

REGULAR MEETING AGENDA

November 8, 2023

AGENDA LETTER



November 1, 2023

Board of Supervisors
Sunshine Water Control District

ATTENDEES:

Please identify yourself each time you speak to facilitate accurate transcription of meeting minutes.

Dear Board Members:

The Board of Supervisors of the Sunshine Water Control District will hold a Regular Meeting on November 8, 2023 at 6:30 p.m., at the Sartory Hall, 10150 NW 29th Street, Coral Springs, Florida 33065. The agenda is as follows:

- 1. Call to Order
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Public Comments [3-Minute Time Limit] (Comments should be made from the microphone to ensure recording. Please state your name prior to speaking.)
- 5. Consideration of Resolution 2024-01, Authorizing the District Manager to Retroactively Extend the Agreement with Phillips & Jordan, Incorporated for the Provision of Disaster Debris Removal and Disposal Services for a Period of One Year; and Providing for an Effective Date
- 6. Consideration of Resolution 2024-02, Authorizing the District Manager to Retroactively Extend the Agreement with Rostan Solutions LLC for the Provision of Disaster Debris Monitoring and Reimbursement Management Services for a Period of One Year; and Providing for an Effective Date
- 7. Discussion/Consideration of 2023-2024 Legislative Representation Proposal
- 8. Acceptance of Unaudited Financial Statements as of September 30, 2023
- 9. Approval of October 11, 2023 Regular Meeting Minutes
- 10. Supervisors' Communications
- 11. Staff Reports
 - A. District Counsel: Lewis, Longman & Walker, P.A.

Board of Supervisors Sunshine Water Control District November 8, 2023, Regular Meeting Agenda Page 2

B. District Engineer: Craig A. Smith & Associates

I. Presentation: Monthly Engineer's Report

II. Permit Application(s)

Habitat for Humanity of Broward County [Keith Team]

C. District Engineering Consultant: *John McKune*

D. District Field Supervisor: Cory Selchan

E. District Manager: Wrathell, Hunt & Associates, LLC

NEXT MEETING DATE: December 6, 2023 at 6:30 PM

QUORUM CHECK

JOE MORERA	IN PERSON	PHONE	□No
IVAN ORTIZ	IN PERSON	PHONE	□No
CAROL SMITH	IN PERSON	PHONE	□No

- 12. Public Comments
- 13. Adjournment

Should you have any questions, please contact me directly at (561) 512-9027.

Sincerely,

Jamie Sanchez District Manager FOR BOARD MEMBERS AND STAFF TO ATTEND BY TELEPHONE

CALL-IN NUMBER: 1-888-354-0094 PARTICIPANT PASSCODE: 131 733 0895

RESOLUTION 2024-01

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE SUNSHINE WATER CONTROL DISTRICT AUTHORIZING THE DISTRICT MANAGER TO RETROACTIVELY EXTEND THE AGREEMENT WITH PHILLIPS & JORDAN, INCORPORATED FOR THE PROVISION OF DISASTER DEBRIS REMOVAL AND DISPOSAL SERVICES FOR A PERIOD OF ONE YEAR; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Rostan Solutions LLC ("Contractor") was awarded the contract for the provision of Disaster Debris Removal and Disposal Services; and

WHEREAS, the District's agreement with the Contractor is for a term of 3 years, with two one-year options to extend; and

WHEREAS, the District desires exercise its first option to retroactively extend the agreement for a period of one year; and

WHEREAS, such extension is in the best interest of the District and its residents.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS FOR THE SUNSHINE CONTROL WATER DISTRICT:

- Section 1. The above recitals are incorporated herein.
- Section 2. The District Board of Supervisors hereby authorizes the District Manager to retroactively extend the existing agreement with the Contractor for a period of one (1) year, until October 26, 2024. All terms and conditions of the original contract shall remain in full force and effect.
- Section 3. This resolution shall take effect upon passage by the Board of Supervisors of the Sunshine Water Control District.

PASSED AND ADOPTED this 8th day of November, 2023.

Jose Morera, President	

6

RESOLUTION 2024-02

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE SUNSHINE WATER CONTROL DISTRICT AUTHORIZING THE DISTRICT MANAGER TO RETROACTIVELY EXTEND THE AGREEMENT WITH ROSTAN SOLUTIONS LLC FOR THE PROVISION OF DISASTER DEBRIS MONITORING AND REIMBURSEMENT MANAGEMENT SERVICES FOR A PERIOD OF ONE YEAR; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Rostan Solutions LLC ("Contractor") was awarded the contract for the provision of disaster debris monitoring and reimbursement management services; and

WHEREAS, the District's agreement with the Contractor is for a term of 3 years, with two oneyear options to extend; and

WHEREAS, the District desires exercise its first option to retroactively extend the agreement for a period of one year; and

WHEREAS, such extension is in the best interest of the District and its residents.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS FOR THE SUNSHINE CONTROL WATER DISTRICT:

- Section 1. The above recitals are incorporated herein.
- Section 2. The District Board of Supervisors hereby authorizes the District Manager to retroactively extend the existing agreement with the Contractor for a period of one (1) year, until August 24, 2024. All terms and conditions of the original contract shall remain in full force and effect.
- Section 3. This resolution shall take effect upon passage by the Board of Supervisors of the Sunshine Water Control District.

PASSED AND ADOPTED this 8th day of November, 2023.

•	Jose Morera, President	



Reply to: Tallahassee

October 3, 2023

Sunshine Water Control District Attn: Joe Morera, President 2300 Glades Road, Suite 410W Boca Raton, FL 33431

CONFIDENTIAL ATTORNEY/CLIENT **PRIVILEGED**

RE: 2023-2024 Legislative Representation

Dear President Morera:

On behalf of the law firm of Lewis, Longman & Walker, P.A. ("LLW"), I sincerely thank you for the opportunity to represent you on the above-referenced matter that is further defined in Section 2 of this Engagement Agreement ("Agreement"). The purpose of this Agreement is to document the terms of our professional relationship. A solid attorney-client relationship is built on a clear understanding of the terms of the relationship. Therefore, I ask that you review this letter with care and then either confirm your agreement to these terms or state any different or additional terms that you would like me to consider.

- 1. Client. Unless and until agreed by all parties in writing, LLW's only client in this matter is the Sunshine Water Control District (SWCD).
- Services. On behalf of SWCD, LLW will monitor legislative activities during interim committee 2. weeks (7 scheduled weeks), during the 2024 Legislative Session (January 9 - March 8, 2024) and during the Governor's action on bills (March 9 – June 30, 2024). LLW will provide SWCD with regular written reports summarizing relevant legislative activities. Upon request, LLW will provide oral updates to SWCD, schedule permitting. If SWCD desires for LLW to actively engage on legislative issues, such services will be the subject of a separate agreement. I will be the attorney in charge of this matter and will be responsible for providing and supervising the legislative services required. The legislative team will also include Lori Killinger. I will ensure that this matter is staffed in a manner adequate and appropriate to the requirements of the representation, including accessing the expertise of other LLW attorneys as needed.

Sunshine Water Control District Attn: Joe Morera, President October 3, 2023 Page -2-

Any additional matters that you may ask us to undertake must be covered by separate Engagement Agreements and will require additional conflict checks.

- 3. <u>Term and Professional Fees</u>. The term of this agreement shall be from October 1, 2023, to June 30, 2024. The fee for these services shall be \$24,000.00, payable in nine (9) monthly payments of \$2,666.66. This agreement can be terminated by either party with thirty (30) days written notice.
- 4. <u>Communication and Cooperation</u>. In order for us to serve as your counsel, it is essential that we are able to contact you, and that you respond to our requests for information or documents as expeditiously and completely as possible. We may also require client personnel be made available to meet with us in relation to representing you in this matter. Please bear in mind that if we do not obtain such cooperation, the quality of our representation may suffer and we may feel constrained to withdraw from any further work.
- 5. <u>Costs.</u> LLW will charge you for direct costs incurred on your behalf for this representation. We may advance these costs and seek reimbursement in our billings or we may, at our discretion, require you to deposit these costs with us before the costs are incurred.
- 6. <u>Billing and Payment</u>. We will bill you on a monthly basis for professional services rendered and expenses incurred in connection with this matter. You agree to pay the amount of each invoice in full within twenty (20) days of the billing date. For the convenience of our clients, LLW accepts credit card payments for invoices. Payments received will be applied to the outstanding invoices specified by the payment. If a specific invoice is not specified, the payment will be applied to the oldest outstanding invoice. If you have any questions about the invoice or if you dispute any items or any invoice, you agree to notify me in writing within fifteen (15) days of the billing date of your question or concern. If no issues are raised within this time period, the firm will assume you do not have any dispute with the invoice. Any amount of fees and costs due remaining unpaid for more than thirty (30) days from the date of billing shall bear interest at the rate of twelve (12%) percent per annum, compounded daily, until paid.
- 7. <u>Default</u>. If you fail to abide by the terms of this Agreement, you will be considered in default of this Agreement and we may terminate our representation. In the event any suit or action is brought to enforce the provisions of this Agreement in any arbitration, or administrative or judicial proceeding, the prevailing party shall be entitled to an award of reasonable attorneys' fees and costs incurred in such proceedings, including appeals.
- 8. <u>Client Documents</u>. During the course of your matter, you may provide us with original or sensitive documents such as tax records, expense records, bank records, deeds, etc. We will hold these records, in our office, during the pendency of your action. At the conclusion of your matter and after all outstanding legal fees, costs and expenses, have been paid in full, you may arrange for the return of the original documents to you. It is your responsibility to secure the return of your original or sensitive documents. If you want a copy of all the matter files you will need to pay for the organization, copying/scanning and provision of same. We will retain all documents related to

Sunshine Water Control District Attn: Joe Morera, President October 3, 2023 Page -3-

your matter for seven (7) years following the closure of your matter. At the conclusion of which the documents will be destroyed.

9. <u>Public Records</u>. LLW will keep and maintain public records required by you to perform the service. However, the parties agree that the nature of the retention contemplated herein does not render LLW a "public agency" within the meaning of the term in Chapter 119, Florida Statutes.

Upon request by your custodian of public records, as identified in the next section, LLW will provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

For public records requests that require significant administrative time or the use of technology to fulfill, LLW will prepare an estimate of the cost of fulfilling the public records request and provide same to you in writing. If you have a policy regarding the manner of calculating charges for significant administrative time or the use of technology, LLW will follow the policy in developing the cost estimate. The policy will be attached hereto upon execution by you. If you do not have a specific policy for calculating charges for significant administrative time or the use of technology, LLW shall develop the estimate based on LLW's actual cost. Significant administrative time will be considered time in excess of 30 minutes. Labor costs shall be estimated based on 1.25 x the hourly rate of the lowest paid LLW member capable of performing the work. The cost of technology shall be estimated based on actual cost, with no mark-up.

LLW will ensure that public records maintained or created in connection with this representation that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of this Agreement term and following completion of the representation if LLW does not transfer the records to you.

Upon completion of the representation, LLW shall transfer, at no cost to you, all public records in possession of LLW related to the representation, in the format in which those records were ordinarily kept, provided that all electronic records shall be produced to you in a format that is compatible with your information technology systems. If you desire the records to be transferred in a format that is different than the above-referenced format, LLW shall prepare a cost estimate for the records conversion upon request, and provide the converted records to you upon approval of the cost estimate.

LLW shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. LLW may retain duplicate copies of non-exempt and non-confidential public records after the record copies are transferred to you.

If you receive a public records request for materials the record copies of which are maintained by LLW, you shall immediately notify LLW of the request in writing. LLW will provide the records to you, or allow the records to be inspected or copied within a reasonable time, as directed by you. If

Sunshine Water Control District Attn: Joe Morera, President October 3, 2023 Page -4-

you desire for LLW to review the records for responsiveness and/or exemption/privilege, you shall advise LLW of its desire in writing and LLW shall provide the service at the rates provided herein. If you seek for LLW to "certify" a public record, you should provide LLW with direction on the desired format of such certification along with the records request.

IF LLW HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO LLW'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, LLW WILL CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT <u>Please</u> fill in contact information for the Custodian of Public Records:

Telephone Number	
E-mail Address	
Mailing Address	

10. <u>Binding and Entire Agreement</u>. This Agreement and any concurrent attachments represent the entire Agreement between the parties, and no party is relying or is entitled to rely on any representations not expressly contained herein. In addition, no changes may be made to this Agreement without the written consent of all the parties hereto.

We sincerely thank you for choosing LLW to assist you in this most important matter. If you agree with the foregoing terms and conditions, please sign in the space provided at the bottom of this Agreement and return to me. On behalf of LLW, I look forward to assisting you in this matter.

Sincerely,

M. Christopher Lyon

Sunshine Water Control District Attn: Joe Morera, President October 3, 2023 Page -5-
ACCEPTED BY:
SUNSHINE WATER CONTROL DISTRICT
Ву:
Title:

Date:_____

UNAUDITED FINANCIAL STATEMENTS

SUNSHINE
WATER CONTROL DISTRICT
FINANCIAL STATEMENTS
UNAUDITED
SEPTEMBER 30, 2023

SUNSHINE WATER CONTROL DISTRICT BALANCE SHEET GOVERNMENTAL FUNDS SEPTEMBER 30, 2023

	General Fund	Debt Service Fund Series 2021	Total Governmental Funds
ASSETS		OCTICS ZUZ I	1 unus
Centennial Bank	\$ 2,770,625	\$ -	\$ 2,770,625
Centennial Bank - escrow	81,275	-	81,275
DS - Series 2021	, -	587,044	587,044
Investments		,	,
State Board of Administration			
A Investment account	5,424	-	5,424
A Bank maintenance reserve account	2,841	-	2,841
A Renewal & replacement reserve account	2,114	-	2,114
A Equipment replacement reserve account	223	-	223
Centennial Bank - MMA	261,088	-	261,088
FineMark Bank - MMA	769	-	769
FineMark Bank - ICS	38,797	-	38,797
Bank United - MMA	250,000	-	250,000
Bank United - ICS	10,083,065	-	10,083,065
Iberia Bank - MMA	5,547	-	5,547
Undeposited funds	350	-	350
Due from general fund	-	11	11
Due from other soures	2,396		2,396
Total assets	\$13,504,514	\$ 587,055	\$ 14,091,569
LIABILITIES			
Liabilities:			
Retainage payable	242,277	-	242,277
Due to debt service	11	-	11
Deposits payable/trash bonds	229,500	-	229,500
Cost recovery deposits	52,878	-	52,878
Total liabilities	524,666		524,666
FUND BALANCES			
Assigned:	1 760 212		1 760 212
3 months working capital	1,760,312 3,500,000	-	1,760,312 3,500,000
Disaster recovery Truck replacement	180,000	-	180,000
Restricted for	100,000	-	160,000
Debt service		587,055	587,055
Unassigned	7,539,536	567,055	
Total fund balances		587 055	7,539,536
Total fullu palatices	12,979,848	587,055	13,566,903
Total liabilities and fund balances	\$13,504,514	\$ 587,055	\$ 14,091,569

SUNSHINE

WATER CONTROL DISTRICT

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES GENERAL FUND

FOR THE PERIOD ENDED SEPTEMBER 30, 2023

	Current Month	Year to Date	Adopted Budget	% of Budget
REVENUES	 			
Assessments	\$ 46	\$ 3,625,806	\$ 3,610,139	100%
Interest and miscellaneous	45,653	88,343	9,000	982%
Permit review fees	350	3,500	2,450	143%
Cost recovery	 		17,500	0%
Total revenues	 46,049	3,717,649	3,639,089	102%
EXPENDITURES				
Administrative				
Supervisors	450	1,250	1,800	69%
Supervisor health care benefits	4,879	9,845	25,000	39%
Supervisors reimbursement	-	330	7,500	4%
Management/accounting/recording	5,478	65,734	65,734	100%
DSF & CPF accounting	1,280	15,355	15,355	100%
Dissemination fee	83	1,000	1,000	100%
Arbitrage rebate calculation	-	-	750	0%
Trustee	_	_	5,000	0%
Audit	_	11,500	11,500	100%
Legal	_	48,023	95,000	51%
Legal - legislative representation	_	51,750	53,100	97%
Retirement plan consulting	_	-	10,000	0%
Human resource services	630	7,557	7,557	100%
Communication	_	-	7,500	0%
Dues/subscriptions	_	4,000	4,500	89%
Rent - operations facility	4,055	48,666	48,666	100%
Insurance	-	25,118	35,440	71%
Legal advertising	944	2,217	2,500	89%
Office supplies and expenses	_	372	1,500	25%
Postage	123	1,061	1,200	88%
Postage-ROW clearing	_	, -	500	0%
Printing and binding	117	1,400	1,400	100%
Website	_	1,109	3,000	37%
ADA website compliance	_	210	210	100%
Contingencies	816	6,178	5,000	124%
Total administrative expenses	18,855	302,675	410,712	74%
Field operations				
Salaries and wages	30,734	427,283	437,561	98%
FICA taxes	2,570	33,656	33,473	101%
Special pay	2,570	1,534	2,000	77%
Bonus program	_	5,000	2,500	200%
401a retirement plan	5,431	50,554	43,756	116%
Health insurance	24,215	284,947	325,000	88%
Workers' compensation insurance	- 1,210	13,327	15,000	89%
Engineering	5,750	30,650	100,000	31%
Engineering - capital outlay westchester	-	-	7,500	0%
Engineering - capital outlay ps1 & ps2	656	88,334	42,472	208%
Engineering - capital outlay ps1 h/s/c	175	68,052	134,000	51%
Engineering - capital outlay NW 123 ave	-	-	12,550	0%
Engineering - capital outlay Riverside drive	_	<u>-</u>	251,586	0%
Engineering - capital outlay University drive	-	_	89,627	0%
Engineering - telemetry	_	<u>-</u>	75,500	0%
Consulting engineer services	_	_	25,000	0%
Cost recovery	875	32,446	17,500	185%
Water quality testing	-	3,912	5,224	75%
Telephone	126	1,106	1,800	61%
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SUNSHINE

WATER CONTROL DISTRICT

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES GENERAL FUND

FOR THE PERIOD ENDED SEPTEMBER 30, 2023

	Current	Year to	Adopted	% of
	Month	Date	Budget	Budget
Electric	36,641	110,550	85,000	130%
Insurance	-	60,483	55,529	109%
Repairs and maintenance				
Canal banks	54,780	54,780	75,000	73%
Canal dredging	-	-	50,000	0%
Culvert inspection & cleaning	-	4,250	100,000	4%
Dumpster service	1,024	10,143	13,000	78%
Truck, tractor and generator	2,493	14,132	21,000	67%
Other	4,351	14,091	21,000	67%
Operating supplies				
Chemicals	21,704	71,114	90,000	79%
Fuel	1,117	11,569	20,000	58%
Fuel-pump station generator	-	-	35,000	0%
Triploid carp	-	-	19,755	0%
Uniforms	217	1,550	3,217	48%
Other	2,031	5,352	4,000	134%
Permit fees, licenses, schools	-	880	5,000	18%
Capital outlay - westchester culvert	-	20,915	288,125	7%
Capital outlay - pump station 1 & 2	143,042	2,550,830	1,444,200	177%
Capital outlay - ps1 hydra/struc/canal	-	-	625,440	0%
Capital outlay - NW 123 Ave	-	-	150,000	0%
Capital outlay - Riverside drive	-	-	985,000	0%
Capital outlay - University drive	-	-	150,000	0%
Capital outlay - telemetry	-	-	340,000	0%
Field equipment	-	-	35,000	0%
Pump station telemetry	439	4,046	40,000	10%
Contingencies	-	14,270	5,000	285%
Total field operations	338,371	3,989,756	6,282,315	64%
Other fees and charges				•
Tax collector	-	36,196	37,606	96%
Property appraiser	-	36,196	37,606	96%
Property tax bills - fire & EMS assessment	-	33	100	33%
Total other fees & charges	-	72,425	75,312	96%
Total expenditures	357,226	4,364,856	6,768,339	64%
Excess/(deficiency) of revenues				
over/(under) expenditures	(311,177)	(647,207)	(3,129,250)	
Fund balance - beginning Fund balance - ending	13,291,025	13,627,055	13,725,082	
Assigned:				
3 months working capital	1,760,312	1,760,312	1,760,312	
Disaster recovery	3,500,000	3,500,000	3,500,000	
Truck replacement	180,000	180,000	180,000	
Unassigned	7,539,536	7,539,536	5,155,520	-
Total fund balance - ending	\$ 12,979,848	\$12,979,848	\$10,595,832	İ

SUNSHINE WATER CONTROL DISTRICT STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES DEBT SERVICE FUND SERIES 2021 FOR THE PERIOD ENDED SEPTEMBER 30, 2023

	Current Month	`	Year To Date		Adopted Budget	% of Budget
REVENUES						
Assessment levy: on-roll	\$ 11	\$	852,157	\$	848,359	100%
Interest	2,371		18,216		-	N/A
Total revenues	2,382		870,373		848,359	103%
EXPENDITURES						
Debt service						
Principal	-		470,000		470,000	100%
Interest	-		362,493		362,493	100%
Total debt service	-		832,493	-	832,493	100%
Other fees and charges						
Tax collector	_		8,507		8,837	96%
Property appraiser	_		8,507		8,837	96%
Total other fees and charges	-		17,014		17,674	96%
Total expenditures	-		849,507		850,167	100%
Excess/(deficiency) of revenues						
over/(under) expenditures	2,382		20,866		(1,808)	
Fund balances - beginning	584,673		566,189		253,407	
Fund balances - ending	\$ 587,055	\$	587,055	\$	251,599	

SUNSHINE

Water Control District Special Assessment Revenue Refunding Bonds, Series 2021 \$12,010,000

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I
11/01/2022		-	181,246.25	181,246.25
05/01/2023	470,000.00	3.050%	181,246.25	651,246.25
11/01/2023	-	-	174,078.75	174,078.75
05/01/2024	490,000.00	3.050%	174,078.75	664,078.75
11/01/2024	-	-	166,606.25	166,606.25
05/01/2025	500,000.00	3.050%	166,606.25	666,606.25
11/01/2025	-	-	158,981.25	158,981.25
05/01/2026	515,000.00	3.050%	158,981.25	673,981.25
11/01/2026	-	-	151,127.50	151,127.50
05/01/2027	530,000.00	3.050%	151,127.50	681,127.50
11/01/2027	-	-	143,045.00	143,045.00
05/01/2028	550,000.00	3.050%	143,045.00	693,045.00
11/01/2028	-	-	134,657.50	134,657.50
05/01/2029	565,000.00	3.050%	134,657.50	699,657.50
11/01/2029	_	-	126,041.25	126,041.25
05/01/2030	585,000.00	3.050%	126,041.25	711,041.25
11/01/2030	-	-	117,120.00	117,120.00
05/01/2031	600,000.00	3.050%	117,120.00	717,120.00
11/01/2031	_	-	107,970.00	107,970.00
05/01/2032	615,000.00	3.050%	107,970.00	722,970.00
11/01/2032	_	-	98,591.25	98,591.25
05/01/2033	635,000.00	3.050%	98,591.25	733,591.25
11/01/2033	, <u>-</u>	-	88,907.50	88,907.50
05/01/2034	655,000.00	3.050%	88,907.50	743,907.50
11/01/2034	_	-	78,918.75	78,918.75
05/01/2035	675,000.00	3.050%	78,918.75	753,918.75
11/01/2035	_	-	68,625.00	68,625.00
05/01/2036	690,000.00	3.050%	68,625.00	758,625.00
11/01/2036	_	-	58,102.50	58,102.50
05/01/2037	720,000.00	3.050%	58,102.50	778,102.50
11/01/2037	· -	-	47,122.50	47,122.50
05/01/2038	735,000.00	3.050%	47,122.50	782,122.50
11/01/2038	_	-	35,913.75	35,913.75
05/01/2039	760,000.00	3.050%	35,913.75	795,913.75
11/01/2039	, <u>-</u>	-	24,323.75	24,323.75
05/01/2040	785,000.00	3.050%	24,323.75	809,323.75
11/01/2040	, <u>-</u>	-	12,352.50	12,352.50
05/01/2041	810,000.00	3.050%	12,352.50	822,352.50
Total	\$11,885,000.00	-	\$3,947,462.50	\$15,832,462.50

MINUTES

DRAFT

1 2 3	2 SUNSHINE WATER CONTROL DISTRICT			
4	The Board of Supervisors of the Sunshine Water Control District held a Regular Meetin			
5	on October 11, 2023 at 6:30 p.m. at the Sartory	Hall, 10150 NW 29th Street, Coral Springs,		
6	Florida 33065.			
7				
8 9	Present were:			
10	Joe Morera	President		
11	Ivan Ortiz	Vice President		
12	Carol Smith	Secretary		
13	_			
14	Also present were:			
15		2		
16	Jamie Sanchez	District Manager		
17	Cindy Cerbone (via telephone)	Wrathell, Hunt and Associates LLC District Counsel		
18 19	Seth Behn Chris Lyons (via telephone)			
20	Bill Capko (via telephone)	Lewis, Longman & Walker, P.A. Lewis, Longman & Walker, P.A.		
21	Orlando Rubio	District Engineer		
22	Cory Selchan	Field Superintendent		
23	cory scientifi	Treid Superintendent		
24				
25	FIRST ORDER OF BUSINESS	Call to Order		
26				
27	Mr. Morera called the meeting to order at 6	5:30 p.m.		
28				
29	SECOND ORDER OF BUSINESS	Roll Call		
30				
31	All Supervisors were present.			
32				
33	THIRD ORDER OF BUSINESS	Pledge of Allegiance		
34	THIND ONDER OF BOSINESS	Treage of Allegiance		
35	All present recited the Pledge of Allegiance.			
36	7 iii present redited the Fledge of Allegiance.			
	EQUIPTE ODDED OF BUICINESS	Dublic Comments [2 Minute Time Limit]		
37 38	FOURTH ORDER OF BUSINESS	Public Comments [3-Minute Time Limit] (Comments should be made from the		
50		Teominents should be made from the		

69

39 40 41		microphone to ensure recording. Please state your name prior to speaking.)
42	There were no public comments.	
43		
44 45 46	FIFTH ORDER OF BUSINESS	Discussion/Consideration of 2023-2024 Legislative Representation Proposal
47	Mr. Lyons recalled successfully representing	ng the District in a matter related to a local bi
48	and his previous proposal to continue represe	enting the District by making appropriation
49	requests or monitoring legislative matters and pr	oviding regular written reports. Given that the
50	Board expressed some interest in a legislative mo	nitoring contract and set aside funds for some
51	level of legislative representation in the Fiscal '	ear 2024 budget, he prepared a monitoring
52	contract that would cover all seven weeks of the	egislative session. He reviewed the 2023-2024
53	Legislative Representation Proposal, highlighting	the pertinent information and took questions.
54	In response to Ms. Smith's question, Mr.	Lyons confirmed that the proposal covers the
55	monitoring of everything that might pertain to a	n Independent Special District and stated, a
56	issues arise, the proposal will cover District-rela	ated matters such as stormwater, water and
57	anything that affects Independent Special District	s, including pre-emptions.
58	Mr. Ortiz asked if there are any issues	that the Board should start looking into o
59	worrying about. Mr. Lyons stated, there is curren	ntly no legislation that impacts the District bu
60	he will examine the current list of bills filed and	alert the Board of any local Broward Count
61	bills that might be of interest.	
62	Mr. Morera stated, although he thinks th	ere was value in retaining Mr. Lyons' service
63	to represent the District in Tallahassee, he is u	ncertain, from a return on investment (ROI
64	standpoint.	
65	Mr. Morera noted that the City was	awarded funds designated for stormwate
66	management. He asked how the District, which i	s in the business of stormwater managemen
67	and flood prevention, can receive some of the fur	nds that the City will receive. Mr. Lyons stated
68	to request State funds, City officials must fill out	very detailed forms explaining how the fund

will be expended and, when and if stormwater-related funds are granted, it goes to the Florida

Department of Environmental Protection (FDEP), which executes a contract with the City for them to receive the funds to perform the work; unless the City, in its request, stated one of the conditions for asking and receiving the funds was to reduce the impact on the Special Districts it coordinates with, he doubted that anything can be done to coerce the City into to sharing its funds with the District. He stated the best way for the District to tap into State funds is to have a particular project that benefits its residents that the State could contribute towards. He suggested Mr. Morera confer with the two local representatives regarding sharing the proceeds to reduce the contribution from the District.

