



**AGENDA
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
OCTOBER 14, 2021
9:00 AM
CITY HALL COMMISSION CHAMBERS
204 ASH STREET
FERNANDINA BEACH, FL 32034**

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PLEDGE OF ALLEGIANCE**
- 4. APPROVAL OF MINUTES**
 - 4.1 Approval of Minutes for the September 23, 2021 Regular Meeting.
- 5. NEW BUSINESS**
 - 5.1 SPR 2021-0012: Wade Olszewski, CPH, Inc., agent for Property Management Support Trustee of Sadler Square Land Trust - 2112 Sadler Rd. - Demolition of existing building and associated utilities and construction of a 27,862 SF grocery store.
- 6. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.**
- 7. COMMITTEE BUSINESS**
 - 7.1 SPR 2021-0011 McJunking Station_Sign Off
- 8. ADJOURNMENT**

NEXT REGULAR TRC MEETING IS SCHEDULED FOR OCTOBER 28, 2021

Persons with disabilities requiring accommodations in order to participate in this program or activity should contact 310-3115, TTY 711, or through the Florida Relay Services at 1-800-955-8771 (TTY number for all City offices) at least 24 hours in advance to request such accommodations.



**MINUTES
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
SEPTEMBER 23, 2021**

1. CALL TO ORDER 9:00

2. ROLL CALL

MEMBERS PRESENT:

Jacob Platt, Planning

Sal Cumella, Historic Preservation

Andre Desilet, Stormwater/Utilities

Don Kukla, Building

Michelle Forstrom, Code Enforcement

Jason Higginbotham, Fire

OTHERS PRESENT:

Taylor Hartmann, Recording Secretary

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

4.1 Approval of Minutes for the September 9, 2021, Regular Meeting

ACTION TAKEN: A motion was made by Ms. Forstrom, seconded by Mr. Desilet to approve the minutes as presented.

Vote upon passage of the motion was taken by ayes and nays and being all ayes, carried.

5. DISCUSSION ITEMS

5.1 Pre-application Discussion - Kelsie Kenney, 3381 S. Fletcher Avenue - To discuss including the sale of coffee to an existing retail location. This property is zoned C-1.

Mr. Platt introduced the case and invited the applicant to speak.

Kelsie Kenney, applicant, informed members that they have obtained a permit from the Department of Agriculture.

Mr. Platt confirmed that any signage will need to go through the appropriate permitting process.

Mr. Desilet stated that a grease trap might need to be installed to accommodate the proposed coffee bar. He also noted that he would calculate any impact fees or credits associated with the new business.

Mr. Kukla indicated that the applicant should consider meeting with a design professional to address ADA accessibility.

Mr. Platt stated that the applicant will need to work with the current contractor and the Building Department to address any open permits and obtain a Local Business Tax Receipt. He also confirmed

DRAFT

the dimensional standards for an ADA parking space.

The applicant stated that the upstairs will be used for an art gallery with seating and that they would proceed with applying for a business license and close out any opened permits.

6. DEVELOPMENT INQUIRIES FROM APPLICANTS NOT ON THE AGENDA - DISCUSSION ONLY, NO ACTION TO BE TAKEN.

7. COMMITTEE BUSINESS

There were no Committee Business items to discuss.

8. ADJOURNMENT 9:22

Jacob Platt

Print

Technical Review Committee: Application - Submission #8070

Date Submitted: 9/17/2021

Technical Review Committee: Application

USE THIS FORM TO To apply for review of site plans, preliminary subdivision plats, final subdivision plats, minor subdivisions, and amendments to previously issued local development orders, change of use, and nonresidential building expansions.

Fees

- ☒ Initial submittal + two submittals of full site plans. \$400 + 2% of the project construction cost (whichever is greater) for up to a maximum of \$5,500.
- ☐ 3rd and subsequent resubmittals. \$400
- ☐ Change of Use Determination Letter \$50
- ☐ Engineering Review (Consultant Hourly Rate) \$125

TRC_2021 Meeting Calendar



December 2020 meeting dates are: December 10, 2020 & December 17, 2020

IMPORTANT NOTES

This application will be routed to the various departments for review of the applicable codes and design standards.

Please see the Land Development Code (LDC) for detailed information:

- ☐ Requirements for All Site Plans “ see LDC section 11.01.04
- ☐ Requirements for Subdivision Plats “ see LDC section 11.01.05
- ☐ Determination for Completeness & sufficiency “ see LDC section 11.03.01
- ☐ Review and Compliance Report by the Technical Review Committee “ see LDC Section 11.03.02
- ☐ Construction and Improvements “ see LDC section 11.05.00
- ☐ Amendments to Local Development Orders “ see LDC section 11.06.00

The LDC is available for review at

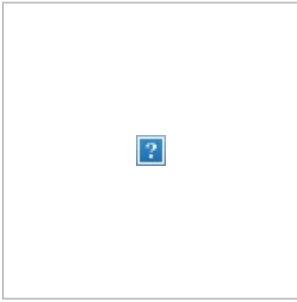
www.fbfl.us/LDC

Application Requirements

- ☐ See Development Plan Submittal Checklist
- ☐ All applications are subject to a determination of completeness as required by Land Development Code section 11.03.01.
- ☐ A determination of completeness is a determination that all required documents and plans have been submitted, and whether all fees have been paid.
- ☐ A determination of completeness is not a determination of compliance with substantive standards and criteria.

Key Contacts

TRC will guide your application from start to finish, engaging other City departments as needed.



PROPERTY INFORMATION

[Property information can be found at the Nassau County Property Appraiser's Website's Map Search](#)

Site Address*

2112 Sadler Road

City*

Fernandina Beach

State*

FL

Zip*

32034

Parcel ID #(s)

29-3N-28-0000-0004-0080

Lot

Govt Lot 5

Block

Subdivision

Zoning District

C-2

Future Land Use Designation*

General Commercial

Overlay District*

None

Size of Property (acres)*

12.44

Present Property Use*

COMMUNITY 001600

Wetlands*

No

Flood Zone*

X, area of minimal flood

Coastal Construction Control Line (CCCL)*

No

OWNER OF RECORD

As recorded with the Nassau County Property Appraiser

First Name*

Mike

Last Name*

Herzberg

Company (if applicable)

Property Management Support Inc Trustee of Sadler Square Land Trust

Mailing Address*

1 Sleiman Parkway Ste #270

City*

Jacksonville

State*

Florida

Zip*

32216

Telephone Number*

9048074242

Email Address*

Mherzberg@sleiman.com

OWNER'S AGENT

If other than owner. If an agent will be representing the owner, an Owner's Authorization For Agent Representation form must be included

First Name

Wade

Last Name

Olszewski

Company (if applicable)

CPH, Inc.

Mailing Address

5200 Belfort Road, Suite 220

City

Jacksonville

State

Florida

Zip

32256

Telephone Number

9043320999

Email Address

ksheffield@cphcorp.com

PROJECT INFORMATION

Project Type*

Site Plan Review

Project Name

Sadler Square Improvements

Proposed Access Road*

N/A

Rd Maintenance Jurisdiction*

Unimproved ROW

Project Estimated Cost*

5,000,000

Description of Request*

Demolition of existing building and associated utilities. Construction of a 27,862 SF grocery store that includes associated utilities, parking lot improvements, and a retaining wall addition to the existing stormwater pond adjacent of the backside of the proposed building. The drainage patterns will remain the same.

Site Plan Review Checklist

☒

The names, address, telephone number, fax number, and email address of the person preparing the plan.

☒

The date of preparation and date(s) of any modifications, a north arrow, and a written and graphic scale.

☒

The legal description of the property, consistent with the required survey.

☒

A vicinity map showing the location of the property.

☐

The location of streams, bodies of water, natural features, roads, rights-of-way, street intersections, and paved areas within the boundaries of the property.

☐

The location of streams, bodies of water, dunes and dune systems, and other natural features within 250 feet of the boundaries of the property.

☐

The location of the mean high-water line, if such line is within the boundaries of the property.

☒

A topographic survey, soils report, grading plan, and an erosion control plan.

☐

A general floodplain map indicating areas subject to inundation and high groundwater levels up to a 100-year flood classification.

☐

A statement indicating the distances to schools and public safety facilities intended to serve the proposed development.

☒

The name, plat book, and page number of any recorded subdivision comprising all or part of the site.

☒

The location and use of any existing and proposed principal or accessory buildings and structures, showing proposed setbacks, building heights, and other dimensional requirements of the zoning distr

☐

Elevations of all proposed structures.

☐

The access points, driveway design, on-site parking, including required parking lot landscaping, internal circulation, sidewalks, and bicycle facilities

☒

The location of existing and proposed utilities, utility services, and easements.

☒

A tree survey showing protected trees, proposed replacement trees, if required, and landscaping and buffering. (See

Section 4.05.00.)



A soil erosion and sediment control plan compliant with Section 3.01.04.



For a PUD site plan, a detailed, written list and explanation of how the proposed PUD differs from any provision of this LDC applicable to the underlying zoning district.



