Public Services & Facilities Committee
9:00 a.m., Tuesday, September 1, 2026
1207 Palm Boulevard
City Hall Council Chambers

Public Comment:
Citizens who wish to speak during the meeting must email their first and last name, address and topic to Nicole DeNeane, City Clerk, at nicoled@isleofpalms.gov no later than 3:00 p.m. the day before the meeting. Citizens may also provide written public comment here: https://www.isleofpalms.gov/public-comment-form

Agenda

1. **Call to order** and acknowledgment that the press and the public have been duly notified of the meeting in accordance with the Freedom of Information Act.

2. **Citizens' Comments –** All comments have a time limit of three (3) minutes.

3. **Approval of previous meeting's minutes –** August 4, 2026

4. **Marina Tenants' Comments**

5. **Departmental Reports- Public Works overview from Director Asero**

6. **Old Business**
   a. Update and discussion of Waterway Boulevard project
   b. Update and discussion of beach projects
   c. Update and discussion of marina parking lot reconfiguration
   d. Update and discussion of marina dredging project work schedule
   e. Discussion and consideration of amending trash collection policies as they relate to commercial operations

7. **New Business**
   a. Discussion and consideration of proposals to manage bulkhead recoating
   b. Discussion and consideration of Waterway flood barrier project- Thomas and Hutton CO#6 $35,000 for additional field management expenses
   c. Discussion of Waterway flood barrier project- Thomas and Hutton CO#7 $63,550 for feasibility/planning work for Phase 3 of Waterway flood barrier project
   d. Discussion of drainage project for Palm Boulevard and 38th-41st Avenues
   e. Discussion and consideration of A/V RFP responses
   f. Discussion and consideration of IT RFP responses
   g. Consideration of purchase of new truck for Building Department for $37,686.00- Santee Automotive, State purchasing contract ($45,000 in FY27 budget, Capital)

8. **Miscellaneous Business- next meeting: Tuesday, October 6, 2026 at 9am**

9. **Adjournment**

Public Services & Facilities Committee Meeting
9:00am, Tuesday, August 4, 2026
1207 Palm Boulevard, Isle of Palms, SC and
broadcasted live on YouTube: https://www.youtube.com/user/cityofisleofpalms

MINUTES

1. **Call to Order**

Present: Council members Miars, Streetman and Pierce

Staff Present: Deputy Administrator Kuester, Director Asero, Director Ferrell

Absent: Administrator Kerr

2. **Citizen's Comments - none**

3. **Approval of Previous Meeting's Minutes** – July 7, 2026

MOTION: Council Member Streetman made a motion to approve the minutes. Council Member Pierce seconded the motion. The motion passed unanimously.

4. **Marina Tenant's Comments** – none

5. **Departmental Reports**

Council Member Pierce asked that future communications further clarify the dropoff spots for camp attendees.

Council Member Pierce asked about the increased level of debris pickup. Director Asero agreed the volume was high for June and it has continued into July. He noted that construction and yard debris pickup has increased and that household waste has remained steady.

Director Asero will share a "State of the Union" for the Public Works Department at the September meeting.

6. **Old Business**

A. **Update and discussion of Waterway Boulevard project**

Deputy Administrator Kuester reported that paving work continues. Some new infrastructure needs to be installed at 31st Avenue requiring AT&T to move some utilities which requires a permit from SCDOT. There is no timeline for when that permit might be received. Staff still anticipates a mid-September completion.

DRAFT

Council Member Miars asked about the addition of a crosswalk at 28th Avenue connecting the Recreation Center to the Waterway Boulevard path. Deputy Administrator Kuester said he would look into it.

B. **Update and discussion of beach projects**

Deputy Administrator Kuester reported that renourishment began on July 27, and to date, Marinex has placed 157,000 cubic yards of sand within Wild Dunes. Dredge operations have stopped during the recent rainy weather. The project remains generally on schedule.

Staff is working with BCM and DES to address some derelict sand fencing that is out of compliance with BCM standards.

Deputy Administrator Kuester stated that at a point in the near future, the public will be unable to walk back and forth along the beach. The public has been notified of the lack of access. He believes that will last for a month. He added that sandbag removal will exacerbate the situation. He will work with Mr. Traynum on possible solutions and timeline.

C. **Update and discussion of marina parking lot reconfiguration**

Deputy Administrator Kuester reported that Mr. Cline has submitted permitting plans to the County for the marina parking lot. Permitting could take 6-9 weeks. He noted the differences between the concept plans and the permitting plans, including an update to the driveway between the trailer spots to allow for easier truck exit and maneuverability, an added bid alternate for a Barracuda water quality control system, a second bid alternate for a ribbon curve, and modified asphalt to match the existing conditions more closely.

As water quality is an issue related to the permitting, the $50,000 water quality system will need more discussion when the bids are opened.

Deputy Administrator Kuester said they are working closely with Mr. Cline to stay on top of the timeline due to the "kill switch" in the lease agreement. Updated timelines and planning documents will be available at the September meeting.

D. **Update on Marina dredging project work schedule**

Deputy Administrator Kuester stated that Geosyntech (formerly ATM) has prepared the plans for bidding. They are awaiting a package from USACE stating the City's use of the disposal site near the IOP Connector creates no environmental impact on the ICW. The bid process can be initiated before that package arrives, but it is required prior to the start of work.

E. **Update on potential beach volleyball court**

Deputy Administrator Kuester said that while staff continues to investigate possible locations for a beach volleyball court, it will be hard to do without taking away from pre-existing programs.

Director Ferrell said that a grass court could be a temporary solution that would allow them to gauge interest in the court. She estimates the cost of a grass court could be $3-$5,000. She will bring more information to the September meeting.

F. **Update on IT Costs**

Deputy Administrator Kuester said "big ticket" IT accounts are being pruned. The bid for managed IT services has gone out and there have been several site visits from potential vendors. The bids will be opened on August 28.

G. **Discussion of amending trash collection policies as they relate to commercial operations**

Director Asero said the City needs an ordinance to deal with "imported" debris. He noted that Wild Dunes has a rule preventing landscapers from leaving debris, but they have no way to enforce it. A cleaner version of the proposed ordinance will be discussed at the September meeting.

7. **New Business**

A. **Discussion and consideration of purchase of Public Works Automated Side Loader (FY 27, Hospitality Fund, $435K budgeted)**

Director Asero said this side loader is in the F27 budget and will provide departmental efficiencies, including savings on temporary labor, but add some maintenance. The truck will be received in the off season, giving staff time to be educated on its use as well as to educate residents on the proper placement of their roll carts.

MOTION: Council Member Pierce made a motion to approve the purchase and recommend the purchase to the Ways & Means Committee for approval. Council Member Miars seconded the motion. The motion passed unanimously.

B. **Discussion of trash at the marina**

Committee members discussed the problem of trash at the marina following complaints from residents. Director Asero reviewed the trash pickup schedule at the marina, adding that some of the trash has been due to lack of oversight. He said household trash is being placed in the dumpsters. He would like an enclosed trash receptacle when the parking lot and greenspace are complete to prevent people from placing their trash in the area.

Council Member Streetman reported that Mr. Lorenz has committed to trash sweeps of the area.

Deputy Administrator Kuester said he will identify where the dumpsters will be located in the marina parking lot following the parking lot reconfiguration.

8. **Miscellaneous Business**

The next regular meeting of the Public Services & Facilities Committee will be Tuesday, September 1, 2026 at 9am.

9. **Adjournment**

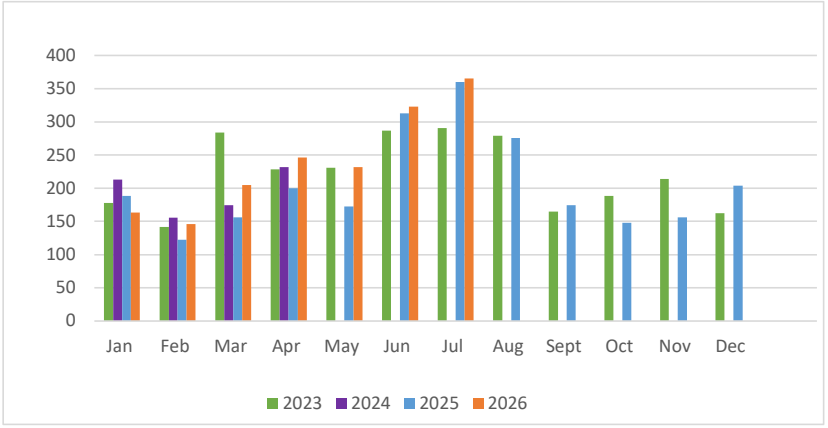
Council Member Pierce made a motion to adjourn and Council Member Streetman seconded the motion. The meeting was adjourned at 10:19am.

Respectfully submitted,
Nicole DeNeane
City Clerk

City of Isle of Palms, SC
Public Services Department - July 2026 Report

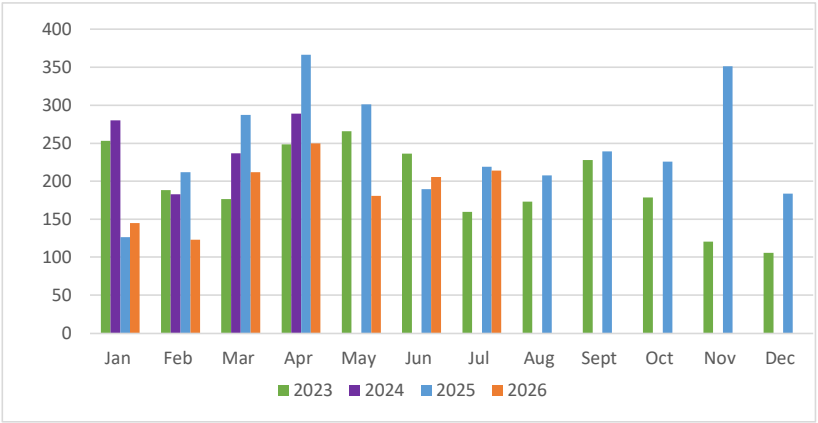
Household Garbage (Tons)

Month	2021	2022	2023	2024	2025	2026
Jan	177.84	195.16	177.78	213.1	188.39	163.35
Feb	146.48	166.74	141.99	155.8	122.54	146.13
Mar	204.6	269.88	283.84	174.12	155.86	204.7
Apr	249.86	232.29	228.59	231.41	200.01	246.21
May	238.23	224.49	230.63	270.85	172.1	231.4
Jun	309.71	295.83	286.52	285.71	312.67	322.86
Jul	334.17	317.47	290.33	369.56	360.17	365.13
Aug	285.21	275.99	279.2	251.11	275.98	
Sept	247.76	167.91	164.66	207.05	174.7	
Oct	184.63	175.99	188.33	188.84	147.66	
Nov	315.31	147.67	213.92	130.67	155.89	
Dec	286.85	133.1	162.31	177.15	203.88	



Yard Debris (Tons)

Month	2021	2022	2023	2024	2025	2026
Jan	183.07	218.4	252.78	279.78	126.21	145
Feb	156.06	190.63	188.5	182.95	212.03	123.28
Mar	282.37	215.58	176.46	236.88	286.98	212.02
Apr	256.07	231.64	248.37	288.91	366.07	249.44
May	208.32	190.02	265.62	229.39	300.94	180.87
Jun	266.23	217.88	236.52	186.2	189.64	205.54
Jul	273.08	202.64	159.51	256.16	218.83	214.01
Aug	223.64	184.78	172.83	250.74	207.4	
Sept	182.96	212.11	227.8	176.09	239.25	
Oct	152.16	528.77	178.51	317.18	225.59	
Nov	124.04	304.19	120.6	166.13	350.71	
Dec	125.14	126.89	106.2	141.64	183.77	

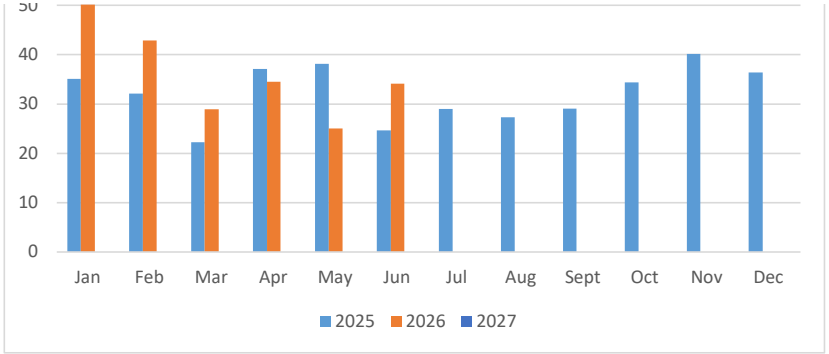


Miscellaneous Garbage Collection (Tons)

Month	2025	2026	2027
Jan	35.07	50.14	

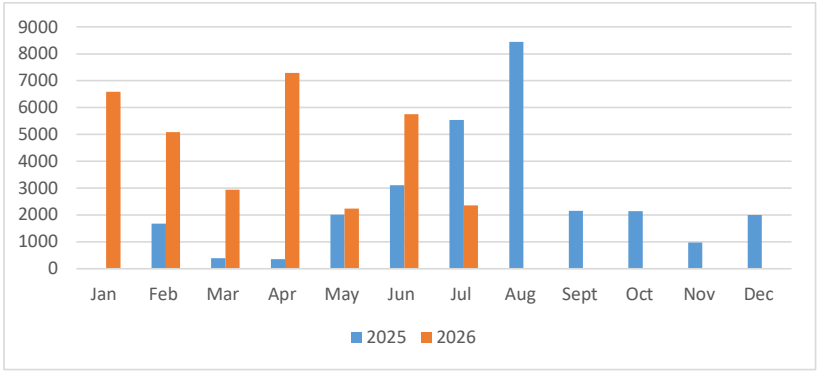


Feb	32.09	42.84	
Mar	22.25	28.92	
Apr	37.1	34.49	
May	38.12	25.02	
Jun	24.64	34.11	
Jul	28.98	15.17 CW	7/8 - 2.80 tons Trident container
Aug	27.3		7/16 - 4.27 tons Trident container
Sept	29.06		7/24 - 4.59 tons Trident container
Oct	34.36		26.83 July
Nov	40.14		
Dec	36.36		



Stormwater Management (Linear Feet)

Month	2025	2026
Jan	0	6587
Feb	1679	5087
Mar	395	2940
Apr	358	7295
May	2010	2230
Jun	3115	5750
Jul	5530	2360
Aug	8445	
Sept	2150	
Oct	2140	
Nov	975	
Dec	2000	



Stormwater Management

DATE	COMPANY	ZONE	LOCATION	ft	DESCRIPTION
DATE	COMPANY	ZONE	LOCATION	ft	DESCRIPTION
7/2/2026	IOP		25th Ave	600	Weed eat and remove debris
7/3/2026	IOP		5th and Palm	10	Maintenance on tide valve
7/6/2026	IOP		7th palm	150	Maintenannce of right-a-way/ditches
7/8/2026	IOP		29th and Palm	50	Clean ditch
7/10/2026	IOP		Citywide	250	Weed eat and remove debris from ditch line
7/28/2026	Fortis		32nd ditch	1300	Vegetation maint. of ditch line
7/26/2026	IOP		City wide		Cleaning of drains on July 26th storm

Fortis Enviornmental LLC-City of Isle of Palms drainage maintence contractor FE
IOP Public Services IOP-PS Drainage maintenance
Pleasant Places Drainage Maintenance

Beach Access Paths Maintenance & Improvements

LOCATION	DESCRIPTION
Island wide	Maintenance
Front beach restroom access	Maintenance and repair
City wide beach clean up	Cleaning of beach sanitation Trident Waste-Public Services
Public restroom, sea cabins, 9th 1X	Regrading beach accesses
Palm Blvd. 21st-41st	Rights of way maintenance
Beach accesses	Beach access maintenance

Building & Facilities Maintenance

LOCATION	DESCRIPTION
City Hall	Exterior repairs
Carmen R Bunch Park	Eagle scout landscape project scheduled
Public Services	Ongoing deployment of new city garbage cans
Front Beach	Ongoing Plant a palm 2.0 coordination.
Beach/Public Services	Public services city wide clean up
City Hall	City Hall roof installation
PSB	Elevator repairs/irrigation repairs
Tree removal	Hazard tree removal 27h and Hartnett
Garbage compactor	Cleaning weekly/powerwashing
Streets	Street sign instalation
Garbage compactor	Maintenance
Marina	UST Marina/ PSB and compliance testing
City wide	City wide trash clean up - FVS contracting-public services
City wide UST	DES Compliance teting
Public Services	Estimates for building interior repairs

Isle of Palms Recreation Department

Monthly Report
August 2026

Programs, Group Fitness, Athletics & Special Events

- September - December 2026 Activity Guide released Thursday, Aug. 6.
- Adult Classes: Fitness Classes and Programs with top participation: Core & More (13), Strength (12), Tabata (20), Move-It (18), Stability & Strength (17), RXFit Club (15), Suspension Training (12), and Pilates (11)
- Beach Yoga: Tuesdays at 7:30am through Oct. - 25th Ave Beach Access. Approximately 26 people per week.
- Youth Soccer: Registration closed Aug. 14. 135 youth registered for the league, practices & games start in Sept.
- Adult Athletics: 3 on 3 Basketball - 6 teams registered. 6 v 6 Soccer – 4 teams registered. Table Tennis - 7 people registered. Games start in Sept.
- Farmers Market, Food Truck Jam, Thursday, Aug. 20. 51 vendors onsite, live music and great community support.
- Get your Spike On Volleyball Camp: August 3 - 6 from 9am - 11am, 16 youth participated.
- Gymnastics Camp: Aug. 3 - 5 from 10:30am - Noon, 15 youth participated.
- Trading Card Lab: Aug. 4 - 6 from 3:15 - 5:15pm, Ages 7-11. 2 youth participated.
- 28th Annual Half Rubber Tournament: Saturday, August 8 at 8am, 8 teams participated in a double elimination tournament. Teams traveled from Savannah and Charleston areas to participate. Below Average, Charleston team won the 2026 tournament.
- Tiny Chefs: Aug. 10 - Sept. 14 at 3pm. 4 youth participating.
- Speaker Series: Narcan Training for youth and families: Monday, Aug. 10 - 19 participated. Move Better, Live Better, Simple Strategies to stay strong & Active: Tuesday, Aug. 11 - 1 participated.
- Sea Stroll & Learn: Thursday, Aug. 13 - 22 participated.
- Art at the Rec: August 3 - October 31 the Recreation Center's hallway & lobby are turning into an Art Walk, showcasing local talent. Artists featured to-date include - Amanda Lamontagne and Alba Ortiz.

Upcoming Programs, & Events

- Coffee with the Mayor: Friday, Aug. 28 at 9am
- Keenagers: Wednesday, September 3 at Noon. Covered dish lunch and entertainment. Free
- Speaker Series: Guardianship- September 8 at 6pm
  The Science behind water runoff - September 9 at 11am
  The Power of positive painting - September 15 at 11am
  IOP Compost Program - September 18 at 11am
  Connection before correction- September 28 at 5:30pm.
- Sea Stroll & Learn: Thursday, September 10 at 7:30am – Stingrays, Barrier Island Eco Tours. Free
- Farmers Market & Food Truck Jam: Thursday, September 17 from 4pm - 7pm.
- Mahjong Tournament: September 23 at 10am.
- IOP Connector Run: Saturday, October 3 at 8am.

Operations

- Tennis Court reopened Monday, August 24. Landscape, signage and finishing touches will continue over the next few weeks.
- Meeting with vendors for quotes on exterior lighting upgrades at the Recreation Center.
- Special Elections: August 11 and August 25.
- Hosted IOP Chamber Meeting on August 25, facility tour, sponsorship opportunities and involvement with the Rec.
- IOP Connector Run: monthly meetings with board for preparations and planning of the 5K & 10K Run on October 3.

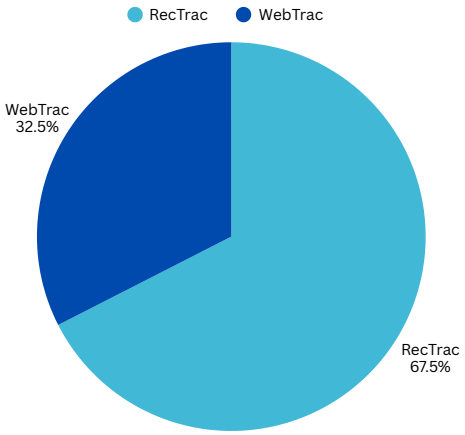
Maintenance & Repairs

- Soccer Field: replaced irrigation heads, turf field applications, treatment for moles. Prepped fields for Half Rubber Tournament, 6 v 6 soccer league and youth leagues ages 7-8 & 9-12.
- Basketball, Pickleball, Fitness Court: daily blowing, cleaning, trash pickup, trim and edge. Repaired fitness court tiles.
- Tennis Court: prepped new sidewalk at tennis courts, ordered sod and continue to work on landscaping around courts.
- Multi-purpose field: treatments and prep for youth soccer leagues ages 3-4 & 5-6.
- Cleaning and prepping island curb to be painted safety yellow.
- Planet Green Tree service cut 18 palm trees on Recreation grounds as a part of the city wide contract.
- HVAC: Berkely Heating and Air site and maintenance visit for three units.
- Exterior lights: replaced bulbs and cleaned lights around building.

Enrollment Report
August 2026

Participants registering for classes during the month from July 31 - August 27 RecTrac: in-house registration vs. WebTrac: online Registrations.

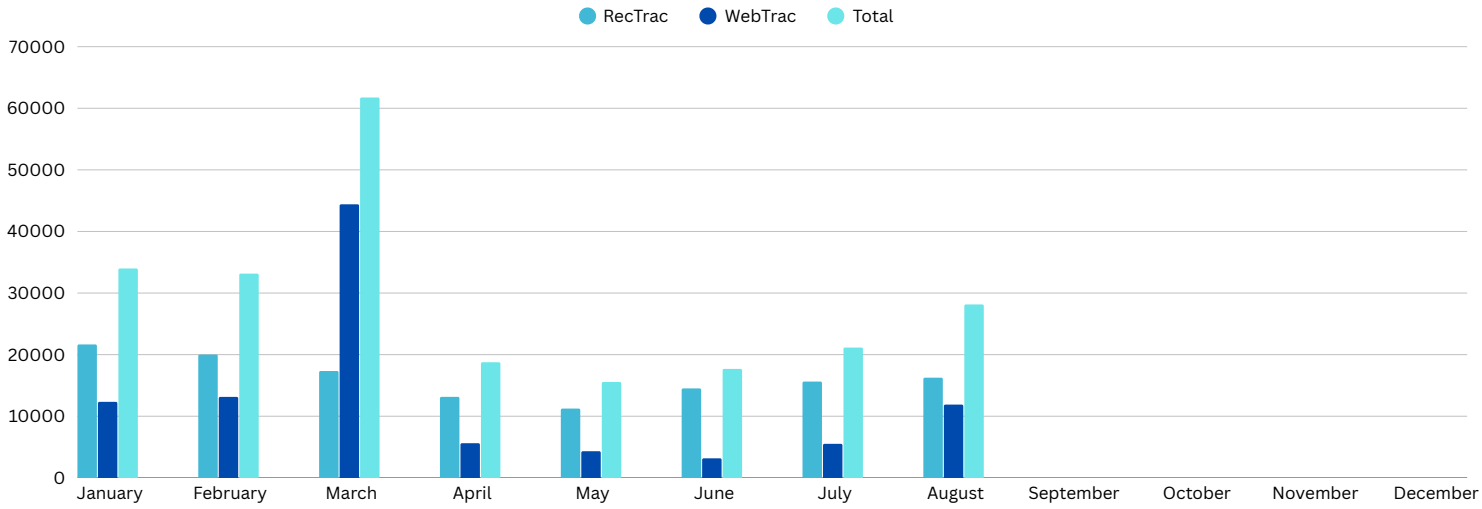
Total registrations for August: 446



Monthly Revenues 2026

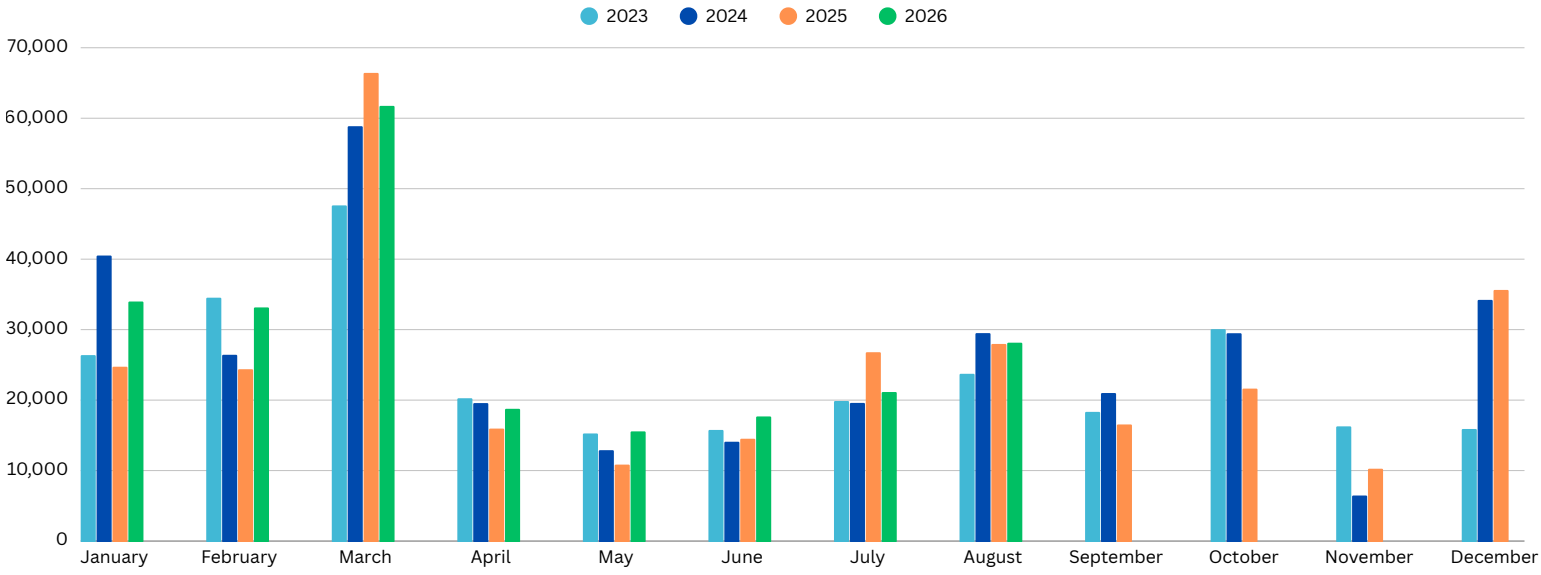
Revenue sales brought in by programs, athletics and events. RecTrac: in-house vs WebTrac: online

Total Revenue for August: $28,148



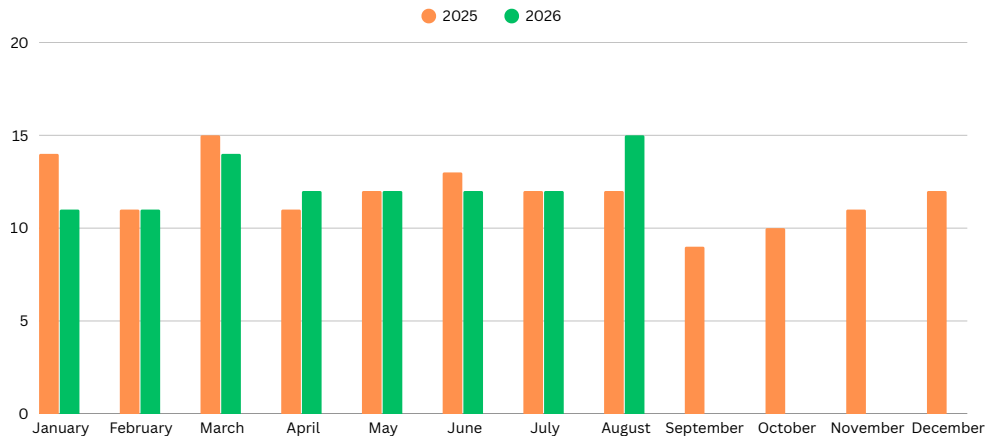
Annual Comparison

Year to Year



Open Gym Daily Average Visits

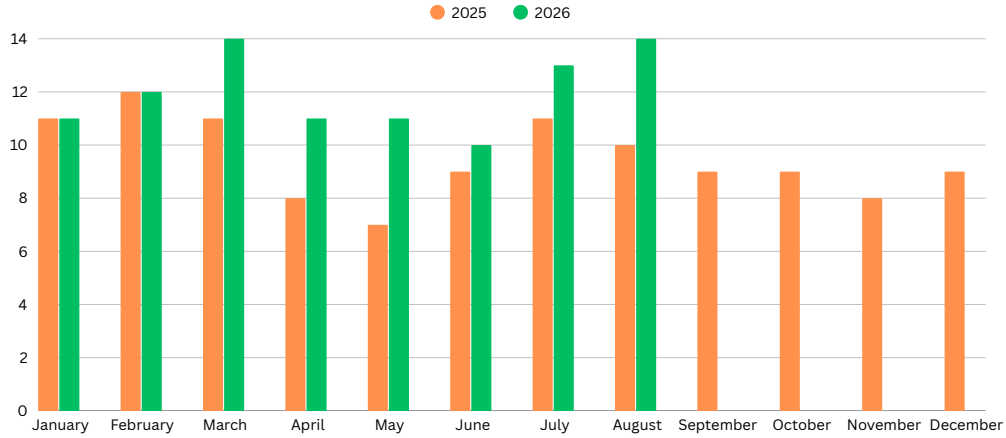
Participants utilizing the gymnasium for open play





Cardio Room Daily Average Visits

Participants utilizing the cardio room





Upcoming Events:













THOMAS & HUTTON

682 Johnnie Dodds Blvd., Suite 100
Mt. Pleasant, SC 29464
843.849.0200
thomasandhutton.com

Project Meeting Notes

Meeting Date	Start	End	Next Meeting	Next Time	Prepared By
August 20, 2026	9:00 AM	9:20 AM	9/3/26	9:00 AM	MCV

Purpose	Location
Waterway Blvd Pathway Construction Progress Meeting	Virtual

Attended By	Copies To
Douglas Kerr – City of Isle of Palms	Douglas Kerr
Sean Kuester – City of Isle of Palms	Sean Kuester
Robert Asero – City of Isle of Palms	Robert Asero
Greg Parris – Bastion	Greg Parris
Rick Karkowski – Thomas & Hutton	Rick Karkowski
Maria Valenzuela – Thomas & Hutton	Maria Valenzuela

Summary of Meeting

1. Schedule/ construction progress
    - Utility relocations complete
    - Drainage around 3605 – 3607 Waterway Blvd complete
    - Starting on drainage at Sparrow Drive
    - Starting curb and gutter, wall on Monday
    - Seewee to stabilize ditch at 22nd Avenue
    - Pleasant Places to start seeding
2. Wild Dunes driveway
    - Expected to be low cost
    - Murray and Robert coordination
3. AT&T coordination
    - AT&T waiting on SCDOT
    - Maria to follow up and ask for SCDOT contact
4. Change order #3
    - Removal/reduction of Dewees work, driveways, and sodding
    - Bastion change order for unexpected utility conflicts and changes

– End of Notes

Above is a summary of the meeting. Notify the undersigned as soon as possible if there are any discrepancies or misunderstandings with the above notes. Please contact me if you have any questions or if there are other issues or items requiring attention.