Mr. Morera stated that the District Board Member compensation rate has been frozen since 1963 and voiced his opinion that the compensation rate should be adjusted. He asked how Board Members can obtain reasonable compensation for their time while serving the Board. Mr. Lyons stated increasing the compensation for Sunshine Board Members would require a local bill; unfortunately, the Broward County deadline for local bills expired for this session. If the Board would like to pursue that, it would likely be an effort for the next session.

Ms. Sanchez stated that, if the Board wishes to proceed, there would be two motions; one to engage Mr. Lyons, based on the proposal, and another to authorize Mr. Lyons research the two items that were broached by Mr. Morera.

Mr. Morera stated the Board will have further discussions regarding the proposal and Mr. Lyons will be apprised of the decision.

Mr. Lyons left the call.

Discussion ensued regarding increasing District Board Member compensation, what other Broward County Boards are paid, whether the Board should approve the legislative monitoring agreement and an upcoming Florida Association of Special Districts (FASD) meeting.

The consensus was to table this item to the next meeting.

Mr. Behn will research current compensation studies and report his findings.

Ms. Sanchez will email Mr. Lyons to apprise him of the Board's decision and invite him to the next meeting.

SIXTH ORDER OF BUSINESS

Acceptance of Unaudited Financial Statements as of August 31, 2023

100 101	Ms. Sanchez presented the Unaudited Financial Statements as of August 31, 2023.			
102	Asked if there is anything to call out, Ms. Sanchez stated that, in conferring with Mr. Rubio and			
103	Mr. Selchan prior to the meeting, it was noted that some of the line items might have been			
104	miscoded. Staff will coordinate to ensure that the line items are coded properly. Asked which			
105	items were miscoded, Ms. Sanchez pointed to the "Repairs and maintenance" line, on Page 3			
106	and stated "Canal banks" should be changed from \$0 to \$66,530, under the Year-to-Date			
107	column. Mr. Selchan pointed out the "Capital outlay – pump station 1 & 2" line item at 167%			
108	and the "Capital outlay – ps1 hydra/struc/canal" line item at 0%.			
109				
110 111	On MOTION by Ms. Smith and seconded by Mr. Ortiz, with all in favor, the Unaudited Financial Statements as of August 31, 2023, were accepted.			
112				
113 114 115 116	SEVENTH ORDER OF BUSINESS Approval of September 13, 2023 Public Hearings and Regular Meeting Minutes			
117	Ms. Sanchez presented the September 13, 2023 Public Hearings and Regular Meeting			
118				
119	Line 167: Change "Mr. Santiago" to "Mrs. Santiago"			
120	Line 170: Change "District website" to "Broward County SOE's website"			
121	Discussion ensued regarding a link to the Broward County SOE's website and the specific			
122	qualification information for prospective Board Supervisors.			
123				
124 125 126	On MOTION by Ms. Smith and seconded by Mr. Ortiz, with all in favor, the September 13, 2023 Public Hearings and Regular Meeting Minutes, as amended, were approved.			
127 128 129 130	EIGHTH ORDER OF BUSINESS Supervisors' Communications			

131

132

133

Mr. Ortiz stated he was saddened to hear about Mr. Malefatto's passing and expressed sincere condolences to Mr. Malefatto's family and colleagues.

Ms. Smith echoed Mr. Ortiz' sentiments and stated it is a tragic loss.

Mr. Morera asked everyone to rise and pause for a moment of silence for Mr. Malefatto, a close friend, confidante, counselor and advisor. Mr. Morera stated it is a tremendous loss and opined that Mr. Malefatto is irreplaceable and will be greatly missed.

Mr. Morera discussed the District's recent collaboration with Habitat for Humanity on a low-income housing project consisting of 13 homes on two lots on Riverside Drive. The project was not prepared to deal with the District's fees and requirements and the City asked for Mr. Selchan's assistance mitigating the fees to help the project come to fruition. Mr. Morera commended Mr. Selchan and Rio-Bak for doing the work required by the District to bring the project into compliance with its criteria. He expressed his disappointment that the District was barely recognized at the groundbreaking ceremony, despite donating a substantial amount of time and money to the project. He communicated his feelings in an email to the CEO of Habitat for Humanity and City Officials.

Mr. Morera asked about the status of Mr. Prudhomme's memorial tree. Mr. Selchan stated a check was recently remitted for the tree, which will soon be delivered, and a plaque was ordered. The memorial is in progress.

Mr. Behn thanked the Board and Staff for honoring Mr. Malefatto and stated he worked with Mr. Malefatto for 16 years and Mr. Malefatto encouraged him to enroll in law school and taught him that he can be an attorney and a genuinely good human being at the same time. He noted that Mr. Malefatto treated everyone with respect and kindness.

NINTH ORDER OF BUSINESS

Staff Reports

A. District Counsel: Lewis, Longman & Walker, P.A.

Mr. Behn stated the firm is committed to continuing to serve the District and designated Ms. Janice Rustin, a Board-certified attorney, to serve as District Counsel. Mr. Behn stated that he and Mr. Capko will back her up and be available, as needed. He thanked the Board for the trust placed in the firm and in Mr. Malefatto.

Mr. Morera suggested that the firm create and award an "Al Malefatto Good Citizen Award" to a deserving attorney annually.

and

198

163		Mr. Capko voiced his appreciation for the kind comments about Mr. Malefatto			
164	state	d he and Mr. Behn will convey Mr. Morera's suggestion to the Executive Committee.			
165	B. District Engineer: Craig A. Smith & Associates				
166		I. Presentation: Monthly Engineer's Report			
167		Mr. Rubio presented the Monthly Engineer's Report.			
168		II. Permit Applications			
169		Mr. Rubio presented the following:			
170		Blue Stream Communications, LLC [Holiday Springs Village]			
171					
172 173 174		On MOTION by Mr. Ortiz and seconded by Ms. Smith, with all in favor, the CAS Project No. 15-1826, Right-of-Way permit application, submitted by Blue Stream Communications, LLC – S14/15/T48S/R41E, for two directional bore			
175 176 177 178		installations; 70 LF – 2" HDPE Conduit under the SWCD Canal "G" near 8605 W Sample Road and 70 LF – 2" HDPE Conduit under the SWCD Canal "E" east of NW 81 st Avenue, subject to the Special Conditions set forth in the October 4, 2023 recommendation letter, was approved			
179 180 181 182		FPL [South of Atlantic Blvd.]			
183 184 185 186 187 188		On MOTION by Mr. Ortiz and seconded by Ms. Smith, with all in favor, the CAS Project No. 15-1826, Right-of-Way permit application, submitted by Florida Power & Light (FPL) S34/T48S/R41E, directional bore installation, 170 LF of 2-6" HDPE Conduits under the SWCD East Outfall Canal, subject to the Special Conditions set forth in the October 4, 2023 recommendation letter, was approved.			
189 190					
191	•	Ladybird Academy Permit Extension Request			
192		This was an addition to the agenda.			
193					
194 195 196 197		On MOTION by Ms. Smith and seconded by Mr. Ortiz, with all in favor, the CAS Project No. 15-1826, Right-of-Way permit extension request 2 for Ladybird Academy – Canal L, subject to the Special Conditions set forth in the October 11, 2023 recommendation letter, was approved.			

199 200	C.	C. District Engineering Consultant: John McKune			
201		There was no report.			
202	D.	District Field Supervisor: Cory Selchan			
203		Mr. Selchan reported the following:			
204	>	The District sustained 9" of rain in September and close to 3" to date, in October. He			
205	hopes	there will not be any additional st	corms.		
206	>	Most of the District's projects fo	r the year are complete.		
207	>	The tree-trimming projects were completed and residents expressed satisfaction.			
208	The canals are beginning to look better.				
209	E. District Manager: Wrathell, Hunt & Associates, LLC				
210	Ms. Sanchez stated Mr. Malefatto was wonderful to work with and eased her transition				
211	to becoming the District's Manager.				
212	The District's Holiday luncheon will be held on December 1, 2023 at 11:30 a.m.				
213	• NEXT MEETING DATE: November 8, 2023 at 6:30 PM				
214		O QUORUM CHECK			
215		The next meeting will be held on	November 8, 2023.		
216					
217	TENTH	H ORDER OF BUSINESS	Public Comments		
218 219		No members of the public spoke			
220					
221 222 223	ELEVE	NTH ORDER OF BUSINESS	Adjournment		
224 225	On MOTION by Ms. Smith and seconded by Mr. Ortiz, with all in favor, the meeting adjourned at 8:16 p.m.				
226227228229					
230231232	[SIGNATURES APPEAR ON THE FOLLOWING PAGE]				

233		
234		
235		
236		
237	Secretary/Assistant Secretary	President/Vice President

DRAFT

SUNSHINE WATER CONTROL DISTRICT

October 11, 2023

STAFF REPORTS BI



November 1, 2023

Board of Supervisors Sunshine Water Control District 2300 Glades Road, Suite 410W Boca Raton, Florida 33073

RE: SUNSHINE WATER CONTROL DISTRICT - NOVEMBER MONTHLY ENGINEER'S REPORT (MER)

October 11, 2023 - November 1, 2023

CAS PROJECT NO. 15-1826

Dear Board of Supervisors:

Craig A. Smith & Associates, Inc. (CAS) is pleased to provide you with the MER summarizing activity performed by our team on behalf of SWCD during the referenced period including future work. Anything of significance or modifications occurring after this writing will be brought up at the November 8, 2023 BOS meeting.

Electrical Repairs at Pump Station Nos. 1 and 2

Recommended is the approval of Change Order No. 4 in the amount of \$4,220 to replace the Main CB metering screen on face of switchboard. The current screen is no longer produced and requires new model. Supporting documentation is attached.

Right-of-Way Permitting

Recommended for Approval:

Recommended is the ROW permit for the construction of Coral Springs Townhomes North & South from Habitat for Humanity of Broward County adjacent to SWCD Canal "D" located at 3710-3734 Riverside Dr Coral Springs, Fl 33065. Canal "D" was in need of work and the burden of this work is procedurally placed on the permittee. However, due to the financial constraints with the project and in cooperation with the City, the SWCD volunteered its services to perform the canal work for the greater goal of serving the East Basin and the project as well. Without this work by the SWCD, this project may not have been realized. Furthermore, the City in its efforts agreed to and has removed the guardrail to give SWCD maintenance access to Canal "D" via the North parcel.

Under Review:

Amera Downtown Development Co., LLC – Sample Road and University Drive: Review comments were sent the applicant's consultant on August 10, 2023.







Board of Supervisors - November 8, 2023 Board Meeting

RE: SUNSHINE WATER CONTROL DISTRICT - MONTHLY ENGINEER'S REPORT (MER)

Page | 2

As always, we continue to look forward to working with the SWCD staff on current and future important projects. Should there be any questions, I can be reached at the letterhead numbers shown or by electronic mail at orubio@craigasmith.com.

Sincerely,

CRAIG A. SMITH & ASSOCIATES

Orlando A. Rubio, PE

VP - Stormwater Engineering

Enclosures: Permit Recommendation for Coral Springs Townhomes

Change Order No. 4 for CCI

cc via e-mail: **SWCD -** Cory Selchan, District Superintendent

WHA - Jamie Sanchez, Cindy Cerbone, Daphne Gillyard, Gianna Denofrio, Caryn Kupiec

CAS - Steve C. Smith, PE

 $\verb|\cas-file|projects|districts|sunshine_water_control|monthly| engineers| 2023-11|swcd-monthly|pt-2023-10-30.docx| and the control|monthly| of the control|monthly| engineers| and the control|monthly| engineer$

SECTION 00931

CHANGE ORDER

DATE OF ISSUANCE: November 8, 2023 No. 04

PROJECT: SWCD STORMWATER PUMP STATION NOS. 1 & 2 ELECTRICAL REPAIRS

CAS PROJECT No. 15-1826-PS1/PS2

OWNER: Sunshine Water Control District

CONTRACTOR: Current Connections, Inc.

DISTRICT ENGINEER CRAIG A. SMITH AND ASSOCIATES.

PROJECT ENGINEER: SMITH ENGINEERING CONSULTANTS

YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES IN THE CONTRACT DOCUMENTS. DESCRIPTION:

Background: Recommended for approval is project change order no. 4 to cover the cost of the following items.

Provide the labor and material to remove and replace Main CB metering screen on face of switchboard. The PM800 metering screen is no longer produced. The recommended replacement (PM5563) will be installed.

Total Cost for Change Order No. 4: \$4,220.00

ATTACHMENTS: Detailed pricing from CCI is attached to this document including scope work.

CHANGE IN CONTRACT PRICE: Original Contract Price	CHANGE IN CONTRACT TIME: Original Contract Time		
\$1,251,000.00	180 Days		
Previous Change Orders	Net change from previous Change Orders		
\$281,980.00	0 Days		
Contract Price prior to this Change Order	Contract Time prior to this Change Order		
\$ 1,532,980.00	270 Days		
Net increase of this Change Order	Net Increase of this Change Order		
\$4,220.00	30 days		
Contract Price with all approved Change Orders	Contract Time with all approved Change Orders		
\$1,537,200.00	300 Days		

RECOMMENDED:
ane.
Ву:
CAS/District Engineer – Orlando A. Rubio, PE
ACCEPTED:
ByContractor: Don Sharkey, President/
APPROVED:
Ву
District Manager Via Board Approval: Jaime Sanchez
END OF SECTION

PROPOSED CHANGE ORDER

Current Connections, Inc.

1620 Hill Avenue Mangonia Park, Florida 33407 Telephone: (561) 863-0010 Fax: (561) 863-5380

Client Address:

Sunshine Water Control District 2300 Glades Road, Suite 410W

Boca Raton, Florida 33431

CCN # 9

Date: 10/17/2023

Project Name: SWCD Pump Station #1 & 2 Electrical Re

Page Number: 1

Site Address:

Pump Station #1 & 2

PS #1 - 8085 Royal Palm Blvd. PS #2 - 10600 Riverside Dr Coral Springs, Florida 33071

Work Description

Itemized Breakdown

Below is a labor and material breakdown for the work to remove and replace Main CB metering screen on face of switchboard. The PM800 metering screen is no longer produced. The recommended replacement will be installed PM5563. Cut Sheet Attached. We reserve the right to correct this quote for errors and omissions.

Description	Qty	Net Price U	Total Mat.	Labor U	Total Hrs.
Site Investigation	1	0.00 E	0.00	2.00 E	2.00
Remove Meter Controller Remove Meter Screen	1	0.00 E 0.00 E	0.00 0.00	1.00 E 0.50 E	1.00 0.50
Install new Meter Screen	1	0.00 E	0.00	1.00 E	1.00
Install new Meter Controller	1	0.00 E	0.00	2.00 E	2.00
Travel Time / Man	2	0.00 E	0.00	2.00 E	4.00
Totals	7		0.00		10.50
Summary					
MATERIAL COSTS DISTRIBUTION					2,400.00
Material Subtotal					2,400.00
Material Tax	(@ 7.000 %)				168.00
Total Material LABOR COSTS					2,568.00
JOURNEYMAN	(5.25 Hrs @ \$64.00)				336.00
FOREMAN	(5.25 Hrs @ \$80.00)				420.00
PROJECT MANAGER @ 15%	(1.58 Hrs @ \$93.00)				146.94
Total Labor GENERAL EXPENSE COSTS					902.94
TRAVEL EXPENSES (per Mile)	(100.00 @ 0.6500)				65.00
FREIGHT	(1.00 @ 50.0000)				50.00
Total General Expenses OVERHEAD & MARKUP					115.00
Overhead	(@ 10.000 %)				358.59
Markup	(@ 5.000 %)				197.23
Total OH & P					555.82
Subtotal	(0.4.000)			_	4,141.76
P & P BOND FEE Final Adjustment	(@ 1.900 %)				78.69 -0.45
Final Amount				_	\$4,220.00



power meter PowerLogic PM5563, 2 ethernet, up to 63th Harmonic, 1,1MB 4DI/2DO 52 alarms, with remote display

METSEPM5563RD

Product availability: Stock - Normally stocked in distribution

Price*: 4,316.40 USD

Main

Range	PowerLogic
Product name	PowerLogic PM5000
Device short name	PM5563
Product or Component Type	Power meter

Complementary	
Power quality analysis	up to the 63rd harmonic
Metering type	Measured neutral current Calculated ground current
Device Application	Gateway Power monitoring WAGES metering Multi-tariff
Type of measurement	Current Voltage Frequency Power factor Energy Active and reactive power
Supply voltage	100300 V DC 90528 V AC 4565 Hz
Network Frequency	50 Hz 60 Hz
Line Rated Current	1 A 5 A
Type of network	1P + N 3P 3P + N
Maximum power consumption in VA	16 VA 480 V
Ride-through time	35 ms 120 V AC typical 129 ms 230 V AC typical 50 ms 125 V DC typical
Display Type	Remote LCD display
Display Resolution	128 x 128 pixels

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Sampling rate

Measurement current

128 samples/cycle

Analogue input type	Voltage (impedance 5 MOhm) Current (impedance <= 0.3 mOhm)
Measurement voltage	20400 V AC 4565 Hz between phase and neutral 20828 V AC 4565 Hz between phases
Frequency measurement range	4565 Hz
Number of inputs	4 digital
Measurement accuracy	Apparent power +/- 0.5 % Frequency +/- 0.05 % Active energy +/- 0.2 % Reactive energy +/- 1 % Active power +/- 0.2 % Voltage +/- 0.1 % Power factor +/- 0.005 Current +/- 0.15 % Reactive power +/- 1 %
Accuracy class	Class 0.2S active energy IEC 62053-22
Number of Outputs	2 digital
Information displayed	Tariff 8)
Communication port protocol	Modbus RTU and ASCII 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires 2500 V JBUS Modbus TCP/IP 10/100 Mbit/s 2500 V Ethernet Modbus TCP/IP daisy chain BACnet IP DNP3 over ethernet
Communication port support	RS485 ETHERNET
Communication gateway	Ethernet/serial
Data recording	Time stamping Data logs Maintenance logs Event logs Alarm logs Min/max of instantaneous values
Memory capacity	1.1 MB
Web services	Diagnostic via predefined web pages Real time viewing of data Web server Alarm notification by e-mail
Ethernet service	SNTP client SNMP-Traps
Connections - terminals	Voltage circuit screw terminal block4 Control circuit screw terminal block2 Current transformer screw terminal block6 RS485 link screw terminal block4 Digital input screw terminal block8 Digital output screw terminal block4 Ethernet network RJ45 connector2
Mounting Mode	Clip-on
Mounting support	DIN rail
Standards	EN 50470-3 EN 50470-1 IEC 62053-22 IEC 60529 UL 61010-1 IEC 62053-24 IEC 61557-12 ANSI C12.20
Product certifications	CE IEC 61010-1 CULus UL 61010-1 BTL
Width	3.78 in (96 mm)
Depth	2.83 in (72 mm)
Height	3.78 in (96 mm)
Net Weight	15.87 oz (450 g)

Environment

Electromagnetic compatibility	Limits for harmonic current emissionsclass A IEC 61000-3-2 Conducted RF disturbanceslevel 3 IEC 61000-4-6 Magnetic field at power frequencylevel 4 IEC 61000-4-8 Conducted and radiated emissionsclass B EN 55022 Limitation of voltage changes, voltage fluctuations and flicker in low-voltage IEC 61000-3-3 Electrostatic discharge 8 kVlevel 4 IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test IEC 61000-4-3 Electrical fast transient/burst immunity testlevel 4 IEC 61000-4-4 Surge immunity testlevel 4 IEC 61000-4-5 Voltage dips and interruptions immunity test IEC 61000-4-11
IP degree of protection	Display IP54 IEC 60529 Rear IP30 IEC 60529
Relative humidity	595 % 122 °F (50 °C) non-condensing
Pollution degree	2
Ambient air temperature for operation	-13158 °F (-2570 °C)
Ambient Air Temperature for Storage	-40185 °F (-4085 °C)
Operating altitude	<= 9842.52 ft (3000 m)

Ordering and shipping details

Category	09777-POWERLOGIC PM5000 HARDWARE
Discount Schedule	PL1
GTIN	3606480761416
Returnability	Yes
Country of origin	IN

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.98 in (15.2 cm)
Package 1 Width	4.84 in (12.3 cm)
Package 1 Length	6.77 in (17.2 cm)
Package 1 Weight	35.13 oz (996.0 g)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

WEEE

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

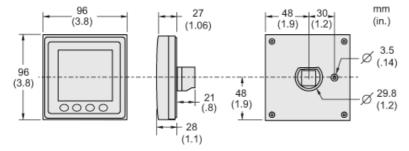
Product data sheet

METSEPM5563RD

Dimensions Drawings

Approximate Dimensions

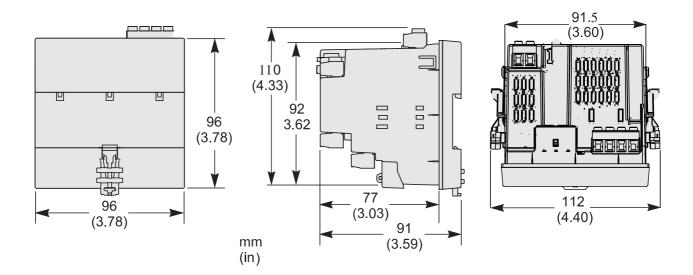
PM5000 Series Remote Display



Life Is On Schneider

Technical Illustration

Dimensions



PM5563

ALL DIMENSIONS ARE APPROXIMATE. REFER TO TECHNICAL DRAWINGS AND DOCUMENTATION FOR COMPLETE INFORMATION.

Recommended replacement(s)

Ron Foertmeyer

From: Jared Bloom <jared.bloom@se.com>
Sent: Tuesday, October 17, 2023 11:58 AM

To: Ron Foertmeyer; Tom Crossey

Subject: RE: SWCD Pump Stations #1 & 2 Electrical Repairs **Attachments:** PowerLogic PM5000 series_METSEPM5563RD.pdf

Ron – the PM800 series is now obsolete.

The direct replacement is the PM5563, p/n METSEPM5563RD.

See attached data sheet.

Plenty in-stock.

Contractor net price : \$2,400

Regards, Jared

Jared Bloom

Senior Sales Executive M 561-662-1508 450 South Orange Ave, Room 384 Square D by Schneider Electric E jared.bloom@se.com Orlando, FL 32801

Internal

From: Ron Foertmeyer <ronf@currentconnections.net>

Sent: Tuesday, October 17, 2023 11:33 AM

To: Tom Crossey <TCrossey@pedwpb.com>; Jared Bloom <jared.bloom@se.com>

Subject: Re: SWCD Pump Stations #1 & 2 Electrical Repairs

[External email: Use caution with links and attachments]



The meter that needs to be replaced at PS1, please forward pricing. It's a rj45 connector Current Connection can install.

Thanks

Ron Foertmeyer Current Connections, Inc. (561) 512-0210 On Oct 5, 2023, at 10:29 AM, Ron Foertmeyer < ronf@currentconnections.net> wrote:

I have that but its PS2 MCC only.

I will get the information next week.

Thanks for your help.

Ron

From: Tom Crossey < TCrossey@PEDWPB.com > Sent: Thursday, October 5, 2023 10:00 AM

To: Ron Foertmeyer < ronf@currentconnections.net >

Subject: FW: SWCD Pump Stations #1 & 2 Electrical Repairs

Ron look at this I don't see a meter on this??

Tom

Tom Crossey

Outside Sales

Peninsular Electric Distributors Inc.

Direct – (561)662-8482 Office - (561)832-1626 Fax - (561)832-2108 1301 Okeechobee Road West Palm Beach, FL 33401

www.pedwpb.com

<image001.png>

SUNSHINE WATER CONTROL DISTRICT

STAFF REPORTS BII



November 1, 2023

Board of Supervisors Sunshine Water Control District 2300 Glades Road, Suite 410W Boca Raton, Florida 33073

RE: SWCD RIGHT-OF-WAY (ROW) PERMIT APPLICATION

Proposed: Coral Springs Townhomes - North & South; Adjacent to SWCD Canal "D"

Permittee: Habitat for Humanity of Broward County - S14/T48S/R41E

CAS PROJECT NO. 15-1826

Dear Board of Supervisors:

We have reviewed a ROW permit application submitted by the Keith Team for the development of a low income residential project adjacent to SWCD Canal "D" located at 3710-3734 Riverside Dr Coral Springs, FI 33065. Canal "D" was in need of work and the burden of this work is procedurally placed on the permittee. However, due to the financial constraints with the project and in cooperation with the City, the SWCD volunteered its services to perform the canal work for the greater goal of serving the East Basin and the project as well. Without this work by the SWCD, this project may not have been realized. Furthermore, the City in its efforts agreed to and has removed the guardrail to give SWCD maintenance access to Canal "D" via the North parcel. We recommend that the SWCD Board of Supervisors issue a Right-of-Way Permit to the applicant, subject to the following Special Conditions to be made part of the Permit:

- 1. All work must be in compliance with the latest SWCD Permit Criteria Manual.
- 2. Permittee will ensure that all necessary Sediment & Erosion Control devices will be utilized at the SWCD right-of-way during construction.
- 3. Trash bond (\$2,500) shall be submitted prior to permit issuance and the Permittee shall repair and replace any SWCD facilities damaged during construction at no cost to the District.
- 4. A copy of Record As-builts and Engineer Certification shall be provided to SWCD upon completion of all work.
- 5. All applicable permits and approvals for Work shall be obtained.
- 6. All disturbed areas are to be restored.
- 7. SWCD shall be notified at least 48 hours prior to construction.

