THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

TO: Technical Review Committee

FROM: Planning Department

RE: Project: #22-07000008

MEETING DATE: April 21, 2022

Site Plan and Conditional Use with New Construction– Bev Smith Toyota North
2427-421-0002-000-4
(S. US Highway 1 and Southland Drive)

The applicant is proposing construction of a 7, 329 square foot vehicle reconditioning building (Recon) along with associated stormwater pond, underground drainage system, utilities, and paved parking lot.

Please e-mail comments to ***planning_dl@cityoffortpierce.com*** prior to Tuesday, April 19, 2022.

If you have any questions, please call the Planning department at 772-467-3737.

Thank You

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DEVELOPMENT REVIEW

Property address or Location 3300 South US 1, Fort Pierce FL 34982

Parcel ID #(s) 2427-421-0002-000-4

Project description Proposed construction of a vehicle reconditioning building (Recon) along with associated stormwater pond. Underground drainage system, Utilities and paved parking lot.

Frank Gonzalez	same as owner
Property Owner(s)	**Applicant/Representative, Title, Company**
3350 South US Highway 1	
Street Address	Street Address
Fort Pierce FL 34982	
City State Zip	City State Zip
561-818-2847	
Phone Number	Phone Number
fgonzalez@bevsmithautomotive.com	
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 29 day of March, 2022 by Frank X Gonzalez who is personally known to me or has produced _____ as identification.

Signature of Notary

JANICE FREY
MY COMMISSION # GG 338050
EXPIRES: April 3, 2022
Bonded Thru Notary Public Underwriters

INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

❑ DEVELOPMENT REVIEW

General Information

- ❑ Incomplete application packets cannot be accepted.
- ❑ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
■ Site Plan	❑ Conditional Use with New Const.	❑ Major Amendment
❑ Conceptual Development Plan		❑ Minor Amendment

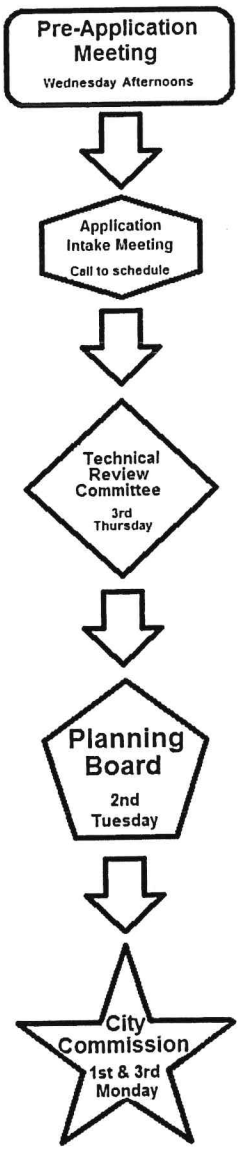
Site Information:

Non-Residential: Proposed Sq. Ft.: 7,329 Residential: Proposed Units:_____

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
vacant	commercial	vacant	vacant

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ❑ Complete notarized application
- ❑ Warranty Deed
- ❑ SLC Property Record Card
- ❑ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ❑ General location map (see Section 22-58.d.2)
- ❑ Survey (see Section 22-58.d.3)
- ❑ Site Plan (see Section 22-58.d.4)
- ❑ Landscaping Plan (see Section 22-187)
- ❑ Storm Drainage Plan (see Section 22-58.d.6)
- ❑ Environmental Impact Report
- ❑ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7)
- ❑ Lighting Plan (see Section 22-58.d.8)
- ❑ Design Review submittals (see Design Review application)
- ❑ Traffic Impact Report
- ❑ Concurrency Review submittals (see Concurrency Review application)

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

Design Review

Property address or Location 3300 SOUTH US HIGHWAY 1 FORT PIERCE, FL 34982

Parcel ID #(s) 2427-421-0002-000-4

Project Description Proposed construction of a vehicle reconditioning building (Recon) along with associated stormwater pond. Underground drainage system, Utilities and paved parking lot.

FRANK GONZALEZ	FRANK GONZALEZ
Property Owner(s)	Applicant/Representative, Title, Company
3350 SOUTH US HIGHWAY 1	3350 SOUTH US HIGHWAY 1
Street Address	Street Address
FORT PIERCE FL 34982	FORT PIERCE FL 34982
City State Zip	City State Zip
561-818-2847	5618182847
Phone Number	Phone Number
FGONZALEZ@BEVSMITHAUTOMOTIVE.COM	FGONZALEZ@BEVSMITHAUTOMOTIVE.COM
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

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EXPIRES: April 3, 2022
Bonded Thru Notary Public Underwriters

Signature of Notary

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic Districts	Historic Designation

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____

Intake Planner _____

Planner Assigned _____

Approved _____ Date _____

Comments _____

Intake Date Stamp

Design Review Application Checklist
(City Code of Ordinances 22-59)

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 22-194, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 22-58(e) is also available.

Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 22-58
c. A final site lighting plan that meets the requirements of subsection 22-58(d)(8).
d. A final landscape plan that meets the requirements of Article XII, Landscaping and Trees.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	VACANT	GC	C-3
South	AUTOMOTIVE DEALERSHIP	GC	C-3
East	VACANT	GC	C-3
West	US-HWY 1	N/A	N/A

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	GC	C-3	0.00	5.24	X
****Proposed**	GC	C-3	7,329	5.24	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot 917
Demand Analysis	Maximum 3,665
Current Zoning/FLU	Total gallons per day 0.00
**Proposed Zoning/FLU	Total gallons per day 917
**Change in Demand	Total gallons per day 917

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot 917
Demand Analysis	Maximum 3,665
Current Zoning/FLU	Total gallons per day 0.00
**Proposed Zoning/FLU	Total gallons per day 917
**Change in Demand	Total gallons per day 917

C. Parks and Recreation (Residential Classifications Only):
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU Enrollment Demand		
****Proposed Zoning/FLU Enrollment Demand**		
****Change in Demand**		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	
****Proposed Zoning/FLU**	
***Change in Demand**	

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	Under the proposed conditions of this application, the impervious area is reduced.

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	0.00	0.00
****Proposed Zoning/FLU**	16	20/ 19
***Change in Demand**	Trips 16	Trips 20/ 19
Impact to Capacity	INCREASED DAILY TRIPS	

IV. Project Description

PHASING
Is this project (phase) part of a larger project? ☐ Yes ☑ No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage):
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total)

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**
AUTOMOTIVE RECONDITIONING/ STORAGE	1	7,329	0.17	JUNE 2022	JUNE 2023

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. ☐ Yes ☑ No

B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

2. What is the current use of the structure to be demolished or re-used? N/A

3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested: 0.00

** Complete section if requesting a change in zoning, future land use, or expanding

PENNEY DESIGN GROUP

TO: City of Fort Pierce
100 N. US Highway 1
Fort Pierce, FL 34950

RE: Bev Smith Recon Facility
3350 South US Highway 1
Fort Pierce, FL 34982

DATE: **MARCH 25, 2022**

To Whom it May Concern:

This letter represents our design intent for the proposed renovations and additions to the above referenced existing facility.

The project site is on the east side of US Highway 1, approximately 2 miles south of Virginia Avenue/Florida Route 70. Today, the existing site is vacant and undeveloped, just north of the existing Bev Smith Toyota facility.

The goals of the proposed project are to: expand the reconditioning components of the existing sales and service facility on the adjacent parcel, primarily to meet customer demands and to enhance the dealerships existing values of customer care and a high-quality level of service.

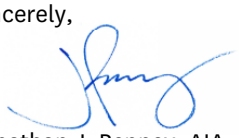
The building exterior is comprised of attractive, integrally-colored and textured "split-face masonry block." Proposed materials for the reconditioning building are consistent with the proposed addition to the adjacent sales and service facility.

Proposed colors for the facility are as follows:

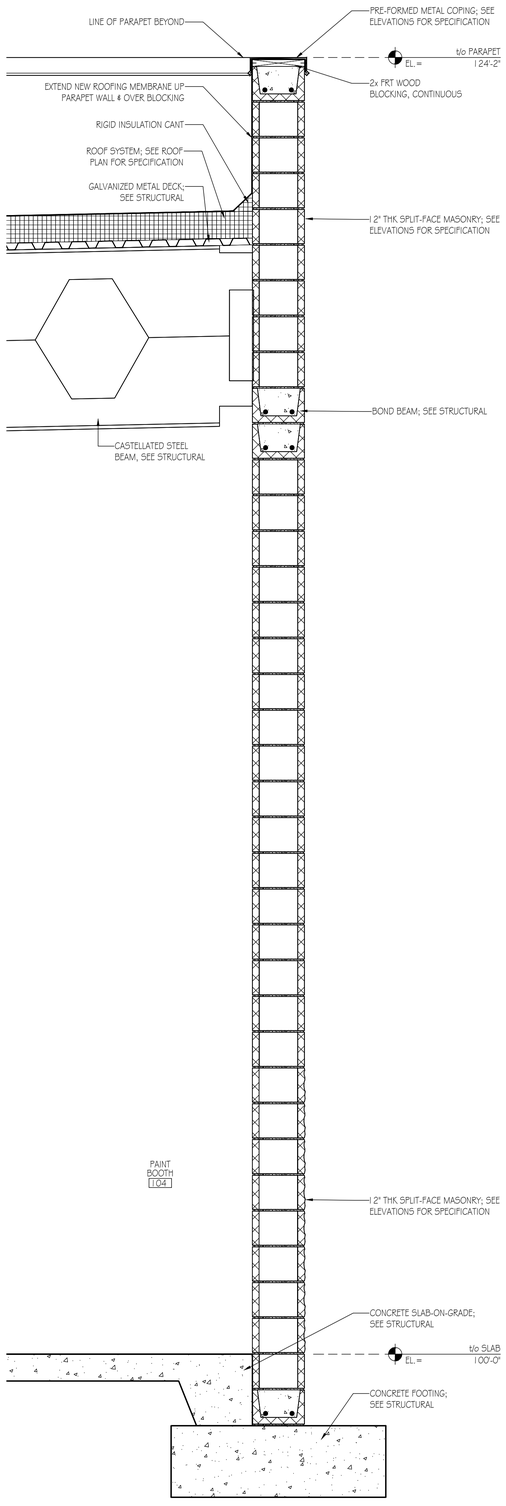
- Light (mist) and medium gray (charcoal) tones for split-face CMU masonry

Please do not hesitate to reach out with any comments or questions.

Sincerely,

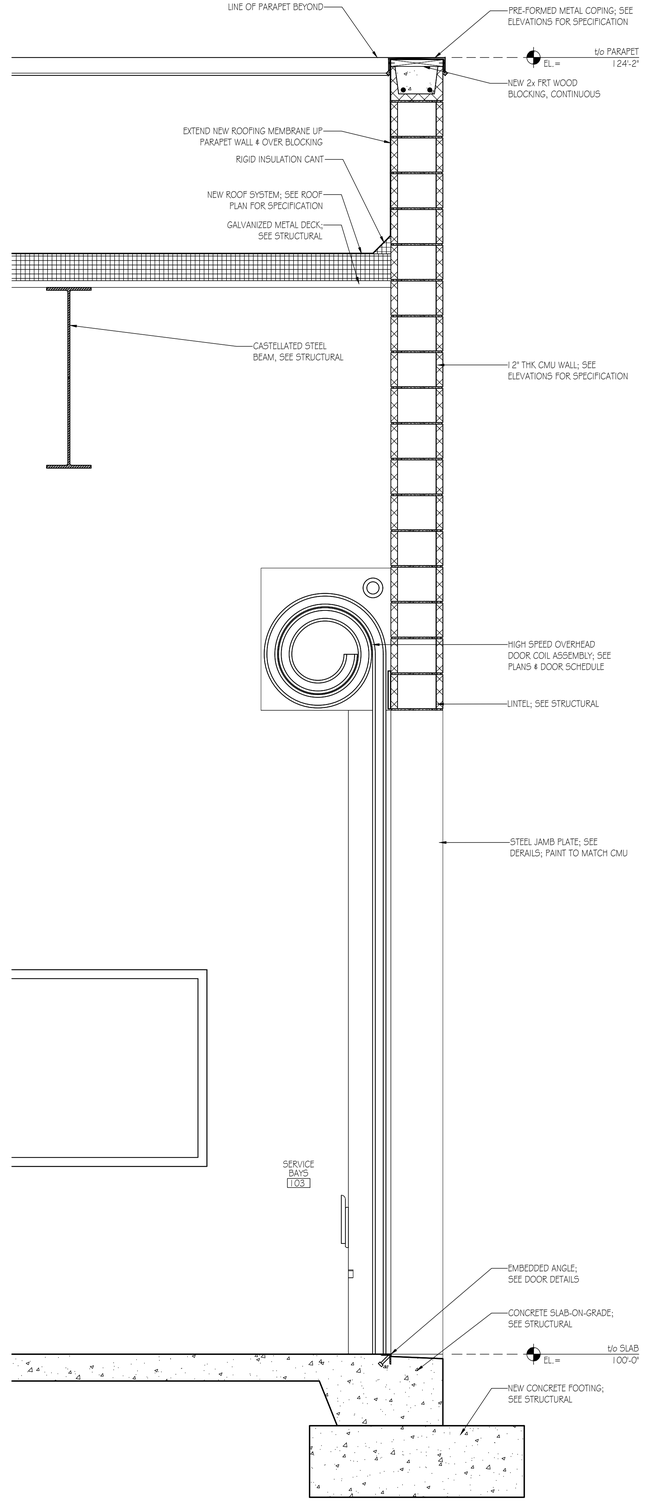


Jonathan J. Penney, AIA
Penney Design Group, LLC
FL License No. AR97071



2 WALL SECTION

Scale: 3/4" = 1'-0"



1 WALL SECTION

Scale: 3/4" = 1'-0"

PENNEY DESIGN GROUP

ARCHITECTURE | PLANNING | INTERIORS

8120 Woodmont Avenue
Suite 750
Bethesda, Maryland 20814
p.301.979.7600
f.301.710.6384

www.penneydesigngroup.com

Bev Smith Recon Building

New Construction

3350 US-1
Fort Pierce, FL 34982

Bev Smith TOYOTA

I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Florida, license number: AR97071; expiration date: February 28, 2022.

No.	Issue / Revision	Date
	Bid Set	2021.10.04

Drawn By:	TK
Checked By:	PS
Plot Date:	October 5, 2021

Sheet Number

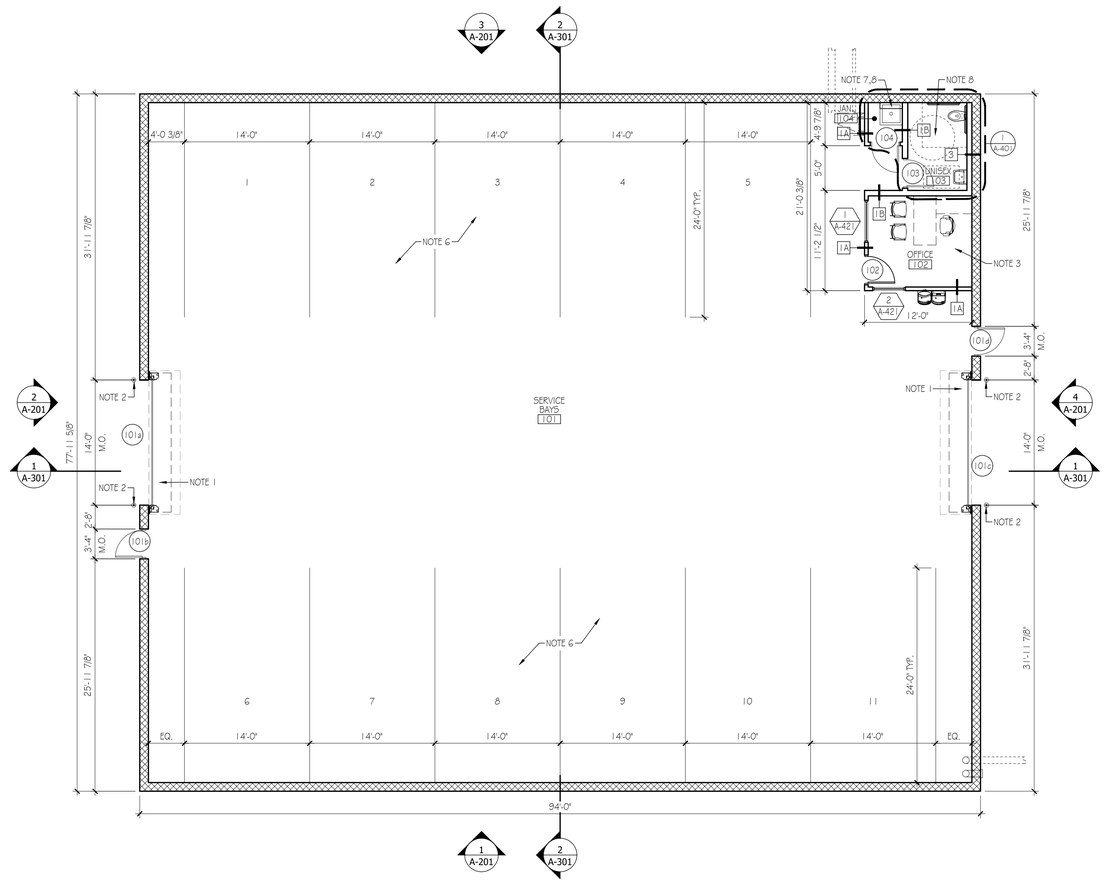
A-311

Sheet Title

Wall Sections

Project Number	File Name
BST001b	BST001b_A-311.dwg

J:\Projects\Bev Smith\BST001b - Bev Smith Toyota Recon\Revit Sheets\Sheets\BST001b_A-311.rvt



1 FLOOR PLAN

Scale: 1/8" = 1'-0"

KEYED FLOOR PLAN NOTES

1. HIGH SPEED OVERHEAD DOOR COIL ABOVE; SEE SECTIONS & DOOR SCHEDULE; SEE MEP & STRUCTURAL FOR ADDITIONAL REQUIREMENTS
2. NON-CUSTOMER AREA BOLLARD @ OVERHEAD DOORS, PAINTED; SEE TYPICAL DETAILS
3. COORD. INSTALLATION OF OWNER'S I.T. EQUIPMENT w/ OWNER'S VENDOR; SEE MEP FOR ADD'L REQUIREMENTS
4. OVERHEAD REEL & STRUCTURAL SUPPORT BY OWNER VENDOR; SEE MEP & COORD. INSTALLATION w/ VENDOR
5. CATCH BASIN w/ TRAFFIC-RATED GRATE; t/o GRATE TO BE 1" BELOW TYPICAL FINISHED FLOOR
6. SERVICE DEPARTMENT EQUIPMENT (INCL. LIFTS, TOOL BENCHES, WHEEL SERVICE, TIRE CAROUSELS, OIL STORAGE, COMPRESSORS, ETC.) BY OWNER VENDOR; G.C. SHALL COORDINATE ALL WORK w/ VENDOR; SEE MEP FOR ADDITIONAL REQUIREMENTS
7. FLOOR MOP SINK, SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
8. FLOOR DRAIN, SLOPE FLOOR TOWARD DRAIN 1/8" PER 1'-0", TYP. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
9. APPROXIMATE LOCATION OF HOSE BIB HYDRANT, SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

GENERAL FLOOR PLAN NOTES

ALL DIMENSIONS ARE TO FACE OF WALL UNLESS NOTED OTHERWISE

- OUTSIDE EDGE OF ALL HM DOOR FRAMES TO BE 3" FROM ADJACENT WALL @ STUD WALLS & 4" FROM ADJACENT WALL @ MASONRY WALLS, UNLESS OTHERWISE NOTED
- GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD; NOTIFY ARCHITECT OF DISCREPANCIES

PLAN LEGEND

#	NEW DOOR # TAG - SEE DOOR SCHEDULE
EXIST	EXISTING DOOR TO REMAIN
	NEW WALL
	EXISTING WALL/PARTITION TO REMAIN
	AREA NOT IN CONTRACT - NO WORK PROPOSED

NORTH ARROW & SCALE

0 2' 4' 8' 16'

1/8" = 1'-0" @ 30"x42"

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www.penneydesignngroup.com

Bev Smith Recon Building

New Construction

3350 US-1
Fort Pierce, FL 34982

Bev Smith Toyota

STATE OF FLORIDA
THOMAS PENNEY
37071
REGISTERED ARCHITECT
MAR 2 5 2022

No.	Issue / Revision	Date
	Bid Set	2021.10.04
Drawn By:		TK
Checked By:		PS
Plot Date:		October 5, 2021

Sheet Number

A-110

Sheet Title

Floor Plan

Project Number	File Name
BST001b	BST001b_A-110.dwg

J:\Projects\Bev Smith\BST001b - Bev Smith Toyota Recon\Revit\Sheets\Sheets\BST001b_A-110.rvt

EXTERIOR MATERIALS SCHEDULE

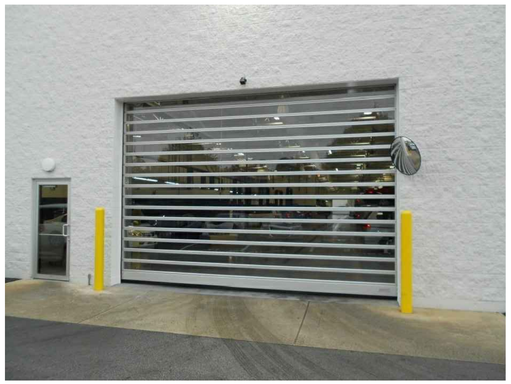
TAG	TYPE	SPECIFICATION	REMARKS
WALLS			
CMU-1	CONCRETE MASONRY UNIT	YORK BUILDING PRODUCTS, "MIST"	SERVICE BAYS
CMU-2	CONCRETE MASONRY UNIT	YORK BUILDING PRODUCTS, "CHARCOAL", SPLIT FACE	SERVICE BAYS
EP-1	EXTERIOR PAINT	SHERWIN WILLIAMS, "GAUNTLET GRAY", SW7019	BOLLARDS, DOORS & OH DOOR STEEL JAMB, U.N.O
PC-1	PRE-FORMED PARAPET COPING	PAC-CLAD - PAC-TITE TAPERED - 4" FACE - .040" ALUMINUM - COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE	NEW PARAPET COPING AS INDICATED

GENERAL EXTERIOR FINISH SCHEDULE NOTES

- UNLESS NOTED OTHERWISE, PAINTED SURFACES SHALL BE PREPARED & FINISHED AS FOLLOWS:
  - EXTERIOR HOLLOW METAL DOOR FRAMES & MISCELLANEOUS METALS - 1 COAT PRIMER - 2 FINISH COATS - SEMI-GLOSS FINISH
  - EXTERIOR GYPSUM WALLBOARD CEILINGS/SOFFITS - 1 COAT PRIMER - 2 FINISH COATS - FLAT FINISH
  - EXTERIOR WALLS - STUCCO/EIFS - 1 COAT PRIMER - 2 FINISH COATS - SATIN FINISH

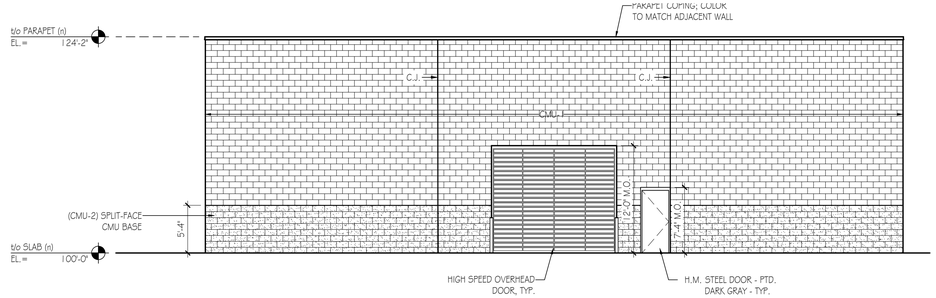
CMU-1 - YORK MIST SPLIT-FACE

CMU-2 - YORK CHARCOAL SPLIT-FACE



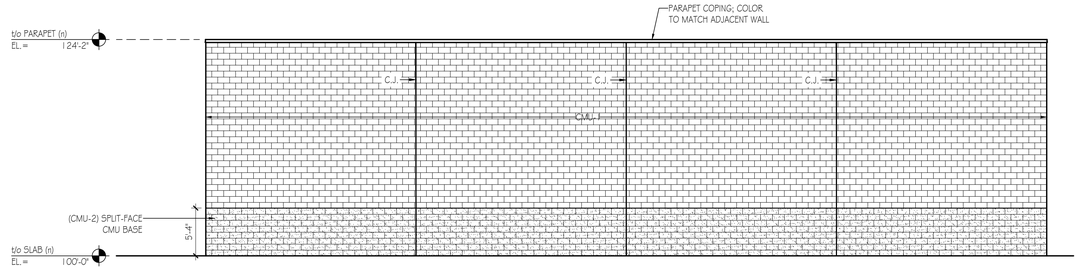
SAMPLE IMAGE - RYTEC SPIRAL FV
HIGH-SPEED OVERHEAD DOOR

EXTERIOR ELEVATIONS



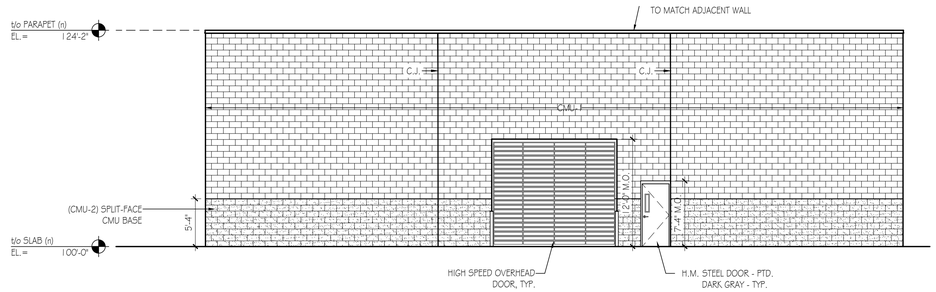
4 WEST ELEVATION

Scale: 1/8" = 1'-0"



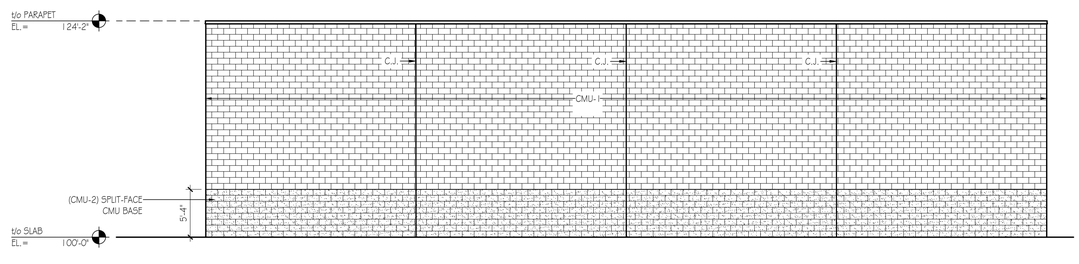
3 EAST ELEVATION

Scale: 1/8" = 1'-0"



2 SOUTH ELEVATION

Scale: 1/8" = 1'-0"



1 NORTH ELEVATION

Scale: 1/8" = 1'-0"

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Suite 750
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p.301.979.7600
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Bev Smith Recon Building

New Construction

3350 South US Hwy 1
Fort Pierce, FL 34982

Bev Smith TOYOTA

STATE OF FLORIDA
PAUL SCHWARTZ
REGISTERED ARCHITECT
97071
MAR 25 2022

No.	Issue / Revision	Date
	Permit Set	2021.12.01
	Bid Set	2021.10.04

Drawn By: TK
Checked By: PS
Plot Date: March 25, 2022

Sheet Number

A-201

Sheet Title

Building Elevations

Project Number: BST001b
File Name: BST001b_A-201.dwg

Z:\Projects\Bev Smith\BST001b - Bev Smith Toyota Recon\4Arch\Sheets\2Arch\200\BST001b_A-201.dwg, 1:1

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4469116 OR BOOK 4168 PAGE 975, Recorded 08/13/2018 10:04:56 AM Doc Tax: $1939.00

PREPARED BY & RETURN TO:

Mark L. Ornstein, Esquire
Bass Sox Mercer
2822 Remington Green Circle
Tallahassee, Florida 32308

Consideration: $276,923.00
Documentary Stamp Tax: $1,939.00
Parcel ID No.: 2427-421-0001-000-7

WARRANTY DEED

THIS INDENTURE made this 12th day of July, 2018, between Nicholas S. Smith ("**Smith**"), as to an undivided seventy-five percent (75%) interest, whose mailing address is 7845 SW Ellipse Way, Stuart, Florida 34997 and Frank X. Gonzalez ("**Gonzalez**" and, with Smith, collectively referred to as "**Grantors**"), as to an undivided twenty-five percent (25%) interest, whose mailing address is 1995 SE Saint Lucie Boulevard, Stuart, Florida 34996, and N.S.S. Acquisition Corp., a Florida corporation, whose mailing address is 3350 South U.S. Highway 1, Fort Pierce, Florida 34982 (the "**Grantee**").

WITNESSETH:

WITNESSETH, that the Grantors, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00), and other good and valuable considerations to the Grantors in hand paid by the Grantee, the receipt and sufficiency of which are hereby acknowledged, has granted, bargained, sold, conveyed, remised, released and transferred to the Grantee, and the Grantee's successors and assigns forever, the following described land (the "**Property**") located in St. Lucie County, Florida, to-wit:

> A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, MORE PARTICULARLY DESCRIBED AS FOLLOWS;
>
> COMMENCE AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4; THENCE NORTH 89°30'01" WEST, ALONG THE NORTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, A DISTANCE OF 49.19 FEET TO AN INTERSECTION WITH A NON TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 11,334.20 FEET, THE CHORD BEARS SOUTH 02°17'45" EAST, 242.65 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 242.66 FEET THROUGH A CENTRAL ANGLE OF 01°13'36"; THENCE SOUTH 02°17'45" EAST, A DISTANCE OF 211.97 FEET 0TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL;
>
> THENCE NORTH 87°42'01" EAST, A DISTANCE OF 752.53 FEET; THENCE SOUTH 02°05'44" EAST, A DISTANCE OF 422.62 FEET TO THE NORTH RIGHT-OF-WAY OF SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT-OF-WAY); THENCE SOUTH 89°33'19" WEST, ALONG THE NORTH RIGHT-OF-WAY OF SOUTHLAND DRIVE, A DISTANCE OF 751.45 FEET TO THE EAST RIGHT-OF-WAY OF U.S. HIGHWAY NO. 1; THENCE NORTH 02°17'45" WEST, ALONG THE EAST RIGHT-OF-WAY OF U.S. HIGHWAY NO. 1, A DISTANCE OF 398.29 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH all tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

GENERAL ADDRESS REQUEST

Residential $25.00 per address
Commercial - $50.00 per address
E-mail Address request form to planning_dl@cityoffortpierce.com

☐ Assigned ☐ Corrected ☐ Changed

Residential subdivisions or **apartment complexes** of three or more units require a site plan showing each unit's address and a spreadsheet with the address and corresponding parcel ID #.

Property Owner(s): Frank Gonzalez

Parcel Identification(s): 2427-421-0002-000-7

Legal Description: A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT

Current Address: 3300 S US Hwy 1

Use of Property: Vacant

Applicants Signature: _____ **Date:** _____

Printed Name: Frank Gonzalez

☐ I am not the owner of the described property; however, the owner(s) authorizes me to act as agent for the owner(s) of record. (Provide copy of authorization).

Contact Information: Phone: 561-818-2847 Email: fgonzalez@bevsmithautomotive.com

Office Use Only

PROPOSED NEW ADDRESS: _____

Signature of City Representative: _____

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

CONDITIONAL USE – NO NEW CONSTRUCTION

Property Information

Property address or Location

TBD

Parcel ID #(s)

2427-421-0002-000-4

Project description

Proposed Automotive reconditioning center building with associated site parking, stormwater and utilities.

Site Information

Building Size: 7,329 Parking Spaces: 13

Frank Gonzalez	FRANK GONZALEZ
Property Owner(s)	**Applicant/Representative, Title, Company**
3350 SOUTH US HIGHWAY 1	3350 SOUTH US HIGHWAY 1
Street Address	Street Address
FORT PIERCE FL 34982	FORT PIERCE FL 34982
City State Zip	City State Zip
561-818-2847	561-818-2847
Phone Number	Phone Number
FGONZALEZ@BEVSMITHAUTOMOTIVE.COM	FGONZALEZ@BEVSMITHAUTOMOTIVE.COM
Email Address	Email Address

Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.*

Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

General Information

- **Incomplete application packets will not be accepted.**
- In-take meetings are required for application submittals.
- Conditional Use approval is valid for one (1) year following City Commission approval.
- Fee Schedule - https://www.cityoffortpierce.com/DocumentCenter/View/2620/Fee-Schedule-
- Public Notice Fees - https://www.cityoffortpierce.com/DocumentCenter/View/8818/Public-Notice-Fees-

Submittal Requirements:

Submit one (1) original & three (3) hard copies and one (1) CD or Flash Drive of the following. Additional copies will be required of subsequent submittals.

- ❑ As-built Survey
- ❑ Floor Plan of Existing Buildings
- ❑ Site plan, to scale, including existing improvements and proposed parking, driveways, landscaping & storm drainage
- ❑ Lighting Plan
- ❑ Complete Application

The application for conditional use with the application for site plan review, when not exempt in accordance with the requirements of section 125-236, shall be reviewed as a unit in accordance with the requirements of section 125-313 except that:

1. The City Commission shall hold a public hearing in accordance with the provisions of section 125-38 prior to acting on the application for conditional use.

2. In permitting a conditional use or the modification of an existing conditional use, the city commission may impose, in addition to those standards and requirements expressly specified in this chapter, any condition which it finds to be necessary to protect the best interest of the surrounding property of the city.

Florida Environmental Consulting, Inc.

Environmental Impact Report

For:

Bev Smith Toyota

Prepared for:

Frank Gonzalez
Bev Smith Toyota
7845 SW Ellipse Way
Stuart, FL 34997
561-818-2847

TIMOTHY E. MASLIN #77283 Certified Environmental Assessment Specialist Association

05/28/2021

Timothy E. Maslin, C.E.S. / C.E.C.
Certification #77283

FEC Job #21-185

1835 20th Street • Vero Beach, Florida 32960
Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-env.com

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1.0 Executive Summary

The proposed Bev Smith Toyota property:

- is approximately 26.65 acres in St. Lucie County, Florida.
- is two undeveloped parcels along US1, a portion of which is proposed for land development improvements.
- contains mostly poorly drained sandy soils.
- is approximately at an elevation of 15
- is in Flood Zone X.
- contains a Pine Flatwoods habitat which supports some palms and pines.
- contains a Mixed Pine and Oak habitat which supports some palms, pines, as well as live and laurel oaks.
- contains a 0.77-acre Exotic Melaleuca Wetland
- contains a 0.06-acre Wetland Scrub
- has an adjacent 0.21-acre Depressional Marsh Wetland in the right-of-way of US1
- does support the gopher tortoise.
- does contain jurisdictional wetlands.
- improvements within only the proposed site plan area will cause *de minimis* environmental impacts.
- improvements to other areas of the parcel unless properly permitted, may cause adverse environmental impacts to protected species, native habitats, trees, and wetlands.

2.0 Environmental Impact Report

2.1 Objective

In May of 2021 Environmental Specialists from *Florida Environmental Consulting Inc.* performed an environmental impact study of the **Bev Smith Toyota** property. The objective of this study was to assess and report on the baseline environmental condition of the subject site as well as to discuss how developing this site may impact the environment.

2.2 Introduction

The subject property is parcel IDs 2427-421-0001-000-7 and 2427-421-0002-000-4 in section 27 of township 35, range 40 of Saint Lucie County, Florida. More specifically, on the east side of US1, directly south of High Point Blvd. It is comprised of approximately 26.65 acres of vacant land, at -80.32342, 27.40226 however only a portion of these parcels is currently proposed for land development improvements. Please see the maps and other reference materials in the appendix of this report.

2.3 Materials and Methods

The site assessment included preliminary research of the site and surrounding area to determine what type of ecological community to expect as well as what types of individual flora and fauna may be found on site. This preliminary research included Geographic Information Systems (GIS) Mapping, aerial interpretation, Florida Department of Environmental Protection (FDEP) Environmental Resource Analysis and assessing the potential for species and habitats listed by the County, South Florida Water Management District (SFWMD), Florida Natural Areas Inventory (FNAI), Florida Fish and Wildlife Conservation Commission (FWC), and the U.S. Fish and Wildlife Service (FWS).

The site assessment also included traversing and observing communities adjacent to and within the site. During the site assessment community types, vegetation, wildlife, and other pertinent observations were noted.

2.4 Soils

According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) the property contains 2 major soil types more specifically described as:

Soil 50, *Waveland and Immokalee fine sands* characterized as poorly drained sand with a water table typically about 6 to 18 inches below the surface with no typical frequency of ponding or flooding.

Soil 21, *Lawnwood and Myakka sands,* characterized as poorly drained sand with a water table typically about 6 to 18 inches below the surface with no typical frequency of ponding or flooding.

Please see the soils map in the appendix of this report for the general location of these soils.

2.5 Hydrology

This project is in hydrologic basin 17, the *St. Lucie basin*, and the United States Geological Survey (USGS) Topographic Map in the Appendix shows the area as generally flat but seemingly the eastern and western sections are slightly lower than the middle of the parcel. Stormwater runoff accumulates in a depressional area and/or sheet flows to roadside swales, ditches, and canals that surround the property. Using the North American Vertical Datum of 1983 (NAD83) the natural ground grade is approximately elevation 15 and according to the Flood Hazard Map in the Appendix, this area is not in a flood plain and as such is considered Flood Zone X.

2.6 Flora

As noted in the introduction the parcel is approximately 26.65 acres of Pine Flatwoods LULC 4110. While this designation is accurate for much of the site, based on the inspection an aerial interpolation it was found that the site contained 0.77 acres of LULC 6191: Exotic Melaleuca Wetland, 5.9 acres of LULC 4340: Mixed Pine and Oak, and also has a 0.21 acre offsite LULC 6410 Depressional Marsh Wetland in the US1 Right of Way, and a 0.06-acre LULC 6310: Wetland Scrub. Please see the Aerial LULCS Map and Site Photos in the Appendix.

The flora of the Pine Flatwoods habitat included a mixed canopy dominated by slash pine (*Pinus elliottii*) with some laurel oak (*Quercus laurifolia*), live oaks (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and significant amounts of exotic melaleuca *(Melaleuca quinquenervia*). The understory species included dominant saw palmetto (*Serenoa repens*), also some wax myrtles (*Morella cerifera*), Indian hawthorn (*Rhaphiolepsis indica*), and rusty staggerbush (*Lyonia spp.)* with dense Brazilian pepper (*Schinus terebinthifolius*). The groundcover of the site consisted of muscadine grape (*Vitis rotundifolia*), as well as miscellaneous grasses and forbes.

The flora of the Mixed Pine and Oak habitat included a canopy consisting of laurel oak, slash pines, cabbage palm, and some live oak. The understory species included some wax myrtles, Indian hawthorn, and rusty staggerbush. The groundcover of the mixed forests consisted of muscadine grape, dog fennel (*Eupatorium capillifolium*), swamp fern (*Blechnum serrulatum*), chalky bluestem (*Andropogon virginicus*), red root (*Lachnanthes caroliana*), as well as miscellaneous grasses and forbes.

The flora of the Exotic Melaleuca Wetland habitat included a canopy dominated by exotic melaleuca (*Melaleuca quinquenervia*). The groundcover of the consisted of muscadine grape, dog fennel, hatpins (*Syngonanthus spp*.), swamp fern, chalky bluestem, red root, as well as miscellaneous grasses and forbes.

The flora of the onsite 0.06-acre Wetland Scrub included a couple perimeter cabbage palms and laurel oaks, with swamp fern, chalky bluestem, dog fennel, and red root, as well as miscellaneous grasses and forbes in the middle.

The flora of the offsite Depressional Marsh wetland included a couple cabbage palms, lanceleaf arrowhead (*Sagittaria lancifolia*), swamp fern, and some red root, as well as miscellaneous grasses and forbes.

No species of flora was observed on site listed by the County, Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, or U.S. Fish and Wildlife Service, as Endangered, Threatened, or a Species of Special Concern.

2.7 Fauna

The species directly observed and evidenced on site were cardinals (*Cardinalis cardinalis*), squirrels (*Sciurus carolinensis*), brown anoles (*Anolis sagrei*), ants (*Formicidae spp*.), spiders (*Arachnida spp.*), dragon flies (*Odonata spp.*), and bees (*Apidae spp.*).

Additionally, there were multiple gopher tortoise burrows found in the Pine Flatwoods habitat. The gopher tortoise is a species listed by the Florida Fish and Wildlife Conservation Commission and is protected along with their burrows.

Further, the site does not contain scrub jay habitat and was specifically far outside the quarter-mile survey threshold from the nearest occupied scrub jay territory or suitable habitat, and no additional evidence or suspicion of use was formulated of other listed species of fauna according to the county, Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, and the U.S. Fish and Wildlife Service lists of Endangered, Threatened, and Species of Special Concern.

2.8 Wetlands

Based on aerial interpolation and in conjunction with the soils survey publication describing the site soils as potentially hydric, wetlands were suspected. As such, 0.77 acre of Exotic Melaleuca Wetland were found on site via the presence of wetland vegetation and hydrologic indicators. Another small Wetland Scrub of approximately 0.06 acre was located near the south western corner of the property with dominant swamp fern in the center of a small depression. Additionally, there is a 0.21-acre Depressional Marsh Wetland on the western frontage of the property in the right-of-way of US1 defined by low elevations in the right of way grading along US1 and numerous emergent species of vegetation. This R-O-W wetland could conversely be classified as an ‘Other Surface Water’. Please see the FLUCCS Map in the Appendix of this report.

2.9 Summary and Discussion

In summary, the proposed Bev Smith Toyota is 26.65-acre parcel proposed for land development improvements in St. Lucie County, Florida. The site plan as shown currently

only proposes development improvements to the southern third of the property. However the full parcel contains 19.98 acres of pine flatwoods, 5.9 acres of mixed pine and oak, a 0.77-acre exotic melaleuca wetland, and a 0.06-acre depressional wetland. These habitats support some protected native vegetation that includes oaks, pines, palms, wetlands, and the protected gopher tortoise. There is also a 0.21-acre wetland in the right-of-way of US1 that is not currently proposed to be impacted, however, this wetlands' location should be noted in the event of future development. The property is in Flood Zone X, contains mostly poorly drained sandy soils at an approximate elevation of 15 with directly adjacent drainage facilities. Additionally, the property does support the protected gopher tortoise, and does support wetlands, but does not support the scrub jay, nor other protected species.

As stated above, the site supports an Exotic Melaleuca Wetland which is larger than a ½-acre and as such any impacts will require additional environmental permitting and mitigation.

The site also contains a small onsite Wetland Scrub and a Depressional Marsh Wetland in the right of way that both are under a ½ acre and therefor will not require mitigation. Mitigation credits may be available within Basin 17, the St. Lucie basin, at one of several mitigation banks and could be utilized during the site planning and permitting process to offset unavoidable impacts to such wetlands. Onsite mitigation may also be required and accomplished through wetland enhancement or creation and preservation, where exotic vegetation can be removed, appropriate wetland vegetation planted and a conservation easement recorded, and the wetland maintained through a Preserve Area Management Plan to supersede at least some of the impacts proposed. A formal wetland delineation will be required during the permitting process.

As stated above the property does contain some pines, oaks, and palms, and though these trees may be cleared with a permit, it is recommended that micro-site-planning be looked into in an effort to save trees as best practical. Cabbage palms over 10 feet in trunk height, as well as laurel oaks, live oaks and pines over 12" may require individual tree protection or mitigation if proposed for removal. Alternatively, if 15% of native uplands are preserved and placed under a conservation easement, tree mitigation may not be required.

Finally, this site does support the gopher tortoise, and any proposed site impacts within 25' of a gopher tortoise burrow will require special permitting from the FWC, as well as the relocation of any tortoise found along with associated mitigation fees. If suitable habitat is left after site planning, some tortoises may remain on site undisturbed. Similarly, depending on the ultimate Site Plan and appropriate gopher tortoise population stocking rates, others could be relocated to undisturbed areas on site or relocated to an offsite Gopher Tortoise Recipient Site. This gopher tortoise permitting, mitigation, and relocation should be initiated 90 days prior to any site work activity including bush-hogging and geotechnical work requiring clearing.

Based on the proposed site plan, impacts are currently limited to the southern 1/3rd of the property. As such, there are no impacts currently proposed to the onsite or offsite wetlands. However, there are gopher tortoise burrows within the footprint of the proposed parking/storage area that will need to be addressed prior to the above mentioned clearing.

2.10 Conclusion

In conclusion, permitting and development or other improvements to the proposed Bev Smith Toyota Site Plan would cause *de minimis* environmental impacts, however impacts to other areas of the property could cause adverse environmental impacts to native uplands, wetlands, and the protected gopher tortoise. Additional wetland delineations, environmental resource permitting, as well as gopher tortoise permitting and relocation are recommended.

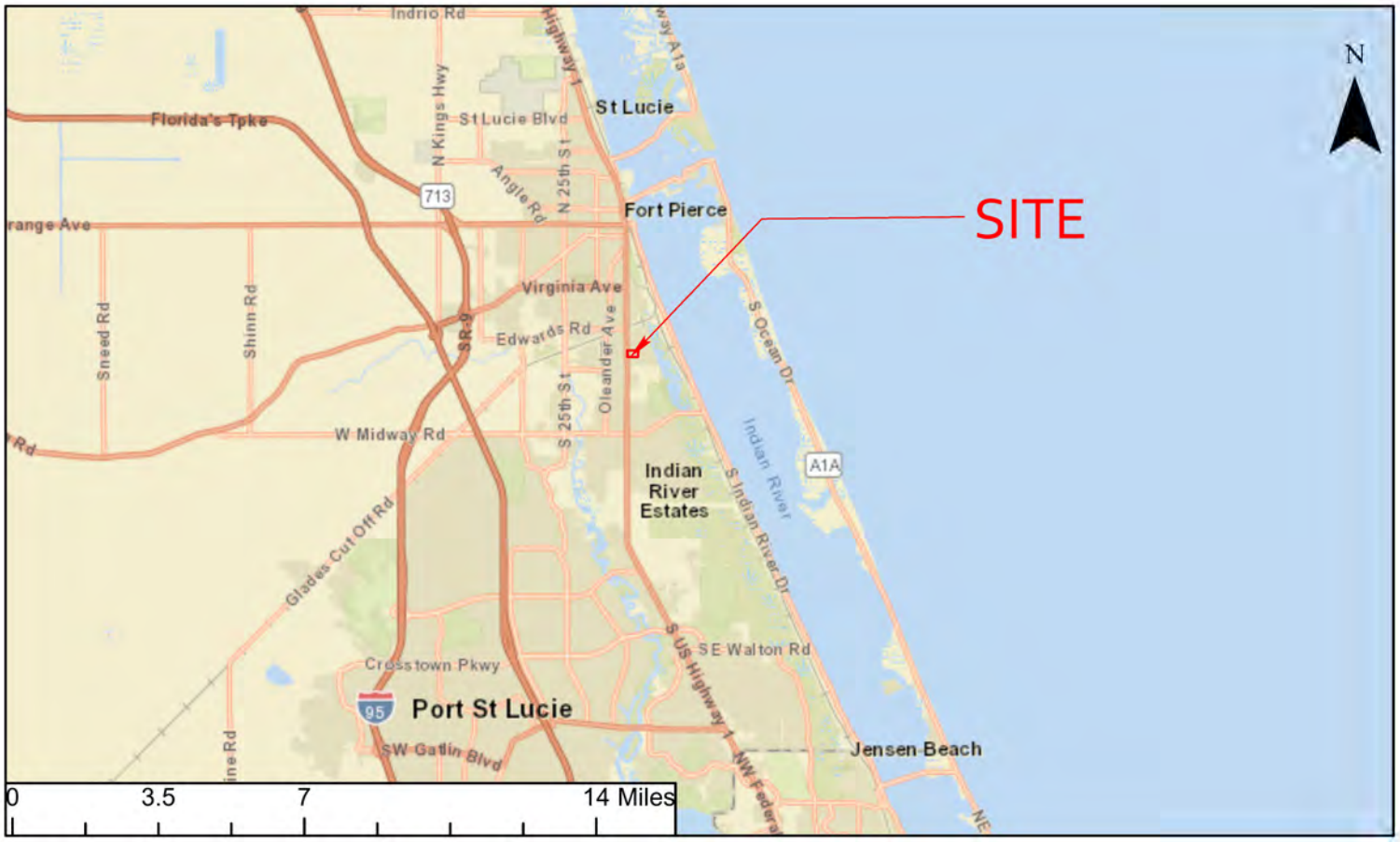
Please contact Florida Environmental Consulting, Inc. with any questions or comments regarding this report or for any additional specific consulting.