For site plans and PUD site plans where development is proposed in phases, the plans shall include phase lines and the following supporting information:



o Timeline for the development; and



o Benchmarks for monitoring the progress of construction of each phase regarding land clearing, soil stabilization and erosion control, installation of infrastructure, and installation of landscaping.



A summary block containing:



o Land use category from the Future Land Use Map in the comprehensive plan;



o Zoning district;



o Total acreage;



o Total square footage for non-residential uses;



o Total density and number of units, proposed and permissible for residential uses;



o Impervious surface ratio calculation, proposed and permissible;



o Floor area ratio calculation, proposed and permissible;



o Total number of parking spaces, required and provided; and



o Number of trees required to be protected, number of trees remaining on the site, and number of trees to be planted.



Additional plans, documents, or reports that are necessary to support the application shall be submitted. Such plans, documents, or reports may include, but are not limited to:



o Subdivision Plats (subdivision plats shall contain the information set forth in Section 11.01.05.)



o Concurrency analysis (concurrency analysis reports shall contain the information set forth in Section 7.04.00.)



o Traffic analysis reports (requirements for traffic analysis reports are set forth in Section 11.01.06.)



o Parking studies (requirements for parking studies are set forth in Section 7.01.04.)



o Stormwater management plans (requirements for stormwater management plans are set forth in Section 7.03.00.)



o Environmental Impact Study (requirements for environmental impact studies are set forth by regional, State, and federal agencies with jurisdiction and in Chapter 3 of the LDC.)



o Tree Protection Plan (Section 4.05.09.)



o Landscape Plan (Section 4.05.00.)



o Lighting Plan (Section 3.05.00.), Section 7.01.04.B)



o Signage Plan (Section 5.03.00.)



o Proof of Ownership “ provide a legal description, Property Identification Number (PIN) and a copy of the warranty deed.



Concurrency analysis reports shall contain the information set forth in Section 7.04.00. Requirements for traffic analysis reports are set forth in Section 11.01.06. Requirements for parking studies



“ Any development application for development proposed within the Airport Overlay Zone established for the Fernandina Beach Municipal Airport shall provide confirmation of notification to the FAA as r

School Concurrency

New residential development is required to demonstrate compliance with school concurrency as regulated in the City of Fernandina Beach through the City of Fernandina Beach’s Comprehensive Plan Intergovernmental Coordination Element and the Interlocal Agreement Amendment for Public School Facility Planning adopted by the City on May 21, 2019. No new residential rezoning, preliminary plat, site plan or functional equivalent may be approved by the City unless the residential development is exempt from requirements outlined in Section 9.13 of the Amended Interlocal Agreement OR a School Concurrency Reservation Letter has been issued by the School Board indicating that adequate school facilities exist.

Certification*



By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.



I acknowledge that I understand and have complied with all of the submittal requirements and procedures.

Applicant First Name*

Wade

Applicant Last Name*

Olszewski

Today's Date*

9/17/2021

Upload Supporting Documentation*

Civil Plans SS.pdf

Upload 2

Landscape Plans SS.pdf

Upload 3

Owners Authorization Signed.pdf

Upload 4

Property Card.pdf

Upload 5

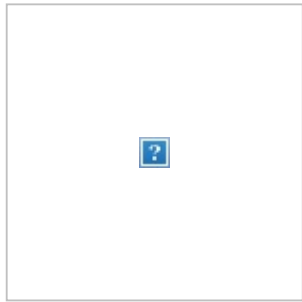
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DEPARTMENT OF PLANNING & CONSERVATION

204 Ash Street | Fernandina Beach, FL 32034 | 904 310-3480 | www.fbfl.us/planning

CONSTRUCTION PLANS FOR ***SADLER SQUARE IMPROVEMENTS***

FOR

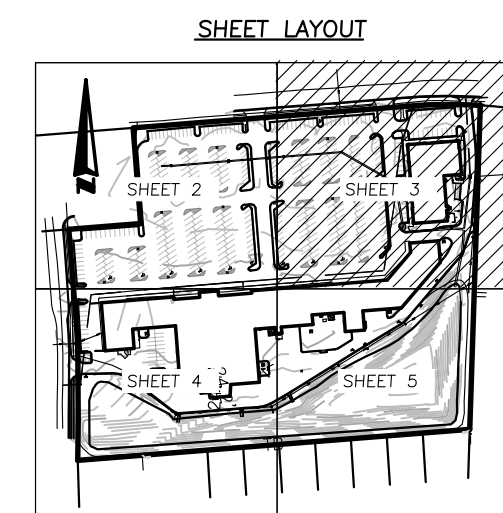
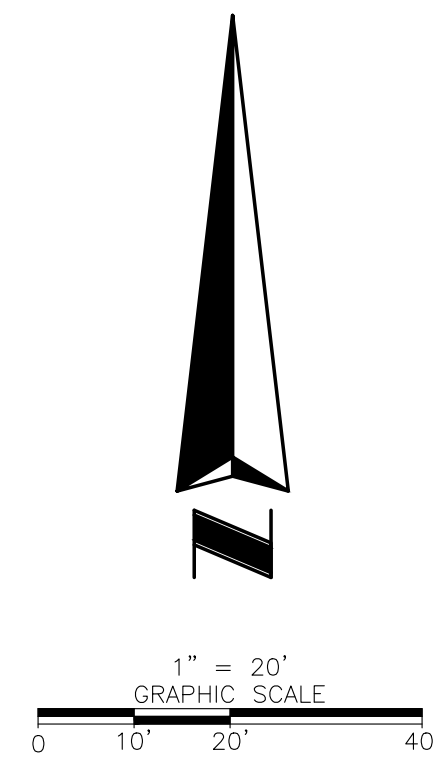
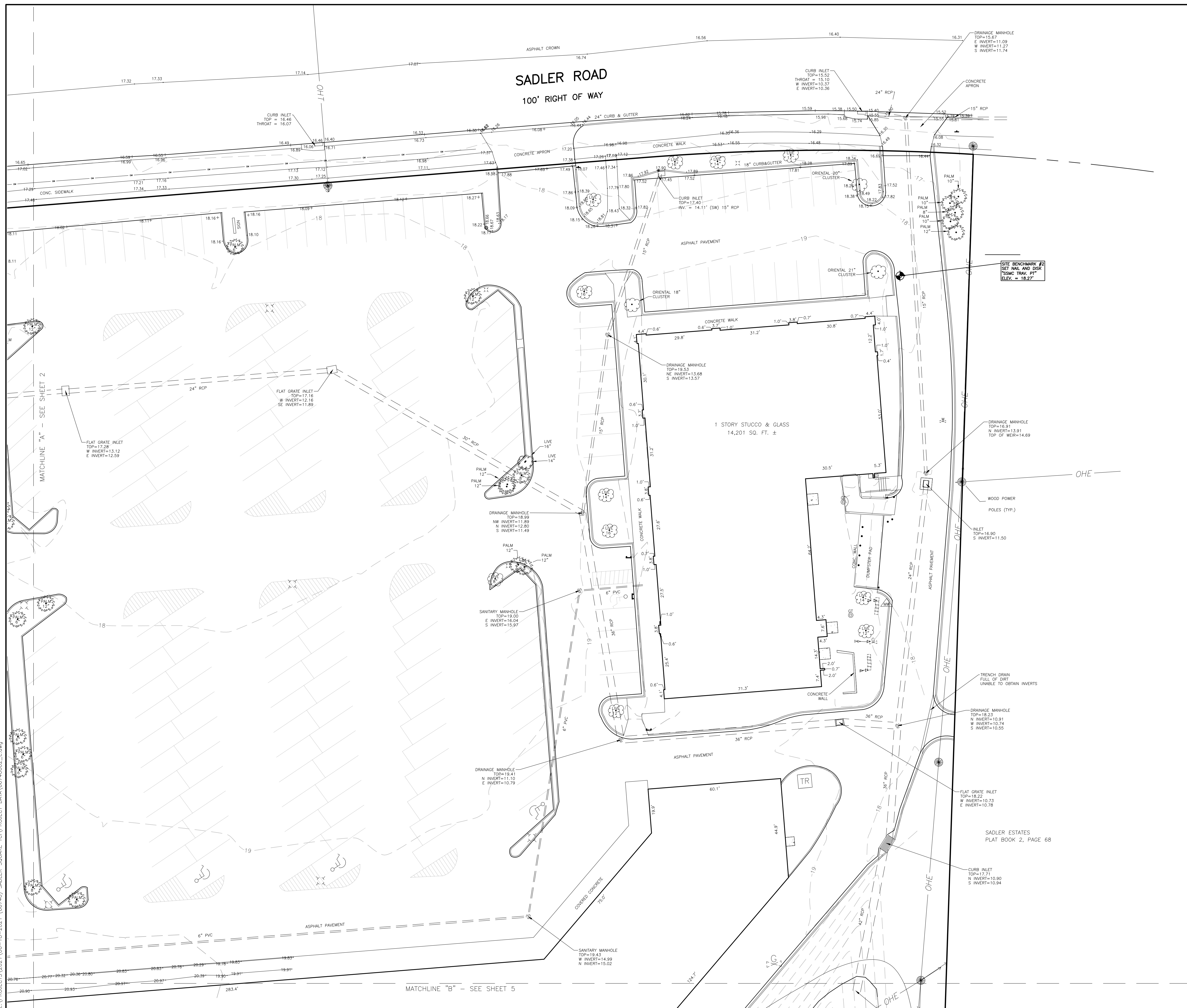
SLEIMAN ENTERPRISES