Prepared by:

Maria Valenzuela

MARIA VALENZUELA | Designer
THOMAS & HUTTON
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a 682 Johnnie Dodds Blvd.; Suite 100 | Mt. Pleasant, SC 29464
vCard | **Website** | **LinkedIn** | **Facebook** | **Instagram** | **YouTube**

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CONSTRUCTION CONTRACT CHANGE ORDER

Project: **Waterway Blvd. Pathway**

Construction Contract: **Contract I**
Change Order Number: **3**

Owner: **City of Isle of Palms**

Date Issued: **TBD**

Contractor: **The Bastion Group, LLC**

Engineer's Project Number: **27670.0010**

The Contract is changed as follows:

- Remove work behind fire station on 41st and within the Dewees marina driveway, remove sod, reduce driveway replacements, and additional utility conflict work.

Not valid until signed by the Owner, Engineer, and Contractor.

Adjustments in the Contract Sum:

The original Contract Amount was	$ 2,890,156.00
Net change by previously authorized Change Orders	$ 102,100.50
The Contract Amount prior to this Change Order was	$ 2,992,256.50
The new Contract Amount will be (~~increased~~) (**decreased**) (~~unchanged~~) by this Change Order in the amount of	$ 155,625.90
The new Contract Amount including this Change Order will be	$ 2,836,630.60

Adjustments in the Contract Time:

Original Substantial Completion Date	07/21/2026
Sum of Previously Approved Increases and Decreases	(56) days
Date of Substantial Completion prior to this Change Order	09/15/2026
The Contract Time will be (~~increased~~) (~~decreased~~) (**unchanged**) by	(0) days
The date of Substantial Completion as a result of this Change Order therefore is	09/15/2026

ENGINEER RECOMMENDATION

Richard Karkowski, PE, PH, D.WRE		08/28/2026
ENGINEER	SIGNATURE	DATE

CONTRACTOR ACCEPTANCE

CONTRACTOR	SIGNATURE	DATE

OWNER APPROVAL

Douglas Kerr		
OWNER	SIGNATURE	DATE

City of Isle of Palms
Waterway Blvd Pathway
Change Order #3

NOTES: THE QUANTITIES LISTED HEREIN ARE ESTIMATES ONLY AND DO NOT CONSTITUTE ANY WARRANTY OR GUARANTEE BY THE CITY, AND SHOULD NOT BE RELIED UPON BY BIDDERS. ALL QUANTITIES MAY VARY. THE TOTALS REQUIRED ON THE BID FORM HEREIN ARE FOR INFORMAL COMPARISON ONLY. PAYMENTS WILL BE BASED UPON UNIT PRICES WHERE INDICATED. CONTRACTOR MUST BID ON ALL WORK HEREIN.

ITEM	DESCRIPTION	CONTRACT				CHANGE ORDER #1				
		QUANTITY		COST		QUANTITY		COST		ADD/DEDUCT NOTES
		NUMBER OF UNITS	UNIT MEASURE	UNIT PRICE	TOTAL COST	NUMBER OF UNITS	UNIT MEASURE	UNIT PRICE	TOTAL COST	
Earthwork										
8	Removal & Disposal of Existing Pavement	6,685	SY	$ 11.65	$ 77,880	(325.0)	SY	$ 11.65	$ (3,786.25)	deduct - driveways removed
9	Removal & Disposal of Existing Concrete	600	CY	$ 20.15	$ 12,090	(249.0)	CY	$ 20.15	$ (5,017.35)	deduct - driveways removed
10	Controlled Fill - Borrow Material	750	CY	$ 49.95	$ 37,463	(32.0)	CY	$ 49.95	$ (1,598.40)	deduct - Dewees work removed
11	Grading	11,400	SY	$ 5.95	$ 67,830	(120)	SY	$ 5.95	$ (714.00)	deduct - Dewees work removed
Roadway and Pathway										
12	Graded Aggregate Base Course	2,191	SY	$ 45.00	$ 98,595	(325.00)	SY	$ 45.00	$ (14,625.00)	deduct - driveways removed
13	Hot Mix Asphalt Intermediate Course Type B	7,715	TON	$ 22.65	$ 174,745	(0.45)	TON	$ 223.00	$ (100.35)	deduct - driveways removed
14	Hot Mix Asphalt Surface Course Type B	244	TON	$ 223.00	$ 54,412	(0.45)	TON	$ 223.00	$ (100.35)	deduct - driveways removed
18	Concrete Driveway	550	SY	$ 113.00	$ 62,150	(249)	SY	$ 113.00	$ (28,137.00)	deduct - driveways removed
19	Gravel Drive	220	SY	$ 40.80	$ 8,976	(84)	SY	$ 40.80	$ (3,427.20)	deduct - Dewees work removed
Miscellaneous										
44	Sodding	7.25	MSY	$ 12,800.00	$ 92,800	(7.25)	MSY	$ 12,800.00	$ (92,800.00)	removed from contract
45	CMU Wall - Firestation	313	LF	$ 238.00	$ 74,494	(140)	LF	$ 238.00	$ (33,320.00)	deduct - Dewees work removed
Change Order #3 - Additional Line Items										
	Structure Adjustments					9	EA	$ 1,000.00	$ 9,000.00	added per Bastion CO
	Field Coordination Delays (incorrect utility locates, etc.)					38	HR	$ 500.00	$ 19,000.00	added per Bastion CO

CONTRACT TOTAL TO DATE **$2,992,256.00**

CO #3 TOTAL **-$155,625.90**

MARINEX CONSTRUCTION DAILY CLIENT PRODUCTION & OPERATIONS REPORT

CONTRACT:	FY26-IOP				Wadmalaw	SEQ#	2
OWNER	Isl of Palms	CLIN Description	CLIN	Work Order	Work Section	Date	08/27/26
		Reach 1	20	2	Reach 1		
Owner Contract Number	FY26-IOP						

Pipelines, ft	
Float	1,800
Subline	13,000
Shorepipe	4,000
Total	18,800

Production Summary

	Work Order 2 Today		Work Order 2 To Date		Total Project To Date
Dig CY	46,944	KK	879,938	KK	2,639,814
Pay CY	46,944	MM	802,067	LL	2,406,201
Dig cy/wh	2,094		1,950		
Area	253,500		5,194,500		
sf/wh	11,307		11,510		
Dig Face, ft	5.00		4.57		

	Work Order / Seq# Today	Work Order / Seq# To Date	Total Project To Date
Revenue Hrs	24.00	768.0	1,392.0
Dredge Days	1.00	32.0	58.0
Work Hours	22.42	451.3	
TE	93.4%	58.8%	

DAILY DREDGE AND BEACHFILL LOCATIONS - *Dredge Cut Stations and Ranges, Before and After Dredging Depths, Disposal Cell, Beachfill Stations*	Cuts this Period	Stations dredged this period From	To	Length of cut Ft	Dredge Depths Bef	Aft	Avg bank Hgt	Dredging Ranges From	To	Width of cut Ft	DA Used	Cys per Reach		Beachfill Stations Sta	Sta	Distance
	Cut 1	02+980	03+825	845	20.0	25.0	5.0	-	300.0	300.0		46,944		31+750	31+775	25
	Cut 2	-	-	-	-	-	-	-	-	-		-				
	Cut 3	-	-	-	-	-	-	-	-	-		-				
	Cut 4	-	-	-	-	-	-	-	-	-		-				
	Dredged Area	253,500	Advance	845			5.0		Avg Cut Width	300	CYs	46,944				

Order # 2 Reach 1

Volume Summary for this Order

BD Qnty (CY)	900,000
Dredged to Date	802,067
Remaining CY	97,933
Est Days Remaining (Avg Prodo)	4
Estimated Completion Date:	08/30/26

DELAYS - NON-EFFECTIVE WORKING TIME - DAILY

Operational Delays	*Hours*	Mechanical Delays	*Hours*
Tow On/Off Site	0.00	CUTTER	0.00
Change Cuts	0.00	UWP	0.00
Move Anchors	0.00	Main Pump	0.00
Add/Remove/Repair Pipelines	0.00	Swing	0.00
Clean UWP	0.00	Electrical	0.00
Clean MP	0.50	Service Water	0.00
Clean Booster Pump	0.00	Wires	0.00
Clean Cutter	0.00	Carriage / Tree / SpudHoist	0.00
Change Cutter	0.00	Ladder Inspection_Greasing	0.00
Change Teeth	1.08	Suction/Discharge Piping	0.00
Fill Site / Beach delays	0.00	Hull	0.00
Survey	0.00	Miscellaneous_Mechanical	0.00
Traffic	0.00		
Weather	0.00		
Contract/Owner related delays	0.00		
Install_Repair_Subline	0.00		
Washout_Loaded_Line	0.00		
Operational_Misc	0.00		

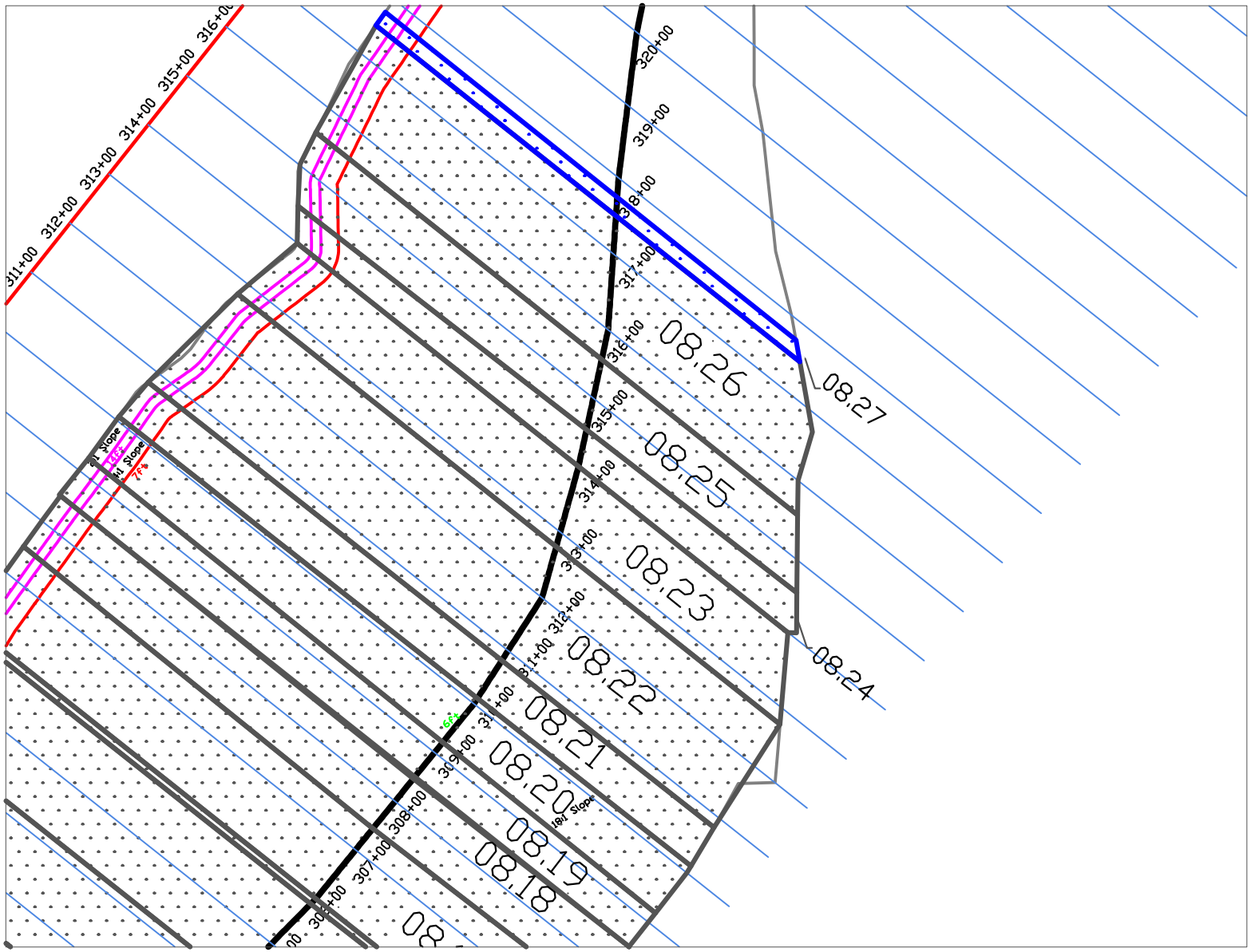
TODAY		TODAY	
Total Operational Delays	1.58	Total Mechanical Delays	-

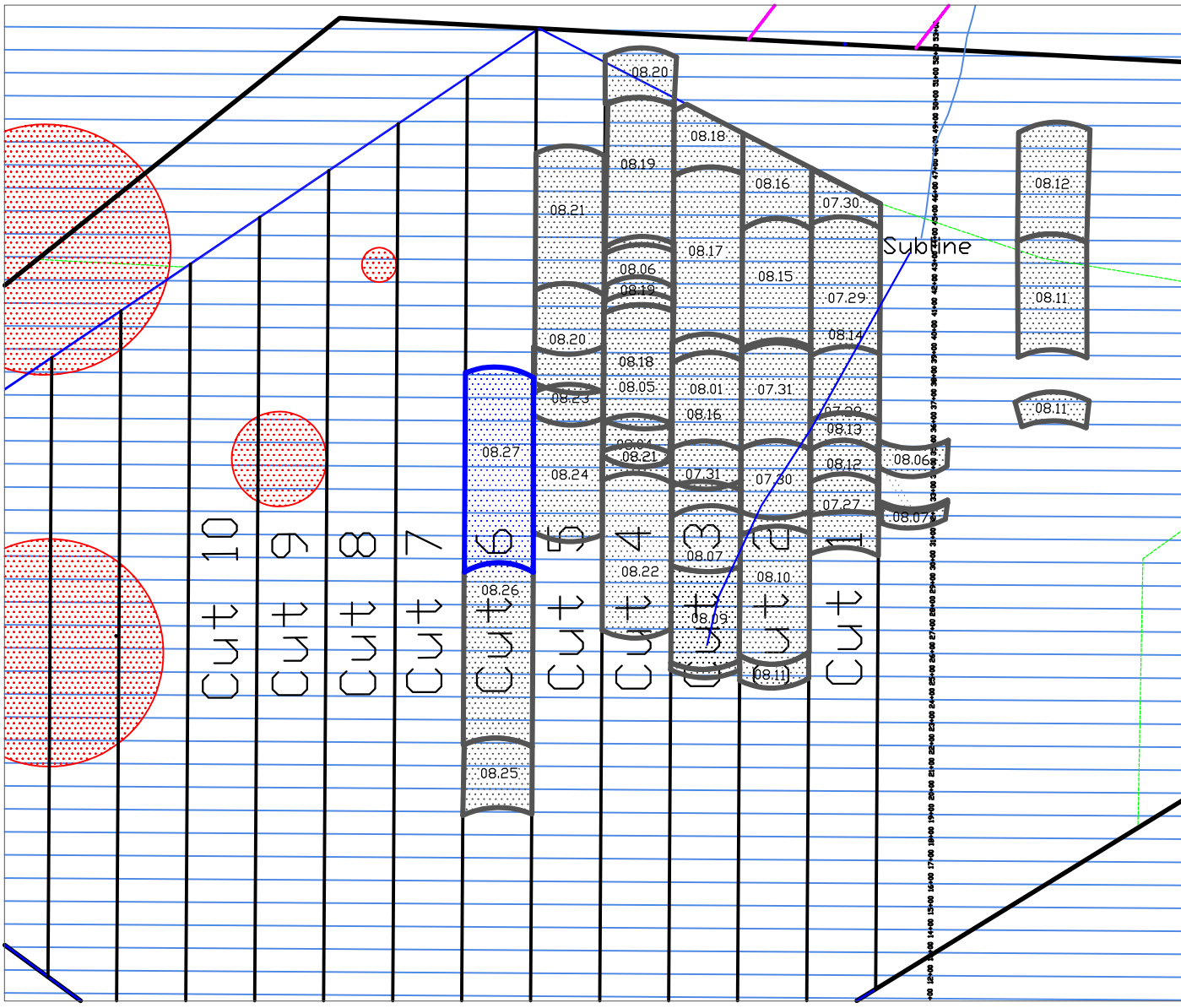
Comments

1	Production	The dredge Wadmalaw continued production in cut lane six of the offshore borrow area where it removed an estimated 46,944 Cyds of material at a rate of 2,093 Cyds/Hr. Beach crews advanced roughly 25' to station 317+75.
2	Downtime	01:05– Cutter– Changing cutter teeth, L/M; 00:30 – Pumps – Clearing debris from pumps;
3	Ship Traffic	0

Equipment List

	Start Date	End Date	Name	Hrs
1	27-Jul-26	27-Aug-26	Wadmalaw	24
2	27-Jul-26	27-Aug-26	Monica Lynn	24
3	27-Jul-26	27-Aug-26	Survey Vessel 1 MB	24
4	27-Jul-26	27-Aug-26	Fuel Bardge 7	24
5	27-Jul-26	27-Aug-26	Lil Chit	24
6	27-Jul-26	27-Aug-26	Sumters Pride	24
7	27-Jul-26	27-Aug-26	Cat D6T #14	24
8	27-Jul-26	27-Aug-26	Cat D6LGP #38	24
9	27-Jul-26	27-Aug-26	Cat D6T #32	24
10	27-Jul-26	27-Aug-26	Cat 950	24
11	27-Jul-26	27-Aug-26	Cat D8T #35	24
12	27-Jul-26	27-Aug-26	Cat D8T #36	24
13	27-Jul-26	27-Aug-26	Cat D6T #69	24
14	27-Jul-26	27-Aug-26	Cat D6LGP #37	24
15	27-Jul-26	27-Aug-26	CB5	24
16	27-Jul-26	27-Aug-26	Ponca	24
17	27-Jul-26	27-Aug-26	A5 Didapper	24
18	27-Jul-26	27-Aug-26	Manitowoc 888	24
19	27-Jul-26	27-Aug-26	Safe Boat	24
20	27-Jul-26	27-Aug-26	UTV Rentals (x3)	24
21	27-Jul-26	27-Aug-26	Cat 966	24
22	27-Jul-26	27-Aug-26	Light Plant Rental (	24


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1:1 Slope


Cut 10
Cut 9
Cut 8
Cut 7
Cut 6
Cut 5
Cut 4
Cut 3
Cut 2
Cut 1
Subline
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NWS Forecast for: Coastal waters from South Santee River to Edisto Beach SC out 20 NM (AMZ360)
Issued by: National Weather Service Charleston, SC
Last Update: 539 AM EDT Thu Aug 27 2026

Print

Today: SW winds 5 to 10 kt, becoming S 10 to 15 kt late. Seas 2 to 3 ft. Wave detail: S 3 ft at 5 seconds and E 1 foot at 10 seconds. Showers likely this morning. A chance of tstms. A chance of showers this afternoon.

Tonight: SW winds 10 to 15 kt. Seas 2 to 3 ft. Wave detail: S 2 ft at 5 seconds and E 1 foot at 9 seconds. A slight chance of showers and tstms in the evening, then a chance of showers and tstms after midnight.

Fri: SW winds 5 to 10 kt. Seas 2 to 3 ft. Wave detail: S 2 ft at 5 seconds and E 2 ft at 9 seconds. A chance of showers and tstms.

Fri Night: SW winds 5 to 10 kt. Seas 2 to 3 ft. Wave detail: S 2 ft at 5 seconds and SE 2 ft at 9 seconds. A chance of tstms. Showers.

Sat: SW winds 5 kt, becoming SE in the afternoon. Seas 2 ft. Wave detail: SE 2 ft at 8 seconds. A chance of tstms. Showers.

Sat Night: SE winds 5 kt. Seas 2 ft. Wave detail: SE 2 ft at 8 seconds. A slight chance of showers and tstms in the evening, then a chance of showers and tstms after midnight.

Sun: E winds 5 kt. Seas 2 ft. A slight chance of showers and tstms.

Sun Night: SE winds 5 to 10 kt. Seas 2 ft.

Mon: E winds 5 kt. Seas 2 ft.

Mon Night: S winds 5 to 10 kt. Seas 2 ft.

winds and seas higher in and near tstms.

Zone Forecast: Coastal waters from South Santee River to Edisto Beach SC out 20 NM (AMZ360)

Visit your local NWS office at: https://www.weather.gov/chs

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SITE DEVELOPMENT PLANS
FOR

IOP MASTER PLAN

50 41ST AVENUE
ISLE OF PALMS, SOUTH CAROLINA

SITE CONTACTS		
CLIENT	CIVIL ENGINEER MATTHEW CLINE, P.E. CLINE ENGINEERING P.O. BOX 21204 CHARLESTON, SC 29413 PHONE (843) 991-7239	PROJECT SURVEYOR
CITY OF ISLE OF PALMS DOUGLAS KERR PO DRAWER 508 ISLE OF PALMS, SC 29451 PHONE (843) 886-6428	SOUTH CAROLINA EROSION CONTROL S.C.D.E.S. B.C.M. STORMWATER DIVISION 1362 MCMILLAN AVE. SUITE 400 CHARLESTON, SC 29405 PHONE (843) 953-0200	SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION DISTRICT 6 6355 FAIN BLVD. NORTH CHARLESTON, SC 29406 PHONE (843) 740-1667

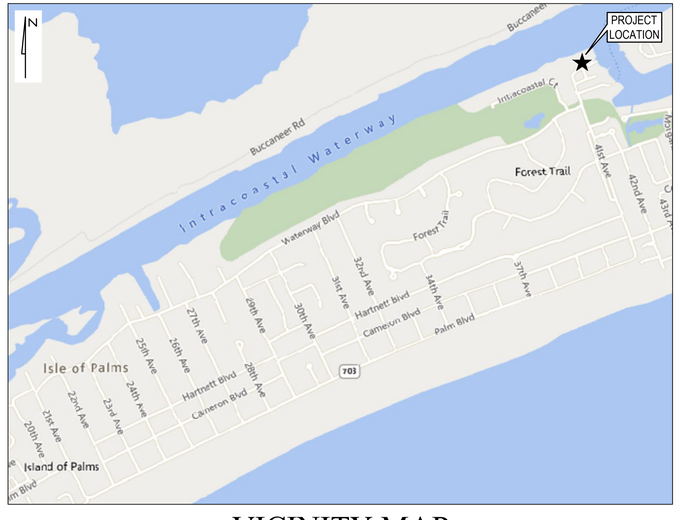
SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
G-1	COVER
G-2	GENERAL NOTES
G-3	GENERAL NOTES
V-1	SITE CONDITIONS
C-1	SITE PLAN
C-2	DEMOLITION AND SWPPP
C-3	GRADING AND DRAINAGE PLAN
C-4	UTILITY PLAN
C-5	CONSTRUCTION DETAILS
C-6	CONSTRUCTION DETAILS
C-7	CONSTRUCTION DETAILS

ADA COMPLIANCE

THE PUBLIC RIGHT-OF-WAY MUST REMAIN ADA COMPLIANT DURING CONSTRUCTION OR AN ALTERNATIVE ROUTE MUST BE PROVIDED. IT IS THE OWNERS RESPONSIBILITY TO REPAIR ALL DAMAGED SIDEWALKS TO REINSTATE AN ADA ACCESSIBLE ROUTE.

PROJECT DESCRIPTION

SITE IMPROVEMENTS WILL CONSIST OF THE REDEVELOPMENT OF PARKING LOT AND DRIVEWAYS.



VICINITY MAP

SCALE 1" = 1000'

REV.	DATE	DESCRIPTION	DRAWN	APPV.
A	07/29/2026	ISSUED FOR REVIEW AND APPROVAL	--	MDC

SOUTH CAROLINA AUTHORIZATION CERTIFICATE OF AUTHORIZATION CLINE ENGINEERING INC. No. 4072

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER MATTHEW D. CLINE No. 26534 07/29/2026

CLINE ENGINEERING
PROFESSIONAL DESIGN CONSULTING

IOP MASTER PLAN

COVER

50 41ST AVENUE
ISLE OF PALMS, SOUTH CAROLINA

PROJECT MANAGER	MDC
DRAWN BY	AJLR
PROJECT DATE	AUGUST 2022
JOB NUMBER	2204

SHEET NUMBER

G-1

PLOT DATE: 7/29/2026 10:53:58 AM FILE LOCATION: X:\2022\2204\1 ACAD\01\PRODUCTION\DRAWINGS\01.DGT

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SITEWORK

1. TOPOGRAPHIC AND BOUNDARY SURVEY BY OTHERS AND PROVIDED TO CLINE ENGINEERING BY CLIENT.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATION OF ALL UNDERGROUND UTILITIES, AND VERIFY PROPERTY CORNERS AND TOPOGRAPHY BEFORE ANY CONSTRUCTION IS BEGUN. CALL UTILITY COMPANIES BEFORE EXCAVATION TO LOCATE ALL BURIED CABLES AND UNDERGROUND UTILITIES. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL VERIFY THE INVERTS OF EXISTING STRUCTURES AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHOULD NOTIFY THE ENGINEERS FOR A REVIEW SHOULD DISCREPANCIES BE DISCOVERED AT THE SITE OR ON THE DRAWINGS BEFORE AND DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE BETWEEN ALL CIVIL DRAWINGS WITH GRADING AND UTILITY CONTRACTORS IN ORDER TO AVOID PROBLEMS DURING CONSTRUCTION.
4. CONTRACTOR TO SCHEDULE A PRECONSTRUCTION MEETING WITH ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER AND UTILITY COMPANIES DURING CONSTRUCTION OF WATER AND SEWER SO PERIODIC OBSERVATIONS CAN BE MADE. CONTRACTOR WILL CERTIFY TO THE ENGINEER IN WRITING THAT WATER AND SEWER LINES HAVE BEEN TESTED AND CONSTRUCTED ACCORDING TO THE ENGINEER'S AND UTILITY COMPANY'S DRAWINGS AND SPECIFICATIONS.
5. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
6. ALL REFERENCE TO SPECIFICATIONS FOR HIGHWAY CONSTRUCTION OR MATERIALS ARE MADE FROM SOUTH CAROLINA STATE HIGHWAY DEPARTMENT'S STANDARD SPECIFICATION, LATEST EDITION.
7. ALL DIMENSIONS SHOWN ARE MEASURED FROM OUTSIDE FACE OF BUILDING WALL AND TO FACE OF CURB LINE. MIDDLE LINE IS THE FACE OF CURB.
8. EARTHWORK SHALL BE TO THE LINES AND GRADES SHOWN. PROOF ROLLING AND COMPACTION TEST SHALL BE ACCOMPLISHED IN THE FIELD TO TEST ALL AREAS. THE OWNER SHALL RETAIN THE SERVICES OF A TESTING COMPANY TO TEST ALL AREAS. MASS AREAS OF FILL SHALL BE PLACED IN LOOSELY MEASURED LIFTS NOT EXCEEDING 8" THICKNESS. ISOLATED AREAS OF FILL (SUCH AS TRENCH BACKFILL) SHALL BE PLACED IN LIFTS NOT EXCEEDING 6" THICKNESS.
9. CONTRACTOR SHALL PROTECT ALL TREES THAT ARE TO REMAIN AS MARKED IN THE FIELD BY OWNER'S REPRESENTATIVE.
10. THE GRADING CONTRACTOR SHALL PROOF-ROLL THE CONSTRUCTION AREA WITH A FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, BY MAKING 2 COMPLETE PASSES IN EACH OF 2 PERPENDICULAR DIRECTIONS. ALL SOFT SPOTS SHALL BE UNDERCUT AND RE-COMPACTED WITH SUITABLE STRUCTURAL FILL MATERIAL. MINIMUM AXLE WEIGHT = 10 TONS.
11. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS, AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. THE CONTRACTOR IS TO COMPLY WITH ALL OSHA REGULATIONS, REQUIREMENTS, AND SAFETY MEETING REQUIREMENTS.
12. ALL NEW ELEVATIONS SHOWN ARE FINISH GRADE ELEVATION. THE GRADING CONTRACTOR SHALL DEDUCT THE FOLLOWING FOR SUBGRADE ELEVATION:

- BUILDING FLOOR - SEE ARCHITECTURAL PLANS
- HEAVY DUTY PAVEMENT - 11"
- LIGHT DUTY PAVEMENT - 8"
- PCC PAVEMENT - 12"
- SIDEWALKS - 4"
- TURF AREAS - 4"

13. THE CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION THAT ARE WITHIN 5 FEET OF NEW CONSTRUCTION. REMOVE DEBRIS FROM SITE OR BURN IN ACCORDANCE WITH LOCAL LAWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY BURNING PERMITS. PROTECT ALL TREES THAT ARE TO REMAIN.
14. TOPSOIL SHALL BE STRIPPED TO A DEPTH AS REQUIRED BY OWNER OR GEOTECH AND STOCKPILED AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
15. THE TOP 18" OF FILL SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY BY THE STANDARD PROCTOR METHOD ASTM D-698. ALL OTHER FILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY. MOISTURE SHALL BE CONTROLLED TO WITHIN ±2% OF OPTIMUM.
16. ALL EXCAVATION SHALL BE "CLASSIFIED EXCAVATION". EXCAVATION SHALL BE "CLASSIFIED" AS "COMMON EXCAVATION" OR "ROCK EXCAVATION". ROCK EXCAVATION SHALL BE CLASSIFIED AS FOLLOWS:

- MASSIVE ROCK EXCAVATION - ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A SINGLE TOOTH RIPPER DRAWN BY A CRAWLER TRACTOR HAVING A MINIMUM DRAW BAR RATED AT NOT LESS THAN 53,000 POUNDS (CATERPILLAR D-8 OR EQUIVALENT) AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST ONE CUBIC YARD OR MORE.
- TRENCH EXCAVATION - ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A POWER SHOVEL HAVING THE CAPACITY OF AT LEAST THAT OF A CATERPILLAR 225 AND OCCUPYING AN ORIGINAL VOLUME OF AT LEAST 1/2 CUBIC YARD OR MORE.

COMMON EXCAVATION SHALL INCLUDE ALL MATERIALS THAT CAN BE RIPPED, BOULDERS, AND ALL OTHER MATERIALS THAT DO NOT FALL IN THE CATEGORY OF ROCK EXCAVATION AS DEFINED ABOVE.

