E. OUT: 32.00

SDYI-D2A
FR: 36.11
I.E. IN: 31.92
I.E. OUT: 31.92

SDGI-D2C
FR: 39.78
I.E. OUT: 32.10

SDGI-D5
FR: 39.23
I.E. OUT: 32.34

SDGI-D4
FR: 39.02
I.E. IN: 32.19
I.E. OUT: 32.19

SDGI-D1
FR: 34.98
I.E. IN: 31.61
I.E. OUT: 31.61

SDGI-D2
FR: 35.13
I.E. IN: 31.83
I.E. OUT: 31.83

SDGI-D3
FR: 35.42
I.E. IN: 32.04
I.E. OUT: 32.04

39 LF 15" HDPE S=0.25%
36 LF 15" HDPE S=0.23%
45 LF 18" RCP S=0.13%
47 LF 15" HDPE S=0.19%
55 LF 15" RCP S=0.13%
86 LF 18" HDPE (PERFORATED) S=0.25%
85 LF 18" HDPE (PERFORATED) S=0.25%
67 LF 18" RCP S=0.23%

BUILDING A
F.F.E: 40.00'

BUILDING B
F.F.E: 40.00'

UNDERGROUND STONE TRENCH

PERFORATED PIPE WITHIN STONE TRENCH SYSTEM

PARCEL 5
57,581 S.F.
1.322 AC.

N/F
SC COMMISSION
OF FORESTRY
TMS R600 036
000 0013 0000

FUTURE RIGHT OF WAY
(PB:157 PG:137)

MAY RIVER ROAD R/W VARIES

PARKSIDE COMMONS R/W VARIES

EXISTING FIRE HYDRANT (BL4187)

50' ADJACENT PROPERTY BUFFER

50' ACCESS & UTILITY EASEMENT

15' UTILITY EASEMENT

S48°55'57"W 228.33'

S48°55'57"W 82.13'

S48°55'57"W 414.71'

SHEET 01
SHEET 02

Sheet 01 | Sheet 02

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
7/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

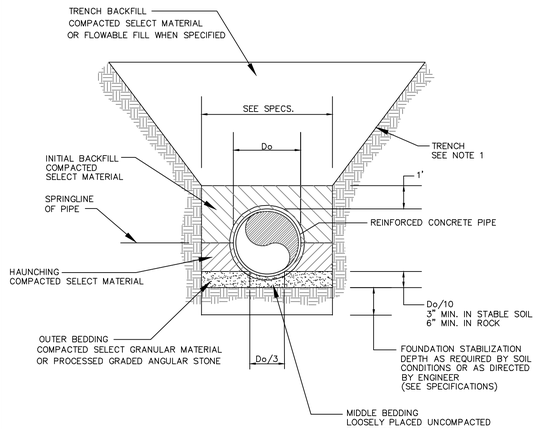
Prepared for
Architecture 101

Drainage Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1" = 20' Feet

C602

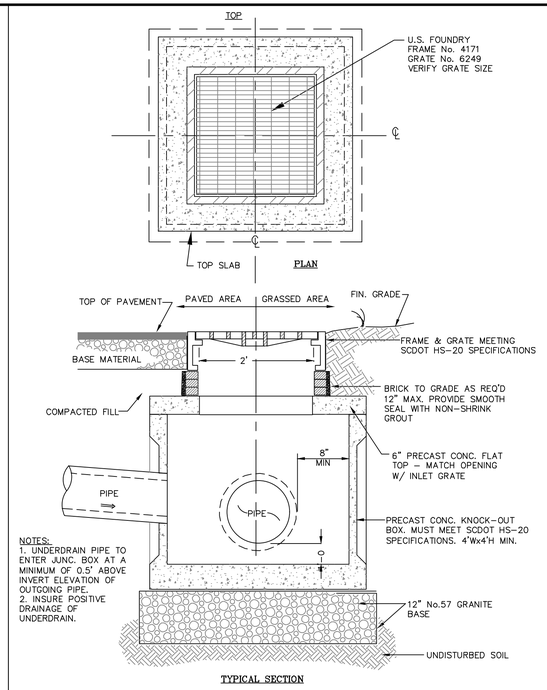


NOTES:

1: DEPTH OF VERTICAL TRENCH AND SIDE SLOPES OF TRENCH MAY VARY DEPENDING ON DEPTH OF EXCAVATION AND TRENCH PROTECTION SYSTEM USED. COMPLY WITH OSHA REGULATIONS (STANDARDS – 29 CFR) PART 1956 SUBPART P, EXCAVATIONS.

2. WHEN PROCESSED ANGULAR STONE IS USED FOR MIDDLE AND OUTER BEDDING, THE STONE SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC TO PREVENT MIGRATION OF SURROUNDING SOILS.

EMBEDMENT DETAIL FOR REINFORCED CONCRETE PIPE

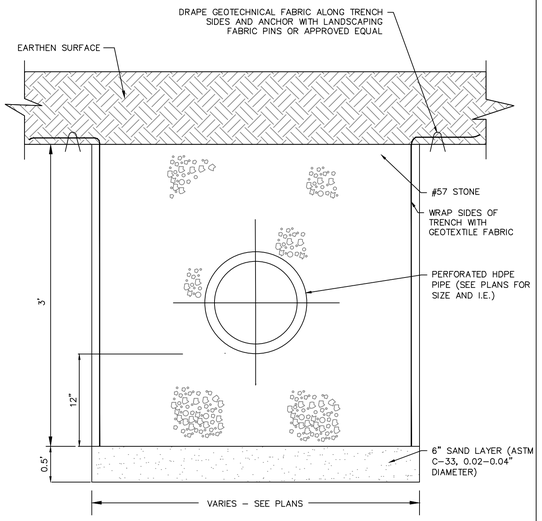


NOTES:
1. UNDERDRAIN PIPE TO ENTER JUNC. BOX AT A MINIMUM OF 0.5' ABOVE INVERT ELEVATION OF OUTGOING PIPE.
2. INSURE POSITIVE DRAINAGE OF UNDERDRAIN.

TYPICAL SECTION

GRATE INLET

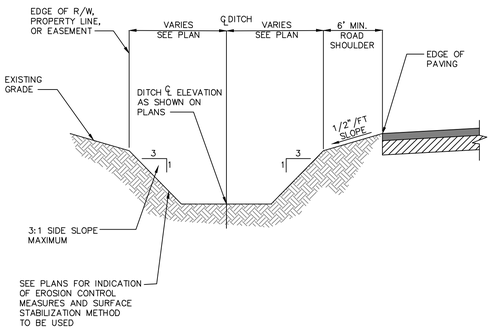
DETAIL 02630-027



TOWN OF BLUFFTON NOTE: SEE SOLOCO STORMWATER MANUAL SECTION 4.5.6 FOR INFILTRATION CONSTRUCTION SEQUENCE

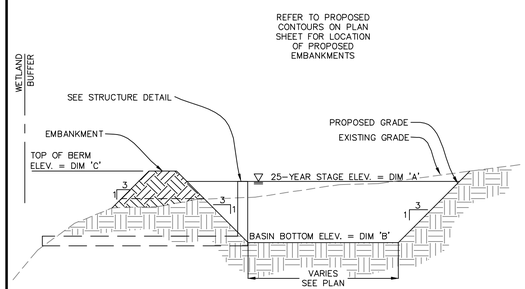
UNDERGROUND STONE TRENCH DETAIL

DETAIL 02630-021



TYPICAL DITCH CROSS SECTION

DETAIL 02630-006



DIMENSION DATA

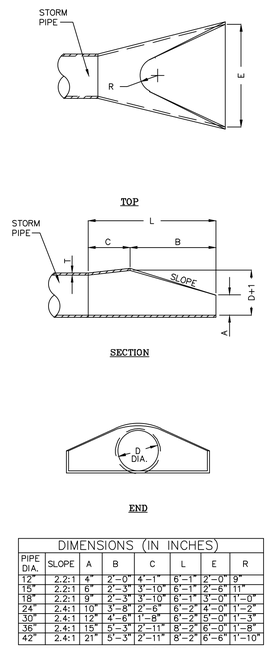
	BASIN 1	BASIN 2	
DIM 'A'	15.35'	17.11'	25 YR. PEAK
DIM 'B'	14.15'	16.25'	BOTTOM ELEV
DIM 'C'	16.00'	17.50'	TOP OF BERM

EMBANKMENT CONSTRUCTION NOTES:
1. ALL VEGETATION ROOTS, BRUSH, SOD, RUBBISH, DEBRIS, AND ALL OTHER UNSUITABLE MATERIALS SHALL BE STRIPPED AND REMOVED FROM THE LIMITS OF THE PROPOSED EMBANKMENT CONSTRUCTION.
2. THE MATERIAL FOR THE EMBANKMENT CONSTRUCTION SHALL CONSIST OF SAND-CLAY OR CLAYEY SAND. THE SOIL FILL SHALL BE FREE OF ORGANICS AND SENSITIVE CLAY MATERIALS.
3. THE EMBANKMENT AND BACKFILL MATERIAL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY, AS DETERMINED BY THE STANDARD PROCTOR TEST. ALL FILL SHALL BE COMPACTED TO THE LINES, DEPTHS, AND GRADES AS INDICATED. EXCESS EXCAVATION OF THE EXISTING SOILS MAY BE NECESSSARY TO OBTAIN THE REQUIRED DENSITY AT THE LIMITS OF EXCAVATION.

EROSION & SEDIMENT CONTROL NOTE:
1. SEE PLANS FOR INDICATION OF EROSION CONTROL MEASURES AND SURFACE STABILIZATION METHOD TO BE USED

DRY DETENTION BASIN CROSS SECTION

DETAIL 02630-033

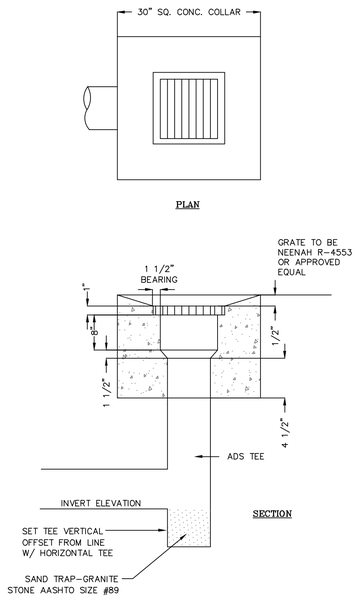


DIMENSIONS (IN INCHES)							
PIPE DIA.	SLOPE	A	B	C	L	E	R
12"	2.2:1	4"	2'-0"	4'-1"	6'-1"	2'-0"	9"
15"	2.2:1	6"	2'-3"	3'-10"	6'-1"	2'-6"	11"
18"	2.2:1	9"	2'-3"	3'-10"	6'-1"	3'-0"	1'-0"
24"	2.4:1	10"	3'-8"	2'-6"	6'-2"	4'-0"	1'-2"
30"	2.4:1	12"	4'-6"	1'-8"	6'-2"	5'-0"	1'-3"
36"	2.4:1	15"	5'-3"	2'-11"	8'-2"	6'-0"	1'-8"
42"	2.4:1	21"	5'-3"	2'-11"	8'-2"	6'-6"	1'-10"