3818 SOUTH 3RD STREET

CITY OF FERNANDINA BEACH / FLORIDA

SECTION 22 - TOWNSHIP 3 NORTH - RANGE 28 EAST

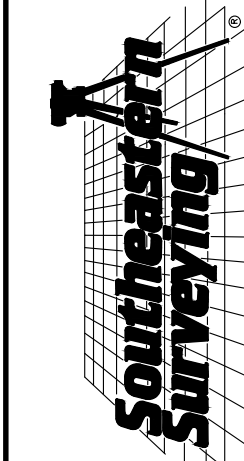
PARCEL ID: 181416 1110[illegible]



LEGEND & ABBREVIATIONS

- | | |
|---|--|
|  | = BENCHMARK |
|  | = BACKFLOW PREVENTER |
|  | = CLEAN OUT |
|  | = DRAINAGE MANHOLE |
|  | = FLAT GRATE INLET |
|  | = FIRE HYDRANT |
|  | = UNKNOWN GATE VALVE |
|  | = GREASE TRAP |
|  | = DOWN GUY |
|  | = LIGHT POLE |
|  | = MONITORING WELL |
|  | = NAIL W/DISC |
|  | = POST/BOLLARD |
|  | = SANITARY MANHOLE |
|  | = FORCEMAIN AIR RELEASE VALVE |
|  | = NON-TRAFFIC SIGN |
|  | = TRANSFORMER |
|  | = UTILITY POLE (TYPICAL) |
|  | = UNKNOWN MANHOLE |
|  | = WATER METER |
|  | = WATER VALVE |
|  | = CHAINLINK FENCE |
|  | = OVERHEAD TELEPHONE |
|  | = OVERHEAD ELECTRIC |
|  | = GAS MAIN |
|  | = TOP OF BANK |
|  | = POLYVINYL CHLORIDE PIPE |
|  | = REINFORCED CONCRETE PIPE |
|  | = NORTH AMERICAN DATUM |
|  | = NORTH AMERICAN VERTICAL DATUM |
|  | = TRAVERSE POINT |
|  | = SOUTHEASTERN SURVEYING & MAPPING CORPORATION |
- SIZE SHOWN IS TRUNK DIAMETER
IN INCHES MEASURED AT CHEST
HEIGHT
- | | |
|---|------------|
|  | = TREE |
|  | = LIVE OAK |
|  | = PALM |

SHEET NUMBER 3 OF 5
NOT VALID WITHOUT SHEETS
1 THROUGH 5



**SOUTHEASTERN SURVEYING
AND MAPPING CORPORATION**
8641 Bayline Road, Suite 5
Jacksonville, Florida 32256
(904) 737-5980
e-mail: info@southeasternsurveying.com

REVISION DATE	REVISION	BY

Topographic Survey

Sadler Square
Fernandina Beach, Nassau County, Florida

Fernandina Beach, Nassau County, Florida

Field Date:	Debris B.:	Soils:
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SEE SHEET 1 FOR NOTES,
LEGEND AND DESCRIPTION.

DRAWING NUMBER
66740002_C
SHEET
NUMBER

3 OF 5

GENERAL PROVISIONS

1. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL AVAILABLE REGULATORY AGENCY PERMITS AND LOCAL AGENCY PERMITS.
2. CONTRACTOR, AS PART OF THE BASE BID, SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA WITHIN THE 30 DAYS OF PROJECT AWARD. CONTRACTOR SHALL REVIEW THE PLANS AND SHALL NOTE ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
3. CONTRACTORS, AS PART OF THE BASE BID, SHALL PROVIDE ALL COORDINATION WITH UTILITY PROVIDERS TO PROVIDE FOR THE MATERIALS AND WORK NEEDED TO PROVIDE SERVICES TO THE PROJECT.
4. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE FOR ALL DEMOLITION OF ABOVE GROUND AND UNDERGROUND IMPROVEMENTS IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS NOTED ON THE PLANS. UNLESS APPROVED IN WRITING FROM THE OWNER, ALL MATERIALS SHALL BE REMOVED FROM THE SITE AS PART OF THE BASE BID.
5. ALL DETAILS AND REFERENCES TO FOOT REFER TO THE LATEST EDITION OF THE FOOT STANDARD PLANS.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES, IN SUCH A MANNER AS TO AVOID CONFLICT AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH UTILITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR THE IN-S CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
7. CONTRACTOR AND HIS SURVEYOR SHALL NOTE THE PROJECT BENCHMARK INFORMATION PROVIDED IN THE PLANS AND VERIFY PRIOR TO CONSTRUCTION.
8. ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ACT (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGE FROM SMALL AND LARGE CONSTRUCTION ACTIVITIES. IN ORDER TO MEET NPDES REQUIREMENTS, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING, INSPECTING, MAINTAINING, AND REPORTING ON ALL ELEMENTS OF SWPPP, INCLUDING THE SUBMITTING THE REQUIRED NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT), FORMS AS THE OPERATOR, AND PAYING ALL ASSOCIATED FEES. FOR PROJECTS LESS THAN 1 ACRE IN SIZE THAT ARE NOT REQUIRED TO COMPLY WITH THE NPDES GENERAL PERMIT, THE CONTRACTOR IS STILL RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
9. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL USE THE GEOMETRY PROVIDED ON THE CONSTRUCTION PLANS. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNERS SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
10. BASE SURVEY INFORMATION INCLUDING BUT NOT LIMITED TO ELEVATIONS, EASEMENTS, RIGHTS OF WAY, AND OTHER TOPOGRAPHIC INFORMATION HAS BEEN PREPARED BY OTHER PROFESSIONALS. CPH, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.
11. THIS SET OF PLANS MAY CONTAIN DRAWINGS PREPARED BY OTHER PROFESSIONALS, WHICH CONTAIN THE NAME, ADDRESS, AND LOGO OF THE PROFESSIONAL. CPH, INC. IS NOT RESPONSIBLE FOR DRAWINGS PREPARED BY OTHER PROFESSIONALS.
12. THE CONTRACTOR SHALL SUBMIT ONE ELECTRONIC COPY OF SHOP DRAWINGS TO THE ENGINEER TO KEEP FOR THEIR RECORDS. THE ENGINEER WILL NOT PROVIDE FOR APPROVAL OF SHOP DRAWINGS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL MATERIALS FOR ACCURACY PRIOR TO ORDERING THE MATERIALS. ANY DISCREPANCIES IDENTIFIED BY THE CONTRACTOR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
13. PROTECT BENCHMARKS, PROPERTY CORNERS, AND OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF MARKER NEEDS TO BE REMOVED IT SHALL BE REFERENCED BY LICENSED LAND SURVEYOR AND REPLACED, AS NECESSARY, BY SAME.
14. THE CONTRACTOR IS RESPONSIBLE FOR ALL QUALITY CONTROL TESTING. AS A MINIMUM, TESTING SHALL INCLUDE A) PIPING AND STRUCTURAL EXCAVATION, BEDDING AND BACKFILL MATERIALS AND DENSITY TESTS; B) DETERMINATION OF COMPACTIVE EFFORT NEEDED FOR COMPLIANCE WITH THE DENSITY REQUIREMENTS; C) PORTLAND CEMENT CONCRETE AND ASPHALT. THE PAYING QUALITY CONTROL TESTING INCLUDING DESIGN PLAN REVIEW, MATERIALS, FIELD SLUMP AND AIR CONTENT, AND FIELD AND LAB CURED STRENGTH SAMPLES AND TESTING.
15. IN ADDITION TO QUALITY CONTROL TESTING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIRED TESTING OR APPROVALS FOR ANY WORK (OR ANY PART THEREOF) IF LAWS OR REGULATIONS OF ANY PUBLIC BODY HAVING JURISDICTION SPECIFICALLY REQUIRE TESTING, INSPECTIONS OR APPROVAL. THE CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION THEREWITH AND SHALL FURNISH THE OWNER AND ENGINEER THE REQUIRED CERTIFICATES OF INSPECTION, TESTING OR APPROVAL.
16. ANY DESIGN OR TESTING LABORATORY UTILIZED BY THE CONTRACTOR SHALL BE AN INDEPENDENT LABORATORY ACCEPTABLE TO THE OWNER AND THE ENGINEER, APPROVED IN WRITING, AND COMPLYING WITH THE LATEST EDITION OF THE "RECOMMENDED REQUIREMENTS FOR INDEPENDENT LABORATORY QUALIFICATION", PUBLISHED BY THE AMERICAN COUNCIL OF INDEPENDENT LABORATORIES.
17. TESTING RESULTS SHALL BE PROVIDED TO THE OWNER/OPERATOR AND THE ENGINEER. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS.
18. THE ENTIRE PROJECT SITE SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK. CLEAN ALL INSTALLED PIPELINES, STRUCTURES, SIDEWALKS, PAVED AREAS, ACCUMULATED SILT IN PONDS, PLUS ALL ADJACENT AREAS AFFECTED BY CONSTRUCTION, AS DIRECTED BY THE OWNER OR JURISDICTIONAL AGENCY. EQUIPMENT TO CLEAN THESE SURFACES SHALL BE SUBJECT TO APPROVAL BY THE OWNER.
19. ALL DISTRIBUTED AREAS WITHIN RIGHT OF WAYS SHALL BE SODDED.
20. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT BE LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
21. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
22. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER FOR PROPER DIRECTION IF ANY ENVIRONMENTAL OR HEALTH RELATED CONTAMINATE IS ENCOUNTERED DURING EXCAVATION.