17. THE CLASSIFICATION OF SOILS INCLUDE: TOPSOIL, FILL MATERIAL, UNSUITABLE MATERIAL, AND ROCK EXCAVATION. THE CLASSIFICATION OF SOILS IS THE RESPONSIBILITY OF THE OWNER'S SOIL TESTING FIRM.
18. ALL FILL MATERIAL SHALL CONSIST OF AN APPROVED MATERIAL AND BE FREE OF ORGANIC MATTER AND DEBRIS. IMPORTED FILL SHALL HAVE A MINIMUM STANDARD PROCTOR MAXIMUM DRY DENSITY OF 95 PCF, CLAY/SILT FINES CONTENT NOT GREATER THAN 25%, AND A PLASTICITY INDEX LESS THAN 15%.
19. ALL EXISTING SLOPES STEEPER THAN 4:1 THAT WILL RECEIVE FILL SHALL BE PLOWED AND SCARIFIED SO NEW FILL WILL BOND WITH EXISTING SURFACE.
20. CONTRACTOR SHALL SCARIFY ALL EXISTING ASPHALT PAVEMENT BEFORE PLACING FILL, UNLESS OVERLAYING ASPHALT ONTO EXISTING ASPHALT.
21. THE GRADING CONTRACTOR SHALL CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF PLUS OR MINUS 0.05 FEET. (FINAL GRADED SURFACE UNDER BUILDING SLABS SHALL BE WITHIN A TOLERANCE OF 3/8" WHEN MEASURED WITH A 10' STRAIGHT EDGE). (FINAL PAVEMENT WEARING COURSE SURFACE SHALL BE WITHIN A TOLERANCE OF 3/16" WHEN MEASURED WITH A 10' STRAIGHT EDGE.) (PAVEMENT VARIATION FROM TRUE DESIGN ELEVATION SHALL BE 1/4" OR LESS.)
22. SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SPOT ELEVATIONS WHICH DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS SHALL BE USED FOR SETTING ELEVATIONS OF CURB AND GUTTER AND UTILITIES.
23. IF GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE THE ENGINEER TO INVESTIGATE SUCH ADJUSTMENTS.
24. GRADES SHOWN AT ALL ENTRANCES ARE DESIGN GRADES. CONTRACTOR SHALL COORDINATE GRADING IN THESE AREAS WITH THE EXISTING FEATURES IN THE FIELD AND/OR CURRENT DESIGN DRAWINGS.
25. SITE CONTRACTOR SHALL EXTEND UNDERGROUND ROOF DRAINAGE PIPING TO WITHIN 5 FT OF BUILDING FOR CONNECTION TO ROOF DOWNSPOUTS. CONNECTIONS SHALL BE COORDINATED WITH BUILDING CONTRACTOR.
26. ALL ROADS AND PARKING LOTS SHALL HAVE A MINIMUM 3'-0" WIDE GRASSED SHOULDER. A 5'-0" WIDE SHOULDER IS PREFERRED AND SHALL BE PROVIDED WHERE POSSIBLE.
27. ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III, UNLESS NOTED ON DRAWINGS WITH BELL & SPIGOT ENDS AND SHALL CONFORM TO ALL REQUIREMENTS OF ASTM C 76, LATEST EDITION, INSTALLED WITH FLEXIBLE PLASTIC (BITUMEN) GASKETS AT ALL JOINTS. GASKETS SHALL COMPLY WITH AASHTO M-198 751, TYPE B, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.
28. ALL CORRUGATED PLASTIC PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M-294, TYPE S, SHALL BE SMOOTH INTERIOR WITH ANNULAR CORRUGATED EXTERIOR. HI-Q SURE-LOCK 10.8 PIPE, ADS, N-12, OR APPROVED EQUAL. ALL JOINTS SHALL BE BELL AND SPIGOT AND SHALL MEET THE REQUIREMENTS OF AASHTO M-294, SHALL BE WATERTIGHT, MEETING THE REQUIREMENTS OF ASTM D 3212. THE GASKETS SHALL BE MADE OF POLYISOPRENE MEETING THE REQUIREMENTS OF ASTM F 477. INSTALLATION SHALL CONFORM TO AASHTO M-294, ASTM D-2321, AND MANUFACTURERS INSTALLATION PROCEDURES.
29. ANY REINFORCED CONCRETE PIPE WITH MORE THAN 15 FOOT OF COVER SHALL BE CLASS IV WITH O-RING JOINTS.
30. ALL STORM PIPE LENGTH AND ELEVATIONS (TOPS AND INVERTS) OF STORM DRAINAGE STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE. CONTRACTOR MAY HAVE TO FIELD ADJUST AS NECESSARY DURING CONSTRUCTION. THE CONTRACTOR MAY USE PRE-CAST DRAINAGE STRUCTURES AS AN ALTERNATE FOR STRUCTURES SPECIFIED ON THIS PLAN. HOWEVER, THE OWNER AND CLINE ENGINEERING, INC. ASSUME NO RESPONSIBILITY FOR THESE STRUCTURES, AS FIELD CONDITIONS DURING CONSTRUCTION OFTEN DICTATE ADJUSTMENTS STORM DRAINAGE STRUCTURES. THE CONTRACTOR RETAINS ALL RESPONSIBILITY AND EXPENSE FOR MODIFYING THESE PRE-CAST STRUCTURES TO ACCOMMODATE THESE ADJUSTMENTS.
31. ANY REINFORCED CONCRETE PIPE STEEPER THAN 10 PERCENT MUST HAVE CONCRETE COLLARS. CORRUGATED METAL PIPE WITH HUGGER BANDS MAY BE SUBSTITUTED. THE NUMBER OF CONCRETE COLLARS AND TYPE OF STORM PIPE WILL BE DETERMINED TOGETHER BY THE CONTRACTOR AND THE ENGINEER.
32. ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AND AS DETAILED ON THE DRAWINGS. ALL MANHOLE/CLEANOUT TOP ELEVATIONS ON CIVIL DRAWINGS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MANHOLE/CLEANOUT TOPS ARE FLUSH WITH PAVEMENT FINISHED GRADE THROUGHOUT THE PROJECT.
33. THE CONTRACTOR SHALL PROVIDE STANDARD CLEAN-OUTS OR MANHOLES AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING WITH THE LOCAL AND STATE SEWER APPROVAL AUTHORITIES TO INSURE THAT ALL MATERIALS, INSTALLATION, TESTING, AND AS-BUILT DRAWING REQUIREMENTS WILL BE TO THE SATISFACTION OF THE LOCAL AND STATE AUTHORITIES.
34. ALL WATER LINES SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ALL PIPES, VALVES, AND FITTINGS SHALL COMPLY WITH AWWA STANDARDS, ALL LOCAL AND STATE CODES AND ORDINANCES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. WATER LINES SHALL BE PRESSURE TESTED, AND DISINFECTED AS REQUIRED. ALL NECESSARY AS-BUILTS SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE LOCAL AUTHORITY.
35. ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED AND TESTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES.
36. ASPHALT PAVING FOR LIGHT DUTY AREAS SHALL BE CONSTRUCTED ON A PREPARED AND WELL-DRAINED SUBGRADE COMPACTED AS SPECIFIED. THE BASE COURSE SHALL BE CONSTRUCTED WITH 6" COMPACTED THICKNESS STONE BASE. THE SURFACE COURSE SHALL BE CONSTRUCTED WITH 2" COMPACTED THICKNESS ALL PAVING WORK (MATERIALS AND CONSTRUCTION) SHALL COMPLY WITH STATE SPECIFICATIONS.
37. ASPHALT PAVING FOR HEAVY DUTY AREAS SHALL BE CONSTRUCTED ON A PREPARED AND WELL-DRAINED SUBGRADE COMPACTED AS SPECIFIED. THE BASE COURSE SHALL BE CONSTRUCTED WITH 8" COMPACTED THICKNESS STONE BASE. THE BINDER COURSE SHALL BE CONSTRUCTED WITH 1.5" COMPACTED THICKNESS ASPHALT CONCRETE. THE SURFACE COURSE SHALL BE CONSTRUCTED WITH 1.5" COMPACTED THICKNESS ASPHALT CONCRETE. ALL PAVING WORK (MATERIALS AND CONSTRUCTION) SHALL COMPLY WITH STATE SPECIFICATIONS.
38. CONCRETE TRUCK PAVEMENT SHALL BE CONSTRUCTED WITH 4,000 PSI CONCRETE, 6" THICK REINFORCED WITH 6" X 6" - W2.9 X W2.9 W.W.M. JOINTS SHALL BE CONSTRUCTED AS SHOWN ON DETAILS.
39. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED WITH 3,000 PSI CONCRETE, 4" THICK NON-REINFORCED WITH JOINTS AS SHOWN ON DETAILS.
40. ALL AREAS NOT COVERED BY BUILDINGS AND PAVEMENT SHALL RECEIVE TOPSOIL AND BE GRASSED IN ACCORDANCE WITH SPECIFICATIONS.
41. CONCRETE CURB AND GUTTER SHALL BE 18" WIDE WITH 6" CURB CONSTRUCTED WITH 3,000 PSI CONCRETE WITH EXPANSION JOINTS AND CONTRACTION JOINTS INSTALLED TO COMPLY WITH S.C.D.O.T. STANDARD SPECIFICATION FOR MATERIALS AND CONSTRUCTION OF CURB AND GUTTER.
42. THE GRADING CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING AT ALL TIMES. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY AREAS THAT MAY NOT DRAIN PROPERLY DURING CONSTRUCTION.
43. GRADING CONTRACTOR SHALL INCLUDE IN COST ALL CUT/FILL AND IMPORT/EXPORT NECESSARY FOR EARTHWORK BALANCE. CONTRACTOR SHALL INCLUDE IN COST ALL WETTING/DRYING OF SOILS NECESSARY TO ACHIEVE COMPACTION PER SPECIFICATIONS.
44. THE CONTRACTOR SHALL CONFORM TO THE CONSTRUCTION SEQUENCE.
45. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT TRAPS BEFORE OTHER SITE GRADING AND SITEWORK IS BEGUN. THE SEDIMENT TRAPS AND SEDIMENT CONTROL DURING CONSTRUCTION SHALL COMPLY WITH ALL LOCAL CODES AND REGULATIONS. AFTER ALL SITEWORK IS COMPLETED AND GRASSING ESTABLISHED, THE GRADING CONTRACTOR SHALL REMOVE ALL SILT FROM THE SITE AND LEGALLY DISPOSE OF ALL SILT OFF-SITE AT NO ADDITIONAL COST TO THE OWNER.
46. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE WHEN INSTRUCTIONS FROM REGULATORY AGENCIES ARE RECEIVED AND COMPLY WITH INSTRUCTIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
47. THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONSTRUCTION DOCUMENTS AND SHALL AT ONCE REPORT TO THE ENGINEER ANY INCONSISTENCIES OR OMISSIONS DISCOVERED. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO VERIFY THAT ALL LOCATIONS ARE CORRECT PRIOR TO COMMENCING CONSTRUCTION.
48. THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON ANY UTILITIES OR IN ANY PUBLIC RIGHT-OF-WAYS UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS. ANY FIELD CHANGES WITHIN SCDOT R/W OR CHANGES THAT WOULD IMPACT SCDOT R/W WILL REQUIRE WRITTEN SCDOT APPROVAL PRIOR TO CHANGES BEING IMPLEMENTED IN THE FIELD. (E.G. DRAINAGE, GRADING, ACCESS DESIGN ETC..).
49. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR ALL LANE AND SHOULDER CLOSURES WILL NEED TO BE SUBMITTED FOR ALL WORK WITHIN THE R/W PRIOR TO CONSTRUCTION. NIGHT WORK COULD BE REQUIRED FOR ANY AND ALL LANE CLOSURES.
50. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRIVEWAYS AND OTHER ACCESS POINTS, INCLUDING ANY NEW DRAINAGE STRUCTURES, FOR AREAS WITHIN THE RIGHTS-OF-WAYS OF STATE MAINTAINED FACILITIES IN PERPETUITY.
51. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING ANY EXISTING UTILITIES NECESSARY FOR SITE CONSTRUCTION INCLUDING ALL PERMITS AND FEES.
52. THE CONTRACTOR SHALL VERIFY BENCH MARK LOCATION AND ELEVATION WITH SURVEYOR BEFORE BEGINNING CONSTRUCTION.
53. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EASEMENTS ON THE SITE BEFORE PROCEEDING WITH CONSTRUCTION.
54. ALL PARKING LOT STRIPING IS TO BE PER SOUTH CAROLINA D.O.T. SPECIFICATIONS AND HAVE TWO (2) COATS OF PAINT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING FIRE LANE STRIPING AND SIGNAGE TO MEET LOCAL REQUIREMENTS. THE BASES OF ALL LIGHT POLES, ALL SPEED BUMPS, ALL BOLLARDS, AND ALL FACES OF SIDEWALK THAT ARE NOT FLUSH WITH ASPHALT ARE TO BE PAINTED TRAFFIC YELLOW.
55. IN THE CASE OF A CONFLICT IN SPECIFICATIONS, NOTES, OR DETAILS, THE STRICTER SHALL GOVERN.

DEMOLITION NOTES

1. DEMOLITION INCLUDES THE REMOVAL AND DISPOSAL OF DEMOLISHED MATERIALS, AS SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.
2. CONDITIONS EXISTING AT THE TIME OF INSPECTION FOR BIDDING PURPOSES WILL BE MAINTAINED BY THE OWNER IN SO FAR AS PRACTICABLE, HOWEVER, VARIATIONS MAY OCCUR.
3. STORAGE OR SALE OF DEMOLISHED MATERIAL ON THE SITE WILL NOT BE PERMITTED.
4. THE USE OF EXPLOSIVES WILL BE PERMITTED ONLY WHEN AUTHORIZED BY THE CONSTRUCTION PROJECT MANAGER.
5. CONDUCT DEMOLITION OPERATIONS AND THE REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES OR ADJACENT CONSTRUCTION PROCESSES.
6. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM THE CONSTRUCTION PROJECT MANAGER AND THE AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.
7. ENSURE THE SAFE PASSAGE OF PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, AND PERSONS.
8. PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS AT NO COST TO THE OWNER.
9. MAINTAIN EXISTING UTILITIES, INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL FIELD LOCATE AND VERIFY ALL UTILITIES ON SITE.
10. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING FROM THE CONSTRUCTION PROJECT MANAGER AND THE AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO THE GOVERNING AUTHORITIES. NOTIFY ALL BUSINESSES IMPACTED IN ADVANCE OF ALL SCHEDULED UTILITY INTERRUPTIONS.
11. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
12. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
13. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES BELOW GRADE.
14. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF THE FILL MATERIAL TO A DENSITY EQUAL TO THE ORIGINAL ADJACENT GROUND, UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED. AFTER FILL PLACEMENT AND COMPACTION, GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE FLOW TO SURFACE DRAINAGE STRUCTURES.
15. REMOVE FROM THE SITE DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS, OR AS DIRECTED BY THE CONSTRUCTION PROJECT MANAGER AND LEGALLY DISPOSE OF DEBRIS "OFF-SITE".
16. ALL PIPING, FENCING AND OTHER MATERIALS THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED OR ABANDONED AS DIRECTED BY THE CONSTRUCTION PROJECT MANAGER.
17. ALL SALVAGEABLE MATERIALS WILL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL REMOVE AND STORE THIS MATERIAL AS DIRECTED BY THE CONSTRUCTION PROJECT MANAGER.
18. TRANSPORT MATERIALS REMOVED FROM DEMOLISHED STRUCTURES AND DISPOSE OF "OFF" SITE AS REQUIRED. DEBRIS SHALL NOT BE "BURIED" OR LEFT ON SITE EXCEPT AS ALLOWED BY ALL APPLICABLE LAWS AND BY THE GEOTECHNICAL ENGINEER.
19. THE CONTRACTOR IS TO MAINTAIN MINIMUM COVER OVER ALL UTILITY LINES THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO UTILITY LINES AT NO ADDITIONAL COST TO THE OWNER.
20. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SITE OR TO THE BUILDING AND IMPROVEMENTS ON THE SITE THAT OCCUR DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
21. THE CONTRACTOR MUST VISIT SITE PRIOR TO SUBMITTING BID AND INCLUDE IN HIS PRICE ALL DEMOLITION AND DISPOSAL COSTS TO REMOVE/RELOCATE ANY AND ALL ITEMS THAT MAY INTERFERE WITH NEW CONSTRUCTION.
22. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND COORDINATE THE DEMOLITION, REMOVAL, RELOCATION, ABANDONMENT, ETC. OF ALL UTILITIES THAT INTERFERE WITH NEW CONSTRUCTION. ANY DEMOLITION AND RELOCATION SHOWN IS SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE DESIGN, CONSTRUCTION, AND EASEMENTS OF ALL UTILITY WORK WITH THE APPROPRIATE UTILITIES.
23. DEMOLISH ALL EXISTING UTILITIES THAT LIE UNDER AND 10' OUTSIDE OF NEW BUILDING. THE EXISTING UTILITIES 10' OR MORE OUTSIDE NEW BUILDINGS MAY BE DRAINED AND FILLED WITH FLOWABLE FILL IF TESTING COMPANY APPROVES EXISTING BACKFILL.

TEMPORARY SEEDING

DESCRIPTION

THE PURPOSE OF TEMPORARY SEEDING IS TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WOULD OTHERWISE LAY BARE FOR LONG PERIODS OF TIME BEFORE THEY ARE WORKED OR STABILIZED. TEMPORARY SEEDING IS ALSO USED WHERE PERMANENT VEGETATION GROWTH IS NOT NECESSARY OR APPROPRIATE.

WHEN AND WHERE TO USE IT

TEMPORARY SEEDING IS USED ON EXPOSED SOIL SURFACES SUCH AS DENUDED AREAS, SOIL STOCKPILES, DIKES, DAMS, BANKS OF SEDIMENT BASINS, BANKS OF SEDIMENT TRAPS, AND TEMPORARY ROAD BANKS. TEMPORARY SEEDING PREVENTS AND LIMITS COSTLY MAINTENANCE OPERATIONS ON OTHER SEDIMENT CONTROL STRUCTURES. SEDIMENT CLEANOUT REQUIREMENTS FOR SEDIMENT BASINS, SEDIMENT, TRAPS, AND SILT FENCE IS REDUCED IF THE DRAINAGE AREA IS SEEDED WHEN GRADING AND CONSTRUCTION OPERATION ARE NOT TAKING PLACE.

TEMPORARY STABILIZATION IS REQUIRED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IS COMPLETE UNLESS CONSTRUCTION ACTIVITY IS GOING TO RESUME WITHIN 21 DAYS. COVER SEEDED AREAS WITH AN APPROPRIATE MULCH TO PROVIDE PROTECTION FROM THE WEATHER. WHEN THE TEMPORARY VEGETATION DOES NOT GROW QUICKLY OR THICK ENOUGH TO PREVENT EROSION, RE-SEED AS SOON AS POSSIBLE. KEEP SEEDED AREAS ADEQUATELY MOIST. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION.

SEED SELECTION

SEED SELECTION IS BASED ON GEOGRAPHICAL LOCATION, SOIL TYPE AND THE SEASON OF THE YEAR IN WHICH THE PLANTING IS TO BE DONE. USE THE TABLES IN APPENDIX C AS A GUIDE FOR CONVENTIONAL TILLAGE METHODS (PLOWING, SEEDBED PREPARATION, HYDROSEEDING, ETC). IF A FAST GROWING CROP TO NURSE THE PERMANENT SPECIE OR SPECIES IS REQUIRED, THEN USE THE MIX RATE. FAILURE TO CAREFULLY FOLLOW AGRONOMIC RECOMMENDATIONS RESULTS IN AN INADEQUATE STAND OF TEMPORARY VEGETATION THAT PROVIDES LITTLE OR NO EROSION CONTROL.

INSTALLATION

- TILLAGE: IF THE AREA HAS BEEN RECENTLY PLOWED, NO TILLAGE IS REQUIRED OTHER THAN RAKING OR SURFACE ROUGHENING TO BREAK ANY CRUST THAT HAS FORMED LEAVING A TEXTURED SURFACE. DISK THE SOIL FOR OPTIMAL GERMINATION WHEN THE SOIL IS COMPACTED LESS THAN 6-INCHES.
- SOIL TESTING: SOIL TESTING IS AVAILABLE THROUGH CLEMSON UNIVERSITY COOPERATIVE EXTENSION SERVICE.
- LIME: LIME IS NOT REQUIRED FOR TEMPORARY SEEDING UNLESS A SOIL TEST SHOWS THAT THE SOIL PH IS BELOW 5.0. IT MAY BE DESIRABLE TO APPLY LIME DURING THE TEMPORARY SEEDING OPERATION TO BENEFIT THE LONG-TERM PERMANENT SEEDING.
- FERTILIZER: APPLY A MINIMUM OF 1.5 TONS OF LIME/ACRE (70 POUNDS PER 1000 SQUARE FEET) IF IT IS TO BE USED.APPLY A MINIMUM OF 500 POUNDS PER ACRE OF 10-10-10 FERTILIZER (11.5 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING TEMPORARY SEEDING UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW.
- SEEDING: LOOSEN THE SOIL SURFACE BEFORE BROADCASTING THE SEED. APPLY SEED EVENLY BY THE MOST CONVENIENT METHOD AVAILABLE FOR THE TYPE OF SEED USED AND THE LOCATION OF THE TEMPORARY SEEDING. TYPICAL APPLICATION METHODS INCLUDE BUT ARE NOT LIMITED TO CYCLONE SEEDERS, ROTARY SPREADERS, DROP SPREADERS, BROADCAST SPREADERS, HAND SPREADERS, CULTIPACKER SEEDER, AND HYDRO-SEEDERS. COVER APPLIED SEED BY RAKING OR DRAGGING A CHAIN, AND THEN LIGHTLY FIRM THE AREA WITH A ROLLER OR CULTIPACKER.
- MULCHING: USE MULCH WITH TEMPORARY SEED APPLICATIONS TO RETAIN SOIL MOISTURE AND REDUCE EROSION DURING THE ESTABLISHMENT OF VEGETATION. TYPICAL MULCH APPLICATIONS INCLUDE STRAW, WOOD FIBER, HYDROMULCHES, BFM AND FGM. USE HYDROMULCHES WITH A MINIMUM BLEND OF 70% WOOD FIBERS. THE MOST COMMONLY ACCEPTED MULCH USED IN CONJUNCTION WITH TEMPORARY SEEDING IS SMALL GRAIN STRAW. THIS STRAW SHOULD BE DRY AND FREE FROM MOLD DAMAGE AND NOXIOUS WEEDS. THE STRAW MAY NEED TO BE ANCHORED WITH NETTING OR EMULSIONS TO PREVENT IT FROM BEING BLOWN OR WASHED AWAY. APPLY THE STRAW MULCH BY HAND OR MACHINE AT THE RATE 1.5-2 TONS PER ACRE (90 POUNDS PER 1000 SQUARE FEET). FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.
- IRRIGATION: SEEDED AREAS SHOULD BE KEPT ADEQUATELY MOIST. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION.
- RE-SEEDING: RE-SEED AREAS WHERE SEEDING DOES NOT GROW QUICKLY, THICK ENOUGH, OR ADEQUATELY TO PREVENT EROSION. BASE SEED SELECTION SHOULD ON THE REQUIREMENTS OF LOCAL SPECIFICATIONS.

INSPECTION AND MAINTENANCE

- INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES ½-INCHES OR MORE OF PRECIPITATION.
- COVER SEEDED WITH MULCH TO PROVIDE PROTECTION. FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.
- SUPPLY TEMPORARY SEEDING WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY IN ABNORMALLY HOT OR DRY WEATHER OR ON ADVERSE SITES. CONTROL WATER APPLICATION RATES TO PREVENT RUNOFF.
- BASE SEED SELECTION ON LOCAL SPECIFICATIONS.
- RE-SEED AREAS WHERE THE PLANTS DO NOT GROW QUICK ENOUGH, THICK ENOUGH, OR ADEQUATELY ENOUGH TO PREVENT EROSION SHOULD BE RE-SEEDED.

TEMPORARY SEEDING - COASTAL

SPECIES	RATES PER ACRE	PLANTING DATES
SANDY, DROUGHTY SITES		
BROWNTOP MILLET	40 LBS.	MAR. 10 - SEPT. 1
RYE, GRAIN	56 LBS.	SEPT. 1 - MAR. 15
RYEGRASS	50 LBS.	SEPT. 1 - APR. 15
WELL DRAINED, CLAYEY/LOAMEY SITES		
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS.	MAR. 15 - SEPT. 1
RYE, GRAIN OR OATS	56 LBS. 75 LBS.	SEPT. 1 - MAR. 15
RYEGRASS	50 LBS.	SEPT. 1 - APR. 15

PERMANENT SEEDING

DESCRIPTION

CONTROLLING RUNOFF AND PREVENTING EROSION BY ESTABLISHING A PERENNIAL VEGETATIVE COVER WITH SEED.

WHEN AND WHERE TO USE IT

A MAJOR CONSIDERATION IN THE SELECTION OF THE TYPE OF PERMANENT GRASS TO ESTABLISH IS THE INTENDED USE OF THE LAND. LAND USE IS SEPARATED IN TO TWO CATEGORIES, HIGH-MAINTENANCE AND LOW-MAINTENANCE.

- HIGH-MAINTENANCE: HIGH MAINTENANCE AREAS ARE MOWED FREQUENTLY, LIME OR FERTILIZED ON A REGULAR BASIS, AND REQUIRE MAINTENANCE TO AN AESTHETIC STANDARD. LAND USES WITH HIGH MAINTENANCE GRASSES INCLUDE HOMES, INDUSTRIAL PARKS, SCHOOLS, CHURCHES, AND RECREATIONAL AREAS SUCH AS PARKS, ATHLETIC FIELDS, AND GOLF COURSES.
- LOW-MAINTENANCE: LOW MAINTENANCE AREAS ARE MOWED INFREQUENTLY, IF AT ALL, AND LIME AND FERTILIZER MAY NOT BE APPLIED ON A REGULAR SCHEDULE. THESE AREAS ARE NOT SUBJECT TO INTENSE USE AND DO NOT REQUIRE A UNIFORM APPEARANCE. THE VEGETATION MUST BE ABLE TO SURVIVE WITH LITTLE MAINTENANCE OVER LONG PERIODS OF TIME. GRASS AND LEGUME MIXTURES ARE FAVORED IN THESE AREAS BECAUSE LEGUMES ARE CAPABLE OF FIXING NITROGEN IN THE SOIL FOR THEIR OWN USE AND THE USE OF THE GRASSES AROUND THEM. LAND USES REQUIRING LOW-MAINTENANCE GRASSES INCLUDE STEEP SLOPES, STREAM AND CHANNEL BANKS, ROAD BANKS, AND COMMERCIAL AND INDUSTRIAL AREAS WITH LIMITED ACCESS.

SEED SELECTION

THE USE OF NATIVE SPECIES IS PREFERRED WHEN SELECTING VEGETATION. BASE PLANT SEED SELECTION ON GEOGRAPHICAL LOCATION, THE TYPE OF SOIL, THE SEASON OF THE YEAR IN WHICH THE PLANTING IS TO BE DONE, AND THE NEEDS AND DESIRES OF THE PERMANENT LAND USER. FAILURE TO CAREFULLY FOLLOW AGRONOMIC RECOMMENDATIONS RESULTS IN AN INADEQUATE STAND OF PERMANENT VEGETATION THAT PROVIDES LITTLE OR NO EROSION CONTROL.

INSTALLATION

- TOPSOIL: APPLY TOPSOIL IF THE SURFACE SOIL OF THE SEEDBED IS NOT ADEQUATE FOR PLANT GROWTH.
- TILLAGE: IF THE AREA HAS BEEN RECENTLY PLOWED, NO TILLAGE IS REQUIRED OTHER THAN RAKING OR SURFACE ROUGHENING TO BREAK ANY CRUST THAT HAS FORMED LEAVING A TEXTURED SURFACE. DISK THE SOIL FOR OPTIMAL GERMINATION WHEN THE SOIL IS COMPACTED LESS THAN 6-INCHES. IF THE SOIL IS COMPACTED MORE THAN 6-INCHES, SUB-SOILED AND DISK THE AREA.
- SOIL TESTING: SOIL TESTING IS AVAILABLE THROUGH CLEMSON UNIVERSITY COOPERATIVE EXTENSION SERVICE.
- LIME: UNLESS A SPECIFIC SOIL TEST INDICATES OTHERWISE, APPLY 1½ TONS OF GROUND COURSE TEXTURED AGRICULTURAL LIMESTONE PER ACRE (70 POUNDS PER 1000 SQUARE FEET).
- FERTILIZER: APPLY A MINIMUM OF 1000 POUNDS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING PERMANENT SEEDING OF GRASSES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. DO NOT MIX THE LIME AND THE FERTILIZER PRIOR TO THE FIELD APPLICATION.
- SEEDING: LOOSEN THE SURFACE OF THE SOIL JUST BEFORE BROADCASTING THE SEED. EVENLY APPLY SEED BY THE MOST CONVENIENT METHOD AVAILABLE FOR THE TYPE OF SEED APPLIED AND THE LOCATION OF THE SEEDING. TYPICAL APPLICATION METHODS INCLUDE BUT ARE NOT LIMITED TO CYCLONE SEEDERS, ROTARY SPREADERS, DROP SPREADERS, BROADCAST SPREADERS, HAND SPREADERS, CULTIPACKER SEEDER, AND HYDRO-SEEDERS. COVER APPLIED SEED BY RAKING OR DRAGGING A CHAIN OR BRUSH MAT, AND THEN LIGHTLY FIRM THE AREA WITH A ROLLER OR CULTIPACKER. DO NOT ROLL SEED THAT IS APPLIED WITH A HYDRO-SEEDER AND HYDRO-MULCH.
- MULCHING: COVER ALL PERMANENT SEEDED AREAS WITH MULCH IMMEDIATELY UPON COMPLETION OF THE SEEDING APPLICATION TO RETAIN SOIL MOISTURE AND REDUCE EROSION DURING ESTABLISHMENT OF VEGETATION. APPLY THE MULCH EVENLY IN SUCH A MANNER THAT IT PROVIDES A MINIMUM OF 75% COVERAGE. TYPICAL MULCH APPLICATIONS INCLUDE STRAW, WOOD FIBER, HYDROMULCHES, BFM AND FGM. USE HYDROMULCHES WITH A MINIMUM BLEND OF 70% WOOD FIBERS. THE MOST COMMONLY ACCEPTED MULCH USED IN CONJUNCTION WITH PERMANENT SEEDING IS SMALL GRAIN STRAW. SELECT STRAW THAT IS DRY AND FREE FROM MOLD DAMAGE AND NOXIOUS WEEDS. THE STRAW MAY NEED TO BE ANCHORED WITH NETTING OR ASPHALT EMULSIONS TO PREVENT IT FROM BEING BLOWN OR WASHED AWAY. APPLY STRAW MULCH BY HAND OR MACHINE AT THE RATE 2 TONS PER ACRE (90 POUNDS PER 1000 SQUARE FEET). FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.
- IRRIGATION: KEEP PERMANENT SEEDED AREAS ADEQUATELY MOIST, ESPECIALLY LATE IN THE SPECIFIC GROWING SEASON. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION.
- RE-SEEDING: INSPECT PERMANENTLY SEEDED AREAS FOR FAILURE, MAKE NECESSARY REPAIRS AND RE-SEED OR OVERSEED WITHIN THE SAME GROWING SEASON IF POSSIBLE. IF THE GRASS COVER IS SPARSE OR PATCHY, RE-EVALUATE THE CHOICE OF GRASS AND QUANTITIES OF LIME AND FERTILIZER APPLIED. FINAL STABILIZATION BY PERMANENT SEEDING OF THE SITE REQUIRES THAT IT BE COVERED BY A 70% COVERAGE RATE.