Sincerely,

CRAIG A. SMITH & ASSOCIATES



VP - Stormwater Engineering

Enclosures: Plans

cc via e-mail: SWCD - Cory Selchan, WHA - Jamie Sanchez, Cindy Cerbone, Gianna Denofrio, CAS - Stephen C. Smith, PE

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Pensacola Tallahassee Gainesville Orlanda Orlanda Rockledge Tampa City OF CORAL SPRINGS

RELATIONSHIP BETWEEN NGVD 1929 AND NAVD 1988

DATUM	DIFFERENCE	ELEV.
NGVD 1929	+1.55 FEET	1,55
NAVD 1988		0.00

ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON NAVD 1988 DATUM

LAND DESCRIPTION:

LOTS 1, 2, AND 3, BLOCK "CORAL SPRINGS SUBDIVISION NO. 1" ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 59, PAGE 30, OF THE PUBLIC RECORDED OF BROWARD COUNTY, FLAT HOUSE SAID LANDS LYING IN THE CITY OF CORAL SPRINGS, BROWARD COUNTY, FLAT MO CONTAINING 2293 SOURCE FEET, MORE OR LESS.

PROJECT TEAM

PROPERTY OWNER
HABITAT FOR HUMANITY OF BROWARD, INC.
888 HW 52ND ST,
FORT LAUDERDALE, FL 33309
(954) 395-3030

APPLICANT, CIVIL ENGINEER, & LANDSCAPING KEITH & ASSOCIATES, INC, 301 E ATLANTIC BLVD, POMPANO BEACH, FL 33060 (954) 788-3400

ARCHITECT FSMY ARCHITECTS + PLANNERS 888 S ANDREWS AVE. SUITE 300 FORT LAUDERDALE FL 33316 (954) 794-6575

THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION, THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



HABITAT FOR HUMANITY NORTH

RIVERSIDE DRIVE CORAL SPRINGS, FLORIDA 33065



LOCATION MAP SECTION 14, TOWNSHIP 48 S, RANGE 41 E FOLIO # 484114180010

INDEX OF SHEETS	
SHEET No.	SHEET TITLE
GI-000	COVER SHEET
GI-001	GENERAL NOTES
GI-002	CONSTRUCTION SPECIFICATIONS
GI-003	SPECIFIC CONSTRUCTION NOTES & LEGEND
CD-102	DEMOLITION PLAN
CG-102	PRELIMINARY EROSION CONTROL PLAN
CG-501	EROSION CONTROL DETAILS
CP-102	PRELIMINARY PAVING, GRADING, AND DRAINAGE PLAN
CP-302	PAVING, GRADING, AND DRAINAGE SECTIONS
CP-501 - CP-502	PAVING, GRADING, AND DRAINAGE DETAILS

PREPARED FOR: HABITAT FOR HUMANITY OF BROWARD



THOMAS F, DONAHUE, P. FLORIDA REG, NO, 6052

PROJECT No. 10431.03 OCTOBER 2023

SPECIFIC SITE NOTES

- 1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.
- 1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.
- 1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

2. APPLICABLE CODES

- 2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.
- 2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.
- 2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.
- 2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.
- 2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.
- 2.6. TRENCH SAFETY ACT
- 2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).
- 2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P.
- 2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.
- 2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.
- CONSTRUCTION NOTES:
- 3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.
- 3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR
- 3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.
- 3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.
- 3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 520-001
- 3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.
- 3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.
- 3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.
- 3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.
- 3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.
- 3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

- 3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.
- 3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.
- 3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.
- 3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.
- 3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.
- 3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.
- 4. PRECONSTRUCTION RESPONSIBILITIES
- 4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.
- 4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.
- 4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.
- 4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.
- 4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: HTTP://FLORIDADEPT.GOV/WATER/STORMWATER.

- 4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO: • DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS,
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV,
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL) 4.6.1 CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE,
- WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES. 4.6.2 PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS. AND

SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S

- PLANS OR SPECIFICATIONS. 4.6.3 INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED
- FOR PRECAST STRUCTURES. 4.7 CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH FDOT AND COUNTY REQUIREMENTS, AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- 5. INSPECTIONS / TESTING:

GRATES/TOPS, YARD DRAINS.

- 5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:
- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT
- SIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTING
- ELECTRICAL AND COMMUNICATION LINES • UTILITY CONDUITS
- IRRIGATION
- 5.2 THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL
- 5.3 TESTING ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- 6. TEMPORARY FACILITIES
- 6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.
- 6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.
- 6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.
- 6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.
- 6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
- 7. PROJECT PROGRESS AND CLOSEOUT
- 7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.
- 7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- 7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.
- 7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.
- 8. PROJECT RECORD DOCUMENTS:
- 8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO ENGINEER FOR PROJECT RECORD.
- 8.2. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING

- ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.
- 8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.
- 8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL
- INCLUDE THE FOLLOWING INFORMATION: 8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.
- 8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.
- 8.4.3. ALL CONNECTIONS TO EXISTING LINES.
- 8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.
- 8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING

- BETWEEN STRUCTURES, AND SLOPES. 8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS
- SHALL BE LOCATED HORIZONTALLY AND VERTICALLY. 8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
- 8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.
- 8.6.2. THE SIZE OF THE LINES.
- 8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.
- 8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:
- 8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.
- 8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.
- 8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.
- 8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.
- 8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN
- 8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.
- 8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.
- 8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. EIGHT (8) SETS OF BLUE OR BLACK LINE DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.
- 8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.
- 9. UTILITY NOTES
- 9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.
- 9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.
- 9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE
- 9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE811.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
- •PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
- 9.5 FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR • ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS

- COUNTY TRANSIT AUTHORITY
- SCHOOL BOARD TRANSPORTATION AUTHORITY
- JURISDICTIONAL FIRE DEPARTMENT DISPATCH • JURISDICTIONAL POLICE DEPARTMENT(S)
- 9.6 THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS,
- 9.7 LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.

PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.

- 9.8 THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.
- 10. SIGNING AND PAVEMENT MARKINGS
- 10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.
- 10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.
- 10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.
- 10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.
- 10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH FDOT STANDARD INDEX 706-001 AND / OR AS SHOWN IN THE PLANS.
- 10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT
- 10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE
- 10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT
- DESIGN STANDARD. 10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS
- THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED. 10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.
- 10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.
- 10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

THE LATEST FDOT STANDARD SPECIFICATIONS.

- MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
- CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISIMS,

EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL

BE COMPRISED OF RETROREFLECTIVE FLUORESCENT

• MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF

- YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS. • CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE
- XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS). 10.13 PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATERIAL OF THE FINISHED SIGN PANEL INCLUDING THE BACKGROUND, LEGEND OR BORDER.
- 10.14 ENSURE THE OUTSIDE CORNER OF SIGN IS CONCENTRIC WITH BORDER. ENSURE WHITE BORDERS ARE MOUNTED PARALLEL TO THE EDGE OF THE SIGN. ENSURE BLACK BORDERS ARE RECESSED FROM THE EDGE OF THE SIGN.
- 10.15 LAYOUT PERMANENT FINAL STRIPING THAT LEAVES NO VISIBLE MARKS AT TIME OF FINAL ACCEPTANCE.

301 East Atlantic Blvd. Pompano

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PH: (954) 788-3400 Florida Certificate of Authorization: 7928

Licensed Business Number: 6860 REVISIONS

DESCRIPTION DATE

FOR CONSTRUCTION RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM **ALL AGENCIES HAVING JURISDICTION OVER** THE PROJECT WILL FALL SOLELY UPON THE

ISSUE DATE: 10/30/2023 MC/BI/BA |DESIGNED BY: DRAWN BY: BI/BA TD/MC CHECKED BY: BID-CONTRACT: nd SF DON sealed by Thomas F. Donahue. P.E. on the date No. 60529 adjacent to the STATE OF are not considered on the sinned and sealed on

> THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM)

and the signature must be verified on any

CLIENT

electronic copies.



PROJECT

CORAL SPRINGS **TOWNHOMES** NORTH AND SOUTH

SHEET TITLE

PROJEC1

NUMBER

GENERAL NOTES

GI-001 NUMBER

10431.03

AUTHORITY.

20.GENERAL

- 20.1. IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT. SUCH IMPROVEMENTS MAY GENERALLY INCLUDE, BUT NOT TO BE LIMITED TO, CLEARING, GRADING, PAVING, REMOVAL OF EXISTING PAVEMENT STORM DRAINAGE, WATER LINES AND SANITARY SEWERS
- 20.2. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IF WITHIN A PARTICULAR SECTION, ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.
- 20.3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF A PAVING AND DRAINAGE SYSTEM AS SHOWN ON THE PLANS, SPECIFIED HEREIN, OR BOTH. IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALL NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.
- 20.4. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.

20.5. GUARANTEE - ALL MATERIALS AND EQUIPMENT TO BE FURNISHED

- AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (L) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR
- 21.1. ALL AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.
- 21.2. NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE, UNLESS NOTED IN PLANS. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER.
- 21.3. FILL MATERIAL SHALL BE CLASSIFIED AS A-L, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
- 21.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- 21.5. ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN EARLIER PHASE OF WORK, PRIOR TO THAT TEST OR INSPECTION PASSING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND
- CONCRETE CYLINDERS, ETC. 21.6. WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10) TEN FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE. ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR

LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS,

- 21.7. WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN SHALL BE REMOVED TO FULL DEPTH FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND REPLACED WITH GRANULAR MATERIALS.
- 21.8. ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPACTION AND PAVEMENT CONSTRUCTION.
- 21.9. GROUND ADJACENT TO ROADWAY/PAVEMENT HAVING RUNOFF SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
- 21.10.SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION FOR NON PAVED AREAS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.
- 21.11. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES

- INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.
- 21.12. A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED OR SEEDED AND MULCHED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE INDICATED ON THE PLANS.
- 21.13.SOD SHALL BE ST. AUGUSTINE UNLESS OTHERWISE INDICATED ON THE PLANS, AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.

22.DRAINAGE

- 22.1. INLETS ALL INLETS SHALL BE THE TYPE DESIGNATED ON THE PLANS. AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
- 22.2. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:
- RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, SECTION 941 OF THE STANDARD SPECIFICATIONS.
- CMP = CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196. CMP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE, (SMOOTH
- SCP = SLOTTED CONCRETE PIPE, SECTIONS 941 AND 942, OF THE STANDARD SPECIFICATIONS.
- PVC = POLYVINYL CHLORIDE PIPE.

LINED) ASTM DESIGNATION M-196.

- PCMP = PERFORATED CMP, SECTION 945, OF THE STANDARD
- SPECIFICATIONS CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) (12 INCHES TO 60 INCHES), SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION
- 22.3. PIPE BACKFILL REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE SECTION 125-8, OF THE STANDARD SPECIFICATIONS. PIPELINE BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO T-99 SPECIFICATIONS)
- 22.4. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE LENGTH MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.
- 22.5. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE INNER WALLS OF STRUCTURES.
- 22.6. FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE STANDARD SPECIFICATIONS. 23.ASPHALT PAVING
- 23.1. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- 23.2. INTERNAL ASPHALT PAVING CONSTRUCTED ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 12" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 40 UNLESS OTHERWISE
- 23.3. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 327, 330, 334, 336, 337, 337, 338, 339 AND 341 OF THE STANDARD SPECIFICATIONS.
- 23.4. LIMEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.
- 23.5. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS. IF, THROUGH FIELD TESTS, THE CONTRACTOR CAN DEMONSTRATE THAT THE COMPACTION EQUIPMENT CAN ACHIEVE DENSITY FOR THE FULL DEPTH OF A THICKER LIFT, AND IF APPROVED BY THE ENGINEER, THE BASE MAY BE CONSTRUCTED IN SUCCESSIVE COURSES OF NOT MORE THAN 8 INCHES (200 MM) COMPACTED THICKNESS.
- 23.6. ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON PLANS. 24.CONCRETE CONSTRUCTION
- 24.1. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 310. CONCRETE SIDEWALK SHALL BE 4" THICK, UNLESS OTHERWISE NOT AND CONSTRUCTED ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75', UNLESS OTHERWISE NOTED ON PLANS. CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6" THICK, UNLESS OTHERWISE NOTED ON PLANS.
- 24.2. SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.
- 24.3. CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.
- SECTION 30 WATER DISTRIBUTION AND SANITARY SEWER FORCE MAINS. 30. MATERIALS:
- NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.

- 30.1. ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
- 30.2. DUCTILE IRON PIPE FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.
- 30.3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND- LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE INTERIOR CERAMIC EPOXY LINED AND EXTERIOR COATED WITH THE MANUFACTURER'S COATING SYSTEM (PROTECTO 401 CERAMIC EPOXY WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS AND AN OUTSIDE COATING OF EITHER COAL TAR EPOXY OR ASPHALT). CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.
- 30.4. ALL PIPE & FITTINGS ON THE LIFT STATION SITES SHALL BE DUCTILE IRON CONFORMING TO THE SAME SPECIFICATIONS AS ABOVE FOR SEWAGE FORCE MAINS EXCEPT THAT FLANGED DUCTILE IRON PIPE & FITTINGS SHALL BE USED INSIDE VALVE PITS AND WET WELLS. FLANGED PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA C115/A21.15 LATEST REVISION AND ANSI/AWWA C110/A21.10 LATEST REVISION. THE FOLLOWING THICKNESS CLASSES SHALL BE ADHERED TO: 4" - 12" - CLASS 52, 14" & LARGER - CLASS
- 30.5. PVC PRESSURE PIPE FOR SIZES 4" THROUGH 12" AND SHALL CONFORM TO ANSI/AWWA STANDARD C900 LATEST REVISION. PVC PRESSURE PIPE SHALL BE MADE FROM CLASS 12454-A OR CLASS 12454-B VIRGIN MATERIAL AND CONFORM WITH THE OUTSIDE DIAMETER OF CAST IRON PIPE WITH A MINIMUM WALL THICKNESS OF DR SERIES 18. ULTRA VIOLET DEGRADATION OR SUN BLEACHED PIPE WILL BE CAUSE FOR REJECTION. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES. FORCE MAIN SHALL BE IMPREGNATED WITH GREEN PIGMENT. REUSE MAIN SHALL BE IMPREGNATED WITH PURPLE PIGMENT.
- 30.6. DUCTILE IRON FITTINGS FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. WATER MAIN FITTING SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.
- 30.7. CAST IRON AND DUCTILE IRON FITTINGS FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE COATED IN ACCORDANCE WITH THE REQUIREMENTS OF DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS.
- CONFORM TO ANSI/AWWA STANDARD C111/A21.11 LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET COMPRESSION-TYPE. SPECIAL FITTINGS AND JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER. 30.9. JOINTS FOR PVC PRESSURE PIPE SHALL BE BELL AND SPIGOT PUSH-ON

30.8. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL

- RUBBER GASKET TYPE ONLY. NO SOLVENT WELD OR THREADED JOINTS WILL BE PERMITTED.
- 30.10. WATER DISTRIBUTION SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW:
- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG • LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)
- 30.11. SEWAGE FORCE MAIN SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW
- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET) 30.12. WATER DISTRIBUTION VALVES SHALL BE GATE VALVES, IRON BODY,
- FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509 LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.
- 30.12.1. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2361/2362, AMERICAN 250 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C500 LATEST REVISION OR APPROVED EQUAL.
- 30.12.2. TAPPING VALVES SHALL BE MUELLER T-2361/2362 OR APPROVED EQUAL.
- 30.12.3. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS OR APPROVED EQUAL. 30.13. TAPPING SLEEVES SHALL BE MUELLER H615, CLOW F- 2505 OR

- 30.15.RETAINER GLANDS FOR DIP SHALL CONFORM TO ANSI/AWWA C111/A21.11 LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.

30.14. VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL

PAINTED BLUE WITH THE DESIGNATION "WATER".

- 30.16.DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.
- 30.17.FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUAL. PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE. ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE. RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502 LATEST REVISION. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA #291 OR PER AGENCY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE ROADWAY LANE.
- 30.18. SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED, ECCENTRIC TYPE WITH RESILIENT FACED PLUGS. PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA. THE BODY SHALL BE OF SEMI-STEEL (ASTM A-126 C1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFLON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.
- 30.19.PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.
- 30.20.PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED.
- 30.21.SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH ANSI/AWWA C 508 LATEST REVISION SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2" THROUGH 24" NPS, UNLESS OTHERWISE INDICATED, WITH FULL-OPENING PASSAGES, DESIGNED FOR A WATER-WORKING PRESSURE OF 150 PSI THEY SHALL HAVE A FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.
- 30.22.HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO AWWA C906 STANDARD, LATEST REVISION, PIPES SHALL BE COLOR-CODED BLUE, MINIMUM 40 FEET STANDARD LENGTHS. 31.SERVICE CONNECTION:
- 31.1. SERVICE SADDLES SHALL BE FUSION BONDED PLASTIC COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE.
- 31.2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING NUT.
- 31.3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP, CATALOG # 1100 OR APPROVED EQUAL.
- 31.4. CURB STOPS SHALL BE FORD V63-44W-X" LATEST REVISION OR APPROVED EQUAL.
- 31.5. METER STOPS SHALL BE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE FV63-777W" LATEST REVISION WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES. AS MANUFACTURED BY FORD OR APPROVED EQUAL.
- 32. INSTALLATION:
- 32.1. WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE DIP
- 32.2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-XX LATEST REVISION STANDARD.
- 32.3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/ C600-XX LATEST REVISION.
- 32.4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND 30" COVER FOR DIP.
- 32.5. DETECTOR TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER AND SEWER LINES. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES, BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST.
- 32.6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.
- 32.7. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- 32.8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER", AS APPLICABLE, CAST IN THE COVER. U.S. FOUNDRY OR APPROVED EQUAL 33.TESTING:
- 33.1. BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. COPIES OF PASSING BACTERIOLOGICAL RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPROVED BY, THE ENGINEER, UTILITY OWNER, AND HEALTH DEPARTMENT. HYDROSTATIC TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSI/AWWA C600-05 (HYDROSTATIC

- TEST. THE ALLOWABLE LEAKAGE DURING THE PRESSURE TEST SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE
- L = (SD(P)1/2)/148,000.
- IN WHICH L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR. S EQUALS LENGTH OF PIPE (LINEAR FEET), D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE AVERAGE TEST PRESSURE (POUNDS PER SQUARE INCH GAUGE). MAXIMUM LENGTH OF TEST PIPE SECTION SHOULD BE 2000 FEET. THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE
- WITH THE ANSI/AWWA C651-05 (WATER MAIN BACTERIOLOGICAL TESTS). 33.2. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF
- THE UTILITY OWNER AND THE ENGINEER OF RECORD. 33.3. FOR WATER DISTRIBUTION PIPES, SAMPLING POINTS SHALL BE PROVIDED
- BY THE CONTRACTOR AT THE LOCATIONS SHOWN ON THE PLANS. 33.4. FOR WATER DISTRIBUTION PIPES, DISINFECTION AND BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C651-14 (WATER MAIN BACTERIOLOGICAL TESTS). MAXIMUM DISTANCE BETWEEN SAMPLING POINTS
- TRANSMISSION MAINS: EVERY 1200 FEET
- BRANCH MAINS: EVERY 1000 FEET

SHALL BE AS FOLLOWS:

- ISOLATED MAINS < 1000 FEET: 2 SAMPLE POINTS
- ISOLATED MAINS > 1000 FEET: 3 SAMPLE POINTS

SECTION 40 - GRAVITY SANITARY SEWER COLLECTION SYSTEM 40.GENERAL

- 40.1. MANHOLE, VALVE BOX, METER BOX AND OTHER STRUCTURE RIM ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE ADJUSTED TO CONFORM TO PLAN GRADES PROPOSED IN THESE PLANS. IF NO OTHER INDIVIDUAL COST ITEM IS INCLUDED IN THE CONTRACT SCHEDULE FOR A PARTICULAR STRUCTURE ADJUSTMENT.
- 40.2. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.

41. MATERIALS:

- NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.
- 41.1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
- 41.2. DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA C151/A21.51-XX LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH WALL THICKNESS CLASS 51 FOR 8" AND ABOVE, CLASS 52 FOR 4" AND 6", UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DUCTILE IRON PIPE SHALL BE EPOXY LINED OR COATED WITH THE MANUFACTURER'S COATING SYSTEM AS APPROVED BY THE ENGINEER OF RECORD AND THE LOCAL MUNICIPALITY OR UTILITY OWNER. IN EITHER CASE, THE ENGINEER'S REVIEW AND APPROVAL IS REQUIRED FOR EITHER ALTERNATIVE PRIOR TO CONSTRUCTION. CEMENT MORTARED LININGS ARE
- NOT APPROPRIATE FOR THIS APPLICATION. 41.3. ALL DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10-XX LATEST REVISION. ALL FITTINGS AND ACCESSORIES SHALL BE EPOXY LINED AND AS MANUFACTURED OR SUPPLIED BY THE PIPE
- MANUFACTURER OR APPROVED EQUAL. 41.4. MANHOLES SHALL BE PRECAST PER ASTM C 478 AND IN ACCORDANCE
- WITH THE PLANS AND SPECIFICATIONS. 41.5. MANHOLES ARE TO BE SEALED WITH TYPE II SULPHATE RESISTANT
- CEMENT OR APPROVED EQUAL NO MOLDING PLASTER. 41.6. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A21.11-XX LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET
- COMPRESSION- TYPE. 41.7. PVC CLEAN-OUTS TO HAVE SCREW TYPE ACCESS PLUG. LONG RADIUS WYE CONNECTIONS AND FITTINGS SHALL BE USED IN ORDER TO ACCESS CLEAN-OUT OPERATIONS.
- 41.8. CLEANOUTS SHALL BE INSTALLED AT ALL SEWER SERVICES EXCEEDING 75' IN LENGTH (EVERY 75') WITH A CLEAN OUT AT THE PROPERTY LINE. EASEMENT LINE, OR 5' FROM A BUILDING. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE BUILDING CLEANOUT (5' FROM THE BUILDING) AND ELEVATION OF THE END OF THE SEWER SERVICE WITH THE BUILDING PLUMBING CONTRACTOR. CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LATERAL IN WHICH THEY ARE INSTALLED.
- 42. INSTALLATION:
- 42.1. PVC SEWER PIPE SHALL BE LAID IN ACCORDANCE WITH ASTM D 2321 AND THE UNI-BELL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR
- THE INSTALLATION OF PVC SEWER PIPE." 42.2. DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C-600-XX LATEST REVISION.
- 42.3. PIPE TO MANHOLE CONNECTION TO BE FERNCO NEOPRENE BOOT COUPLINGS WITH STAINLESS STEEL ACCESSORIES OR APPROVED EQUAL. 42.4. MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
- 42.5. ALL OPENINGS AND JOINTS SHALL BE SEALED WATERTIGHT. 42.6. TWO COATS OF KOPPERS 300-M, FIRST RED, SECOND ONE BLACK, SHALL
- BE APPLIED TO THE INSIDE OF ALL MANHOLES AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS (16 MILS PER COAT). COATING AS REQUIRED BY UTILITY OWNER OR ENGINEER SHALL BE APPLIED TO THE OUTSIDE OF THE MANHOLE. THE INTERIOR COATS SHALL BE APPLIED AFTER SEWER LAMPING OF LINES. AFTER THE APPLICATION OF EACH COAT, THE UTILITY OWNER AND ENGINEER SHALL INSPECT THE MANHOLES. THE INSPECTION SHALL BE SCHEDULED A MINIMUM OF 48 HOURS PRIOR TO
- 43.TESTING: TESTING OF GRAVITY SEWER MAINS AND LATERALS SHALL BE IN ACCORDANCE WITH THE UTILITY OWNER'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS LATEST REVISION.

PER MILE PER DAY FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL

- 43.1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
- 43.2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER. 43.3. THE ALLOWABLE LIMITS OF SEWER PIPE LEAKAGE FOR GRAVITY SEWER MAINS SHALL NOT EXCEED 100 GALLONS PER INCH OF INSIDE PIPE DIAMETER
- 43.4. THE INSTALLED SEWERS MAY REQUIRE VIDEO INSPECTIONS.

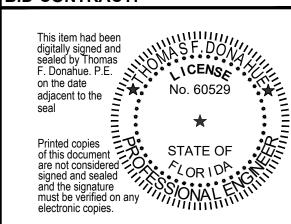
301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

Florida Certificate of Authorization: 7928 Licensed Business Number: 6860

REVISIONS DATE DESCRIPTION

FOR CONSTRUCTION **RESPONSIBILITY FOR THE USE OF THESE** PLANS PRIOR TO OBTAINING PERMITS FROM **ALL AGENCIES HAVING JURISDICTION OVER** THE PROJECT WILL FALL SOLELY UPON THE

ISSUE DATE: 10/30/2023 MC/BI/BA **DESIGNED BY: IDRAWN BY:** BI/BA **CHECKED BY:** TD/MC BID-CONTRACT:



THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM)

CLIENT



PROJECT

CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

CONSTRUCTION **SPECIFICATIONS**

GI-002 NUMBER

APPROVED EQUAL.

TEST). THE PRESSURE TEST SHALL NOT VARY MORE THAN 5 PSI DURING THE

BE ALLOWED.