T = PIPE WALL THICKNESS (0.0833D+1 TYPICAL)

CONCRETE FLARED END SECTION

DETAIL 02630-005



YARD INLET

DETAIL 02630-020

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Drainage Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

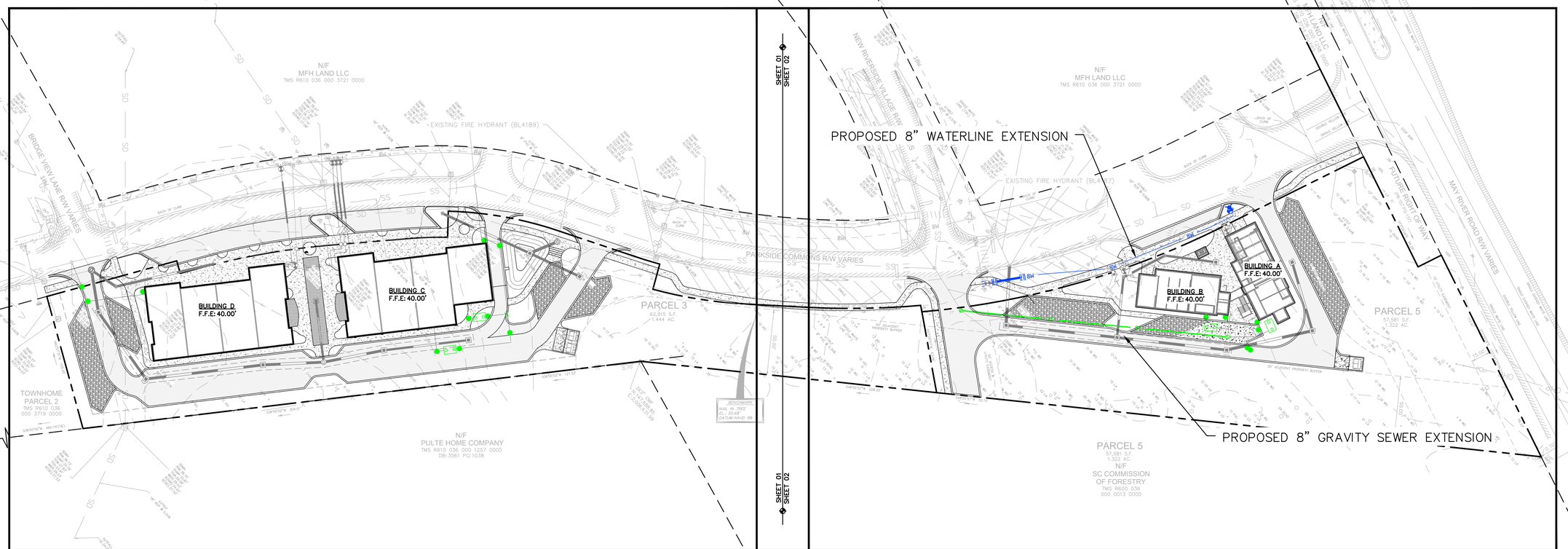
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

C603

Sheet 01

Sheet 02



SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
7/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

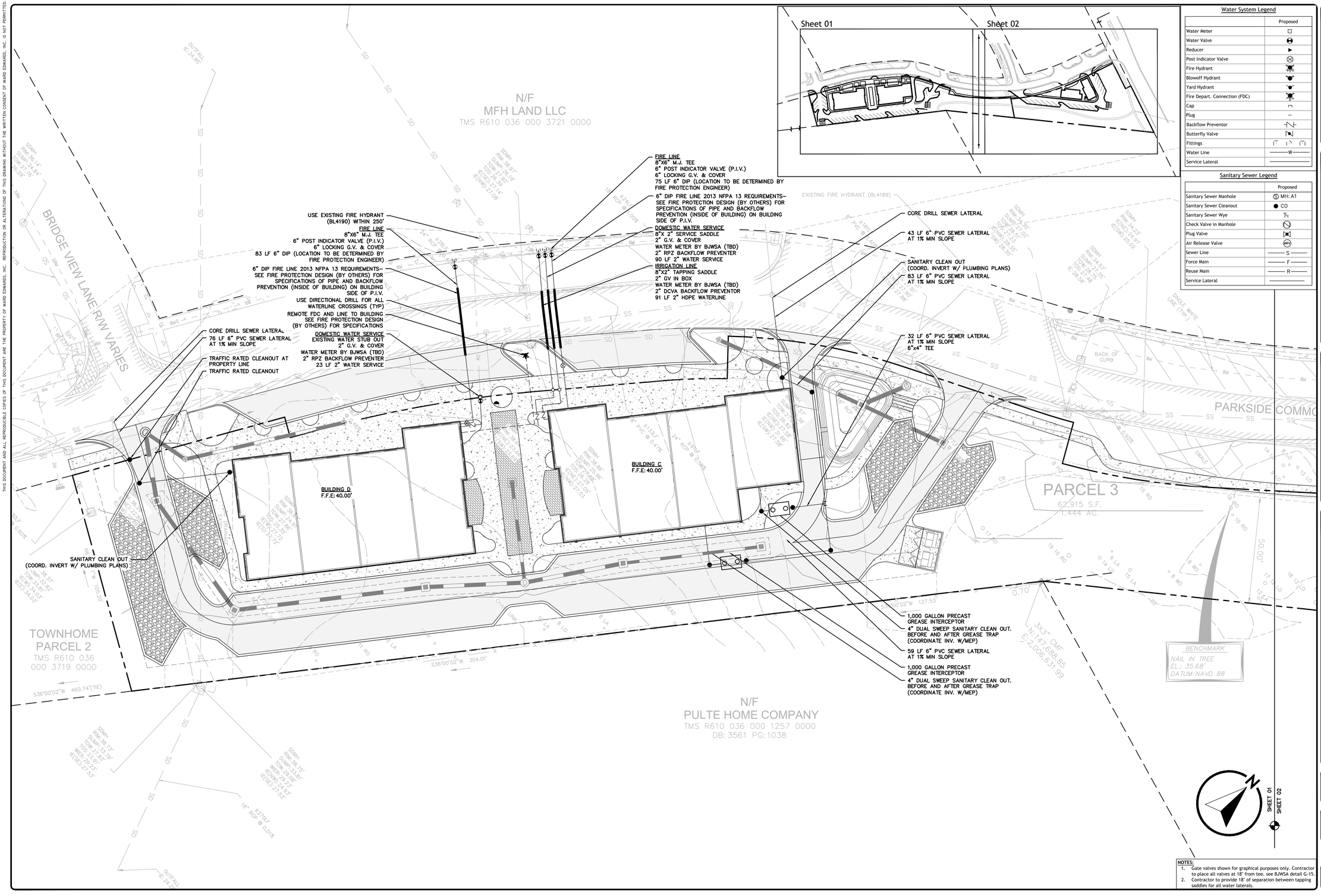
Overall Utility Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 40 80
Scale:1"= 40 ' Feet

C700



NOTES:
1. Gate valves shown for graphical purposes only. Contractor to place all valves at 18' from tee. see BJWSA detail G-15.
2. Contractor to provide 18' of separation between tapping saddles for all water laterals.

Water System Legend

	Proposed
Water Meter	
Water Valve	
Reducer	
Post Indicator Valve	
Fire Hydrant	
Blowoff Hydrant	
Yard Hydrant	
Fire Depart. Connection (FDC)	
Cap	
Plug	
Backflow Preventor	
Butterfly Valve	
Fittings	
Water Line	W
Service Lateral	

Sanitary Sewer Legend

	Proposed
Sanitary Sewer Manhole	MH: A1
Sanitary Sewer Cleanout	CO
Sanitary Sewer Wye	
Check Valve in Manhole	
Plug Valve	
Air Release Valve	ARV
Sewer Line	S
Force Main	F
Reuse Main	R
Service Lateral	

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 07/24/2023 PAUL R. MOORE

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Utility Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

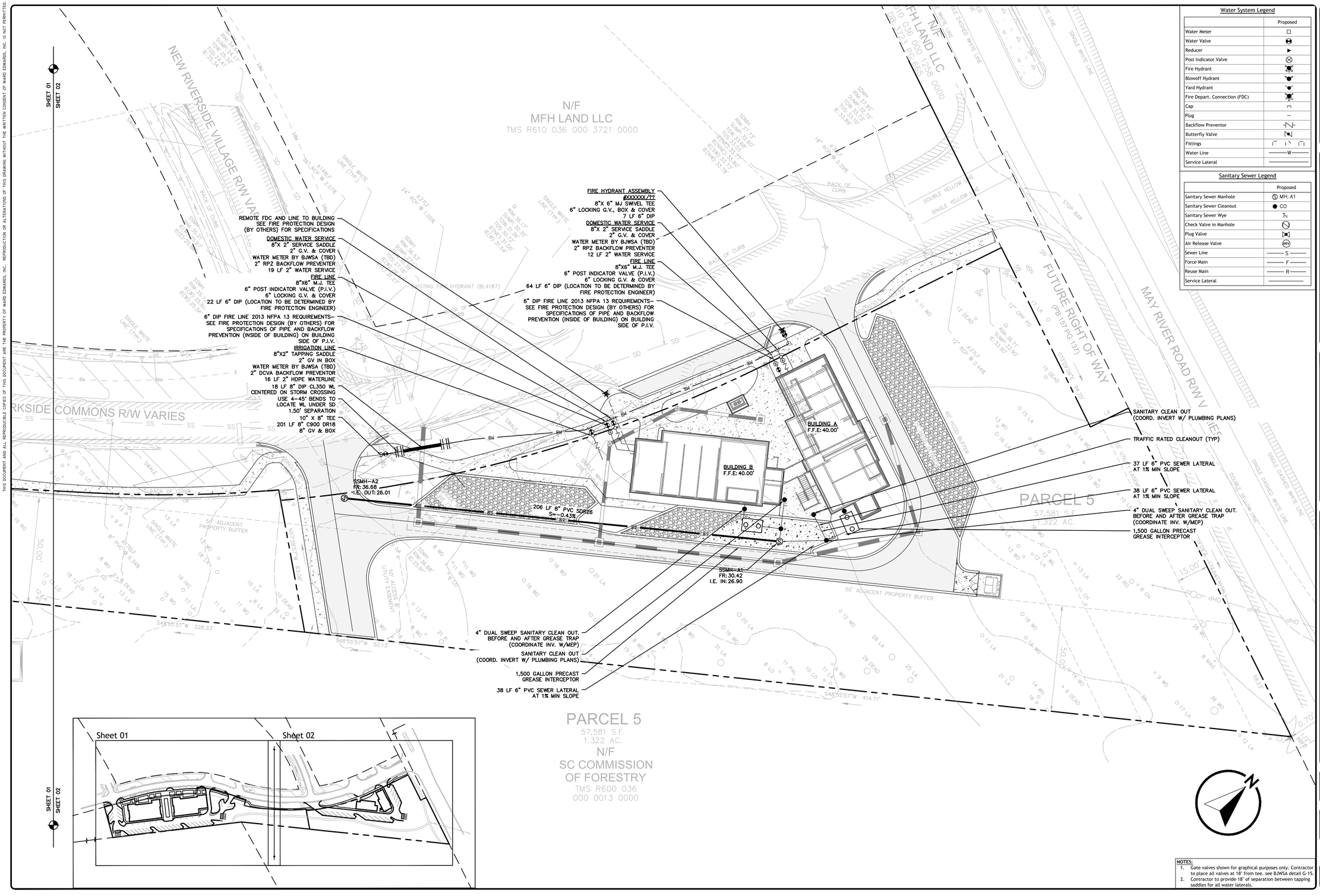
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20 ' Feet

C701

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



Water System Legend

	Proposed
Water Meter	
Water Valve	
Reducer	
Post Indicator Valve	
Fire Hydrant	
Blowoff Hydrant	
Yard Hydrant	
Fire Depart. Connection (FDC)	
Cap	
Plug	
Backflow Preventor	
Butterfly Valve	
Fittings	
Water Line	—W—
Service Lateral	

Sanitary Sewer Legend

	Proposed
Sanitary Sewer Manhole	MH: A1
Sanitary Sewer Cleanout	CO
Sanitary Sewer Wye	
Check Valve in Manhole	
Plug Valve	
Air Release Valve	
Sewer Line	—S—
Force Main	—F—
Reuse Main	—R—
Service Lateral	

NOTES:
1. Gate valves shown for graphical purposes only. Contractor to place all valves at 18' from tee. see BJWSA detail G-15.
2. Contractor to provide 18' of separation between tapping saddles for all water laterals.