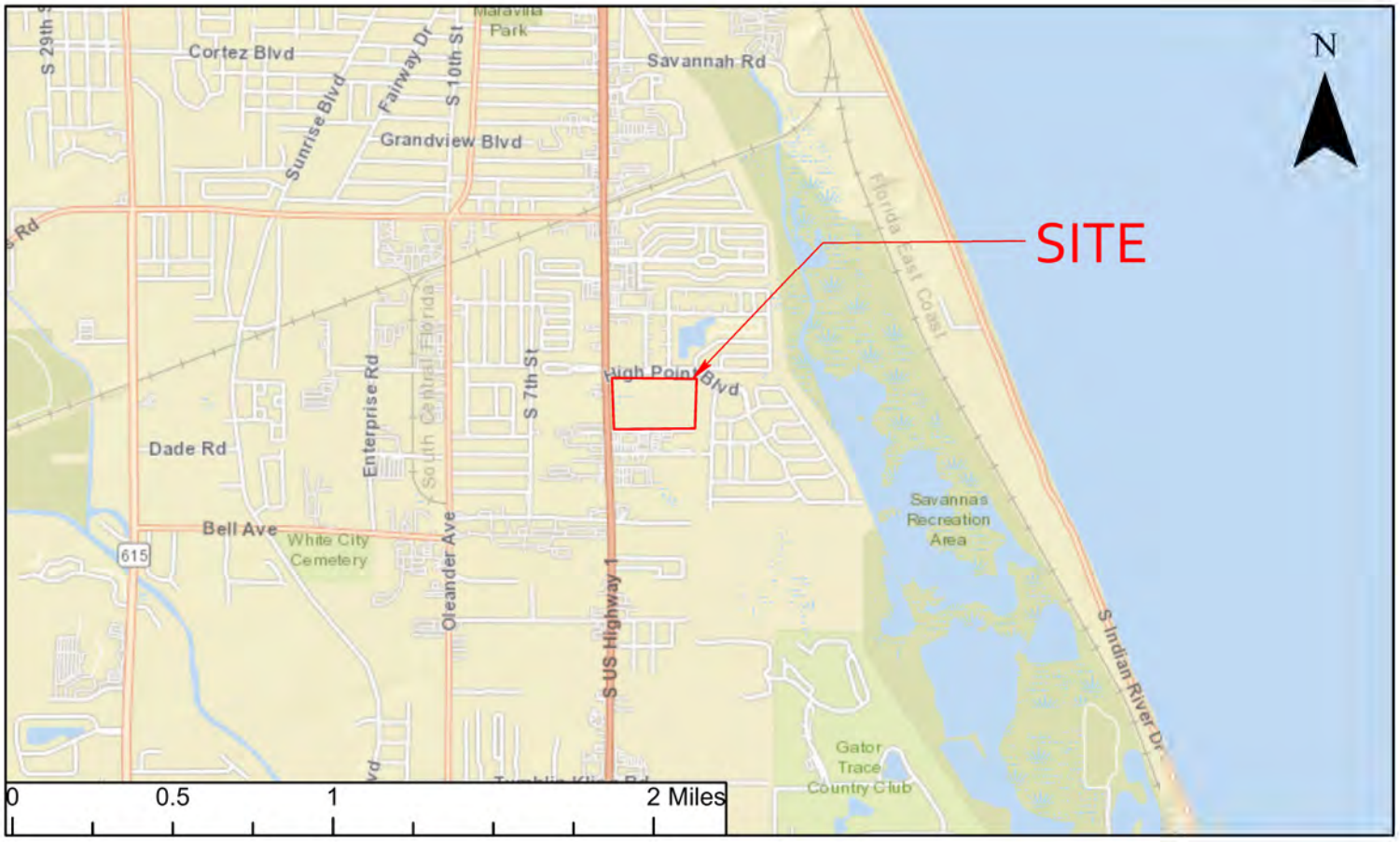
2.11 Qualifications of Individual Preparing Report

Florida Environmental Consulting is a Florida registered environmental consulting firm, the person who prepared this report is the president of the company, and his signature and seal on the cover of this document demonstrate that he is in responsible charge of the information provided. He is a Certified Environmental Consultant and Environmental Specialist. Additionally, he has a Bachelor of Science in Environmental Science from the University of Florida with a minor in Natural Resource Management, along with 21 years of experience. Finally he is a member of the National Association of Environmental Professionals, and the Environmental Assessment Association where a code of ethics and personal commitment to quality work is upheld.

3.0 Appendix

3.1 Location Map
3.2 Soils Map
3.3 Topographic Map
3.4 Flood Map
3.5 Land Use Land Cover Map
3.6 National Wetland Inventory Map
3.7 Site Photos





LOCATION	BEV SMITH TOYOTA	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-env.com	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

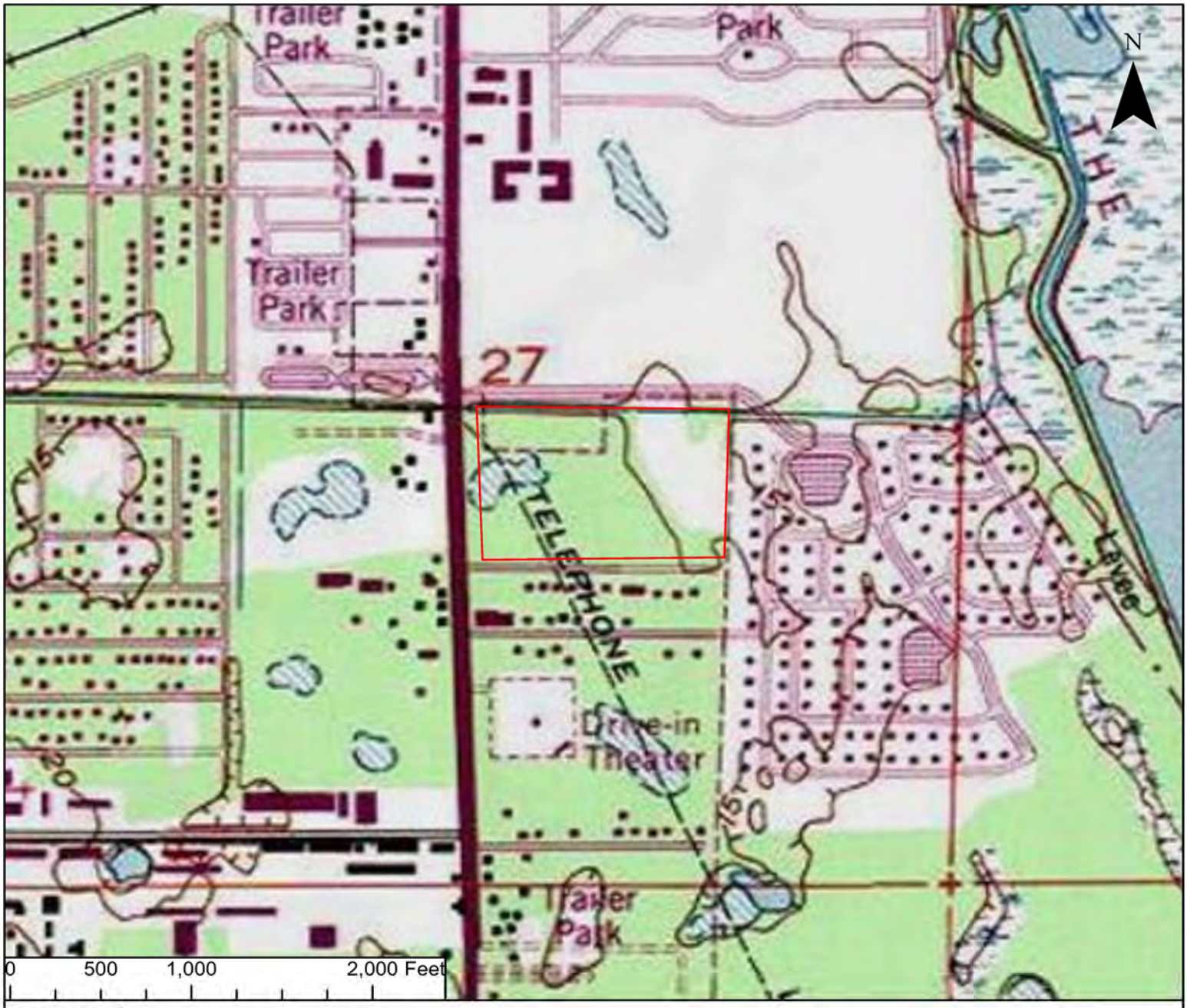
Subject Site

Florida Soils

Soil Type

- Arents, 0-5 percent slopes
- Lawnwood and Myakka sands
- Urban land
- Water
- Waveland and Immokalee fine sands
- Waveland-Lawnwood complex, depressional

SOILS	BEV SMITH TOYOTA	Florida Environmental Consulting Inc.	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date



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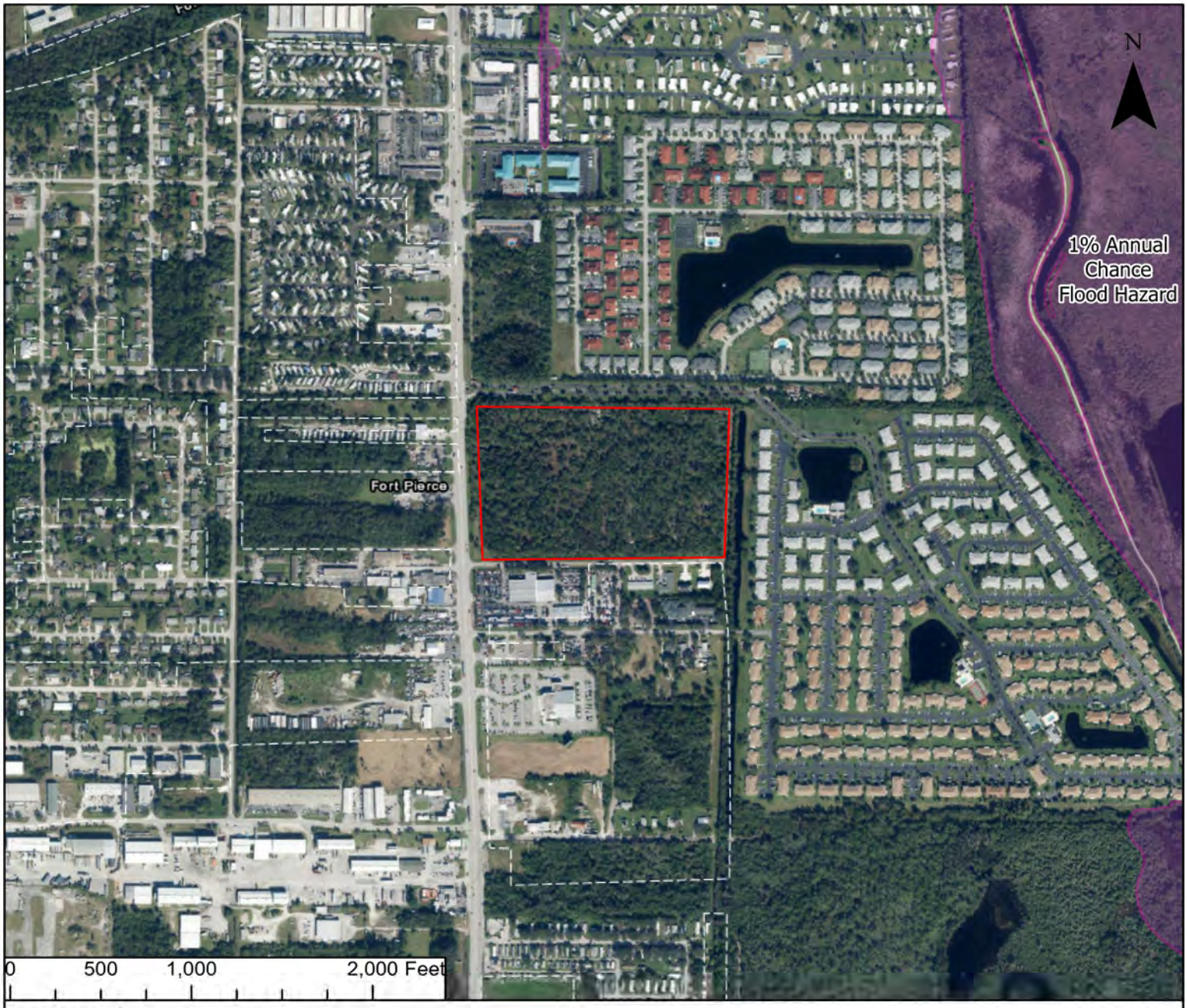
Subject Site

TOPO	BEV SMITH TOYOTA	Florida Environmental Consulting Inc.	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date



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Subject Site

USA Flood Hazard

Esri Symbology

1% Annual Chance Flood Hazard

FLOOD HAZARD	BEV SMITH TOYOTA	Florida Environmental Consulting Inc. 1835 20th Street Vero Beach, Florida 32960 Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-enc.com	JOB NO FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date

Legend

Subject Site

LANDUSE_DE

- 1330: High Density, Multiple Dwelling Units, Low Rise
- 1400: Commercial and Services,1400: Commercial and Services
- 4110: Pine Flatwoods,4110: Pine Flatwoods
- 4340: Mixed - Pine and Oak
- 5120: Channelized Waterways, Canals
- 5300: Reservoirs,5300: Reservoirs
- 6191: Wet Melaleuca
- 6400: Vegetated Non-Forested Wetlands
- 6460: Mixed Scrub-shrub Wetland,6460: Mixed Scrub-shrub Wetland
- 8140: Roads and Highways,8140: Roads and Highways

LULC	BEV SMITH TOYOTA	Florida Environmental Consulting Inc.	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date

Legend

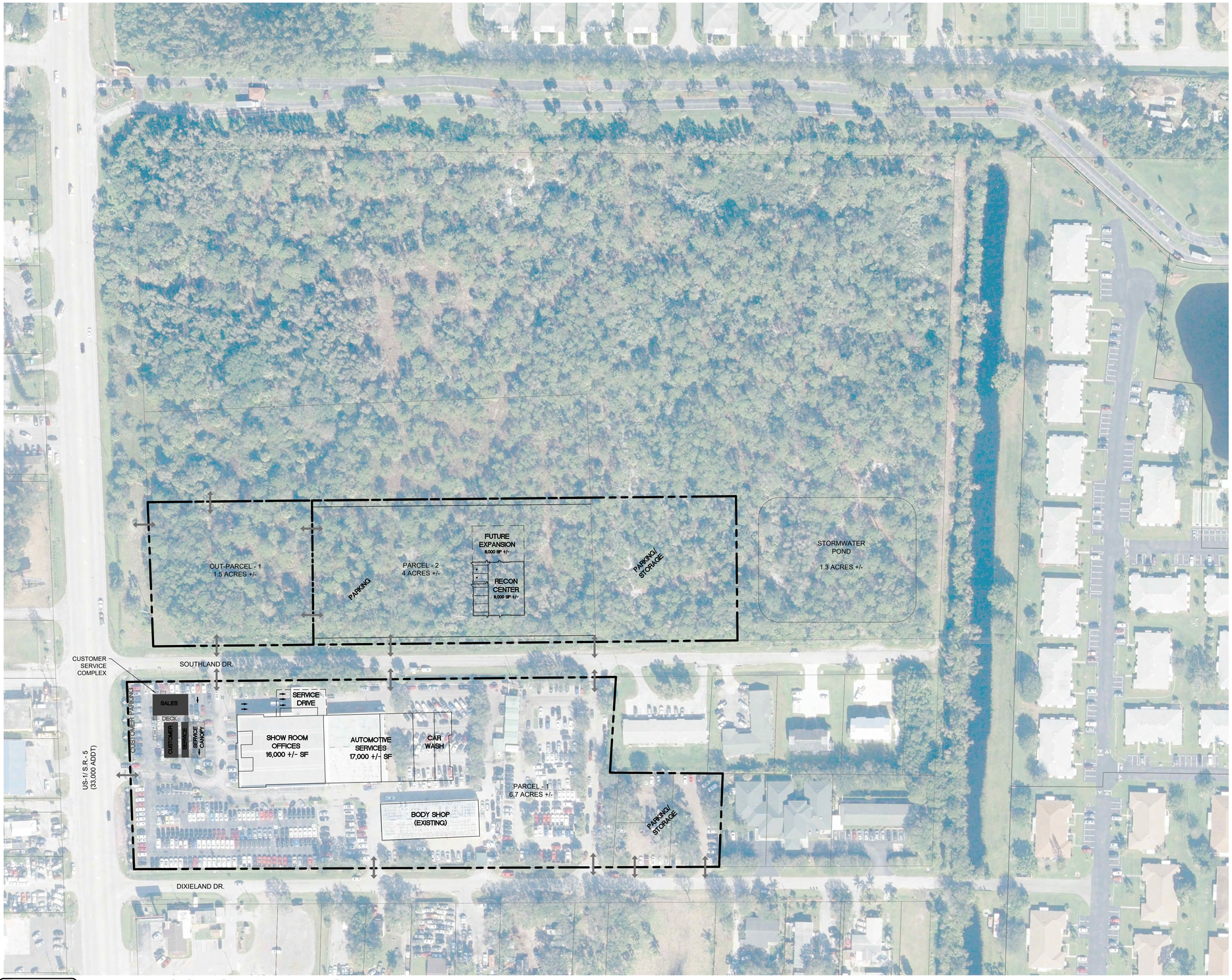
Subject Site

FL Wetlands

WETLAND TYPE

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

NWI	BEV SMITH TOYOTA	Florida Environmental Consulting Inc.	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date



CONCEPTUAL SITE PLAN

SCALE: 1" = 80'

GRAPHIC SCALE
0 80 160
(IN FEET)
1 inch = 80 ft.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

LOCATION MAP

	REVISIONS	DATE
1	–	–
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	–	–
8	–	–

JOB NO.	20-0424
DESIGNED	WFP
DRAWN	WFP
DATE	JANUARY 2021
CHECKED	AJB
DATE ISSUED	1/19/2021

MBV ENGINEERING, INC.
MOJA BOWLES VILAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1893 - 28TH STREET
VERO BEACH, FL 32960
PH: (772) 794-0051
FX: (772) 778-7917
MELBOURNE, FL - PH (321) 253-4100
FT. PIERCE, FL - PH (772) 468-9051

CONCEPTUAL SITE PLAN

BEV SMITH TOYOTA

FLORIDA

ST. LUCIE COUNTY

NOT FOR CONSTRUCTION
PLAN SHEETS ARE PRELIMINARY AND FOR INFORMATION ONLY. PLANS SHOULD NOT BE USED AS A BASIS FOR BIDS. CONTRACTOR SHOULD ORDER THE OFFICIAL PLANS FROM THE ENGINEER OF RECORD TO ENSURE THAT ANY ADDENDUMS ARE PROPERLY DISTRIBUTED. PLANS ARE INVALID WITHOUT ENGINEER OF RECORDS SEAL AND SIGNATURE.

SHEET
CSP1
OF 1
20-0424

O:\DRAWINGS\2020\20-0424 Bev Smith Toyota\4 - Drawings\20-0424 BASE.dwg, 1/19/2021 2:53 PM, BILL PITTSLEY

PICTURES: FRONTAGE AND ROW WETLAND	BEV SMITH TOYOTA	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-env.com	JOB NO. FEC-21-185 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

PICTURES: LARGE WETLAND

BEV SMITH TOYOTA

Florida Environmental Consulting Inc.
1835 20th Street• Vero Beach, Florida 32960
Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-enc.com

JOB NO.	FEC-21-185
DESIGNED	
DRAWN	
CHECKED	
DATE	
SCALE	

Revisions	Date

PICTURES: MIXED OAK AND PINE

BEV SMITH TOYOTA

Florida Environmental Consulting Inc.
1835 20th Street• Vero Beach, Florida 32960
Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: flenv@fl-enc.com

JOB NO. FEC-21-185
DESIGNED
DRAWN
CHECKED
DATE
SCALE

Revisions	Date

PICTURES: PINE FLATWOODS

BEV SMITH TOYOTA

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JOB NO. FEC-21-185
DESIGNED
DRAWN
CHECKED
DATE
SCALE

Revisions	Date

PICTURES: SMALL WETLAND

BEV SMITH TOYOTA

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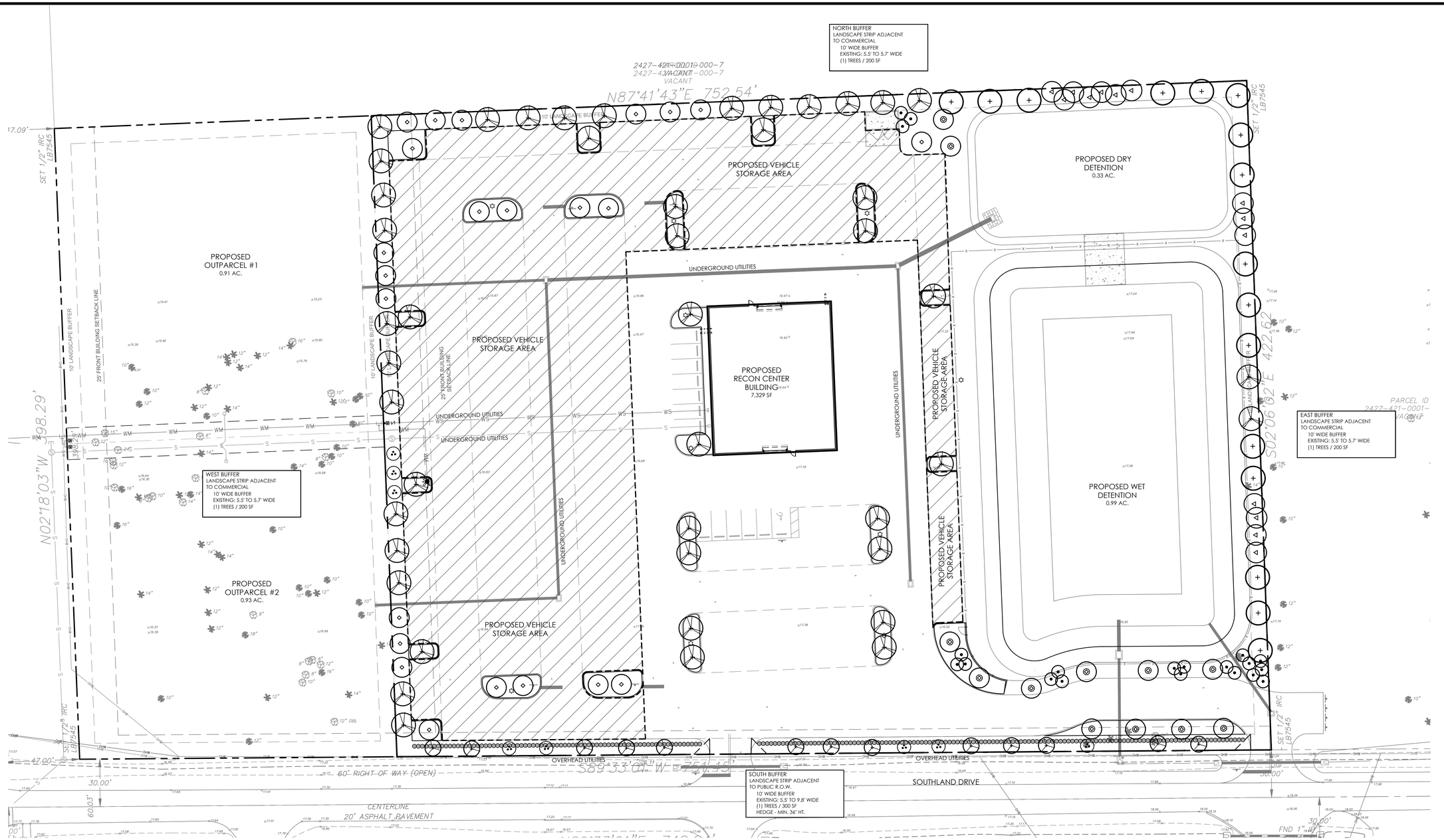
SCALE

Revisions	Date



Landscape Calculations

	REQUIRED/ PERMITTED	PROVIDED
LANDSCAPE STRIPS ADJACENT TO PUBLIC R.O.W.		
SOUTH - Southland Drive - 513 LF (552' LESS 39' DRIVEWAYS)		
10' WIDE LANDSCAPE STRIP (513 x 10 = 5,130 sf.)		
TREES: 1 / 300 SF	18 TREES	18 TREES
plus 36" ht. hedge		
LANDSCAPE STRIPS ADJACENT TO COMMERCIAL		
West Side - 405 LF		
10' WIDE LANDSCAPE STRIP (405 x 10 = 4,050 sf.)		
(1) TREE / 200 SF	21 TREES	21 TREES
North Side - 553 LF		
10' WIDE LANDSCAPE STRIP (553 x 10 = 5,530 sf.)	28 TREES	28 TREES
East Side - 386 LF (423' LESS 37' DRIVEWAYS)		
10' WIDE LANDSCAPE STRIP (386 x 10 = 3,860 sf.)		
(1) TREE / 200 SF	20 TREES	20 TREES

INTERIOR VEHICULAR USE LANDSCAPE AREA	REQUIRED/ PERMITTED	PROVIDED
VEHICULAR USE AREA: 53,683 SF		
1 SF / 15 SF OF VUA = 3,579 SF	3,579 SF	4,057 SF
(1) CANOPY TREE / 100 SF =	36 TREES	41 TREES

Plant List

	SYM	KEY	BOTANICAL NAME/ COMMON NAME	HEIGHT/ SPREAD	SPECIFICATION	NATIVE	DROUGHT TOLERANT	TOTAL
TREES	●	AR	ACER RUBRUM RED MAPLE	14' HT. 6' SPR.	FIELD GROWN B&B 3" CAL. 5' CT. MIN.	Y	H	16
		IA	ILEX X 'ATTENUATA' EAST PALATKA HOLLY	12' HT. 5' SPR.	45 GAL. MIN. 2.5 C.AL. TREE FORM, 5' CT. MIN.	Y	M	13
	●	MG	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	14' HT. 5' SPR.	FIELD GROWN B&B 3" CAL.. 5' C.T. MIN.	Y	H	23
	▲	MGM	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	14' HT. 5' SPR.	FIELD GROWN B&B 3" CAL.. 5' C.T. MIN.	Y	H	12
		LI	LAGERSTROEMIA INDICA CRAPE MYRTLE	12' HT. 5' SPR.	FIELD GROWN B&B 2.5" CAL.. 5' C.T. MIN.	N	M	8
	●	QV	QUERCUS VIRGINIANA LIVE OAK	14' HT. 5' SPR.	FIELD GROWN, B&B 3" CAL. 5' CT. MIN.	Y	H	45
	□	SP	SABAL PALMETTO SABAL PALMETTO	10 CT.		Y	H	21
		TD	TAXODIUM DISTICHUM BALD CYPRESS	12' HT. 5' SPR.	45 GAL. MIN. 2.5 C.AL. TREE FORM, 5' CT. MIN.	Y	M	14
SHRUBS		VIB	VIBURNUM OBOVATUM WALTERS VIBURNUM	24" X 16"	3 GAL., 24" O.C.	Y	H	196
		SOD	STENOTAPHRUM SECUNDATUM ST. AUGUSTINE SOD		DISEASE FREE, LAID TIGHTLY, EVEN UNIFORM	N	M	T.B.D.

▲ DENOTES TREES COUNTING TOWARDS MITIGATION REQUIREMENTS.
● DENOTES TREES EXCEEDING MINIMUM SIZE COUNTING AS HALF CREDIT TOWARDS MITIGATION REQUIREMENTS.
□ DENOTES PALMS COUNTING TOWARDS MITIGATION REQUIREMENTS.

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plot date:
file name:

Patrick D. Cunningham, LLC
land planning
landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcunningham.LLC@gmail.com

Conceptual Landscape Plan North Parcel

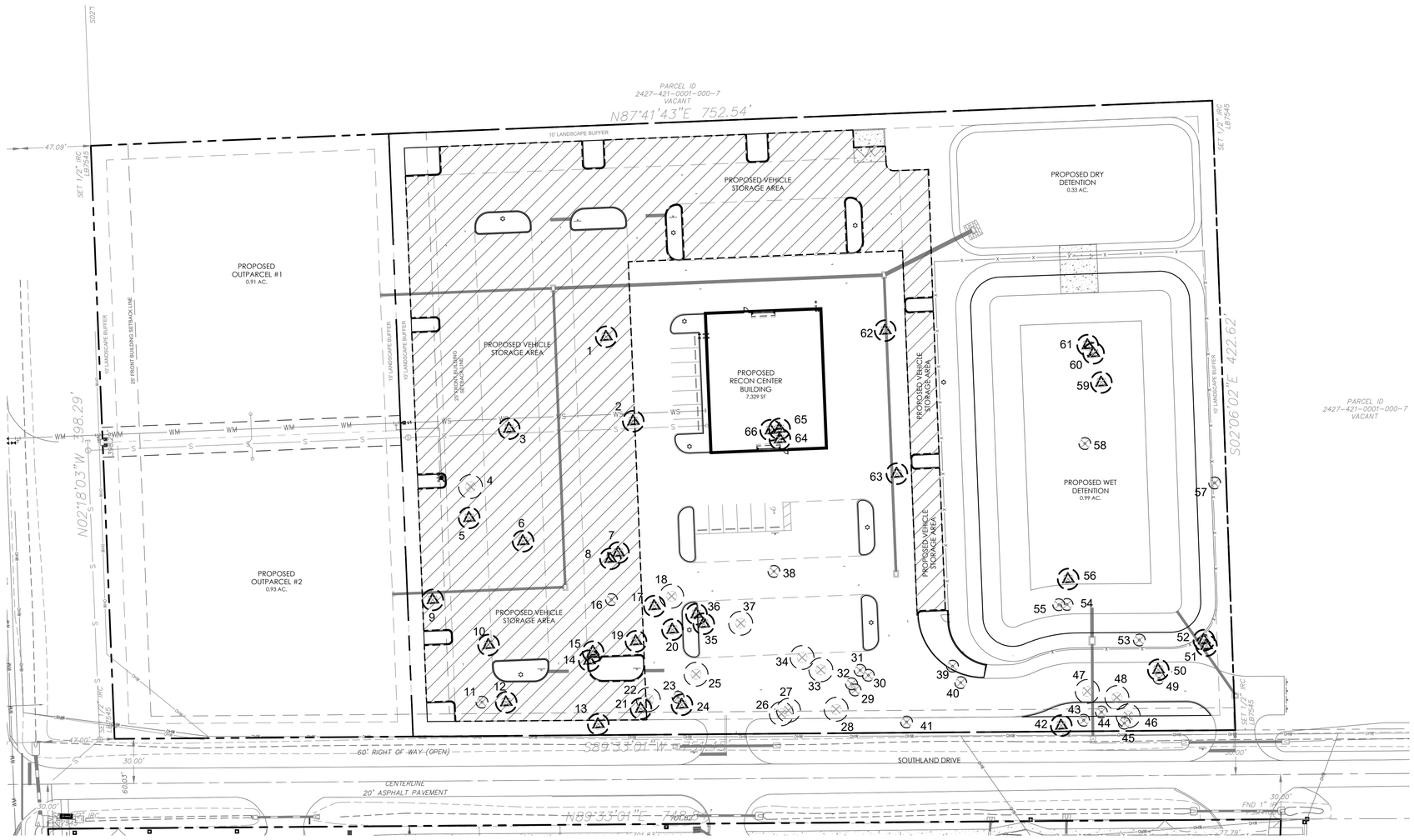
Bev Smith Toyota North Parcel
3350 US Highway One
Ft. Pierce, Florida

DATE: 03.21.2022
REV:
SCALE: 1"=30'-0"

PATRICK D. CUNNINGHAM FL REG. # LA: 0001669
SEAL

NORTH 0 30 60

SHEET L-1



General Notes:

1. CALCULATIONS ABOVE ARE PER TREE REPLACEMENT CHART IN THE JURISDICTION'S LAND DEVELOPMENT REGULATIONS.
2. A TREE REMOVAL PERMIT WILL BE REQUIRED PRIOR COMMENCEMENT OF DEVELOPMENT ACTIVITY.
3. THE CONDITION OF THE TREES LISTED ARE BASED ON A VARIETY OF MATERIALS, AS WELL AS FIELD OBSERVATIONS, AND ARE TO BE USED AS REFERENCE ONLY AND IS NOT TO BE USE FOR TREE PERMITTING. A CERTIFIED ARBORIST, NOT THE LANDSCAPE ARCHITECT IS RESPONSIBLE FOR ANY TREE EVALUATION REQUIRED BY THE CITY.
4. A CERTIFIED ARBORIST IS TO PROVIDE THE FINAL TREE DISPOSITION PLAN AT TIME OF TREE PERMITTING. THE VALUATION OF TREES SHALL BE APPRAISED USING THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS GUIDE FOR PLANT APPRAISAL, LATEST EDITION.

Additional Notes:

1. TREE BARRICADES FOR TREES TO BE PRESERVED DURING CONSTRUCTION SHALL BE LOCATED AT THE DRIP LINE, UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL REVIEW STAFF, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE AREA WITHIN THE DRIP LINE SHALL REMAIN UNDISTURBED.
3. THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN TECH DRIP LINE OF PRESERVED TREES:
   - A. IMPROVEMENTS, FILL, MACHINERY AND VEHICLE TRAVEL OR PARKING
   - B. UNDERGROUND UTILITIES
   - C. GRADE CHANGES, COMPACTION OF SOIL, OR EXCAVATION
   - D. STORAGE OR CONSTRUCTION MATERIALS.
4. THE TREE PROTECTION BARRICADES SHALL CONSIST OF CHAIN LINK FENCE (NEW OR USED) OR ORANGE SAFETY FENCE WITH A MINIMUM 5-FOOT HEIGHT, UNLESS OTHERWISE APPROVED BY THE BUILDING AND DEVELOPMENT SERVICES.
5. A TREE PERMIT WILL BE REQUIRED PRIOR TO ANY CONSTRUCTION, NATIVE VEGETATION REMOVAL WITHIN THE DRIP LINE OF A TREE, AND/OR TREE REMOVAL.
6. NO CLEARING WITH HEAVY EQUIPMENT, FILLING, OR PLACEMENT OF IMPROVEMENTS OR UTILITY LINES SHALL OCCUR WITHIN THE PROTECTED ROOT ZONE OF ANY CANOPY TREE TO BE SAVED.
7. THE PROTECTED ROOT ZONE IS DEFINED AS THE DRIPLINE OF THE TREE. ONLY HAND CLEARING OR MOWING IS PERMITTED WITHIN THE PROTECTED ROOT ZONE OF A CANOPY TREES TO BE SAVED IF AUTHORIZED BY THE ADMINISTRATOR.

ALL EXISTING TREES TO BE PROTECTED DURING ANY LAND CLEARING AND/OR CONSTRUCTION AS FOLLOWS:

(A) PRIOR TO ANY LAND CLEARING OPERATIONS, TEMPORARY BARRIERS SHALL BE INSTALLED AROUND ALL TREES TO REMAIN WITHIN THE LIMITS OF LAND CLEARING OR CONSTRUCTION AND SHALL REMAIN UNTIL THE COMPLETION OF THE WORK.

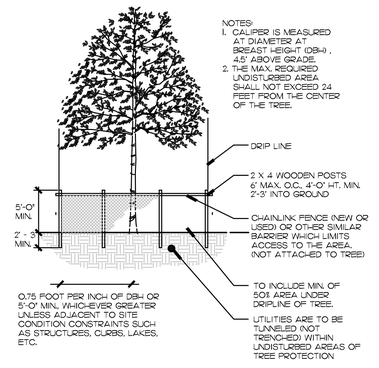
TREE PROTECTION SHALL COMPLY WITH THE JURISDICTION'S REGULATIONS.

(B) NO MATERIALS, TRAILERS, EQUIPMENT OR CHEMICALS SHALL BE STORED, OPERATED DUMPED, BURIED OR BURNED WITHIN THE PROTECTED AREAS.

NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS OR PERMITS SHALL BE ATTACHED TO A PROTECTED TREE.

(C) PROTECTED TREES SHALL BE PRUNED TO RESTORE THIS NATURAL SHAPE AND FERTILIZED AS NECESSARY TO COMPENSATE FOR ANY LOSS OF ROOTS AND TO STIMULATE ROOT GROWTH.

ANY DAMAGE TO TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY AFTER DAMAGE OCCURS.



TYPICAL TREE PROTECTION DETAIL
NOT TO SCALE

Existing Tree Inventory List

NO.	TREE SPECIES	DBH	ACTION	MITIGATION
1	PINE	18"	TO BE REMOVED	18"
2	PINE	12"	TO BE REMOVED	--
3	PINE	16"	TO BE REMOVED	16"
4	PINE	8"	TO BE REMOVED	--
5	PINE	14"	TO BE REMOVED	14"
6	PINE	12"	TO BE REMOVED	--
7	PINE	12"	TO BE REMOVED	--
8	PINE	12"	TO BE REMOVED	--
9	PINE	10"	TO BE REMOVED	--
10	PINE	14"	TO BE REMOVED	14"
11	SABAL		TO BE REMOVED	1 PALM
12	PINE	20"	TO BE REMOVED	20"
13	PINE	12"	TO BE REMOVED	--
14	PINE	12"	TO BE REMOVED	--
15	PINE	10"	TO BE REMOVED	--
16	SABAL		TO BE REMOVED	1 PALM
17	PINE	10"	TO BE REMOVED	--
18	OAK	8"	TO BE REMOVED	--
19	PINE	10"	TO BE REMOVED	--
20	PINE	10"	TO BE REMOVED	--
21	PINE	12"	TO BE REMOVED	--
22	OAK	8"	TO BE REMOVED	--
23	SABAL		TO BE REMOVED	1 PALM
24	PINE	12"	TO BE REMOVED	--
25	OAK	12"	TO BE REMOVED	--
26	OAK	8"	TO BE REMOVED	--
27	OAK	9"	TO BE REMOVED	--
28	OAK	10"	TO BE REMOVED	--
29	SABAL		TO BE REMOVED	1 PALM
30	SABAL		TO BE REMOVED	1 PALM
31	SABAL		TO BE REMOVED	1 PALM
32	SABAL		TO BE REMOVED	1 PALM
33	OAK	8"	TO BE REMOVED	--
34	OAK	8"	TO BE REMOVED	--
35	PINE	12"	TO BE REMOVED	--
36	PINE	10"	TO BE REMOVED	--
37	OAK	20"	TO BE REMOVED	20"
38	SABAL		TO BE REMOVED	1 PALM
39	SABAL		TO BE REMOVED	1 PALM
40	SABAL		TO BE REMOVED	1 PALM
41	SABAL		TO BE REMOVED	1 PALM
42	SABAL		TO BE REMOVED	1 PALM
43	SABAL		TO BE REMOVED	1 PALM
44	SABAL		TO BE REMOVED	1 PALM
45	SABAL		TO BE REMOVED	1 PALM
46	OAK	16"	TO BE REMOVED	16"
47	OAK	8"	TO BE REMOVED	--
48	OAK	8"	TO BE REMOVED	--
49	SABAL		TO BE REMOVED	1 PALM
50	PINE	12"	TO BE REMOVED	--
51	PINE	14"	TO BE REMOVED	14"
52	PINE	12"	TO BE REMOVED	--
53	SABAL		TO BE REMOVED	1 PALM
54	SABAL		TO BE REMOVED	1 PALM
55	SABAL		TO BE REMOVED	1 PALM
56	PINE	14"	TO BE REMOVED	14"
57	SABAL		TO BE REMOVED	1 PALM
58	SABAL		TO BE REMOVED	1 PALM
59	PINE	10"	TO BE REMOVED	--
60	PINE	10"	TO BE REMOVED	--
61	PINE	10"	TO BE REMOVED	--
62	PINE	16"	TO BE REMOVED	16"
63	PINE	12"	TO BE REMOVED	--
64	PINE	10"	TO BE REMOVED	--
65	PINE	10"	TO BE REMOVED	--
66	PINE	10"	TO BE REMOVED	--

Tree Mitigation Calculations

TO BE REMOVED	QUANTITY	DBH (INCHES)	MITIGATION REQU.
LIVE OAKS UNDER 14"	10 TREES	87"	0"
PINE TREES UNDER 14"	25 TREES	272"	0"
LIVE OAKS 14" AND ABOVE	2 TREES	36"	36"
PINE TREES 14" AND ABOVE	8 TREES	126"	126"
SABAL PALMS	21 PALMS	N/A	21 PALMS

MITIGATION (REPLACEMENT)	REQUIRED	PROVIDED
TOTAL TREE MITIGATION REQUIRED	162"	162"
Includes:		
(12) MAGNOLIAS @ 3" cal.		*36"*
(45) LIVE OAKS @ 3" cal. (Half Credit -1.5")		*67.5"*
(23) MAGNOLIAS @ 3" cal. (Half Credit -1.5")		*34.5"*
(16) MAPLES @ 3" cal. (Half Credit -1.5")		*24.0"*
TOTAL PALM MITIGATION REQUIRED	21 PALMS	21 PALMS
Includes:		
(21) SABAL PALMS @ 10' ct min.		*21 PALMS*

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plot date:
file name:

Patrick D. Cunningham, LLC
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519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcunningham.LLC@gmail.com

Existing Vegetation Plan

Bev Smith Toyota
North Parcel
3350 US Highway One
Ft. Pierce, Florida

DATE: 03.21.2022
REV:
SCALE: 1"=40'-0"

PATRICK D. CUNNINGHAM
FL REG. # LA: 0001669
SEAL

0 40 80
NORTH

SHEET
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Additional Notes

1. QUALITY
PLANT MATERIALS USED SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 OR BETTER, AS GIVEN IN THE MOST CURRENT EDITION OF 'GRADES AND STANDARDS FOR NURSERY PLANTS' PART I AND PART II, STATE OF FLORIDA.

2. DROUGHT TOLERANCE REQUIREMENTS
A MINIMUM OF 75% TO 100% OF TOTAL CUMULATIVE LANDSCAPE PLANT MATERIAL USED TO MEET THE PROVISIONS OF THE I.R.C. L.D.R., CHAPTER 926, SHALL BE 'HIGH DROUGHT TOLERANT,' AS CLASSIFIED AND LISTED IN THE MOST RECENT EDITION OF: THE 'WATERWISE - FLORIDA LANDSCAPES - LANDSCAPING TO PROMOTE WATER CONSERVATION USING PRINCIPLES OF XERISCAPE' - FROM FLORIDA'S WATER MANAGEMENT DISTRICTS.

3. TREES
A. CANOPY TREES SHALL BE SPECIES HAVING AN AVERAGE MATURE SPREAD OF CROWN GREATER THAN FIFTEEN (15) FEET IN DIAMETER, AND HAVING A TRUNK WITH OVER FIVE (5) FEET OF CLEAR WOOD.
B. CANOPY TREES SHALL HAVE A 2" DIAMETER AT 0.5' ABOVE GRADE AND BE A MIN. 12' IN HEIGHT WITH A MINIMUM CROWN SPREAD OF 4.5' AT TIME OF PLANTING.
C. PALMS SHALL BE CONSIDERED 1/3 OF A TREE AND, IF USED, THEY SHALL CONSIST OF NO MORE THAN ONE-THIRD OF THE TOTAL NEW TREE REQUIREMENT. ADDITIONALLY, 3 PALMS = 1 CANOPY TREE. SINGLE DATE PALMS (NOT PYGMY DATE PALMS) MAY BE SUBSTITUTED FOR A CANOPY TREE.
D. AT LEAST 50% OF ALL NEW REQUIRED TREES SHALL BE OF A NATIVE SPECIES, AND AT LEAST 75% - 100% OF ALL TREES SHALL BE RATED 'DROUGHT TOLERANT.'
E. REQUIRED UNDERSTORY TREES SHALL BE A MINIMUM OF SIX (6) FEET OVERALL IN HEIGHT AND ONE- AND ONE-HALF (1.5) INCHES DIAMETER AT ONE-HALF (0.5) FEET ABOVE GRADE AT THE TIME OF PLANTING. MULTI-TRUNK TREES SHALL HAVE A COMBINED ONE- AND ONE-HALF-INCH CALIPER FOR ALL TRUNKS AT SIX (6) INCHES ABOVE GRADE. PALM TREES USED AS UNDERSTORY TREES SHALL HAVE A MINIMUM OVERALL HEIGHT OF SIX (6) FEET AND SHALL NOT COMPRISE MORE THAN ONE-THIRD (1/3) OF THE TOTAL UNDERSTORY TREE REQUIREMENT.
F. A ROOT BARRIER IS REQUIRED FOR CANOPY TREES WITHIN 6-FT. OF A SIDEWALK, PAVED AREA, BUILDING, OR UNDERGROUND UTILITY .

4. SHRUBS/ HEDGES:
A. SHRUBS SHALL BE A MINIMUM OF EIGHTEEN (18) INCHES IN HEIGHT WHEN MEASURED IMMEDIATELY AFTER PLANTING, EXCEPT THAT SHRUBS OF NON-NATIVE VIBURNUM AND LIGUSTRUM SPECIES SHALL BE A MINIMUM OF TWENTY-FOUR (24) INCHES IN HEIGHT IMMEDIATELY AFTER PLANTING.
B. SHRUBS, WHERE REQUIRED, SHALL BE PLANTED IN AN OFFSET DOUBLE ROW AND MAINTAINED SO AS TO FORM A CONTINUOUS, UNBROKEN, SOLID SCREEN. WHERE REQUIRED TO FORM A CONTINUOUS SCREEN TO SATISFY A BUFFER OR OPAQUE FEATURE REQUIREMENT, SHRUBS SHALL BE PLANTED ON TWENTY-FOUR (24)-TO-THIRTY (30) INCH CENTERS, UNLESS A GREATER SPACING IS NECESSARY TO ACCOMMODATE LARGER SHRUBS AND IS APPROVED BY PLANNING DIVISION STAFF.
C. ENCLOSING SHRUBS USED IN OPAQUE FEATURES, AT LEAST 50% OF THE REQUIRED NUMBER OF SHRUBS SHALL BE OF NATIVE SPECIES.

5. MULCH AND GROUND COVERS
THE USE OF CYPRESS MULCH IS PROHIBITED. MULCH THAT IS NOT CYPRESS MAY BE USED. GROUND COVERS (NOT INCLUDING SOD GRASS) SHALL BE PLANTED IN SUCH A MANNER AS TO PRESENT A FINISHED APPEARANCE AND REASONABLY COMPLETE COVERAGE WITHIN ONE YEAR AFTER PLANTING. AT LEAST 50% OF THE AREA COVERED BY LIVING MATERIAL SHALL BE OF NATIVE SPECIES. REFER TO I.R.C. L.D.C FOR A LIST OF NATIVE GROUND COVERS AND FLOWERS. THE COMPLETE COVERAGE OF AN AREA BY GROUND COVERS PRECLUDES THE USE OF MULCH THEREAFTER.