NUMBER

10431.03

GENERAL SYMBOLS

SYMBOL	DESCRIPTION	
A CP-301	PROPOSED SECTION MARKER INDICATING THE SECTION LETTER AND THE SHEET ON WHICH THE SECTION VIEW APPEARS.	
C-05	DETAIL REFERENCE CALL OUT INDICATING THE DETAIL NUMBER AND THE SHEET ON WHICH THE DETAIL VIEW APPEARS.	
	REVISION TRIANGLE NUMBER	
	MISC BREAK LINES	
PIC#	PHOTO LOCATION AND CORRESPONDING PICTURE NUMBER.	
N: 623025.4322 E: 850262.1786	COORDINATE VALUES SHOWN ON PROPOSED IMPROVEMENTS ARE RELATIVE TO THE COORDINATE VALUES INDICATED ON THE RIGHT-OF-WAY, PROPERTY CORNERS OR REFERENCE MONUMENT	

GEN SITE & PMS

<u> </u>	
SYMBOL	DESCRIPTION
→ ♣ ∱	PAVEMENT MARKING ARROWS
	STOP BAR
Ġ	ADA PARKING
•	CONCRETE CAR STOP
	BICYCLE
<u></u>	BICYCLE RACK
	AUTOMOBILE
	POST MOUNTED SIGNS 1,2, DOUBLE POST & 4 WAY
33	PARKING SPACE NUMBER
B 4 P F M	BASELINE, CENTER, PROPERTY, FLOW & MONUMENT LINE
>	BUILDING ACCESS (ADA) / (NON-ADA)

PAVING & GRADING

SYMBOL		DESCRIPTION
0.04%	0.04%	FLOW DIRECTIONAL ARROW
6"		ELEVATION CHANGE
5.00	5.00	MAJOR / MINOR CONTOUR ELEVATION
13.56		GRADE ELEVATION
13.56		TOP OF CURB / PAVEMENT ELEVATION
MEG		MATCH EXISTING GRADE
		SLOPE BANK
A-1	24'	DRIVEWAY TURNOUT IDENTIFICATION (FDOT INDEX 522-003) W/ DRIVE WIDTH
CR-?)	SIDEWALK CURB RAMP (PER FDOT INDEX 522-002)
	\	SEAWALL

LITH ITY DIDEC

UTILITY PIPES			
SYMBOL	DESCRIPTION		
H P P P P	PIPE FITTINGS: TEE, 90, 45, 22.5, 11.2, CAP,		
	CAP W/FVO, REDUCER, VERTICAL, PLUG		
	VALVES: GATE, BUTTERFLY, DOUBLE BTRFLY,		
	BFP, DDCV, VACUUM BREAKER		
MBO ABO ARV ARV •	MAN/AUTO BLOWOFF, ARV, PIV, FLUSH VLV, CORP STOP		
SP# HYD FDC WW	SAMPLE PNT, HYDRANT, FDC, WATER WELL		
▶ (TAPPING SADDLE		
SD -	EXFILTRATION TRENCH		
	PIPE CASING		
V	VENT PIPE BOX		
C-X 22	UTILITY CROSSING		

HATCH PATTERNS

SYM	DESCRIPTION	SYM	DESCRIPTION
4 4 4	CONCRETE AREA		BRICK PAVERS
+ + + + + + + + + + + + + + + + + + + +	JOGGING PATH	$\langle \rangle \langle \rangle$	SOIL TRACKING PREVENTION DEVICE
	PAVEMENT AREA		SAND (DETAIL / ELEVATION)
	BUILDING HATCH		EARTH (DETAIL / ELEVATION)
	MILLING AND RESURFACING		GRAVEL (DETAIL / ELEVATION)
00000	DETECTABLE WARNING PER FLORIDA CODE	+ + + + + +	GRASS AREA
	DEMOLITION AREA		ADA STRIPING

UTILITY STRUCTURES

	UTILIT	1 STRUCTURES			
SYMBOL		DESCRIPTION			
CB	FDOT C,D,E,F,G & FABRIC CATCH BASIN				
(CB) (MH) (SS)	NON-FDOT ROUND CB'S & MANHOLES, MDC STRUCTURE				
	FDOT CURB	INLETS TYPE1-TYPE10			
	TRENCH DRA	AIN			
	PIPE CULVER	RT - MITERED END SECTION			
	STRAIGHT EI	NDWALL			
PS#	PUMP STATION	ON LOCATION AND NUMBER			
	GREASE TRA	AP SINGLE AND DOUBLE			
0 0	SEPTIC TANK	<			
	SEPTIC DRAIN FIELD				
	DRAINAGE WELL, DRAIN C.B., CONTROL STRUCTURE				
MW	MONITORING WELL				
WELL	WATER WELL				
M	METER BOX WATER AND IRRIGATION				
○YD ○DD □DD	YARD DRAIN / 9" DECK DRAIN ROUND & SQUARE				
oco oco	CLEAN OUT 6	6", 4" & BOX			
22	STORM STRI	UCTURE TABLE REFERENCE NUMBER			
SEWER STR		JCTURE TABLE REFERENCE NU	MBER		
CONST. 4' Ø MAS RIM EL. = 10.00 (N) INV. EL. = 4.00 - XX" DIP (E) INV. EL. = 4.00 - XX" DIP (S) INV. EL. = 4.00 - XX" DIP (W) INV. EL. = 4.00 - XX" DIP (W) INV. EL. = 4.00 - XX" DIP (XX) CONST. 4' Ø CB RIM EL. = 10.50		SEWER STRUCTURE CALLOUT (SHOWN AS A CIRCLE CIRCUMSCRIBING THE STRUCTURE NUMBER.) STORM STRUCTURE	INDICATES STRUCTURE NUMBER, STATION & OFFSET, STRUCTURE SIZE & TYPE, RIM/GRATE ELEVATION, PIPE INVERT ELEVATIONS & DIRECTION, PIPE SIZE & MATERIAL AS		
(N) INV. EL. = 4.50 - XX" (E) INV. EL. = 4.50 - XX" (S) INV. EL. = 4.50 - XX" (W) INV. EL. = 4.50 - XX"	HDPE HDPE	CALLOUT (SHOWN AS A HEXAGON CIRCUMSCRIBING THE STRUCTURE NUMBER.)	WELL AS ANY SPECIAL NOTES.		
		. IN IE TY (DEC			

LINE TYPES

PROPOSED UTILITIES			PAVEM	IENT MARKING
w	WATER LINE		STRIPE SKIP 2-4	
SAN	— SAN — SANITARY SEWER		- STRIPE SKIP 3-9	
FM	FORCE MAIN	_		STRIPE SKIP 6-10
LFM	LOW PRESSURE FM	STRIPE SKIP 10-30		STRIPE SKIP 10-30
SD	STORM DRAIN		STRIPE SKIP 10-10-20	
PSD	PRESSURE STORM		STRIPE SKIP 2-2-2	
IRR	IRRIGATION		051	VIEDAL OITE
RAW	RAW WATER	GENERAL SITE		
RCW	RECLAIMED WATER	-/-/-/-/-/-/-/-/-	DEMOLI	TION
G	GAS LINE	-11-11-11-	TURBIDI	TY BARRIER
			PARKING	STRIPING (SINGLE)
ТОРО		—— BUILDING SETBACK		
	REAKLINE		FIRE TRU	JCK PATH
MA	MAJOR CONTOUR		SIGHT TI	RIANGLE
MI	MINOR CONTOUR		BUILDING	G FOOTPRINT
TOP OF BANK			VEHICLE	OVERHANG
тс	DE OF SLOPE	0		CONSTRUCTION LIMITS
ED	OGE OF WATER	SF —		SILT FENCE SUPER SILT FENCE
	ENTERLINE OF SWALE	SSF		PARKING STRIPING (DOUBLE)
				PARTITIO OTTAL ING (DOODLE)

DESCRIPTION	ABBREVIATION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADDROV	ADDROVIMATE
APPROX.	ASPHALT CONCRETE
	ASPHALT CONTENT CORPUGATED METAL
ACCM PIPE	ASPHALT COATED CORRUGATED METAL
BIT.	BITUMINOUS
BC	BACK OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR. CAP	BRIDGE CORRUGATED ALUMINUM PIPE
CBCI	CATCH BASIN WITH CURB INLET
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE MASONDY
CCM	CEMENT CONCRETE MASONRY
CEM	CHIRD IN ET
CIP	CAST IDON DIDE
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CMD	CORRUGATED METAL PIDE
CMP	COUNTY
CONC	CONCRETE
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DDCV	DOUBLE DETECTOR CHECK VALVE DOUBLE DETECTOR CHECK VALVE
DDCVA	ASSEMBLY
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EMD	ENAD ANUCNATAIT
EMB	EMBANKMENT EDGE OF BAYEMENT
EOP	EDGE OF PAVEMENT
EOP EXIST (OR EX)	EDGE OF PAVEMENT EXISTING
EOP EXIST (OR EX) EXC	EDGE OF PAVEMENT EXISTING EXCAVATION
EOP EXIST (OR EX) EXC F&C	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER
EOP EXIST (OR EX) EXC F&C F&G	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE
EOP EXIST (OR EX) EXC F&C F&G FDC	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION
EOP EXIST (OR EX) EXC F&C F&G FDC FDN.	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRAV GRD GV HDPE HDW HMA	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRAV GRD GV HDPE HDW HMA HOR	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT
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EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRAV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRAV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB MEG	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX MATCH EXISTING GRADE
EOP EXIST (OR EX) EXC F&C F&G FDC FDN. FH FLDSTN GAR GD GI GIP GRAN GRAV GRAV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB	EDGE OF PAVEMENT EXISTING EXCAVATION FRAME AND COVER FRAME AND GRATE FIRE DEPARTMENT CONNECTION FOUNDATION FIRE HYDRANT FIELDSTONE GARAGE GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX

NOT IN CONTRACT

DESCRIPTION	ABBREVIATION
NO.	NO. NUMBER
O/S or OFF	O/S or OFF OFFSET
PB	PB PLAT BOOK
PC	PC POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	
	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
RSGV	RESILIENT SEAT GATE VALVE
RT	RIGHT
R/W	RIGHT OF WAY
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SW	SIDEWALK
Т	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TSV	TAPPING SLEEVE AND VALVE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

LINE WEIGHTS

SHADED LINES & TEXT DENOTE EXISTING EQUIPMENT AND STRUCTURES.

NON-SHADED DASHED LINES & TEXT **FUTURE** DENOTE FUTURE EQUIPMENT, STRUCTURES AND WORK.

NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK. PROPOSED / CONSTRUCT

NOTE: THIS IS A STANDARD LEGEND SHEET. NOT ALL ITEMS ARE PERTINENT TO THIS SET OF DRAWINGS

301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400 Florida Certificate of Authorization: 7928 Licensed Business Number: 6860 **REVISIONS** DATE **DESCRIPTION**

FOR CONSTRUCTION RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

ISSUE DATE: 10/30/2023 MC/BI/BA **DESIGNED BY:** DRAWN BY: BI/BA TD/MC CHECKED BY: BID-CONTRACT:

This item had been digitally signed and sealed by Thomas F. Donahue. P.E. on the date adjacent to the adjacent to the Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM)

CLIENT



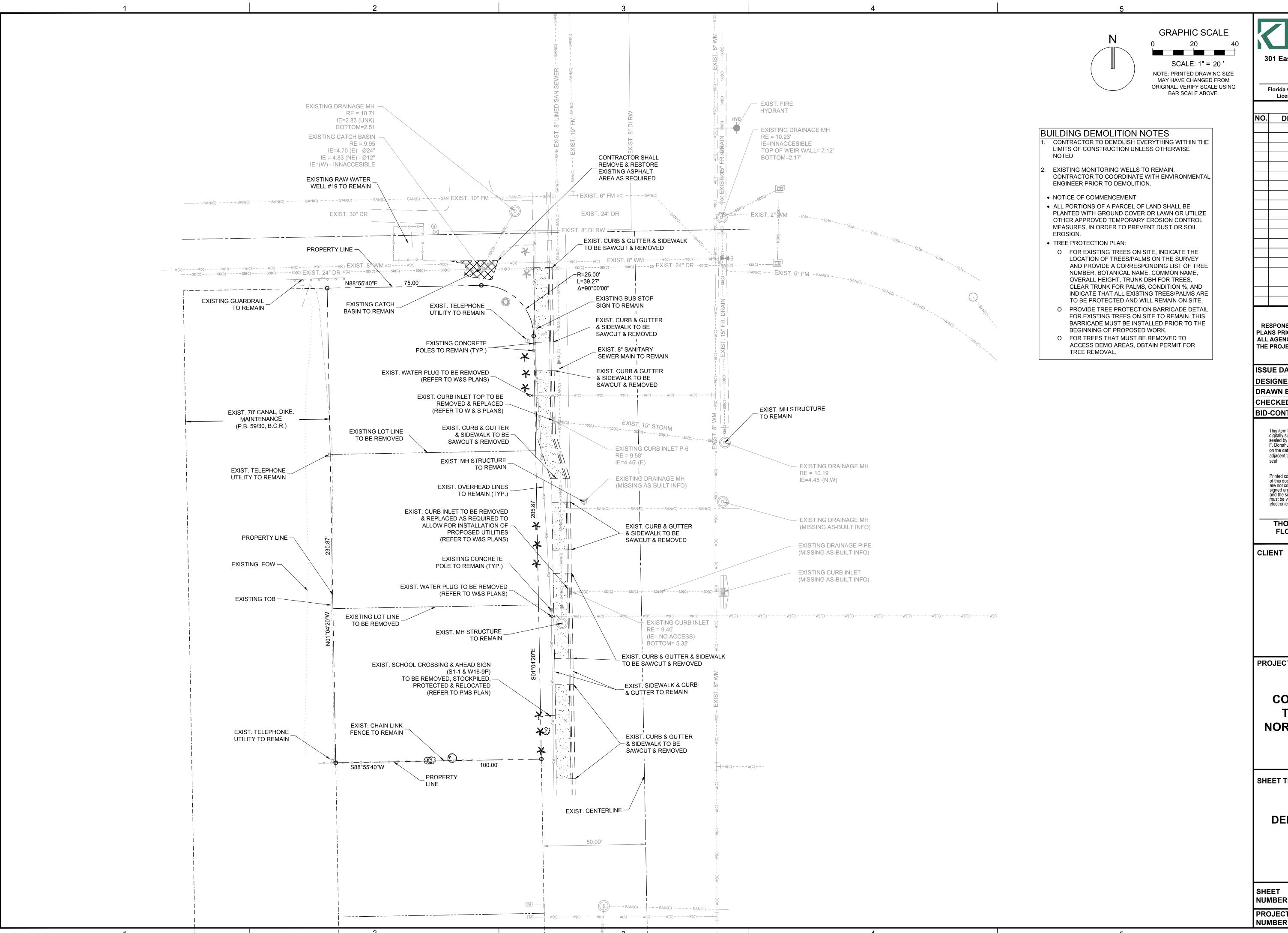
PROJECT

CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

LEGEND & **ABREVIATIONS**

GI-003 NUMBER PROJECT 10431.03 NUMBER



301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

Florida Certificate of Authorization: 7928 Licensed Business Number: 6860

REVISIONS DESCRIPTION

DATE

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ISSUE DATE: 10/30/2023 MC/BI/BA **DESIGNED BY:** DRAWN BY: BI/BA TD/MC CHECKED BY: BID-CONTRACT:

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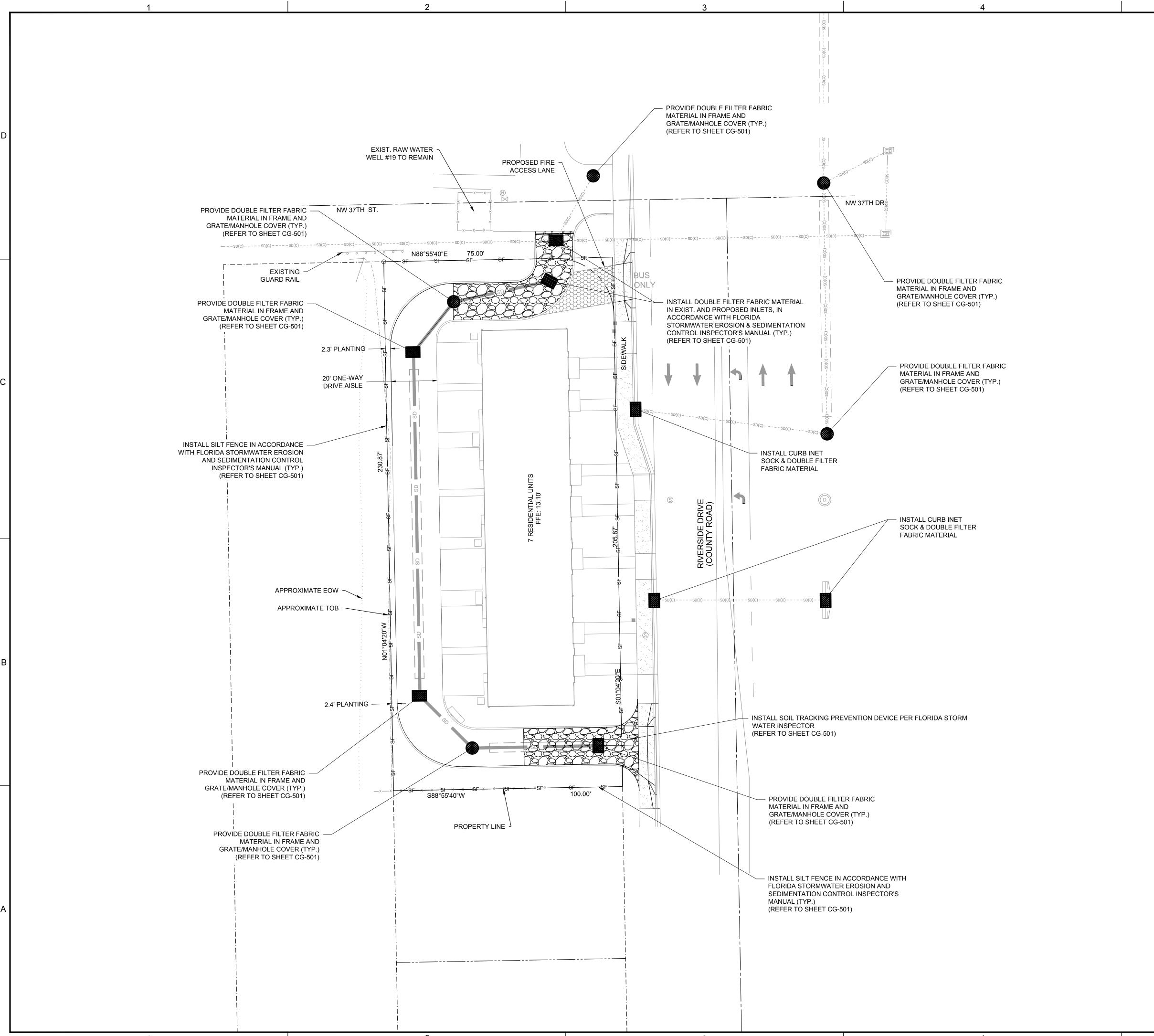
PROJECT

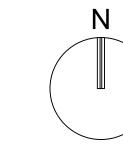
CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

DEMOLITION PLAN NORTH

CD-102 NUMBER 10431.03





GENERAL NOTES:

RECORD.

TRACKING.

AND REQUIREMENTS.

THE FINAL GROUND COVER.

REGARDING HIS MATTER.

GRAPHIC SCALE

ORIGINAL. VERIFY SCALE USING

BAR SCALE ABOVE.

SCALE: 1" = 20 ' NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM

ANY OTHER METHODS APPROVED BY THE AGENCY

THE CONTRACTOR SHALL INSTALL A SOIL TRACKING

CONTROL INSPECTOR'S MANUAL. THE CONTRACTOR SHALL TAKE MEASURES TO INSURE THE CLEANUP OF

OR HAVE BEEN TRANSPORTED BY WIND OR STORM

ALL AREAS OF DISTURBANCE THAT ARE NOT WITHIN

BUILDING OR PAVEMENT LIMITS SHALL BE SODDED,

REMOVE ALL EROSION CONTROL IMPROVEMENTS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ALL

THE PERMITS PREVIOUSLY ACQUIRED FOR THIS

PROPOSED IMPROVEMENTS. THE CONTRACTOR IS

THE REQUIREMENTS OF THESE PERMITS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ACQUIRING A VALID NPDES PERMIT. UNLESS SUCH PERMIT IS DETERMINED TO BE NON-APPLICABLE BY REGULATORY AGENCY HAVING PROPER JURISDICTION

PROJECT. THE CONDITIONS OUTLINED IN THE PERMITS ARE IN FORCE AND FULL EFFECT AS PART OF THE

RESPONSIBLE FOR ENSURING ALL WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH ALL OF

AFTER ALL DISTURBED AREAS ARE STABILIZED WITH

REFER TO LANDSCAPE PLANS FOR SOD SPECIFICATION

HAVING JURISDICTION OR DESIGN ENGINEER OF

PREVENTION DEVICE AS PER THE FLORIDA

STORMWATER EROSION AND SEDIMENTATION

STABILIZED CONSTRUCTION ENTRANCES AND CONSTRUCTION ROADS, IF APPROPRIATE, SHALL BE

IMPLEMENTED IN ORDER TO REDUCE OFFSITE

301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

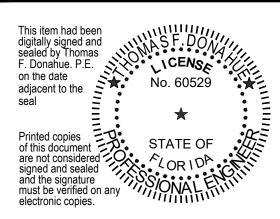
Florida Certificate of Authorization: 7928

Licensed Business Number: 6860 **REVISIONS**

NERAL NOTES.	NO.	DESCRIPTION	DATE
THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN FLORIDA (HEREAFTER REFERRED TO AS FL GUIDELINES).			
MAINTENANCE MEASURES SHALL BE APPLIED AS			
NEEDED DURING THE ENTIRE CONSTRUCTION PERIOD. AFTER EACH RAINFALL, A VISUAL INSPECTION SHALL BE			
MADE OF ALL INSTALLED EROSION CONTROL			
MEASURES AND REPAIRS SHALL BE CONDUCTED TO			
ENSURE THEIR CONTINUING FUNCTION AS DESIGNED.			
ALL EXISTING/NEW CATCH BASIN, INLETS, STORM			
SEWER MANHOLES STRUCTURES WITHIN THE WORK AREAS, ETC. SHALL BE PROTECTED DURING			
CONSTRUCTION OPERATIONS FROM SEDIMENT RUNOFF			
AND DEBRIS BY PLACING A FILTER FABRIC MATERIAL IN			
THE FRAME AND GRATE/MANHOLE COVER. PREVENTIVE			
METHODS MUST BE UTILIZED AROUND THESE STRUCTURES (DURING CONSTRUCTION OPERATIONS)			
BY GRADING TO DRAIN AWAY FROM STRUCTURES AND			

FOR CONSTRUCTION RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE

SEDIMENTS THAT HAVE BEEN TRACKED BY VEHICLES ISSUE DATE: 10/30/2023 MC/BI/BA **DESIGNED BY:** WATER ABOUT THE SITE OR ONTO NEARBY ROADWAYS DRAWN BY: BI/BA TD/MC CHECKED BY: BID-CONTRACT:



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PROJECT

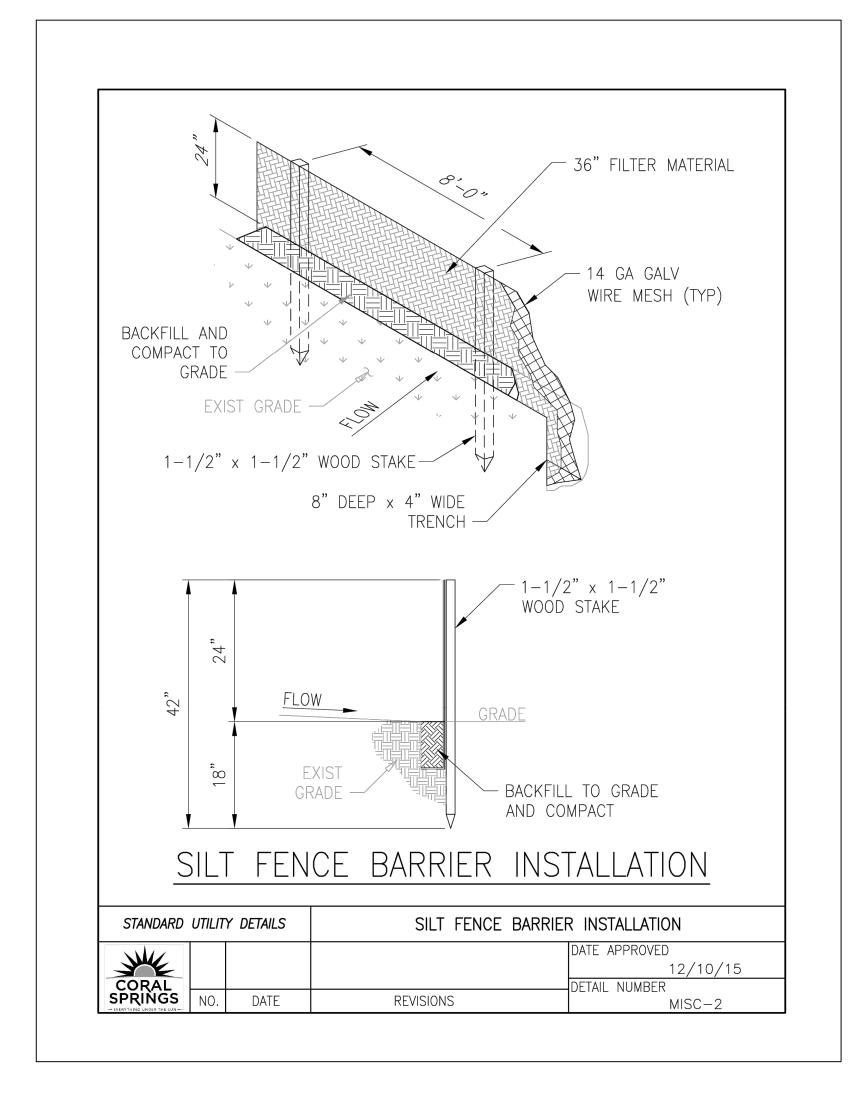
CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