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

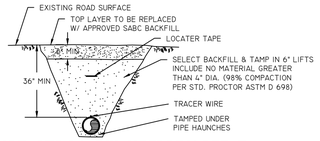
Utility Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

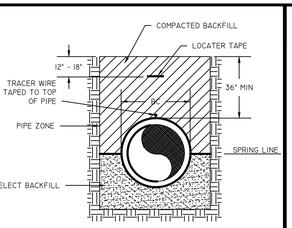
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20 ' Feet

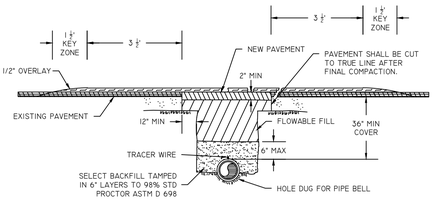
C702



UNPAVED ROADWAY BEDDING DETAIL



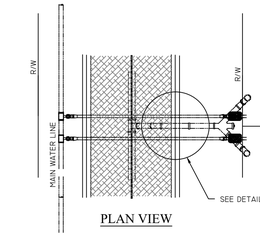
TYPICAL BEDDING DETAIL



PAVED AREA DETAIL

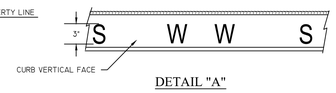
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MATCH EXISTING PAVEMENT TYPE AND THICKNESS. MINIMUM THICKNESS OVER TRENCH IS 2".
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT.

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BEDDING PRESSURE PIPE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–02
SCALE: N.T.S	APPROVED BY: ERS	

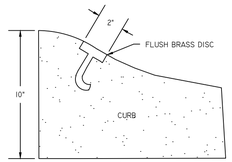


PLAN VIEW

NOTES:
1. CURB MARKING SHALL BE PERPENDICULAR WITH SERVICE LOCATION.
2. CURB MARKING SHALL BE EMBOSSED INTO CURB FACE.
   A. WATER SERVICES SHALL BE DENOTED WITH A "W".
   B. SEWER SERVICES SHALL BE DENOTED WITH A "S".
   C. VALVES SHALL BE DENOTED BY A "V".
   D. BENDS SHALL BE DENOTED WITH A "B".
3. VALVE AND PIPELINE MARKERS ARE NOT REQUIRED IF A SURVEYORS 2"Ø BRASS DISK IS EMBEDDED ADJACENT TO EMBOSSED LETTER AND MARKED TO INDICATE LOCATION OF REFERENCED ITEM.
4. DISC MUST BE EMBEDDED, MAY NOT PROTRUDE PASS CONCRETE SURFACE OR EMBEDDED MORE THAN 3/8".



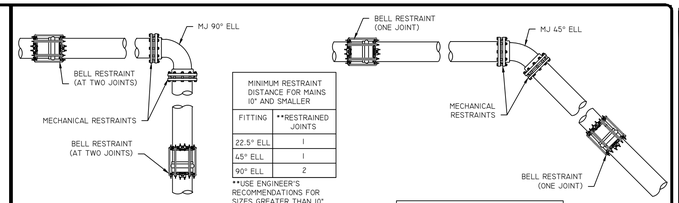
DETAIL "A"



SECTION A-A

DETAIL "B"

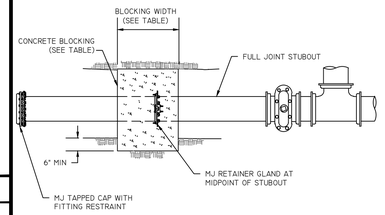
BEAUFORT–JASPER WATER & SEWER AUTHORITY		
CURB MARKING DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–07
SCALE: N.T.S	APPROVED BY: ERS	



MINIMUM RESTRAINT DISTANCE FOR MAINS 10" AND SMALLER	
FITTING	**RESTRAINED JOINTS
22.5° ELL	1
45° ELL	1
90° ELL	2

**USE ENGINEER'S RECOMMENDATIONS FOR SIZES GREATER THAN 10"

TYPICAL FITTING AND JOINT RESTRAINT

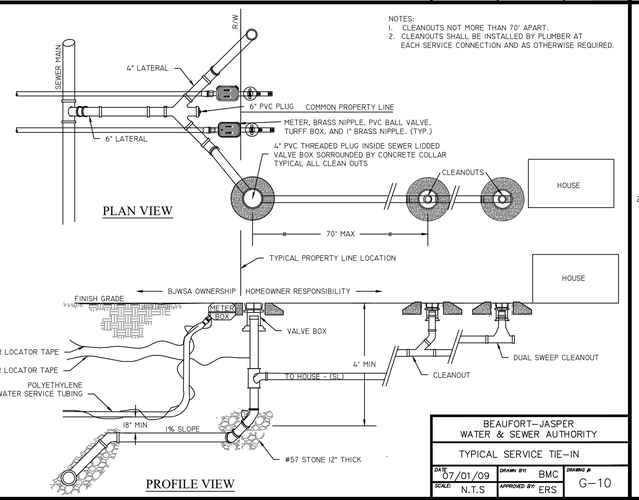


TYPICAL FUTURE STUBOUT

MINIMUM BLOCKING DIMENSIONS		
PIPE SIZE (IN)	BLOCKING BEARING AREA (FT²)	BLOCKING WIDTH (IN)
4	2	24
6	4	24
8	7	36
10	11	36
12	15	36
OVER 12" BY THE DESIGN ENGINEER		

NOTE:
1. THE MINIMUM DIMENSIONS TABLE IS BASED ON AN ASSUMED SOIL BEARING OF 2000 LBS PER SQ. FT. IF BEARING VALUE FOR SOIL IS LESS THAN AREA SHOWN HEREIN SHOULD BE INCREASED ACCORDINGLY.
2. JOINT IS DEFINED TO BE A MINIMUM OF 18" IN LENGTH.

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
MECHANICAL RESTRAINT		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–08
SCALE: N.T.S	APPROVED BY: ERS	

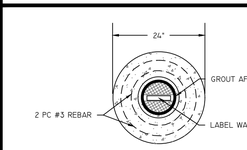


PLAN VIEW

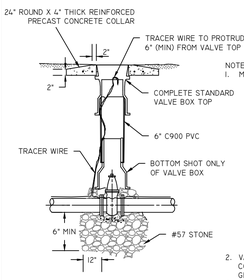
PROFILE VIEW

NOTES:
1. CLEANOUTS NOT MORE THAN 70' APART.
2. CLEANOUTS SHALL BE INSTALLED BY PLUMBER AT EACH SERVICE CONNECTION AND AS OTHERWISE REQUIRED.

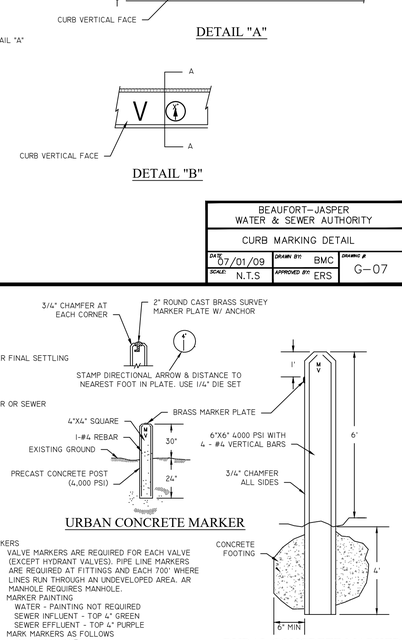
BEAUFORT–JASPER WATER & SEWER AUTHORITY		
TYPICAL SERVICE TIE–IN		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–10
SCALE: N.T.S	APPROVED BY: ERS	



CONCRETE COLLAR



VALVE AND VALVE BOX

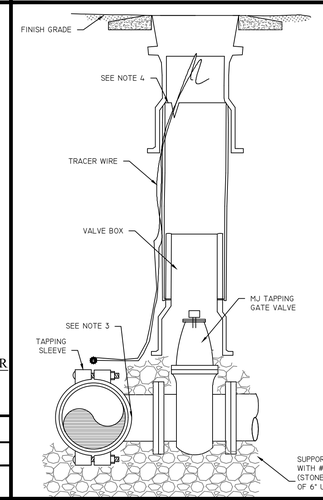


URBAN CONCRETE MARKER

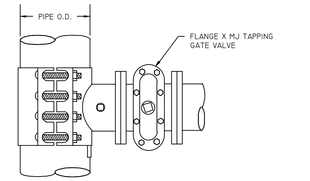
RURAL CONCRETE MARKER

NOTES:
1. MARKERS
   A. VALVE MARKERS ARE REQUIRED FOR EACH VALVE (EXCEPT HYDRANT VALVES). PIPE LINE MARKERS ARE REQUIRED AT FITTINGS AND EACH 700' WHERE LINES RUN THROUGH AN UNDEVELOPED AREA. AR MANHOLE REQUIRES MANHOLE.
   B. MARKER PAINTING
      WATER - PAINTING NOT REQUIRED
      SEWER INFLUENT - TOP 4" GREEN
      SEWER EFFLUENT - TOP 4" PURPLE
   C. MARK MARKERS AS FOLLOWS
      MV - MAIN VALVE
      AV - AIR RELEASE VALVE
      PIPELINE - PIPELINE MARKER
   D. VALVE AND PIPELINE MARKERS IN MOWED AREAS TO BE SET TO AN EXPOSURE OF NOT MORE THAN 18" OR LESS THAN 6" ABOVE FINAL GRADE.
   E. IF SOILS ARE NOT STABLE ENOUGH TO MAINTAIN THE URBAN MARKERS VERTICAL, CONCRETE FOOTINGS ARE TO BE INSTALLED.
2. VALVE BOX LID SHALL BE WITHIN ¼" OF COLLAR TOP. COLLAR TOP IS TO BE NO MORE THAN 1" ABOVE FINAL GRADE AND NO LOWER THAN 1" BELOW FINAL GRADE.
3. CONCRETE COLLAR NOT REQUIRED IN PAVEMENT. VALVE BOX TOP IS TO BE TRAFFIC RATED.