6. TURF GRASS
TURF GRASS AREAS SHALL BE IDENTIFIED ON THE LANDSCAPE PLAN AND SHALL BE LIMITED TO A MAXIMUM OF 50% OF THE TOTAL IRRIGATED, LANDSCAPED AND VEGETATED PROJECT AREA, EXCLUDING RIGHTS-OF-WAY, ACTIVE RECREATION AREAS (E.G. PLAYFIELDS), AND SLOPES WITHIN DRY RETENTION AREAS. TURF GRASS SHALL BE PLACED SO THAT IT CAN BE IRRIGATED IN A SEPARATE ZONE. PREFERRED TURF GRASSES ARE THOSE QUALIFYING AS NATIVE.

7. IRRIGATION USAGE ZONES SHALL BE AS FOLLOWS:
A. GRASS AREA SHALL BE IN HIGH USAGE ZONES.
B. TREES & SHRUBS SHALL BE IN LOW USAGE ZONES.

8. THERE SHALL BE (6) DIFFERENT SPECIES OF TREES USED, AND (9) DIFFERENT SPECIES OF SHRUBS WITH (4) BEING NATIVE PER I.R.C. ORDINANCE, CHAPTER 926.

9. THE CONTRACTOR SHALL ATTEMPT TO PRESERVE AS MANY EXISTING TREES AS POSSIBLE AND FEASIBLE. TREES THAT ARE PRESERVED MAY BE CREDITED TOWARDS THE SITE TREE REQUIREMENT IF THEY MEET THE SPECIFICATIONS.

10. THE CONTRACTOR SHALL COORDINATE THE PLACEMENT OF TREES, SIGNS AND LIGHTS SUCH THAT ALL SIGNAGE IS EASILY SEEN AND LIGHTING WORKS FOR ITS INTENDED PURPOSE. TREE PLACEMENT MAY VARY FROM THIS PLAN TO ACHIEVE THIS REQUIREMENT.

11. LANDSCAPE ISLANDS SHALL BE BACKFILLED AT LEAST TO TOP OF CURB, AND MAY BE BERMED TO A MAXIMUM HEIGHT OF 24" ABOVE ADJACENT PARKING LOT GRADE.

12. ALL LANDSCAPE MATERIAL IN SHOCK WILL BE REPLACED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.

LAND CLEARING NOTES
A. ALL NATIVE UPLAND VEGETATION CONTRIBUTING TO THE STABILIZATION OF BANKS OR EXISTING CANALS, DITCHES OR NATURAL WATERCOURSES SHALL BE RETAINED.

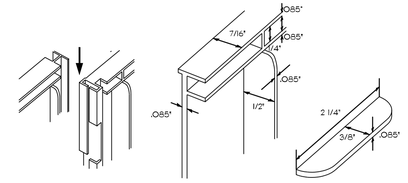
B. ALL NUISANCE EXOTIC VEGETATION EXISTING ON SITE SHALL BE REMOVED IN CONJUNCTION WITH ANY SITE DEVELOPMENT.

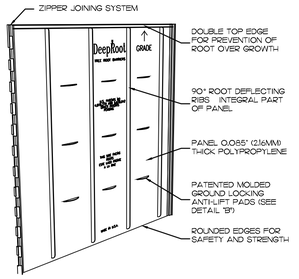
C. ANY ABANDONED FLOW WELLS EXISTING ON SITE SHALL BE PLUGGED IN CONJUNCTION WITH SITE DEVELOPMENT.

NOTES:
SPECIFIED TREE ROOT BARRIERS ARE A MECHANICAL BARRIER AND ROOT DEFLECTOR TO PREVENT TREE ROOTS FROM DAMAGING HARDSCAPES AND LANDSCAPES. ASSEMBLED IN 2' LONG MODULES TO CREATE VARYING SIZES OF CYLINDERS FOR SURROUNDING ROOT BALLS (SURROUND PLANTING STYLE) OR FOR LINEAR APPLICATIONS DIRECTLY BESIDE A HARDSCAPE ADJACENT TO ONE SIDE OF THE TREES (LINEAR PLANTING STYLE).

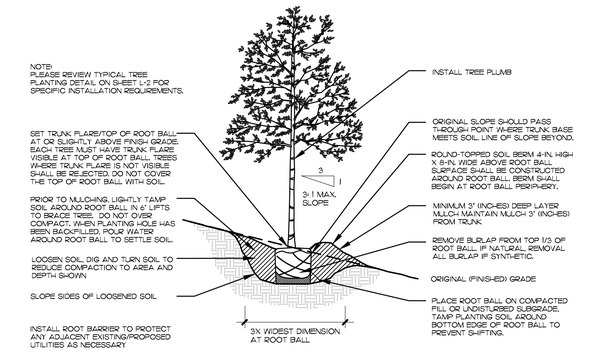
A. MATERIALS
1. THE CONTRACTOR SHALL FURNISH AND INSTALL TREE ROOT BARRIERS AS SPECIFIED. THE TREE ROOT BARRIERS SHALL BE PRODUCT # LB 2 AND # LB 48-2 AS MANUFACTURED BY DEEP ROOT PARTNERS, LP, 345 LORTON AVE. #103, BURLINGAME, CA. (800)-458-7668). OR APPROVED EQUAL. THE BARRIER SHALL BE BLACK, INJECTION MOLDED PANELS, OF 0.085" WALL THICKNESS IN MODULES 24" LONG BY 24" & 48" DEEP, MANUFACTURED WITH A MINIMUM 50% POST CONSUMER RECYCLED POLYPROPYLENE PLASTIC WITH ADDED ULTRAVIOLET INHIBITORS. RECYCLABLE. EACH PANEL SHALL HAVE:

B. CONSTRUCTION AND INSTALLATION
1. THE CONTRACTOR SHALL INSTALL THE TREE ROOT BARRIERS WITH THE NUMBER OF PANELS AND IN THE MANNER SHOWN ON THE DRAWINGS. THE VERTICAL ROOT DEFLECTING RIBS SHALL BE FACING INWARDS TO THE ROOT BALL AND THE TOP OF THE DOUBLE EDGE SHALL BE 1/2" ABOVE GRADE. EACH OF THE REQUIRED NUMBER OF PANELS SHALL BE CONNECTED TO FORM A CIRCLE AROUND THE ROOT BALL OR WHERE SPECIFIED JOINED IN A LINEAR FASHION AND PLACED ALONG THE ADJACENT HARDSCAPE. ALL STREET TREES WITH TRUNKS CLOSER THAN 4 FT. TO PAVED SURFACES SHALL BE PLANTED WITH ROOT BARRIER BETWEEN THE ROOT BALL AND PAVING. PLANTINGS WITHIN TREE WELLS REQUIRE ROOT BARRIERS ALONG ALL SIDES OF THE TREE WELL.
2. EXCAVATION AND SOIL PREPARATION SHALL CONFORM TO THE DRAWINGS.
3. THE TREE ROOT BARRIERS SHALL BE BACKFILLED ON THE OUTSIDE WITH 3/4" TO 1 1/2" GRAVEL OR CRUSHED ROCK AS SHOWN ON THE DRAWINGS. NO GRAVEL BACKFILL IS REQUIRED FOR A LINEAR PLANTING

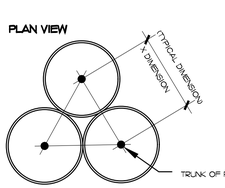




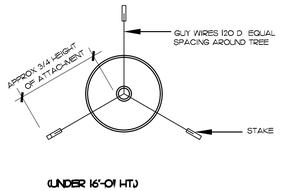
24" DEEPROOT TREE ROOT BARRIERS
NOT TO SCALE



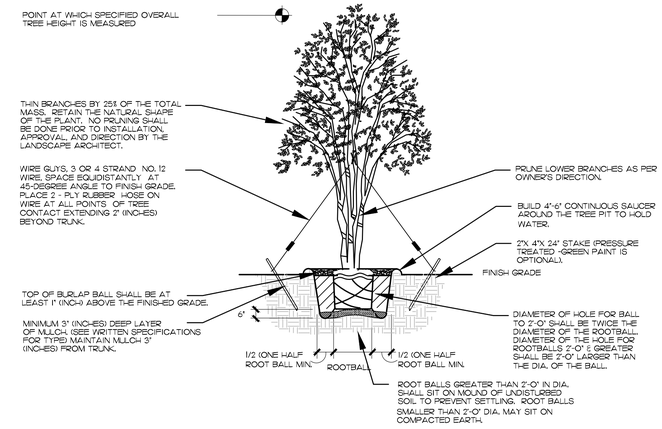
TYPICAL TREE ON SLOPE PLANTING DETAIL
NOT TO SCALE



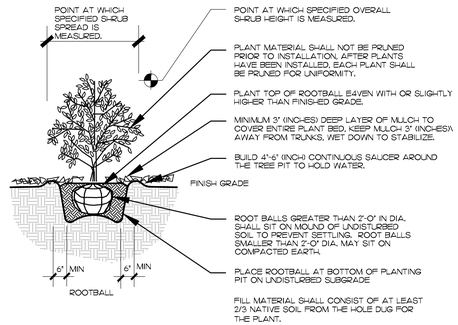
TYPICAL PLANT SPACING DETAIL
NOT TO SCALE



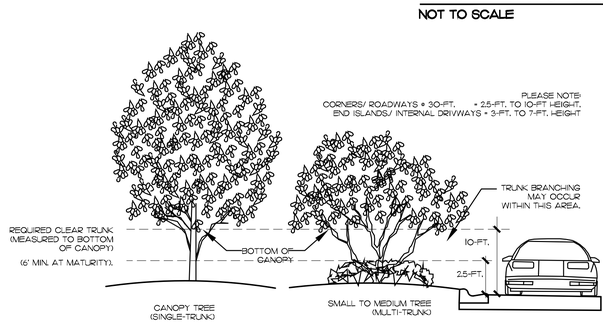
(UNDER 15'-0" HT.)
TYPICAL TREE GUYING DETAIL
NOT TO SCALE



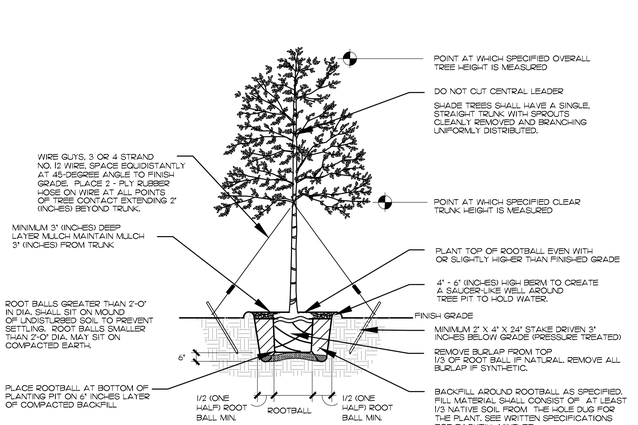
TYPICAL IRRIGULAR/MULTI-TRUNK TREE PLANTING DETAIL
NOT TO SCALE



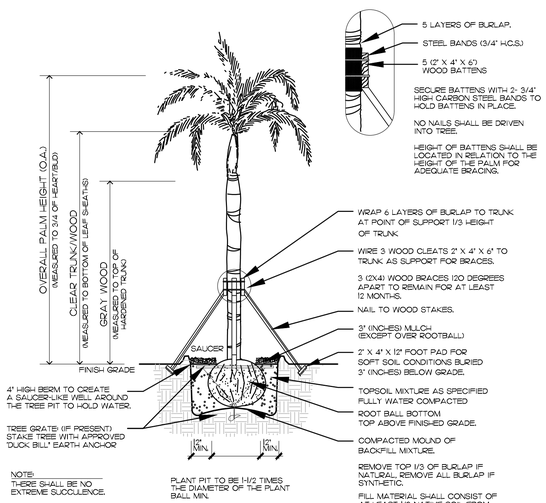
TYPICAL SHRUB/ GROUNDCOVER PLANTING DETAIL
NOT TO SCALE



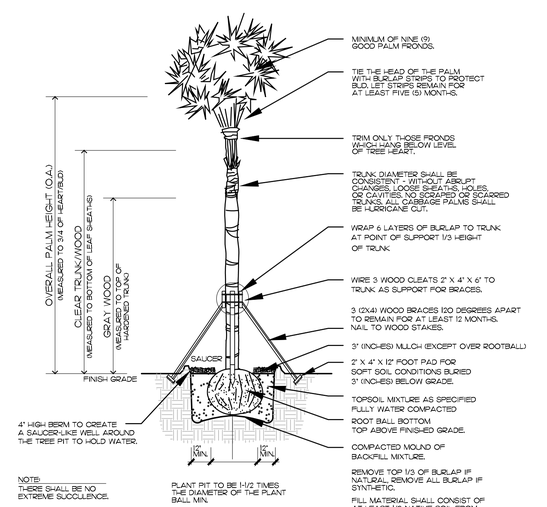
CLEAR TRUNK WITHIN SIGHT TRIANGLE DETAIL
NOT TO SCALE



TYPICAL TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL PALM PLANTING DETAIL
NOT TO SCALE



TYPICAL PALM PLANTING DETAIL
NOT TO SCALE

48 HOURS BEFORE DIGGING CALL TOLL FREE
8-1-1
SUNSHINE811.COM
NOTIFICATION CENTER

plot date:
file name:

Patrick D. Cunningham, LLC
land planning
landscape architecture
519 Sapphire Drive
Sarasota, FL 34234
o: 941.351.8915
pcuningham.LLC@gmail.com

Landscape Details

Bev Smith Toyota
North Parcel
3350 US Highway One
Ft. Pierce, Florida

DATE: 03.21.2022
REV:

SEAL
PATRICK D. CUNNINGHAM FL REG. # LA. 0001469

SCALE: N.T.S.

SHEET NORTH
L-3

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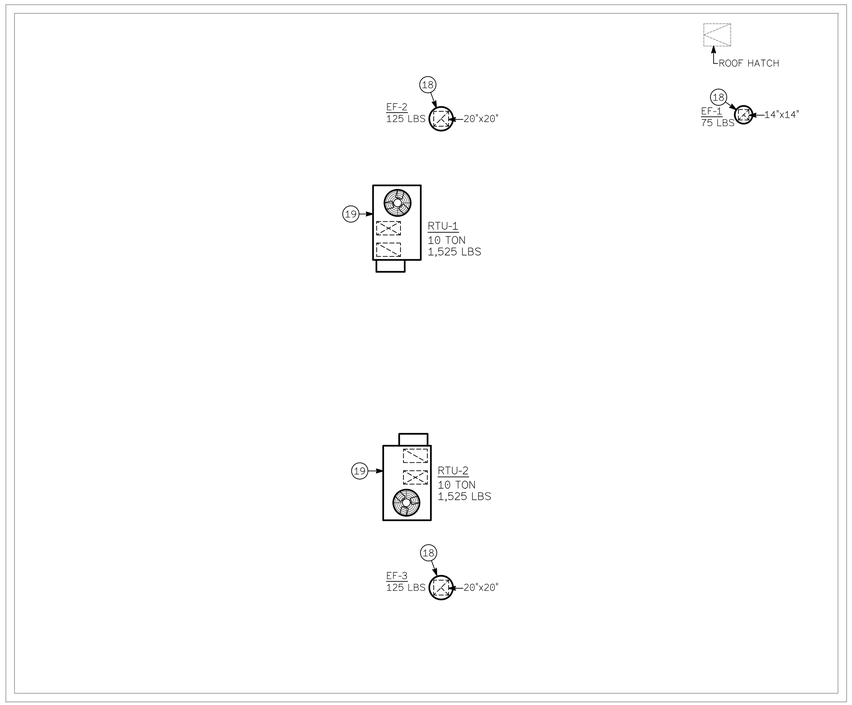
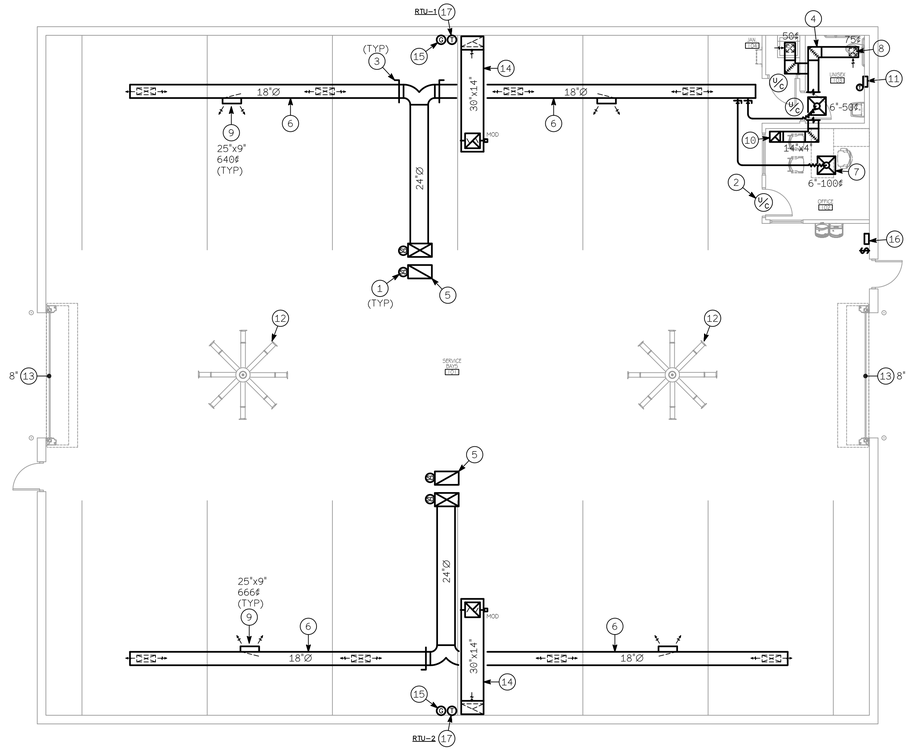


ROOF PLAN
SCALE: 1/8" = 1'-0"



FLOOR PLAN
SCALE: 1/8" = 1'-0"

HVAC KEYED NOTES (1 #)

1. PHOTOELECTRIC DUCT MOUNTED SMOKE DETECTOR WITH 12"x12" ACCESS DOOR FOR TUBE INSPECTION (TYPICAL).
2. 1" UNDERCUT DOOR (TYPICAL).
3. MANUAL BALANCING DAMPER (TYPICAL).
4. EXHAUST AIR DUCTWORK SUPPORTED FROM STRUCTURE ABOVE CEILING.
5. FULL SIZE OPEN END SOUND LINED RETURN AIR DUCTWORK WITH DOWN TO BOTTOM OF ROOF STRUCTURE WITH 1"x1" WIRE MESH TO COVER OPENING.
6. ROUND SPIRAL SUPPLY AIR DUCTWORK SUPPORTED FROM STRUCTURE WITH AIR CRAFT CABLING OR AS RECOMMENDED BY MANUFACTURER, TIGHT TO STRUCTURE ABOVE. DUCTWORK SHALL BE DOUBLE WALL, INSULATED WITH SELF-SEALING/GASKETED CONNECTIONS.
7. 24"x24" CEILING MOUNTED SUPPLY AIR DIFFUSER WITH NECK SIZE AND AIR QUANTITY INDICATED (TYPICAL). PROVIDE RIGID/FLEXIBLE DUCTWORK BACK TO MAIN WITH AIR-TITE FITTING AND MANUAL VOLUME DAMPER.
8. 10"x10" CEILING MOUNTED EXHAUST AIR REGISTER WITH AIR QUANTITY INDICATED (TYPICAL).
9. SUPPLY AIR REGISTER MOUNTED IN BOTTOM (AND SIDE) OF ROUND DUCTWORK WITH NECK SIZE AND AIR QUANTITY INDICATED (TYPICAL). LINDAB RGS-3 OR APPROVED EQUAL WITH INTEGRAL VOLUME CONTROL AND DOUBLE DEFLECTION LOUVERS SET AT 30° LEFT/RIGHT.
10. EXHAUST DUCTWORK UP THRU ROOF TO FAN.
11. 500 WATTS ELECTRIC WALL MOUNTED (RECESSED) FAN FORCED HEATER WITH INTEGRAL THERMOSTAT AND TAMPER-PROOF ENCLOSURE. BERKO MODEL SRA1012DS OR APPROVED EQUAL. HEATER SHALL BE 1,706 BTUH, 65 CFM, 120V/1Ø.
12. LARGE CIRCULATION FAN (BY OTHERS).
13. INTERLOCK DOOR MOTOR WITH GAS DETECTION CONTROL PANEL SO THAT DOOR OPENS 8" ABOVE FLOOR WHEN SYSTEM IS ENERGIZED.
14. EXHAUST DUCTWORK SUPPORTED HIGH AND UP THRU ROOF TO FAN WITH LOW-LEAKAGE MOTORIZED DAMPER. EXTEND DUCTWORK DOWN ALONG WALL TO 12" ABOVE FLOOR WITH 1"x1" WIRE MESH OVER OPENING.
15. REMOTE CARBON MONOXIDE AND TOXIC/EXPLOSIVE GAS SENSOR MOUNTED ON WALL 48" ABOVE FLOOR AND INTERLOCKED WITH GAS CONTROL PANEL.
16. GAS DETECTOR MAIN CONTROL PANEL MOUNTED ON WALL 48" ABOVE FLOOR WITH MANUAL OVERRIDE SWITCH. INTERLOCK PANEL WITH REMOTE GAS SENSORS, ROLLUP DOORS AND EXHAUST SYSTEM FANS/DAMPERS. REFER TO CONTROL SEQUENCE/OPERATIONS.
17. THERMOSTAT MOUNTED ON WALL 48" ABOVE FLOOR AND INTERLOCKED WITH UNIT INDICATED.
18. ROOF MOUNTED EXHAUST FAN ON 14" FACTORY CURB. REFER TO SCHEDULE.
19. GAS FIRED ROOFTOP UNIT ON 14" FACTORY CURB. COORDINATE EXACT LOCATION WITH STRUCTURAL DRAWINGS. REFER TO SCHEDULE.

SHOP VENTILATION ANALYSIS:
0.75 CFM/SQ.FT. OF "MECHANICAL" EXHAUST IS REQUIRED BY THE 2020 FLORIDA MECHANICAL CODE, SECTION 403, DURING OCCUPIED TIMES.

1 CFM/SQ.FT. OF VENTILATION EXHAUST IS REQUIRED BY THE N.E.C. CODE, SECTION 511, DURING OCCUPIED TIMES, IN ORDER TO "DE-CLASSIFICATION" THE SPACE.

TOTAL FLOOR AREA= 6,750 SQ.FT.

THEREFORE: A MECHANICAL EXHAUST SYSTEM WILL BE DESIGNED PROVIDING (2) FANS AT 3,375 CFM EACH AND INTERLOCKED WITH AN AUTOMATIC GAS DETECTION SYSTEM.

0 4 8 16 24
SCALE:1/8"=1'-0"

PENNEY DESIGN GROUP
ARCHITECTURE | PLANNING | INTERIORS
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INTEGRATED DESIGN CONSULTANTS
139 N. MAIN ST, SUITE 308
BEL AIR, MD 21014
443.787.4264
MECHANICAL ▪ ELECTRICAL ▪ PLUMBING ENGINEERING SERVICES

Bev Smith Recon Building
New Construction
3350 US-1
Fort Pierce, FL 34982

Bev Smith TOYOTA

No.	Issue / Revision	Date
	Bid Set	2021.10.04
Drawn By:		MRB/JLS
Checked By:		EPL/JFR
Plot Date:		-

Sheet Number
M-101
Sheet Title
FLOOR/ROOF PLANS

Project Number	File Name
21-061	

MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
www.mbveng.com CA #3728

PROJECT NARRATIVE

This project proposes site and building improvements to a vacant, undeveloped, wooded parcel. The proposed development shall also create two 1+/- acre outparcels adjacent to US Hwy. 1. The outparcels are proposed to remain undeveloped, with the exception of drainage and utility stub-outs to the parcels.

The proposed building is referred to as the Recon building, which shall be utilized for the dealership's reconditioning of vehicles. This facility is not proposed to receive customer traffic and is proposed to be utilized by employees.

The site proposes a large parking area for storage of vehicles to be serviced and reconditioned. There are two access points proposed on Southland Drive that are aligned with existing access points on the South side for the existing dealership. A drive aisle stub-out is provided to the East for any future development access connection.

Parking spaces shall be allotted for employee parking for the main dealership and shall be located along the Southland Drive parking area.

Stormwater is proposed on-site and shall service the two proposed outparcels. The stormwater system includes a dry pond and wet pond system designed to meet the water management district's BMP Trains requirements. The outfall is proposed to discharge to a swale along the North side of Southland Drive and run East to the existing main relief canal. It is understood this section of canal is not part of the NSLRWCD and is within the St. Lucie County jurisdiction.

Utilities have been coordinated with FPUA. The Sewer shall connect to an existing manhole located in the intersection of Southland Drive and US Hwy. 1. The sewer will run North at the rear of the US Hwy. 1 ROW and will enter the site via a proposed utility easement. This sewer main extension shall service the proposed development and the two proposed outparcels. The water service is proposed to connect via the proposed utility easement to an existing 12" watermain adjacent to US Hwy. 1 under the exiting sidewalk.

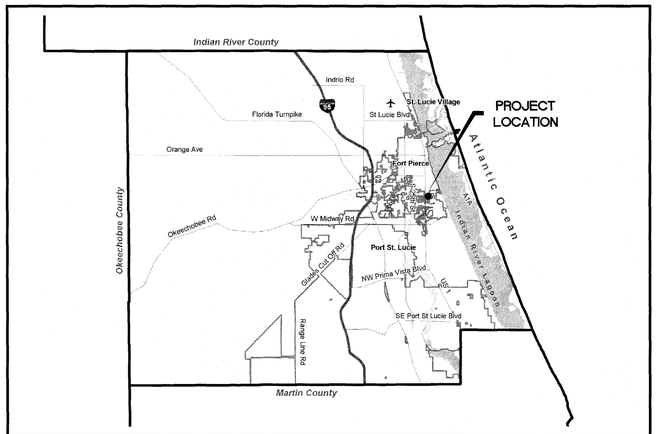
An environmental impact report has been performed and some gopher tortoises have been identified North and East of the proposed development, further than 500 feet from proposed development. The tortoises shall be relocated prior to construction commencement in accordance with appropriate regulations by the environmental consultant.

The facility hours shall remain as currently published on the website, Monday – Saturday 7am – 8pm, and Sunday 10am – 5pm.

BEV SMITH TOYOTA
NORTH PARCEL

SECTION 27, TOWNSHIP 35S, RANGE 40E
CITY OF FORT PIERCE, FLORIDA

MARCH 2022



LOCATION MAP

VICINITY MAP

OWNER/APPLICANT

NSS ACQUISITION CORP.
3350 SOUTH U.S. HIGHWAY 1
FORT PIERCE, FLORIDA 34982
PH: (561) 818-2847

ENGINEER

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES

CIVIL ▪ STRUCTURAL ▪ SURVEYING ▪ ENVIRONMENTAL

1835 20TH STREET
VERO BEACH, FL 32960
PH: (772) 569-0035
MELBOURNE, FL - PH: (321) 253-1510
FT. PIERCE, FL - PH: (772) 468-9055

SURVEYOR

INDIAN RIVER SURVEY, INC.
Professional Surveying and Mapping
1835 20TH STREET
VERO BEACH, FL 32960
PH: (772) 569-7880

ARCHITECT

PENNEY DESIGN GROUP, LLC
8120 WOODMONT AVENUE, SUITE 750
BETHESDA, MD 20814
PH: (301) 979-7600

LANDSCAPE ARCHITECT

PATRICK D. CUNNINGHAM, LLC
519 SAPPHIRE DRIVE
SARASOTA, FL 34243
PH: (941) 351-8915

INDEX OF DRAWINGS

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C6	OFF-SITE DRAINAGE PLAN
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C8	UTILITY PLAN
C9	GENERAL DETAILS
C10	UTILITY DETAILS
C11	EROSION CONTROL DETAILS

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313

DATE: 3/30/22

PROJECT: 22-0066

SHEET
C1

O:\DRAWINGS\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\22-0066 NORTH COVER - DETAILS.dwg 3/30/2022 12:11 PM BILL.WITTELEY

PRE-CONSTRUCTION REQUIREMENTS:

1. THE CONTRACTOR IS REQUIRED TO PERFORM HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE VARIOUS PERMITS WHICH WILL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
2. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE (SEQUENCE OF OPERATIONS) PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. CONTRACTOR WILL ATTEND A PRE-CONSTRUCTION MEETING WITH THE DESIGN ENGINEER, MUNICIPALITY AND/ OR OWNER PRIOR TO LAND DISTURBANCE.
4. SHOP DRAWINGS SHALL BE SUBMITTED BEFORE ORDERING MATERIAL FOR PLANNED PROJECT. CORRESPONDING SHALL BE BETWEEN THE DESIGN ENGINEER AND THE LOCAL GOVERNING AGENCY AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONSTRUCTION NOTES:

1. THE CONTRACTOR IS ADVISED TO THOROUGHLY REVIEW THIS PLAN PACKAGE SO AS TO BE TOTALLY PREPARED TO PRESENT HIS BID PRICES IN THE CONTRACT DOCUMENTS. THE PLAN PACKAGE SUFFICIENTLY DELINEATES THE SCOPE AND INTENT OF THE ROADWAY WORK TO BE ACCOMPLISHED. IT WILL, THEREFORE, BE INCUMBENT ON THE CONTRACTOR TO ADJUST HIS FEE DOLLARS TO REFLECT ANY AND ALL ITEMS WHICH MAY NOT BE CLEARLY OUTLINED OR THOSE ITEMS WHICH MAY NOT BE INDICATED BUT WHICH ARE NECESSARY FOR THE SUCCESSFUL COMPLETION OF THIS PROJECT WITHOUT ADDITIONAL COSTS TO THE OWNER.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF FORT PIERCE AND FDOT STANDARDS AND SPECIFICATIONS.
3. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR THE COORDINATION OF UTILITY RELOCATION.
4. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN THE FIELD WITH UTILITY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION, AS REQUIRED BY THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, NOTIFY SUNSHINE AT 811.
6. CONTRACTOR SHALL TAKE EXTREME CAUTION WHEN EXCAVATING NEARBY EXISTING UTILITIES.
7. CONTRACTOR SHALL INFORM ENGINEER OF ANY CONFLICT BEFORE ANY FURTHER WORK IS COMPLETED.
8. UTILITIES ARE TO BE ADJUSTED BY UTILITY OWNER OR AS DIRECTED BY THE ENGINEER.
9. SURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND IS TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
10. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SOIL OR SUBSURFACE CONDITIONS UNSUITABLE FOR CONSTRUCTION ARE ENCOUNTERED,
11. ALL EXCAVATED SOILS DEEMED SUITABLE AS FILL MATERIAL AS DETERMINED BY THE ENGINEER SHALL BE UTILIZED ON SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE EXACT LOCATION OF DELIVERY ON SITE SHALL BE DETERMINED BY THE ENGINEER, ALL EXCAVATED SOILS DEEMED UNSUITABLE SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE.
12. ITEM IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES, PAVEMENT AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT HIS OWN EXPENSE.
13. CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR CONSTRUCTION.
14. IT SHOULD BE NOTED THAT THE OCCUPATIONAL SAFETY AND HEALTH ACT PROHIBITS THE OPERATING OF EQUIPMENT OR MACHINES CLOSER THAN TEN (10) FEET TO ENERGIZED ELECTRIC LINES RATES AT FIFTY KILOVOLTS OR BELOW. ALSO, NO EXCAVATION IS PERMITTED WITHIN FIVE (5) FEET OF POWER POLE FACILITIES.
15. ALL IRONS AND MONUMENTS (P.R.M.'S) SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
16. ANY PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR WILL NOTIFY THE ENGINEER.
17. ALL EXISTING TREES WITHIN THE RIGHT OF WAY ARE TO BE REMOVED AS CLEARING AND GRUBBING UNLESS OTHERWISE NOTED.
18. WHEN REFERENCED TO, FDOT REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS,CURRENT EDITION.
19. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO A CONDITION EQUAL TO, OR BETTER THAN THAT WHICH IS NOW EXISTING.
20. BACKFILL, GRADE AND SOD AS REQUIRED AROUND ALL NEW CONSTRUCTION AND ALL DEVELOPED LOTS TO PREVENT EROSION. SEED AND MULCH WILL ONLY BE ALLOWED TO RESTORE UNDEVELOPED LOTS AFFECTED BY CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
21. SODDING TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER. SOD ALL DISTURBED AREAS UPON COMPLETION.
22. ALL EXCESS CONSTRUCTION MATERIAL AND WASTE TO BE HAULED OFF-SITE AND DISPOSED OF PROPERLY AT CONTRACTOR'S EXPENSE.
23. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH FDOT STANDARDS FOR TRAFFIC CONTROL THROUGH WORK ZONES AND MUTCD (PART VI).
24. PROPERTY OWNERS AND BUSINESSES WITHIN THE AREA OF CONSTRUCTION SHALL BE GIVEN ACCESS TO THEIR PROPERTY AT ALL TIMES DURING THE PERIOD OF CONSTRUCTION.
25. ALL MAILBOXES SHALL BE RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE U.S. POSTAL MAIL CARRIER.
26. THE CONTRACTOR SHALL REMOVE, COVER OR OBLITERATE EXISTING ROADWAY SIGN AND PAVEMENT MARKINGS THAT CONFLICT WITH THE CONSTRUCTION TRAFFIC CONTROL PLANS.
27. CONTRACTOR TO PROTECT ALL SPRINKLER HEADS NOT IN CONFLICT WITH DESIGN AND RELOCATE ALL THOSE WHICH ARE IN CONFLICT TO A LOCATION DETERMINED IN FIELD.
28. SOD TWO (2) FEET MINIMUM ALONG SIDE PROPOSED EDGE OF PAVEMENT.
29. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY DRAINAGE MEASURES AS REQUIRED TO ADEQUATELY DRAIN THE PROJECT AND ANY TEMPORARILY TRAVELED ROADWAYS. TEMPORARY DRAINAGE DESIGN, CONSTRUCTION AND MAINTENANCE IS THE CONTRACTOR'S RESPONSIBILITY; HOWEVER, ALL SUCH MEASURES MUST BE APPROVED BY THE ENGINEER.
30. THE EXISTING SIDEWALK SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED.
31. GRADES SHOWN ARE FINISHED GRADES.
32. SAWCUT CONCRETE OR ASPHALT DRIVEWAYS AS REQUIRED FOR REPLACEMENT.
33. ALL ABANDONED UTILITIES (INCLUDING PIPES, CABLES AND STRUCTURES) FOUND IN THE RIGHT OF WAY AND NOT SHOWN ON THE PLANS, ARE TO BE REMOVED AND PROPERLY DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR. THIS INCLUDES ALL EXOTIC PIPES LIKE ASBESTOS-CEMENT PIPE, COST TO BE INCLUDED IN CLEARING AND GRUBBING ITEM.
34. DRIVEWAY LOCATIONS AND WIDTHS ARE APPROXIMATE AND ARE TO BE ADJUSTED AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
35. BENCHMARK DATUM IN NAVD 88.
36. BACKFILL AND SOD AS REQUIRED BEYOND RIGHT OF WAY LINES ON INDIVIDUAL LOTS TO MAINTAIN POSITIVE DRAINAGE FLOW INTO CURB AND GUTTER.
37. GRADE AND SOD SWALES TEN (10) FEET FROM PROPOSED DITCH BOTTOM INLETS AND MITERED END SECTIONS ON SIDE STREETS AS REQUIRED.
38. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ℄ (BASELINE) AND ℄ (CENTERLINE) CONSTRUCTION THROUGHOUT THE PROJECT.
39. THE CONTRACTOR SHALL REMOVE DRIVEWAY APRONS AND DRIVEWAY CULVERTS AND SHALL MAINTAIN ROUGH GRADE FOR UTILITY MODIFICATIONS.
40. ALL EXISTING SWALES SHALL BE PROTECTED BY THE CONTRACTOR. ANY DAMAGE TO THE SWALE LINE SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
41. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR BID ITEMS.
42. MAINTAIN A MINIMUM OF ONE (1) FOOT CLEARANCE BETWEEN POWER POLE AND EDGE OF SIDEWALK.
43. WHEN ALL OTHER PERMANENT CONSTRUCTION IS COMPLETE, THE FINAL SURFACE COURSE SHALL BE PLACED.
44. CONSTRUCTION OPERATIONS FOR PLACEMENT OF THE FINAL SURFACE COURSE SHALL BE LIMITED TO A DISTANCE, AS DIRECTED BY THE ENGINEER, THE CONTRACTOR CAN COMPLETE IN ONE (1) DAY.
45. THE CONTRACTOR SHALL IMPLEMENT TEMPORARY PAVEMENT MARKINGS UNTIL THE FINAL SURFACE COURSE HAS CURED (MINIMUM THIRTY (30) DAYS AFTER FINAL SURFACE COURSE PLACEMENT), ANY TEMPORARY PAINTED MARKINGS PLACED ON THE FINAL.
46. PAVEMENT TRANSITION SHALL BE MADE IN ACCORDANCE WITH PAVEMENT TRANSITION DETAIL.
47. ALL APPROVED PERMIT CONDITIONS, INCLUDING BUT NOT LIMITED TO FDOT, FDEP AND CITY OF FORT PIERCE, SHALL BE MET BY CONTRACTOR PRIOR TO CERTIFICATION OF COMPLETION BY ENGINEER.

ROADWAY SPECIFICATIONS

GENERAL

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" MOST CURRENT EDITION BE USED WHERE APPLICABLE FOR 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 THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE STANDARD SPECIFICATIONS ALSO.

THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF TWO YEARS FROM THE DATE OF PROJECT ACCEPTANCE, DURING WHICH ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

GRADING

THE CONTRACTOR SHALL PERFORM ALL GRADING NECESSARY TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL SECTIONS.

ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS.

STAKING

CONSTRUCTION STAKING WILL BE PERFORMED BY THE CONTRACTOR.

STABILIZING

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO THE FLORIDA BEARING VALUE AS PER PLAN FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS.

(TYPE C STABILIZATION), ALL STABILIZED AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

BASE COURSE

THE BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL IN ACCORDANCE WITH SECTION 911 OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 915 OF THE STANDARD SPECIFICATIONS.

LIMEROCK BASE AND CEMENTED COQUINA SHELL BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL. BASE SHALL BE COMPACTED BY AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. BASE SHALL BE APPROVED PRIOR TO PRIME COAT.

PRIME AND TACK COAT

PRIME AND TACK COAT FOR THE BASE SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.)

TYPE S-III ACSC SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, IN ACCORDANCE WITH SECTIONS 320, AND 330 OF THE STANDARD SPECIFICATIONS.

TESTING

THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIALS. TEST RESULTS MUST BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS.

THE SCHEDULE FOR TESTING OF THE ROAD CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:
1. FLORIDA BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS.
2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:
1. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 500 FEET OR CLOSER AS MIGHT BE NECESSARY.

ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 1 1/2 INCHES INSIDE THE LEFT EDGE, TO THE CENTER, TO A POINT 12 INCHES INSIDE THE RIGHT EDGE OF THE ITEM TESTED.

IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE. UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET,

ALL PASSING TESTS SHALL BE PAID FOR BY THE OWNER. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CLEAN-UP

THE CONTRACTOR MUST PROVIDE CLEAN-UP OF EXCESS CONSTRUCTION MATERIAL UPON COMPLETION OF THE PROJECT. THE SITE MUST BE LEFT IN A NEAT, CLEAN, GRADED CONDITION.

CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS

1. OPEN ROAD CUTS REQUIRES PRIOR APPROVAL OF THE CITY, COUNTY, STATE OR ANY OTHER AGENCY WHICH MAY HAVE JURISDICTION.
2. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS.
3. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL RECEIVE SOLID SOD.
4. STREET RESTORATION TO BE DONE AS PER CITY OF FORT PIERCE STANDARDS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
6. TRAFFIC CONTROL ON ALL COUNTY AND STATE HIGHWAY RIGHT-OF-WAYS SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION.

DRAINAGE SPECIFICATIONS

STORM INLETS AND MANHOLES SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3000 PSI.

ALL REINFORCING STEEL TO BE ASTM A 615-72 GRADE 40, FYP = 40,000 PSI, AND SHALL BE HANDLED AND PLACED IN ACCORDANCE WITH ACI 318-71.

PRECAST CONCRETE MANHOLES AND STORM INLETS MAY BE USED UPON THE ENGINEER'S APPROVAL OF THE MANUFACTURER'S SHOP DRAWINGS.

STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 430 AND RELATED SECTIONS OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE

UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI. ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA.

CULVERT PIPES

REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

PRECAST CONCRETE DRAINAGE PRODUCTS

ALL PRECAST CONCRETE DRAINAGE PRODUCTS (INCLUDING BUT NOT LIMITED TO ROUND CONC. PIPE, ELLIPTICAL CONC. PIPE, UNDERDRAINS, MANHOLES, INLETS, ENDWALLS, JUNCTION BOXES, THREE SIDED CONC. CULVERTS, AND CONC. BOX CULVERTS) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

GROUNDWATER

GROUNDWATER MAY BE ENCOUNTERED ON THIS SITE. THE CONTRACTOR IS TO PLAN ACCORDINGLY.

RECORD DRAWINGS

CONTRACTOR SHALL KEEP AND MAINTAIN RECORD DRAWINGS ON THE PROJECT SITE AT ALL TIMES WHICH SHALL BE ANNOTATED BY THE CONTRACTOR DEPICTING ANY CHANGES MADE IN THE FIELD WHICH DIFFER FROM THE CONTRACT DRAWINGS. RECORD DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INVERT AND TOP ELEVATIONS OF CULVERTS AND INLET STRUCTURES. CONTRACTOR SHALL SUBMIT COMPLETE AND FINAL RECORD DRAWINGS TO ENGINEER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL INSPECTION AND FINAL PAYMENT.

INSPECTION

MINIMUM CONSTRUCTION INSPECTION CHECKPOINTS

THE ENGINEER SHALL BE NOTIFIED:
1. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
2. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
3. UPON COMPLETION OF SUBGRADE GRADING AND COMPACTION,
4. UPON BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
5. UPON COMPLETION OF GRADING AND COMPACTION OF THE BASE MATERIAL AND PRIOR TO PRIMING.
6. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C.
7. UPON COMPLETION OF CONSTRUCTION.

FDEP SEPARATION CRITERIA:

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER. STORM WATER, FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C.
(B)NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2),F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUME-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE, HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE, HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
(C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL THE WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
(B)EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
2. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
3. ALL WORK SHALL BE IN WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.
4. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE CITY OF FORT PIERCE, WATER MANAGEMENT DISTRICT, FDEP AND THESE PLANS AND SPECIFICATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
6. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. CONTRACTOR SHALL SUPPLY DENSITY TESTS TO ENGINEER ON ALL SUB-GRADE AND BASE, TESTS SHALL BE PREPARED PER AASHTO T-180 METHOD.
8. SLOPE GRADES FROM ELEVATIONS SHOWN TO EXISTING GRADE AT PROPERTY LINE, MAXIMUM SLOPE 4:1.
9. ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTION.
10. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH M.U.T.C.D. STANDARDS, CITY OF FORT PIERCE AND F.D.O.T.
11. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
12. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTORS BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE. WHEN GROUNDWATER IS ENCOUNTERED THE CONTRACTOR SHALL PLAN ACCORDINGLY.
13. ALL INLETS SHALL HAVE A 6" MIN. SUMP BELOW LOWEST INVERT.
14. EROSION CONTROL FENCING MUST BE IN PLACE PRIOR TO GRADING.
15. PIPE LENGTHS AND SLOPES SHOWN ARE APPROXIMATE.
16. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
17. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
18. CONTRACTOR SHALL ADJUST INLET/STRUCTURE OR CONNECTION LOCATION AS REQUIRED TO ENSURE PROPOSED STRUCTURES AND PIPES ARE IN PROPER ALIGNMENT AND MATCH SLOPE OF EXISTING PIPES OR CONNECTIONS.
19. THIS PLAN CONTEMPLATES ACCESS CONNECTIONS TO ADJACENT ROADS AS SHOWN.
20. FILL MATERIAL MAY NOT BE STOCKPILED HIGHER THAN SIX (6) VERTICAL FEET ONSITE PER CITY OF FORT PIERCE CODE.
21. DIMENSIONS SHOWN ARE TO EDGE OF GUTTER OR PAVEMENT, RADII SHOWN ARE TO FACE OF CURB.
22. ALL SIGNS SHALL BE PER M.U.T.C.D. STANDARDS.
23. ALL PAVEMENT MARKINGS, EXCEPT PARKING STALL STRIPING, SHALL BE THERMOPLASTIC PER CITY OF FORT PIERCE REQUIREMENTS.
24. THE USES PROPOSED AS PART OF THIS PLAN DO NOT REQUIRE A SUBMITTAL OF A RISK MANAGEMENT PLAN PURSUANT TO U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS AND SHALL NOT EXCEED THE *EPA'S RMP THRESHOLD QUANTITIES OF LISTED SUBSTANCES*.
25. WATER FOR FIRE FIGHTING PURPOSES SHALL BE INDICATED WITH A BLUE ROADWAY REFLECTOR, PLACE ONE FOOT OFF OF THE CENTERLINE OF THE ROAD FACING THE FIRE HYDRANT. THIS INCLUDES NEW AND EXISTING SOURCES.
26. REGARDLESS OF PRIVATE OR PUBLIC DEDICATIONS, THERE SHALL BE NO

EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

SCALE: 1" = 30'

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

DEMOLITION NOTES

1. ALL EXOTIC AND INVASIVE SPECIES TO BE REMOVED CONGRUENT WITH DEVELOPMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE ATTAINMENT OF ALL DEMOLITION PERMITS NECESSARY FOR PROPOSED CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY / ALL NECESSARY EROSION CONTROL MEASURES AS PRESENTED ON THIS SHEET AND INCLUDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
4. ALL BARRIERS AND PROTECTION MEASURES FOR TREES BEING SAVED SHALL BE PLACED BEFORE ANY DEMOLITION ACTIVITY BEGINS. LARGE TREES ON ADJACENT PROPERTIES, NEAR THE PROPERTY LINE, SHOULD ALSO BE PROTECTED.
5. SEE LANDSCAPE ARCHITECT SPECIFICATIONS FOR SPECIFIC INFORMATION REGARDING TREE REMOVAL / MITIGATION.
6. CONTRACTOR RESPONSIBLE TO OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION / REMOVAL OF EACH ITEMS AS IDENTIFIED IN THESE PLANS OR IDENTIFIED DURING CONSTRUCTION ACTIVITIES.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

LEGAL DESCRIPTION:

PARCEL 2

A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE S89°27'02"E ALONG THE NORTH LINE OF SAID SOUTHEAST 1/4 OF SECTION 27 A DISTANCE OF 49.21 FEET TO AN INTERSECTION WITH A NON-TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 11334.20 FEET, THE CHORD OF WHICH BEARS S01°41'15"E AT 242.70 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 01°13'37" FOR AN ARC DISTANCE OF 242.71 FEET; THENCE S02°18'03"E A DISTANCE OF 211.97 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE N87°41'43"E A DISTANCE OF 752.54 FEET; THENCE S02°06'02"E A DISTANCE OF 422.62 FEET TO THE NORTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT OF WAY); THENCE S89°33'01"W ALONG SAID NORTH RIGHT OF WAY LINE A DISTANCE OF 751.45 FEET; THENCE N02°18'03"W A DISTANCE OF 398.29 FEET TO THE POINT OF BEGINNING.
CONTAINS 7.08 ACRES MORE OR LESS.