UTILITY GENERAL NOTES

1. THE UTILITY DATA SHOWN ON THESE PLANS WAS LOCATED BY THE RESPECTIVE UTILITY, OR IS BASED ON UTILITY DRAWINGS, MAPS, OR FIELD RECONNAISSANCE.
2. THE LOCATION, MATERIAL, TYPE, AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELIEF OF PIPE OR THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ANY UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE ENGINEER AND THE RESPECTIVE UTILITY COMPANY FOR RELOCATION OR PROPER INSTRUCTION.
3. A SINGLE POINT UTILITY IDENTIFICATION SERVICE HAS BEEN SET UP FOR EXISTING UTILITIES. THE CONTRACTOR IS TO CONTACT THE SUNSHINE STATE ONE CALL CENTER BY DIALING 811 AT LEAST TWO (2) AND NO MORE THAN FIVE (5) WORKING DAYS PRIOR TO THE SPECIFIC CONSTRUCTION ACTIVITY FOR FIELD LOCATION. NOTE THAT NOT ALL UTILITIES PARTICIPATE IN THIS PROGRAM. THE CONTRACTOR SHOULD CONTACT ALL NON-PARTICIPATING UTILITIES SEPARATELY FOR FIELD LOCATION OF THEIR FACILITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
4. THE UTILITY PROVIDERS NOTED ON THE COVER SHEET HAVE PREVIOUSLY INDICATED THAT THEY MAY HAVE FACILITIES IN THE VICINITY OF THE CONSTRUCTION AREA.
5. THE CONTRACTOR SHALL KEEP LOCATE TICKETS UP TO DATE AT ALL TIMES.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITY AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL ALSO COORDINATE NECESSARY RELOCATIONS OR OTHER CONSTRUCTION RELATED MATTERS WITH EACH UTILITY.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR WITH THE PERMISSION OF THE OWNER AND THE ENGINEER.
8. TYPICAL DETAILS AND PROPOSED CONSTRUCTION AS SHOWN ILLUSTRATE THE ENGINEER'S INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY ALTER THE PROPOSED CONSTRUCTION PROVIDED IT COMPLIES WITH THE PROJECT SPECIFICATION AND THE ENGINEER'S APPROVAL IS RECEIVED FROM THE ENGINEER. WHERE SUCH PROPOSED REVISIONS DEVIATE FROM THE FDEP CONSTRUCTION PERMIT, THEN SUCH REVISIONS WILL ALSO REQUIRE APPROVAL FROM FDEP.
9. FOR EACH RESPECTIVE PIPELINE CONSTRUCTION REQUIRED, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, DEPTH, SIZE, MATERIAL, TYPE, AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC. TO BE CROSSED OR CONNECTED TO. IF THE CONTRACTOR DEEMS NECESSARY (A) A CHANGE IN ALIGNMENT OR DEPTH, OR THE NEED FOR ADDITIONAL FITTINGS, BENDS, OR COUPLINGS, WHICH REPORTING TO THE ENGINEER AND THE OWNER IN WRITTEN FORM, (B) A NEED FOR RELOCATION OF EXISTING UTILITIES, THEN DETAILS OF SUCH DEPARTURES, RELOCATIONS, OR ADDITIONAL FITTINGS, INCLUDING CHANGES IN RELATED PORTIONS OF THE PROJECT AND THE REASONS THEREFORE, SHALL BE SUBMITTED WITH SHOP DRAWINGS. APPROVED DEPARTURES FOR THE CONTRACTOR'S CONVENIENCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIALS AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND THE OWNER IN WRITTEN FORM, FORTY- EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRE-TESTING PRIOR TO NOTIFICATION.

AS-BUILT DRAWING REQUIREMENTS

1. AS-BUILT DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER AT LEAST THREE WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED BY A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED AND DATED BY THE RESPONSIBLE PARTY. THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY ALL AS-BUILT SURVEY REQUIREMENTS TO THE GOVERNING AGENCIES PRIOR TO START OF CONSTRUCTION TO ENSURE THAT AS-BUILT INFORMATION IS PROVIDED FOR.
2. ALL RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR IN ACAD FORMAT USING CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER. AS-BUILT INFORMATION SHALL BE FIELD VERIFIED, MEASURED, ADDED TO THE ACAD FILES OF

THE CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER, AND CERTIFIED, SIGNED AND SEALED BY THE CONTRACTOR'S LICENSED SURVEYOR WHO WILL BE RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS AND ELEVATIONS.

3. THE AS-BUILT INFORMATION IS TO INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- A. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS FOR ALL UTILITY AND STORM STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLES, INLETS AND CLEANOUTS, INCLUDING STRUCTURE TOP AND INVERT ELEVATIONS.
- B. DISTANCE ALONG PIPELINES BETWEEN STRUCTURES.
- C. STORMWATER POND TOP OF BERM AND POND BOTTOM ELEVATIONS AND HORIZONTAL DIMENSIONS MEASURED AT A MINIMUM OF TEN LOCATIONS PER POND, AT LOCATIONS DESIGNATED BY THE ENGINEER. TOP OF POND HORIZONTAL DIMENSIONS ARE ALSO TO BE TIED TO PROPERTY CORNERS, EASEMENTS, AND RIGHTS-OF-WAY.
- D. STORMWATER CONTROL, STRUCTURE DIMENSIONS AND ELEVATIONS, INCLUDING ALL WEIRS, SLOTS, ORIFICES, GRATES, AND SKIMMERS.
- E. STORMWATER CONVEYANCE SYSTEMS INCLUDING DIMENSIONS, ELEVATIONS, CONTOURS, AND CROSS SECTIONS.
- F. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS OF ALL UTILITY VALVES, FITTINGS, CONNECTION POINTS, ETC.
- G. VERTICAL ELEVATIONS OF ALL PIPELINES AT CROSSINGS OF POTABLE WATER MAINS (WHETHER THE WATER MAIN IS EXISTING OR NEW) IN ORDER TO DOCUMENT THAT THE MINIMUM REQUIRED VERTICAL SEPARATION HAS BEEN MET.
- H. UTILITY PIPELINE TIED HORIZONTALLY TO EDGE OF PAVEMENT AND RIGHT-OF-WAY LINES, LOCATED EVERY 200-FT PLUS ALL CHANGES IN HORIZONTAL OFFSET.
- I. PAVEMENT WIDTH AND ELEVATIONS AT THE CENTERLINE AND EDGE OF PAVEMENT EVERY 200 FEET PLUS AT ALL CHANGES IN LONGITUDINAL SLOPE, CROSS SLOPE, INLET LOCATIONS, AND AT ALL DRIVEWAY AND STREET INTERSECTIONS, FOR PARKING LOTS, RECORD CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS ALONG ALL DRIVE AISLES AND ISLANDS.
- J. ALL PARKING AREAS AND SIDEWALK RAMPS DESIGNATED FOR HANDICAP ACCESS SHALL CONTAIN HORIZONTAL AND VERTICAL MEASUREMENTS IN ORDER TO VERIFY REQUIRED WIDTHS AND SLOPES HAVE BEEN MET.
- K. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS.
- L. WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION DATA, SUCH AS STATION AND OFFSET, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL HORIZONTAL LOCATION.
- M. WHERE THE PLANS CONTAIN SPECIFIC VERTICAL ELEVATION DATA, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL MEASURED VERTICAL ELEVATION.
- N. ANY ADDITIONAL INFORMATION REQUIRED BY GOVERNING AGENCIES.

4. IN CASES WHERE THE OWNER DETERMINES PARTIAL CLEARANCES FROM PERMITTING AGENCIES ARE BENEFICIAL TO THE OWNER FOR COMPLETED PORTIONS OF THE PROJECT, PROVIDE PRELIMINARY AS-BUILT DRAWINGS (ACAD FORMAT) TO THE ENGINEER FOR ITS USE IN PREPARING THE PARTIAL CLEARANCE APPLICATIONS FOR THE OWNER.
5. COMPLETE AS-BUILT DRAWINGS THAT ARE FOUND TO BE SATISFACTORY AS A RESULT OF THE ENGINEER'S REVIEW WILL BE USED AS THE BASIS FOR THE FINAL PROJECT RECORD DRAWINGS PREPARED BY THE ENGINEER USING THE CONTRACTOR PROVIDED AS-BUILT DRAWINGS PLUS ENGINEER ADDED INFORMATION.