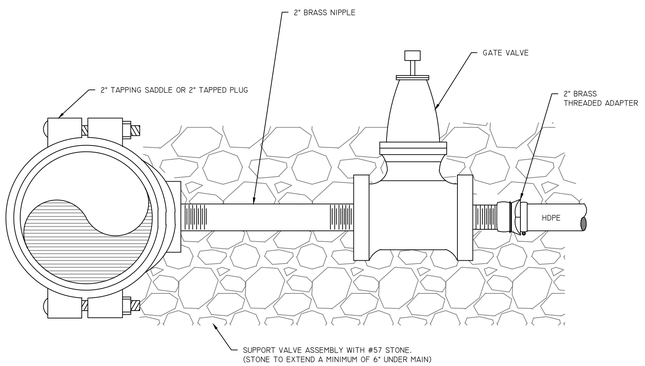
BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD VALVE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–12
SCALE: N.T.S	APPROVED BY: ERS	



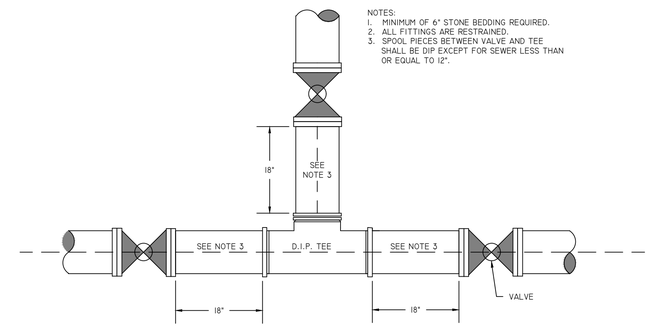
NOTES:
1. ALL TAPPING SLEEVES GREATER THAN 2" SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI FOR 20 MINUTES.
2. ALL WET TAPS 12" AND UNDER SHALL BE PERFORMED BY BJWSA.
3. TAP DIAMETER SHALL BE WITHIN ½" OF LINE DIAMETER.
4. NOTCH TOP OF PVC PIPE TO AVOID PINCHING TRACER WIRE.



BEAUFORT–JASPER WATER & SEWER AUTHORITY		
TAPPING SLEEVE & VALVE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–13
SCALE: N.T.S	APPROVED BY: ERS	

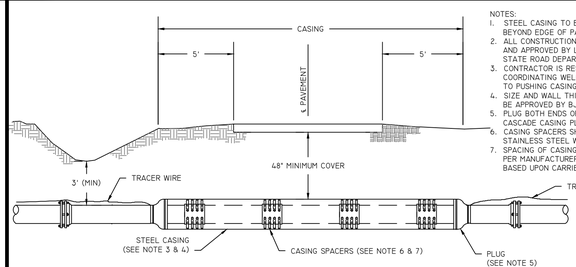


BEAUFORT–JASPER WATER & SEWER AUTHORITY		
2" CONNECTION		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–14
SCALE: N.T.S	APPROVED BY: ERS	

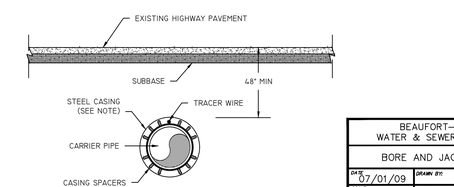


NOTES:
1. MINIMUM OF 6" STONE BEDDING REQUIRED.
2. ALL FITTINGS ARE RESTRAINED.
3. SPOOL PIECES BETWEEN VALVE AND TEE SHALL BE DIP EXCEPT FOR SEWER LESS THAN OR EQUAL TO 12".

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
TEE AND VALVES		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–15
SCALE: N.T.S	APPROVED BY: ERS	



NOTES:
1. STEEL CASING TO EXTEND MINIMUM OF 5' BEYOND EDGE OF PAVEMENT.
2. ALL CONSTRUCTION TO BE INSPECTED AND APPROVED BY LOCAL COUNTY OR STATE ROAD DEPARTMENT.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WELD INSPECTIONS PRIOR TO PUSHING CASING.
4. SIZE AND WALL THICKNESS OF CASING TO BE APPROVED BY BJWSA AND DOT DEPT.
5. PLUG BOTH ENDS OF CASING WITH CASCADE CASING PLUGS.
6. CASING SPACERS SHALL BE ALL STAINLESS STEEL WITH PLASTIC SLIDES.
7. SPACING OF CASING SPACERS SHALL BE PER MANUFACTURERS SPECIFICATIONS BASED UPON CARRIER PIPE MATERIAL.



BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BORE AND JACK DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G–03
SCALE: N.T.S	APPROVED BY: ERS	

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE
SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Permit Set - NOT FOR CONSTRUCTION

New Riverside Village Commercial
Town of Bluffton, South Carolina

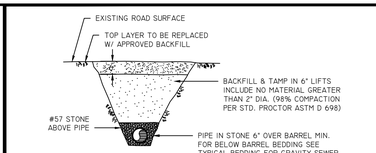
Prepared for
Architecture 101

Utility Details

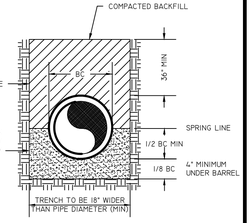
Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

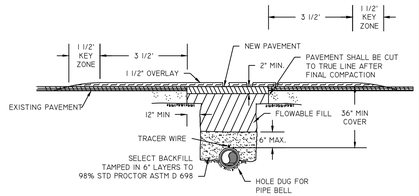
C703



UNPAVED ROADWAY BEDDING DETAIL



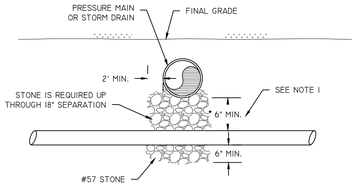
TYPICAL BEDDING FOR GRAVITY SEWER PIPE



PAVED AREA DETAIL

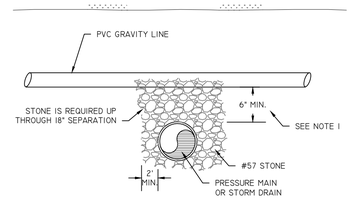
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH INSTALLATION CUT. FINAL CUT TO BE MADE AFTER FINAL COMPACTION.
2. MATCH EXISTING PAVEMENT TYP. THICKNESS IS TO BE 2" UNLESS EXISTING IS THICKER.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT, IF MORE STRINGENT.

BEAUFORT–JASPER WATER & SEWER AUTHORITY			
BEDDING DETAIL, GRAVITY PIPE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–01	
SCALE: N.T.S	APPROVED BY: ERS		



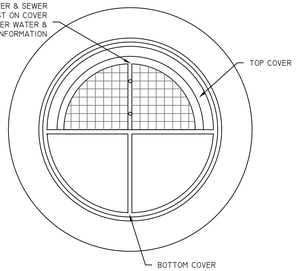
GRAVITY MAIN CROSSING UNDER STORM DRAIN / PRESSURE MAIN

NOTE:
1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED.
2. NOT APPLICABLE FOR UTILITIES WITHIN SCDOT RIGHT OF WAY.



GRAVITY MAIN CROSSING OVER STORM DRAIN / PRESSURE MAIN

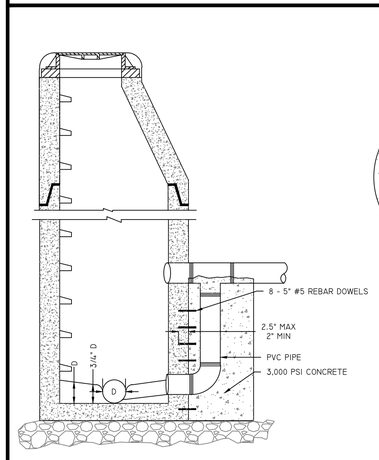
BEAUFORT–JASPER WATER & SEWER AUTHORITY			
GRAVITY MAIN CROSSING			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–03	
SCALE: N.T.S	APPROVED BY: ERS		



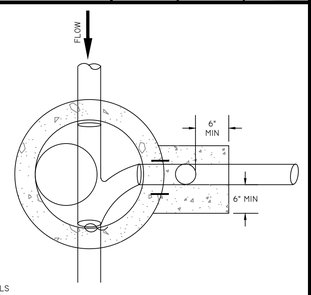
LOGO

NOTES:
1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN

BEAUFORT–JASPER WATER & SEWER AUTHORITY			
MANHOLE, COVER AND FRAME			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–05	
SCALE: N.T.S	APPROVED BY: ERS		

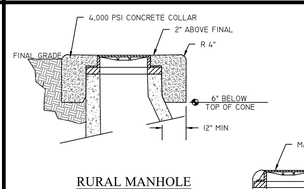


SECTION VIEW

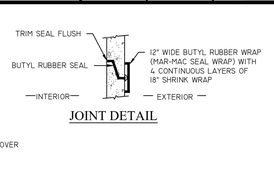


PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY			
DROP MANHOLE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–06	
SCALE: N.T.S	APPROVED BY: ERS		

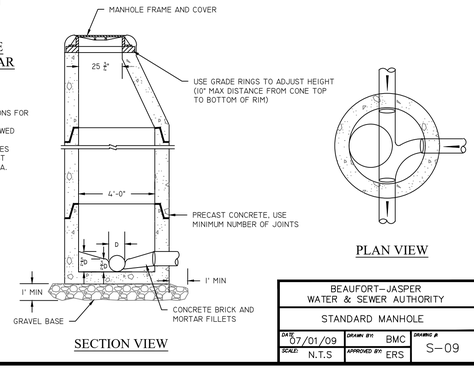


RURAL MANHOLE PROTECTIVE COLLAR



JOINT DETAIL

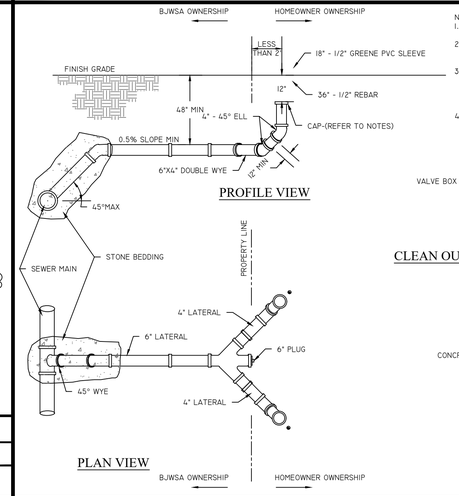
NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.