CONTAINING 13.76 ACRES MORE OR LESS, (COMBINED TOTAL)

SURVEYOR'S NOTES

1. THIS SURVEY DOES NOT DETERMINE OR INDICATE LAND OWNERSHIP.
2. THE SURVEYOR DID NOT RESEARCH OR ABSTRACT THE LAND RECORDS FOR RIGHTS-OF-WAY, EASEMENTS, RESERVATIONS, DEED RESTRICTIONS, ZONING REGULATIONS, SETBACKS, LAND USE PLAN DESIGNATIONS, LIENS, MURPHY ACT RIGHTS-OF-WAY, AREAS OF LOCAL CONCERN, OR OTHER SIMILAR JURISDICTIONAL DETERMINATIONS. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF INFORMATION PROVIDED BY THE CLIENT OR INFORMATION OTHERWISE KNOWN TO THE SURVEYOR AND MAY NOT BE COMPLETE.
3. UNDERGROUND UTILITIES, BUILDING FOUNDATIONS, AND OTHER UNDERGROUND FIXED IMPROVEMENTS WERE NOT LOCATED, UNLESS OTHERWISE INDICATED. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF SURFACE INDICATIONS OBSERVED BY THE SURVEYOR AND MAY NOT BE COMPLETE.
4. JURISDICTIONAL WETLANDS AND ENDANGERED OR THREATENED SPECIES HABITAT, IF ANY, THAT MAY EXIST ON OR AROUND THE SURVEY SITE WERE NOT DETERMINED OR LOCATED.
5. THE SURVEY DATE IS THE FIELD DATE SHOWN IN THE TITLE BLOCK, NOT THE SIGNATURE DATE.
6. BEARINGS BASED ON THE ASSUMPTION THAT THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE BEARS S89°32'47"W.
7. ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 NGS COUNTY BENCHMARK NGS B401 (PID AF7508) AT AN ELEVATION OF 16.17 FEET(NAVD88)
8. FLOOD ZONE X, FLOOD INSURANCE RATE MAP NUMBER 12061C0189K, DATED FEBRUARY 19, 2020.

LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- SILT FENCE
- TREE PROTECTION FENCE
- EXISTING TREE TO BE REMOVED

LEGEND

BFP	= BACKFLOW PREVENTER	PG.	= PAGE
BOC	= BACK OF CURB	PSM	= PROFESSIONAL SURVEYOR AND MAPPER
BWF	= BARBED WIRE FENCE	PVC	= POLY VINYL CHLORIDE
CLF	= CHAIN LINK FENCE	RCP	= REINFORCED CONCRETE PIPE
CM	= CONCRETE MONUMENT	(S)	= SURVEYED
CMP	= CORRUGATED METAL PIPE	TOB	= TOP OF BANK
CONC.	= CONCRETE	TOS	= TOE OF SLOPE
COVD.	= COVERED	TRANS	= TRANSFORMER
(D)	= DESCRIPTION	UG	= UNDERGROUND
ECMP	= ELLIPTICAL CORRUGATED METAL PIPE	WDF	= WOODEN FENCE
EDR	= EDGE OF DIRT DRIVE	WL	= WATER LINE
EL	= ELEVATION	WM	= WATER METER
EM	= ELECTRIC METER		= FIRE HYDRANT
FFE	= FINISHED FLOOR ELEVATION		= GUY ANCHOR
FM	= FORCE MAIN		= UTILITY POLE
FND.	= FOUND		= WATER GATE VALVE
GV	= GATE VALVE		= WELL
HW	= HEADWALL		= CAMERA
ID	= IDENTIFICATION		= LIGHT POLE
IP	= IRON PIPE		= CLEAN OUT
IR	= IRON ROD		= SIGN
IRC	= IRON ROD WITH CAP		= PALM (73)
LB	= LICENSED BUSINESS		= PINE (132)
LS	= LICENSED SURVEYOR		= OAK (61)
OHW	= OVERHEAD WIRES		
O.R.B.	= OFFICIAL RECORD BOOK		
(P)	= PLAT		
P.B.	= PLAT BOOK		
PG.	= PAGE		

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1855 - 25TH STREET
VERO BEACH, FL 32960
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MELBOURNE, FL - PH (321) 253-1510
FT. PIERCE, FL - PH (772) 468-9500

REVISIONS	DATE
1	
2	
3	
4	
5	
6	
7	
8	

JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GWR
DATE	APRIL 2022
CHECKED	AJB
DATE ISSUED	3/30/2022

EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

BEV SMITH TOYOTA
NORTH PARCEL

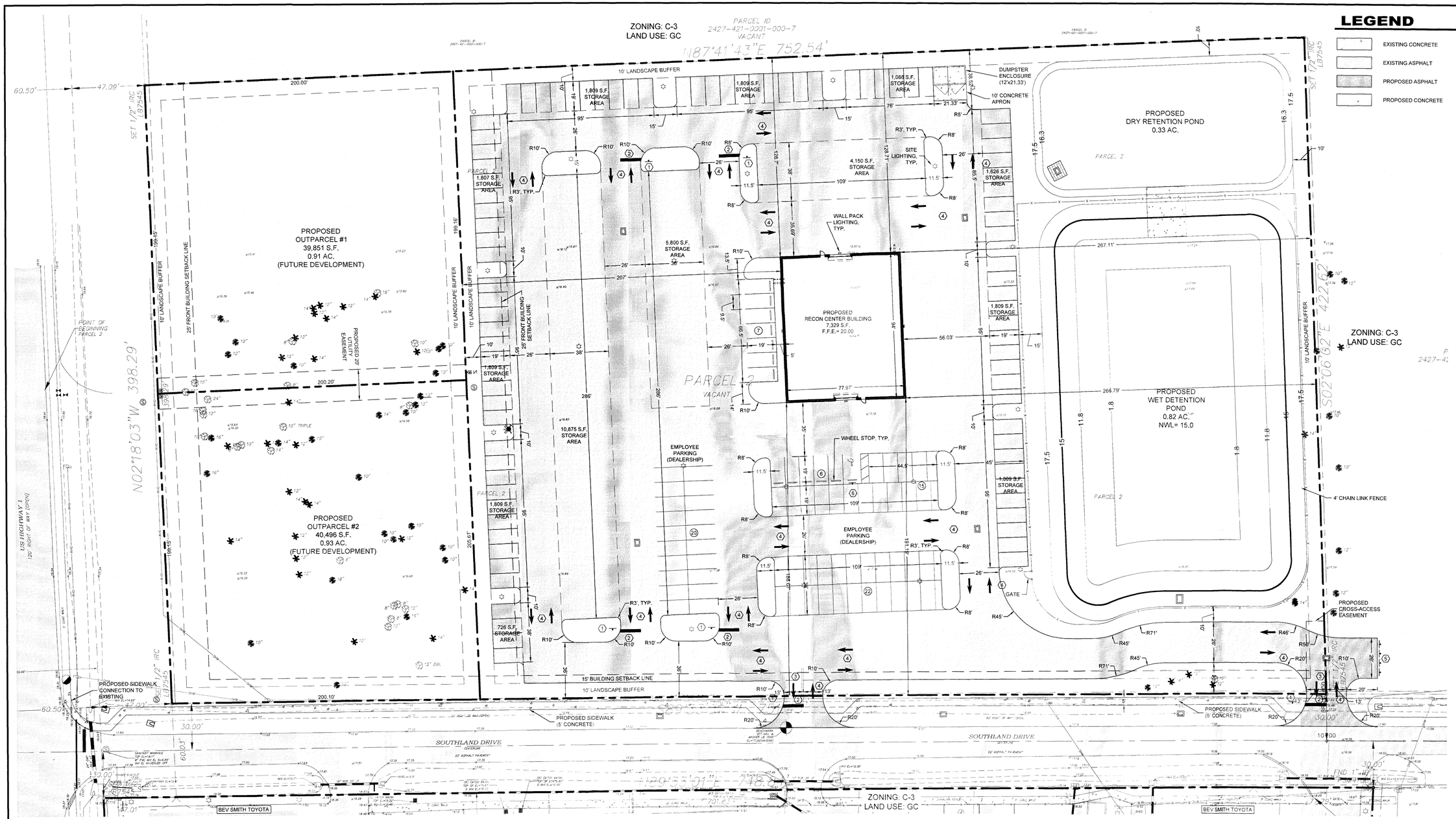
CITY OF FORT PIERCE — FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C3

22-0066

O:\DRAWINGS\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\02-ADMIN NORTH EX CONDI-DEMO-EROS.dwg 3/30/2022 8:44:38 AM WFP



LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

SITE PLAN

SCALE: 1" = 30'

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

SIGNAGE & PAVEMENT MARKING SCHEDULE		
SIGN ID NUMBER	SIZE	DESIGNATION / NOTES
①	30"	R1-1 "STOP" SIGN
②	24"	SOLID WHITE STOP BAR
③	6"	25 LF DOUBLE YELLOW STRIPING
④		PAVEMENT MARKINGS PER FDOT INDEX #711-001
⑤		(4) TYPE 4 OBJECT MARKERS (OM4-1) 6' O.C.
⑥	12"	FTP-20-06 HC PARKING SIGN, SEE DETAIL SHEET C12

NOTES:

1. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DETAILS.

72 HOURS BEFORE DIGGING CALL TOLL FREE 811 Know what's below. Call before you dig.

PROJECT INFORMATION

SITE ADDRESS
3300 SOUTH US#1
FORT PIERCE, FL 34982

OWNER/ APPLICANT
NBS ACQUISITION CORP.
3350 SOUTH US HIGHWAY 1
FORT PIERCE, FL 34982
PHONE: (561) 818-2847

ENGINEER
MBV ENGINEERING, INC.
1835 20TH STREET
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-0035

ARCHITECT
PENNEY DESIGN GROUP, INC.
8120 WOODMONT AVENUE, SUITE 750
BETHESDA, MD 20814
PHONE: (301) 979-7400

SURVEYOR
INDIAN RIVER SURVEY, INC
1835 20TH STREET
VERO BEACH, FLORIDA 32960
PHONE: (772) 569-7880

TAX PARCEL I.D NUMBER(S)
2427-421-0002-000-4

ZONING C-3
LAND USE GC

LATITUDE 27°24'8.09"N
LONGITUDE 80°19'25.86"W

PROJECT DESCRIPTION
PROPOSED CONSTRUCTION OF A VEHICLE RECONDITIONING BUILDING (RECON) ALONG WITH ASSOCIATED STORMWATER POND, UNDERGROUND DRAINAGE SYSTEM, UTILITIES, AND PAVED PARKING LOT.

SITE DATA

EXISTING SITE DATA

	SF	AC	%
SITE AREA	228,278 SF	5.24 AC	100%
AREA OF DEVELOPMENT	228,278 SF	5.24 AC	100.00%
IMPERVIOUS AREA	0 SF	0.00 AC	0.00%
PERVIOUS AREA	228,278 SF	5.24 AC	100.00%

PROPOSED SITE DATA

SITE AREA	228,278 SF	5.24 AC	100%
IMPERVIOUS AREA	168,960 SF	3.88 AC	74.02%
BUILDING	7,329 SF	0.17 AC	3.21%
CONCRETE	4,70 SF	0.01 AC	0.21%
ASPHALT	125,486 SF	2.88 AC	54.97%
WET POND (@ NWL)	35,675 SF	0.82 AC	15.63%
PERVIOUS AREA	59,318 SF	1.36 AC	25.98%
OPEN SPACE	59,318 SF	1.36 AC	25.98%
NET NEW IMPERVIOUS	168,960 SF	3.88 AC	74.02%

ZONING DATA

CRITERIA	CODE	EXISTING	PROPOSED
LOT SIZE	10,000 SF	228,278	228,278 SF
LOT WIDTH	70-FT	---	
BUILDING SETBACKS			
FRONT	25-FT	---	207.00-FT
SIDE (E R/W	15-FT	---	128.70-FT
SIDE	0-FT	---	188.67-FT
REAR	0 FT	---	266.79-FT
LOT COVERAGE	60%	0%	18.95%
OPEN SPACE	N/A	100%	21.98%
BUILDING HEIGHT	65-FT	-	24'-2"

PARKING DATA

OTHER COMMERCIAL WAREHOUSE

1 SPACE	600 SF	7,329 SF	=	13	SPACES REQUIRED
PROPOSED PARKING				13	SPACES PROVIDED
				1	ADA SPACES
				12	STANDARD SPACES

TRAFFIC STATEMENT

PER ITE, 10TH EDITION:
(943): (AUTOMOBILE PARTS & SERVICE CENTER) = 2.25 ADT PER 1,000 SF GFA
2.25 X 7.3 KSF = 16 ADDT (PROPOSED)

DRAINAGE STATEMENT

STORMWATER TO BE COLLECTED VIA CONVENTIONAL UNDERGROUND DRAINAGE SYSTEM AND CONVEYED VIA CONVENTIONAL DRAINAGE SYSTEM TO ON-SITE WET POND. OUTFALL SOUTHLAND DRIVE CONVEYANCE DITCH.

PERMITS REQUIRED

CoF P DEVELOPMENT REVIEW APPLICATION
CoF P DRIVEWAY, SIDEWALK & DRAINAGE PERMIT
CoF P RIGHT-OF-WAY
CoF P EROSION AND SEDIMENT CONTROL
CoF P DRIVEWAY, SIDEWALK & DRAINAGE PERMIT
SLC FIRE REVIEW
FORT PIERCE UTILITIES AUTHORITY (FPUA)
SLC STORMWATER
SFWMD PERMIT MODIFICATION
FDEP NPDES NOI PERMIT
FDOT DRAINAGE PERMIT
FDOT UTILITIES PERMIT

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X PER FLOOD INSURANCE RATE MAP #12111C0189 K, DATED FEB 19, 2020.

LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE S89°27'02"E ALONG THE NORTH LINE OF SAID SOUTHEAST 1/4 OF SECTION 27 A DISTANCE OF 49.21 FEET TO AN INTERSECTION WITH A NON-TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 11334.20 FEET, THE CHORD OF WHICH BEARS S01°41'15"E AT 242.70 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 01°13'37" FOR AN ARC DISTANCE OF 242.71 FEET; THENCE S02°18'03"E A DISTANCE OF 211.97 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE N87°41'43"E A DISTANCE OF 752.54 FEET; THENCE S02°06'02"E A DISTANCE OF 422.62 FEET TO THE NORTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT OF WAY); THENCE S89°33'01"W ALONG SAID NORTH RIGHT OF WAY LINE A DISTANCE OF 751.45 FEET; THENCE N02°18'03"W A DISTANCE OF 398.29 FEET TO THE POINT OF BEGINNING.
CONTAINS 7.08 ACRES MORE OR LESS.

WASTEWATER SOURCE
FPUA

POTABLE WATER SOURCE
FPUA

CONSTRUCTON SCHEDULE
START: JUNE 2022
FINISH: FEBRUARY 2023

DATE	REVISIONS
1	
2	
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7	
8	

JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GWR
DATE	APRIL 2022
CHECKED	AJB
DATE ISSUED	3/30/2022

MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1835 20TH STREET
VERO BEACH, FL 32960
PH: (772) 569-0035
PX: (772) 778-3417
MELBOURNE, FL - PH (321) 253-3100
FT PIERCE, FL - PH (772) 464-3400

SITE PLAN

BEV SMITH TOYOTA
NORTH PARCEL

CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C4

22-0066

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PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 30'

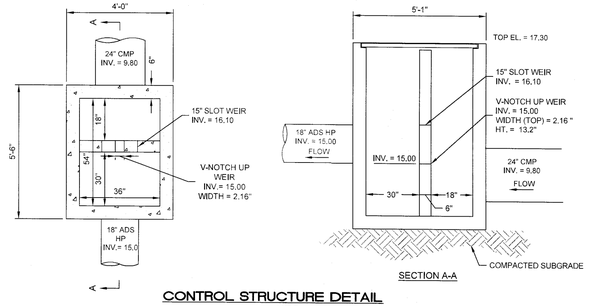
DRAINAGE STRUCTURE SCHEDULE		STRUCTURE NUMBER	DS-1	DS-2	DS-3	DS-4	DS-5	DS-6	CS-1	DS-7	DS-8	DS-9
		FDOT INDEX #	# 425-053	# 425-053	# 425-053	# 425-053	# 425-053	# 425-053	# 425-052	# 425-053	# 425-053	# 425-053
		DESCRIPTION	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	MODIFIED TYPE "E" CONTROL STRUCTURE	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET	TYPE "F" DITCH BOTTOM INLET
		RIM ELEV.	17.80	17.80	17.80	17.80	16.30	18.20	17.20	16.40	16.50	17.00
		PIPE DIA.	18.00	18.00	18.00	24.00	24.00	18.00	18.00	15.00	18.00	18.00
		COVER	2.50	3.50	3.30	3.00	2.60	2.00	0.70	1.35	1.90	0.50
	INVERT ELEVATION	N	13.00 N	-	13.00 N	-	-	14.70 N	9.80 N	-	-	15.00 N
		S		12.80 S	-	12.80 S	-	-	15.00 S	-	-	-
		E		12.00 E	-	11.80 E	-	-	-	13.80 E	13.00 E	15.00 E
		W	13.80 W	12.00 W	-	11.80 W	11.70 W	-	-	-	13.10 W	12.60 W
		BOTTOM ELEV.	13.30	11.50	12.50	11.30	11.20	14.20	9.30	13.30	12.50	12.10

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

NOTES:
1. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DETAILS.
2. BUILDING TO DISCHARGE TO STORM SYSTEM.
3. PRESENCE OF GROUNDWATER ANTICIPATED.



CONTROL STRUCTURE DETAIL
N.T.S.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

O:\DRAWING\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\22-0066 NORTH POD PLAN.dwg 3/30/2022 1:47 PM

REVISIONS	DATE
8 –	
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JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GWR
DATE	APRIL 2022
CHECKED	AJB
DATE ISSUED	3/30/2022

MBV ENGINEERING, INC.
MOJA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1800 54TH TERRACE
VERO BEACH, FL 32960
PH: (772) 794-3003
FX: (772) 794-3441
MELBOURNE, FL - PH (321) 253-1410
FT PIERCE, FL - PH (772) 626-0620

PAVING, GRADING AND DRAINAGE PLAN

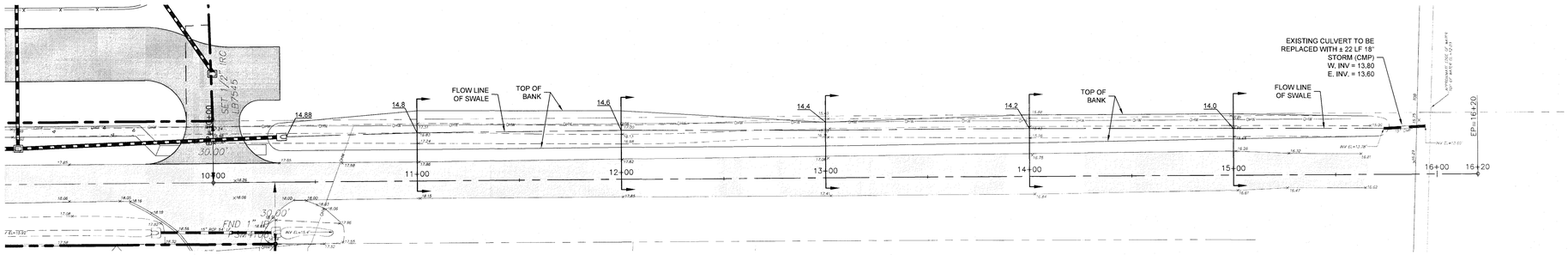
BEV SMITH TOYOTA
NORTH PARCEL

CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C5

22-0066



OFF-SITE DRAINAGE PLAN

SCALE: 1" = 30'

N

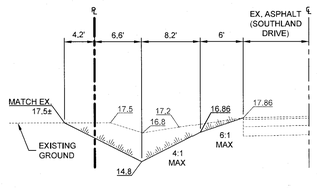
GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

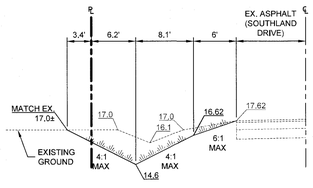
- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

NOTES:

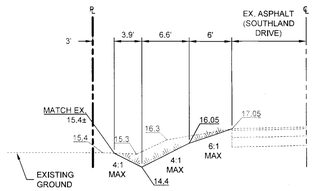
1. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DETAILS.
2. BUILDING TO DISCHARGE TO STORM SYSTEM.
3. PRESENCE OF GROUNDWATER ANTICIPATED.



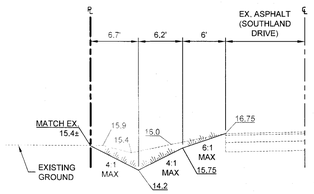
STA. 11+00
N.T.S.



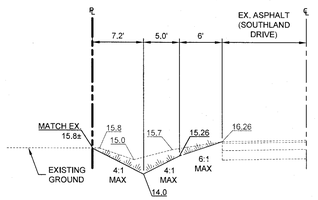
STA. 12+00
N.T.S.



STA. 13+00
N.T.S.



STA. 14+00
N.T.S.



STA. 15+00
N.T.S.

72 HOURS BEFORE DIGGING CALL TOLL FREE 811
Know what's below. Call before you dig.

O:\BMV\MOS\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\22-0066 NORTH FIGD PLAN.dwg 3/30/2022 1:47 PM

	DATE
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△	REVISIONS

JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GWR
DATE	APRIL 2022
CHECKED	AJB
DATE ISSUED	3/30/2022

MBV ENGINEERING, INC.
MOJA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1855 - 25TH STREET
VERO BEACH, FL 32960
PH. (772) 564-0033
FAX. (772) 770-1447
MELBOURNE, FL - PH: (321) 253-1510
FT. PIERCE, FL - PH: (772) 626-0033

OFF-SITE DRAINAGE PLAN

BEV SMITH TOYOTA
NORTH PARCEL

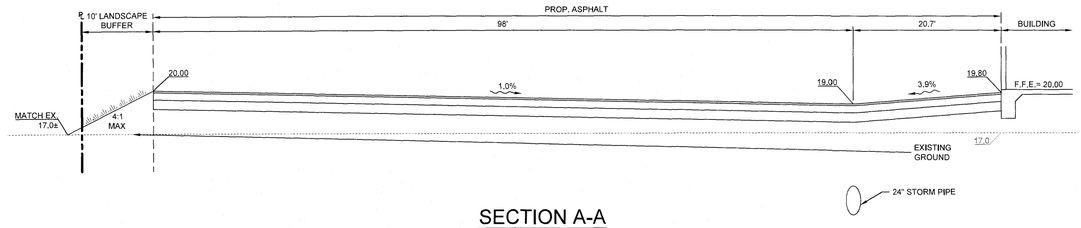
CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES LICENSE No. 55313 * STATE OF FLORIDA PROFESSIONAL ENGINEER

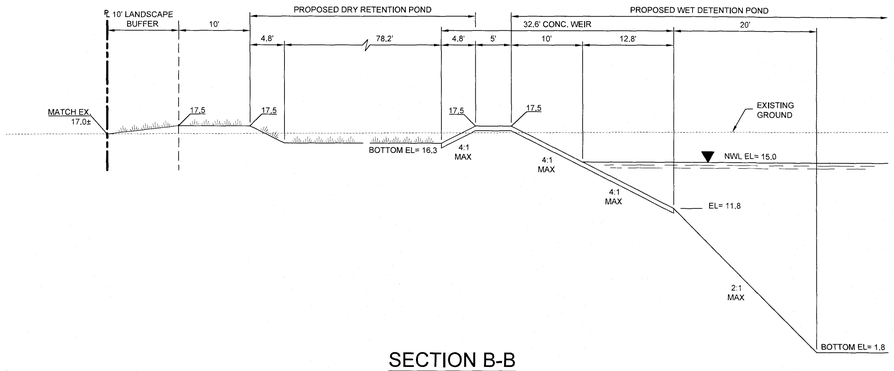
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C6

22-0066



SECTION A-A
N.T.S.



SECTION B-B
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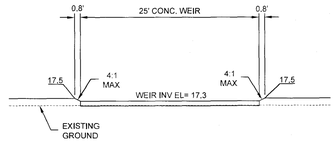

SECTION C-C
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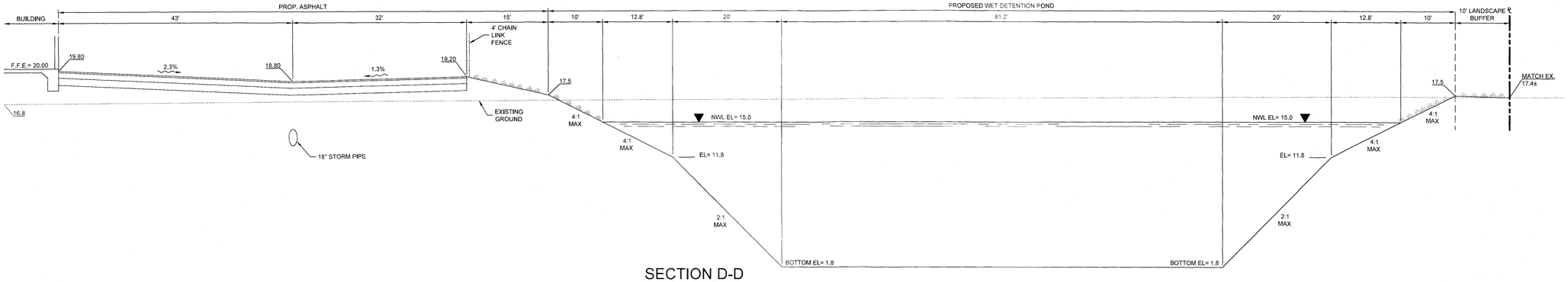

SECTION D-D
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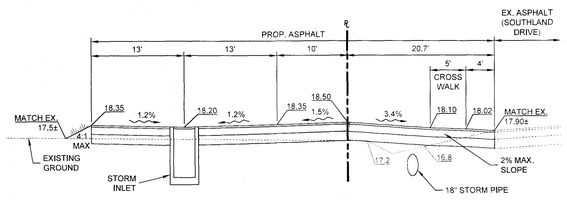

SECTION E-E
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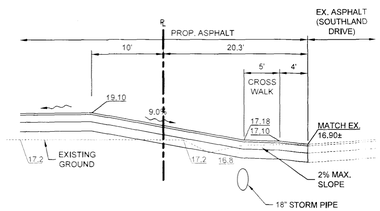

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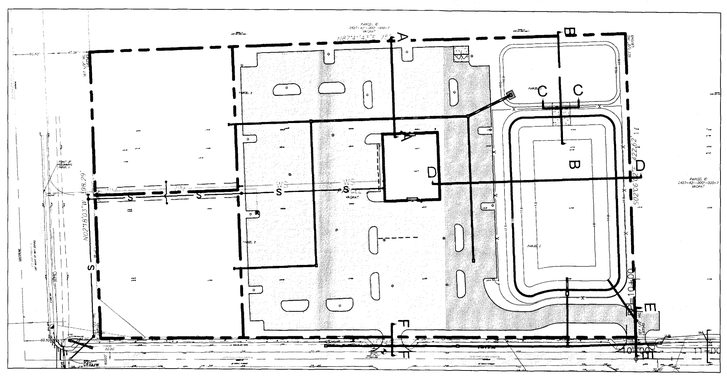

KEY MAP
N.T.S.

72 HOURS BEFORE DIGGING CALL TOLL FREE 811 Know what's below. Call before you dig.

REVISIONS	DATE
8 –	–
7 –	–
6 –	–
5 –	–
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JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GMR
DATE	APRIL 2022
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MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3726
HEADQUARTERS:
1035 FIRST AVE.
VERO BEACH, FL 32960
PH: (772) 778-7340
FAX: (772) 778-7341
PH: (561) 753-1100
FT. PIERCE FL., FAX (772) 468-9055

CROSS SECTIONS

BEV SMITH TOYOTA
NORTH PARCEL

CITY OF FORT PIERCE, FLORIDA

AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C7

22-0066

O:\ENGINEERING\2022\22-0066 Bev Smith Toyota - NORTH\44 - Drawings\22-0066 NORTH POD PLAN.dwg 3/30/2022 1:49 PM

PARCEL ID
2427-421-0001-000-7
VACANT

N87°41'43"E 752.54'

PROPOSED
OUTPARCEL #1
39,851 S.F.
0.91 AC.
(FUTURE DEVELOPMENT)

PROPOSED
OUTPARCEL #2
40,496 S.F.
0.93 AC.
(FUTURE DEVELOPMENT)

PROPOSED
DRY RETENTION POND
0.33 AC.

PROPOSED
WET DETENTION
POND
0.82 AC.
NWL= 15.0

PROPOSED
RECON CENTER BUILDING
7,329 S.F.
F.F.E.= 20.00

PARCEL 2

CONTRACTOR TO CONNECT TO EXISTING 12" WATER MAIN, 12"X6" TAPPING SLEEVE & VALVE

POINT OF BEGINNING PARCEL 2

INSTALL 2" DOUBLE WATER SERVICE (FOR FUTURE CONNECTIONS)

INSTALL 5 LF 8" PVC SAN @ 0.4% & 8" CAP FOR FUTURE EXTENSION

INSTALL 6" SAN SEWER SERVICE LATERAL & 6" CLEANOUT (FUTURE CONNECTION)

PROPOSED 20' WIDE UTILITY EASEMENT

PROPOSED 269 LF 6" PVC WATER MAIN

PROPOSED 6"X2" REDUCER

PROPOSED 1-1/2" WATER METER & RPZ

PROPOSED 211 LF 8" PVC SAN. @ 0.4% SLOPE

INSTALL FIRE HYDRANT ASSEMBLY

MH#4
INSTALL SAN. MH
RIM EL.= 19.50
E. INV.= 14.92
W. INV.= 13.84

MH#3
INSTALL SAN. MH
RIM EL.= 17.00
E. INV.= 14.07
N. INV.= 8.12
S. INV.= 8.02

PROPOSED 190 LF 8" PVC SAN. @ 0.4% SLOPE

MH#2
INSTALL SAN. MH
RIM EL.= 17.30
N. INV.= 7.26
S. INV.= 7.16

CONTRACTOR TO OPEN CUT ROAD, CORE EX. MANHOLE @ INV.= 7.00

PROPOSED 40 LF 8" PVC SAN. @ 0.4% SLOPE

C1
CONFLICT CROSSING
PAVEMENT EL.= 18.65
WTR (1.5" PE) INV.= 15.5
SEPARATION= 1.0'
TOP 18" STORM= 14.5

PROPOSED 205 LF 1-1/2" PE WATER SERVICE

PROPOSED CLEANOUT INV.= 17.00

PROPOSED 168 LF 6" PVC SEWER SERVICE @ 1.05% SLOPE

C2
CONFLICT CROSSING
PAVEMENT EL.= 18.65
SAN (6" PVC) INV.= 16.0
SEPARATION= 1.4'
TOP 18" STORM= 14.6

US HIGHWAY 1
(120' RIGHT OF WAY (OPEN))

SOUTHLAND DRIVE
(80' RIGHT OF WAY (OPEN))

N20°33'04"E 748.23'

S02°06'62"E 422.62'

N02°18'03"W 199.15'

200.00'

200.20'

200.10'

205.61'

60.50'

47.09'

30.00'

SET 1/2" IRC LB7545

UTILITY PLAN

SCALE: 1" = 30'

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE

NOTES:

1. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DETAILS.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

	DATE	REVISIONS
8	-	-
7	-	-
6	-	-
5	-	-
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1	-	-

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MBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CIVIL UTILITY ENGINEERING CA #5728
1815 - 20TH STREET
VERO BEACH, FL 32960
TX: (772) 778-3417
MBVENGINEERING.COM
765 BOURNE PL - PH (321) 333-5410
FT. PIERCE, FL - PH (772) 462-9505

UTILITY PLAN

BEV SMITH TOYOTA
NORTH PARCEL

CITY OF FORT PIERCE — FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C8

22-0066

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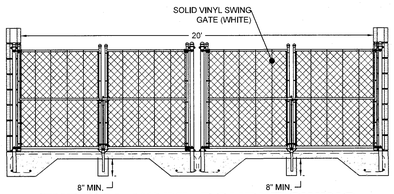
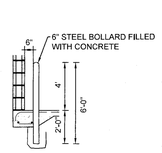
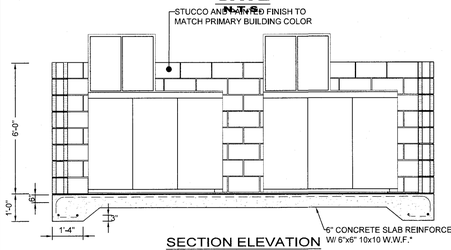


TYPICAL VINYL DOUBLE SWING GATE
N.T.S.

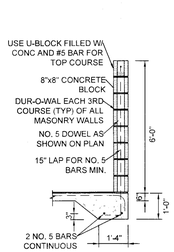


BOLLARD DETAIL
N.T.S.

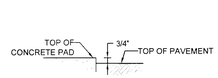


SECTION ELEVATION
N.T.S.

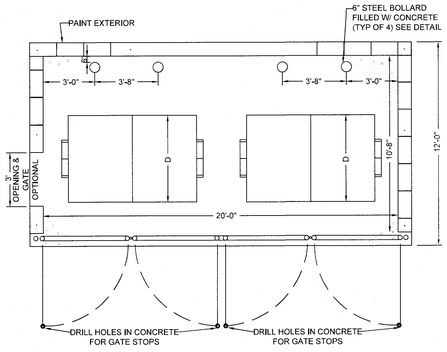
* OR FIBERMESH (FIBERGLASS REINFORCING) CONCRETE TO 2500 PSI @ 25 DAYS



TYPICAL WALL SECTION
N.T.S.

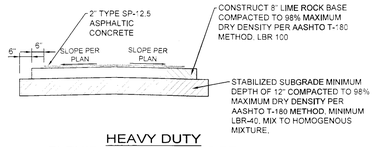


CONCRETE PAD DETAIL
N.T.S.

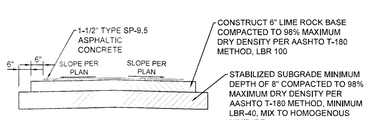


PLAN VIEW
N.T.S.

CONCRETE BLOCK DUMPSTER ENCLOSURE DETAIL
N.T.S.

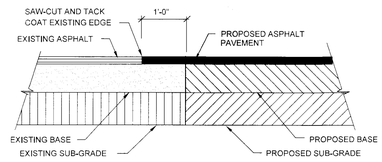


HEAVY DUTY
FLEXIBLE PAVEMENT DETAIL
N.T.S.

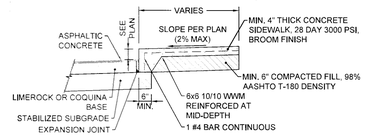


REGULAR DUTY
FLEXIBLE PAVEMENT DETAIL
N.T.S.

FDOT TYPE 'D' CURB DETAIL
N.T.S.

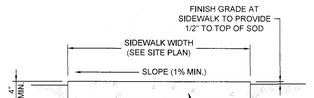


PAVEMENT SAW-CUT AND
BUTT JOINT DETAIL
N.T.S.

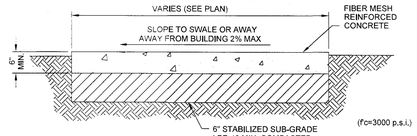


1. CONTRACTOR TO PROVIDE HAND TOOLED TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS @ 5'-0" O.C. MAX. 3/8" EXPANSION JOINTS @ 25'-0" O.C. MAX.
2. IN LIEU OF WELDED WIRE FABRIC, FIBER MESH CONCRETE MAY BE USED.
3. FINISH EDGE OF SIDEWALK WITH EDGING TOOL HAVING A RADIUS OF 1/2".

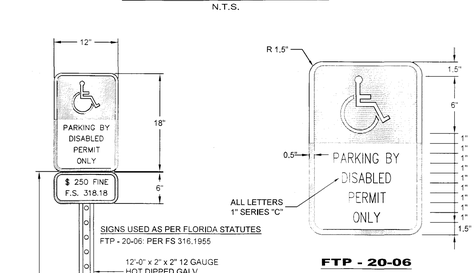
CONCRETE SIDEWALK ADJACENT TO
PAVEMENT DETAIL
N.T.S.



ON-SITE CONCRETE SIDEWALK
DETAIL
N.T.S.



OFF-SITE CONCRETE SIDEWALK
DETAIL
N.T.S.



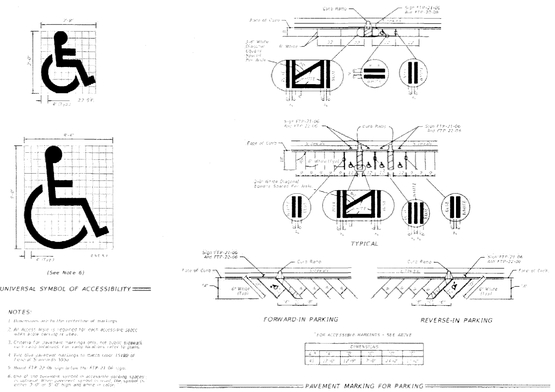
FTP - 20-06

FTP - 22-06

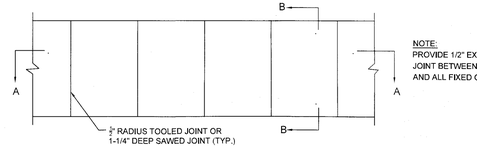
1' x 6"
1-1/2" RADII
3/4" BORDER
1" SERIES C LETTERS
WHITE BACKGROUND
BLACK LEGEND & BORDER

GENERAL NOTES
1. TOP PORTION OF FTP-20-06 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION OF FTP-20-06 SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. THE SIGN SHALL BE PLACED A MINIMUM OF 3' FROM THE WHEEL STOP OR THE BACK OF CURB (WHERE APPLICABLE).

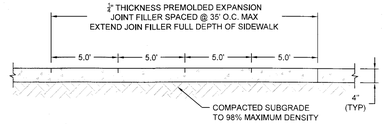
HANDICAPPED SIGN DETAIL
N.T.S.



HANDICAPPED PAVEMENT MARKING DETAIL
N.T.S.

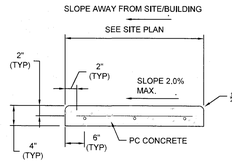


PLAN VIEW



SECTION A-A

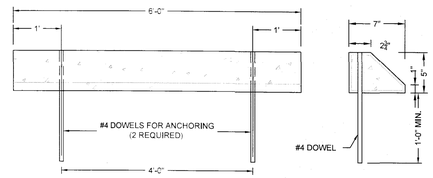
NOTE:
WHERE REQUIRED REINFORCEMENT WILL BE No. 3 BARS 24" O.C. EACH WAY MAX. SPACING. OR 6 x 6 - W1.4 X W1.4 WWF



SECTION B-B

NOTE:
SLOPE SIDEWALK AS INDICATED AWAY FROM SITE/BUILDING

CONCRETE SIDEWALK DETAIL
N.T.S.



FRONT ELEVATION
SECTION

PRE-CAST CONCRETE WHEEL STOP DETAIL
N.T.S.

DATE	REVISIONS
1	
2	
3	
4	
5	
6	
7	
8	

JOB NO.	22-0066
DESIGNED	WFP
DRAWN	GWR
DATE	APRIL 2022
CHECKED	AJB
DATE ISSUED	3/30/2022

MBV ENGINEERING, INC.
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GENERAL DETAILS

BEV SMITH TOYOTA
NORTH PARCEL

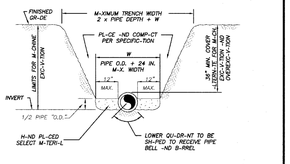
CITY OF FORT PIERCE — FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C9

22-0066

O:\DRAWINGS\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\22-0066 NORTH COVER - DETAILS.dwg 3/30/2022



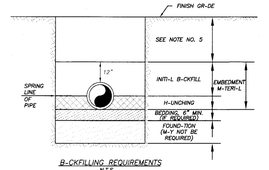
NOTES:

1) THE CONTR-CTOR SH-LL COMPLY WITH REQUIREMENTS OF THE FLORID- TRENCH SI-FETY -CT.

2) INITI-L B-CKFILL SH-LL BE H-ND PL-CED TO 12" -BOVE THE PIPE. B-CKFILL SH-LL BE MECH-NIC-LLY TAMPED TO - MINIMUM OF 100% OF M-X. DENSITY -S DETERMINED BY -SHTO METHOD T-99.

TYPIC-L TRENCH DET-IL
N.T.S.

TYPICAL TRENCH DETAILS	M-1
FT. PIERCE UTILITIES -UTHORITY	



B-CKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERT-IN SOIL CONDITIONS - FOUND-TION M-Y BE REQUIRED.

2) BEDDING IS REQUIRED PRIM-RILY TO BRING THE TRENCH BOTTOM UP TO GR-DE. BEDDING M-TERI-LS SH-LL PROVIDE - UNIFORM -ND -DEQU-TE LONGITUDIN-L SUPPORT UNDER THE PIPE.

3) H-UNCHING M-TERI-L SH-LL BE H-ND PL-CED TO THE SPRINGLINE OF THE PIPE. M-TERI-L SH-LL BE CONSOLI-TED UNDER THE PIPE -ND H-ND T-MPED TO PROVIDE -DEQU-TE SIDE SUPPORT.

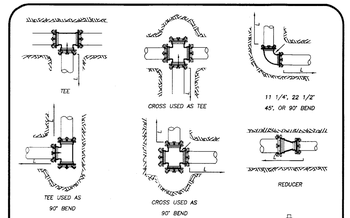
4) INITI-L B-CKFILL M-TERI-L SH-LL BE H-ND PL-CED TO 12" -BOVE THE TOP OF PIPE. THE SOIL SH-LL BE COMPI-CTED TO 100% M-X. DENSITY.(-SHTO T-99)

5) B-CKFILL SH-LL BE COMPI-CTED TO 100% OF M-X. DENSITY -S PER -SHTO T-99, TO - POINT 30" BELOW PROPOSED PROFILE GR-DE OR EXISTING GR-DE, THE FIN-L 30". OF B-CKFILL SH-LL BE COMPI-CTED TO 98% OF M-X. DENSITY -S PER -SHTO T-180.

6) DENSITY TEST SH-LL BE PERFORMED -T -RE-S DETERMINED BY THE UTILITIES ENGINEER OR PERMIT -GENCY H-VING JURISDICTION, -T THE CONTR-CTOR'S EXPENSE.

7) CONTR-CTOR TO COMPLY WITH -LL FEDER-L, ST-TE -ND LOC-L TRENCH S-FETY REGUL-TIONS.

BACKFILLING REQUIREMENTS	M-2
FT. PIERCE UTILITIES -UTHORITY	



MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

MECHANICAL JOINT ANCHORING REQUIREMENTS	M-3
FT. PIERCE UTILITIES AUTHORITY	

MECH-NIC-L JOINT RESTR-INT NOTES

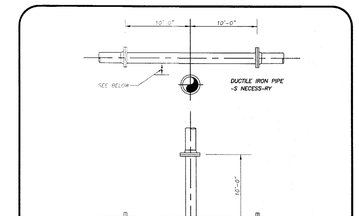
NOTES:

1) THE ENGINEER SH-LL BE RESPONSIBLE FOR DETERMINING THE REQUIRED LENGTH TO BE RESTR-INED B-SED UPON THE PROJECT -RE- SOIL TYPE, PROPOSED TRENCH CONDITIONS -ND DEPTH, PRESSURE OF 150 PSI, -ND - S-FETY F-CTOR OF TWO (2). - DR-WING OF EVERY TYPIC-L FITTING. -SSEMBLY WITHIN THE PROJECT SH-LL BE SUBMITTED WHICH REFLECTS THE LENGTH -ND DET-IL PROPOSED FOR USE, INCLUDING LENGTH OF PIPE RESTR-INED.

2) REQUIRED RESTR-INED LENGTH C-LCUL-TIONS SH-LL -LSO CONSIDER THE CONDITIONS OF OTHER BENDS OR FITTINGS TH-T WILL BE LOC-TED WITHIN THE C-LCUL-TED RESTR-INED LENGTH (L) OF THE BEND OR FITTING IN QUESTION.

3) EVERY JOINT OR FITTING MUST BE RESTR-INED ON BOTH SIDES OF THE BEND -ND FOR TEES -LONG THE BEND -LSO.

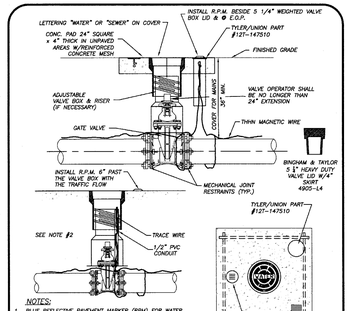
MECHANICAL JOINT RESTRAINT NOTES	M-4
FT. PIERCE UTILITIES -UTHORITY	



NOTE:
PLE-SE REFER TO FORT PIERCE UTILITIES ST-ND-RD SEP-R-TION ST-TEMENT FOR W-TER / SEWER CONFLICTS.

UTILITY CROSSING DET-IL
N.T.S.

UTILITY CROSSING DETAIL	M-5
FT. PIERCE UTILITIES -UTHORITY	

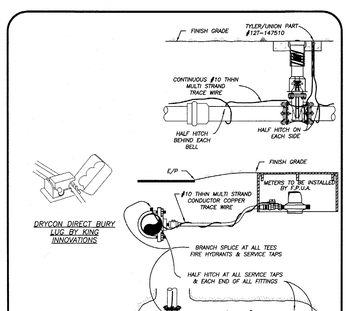


NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER (RPM) FOR WATER VALVES AND GREEN RPM FOR WASTEWATER VALVES PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, ELIMINATE CONCRETE PAD AND ENCASE THE MAGNETIC WIRE IN 1/2" PVC INSIDE THE VALVE BOX SEVEN INCHES BELOW GRADE.
3. DIP MAY BE USED AS RISERS ONLY IF A VALVE BOX IS NOT MANUFACTURED FOR THAT DEPTH. NO PVC RISERS SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL
N.T.S.

TYPICAL GATE VALVE & VALVE BOX DETAIL	M-6
FT. PIERCE UTILITIES AUTHORITY	

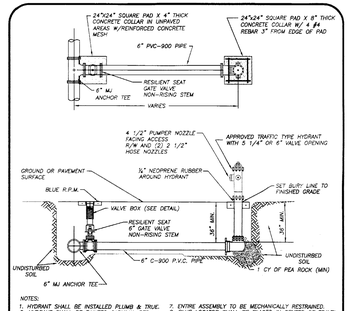


NOTES:

1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER AND SHOWN IN STANDARD DETAILS.
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

TRACE WIRE DETAIL	M-11
FT. PIERCE UTILITIES AUTHORITY	

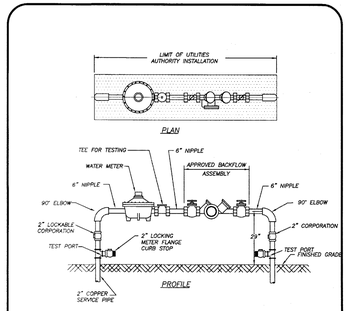


NOTES:

1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: KENNEDY GUARDIAN, MUELLER CENTURION, & AMERICAN AVK, CLOW OR APPROVED EQUAL.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE MECHANICAL JOINT.
7. ENTIRE ASSEMBLY TO BE MECHANICALLY RESTRAINED.
8. BLUE LOCATOR SHALL BE PLACED IN CENTER OF TRAVEL LANE CLOSEST TO HYDRANT.
9. ALL HYDRANT VALVE BOX COVERS SHALL BE PAINTED CARNIVAL RED.
10. LOCATE WIRE SHALL TERMINATE AT HYDRANT ISOLATION VALVE.
11. HYDRANTS SHALL BE NO MORE THAN FIFTEEN FEET (15.0') FROM THE CURB OF ROADWAYS OR FROM THE EDGE OF PAVEMENT OF ROADWAYS WITH NO CURB AND HALF FEET (19'-6IN.) IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANTS, WITH FOUR FOOT (4 FT.) CLEARANCE TO THE REAR OF HYDRANTS SHALL BE MAINTAINED.