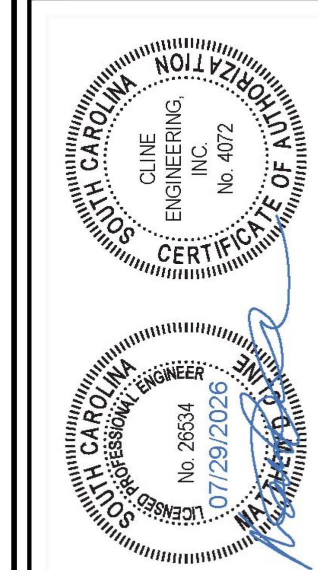
INSPECTION AND MAINTENANCE FOR PERMANENT SEEDING

- INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEED IMMEDIATELY. CONDUCT A FOLLOW-UP SURVEY AFTER ONE YEAR AND REPLACE FAILED PLANTS WHERE NECESSARY.
- IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVERSEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS.
- IF A STAND OF PERMANENT VEGETATION HAS LESS THAN 40 PERCENT COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER.
- RE-ESTABLISH THE STAND FOLLOWING SEED BED PREPARATION AND SEEDING RECOMMENDATIONS, OMITTING LIME AND FERTILIZER IN THE ABSENCE OF SOIL TEST RESULTS.
- IF THE SEASON PREVENTS RE-SOWING, MULCH IS AN EFFECTIVE TEMPORARY COVER.
- FINAL STABILIZATION OF THE SITE REQUIRES A 70 PERCENT OVERALL COVERAGE RATE. THIS DOES NOT MEAN THAT 30 PERCENT OF THE SITE CAN REMAIN BARE. THE COVERAGE IS DEFINED AS LOOKING AT A SQUARE YARD OF COVERAGE, IN WHICH 70 PERCENT OF THAT SQUARE YARD IS COVERED WITH VEGETATION.

PERMANENT SEEDING - COASTAL

SPECIES	RATES PER ACRE	PLANTING DATES
SANDY, DROUGHTY SITES		
BROWNTOP MILLET BAHIAGRASS	10 LBS. 40 LBS.	MAR. 10 - SEPT. 1
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS. 30 LBS. 40 LBS.	MAR. 10 - SEPT. 1
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS. 15 LBS. PLS	MAR. 10 - JUN. 25
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS. 8 LBS. PLS 4 LBS. 20 LBS.	MAR. 10 - JUN. 25
BROWNTOP MILLET WEEPING LOVEGRASS	10 LBS. 8 LBS.	MAR. 10 - JUN. 25
WELL DRAINED, CLAYEY/LOAMEY SITES		
BROWNTOP MILLET BAHIAGRASS	10 LBS. 40 LBS.	MAR. 15 - SEPT. 1
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS. 40 LBS. 5 LBS.	SEPT. 1 - NOV. 10
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS. 30 LBS. 40 LBS.	MAR. 15 - SEPT. 1
BROWNTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS. 10 LBS. 40 LBS.	MAR. 15 - SEPT. 1
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS. 12 LBS. 10 LBS.	MAR. 15 - SEPT. 1
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS. 20 LBS. 6 LBS. 40 LBS.	MAR. 15 - SEPT. 1
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM INDIANGRASS	10 LBS. 8 LBS. PLS 3 LBS. PLS 3 LBS. PLS	MAR. 15 - SEPT. 1

REV.	DATE	DESCRIPTION	DRAWN	APPV.
A	07/29/2026	ISSUED FOR REVIEW AND APPROVAL	--	MDC



CLINE ENGINEERING
PROFESSIONAL DESIGN CONSULTING

IOP MASTER PLAN

GENERAL NOTES

50 41ST AVENUE
ISLE OF PALMS, SOUTH CAROLINA

PROJECT MANAGER	MDC
DRAWN BY	AJ/JR
PROJECT DATE	AUGUST 2022
JOB NUMBER	22047

SHEET NUMBER

G-2

PLOT DATE: 7/29/2026 10:53:53 AM FILE LOCATION: X:\2022\22047 ACAD\001\X\PRODUCTION DRAWINGS\PD.0028

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WATER LINES

1. ALL WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAILS. ALL MATERIALS AND PRODUCTS THAT CONTACT POTABLE WATER MUST BE THIRD PARTY CERTIFIED AS MEETING THE SPECIFICATIONS OF ANSI/NSF STANDARD 61. ALL PIPING MATERIALS AND INSTALLATION SHALL MEET THE APPROVAL OF THE LOCAL AUTHORITY AND THE STATE HEALTH AUTHORITY.
2. ALL DUCTILE IRON PIPE (DIP) SHALL BE PRESSURE CLASS "350" CONFORMING TO AWWA C151. ALL FITTINGS SHALL BE EITHER MECHANICAL OR PUSH-ON JOINT AND SHALL COMPLY WITH AWWA C110. ALL POLYVINYL CHLORIDE WATER LINES 4" AND SMALLER SHALL BE CLASS 200 -SDR21 CONFORMING TO ASTM D-2241 AND ASTM D-1784. WATER LINES 6" AND LARGER SHALL BE 235, DR18, JM EAGLE OR APPROVED EQUAL CONFORMING TO AWWA C-900 AND N.S.F. APPROVED. A DETECTABLE TAPE WITH THE WORDS "CAUTION: WATERLINE BURIED BELOW" SHALL BE INSTALLED 6" TO 12" ABOVE THE PIPE.
3. SEAMLESS COPPER TUBING, 3" AND SMALLER SHALL BE TYPE "K" ROLL FORM TO COMPLY WITH ASTM B-88, LATEST REVISION AND SHALL BE INSTALLED WITH WROUGHT COPPER (95-5 TIN ANTIMONY SOLDER JOINT) FITTINGS IN ACCORDANCE WITH ASTM B16.22.
4. ALL WATER LINES SHALL BE PRESSURE TESTED TO 1.5 TIMES THE MAXIMUM WORKING PRESSURE, 150 PSIG (MINIMUM), CLEANED, STERILIZED, AND FLUSHED UNTIL TWO SUCCESSIVE SATISFACTORY WATER BACTERIOLOGICAL SAMPLES TAKEN AT LEAST 24 HOURS APART ARE OBTAINED. THE SAMPLES SHALL BE ANALYZED BY A STATE APPROVED LABORATORY. THE RESULTS SHALL INCLUDE BOTH COLIFORM AND NON-COLIFORM GROWTH. ALL BACKFLOW PREVENTION DEVICES SHALL BE INSPECTED AND CERTIFIED BY A LICENSED INSPECTOR.
5. ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA C502 AND MEET THE APPROVAL OF THE LOCAL WATER AUTHORITY.
6. ALL GATE VALVES SHALL COMPLY WITH AWWA C500, 175 PSI WORKING PRESSURE AND MEET THE APPROVAL OF THE LOCAL WATER AUTHORITY.
7. A MINIMUM OF A DOUBLE CHECK VALVE (BACKFLOW PREVENTOR) ASSEMBLY SHALL BE INSTALLED ON ALL LINES DEDICATED FOR FIRE LINE SPRINKLER SYSTEMS IN A MANNER ACCEPTABLE TO THE LOCAL AUTHORITY. A BACKFLOW PREVENTION DEVICE MEETING STATE AND LOCAL REQUIREMENTS SHALL BE INSTALLED ON ALL DOMESTIC WATER LINES.
8. ALL PIPE MATERIAL, SOLDER AND FLUX SHALL BE LEAD FREE (LESS THAN 0.2% LEAD IN SOLDER AND FLUX AND LESS THAN 8.0% LEAD IN PIPES AND FITTINGS). LUBRICANTS WHICH WILL SUPPORT MICROBIOLOGICAL GROWTH SHALL NOT BE USED FOR SLIP ON JOINTS. VEGETABLE SHORTENING SHALL NOT BE USED TO LUBRICATE JOINTS. NATURAL RUBBER OR OTHER MATERIAL WHICH WILL SUPPORT MICROBIOLOGICAL GROWTH MAY NOT BE USED FOR ANY GASKETS, O-RINGS, AND OTHER PRODUCTS USED FOR JOINTING PIPES, SETTING METERS OR VALVES, OR OTHER APPURTENANCES WHICH WILL EXPOSE THE MATERIAL TO THE WATER.
9. ALL WATER LINES SHALL BE INSPECTED BY THE UTILITY COMPANY AND THE ENGINEER AND CERTIFIED TO THE STATE HEALTH AUTHORITY BEFORE ACCEPTANCE AND A PERMIT TO OPERATE WILL BE ISSUED AS REQUIRED.
10. ALL WATER LINE SHALL HAVE A MINIMUM 3'-0" COVER.
11. WATER LINE SHALL BE INSTALLED AFTER SANITARY SEWER LINES ARE COMPLETE WHERE THEY CROSS. CONTRACTOR SHALL MAINTAIN A 10' HORIZONTAL AND 2' VERTICAL CLEARANCE OF WATER AND SEWER LINES. ALL WATER LINES SHALL CROSS ABOVE SEWER LINES.
12. CONTRACTOR SHALL INCLUDE COST OF METER AND TAP FEES IN PROPOSAL. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL EXCAVATION, COORDINATION AND SCHEDULING OF TAPS. THE CONTRACTOR WILL INSTALL WATER METER AND BOX AS FURNISHED BY THE LOCAL AUTHORITY AND INSTALL SERVICES LINES TO WITHIN 5' OF BUILDING AS INDICATED ON THE DRAWINGS.
13. THE CONTRACTOR WILL FOLLOW PROCEDURES AS DIRECTED TO FLUSH, STERILIZE AND FURNISH WATER SAMPLES FOR TESTING AS PER AWWA 651 UNTIL APPROVAL IS GRANTED BY THE STATE HEALTH AUTHORITY AND THE LOCAL WATER SYSTEM. A PERMIT TO OPERATE WILL NOT BE ISSUED UNTIL THE COMPLETED WATER SYSTEM MEETS ALL REQUIRED STATE AND LOCAL APPROVALS. THE CONTRACTOR IS RESPONSIBLE TO FURNISH THE OWNER WITH A COMPLETED AND APPROVED WATER SYSTEM ALONG WITH A SET OF APPROVED AS-BUILT DRAWINGS IN A FORMAT ACCEPTABLE TO THE LOCAL UTILITY AUTHORITY.
14. THE CONTRACTOR SHALL NOT PERFORM ANY WORK UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS.
15. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL WATER AUTHORITY AND DETERMINING THE REQUIREMENTS AND PROCEDURES FOR OBTAINING THE AUTHORITY'S APPROVAL OF THE WATER SYSTEM PRIOR TO SUBMITTING A PRICE TO THE OWNER. THE DETAILS AND SPECIFICATIONS OF THE LOCAL WATER AUTHORITY SHALL GOVERN.

SANITARY SEWER LINES

1. ALL CONSTRUCTION SHALL BE PER THE LOCAL SEWER UTILITY'S REQUIREMENTS AND SPECIFICATIONS.
2. THE PLUMBER IS RESPONSIBLE FOR SETTING INVERT ELEVATIONS, PIPE SLOPES, ETC MEETING ALL LOCAL AND STATE CODES.
3. EACH JOINT SHALL BE CLEARLY AND LEGIBLY MARKED WITH THE MANUFACTURER'S NAME OR IDENTIFYING SYMBOL WITH THE LETTERS E.S. APPEARING ON THE EXTERIOR OF THE PIPE NEAR THE SOCKET.
4. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER ALL PVC PIPE LINES.
5. WATER LINES SHALL BE INSTALLED AFTER ALL GRAVITY SEWER LINES ARE INSTALLED.
6. THIS CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTACT WATER, TELEPHONE, POWER AND GAS COMPANY BEFORE EXCAVATION IS BEGUN.
7. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY WORK NECESSARY TO STAKE SEWER LINES. THE CENTERLINE AND ALL CLEANOUT LOCATIONS SHALL BE STAKED IN THE FIELD. THE OWNER'S SURVEYOR WILL SET ALL LOT CORNERS. THE CONTRACTOR SHALL PROTECT ALL PROPERTY MARKERS.
8. ALL UTILITY TRENCHES SHALL BE THOROUGHLY COMPACTED TO PREVENT SETTLEMENT AND DAMAGE TO FUTURE PAVEMENT AND STRUCTURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO EXISTING ROADS USED BY HIS OPERATION. THE CONTRACTOR SHALL REMOVE MUD AND DEBRIS FROM HIGHWAY AND NOT ALLOW DUST TO BECOME A NUISANCE OR SAFETY HAZARD.
10. ALL SANITARY SEWER WORK SHALL BE CONSTRUCTED TO LINES AND GRADES SHOWN AS DETAILED ON THE DRAWING. THE CONTRACTOR SHALL PROVIDE STANDARD MANHOLES OR CLEAN-OUTS AT ALL BENDS AND CHANGES IN GRADE IN SEWER LINES AND CONNECTIONS TO EXISTING SEWER LINES. PIPE BEDDING AND BACKFILL SHALL BE CAREFULLY CONTROLLED. ALL SANITARY SEWER WORK SHALL COMPLY WITH LOCAL CODES AN ORDINANCES. THE ENGINEER, THE LOCAL AUTHORITY AND THE STATE HEALTH AUTHORITY MUST INSPECT ALL SEWER WORK AS REQUIRED BEFORE BEING PUT IN SERVICE.
11. ALL WORK SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND INSTRUCTIONS GIVEN BY THE OWNER'S REPRESENTATIVE, THE STATE HEALTH AUTHORITY AND THE LOCAL GOVERNING AUTHORITY.
12. ALL SEWER LINES IN RELATION TO WATER LINES MUST CONFORM TO "TEN STATES STANDARDS", SECTION 38.3, 1990 EDITION, AT A MINIMUM. MAINTAIN A MINIMUM OF 10' HORIZONTAL AND 2' VERTICAL SEPARATION BETWEEN THE WATER AND SANITARY SEWER LINES. WATER LINES SHALL CROSS OVER SANITARY SEWER LINES.
13. CONTRACTOR TO ASSUME CLASS "B" BEDDING FOR SDR-26 PVC IN HIS B/D PROPOSAL. CLASS "A" BEDDING WILL BE PAID FOR AS AN "EXTRA" SHOULD FIELD CONDITIONS REQUIRE THIS BEDDING.
14. COUPLINGS SHALL BE EASTERN STANDARD SEWER REPAIR COUPLINGS AS MANUFACTURED BY MISSION RUBBER COMPANY, INC. CATALOG NO. 0408-807 (8640) 0410-704 (0636), OR 0412-6250 (2636), OR AS MANUFACTURED BY FERNCO JOINT SEALER CO., FERNDALE, MICHIGAN, OR APPROVED EQUAL.
15. SANITARY SEWER SERVICES SHALL BE INSTALLED PER DETAILS. LOCATION OF SERVICE LINES SHALL BE MEASURED FROM MANHOLES AND FURNISHED WITH "AS-BUILT" DRAWINGS TO THE ENGINEER. EACH BUILDING SHALL HAVE (1) 6" OR 4" SERVICE LINE, AS SPECIFIED FOR ON THE DRAWINGS, BROUGHT TO WITHIN 5' OF THE BUILDING. SERVICE LINES SHALL BE INSTALLED AS REQUIRED ON PLANS. MINIMUM SLOPE AND CLEANOUT SPACING SHALL 1.04% FOR 6" AND 2.08% FOR 4" SERIES.
16. ALL WATER AND SEWER LINE BACKFILL SHALL BE COMPACTED TO 95% STD. PROCTOR BY CONTRACTOR. THE OWNER SHALL TEST COMPACTION.
17. THE OWNER SHALL PAY ALL SEWER TAP FEES TO THE LOCAL GOVERNING AUTHORITY. THE CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITY ON SEWER TAPS.
18. THIS CONTRACTOR SHALL SHORE TRENCH EXCAVATION AND USE PIPE BOX TO COMPLY WITH ALL OSHA SAFETY REGULATIONS. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO PROVIDE JOB SITE SAFETY AND COMPLY WITH ALL SAFETY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR HIS MEANS AND METHODS OF CONSTRUCTION.
19. POLYVINYL CHLORIDE (PVC) 8" AND LARGER SHALL CONFORM TO ASTM D-3034, SDR-26, INSTALLED IN ACCORDANCE WITH ASTM D-2321. ELASTOMERIC JOINTS SHALL COMPLY WITH ASTM D-3212. SDR-26 SHALL BE INSTALLED IN CLASS "B" BEDDING AS DETAILED ON THE DRAWINGS. PVC SEWER 6" AND SMALLER SHALL CONFORM TO SCHEDULE 40.
20. DUCTILE IRON SHALL BE PRESSURE CLASS "350", CONFORMING TO AWWA C151, FURNISHED AND INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS. JOINTS IN DIP AT THE CREEK CROSSING SHALL BE RESTRAINED FROM MOVEMENT (LOK-TIGHT OR APPROVED EQUAL).
21. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE LOCAL SEWER AUTHORITY AND DETERMINING THE REQUIREMENTS AND PROCEDURES FOR OBTAINING THE AUTHORITY'S APPROVAL OF THE SEWER SYSTEM PRIOR TO SUBMITTING A PRICE TO THE OWNER. THE DETAILS AND SPECIFICATIONS OF THE LOCAL SEWER AUTHORITY SHALL GOVERN.
22. MANHOLE FRAME AND COVER SHALL BE MF-11 AND MC-18 RESPECTIVELY AS MANUFACTURED BY SUMTER MACHINERY COMPANY OR SEWER AUTHORITY APPROVED EQUAL. FRAME SHALL WEIGH 208 POUNDS AND COVER SHALL WEIGH 120 POUNDS. ALL SURFACES OF FRAME AND COVER SHALL BE BITUMINOUS COATED.
23. STEPS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC, REINFORCED WITH 1/2" GRADE 60 REINFORCEMENT OR SEWER DISTRICT APPROVED (IF ALLOWED BY LOCAL AUTHORITY).
24. ALL SANITARY SEWER LINES SHALL BE AIR TESTED AND MUST CONFORM TO ASTM C828, LATEST REVISION.
25. ALL FLEXIBLE AND SEMI-RIGID PIPE SHALL BE TESTED BY PULLING A MANDREL, GO/NO GO, DEVICE BY HAND NO EARLIER THAN 30 DAYS AFTER THE TRENCHING HAS BEEN COMPLETELY BACKFILLED. THE MAXIMUM ALLOWABLE DEFLECTION SHALL NOT EXCEED 5 PERCENT OF NOMINAL INSIDE DIAMETER.
26. CONTRACTOR SHALL NOT TIE NEW SEWER LINE TO EXISTING MANHOLE UNTIL ALL CONSTRUCTION IS APPROVED, TESTED AND ACCEPTED BY THE LOCAL GOVERNING AUTHORITY.
27. A PRE-CONSTRUCTION CONFERENCE WITH THE CONTRACTOR, SEWER AUTHORITY, STATE HEALTH AUTHORITY, AND THE ENGINEER WILL BE HELD PRIOR TO SEWER LINE CONSTRUCTION. CONTRACTOR SHALL SET UP PRE-CONSTRUCTION CONFERENCE WITH CITY.
28. THE CONTRACTOR SHALL GRASS ALL RIGHT-OF-WAY IN ACCORDANCE WITH SPECIFICATIONS FOR GRASSING.
29. ALL SEWER LINE WORK SHALL BE "APPROVED" BY THE STATE HEALTH AND LOCAL AUTHORITY, AND "APPROVED" AS-BUILT DRAWINGS SHALL BE FURNISH TO THE OWNER BEFORE CONTRACTOR RECEIVES FINAL PAYMENT.
30. THE CONTRACTOR SHALL NOT PERFORM ANY WORK UNTIL HE HAS OBTAINED COPIES OF ALL NECESSARY ENCROACHMENT AND CONSTRUCTION PERMITS.

SCDES

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.
   - WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   - 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, 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 ONCE 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
   - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
   - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
   - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
   - 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.

MISCELLANEOUS

1. ALL RIP RAP FOR CHECK DAMS, EMERGENCY SPILLWAYS, AND OUTLET STABILIZATION PROTECTION TO BE UNDERLAIN WITH FILTER FABRIC. ALL RIP-RAP SHALL BE DUMPED RIP-RAP IN ACCORDANCE WITH THE SOUTH CAROLINA STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION. PIECES SHALL BE NO LARGER THAN 24 INCHES.
2. ASPHALT DESIGN SHALL BE DONE BY GEOTECHICAL ENGINEER. CONTRACTOR TO COORDINATE WITH OWNER FOR ASPHALT SPECIFICATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS HIS REQUIRED FOR BORROW AREA (IF NEEDED).
4. ALL EROSION CONTROL FOR STOCKPILING OF DIRT SHALL COMPLY WITH SCDES STANDARDS.
5. SEDIMENT MUST BE REMOVED FROM SEDIMENT CONTROL DIKE WHEN SEDIMENT REACHES 50% OF THE SEDIMENT STORAGE VOLUME OR THE TOP OF THE CLEAN-OUT STAKE, WHICHEVER IS LESS.
6. ALL SLOPES DRAINING OFF-SITE, (NOT THROUGH POND) TO BE GRASSED AND STABILIZED WITH EROSION CONTROL BLANKETS.

ABBREVIATIONS

±	MORE OR LESS
Ø	DIAMETER
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS
Ac.	ACRE
ADA	AMERICANS WITH DISABILITY ACT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BM	BENCHMARK
BMP	EROSION CONTROL BEST MANAGEMENT PRACTICES
BOW	BOTTOM OF WALL
C&G	CURB AND GUTTER
CB	CATCH BASIN
CIP	CAST IN PLACE
CL	CENTERLINE
CY	CUBIC YARD
DBH	DIAMETER BREAST HEIGHT
DES	DEPARTMENT OF ENVIRONMENTAL SERVICES
DIP	DUCTILE IRON PIPE
E	EAST
E.G.	EXAMPLE GIVEN
EL	ELEVATION
ETC	ETCETERA
FDC	FIRE DEPARTMENT CONNECTION
FFE	FINISHED FLOOR ELEVATION
FHWA	FEDERAL HIGHWAY ADMINISTRATION
FIRM	FLOOD INSURANCE RATE MAP
FPE	FINISHED PAD ELEVATION
FT	FEET (LENGTH)
H	HORIZONTAL
HDPE	HIGH-DENSITY POLYETHYLENE
HP	HIGH POINT
IBC	INTERNATIONAL BUILDING CODE
IE	INVERT ELEVATION
INV	INVERT
LBS	POUNDS
LF	LINEAR FEET (LENGTH)
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
MPCE	MATCH PRE-CONSTRUCTION ELEVATION
MS4s	STORMWATER DISCHARGE FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
NE	NORTHEAST
NO.	NUMBER
NSF	NATIONAL SANITATION FOUNDATION
NTS	NOT TO SCALE
NW	NORTHWEST
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PC	PRECAST
PVC	POLYVINYLCHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
PSF	POUNDS PER SQUARE FOOT (PRESSURE)
PSI	POUNDS PER SQUARE INCH (PRESSURE)
PSIG	POUNDS PER SQUARE INCH GUAGE
S	SOUTH
SCDES	SOUTH CAROLINA DEPARTMENT OF ENVIRONMENTAL SERVICES
SCDOT	SOUTH CAROLINA DEPARTMENT OF TRANSPORATION
SE	SOUTHEAST
SF	SQUARE FEET
STA	STATION
STD.	STANDARD
SW	SOUTHWEST
TC	TOP OF CURB
TP	TOP OF PAVEMENT
TOW	TOP OF WALL
TYP	TYPICAL
V	VERTICAL
VCP	VITRIFIED CLAY PIPE
W	WEST
WWF	WELDED WIRE FABRIC

THERE MAY BE ADDITIONAL ABBREVIATIONS USED IN THESE PLANS. PLEASE CONTACT ENGINEER IF ANY ABBREVIATION IS UNDEFINED OR UNCLEAR.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BENCHMARK
	A	INLET PROTECTION TYPE A
	F	INLET PROTECTION TYPE F
	E	INLET PROTECTION TYPE E
		SILTSACK INLET PROTECTION
		GUTTER EEL INLET PROTECTION
		ROCK CHECK DAM
		ROCK SEDIMENT DIKE
		ROCK OUTLET STABILIZATION
	CW	CONCRETE WASHOUT
D or		STORM DRAINAGE - MISCELLANEOUS
		STORM DRAINAGE - CATCH BASIN TYPE 16
		STORM DRAINAGE - CATCH BASIN TYPE 9
		STORM DRAINAGE - CURB INLET TYPE 1
		STORM DRAINAGE - DROP INLET
	D	STORM DRAINAGE - JUNCTION BOX
S or	S	SANITARY SEWER MANHOLE
or		SEWER CLEANOUT
		FIRE HYDRANT
or		WATER METER
		WATER VALVE
		REDUCER
or		LIGHT POLE
		IRON PIN
		SIGN
		UTILITY POLE
	E	ELECTRICAL BOX
	E	ELECTRICAL MANHOLE
	C	CABLE BOX
	T	TELEPHONE BOX
	T	TELEPHONE MANHOLE
	10	PARKING COUNT
	PI	PARKING ISLAND
		FIRE DEPARTMENT CONNECTION
		POST INDICATOR VALVE
		TREE
		TREE - TO BE RELOCATED
		TREE - TO BE REMOVED
		LIMITS OF DISTURBANCE
		PROPERTY BOUNDARY
		ADJACENT/INTERNAL PROPERTY LINES
		BUFFER
		EASEMENT
		SETBACK
		WETLANDS
		CENTERLINE
		TURBIDITY BARRIER
	DB	DIVERSION BERM
	DD	DIVERSION DITCH
XG	G	GAS
	HP	HOSE PULL
XOC	OC	OVERHEAD CABLE
XOE	OE	OVERHEAD ELECTRIC
XOT	OT	OVERHEAD TELEPHONE
	PD	PERMANENT DIVERSION DITCH
	RD	ROOF DRAIN
	RSF	REINFORCED SILT FENCE
XD	SD	STORM DRAINAGE
XS	SS	SANITARY SEWER
	SF	SILT FENCE
	SSD	SUBSURFACE DRAIN
	TB	TREE PROTECTION BARRICADE
	TD	TEMPORARY DIVERSION DITCH
	TP	TREE PROTECTION
XC	C	UNDERGROUND COMMUNICATION
XE	E	UNDERGROUND ELECTRIC
XW	W	WATER
	FW	FIRE SERVICE
XX	X	FENCE
		WETLANDS
		UTILITY LINE, PIPE, OR CURB TO BE DEMOLISHED
		ENTITY TO BE DEMOLISHED
		ASPHALT PAVEMENT (LIGHT DUTY)
		ASPHALT PAVEMENT (HEAVY DUTY)
		CONCRETE PAVEMENT
		BRICK PAVEMENT OR HARDSCAPE
		GRAVEL PAVEMENT

THERE MAY BE ADDITIONAL SYMBOLS USED IN THESE PLANS. PLEASE CONTACT ENGINEER IF ANY SYMBOL IS UNDEFINED OR UNCLEAR.

REV.	DATE	DESCRIPTION	DRAWN	APPV.
A	07/29/2026	ISSUED FOR REVIEW AND APPROVAL		MDC

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — CLINE ENGINEERING INC. — No. 4072

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 29534 — 07/29/2026 — MATTHEW D. CLINE

CLINE ENGINEERING — PROFESSIONAL DESIGN CONSULTING

IOP MASTER PLAN

GENERAL NOTES

50 41ST AVENUE
ISLE OF PALMS, SOUTH CAROLINA

PROJECT MANAGER	MDC
DRAWN BY	AJLR
PROJECT DATE	AUGUST 2022
JOB NUMBER	22047

SHEET NUMBER

G-3

PLOT DATE: 7/29/2026 10:53:16 AM FILE LOCATION: X:\2022\2047 ACAD\01-XPRODUCTION\DRAWINGS\25\G28

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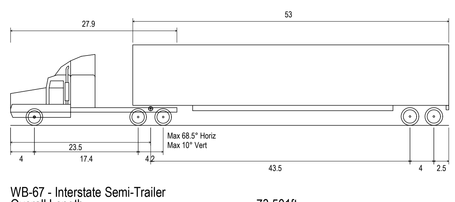
SAFETY NOTE TO CONTRACTOR
THE CONTRACTOR SHALL SHORE TRENCH EXCAVATION AND USE PIPE BOX TO COMPLY WITH ALL OSHA SAFETY REGULATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE JOB SITE SAFETY AND COMPLY WITH ALL SAFETY REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR HIS MEANS AND METHODS OF CONSTRUCTION.