SECTION VIEW

PLAN VIEW

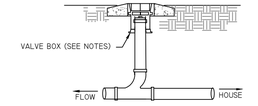
BEAUFORT–JASPER WATER & SEWER AUTHORITY			
STANDARD MANHOLE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–09	
SCALE: N.T.S	APPROVED BY: ERS		



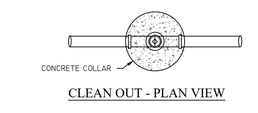
PROFILE VIEW

PLAN VIEW

NOTES:
1. DOUBLE SERVICE LATERALS SHALL ONLY BE ALLOWED FOR RESIDENTIAL SERVICES.
2. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
3. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
4. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

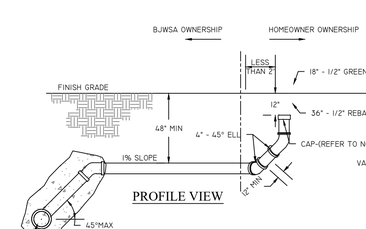


CLEAN OUT INSTALLATION - PROFILE VIEW



CLEAN OUT - PLAN VIEW

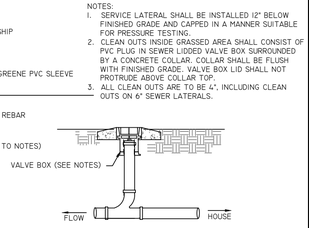
BEAUFORT–JASPER WATER & SEWER AUTHORITY			
SEWER SERVICE, DOUBLE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–10	
SCALE: N.T.S	APPROVED BY: ERS		



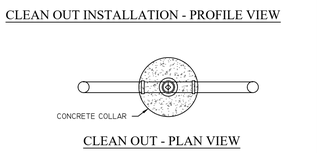
PROFILE VIEW

PLAN VIEW

NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
3. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

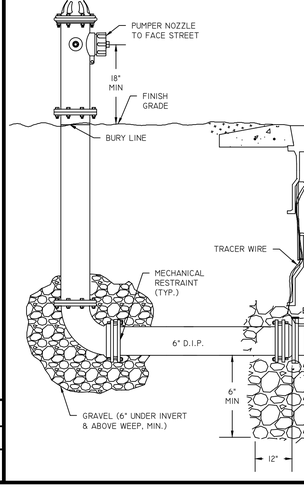


CLEAN OUT INSTALLATION - PROFILE VIEW



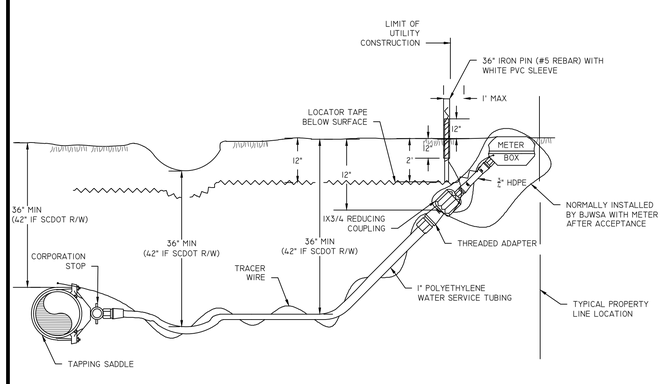
CLEAN OUT - PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY			
SEWER SERVICE, SINGLE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–11	
SCALE: N.T.S	APPROVED BY: ERS		



NOTES:
1. BURY LINE INDICATED ON HYDRANT SHALL BE AT FINAL GRADE.
2. ALL FITTINGS SHALL BE RESTRAINED.

BEAUFORT–JASPER WATER & SEWER AUTHORITY			
STANDARD FIRE HYDRANT			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W–03	
SCALE: N.T.S	APPROVED BY: ERS		



BEAUFORT–JASPER WATER & SEWER AUTHORITY			
WATER SERVICE PROFILE			
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W–09	
SCALE: N.T.S	APPROVED BY: ERS		

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 DATE: 7/24/23 PAUL R. MOORE

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEER
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Utility Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

C704

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

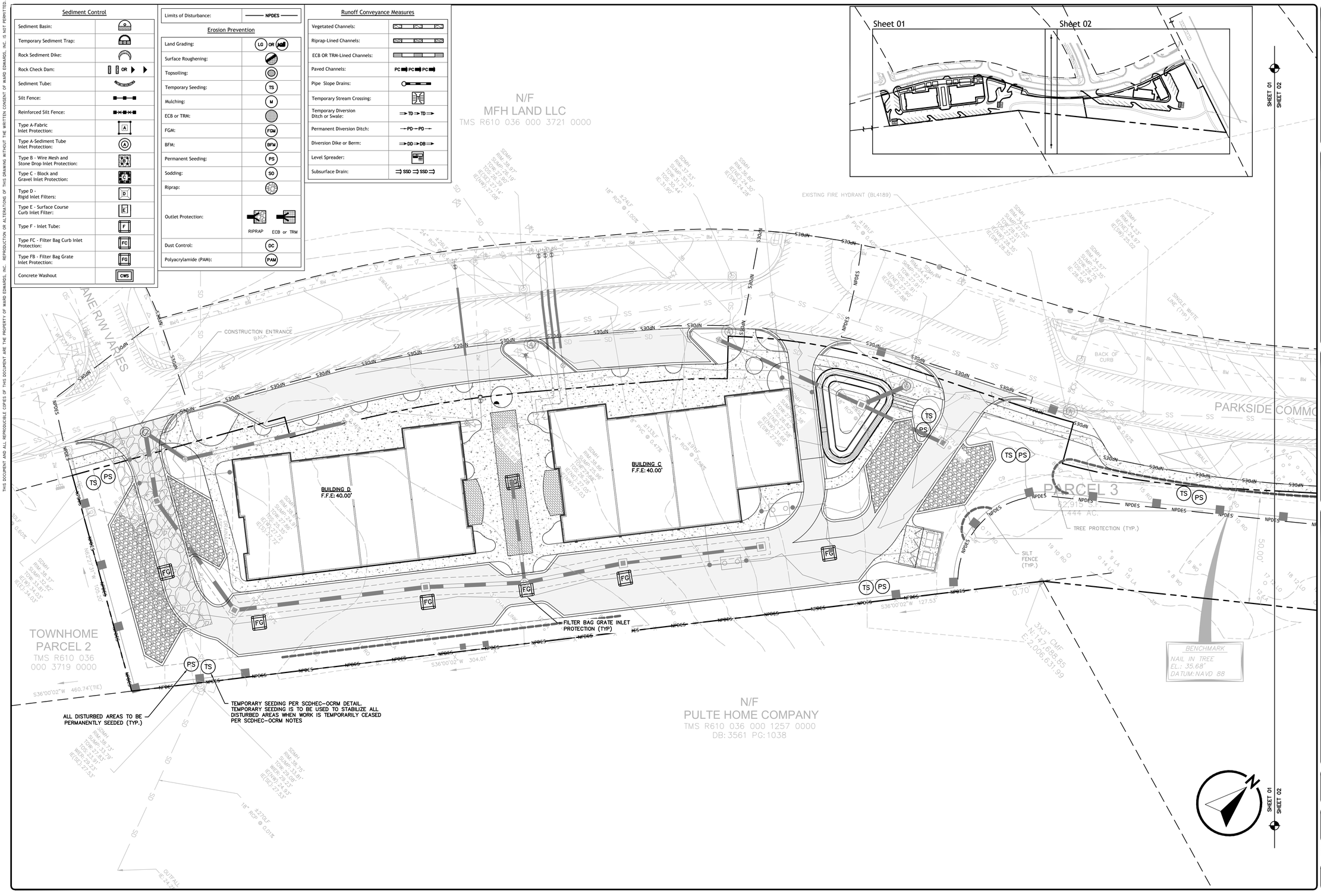
Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP / ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Runoff Conveyance Measures

Vegetated Channels:	PC PC PC
Riprap-Lined Channels:	PC PC PC
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD



SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
(843) 837-5250
www.WardEdwards.com
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Intermediate Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20 ' Feet

C801

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP / ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

N/F
MFH LAND LLC
TMS R610 036 000 3721 0000

N/F
MFH LAND LLC
TMS R610 036 000 1258 0000

PARCEL 5
57,581 S.F.
1.322 AC.

N/F
SC COMMISSION
OF FORESTRY
TMS R600 036
000 0013 0000

USE DUST CONTROL MEASURES AND SWEEPING AS NEEDED TO KEEP SEDIMENT OFF EXISTING STREETS.

CONCRETE WASHOUT STATION

CONSTRUCTION ENTRANCE

NPDES LIMITS OF DISTURBANCE = 2.2 AC

FILTER BAG GRATE INLET PROTECTION (TYP)

TEMPORARY SEEDING PER SCDHEC-OCRM DETAIL.
TEMPORARY SEEDING IS TO BE USED TO STABILIZE ALL DISTURBED AREAS WHEN WORK IS TEMPORARILY CEASED PER SCDHEC-OCRM NOTES
ALL DISTURBED AREAS TO BE PERMANENTLY SEEDED (TYP.)

TREE PROTECTION (TYP.)

SILT FENCE (TYP.)

BUILDING A
F.F.E: 40.00'

BUILDING B
F.F.E: 40.00'

FUTURE RIGHT OF WAY
(PB:157 PG:137)

MAY RIVER ROAD R/W VARIES

PARKSIDE COMMONS R/W VARIES

EXISTING FIRE HYDRANT (BL4187)

50' ADJACENT PROPERTY BUFFER

S48°55'57"W 414.71'

S48°55'57"W 92.13'

SHEET 01
SHEET 02

Sheet 01 | Sheet 02

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
07/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Intermediate Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20' Feet

C801

TEMPORARY SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40 LBS/AC												
RYE, GRAIN	56 LBS/AC												
RYEGRASS	50 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS/AC												
RYE, GRAIN OR OATS	56 LBS/AC 75 LBS/AC												
RYEGRASS	50 LBS/AC												

TS

TEMPORARY SEEDING - COASTAL

DETAIL 02370-011

PERMANENT SEEDING – COASTAL

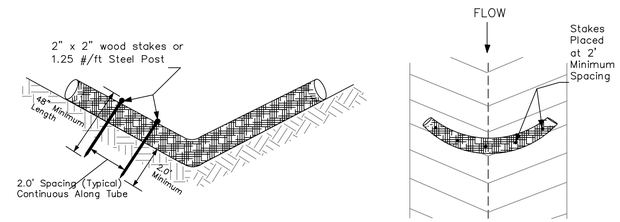
SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS/AC 15 LBS/AC PLS												
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS/AC 8 LBS/AC PLS 4 LBS/AC 20 LBS/AC												
BROWNTOP MILLET WEEPING LOVEGRASS	10 LBS/AC 8 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS/AC 40 LBS/AC 5 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS/AC 12 LBS/AC 10 LBS/AC												
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 20 LBS/AC 6 LBS/AC 40 LBS/AC												
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM INDIANGRASS	10 LBS/AC 8 LBS/AC PLS 3 LBS/AC PLS 3 LBS/AC PLS												

PS

PERMANENT SEEDING - COASTAL

DETAIL 02370-010

SEDIMENT TUBE INSTALLATION



SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
GREATER THAN 6%	25-FEET

PLAN SYMBOL

SEDIMENT TUBE

South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE

SEDIMENT TUBES – GENERAL NOTES

1. Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent off-site discharge of sediment-laden stormwater runoff.
2. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
3. The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material.
4. Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on channel dimensions. Diameters outside this range may be allowed where necessary when approved.
5. Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
6. Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
7. Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before installation.
8. The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
9. Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
10. Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
11. Sediment tubes should continue up the side slopes a minimum of 1-foot above the design flow depth of the channel.
12. Install stakes at a diagonal facing incoming runoff.