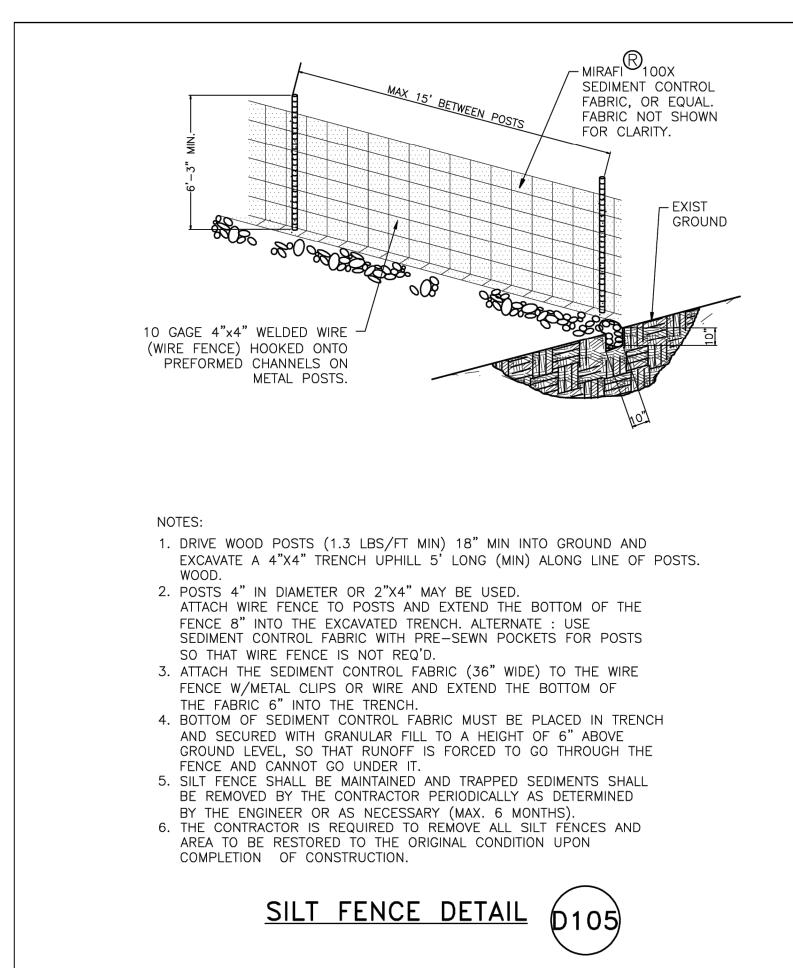
SHEET TITLE

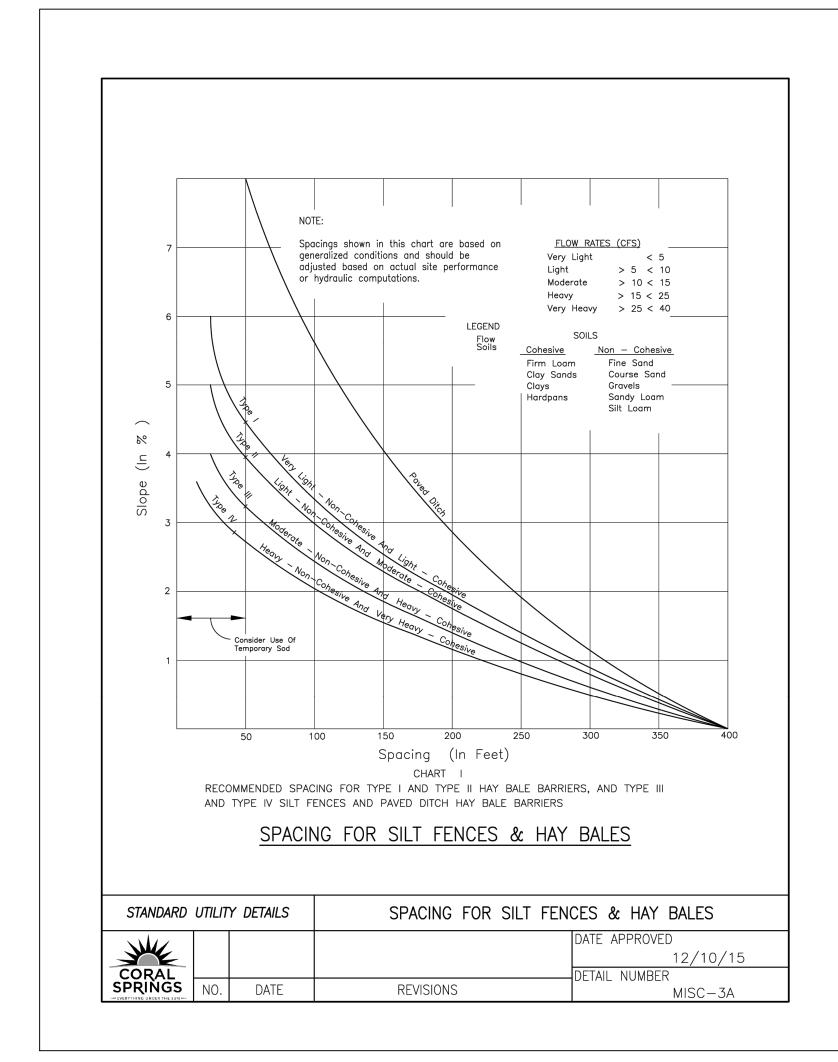
NUMBER

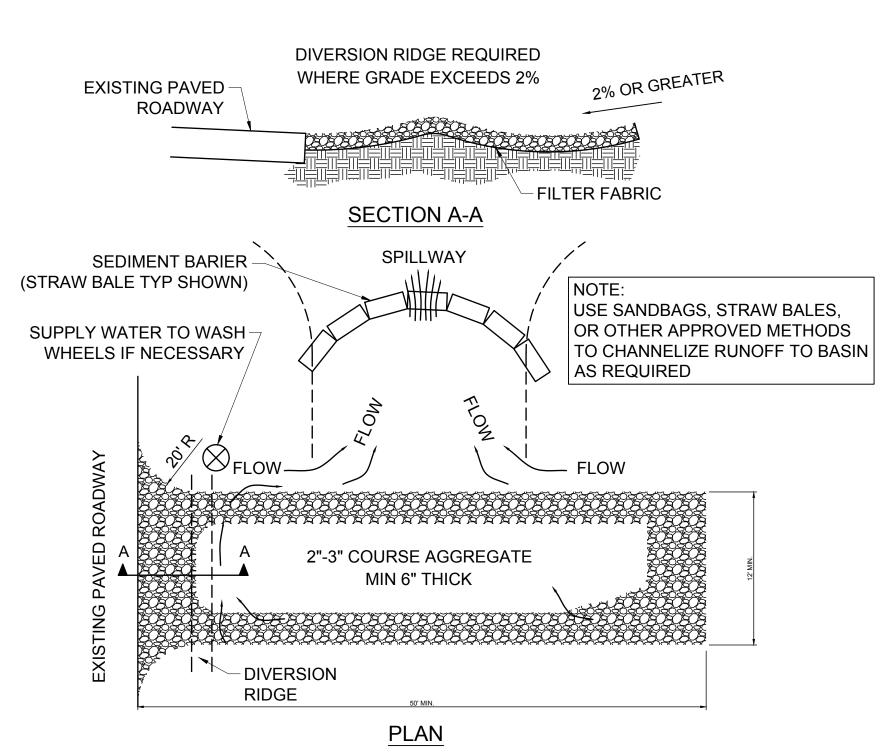
EROSION CONTROL PLAN-NORTH

CG-102 NUMBER PROJEC1 10431.03





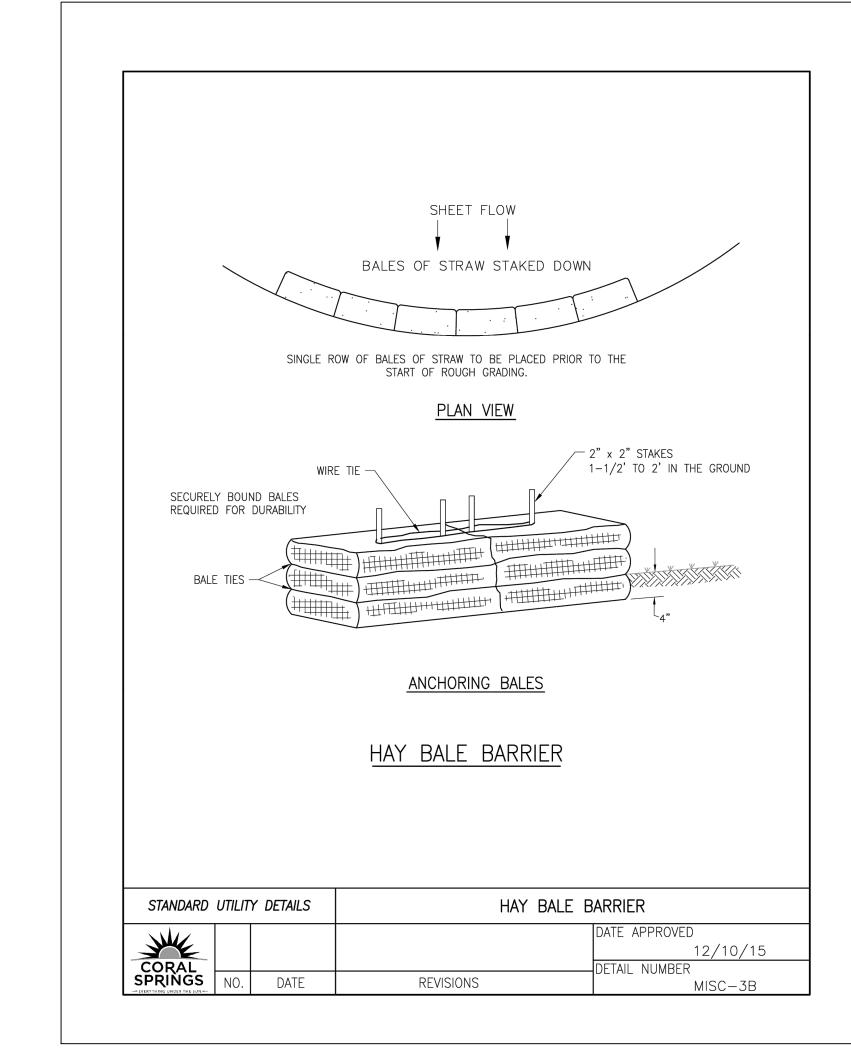


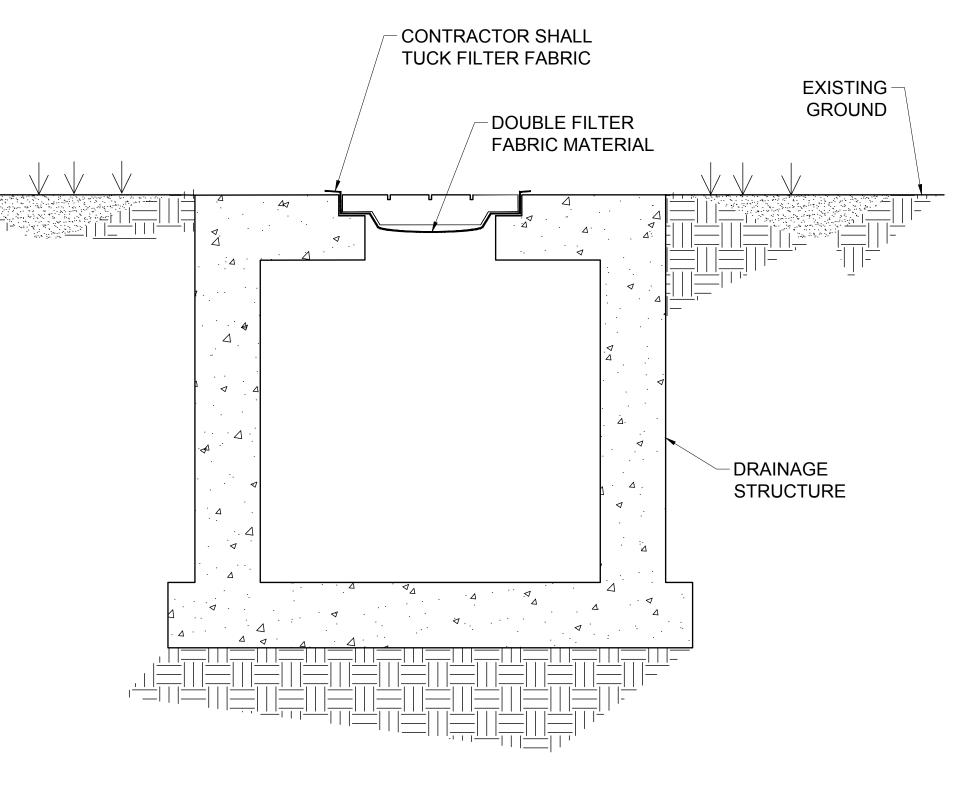


THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE





INLET / MANHOLE PROTECTION DETAIL

301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400 Florida Certificate of Authorization: 7928 Licensed Business Number: 6860 **REVISIONS** DATE DESCRIPTION FOR CONSTRUCTION

RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE

ISSUE DATE: 10/30/2023 MC/BI/BA DESIGNED BY: DRAWN BY: BI/BA CHECKED BY: TD/MC BID-CONTRACT: This item had been Inomas
P.E.
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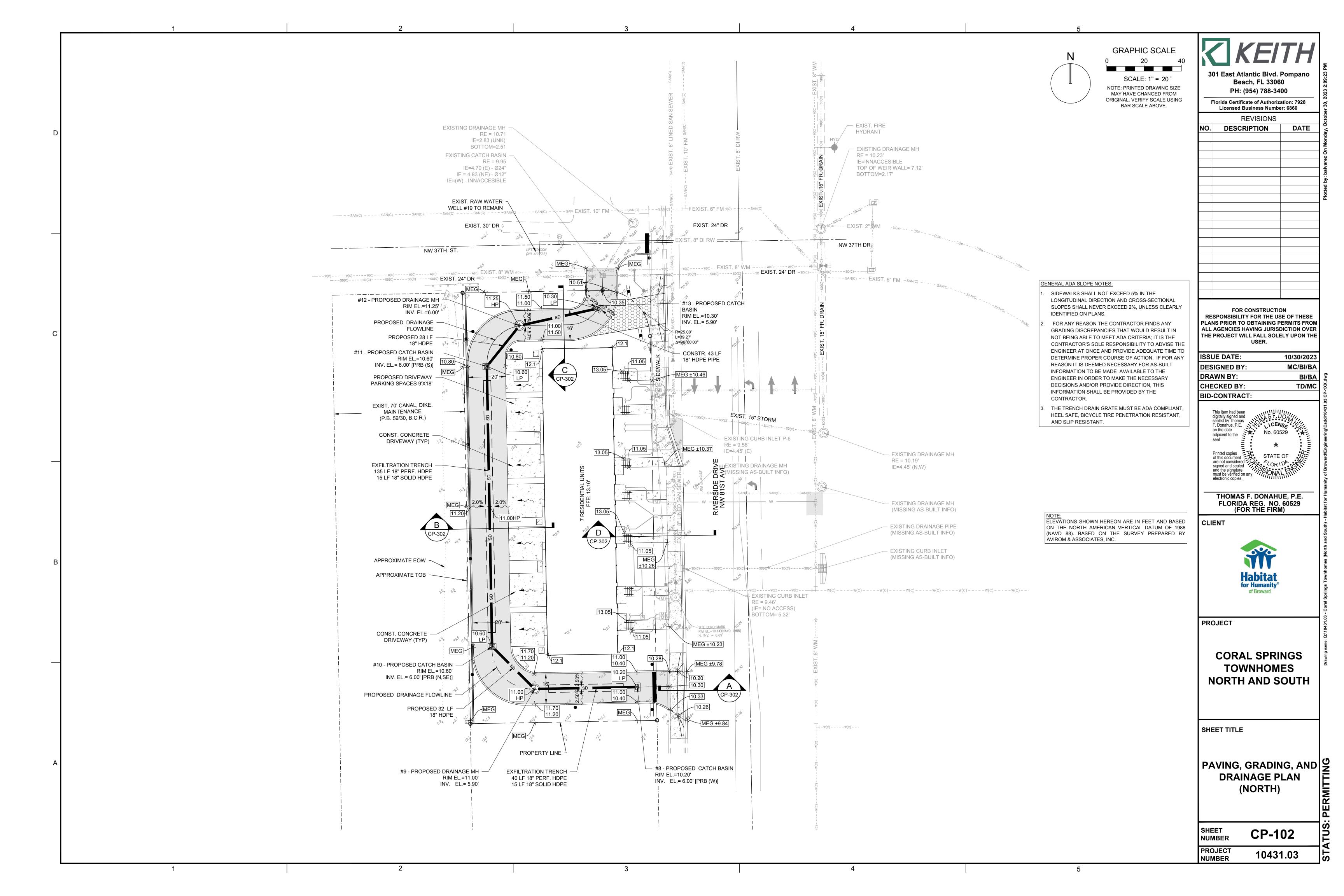
PROJECT

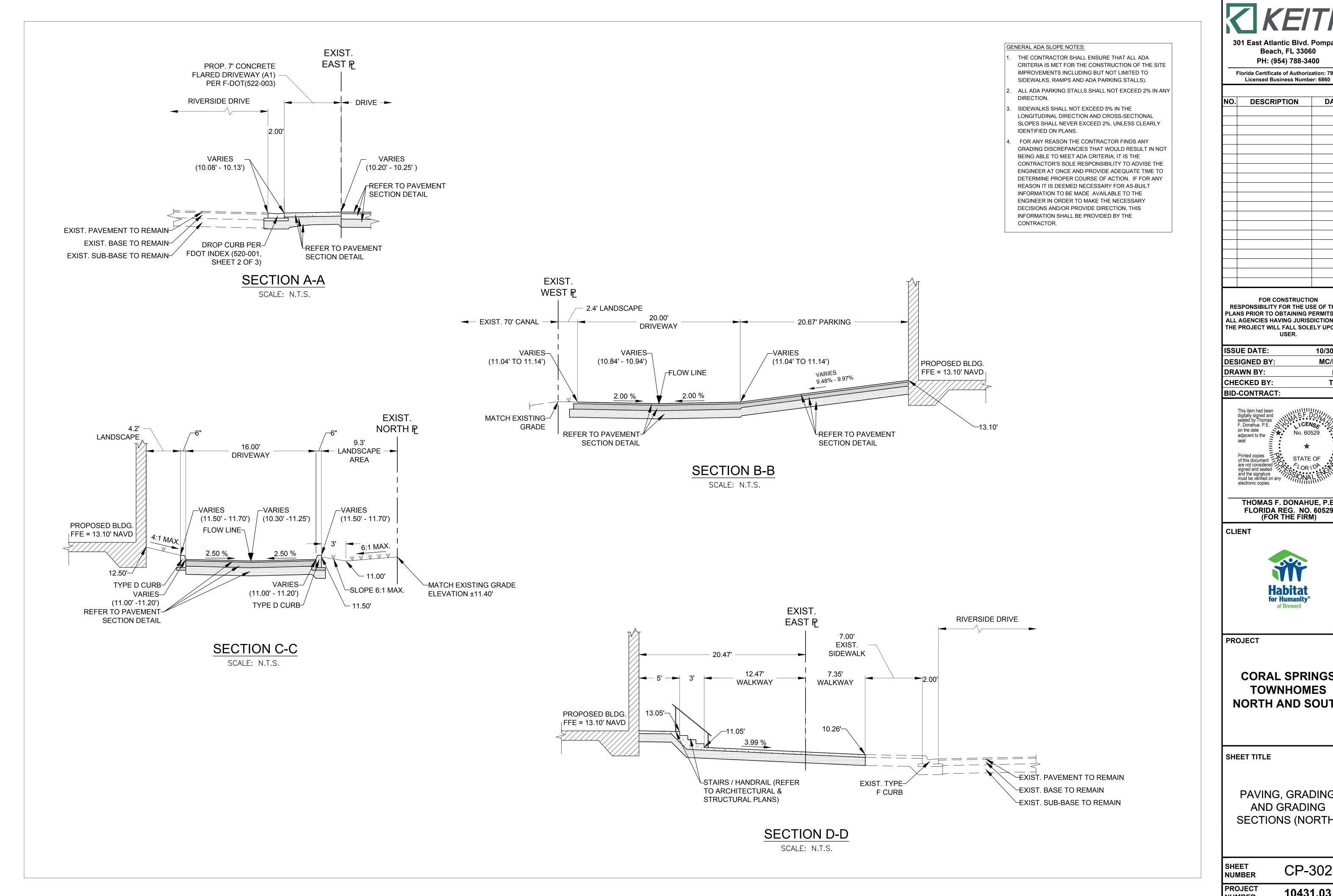
CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

EROSION CONTROL DETAILS

SHEET **CG-501** NUMBER PROJEC1 10431.03 NUMBER





301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

Florida Certificate of Authorization: 7928

NO.	DESCRIPTION	DATE

FOR CONSTRUCTION RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE

ISSUE DATE:	10/30/2023
DESIGNED BY:	MC/BI/BA
DRAWN BY:	BI/BA
CHECKED BY:	TD/MC
BID-CONTRACT:	

v Thomas
a. P.E.

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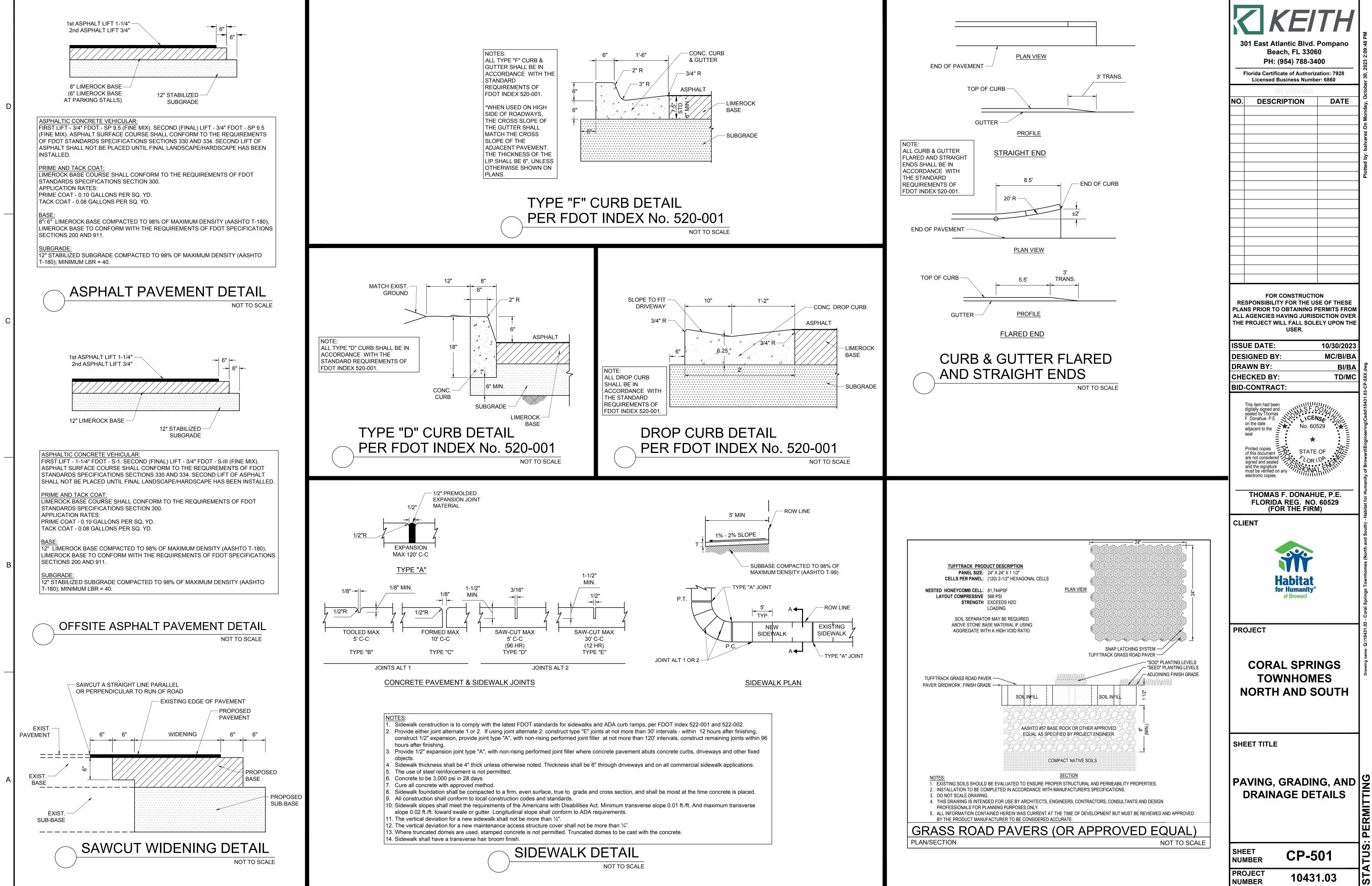
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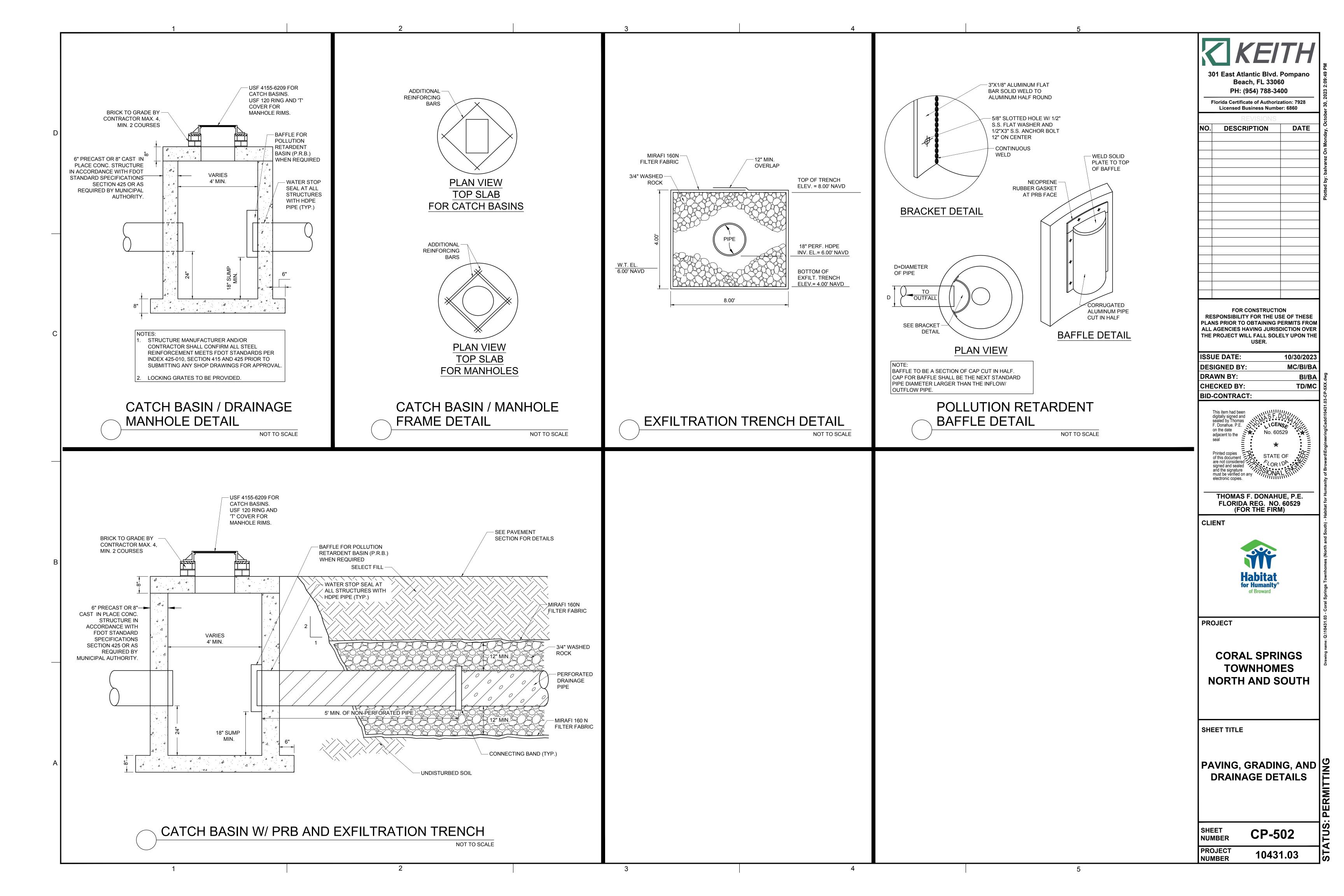
CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

PAVING, GRADING AND GRADING **SECTIONS (NORTH)**

CP-302 10431.03 NUMBER



BI/BA



HABITAT FOR HUMANITY SOUTH

RIVERSIDE DRIVE CORAL SPRINGS, FLORIDA 33065



LOCATION MAP
SECTION 14, TOWNSHIP 48 S, RANGE 41 E
FOLIO #, 484114180010

SHEET No.	SHEET TITLE
G1-000	COVER SHEET
GI-001	GENERAL NOTES
GI-002 -	CONSTRUCTION SPECIFICATIONS
GI-003	SPECIFIC CONSTRUCTION NOTES & LEGEND
CD-101	DEMOLITION PLAN
CG-101	PRELIMINARY EROSION CONTROL PLAN
CG-501	EROSION CONTROL DETAILS
CP-102	PRELIMINARY PAVING, GRADING, AND DRAINAGE PLAN
CP-302	PAVING, GRADING, AND DRAINAGE SECTIONS
CP-501 - CP-502	PAVING, GRADING, AND DRAINAGE DETAILS

RELATIONSHIP BETWEEN NGVD 1929 AND NAVD 1988

CORAL SPRINGS

DATUM	DIFFERENCE	ELEV.
NGVD 1929	+1,55 FEET	1,55
NAVD 1988		0,00

ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON NAVD 1988 DATUM

LAND DESCRIPTION:

LOTS 7, 8, AND 9, BLOCK "CORAL SPRINGS SUBDIVISION NO, 1".
ACCORDING TO THE FLAT THEREOF, AS RECORDED IN PLAT BOOK 99
PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COLUTY, FLORIDA.
SAID LANDS LYING IN THE CITY OF CORAL SPRINGS BROWARD.