TYPICAL FIRE HYDRANT ASSEMBLY
(N.T.S.)

TYPICAL FIRE HYDRANT ASSEMBLY	W-5
FT. PIERCE UTILITIES AUTHORITY	

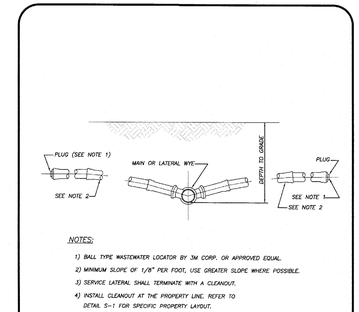


NOTES:

1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

WATER METER/BACKFLOW PREVENTER ASSEMBLY-DOMESTIC SERVICE (METER SIZE 1" OR LESS)	W-8
FT. PIERCE UTILITIES AUTHORITY	

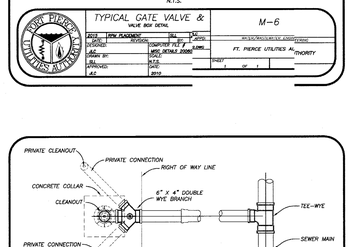


NOTES:

1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

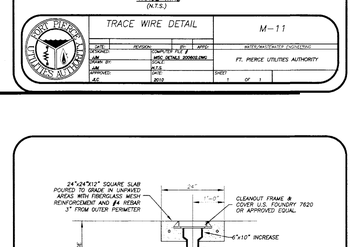
SERVICE CONNECTION WASTEWATER	S-2
FT. PIERCE UTILITIES AUTHORITY	



⊕ = BALL TYPE WASTEWATER LOCATOR INSTALLED ABOVE THIS POINT BALL BY 3M CORP. OR APPROVED EQUAL.
SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT

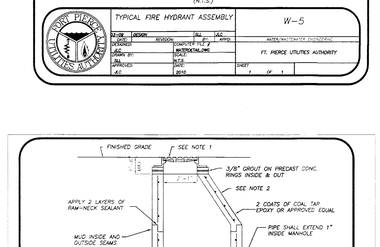
SERVICE CONNECTION
(N.T.S.)

SERVICE CONNECTION WASTEWATER	S-3
FT. PIERCE UTILITIES AUTHORITY	



TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

TERMINAL CLEANOUT DETAIL WASTEWATER	S-4B
FT. PIERCE UTILITIES AUTHORITY	



PIPE DIA	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	5''	76"	8"
30"-36"	5'-0"	5''	88"	10"
42"-48"	6'-0"	5''	100"	12"

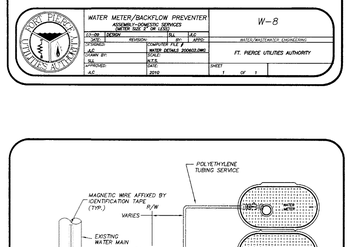
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

STANDARD MANHOLE
DEPTH 5'-0" AND GREATER
(N.T.S.)

PRECAST MANHOLE DEPTH 5'-0" & GREATER	S-7
FT. PIERCE UTILITIES AUTHORITY	



NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RAN TO OUTER METERS ONLY.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. ALL METER SIZES SHALL REQUIRE LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".
5. POLY SERVICE LINE SHALL VARY IN SIZE PER COMMERCIAL USE.
6. F.P.U.A. SHALL REMOVE METER BOXES AND INSTALL STAND PIPES AT THE TIME OF CONNECTION.

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)
(N.T.S.)

TYPICAL MULTIPLE WATER SERVICE CONNECTION (COMMERCIAL)	W-4A
FT. PIERCE UTILITIES AUTHORITY	

NO.	DATE	REVISIONS
8	-	-
7	-	-
6	-	-
5	-	-
4	-	-
3	-	-
2	-	-
1	-	-

JOB NO.	22-0066
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UTILITY DETAILS

BEV SMITH TOYOTA
NORTH PARCEL

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FLORIDA

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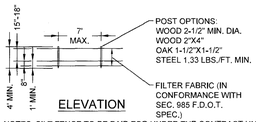
AARON J. BOWLES
FL. P.E. #55313 3/30/22

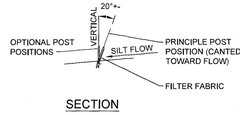
SHEET
C10

22-0066

G:\DRAWINGS\2022\22-0066 Bev Smith Toyota - NORTH\14 - Drawings\22-0066 NORTH COVER - DETAILS.dwg 3/30/2022



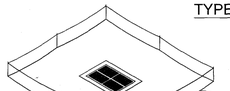
ELEVATION



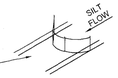
SECTION

NOTES: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (L.F.)

TYPE III SILT FENCE



NOTE: SPACING FOR TYPE III FENCE TO BE IN ACCORDANCE WITH CHART I, SHEET 1 OF 3 AND DITCH INSTALLATIONS AT DRAINAGE STRUCTURES SHEET 2 OF 3



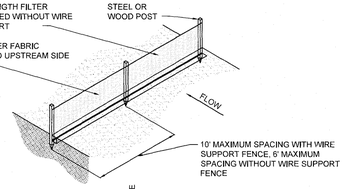
TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

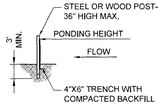
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

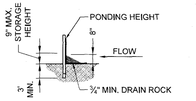
N.T.S.

NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.





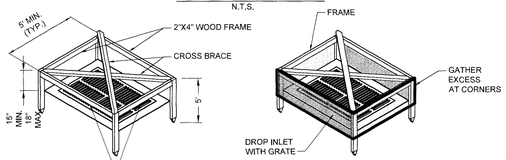
TRENCH DETAIL



INSTALLATION WITHOUT TRENCHING

TYPE IV SILT FENCE

N.T.S.

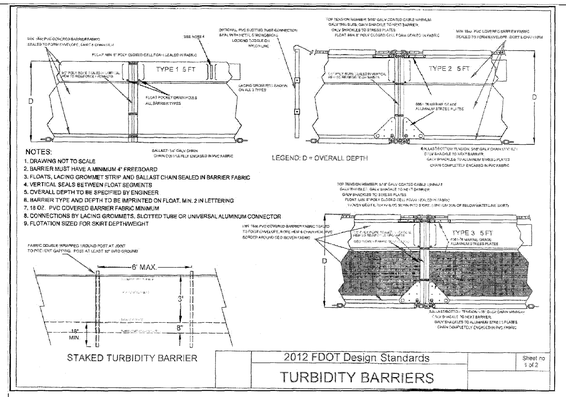


VIEW OF FRAME WITHOUT SILT FENCE

VIEW OF FRAME WITH SILT FENCE

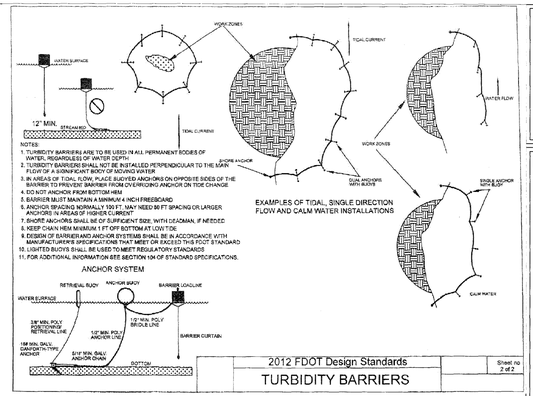
SILT FENCE INLET PROTECTION

N.T.S.



STAKED TURBIDITY BARRIER

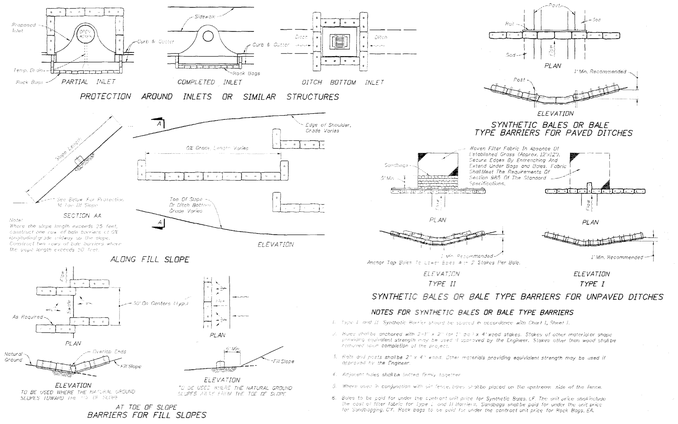
2012 FDOT Design Standards	Sheet no 1 of 2
TURBIDITY BARRIERS	



2012 FDOT Design Standards	Sheet no 2 of 2
TURBIDITY BARRIERS	

TURBIDITY BARRIER APPLICATIONS

N.T.S.

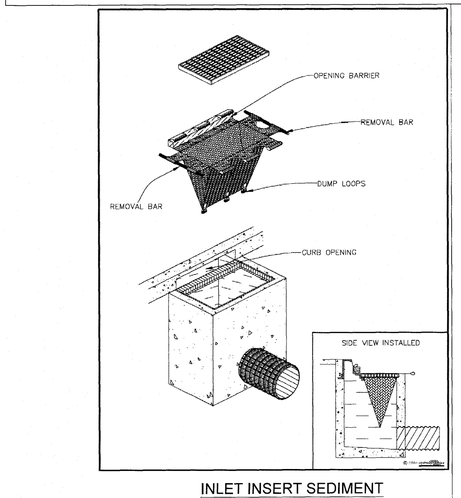


EROSION AND SEDIMENTATION CONTROL NOTES

CONSTRUCTION ACTIVITIES CAN RESULT IN THE GENERATION OF SIGNIFICANT AMOUNTS OF POLLUTANTS WHICH MAY REACH SURFACE OR GROUND WATERS. ONE OF THE PRIMARY POLLUTANTS OF SURFACE WATERS IS SEDIMENT DUE TO EROSION. EXCESSIVE QUANTITIES OF SEDIMENT WHICH REACH WATER BODIES OF FLOOD PLAINS HAVE BEEN SHOWN TO ADVERSELY AFFECT THEIR PHYSICAL, BIOLOGICAL AND CHEMICAL PROPERTIES. TRANSPORTED SEDIMENT CAN OBSTRUCT STREAM CHANNELS, REDUCE HYDRAULIC CAPACITY OF WATER BODIES OF FLOOD PLAINS, REDUCE THE DESIGN CAPACITY OF CULVERTS AND OTHER WORKS, AND ELIMINATE BENTHIC INVERTEBRATES AND FISH SPAWNING SUBSTRATES BY SILTATION. EXCESSIVE SUSPENDED SEDIMENTS REDUCE LIGHT PENETRATION AND THEREFORE, REDUCE PRIMARY PRODUCTIVITY.

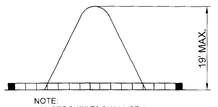
MINIMUM STANDARDS

1. SEDIMENT BASIN AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UNSLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE REVIEWER, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
6. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
7. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
8. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY, ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
9. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
10. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
11. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
12. BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
13. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT. CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS, EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
14. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
16. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
17. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
    A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
    B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
    C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
    D. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
18. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE, WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, IN THE OPINION OF THE REVIEWER, DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
20. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITE SHALL BE PROTECTED FROM SEDIMENT DISPOSITION AND EROSION.
21. PHASED PROJECTS SHOULD BE CLEARED IN CONJUNCTION WITH CONSTRUCTION OF EACH PHASE.
22. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NOS. 104 AND 105 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
23. THE REVIEWER MAY APPROVE MODIFICATIONS OR ALTER PLANS TO THESE EROSION CONTROL CRITERIA DUE TO SITE SPECIFIC CONDITIONS.



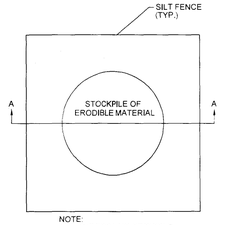
INLET INSERT SEDIMENT CONTAINMENT SYSTEM

N.T.S.



NOTE:
ALL STOCKPILES SHALL BE A MAXIMUM OF 25' HIGH.

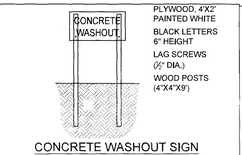
SECTION A-A



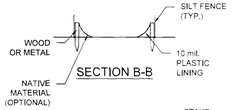
NOTE:
FOR STOCKPILING ERODIBLE MATERIAL FOR EXTENDED PERIODS, THE AREA SHALL BE SEEDED AND MULCHED.

SEDIMENT CONTROL DETAIL FOR STOCKPILING OF ERODIBLE MATERIAL

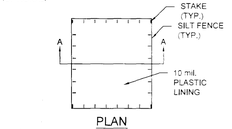
N.T.S.



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)



SECTION B-B



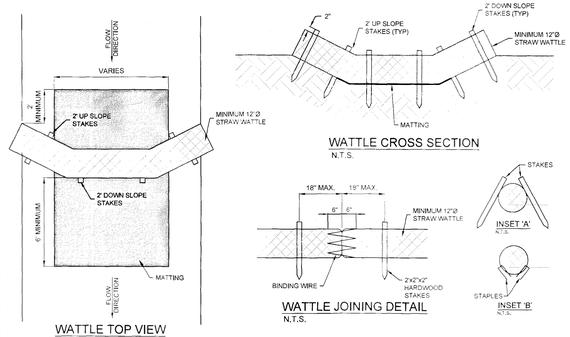
PLAN

NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

TYPE "ABOVE GRADE" WITH SILT FENCE

CONCRETE & STUCCO WASTE MANAGEMENT

N.T.S.

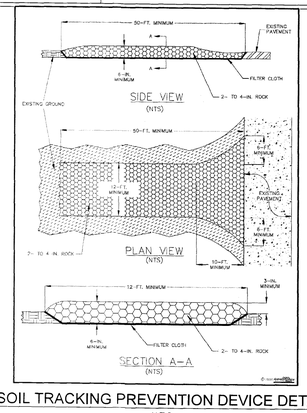


N.T.S.

NOTES:
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD OVERLAP 24" - SHINGLE IN DIRECTION OF FLOW.
3. SECURE THE WATTLE WITH 18"-24" STAKES EVERY 3'-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2"-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKE SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
4. USE MINIMUM 12"Ø COIR (COCONUT FIBER)/STRAW WATTLE.
5. USE 2' WOODEN STAKES WITH A 2"X2" NOMINAL CROSS SECTION.
6. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AS DIRECTED.
7. INSTALL A MINIMUM OF 2 UP SLOPE STAKES AND 4 DOWN SLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
8. PROVIDE STAPLES MADE OF 0.125"Ø STEEL WIRE FORMED INTO A 'U' SHAPE NOT LESS THAN 12" IN LENGTH.
9. INSTALL STAPLES APPROX. EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE DETAILS

N.T.S.



SOIL TRACKING PREVENTION DEVICE DETAIL

N.T.S.

	DATE	REVISIONS
8		
7		
6		
5		
4		
3		
2		
1		
△	3/30/2022	DATE ISSUED
	AJB	CHECKED
	APRIL 2022	DATE
	GMR	DRAWN
	WFP	DESIGNED
	22-0066	JOB NO.

HMBV ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728
1800 SE 10TH AVE
SUITE 205
VERO BEACH, FL 32960
PH: (772) 778-5100
FX: (772) 778-5477
PREPARED BY, ELECTRONICALLY SIGNED AND SEALED

EROSION CONTROL DETAILS

BEV SMITH TOYOTA
NORTH PARCEL

CITY OF FORT PIERCE — FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 3/30/22

SHEET
C11

22-0066

O:\DRAWINGS\2022\22-0066 Bev Smith Toyota - NORTH\4 - Drawings\22-0066 NORTH COVER - DETAILS.dwg 3/30/2022

Michelle Franklin

Certified Florida Appraiser

✖ Close Property Card

Basic Info | Buildings | Features/Yard Items | Values | Sales | Permits | Tax Estimate/Tools | Property Card

Property Identification

Site Address: 3300 S US HIGHWAY 1
Sec/Town/Range: 27/35S/40E
Parcel ID: 2427-421-0001-000-7
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 31555
Map ID: 24/27S
Zoning: General Co

Ownership

Nicholas S Smith
Frank X Gonzalez

7845 SW Ellipse WAY
Stuart, FL 34997

Legal Description

27 35 40 BEG AT PT 125 FT ELY OF C/L US 1 AND N LI OF NW 1/4 OF SE 1/4, TH RUN SLY ALG ELY R/W US 1 851.23 FT, TH ELY TO A PT 1349.5 FT W OF E SEC LI, SD PT BEING ON W LI OF 30 FT ESMT TO ST LUCIE CO, TH NLY ALG W LI 845 FT M/L TO N LI OF SE 1/4, TH WLY 1407.14 FT M/L ALG SD N LI TO POB- LESS THAT PART MPDAF: FROM NW COR OF SE 1/4, TH N 89 30 01 W 49.19 FT TO CURVE CONC E, R OF 11,334.20 FT, TH SLY ALG ARC 242.66 FT, TH S 02 17 45 E 211.97 FT TO POB; TH N 87 42 01 E 752.53 FT, TH S 02 05 44 E 422.62 FT TO N RD R/W LI OF SOUTHLAND DR, TH S 89 33 19 W ALG R/W LI 751.45 FT TO E RD R/W LI OF US HWY 1, TH N 02 17 45 W ALG E R/W LI 398.29 FT TO POB- (19.566 AC - 852,295 SF)

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	19.57
Land Size (SF):	852,295

Current Values

Just/Market Value:	$605,600
Assessed Value:	$605,600
Exemptions:	$0
Taxable Value:	$605,600

Building Design Wind Speed

Occupancy Category	I	II	III & IV
Speed	140	160	170

Sources/links:

Property taxes are subject to change upon change of ownership.

- **Past taxes are not a reliable projection of future taxes.**
- **The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.**

Taxes for this parcel: SLC Tax Collector's Office

MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
www.mbveng.com CA #3728

March 30, 2022

Ms. Alicia Rosenthal
City of Fort Pierce Planning
100 North U.S. HWY 1
Fort Pierce, FL 34950

Subject: Bev Smith Toyota - North
Saint Lucie County, Florida
Engineer's Project Number: 22-0066

Dear Ms. Rosenthal:

Enclosed you will find the conditional use, development and design review submittals for the subject project. This information has been provided in accordance to your pre-application comment letter dated February 25, 2022. The following are our responses:

Fort Pierce Planning Department

1. The proposed development appears to fit vehicle repair and vehicle storage, please clarify the business. **The proposed development is an accessory to the Existing Toyota Automotive Dealership directly south of Southland Drive. It will provide vehicle restoration services, as well as vehicle storage. A small portion of the site will also be utilized for employee parking for the main dealership facility.**

2. Please note, per Sec. 125-187, warehouses are considered a conditional use in the C-3 Zoning District and will require a conditional use application. **Form enclosed.**

3. Please note, per Sec. 125-187, vehicle storage is considered a conditional use in the C-3 Zoning District and will require a conditional use application. **Form enclosed.**

4. Revise project narrative to include more details such as but not limited to: the existing/proposed land use and zoning, hours of operations. **Project Narrative is provided accordingly.**

5. Please note, the application will require a unity of title and/or replat. **Acknowledged. This shall be coordinated with owner and addressed prior to C.O.**

6. Provide screening detail of the proposed dumpsters. **Refer to sheet C9 for details.**

7. Provide the proposed setbacks from building to the property line, and setbacks from any accessory structures to the property line(s) on the site plan drawing. **See sheet C4.**

8. Provide location of proposed mechanical equipment and pads. If the mechanical equipment is on the roof, provide roof detail. **Rooftop units are proposed. See enclosure for information.**

9. Provide screening material/method of the proposed mechanical equipment. **Refer to Architectural building sections enclosed.**

10. Clarify the various storage areas indicated on the site plan**. See sheet C4.**

11. Provide sidewalks, include labels and the sidewalk width. **See sheet C4 for sidewalk.**

12. Confirm the proposed development will provide the necessary shrub and tree requirements. **Refer to Landscape Plans.**

13. Provide width of drive isle between storage and terminating island. **See sheet C4.**

14. Provide photometric/lighting plan. **Enclosed.**

15. Provide color/material board. **Refer to Architectural elevation plans.**

16. Revise "building coverage" wording to lot coverage. **Refer to updated site data.**

17. Revise lot coverage calculation. Currently, the calculation indicates 18.95%. **Revised accordingly.**

18. Remove or revise F.A.R calculation from site data. Currently, the table indicates an FAR of 0.19, clarify this calculation. **Removed.**

19. Please note, the owner must comply with Sec. 123-6, and provide a certified letter from a landscape architect, a landscape bond and cost estimate of landscaping. **Acknowledged. This information shall be provided upon approval of Landscape Plan at completion of project.**

20. Please complete an Address Request Form at the time of formal submittal. **Enclosed.**

21. A landscape plan will be required at the time of formal submittal that includes a Tree Survey, Tree Disposition Plan, and Tree Mitigation. **Refer to enclosed landscape plans.**

22. Further comments may be provided at the Pre-application meeting. **Assume this is an old comment to be removed/ disregarded.**

23. Note that all fees for advertising, mailing, and signs shall be paid upfront with the application fees. These fees can be found on the City website under the Planning Departments page under "*Public Notice Fee*". **Acknowledged.**

24. Contact Mr. Larry Hymowitz, FDOT Planning Specialist, pertaining to a separate pre-application meeting with FDOT. **Acknowledged.**

Fort Pierce Engineering Department

The following preliminary comments are provided based on the review of the stormwater management facilities along with any applicable City of Fort Pierce right-of-way improvements:

- Stormwater water quality/quantity shall meet the minimum requirements as specified in the City of Fort Pierce Code of Ordinances Section 119. **See enclosed calculations.**
- SFWMD permit and SLC Drainage Connection permit will be required at time of DPCR submittal. **Acknowledged.**

Fort Pierce Code Enforcement Division

Maybe forthcoming.

Fort Pierce Building Department

Maybe forthcoming

Fort Pierce Utility Authority

W/WW Eng: Concept approved

Water and wastewater services are available to serve the subject properties. To connect to these services please submit Utility Plan (2 complete sets) along with a completed plan review and commercial service application to FPUA's Water and Wastewater Engineering department, at 1701 S 37th Street Fort Pierce Florida 34947. Please see the Developer's Responsibilities page on the FPUA website for important steps to guide through the entire process including utility details and permit applications (see link). Details and Specifications can be found at W/WW Engineering Page. For any additional questions please contact Shane Ostrander sostrander@fpua.com. **Acknowledged. Applications to be made with FPUA for utilities review.**

Electric & Gas Eng: Approved
Electric service is available to the site (from Southland Drive). Please provide electric load information and AutoCAD drawing. Customer will be responsible for all transformer pads, conduits and secondary conductors. For more information and project coordination, please contact Sal Scimeca. **Acknowledged. Information to be provided with response to comments when all major concerns are addressed.**

St. Lucie County Public Works
The following comments are offered by SLC PW – Engineering:

1. The applicant should provide for interconnectivity between the site and outparcels, as well as planning for future access locations. The proposed outparcels do not appear to account for FDOT spacing requirements on US Highway 1 or setback standards from the intersection of US Highway 1 and Southland Drive. **The site needs to remain secure for the proposed operations and use. This is not a commercial property open to public. The proposed outparcels are anticipated to provide cross-access between them along US-1 corridor.**

2. The applicant should schedule a Preapplication meeting with FDOT to discuss future access to US Highway 1. **Acknowledged. Will schedule.**

3. A 5-foot sidewalk along Southland Drive is required. **Refer to plans for proposed sidewalk.**

4. Are the proposed driveway entrances on Southland Drive going to be gated? **No gates proposed.**

5. The plan shows a proposed shared driveway on the eastern property line. An easement will be required over the driveway**. Refer to proposed easement.**

6. The driveway connections to Southland Drive will require a Site Development Permit from St. Lucie County. **Acknowledged.**

7. Provide written response directly to the County for review. The city does not provide. **Acknowledged.**

8. For discussion regarding these comments and response, please contact me at 772-462-2741, chambersg@stlucieco.org or David Hays at 772-462-1491, haysd@stlucieco.org

FPUA

W/WW Eng: Concept approved.

Water and wastewater services are available to serve the subject properties. To connect to these services please submit Utility Plan (2 complete sets) along with a completed plan review and commercial service application to FPUA's Water and Wastewater Engineering department, at 1701 S 37th Street Fort Pierce Florida 34947. Please see the Developer's Responsibilities page on the FPUA website for important steps to guide through the entire process including utility details and permit applications (see link). Details and Specifications can be found at W/WW Engineering Page. For any additional questions please contact Shane Ostrander sostrander@fpua.com. **Acknowledged. Applications to be made with FPUA for utilities review.**

Electric & Gas Eng: Approved

Should you have any questions regarding the above subject, please do not hesitate to reach out to our office at any time.

Sincerely,

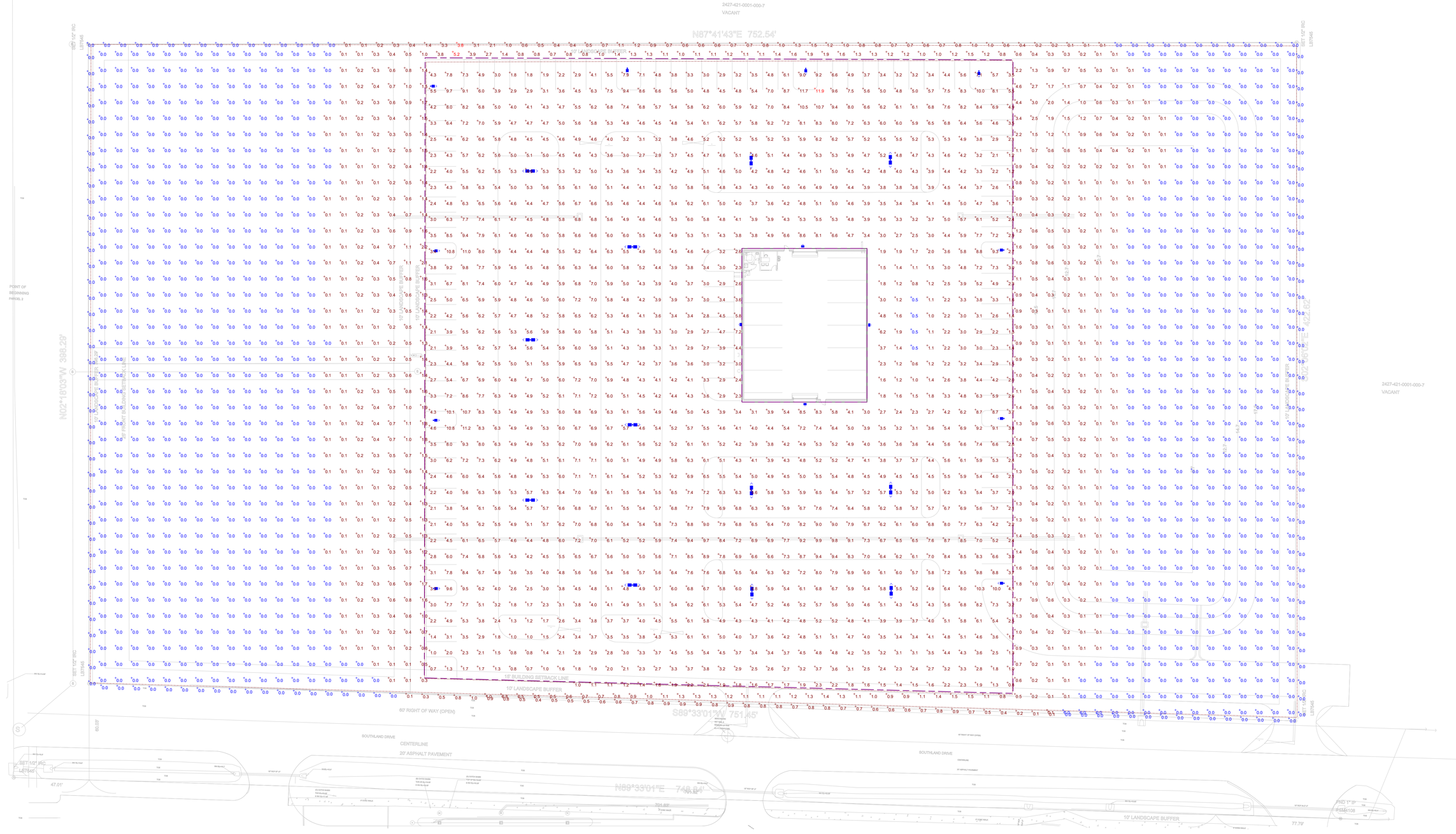
William Pittsley
Project Manager

WP/ag

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking area	+	4.9 fc	11.9 fc	0.5 fc	23.8:1	9.8:1
Property Line	+	0.3 fc	3.8 fc	0.0 fc	N/A	N/A
Remaining Site Area	+	0.2 fc	5.2 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	A		12	POWERSECURE dba PENTAIR LTG	GLA-ID-3G-700-STD-D-UV-R-IC-WA-XA	3602-4	1	35821	1	332.44
	B		10	POWERSECURE dba PENTAIR LTG	GLA-ID-3M-730-STD-D-UV-R-IC-WA-XA	3602-2	1	20688	1	166.01
	C		4	Solais Lighting Inc dba Energy2Go	GLA-4-2M-730-STD	GLA-4-2M-730-STD	1	4450	1	35.48

STATE OF FLORIDA
ANTHONY L. PENNA
REGISTERED ARCHITECT
37071
MAR 25 2022



Plan View
Scale - 1" = 30ft

Bev Smith Toyota Recon Building
3350 South US Hwy 1
Fort Pierce, FL 34982
Site Photometric Plan

Designer
Eric Levison
Date
03/11/2022
Scale
Not to Scale
Drawing No.

Summary

MBV
ENGINEERING, INC.
MOIA BOWLES VILLAMIZAR & ASSOCIATES
www.mbveng.com CA #3728

STORMWATER MANAGEMENT CALCULATIONS

for

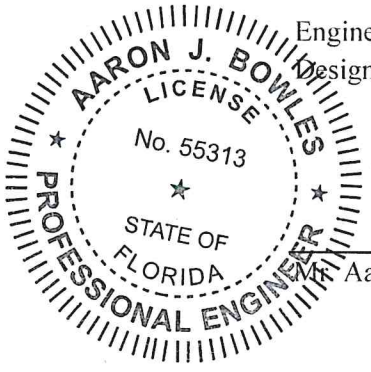
BEV SMITH TOYOTA- NORTH

FORT PIERCE, FLORIDA

MARCH 2022

Prepared by: MBV Engineering, Inc.
1835 20th Street
Vero Beach, Florida 32960
772-569-0035
Certificate of Authorization #: 3728

Engineers Project #: 22-0066
Designed By: RTM



Aaron J. Bowles, P.E. #55313 3/30/22

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Appendix B	Geotechnical Investigation by KSM Engineering (KSM Internation, Dated 9/8/2021)
Appendix C	Dry Retention Recovery Analysis
Appendix D	Nutirent Reduction Analysis (BMP Trains 2020)
Appendix E	Other Miscellaneous Backup (Mannings Table, Curve Number Sheet, Pre-Tc / Basin Exhibit)

Prepared by: MBV Engineering, Inc.
1835 20th Street
Vero Beach, Florida 32960
772-569-0035
Certificate of Authorization #: 3728

AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER

Engineers Project #: 22-0066
Designed By: RTM

Aaron J. Bowles, P.E. #55313 3/30/22

I. PURPOSE

The purpose of this report is to provide City of Ft. Pierce (CoFP), St. Lucie County (SLC), South Florida Water Management District (SFWMD), North St. Lucie River Water Control District (NSLRWCD), and Florida Department of Transportation (FDOT) with calculations and documentation which demonstrates the proposed surface water management system complies with state and local criteria.

II. PROPOSED SYSTEM

The proposed stormwater management system is comprised of a dry retention and wet detention mixed use stormwater treatment system to support the proposed site improvements. The mixed-use system will serve as a master stormwater system for the current proposed development and provide for an allowance of impervious coverage for the defined outparcels. Upon meeting system requirements, the system shall outfall to the Southland Dr. northern r/w conveyance ditch, draining east, and ultimately terminate in the St. Lucie County canal located at the eastern termination of Southland Dr.

The retention basin is designed to retain the required treatment volume and attenuation per the following SFWMD Water Quality / Quantity Criteria:

1. Minimum pavement elevations shall exceed the 10yr- 24hr storm event. (6.0" Rainfall)
2. The site shall provide storage to sustain the 25yr-72hr storm event. (9.5" Rainfall)
3. Finished Floor Elevations shall exceed the 100yr-72hr storm event (12.23" Rainfall)

LAND USE BREAKDOWN (POST-DEVELOPMENT)			
	AREA (AC)	**IMPERVIOUS (AC)**	**PERVIOUS (AC)**
PAVEMENT AREA	3.94	3.94	
BUILDINGS	0.72	0.72	
DRY RETENTION	0.35		0.35
DRY RETENTION SLOPES	0.05		0.05
WET DETENTION	0.82	0.82	
WET DETENTION SLOPES	0.18		0.18
OPEN / GRASSED AREAS	1.02		1.02
Total	7.09	5.48	1.60

III. SITE DATA

Contiguous Parcel Area	308,625 s.f.	7.09 ac
Proposed Development Parcel Area	228,278 s.f.	5.24 ac
Proposed Outparcel Area	80,347 s.f.	1.84 ac

Site Location (West): NE Corner of Southland Dr. & US Highway 1
Fort Pierce, FL 34982

Flood Zone: THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE AE (EL 6 FEET) PER FLOOD INSURANCE RATE MAP #12111C0189, DATED FEB 19, 2020.

Site Soils:

The soil survey mapped the area as (50),Waveland and Immokalee Fine Sands, (21) Lawnwood and Myakka Sands, and (47) Urban Land (0 to 2 % Slopes), HSG B/D & B/D & C, respectively
Pre-Development: HSG C, See Appendix D

Post-Development: HSG C, See Appendix D

Soil Boring #

Soil Boring P-1:				
Existing Grade at Soil Boring	16.5 ft. (NAVD)		17.5	8.90
Measured Water Table Elev.	13.4 ft. (NAVD)	37		
Seasonal High Water Elev.	15.3 ft. (NAVD)	14		
Normal Water Elev.	13.8 ft. (NAVD)	32		
Soil Boring P-2:				
Existing Grade at Soil Boring	16.0 ft. (NAVD)		17.4	8.1
Measured Water Table Elev.	12.8 ft. (NAVD)	38		
Seasonal High Water Elev.	15.2 ft. (NAVD)	10		
Normal Water Elev.	13.7 ft. (NAVD)	28		
Average SHWT Elev. =	15.3 ft. (NAVD)		**k_h = 17.45***	**k_v =8.5***
Average Normal Elev. =	13.8 ft. (NAVD)			

* Flow rates shown are the averages of the flows at differing strata.

IV. PRE-DEVELOPMENT CONDITIONS

Per previous SFMWD review, the existing un-developed parcel can be characterized as fairly flat with sandy soils and moderately vegetated with pine flatwoods. The existing site drains generally to the north with a historic flow across the adjacent property and discharging into the Highpoint Blvd conveyance ditch. This ditch flow west to east and subsequently discharges into the St. Lucie County canal located at the eastern termination of Southland drive.

Basin Area	308,625 s.f.	7.09	100.0%
Exist. Building Area	s.f.	0.00	0.0%
Exist. Asphalt Pavement Area	s.f.	0.00	0.0%
Exist. Conc. Pavement Area	s.f.	0.00	0.0%
Total Impervious	0 s.f.	0.00	0.0%
Total Pervious	308,625 s.f.	7.09	100.0%

Weighted Curve Number for Drainage Basin

% Impervious	0.0%	Soil Group D	CN1 = 98
% Semi-Impervious	0.0%	Soil Group D	CN2 = 98
% Pervious	100.0%	Soil Group D	CN3 = 74 *

*Non DCIA CN Value Based on Woodmings Table, Curve Number Sheet)

CN = [(% Impervious)(CN1) + (% Semi-Impervious)(CN2) + (% Pervious)(CN3)]
CN = 74.0

Time of Concentration

T_1: Over wooded area

Tc = [0.007 (N x L)^0.8] / [P^0.5 x S^0.4] Kinematic Wave Eq.

Where :

N = Mannings Roughness Coeff. =	0.250
L = Length of Flow (ft) =	300
Change in elevation (ft)=	1.4
P = Rainfall Intensity (in/hr)=	5.5
S = slope (ft/ft) =	0.0047
T_1=	48.5 min.

Total Time of Concentration (Tc) 48.5 min.

T2: Thru Pine Flatwoods

Tc = L / (60 x V) Kinematic Wave Eq.

Where :

L = Length of Flow (ft) =	91
Change in elevation (ft)=	1
V = Average Velocity (ft/s)	1
S = slope (ft/ft) =	0.0110
T_2=	1.5 min.

Time of Concentration (Tc) T_{total}= 50.0 min.

V. POST-DEVELOPMENT CONDITIONS

Contiguous Parcel Area	308,625 s.f.	7.09	100.0%
Proposed Development Parcel	228,278 s.f.	5.24	74.0%
Total Building Area	7,329 s.f.	0.17	2.4%
Total Concrete Area	470 s.f.	0.01	0.2%
Total Asphalt Area	131,037 s.f.	3.01	42.5%
Outparcel Development Area	80,347 s.f.	1.84	26.0%
Building Allowance (30%)	24,104 s.f.	0.55	7.8%
Pavement Allowance (50%)	40,174 s.f.	0.92	13.0%
Wet Pond @ Control Elev.	35,708 s.f.	0.82	11.6%
Total Impervious Area	238,822 s.f.	5.48	77.4%
Total Pervious Area	69,803 s.f.	1.60	22.6%
Net Impervious Area	238,822 s.f.	5.48	100.0%

Weighted Curve Number for Drainage Basin

% Impervious	77.4%	Soil Group C	CN1 = 98
% Semi-Impervious	0.0%	Soil Group C	CN2 = 98
% Pervious	22.6%	Soil Group C	CN3 = 74

*Non DCIA CN Value Based on Open Space (Good Condition) - HSG C

CN = [(% Impervious)(CN1) + (% Semi-Impervious)(CN2) + (% Pervious)(CN3)]
CN = 92.6

Time of Concentration

T_1: Roof to Ground (Building Discharge) T_1= 2.0 min.

T_2: Over Asphalt Drive
Tc = [0.007 (N x L)^0.8] / [P^0.5 x S^0.4] Kinematic Wave Eq.
Where :

N = Mannings Roughness Coeff. =	0.011
L = Length of Flow (ft) =	131
Change in elevation (ft)=	1.7
P = Rainfall Intensity (in/hr)=	5.5
S = slope (ft/ft) =	0.0130

T_2= 1.4 min.

T_3 = time in pipe = L/ Vel =500' / 1 fps = T_3= 8.3 min.

Time of Concentration (Tc)	Calculated Tc =	9.7 min.
	Min. Tc =	10.0 min.

VI. REQUIRED TREATMENT VOLUME

A. Treatment Volume Tabulations Based on Contributing Area

Total Contributing Area (ac) =		7.085	100.0%
Total Impervious Area (ac) =		3.941	55.6%
*Excluding Building / Lake Area			
Required Treatment over site (in) =	1.0	0.590 ac-ft	= 25,719 cf
Required Treatment over impervious area (in) =	2.50	0.821 ac-ft	= 35,767 cf
Required Treatment Volume from above Wet Detention (ac-ft) =		0.821 ac-ft	= 35,767 cf
Required Treatment Volume from above Dry Detention (ac-ft) (75% WD REQ.) =		0.616 ac-ft	= 26,825 cf
Required Treatment Volume from above Dry Retention (ac-ft) (50% WD REQ.) =		0.411 ac-ft	= 17,883 cf
Total Required Treatment Volume (ac-ft) from above =		0.821 ac-ft	= 35,767 cf

Per SFWMD Section 4.2.1

Additional 50% Treatment Volume (ac-ft) =	0.411 ac-ft	= 17,883 cf
Total Required Treatment Volume for Basin (ac-ft) = Max. of ` above =	***1.232 ac-ft***	***= 53,650 cf***
Total Provided Treatment Volume-Overall (ac-ft) =	***1.233 ac-ft***	***= 53,711 cf***
Total Provided Treatment Volume- Dry Retention(ac-ft) =	*0.288 ac-ft*	*= 12,540 cf*
Total Provided Treatment Volume- Wet Detention(ac-ft) =	*0.945 ac-ft*	*= 41,171 cf*

VII. PROPOSED TREATMENT VOLUME

A. Dry Retention Stage-Storage Calculations

Stage (ft)	Area (ac)	Incremental volume (ac-ft)	Incremental volume (c.f.)	Cumulative volume (ac-ft)	Cumulative volume (c.f.)
bot. of pond = 16.30	0.281 12,250.s.f.	0.21	9,065	0.000	0
17.00	0.313 13,650.s.f.	0.08	3,475	0.208	9,065
rqd. treat. vol. = 17.25	0.325 14,150.s.f.	0.00	0	0.288	12,540
weir elev. = 17.25	0.325 14,150.s.f.	0.00	0	0.288	12,540
17.25	0.325 14,150.s.f.	0.08	3,600	0.288	12,540
top of bank = 17.50	0.336 14,650.s.f.			0.371	16,140

B. Wet Detention Stage-Storage Calculations

Stage (ft)	Area (ac)	Incremental volume (ac-ft)	Incremental volume (c.f.)	Cumulative volume (ac-ft)	Cumulative volume (c.f.)
bot. of pond = 1.80	0.335 14,607.s.f.	4.73	206,105	0.00	0
11.80	0.611 26,614.s.f.	2.29	99,715	4.73	206,105
Control = 15.00	0.820 35,708.s.f.	0.419	18,245	7.02	305,820
15.50	0.856 37,272.s.f.	0.44	19,027	0.42	18,245
1/2 treatment vol. = 16.00 **should =0.47 ac-ft*	0.892 38,836.s.f.	0.09	3,899	0.86*	37,272
rqd. treat. vol. = 16.10	0.899 39,149.s.f.	0.00	0	*0.945*	41,171
weir = 16.10 .	0.899 39,149.s.f.	1.33	57,875	0.945	41,171
top of bank = 17.5	0.999 43,529.s.f.	0.00	0	2.27	99,046
17.50	0.999 43,529.s.f.			2.27	99,046

Permanent Pool Volume Calculations

Contributing Area (CA)	7.085	acres
length of wet season (WS)	153	days
wet season rainfall depth (R)	31	inches
minimum residence time (RT)*	21	days
runoff coefficient (C)	0.55	
Required PPV****	1.38	ac-ft

**** PPV = (CA*C*R*RT/(WS*12))

PPV Provided : 7.02 ac-ft

Mean Depth = PPV/Ap = 8.56 ft

Note: PPV provided requires no littoral zone.

Note : 14 1.5 = 21 days utilized to eliminate need of littoral zone.

Orifice Sizing Drawdown Calculations-Detention Discharge Calculations

Per BOR 5.1, a "V-Notch" drawdown orifice shall be provided to discharge no more than 0.5" of required detention in first 24 hours

Detention Discharge Critera

Total Site Area for Discharge 7.09 ac

Volume to Be Discharged per day

Required Treatment Vol. to Draw Down

0.5" x (Total Area - Lakes) = 0.26 ac-ft

Design Head

Water Quality Stage - Design Water Level= 1.1 ft

Maximum Angle of Inverted Triangle 11.54 Degrees

VIII. STAGE-STORAGE COMPUTATION

	Building	Pavement	Open	Dry Retention Bottom	Dry Retention Bank	Wet Detention Bottom	Wet Detention Bank	
	Vertical	Linear	Linear	Vertical	Bank	Vertical	Linear	Total
Area (ac)	0.72	3.94	1.12	0.281	0.023	0.82	0.18	7.09
	V	L	L	V	L	V	L	
Starting Elev (ft)	20.00	17.80	16.50	16.30	16.30	15.00	15.00	
Ending Elev (ft)	25.00	20.00	20.00	20.00	17.50	17.50	17.50	

	Vertical	Linear	Linear	Vertical	Linear	Vertical	Linear	Total
Stage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage
NAVD	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft	ac-ft
15.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
15.50	0.000	0.000	0.000	0.000	0.000	0.410	0.009	0.42
16.00	0.000	0.000	0.000	0.000	0.000	0.820	0.036	0.86
16.50	0.000	0.000	0.000	0.056	0.000	1.230	0.081	1.37
17.00	0.000	0.000	0.040	0.197	0.005	1.639	0.144	2.02
17.50	0.000	0.000	0.160	0.337	0.014	2.049	0.224	2.78
18.00	0.000	0.036	0.360	0.478	0.025	2.459	0.314	3.67
18.50	0.000	0.439	0.640	0.619	0.036	2.869	0.404	5.01
19.00	0.000	1.290	0.999	0.759	0.047	3.279	0.494	6.87
19.50	0.000	2.589	1.439	0.900	0.059	3.689	0.584	9.258
20.00	0.000	4.335	1.959	1.041	0.070	4.099	0.673	12.176

IX. SUMMARY

Following are summaries of pre-developed / post-developed discharges and peak stages for the storms that have been analyzed.

ROUTING SUMMARY

Discharge Rate Summary

Design Storm Event	Pre-Developed Peak Discharge (CFS)	Post-Developed Peak Discharge (CFS)	Post-Developed Peak Stage (NAVD)	Design Threshold	
				(NAVD)	Notes
10 YR- 24 HR	***4.25***	***3.46***	***16.82***	17.80	ROAD CROWN
25 YR - 72 HR	***6.37***	***6.33***	***17.44***	20.00	FFE / DISCHARGE
100 YR - 72 HR	-		***17.77***	20.00	FFE

Water Quality Recovery (Drawdown) Time

Treatment Vol. Elev. (NAVD)	Bott. Of Pond Elev. (NAVD)	Hr at which water EL reaches pond bottom
17.25	*16.30*	*12.75*

As demonstrated by the above calculations and the flood routing computations and mounding analysis contained in the appendices of this report, the proposed stormwater management system meets the requirements of the CoFP, SFMWD, FDOT, and NSLRCD. The system provides adequate treatment volume, recovery of the treatment volume and attenuation for the required design storm events as well as drawing down the required treatment volume within 72 hours per SFWMD criteria.