SEDIMENT TUBES – INSPECTION & MAINTENANCE

1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Large debris, trash, and leaves should be removed from in front of tubes when found.
7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.
8. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

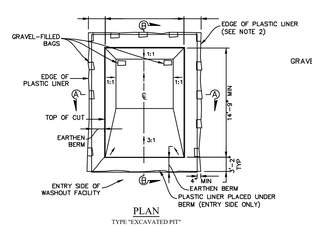
South Carolina Department of Health and Environmental Control

SEDIMENT TUBES

STANDARD DRAWING NO. SC-05 PAGE 2 of 2

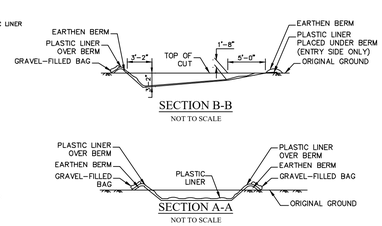
GENERAL NOTES — FEBRUARY 2014 DATE

EXCAVATED PIT CONCRETE WASHOUT



PLAN

TYPE "EXCAVATED PIT"



SECTION B-B

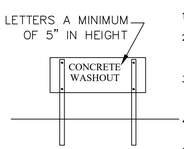
NOT TO SCALE

SECTION A-A

NOT TO SCALE

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.



CONCRETE WASHOUT SIGN DETAIL

CWS

South Carolina Department of Health and Environmental Control

CONCRETE WASHOUT

EXCAVATED PIT

STANDARD DRAWING NO. RC-08 PAGE 1 of 1

NOT TO SCALE — FEBRUARY 2014 DATE

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 — 7/24/23 — PAUL R. MOORE

SOUTH CAROLINA — WARD EDWARDS, INC. No. C00152 — CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7	Plan Revisions	
6		
5		
4		
3		
2		
1		

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Intermediate Erosion Control Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

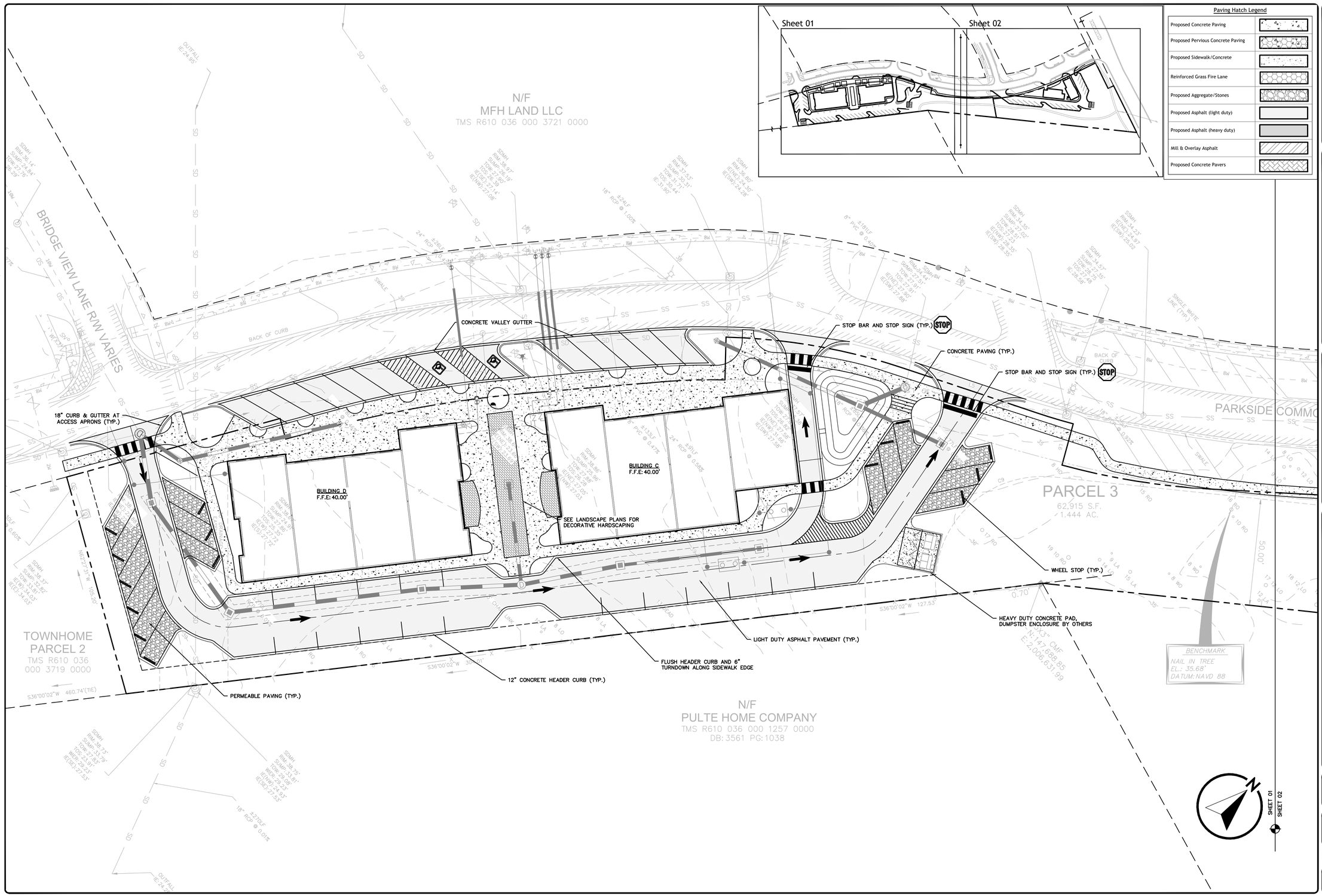
C803

Attachment 6

Permit Set - NOT FOR CONSTRUCTION

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



Paving Hatch Legend

Proposed Concrete Paving	
Proposed Pervious Concrete Paving	
Proposed Sidewalk/Concrete	
Reinforced Grass Fire Lane	
Proposed Aggregate/Stones	
Proposed Asphalt (light duty)	
Proposed Asphalt (heavy duty)	
Mill & Overlay Asphalt	
Proposed Concrete Pavers	

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 07/24/23 PAUL R. MOORE

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Paving Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

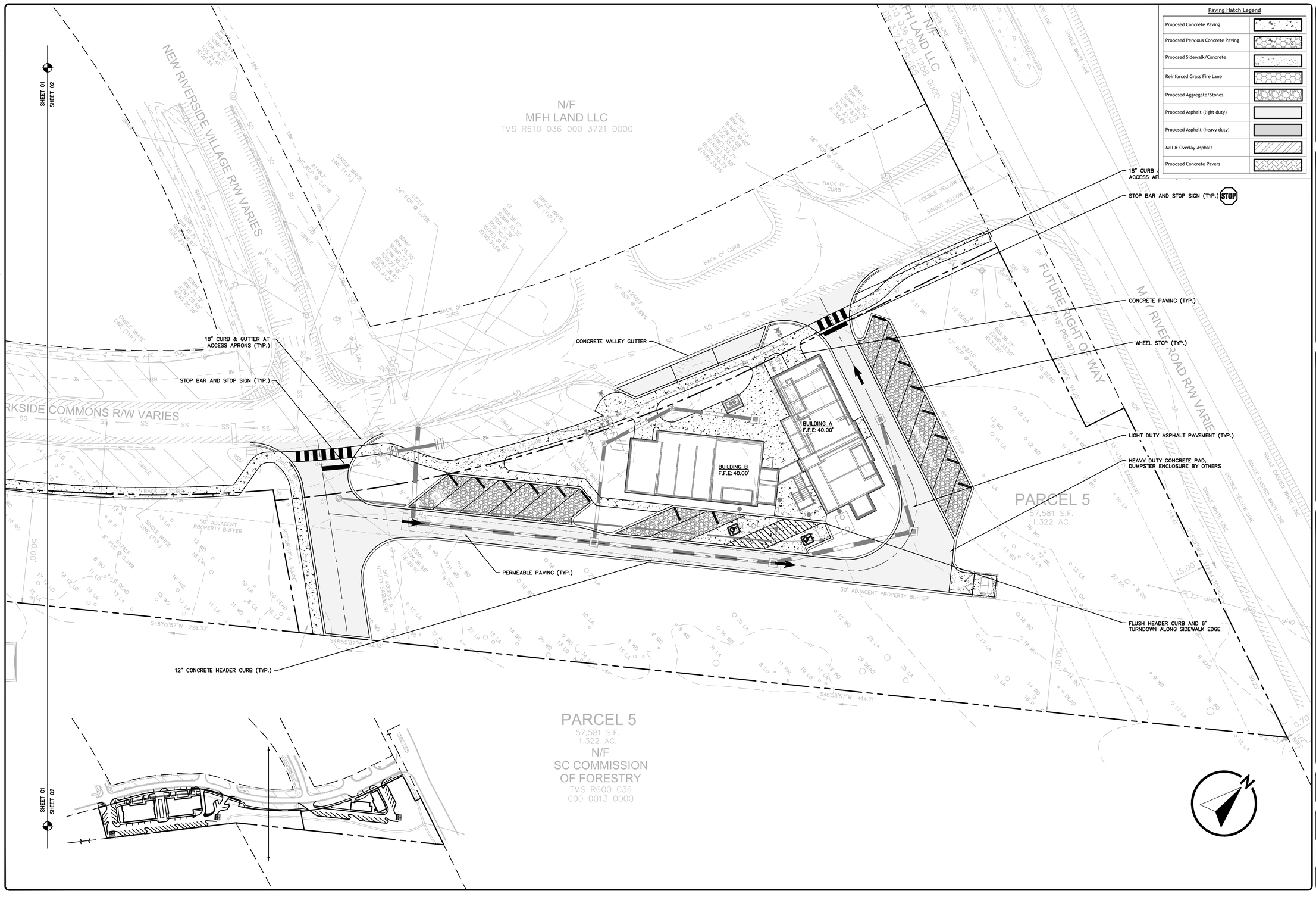
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 20 40
Scale: 1"= 20' Feet

C901

Attachment 6

Permit Set - NOT FOR CONSTRUCTION



SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
7/1/24
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Paving Plan

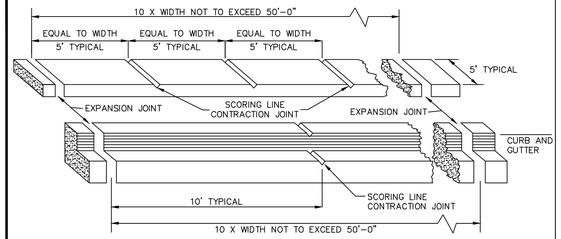
Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