PROJECT TEAM

PROPERTY OWNER
HABITAT FOR HUMANITY OF BROWARD, INC.
688 INV 62ND ST,
FORT LAUDERDALE FL 33309
(954) 395-3030

APPLICANT, CIVIL ENGINEER, & LANDSCAPING KETH & ASSOCIATES, INC. 301 E ATLANTIC BLVD. POMPANO BEACH, FL 33090 (954) 788-3400

ARCHITECT
FSMY ARCHITECTS + PLANNERS
888 S ANDREWS AVE. SUITE 300
FORT LAUDERDALE, FL 33316

THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



St. Augustine

PREPARED FOR: HABITAT FOR HUMANITY OF BROWARD



THOMAS F, DONAHUE, P.E. FLORIDA REG. NO. 60529

PROJECT NO. 10431.03 OCTOBER 2023

1. SPECIFIC SITE NOTES

- 1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.
- 1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.
- 1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

2. APPLICABLE CODES

- 2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.
- 2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.
- 2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.
- 2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.
- 2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.
- 2.6. TRENCH SAFETY ACT
- 2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).
- 2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P.
- 2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.
- 2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.
- 3. CONSTRUCTION NOTES:
- 3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.
- 3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR.
- 3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.
- 3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.
- 3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 520-001.
- 3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.
- 3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.
- 3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.
- 3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.
- 3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.
- 3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

- 3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.
- 3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.
- 3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.
- 3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.
- 3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.
- 3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.
- 4. PRECONSTRUCTION RESPONSIBILITIES
- 4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.
- 4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.
- 4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.
- 4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.
- 4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: HTTP://FLORIDADEPT.GOV/WATER/STORMWATER.

- 4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO:
 DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS,
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV, METER BOX.
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL)
 4.6.1 CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE,
- WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.

 4.6.2 PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS. AND

SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S

- PLANS OR SPECIFICATIONS.

 4.6.3 INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES
 ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED
- FOR PRECAST STRUCTURES.

 4.7 CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH FDOT AND COUNTY REQUIREMENTS, AND
- SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.

 5. INSPECTIONS / TESTING:

GRATES/TOPS, YARD DRAINS.

- 5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:
- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS
- SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENTSIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTINGELECTRICAL AND COMMUNICATION LINES
- UTILITY CONDUITS
- IRRIGATION
- 5.2 THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME.

 THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL
- 5.3 TESTING ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- 6. <u>TEMPORARY FACILITIES</u>
- 6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.
- 6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.
- 6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.
- 6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.
- 6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
- 7. PROJECT PROGRESS AND CLOSEOUT
- 7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.
- 7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- 7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.
- 7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.
- 8. PROJECT RECORD DOCUMENTS:
- 8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO ENGINEER FOR PROJECT RECORD.
- 8.2. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING

- ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.
- 8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.
- 8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL
- INCLUDE THE FOLLOWING INFORMATION: 8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.
- 8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.
- 8.4.3. ALL CONNECTIONS TO EXISTING LINES.
- 8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.
- 8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING

- BETWEEN STRUCTURES, AND SLOPES.

 8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS
- SHALL BE LOCATED HORIZONTALLY AND VERTICALLY.

 8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE
- 8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.
- 8.6.2. THE SIZE OF THE LINES.

THE FOLLOWING INFORMATION:

- 8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.
- 8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:
- 8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.
- 8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.
- 8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.
- 8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.
- 8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.
- 8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.
- 8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.
- 8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. EIGHT (8) SETS OF BLUE OR BLACK LINE DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.
- 8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.
- 9. <u>UTILITY NOTES</u>

AUTHORITY.

- 9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.
- 9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.
- 9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE UTILITIES.
- 9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE811.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
- PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.
- 9.5 FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY:
 ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS

- COUNTY TRANSIT AUTHORITY
- SCHOOL BOARD TRANSPORTATION AUTHORITY
- JURISDICTIONAL FIRE DEPARTMENT DISPATCH
 JURISDICTIONAL POLICE DEPARTMENT(S)
- 9.6 THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.
- 9.7 LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.
- 9.8 THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.
- 10. SIGNING AND PAVEMENT MARKINGS
- 10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.
- 10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.
- 10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.
- 10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.
- 10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH FDOT STANDARD INDEX 706-001 AND / OR AS SHOWN IN THE PLANS.
- 10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE
- 10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT
- DESIGN STANDARD.

 10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS
- THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED.

 10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC
- IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.

 10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.
- 10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

THE LATEST FDOT STANDARD SPECIFICATIONS.

- •MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
- CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISIMS,

EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL

BE COMPRISED OF RETROREFLECTIVE FLUORESCENT

• MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF

- YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.

 CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE
- XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS).

 10.13 PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATERIAL OF THE FINISHED SIGN PANEL INCLUDING THE BACKGROUND, LEGEND OR BORDER.
- 10.14 ENSURE THE OUTSIDE CORNER OF SIGN IS CONCENTRIC WITH BORDER. ENSURE WHITE BORDERS ARE MOUNTED PARALLEL TO THE EDGE OF THE SIGN. ENSURE BLACK BORDERS ARE RECESSED FROM THE EDGE OF THE SIGN.
- 10.15 LAYOUT PERMANENT FINAL STRIPING THAT LEAVES NO VISIBLE MARKS AT TIME OF FINAL ACCEPTANCE.

301 East Atlantic Blvd Pompano

301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

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REVISIONS

IO. DESCRIPTION DATE

FOR CONSTRUCTION
RESPONSIBILITY FOR THE USE OF THESE
PLANS PRIOR TO OBTAINING PERMITS FROM
ALL AGENCIES HAVING JURISDICTION OVER
THE PROJECT WILL FALL SOLELY UPON THE

ISSUE DATE: 10/30/2023

DESIGNED BY: MC/BI/BA

DRAWN BY: BI/BA

CHECKED BY: TD/MC

BID-CONTRACT:

This item had been digitally signed and sealed by Thomas F. Donahue. P.E. on the date adjacent to the seal

STATE OF

are not considered signed and sealed OR IDP

and the signature must be verified on any

THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM)

electronic copies.

CLIENT



PROJECT

CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

GENERAL NOTES

SHEET GI-001

PROJECT 10431.03

SECTION 20 - GENERAL SPECIFICATIONS PAVING GRADING DRAINAGE AND **EARTHWORK**

20.GENERAL

- 20.1. IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT. SUCH IMPROVEMENTS MAY GENERALLY INCLUDE, BUT NOT TO BE LIMITED TO, CLEARING, GRADING, PAVING, REMOVAL OF EXISTING PAVEMENT STORM DRAINAGE, WATER LINES AND SANITARY SEWERS
- 20.2. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IF WITHIN A PARTICULAR SECTION, ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.
- 20.3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF A PAVING AND DRAINAGE SYSTEM AS SHOWN ON THE PLANS, SPECIFIED HEREIN, OR BOTH. IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALL NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.
- 20.4. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- 20.5. GUARANTEE ALL MATERIALS AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (L) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR
- 21.1. ALL AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.
- 21.2. NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE, UNLESS NOTED IN PLANS. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER.
- 21.3. FILL MATERIAL SHALL BE CLASSIFIED AS A-L, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
- 21.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- 21.5. ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN EARLIER PHASE OF WORK, PRIOR TO THAT TEST OR INSPECTION PASSING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND
- CONCRETE CYLINDERS, ETC. 21.6. WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10) TEN FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE. ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR

LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS,

- 21.7. WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN SHALL BE REMOVED TO FULL DEPTH FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND REPLACED WITH GRANULAR MATERIALS.
- 21.8. ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPACTION AND PAVEMENT CONSTRUCTION.
- 21.9. GROUND ADJACENT TO ROADWAY/PAVEMENT HAVING RUNOFF SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
- 21.10.SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION FOR NON PAVED AREAS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.
- 21.11. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES

- INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.
- 21.12. A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED OR SEEDED AND MULCHED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE INDICATED ON THE PLANS.
- 21.13.SOD SHALL BE ST. AUGUSTINE UNLESS OTHERWISE INDICATED ON THE PLANS, AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.

22.DRAINAGE

- 22.1. INLETS ALL INLETS SHALL BE THE TYPE DESIGNATED ON THE PLANS. AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
- 22.2. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:
- RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, SECTION 941 OF THE STANDARD SPECIFICATIONS.
- CMP = CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196. CMP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE, (SMOOTH
- LINED) ASTM DESIGNATION M-196. • SCP = SLOTTED CONCRETE PIPE, SECTIONS 941 AND 942, OF THE
- STANDARD SPECIFICATIONS. PVC = POLYVINYL CHLORIDE PIPE.
- PCMP = PERFORATED CMP, SECTION 945, OF THE STANDARD
- SPECIFICATIONS CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) (12 INCHES TO 60 INCHES), SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION
- 22.3. PIPE BACKFILL REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE SECTION 125-8, OF THE STANDARD SPECIFICATIONS. PIPELINE BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO T-99
- SPECIFICATIONS) 22.4. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE LENGTH MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.
- 22.5. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE INNER WALLS OF STRUCTURES.
- 22.6. FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE STANDARD SPECIFICATIONS. 23.ASPHALT PAVING
- 23.1. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- 23.2. INTERNAL ASPHALT PAVING CONSTRUCTED ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 12" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 40 UNLESS OTHERWISE
- 23.3. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 327, 330, 334, 336, 337, 337, 338, 339 AND 341 OF THE STANDARD SPECIFICATIONS.
- 23.4. LIMEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.
- 23.5. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS. IF, THROUGH FIELD TESTS, THE CONTRACTOR CAN DEMONSTRATE THAT THE COMPACTION EQUIPMENT CAN ACHIEVE DENSITY FOR THE FULL DEPTH OF A THICKER LIFT, AND IF APPROVED BY THE ENGINEER, THE BASE MAY BE CONSTRUCTED IN SUCCESSIVE COURSES OF NOT MORE THAN 8 INCHES (200 MM) COMPACTED THICKNESS.
- 23.6. ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON PLANS. 24.CONCRETE CONSTRUCTION
- 24.1. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 310. CONCRETE SIDEWALK SHALL BE 4" THICK, UNLESS OTHERWISE NOT AND CONSTRUCTED ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75', UNLESS OTHERWISE NOTED ON PLANS. CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6" THICK, UNLESS OTHERWISE NOTED ON PLANS.
- 24.2. SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.
- 24.3. CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.

SECTION 30 - WATER DISTRIBUTION AND SANITARY SEWER FORCE MAINS. 30. MATERIALS:

NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.

- 30.1. ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
- 30.2. DUCTILE IRON PIPE FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.
- 30.3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND- LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE INTERIOR CERAMIC EPOXY LINED AND EXTERIOR COATED WITH THE MANUFACTURER'S COATING SYSTEM (PROTECTO 401 CERAMIC EPOXY WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS AND AN OUTSIDE COATING OF EITHER COAL TAR EPOXY OR ASPHALT). CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.
- 30.4. ALL PIPE & FITTINGS ON THE LIFT STATION SITES SHALL BE DUCTILE IRON CONFORMING TO THE SAME SPECIFICATIONS AS ABOVE FOR SEWAGE FORCE MAINS EXCEPT THAT FLANGED DUCTILE IRON PIPE & FITTINGS SHALL BE USED INSIDE VALVE PITS AND WET WELLS. FLANGED PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA C115/A21.15 LATEST REVISION AND ANSI/AWWA C110/A21.10 LATEST REVISION. THE FOLLOWING THICKNESS CLASSES SHALL BE ADHERED TO: 4" - 12" - CLASS 52, 14" & LARGER - CLASS
- 30.5. PVC PRESSURE PIPE FOR SIZES 4" THROUGH 12" AND SHALL CONFORM TO ANSI/AWWA STANDARD C900 LATEST REVISION. PVC PRESSURE PIPE SHALL BE MADE FROM CLASS 12454-A OR CLASS 12454-B VIRGIN MATERIAL AND CONFORM WITH THE OUTSIDE DIAMETER OF CAST IRON PIPE WITH A MINIMUM WALL THICKNESS OF DR SERIES 18. ULTRA VIOLET DEGRADATION OR SUN BLEACHED PIPE WILL BE CAUSE FOR REJECTION. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES. FORCE MAIN SHALL BE IMPREGNATED WITH GREEN PIGMENT. REUSE MAIN SHALL BE IMPREGNATED WITH PURPLE PIGMENT.
- 30.6. DUCTILE IRON FITTINGS FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. WATER MAIN FITTING SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.
- 30.7. CAST IRON AND DUCTILE IRON FITTINGS FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE COATED IN ACCORDANCE WITH THE REQUIREMENTS OF DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS.
- CONFORM TO ANSI/AWWA STANDARD C111/A21.11 LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET COMPRESSION-TYPE. SPECIAL FITTINGS AND JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER. 30.9. JOINTS FOR PVC PRESSURE PIPE SHALL BE BELL AND SPIGOT PUSH-ON

30.8. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL

- RUBBER GASKET TYPE ONLY. NO SOLVENT WELD OR THREADED JOINTS WILL BE PERMITTED.
- 30.10. WATER DISTRIBUTION SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW:
- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG • LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)
- 30.11. SEWAGE FORCE MAIN SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW
- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET) 30.12. WATER DISTRIBUTION VALVES SHALL BE GATE VALVES, IRON BODY,
- FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509 LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.
- 30.12.1. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2361/2362, AMERICAN 250 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C500 LATEST REVISION OR APPROVED EQUAL.
- 30.12.2. TAPPING VALVES SHALL BE MUELLER T-2361/2362 OR APPROVED EQUAL. 30.12.3. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH
- MALLEABLE HAND WHEELS OR APPROVED EQUAL. 30.13. TAPPING SLEEVES SHALL BE MUELLER H615, CLOW F- 2505 OR APPROVED EQUAL.

- 30.14. VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL PAINTED BLUE WITH THE DESIGNATION "WATER".
- 30.15.RETAINER GLANDS FOR DIP SHALL CONFORM TO ANSI/AWWA C111/A21.11 LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.
- 30.16.DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.
- 30.17.FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUAL. PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE. ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE. RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502 LATEST REVISION. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA #291 OR PER AGENCY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE ROADWAY LANE.
- 30.18. SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED, ECCENTRIC TYPE WITH RESILIENT FACED PLUGS. PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA. THE BODY SHALL BE OF SEMI-STEEL (ASTM A-126 C1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFLON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.
- 30.19.PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.
- 30.20.PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED.
- 30.21.SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH ANSI/AWWA C 508 LATEST REVISION SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2" THROUGH 24" NPS, UNLESS OTHERWISE INDICATED, WITH FULL-OPENING PASSAGES, DESIGNED FOR A WATER-WORKING PRESSURE OF 150 PSI THEY SHALL HAVE A FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.
- 30.22.HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO AWWA C906 STANDARD, LATEST REVISION, PIPES SHALL BE COLOR-CODED BLUE, MINIMUM 40 FEET STANDARD LENGTHS. 31.SERVICE CONNECTION:
- 31.1. SERVICE SADDLES SHALL BE FUSION BONDED PLASTIC COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE.
- 31.2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING NUT.
- ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP, CATALOG # 1100 OR APPROVED EQUAL. 31.4. CURB STOPS SHALL BE FORD V63-44W-X" LATEST REVISION OR

31.3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN

- APPROVED EQUAL. 31.5. METER STOPS SHALL BE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE FV63-777W" LATEST REVISION WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS
- AS MANUFACTURED BY FORD OR APPROVED EQUAL.
- 32. INSTALLATION: 32.1. WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE DIP

SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES.

- 32.2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-XX LATEST REVISION STANDARD.
- 32.3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/ C600-XX LATEST REVISION.
- 32.4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND 30" COVER FOR DIP.
- 32.5. DETECTOR TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER AND SEWER LINES. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES, BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST.
- 32.6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.
- 32.7. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- 32.8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER", AS APPLICABLE, CAST IN THE COVER. U.S. FOUNDRY OR APPROVED EQUAL
- 33.TESTING:
- 33.1. BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. COPIES OF PASSING BACTERIOLOGICAL RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPROVED BY, THE ENGINEER, UTILITY OWNER, AND HEALTH DEPARTMENT. HYDROSTATIC TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSI/AWWA C600-05 (HYDROSTATIC TEST). THE PRESSURE TEST SHALL NOT VARY MORE THAN 5 PSI DURING THE

TEST. THE ALLOWABLE LEAKAGE DURING THE PRESSURE TEST SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE

L = (SD(P)1/2)/148,000.

IN WHICH L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR. S EQUALS LENGTH OF PIPE (LINEAR FEET), D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE AVERAGE TEST PRESSURE (POUNDS PER SQUARE INCH GAUGE). MAXIMUM LENGTH OF TEST PIPE SECTION SHOULD BE 2000 FEET. THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE

- WITH THE ANSI/AWWA C651-05 (WATER MAIN BACTERIOLOGICAL TESTS). 33.2. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF
- THE UTILITY OWNER AND THE ENGINEER OF RECORD. 33.3. FOR WATER DISTRIBUTION PIPES, SAMPLING POINTS SHALL BE PROVIDED
- BY THE CONTRACTOR AT THE LOCATIONS SHOWN ON THE PLANS. 33.4. FOR WATER DISTRIBUTION PIPES, DISINFECTION AND BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C651-14 (WATER MAIN BACTERIOLOGICAL TESTS). MAXIMUM DISTANCE BETWEEN SAMPLING POINTS
- TRANSMISSION MAINS: EVERY 1200 FEET
- BRANCH MAINS: EVERY 1000 FEET

SHALL BE AS FOLLOWS:

- ISOLATED MAINS < 1000 FEET: 2 SAMPLE POINTS
- ISOLATED MAINS > 1000 FEET: 3 SAMPLE POINTS

SECTION 40 - GRAVITY SANITARY SEWER COLLECTION SYSTEM 40.GENERAL

- 40.1. MANHOLE, VALVE BOX, METER BOX AND OTHER STRUCTURE RIM ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE ADJUSTED TO CONFORM TO PLAN GRADES PROPOSED IN THESE PLANS. IF NO OTHER INDIVIDUAL COST ITEM IS INCLUDED IN THE CONTRACT SCHEDULE FOR A PARTICULAR STRUCTURE ADJUSTMENT.
- 40.2. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.

41. MATERIALS:

NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.

- 41.1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
- 41.2. DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA C151/A21.51-XX LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH WALL THICKNESS CLASS 51 FOR 8" AND ABOVE, CLASS 52 FOR 4" AND 6", UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DUCTILE IRON PIPE SHALL BE EPOXY LINED OR COATED WITH THE MANUFACTURER'S COATING SYSTEM AS APPROVED BY THE ENGINEER OF RECORD AND THE LOCAL MUNICIPALITY OR UTILITY OWNER. IN EITHER CASE, THE ENGINEER'S REVIEW AND APPROVAL IS REQUIRED FOR EITHER ALTERNATIVE PRIOR TO CONSTRUCTION. CEMENT MORTARED LININGS ARE
- 41.3. ALL DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10-XX LATEST REVISION. ALL FITTINGS AND ACCESSORIES SHALL BE EPOXY LINED AND AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
- 41.4. MANHOLES SHALL BE PRECAST PER ASTM C 478 AND IN ACCORDANCE
- WITH THE PLANS AND SPECIFICATIONS. 41.5. MANHOLES ARE TO BE SEALED WITH TYPE II SULPHATE RESISTANT CEMENT OR APPROVED EQUAL - NO MOLDING PLASTER.

NOT APPROPRIATE FOR THIS APPLICATION.

- 41.6. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A21.11-XX LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET
- COMPRESSION- TYPE. 41.7. PVC CLEAN-OUTS TO HAVE SCREW TYPE ACCESS PLUG. LONG RADIUS WYE CONNECTIONS AND FITTINGS SHALL BE USED IN ORDER TO ACCESS CLEAN-OUT OPERATIONS.
- 41.8. CLEANOUTS SHALL BE INSTALLED AT ALL SEWER SERVICES EXCEEDING 75' IN LENGTH (EVERY 75') WITH A CLEAN OUT AT THE PROPERTY LINE, EASEMENT LINE, OR 5' FROM A BUILDING. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE BUILDING CLEANOUT (5' FROM THE BUILDING) AND ELEVATION OF THE END OF THE SEWER SERVICE WITH THE BUILDING PLUMBING CONTRACTOR. CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LATERAL IN WHICH THEY ARE INSTALLED.

42. INSTALLATION:

- 42.1. PVC SEWER PIPE SHALL BE LAID IN ACCORDANCE WITH ASTM D 2321 AND THE UNI-BELL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR
- THE INSTALLATION OF PVC SEWER PIPE." 42.2. DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C-600-XX LATEST REVISION.
- 42.3. PIPE TO MANHOLE CONNECTION TO BE FERNCO NEOPRENE BOOT COUPLINGS WITH STAINLESS STEEL ACCESSORIES OR APPROVED EQUAL. 42.4. MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
- 42.5. ALL OPENINGS AND JOINTS SHALL BE SEALED WATERTIGHT. 42.6. TWO COATS OF KOPPERS 300-M, FIRST RED, SECOND ONE BLACK, SHALL
- BE APPLIED TO THE INSIDE OF ALL MANHOLES AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS (16 MILS PER COAT). COATING AS REQUIRED BY UTILITY OWNER OR ENGINEER SHALL BE APPLIED TO THE OUTSIDE OF THE MANHOLE. THE INTERIOR COATS SHALL BE APPLIED AFTER SEWER LAMPING OF LINES. AFTER THE APPLICATION OF EACH COAT, THE UTILITY OWNER AND ENGINEER SHALL INSPECT THE MANHOLES. THE INSPECTION SHALL BE SCHEDULED A MINIMUM OF 48 HOURS PRIOR TO
- 43.TESTING: TESTING OF GRAVITY SEWER MAINS AND LATERALS SHALL BE IN ACCORDANCE WITH THE UTILITY OWNER'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS LATEST REVISION.
- 43.1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
- 43.2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER. 43.3. THE ALLOWABLE LIMITS OF SEWER PIPE LEAKAGE FOR GRAVITY SEWER MAINS SHALL NOT EXCEED 100 GALLONS PER INCH OF INSIDE PIPE DIAMETER
- 43.4. THE INSTALLED SEWERS MAY REQUIRE VIDEO INSPECTIONS.

PER MILE PER DAY FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL

301 East Atlantic Blvd. Pompano Beach, FL 33060 PH: (954) 788-3400

Florida Certificate of Authorization: 7928 Licensed Business Number: 6860

REVISIONS DATE DESCRIPTION

FOR CONSTRUCTION **RESPONSIBILITY FOR THE USE OF THESE** PLANS PRIOR TO OBTAINING PERMITS FROM **ALL AGENCIES HAVING JURISDICTION OVER** THE PROJECT WILL FALL SOLELY UPON THE

MC/BI/BA **DESIGNED BY: IDRAWN BY:** BI/BA **CHECKED BY:** TD/MC BID-CONTRACT: digitally signed and sealed by Thomas F. Donahue. P.E. on the date No. 60529 adjacent to the

10/30/2023

electronic copies. THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529

(FOR THE FIRM)

are not considered signed and sealed OR IDP

and the signature must be verified on any

STATE OF

WONALES!