Appendix A

ICPR Modeling Data:

10YR-24HR, 25YR-72 HR, 100YR-72HR

Node Max Conditions [DRY-WET]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
GROUNDWATER	1. 10YR-24HR	0.00	15.30	0.0000	0.70	0.33	0
POST-DEV STAGE STORAGE	1. 10YR-24HR	17.50	16.82	0.0010	25.99	3.46	57407
POST-TAILWATER	1. 10YR-24HR	17.50	15.00	0.0000	2.96	0.00	0
PRE-DEV STAGE STORAGE	1. 10YR-24HR	0.00	15.52	0.0010	3.77	4.25	802
PRE-TAILWATER	1. 10YR-24HR	17.50	15.00	0.0000	4.25	0.00	0
GROUNDWATER	2. 25YR-72HR	0.00	15.30	0.0000	0.67	0.33	0
POST-DEV STAGE STORAGE	2. 25YR-72HR	17.50	17.44	0.0010	31.41	6.33	70673
POST-TAILWATER	2. 25YR-72HR	17.50	15.00	0.0000	5.84	0.00	0
PRE-DEV STAGE STORAGE	2. 25YR-72HR	0.00	15.52	0.0010	5.80	6.37	1054
PRE-TAILWATER	2. 25YR-72HR	17.50	15.00	0.0000	6.37	0.00	0
GROUNDWATER	3. 100YR-72HR	0.00	15.30	0.0000	0.78	0.33	0
POST-DEV STAGE STORAGE	3. 100YR-72HR	17.50	17.77	0.0010	40.74	8.04	85161
POST-TAILWATER	3. 100YR-72HR	17.50	15.00	0.0000	7.47	0.00	0
PRE-DEV STAGE STORAGE	3. 100YR-72HR	0.00	15.53	0.0010	7.77	8.38	1239
PRE-TAILWATER	3. 100YR-72HR	17.50	15.00	0.0000	8.38	0.00	0

Simple Basin: POST-DEVELOPMENT

Scenario:	DRY-WET
Node:	POST-DEV STAGE STORAGE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	7.0900 ac
Curve Number:	91.1
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: PRE-DEVELOPMENT

Scenario:	DRY-WET
Node:	PRE-DEV STAGE STORAGE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	150.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	7.0900 ac
Curve Number:	80.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST-DEVELOPMENT

Scenario:	RECOVERY
Node:	POST-DEV STAGE STORAGE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0
Area: 7.0900 ac
Curve Number: 91.1
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Node: GROUNDWATER

Scenario: DRY-WET
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 15.30 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	15.30
0	0	0	999.0000	15.30

Comment:

Node: POST-DEV STAGE STORAGE

Scenario: DRY-WET
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 17.50 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
15.00	0.00	0
15.50	0.42	18295
16.00	0.86	37462
16.50	1.37	59677
17.00	2.02	87991
17.50	2.78	121097
18.00	3.67	159865
18.50	5.00	217800
19.00	6.86	298822
19.50	9.25	403061
20.00	12.17	530169

Comment:

Node: POST-TAILWATER

Scenario: DRY-WET
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.70 ft
Warning Stage: 17.50 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	15.00
0	0	0	999.0000	15.00

Comment:

Node: PRE-DEV STAGE STORAGE

Scenario: DRY-WET
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
15.50	0.0000	0
16.00	0.5000	21780
16.50	1.0000	43560
17.00	1.5000	65340
17.50	2.5000	108900
18.00	3.5000	152460

Comment:

Node: PRE-TAILWATER

Scenario: DRY-WET
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.70 ft
Warning Stage: 17.50 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	15.00
0	0	0	999.0000	15.00

Comment:

Node: GROUNDWATER

Scenario: RECOVERY
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 15.30 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	15.30
0	0	0	999.0000	15.30

Comment:

Node: POST-DEV STAGE STORAGE

Scenario: RECOVERY
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 17.25 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
16.50	0.0000	0
17.00	0.4200	18295
17.50	0.9900	43124
18.00	1.7200	74923
18.50	2.6200	114127
19.00	3.9600	172498
19.50	6.0300	262667
20.00	8.8500	385506

Comment:

Drop Structure Link: CS-1

Scenario: DRY-WET
From Node: POST-DEV STAGE

Upstream Pipe
Invert: 15.00 ft
Manning's N: 0.0120

Downstream Pipe
Invert: 15.00 ft
Manning's N: 0.0120

		Geometry: Circular		Geometry: Circular	
	STORAGE				
To Node:	POST-TAILWATER	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Solution:	Combine	Op Table:		Op Table:	
Increments:	0	Ref Node:		Ref Node:	
Pipe Count:	1	Manning's N:	0.0000	Manning's N:	0.0000
Damping:	0.0000 ft	Top Clip			
Length:	58.00 ft	Default:	0.00 ft	Default:	0.00 ft
FHWA Code:	0	Op Table:		Op Table:	
Entr Loss Coef:	1.00	Ref Node:		Ref Node:	
Exit Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	Top Clip	
Geometry Type:	V-Notch Up	Default:	0.00 ft
Invert:	15.00 ft	Op Table:	
Control Elevation:	15.00 ft	Ref Node:	
Max Depth:	1.50 ft	Discharge Coefficients	
Max Width:	0.18 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component			
Weir:	2	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	16.10 ft	Op Table:	
Control Elevation:	16.10 ft	Ref Node:	
Max Depth:	1.40 ft	Discharge Coefficients	
Max Width:	1.25 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	None
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	17.30 ft
Control Elevation:	17.30 ft
Max Depth:	3.00 ft
Max Width:	4.50 ft
Fillet:	0.00 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Weir Link: NORTHERN BOUNDARY

Scenario:	DRY-WET
From Node:	PRE-DEV STAGE STORAGE
To Node:	PRE-TAILWATER
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	15.50 ft
Control Elevation:	15.50 ft
Max Depth:	2.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	600.00 ft
Left Slope:	100.000 (h:v)
Right Slope:	100.000 (h:v)

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Percolation Link: PERC

Scenario:	DRY-WET
From Node:	POST-DEV STAGE STORAGE
To Node:	GROUNDWATER
Link Count:	1
Flow Direction:	Both
Aquifer Base Elevation:	0.00 ft
Water Table Elevation:	15.30 ft
Annual Recharge Rate:	0 ipy
Surface Area Option:	Vary Based on Stage/Area Table
Vertical Flow Termination:	Horizontal Flow Algorithm
Perimeter 1:	910.00 ft
Perimeter 2:	1225.00 ft
Perimeter 3:	2795.00 ft
Distance P1 to P2:	50.00 ft
Distance P2 to P3:	250.00 ft

Horizontal Conductivity:	17.450 fpd		
Vertical Conductivity:	8.500 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.300	# of Cells P2 to P3:	25
Layer Thickness:	0.00 ft		

Comment:

Percolation Link: PERC

Scenario:	RECOVERY	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	POST-DEV STAGE STORAGE		
To Node:	GROUNDWATER	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	910.00 ft
Flow Direction:	Both	Perimeter 2:	1225.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	2795.00 ft
Water Table Elevation:	15.30 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	250.00 ft
Horizontal Conductivity:	17.450 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	8.500 fpd	# of Cells P2 to P3:	25
Fillable Porosity:	0.300		
Layer Thickness:	0.00 ft		

Comment:

Simulation: 1. 10YR-24HR

Scenario:	DRY-WET
Run Date/Time:	3/30/2022 8:31:43 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 25HR
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 6.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 2. 25YR-72HR

Scenario: DRY-WET
Run Date/Time: 3/30/2022 8:31:46 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 72 HR
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~SFWMD-72
Rainfall Amount: 9.50 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 3. 100YR-72HR

Scenario: DRY-WET
Run Date/Time: 3/30/2022 8:31:56 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 72 HR
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	12.23 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 2. 25YR-72HR

Scenario: RECOVERY
Run Date/Time: 3/30/2022 8:35:23 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

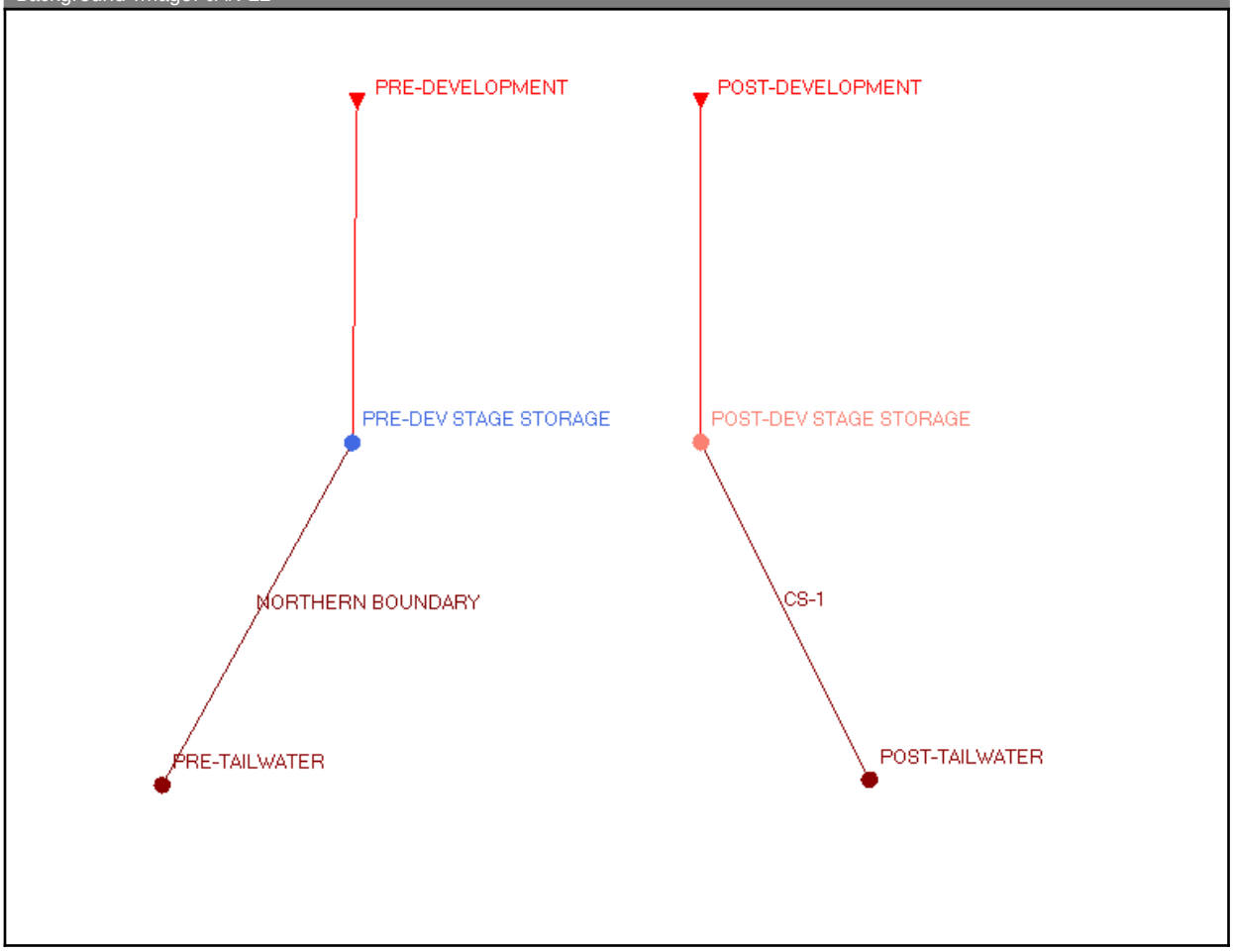
Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: No Rainfall
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Background Image: JAN 22



Appendix B

Geotechnical Investigation by KSM Engineering

(KSM Internation, Dated 9/8/2021)

Headquarters
11345 U.S. Highway 1
Sebastian, FL. 32958
Orlando
723 Progress Way
Sanford, FL. 32771

KSM ENGINEERING AND TESTING

Mailing
P.O. Box 78-1377
Sebastian, FL. 32978
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C.A. # 5693
KSMengineering.net

September 8, 2021

Frank Gonzalez
Bev Smith Toyota
3350 US Highway 1
Fort Pierce, FL 34982

Re: Bev Smith Toyota
3350 US Highway 1
Fort Pierce, Florida
KSM Project #: 215585-b&p

Dear Mr. Gonzalez:

As requested, KSM Engineering & Testing has performed a subsurface investigation for the proposed renovation and addition to the existing car dealership building, the new recon center building, the proposed parking areas and the stormwater pond at the referenced sites. Presentation of the data gathered during the investigation, together with our geotechnical related opinions, are included in this report.

Scope of Work and Professional Services Agreement:

The agreement to perform a geotechnical exploration with the scope of services included in this report is described in the "Professional Service Agreement" that was executed by Mr. Frank Gonzalez, of Bev Smith Toyota on July 21, 2021. KSM issued the proposal to perform the requested exploration, testing, and evaluations, dated May 20, 2021. KSM's report follows below.

Site Location and Physiography:

Site Location – The site is located in Fort Pierce, FL, east of US Highway 1, north of Dixieland Drive and south of Southland Drive. There is also an undeveloped property west of US Highway 1 and north of Southland Drive that will be developed as part of this project and currently has no address attached to the property.

Physiography/Topography and Developmental Features – At the time of drilling, the site between Dixieland and Southland Drives had an existing auto dealership building with a service bay, as well as a separate body shop building. The majority of the site had existing asphalt pavement with some vegetation and trees located in the "green space" islands throughout the parking areas. The undeveloped site north of Southland Drive had moderate to dense surface vegetation with many palm, pepper, pine and oak trees along with palmettos. There was organic surface debris on the site remaining from the clearing operations conducted prior to KSM's arrival to provide access for our equipment. The sites are both commercially zoned and there are various existing businesses on the adjacent lots.

Project Description:

Based on the "Conceptual Site Plan" (Sheet CSP1) provided by "MBV Engineering, Inc." and dated 01-19-21, it is our understanding that the existing car dealership building (approximately 22,000 square feet) is to receive some minor renovations as well as a one-story car wash addition at the rear (or east side) of the existing building. On the undeveloped property to the north, it is our understanding that a new one-story recon building will be constructed. Associated parking areas will be constructed as part of the project. A 1.3 acre stormwater retention pond will also be constructed east of the northern lot.

We assume that loads from the structures will be transferred to the ground by conventional shallow stemwall footings. Although we were not furnished with structural loading conditions or a foundation plan, for our geotechnical analysis, we have assumed the following estimated loading conditions:

- For the Existing Dealership Addition, a maximum of 5,000 pounds per linear foot along the wall foundations and less than 75 kips for any individual column loads, and
- For the proposed Recon structure, a maximum of 2,500 pounds per linear foot along the wall foundations.

The Structural engineer of record should contact our office if the design loading exceeds our assumptions.

Based on the existing site grades and groundwater table elevations discovered at the time of the investigation, we estimate that several feet of site fill will be required to reach the desired grades in the building and pavement areas.

The scope of our study consisted of the following:

1. Performed Standard Penetration Test (SPT) borings and a Dynamic Cone Penetrometer Test (DC) sounding in the proposed building areas, Percolation (PB) borings in the proposed stormwater retention area, and Hand Auger (HA) borings with Static Cone Penetrometer Test (SCPT) readings in the proposed pavement areas of the northern property to estimate the subsoil relative density and visually classify the soils.

2. Measured the observed groundwater level at each boring.

3. Evaluated the discovered subsurface conditions with respect to the proposed construction and provided recommendations for site preparation and foundation design.

4. Obtain Shelby tube soil samples per each soil type encountered at the stormwater pond locations in order to perform both constant head horizontal and vertical permeability tests in our laboratory.

5. Perform engineering calculations to determine the permeability coefficient "K" values along with estimates for the elevation of wet-season and dry-season water tables for the percolation test locations.

6. Prepared this report to document our findings.

NCRS Surficial Soil Information:

Mapping of this area of Florida that was performed by the USDA, Natural Resources Conservation Service (NCRS) indicates that three (3) USDA soil units were mapped on the property. These included:

- 50: **Waveland and Immokalee fine sands** – Waveland and Immokalee fine sands occupied the majority of the sites, totaling approximately 15 acres ±. The typical profile of this soil consists of two layers of fine sand and sand that extend to a depth of about 3 feet, lying atop a layer of loamy sand extending to about 3-½ feet, followed by layers of sand. Groundwater elevations are expected to be found approximately 6 to 18 inches below the surface.

- 21: **Lawnwood and Myakka sands** – Lawnwood and Myakka sands occupied the southeastern portion of the proposed stormwater pond location, approximately 1.7 acres ±. The typical profile of this soil consists of layers of sand that extend from the surface to a depth of about 6-½ feet (maximum depth of data available via NCRS). Groundwater elevations are expected to be found approximately 6 to 18 inches below the surface.

- 47: **Urban land, 0 to 2 percent slopes** – Urban land occupied a single patch of approximately 1.5 acres ± in the western portion of the previously developed site which had the existing structure. This area included the western half of the existing structure and the northwestern group of parking spaces, as well as a portion of Southland Drive and a very small portion of the southwestern corner of the site located north of Southland Drive. No typical soil profile of expected water table elevation is available via the NCRS for this land type classification.

In summary, KSM expected that the investigation of this property, within approximately 7 feet of the land surface, would encounter deposits of predominantly cohesionless sand that featured low fines contents within approximately the top 3 feet followed by a relatively thin layer loamy sand, lying atop more layers of sandy material.

Site Investigation:

KSM's site investigation program consisted of performing a total of eleven (11) Standard Penetration Test (SPT) borings, one (1) Dynamic Cone Penetrometer Test (DC) sounding, two (2) Percolation (PB) borings and six (6) Hand Auger (HA) borings with Static Cone Penetrometer Test (SCPT) readings in the proposed development and construction areas. The SPT borings were terminated at depths ranging from ±10 to ±25 feet below grade, the DC sounding was terminated at a depth of ±11 feet below grade, the PB borings were terminated at depths of ±15 feet below grade and the HA borings at a depth of ±6 feet below grade. The approximate locations of the borings are indicated on the attached Location Plan.

Ground Penetrating Radar Investigation – KSM engaged GPRS, Inc. to conduct an investigation in the existing parking areas around the existing car dealership building in order to locate any buried utilities prior to KSM's soil boring operations. A ground penetrating radar

(GPR) device and an electromagnetic pipe and cable locator were used to locate utilities or buried objects within a 10' by 10' area around the proposed boring locations and marked.

Standard Penetration Test Borings – The SPT borings were performed in general accordance with procedures described in ASTM D-1586. The location of our testing was indicated by the client.

Following completion of each SPT boring, the groundwater in the open borehole was allowed time to attain an equilibrium level and the depth to the surface of the groundwater was measured from existing grade and recorded in the field log. The records of the soils that were encountered, the recorded SPT "N" values and the measured groundwater depths are shown on the attached SPT boring logs.

Dynamic Cone Penetrometer Test Soundings – Performance of the Dynamic Cone Penetrometer Test sounding consists of repeatedly dropping a 35-pound safety hammer, a height of 15", to drive a 10 square centimeter cone through the ground. The number of blows per 10 centimeter of penetration is recorded and is called the dynamic cone resistance. The equivalent SPT "N" values are correlated to the cone resistance. Both the dynamic cone resistance and the equivalent SPT "N" values are shown in the attached logs.

Hand Auger Borings – The hand auger borings were performed using a bucket auger tool to advance the borehole and to return disturbed samples of the soils. The drilling was performed in general accordance with the procedures delineated in ASTM D1452. A Static Cone Penetrometer Test (SCPT) sounding was performed throughout the advancement of each hand auger boring.

Static Cone Penetrometer Test (SCPT) Soundings – Execution of a SCPT sounding consists of pushing a thin steel shaft, with an attached 60˚-conical point, by hand through the soil. The capacity of this tool to measure the relative density of the soil is directly related to the weight that is applied on the shaft by the technician that operates the tool. The thrust required to push the cone tip is measured by an attached proving ring with a calibrated gauge. The value of the bearing pressure exerted by the cone point has been correlated with the relative soil density. The relationship of the SCPT reading to the relative density is listed in Table 1:

Table 1 - Penetrometer Table

Relative Density	Static Penetrometer Reading
Very Loose or Soft	<15
Loose	15-40
Medium Dense	40-70
Dense	>70

Following completion of each hand auger boring, the groundwater was allowed to attain an equilibrium level and the depth to the surface of the groundwater was measured from existing grade and recorded in the field log. The records of the soils that were encountered, the recorded SCPT resistance values, and the measured groundwater depths are shown on the attached logs.

Engineering Evaluation and Conclusions:

Based on the information obtained from this site investigation, we are pleased to offer the following evaluation:

Subsurface Condition Summary - The boring logs and SPT "N" values recorded during the SPT borings indicate that the subsurface soils in the area of the proposed addition and renovations to the existing car dealership structure consisted of:

- In the existing pavement areas, surface layers of asphalt, followed by base material were cored through in order to reach the underlying soil layers. Generally, the asphalt was approximately 1-½ inches thick and the base material was about 6 inches thick.
- Surface layers in the unpaved areas typically consisted of fine-grained sand with rock fragments and some pieces of clay mixed in. This material appears to have been used as a site fill material for the original project.
- Below the surface layers, the soils generally consisted of medium dense to dense layers of fine-grained sand and fine-grained sand with hardpan.
- Below a depth of approximately 8 feet, some of the borings encountered medium dense layers of slightly silty or silty fine-grained sand.

The boring logs and SPT "N" values recorded during the SPT borings and DC sounding indicate that the subsurface soils in the area of the proposed recon building on the northern property consisted of:

- Loose surface layers of fine-grained sand with roots were encountered to a depth of about 2 feet below existing grade.
- Below the surface layer, loose to medium dense fine grained sand and slightly silty fine-grained sand were generally encountered to a depth of approximately 6 to 8 feet below existing grade.
- Below a depth of approximately 6 to 8 feet, the borings encountered medium dense layers of fine-grained sand to the boring terminus.

No "muck" or other unsuitable material was found in the boring locations for the proposed addition/renovations, the new recon building and the pavement areas. Please refer to the attached soil boring logs for specific information relative to the soil description and the SPT/SCPT resistance records.

Based on the results of the SPT borings and DC sounding conducted in the general area of the proposed addition/renovations to the existing building, as well as the proposed recon building as indicated on the attached location plan and based on the provided conceptual site layout, it is KSM's professional opinion that the existing soils in the proposed building areas are generally suitable for the construction of the commercial structures.
This is based on assumed loading conditions stated in the "Project Description" section of this report.

Observed Groundwater Table - The observed water table ranges encountered in each of the general test areas were as follows:

- Existing Dealership Building: 40 to 72 inches below existing grade.
- Proposed Recon Building: 17 to 28 inches below existing grade.
- Proposed Pavement Areas for Recon Building: 17 to 27 inches below existing grade.
- Proposed Stormwater Pond: 37 to 38 inches below existing grade.

KSM estimates that the surface of the groundwater table will rise approximately 24 to 28 inches above the measured levels, during the peak wet season. Given this estimate, it is KSM's opinion that several feet of fill will be required above existing grade in the proposed recon building and pavement areas in order to create acceptable distance between the bottom of the shallow footings or pavement section and the anticipated seasonal high water table elevation. It is possible that excavations that are made to install buried utility lines could require installation below the groundwater surface. In such instances, dewatering of the excavations will be necessary to allow the earthwork to be performed in dry conditions.

The estimated seasonal groundwater position provided for the proposed building and pavement areas herein should be used only as a rough estimate for site work purposes. For actual stormwater basin design and control, we recommend performing additional site-specific borings, at the proposed location(s) of the stormwater management area(s).

Groundwater Control and Excavation – Depending on the season in which construction occurs, temporary groundwater control may be necessary to create stable excavations and to properly compact utility trench subgrade and backfill material. While the actual method of dewatering should be selected and designed by the contractor, we suggest drawing down the water table a depth of at least 24 inches below the bottom of excavations to avoid compaction related problems.

Excavation banks should be cut and dressed as necessary to prevent slope failure and to allow backfilling. As a minimum, the sides of temporary excavations that extend below 4 feet should be cut to a slope inclination that complies with OSHA regulations. Where lateral restrictions will not permit slopes to be laid back to the required inclination, the excavation should be shored in accordance with OSHA requirements. KSM recommends that excavated materials should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth. Provisions for maintaining workman safety within excavations is the sole responsibility of the contractor.

Foundation Evaluation - It is KSM's professional opinion that, based on the discovered subsurface conditions, the proposed structures can be supported on conventional concrete, steel reinforced footings, provided that the near surface very loose to loose soils are compacted in accordance with the provided site preparation recommendations.

The following sections provide recommendations for the site preparation and foundation design.

Site Preparation:

Site Subgrade Preparation – Due to the near surface very loose and loose soils, KSM recommends that the building site subgrade be prepared for construction of the foundations and floor slabs-on-grade by improving the in-place density of the soil that will support the structure within the zone where the stress from the structure will be primarily distributed. KSM has assumed that the proposed finished floor of the structure lies above the discovered land surface level. The following earthwork procedure is recommended.

1. The proposed construction area, plus a minimum margin of five feet beyond the proposed limit of construction, should initially be prepared by removing any organic materials including roots and surface vegetation. This is especially important due to the amount of existing vegetation on site.

2. The exposed surface, created in step 1 above, should be graded level and proofrolled to compact the subgrade. Sufficient passes of the roller should be made to produce an in-place dry density that equals or exceeds 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density to a depth of 2 feet below the proofrolled surface.

3. Upon completion of the proofrolling operation, the exposed surface should be filled to produce the desired line and grades of the building pad. Fill should consist of sandy soil containing less than 10% material that passing through the U.S. Standard no. 200 sieve and is free of debris and organic material. The fill should be placed in level lifts not more than 12-inches thick, moisture conditioned, and compacted to attain an in-place dry density that equals or exceeds 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density. If additional site fill will not be brought onto the site, this step may be skipped.

4. For the proposed recon building:

    a. Excavate the compacted pad to 12 inches below the foundation base line-and-grade of the perimeter wall footings, interior footings and isolated footings to the proposed foundation subgrade elevation. The exposed undercut footing subgrade should then be compacted to attain an in-place dry density that equals or exceeds 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density, to depth of 12 inches below the footing subgrade surface. This can best be achieved with the use of a small vibratory sled or roller type compactor. Testing should be done to confirm that the specified level of compaction has been achieved.

    b. Following confirmation that the undercut subgrade soil has been compacted, fill should be placed and compacted in 6-inch-thick level lifts to a density that equals or exceeds 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density, in the foundation trenches to attain the proposed foundation subgrade levels. This can best be achieved with the use of a relatively light weight walk behind plate or roller type compactor. Testing should be done to confirm that the specified level of compaction has been achieved.

4. (continued) For the proposed addition:

    a. Excavate the compacted pad to the proposed foundation subgrade elevation. The exposed footing subgrade should then be compacted to attain an in-place dry density that equals or exceeds 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density, to depth of 12 inches below the footing subgrade surface. This can best be achieved with the use of a small vibratory sled or roller type compactor. Testing should be done to confirm that the specified level of compaction has been achieved.

5. Following the successful completion of the preparation of the foundation subgrade, foundation forms (if used) and steel reinforcement should be placed, and the foundation concrete should be cast, as necessary. Any backfill that is placed adjacent to the foundations, as well as backfill placed in utility trench excavations within the building pad, should be likewise compacted to attain or exceed 95 percent of the Modified Proctor (ASTM D-1557) maximum dry density.

Compaction Equipment - KSM does not recommend using heavy vibratory equipment for the addition to the existing dealership building due to the proximity to the existing structure and the potential that ground vibrations created by the compaction machinery might be transmitted and cause damage to the nearby structures. Accordingly, non-vibratory compaction methods are preferred to perform the recommended earthwork delineated above.

Compaction Testing - In-place density of the compacted soil can be verified using a nuclear density gauge or any other ASTM approved method to determine percent compaction. It is our recommendation that compaction tests in the excavated footings should be conducted prior to placement of any steel or concrete and conducted at every column footing and once for every 100 linear feet of footing trench.

Subgrade and each lift (12” max) of fill should be tested for compaction at a frequency of no less than one test per 2,500 sf of building area, per lift and one test per 10,000 sf of pavement area, per lift with a minimum of 4 tests in each area prepared. The placement and frequency of testing can be modified at the discretion of the site contractor and the onsite soils technician based on the requirements of the project as stated by the Engineer of Record.

Foundation:

Bearing Capacity - Provided that our recommendations for site preparation are followed, the proposed addition and new recon building may be supported on conventional concrete, steel reinforced stemwall footings designed for an allowable soil bearing pressure of 2,500 pounds per square foot, or less.

Assumed Footing Dimensions and Settlement Analysis - With the foundation properly designed and the site properly prepared, we anticipate total settlements less than 1 inch and differential settlement of less than ½ of an inch. The majority of the settlement should occur during construction. This is based on the assumed loading as indicated in the “Project Description” section of this report with a minimum continuous footer width of 24 inches and a minimum isolated pad footing of 3 feet squared for the dealership building. For the proposed recon building, KSM has assumed a minimum continuous footer width of 18 inches. All footings are assumed to have a minimum embedment depth of 16 inches. If the loading or footer is to vary from these parameters, please contact our office for additional settlement calculations. KSM maintains the right to modify any of these estimates based on new information.

Floor Slabs:

A conventional slab-on-grade can be used in the “at grade” portion of the buildings. We recommend the disturbed subgrade below the floor slab be re-compacted to 95 percent of the modified Proctor maximum dry density (ASTM D 1557) prior to placement of the concrete. We recommend that control joints be incorporated in the slab at frequent intervals to control shrinkage cracks.

A moisture barrier is recommended beneath the floor slab to prevent moisture migration from the underlying soil resulting in dampness of the slab.

Drives and Parking Areas:

We performed six (6) Hand Auger borings with static cone penetrometer readings in the proposed drive and parking area to evaluate the soils in relation to the proposed pavement. We did not find any "muck" or other unsuitable material in the test borings. Penetrometer readings recorded during the investigation indicates the existing soil density is generally loose at the surface and becomes medium dense.

Although a comprehensive pavement evaluation was not within the scope of this study the site may be prepared to support a flexible pavement or rigid concrete pavement. The pavement should be designed for the anticipated loads and frequencies. Refer to Table 2 for the minimum pavement section. The minimum pavement design for standard duty asphalt should include the following:

Clear the roadway area of any surface debris, including vegetation, roots, organic matter and existing pavement. Stumps shall be removed entirely. The cleared areas should be graded level and proof rolled. Any soft yielding areas shall be excavated and replaced with clean compacted fill. Sufficient passes should be made during compaction operations to produce a density no less than 95 percent of its modified dry Proctor value (AASHTO T180) to a depth of two feet. Additional fill shall consist of clean granular sand containing less than 10% material passing the U.S. Standard No. 200 mesh sieve and placed in loose layers of 12 inches and compacted to the above densities. A minimum of 16 inches separation should be maintained between the bottom of the base and the high seasonal groundwater table.

Where a concrete pavement section is used, concrete reinforcement should be designed to withstand the design traffic loads and saw cuts constructed for crack control. The concrete should have a minimum compressive strength of 4,000 psi.

Light duty pavement areas are considered car and pickup truck loading conditions and a few medium trucks such as box trucks. Heavy duty pavement areas are considered dumpster pad & apron area and semi-tractor trailer truck loading conditions.

Please see Table 2 for a summary of the minimum recommended pavement sections.

Table 2 - Minimum Pavement Section

Pavement Type	Material	Layer Thickness (in)	
		Standard Duty	Heavy Duty
Flexible	Florida DOT Asphalt Type 3	1.5	2
	Cemented Coquina Rock (LBR of 100)*-or-Limerock* Base Course	6	8
	Clayed Soil (LBR of 40)* Stabilized Subgrade	8	12
Rigid	Portland Cement Concrete (4,000 psi)	5	7
	Clayed Soil (LBR of 40)* Stabilized Subgrade	6	10

* Compacted to minimum 98 percent of its modified dry Proctor value (AASHTO T180)

Soil Percolation, Estimated Water Tables, and Hydrologic Soil Group:

The tests and observations noted in this section were performed to evaluate the drainage characteristics of the soils for this particular test locations.

Usual Open-Hole Test (in-field) – Two (2) in-field permeability tests were performed in general conformance with the South Florida Water Management District described procedures for the 'Usual Open-Hole Test' method. The results of the in-field test can be found in Table 3:

Table 3 - Usual Open-Hole Test Results

Test Location (See Location Plan)	Hydraulic Conductivity (CFS/SF- Ft Head)
P-1	3.8×10^{-4}
P-2	4.6×10^{-4}

NOTES:
1) The above hydraulic conductivity values are for a French drain installed to the same depth as the borehole tests. The designer should apply the appropriate factor of safety.
2) A hole diameter of 3" was used in the computation of the Hydraulic Conductivity values presented in the above table.

Constant Head Permeability Test (in-lab) - The horizontal and vertical permeability flow rates were determined by excavating a test pit adjacent to the soil profiles and obtaining undisturbed shelby tube samples. We then performed constant head permeability tests on the field samples in our laboratory in general accordance with ASTM D 2434. Table 4 indicates the horizontal and vertical flow rates for the test locations.

Table 4 - Constant Head Permeability Results (ASTM D2434)

Test Location (See Location Plan)	Horizontal Flow Rate (in/hr)	Vertical Flow Rate (in/hr)	Layer Depth (in)
P-1	6.7	5.4	0-16
P-1	10.8	10.0	16-30
P-1	--	0.7	30-46
P-1	--	1.7	46-60
P-2	6.1	4.6	0-10
P-2	11.3	10.0	10-30
P-2	--	0.3	30-40
P-2	--	1.3	40-60

Estimated Normal Wet Season & Dry Season Water Table – Table 5 indicates the observed water table and our estimated normal wet season water table and normal dry season water table for the test locations. This estimate is based upon our interpretation of existing site conditions and a review of the USDA Soil Survey for St. Lucie County, Florida. The majority of the site soils in the proposed stormwater pond location are mapped as (50) Wavelend and Immokalee fine sands and (21) Lawnwood and Myakka sands, according to the Soil Survey Map of St. Lucie County, Florida.

Table 5 - Water Table Observations

Test Location (See Location Plan)	Observed Water Table	Estimated Wet Season Water Table	Estimated Dry Season Water Table
P-1, PB-1	37" Below Grade	14" Below Grade	50" Below Grade
P-2, PB-2	38" Below Grade	10" Below Grade	46" Below Grade

Hydrologic Soil Group – The soils in the test locations can be classified in accordance with Chapter 7, Part 630 of the USDA National Engineering Handbook. Please refer to Table 6:

Table 6 – Hydrologic Soil Group Classification

Test Location (See Location Plan)	Hydrologic Soil Group
P-1	B/D
P-2	C/D

The soils in test location P-1 are part of the dual hydrologic soil group “B/D” due to the slightly silty soil layer encountered in the tested depth range, the overall moderate hydraulic conductivity rates of the soils in the tested depth range, the absence of a water impermeable layer and the depth to high season water table which is less than 24 inches from the surface.

The soils in test location P-2 are part of the dual hydrologic soil group “C/D” due to the lower permeability of the slightly silty soil layer encountered in the tested depth range, the overall relatively low hydraulic conductivity rates of the soils in the tested depth range, the absence of a water impermeable layer and the depth to high season water table which is less than 24 inches from the surface.

Note that the Hydrologic Soil Group is a dynamic classification which changes with the conditions of the site at any given moment. Changes in water table elevation as well as changes in the ground elevations of the site can affect the hydrologic soil group for any particular location.

Closure:

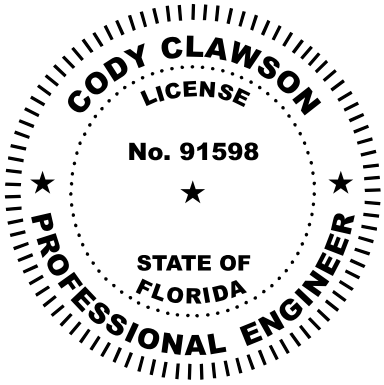
This report has been prepared in accordance with generally accepted soil and foundation engineering practices based on the results of the test borings and the assumed loading conditions. No warranties, either expressed or implied, are intended or made. This report does not reflect any variations which may occur between the borings. If variations appear evident during the course of construction, it would be necessary to re-evaluate the recommendations of this project.

Based upon our subsurface investigation at the above-mentioned project location, the reliance of the recommendations presented within this signed and sealed report is predicated on KSM representative's involvement to verify that not only have the soils been prepared following the indicated recommendations, but the foundations are installed in compliance within the parameters indicated. The Structural Engineer of Record is responsible for confirming that the estimated capacities provided are adequate for the anticipated loading. If additional capacity is required, KSM is to be notified so that our recommendations can be amended as required.

Environmental conditions, wetland delineation, karst activity, water quality, and municipal requirements are not a part of this report.

We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please feel free to contact the office.

Respectfully,



Christopher S. LeBrun

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9/8/2021

Cody C. Clawson, P.E.
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9/8/2021

CCC/cv/CSL

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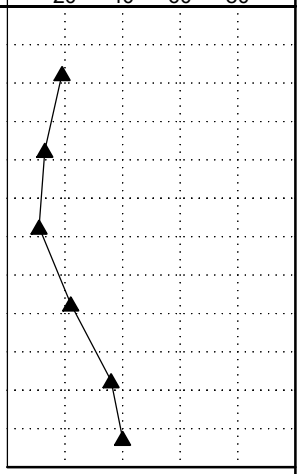
BORING NUMBER B-01

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/12/21 **COMPLETED** 8/12/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 5.75 ft
LOGGED BY PM/SF/DP/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Asphalt					
		Cemented Coquina Rock					
		Gray Fine Grained Sand	SS		14-6-13 (19)		
			SS		6-6-7 (13)		
5		Dark Brown Sand with Traces of Hardpan					
		▽ Brown Sand	SS		3-4-7 (11)		
		Dark Brown Sand with Traces of Hardpan	SS		7-10-12 (22)		
10			SS		14-16-20 (36)		
			SS		20-20-20 (40)		

Bottom of borehole at 12.0 feet.



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BORING NUMBER B-02

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/12/21 **COMPLETED** 8/12/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 4.58 ft
LOGGED BY PM/SF/DP/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Asphalt (1 1/2")					
		Cemented Coquina Rock					
		Gray Sand	SS		7-8-9 (17)		
			SS		14-11-6 (17)		
5		▽					
		Dark Brown Sand with Traces of Hardpan	SS		5-8-10 (18)		
			SS		5-5-7 (12)		
		Light Brown Sand					
10			SS		5-6-8 (14)		
		Dark Brown Sand, Slightly Silty	SS		3-6-9 (15)		
15							
20			SS		6-8-8 (16)		
		Dark Brown Silty Sand					
25			SS		7-8-8 (16)		

Bottom of borehole at 25.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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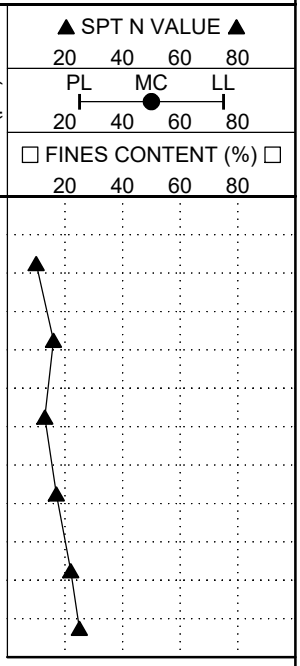
BORING NUMBER B-03

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/12/21 **COMPLETED** 8/12/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 5.33 ft
LOGGED BY PM/SF/DP/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Asphalt (1 1/2")					
		Cemented Coquina Rock					
		Gray Sand	SS		3-6-4 (10)		
			SS		6-7-9 (16)		
5		Dark Brown Sand with Traces of Hardpan ▽	SS		6-6-7 (13)		
		Brown Sand	SS		6-7-10 (17)		
10			SS		6-8-14 (22)		
		Dark Brown Sand, Slightly Silty	SS		9-11-14 (25)		

Bottom of borehole at 12.0 feet.



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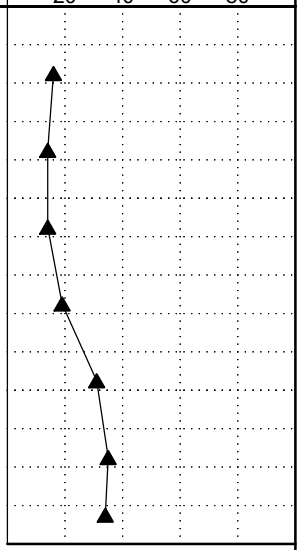
BORING NUMBER B-04

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/13/21 **COMPLETED** 8/13/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 3.33 ft
LOGGED BY MM/NV **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Brown Sand with Rock Fragments and Some Clay	SS		13-8-8 (16)		
		Gray Sand					
		▽ Light Brownish Gray Sand	SS		10-6-8 (14)		
5			SS		4-6-8 (14)		
		Dark Brown Sand with Traces of Hardpan	SS		9-8-11 (19)		
10			SS		16-14-17 (31)		
		Dark Brown Sand	SS		11-17-18 (35)		
			SS		16-17-17 (34)		

Bottom of borehole at 14.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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BORING NUMBER B-05

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/12/21 **COMPLETED** 8/12/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 6.00 ft
LOGGED BY PM/SF/DP/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Asphalt (1 1/2")					
		Cemented Coquina Rock					
		Gray Sand	SS		9-3-4 (7)		
			SS		3-4-6 (10)		
5		Dark Brown Sand with Traces of Hardpan ▽	SS		3-4-5 (9)		
			SS		6-11-15 (26)		
		Dark Brown Sand, Slightly Silty	SS		15-16-20 (36)		
10							
			SS		3-4-6 (10)		
15							
		Brown Sand	SS		3-4-3 (7)		
20		Light Brown Sand					
			SS		3-4-6 (10)		
25							

Bottom of borehole at 25.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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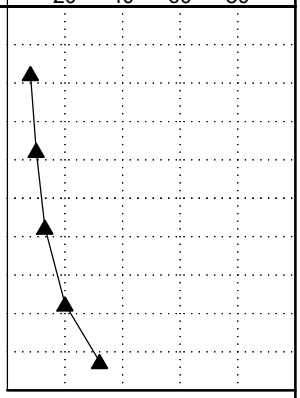
BORING NUMBER B-06

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/13/21 **COMPLETED** 8/13/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 3.50 ft
LOGGED BY MM/NV **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Brown Sand with Rock					
			SS		9-4-4 (8)		
		Gray Sand					
		▽	SS		6-5-5 (10)		
5		Dark Brown Sand with Root and Traces of Hardpan	SS		3-6-7 (13)		
		Brown Clayed Sand with Root					
		Dark Brown Slightly Silty Sand with Traces of Root	SS		7-8-12 (20)		
10			SS		16-15-17 (32)		

Bottom of borehole at 10.0 feet.



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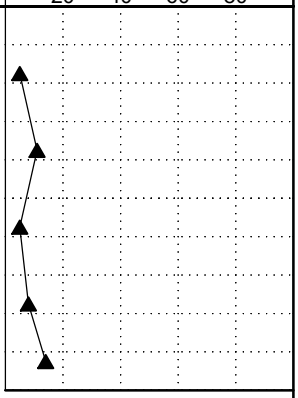
BORING NUMBER B-07

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 2.33 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Root					
		▽ Light Brown Sand	SS		1-2-3 (5)		
			SS		5-6-5 (11)		
5		Dark Brown Sand, Slightly Silty	SS		3-3-2 (5)		
			SS		3-3-5 (8)		
		Brown Sand	SS		6-6-8 (14)		
10							

Bottom of borehole at 10.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:44 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ

KSM Engineering & Testing
P.O. Box 78-1377
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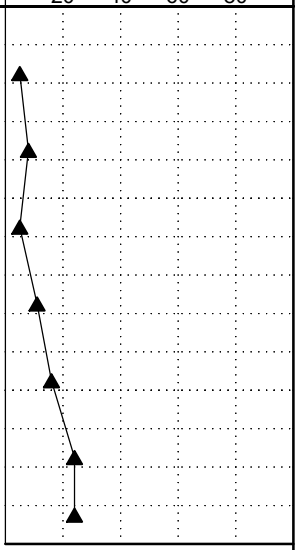
Tel: (772)-589-0712
Fax: (772)-589-6469

BORING NUMBER B-08

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 2.17 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Root					
		Light Brown Sand	SS		1-2-3 (5)		
			SS		6-5-3 (8)		
5		Dark Brown Sand, Slightly Silty	SS		2-2-3 (5)		
			SS		3-5-6 (11)		
		Brown Sand					
10			SS		5-7-9 (16)		
			SS		10-11-13 (24)		
			SS		11-11-13 (24)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 14.0 feet.

GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:45 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ

WILDCAT DYNAMIC CONE LOG

Company Name KSM Engineering & Testing
Company Street # 11345 Hwy. U.S. 1
Company City, State, Zip Sebastian, Florida 32958

PROJECT NUMBER: 215585-B-09
DATE STARTED: 08-18-2021
DATE COMPLETED: 08-18-2021

HOLE #: B-09, See Attached Location Plan
CREW: SF/HM
PROJECT: Bev Smith Toyota
ADDRESS: 3350 US Highway 1
LOCATION: Fort Pierce, Florida

SURFACE ELEVATION: N/A
WATER ON COMPLETION: 17"
HAMMER WEIGHT: 35 lbs.
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm²	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY NON-COHESIVE	COHESIVE
-	1	4.4	•	1	VERY LOOSE	VERY SOFT
-	3	13.3	••••	3	VERY LOOSE	SOFT
- 1 ft	4	17.8	••••••	5	LOOSE	MEDIUM STIFF
-	4	17.8	••••••	5	LOOSE	MEDIUM STIFF
-	6	26.6	•••••••••	7	LOOSE	MEDIUM STIFF
- 2 ft	7	31.1	••••••••••	8	LOOSE	MEDIUM STIFF
-	9	40.0	••••••••••••••	11	MEDIUM DENSE	STIFF
-	13	57.7	••••••••••••••••••••	16	MEDIUM DENSE	VERY STIFF
- 3 ft	11	48.8	•••••••••••••••••	13	MEDIUM DENSE	STIFF
- 1 m	9	40.0	••••••••••••••	11	MEDIUM DENSE	STIFF
-	8	30.9	••••••••••	8	LOOSE	MEDIUM STIFF
- 4 ft	6	23.2	••••••••	6	LOOSE	MEDIUM STIFF
-	3	11.6	••••	3	VERY LOOSE	SOFT
-	2	7.7	••	2	VERY LOOSE	SOFT
- 5 ft	3	11.6	••••	3	VERY LOOSE	SOFT
-	3	11.6	••••	3	VERY LOOSE	SOFT
-	4	15.4	•••••	4	VERY LOOSE	SOFT
- 6 ft	7	27.0	•••••••••	7	LOOSE	MEDIUM STIFF
-	11	42.5	••••••••••••••	12	MEDIUM DENSE	STIFF
- 2 m	10	38.6	••••••••••••	11	MEDIUM DENSE	STIFF
- 7 ft	11	37.6	••••••••••••	10	LOOSE	STIFF
-	12	41.0	••••••••••••••	11	MEDIUM DENSE	STIFF
-	14	47.9	•••••••••••••••••	13	MEDIUM DENSE	STIFF
- 8 ft	15	51.3	••••••••••••••••••	14	MEDIUM DENSE	STIFF
-	16	54.7	•••••••••••••••••••	15	MEDIUM DENSE	STIFF
-	19	65.0	••••••••••••••••••••••	18	MEDIUM DENSE	VERY STIFF
- 9 ft	21	71.8	•••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
-	20	68.4	••••••••••••••••••••••	19	MEDIUM DENSE	VERY STIFF
-	21	71.8	•••••••••••••••••••••••	20	MEDIUM DENSE	VERY STIFF
- 3 m 10 ft	23	78.7	••••••••••••••••••••••••	22	MEDIUM DENSE	VERY STIFF
-	28	85.7	••••••••••••••••••••••••••	24	MEDIUM DENSE	VERY STIFF
-	28	85.7	••••••••••••••••••••••••••	24	MEDIUM DENSE	VERY STIFF
-						
- 11 ft						
-						
-						
- 12 ft						
-						
-						
- 4 m 13 ft						

KSM Engineering & Testing
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Sebastian, FL 32978
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Fax: (772)-589-6469

BORING NUMBER B-09

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.42 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Root ▽						
		Dark Brown Sand, Slightly Silty						
5								

Bottom of borehole at 6.0 feet.