TRAFFIC CONTROL

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A CONTROL MAINTENANCE OF TRAFFIC (M.O.T.) PLAN PRIOR TO CONSTRUCTION. THE M.O.T. PLAN SHALL SHOW ALL PROPOSED TRAFFIC CONTROL MEASURES, INCLUDING BARRICADES, AND SHALL DETAIL ALL PROPOSED CONSTRUCTION SEQUENCING. THE M.O.T. PLAN AND INSTALLED TRAFFIC CONTROL MEASURES SHALL BE APPROVED BY THE ENGINEER, OWNER, AND ROADWAY JURISDICTIONAL AGENCY PRIOR TO CONSTRUCTION. IN GENERAL, ROADWAY AND DRIVEWAY LANE CLOSURES ARE PROHIBITED DURING CONSTRUCTION UNLESS SPECIFICALLY DETAILED ON THESE PLANS. IN THE EVENT IT IS DETERMINED THAT ROADWAY AND DRIVEWAY LANE CLOSURES WILL BE ALLOWED, THE CLOSURES SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M. UNLESS OTHERWISE AUTHORIZED IN THE APPROVED M.O.T.
2. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102-600 AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION.
3. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.
4. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION. COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.
5. WET UNSTABILIZED AREAS AS NECESSARY TO CONTROL DUST.
6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.

7. THE CONTRACTOR IS EXPECTED TO COORDINATE ITS ACTIVITIES WITH OTHER CONTRACTORS WHO MAY BE WORKING IN THE IMMEDIATE VICINITY.
8. WHEN WORK OCCURS WITHIN 15-FT OF ACTIVE ROAD TRAVEL LANES BUT NO CLOSER THAN 2-FT FROM THE EDGE OF PAVEMENT, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102-600 AND 102-602.
9. TYPE I OR TYPE II BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD WHEREVER DROP-OFFS OR OTHER HAZARDS EXIST AND TO BLOCK ENTRANCE INTO COMPLETED OR PARTIALLY COMPLETED PAVEMENTS UNTIL SUCH PAVEMENTS ARE OPEN TO PUBLIC USE.

SITE PREPARATION

1. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN RIGHT-OF-WAY AND EASEMENTS AS INDICATED ON THE DRAWINGS. AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. ANY REPAIR OR RECONSTRUCTION OF DAMAGED AREAS IN SURROUNDING PROPERTIES SHALL BE REPAIRED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.
2. STAKE OUT THE CONSTRUCTION, ESTABLISH LINES AND LEVELS, TEMPORARY BENCH MARKS, BATTER BOARDS, CENTERLINES, BASELINES, AND REFERENCE POINTS FOR THE WORK. ADVISE ALL DIMENSIONS RELATING TO INTERCONNECTION WITH EXISTING FEATURES. REPORT ANY INCONSISTENCIES IN THE PROPOSED GRADINGS, LINES AND LEVELS, DIMENSIONS AND LOCATIONS TO THE ENGINEER BEFORE COMMENCING WORK.
3. PROTECT ALL TREES AND SHRUBS LOCATED OUTSIDE THE RIGHT-OF-WAY, EASEMENTS, AND OWNER SECURED PROPERTY, PARTICULARLY THOSE TREES AND SHRUBS LOCATED ADJACENT TO WORK AREAS.
4. WITHIN THE RIGHT-OF-WAY, EASEMENTS, AND OWNER SECURED PROPERTY, THE INTENT IS TO ALLOW TREES AND SHRUBS TO REMAIN IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: NEW ROADWAY CONSTRUCTION - TREES AND SHRUBS TO REMAIN WHERE LOCATED MORE THAN 15 FEET FROM THE BACK OF CURB, OR OUTSIDE THE LIMITS OF EXCAVATION OR FILL AREAS, WHICHEVER IS FURTHER. UTILITY PIPELINE CONSTRUCTION - TREES AND SHRUBS TO REMAIN OUTSIDE A 15 FOOT WIDE PATH, CENTERED ON THE PIPELINE.
5. TREES TO REMAIN IN THE CONSTRUCTION AREA SHALL BE BOXED, FENCED OR OTHERWISE PROTECTED IN ACCORDANCE WITH DETAILS ON THE DRAWINGS. DO NOT PERMIT HEAVY EQUIPMENT OR STOCKPILES WITHIN BRANCH SPREAD.
6. AREAS TO RECEIVE CLEARING AND GRUBBING SHALL INCLUDE ALL AREAS TO BE OCCUPIED BY THE PROPOSED IMPROVEMENTS, AREAS FOR FILL AND SITE GRADING, AND BORROW SITES. REMOVE TREES OUTSIDE OF THESE AREAS ONLY AS INDICATED ON THE DRAWINGS OR AS APPROVED IN WRITING BY THE ENGINEER.
7. CLEARING SHALL CONSIST OF REMOVING TREES AND BRUSH AND DISPOSAL OF OTHER MATERIALS THAT ENDOURCH UPON OR OTHERWISE OBSTRUCT THE WORK.
8. EXERCISE EXTREME CARE DURING THE CLEARING AND GRUBBING OPERATIONS. DO NOT DAMAGE EXISTING STRUCTURES, PIPES OR UTILITIES.
9. GRUBBING SHALL CONSIST OF REMOVING AND DISPOSING OF STUMPS, ROOTS LARGER THAN 2" IN DIAMETER, AND MATTED ROOTS. REMOVE TO A DEPTH OF NOT LESS THAN 18" BELOW THE ORIGINAL SURFACE LEVEL OF THE GROUND.
10. ALL COMBUSTIBLE DEBRIS AND REFUSE FROM SITE PREPARATION OPERATIONS SHALL BE REMOVED TO LEGAL OFFSITE DISPOSAL AREAS.

DEWATERING

1. DESIGN AND PROVIDE A DEWATERING SYSTEM USING ACCEPTED AND PROFESSIONAL METHODS CONSISTENT WITH CURRENT INDUSTRY PRACTICE. PROVIDE A DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR RAVELING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES. WHERE NECESSARY TO THESE PURPOSES, LOWER WATER LEVEL IN ADVANCE OF EXCAVATION, UTILIZING WELLS, WELL POINTS, OR SIMILAR POSITIVE METHODS. MAINTAIN THE GROUNDWATER LEVEL TO A MINIMUM OF 2 FEET BELOW EXCAVATIONS, PROVIDE PIEZOMETERS IF DIRECTED BY THE ENGINEER TO DOCUMENT THE GROUNDWATER LEVEL IS BEING MAINTAINED.
2. CONTROL, BY ACCEPTABLE MEANS, ALL WATER REGARDLESS OF SOURCE AND BE FULLY RESPONSIBLE FOR DISPOSAL OF THE WATER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY SUPPLEMENTAL MEASURES TO CONTROL SEEPAGE, GROUNDWATER, OR ARTESIAN HEAD.
3. DEWATERING DISCHARGE FROM THE SITE SHALL COMPLY WITH ALL NPDES GENERAL PERMIT REQUIREMENTS AND STATE WATER QUALITY STANDARDS. PROVIDE ALL TESTING AND PERMITTING REQUIRED AND COMPLY WITH ALL TREATMENT OR DISPOSAL METHODS REQUIRED TO MEET ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
4. OPEN PUMPING WITH SUMPS AND DITCHES SHALL BE ALLOWED, PROVIDED IT DOES NOT RESULT IN BOILS, LOSS OF FINES, AND PRESSURE TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY ALL AS-BUILT SURVEY REQUIREMENTS TO THE GOVERNING AGENCIES PRIOR TO START OF CONSTRUCTION TO ENSURE THAT AS-BUILT INFORMATION IS PROVIDED FOR.
6. CONTINUOUSLY MAINTAIN EXCAVATIONS IN A DRY CONDITION WITH POSITIVE DEWATERING METHODS DURING PREPARATION OF SUBGRADE, INSTALLATION OF PIPE, AND CONSTRUCTION OF STRUCTURES UNTIL THE CUTTING PERIOD OF CONSTRUCTION AND/OR BACKFILL IS COMPLETED TO PREVENT DAMAGE OF SUBGRADE SUPPORT, PIPING, STRUCTURE, SIDE SLOPES, OR

ADJACENT FACILITIES FROM FLOTATION OR OTHER HYDROSTATIC PRESSURE IMBALANCE.

7. WHEN CONSTRUCTION IS COMPLETE, REMOVE ALL DEWATERING EQUIPMENT FROM THE SITE, INCLUDING WELLS AND RELATED TEMPORARY ELECTRICAL SERVICE.