ISSUE DATE:



PROJECT

CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

SHEET TITLE

NUMBER

CONSTRUCTION **SPECIFICATIONS**

GI-002 NUMBER

BE ALLOWED.

10431.03

GENERAL SYMBOLS

SYMBOL	DESCRIPTION		
A CP-301	PROPOSED SECTION MARKER INDICATING THE SECTION LETTER AND THE SHEET ON WHICH THE SECTION VIEW APPEARS.		
22 C-05	DETAIL REFERENCE CALL OUT INDICATING THE DETAIL NUMBER AND THE SHEET ON WHICH THE DETAIL VIEW APPEARS.		
	REVISION TRIANGLE NUMBER		
	MISC BREAK LINES		
PIC#	PHOTO LOCATION AND CORRESPONDING PICTURE NUMBER.		
N: 623025.4322 E: 850262.1786	COORDINATE VALUES SHOWN ON PROPOSED IMPROVEMENTS ARE RELATIVE TO THE COORDINATE VALUES INDICATED ON THE RIGHT-OF-WAY, PROPERTY CORNERS OR REFERENCE MONUMENT		
	·		

GEN SITE & PMS

SYMBOL	DESCRIPTION
→ 4 7	PAVEMENT MARKING ARROWS
	STOP BAR
Ġ	ADA PARKING
•	CONCRETE CAR STOP
	BICYCLE
	BICYCLE RACK
	AUTOMOBILE
• • • • • • • • • • • • • • • • • • •	POST MOUNTED SIGNS 1,2, DOUBLE POST & 4 WAY
(33)	PARKING SPACE NUMBER
B G P F M	BASELINE, CENTER, PROPERTY, FLOW & MONUMENT LINE
>	BUILDING ACCESS (ADA) / (NON-ADA)

PAVING & GRADING

SYMBOL	DESCRIPTION
0.04%	FLOW DIRECTIONAL ARROW
6"[5777	ELEVATION CHANGE
5.00 5.00	MAJOR / MINOR CONTOUR ELEVATION
13.56	GRADE ELEVATION
13.56	TOP OF CURB / PAVEMENT ELEVATION
MEG	MATCH EXISTING GRADE
	SLOPE BANK
A-1 24'	DRIVEWAY TURNOUT IDENTIFICATION (FDOT INDEX 522-003) W/ DRIVE WIDTH
CR-?	SIDEWALK CURB RAMP (PER FDOT INDEX 522-002)
	SEAWALL

LITH ITV DIDEC

	UTILITY PIPES
SYMBOL	DESCRIPTION
$H \vdash P \vdash $	PIPE FITTINGS: TEE, 90, 45, 22.5, 11.2, CAP,
	CAP W/FVO, REDUCER, VERTICAL, PLUG
	VALVES: GATE, BUTTERFLY, DOUBLE BTRFLY,
	BFP, DDCV, VACUUM BREAKER
MBO ABO ARV ARV •	MAN/AUTO BLOWOFF, ARV, PIV, FLUSH VLV, CORP STOP
SP# HYD FDC WW	SAMPLE PNT, HYDRANT, FDC, WATER WELL
▶ (TAPPING SADDLE
SD -	EXFILTRATION TRENCH
	PIPE CASING
V	VENT PIPE BOX
C-X 22	UTILITY CROSSING

HATCH PATTERNS

SYM	DESCRIPTION	SYM	DESCRIPTION
4. 4	CONCRETE AREA		BRICK PAVERS
+ + + + + + + + + + + + + + + + + + + +	JOGGING PATH		SOIL TRACKING PREVENTION DEVICE
	PAVEMENT AREA		SAND (DETAIL / ELEVATION)
	BUILDING HATCH		EARTH (DETAIL / ELEVATION)
	MILLING AND RESURFACING		GRAVEL (DETAIL / ELEVATION)
00000	DETECTABLE WARNING PER FLORIDA CODE	* * * * * * * * *	GRASS AREA
	DEMOLITION AREA		ADA STRIPING

UTILITY STRUCTURES

	UTILIT	TOTRUCTURES	
SYMBOL		DESCRIPTION	
CB	FDOT C,D,E,F	F,G & FABRIC CATCH BASIN	
(CB) (MH) (SS)	NON-FDOT R	OUND CB'S & MANHOLES, MDC S	STRUCTURE
	FDOT CURB	INLETS TYPE1-TYPE10	
	TRENCH DRA	AIN	
	PIPE CULVER	RT - MITERED END SECTION	
	STRAIGHT EI	NDWALL	
PS#	PUMP STATION	ON LOCATION AND NUMBER	
	GREASE TRA	AP SINGLE AND DOUBLE	
0 0	SEPTIC TANK	<	
	SEPTIC DRA	IN FIELD	
	DRAINAGE W	/ELL, DRAIN C.B., CONTROL STRI	UCTURE
MW	MONITORING	S WELL	
WELL	WATER WEL	L	
M	METER BOX	WATER AND IRRIGATION	
○YD ○DD □DD	YARD DRAIN	/ 9" DECK DRAIN ROUND & SQUA	ARE
oco oco	CLEAN OUT 6	S", 4" & BOX	
22	STORM STRI	JCTURE TABLE REFERENCE NUI	MBER
22)	SEWER STR	JCTURE TABLE REFERENCE NUI	MBER
CONST. 4' Ø MAS RIM EL. = 10.00 (N) INV. EL. = 4.00 - XX" (E) INV. EL. = 4.00 - XX" (S) INV. EL. = 4.00 - XX" (W) INV. EL. = 4.00 - XX"	DIP DIP	SEWER STRUCTURE CALLOUT (SHOWN AS A CIRCLE CIRCUMSCRIBING THE STRUCTURE NUMBER.)	INDICATES STRUCTURE NUMBER, STATION & OFFSET, STRUCTURE SIZE & TYPE, RIM/GRATE
CONST. 4' Ø CB RIM EL. = 10.50 (N) INV. EL. = 4.50 - XX" (E) INV. EL. = 4.50 - XX" (S) INV. EL. = 4.50 - XX" (W) INV. EL. = 4.50 - XX"	HDPE HDPE	STORM STRUCTURE CALLOUT (SHOWN AS A HEXAGON CIRCUMSCRIBING THE STRUCTURE NUMBER.)	ELEVATION, PIPE INVERT ELEVATIONS & DIRECTION, PIPE SIZE & MATERIAL AS WELL AS ANY SPECIAL NOTES.
		I INE TYPES	

LINE TYPES

PROPOSED U	JTILITIES		PAVEN	IENT MARKING
— w —	WATER LINE		STRIPE SKIP 2-4	
SAN	SANITARY SEWER		STRIPE SKIP 3-9	
	FORCE MAIN			STRIPE SKIP 6-10
LFM	LOW PRESSURE FM			STRIPE SKIP 10-30
SD	STORM DRAIN			STRIPE SKIP 10-10-20
——————————————————————————————————————	PRESSURE STORM			STRIPE SKIP 2-2-2
IRR	IRRIGATION			
RAW	RAW WATER			NERAL SITE
RCW	RECLAIMED WATER	-/-/-/-/-/-/-/-	DEMOLI	TION
G	GAS LINE	TURBIDITY BARRIER		TY BARRIER
		_	PARKING	S STRIPING (SINGLE)
TOPO			BUILDING	G SETBACK
·BR	REAKLINE		FIRE TRU	JCK PATH
MA	AJOR CONTOUR		SIGHT T	RIANGLE
MI	NOR CONTOUR		BUILDING	G FOOTPRINT
TC	P OF BANK		VEHICLE	OVERHANG
тс	DE OF SLOPE	0		CONSTRUCTION LIMITS
ED	GE OF WATER			SILT FENCE
	ENTERLINE OF SWALE	SSF		SUPER SILT FENCE PARKING STRIPING (DOUBLE)
				I AMMING STRIPTING (DOUBLE)

DESCRIPTION	ABBREVIATION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL
BIT.	BITUMINOUS
ВС	BACK OF CURB
BD.	BOUND
BLDG	BASELINE BUILDING
BM	BENCHMARK
ВО	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET CEMENT CONCRETE
ССМ	CEMENT CONCRETE MASONRY
СЕМ	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE CORRUGATED METAL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DDCV	DOUBLE DETECTOR CHECK VALVE DOUBLE DETECTOR CHECK VALVE
DDCVA	ASSEMBLY
DHV	DESIGN HOURLY VOLUME DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EMB	EMBANKMENT
EOP EXIST (OR EX)	EDGE OF PAVEMENT EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDC	FIRE DEPARTMENT CONNECTION
FDN.	FOUNDATION
FH	FIRE HYDRANT
FLDSTN GAR	FIELDSTONE
	GARAGE
GD	GARAGE GROUND
GD	GROUND
GD GI	GROUND GUTTER INLET
GD GI GIP GRAN GRAV	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL
GD GI GIP GRAN GRAV GRD	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD
GD GI GIP GRAN GRAV GRD GV	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE
GD GI GIP GRAN GRAV GRD	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD
GD GI GIP GRAN GRAV GRD GV HDPE	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE
GD GI GIP GRAN GRAV GRD GV HDPE HDW	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB MEG	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX MATCH EXISTING GRADE
GD GI GIP GRAN GRAV GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB MEG MH	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX MATCH EXISTING GRADE MANHOLE
GD GI GIP GRAN GRAV GRD GV HDPE HDW HMA HOR HYD INV JCT L LB LP LT MAX MB MEG	GROUND GUTTER INLET GALVANIZED IRON PIPE GRANITE GRAVEL GUARD GATE VALVE HIGH DENSITY POLYETHYLENE HEADWALL HOT MIX ASPHALT HORIZONTAL HYDRANT INVERT JUNCTION LENGTH OF CURVE LEACH BASIN LIGHT POLE LEFT MAXIMUM MAILBOX MATCH EXISTING GRADE

NO.	NO. NUMBER
O/S or OFF	O/S or OFF OFFSET
PB	PB PLAT BOOK
PC	PC POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
RSGV	RESILIENT SEAT GATE VALVE
RT	RIGHT
R/W	RIGHT OF WAY
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SW	SIDEWALK
	TANGENT DISTANCE OF CURVE/TRUCK
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TSV	TAPPING SLEEVE AND VALVE
TYP	TYPICAL
UP VAR	UTILITY POLE
VAR	VARIES
VERT	VERTICAL OURVE
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

LINE WEIGHTS

SHADED LINES & TEXT DENOTE EXISTING EQUIPMENT AND STRUCTURES.

NON-SHADED DASHED LINES & TEXT DENOTE FUTURE EQUIPMENT, FUTURE STRUCTURES AND WORK.

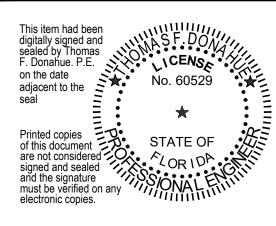
PROPOSED / NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK.

NOTE: THIS IS A STANDARD LEGEND SHEET. NOT ALL ITEMS ARE PERTINENT TO THIS SET OF DRAWINGS

	1 East Atlantic Blvd. Beach, FL 3306 PH: (954) 788-34	Pompano 0
F	lorida Certificate of Authoriz Licensed Business Numbe	
	REVISIONS	
NO.	DESCRIPTION	DATE

FOR CONSTRUCTION RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

ISSUE DATE:	10/30/2023
DESIGNED BY:	MC/BI/BA
DRAWN BY:	BI/BA
CHECKED BY:	TD/MC
BID-CONTRACT:	
This item had been	WASE DOWN



THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM)

CLIENT



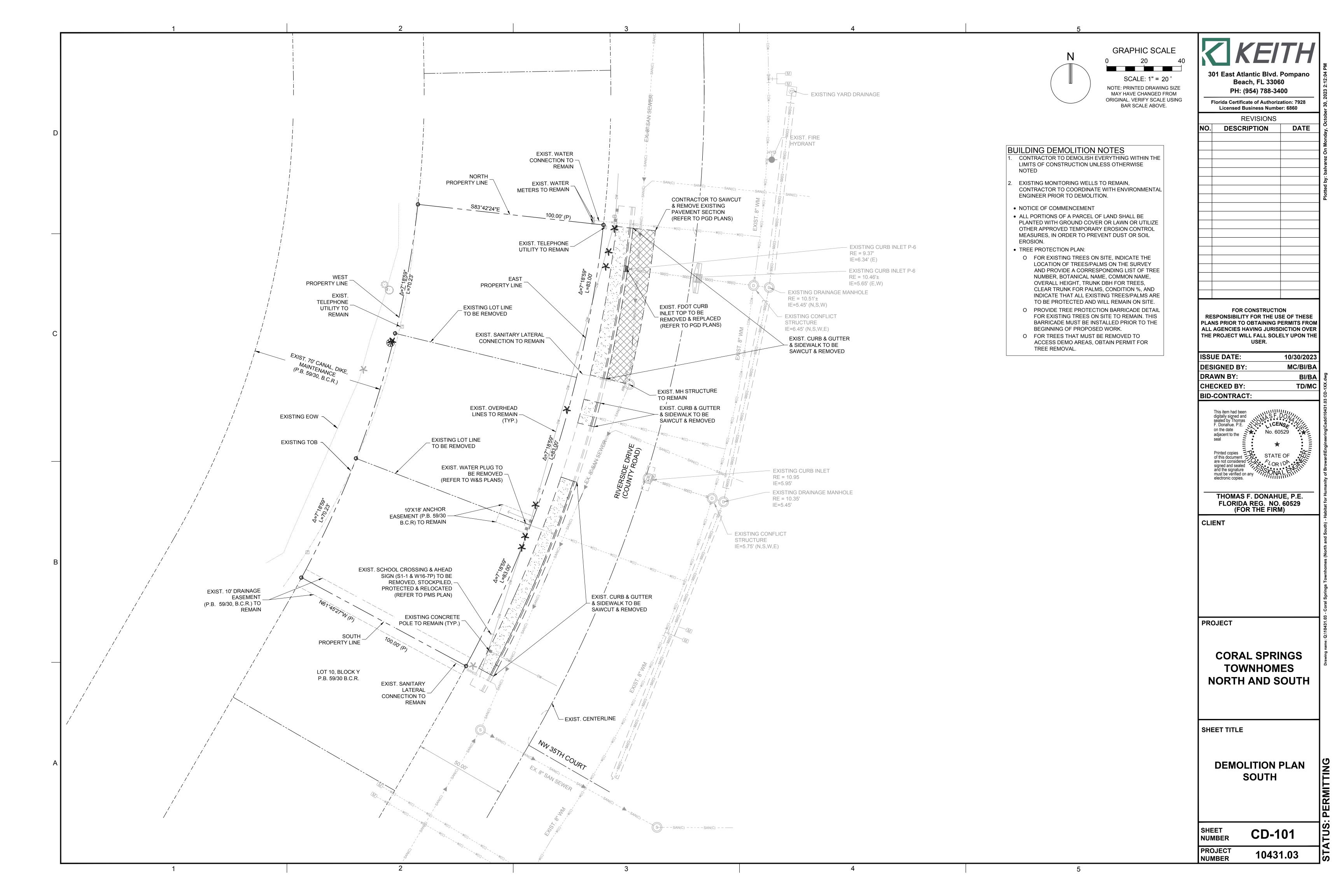
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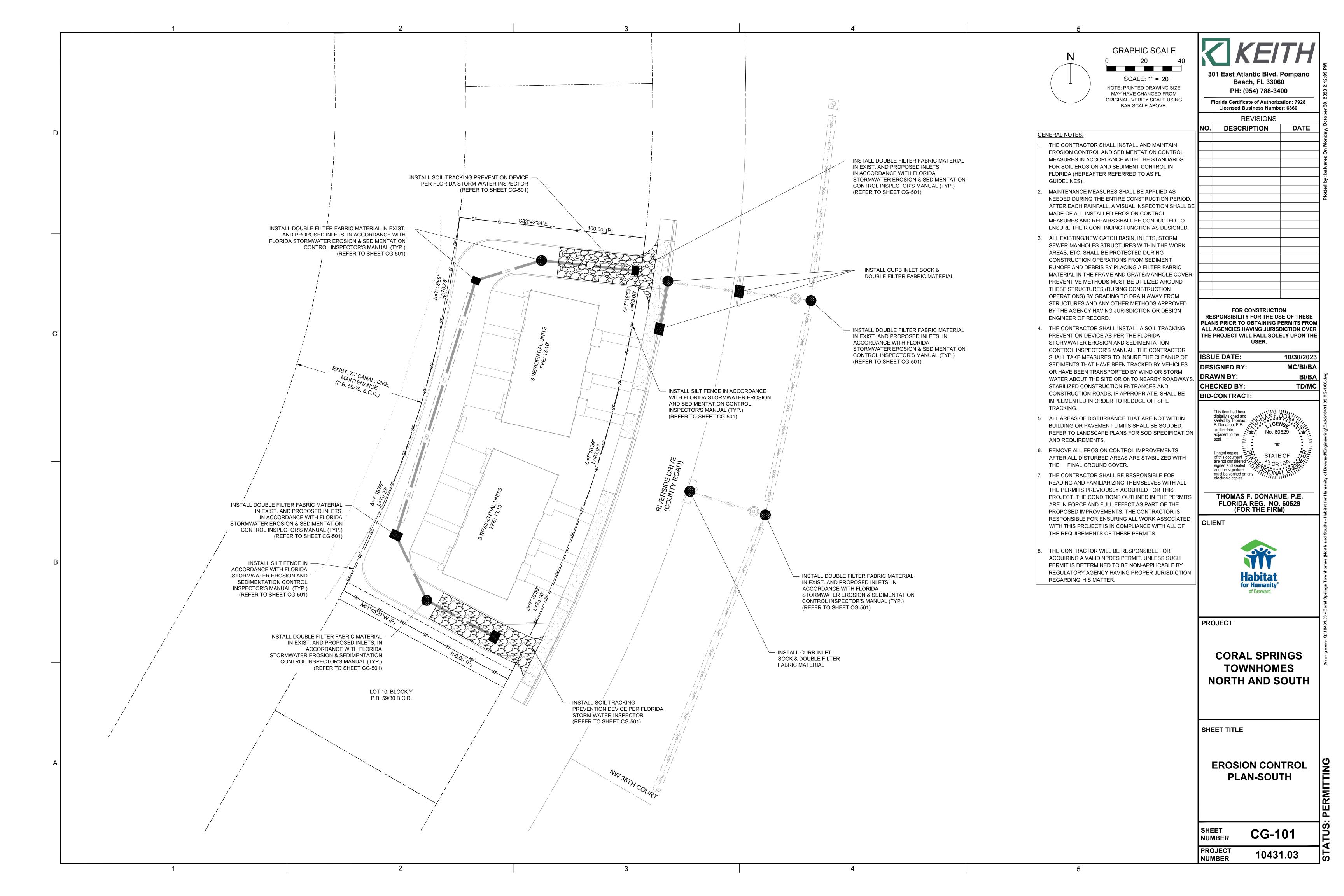
CORAL SPRINGS TOWNHOMES NORTH AND SOUTH

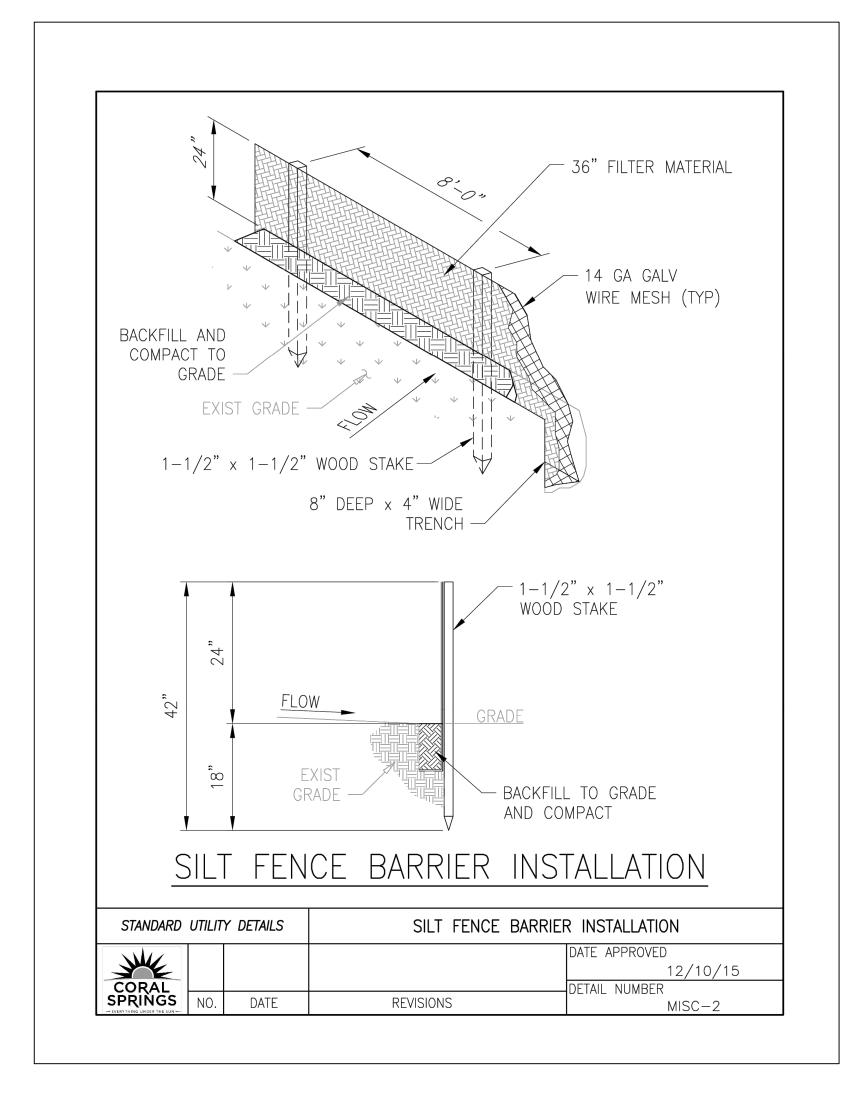
SHEET TITLE

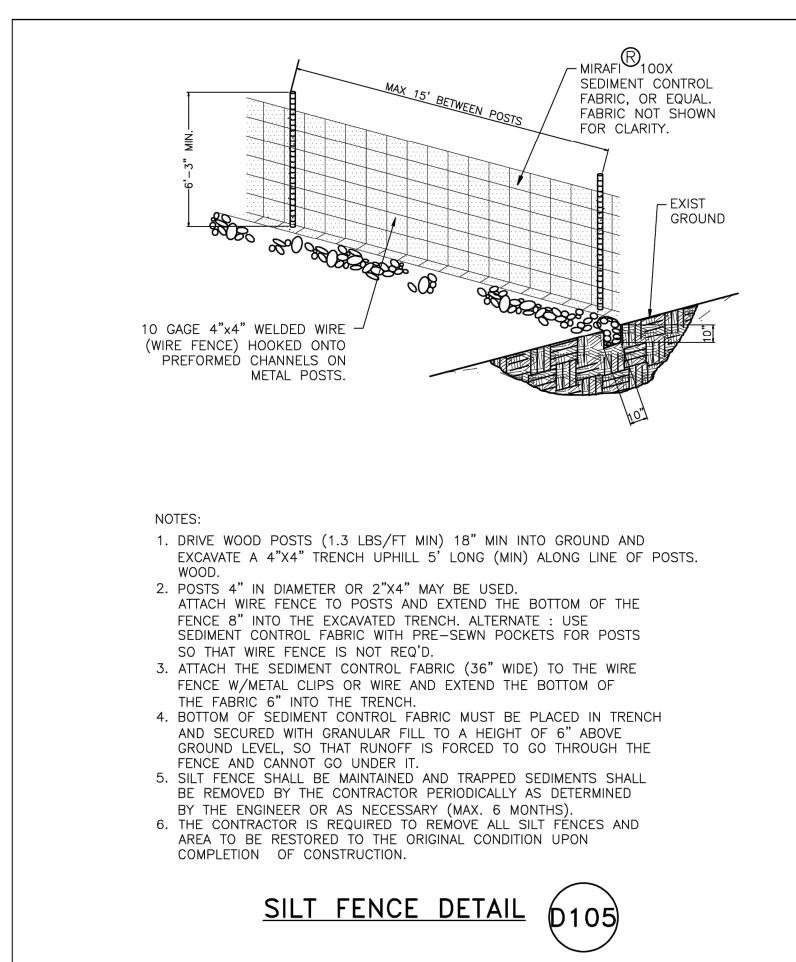
LEGEND & ABREVIATIONS

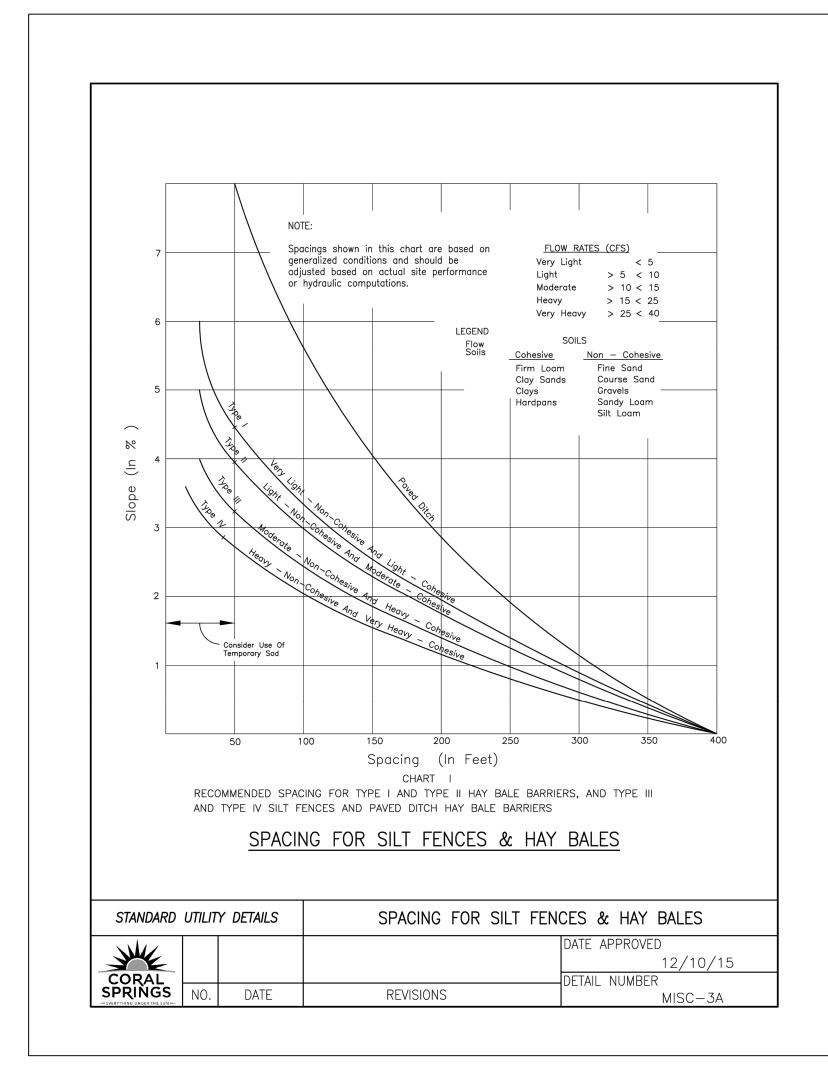
GI-003 NUMBER **PROJECT** 10431.03 NUMBER