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SITE DATA	
TAX MAP INFORMATION	
SUBJECT PARCEL(S) ZONING	GENE
SUBJECT PARCEL(S) AREA	
BUILDING AREA - PROPOSED	
BUILDING SETBACK REQUIREMENTS	
SITE BUFFER REQUIREMENTS	15' BUFFER Y
BUILDING HEIGHT LIMITS	
FLOOD ZONE INFORMATION (PROVIDED BY OTHERS)	PROJECT SITE A (11 & 12)' AS SCA 45541G AND MAP 2021. THE DEPIC OF PLANS SHA ZONE DETERMI

PARKING TRANSITION
ADA ACCESSIBLE PATH
RESIDENT KAYAK STORAGE
ADA SIGN (TYP)
8"H x 12"W RIBBON CURB. BID ALTERNATE #2.
OPEN AREA / GREEN SPACE
ASPHALT
ASPHALT MILLINGS
24' GATE IN ROPE OR FENCING FOR EMPLOYEE EXIT ONLY
ISLANDER 71 MONUMENT SIGNAGE
30' GATE IN ROPE OR FENCING FOR MAIN ENTRANCE
VEHICLE SWEPT PATH
LIMITS OF DISTURBANCE (TYP)
10'X10' TRANSFORMER PAD
30' GATED ACCESS FOR DELIVERY
SUBJECT PARCEL 571-08-00-007
SSMH RIM=6.08' (A)IE 8"PVC=-0.17' (B)IE 8"PVC=-0.17' (C)IE 8"PVC=-0.06' (D)IE 8"PVC=0.12'
SEWER VAULT RIM=7.00' (A)IE 6"PVC=-0.31'
JUNCTION BOX RIM=4.44' BOTTOM=2.29' IE OUT=2.29' IE IN=2.29'
GI 2X3 RIM=4.66' BOTTOM=2.71' IE OUT=2.71' IE IN=2.71'
GI 2X2 RIM=0.00 BOX
GI 2X3 RIM=5.78' IE OUT=3.45' IE IN=3.45'
N 67°32'21" E 348.57'
N 15°52'42" E 60.01'
N 20°07'10" W 209.56'
N 20°07'24" W 259.60'
S 65°51'49" W 9.83'
15" RCP
IE PVC 8 1.09
IE 15" RCP 0.98

VEHICLE TRACKING SPECIFICATIONS



WB-67 - Interstate Semi-Trailer	
Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

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N 67°32'21" E
348.57'

CONTRACTOR TO SAWCUT EXISTING ASPHALT (TYP)

GI 2X2
RIM=0.00'
BOX FULL

GI 2X2
RIM=0.00
BOX FULL

LIMITS OF DISTURBANCE (TYP)

DESIGN OUTLINE SHOWN FOR REFERENCE ONLY

CONSTRUCTION ENTRANCE

MILL ASPHALT

SILT FENCE (TYP)

CONTRACTOR TO SAWCUT EXISTING ASPHALT (TYP)

N 20°07'10" W
209.56'

S 69°51'49" W
79.83'

SSMH
RIM=6.08'
(A)IE 6"PVC=-0.12'
(B)IE 8"PVC=0.12'
(C)IE 2"PVC=-0.92'
(D)IE 6"PVC=0.12
8" PVC

GI 2X3
RIM=5.78'
IE OUT=3.45'
IE IN=3.45'

INLET PROTECTION

MILL ASPHALT

INLET PROTECTION

GI 2X3
RIM=5.47'
BOTTOM=3.77'
OUT=4.02'
WATER
AREA

CONTRACTOR TO SAWCUT EXISTING ASPHALT (TYP)

SUBJECT PARCEL
571-08-00-007

12" RCP

SEWER VAULT
RIM=7.00'
(A)IE 6"PVC=-0.31'
(B)IE 8"PVC=-1.38'
(C)IE 2" PVC=3.17'

JUNCTION BOX
RIM=4.44'
BOTTOM=2.29'
IE OUT=2.29'
IE IN=2.29'

GI 2X3
RIM=5.63'
BOTTOM=3.03'
IE OUT=3.33'
IE IN=3.33'

GI 2X3
RIM=5.65'
BOTTOM=3.05'
IE OUT=3.05'
IE IN(A)=3.10'

GI 2X3
RIM=5.65'
BOTTOM=3.20'
IE OUT=3.70'

GI 2X3
RIM=4.66'
BOTTOM=2.71'
IE OUT=2.71'
IE IN=2.71'

IE PVC 8
1.09

15" RCP

15" RCP

15" RCP

15" RCP

15" RCP

N 20°07'10" W
259.60'

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PLOT DATE: 7/29/2025 10:00:08 AM FILE LOCATION: X:\2022\2204\CAD\GRDP\CONSTRUCTION DRAWINGS\GRDP2.DWG

SAFETY NOTE TO CONTRACTOR
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N 67°32'21" E
348.57'

N 22°27'39" W
BOUT

N 20°07'10" W
209.50'

S 66°51'49" W
259.60'

EXISTING INLET WITH OBSERVED SEDIMENT BUILD UP. ASSUMED TO HAVE NO PIPE CONNECTION TO OTHER DRAINAGE STRUCTURES FOR DESIGN PURPOSES

GI 2X2
RIM=0.00
BOX FULL

INSTALL FLEXSTORM FX PERMANENT WOVEN INLET FILTER BAG. SEE DETAIL

GI 2X3
RIM=5.78'
IE OUT=3.45'
IE IN=3.45'

SSMH
RIM=6.08'
(A)IE 6"PVC=-0.12'
(B)IE 8"PVC=0.12'
(C)IE 2"PVC=-0.92'
(D)IE 6"PVC=0.12

8" PVC

SUBJECT PARCEL
571-08-00-007

SEWER VAULT
RIM=7.00'
(A)IE 6"PVC=-0.31'
(B)IE 8"PVC=-1.36'
(C)IE 2" PVC=3.17'

JUNCTION BOX
RIM=4.44'
BOTTOM=2.29'
IE OUT=2.29'
IE IN=2.29'

GI 2X3
RIM=5.63'
BOTTOM=3.03'
IE OUT=3.33'
IE IN=3.33'

GI 2X3
RIM=4.66'
BOTTOM=2.71'
IE OUT=2.71'
IE IN=2.71'

GI 2X3
RIM=5.65'
BOTTOM=3.05'
IE OUT=3.05'
IE IN(A)=3.10'

GI 2X3
RIM=5.65'
BOTTOM=3.20'
IE OUT=3.70'

GI 2X3
RIM=5.47'
BOTTOM=2.97'
IE OUT=2.97'
IE IN=2.97'

IE PVC 8
1.09

15" RCP

MODIFY CATCH BASIN INTO GRATE INLET. INSTALL FLEXSTORM FX PERMANENT WOVEN INLET FILTER BAG. SEE DETAIL.

INSTALL BARRACUDA WATER QUALITY UNIT AS ALTERNATE #1 TO REPLACE EXISTING BOX AND TIE TO EXISTING.

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N 67°32'21" E
348.57'

N 15°57'22" E
60.01'

IE
0.63

GI 2X2
RIM=0.00
BOX
FULL

GI 2X2
RIM=0.00
BOX FULL

GI 2X3
RIM=5.78'
IE OUT=3.45'
IE IN=3.45'

SSMH
RIM=6.08'
(A)IE 6"PVC=-0.12'
(B)IE 8"PVC=0.12'
(C)IE "PVC=-0.92'
(D)IE 6"PVC=0.12
8" PVC

GI 2X3
RIM=5.47'
BOTTOM=2.
IE OUT=2.

NO UTILITY IMPROVEMENTS PROPOSED

SUBJECT PARCEL
571-08-00-007

N 20°07'10" W
209.50'

79.83'
S 65°51'49" W

SEWER VAULT
RIM=7.00'
(A)IE 6"PVC=-0.31'
(B)IE 8"PVC=-1.38'
(C)IE 2" PVC=3.17'

JUNCTION BOX
RIM=4.44'
BOTTOM=2.29'
IE OUT=2.29'
IE IN=2.29'

GI 2X3
RIM=5.63'
BOTTOM=3.03'
IE OUT=3.33'
IE IN=3.33'

TBM
7.06

IE PVC 8
1.09

IE 15"
0.39

15" RCP

15" RCP

15" RCP

15" RCP

15" RCP

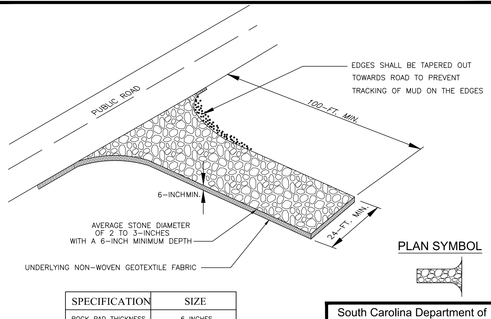
GI 2X3
RIM=4.66'
BOTTOM=2.71'
IE OUT=2.71'
IE IN=2.71'

GI 2X3
RIM=5.65'
BOTTOM=3.05'
IE OUT=3.05'
IE IN(A)=3.10'

GI 2X3
RIM=5.65'
BOTTOM=3.20'
IE OUT=3.70'

N 20°05'24" W
259.60'

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PLAN SYMBOL

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

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.

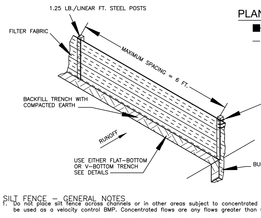
South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE

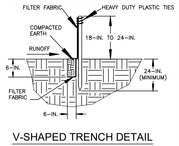
SILT FENCE INSTALLATION



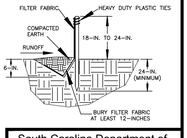
PLAN SYMBOL

—SF—SF—

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



SILT FENCE – GENERAL NOTES

1. Do not place on paved surface, roadway 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, folding the end of the new roll back 180-degrees; 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.

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:
   - Be made from T, U or L 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 shall 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 of the steel post shall be above the installed, and a minimum 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

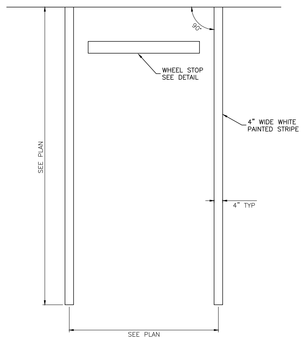
SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 2 of 2

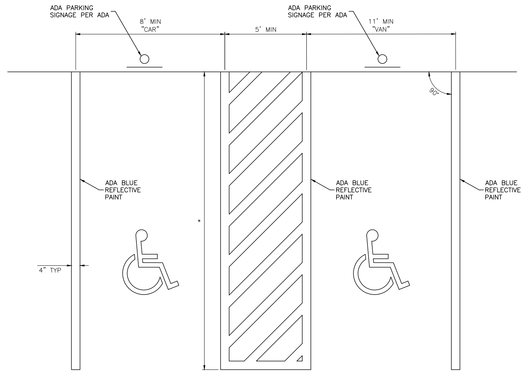
GENERAL NOTES — FEBRUARY 2014 DATE

PLOT DATE: 7/29/2015 10:10:31 AM FILE LOCATION: X:\2015\2504\ PROPERTY\PRODUCTION\DRAWINGS\SPD.DGN

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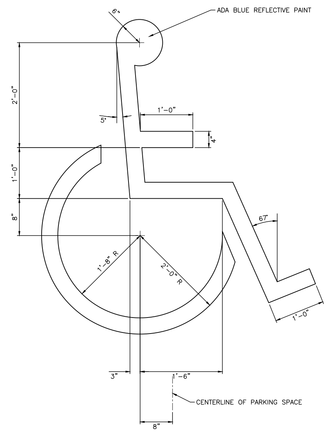


TYPICAL PARKING SPACE DETAIL
NOT TO SCALE



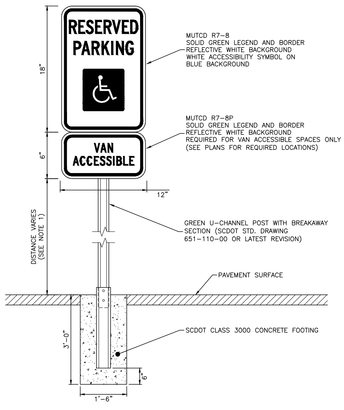
* TYPICAL PARKING SPACES ARE 9'-0" x (18.5' OF 17')
"CAR" SPACES ARE 8'-0" x (18.5' OF 17')
"VAN ACCESSIBLE" SPACES ARE 11'-0" x (18.5' OF 17')
** USE 5' WIDE LOADING ZONE FOR ALL ADA PARKING SPACES

TYPICAL ADA PARKING STRIPING DETAIL
NOT TO SCALE

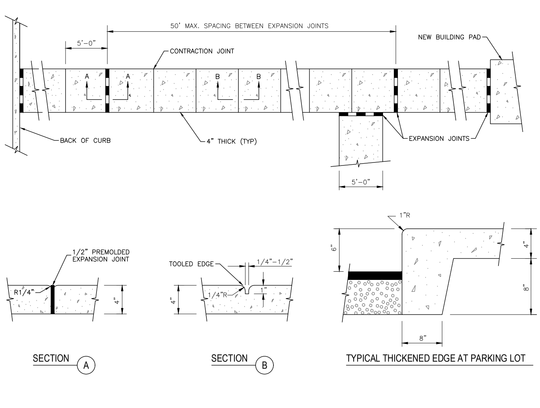


INTERNATIONAL ADA SYMBOL DETAIL
NOT TO SCALE

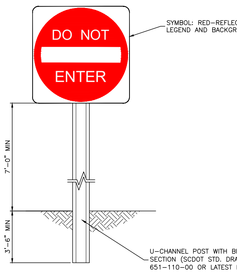
NOTES
1. 12" X 18" ACCESSIBILITY SIGN (R7-8) SHALL BE MOUNTED 7' FROM FINISH GRADE TO BOTTOM EDGE OF SIGN FACE. MOUNTED HEIGHT MY BE REDUCED TO 5' IF PLACED IN A LANDSCAPE AREA IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
2. SIGNAGE SHALL BE INSTALLED IN FRONT OF EACH ACCESSIBLE SPACE, CENTERED ON THE WIDTH OF THE SPACE.
3. REFER TO AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES (ADAAG), LATEST EDITION, FOR REQUIRED NUMBER OF ACCESSIBLE SPACES. PER ADAAG, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED, PLUS ONE ADDITIONAL VAN ACCESSIBLE SPACES PER ADAAG REQUIREMENTS.
4. ALL SIGNAGE SHALL BE ENGINEER GRADE .080 ALUMINUM REFLECTIVE SIGN MEETING THE REQUIREMENTS OF THE MUTCD AND ADAAG.



ADA PARKING SIGN DETAIL
NOT TO SCALE

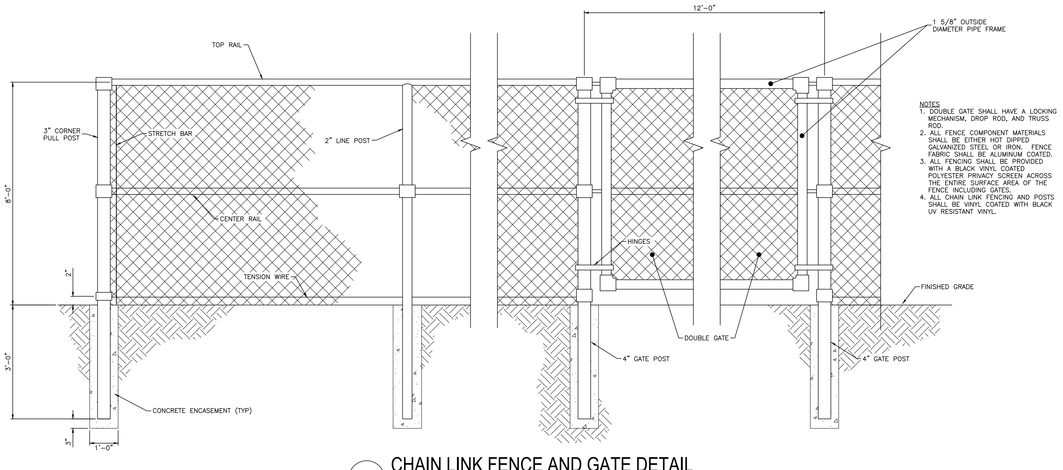


CONCRETE SIDEWALK DETAIL
NOT TO SCALE



NOTES
1. MUTCD REFERENCE NUMBER R5-1 (30"x30")
2. INSTALLED ON MINIMUM 2LB/FT. U-CHANNEL POST.
3. TO MEET MINIMUM REFLECTIVITY STANDARDS SET BY SCDOT QUALIFIED PRODUCTS LIST.

DO NOT ENTER SIGN DETAIL
NOT TO SCALE



NOTES
1. DOUBLE GATE SHALL HAVE A LOCKING MECHANISM, DROP ROD, AND TRUSS ROD.
2. ALL FENCE COMPONENT MATERIALS SHALL BE EITHER HOT DIPPED GALVANIZED STEEL OR IRON; FENCE FABRIC SHALL BE ALUMINUM COATED.
3. ALL FENCING SHALL BE PROVIDED WITH A BLACK VINYL COATED POLYESTER PRIVACY SCREEN ACROSS THE ENTIRE SURFACE AREA OF THE FENCE INCLUDING GATES.
4. ALL CHAIN LINK FENCING AND POSTS SHALL BE VINYL COATED WITH BLACK UV RESISTANT VINYL.

CHAIN LINK FENCE AND GATE DETAIL
NOT TO SCALE

PLOT DATE: 7/29/2015 10:10:38 AM FILE LOCATION: X:\2015\2204\ACAD\07-DRYDOCK\DRYDOCK DRAWINGS\05.DGN

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FlexStorm Pure™ Replacement Bag Maintenance Guide

After following the FlexStorm Operation and Maintenance Guide and performing routine maintenance, you may notice damage or degradation of the inlet filter's geotextile bag. This will require replacement of the geotextile bag portion of your inlet filter device. FlexStorm Pure™ (permanent) has replacement bags. If a FlexStorm Lite™ (temporary) filter is damaged, please replace the entire filter unit.

Sizing the Replacement Bag

Option 1: Check the Label
Locate the inlet filter's label attached on the inside visible perimeter of the existing filter frame.

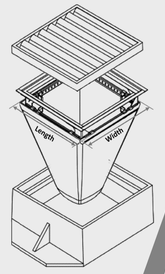
Note the bag size and style listed:
(##" x ##" & STYLE)



Option 2: Take Measurements
If the label cannot be located, remove the filter from the inlet and take off the existing bag. Measure the length and width of the frame perimeter that holds the bag's hose clamp as shown on the right.

Note: If the filter is round provide the outer diameter of the bottom framing channel.

It is necessary to also provide the bag style that was originally provided on the filter. Pure filters have a variety of options available for replacement bags pertaining to treatment properties required ("FX" or "PCP").



Sediment Bag Replacement

1. Remove the bag by loosening or cutting off the clamping band.
2. Take the new, correctly sized geotextile bag and secure the hose clamping band to the frame channel as previously removed.
3. Ensure the bag is secure and there is no slack around perimeter.

ADS

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adspipe.com
800-821-6710

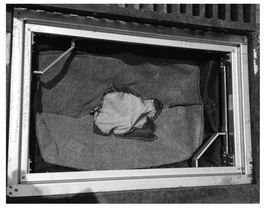
FlexStorm Pure™ Inlet Filter

FlexStorm Pure inlet filters are the preferred choice for permanent inlet protection and stormwater runoff control. Constructed of stainless steel, FlexStorm Pure inlet filters will fit any drainage structure and are available with site-specific filter bags providing various levels of filtration.

Applications
- Car washes
- Commercial
- Loading ramps
- Industrial
- Gas stations
- Parking lots
- Dock drains
- Maintenance

Features
- Custom stainless steel frames are configured to fit into any drainage structure
- Flow and bypass rates meet specific inlet requirements
- Works below grade with bypass to drain area if bag is full
- Installed and maintained by one worker, without additional equipment

Benefits
- Stainless steel frame provides extended service life
- Easily replaceable filter bags
- Meets stringent removal requirements:
  - All bags rated >84% removal efficiency
  - Bag styles available to remove hydrocarbon oils when required





ADS

Stormwater Treatment

FlexStorm Pure™ (Permanent) Inlet Filters

Round

Clear Opening Dimensions in. (mm)	Frame Material	FX Woven Bag	PCP Bag (+ Oil Pouch)
Small - up to 16 (400 mm) diameter openings	Stainless	62SHDRFX	62SHDRPCP
Medium - up to 24 (600 mm) diameter openings	Stainless	62MHDRFX	62MHDRPCP
Large - up to 36 (900 mm) diameter openings	Stainless	62LHDRFX	62LHDRPCP



Rectangular

Clear Opening Dimensions in. (mm)	Frame Material	FX Woven Bag	PCP Bag (+ Oil Pouch)
Small - up to 16 x 16 (400 x 400) openings or 64 (1,600) perimeter	Stainless	62SHDFX	62SHDPCP
Medium - up to 24 x 24 (600 x 600) openings or 96 (2,400) perimeter	Stainless	62MHDFX	62MHDPCP
Large - up to 36 x 24 (900 x 600) openings or 120 (3,000) perimeter)	Stainless	62LHDFX	62LHDPCP
XLarge (typical 2 piece set to fit up to 48 x 36 (1,200 x 900) opening)	Stainless	62XLHDFX	62XLHDPCP



Wall Mount for Open Throat Curb Inlets

Clear Opening Dimensions ft. (m)	Frame Material	FX Woven Bag	PCP Bag (+ Oil Pouch)
Between 1 & 4 (0.3 & 1.2) curb openings (1 filter & mounting hardware)	Stainless	62HDWM1FX	62HDWM1PCP
Between 4 & 8 (1.2 & 2.4) or single wing basins (2 filters & mounting hardware)	Stainless	62HDWM2FX	62HDWM2PCP
Between 8 & 12 (2.4 & 3.6) or double wing basins (3 filters & mounting hardware)	Stainless	62HDWM3FX	62HDWM3PCP
Between 12 & 16 (3.6 & 4.8) or four-sided basin flow (4 filters & mounting hardware)	Stainless	62HDWM4FX	62HDWM4PCP



Replacement Bags

Bag Size (Round or Rectangle)	FX Woven Bag	PCP Bag (+ Oil Pouch)
Small	62SRBFX	62SRBPCP
Medium	62MRBFX	62MRBPCP
Large	62LRBFX	62LRBPCP



Replacement Oil Skimmer Pouches

Product	Product Code
Oil skimmer pouch with swivel hook/strap (20 per box)	62CTSB
Oil skimmer 3" x 34" (75 x 850) for wall mounts (30 per box)	62CTSB34

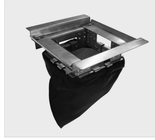


FlexStorm Pure™ Bag Options

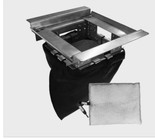
FlexStorm Pure, for permanent applications, has three filter bag options available to meet your specific needs. They have varying degrees of TSS and hydrocarbon oil removal properties.

FlexStorm Filter Bags

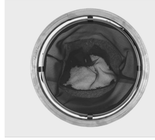
FX: Standard Woven Bag



FXP: Woven Bag with Oil Skimmer Pouch



PCP: Woven Bag with Oil Skimmer Pouch & Liner



Filter Bag Test Results

FX	TSS Filtration Efficiency = 85%[1]
PCP	TSS Filtration Efficiency = 97%[1]

[1] Large scale, 3rd party testing per ASTM D 7351 modified for inlet filters

Filter Bag Specifications & Capabilites

Bag Type (P/N)	Geotextile Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
Woven (FX/FXP)	200	40
Post Construction (PCP)	137	140

Total Bypass Capacity

Bypass capacity will vary with each size drainage structure. FlexStorm designs filter bypass to meet the minimum design flow of the particular drainage structure.

Standard Bag Sizes (match frame sizes)	Solids Storage Capacity ft³ (m³)	Filtered Flow Rate at 50% Max (CFS)		Oil Retention (Oz)	
		FX	PCP	FXP	PCP
Small	1.6 (0.5)	1.2	0.8	89	168
Medium	2.1 (0.6)	1.7	1.2	89	204
Large	3.8 (1.2)	2.7	1.8	89	262
XL	4.2 (1.3)	3.6	2.4	178	319

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800-821-6710

REV.	DATE	DESCRIPTION	DRAWN	APPV.
A	07/29/2026	ISSUED FOR REVIEW AND APPROVAL	-	MDC

NOTICE OF CERTIFICATE OF AUTHORIZATION
SOUTH CAROLINA
CLINE ENGINEERING INC.
No. 4072

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29534
07/29/2026
MICHAEL D. CLINE

CLINE ENGINEERING
PROFESSIONAL DESIGN CONSULTING

IOP MASTER PLAN

CONSTRUCTION DETAILS

50 41ST AVENUE
ISLE OF PALMS, SOUTH CAROLINA

PROJECT MANAGER	MDC
DRAWN BY	AJUR
PROJECT DATE	AUGUST 2025
JOB NUMBER	22047

SHEET NUMBER

C-7

PLOT DATE: 7/29/2026 10:55:38 AM FILE LOCATION: X:\2022\0047.A2\2025\01PRODUCTION\DRAWINGS\P1.RCP

Title 3 PUBLIC WORKS

CHAPTER 1. STREETS AND SIDEWALKS[1]

ARTICLE A. GENERAL PROVISIONS

Sec. 3-1-1. Obstruction—Consent required.

It shall be unlawful for any person to obstruct, cause to be obstructed, or permit the obstruction by any means or in any manner and to any extent any public sidewalk, footway, bicycle path, public street or highway, public square, alley or other public place or grounds within the City for any purpose without the consent of the City.

(Code 1994, § 3-1-1)

Sec. 3-1-2. Same—Removal required within time fixed or required.

It shall be unlawful for any person to refuse or fail to remove or cause to be removed any obstruction on any street, highway or other public place within the time for which the City may have given its permission for the obstruction thereof; or if no time is set when permission is given, the obstruction shall be removed within such time as the City may require.

(Code 1994, § 3-1-2)

Sec. 3-1-3. Same—Permanent obstruction prohibited.

No permission shall be granted for the placing of a permanent obstruction on any of the streets, highways or other public places in the City.

(Code 1994, § 3-1-3)

Sec. 3-1-4. Building materials in streets, sidewalks and public places—Permission required. BD

Building materials shall not be laid on any sidewalk, street or public place until the consent of the ~~Director of Public Works~~ **Building ~~inspector~~Official** is first obtained; and it shall be the duty of the person desiring to use the streets to inform the **Building ~~inspector~~Official** ~~Director~~ when permission is desired to lay material thereon, and otherwise to obstruct the places for the purpose of erecting a building adjoining the street, where some obstruction thereof is necessary, what space will be needed and for what length of time the obstruction will be

[1]State law reference(s)—Streets and sidewalks, S.C. Code 1976, § 5-7-10 et seq.; issuance of permits to charitable groups to solicit funds from motorists, S.C. Code 1976, § 5-27-910; municipality may establish a farm marketing center, S.C. Code 1976, § 46-19-110; municipal authority to regulate processions on highways, S.C. Code 1976, § 56-5-710(3).

necessary; and the ~~Director~~ building inspector shall then give permission accordingly, imposing then and from time to time the reasonable conditions as the ~~Director~~ building inspector may consider necessary or proper for the protection of the public and the public property.

(Code 1994, § 3-1-4)

Sec. 3-1-5. Same—Protection by barricades, lights.

While the obstructions provided for herein remain on the streets, sidewalks or other public places, suitable safeguards by day and by night shall be maintained by the contractor, owner or person in charge of the work, for the protection of the public, by roping off and using lanterns and other proper means.

(Code 1994, § 3-1-5)

Sec. 3-1-6. Same—Removal of conditions. BD

At the expiration of the time provided for herein, all obstructions, materials and trash or other things shall be removed by the owner or contractor, and the street, sidewalk or public place shall be restored to as good condition in every respect as before the materials or other obstructions are laid thereon.

(Code 1994, § 3-1-6)

Sec. 3-1-7. Removal of glass, etc., left by wrecked vehicle.

Any person removing a wrecked or damaged vehicle from a highway shall remove any glass or other injurious substance dropped upon the highway from the vehicle.

(Code 1970, § 20-2; Code 1994, § 3-1-7)

Sec. 3-1-8. Draining of grease, oil, etc., upon street prohibited.

It shall be unlawful for any person to drain, deposit or discharge grease, oil, gasoline, animal waste, washing machine wastewater or other deleterious substances upon any street, ditch or ground, or into the ocean or marsh.

(Code 1970, § 20-3; Code 1994, § 3-1-8; Ord. No. 1991-5, 7-25-1991)

Sec. 3-1-9. Putting glass, trash, oil, etc., on the street prohibited.

No person shall throw or deposit upon any street any glass, bottles, glass, nails, tacks, wire, cans, paper, trash or any other substance. Any person who drops or permits to be dropped or thrown upon any highway any destructive or injurious material shall immediately remove the same or cause it to be removed.

(Code 1970, § 20-4; Code 1994, § 3-1-9)

Sec. 3-1-10. Picnics on streets, rights-of-way, etc., prohibited.

Outings and picnics on the rights-of-way, streets, highways or roads within the City are expressly prohibited.

(Code 1970, § 6-6; Code 1994, § 3-1-10)

Sec. 3-1-11. Dumping ~~prohibited~~ is prohibited in waterways and ditches.

(a) No person shall throw or place any refuse, paper, trash, glass, nails, tacks, wire, bottles, cans, yard trash, concrete, earthen fill, garbage, containers or litter or other debris in any ditch, creek, stream, river, or retention basin that regularly or periodically carries surface water runoff.

(b) Any person who deposits any of the above-referenced items in any ditch, creek, stream, river or retention basin that regularly or periodically carries surface water runoff shall remove such items or cause such items to be removed therefrom immediately.

(c) A violation of the foregoing shall be punishable as provided in section 1-3-66.

(d) If deposited debris is not removed by the violator, the City is authorized to enter onto and upon private property as necessary to effect removal of debris.

(e) The City is authorized to enter onto and upon private property to perform routine maintenance of all ditches, streams, rivers, or retention basins so as to effect the removal of any debris deposited for which no individual bears responsibility.

(Code 1994, § 3-1-11; Ord. No. 1993-24, 12-28-1993)

Secs. 3-1-12—3-1-20. Reserved.

ARTICLE B. EXCAVATIONS

Sec. 3-1-21. Permit required.

It shall be unlawful for any person to dig any ditch, excavation, hole or opening in any street, sidewalk or public place without the permission of the City or the appropriate State agency where such excavation is not on private property. Permission shall not be granted until the purpose for which it is to be made or dug shall be made known, and then the ditch, excavation, hole or opening shall be used for the purpose so declared and no other.

(Code 1994, § 3-1-21)

Sec. 3-1-22. Protection by barricades, lights.

Every ditch, excavation, hole or opening in any street, sidewalk or public place, no matter for what purpose made, shall be securely and safely covered over with boards or other suitable material, or enclosed in a secure way as to prevent accidents to persons, animals and vehicles, both during the night and day, when the workmen are not engaged thereon; and during the night provide safety lighting ~~lanterns shall be kept burning~~ at these places as a signal of danger to all pedestrians and drivers.

(Code 1994, § 3-1-22)

Sec. 3-1-23. Restoration of surface.

Every ditch, excavation, hole or opening in any street, sidewalk or public place, shall be as speedily filled as possible, and shall not be kept open longer than is absolutely necessary. The street, sidewalk or public place shall be restored to as good condition with as good materials as existed before the ditch, excavation, hole or opening was made.

CHAPTER 2. SOLID WASTE[2]

Sec. 3-2-1. Burning to be performed in incinerator, etc. FD

No person shall burn or cause to be burned any rubbish, trash, leaves, tree limbs, shavings, chips, sawdust or other debris within the City unless such material is burned in an incinerator or suitable metal container and such burning complies with all applicable state, federal and local environmental and safety laws, rules and regulations.

(Code 1970, § 18-1; Code 1994, § 3-2-1; Ord. No. 1997-16, § 1, 8-26-1997)

Sec. 3-2-2. Hours of authorized burning. FD

Burning shall be allowed only during daylight hours.

(Code 1994, § 3-2-2; Ord. No. 1997-16, § 2, 8-26-1997)

State law reference(s)—Regulations of department of health and environmental control concerning burning, R 61-62.2.

Sec. 3-2-3. Procedure for burning quantity exceeding incinerator capacity. FD

Whenever the material to be disposed of as set forth in section 3-2-1 exceeds the quantity that can be accommodated by an incinerator or suitable metal container, written permission to burn the material shall be secured from the Chief of the Fire Department and the burning shall be done only under the direction of the Fire Department and during daylight hours.

(Code 1970, § 18-3; Code 1994, § 3-2-3)

Sec. 3-2-4. Garbage containers required.