GRADING

1. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS AS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.
2. ALL PROPOSED ELEVATIONS ON THE PLANS WITHIN PAVED AREAS ARE SHOWN AT PAVEMENT, UNLESS OTHERWISE NOTED. C15/A21.53, A FLUX, AND A FINISH. THE MINIMUM FINISH PRESSURE RATED TO 250 PSI, MINIMUM. ALL COMPACT FITTINGS (C15/A21.53) SHALL BE PRESSURE RATED TO 350 PSI, MINIMUM.
3. ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. THE STANDARD CROWN MAY HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSULTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR GIVE SUPPLEMENTARY INSTRUCTIONS TO ACCOMPLISH THE INTENT OF THE PLANS.
4. UNIFORMLY SMOOTH GRADE THE SITE. DEPRESSIONS FROM SETTLEMENT SHALL BE FILLED AND COMPACTED. TOPS OF EMBANKMENTS AND BREAKS IN GRADE SHALL BE ROUNDED. FINISHED SURFACES SHALL BE REASONABLY SMOOTH, COMPACTED, FREE FROM IRREGULAR SURFACE CHANGES AND COMPARABLE TO THE SMOOTHNESS OBTAINED BY BLADE-FREER OPERATIONS.
5. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION. ALL SETTLEMENT OR WASHING AWAY THAT MAY OCCUR FROM ANY CAUSE PRIOR TO SEEDING OR ACCEPTANCE SHALL BE REPAIRED AND GRADES RE-ESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO THE OWNER.

EXCAVATION, TRENCHING, AND FILL

1. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (FS 553.60-553.64). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
2. ROUGH EXCAVATE AND GRADE ANY PROPOSED STORMWATER PONDS AT THE START OF SITE GRADING ACTIVITIES. DIRECT SITE RUNOFF TO THE PONDS TO MINIMIZE RUNOFF TO OFFSITE AREAS.
3. POND CONSTRUCTION SHALL RESULT IN THE FINISHED POND HAVING SIDE SLOPES AND DIMENSIONS THAT ARE IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT THESE REQUIREMENTS HAVE BEEN MET. IF THE CONSTRUCTION SIDE SLOPES ARE STEEPER THAN THE REQUIRED SIDE SLOPES, OR THE POND VOLUME IS NOT WITHIN THREE (3) PERCENT OF THE DESIGN VOLUME, THE CONTRACTOR SHALL BE REQUIRED TO MAKE CORRECTIONS TO THE POND AT NO ADDITIONAL COST TO THE OWNER.
4. FIELD DENSITY TESTING FREQUENCIES: A) ONE TEST FOR EACH 10,000 SQUARE FEET OR FRACTION THEREOF PER LIFT OF GENERAL BACKFILLING; MINIMUM 2 TESTS EACH LAYER; B) ONE TEST FOR EACH 100 SQUARE FEET OR FRACTION THEREOF OF BACKFILL AROUND AND UNDER STRUCTURES; C) ONE TEST FOR EACH 300 LINEAL FEET OR FRACTION THEREOF PER LIFT OF GENERAL BACKFILLING IN THE PIPELINE TRENCH; D) ONE TEST PER LIFT PER EACH CHANGE IN TYPE OF FILL; E) ONE TEST PER 1000 SQUARE FEET OF PAVEMENT SUBGRADE, MINIMUM OF 2 TESTS.
5. IT IS INTENDED THAT PREVIOUSLY EXCAVATED MATERIALS CONFORMING TO THE FOLLOWING REQUIREMENTS BE UTILIZED WHEREVER POSSIBLE.
- A. ACCEPTABLE MATERIALS: AASHTO M145 CLASSIFICATION A-1, A-2, A-3, A-2.6, A-2.6; ASTM D2487 CLASSIFICATION GP, GM, SM, SW, SP, UNLESS OTHERWISE DISAPPROVED WITHIN THE SOIL AND SUBSURFACE INVESTIGATION REPORTS. NO MORE THAN 12% OF ACCEPTABLE MATERIALS SHALL PASS THE NUMBER 200 SIEVE.
- B. ACCEPTABLE MATERIALS: AASHTO M145 CLASSIFICATION A-2.5, A-2.7, A-4, A-5, A-6, A-7, A-8; ASTM D2487 CLASSIFICATION GC, SC, ML, MH, CL, CL, OH, CL, OR, UNLESS OTHERWISE APPROVED WITHIN THE SOIL AND SUBSURFACE INVESTIGATION REPORTS.
6. PROVIDE BARRIERS, WARNING LIGHTS AND OTHER PROTECTIVE DEVICES AT ALL EXCAVATIONS.
7. SIDEWALKS, ROADS, STREETS, AND PAVEMENTS SHALL NOT BE BLOCKED OR OBSTRUCTED BY EXCAVATED MATERIALS, EXCEPT AS AUTHORIZED BY THE ENGINEER. ALL TEMPORARY PROVISIONS MUST BE MADE FOR SATISFACTORY TEMPORARY PASSAGE OF PEDESTRANS, AND VEHICLES. MINIMIZE INCONVENIENCE TO PUBLIC TRAVEL OR TO TENANTS OCCUPYING ADJOINING PROPERTY.
8. FURNISH, INSTALL, AND MAINTAIN, WITHOUT ADDITIONAL COMPENSATION, SHEETING, BRACING, AND SHORING SUPPORT REQUIRED TO KEEP EXCAVATIONS WITHIN THE PROPERTY OR EASEMENTS PROVIDED, TO SUPPORT THE SIDES OF THE EXCAVATION, AND TO PREVENT ANY MOVEMENT WHICH MAY DAMAGE ADJACENT PAVEMENTS OR STRUCTURES, DAMAGE OR DELAY THE WORK, OR ENDANGER LIFE AND HEALTH. VOIDS OUTSIDE THE SUPPORTS SHALL BE IMMEDIATELY FILLED AND COMPACTED.
9. SHEETING, SHORING, AND BRACING USED FOR THE SUPPORT OF EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED BY THE STATE OF FLORIDA.
10. ALL EXCAVATIONS SHALL BE MADE BY OPEN CUT UNLESS OTHERWISE INDICATED. SLOPE SIDES OF TRENCHES IN ACCORDANCE WITH OSHA REQUIREMENTS AND THE RECOMMENDATIONS CONTAINED WITHIN THE PROJECT GEOTECHNICAL REPORT.
11. EXCAVATE TRENCHES TO DEPTH INDICATED OR REQUIRED FOR INDICATED FLOW LINES AND INVERT ELEVATIONS. OVER EXCAVATE TRENCHES A MINIMUM OF 2 FEET WHERE EXCAVATIONS OCCUR WITHIN UNSUITABLE SOILS, AND REPLACE OVER EXCAVATED MATERIAL WITH SUITABLE SOILS.
12. TRENCH BOTTOMS AND THE BOTTOMS OF ALL STRUCTURES SHALL BE KEPT DRY, COMPACTED, AND STABLE TO A DEPTH TWO FEET BELOW THE BOTTOM OF THE TRENCH OR STRUCTURE.
13. ALL BEDDING, FILL, AND BACKFILL MATERIAL SHALL BE SUITABLE SOILS OR FLOWABLE FILL. WHERE TRENCH OR EXCAVATION IS WITHIN THE INFLUENCE AREA OF ROADWAYS, STRUCTURES, FOUNDATIONS, OR SLABS, PLACE BACKFILL IN LAYERS OF 8 INCH LOOSE DEPTH. IN ALL OTHER AREAS, PLACE FILL AND BACKFILL IN LAYERS OF 12 INCH LOOSE DEPTH.
14. MINIMUM DENSITY REQUIREMENT (ASTM D1557 OR AASHTO T180): BACKFILL AND FILL UNDER AND WITHIN THE INFLUENCE AREA OF ROADWAYS, STRUCTURES, SLABS, FOUNDATIONS = 98 PERCENT; BACKFILL AND FILL PLACED WITHIN PUBLIC ROAD RIGHT-OF-WAY AND UTILITY EASEMENTS = 95 PERCENT; BACKFILL AND FILL PLACED WITHIN POND AND ROAD EMBANKMENT = 95 PERCENT; BACKFILL AND FILL PLACED IN ALL OTHER AREAS = 90 PERCENT.