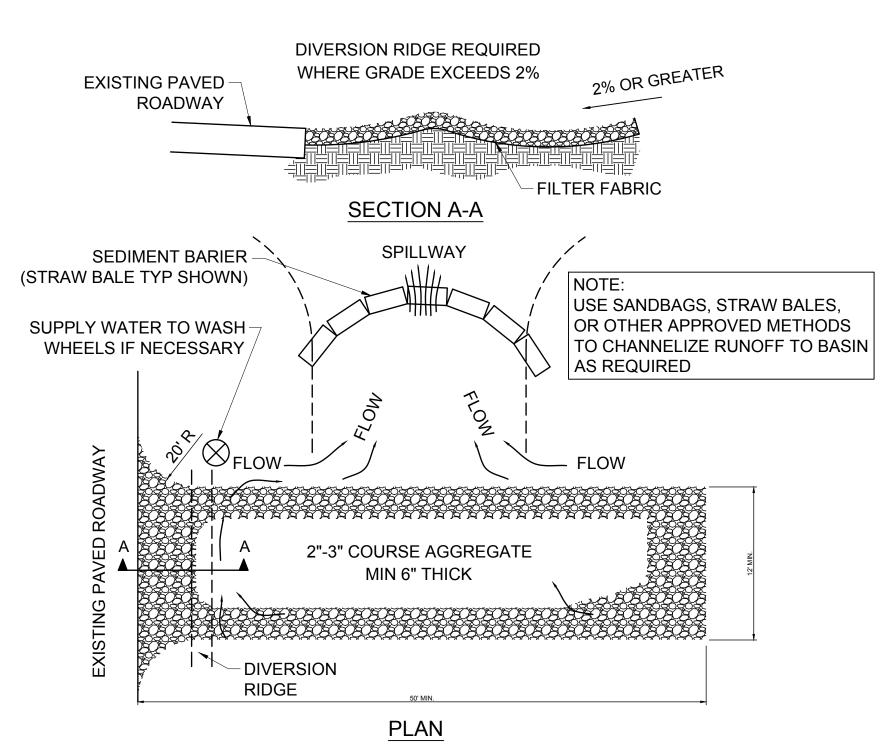








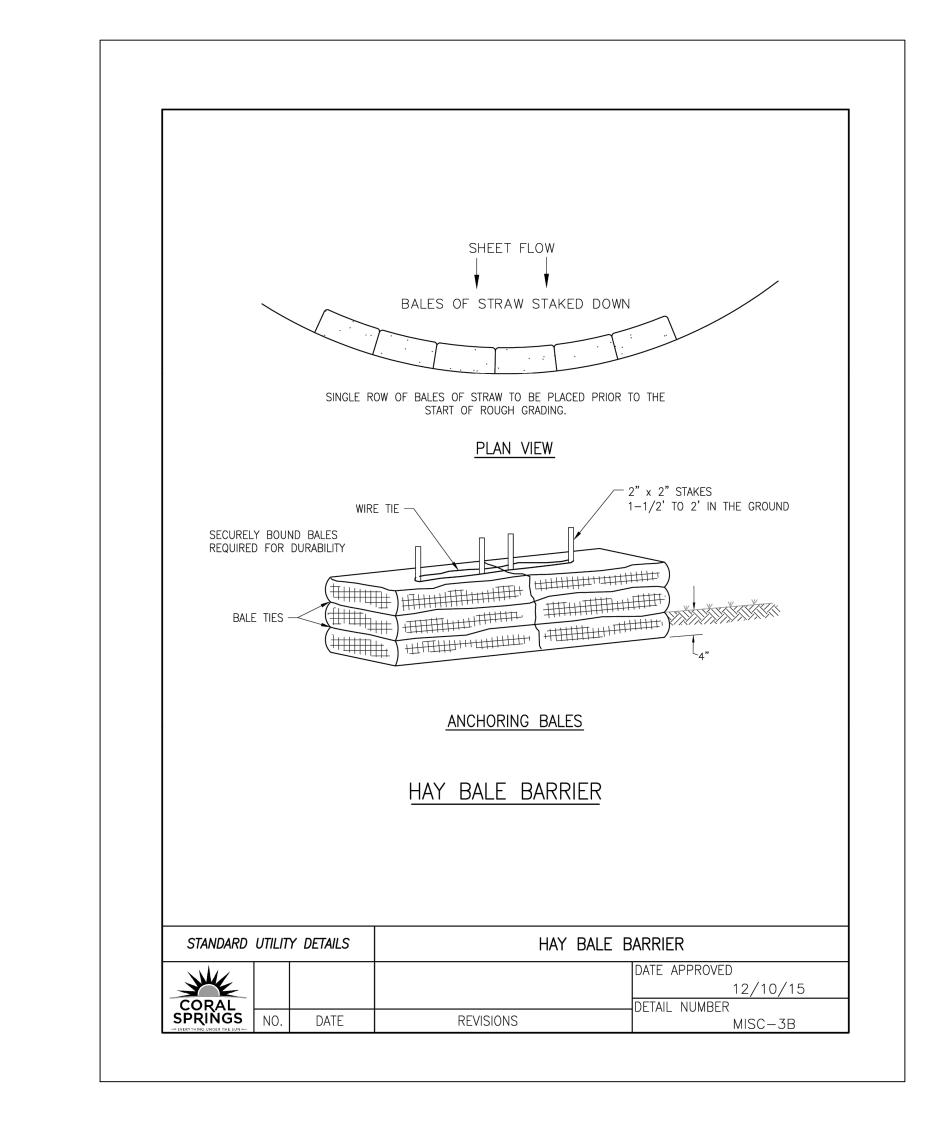


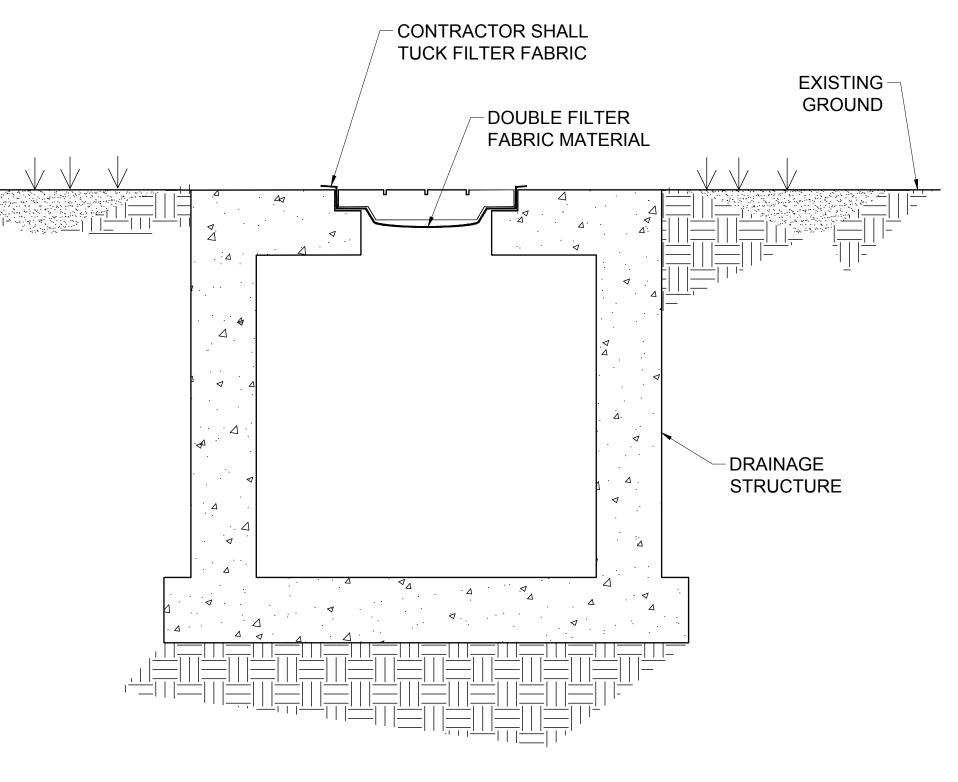


THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC

RIGHTS-OF-WAY. 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.





INLET / MANHOLE PROTECTION DETAIL

Beach, FL 33060 PH: (954) 788-3400 Florida Certificate of Authorization: 7928 Licensed Business Number: 6860 **REVISIONS** DATE DESCRIPTION FOR CONSTRUCTION **RESPONSIBILITY FOR THE USE OF THESE** PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE **ISSUE DATE:** 10/30/2023 MC/BI/BA DESIGNED BY: DRAWN BY: BI/BA CHECKED BY: TD/MC BID-CONTRACT: digitally signed and sealed by Thomas F. Donahue. P.E. on the date adjacent to the are not considered on the signed and sealed on and the signature must be verified on any electronic copies electronic copies. THOMAS F. DONAHUE, P.E. FLORIDA REG. NO. 60529 (FOR THE FIRM) CLIENT PROJECT **CORAL SPRINGS TOWNHOMES NORTH AND SOUTH** SHEET TITLE **EROSION CONTROL DETAILS**

SHEET

NUMBER

PROJEC1

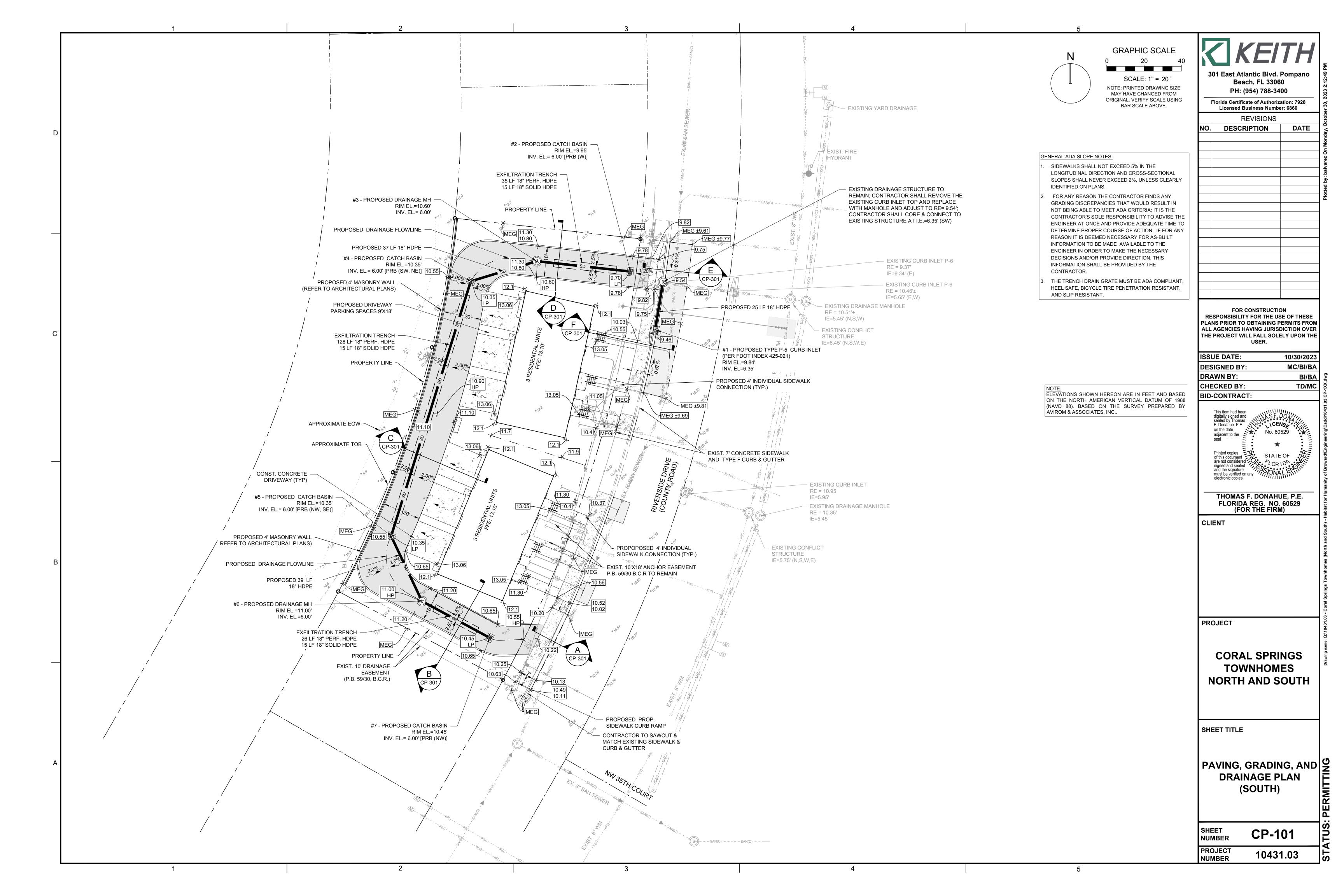
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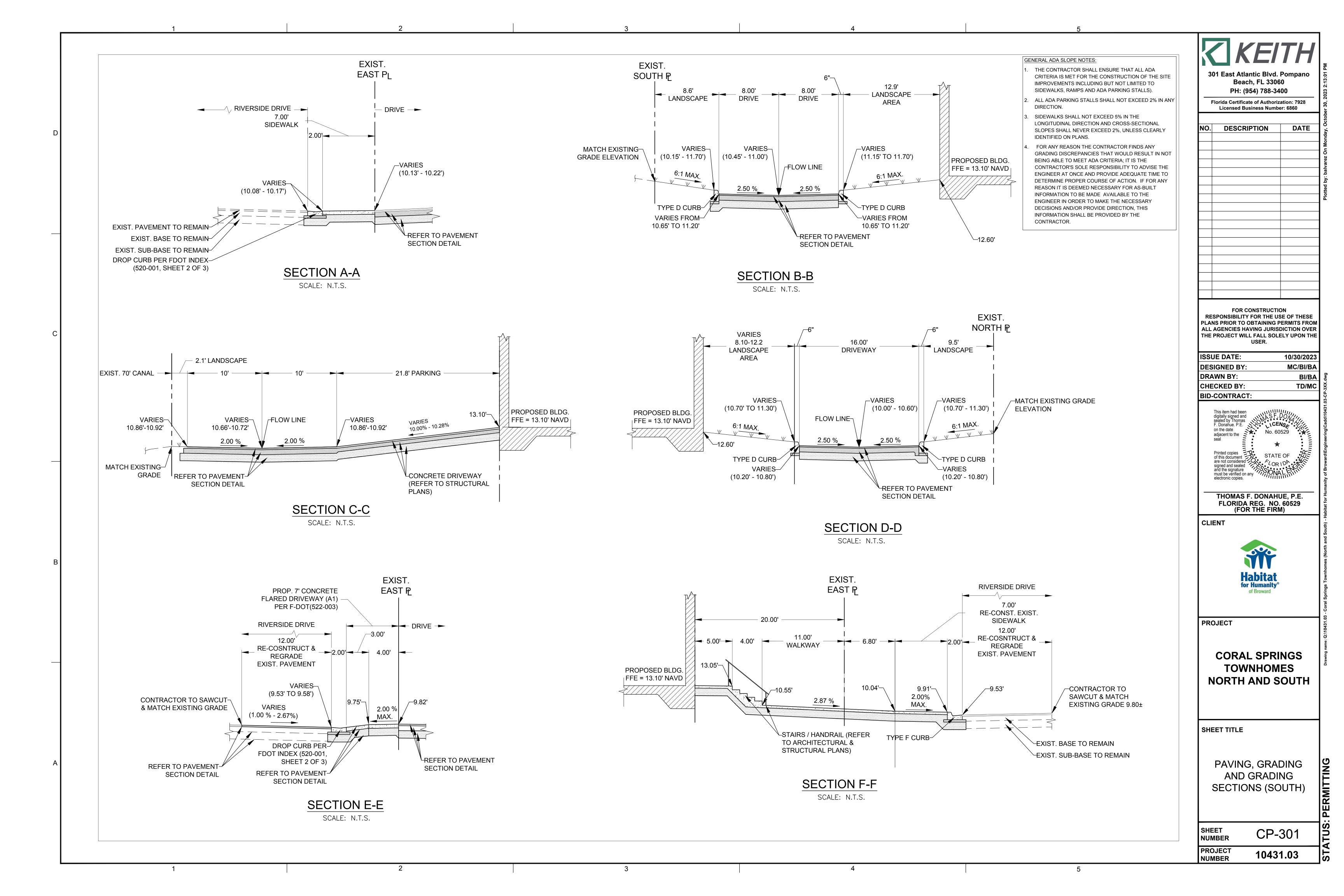
CG-501

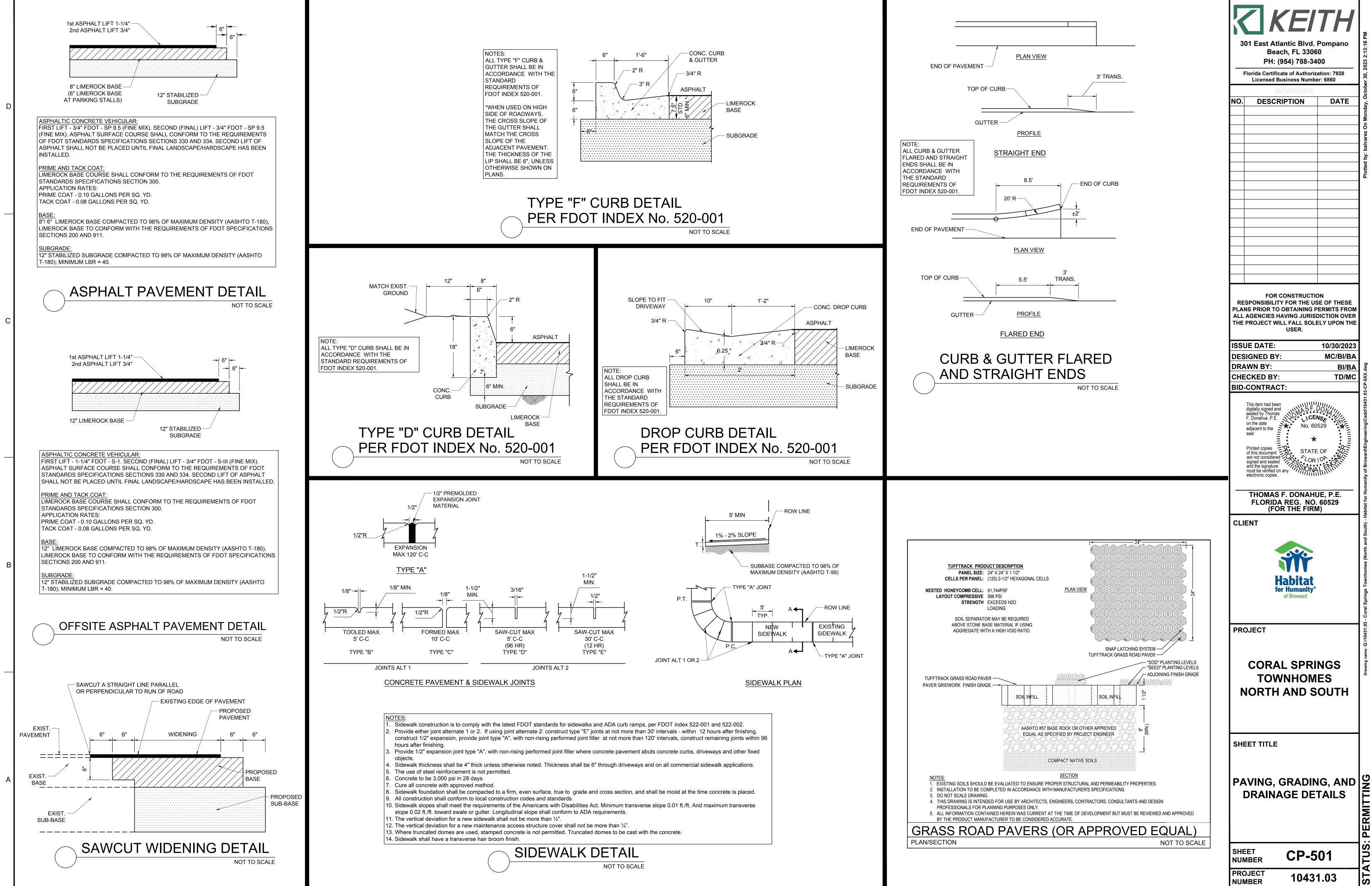
10431.03

301 East Atlantic Blvd. Pompano

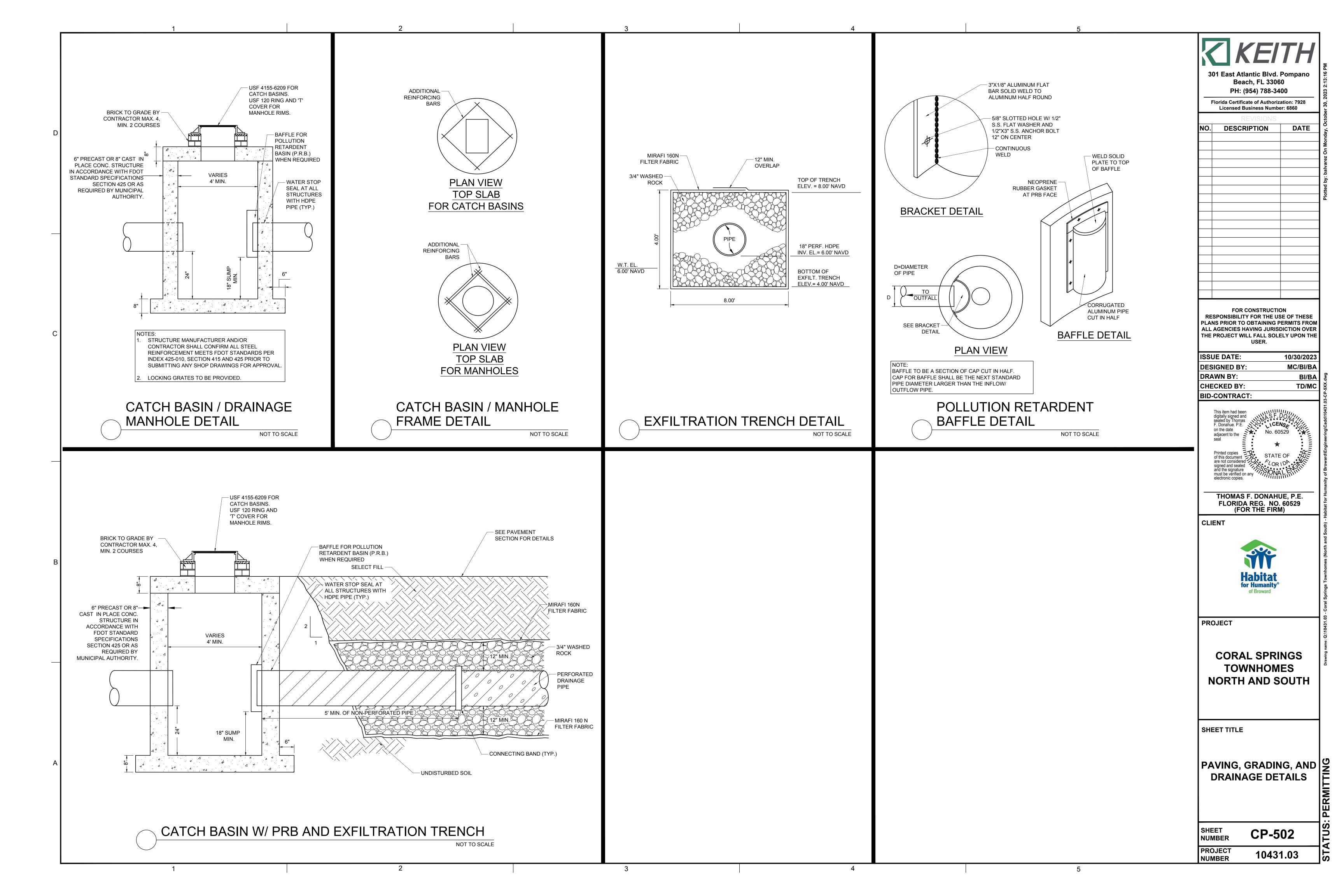
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE







BI/BA



SUNSHINE WATER CONTROL DISTRICT

STAFF REPORTS E

SUNSHINE WATER CONTROL DISTRICT

BOARD OF SUPERVISORS FISCAL YEAR 2023/2024 MEETING SCHEDULE

LOCATION

Sartory Hall, 10150 NW 29 St., Coral Springs, Florida 33065

DATE	POTENTIAL DISCUSSION/FOCUS	TIME
October 11, 2023	Regular Meeting	6:30 PM
November 8, 2023	Regular Meeting	6:30 PM
December 6, 2023	Regular Meeting	6:30 PM
December 13, 2023 Rescheduled to December 6, 2023	Regular Meeting	6:30 PM
January 10, 2024	Regular Meeting	6:30 PM
February 14, 2024 Rescheduled to February 15, 2024	Regular Meeting	6:30 PM
February 15, 2024	Regular Meeting	6:30 PM
March 13, 2024	Landowners' Meeting & Regular Meeting	6:30 PM
April 10, 2024	Regular Meeting	6:30 PM
May 8, 2024	Regular Meeting	6:30 PM
June 12, 2024	Regular Meeting	6:30 PM
July 10, 2024	Regular Meeting	6:30 PM
August 14, 2024	Regular Meeting	6:30 PM
September 11, 2024	Regular Meeting	6:30 PM