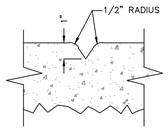
0 20 40
Scale: 1"= 20 ' Feet

C902

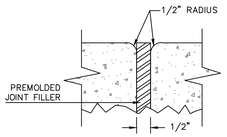
Permit Set - NOT FOR CONSTRUCTION



ISOMETRIC



CONTRACTION JOINT
SCORING LINE

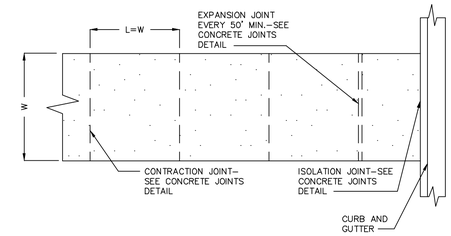


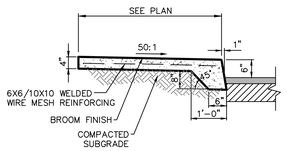
EXPANSION JOINT

NOTES:
1. EXPANSION JOINTS, 1/2 INCH THICK, SHALL BE PLACED IN THE SIDEWALK AND CURBING AT THE POINT OF CURVATURE (PC) AND POINT OF TANGENCY (PT) OF ALL CURVES, AT THE OUTER EDGES OF DRIVEWAYS, AND AT UNIFORM INTERVALS AS SHOWN. EXPANSION JOINTS SHALL MEET SCDOT SPECIFICATION SECTION 702.2.2.1.
2. TRANSVERSE SCORING LINES (CONTRACTION JOINTS) IN THE SIDEWALK SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM INTERVALS EQUAL TO THE WIDTH OF THE WALK AS SHOWN.
3. LONGITUDINAL SCORING LINES WILL BE REQUIRED IN WALKS WIDER THAN 5 FEET OR AS DIRECTED BY THE ENGINEER.
4. TRANSVERSE CONTRACTION JOINTS IN THE CURBING SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM 10' INTERVALS.
5. TRANSVERSE AND LONGITUDINAL SCORING LINES SHALL BE A DEPTH OF 1" AND NOT LESS THAN 1/4 INCH OR MORE THAN 1/2 INCH IN WIDTH. THE CORNERS OF THE SCORING LINES SHALL HAVE A 1/2 INCH MINIMUM RADII.
6. JOINTS IN THE CURB AND GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN THE SIDEWALK.

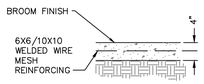
EXPANSION JOINTS AND SCORING LINES

DETAIL 03300-007A





TURNED DOWN SIDEWALK



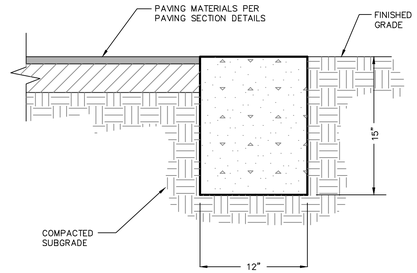
REINFORCED SIDEWALK

NOTES:
1. W = VARIES, REFER TO STAKING PLAN FILL IN BASED ON SITE PLAN
2. L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
3. SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OF 8.33% LONGITUDINAL
4. ALL CONCRETE SHALL BE CLASS A 3000 PSI
5. FINISH BROOM WITH HAND TOOLED JOINTS AND EDGES.

CONCRETE SIDEWALK

DETAIL 03300-006

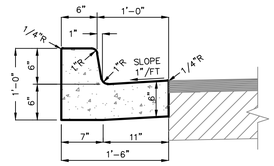
NOTES:
1. ALL CONCRETE SHALL BE 3,000 PSI.
2. PROVIDE CONTRACTION JOINTS EVERY TEN FEET (10').
3. PROVIDE EXPANSION JOINTS EVERY FIFTY (50') FEET AND AT ALL TANGENT POINTS.
4. PROVIDE EXPANSION JOINTS WHERE CURB ABUTS SIDEWALKS OR OTHER RIGID STRUCTURES.
5. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED JOINT FILLER.
6. TOOL ALL EXPOSED EDGES & JOINTS TO 1/4" RADIUS.
7. PROVIDE LIGHT BROOM FINISH.



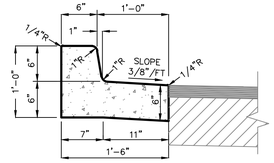
FLUSH HEADER CURB

DETAIL 03300-005

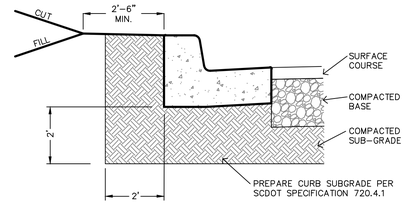
NOTES:
1. USE NORMAL OR PITCHED GUTTER AS REQUIRED TO MATCH PAVING SLOPE.
2. ALL CONCRETE SHALL BE 3,000 PSI.
3. PROVIDE CONTRACTION JOINTS EVERY TEN FEET (10').
4. PROVIDE EXPANSION JOINTS EVERY FIFTY (50') FEET AND AT ALL TANGENT POINTS.
5. PROVIDE EXPANSION JOINTS WHERE CURB ABUTS SIDEWALKS OR OTHER RIGID STRUCTURES.
6. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED JOINT FILLER.
7. TOOL ALL EXPOSED EDGES & JOINTS TO 1/4" RADIUS.
8. PROVIDE LIGHT BROOM FINISH.



NORMAL GUTTER

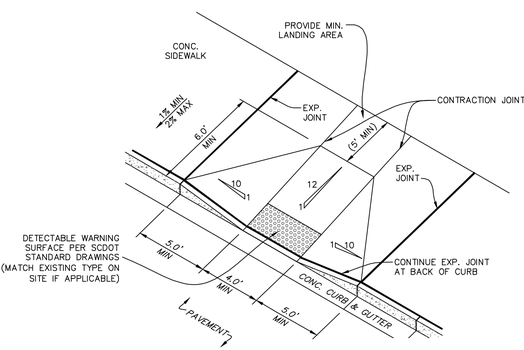


PITCHED GUTTER



18" CURB AND GUTTER

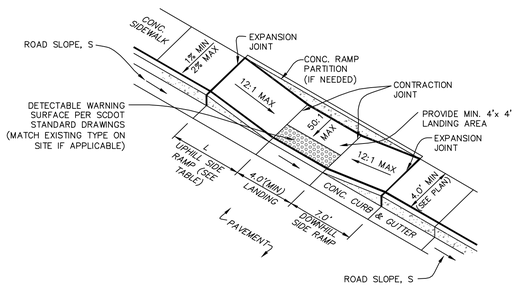
DETAIL 03300-004A



NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP-TYPE A

DETAIL 03300-028

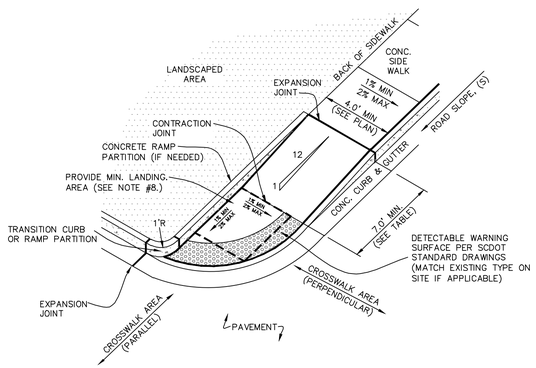


ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'-0"
1% < S ≤ 3%	10'-0"
S > 3%	15'-0"

NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP TYPE-B

DETAIL 03300-029A

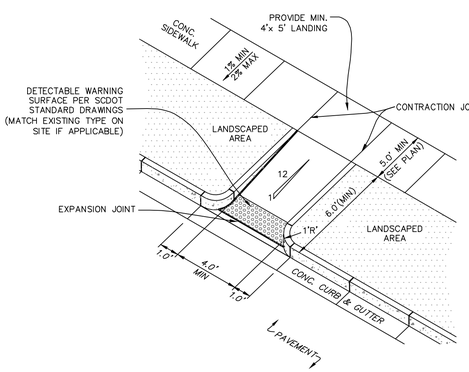


ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'-0"
1% < S ≤ 3%	10'-0"
S > 3%	15'-0"

NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).
8. IF CROSSWALK IS PARRALLEL WITH WALK, A MIN. LANDING OF 4'x 4' MUST BE PROVIDED. HOWEVER, IF THE CROSSWALK IS PERPENDICULAR TO THE WALK, A MIN. LANDING OF 5'x 5' MUST BE PROVIDED

CONCRETE CURB RAMP TYPE-C

DETAIL 03300-031



NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP- TYPE D

DETAIL 03300-033

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22816
7/24/23
PAUL R. MOORE

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

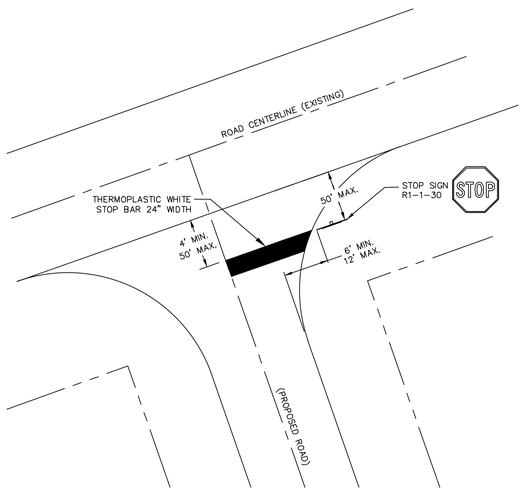
Paving Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

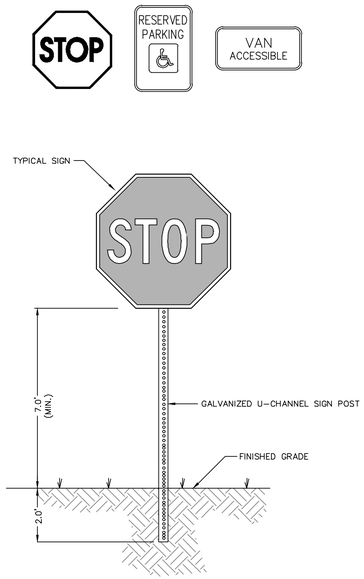
C903

Permit Set - NOT FOR CONSTRUCTION



TYPICAL STOP SIGN & STOP BAR STRIPING AT INTERSECTION

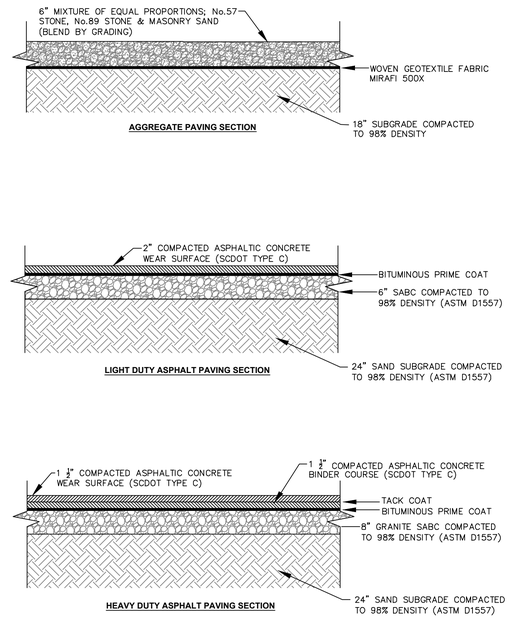
DETAIL #02740-018



NOTE:
ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (LATEST EDITION) AND THE DEPARTMENT OF TRANSPORTATION STANDARDS AT THE LOCATIONS SHOWN ON THE PLANS.