RIPRAP

1. ALL RIPRAP CONSTRUCTION SHALL MEET THE REQUIREMENTS OF SECTION 530 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

UTILITY SEPARATION REQUIREMENTS

1. THE HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER, STORM SEWER, WASTEWATER FORCE MAINS, STORMWATER FORCE MAINS, RECLAIMED WATER MAINS AND ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
- A. THE OUTSIDE OF WATER MAINS SHALL BE A MINIMUM OF FIVE FEET FROM THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, VACUUM TYPE SANITARY SEWER AND RECLAIMED WATER MAIN.
- B. THE OUTSIDE OF WATER MAINS SHALL BE A MINIMUM OF TEN FEET FROM THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY SANITARY SEWER AND WASTEWATER FORCE MAIN. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN THE OUTSIDE OF WATER MAINS AND THE OUTSIDE OF GRAVITY SANITARY SEWERS CAN BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES ABOVE THE TOP OF THE SEWER.
- C. THE OUTSIDE OF WATER MAINS SHALL BE A MINIMUM OF TEN FEET FROM ALL PARTS OF ANY EXISTING OR PROPOSED ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM SUCH AS SEPTIC TANKS, DRAINFIELDS, AND GREASE TRAPS. ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS DO NOT INCLUDE PACKAGE SEWAGE TREATMENT FACILITIES AND PUBLIC WASTEWATER TREATMENT FACILITIES.
2. THE VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY AND STORM SEWER, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER MAINS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
- A. WHEREVER POSSIBLE, WATER MAINS SHALL CROSS OVER EXISTING OR PROPOSED GRAVITY SANITARY SEWER, VACUUM TYPE SANITARY SEWER, AND STORM SEWER, 80 THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OUTSIDE OF THE SEWER. WHERE IT IS NOT POSSIBLE FOR THE WATER MAIN TO CROSS OVER EXISTING OR PROPOSED GRAVITY SANITARY SEWER, VACUUM TYPE SANITARY SEWER, AND STORM SEWER, THEN THE WATER MAIN CAN CROSS UNDER THESE TYPES OF PIPELINE SYSTEMS PROVIDED THE OUTSIDE OF THE WATER MAIN IS AT LEAST 18 INCHES BELOW THE OUTSIDE OF THE PIPELINE. AT THE CROSSING, THE PROPOSED WATER MAIN SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST FIVE FEET FROM VACUUM TYPE SANITARY SEWER OR STORM SEWER JOINTS, AND AT LEAST TEN FEET FROM GRAVITY SANITARY SEWER JOINTS.
- B. WHEREVER POSSIBLE, WATER MAINS SHALL CROSS OVER EXISTING OR PROPOSED RECLAIMED WATER MAINS, WASTEWATER FORCE MAINS AND STORMWATER FORCE MAINS. WHETHER THE WATER MAIN CROSSES OVER OR UNDER THESE TYPES OF PIPELINE SYSTEMS, THE OUTSIDE OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES FROM THE OUTSIDE OF THE EXISTING OR PROPOSED RECLAIMED WATER MAIN, WASTEWATER FORCE MAIN AND STORMWATER FORCE MAIN. AT THE CROSSING, THE PROPOSED PIPE JOINTS SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST FIVE FEET FROM RECLAIMED WATER MAIN JOINTS AND STORMWATER FORCE MAIN JOINTS, AND AT LEAST TEN FEET FROM THE JOINTS OF WASTEWATER FORCE MAINS.
3. NO WATER MAIN SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE.
4. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN (WEEP HOLE) IS AT LEAST:
- A. FIVE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER MAIN, OR VACUUM TYPE SANITARY SEWER.
- B. TEN FEET FROM ANY EXISTING OR PROPOSED GRAVITY SANITARY SEWER AND WASTEWATER FORCE MAIN.
- C. TEN FEET FROM ANY ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM SUCH AS SEPTIC TANKS, DRAINFIELDS, AND GREASE TRAPS. ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS DO NOT INCLUDE PACKAGE SEWAGE TREATMENT FACILITIES AND PUBLIC WASTEWATER TREATMENT FACILITIES.

WATER AND RECLAIMED WATER DISTRIBUTION SYSTEMS

1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE WATER AND RECLAIMED WATER SYSTEMS SHOWN ON THESE PLANS IS SADDLER SQUARE LAND TRUST AND CITY OF FERNANDINA BEACH. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF CITY OF FERNANDINA BEACH.
2. INSTALL ALL WATER AND RECLAIMED MAINS AT A MINIMUM 36 INCHES OF COVER.

3. BURIED DUCTILE IRON PIPE SHALL COMPLY WITH THE FOLLOWING PRESSURE CLASS (PC) DESIGNATIONS UNLESS OTHERWISE INDICATED ON THE DRAWINGS: A) 12" DIAMETER AND SMALLER = PC 350; B) 14" THROUGH 24" DIAMETER = PC 250; C) 30" THROUGH 64" DIAMETER = PC 200.
4. DUCTILE IRON PIPE AND FITTINGS WITHIN 10 FEET OF GAS MAINS SHALL HAVE AN 8-MIL POLYETHYLENE WRAP IN ACCORDANCE WITH ANSI/AWWA C105/A21.5.
5. PVC PIPE SHALL BE NATIONAL SANITATION FEDERATION (NSF) APPROVED. PIPE SHALL HAVE MARKINGS ON EACH SECTION SHOWING CONFORMANCE TO THE ABOVE SPECIFICATIONS. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO AWWA C900 OR C905. THE BELL END SHALL BE IN THE LINE WITH THE PIPE AND ON GREATER PRESSURE RATING. THE BELL OF PIPE AND FITTINGS USING PUSH-ON JOINTS SHALL HAVE AN INTEGRAL GROOVE TO RETAIN THE GASKET IN PLACE.
6. ALL FITTINGS SHALL BE MANUFACTURED OF DUCTILE IRON, CONFORMING TO ANSI/AWWA C110/A21.10 OR ANSI/AWWA C153/A21.53. ALL FITTINGS SHALL BE PRESSURE RATED TO 350 PSI, MINIMUM. ALL COMPACT FITTINGS (C153/A21.53) SHALL BE PRESSURE RATED TO 350 PSI, MINIMUM.
7. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE LINED AND COATED. INTERIOR LINING SHALL BE STANDARD THICKNESS CEMENT MORTAR LINING PER ANSI/AWWA C104/A21.4. EXTERIOR COATING FOR BURIED PIPE AND FITTINGS SHALL BE A PETROLEUM ASPHALTIC COATING IN ACCORDANCE WITH ANSI/AWWA C110/A21.10. EXTERIOR COATING OF EXPOSED PIPE AND FITTINGS SHALL BE FACTORY APPLIED RUST INHIBITING EPOXY PRIMER, MINIMUM 3 MILS DRY FILM THICKNESS. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT (INTERMEDIATE COAT) SHALL BE 4.0-10.0 MIL DFT NEMEC COLOR H-BUILD EPOXOLINE I SERIES N69 OR APPROVED EQUAL, AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT NEMEC ENDURASHIELD SERIES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
8. MECHANICAL AND PUSH ON JOINTS FOR DUCTILE IRON PIPE AND FITTINGS SHALL BE RUBBER GASKETED, CONFORMING TO ANSI/AWWA C111/A21.11. LUBRICANTS OTHER THAN THAT FURNISHED BY THE PIPE MANUFACTURER WITH THE PIPE SHALL NOT BE USED.
9. RESTRAINED JOINTS FOR DUCTILE IRON PIPE BELL JOINTS SHALL BE AMERICAN FAST GRIP GASKET, MCWANE SUPER GRIP 350 GASKET, U.S. PIPE FLEX LOCK 350 GASKET, OR EBAA IRON MEGA LUG SERIES 1100HD. RESTRAINED JOINTS FOR DUCTILE IRON PIPE AND FITTINGS MECHANICAL JOINTS SHALL BE EBAA IRON MEGA LUG SERIES 1100, STAR GRIP SERIES 2000, OR TYLER UNION TUF-GRIP SERIES TLD. LOCKING BELL JOINT RESTRAINT SHALL BE AMERICAN FLEX RING JOINT, AMERICAN LOCK-RING JOINT, OR U.S. PIPE TR-FLEX. RESTRAINED JOINTS FOR PVC PIPE MECHANICAL JOINTS SHALL BE TYLER UNION SERIES 2000 TUF GRIP, TUF JOM SUR-GRIP BELL RESTRAINT, FORD UNI-FLANGE SERIES 1300, OR EBAA IRON MEGA LUG SERIES 2000P. RESTRAINED JOINTS FOR PVC PIPE PUSH ON JOINTS SHALL BE EBAA IRON MEGA LUG SERIES 1500 OR SERIES 1600 (C900 PVC), SERIES 2800 (C905 PVC), FORD UNI-FLANGE SERIES 1300, OR SMITH-BLAIR BELL-LOCK SERIES 165. PIPE JOINTS SHALL BE RESTRAINED UPSTREAM AND DOWNSTREAM OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS OR THE TABLE SHOWN IN THE DRAWINGS, WHICHEVER IS GREATER.
10. POLYETHYLENE PIPE AND TUBING SHALL BE COLOR CODED BLUE (POTABLE WATER) OR PURPLE (RECLAIMED WATER). PIPE AND FITTINGS SHALL BE NSF APPROVED FOR THE USAGE TO WHICH THEY ARE TO BE APPLIED. JOINTS IN SDR-PE PIPE SHALL BE BUTT HEAT FUSION OR SOCKET HEAT FUSION TYPE. FITTINGS SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE PIPE AND SHALL BE OF THE SAME SDR OR LESS. PROVIDE ADAPTERS AS REQUIRED TO JOIN PE PIPE TO PIPE, FITTINGS AND EQUIPMENT OF OTHER MATERIALS.
11. SERVICE SADDLES SHALL MEET THE REQUIREMENTS OF AWWA C800 AND SHALL CONSIST OF EPOXY COATED DUCTILE IRON BODIES IN ACCORDANCE WITH ASTM A536, WITH DOUBLE STAINLESS STEEL STRAPS, BOLTS, WASHERS AND NUTS. STAINLESS STEEL SHALL BE TYPE 304, AND NUTS ARE TO BE TEFELON COATED. THE DUCTILE IRON BODY IS TO BE FUSION BONDED NYLON COATED, MINIMUM THICKNESS 12 MILS. OUTLET OF SADDLE IS TO HAVE NPT THREADS. SERVICE SADDLES SHALL BE MANUFACTURED BY FORD, MUELLER, OR SMITH-BLAIR.
12. ALL SERVICES SHALL INCLUDE THE FOLLOWING: CURB STOPS, UNIONS AS REQUIRED, CORROSION STOPS, CONFORMANCE WITH AWWA C800 AND C901 IS REQUIRED. THE CONTRACTOR SHALL CUT "W" IN THE TOP CURB OF EACH WATER SERVICE AND A "V" AT ALL VALVE LOCATIONS. CUT "W'S AND V'S SHALL BE HIGHLIGHTED WITH BLUE PAINT.
13. UNLESS OTHERWISE NOTED IN THE PLANS, THE UTILITY COMPANY SHALL PROVIDE AND INSTALL WATER METERS AND RECLAIMED WATER METERS. CONTRACTOR SHALL CONSTRUCT WATER SERVICE AND RECLAIMED WATER SERVICE TO THE CORPORATION STOP.
14. UNLESS OTHERWISE INDICATED OR SPECIFIED, ALL VALVES TWO INCHES AND SMALLER SHALL BE ALL BRASS OR BRONZE; VALVES OVER TWO INCHES SHALL BE IRON BODY, FULLY BRONZE OR BRONZE MOUNTED.
15. VALVES 4 INCHES AND LARGER SHALL BE LINED AND COATED. BURIED AND EXPOSED VALVES SHALL BE COATED INSIDE AND OUT WITH A RUST INHIBITING EPOXY PRIMER, FOLLOWED BY AN EPOXY COATING MEETING THE REQUIREMENTS OF AWWA C550, APPLIED AT THE FACTORY. THE INTERIOR OF VALVES WITH A CAST IRON OR DUCTILE IRON BODY SHALL BE COATED WITH AN EPOXY PROTECTIVE COATING. VALVE BOXES SHALL BE CAST IRON OR DUCTILE IRON. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT (INTERMEDIATE COAT) SHALL BE 4.0-10.0 MIL DFT NEMEC COLOR H-BUILD EPOXOLINE II SERIES N69 OR APPROVED EQUAL, AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT NEMEC ENDURASHIELD SERIES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
16. ALL VALVES 12" AND SMALLER SHALL BE GATE VALVES UNLESS OTHERWISE INDICATED ON THE DRAWINGS. GATE VALVES 3 INCHES TO 12 INCHES SHALL CONFORM TO AWWA C500 OR AWWA S15.5. THE VALVES SHALL BE IRON BODY, GATE VALVE, FULLY ENCAPSULATED MOLDED RUBBER WEDGE COMPLYING WITH ASTM D2000, NON-RISING STEM WITH O-RING SEALS. VALVES SHALL OPEN COUNTERCLOCKWISE.
17. TAPPING SLEEVES ARE TO BE 18-# TYPE 304 STAINLESS STEEL AND STAINLESS STEEL OUTLET, AS MANUFACTURED BY JCM OR APPROVED EQUAL. TAPPING VALVES SHALL BE RESILIENT SEATED GATE VALVES AND SHALL CONFORM TO THE REQUIREMENTS OF AWWA C509. TAPPING VALVES SHALL BE AMERICAN FLOW CONTROL SERIES 2500, CLOUING FIRE F-6100, OR MUELLER SERIES A261.
18. VALVES 14" AND LARGER SHALL BE BUTTERFLY VALVES. BUTTERFLY VALVES SHALL MEET OR EXCEED THE DESIGN STRENGTH, TESTING AND PERFORMANCE REQUIREMENTS AWWA C504, CLASS 150. VALVE BODY SHALL BE MECHANICAL JOINT END TYPE VALVE CONSTRUCTED OF CAST IRON OR DUCTILE IRON. DISC SHALL BE ONE PIECE CAST IRON DESIGN WITH EXTERNAL RIBS TRANSVERSE TO FLOW. DISC SHALL BE CAST IRON OR DUCTILE IRON. THE RESILIENT SEAT SHALL MATE WITH A 30