(a) *Residential.* It shall be the duty of every owner or other occupant of a residential dwelling to use ~~either~~ a 96 ~~90~~-gallon ~~or a 40-gallon~~ plastic roll-out cart approved by the City. Each dwelling shall receive one (1) cart from the City at no cost to the user. Additional carts may be ~~rented~~ purchased by the user. Each dwelling owner shall be responsible for damage to the cart unless such damage is caused by City personnel or normal wear. All garbage shall be kept in the carts until collected by the City and shall be kept closed in such a manner as will prevent access by flies, rodents and other animals. The cart and contents shall not weigh more than two hundred (200) pounds. No garbage cart shall be used for any other purpose. In the event of overflow, plastic bags which are tightly bound may be placed on the carts at curbside on the day of collection. In the event of regular overflow, the Director of Public Works may require owners to purchase ~~an~~ additional roll cart(s). The owner or occupant of any dwelling where carts ~~or plastic bags~~ are placed at curbside shall be responsible for prompt cleanup and removal of the contents of such carts and bags if the

[2]State law reference(s)—Spilling loads on highways, S.C. Code 1976, § 56-5-4100; solid waste management; storage, transportation and collection of municipal solid wastes, S.C. Code Reg. 61-107.5; full cost disclosure by local governments concerning solid waste management, S.C. Code 1976, § 44-96-90.

bags are torn or the carts overturned from any cause. If a cart is damaged through negligence or abuse, it shall be the responsibility of the owner to replace the cart and the Public Works Department may refuse to handle such cart until it is replaced. Roll-out carts found to be inoperable due to normal wear or usage shall be repaired or replaced by the Public Works Department. The Public Works Department will notify users that a roll-out cart is unfit for continued use by placing a tag on the cart. All carts shall remain at the dwelling, and shall remain the property of the City.

(b) *Commercial.*

(1) Each business which generates a volume of garbage in excess of two (2) 90-gallon roll-out carts between scheduled collection dates of the Public Works Department may be required to use a bulk container of appropriate capacity approved by the Public Works Department if the site lacks sufficient area for safe and proper storage of the cart.

(2) Bulk containers shall be of sufficient size to hold all garbage deposited between scheduled collection dates so that there shall be no spillage of garbage or other material from said container.

(3) Bulk containers shall be placed in an area easily accessible to the equipment used for collection. Such area shall be designated for each container by the Public Works Department.

(4) No container used for garbage shall be used for any other purpose. Garbage will be collected only if it is deposited in an approved container at a location also approved by the Public Works Department.

(5) The Public Works Department may refuse service to any bulk container that is no longer in serviceable condition to rust, wear, or other damage.

(6) It shall be the duty of the commercial user to maintain the bulk container in a reasonably clean and sanitary condition.

(c) *Rental property.* The owner and tenant of each rental property shall have joint and several liability for any violation of this section.

(d) *Proper disposal.* It shall be unlawful for any person to place any material in any bulk container, or garbage roll-out cart, which at the time of collection is not qualified for municipal solid waste disposal at the County solid waste landfill or Resource Recovery Center.

(Code 1994, § 3-2-4; Ord. No. 1979-16, 10-14-1979; Ord. No. 1997-16, § 3, 8-26-1997)

Sec. 3-2-5. Trash collection.

(a) No waste which at the time of collection is defined by the United States Environmental Protection Agency or the State Department of Health and Environmental Control as hazardous waste shall be collected by the City.

(b) No tires, batteries, motor oil, petroleum products or auto parts of any kind will be collected by the City. No paint shall be mixed in with household trash into city roll carts. Paint spillage on to city, state or private roads is not the responsibility of the Isle of Palms public service department. Proper disposal of same shall be the responsibility of the owner or person in possession of the same.

(c) *Leaves and grass clippings.* All leaves and grass clippings shall be placed at the curb in front of the property in bio-degradable paper bags ~~or plastic containers for collection~~. No plastic bags shall be used for the disposal of leaves or grass clippings. No household garbage or other materials may be placed with leaves or grass clippings. No mixed materials or plastic bags will be collected by the City. Home composting of leaves and grass clippings is encouraged.

(d) Logs, limbs, brush, and like materials shall be placed at the curb in front of the property in the following manner:

(1) Length of material shall not exceed four feet.

(2) Diameter of material shall not exceed four inches.

(3) ~~The City will only collect materials as listed in this category which are generated by routine landscape maintenance on developed lots. Debris generated by grading or clearing of undeveloped property shall be disposed of by the party generating such debris.~~ The city will not collect materials listed in this category which are generated by landscapers, tree services or other contractors. Debris resulting from commercial landscaping maintenance operations tree service or other contractors shall be removed and legally disposed of by the ~~-~~contractor.

(4) When placed at the curbside for collection, materials shall not obstruct access to water meters, stormwater collection boxes, sewer manhole covers, or fire hydrants.

(5) No garbage shall be mixed with the items listed in this category.

(6) No plastic bags shall be used for the disposal of any items listed in this category.

(e) Building materials, furniture or other trash shall be placed at the curb in front of the property for collection in the following manner:
Builder refuse which is generated exclusively by an owner or resident shall be collected by the city when the volume of the said material does not exceed limits outlined in the Solid Waste Services Collection Procedures

(1) Any single collection day will be limited to the equivalent of ninety (192~~80~~) gallons in volume the equivalent of two trash carts.

(2) No hazardous waste as defined in subsection (a) of this section will be collected by the City.

(3) No roofing shingles will be collected by the City.

(4) No building materials or other trash generated by a contractor shall be collected by the City.

(5) Items within this category shall be separated at the curb for collection. Any materials in these categories that are mixed together shall not be collected by the City.

(6) No garbage shall be mixed with the items in this category.

(f) ~~Collection days shall be designated by the City from time to time. Reasonable notice will be given by the City of collection schedules or practices.~~

(Code 1994, § 3-2-5; Ord. No. 1993-8, 5-25-1993; Ord. No. 1997-16, § 4, 8-26-1997; Ord. No. 1998-8, 4-28-1998; Ord. No. 2011-03, § 1, 3-22-2011)

Sec. 3-2-6. Removal of contractors' and builders' refuse.

Contractors' and builders' refuse ~~,~~ generated by a contractor, bricks, scraps of lumber, mortar, plaster, roofing, guttering, shavings, vegetative debris and all other like materials shall be removed by the contractor, owner or tenant of the premises, each being jointly and severally responsible for such removal.

(Code 1970, § 18-7; Code 1994, § 3-2-6; Ord. of 1-13-1977)

Sec. 3-2-7. Scattering of contents or rummaging through garbage containers.

It shall be unlawful for any person to dump, scatter or spread, or allow to be dumped, scattered or spread, the contents of garbage carts, bags or containers, public or private, on any property in the City, and further it shall be unlawful for any person to enter upon or rummage or plunder through the contents of any garbage cart, bag or

container of another, or to use the container or trash enclosure of another without permission. Placing items on vacant parcels or on any public or on any public property shall be considered illegal dumping.

(Code 1970, § 18-9; Code 1994, § 3-2-7; Ord. of 1-13-1977; Ord. No. 1997-16, § 5, 8-26-1997)

Sec. 3-2-8. Garbage roll-out carts and county recycling containers shall not be kept upon street or road rights-of-way.

Garbage roll-out carts and county recycling containers shall not be placed in the right-of-way of a street or road except when placed for collection. Garbage carts and recycling containers shall not be placed for collection prior to 5:00 p.m. on the day before collection. Garbage carts and recycling containers shall be removed from the right-of-way no later than 9:00 a.m. on the day following collection. Except for such times when lawfully placed for collection, no garbage carts or recycling containers shall be allowed to remain clearly visible from a street, road, or right-of-way. Garbage carts and recycling containers located on publicly owned areas, including, but not limited to, public parking lots, public parks, public beach and recreational areas, or any City-owned property, are exempt from the requirements of this section. The City has the right to move garbage carts and recycling containers placed in violation of this section.

(Code 1970, § 18-10; Code 1994, § 3-2-8; Ord. of 1-13-1977; Ord. No. 1997-16, § 6, 8-26-1997; Ord. No. 2001-3, § 1, 2-27-2001; Ord. No. 2013-03, § 1, 5-28-2013)

Editor's note(s)—Ord. No. 2013-03, § 1, adopted May 28, 2013, changed the title of § 3-2-8 from garbage roll-out carts shall not be kept upon street or road rights-of-way to garbage roll-out carts and county recycling containers shall not be kept upon street or road rights-of-way.

PAPER AND CARDBOARD.

(A) Paper and cardboard boxes in large quantities shall be disposed of at a recycling center.

(B) If being disposed in the Charleston County blue recycling carts, cardboard boxes must be broken down and fit loosely in the cart.

Sec. 3-2-9. Collection.

~~All garbage generated from residential property will be collected in accordance with schedules established by the City from time to time~~. Scheduled collections of, garbage, trash shall be collected according to the schedule established by the Director of Public Services Department. Property owners and tenants shall be notified of such schedule change or practices by public notice.

(Code 1994, § 3-2-9; Ord. No. 1997-16, § 7, 8-26-1997)

Sec. 3-2-10. Placing garbage roll-out carts for collection.

When placing garbage roll-out carts for collection, they shall be placed within ten (10) feet of the edge of the pavement of the street. Carts which are not placed in a location which is easily accessible by collection personnel and equipment will not be emptied. The handles of the carts shall be faced toward the street unless otherwise notified with the implementation of the automatic side loading garbage truck which will effect handle placement.~~.~~

(Code 1994, § 3-2-10; Ord. No. 1997-16, § 8, 8-26-1997)

Sec. 3-2-11. Collection of major household appliances.

The collection of major household appliances such as refrigerators, washing machines, dryers, dishwashers, furniture, bed mattresses, etc., are to be placed out **Tuesday night for Wednesday pick up,** unless otherwise agreed to by the Public Works Department. .

(Code 1970, § 18-13; Code 1994, § 3-2-11)

Sec. 3-2-12. Penalties for noncompliance with or violation of this chapter.

Any person violating any provision of this chapter shall, upon conviction, be punished as provided in section 1-3-66. A violation of this chapter shall not be considered as a continuing offense, but each day that this chapter is violated shall be a separate and distinct offense.

(Code 1994, § 3-2-12; Ord. No. 1979-16, 10-14-1979)

Sec. 3-2-13. Definition of curb.

For purpose of this chapter, the term "curb" shall include the edge of a street, road or right-of-way.

(Code 1994, § 3-2-13; Ord. No. 2001-3, § 2, 2-27-2001)

CHAPTER 3. STORMWATER REGULATIONS

ARTICLE A. STORMWATER MANAGEMENT UTILITY[3]

Sec. 3-3-1. Article designation and authority.

This article may be cited as the "Stormwater Management Utility Ordinance" and is adopted pursuant to S.C. Code 1976, § 48-14-10 et seq.; S.C. Code 1976, § 5-7-30; and S.C. Code Reg. 72-300 et seq., and S.C. Code 1976, § 5-31-10 et seq.

(Ord. No. 2007-14, § 2(3-3-1), 8-28-2007)

Sec. 3-3-2. Definitions.

The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning. Unless otherwise stated herein or the context specifically indicates otherwise, the meaning of words and terms used in this article shall be as set forth in S.C. Code 1976, § 48-10-20 and S.C. Code Reg. 72-301.

City means the City of Isle of Palms, South Carolina.

City Administrator means the City Administrator of the City.

[3]State law reference(s)—Stormwater Management and Sediment Reduction Act, S.C. Code 1976, § 48-14-10 et seq.; standards for stormwater management and sediment reduction, S.C. Code Reg. 72-300 et seq.

Initials: _____ (Client)

Initials: _____ (ATM)

GEOSYNTEC CONSULTANTS, INC.

PROPOSAL FOR CONSULTING SERVICES

MARINA BULKHEAD COATING MAINTENANCE
ISLE OF PALMS MARINA

PREPARED FOR:

The City of Isle of Palms

Attn: Mr. Douglas Kerr

June 9, 2026

Important Notice: The information contained in this proposal is proprietary to Geosyntec Consultants Inc. and is intended solely for the lawful use of the persons/parties named above; it must not be used for any other purpose other than its evaluation; and it must not be divulged to any other third party, in whole or in part, without the prior written permission of Geosyntec.

PROPOSAL FOR CONSULTING SERVICES

INTRODUCTION

Geosyntec Consultants (formerly Applied Technology & Management, Inc.) respectfully submits this proposal to **the City of Isle of Palms (the City)** to provide professional services associated with the assessment, design, bidding, and construction support for maintenance recoating of the existing steel sheetpile bulkhead at the Isle of Palms Marina.

About Geosyntec

Geosyntec is a specialized consulting and engineering firm that has been working with private and public sector clients for more than 40 years to address complex problems involving the environment, natural resources, and civil infrastructure. In 2021, Geosyntec acquired Applied Technology and Management (ATM), who has previously supported the City with related consulting services.

Project Background

In 2020 and 2021, Geosyntec (then ATM) supported the City with development of a bulkhead re-coating program, bidding support, and observation of the completed maintenance work. Bulkhead coating was required following moderate corrosion and coating degradation identified, primarily within the splash zone and concentrated along seams, joints, and other vulnerable features.

The City has identified the bulkhead is due for maintenance and recoating. At the request of the City, Geosyntec performed an initial screening of the current condition of the bulkhead. The bulkhead again shows signs of corrosion and need for maintenance. Geosyntec has recommended the following steps:

- Update plans and specifications for recoating
- Assist with bid process
- Perform limited construction phase services

To support these objectives, Geosyntec proposes the following scope of services.

TASK 1: UPDATE BULKHEAD COATING PLANS

Under this task, Geosyntec will formalize our cursory, visual assessment of the bulkhead to document the current condition of the exposed/outer face of the wall. As part of this effort, we will coordinate with the coating product manufacturer to assess the performance of the wall coating to date and identify any recommendations for additional or alternative coating products or application methods for improved performance / longevity.

ATM will update our bulkhead maintenance plan for patching and recoating the exterior/exposed side of the bulkhead with a specific focus on the sheets, hardware, and walers. The plan will include a plan view and sections of the proposed maintenance as well as specification of surface preparation and coating treatment. Our estimated effort and associated fee assume minor revisions and updates to the 2021 bid package.

On completion of this task, we will notify SCDHEC-OCRM of the proposed maintenance. We assume no permitting is required as part of this scope of services and do not expect this requirement (as was the case previously).

Deliverables: Summary memo of observations; Basic plan & section drawings with technical specification.

TASK 2: PROJECT BIDDING ASSISTANCE

We assume that the City will lead a formal bid process to solicit competitive bids from qualified contractors to complete the maintenance works. To support the City, we propose to provide limited assistance to this process. This is assumed to include:

- Review and compile the bid package for distribution by the City. The package will include documentation prepared by the City (i.e. Invitation, Instructions, Bid Form, Form of Contract) and the technical drawings and specification
- Participate in pre-bid meeting with the City
- Respond to technical inquiries
- Review of bids received for conformance and recommendation for award (as desired by the City).

Geosyntec's efforts are assumed to be limited. Should additional support be required, we will be pleased to revisit the level of service offered and the associated fee.

Deliverables: Compiled bid package, bid tabulation, and recommendation.

TASK 3: LIMITED CONSTRUCTION PHASE SERVICES

Geosyntec will provide limited construction phase services for the project, including:

- Coordinate and lead pre-construction meeting on site
- Review Contractor submittals (coating materials, etc.)
- Conduct 3 field observations of the work at milestones below:
    - 1) at ~10% completion to review contractor performance and approach,
    - 2) at substantial completion of the field work, and
    - 3) at final completion.
- Review and certify contractor payment applications (assume 2)

Deliverables: Pre-construction meeting agenda and minutes, documentation of field observations (3 memoranda), two certified payment applications.

TASK 4: ADDITIONAL MEETINGS AND COORDINATION (T&M)

Where the City or the Contractor team requires additional coordination with Geosyntec, we include this task that may be used for team meetings, calls, presentation, preparation of additional documentation, etc. on a time and material basis for efforts in addition to the above prescribed scope of work. This task may also include coordination between team members, advice, extra site visits, or other services not specifically included herein. We will notify the City if the efforts demanded may exceed the budgeted allowance. Geosyntec hourly billing rates will apply.

Task 1-3 fees below include estimated professional labor fees and expenses. Task 4 is offered on a Time & Materials allowance basis.

Task	Professional Fee (USD)
1. Update Bulkhead Coating Plans	**$8,000**
2. Project Bidding Assistance	**$8,000**
3. Limited Construction Phase Services	**$13,000**
4. Additional Meetings & Coordination (T&M Allowance)	**$4,000**
Total	**$33,000**

Geosyntec services may be initiated immediately upon the acceptance of this proposal and execution of a professional services agreement (PSA).

2026 Geosyntec hourly billing rates

Staff Professional	$175
Senior Staff Professional	$200
Professional	$227
Project Professional	$254
Senior Professional	$280
Principal	$305
Senior Principal	$325
Project Administrator	$94
Clerical	$78

Jon Guerry Taylor & Associates, Inc.
ENGINEERS - PLANNERS - ENVIRONMENTAL CONSULTANTS
P.O. BOX 1082; MOUNT PLEASANT, SC 29465 USA
PHONE: 843.884.6415
FAX: 843.884.4026
www.jgtinc.com

August 8, 2026

Douglas Kerr
City of Isle of Palms
1207 Palm Blvd.
Isle Of Palms, SC 29451

Via email: Douglas Kerr <dkerr@isleofpalms.gov>

RE: Professional Engineering and Construction Administration Services
City of Isle of Palms Marine
Steel Bulkhead Re-Coating
Isle of Palms, South Carolina

Mr. Kerr,

Outlined below is the scope of work and fee schedule for professional services associated with development of the re-coating plans and specifications for the re-coating of the steel bulkhead at the City of Isle of Palms Marine, Isle of Palms, South Carolina.

Scope of Services: The scope of services in this contract includes the following:

TASK 1: ASSESSMENT AND RECOMMENDATIONS

JGT will work with Industry Standard Engineers & Consultants – PLLC (ISEC) and an AMPP (formerly National Association of Corrosion Engineers - NACE) Coating Inspector to develop options, and probable cost estimates for the re-coating of the steel bulkhead. This will include:

- Work with a NACE Coatings Inspector to conduct a site visit to review and inspect the existing bulkhead.
- Review the original coating information and specifications of the steel sheets and components, review the information and specifications of the re-coating of the steel sheets in 2020/2021. This will include materials used, techniques for re-coating that were used and inspection reports.
- Develop options for the re-coating of the steel bulkhead. This will include coating options and alternative corrosion prevention systems.
- Develop probable cost estimates for each of the options.
- Develop a brief report outlining the re-coating options, pros and cons of each, estimated life expectancy and probable costs.

- Review with the City of Isle of Palms and make recommendations for re-coating.

Assessment and Recommendations $8,500.00
Total Assessment and Recommendations Fees $8,500.00

TASK 2: RECOATING PLANS AND SPECIFICATIONS

JGT will work with ISEC and an AMPP Coating Inspector to develop a complete plan and specification package for the re-coating of the steel bulkhead at the City of Isle of Palms Marina. This will include:

- Use the information from Task 1 and the selected recoating option to develop the plans and specifications package.
- Specifications and plans include: minimum product specifications, minimum recoating process requirements and testing and inspection requirements.
- Plans and specification will meet Association for Materials Protection and Performance (AMPP) minimum specifications for preparation, application, testing and inspections.
- Present package to the City of Isle of Palms for review, revisions and approval.

Recoating Plans and Specifications..... $21,500.00
Total Recoating Plans and Specifications Fees..... $21,500.00

TASK 3: RECOATING INSPECTION AND OVERSIGHT

JGT will work with ISEC and an AMPP Coating Inspector to inspect, test and oversee the recoating process. This will include:

- Conduct a pre-construction meeting with the selected Contractor to ensure the product, preparation, recoating, testing and inspection requirements are adhered to and review the recoating project procedures and schedule.
- Answer questions and address issues or changes during the recoating process.
- Conduct regular site visits to oversee recoating process
- Weekly project meetings with City of Isle of Palms, Contractor and JGT to review progress, issues and schedule.
- Review inspection and testing reports.
- Conduct walk-thru with Contractor for section and overall approval of recoating.
- Conduct substantial completion punch list walk-thru with Contractor.
- Conduct final walk-thru with Contractor and issue final approval.
- Finalize all warranty and final approval package items.

Recoating Inspection and Oversight $30,000.00
Total Recoating Inspection and Oversight Fees $30,000.00

FEES TOTALS:

TASK 1: Assessment and Recommendations*: $8,500.00*
TASK 2: Recoating Plans and Specifications:*..... $21,500.00*
TASK 3: Recoating Inspection and Oversight*:..... $30,000.00*
Total: $60,000.00

Terms and Conditions:
Reimbursable expenses are in addition to the Basic Services and will be billed at cost plus 10%. These include printing and plotting fees beyond what is reasonable for the above Scope of Work, mileage ($0.70 per mile) and application or permit fees.

Anticipated Reimbursables: *none*

Invoices will be rendered monthly based on percentage completed in accordance with the fees outlined for this Scope of Work. Payments are due within thirty days of the date of the invoice. Invoices not paid within forty-five days of date rendered will be assessed as a finance charge of one percent per month, or fraction thereof, for every month past due. Invoices not paid within sixty days will result in Jon Guerry Taylor & Associates, Inc. stopping work until such invoices are paid in full.

Jon Guerry Taylor & Associates, Inc. will commence work upon receipt of the signed and dated proposal by the Owner. The professional services shall be completed within the allotted time outlined in this Scope of Work with adjustments made to the schedule based upon changes or directions from the Owner. Any changes to the Scope of Work or schedule shall be mutually agreed to in writing by the Owner and Jon Guerry Taylor & Associates, Inc. prior to implementation. Jon Guerry Taylor & Associates, Inc. will perform the work in a timely manner but will not be held responsible for delays that occur from factors beyond their control or that could not have been reasonably foreseen at the time this Proposal was executed.

Limits of Liability:
The Owner and Jon Guerry Taylor & Associates, Inc. mutually agree that the services provided pursuant to this Proposal involve risk of liability, which cannot be adequately compensated for by payments the Owner makes under this Proposal. Therefore, the total cumulative liability of Jon Guerry Taylor & Associates, Inc., it's agent(s) and employee(s) including negligence (whether sole or concurrent) and strict liability, or otherwise arise out of, connected with or resulting from services provided pursuant to this Proposal shall not exceed the total fees paid by the Owner.

Should you have any questions or comments once you have reviewed the above Scope of Services, please feel free to give us a call at (843) 884-6415.

Sincerely,
JON GUERRY TAYLOR & ASSOCIATES, INC.



Christopher Moore, P.E.
President/Principal Engineer

cc: Craig Pawlyk, JGT

Background and Team:

Jon Guerry Taylor & Associates, Inc. (JGT) has been involved with projects within the Morgan Creek basin for over 30+ years. This includes working with the Morgan Creek Homeowners Association (MCHA) on Dredging, dock replacement and the installation of a cathodic protection system and recoating of the MCHA steel bulkhead. JGT has worked with Dewees Island on the inspection of the existing aluminum bulkhead and was involved in the design of elements of the marina replacement.

JGT has conducted several condition assessments of the original timber bulkhead at the City of Isle of Palms Marina and in 2008, permitted, design and conducted construction oversight of the bulkhead replacement of the original timber bulkhead with the existing steel sheet pile bulkhead. JGT was involved in the design of several structural elements of the City of Isle of Palms Marina redevelopment.

JGT has designed hundreds of bulkheads along the coast of South Carolina and North Carolina. In addition, JGT has been involved in several steel recoating projects including the MCHA steel bulkhead rehabilitation and recoating project and the Waterfront Plantation Bulkhead inspection and recoating project.

JGT worked with Southern Cathodic Protection, Inc. to develop the cathodic protection system and recoating of the 6,000 linear feet of steel bulkhead around the Morgan Creek Basin.

Chris Moore, PE is the President and Principal Engineer at JGT. He has over 26 years of experience with bulkhead inspections, design and construction. Chris was the design engineer on the City of Isle of Palms Marina bulkhead replacement in 2008/2009 and other design elements of the marina replacement. He was the JGT Project Manager representative for the MCHA bulkhead recoating and cathodic protection project Team.

Caleb Wright, PE, is the Principal Engineer of Industry Standard Engineers & Consultants – PLLC (ISEC) with more than 30 years of experience in metallurgical, corrosion, and cathodic protection engineering.

MR. Wright served as the on-site engineering lead for the MCHA steel bulkhead rehabilitation and recoating project, directing the redevelopment and validation of the coating specification, cathodic protection design, leak remediation, and structural repairs. Mr. Wright has provided corrosion engineering services for the U.S. Army Corps of Engineers, Department of Defense, industrial clients, and local governments on projects involving waterfront structures, tanks, pipelines, and process equipment. He holds AMPP certifications in Coating Inspection and Cathodic Protection and is licensed as a Professional Engineer in multiple states.

Mr. Moore and Mr. Wright worked on the MCHA bulkhead re-coating project as project engineers together. Mr. Wright and ISEC will be part of the Team for the City of Isle of Palms Marina Recoating project. Mr. Craig Pawlyk with JGT will oversee the regulatory agencies permitting approvals.

Resumes Attached

CHRISTOPHER W. MOORE, P.E.

2008 to Present - Jon Guerry Taylor, & Associates, Inc., President/Principal Engineer
2000-2007 - Zande - Jon Guerry Taylor, P.E., Inc., Associate Engineer / Assistant Manager
Responsible for business development, project coordination, contracts, financial and company management. Technical involvement in engineering and planning includes project management and engineering design of waterfront projects and structures, docks, bulkheads, marinas and piers. Other civil engineering duties include permitting and design of water and wastewater systems, storm drainage systems, roadway systems requiring general civil engineering expertise. Project Management tasks include complete preparation of engineering construction drawings and specifications, communications with owners, contractors, and regulatory authorities associated with projects, cost estimating, bidding administration, and construction supervision/inspection.

Years with this firm: 26 Years with other Firms: 4 Total Experience: 30 years

RELEVANT PROJECTS:
Cumberland Island National Park Boat Ramp Replacement, Cumberland Island, GA
Congaree National Park Pedestrian Bridge and Kayak Launch; Hopkins, SC
Morgan Creek Dredging; Isle of Palms, SC
Morgan Creek Bulkhead Recoating and Renovations; Isle of Palms, SC
Waterfront Plantation Bulkhead Recoating; Charleston, SC
James Island Yacht Club Dredging, Charleston, SC
Remley's Point Boat Landing Replacement and Expansion; Mount Pleasant, SC
Ebenezer Park Fixed Pier, Kayak Launch and Dredging; York County, SC
Clark Island Dry Stack and Marina; Johns Island, SC
Northbridge Park Kayak Launch and Fishing Pier; Charleston, SC
Calhoun Falls State Park Marina; Abbeville, SC
James Island Yacht Club Dock Replacements; Charleston, SC
Congaree National Park Boardwalk Replacement, Phase 1 and Phase 2; Hopkins, SC
Natchez Trace National Parkway Pedestrian Bridges; Mississippi
Limehouse Bridge Fishing Pier; Charleston, SC
Wando Marina, Berkeley County, SC
Governors Park Marsh Boardwalk; Daniel Island, Charleston, SC
Isle of Palms Municipal Marina Bulkhead Replacement; Isle of Palms, SC
Richardson's Landing Breakwater; Lake Moultrie, SC

EDUCATION:
B.S. Civil Engineering, The Citadel, The Military College of South Carolina, 1997
Structural Engineering Graduate Certificate Program; The Citadel Graduate School

PROFESSIONAL REGISTRATION:

Professional Engineer; South Carolina	No. 22003
Professional Engineer; North Carolina	No. 59680
Professional Engineer; Mississippi	No. 32442
Professional Engineer; Georgia	No. 32534
National Council of Examiners for Engineering and Surveying (NCEES)	No. 28717

MEMBERSHIPS AND ACTIVITIES:
Member of American Society of Civil Engineers (ASCE)

CRAIG A. PAWLYK, R.L.A., A.S.L.A., A.I.C.P.

2008 to Present – Jon Guerry Taylor & Associates, Inc., Vice-President/Director of Critical Area Permitting
2001-2007 - Zande - Jon Guerry Taylor, P.E., Inc., Planning Project Manager
Environmental Permitting duties include preparation and administration of Regulatory permits including Army Corps of Engineers, SCDES Navigable Water Permits and SCDES-BCM Critical Area permits (including docks, marinas, dredging, boat ramps, piers, boardwalks), and SCDES 401 Water Quality Certifications. Additional responsibilities include preparation of public waterfront recreation land use plans, conceptual master plans, and marina facilities planning as well as construction documents for waterfront commercial and recreational projects.

Years with this firm: 24 Years with other Firms: 4 Total Experience: 28 years

RELEVANT PROJECTS:
Morgan Creek Dredging; Isle of Palms, SC
Morgan Creek Bulkhead Recoating and Renovations; Isle of Palms, SC
James Island Yacht Club Dredging, Charleston, SC
Hidden Cove Marina, Moncks Corner, SC
Harborage at the Ashley Marina, Charleston, SC
The Pointe at Rivertown Community Dock, Mt. Pleasant, SC
Riverland Terrance Boat Ramp, Charleston, SC
Atlantis Marine Docks and Dredging, Berkeley County, SC
Beaufort County SC Boat Landing Study, Beaufort County, SC
Remleys Point Boat Landing Replacement and Expansion; Mount Pleasant, SC
Ebenezer Park Fixed Pier, Kayak Launch and Dredging; York County, SC
Northbridge Park Kayak Launch and Fishing Pier; Charleston, SC
Palmetto Islands County Park Kayak Launch Dock; Mount Pleasant, SC
James Island Yacht Club Dock Replacements; Charleston, SC
Calhoun Falls State Park Marina; Abbeville, SC
Hidden Cove Marina Redevelopment; Moncks Corner, SC
Limehouse Bridge Fishing Pier; Charleston, SC
Charleston Waterfront Park Harbor Taxi Dock; Charleston, SC
Ross Marine Drystack and Wet Slip Marina; Johns Island, Marina
Town of McClellanville Observation and Fishing Pier; McClellanville, SC
Shem Creek Park Dredging; Town of Mount Pleasant, SC

EDUCATION:
B.L.A. Landscape Architecture, Clemson University, 1994

PROFESSIONAL REGISTRATION:
Landscape Architect – South Carolina – No. 826
Landscape Architect - North Carolina – No. 1245
Certified Planner (A.I.C.P.) – No. 020183

MEMBERSHIPS AND ACTIVITIES:
American Society of Landscape Architects American Institute of Certified Planners
American Planning Association

CALEB WRIGHT, PE

Corrosion Engineer
Industry Standard Engineers & Consultants – PLLC

PROFESSIONAL SUMMARY

Corrosion Engineer with 30 years of professional experience, including 12 years with Industry Standard Engineers & Consultants – PLLC, specializing in corrosion engineering, cathodic protection, protective coatings, and corrosion mitigation for water, utility, marine, and infrastructure systems. Experienced in cathodic protection system design, coating system design and inspection, field engineering, construction support, contractor coordination, and evaluation of existing corrosion-control systems. Provides hands-on technical leadership from design through construction and commissioning.