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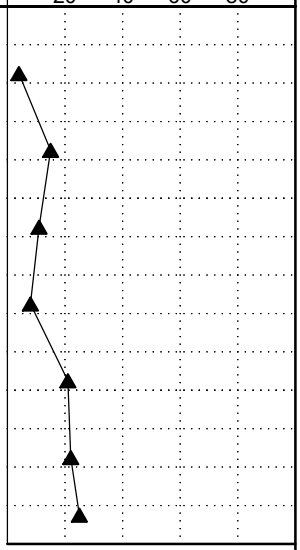
BORING NUMBER B-10

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 1.58 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Root					
		▽	SS		1-1-3 (4)		
		Dark Brown Sand, Slightly Silty	SS		4-7-8 (15)		
5			SS		6-6-5 (11)		
		Brown Sand	SS		3-4-4 (8)		
10			SS		6-10-11 (21)		
			SS		8-11-11 (22)		
			SS		11-12-13 (25)		

Bottom of borehole at 14.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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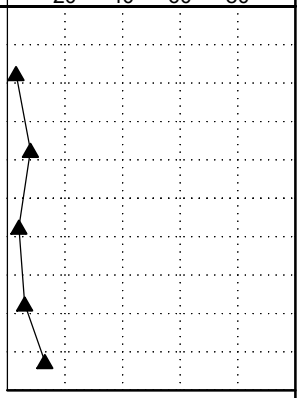
BORING NUMBER B-11

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 2.08 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Root					
		Light Brown Sand	SS		1-1-2 (3)		
			SS		3-4-4 (8)		
5		Dark Brown Sand, Slightly Silty	SS		3-2-2 (4)		
			SS		2-3-3 (6)		
		Brown Sand	SS		4-6-7 (13)		
10							

Bottom of borehole at 10.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



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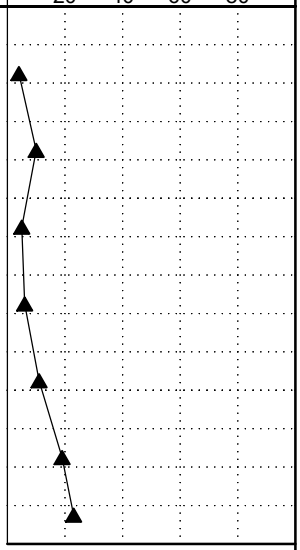
BORING NUMBER B-12

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 8/18/21 **COMPLETED** 8/18/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 2.17 ft
LOGGED BY SF/HM **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Root					
		Light Brown Sand	SS		1-1-3 (4)		
			SS		3-6-4 (10)		
5		Dark Brown Sand, Slightly Silty	SS		2-2-3 (5)		
			SS		2-3-3 (6)		
		Brown Sand	SS		3-5-6 (11)		
10			SS		8-9-10 (19)		
			SS		11-11-12 (23)		

Bottom of borehole at 14.0 feet.



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BORING NUMBER HA-01

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.83 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Roots				31		
		Dark Gray Sand, Slightly Silty				48		
						43		
		Brown Sand				36		
						38		
5		Light Brown Sand				38		

Bottom of borehole at 6.0 feet.

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BORING NUMBER HA-02

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.42 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Roots				36		
		▽ Dark Gray Sand, Slightly Silty				54		
						53		
						44		
		Brown Sand				40		
5						41		

Bottom of borehole at 6.0 feet.

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BORING NUMBER HA-03

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.67 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Roots ▽				37		
						66		
						60		
		Dark Gray Sand, Slightly Silty				56		
						47		
5		Brown Sand				46		

Bottom of borehole at 6.0 feet.

GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:45 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ

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BORING NUMBER HA-04

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 2.25 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Roots				33		
		▽ Dark Brown Sand, Slightly Silty				50		
						63		
						48		
		Brown Sand				46		
5						46		

Bottom of borehole at 6.0 feet.

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BORING NUMBER HA-05

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.67 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Roots				38	
		▽ Light Gray Sand				43	
						56	
						47	
		Dark Brown Sand, Slightly Silty				44	
5							
		Brown Sand				42	

Bottom of borehole at 6.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

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BORING NUMBER HA-06

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD _____
▽ **AT TIME OF DRILLING** 1.50 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80
0		Gray Sand with Traces of Roots				40		
		▽ Light Gray Sand				40		
						50		
						40		
						39		
5		Dark Brown Sand, Slightly Silty				42		
		Brown Sand						

Bottom of borehole at 6.0 feet.

GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:45 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ

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P.O. Box 78-1377
Sebastian, FL 32978
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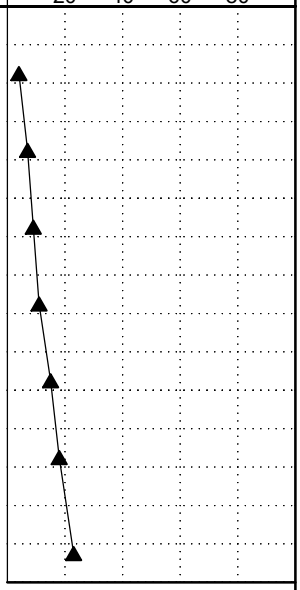
BORING NUMBER PB-01

CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 3.08 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Roots					
		Light Gray Sand	SS		1-2-2 (4)		
		▽ Dark Brown Sand, Slightly Silty	SS		3-3-4 (7)		
5		Brown Sand	SS		3-4-5 (9)		
			SS		4-5-6 (11)		
10			SS		5-7-8 (15)		
			SS		8-9-9 (18)		
15			SS		8-11-12 (23)		

Bottom of borehole at 15.0 feet.

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:45 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ

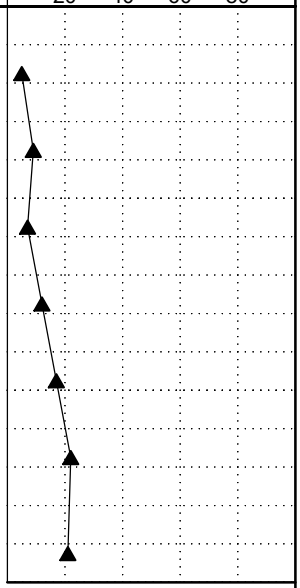
KSM Engineering & Testing
P.O. Box 78-1377
Sebastian, FL 32978
Tel: (772)-589-0712
Fax: (772)-589-6469

BORING NUMBER PB-02

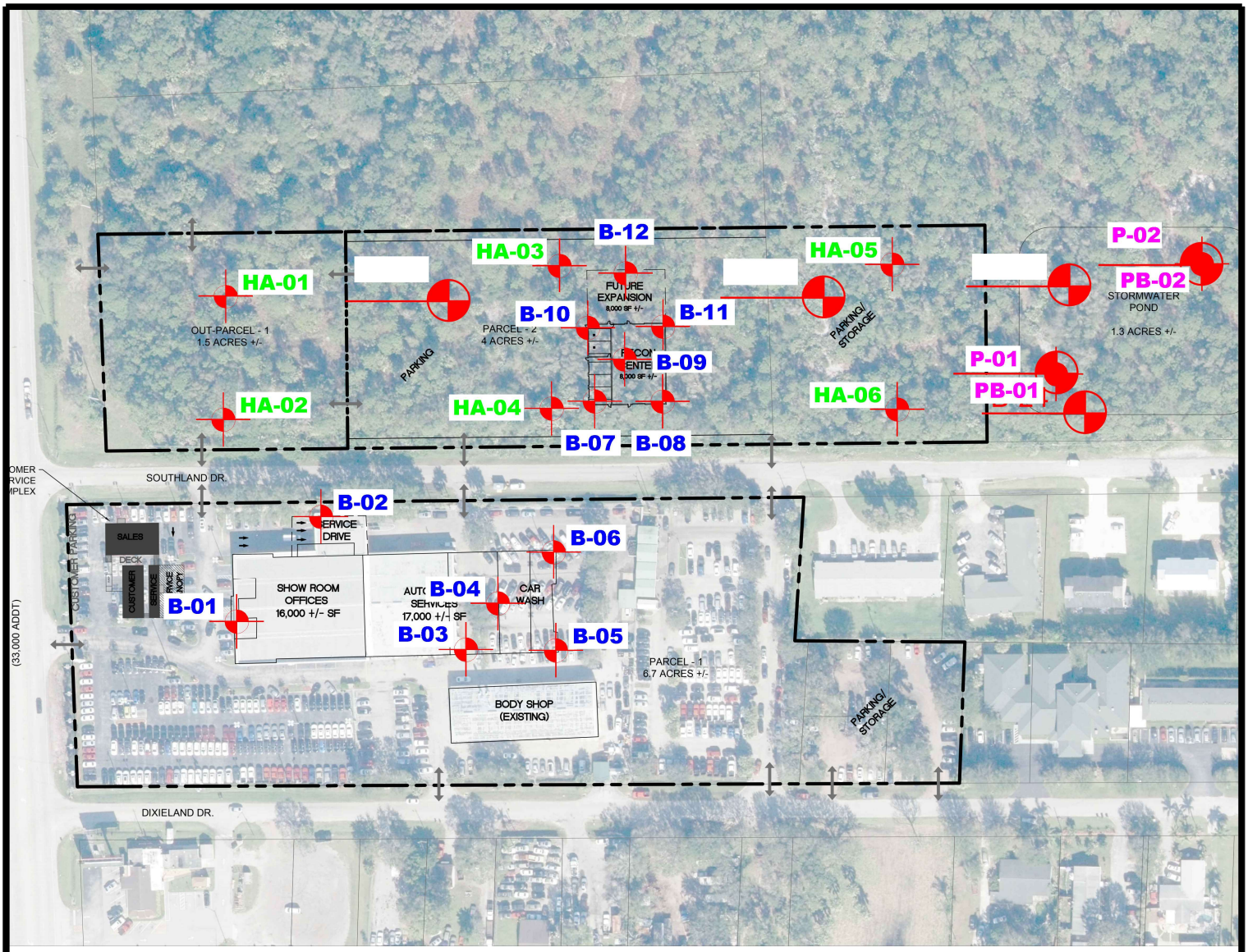
CLIENT Bev Smith Toyota
PROJECT NAME 3350 US Highway 1
PROJECT NUMBER 215585-b&p
PROJECT LOCATION Fort Pierce, Florida
DATE STARTED 7/23/21 **COMPLETED** 7/23/21
GROUND ELEVATION _____ **HOLE SIZE** inches
DRILLING CONTRACTOR _____
GROUND WATER LEVELS:
DRILLING METHOD Split Spoon Sample
▽ **AT TIME OF DRILLING** 3.17 ft
LOGGED BY DP **CHECKED BY** CCC
AT END OF DRILLING ---
NOTES See Attached Location Plan
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		Gray Sand with Traces of Roots					
		Light Gray Sand	SS		2-2-3 (5)		
		▽ Dark Brown Sand, Slightly Silty					
		Brown Sand	SS		4-4-5 (9)		
5			SS		3-4-3 (7)		
			SS		4-5-7 (12)		
10			SS		6-9-8 (17)		
			SS		7-10-12 (22)		
15			SS		10-10-11 (21)		

Bottom of borehole at 15.0 feet.



GEOTECH BH PLOTS - GINT STD US LAB.GDT - 8/26/21 08:45 - K:\KSM FILES\21 DOCS (KSM-SERVER)\215585\SOIL INVESTIGATION\215585-B&P.GPJ



CONCEPTUAL SITE PLAN

SCALE: 1" = 80'

N

GRAPHIC SCALE

0 80 160

(IN FEET)

1 inch = 80 ft.

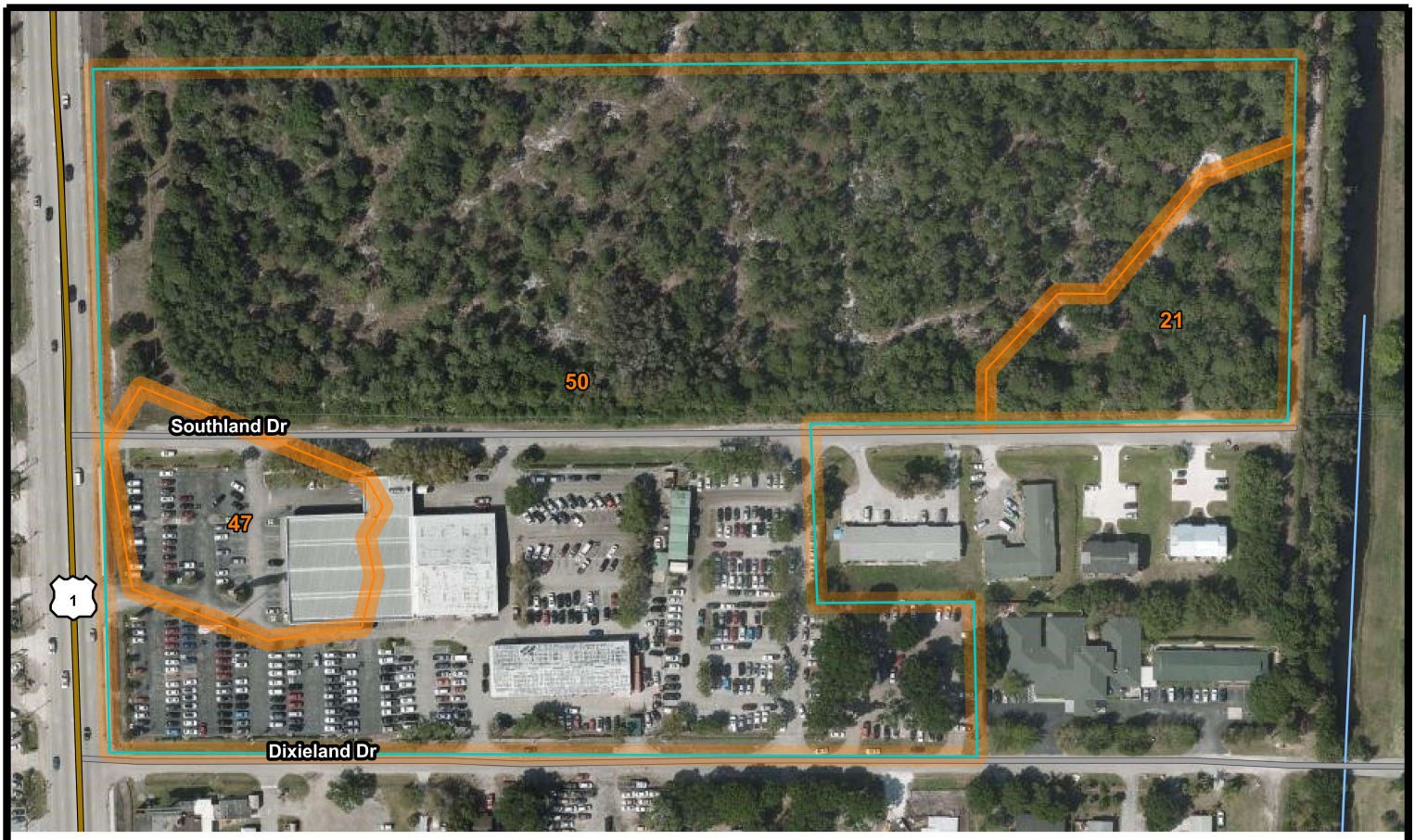
LOCATION OF SOIL TESTING

PROJECT: Bev Smith Toyota, 3350 US Highway 1, Fort Pierce, Florida

SHEET 1 OF 2
PERMIT #:
PROJECT #: 215585-b&p

KSM ENGINEERING AND TESTING

DRAWN BY: C.V.
DESIGNED BY: C.C.C.
DATE: 20210826
SCALE: NONE



USDA SOILS SURVEY

21—Lawnwood and Myakka sands
47—Urban land, 0 to 2 percent slopes
50—Waveland and Immokalee fine sands

PROJECT: Bev Smith Toyota, 3350 US Highway 1, Fort Pierce, Florida

SHEET 2 OF 2
PERMIT #:
PROJECT #: 215585-soils

KSM ENGINEERING AND TESTING

DRAWN BY: C.V.
DESIGNED BY: C.C.C.
DATE: 20210826
SCALE: NONE

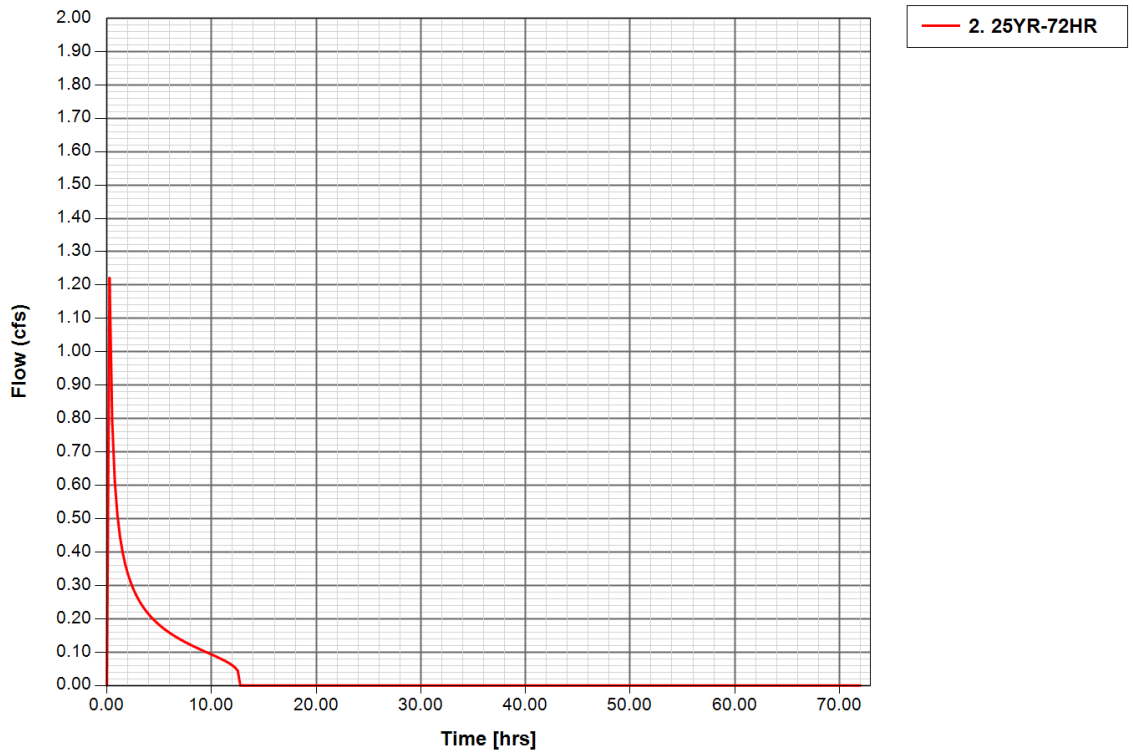
Appendix C
Dry Retention Recovery Analysis

Percolation Link: PERC

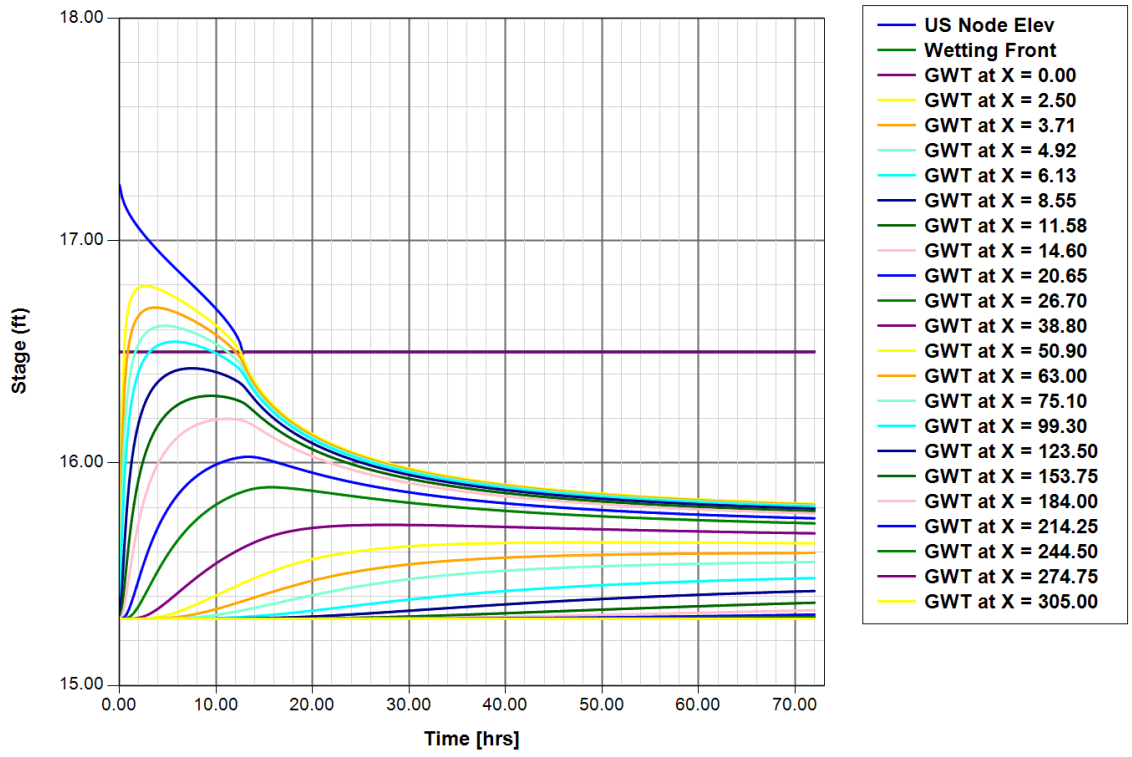
Scenario:	RECOVERY	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	POST-DEV STAGE STORAGE		
To Node:	GROUNDWATER	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	910.00 ft
Flow Direction:	Both	Perimeter 2:	1225.00 ft
Aquifer Base Elevation:	0.00 ft	Perimeter 3:	2795.00 ft
Water Table Elevation:	15.30 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	250.00 ft
Horizontal Conductivity:	17.450 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	8.500 fpd	# of Cells P2 to P3:	25
Fillable Porosity:	0.300		
Layer Thickness:	0.00 ft		

Comment:

Link Flow: PERC [RECOVERY]



Perc Link: PERC (Sim: 2. 25YR-72HR) [PERC]



Appendix D

Nutirent Reduction Analysis (BMP Trains 2020)

Complete Report (not including cost) Ver 4.3.5

Project: BEV SMITH TOYOTA-NORTH
Date: 3/30/2022 8:45:43 AM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	BASIN AREA
Rainfall Zone	Florida Zone 5
Annual Mean Rainfall	56.00

Pre-Condition Landuse Information

Landuse	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346
Area (acres)	7.09
Rational Coefficient (0-1)	0.11
Non DCIA Curve Number	74.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.042
Phosphorus EMC (mg/l)	0.346
Runoff Volume (ac-ft/yr)	3.792
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	4.872
Phosphorus Loading (kg/yr)	1.618

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188
Area (acres)	7.09
Rational Coefficient (0-1)	0.43
Non DCIA Curve Number	74.00
DCIA Percent (0-100)	45.10

Wet Pond Area (ac)	0.82
Nitrogen EMC (mg/l)	1.130
Phosphorus EMC (mg/l)	0.188
Runoff Volume (ac-ft/yr)	12.514
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	17.436
Phosphorus Loading (kg/yr)	2.901

Catchment Number: 1 Name: BASIN AREA

Project: BEV SMITH TOYOTA-NORTH
Date: 3/30/2022

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	0.488
Retention Volume (ac-ft)	0.255

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	4.420
Permanent Pool Volume (ac-ft) for 31 days residence	1.063
Annual Residence Time (days)	129
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: Stormwater Harvesting

Total Contributing Area to Harvesting (ac)	6.270
Total Area Available for Irrigation (ac)	2.050

Available Harvest Volume (ac-ft)	1.300
Harvest Rate (0.1-4.0 in/week)	0.250

BMP in Series Number: 4
BMP Type: None

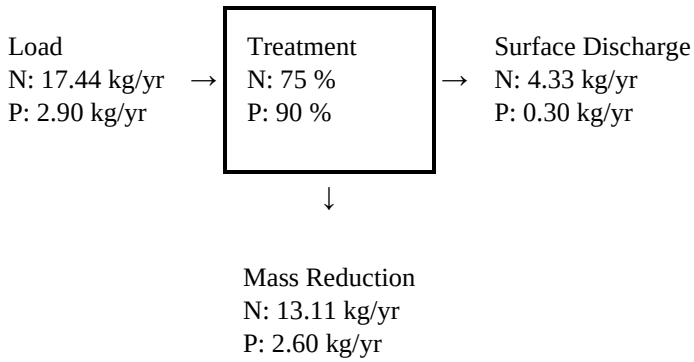
Watershed Characteristics

Catchment Area (acres)	7.09
Contributing Area (acres)	6.270
Non-DCIA Curve Number	74.00
DCIA Percent	45.10
Rainfall Zone	Florida Zone 5
Rainfall (in)	56.00

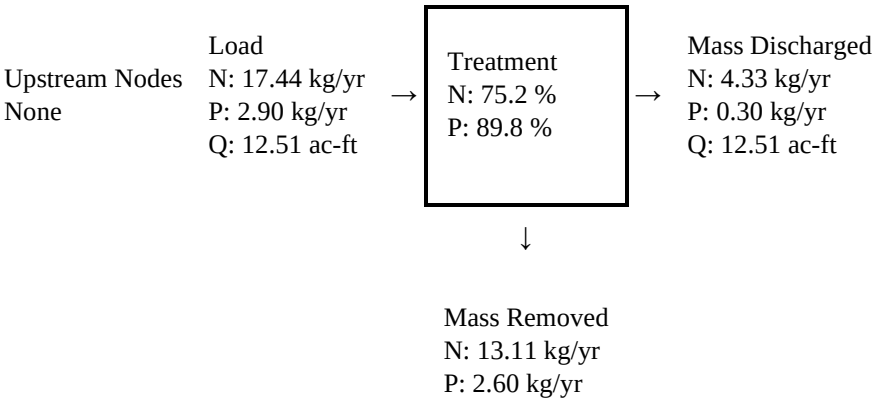
Surface Water Discharge

Required TN Treatment Efficiency (%)	72
Provided TN Treatment Efficiency (%)	75
Required TP Treatment Efficiency (%)	44
Provided TP Treatment Efficiency (%)	90

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Summary Treatment Report Version: 4.3.5

Project: BEV SMITH TOYOTA-NORTH

Date:3/30/2022

Analysis Type: Net Improvement
BMP Types:
Catchment 1 - (BASIN AREA) Multiple BMP
Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report
Nitrogen

Surface Water Discharge

Total N pre load	4.87 kg/yr	
Total N post load	17.44 kg/yr	
Target N load reduction	72 %	
Target N discharge load	4.87 kg/yr	
Percent N load reduction	75 %	
Provided N discharge load	4.33 kg/yr	9.54 lb/yr
Provided N load removed	13.11 kg/yr	28.9 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	1.618 kg/yr	
Total P post load	2.901 kg/yr	
Target P load reduction	44 %	
Target P discharge load	1.618 kg/yr	
Percent P load reduction	90 %	
Provided P discharge load	.297 kg/yr	.65 lb/yr
Provided P load removed	2.604 kg/yr	5.742 lb/yr

Appendix E

Other Miscellaneous Backup

(Mannings Table, Curve Number Sheet, Pre-Tc / Basin Exhibit)

Sheet flow

Sheet flow is flow over plane surfaces. It usually occurs in the headwater of streams. With sheet flow, the friction value (Manning's n) is an effective roughness coefficient that includes the effect of raindrop impact; drag over the plane surface; obstacles such as litter, crop ridges, and rocks; and erosion and transportation of sediment. These n values are for very shallow flow depths of about 0.1 foot or so. Table 3-1 gives Manning's n values for sheet flow for various surface conditions.

Table 3-1 Roughness coefficients (Manning's n) for sheet flow

Surface description	n [1/]
Smooth surfaces (concrete, asphalt, gravel, or bare soil)	0.011
Fallow (no residue)	0.05
Cultivated soils:	
Residue cover ≤20%	0.06
Residue cover >20%	0.17
Grass:	
Short grass prairie	0.15
Dense grasses [2/]	0.24
Bermudagrass .	0.41
Range (natural)	0.13
Woods:[3/]	
Light underbrush	0.40
Dense underbrush	0.80

1 The n values are a composite of information compiled by Engman (1986).

2 Includes species such as weeping lovegrass, bluegrass, buffalo grass, blue grama grass, and native grass mixtures.

3 When selecting n , consider cover to a height of about 0.1 ft. This is the only part of the plant cover that will obstruct sheet flow.

For sheet flow of less than 300 feet, use Manning's kinematic solution (Overtop and Meadows 1976) to compute T_t:

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} s^{0.4}} \qquad \text{[eq. 3-3]}$$

where:

T_t = travel time (hr),
n = Manning's roughness coefficient (table 3-1)
L = flow length (ft)
P_2 = 2-year, 24-hour rainfall (in)
s = slope of hydraulic grade line (land slope, ft/ft)

This simplified form of the Manning's kinematic solution is based on the following: (1) shallow steady uniform flow, (2) constant intensity of rainfall excess (that part of a rain available for runoff), (3) rainfall duration of 24 hours, and (4) minor effect of infiltration on travel time. Rainfall depth can be obtained from appendix B.

Shallow concentrated flow

After a maximum of 300 feet, sheet flow usually becomes shallow concentrated flow. The average velocity for this flow can be determined from figure 3-1, in which average velocity is a function of watercourse slope and type of channel. For slopes less than 0.005 ft/ft, use equations given in appendix F for figure 3-1. Tillage can affect the direction of shallow concentrated flow. Flow may not always be directly down the watershed slope if tillage runs across the slope.

After determining average velocity in figure 3-1, use equation 3-1 to estimate travel time for the shallow concentrated flow segment.

Open channels

Open channels are assumed to begin where surveyed cross section information has been obtained, where channels are visible on aerial photographs, or where blue lines (indicating streams) appear on United States Geological Survey (USGS) quadrangle sheets. Manning's equation or water surface profile information can be used to estimate average flow velocity. Average flow velocity is usually determined for bankfull elevation.

Table 2-2a Runoff curve numbers for urban areas [1/]

Cover description: Cover type and hydrologic condition	Average percent impervious area [2/]	Curve numbers for hydrologic soil group: A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) [3/]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)	POST-DEV	39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) [4/]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation) [5/]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

[1] Average runoff condition, and $I_a = 0.2S$.

[2] The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

[3] CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

[4] Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

[5] Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2b Runoff curve numbers for cultivated agricultural lands [1/]

Cover description			Curve numbers for hydrologic soil group			
Cover type	Treatment [2/]	Hydrologic condition [3/]	A	B	C	D
Fallow	Bare soil	—	77	86	91	94
	Crop residue cover (CR)	Poor	76	85	90	93
		Good	74	83	88	90
Row crops	Straight row (SR)	Poor	72	81	88	91
		Good	67	78	85	89
	SR + CR	Poor	71	80	87	90
		Good	64	75	82	85
	Contoured (C)	Poor	70	79	84	88
		Good	65	75	82	86
	C + CR	Poor	69	78	83	87
		Good	64	74	81	85
	Contoured & terraced (C&T)	Poor	66	74	80	82
		Good	62	71	78	81
	C&T+ CR	Poor	65	73	79	81
		Good	61	70	77	80
Small grain	SR	Poor	65	76	84	88
		Good	63	75	83	87
	SR + CR	Poor	64	75	83	86
		Good	60	72	80	84
	C	Poor	63	74	82	85
		Good	61	73	81	84
	C + CR	Poor	62	73	81	84
		Good	60	72	80	83
	C&T	Poor	61	72	79	82
		Good	59	70	78	81
	C&T+ CR	Poor	60	71	78	81
		Good	58	69	77	80
Close-seeded or broadcast legumes or rotation meadow	SR	Poor	66	77	85	89
		Good	58	72	81	85
	C	Poor	64	75	83	85
		Good	55	69	78	83
	C&T	Poor	63	73	80	83
		Good	51	67	76	80

[1] Average runoff condition, and I_a=0.2S

[2] Crop residue cover applies only if residue is on at least 5% of the surface throughout the year.

[3] Hydraulic condition is based on combination factors that affect infiltration and runoff, including (a) density and canopy of vegetative areas, (b) amount of year-round cover, (c) amount of grass or close-seeded legumes, (d) percent of residue cover on the land surface (good ≥ 20%), and (e) degree of surface roughness.

Poor: Factors impair infiltration and tend to increase runoff.

Good: Factors encourage average and better than average infiltration and tend to decrease runoff.

Table 2-2c Runoff curve numbers for other agricultural lands [1/]

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. [2/]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. [3/]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 [4/]	48	65	73
Woods—grass combination (orchard or tree farm). [5/]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. [6/]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 [4/]	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

1 Average runoff condition, and $I_a = 0.2S$.

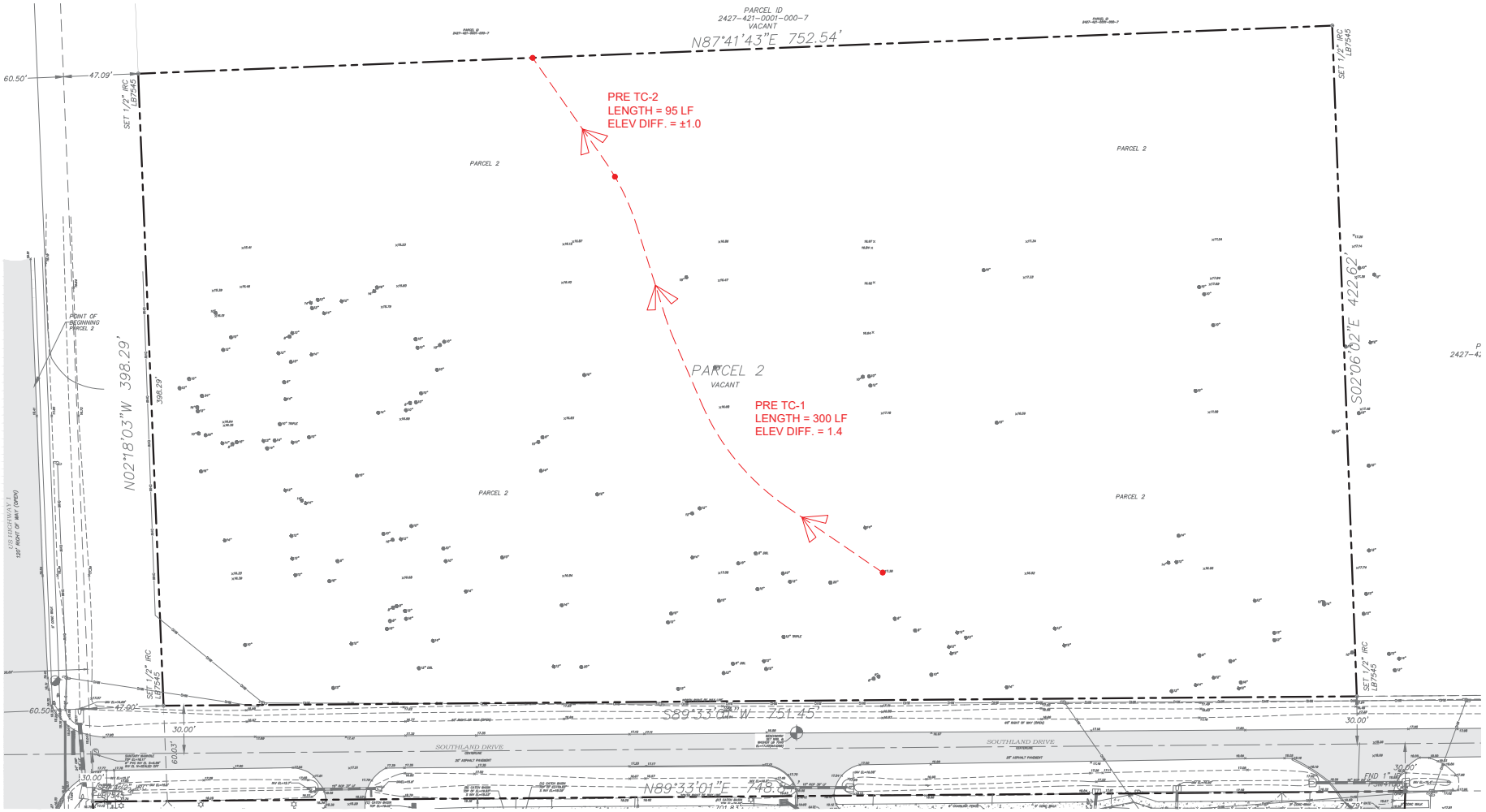
2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: > 75% ground cover and lightly or only occasionally grazed.

3 *Poor*: <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

4 Actual curve number is less than 30; use CN = 30 for runoff computations.

5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.



PRE-TC PATH EXHIBIT

SCALE: NTS

N

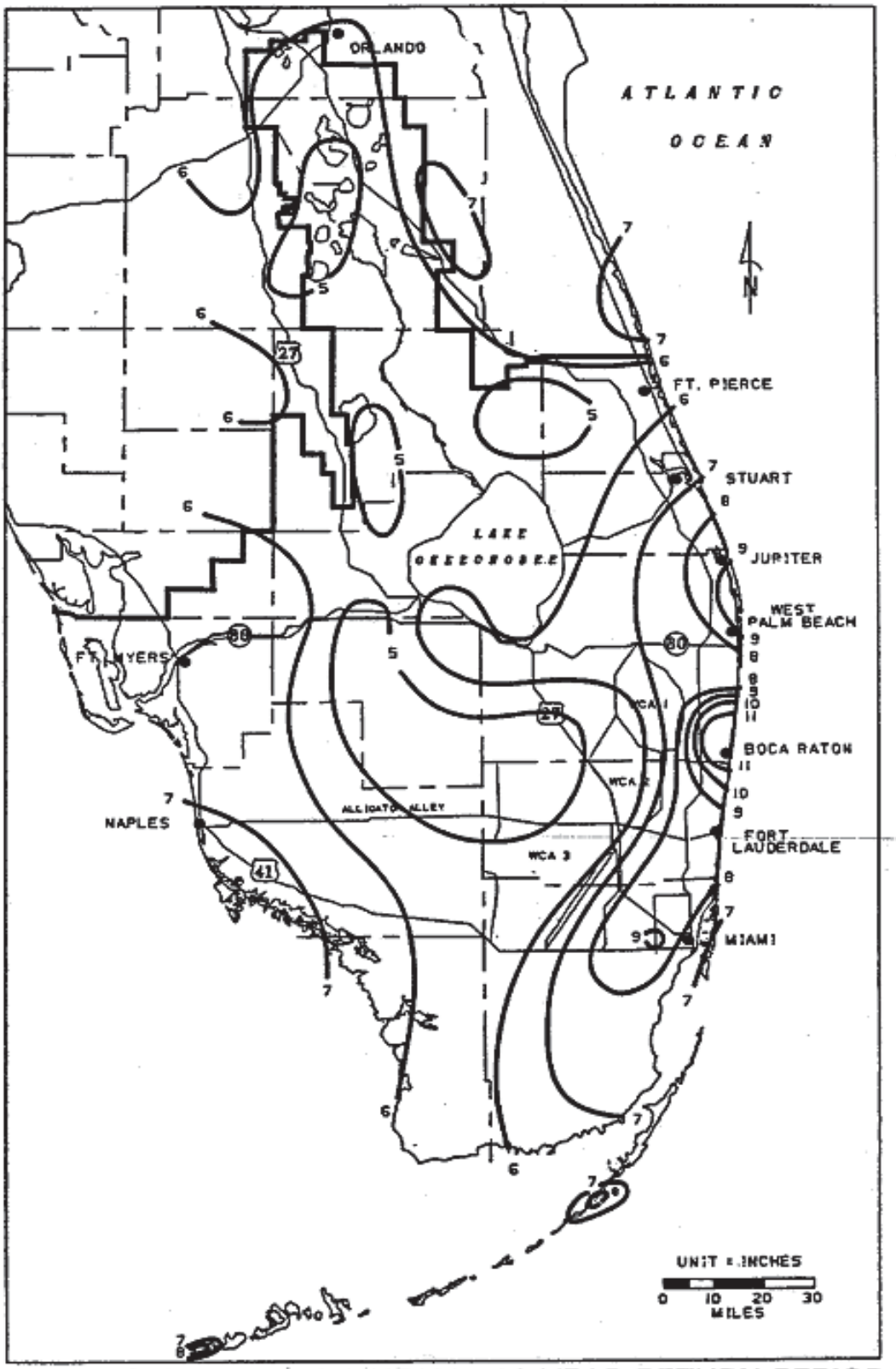


FIGURE C-4. 1-DAY RAINFALL: 10-YEAR RETURN PERIOD

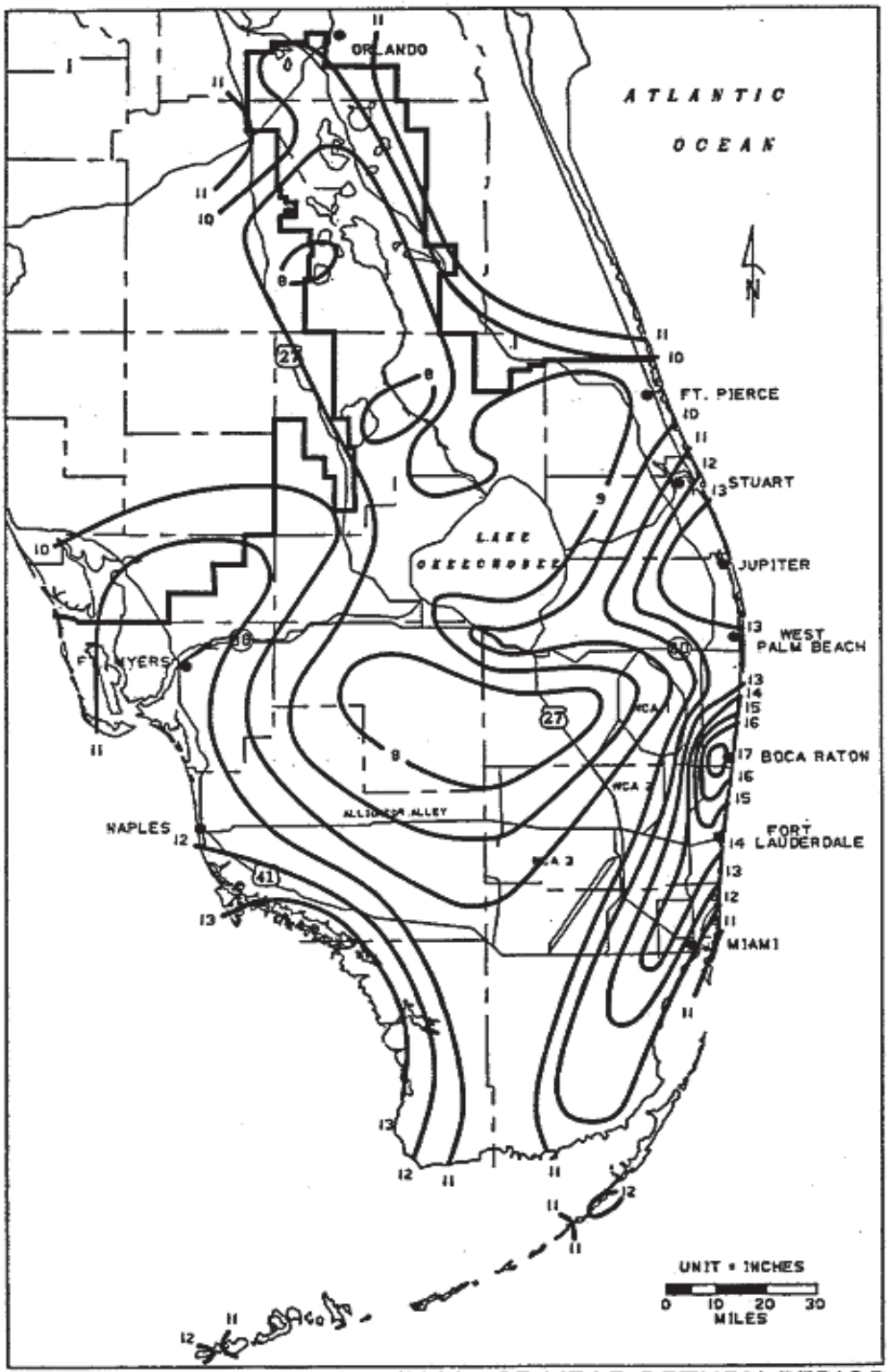


FIGURE C-8. 3-DAY RAINFALL: 25-YEAR RETURN PERIOD

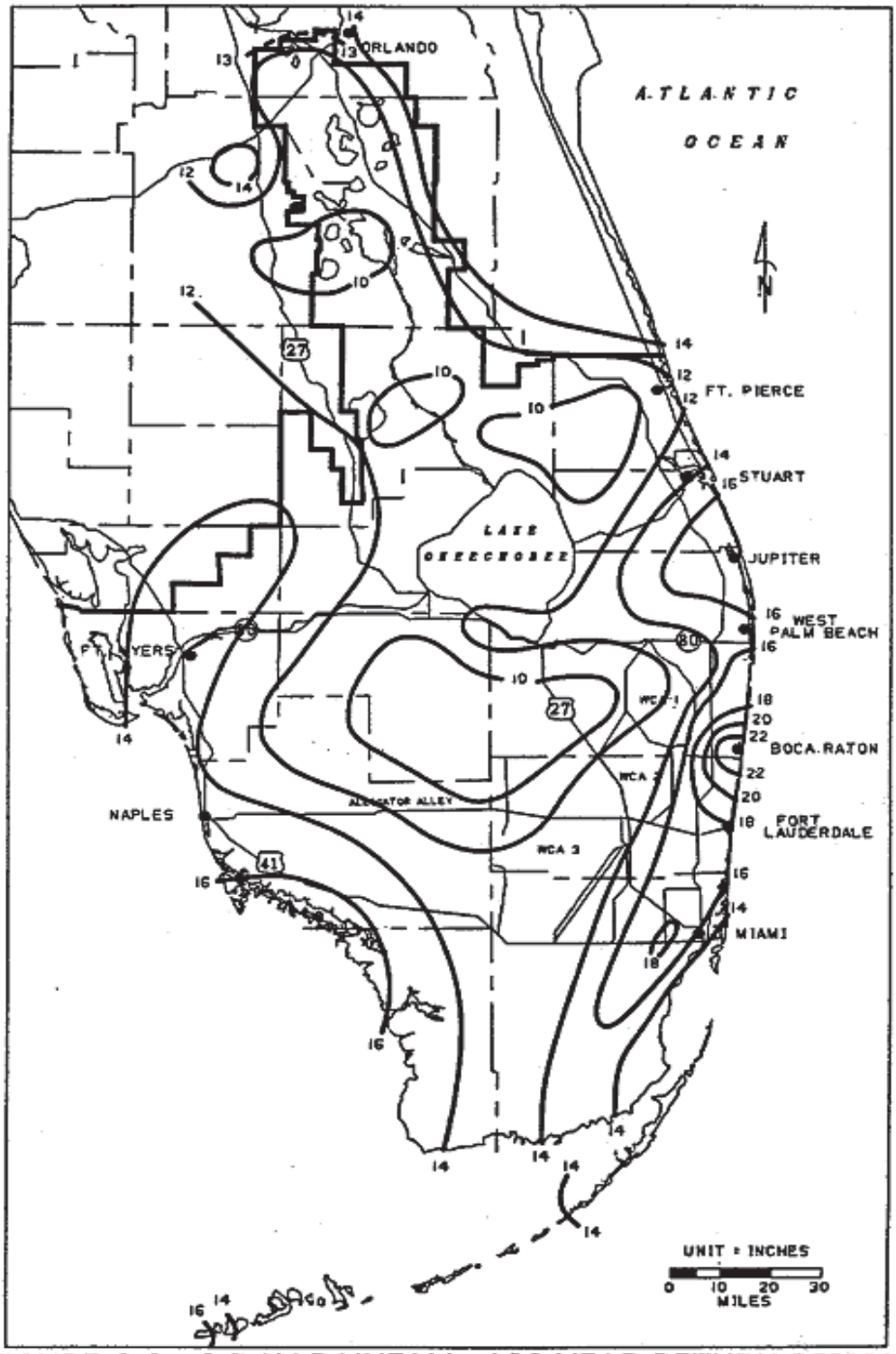
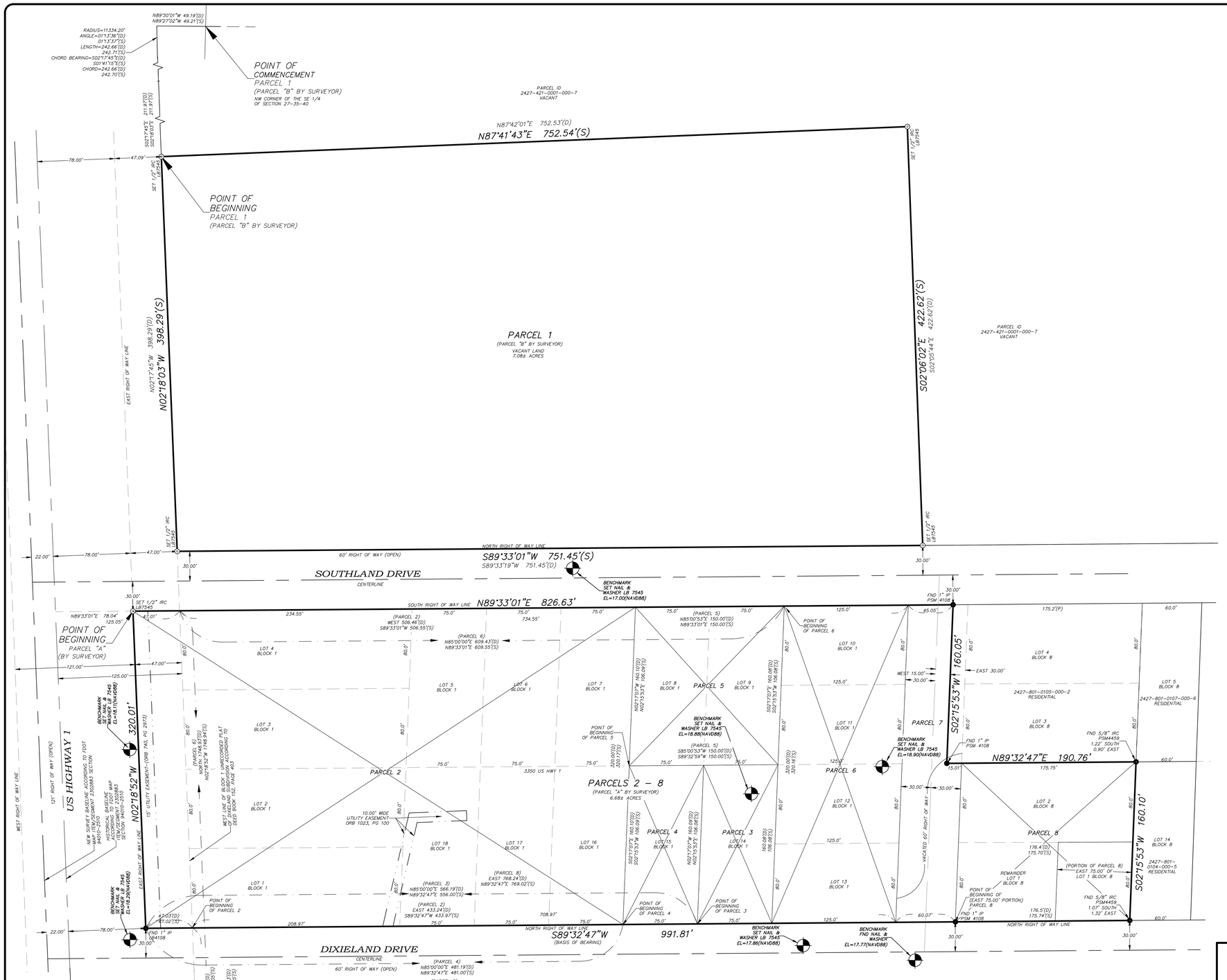