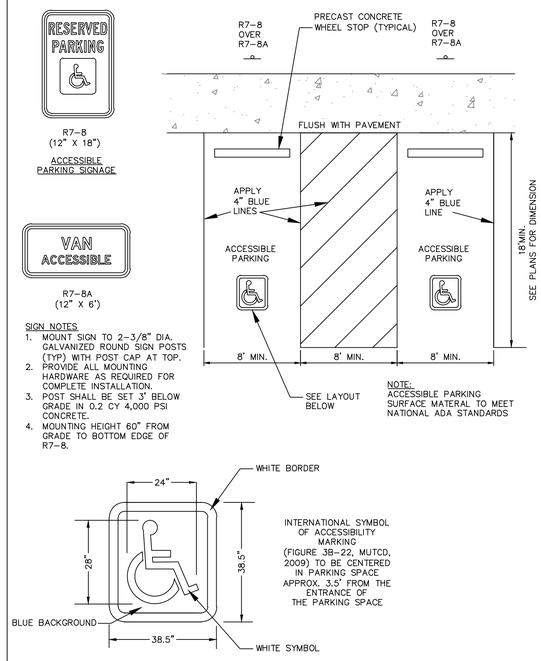
TYPICAL SIGNAGE

DETAIL #02890-002A

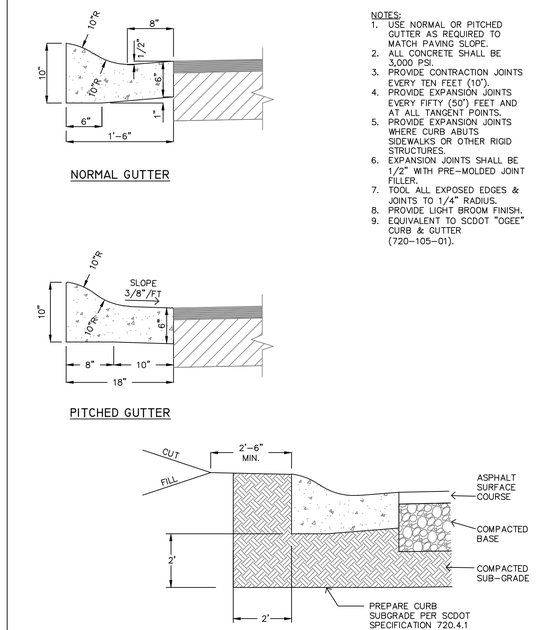


TYPICAL PAVING SECTIONS

DETAIL 02740-016



ACCESSIBLE PARKING DETAIL



NOTES:
1. USE NORMAL OR PITCHED GUTTER AS REQUIRED TO MATCH PAVING SLOPE.
2. ALL CONCRETE SHALL BE 3,000 PSI.
3. PROVIDE CONTRACTION JOINTS EVERY TEN FEET (10').
4. PROVIDE EXPANSION JOINTS EVERY FIFTY (50') FEET AND AT ALL TANGENT POINTS.
5. PROVIDE EXPANSION JOINTS WHERE CURB ABUTS SIDEWALKS OR OTHER RIGID STRUCTURES.
6. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED JOINT FILLER.
7. TOOL ALL EXPOSED EDGES & JOINTS TO 1/4" RADIUS.
8. PROVIDE LIGHT BROOM FINISH.
9. EQUIVALENT TO SCDOT "OGEE" CURB & GUTTER (720-105-01).

18" ROLL-OVER CURB & GUTTER

DETAIL 03300-002A

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 07/24/23 PAUL R. MOORE

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

Paving Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

Not to Scale

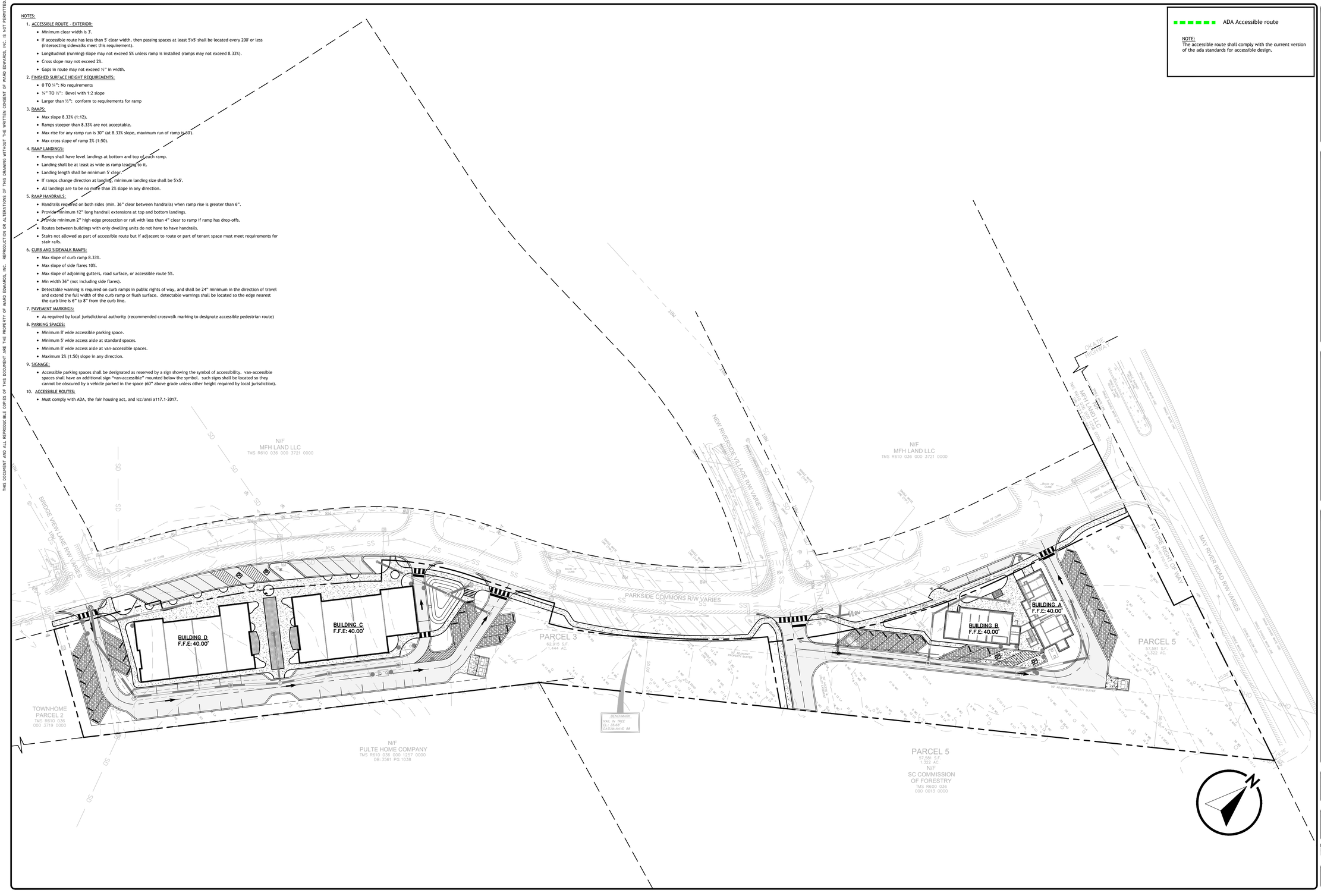
C904

NOTES:

1. ACCESSIBLE ROUTE - EXTERIOR:
   - Minimum clear width is 3.
   - If accessible route has less than 5' clear width, then passing spaces at least 5'x5' shall be located every 200' or less (intersecting sidewalks meet this requirement).
   - Longitudinal (running) slope may not exceed 5% unless ramp is installed (ramps may not exceed 8.33%).
   - Cross slope may not exceed 2%.
   - Gaps in route may not exceed ½" in width.
2. FINISHED SURFACE HEIGHT REQUIREMENTS:
   - 0 TO ¼": No requirements
   - ¼" TO ½": Bevel with 1:2 slope
   - Larger than ½": conform to requirements for ramp
3. RAMPS:
   - Max slope 8.33% (1:12).
   - Ramps steeper than 8.33% are not acceptable.
   - Max rise for any ramp run is 30" (at 8.33% slope, maximum run of ramp is 30).
   - Max cross slope of ramp 2% (1:50).
4. RAMP LANDINGS:
   - Ramps shall have level landings at bottom and top of each ramp.
   - Landing shall be at least as wide as ramp leading to it.
   - Landing length shall be minimum 5' clear.
   - If ramps change direction at landing, minimum landing size shall be 5'x5'.
   - All landings are to be no more than 2% slope in any direction.
5. RAMP HANDRAILS:
   - Handrails required on both sides (min. 36" clear between handrails) when ramp rise is greater than 6".
   - Provide minimum 12" long handrail extensions at top and bottom landings.
   - Provide minimum 2" high edge protection or rail with less than 4" clear to ramp if ramp has drop-offs.
   - Routes between buildings with only dwelling units do not have to have handrails.
   - Stairs not allowed as part of accessible route but if adjacent to route or part of tenant space must meet requirements for stair rails.
6. CURB AND SIDEWALK RAMPS:
   - Max slope of curb ramp 8.33%.
   - Max slope of side flares 10%.
   - Max slope of adjoining gutters, road surface, or accessible route 5%.
   - Min width 36" (not including side flares).
   - Detectable warning is required on curb ramps in public rights of way, and shall be 24" minimum in the direction of travel and extend the full width of the curb ramp or flush surface. detectable warnings shall be located so the edge nearest the curb line is 6" to 8" from the curb line.
7. PAVEMENT MARKINGS:
   - As required by local jurisdictional authority (recommended crosswalk marking to designate accessible pedestrian route)
8. PARKING SPACES:
   - Minimum 8' wide accessible parking space.
   - Minimum 5' wide access aisle at standard spaces.
   - Minimum 8' wide access aisle at van-accessible spaces.
   - Maximum 2% (1:50) slope in any direction.
9. SIGNAGE:
   - Accessible parking spaces shall be designated as reserved by a sign showing the symbol of accessibility. van-accessible spaces shall have an additional sign "van-accessible" mounted below the symbol. such signs shall be located so they cannot be obscured by a vehicle parked in the space (60" above grade unless other height required by local jurisdiction).
10. ACCESSIBLE ROUTES:
    - Must comply with ADA, the fair housing act, and icc/ansi a117.1-2017.

ADA Accessible route

NOTE:
The accessible route shall comply with the current version of the ada standards for accessible design.



No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

New Riverside Village Commercial
Town of Bluffton, South Carolina

Prepared for
Architecture 101

ADA Accessible Route Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	220145
Date:	07/24/23
Designed by:	ASH
Checked by:	PRM

0 40 80
Scale:1"= 40' Feet

C1301

Attachment 6

Permit Set - NOT FOR CONSTRUCTION