CORE QUALIFICATIONS

- *Corrosion Engineering*
- *Cathodic Protection System Design*
- *Galvanic Cathodic Protection*
- *Protective Coating Systems*
- *Coating Inspection*
- *Corrosion Control & Mitigation*
- *Field Engineering & Construction Support*
- *Utility & Water Infrastructure*
- *Contractor Coordination*
- *Construction Quality Assurance*
- *Existing-System Evaluation*
- *Technical Coordination with Owners and Contractors*
-

PROFESSIONAL CERTIFICATIONS & QUALIFICATIONS

- *NACE/AMPP Cathodic Protection Technician #66725*
- *NACE/AMPP Basic Coating Inspector / CIP Level 1 #11038*

RELEVANT PROJECT EXPERIENCE

MCHA Steel Bulkhead Rehabilitation

Isle of Palms, South Carolina | Professional Services: 2025 | Construction: 2025
Served as site engineering representative for Southern Cathodic Protection Company during rehabilitation of a steel bulkhead. Reworked cathodic protection, coating, repair, and leak-control plans as field conditions warranted. Managed site coating contractors and inspectors and conducted weekly coordination meetings with the owner. Provided hands-on involvement in coating inspections and contractor negotiations to address performance and ensure successful execution of the rehabilitation work.

Williams Gas Pipeline Crossing – Atrium Hospital

Charlotte, North Carolina | Professional Services: 2023 | Construction: 2024
Served as Corrosion Engineer providing coating system design, cathodic protection system design, and corrosion engineering services for a ductile iron water main serving the hospital. Addressed corrosion-control requirements associated with the water main's interference with two existing 30-inch gas mains.

Fire Water Tank Cathodic Protection RFP
Stennis Space Center, Mississippi | Professional Services: 2022
Served as Corrosion Engineer providing cathodic protection design and corrosion engineering services for the fire water tank serving the facility. Developed corrosion-control recommendations supporting the cathodic protection procurement and implementation process.

DIP Water Main – 361 ISRG Mission Operations Facility
Hurlburt Field, Florida | Professional Services: 2024
Served as Corrosion Engineer providing galvanic cathodic protection design and corrosion engineering services for civil utility infrastructure supporting the facility. Applied corrosion-control engineering principles to protect ductile iron water main components and associated utility systems.

DIP Water Main – EUPH Barracks, Camp Simons, 7th SFG
Eglin AFB, Florida | Professional Services: 2024
Served as Corrosion Engineer providing galvanic cathodic protection design and corrosion engineering services for civil utilities serving the facility. Supported corrosion-control requirements for ductile iron water main infrastructure through development of an appropriate cathodic protection approach.

PROFESSIONAL EXPERIENCE
Industry Standard Engineers & Consultants – PLLC
Corrosion Engineer | 12 years with current firm
Provides corrosion engineering, cathodic protection, protective coating, inspection, and construction-support services for infrastructure and utility projects. Responsibilities include system design, field evaluation, coating inspection, construction coordination, contractor management, and technical support to owners and project teams.

EXPERIENCE
30 Years Total Professional Experience
12 Years with Current Firm

THOMAS & HUTTON
682 JOHNNIE DODDS BOULEVARD, SUITE 100 | POST OFFICE BOX 1522
MT. PLEASANT, SC 29464 | 843.849.0200
WWW.THOMASANDHUTTON.COM

August 27, 2026

Mr. Douglas Kerr
City of Isle of Palms
P.O. Drawer 508
Isle of Palms, SC 29451

Re: Waterway Boulevard Pathway
Tidal Inundation Mitigation Project
City of Isle of Palms, South Carolina
T&H J-27670.0010
Letter Agreement for Additional Services
(CO#6)

Dear Mr. Kerr:

Thank you for requesting additional service from Thomas & Hutton (T&H) to continue to assist the City with the implementation of this very important and impactful project for City residents. As you are aware, the City is currently constructing the pathway project within the SCDOT right-of-way. During construction, numerous unexpected utility conflicts and field adjustments have occurred, requiring additional time and extending the construction timeline.

Our original design and permitting contract (October 1, 2023), and our previous additional services agreements (CO#1, CO#2, CO#3, CO#4, CO#5) did not include the extended construction work listed under this change order (CO#6).

Please see the attached table for the current project/contract fee and the proposed fee for this additional services request.

If acceptable, please indicate your authorization to proceed with this additional work by signing and initialing where designated below and returning a copy to us for our files. This Proposal will be open for acceptance for 90 days, unless changed by us in writing. Please note that no work will be performed without prior written authorization to proceed. This extra work is subject to the terms and conditions of the Contract executed for this Project dated October 1, 2023.

This Proposal between The City of Isle of Palms (Owner), and Thomas & Hutton Engineering Co. (Consultant), consisting of the Consulting Services on a Time & Expense Basis Rate Sheet, and Exhibit "A," represent the entire understanding between you and us with respect to the Scope change. This agreement may only be modified in writing if signed by both of us.

_____ **CLIENT'S INITIALS**

_____ **CONSULTANT'S INITIALS**

We appreciate this opportunity to be of service to you on this Project. Should you have any questions or need further information, please do not hesitate to call us.

Very truly yours,

THOMAS & HUTTON ENGINEERING CO.

By _____
Richard Karkowski, PE, PH, D.WRE
Water Resources Department Manager

RPK/

Enclosures: Exhibit "A" – Additional Services
Fee Table
2026 Consulting Services Rate Sheet

CITY OF ISLE OF PALMS

ACCEPTED: _____, 2026

By _____

_____
TITLE

_____ **CLIENT'S INITIALS**

_____ **CONSULTANT'S INITIALS**

EXHIBIT "A"

1. ADDITIONAL SERVICES OF CONSULTANT (CO#6)

A. General Consulting Phase

Consultant shall attend construction progress meetings and additional meetings at the request of the Owner.

B. Construction Phase

Consultant will review material data, shop drawings, and construction schedules provided by the Contractor. Consultant will periodically observe construction of the project to ensure compliance with construction drawings and intent of the project. Construction observation and monitoring does not include exhaustive or continuous on–site inspections. However, it does include visits to the Project site at intervals appropriate to the various stages of construction to review general compliance with approved plans and intent of the project. The Consultant shall address the Contractors questions, requests for additional information, etc. The Consultant shall visit the site as needed to address potential field changes. The Consultant shall advise the City as to suitability of the work and percent completion of the work.

C. Exclusions

Items **not** included in the additional Scope of Services are as follows:

- Accessibility construction compliance verification
- Archaeological survey and report
- Easement plat recording
- Phase One or Phase Two environmental assessments
- Endangered species survey and report
- Materials Testing
- Off–site work unless specifically covered in the Scope of Services
- As-built surveys
- Approvals or permits other than those related to the Scope of Work covered by this Contract
- Act as an expert witness for legal activities

These items can be coordinated or provided, if requested by the Owner in writing.

Waterway Boulevard
Pathway Widening and Tidal Inundation Mitigation Project
Additional Services Request No. 6 - Construction for Pathway (SCDOT Right-of-way)
Proposed Fee

Original Proposal (August 2023)			Add. Serv. No. 1		Add. Serv. No. 2		Add. Serv. No. 3		Add. Serv. No. 4		Project Budget as of October 25, 2025			Add. Serv. No. 5		Add. Serv. No. 6	
Phase	**Fee Structure**	**Fee or Time & Expense Budget**	Feasibility Add. Serv. (April 2024)	Total Revised Budget	Design Add. Serv.	Total Revised Budget	Design Add. Serv.	Total Revised Budget	Design, Survey, Bid, and CE&I Add. Serv.	Total Revised Budget	Previous Invoiced	Pending Nov. 2025 Invoice	Budget Remaining	Previous Invoiced	Total Revised Budget	CE&I Add. Serv.	Total Revised Budget
General Consulting	Time & Expense - Budget	$ 22,400	$ 1,000	$ 23,400	$ 20,000	$ 43,400		$ 43,400	$ 5,000	$ 48,400	$ 34,464.60	$ 2,600.00	$ 11,335.40		$ 48,400	$ 5,000	$ 53,400
Survey	Lump Sum	$ 50,000		$ 50,000		$ 50,000		$ 50,000	$ 7,500	$ 57,500	$ 57,500.00		$ -		$ 57,500		$ 57,500
Survey - Easement Plats	Lump Sum (3 easements)	$ 4,100		$ 4,100		$ 4,100	$ 2,500	$ 6,600	$ 3,500	$ 10,100	$ 9,940.00		$ 160.00		$ 10,100		$ 10,100
Design	Lump Sum	$ 44,600		$ 44,600	$ 45,000	$ 89,600		$ 89,600	$ 35,000	$ 124,600	$ 124,600.00		$ -		$ 124,600		$ 124,600
SW Mang. (Feasibility)	Lump Sum		$ 13,500	$ 13,500		$ 13,500		$ 13,500		$ 13,500	$ 13,500.00		$ -		$ 13,500		$ 13,500
Permitting	Time & Expense - Budget	$ 35,600		$ 35,600		$ 35,600	$ 2,500	$ 38,100		$ 38,100	$ 38,100.00		$ -	$ 5,000	$ 43,100		$ 43,100
Bidding (and Cont. Neg.)	Time & Expense - Budget							$ -	$ 7,500	$ 7,500	$ 7,500.00		$ -	$ 15,000	$ 22,500		$ 22,500
Construction Services	Time & Expense - Budget							$ -	$ 25,000	$ 25,000	$ 4,248.25	$ 1,965.00	$ 18,786.75	$ 55,000	$ 80,000	$ 30,000	$ 110,000
Reimbursable Expenses	Time & Expense - Budget				$ 2,000	$ 2,000		$ 2,000		$ 2,000	$ 115.63		$ 1,884.37		$ 2,000		$ 2,000
TOTAL:		**$ 156,700**	$ 14,500	**$ 171,200**	$ 67,000	**$ 238,200**	$ 5,000	**$ 243,200**	$ 83,500	**$ 326,700**	$ 289,968	$ 4,565	$ 32,166.52	$ 75,000	**$ 401,700**	$ 35,000	**$ 436,700**

CONSULTANT'S INITIALS

CLIENT'S INITIALS

THOMAS & HUTTON

2026 CONSULTING SERVICES RATE SHEET

Thomas & Hutton provides services on a time and expense basis as follows:

1. This basis includes allowance for direct salary expenses and for direct non–salary expenses. It also provides for services we may subcontract to others.
2. Direct salary expenses are generally based upon our payroll costs. The payroll costs include the cost of salaries and wages (including sick leave, vacation, and holiday pay) for time directly chargeable to the project; plus, unemployment, excise, payroll taxes, and contributions for social security, employment compensation insurance, retirement benefits, and medical and insurance benefits.

   The current hourly rate charges for each skill position for 2026 are as follows:

Hourly Rate	Engineer	Survey	Landscape	GIS	Quality Control	Business/ Administrative
$ 325.00	Consultant	Consultant	Consultant	Consultant	Consultant	
$ 305.00	Senior Manager	Senior Manager Survey Party (3–Men)	Senior Manager	Senior Manager	Senior Manager	Senior Manager
$ 285.00	Project Manager V Project Engineer V	Survey Manager V Project Surveyor V	Landscape Architect V LA Project Manager V	GIS Manager V		
$ 265.00	Project Manager IV Project Engineer IV	Survey Manager IV Project Surveyor IV	Landscape Architect IV LA Project Manager IV	GIS Manager IV		Senior Application Developer IV, Software/Computer Consultant IV
$ 245.00	Project Manager III Project Engineer III	Survey Manager III Project Surveyor III	Landscape Architect III LA Project Manager III	GIS Manager III		Senior Application Developer III, Software/Computer Consultant III
$ 230.00	Project Manager II Project Engineer II Designer VI	Survey Manager II Project Surveyor II Survey Party (2–Men)	Landscape Architect II LA Project Manager II Landscape Designer VI	GIS Manager II	Construction Administrator II	Senior Application Developer II, Software/Computer Consultant II
$ 215.00	Project Manager I Project Engineer I Designer V Engineering Technician V	Survey Manager I Project Surveyor I	Landscape Architect I LA Project Manager I Landscape Designer V	GIS Manager I	Construction Administrator I Field Representative V	Grant Administrator, Senior Application Developer I, Software/Computer Consultant I
$ 195.00	Designer IV Engineering Technician IV	Staff Surveyor V Survey Field Supervisor	Landscape Designer IV	GIS Analyst IV	Field Representative IV	Application Developer IV
$ 180.00	Designer III Engineering Technician III	Staff Surveyor IV	Landscape Designer III	GIS Analyst III	Field Representative III	Application Developer III Permit Coordinator III Project Coordinator III
$ 165.00	Designer II Engineering Technician II	Staff Surveyor III Survey Party (1–Man)	Landscape Designer II	GIS Analyst II	Field Representative II	Application Developer II Permit Coordinator II, Project Coordinator II, Admin IV
$ 150.00	Designer I Engineering Technician I	Staff Surveyor II	Landscape Designer I	GIS Analyst I		Application Developer I Permit Coordinator I Project Coordinator I
$ 135.00	CADD Technician III	Staff Surveyor I Survey Technician III	Landscape Technician III	GIS Technician III		
$ 125.00	CADD Technician II	Survey Technician II	Landscape Technician II	GIS Technician II	Field Representative I	Admin III
$ 115.00	CADD Technician I	Survey Technician I	Landscape Technician I	GIS Technician I		
$ 110.00						Admin II
$ 100.00						Admin I
$ 485.00	Expert Witness					

3. When warranted, overtime will be charged for any non–salary employees. Overtime hours will be billed at 1.5 times the individual's charge rate.
4. Direct non–salary (reimbursable) expenses, including printing, reproduction, air travel, lodging, and meals are billed at cost. Travel in company or private vehicles will be billed at the IRS Standard Mileage Rate and may be revised based on fuel pricing. Outside consultant fees will be billed at 1.15 times the cost.
5. All rates and charges are effective through December 31st, 2026, including printing, reproductions, materials, and travel and are subject to change at that time. New rates and costs will become immediately effective to contracts in effect at the time of rate changes.

THOMAS & HUTTON
682 JOHNNIE DODDS BOULEVARD, SUITE 100 | POST OFFICE BOX 1522
MT. PLEASANT, SC 29464 | 843.849.0200
WWW.THOMASANDHUTTON.COM

August 26, 2026

Mr. Douglas Kerr
City of Isle of Palms
P.O. Drawer 508
Isle of Palms, SC 29451

Re: Waterway Boulevard Pathway
Tidal Inundation Mitigation Project
City of Isle of Palms, South Carolina
T&H J-27670.0010
Letter Agreement for Additional Services
(CO#7)

Dear Mr. Kerr:

Thank you for requesting additional service from Thomas & Hutton (T&H) to assist the City with the completion of this very important and impactful project for City residents. As you are aware, T&H and the City have worked together to complete the previous two phases of this project. The City has requested T&H to assist in a feasibility study for the third and final phase of the flood mitigation project.

Our original design and permitting contract (October 1, 2023), and our previous additional services agreements (CO#1, CO#2, CO #3, CO#4, CO#5, and CO#6) did not include the services listed under this change order (CO#7).

Please see the attached table for the current project/contract fee and the proposed fee for this additional services request.

If acceptable, please indicate your authorization to proceed with this additional work by signing and initialing where designated below and returning a copy to us for our files. This Proposal will be open for acceptance for 90 days, unless changed by us in writing. Please note that no work will be performed without prior written authorization to proceed. This extra work is subject to the terms and conditions of the Contract executed for this Project dated October 1, 2023.

This Proposal between The City of Isle of Palms (Owner), and Thomas & Hutton Engineering Co. (Consultant), consisting of the Consulting Services on a Time & Expense Basis Rate Sheet, and Exhibit "A," represent the entire understanding between you and us with respect to the Scope change. This agreement may only be modified in writing if signed by both of us.

_____ **CLIENT'S INITIALS**

_____ **CONSULTANT'S INITIALS**

We appreciate this opportunity to be of service to you on this Project. Should you have any questions or need further information, please do not hesitate to call us.

Very truly yours,

THOMAS & HUTTON ENGINEERING CO.

By _____
Richard Karkowski, PE, PH, D.WRE
Water Resources Department Manager

RPK/MCV

Enclosures: Exhibit "A" – Additional Services
Fee Table
2026 Consulting Services Rate Sheet

CITY OF ISLE OF PALMS

ACCEPTED: _____, 2026

By _____

_____
TITLE

_____ **CLIENT'S INITIALS**

_____ **CONSULTANT'S INITIALS**

EXHIBIT "A"

1. ADDITIONAL SERVICES OF CONSULTANT

A. General Consulting Phase

Consultant shall attend additional meetings at the request of the City. The Consultant shall prepare sketches, plans, or other documents; conduct feasibility analyses; prepare cost estimates; and conduct additional tasks as requested by the City.

B. Feasibility Study Phase

1. Alternatives for protection at 3607-3615 Waterway Blvd

Consultant shall create two alternatives for protection between 3607 and 3615 Waterway Blvd. The first alternative should include the flood barrier protection within the residential lots. The second alternative should provide flood barrier protection outside of the residential lots. Preliminary exhibits and drawings will be created for the two alternatives, as well as cost estimates. The Consultant shall present the feasibility of each plan and review the benefits and concerns for each alternative.

2. Alternatives for protection around fire station at 41st Avenue

Consultant shall create two alternatives to complete the flood protection barrier at 41st Avenue, including the fire station in the protected area. The first alternative should consist of the flood barrier incorporating the Dewees property. The second alternative should provide a plan for the flood barrier, not located within the Dewees property. Preliminary exhibits and drawings will be created for the two alternatives, as well as cost estimates. The Consultant shall present the feasibility of each plan and review the benefits and concerns for each alternative.

C. Exclusions

Items **not** included in the additional Scope of Services are as follows:

- Construction drawings
- Accessibility construction compliance verification
- Archaeological survey and report
- Boundary surveys
- Additional Field Survey
- Easement plat preparation and/or recording
- Phase One or Phase Two environmental assessments
- Endangered species survey and report
- Materials Testing
- Off–site work unless specifically covered in the Scope of Services
- Approvals or permits other than those related to the Scope of Work covered by this Contract
- Act as an expert witness for legal activities

These items can be coordinated or provided, if requested by the Owner in writing.

Waterway Boulevard
Pathway Widening and Tidal Inundation Mitigation Project
Additional Services Request No. 7 - Phase 3 Feasibility Study
Proposed Fee

Original Proposal (August 2023)			Add. Serv. No. 1		Add. Serv. No. 2		Add. Serv. No. 3		Add. Serv. No. 4		Project Budget as of October 25, 2025			Add. Serv. No. 5		Add. Serv. No. 6		Add. Serv. No. 7	
Phase	**Fee Structure**	**Fee or Time & Expense Budget**	Feasibility Add. Serv. (April 2024)	Total Revised Budget	Design Add. Serv.	Total Revised Budget	Design Add. Serv.	Total Revised Budget	Design, Survey, Bid, and CE&I Add. Serv.	Total Revised Budget	Previous Invoiced	Pending Nov. 2025 Invoice	Budget Remaining	Previous Invoiced	Total Revised Budget	CE&I Add. Serv.	Total Revised Budget	Add. Serv. Fee	Total Revised Budget
General Consulting	Time & Expense - Budget	$ 22,400	$ 1,000	$ 23,400	$ 20,000	$ 43,400		$ 43,400	$ 5,000	$ 48,400	$ 34,464.60	$ 2,600.00	$ 11,335.40		$ 48,400	$ 5,000	$ 53,400	$ 13,800	$ 67,200
Survey	Lump Sum	$ 50,000		$ 50,000		$ 50,000		$ 50,000	$ 7,500	$ 57,500	$ 57,500.00		$ -		$ 57,500		$ 57,500		$ 57,500
Survey - Easement Plats	Lump Sum (3 easements)	$ 4,100		$ 4,100		$ 4,100	$ 2,500	$ 6,600	$ 3,500	$ 10,100	$ 9,940.00		$ 160.00		$ 10,100		$ 10,100		$ 10,100
Design	Lump Sum	$ 44,600		$ 44,600	$ 45,000	$ 89,600		$ 89,600	$ 35,000	$ 124,600	$ 124,600.00		$ -		$ 124,600		$ 124,600		$ 124,600
SW Mang. (Feasibility)	Lump Sum		$ 13,500	$ 13,500		$ 13,500		$ 13,500		$ 13,500	$ 13,500.00		$ -		$ 13,500		$ 13,500	$ 49,500	$ 63,000
Permitting	Time & Expense - Budget	$ 35,600		$ 35,600		$ 35,600	$ 2,500	$ 38,100		$ 38,100	$ 38,100.00		$ -	$ 5,000	$ 43,100		$ 43,100		$ 43,100
Bidding (and Cont. Neg.)	Time & Expense - Budget							$ -	$ 7,500	$ 7,500	$ 7,500.00		$ -	$ 15,000	$ 22,500		$ 22,500		$ 22,500
Construction Services	Time & Expense - Budget							$ -	$ 25,000	$ 25,000	$ 4,248.25	$ 1,965.00	$ 18,786.75	$ 55,000	$ 80,000	$ 30,000	$ 110,000		$ 110,000
Reimbursable Expenses	Time & Expense - Budget				$ 2,000	$ 2,000		$ 2,000		$ 2,000	$ 115.63		$ 1,884.37		$ 2,000		$ 2,000	$ 250	$ 2,250
TOTAL:		**$ 156,700**	$ 14,500	**$ 171,200**	$ 67,000	**$ 238,200**	$ 5,000	**$ 243,200**	$ 83,500	**$ 326,700**	$ 289,968	$ 4,565	$ 32,166.52	$ 75,000	**$ 401,700**	$ 35,000	**$ 436,700**	$ 63,550	**$ 500,250**

CONSULTANT'S INITIALS

CLIENT'S INITIALS

THOMAS & HUTTON

2026 CONSULTING SERVICES RATE SHEET

Thomas & Hutton provides services on a time and expense basis as follows:

1. This basis includes allowance for direct salary expenses and for direct non–salary expenses. It also provides for services we may subcontract to others.
2. Direct salary expenses are generally based upon our payroll costs. The payroll costs include the cost of salaries and wages (including sick leave, vacation, and holiday pay) for time directly chargeable to the project; plus, unemployment, excise, payroll taxes, and contributions for social security, employment compensation insurance, retirement benefits, and medical and insurance benefits.

   The current hourly rate charges for each skill position for 2026 are as follows:

Hourly Rate	Engineer	Survey	Landscape	GIS	Quality Control	Business/ Administrative
$ 325.00	Consultant	Consultant	Consultant	Consultant	Consultant	
$ 305.00	Senior Manager	Senior Manager Survey Party (3–Men)	Senior Manager	Senior Manager	Senior Manager	Senior Manager
$ 285.00	Project Manager V Project Engineer V	Survey Manager V Project Surveyor V	Landscape Architect V LA Project Manager V	GIS Manager V		
$ 265.00	Project Manager IV Project Engineer IV	Survey Manager IV Project Surveyor IV	Landscape Architect IV LA Project Manager IV	GIS Manager IV		Senior Application Developer IV, Software/Computer Consultant IV
$ 245.00	Project Manager III Project Engineer III	Survey Manager III Project Surveyor III	Landscape Architect III LA Project Manager III	GIS Manager III		Senior Application Developer III, Software/Computer Consultant III
$ 230.00	Project Manager II Project Engineer II Designer VI	Survey Manager II Project Surveyor II Survey Party (2–Men)	Landscape Architect II LA Project Manager II Landscape Designer VI	GIS Manager II	Construction Administrator II	Senior Application Developer II, Software/Computer Consultant II
$ 215.00	Project Manager I Project Engineer I Designer V Engineering Technician V	Survey Manager I Project Surveyor I	Landscape Architect I LA Project Manager I Landscape Designer V	GIS Manager I	Construction Administrator I Field Representative V	Grant Administrator, Senior Application Developer I, Software/Computer Consultant I
$ 195.00	Designer IV Engineering Technician IV	Staff Surveyor V Survey Field Supervisor	Landscape Designer IV	GIS Analyst IV	Field Representative IV	Application Developer IV
$ 180.00	Designer III Engineering Technician III	Staff Surveyor IV	Landscape Designer III	GIS Analyst III	Field Representative III	Application Developer III Permit Coordinator III Project Coordinator III
$ 165.00	Designer II Engineering Technician II	Staff Surveyor III Survey Party (1–Man)	Landscape Designer II	GIS Analyst II	Field Representative II	Application Developer II Permit Coordinator II, Project Coordinator II, Admin IV
$ 150.00	Designer I Engineering Technician I	Staff Surveyor II	Landscape Designer I	GIS Analyst I		Application Developer I Permit Coordinator I Project Coordinator I
$ 135.00	CADD Technician III	Staff Surveyor I Survey Technician III	Landscape Technician III	GIS Technician III		
$ 125.00	CADD Technician II	Survey Technician II	Landscape Technician II	GIS Technician II	Field Representative I	Admin III
$ 115.00	CADD Technician I	Survey Technician I	Landscape Technician I	GIS Technician I		
$ 110.00						Admin II
$ 100.00						Admin I
$ 485.00	Expert Witness					

3. When warranted, overtime will be charged for any non–salary employees. Overtime hours will be billed at 1.5 times the individual's charge rate.
4. Direct non–salary (reimbursable) expenses, including printing, reproduction, air travel, lodging, and meals are billed at cost. Travel in company or private vehicles will be billed at the IRS Standard Mileage Rate and may be revised based on fuel pricing. Outside consultant fees will be billed at 1.15 times the cost.
5. All rates and charges are effective through December 31st, 2026, including printing, reproductions, materials, and travel and are subject to change at that time. New rates and costs will become immediately effective to contracts in effect at the time of rate changes.

PROJECT : Palm Blvd Drainage Improvements
LOCATION : Isle of Palms, SC
ESTIMATOR : HEA, MCV

THOMAS & HUTTON

OPINION OF PROBABLE CONSTRUCTION COST

DATE PREPARED : 07/15/2025	REVISED:
BASIS FOR ESTIMATE	
	(No design completed-Master Plan)
	(Preliminary design - 50% Design Level)
X	(Final design - 95% level)
	(Other)

OPINION OF PROBABLE CONSTRUCTION COST

Since the Engineer has no control over the cost of labor, materials, equipment, over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Opinions of Probable Construction Costs provided for herein are made on the basis of his experience and qualifications. These opinions represent his best judgment as a design professional familiar with the construction industry. However, the Engineer cannot and does not guarantee that proposals, bids, or the construction cost will not vary from Opinions of Probable Construction Costs prepared by him.

		QUANTITY		COST	
SCDOT ITEM NO.	DESCRIPTION	NUMBER OF UNITS	UNIT MEASURE	PER UNIT	TOTAL COST
1031000	Mobilization	1	LS		$ 240,000.00
6011000	Traffic Control	1	LS		$ 100,000.00
1050800	Construction Stakes, Lines & Grades	1	LS		$ 65,000.00
-	As-built Construction Plans	1	LS		$ 20,000.00
2011000	Clearing and Grubbing within Right-of-Way	1	LS		$ 20,000.00
2023000	Removal & Disposal of Existing Pavement	455	CY	$ 60.00	$ 27,300.00
2106000	Selected Removal of Marked Trees	14	EA	$ 1,500.00	$ 21,000.00
3050108	Graded Aggregate Base Course	726	SY	$ 50.00	$ 36,300.00
4013990	Milling Existing Asphalt Pavement	31,385	SY	$ 15.00	$ 470,775.00
4020320	Asphalt Base Course Type B	82	TON	$ 225.00	$ 18,450.00
4040320	Asphalt Surface Course Type B	393	TON	$ 225.00	$ 88,425.00
6271010	4" White Solid Lines (Pvt. Edge Lines) Thermoplastic - 90 mil.	2,100	LF	$ 4.00	$ 8,400.00
6271015	8" White Solid Lines (Crosswalk) Thermoplastic - 125 mil.	205	LF	$ 6.00	$ 1,230.00
6271025	24" White Solid Lines (Stop/Diag Lines) Thermoplastic - 125 mil.	24	LF	$ 25.00	$ 600.00
6271074	4" Yellow Solid Lines (PVT. Edge Lines) Thermoplastic - 90 mil.	860	LF	$ 4.00	$ 3,440.00
-	6" Sewer Service & 12" Steel Casing	18	LF	$ 1,500.00	$ 27,000.00
-	Water Service	1	EA	$ 4,500.00	$ 4,500.00
-	8" PVC	37	LF	$ 550.00	$ 20,350.00
-	12" PVC	76	LF	$ 600.00	$ 45,600.00
-	14" PVC	337	LF	$ 650.00	$ 219,050.00
-	Hydrant Assembly	1	EA	$ 12,000.00	$ 12,000.00
-	14" x 12" Reducer	1	EA	$ 1,800.00	$ 1,800.00
-	12" x 8" Tee	1	EA	$ 1,400.00	$ 1,400.00
-	14" x 12" Reducer	1	EA	$ 1,500.00	$ 1,500.00
-	14" x 14" Tee	1	EA	$ 1,600.00	$ 1,600.00
-	8" 45 Degree Bend	3	EA	$ 1,800.00	$ 5,400.00
	8" 90 Degree Bend	1	EA	$ 2,000.00	$ 2,000.00
-	12" 45 Degree Bend	2	EA	$ 2,500.00	$ 5,000.00
-	14" 22.5 Degree Bend	2	EA	$ 2,800.00	$ 5,600.00
-	14" 45 Degree Bend	6	EA	$ 2,800.00	$ 16,800.00
-	8" Gate Valve	1	EA	$ 8,500.00	$ 8,500.00
-	12" Gate Valve	1	EA	$ 10,000.00	$ 10,000.00
7141118	38" x 60" RCEP (Class III)	835	LF	$ 900.00	$ 751,500.00
7191205	Catch Basin - Type 9	2	EA	$ 10,000.00	$ 20,000.00
7192020	Drop Inlet (24" x 36")	6	EA	$ 8,000.00	$ 48,000.00
7192105	Manhole	1	EA	$ 12,000.00	$ 12,000.00
7192110	Junction Box	2	EA	$ 10,000.00	$ 20,000.00
7204100	Concrete Sidewalk	144	SY	$ 100.00	$ 14,400.00
7204900	Detectable Warning Material	20	SF	$ 40.00	$ 800.00
7205000	Concrete Driveway	215	SY	$ 150.00	$ 32,250.00
8041020	Rip Rap (Class B)	80	TON	$ 200.00	$ 16,000.00
8048205	Geotextile for Erosion Control Under Riprap (Class 2) Type B	110	SY	$ 40.00	$ 4,400.00
8131000	Sodding	6.1	MSY	$ 12,000.00	$ 73,200.00
-	Misc. Erosion Control/Water Management	1	LS		$ 65,000.00
				SUBTOTAL	**$ 2,566,570.00**
	Contingency at	10.0	%	$ 256,700.00	$ 256,700.00
	GRAND TOTAL OPINION OF CONSTRUCTION COST				**$2,823,300**

PROJECT : Palm Blvd Drainage Improvements
LOCATION : Isle of Palms, SC
ESTIMATOR : HEA, MCV

THOMAS & HUTTON

OPINION OF PROBABLE CONSTRUCTION COST

DATE PREPARED : 07/15/2025	REVISED:
BASIS FOR ESTIMATE	
	(No design completed-Master Plan)
	(Preliminary design - 50% Design Level)
X	(Final design - 95% level)
	(Other)

OPINION OF PROBABLE CONSTRUCTION COST

Since the Engineer has no control over the cost of labor, materials, equipment, over the Contractor's methods of determining prices, or over competitive bidding or market conditions, the Opinions of Probable Construction Costs provided for herein are made on the basis of his experience and qualifications. These opinions represent his best judgment as a design professional familiar with the construction industry. However, the Engineer cannot and does not guarantee that proposals, bids, or the construction cost will not vary from Opinions of Probable Construction Costs prepared by him.