FIGURE C-9. 3-DAY RAINFALL: 100-YEAR RETURN PERIOD



LEGEND

BFP = BACKFLOW PREVENTER	OHW = OVERHEAD WIRES
BOC = BACK OF CURB	O.R.B. = OFFICIAL RECORD BOOK
BWF = BARBED WIRE FENCE	(P) = PLAT
CLF = CHAIN LINK FENCE	P.B. = PLAT BOOK
CM = CONCRETE MONUMENT	PG. = PAGE
CMP = CORRUGATED METAL PIPE	PSM = PROFESSIONAL SURVEYOR AND MAPPER
CONC. = CONCRETE	PVC = POLY VINYL CHLORIDE
COVD. = COVERED	RCP = REINFORCED CONCRETE PIPE
(D) = DESCRIPTION	(S) = SURVEYED
ECMP = ELLIPTICAL CORRUGATED METAL PIPE	TOB = TOP OF BANK
EDR = EDGE OF DIRT DRIVE	TOS = TOE OF SLOPE
EL. = ELEVATION	TRANS = TRANSFORMER
EM = ELECTRIC METER	UG = UNDERGROUND
FFE = FINISHED FLOOR ELEVATION	WDF = WOODEN FENCE
FM = FORCE MAIN	WL = WATER LINE
FND. = FOUND	WM = WATER METER
GV = GATE VALVE	= FIRE HYDRANT
HW = HEADWALL	= GUY ANCHOR
ID = IDENTIFICATION	= UTILITY POLE
IP = IRON PIPE	= WATER GATE VALVE
IR = IRON ROD	= WELL
IRC = IRON ROD WITH CAP	= CAMERA
LB = LICENSED BUSINESS	= LIGHT POLE
LS = LICENSED SURVEYOR	= CLEAN OUT
	= SIGN
	= PALM (73)
	= PINE (132)
	= OAK (61)

(SEE SHEET 2 OF 8 FOR LEGAL DESCRIPTIONS)

SURVEYOR'S NOTES:

1. THIS SURVEY DOES NOT DETERMINE OR INDICATE LAND OWNERSHIP.
2. THE SURVEYOR DID NOT RESEARCH OR ABSTRACT THE LAND RECORDS FOR RIGHTS-OF-WAY, EASEMENTS, RESERVATIONS, DEED RESTRICTIONS, ZONING REGULATIONS, SETBACKS, LAND USE PLAN DESIGNATIONS, LIENS, MURPHY ACT RIGHTS-OF-WAY, AREAS OF LOCAL CONCERN, OR OTHER SIMILAR JURISDICTIONAL DETERMINATIONS. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF INFORMATION PROVIDED BY THE CLIENT OR INFORMATION OTHERWISE KNOWN TO THE SURVEYOR AND MAY NOT BE COMPLETE.
3. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF A TITLE COMMITMENT PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT FILE NO. 1062-5729924, DATED 12/22/2021
4. UNDERGROUND UTILITIES, BUILDING FOUNDATIONS, AND OTHER UNDERGROUND FIXED IMPROVEMENTS WERE NOT LOCATED, UNLESS OTHERWISE INDICATED. TO THE EXTENT THAT THIS TYPE OF INFORMATION IS SHOWN, IT IS SHOWN SOLELY ON THE BASIS OF SURFACE INDICATIONS OBSERVED BY THE SURVEYOR AND MAY NOT BE COMPLETE.
5. JURISDICTIONAL WETLANDS AND ENDANGERED OR THREATENED SPECIES HABITAT, IF ANY, THAT MAY EXIST ON OR AROUND THE SURVEY SITE WERE NOT DETERMINED OR LOCATED.
6. THE SURVEY DATE IS THE FIELD DATE SHOWN IN THE TITLE BLOCK, NOT THE SIGNATURE DATE.
7. BEARINGS BASED ON THE ASSUMPTION THAT THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE BEARS S89°32'47"W.
8. ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 REFERENCING NGS BENCHMARK B401 (PID AF7508) AT AN ELEVATION OF 16.17 FEET(NAVD88)
9. FLOOD ZONE X, FLOOD INSURANCE RATE MAP NUMBER 12061C0189K, DATED FEBRUARY 19, 2020.

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING
CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 25' 50'
1" = 50'

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

CERTIFIED TO:
N.S.S. ACQUISITION CORP.
TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK 79	DRAWN TB RJS	SHEET 1	OF 8
PAGE(S) 52	SCALE 1"=50'		
FIELD DATE 11/08/21	JOB # 20-615		

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND THE SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

STEVEN CARTECHINE LICENSE No. 4895 STATE OF FLORIDA

02/08/2022
DATE

STEVE CARTECHINE, LS4895
FLORIDA REGISTERED LAND SURVEYOR

C:\Users\USER\Dropbox\Indian River Survey\Jobs_SAVE\20-615\20-615.dwg Mon, Feb 07, 2022 - 4:26pm

LEGAL DESCRIPTION:
(FIRST AMERICAN TITLE INSURANCE COMPANY-TITLE COMMITMENT FILE NO. 1062-5729924, DATED 12/22/2021)

PARCEL 1:
A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4; THENCE NORTH 89°30'01" WEST, ALONG THE NORTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, A DISTANCE OF 49.19 FEET TO AN INTERSECTION WITH A NON TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 11,334.20 FEET, THE CHORD BEARS SOUTH 02°17'45" EAST, 242.65 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 242.66 FEET THROUGH A CENTRAL ANGLE OF 01°13'36"; THENCE SOUTH 02°17'45" EAST, A DISTANCE OF 211.97 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE NORTH 87°42'01" EAST, A DISTANCE OF 752.53 FEET; THENCE SOUTH 02°05'44" EAST, A DISTANCE OF 422.62 FEET TO THE NORTH RIGHT-OF-WAY OF SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT-OF-WAY); THENCE SOUTH 89°33'19" WEST, ALONG THE NORTH RIGHT-OF-WAY OF SOUTHLAND DRIVE, A DISTANCE OF 751.45 FEET TO THE EAST RIGHT-OF-WAY OF U.S. HIGHWAY NO. 1; THENCE NORTH 02°17'45" WEST, ALONG THE EAST RIGHT-OF-WAY OF U.S. HIGHWAY NO. 1, A DISTANCE OF 398.29 FEET TO THE POINT OF BEGINNING.

PARCEL 2:
LOTS 1 THRU 7 AND 16 THRU 18 OF BLOCK 1 OF AN UNRECORDED PLAT OF SUBDIVISION IN THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST AS SAME APPEARS IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA IN DEED BOOK 152, PAGE 403, ALSO 47.00 FEET AS MEASURED AT RIGHT ANGLES ADJACENT TO THE WEST END OF LOTS 1 THRU 4 MORE PARTICULARLY
DESCRIBED AS FOLLOWS:
COMMENCE AT THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN EAST ON THE SOUTH LINE OF SAID SECTION 125.12 FEET; THENCE RUN NORTH PARALLEL WITH THE CENTERLINE OF SOUTH BOUND LANE OF U.S. HIGHWAY NO. 1, 1428.93 FEET TO THE POINT OF BEGINNING OF THE PARCEL TO BE DESCRIBED. THENCE RUN EAST ALONG THE NORTH LINE OF A 60.00 FOOT RIGHT-OF-WAY FOR DIXIELAND DRIVE 433.24 FEET; THENCE RUN NORTH ALONG THE EAST LINE OF LOTS 16 AND 7 OF BLOCK 1 OF DIXIELAND SUBDIVISION 320.00 FEET TO THE SOUTH LINE OF A 60.00 FOOT RIGHT-OF-WAY FOR SOUTHLAND DRIVE; THENCE RUN WEST ALONG SAID RIGHT-OF-WAY 506.46 FEET TO A POINT THAT IS 78.00 FEET OF THE CENTERLINE OF SOUTH BOUND LANE OF U.S. HIGHWAY NO. 1 AS MEASURED AT RIGHT ANGLES; THENCE RUN SOUTH PARALLEL WITH THE SAID CENTERLINE OF U.S. HIGHWAY NO. 1, 320.00 FEET TO THE NORTH LINE OF DIXIELAND DRIVE; THENCE RUN EAST 47.03 FEET TO THE POINT OF BEGINNING.

PARCEL 3:
LOT 14, BLOCK 1, OF THE DIXIELAND SUBDIVISION, LOCATED IN SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA; SAID SUBDIVISION BEING RECORDED AS A PART OF DEED RECORDED IN DEED BOOK 152, PAGE 403, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. SAID LOT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
FOR A POINT OF COMMENCEMENT START AT THE POINT OF INTERSECTION OF THE NORTHERLY RIGHT OF WAY LINE OF DIXIELAND DRIVE (60' R/W) WITH THE EXISTING EASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1, THENCE RUN NORTH 85°00'00" EAST ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID DIXIELAND DRIVE A DISTANCE OF 556.19 FEET TO THE POINT OF INTERSECTION WITH THE EASTERLY LINE OF LOT 15, BLOCK 1, OF THE HEREINBEFORE DESCRIBED "DIXIELAND SUBDIVISION", SAID POINT OF INTERSECTION ALSO BEING THE POINT AND PLACE OF BEGINNING OF THE HEREINAFTER DESCRIBED PARCEL OF LAND, THENCE CONTINUE NORTH 85°00'00" EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 75.00 FEET TO A POINT, (SAID POINT BEING THE SOUTHEAST CORNER OF SAID LOT 14) THENCE DEPARTING SAID RIGHT OF WAY LINE RUN NORTH 02°12'07" WEST ALONG THE EAST LINE OF SAID LOT 14, A DISTANCE OF 160.08 FEET TO A POINT, (SAID POINT BEING THE NORTHEAST CORNER OF SAID LOT 14) THENCE RUN SOUTH 85°00'27" WEST ALONG THE NORTH LINE OF SAID LOT 14, A DISTANCE OF 75.00 FEET TO THE POINT OF INTERSECTION WITH THE EASTERLY LINE OF SAID LOT 15, (SAID POINT OF INTERSECTION ALSO BEING THE NORTHWEST CORNER OF SAID LOT 14) THENCE RUN SOUTH 02°12'07" EAST ALONG SAID EASTERLY LINE A DISTANCE OF 160.09 FEET TO THE POINT AND PLACE OF BEGINNING.

PARCEL 4:
KNOWN AS LOT 15, BLOCK 1, OF THE UNRECORDED PLAT OF "DIXIELAND SUBDIVISION", AS RECORDED IN DEED BOOK 152, AT PAGE 403, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. SAID LOT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
FOR A POINT OF COMMENCEMENT START AT THE POINT OF INTERSECTION OF THE NORTHERLY RIGHT OF WAY LINE OF DIXIELAND DRIVE (60' R/W) WITH THE EXISTING EASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE RUN NORTH 85°00'00" EAST ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID DIXIELAND DRIVE A DISTANCE OF 481.19 FEET TO THE POINT OF INTERSECTION WITH THE EASTERLY LINE OF LOT 16, BLOCK 1 OF THE HEREINBEFORE DESCRIBED "DIXIELAND SUBDIVISION"; SAID POINT OF INTERSECTION ALSO BEING THE POINT AND PLACE OF BEGINNING OF THE HEREINAFTER DESCRIBED PARCEL OF LAND, THENCE CONTINUE NORTH 85°00'00" EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 75.00 FEET TO A POINT; (SAID POINT BEING THE SOUTHEAST CORNER OF SAID LOT 15) THENCE DEPARTING SAID RIGHT OF WAY LINE RUN NORTH 02°12'07" WEST ALONG THE EAST LINE OF SAID LOT 15, A DISTANCE OF 160.09 FEET TO A POINT; (SAID POINT BEING THE NORTHEAST CORNER OF SAID LOT 15), THENCE RUN SOUTH 85°00'27" WEST ALONG THE NORTH LINE OF SAID LOT 15 A DISTANCE OF 75.00 FEET TO THE POINT OF INTERSECTION WITH THE EASTERLY LINE OF SAID LOT 16; (SAID POINT OF INTERSECTION ALSO BEING THE NORTHWEST CORNER OF SAID LOT 15) THENCE RUN SOUTH 02° 12'07" EAST ALONG SAID EASTERLY LINE A DISTANCE OF 160.10 FEET TO THE POINT AND PLACE OF BEGINNING.

PARCEL 5:
KNOWN AS LOTS 8 & 9, BLOCK 1, OF THE UNRECORDED PLAT OF "DIXIELAND SUBDIVISION", AS RECORDED IN DEED BOOK 152, AT PAGE 403, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, SAID LOT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
FOR A POINT OF COMMENCEMENT START AT THE POINT OF INTERSECTION OF THE EASTERLY RIGHT OF WAY LINE OF DIXIELAND DRIVE (60' R/W) WITH THE EXISTING EASTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE RUN NORTH 85°00'00" EAST ALONG THE NORTH RIGHT OF WAY LINE OF SAID DIXIELAND DRIVE A DISTANCE OF 481.19 FEET TO THE POINT OF INTERSECTION WITH THE EASTERLY LINE OF LOT 16, BLOCK 1, OF THE HEREINBEFORE DESCRIBED "DIXIELAND SUBDIVISION", THENCE RUN NORTH 02°12'07" WEST ALONG SAID EASTERLY LOT LINE A DISTANCE OF 160.10 FEET TO THE POINT AND PLACE OF BEGINNING OF THE HEREINAFTER DESCRIBED PARCEL OF LAND; THENCE CONTINUE NORTH 02°12'07" WEST A DISTANCE OF 160.10 FEET TO THE POINT OF INTERSECTION WITH THE SOUTHERLY RIGHT OF WAY LINE OF SOUTHLAND DRIVE (60' R/W); THENCE RUN NORTH 85°00'53" EAST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 150.00 FEET TO THE POINT OF INTERSECTION WITH THE WEST LINE OF LOT 10, BLOCK 1, OF SAID "DIXIELAND SUBDIVISION";
THENCE DEPARTING SAID RIGHT OF WAY LINE RUN SOUTH 02°12'07" EAST A DISTANCE OF 160.08 FEET TO THE POINT OF INTERSECTION WITH THE NORTHEAST CORNER OF LOT 14, BLOCK 1, OF SAID "DIXIELAND SUBDIVISION"; THENCE RUN SOUTH 85°00'00" WEST A DISTANCE OF 150.00 FEET TO THE POINT AND PLACE OF BEGINNING OF THE HEREINBEFORE DESCRIBED PARCEL OF LAND.

PARCEL 6:
LOTS 10, 11 & 12, BLOCK 1, UNRECORDED PLAT OF DIXIELAND SUBDIVISION IN THE SE 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, AS SAME APPEARS IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA IN DEED BOOK 152, PAGE 403, SAID LAND BEING ALSO DESCRIBED AS FOLLOWS:
FROM THE SOUTHWEST CORNER OF THE SE 1/4 OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN EAST ALONG THE SOUTH LINE OF SAID SECTION 125.12 FEET, THENCE RUN NORTHERLY PARALLEL TO THE CENTER-LINE OF ORIGINAL 66 FOOT RIGHT-OF-WAY OF U.S. HIGHWAY 1, A DISTANCE OF 1748.93 FEET; THENCE RUN EAST PARALLEL TO THE SOUTH LINE OF SAID SECTION 27, A DISTANCE OF 609.43 FEET TO THE POINT OF BEGINNING (THE SAME BEING THE NORTHWEST CORNER OF LOT 10, BLOCK 1, OF THE UNRECORDED PLAT OF DIXIELAND SUBDIVISION); THENCE CONTINUE SAID EASTERLY COURSE 125 FEET, THENCE RUN SOUTH 240 FEET, THENCE RUN WEST 125 FEET, THENCE RUN NORTH 240 FEET TO THE POINT OF BEGINNING.

AND

LOT 13, BLOCK 1, UNRECORDED PLAT OF DIXIE LAND SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN D.B. 152, PAGE(S) 403, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

PARCEL 7:
THE WEST 30 FEET OF THE FOLLOWING DESCRIBED PROPERTY:
A PARCEL OF LAND HAVING AN EAST WEST DIMENSION OF 60 FEET AND A NORTH SOUTH DIMENSION OF 320 FEET, SAID PARCEL OF LAND LYING BETWEEN BLOCK I AND BLOCK 8 AND BOUNDED ON THE NORTH BY THE SOUTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE AND BOUNDED ON THE SOUTH BY THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION ON THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, AS RECORDED IN DEED BOOK 152, PAGE 403, OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA.

AND

THE WEST 15 FEET OF THE EASTERN 30 FEET OF THE NORTH 160 FEET OF THE FOLLOWING DESCRIBED PROPERTY SITUATE IN ST. LUCIE COUNTY, FLORIDA:
A PARCEL OF LAND HAVING AN EAST WEST DIMENSION OF 60 FEET AND A NORTH SOUTH DIMENSION OF 320 FEET, SAID PARCEL OF LAND LYING BETWEEN BLOCK I AND BLOCK 8 AND BOUNDED ON THE NORTH BY THE SOUTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE AND BOUNDED ON THE SOUTH BY THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION ON THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, AS RECORDED IN DEED BOOK 152, PAGE 403, OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA.

AND

THE SOUTH 160 FEET OF THE OF THE FOLLOWING DESCRIBED PROPERTY SITUATE IN ST. LUCIE COUNTY, FLORIDA:
A PARCEL OF LAND HAVING AN EAST WEST DIMENSION OF 60 FEET AND A NORTH SOUTH DIMENSION OF 320 FEET, SAID PARCEL OF LAND LYING BETWEEN BLOCK 1 AND BLOCK 8 AND BOUNDED ON THE NORTH BY THE SOUTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE AND BOUNDED ON THE SOUTH BY THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION ON THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, AS RECORDED IN DEED BOOK 152, PAGE 403, OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA.

PARCEL 8:
ALL OF LOT 2, BLOCK 8 OF THE UNRECORDED PLAT OF DIXIELAND SUBDIVISION, AS RECORDED IN DEED BOOK 152, PAGE 403 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE WEST
100 FEET THEREOF.

AND

THE EAST 75 FEET OF THE FOLLOWING PROPERTY;
FROM THE SOUTH 1/4 CORNER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN EAST ALONG THE SOUTH LINE OF SECTION AFORESAID A DISTANCE OF 125.12 FEET; THENCE NORTH 2°5'30" WEST, PARALLEL WITH THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1, A DISTANCE OF 1428.93 FEET, THENCE EAST ALONG THE NORTH LINE OF AN EXISTING STREET, A DISTANCE OF 768.24 FEET TO THE POINT OF BEGINNING, FROM THE POINT OF BEGINNING, CONTINUE EAST ALONG THE NORTH LINE OF EXISTING STREET A DISTANCE OF 176.5 FEET, THENCE NORTH 80 FEET, THENCE WEST A DISTANCE OF 176.4 FEET; THENCE SOUTH 80 FEET TO THE POINT OF BEGINNING. THIS PARCEL 2 BEING OTHERWISE DESCRIBED AS: THE EAST 75 FEET OF LOT 1, BLOCK 8, OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION ACCORDING TO THE PLAT ATTACHED TO THAT CERTAIN DEED RECORDED IN DEED BOOK 152, PAGE 403, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

AND

LOTS 1 AND 2, BLOCK 8, OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION, AS RECORDED IN DEED BOOK 152, PAGE 403, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. LESS AND EXCEPTING THEREFROM THE PROPERTY DESCRIBED AS FOLLOWS:
ALL OF LOT 2, BLOCK 8 OF THE UNRECORDED PLAT OF DIXIELAND SUBDIVISION, AS RECORDED IN DEED BOOK 152, PAGE 403 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, LESS THE WEST 100 FEET THEREOF.

AND

THE EAST 75 FEET OF THE FOLLOWING PROPERTY;
FROM THE SOUTH 1/4 CORNER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN EAST ALONG THE SOUTH LINE OF SECTION AFORESAID A DISTANCE OF 125.12 FEET; THENCE NORTH 2°5'30" WEST. PARALLEL WITH THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1, A DISTANCE OF 1428.93 FEET, THENCE EAST ALONG THE NORTH LINE OF AN EXISTING STREET, A DISTANCE OF 768.24 FEET TO THE POINT OF BEGINNING, FROM THE POINT OF BEGINNING, CONTINUE EAST ALONG THE NORTH LINE OF EXISTING STREET A DISTANCE OF 176.5 FEET, THENCE NORTH 80 FEET, THENCE WEST A DISTANCE OF 176.4 FEET; THENCE SOUTH 80 FEET TO THE POINT OF BEGINNING. THIS PARCEL 2 BEING OTHERWISE DESCRIBED AS: THE EAST 75 FEET OF LOT 1, BLOCK 8, OF AN UNRECORDED PLAT OF DIXIELAND SUBDIVISION ACCORDING TO THE PLAT ATTACHED TO THAT CERTAIN DEED RECORDED IN DEED BOOK 152, PAGE 403, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LEGAL DESCRIPTION: (BY SURVEYOR)

(BEING ONE AND THE SAME AS THAT PROPERTY DESCRIBED IN FIRST AMERICAN TITLE INSURANCE COMPANY-TITLE COMMITMENT FILE NO. 1062-5729924, DATED 12/22/2021)

PARCEL A

LOTS 1 THROUGH 18. BLOCK 1, UNRECORDED PLAT OF DIXIELAND, AS RECORDED IN DEED BOOK 152, PAGE 403 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

AND

A 47.00 FOOT WIDE PARCEL LYING BETWEEN THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 AND THE WEST LINE OF SAID BLOCK 1, UNRECORDED PLAT OF DIXIELAND, SAID PARCEL BOUND ON THE NORTH BY SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT OF WAY), BOUND ON THE SOUTH BY DIXIELAND DRIVE, BOUND ON THE WEST BY U.S. HIGHWAY NO. 1 (A 121 FOOT WIDE RIGHT OF WAY) AND BOUND ON THE EAST BY SAID BLOC 1 OF THE UNRECORDED PLAT OF DIXIELAND.

AND

LOTS 1 AND 2, BLOCK 8, UNRECORDED PLAT OF DIXIELAND, AS RECORDED IN DEED BOOK 152, PAGE 403 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

THE 60.00 FOOT VACATED ROAD RIGHT OF WAY LYING BETWEEN BLOCK 1 AND BLOCK 8, UNRECORDED PLAT OF DIXIELAND, AS RECORDED IN DEED BOOK 152, PAGE 403 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. EXCLUDING THE EAST 15.00 FEET OF THE NORTH 160 FEET MORE OR LESS OF SAID VACATED ROAD RIGHT OF WAY LYING ADJACENT TO LOTS 3 AND 4 BLOCK 8 OF SAID UNRECORDED DIXIELAND SUBDIVISION.

ACCORDING TO THE UNRECORDED PLAT OF DIXIELAND SUBDIVISION, AS RECORDED IN DEED BOOK 152, PAGE 403, OFFICIAL RECORDS BOOK 3525, PAGE 1149 AND OFFICIAL RECORDS BOOK 3818, PAGE 325 ALL OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF BEGINNING BEGIN AT INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE (A 60 FOOT WIDE RIGHT OF WAY) AND THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (A 121 FOOT WIDE RIGHT OF WAY); THENCE N89°33'01"E ALONG SAID SOUTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE A DISTANCE OF 826.63 FEET TO A POINT THAT IS 15.00 FEET WEST BY PERPENDICULAR MEASUREMENT OF THE WEST LINE OF LOTS 3 AND 4, BLOCK 8 OF SAID UNRECORDED DIXIELAND SUBDIVISION; THENCE S02°15'53"W PARALLEL TO SAID WEST LINE OF SAID LOTS 3 AND LOT 4 A DISTANCE OF 160.05 FEET TO AN EXTENSION THE SOUTH LINE OF SAID LOT 3, BLOCK 8; THENCE N89°32'47"E ALONG SAID SOUTH LINE AND EXTENSION THEREOF A DISTANCE OF 190.76 FEET TO THE SOUTHEAST CORNER OF SAID LOT 3; THENCE S02°15'53"W ALONG THE EAST LINE OF LOTS 1 AND 2, BLOCK 8 OF SAID UNRECORDED DIXIELAND SUBDIVISION A DISTANCE OF 160.10 FEET TO THE SOUTHEAST CORNER OF SAID LOT 1 BLOCK 8, ALSO BEING THE NORTH RIGHT OF WAY LINE OF DIXIELAND DRIVE; THENCE S89°32'47"W ALONG SAID NORTH RIGHT OF WAY LINE A DISTANCE OF 991.81 FEET TO THE EAST RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE N02°18'52"W ALONG SAID EAST RIGHT OF WAY LINE A DISTANCE OF 320.01 FEET TO THE POINT OF BEGINNING. CONTAINS 6.68 ACRES MORE OR LESS.

TOGETHER WITH

PARCEL B

A PARCEL OF LAND LYING IN A PORTION OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 27; THENCE S89°27'02"E ALONG THE NORTH LINE OF SAID SOUTHEAST 1/4 OF SECTION 27 A DISTANCE OF 49.21 FEET TO AN INTERSECTION WITH A NON-TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 11334.20 FEET, THE CHORD OF WHICH BEARS S01°41'15"E AT 242.70 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 01°13'37" FOR AN ARC DISTANCE OF 242.71 FEET; THENCE S02°18'03"E A DISTANCE OF 211.97 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL; THENCE N87°41'43"E A DISTANCE OF 752.54 FEET; THENCE S02°06'02"E A DISTANCE OF 422.62 FEET TO THE NORTH RIGHT OF WAY LINE OF SOUTHLAND DRIVE (A 60.00 FOOT WIDE RIGHT OF WAY); THENCE S89°33'01"W ALONG SAID NORTH RIGHT OF WAY LINE A DISTANCE OF 751.45 FEET; THENCE N02°18'03"W A DISTANCE OF 398.29 FEET TO THE POINT OF BEGINNING.
CONTAINS 7.08 ACRES MORE OR LESS.

CONTAINING 13.76 ACRES MORE OR LESS, (COMBINED TOTAL)

NOTE:
PROPERTY DESCRIBED BY SURVEYOR BEING ONE AND THE SAME AS THAT PROPERTY DESCRIBED IN FIRST AMERICAN TITLE INSURANCE COMPANY-TITLE COMMITMENT FILE NO. 1062-5729924, DATED 12/22/2021.

© Volen LLC/ATI - I:\Applications\Land Temp\Active_Field\20-615\FD\20-615.FD - File Saved on 08-22-2022 by rjs, 08, 2022 - A.Drawing: SHEET 2

INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING
CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

CERTIFIED TO:
N.S.S. ACQUISITION CORP.
TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK 79	DRAWN TB RJS
PAGE(S) 52	SCALE NA
FIELD DATE 11/08/21	JOB # 20-615

SHEET 2 OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

MATCH LINE SHEET 4

MATCH LINE SHEET 3

121' RIGHT OF WAY (OPEN)
US HIGHWAY 1

EAST RIGHT OF WAY LINE

5' CONC WALK

SWALE

TOB

INV EL=14.85'

INV EL=15.00'

INV EL=14.74'

INV EL=14.93'

TRUNCATED DOME (TYP)

BENCHMARK
WASHER LAB, & STAMPED "LB 6545"
EL=18.12'(NAVD88)

24" CMP 47.4' LF

UTILITY EASEMENT (ORB 1461, PG 2915)

1 STORY METAL AND CBS COMMERCIAL BUILDING
3350 U.S. HIGHWAY 1
SHOWROOM/ OFFICE
FFE=20.70

COVER CONCRETE

CONC PAD

SHED

PORTE COCHERE

#10 CATCH BASIN
TOP EL=18.76'
NW INV EL=14.69'
E INV EL=14.69'
BOTTOM EL=13.02'

#11 CATCH BASIN
TOP EL=19.44'
E INV EL=14.78'
BOTTOM EL=13.22'

#12 CATCH BASIN
TOP EL=19.48'
E INV EL=14.69'
BOTTOM EL=13.23'

#16 CATCH BASIN
TOP EL=20.08'
N INV EL=UNDER WATER

#17 CATCH BASIN
TOP EL=20.08'
N INV EL=UNDER WATER

#18 CATCH BASIN
TOP EL=20.07'
N INV EL=UNDER WATER

A/C PADS

1X1 YARD DRAIN (TYP)

WHEELSTOP (TYP)

FLAG POLE

METAL SIGN

BOLLARD (TYP)

6' CHAINLINK FENCE

6' CHAINLINK FENCE CORNER 2.5' SOUTH

GATE

15" RCP 45.5' LF

24" RCP 40.8' LF

SANITARY MANHOLE
TOP EL=17.9'
N INV EL=5.07'
S INV EL=5.15'
E INV EL=5.13'

SANITARY MANHOLE
TOP EL=18.0'
N INV EL=BLOCK OFF
S INV EL=5.73'
E INV EL=6.06'
W INV EL=5.54'

DIXIELAND DRIVE
CENTERLINE
20' ASPHALT PAVEMENT
60' RIGHT OF WAY (OPEN)

NORTH RIGHT OF WAY LINE

220.01'
239.62'
200.3'
200.1'
431.87'

LEGEND

BFP	= BACKFLOW PREVENTER	OHW	= OVERHEAD WIRES
BOC	= BACK OF CURB	O.R.B.	= OFFICIAL RECORD BOOK
BWF	= BARBED WIRE FENCE	(P)	= PLAT
CLF	= CHAIN LINK FENCE	P.B.	= PLAT BOOK
CM	= CONCRETE MONUMENT	PG.	= PAGE
CMP	= CORRUGATED METAL PIPE	PSM	= PROFESSIONAL SURVEYOR AND MAPPER
CONC.	= CONCRETE	PVC	= POLY VINYL CHLORIDE
COVD.	= COVERED	RCP	= REINFORCED CONCRETE PIPE
(D)	= DESCRIPTION	(S)	= SURVEYED
ECMP	= ELLIPTICAL CORRUGATED METAL PIPE	TOB	= TOP OF BANK
EDR	= EDGE OF DIRT DRIVE	TOS	= TOE OF SLOPE
EL	= ELEVATION	TRANS	= TRANSFORMER
EM	= ELECTRIC METER	UG	= UNDERGROUND
FFE	= FINISHED FLOOR ELEVATION	WDF	= WOODEN FENCE
FM	= FORCE MAIN	WL	= WATER LINE
FND.	= FOUND	WM	= WATER METER
GV	= GATE VALVE		= FIRE HYDRANT
HW	= HEADWALL		= GUY ANCHOR
ID	= IDENTIFICATION		= UTILITY POLE
IP	= IRON PIPE		= WATER GATE VALVE
IR	= IRON ROD		= WELL
IRC	= IRON ROD WITH CAP		= CAMERA
LB	= LICENSED BUSINESS		= LIGHT POLE
LS	= LICENSED SURVEYOR		= CLEAN OUT
			= SIGN
			= PALM (73)
			= PINE (132)
			= OAK (61)

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MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'
NORTH

INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING
CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

CERTIFIED TO:
N.S.S. ACQUISITION CORP.
TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK 79	DRAWN TB RJS	SHEET 3	
PAGE(S) 52	SCALE 1"=20'		
FIELD DATE 11/08/21	JOB # 20-615		OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

MATCH LINE SHEET 2

MATCH LINE SHEET 5

#10 CATCH BASIN
TOP EL=18.02'
N INV EL=16.25'
S INV EL=15.20'
W INV EL=14.86'
BOTTOM EL=14.02'

#7 CATCH BASIN
TOP EL=18.02'
N INV EL=15.10'
E INV EL=15.14'
BOTTOM EL=13.24'

#8 CATCH BASIN
TOP EL=17.92'
N INV EL=15.15'
S INV EL=15.08'
W INV EL=14.79'
BOTTOM EL=13.42'

#9 CATCH BASIN
TOP EL=18.99'
N INV EL=14.94'
S INV EL=15.22'
BOTTOM EL=14.05'

#19 CATCH BASIN
TOP EL=19.06'
N INV EL=15.07'
S INV EL=14.66'
BOTTOM EL=13.06'

#20 CATCH BASIN
TOP EL=19.03'
NE INV EL=15.09'
BOTTOM EL=14.58'

#1 CATCH BASIN
TOP EL=18.51'
N INV EL=16.10'
S INV EL=13.95'
E INV EL=13.93'
BOTTOM EL=13.57'

#2 CATCH BASIN
TOP EL=18.51'
N INV EL=13.98'
S INV EL=14.01'
E INV EL=14.04'
BOTTOM EL=13.88'

#6 CATCH BASIN
TOP EL=18.50'
N INV EL=14.02'
E INV EL=14.00'
BOTTOM EL=13.88'

#4 CATCH BASIN
TOP EL=18.54'
W INV EL=14.09'
BOTTOM EL=14.03'

#3 CATCH BASIN
TOP EL=18.48'
W INV EL=14.03'
BOTTOM EL=13.61'

#5 CATCH BASIN
TOP EL=18.54'
W INV EL=14.10'
BOTTOM EL=13.90'

BENCHMARK
SET NAIL &
WASHER LB 7545
EL=18.88(NAVD88)

BENCHMARK
SET NAIL &
WASHER LB 7545
EL=18.90(NAVD88)

BENCHMARK
SET NAIL &
WASHER LB 7545
EL=17.86(NAVD88)

BENCHMARK
FND NAIL &
WASHER
EL=17.77(NAVD88)

15" CMP 149' LF
15" CMP 153' LF
15" CMP 149.4' LF
15" CMP 119' LF
15" CMP 52.2' LF
15" CMP 54' LF
15" CMP 51' LF
15" CMP 90' LF
15" CMP 54' LF
15" RCP 44.7' LF
15" RCP 37' LF
18" CMP 112' LF
18" CMP 119' LF
18" CMP 117' LF
16" CMP 63.2' LF

COVERED CAR CARE AREA
SHED
1 STORY METAL BUILDING
BODY SHOP
FFE=20.67

3"X3" BOLLARD PATTERN (TYP)
BOLLARD (TYP)
6' CHAINLINK FENCE
6' CHAINLINK FENCE CORNER 0.3' SOUTH
6' CHAINLINK FENCE CORNER 0.5' SOUTH
FIRE LINE STAND PIPE
SANITARY MANHOLE TOP EL=19.1'
SANITARY MANHOLE TOP EL=17.9' E INV EL=10.22' W INV EL=9.90'
INV EL=16.70
INV EL=17.14
INV EL=16.60
INV EL=16.51
GATE
SWALE
NORTH RIGHT OF WAY LINE
DIXIELAND DRIVE
CENTERLINE
20' ASPHALT PAVEMENT
60' RIGHT OF WAY (OPEN)
DEDICATED 60' RIGHT OF WAY
6' CHAINLINK FENCE
2" RPZ
TOB
TOP

LEGEND

BFP	= BACKFLOW PREVENTER	OHW	= OVERHEAD WIRES
BOC	= BACK OF CURB	O.R.B.	= OFFICIAL RECORD BOOK
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LB	= LICENSED BUSINESS		= LIGHT POLE
LS	= LICENSED SURVEYOR		= CLEAN OUT
			= SIGN
			= PALM (73)
			= PINE (132)
			= OAK (61)

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'

INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING
CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

CERTIFIED TO:
N.S.S. ACQUISITION CORP.
TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK	DRAWN
79	TB RJS
PAGE(S) 52	SCALE 1"=20'
FIELD DATE 11/08/21	JOB # 20-615

SHEET 4 OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

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LEGEND

BFP = BACKFLOW PREVENTER	OHW = OVERHEAD WIRES
BOC = BACK OF CURB	O.R.B. = OFFICIAL RECORD BOOK
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	= SIGN
	= PALM (73)
	= PINE (132)
	= OAK (61)

MATCH LINE SHEET 7A

MATCH LINE SHEET 5

MATCH LINE SHEET 2

PARCEL 2

398.29'

60.03'

100.00'

120' RIGHT OF WAY (OPEN)

CENTERLINE

US HIGHWAY 1

60' RIGHT OF WAY (OPEN)

SOUTHLAND DRIVE

CENTERLINE

20' ASPHALT PAVEMENT

NORTH RIGHT OF WAY LINE

SOUTH RIGHT OF WAY LINE

5' CONC WALK

SWALE

TOB

TOE

EAST RIGHT OF WAY LINE

SANITARY MANHOLE
TOP EL=18.11'
8" PVC INV EL S=6.89'
INV EL N=SEALED OFF

INV EL=14.69'

INV EL=15.30

INV EL=15.62

INV EL=15.70

INV EL=15.88

INV EL=16.00

INV EL=14.58'

6" DIP
35 L.F.

15" RCP 37' LF

15" RCP 39' LF

10" TRIPLE

12" TRIPLE

12" DBL

8" DBL

(A) CATCH BASIN
TOP OF EL=19.83'
S INV EL=18.09'

(B) CATCH BASIN
TOP OF EL=19.83'
S INV EL=18.03'

(C) CATCH BASIN
TOP EL=19.02'
S INV EL=17.46'

#3 CATCH BASIN
TOP EL=19.46'
SE INV EL=14.98'

#10 CATCH BASIN
TOP EL=18.76'
NW INV EL=14.69'
E INV EL=114.69'
BOTTOM EL=13.02'

#12 CATCH BASIN
TOP EL=19.42'
SW INV EL=14.96'

BENCHMARK
SET NAIL &
WASHER LB 7545
EL=17.00(NAVD88)

CONC PAD

SHED

GATE

SIGN

16' CLEAN OUT

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'

INDIAN RIVER SURVEY, INC.

PROFESSIONAL SURVEYING AND MAPPING

CERTIFICATE OF AUTHORIZATION No. LB 7545
1835 20TH STREET, VERO BEACH, FLORIDA 32960
PHONE (772) 569-7880 FAX (772) 778-3617

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

CERTIFIED TO:
N.S.S. ACQUISITION CORP.
TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK 79	DRAWN TB RJS
PAGE(S) 52	SCALE 1"=20'
FIELD DATE 11/08/21	JOB # 20-615

SHEET 5 OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

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LEGEND

= PALM (73)
= PINE (132)
= OAK (61)

MATCH LINE SHEET 7B

MATCH LINE SHEET 4

MATCH LINE SHEET 6

MATCH LINE SHEET 3

PARCEL 2

PARCEL ID
2427-421-0001-000-7

SOUTHLAND DRIVE
CENTERLINE
20' ASPHALT PAVEMENT
60' RIGHT OF WAY (OPEN)

SWALE TOB

6' CHAINLINK FENCE

5' CONC WALK

GATE

SHED

15" CMP 149' LF

15" RCP 54' LF

15" RCP 37' LF

18" CMP
INV EL=15.39

#1a CATCH BASIN
TOP EL=18.02'
N INV EL=16.25'
S INV EL=15.20'
W INV EL=14.86'
BOTTOM EL=14.02'

INV EL=16.08
INV EL=16.27
INV EL=15.92
INV EL=15.66
INV EL=15.68

INDIAN RIVER SURVEY, INC.

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PHONE (772) 569-7880 FAX (772) 778-3617

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'
NORTH

REVISIONS	DATE
REVISED PER TITLE COMMITMENT	02/03/2022
REVISED SHEET 2 PER COMMENTS	02/08/2022

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TRIPP SCOTT, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY
WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK 79	DRAWN TB RJS
PAGE(S) 52	SCALE 1"=20'
FIELD DATE 11/08/21	JOB # 20-615

SHEET 6 OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

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LEGEND

= PALM (73)
= PINE (132)
= OAK (61)

MATCH LINE SHEET 5

PARCEL ID
2427-421-0001-000-7

APPROXIMATE EDGE OF WATER
TOP OF WATER EL=12.03

15" CMP
INV EL=13.60
INV EL=13.78

TOB
TOE
SWALE

MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'
NORTH

INDIAN RIVER SURVEY, INC.
PROFESSIONAL SURVEYING AND MAPPING

CERTIFICATE OF AUTHORIZATION No. LB 7545
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WORLD OMNI FINANCIAL CORP, A FLORIDA CORPORATION, ISAOA/ATIMA

FIELD BOOK	DRAWN
79	TB RJS
PAGE(S)	SCALE
52	1"=20'
FIELD DATE	JOB #
11/08/21	20-615

SHEET 7 OF 8

NOT VALID WITHOUT ALL SHEETS 1 THROUGH 8

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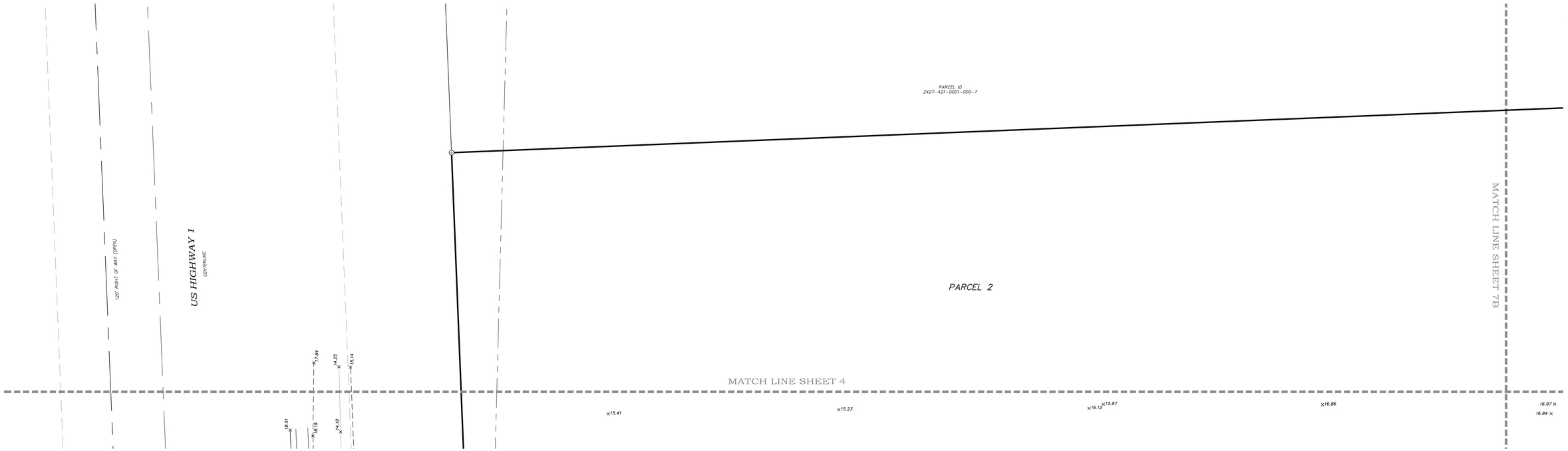
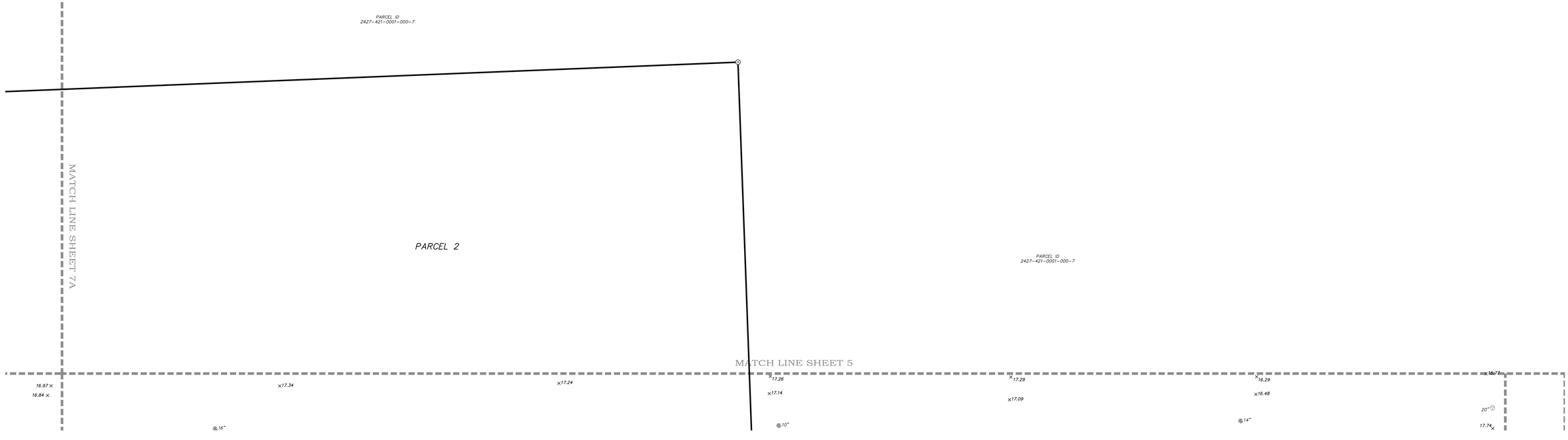
A



B



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MAP OF BOUNDARY & TOPOGRAPHIC SURVEY
GRAPHIC SCALE
0' 10' 20'
1" = 20'

INDIAN RIVER SURVEY, INC.
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SHEET 8 OF 8

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