		QUANTITY		COST	
SCDOT ITEM NO.	DESCRIPTION	NUMBER OF UNITS	UNIT MEASURE	PER UNIT	TOTAL COST
1031000	Mobilization	1	LS		$ 430,000.00
6011000	Traffic Control	1	LS		$ 150,000.00
1050800	Construction Stakes, Lines & Grades	1	LS		$ 75,000.00
-	As-built Construction Plans	1	LS		$ 25,000.00
2011000	Clearing and Grubbing within Right-of-Way	1	LS		$ 25,000.00
2023000	Removal & Disposal of Existing Pavement	936	CY	$ 60.00	$ 56,160.00
2106000	Selected Removal of Marked Trees	49	EA	$ 1,500.00	$ 73,500.00
3050108	Graded Aggregate Base Course	1,520	SY	$ 50.00	$ 76,022.22
4013990	Milling Existing Asphalt Pavement	4,412	SY	$ 25.00	$ 110,300.00
4020320	Asphalt Base Course Type B	172	TON	$ 225.00	$ 38,700.00
4040320	Asphalt Surface Course Type B	497	TON	$ 225.00	$ 111,825.00
6271010	4" White Solid Lines (Pvt. Edge Lines) Thermoplastic - 90 mil.	2,100	LF	$ 4.00	$ 8,400.00
6271015	8" White Solid Lines (Crosswalk) Thermoplastic - 125 mil.	205	LF	$ 6.00	$ 1,230.00
6271025	24" White Solid Lines (Stop/Diag Lines) Thermoplastic - 125 mil.	144	LF	$ 25.00	$ 3,600.00
6271074	4" Yellow Solid Lines (PVT. Edge Lines) Thermoplastic - 90 mil.	860	LF	$ 4.00	$ 3,440.00
-	6" Sewer Service & 12" Steel Casing	18	LF	$ 1,500.00	$ 27,000.00
-	Water Service	19	EA	$ 4,500.00	$ 85,500.00
-	2" PVC FM	350	LF	$ 250.00	$ 87,500.00
-	8" PVC	103	LF	$ 550.00	$ 56,650.00
-	12" PVC	76	LF	$ 600.00	$ 45,600.00
-	14" PVC	337	LF	$ 650.00	$ 219,050.00
-	Hydrant Assembly	1	EA	$ 12,000.00	$ 12,000.00
-	14" x 12" Reducer	1	EA	$ 1,800.00	$ 1,800.00
-	12" x 8" Tee	1	EA	$ 1,400.00	$ 1,400.00
-	14" x 8" Tee	2	EA	$ 1,400.00	$ 2,800.00
-	14" x 12" Reducer	1	EA	$ 1,500.00	$ 1,500.00
-	14" x 14" Tee	1	EA	$ 1,600.00	$ 1,600.00
-	8" 45 Degree Bend	11	EA	$ 1,800.00	$ 19,800.00
-	8" 90 Degree Bend	1	EA	$ 2,500.00	$ 2,500.00
-	12" 45 Degree Bend	2	EA	$ 2,500.00	$ 5,000.00
-	14" 22.5 Degree Bend	2	EA	$ 2,800.00	$ 5,600.00
-	14" 45 Degree Bend	6	EA	$ 2,800.00	$ 16,800.00
-	8" Gate Valve	3	EA	$ 8,500.00	$ 25,500.00
-	12" Gate Valve	1	EA	$ 10,000.00	$ 10,000.00
7141118	38" x 60" RCEP (Class III)	2,402	LF	$ 900.00	$ 2,161,800.00
7191205	Catch Basin - Type 9	2	EA	$ 10,000.00	$ 20,000.00
7192020	Drop Inlet (24" x 36")	21	EA	$ 8,000.00	$ 168,000.00
7192105	Manhole	1	EA	$ 12,000.00	$ 12,000.00
7192110	Junction Box	2	EA	$ 10,000.00	$ 20,000.00
7204100	Concrete Sidewalk	144	SY	$ 100.00	$ 14,400.00
7204900	Detectable Warning Material	20	SF	$ 40.00	$ 800.00
7205000	Concrete Driveway	595	SY	$ 150.00	$ 89,250.00
8041020	Rip Rap (Class B)	80	TON	$ 200.00	$ 16,000.00
8048205	Geotextile for Erosion Control Under Riprap (Class 2) Type B	110	SY	$ 40.00	$ 4,400.00
8131000	Sodding	22.4	MSY	$ 12,000.00	$ 268,800.00
-	Misc. Erosion Control/Water Management	1	LS		$ 75,000.00
				SUBTOTAL	**$ 4,666,227.22**
	Contingency at	10.0	%	$ 466,623.00	$ 466,623.00
	GRAND TOTAL OPINION OF CONSTRUCTION COST				**$5,132,900**

RFP 2026.08
AV Live-streaming Equipment

INA Display

PMC Audio Visual

Portside Technology

Sharp Business Systems

City of Isle of Palms, South Carolina
Request for Proposals (RFP) 2026-08
Audio Visual Design and Implementation Services

In compliance with the City of Isle of Palms procurement ordinances, the City is requesting proposals from qualified vendors to design and implement audio visual technology in the City Hall Council Chambers. The request will be awarded pursuant to the City's procurement ordinance. The City reserves the right to reject any and all proposals and to waive irregularities.

Project Overview

The City of Isle of Palms desires to modernize and upgrade Council Chambers with the latest Audio Visual (AV) technology, including but not limited to new 4K cameras, livestreaming equipment, microphones, displays, speakers, and real-time captioning.

The City is looking for a qualified vendor to provide professional services for this effort by designing and implementing upgrades to enhance the quality of the audio, visual, captioning and livestreaming capabilities. The system should balance the latest AV technology with ease of use for when primary AV staff are absent.

The current quality of our streams can be viewed on YouTube:
www.youtube.com/@CityofIsleofPalmsLivestream

Existing Equipment:

The City currently has the following equipment installed in Council Chambers which may be reused:

- Fourteen (14) gooseneck microphones
- One (1) wireless microphone
- Two (2) flat-panel TVs
- Cabinet for housing racks of equipment

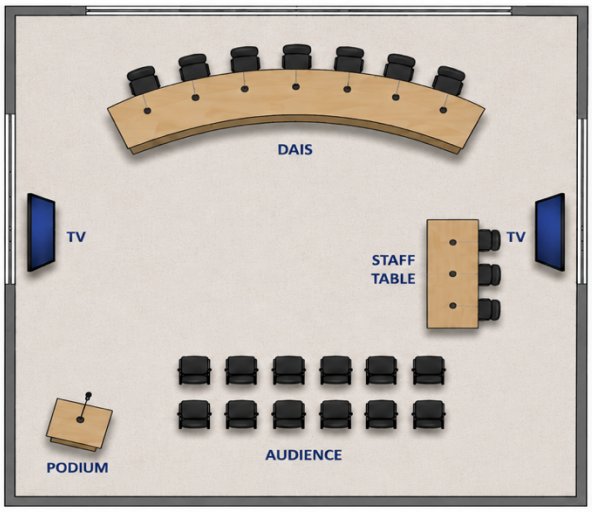
The City is open to either reusing or replacing existing equipment based on the vendor's proposed design and recommendations. The City does not require reuse of any existing equipment if new equipment is necessary to meet the functional requirements of this RFP.

City Provided Equipment:

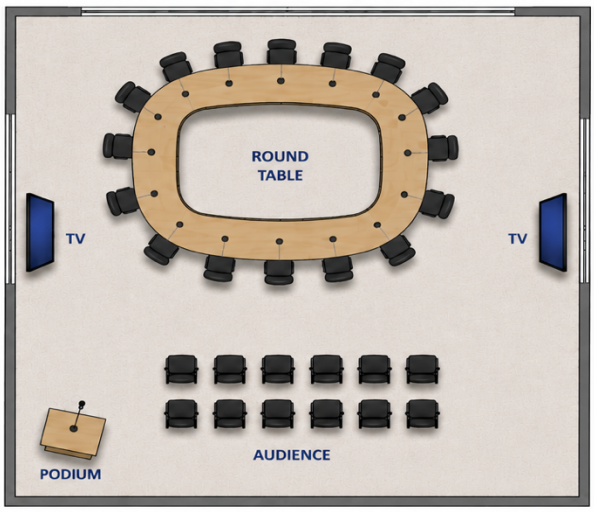
- Apple Mac Studio:
  M4 Max, Four Thunderbolt 5 (USB-C) ports, Two USB-A ports; Two USB-C ports
- A 300mbps+ upload and download fiber internet connection

Room Arrangements:

(1) Council meeting layout
Traditional dais arrangement



(2) Committee meeting layout
Round Table Arrangement



Mandatory Requirements:

- Four (4) or more permanently installed 4K pan, tilt, and optical zoom cameras
- Camera coverage of councilmembers, public comment podium, wide room view, and multiple angles for round-table discussions.
- Professional production capabilities and video switching between camera angles, presentation content, remote meetings, and meeting start, recess, and adjournment screens.
- System should facilitate remote meeting participants (Zoom/Teams/etc.) to show on the livestream and display in the council chamber
- Install necessary cabling for all audio/video work that is hidden or minimally visible
- Ability to overlay graphics including lower-thirds, meeting titles, and City branding.
- Provide hands on training of all AV technology installed
- Provide documentation on network setup, passwords and access information, and instructions on how to use all equipment

Accessibility Requirements

- Real time closed captions with four (4) seconds or less latency.
- Captions must be viewer-selectable and not permanently burned into the video.
- Caption functionality during YouTube livestreams.
- Vendors shall disclose caption accuracy, hardware/cloud subscription costs, licensing requirements.
- Ability to live stream 4K video quality

System Architecture Diagram Requirement

Each proposal shall include a detailed system architecture diagram illustrating cameras, audio systems, video switching, cable connection and feed types, captioning workflow, remote meeting integration, network connectivity, and YouTube streaming workflows.

Signal flow and system responsibilities shall be clearly identified.

Proposal Evaluation Criteria

- Experience in similar installations
- Adherence to best practices to yield a professional, high quality, reliable, and neat AV installation
- References for similar installations
- Timeline for completion of project and proposed downtime
- Cost
- On-going support, training and availability for support 24/7

Proposal Requirements

- The contractor must provide documentation articulating their qualifications, and how many years of experience they have in the area of AV design and implementation.
- The Contractor shall provide a detailed pricing breakdown of all designs and installation services.
- Warranty
    - Labor: Provide a 12-month labor guarantee of all shop and field fabricated components and all QSYS control functionality. This includes the labor to remove and replace any/all defective audio, power or video cabling.
    - Materials: Provide a 12-month warranty of all small components i.e. cables, connectors, stands, custom fabricated products. All other audio, power and video components are covered by each respective manufacturer's warranty and subject to their implicit terms.
    - Provide any software maintenance agreements or warranty information
    - Provide information on any manufacturer or third party hardware warranties
- Provide all system passwords and admin access information

Deadline for Questions

The deadline for questions is August 13, 2026. Proposers should send questions regarding this Request for Proposals to Joshua Uys, Public Information Officer, in writing by email to juys@isleofpalms.gov. Questions received before this deadline will be answered via addendum posted on the City's website at www.isleofpalms.gov/requests-bids-proposals. If an addendum is issued, proposers must acknowledge receipt of the addendum with their proposal. Questions received after this deadline will not be answered.

By submitting a proposal, proposers attest that they have read the "Agreement" that is included in this Request for Proposals and are prepared to execute these documents should they be the successful proposer.

Deadline for Submission

Deadline for submission is 12pm on August 27, 2026. Submissions must be received at 1207 Palm Boulevard, Isle of Palms, South Carolina 29451 in a sealed envelope, where they will be opened and read aloud. Sealed envelopes must be clearly marked RFP 2021-03"Audio Visual Design and Implementation Services" and include one (1) hard copy and one (1) electronic copy in PDF format. The City accepts no responsibility for electronic submissions, and it will be the responsibility of the proposers to verify receipt by the City.

Proposals may be delivered by hand or by mail, but no proposal shall be considered which is not actually received by the City at the place, date and time appointed by the City and the City shall not be responsible for any failure, misdirection, delay or error resulting from the selection by any proposer of any particular means of delivery of Proposals.

If an addendum is issued, proposers must acknowledge receipt of the addendum with their Proposals.

Proposers acknowledge and agree that the City will not be liable for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the respondent or any member of the respondent's organization as a result of, or arising out of, submitting a proposal, negotiating changes to such proposal, or due to the City's acceptance or non-acceptance of the proposal or the rejection of any and all Proposals. Respondents are responsible for submission of accurate, adequate and clear descriptions of the information requests. Neither issuance of the RFP, preparation and submission of a response, nor the subsequent receipt and evaluation of any response by the City of Isle of Palms will commit the City to award a contract to any respondent even if all the requirements in the RFP have been met. By signing its proposal, Proposer certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agrees to provide to the City upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable both to Proposer and its subcontractors or sub-subcontractors; or (b) that Proposer and its subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five

years, or both." Proposer agrees to include in any contracts with its subcontractors language requiring its subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in their contracts with the sub-subcontractors language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14.

If the Proposer is a corporation, state your correct corporate name and State of incorporation. If Proposer is a partnership, state names and addresses of partners. If Proposer is a trust or other legal entity, state correct names and addresses of trustees or names and address of those legally authorized to proposal and enter into contracts.

SCORING. All evaluation criteria will be scored on a scale of 0 to 4.

[1] A score of zero (0) is rated as **Unsatisfactory or Non-Responsive.** The proposal fails to address the requirement, does not meet the minimum requirement, or the information provided is insufficient to evaluate.

[2] A score of one (1) is rated as **Marginal**. The proposal minimally addresses the requirement. Significant deficiencies, unanswered questions, or concerns exist that could affect successful performance. Presents high implementation risk.

[3] A score of three (3) is rated as **Partially Meets Requirements**. The proposal generally addresses the requirement but contains notable weaknesses, omissions, or areas requiring clarification. Presents some implementation risk.

[4] A score of four (4) is rated as **Exceptional**. The proposal fully meets or exceeds the City's requirements. Response is comprehensive, demonstrates a clear understanding of the City's needs, presents minimal risk, and provides significant added value or innovation.

Each individual criterion has an assigned weight. The base score will be multiplied by the weighting factor to determine that criterion's total score. See below.

WEIGHTING. There are seven (7) evaluation criteria listed from A-G on pages six through seven of the RFP. The weight for each of the criteria is as follows:

-Understanding the City's Needs. Weight of one (1)
-Qualifications and Experience. Weight of one (1)
-Technical Approach. Weight of three (3)
-Strategic Advisory Services. Weight of one (1)
-Operational Support. Weight of one (1)
-Pricing. Weight of two (2)
-References. Weight of one (1)

City of Isle of Palms
Request for Proposals (RFP 2026-09)
“Managed Technology Services”

Requirement. The City of Isle of Palms ("City") is requesting proposals from qualified firms to provide comprehensive managed technology services that support the City's municipal day-to-day and crisis response operations, enhance cybersecurity, improve organizational resilience, and assist City leadership in making informed technology decisions.

The City seeks a long-term technology partner rather than a traditional managed services provider. While dependable technical support remains essential, the City also seeks a partner that understands municipal government, assists executive leadership with planning, budgeting, procurement, cybersecurity, and technology decision-making. Moreover, this partner participates in operational and emergency planning as needed and provides proactive recommendations that improve organizational effectiveness and resilience.

The City is seeking a right-sized approach in which it pays a predictable fee for routine operational support while retaining the flexibility to procure additional professional services, when needed, through clearly defined and transparent pricing and service level agreements.

The successful proposer shall demonstrate the ability to deliver reliable technical support, proactive technology management, sound strategic guidance and roadmaps that continuously improve the City's technology environment while balancing operational effectiveness, cybersecurity, fiscal responsibility, optimization and long-term sustainability.

Background. The City of Isle of Palms is a full-service coastal municipality serving approximately 4,500 residents and a substantially larger seasonal population. City operations include Police, Fire, Public Works, Recreation, Building, Administration, Finance, Municipal Court, and other municipal services. As a coastal community, the City is subject to natural disasters such as hurricanes which create operational challenges in planning for and executing continuity of operations of which IT is essential.

Technology plays a critical role in nearly every City function, including public safety communications, financial management, permitting, public works operations, citizen services, emergency response, and continuity of government.

The City currently operates multiple municipal facilities connected through a managed network environment utilizing Microsoft technologies, virtualization, cloud services, public safety applications, and numerous third-party business systems.

The City's objective is not simply to maintain this environment but to continually improve and optimize it through thoughtful planning, sound fiscal stewardship, disciplined cybersecurity practices, and dependable but right-sized operational support.

Desired Relationship. The City desires a technology partner that becomes familiar with its organization, understands departmental operations, anticipates technology needs, and participates in planning rather than simply responding to service requests. The City values firms

that communicate candidly, identify opportunities for improvement, and provide recommendations that support informed executive decision-making.

Current Technology Environment
The following information is provided solely to assist proposers in preparing realistic proposals. The City's primary legacy technology environment includes Microsoft 365, Hyper-V virtualization, public safety systems, enterprise financial software, cloud services, and multiple third-party municipal applications.

- 103 full-time employees
- Approximately 125 Microsoft 365 users
- Mix of Exchange Online Plans 1 and 2 with 137 total licenses
- 90 workstations
- 9 servers (2 being virtual)
- 8 multi-function networked printers
- Multiple additional items classified as network “gear”
- 1 business class backup device
- 2 firewalls
- Fiber/ internet provided by Segra
- Payroll, permitting, and accounting provided by BS&A Software
- Myriad additional software and services such as: Axon, Diverse (NCIC access), Geothinq, iWorks, Image Trend, Power DMS, and others

The successful proposer should assume responsibility for supporting the City's existing technology environment while recommending thoughtful modernization where appropriate.

SCOPE OF WORK AND SERVICES

The following descriptions identify minimum service expectations. Proposers should clearly identify services included within the base monthly fee and distinguish those requiring additional authorization or project pricing.

Base Monthly Support
- Unlimited help desk support (remote, phone, and onsite as required) for approximately 50 managed users and 82 email-only users
- Business-hours support with emergency after-hours response for critical incidents
- Network operations including monitoring, maintenance, firmware updates, configuration backup, and administration of switches, routers, firewalls, wireless infrastructure, Internet connectivity, and patch management
- Following initial procurement, conduct maintenance and management of all Microsoft licensing
- Server administration including preventative maintenance, configuration management, monitoring, operating system patching, storage management, virtualization support, and backup monitoring

- Maintain an accurate and current inventory of the City's technology assets, including identification of active and inactive assets
- Cybersecurity operations including endpoint detection and response (EDR), security monitoring, vulnerability detection and remediation, MFA administration, email protection, phishing response, and security event monitoring
- Microsoft 365 administration including Exchange Online, Teams, SharePoint, OneDrive, license management, and Entra ID routine administration
- Backup and disaster recovery monitoring, including periodic restore testing and an annual disaster recovery exercise
- Routine vendor coordination with third-party software, internet, telecommunications, and hardware providers for incident resolution
- Develop and maintain current documentation of the City's technology environment, including network diagrams, system configurations, administrative credentials, backup procedures, and recovery documentation
- Software and hardware recommendations with immediate operational impacts
- Provide operational support before, during, and after significant events such as hurricanes
- Standard monthly reporting:
    - Open and closed ticket summary
    - Average response and resolution times
    - Patch compliance status
    - Backup success/failure status
    - Critical vulnerabilities and remediation actions
    - Major incidents and root causes
    - Asset inventory updates
    - Recommendations for operational improvements
- Quarterly Operational Review at the executive level covering trends, recurring operational issues, infrastructure health, cybersecurity events, asset lifecycle concerns

Professional Services (Outside Base Monthly Support)

- Annual Strategic Planning:
    - Technology roadmap development / “Greenfield” look
    - Network redesign or architecture changes
    - Budget planning/ forecasting
    - Capital planning and replacement planning recommendations
    - Asset portfolio assessments to ensure City is right-sized, based on usage

- Major projects, implementations, migrations, and new system deployments
- Extended on-site operational support during declared emergencies, prolonged Emergency Operations Center activations, or multi-day disaster response operations beyond the base support services
- Server replacements or infrastructure refresh projects, as needed
- Wireless redesign or expansion projects
- ERP or enterprise application implementations
- Enterprise level security assessments, penetration testing, or vCISO services

- SharePoint development, workflow automation, and data conversions
- Procurement consulting and preparation of specifications unless specifically requested by the City

Modular Options/ Features
The City recognizes that technology needs evolve rapidly. Accordingly, a successful proposer will have the ability to scale technology services, including adding, modifying, or removing technology services, without requiring replacement of the entire agreement.

Potential add on services include but are not limited to:
- All services in the preceding section above
- Telecommunications
- GIS support
- Website management
- Cloud services
- Public safety technology
- Additional facilities
- Additional users
- Other mutually agreed technology services

PROPOSAL CONTENTS AND SUBMITTAL INSTRUCTIONS

Consistent with Chapter 10 *Purchasing Procedures*, Section 1-10-5 *Methods of Source Selection*, of the city code, the City is requesting information that speaks to a firm's track record of "professional and technical qualifications" and "demonstrated competence and qualification."

By 10:00 AM on **Friday August 28, 2026** please provide a hard copy proposal by courier or mail to:

Physical Address Instructions (Delivery by Courier, Mail Service (FEDEX, etc)):
C/o Douglas Kerr
City Administrator
City of Isle of Palms
1207 Palm Boulevard
Isle of Palms, South Carolina 29451

Mailing Instructions (US Mail):
C/o Douglas Kerr
City Administrator
City of Isle of Palms
Post Office Box 508
Isle of Palms, South Carolina 29451

PROPOSAL REQUIREMENTS
The proposal should demonstrate the firm's understanding of municipal government and clearly explain how the proposed services satisfy the City's objectives.

The narrative portion of the Proposals should not be more than ten pages.

At a minimum, proposals shall include/ address the following areas:

1. Cover Letter
Introduce the firm, summarize the firm's understanding of the City's objectives, and identify the individual authorized to negotiate on behalf of the proposer.

2. Firm Qualifications
Describe:

- Years in business
- Office locations
- Number of employees
- Municipal experience
- South Carolina experience
- Experience supporting organizations of similar size and complexity

3. Understanding of the City's Needs
Rather than simply describing services, proposers should explain their understanding of the City's operating environment and philosophy as described in this RFP.
The City is particularly interested in understanding how the proposer approaches long-term client relationships, strategic planning, operational support, cybersecurity, and technology leadership.

4. Proposed Service Delivery
Describe how services will be delivered including:

- Transition of current services/ data and new service implementation
- Help Desk operations
- On-site support
- Remote support
- Assigned personnel
- Escalation procedures
- After-hours support
- Emergency response
- Cybersecurity services
- Strategic advisory services

5. Strategic Advisory Approach
Describe how your firm assists executive leadership with:

- Technology planning
- Budget preparation
- Lifecycle and capital planning
- Cybersecurity governance
- Risk management
- Cost optimization

6. Emergency Operations Support

Describe how your firm supports clients during:

- Hurricanes/ severe weather events
- Cyber incidents
- Significant outages
- Emergency Operations Center activation

Include expected response capabilities and availability of senior technical personnel.

7. References
Provide at least five references from organizations of similar size.

8. Detailed Pricing Proposal.

- Base managed services fee
- Per managed user fee
- Per email only user fee
- Hourly rates for projects, engineering, consulting, project management, travel, after-hours support, and security consulting
- Pricing assumptions and any annual escalation provisions
- Identify any assumptions that materially affect the proposed pricing

EVALUATION PROCESS AND CRITERIA

The City's objective is to select the firm that provides the greatest overall value to the organization while demonstrating technical competence, operational understanding, financial responsibility, and a commitment to long-term partnership.

The City reserves the right to reject any or all proposals, waive minor irregularities, request additional information, interview proposers, negotiate modifications, or cancel this solicitation if determined to be in the City's best interest.

Proposals will be evaluated using, at minimum, the following criteria.

A. Understanding of the City's Needs
The proposer's understanding of the City's operational environment, organizational objectives, and philosophy of services.

The City will evaluate the extent to which the proposal demonstrates an understanding of municipal government operations rather than merely describing generic managed technology services.

B. Qualifications and Experience
The firm's experience supporting organizations of similar size and complexity, particularly municipalities and public safety agencies.
Consideration may include:

- Years in business
- Technical certifications
- Relevant experience

- Staff qualifications
- Organizational stability

C. Technical Approach
The quality and completeness of the proposed technical solution including:
- Infrastructure support
- Cybersecurity
- Help Desk
- Network administration
- Disaster recovery
- Documentation
- Technology planning
- Ability to scale and make any future contract vehicle “modular”

D. Strategic Advisory Services
The City places significant value on a firm's ability to assist executive leadership through high level strategic planning from inception to at least three years out, technology planning, budgeting, lifecycle management, procurement assistance, executive reporting, operational planning, and organizational improvement.

E. Operational Support
The City's technology partner should understand that technology supports municipal operations. The proposal should demonstrate an ability to support the City during routine operations as well as major incidents, emergency response, continuity of government activities, and significant community events.

F. Pricing
Cost savings is a major factor in this RFP and the City will preference proposers with dedicated processes that illustrate a bias toward cost optimization.

Additional consideration may include:
- Overall value
- Pricing transparency and clarity
- Long-term affordability
- Cost predictability
- Optional service pricing

G. References
The City may contact references and consider prior performance, responsiveness, professionalism, communication, and overall client satisfaction.

Deadline for Submissions: The deadline for submission is **10:00 AM Friday August, 28 2026**. Proposals will be received by mail or courier (see above) in a sealed envelope. Sealed envelopes must be clearly marked **“RFP 2026-09 – Managed Technology Services”** and include one (1) hard copy.

The deadline for questions is **5:00 PM, Friday August, 14 2026.** Questions will be answered in addendum format and posted on the City's RFP tab on the City's webpage.

Site visits are encouraged. To coordinate a visit please contact the Deputy City Administrator, Sean Kuester at skuester@isleofpalms.gov or at 843-886-6428. **All visits must be complete no later than Friday August 14, 2026.**

It will be the responsibility of the proposers to verify receipt by the City. Proposals may be delivered by hand or by mail, but no proposal shall be considered which is not actually received by the City at the place, date and time appointed by the City and the City shall not be responsible for any failure, misdirection, delay or error resulting from the selection by any proposer of any means of delivery. All proposals submitted shall include a current e-mail address.

Proprietary and/or Confidential Information: Your proposal is a public document under the South Carolina Freedom of Information Act (FOIA), except as to information that may be treated as confidential as an exception to disclosure under the FOIA as determined by the City. If you cannot agree to this standard, please do not submit your proposal. All information that is to be treated as confidential and/or proprietary must be clearly identified, and each page containing confidential and/or proprietary information, in whole or in part, must be stamped and/or denoted as CONFIDENTIAL, in bold, in a font of at least 12-point type, in the upper right-hand corner of the page. All information not so denoted and identified will be subject to disclosure by the City.

Proposers acknowledge and agree that the City will not be liable for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the respondent or any member of the respondent's organization as a result of, or arising out of, submitting a proposal, negotiating changes, or due to the City's acceptance or non-acceptance of the proposal or the rejection of any and all proposals.

Proposers are responsible for submission of accurate, adequate and clear descriptions of the information requests. Neither issuance of the RFP, preparation and submission of a response, nor the subsequent receipt and evaluation of any response by the City of Isle of Palms will commit the City to award a contract to any respondent even if all the requirements in the RFP have been met. Proposers must have or be able to procure an Isle of Palms Business License.



QUOTE

2026 Ford Ranger STX 4x4

Santee Automotive LLC
2601 Paxville Highway
Manning, South Carolina 29102
United States

Phone: 1-888-853-5338
Fax: 1-888-853-5338
info@santeefleet.com

BILL TO

City of Isle of Palms
Douglas Kerr
1027 Palm Boulevard
Isle of Palms, South Carolina 29451
United States

(843)886-6428
dkerr@isleofpalms.gov

Estimate Number:	16490
Customer Ref:	State Contract # 4400035151
Estimate Date:	August 27, 2026
Valid Until:	October 26, 2026
Grand Total (USD):	**$37,686.00**

Units	Quantity	Price	Amount
Ford Ranger State Contract # 4400035151 2026 Ford Ranger SXT 4x4 Model Code R4P XL Series 100A Equipment Package STX Appearance Package 2.3 L EcoBoost Engine 10 Speed Auto Transmission 3.73 Locking RR Axle Ebony Cloth Bucket Seats Rear Cloth Bench Seat Carpet Flooring with Floor Mats Power Windows & Door Locks Power Glass, Manual Folding Sideview Mirrors Halogen Fog Lamps 17" Black Steel Wheels 255/70 R17 A/T Tires Spare Tire (Full Sized) Black Running Boards Trailer Tow Package Integrated Trailer Brake Controller Class IV Receiver Hitch with 4 & 7 Pin Wiring	1	$36,771.00	$36,771.00
Ford Ranger Standard Features FORD CO-PILOT360 TECHNOLOGY ● Headlamps – Autolamp (Automatic On/Off) ● Auto High-Beam Headlamps	1	$0.00	$0.00



QUOTE

2026 Ford Ranger STX 4x4

Santee Automotive LLC
2601 Paxville Highway
Manning, South Carolina 29102
United States

Phone: 1-888-853-5338
Fax: 1-888-853-5338
info@santeefleet.com

Units	Quantity	Price	Amount
● Pre-Collision Assist with Automatic Emergency Braking ● Analog Rear View Camera ● Cruise Control ● Lane Keeping Aid ● Post-Collision Braking FUNCTIONAL ● Remote Keyless-Entry w/Remote Tailgate Lock ● AM/FM stereo and Six (6) Speakers ● Extended Service Interval Monitor ● FordPass Connect ● USB Ports – A & C ● SYNC 4A — Enhanced Voice Recognition Communications and Entertainment System — 10" Touchscreen in Center Stack with Swipe Capability — Applink — 911 Assist — Apple CarPlay and Android Auto Compatibility			
Exterior Color Carbonized Gray Metallic Oxford White Shadow Black Premium Paints: Ruby Red metallic Tri-Coat Marsh Gray Desert Sand Velocity Blue Metallic	1	$0.00	$0.00
3rd Key Fob Third Key Fob	1	$415.00	$415.00



QUOTE

2026 Ford Ranger STX 4x4

Santee Automotive LLC
2601 Paxville Highway
Manning, South Carolina 29102
United States

Phone: 1-888-853-5338
Fax: 1-888-853-5338
info@santeefleet.com

Units	Quantity	Price	Amount
Vehicle Delivery $15.00 Delivery Fee Plus $1.50 Per Mile	1	$0.00	$0.00
Vehicle Sales Tax South Carolina Vehicle Sales Tax/Infrastructure Maintenance Fee	1	$500.00	$500.00

Grand Total (USD): **$37,686.00**

Notes / Terms

State Contract # 4400035151

Saved Order A001