34. ALL APPARENT LEAKS DISCOVERED WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER SHALL BE LOCATED AND REPAIRED BY CONTRACTOR, REGARDLESS OF THE TOTAL LINE LEAKAGE RATE.
35. PRIOR TO DISINFECTION, CONDUCT FULL DIAMETER FLUSHING OF PIPELINE IN SECTIONS IN ORDER TO REMOVE ANY SOLIDS OR CONTAMINATED MATERIAL THAT MAY HAVE BECOME LODGED IN THE PIPE.
36. OBTAIN A MINIMUM FLUSHING VELOCITY OF 2.5 FEET PER SECOND PER AWWA C651.
37. ALL TAPS REQUIRED FOR FLUSHING AND THE TEMPORARY OR PERMANENT RELEASE OF AIR AS NEEDED FOR FLUSHING SHALL BE PROVIDED BY THE CONTRACTOR.
38. DISINFECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, HYDRANTS. THE WATER MAIN DISINFECTION AND BACTERIOLOGICAL SAMPLING AND METHODS OF DISINFECTION FOR ALL WATER CONTAINMENT DEVICES AND PIPING SYSTEMS SHALL CONFORM TO AWWA C651. THE DISCHARGE LOCATIONS FOR THE CHLORINATED WATER SHALL BE APPROVED BY THE OWNER. NEUTRALIZE THE CHLORINE RESIDUAL BY MEANS OF A REDUCING AGENT IN ACCORDANCE WITH AWWA C651.
39. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY. IF ANY REQUIREMENTS OF THIS SECTION ARE IN CONFLICT WITH REQUIREMENTS OF THE AUTHORITY FOR DISINFECTION, THOSE OF THE AUTHORITY SHALL GOVERN. ALL BACTERIOLOGICAL TESTING SHALL BE PERFORMED BY A STATE CERTIFIED LABORATORY CONTRACTED BY THE CONTRACTOR. PROPER CHAIN OF CUSTODY PROCEDURES MUST BE FOLLOWED AND SAMPLES SHALL ONLY BE COLLECTED BY CERTIFIED LABORATORY PERSONNEL. COPIES OF ALL TESTING RESULTS AND ALL RELATED CORRESPONDENCE FROM THE TESTING LAB SHALL BE SUBMITTED TO THE OWNER, UTILITY, AND ENGINEER.

FIRE PROTECTION SYSTEMS

1. COMBUSTIBLE CONSTRUCTION CANNOT OCCUR UNTIL PROPER DOCUMENTATION HAS BEEN SUBMITTED TO THE LOCAL FIRE MARSHAL. DOCUMENTATION SHALL SHOW THAT HYDRANTS HAVE BEEN INSTALLED, TESTED, AND ARE IN PROPER WORKING ORDER.
2. INSTALL ALL FIRE LINE PIPING AT A MINIMUM 36 INCHES OF COVER.
3. THE CONTRACTOR INSTALLING THE UNDERGROUND FIRE PROTECTION PIPING SHALL HOLD A CLASS I, II, OR LEVEL V CERTIFICATION AS ISSUED BY THE STATE OF FLORIDA, AS REQUIRED BY FS 633.02(1)(5).
4. ALL FIRE PROTECTION SPRINKLER SYSTEMS INSTALLED SHALL COMPLY WITH NFPA 13, AND SHALL BE MONITORED BY A COMPANY LISTED AS A CENTRAL STATION.
5. HYDRANTS SHALL CONFORM TO AWWA C502 AND SHALL BE FURNISHED COMPLETE WITH WRENCH AND OTHER APPURTENANCES. MANUFACTURERS CERTIFICATION OF COMPLIANCE WITH AWWA C502 AND TESTS LISTED THEREIN WILL BE REQUIRED.
6. ALL HYDRANTS SHALL BE OF BREAKABLE TYPE, WITH THE BREAKABLE SECTION LOCATED SLIGHTLY ABOVE THE FINISH GROUND LINE. HYDRANTS SHALL CONTAIN TWO-TWO AND A HALF INCH (2-1/2") HOSE CONNECTIONS AND ONE-FOUR AND A HALF INCH (4-1/2") STEAMER CONNECTIONS WITH NATIONAL STANDARD FIRE HOSE COUPLING SCREW THREADS, FIVE AND ONE QUARTER INCH (5-1/4") VALVE OPENING, SIX INCH (6") DIAMETER MECHANICAL JOINT INLET, ONE AND ONE-HALF INCH (1-1/2") PENTAGON OPERATING NUT. THE HYDRANTS SHALL OPEN COUNTERCLOCKWISE.
7. ALL HYDRANTS SHALL BE PAINTED IN AN APPROVED MANNER WITH THE PRIMER PAINT BEING KOPPER'S "GLAMORTEX" NO. 622 RUST PRIMER AND THE FINISH PAINT SHALL BE TWO COATS OF ENAMEL OR SPECIAL COATING TO COLOR AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.
8. BLUE PAVEMENT REFLECTORS (CAT EYES) SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE DIRECTLY IN FRONT OF ALL FIRE HYDRANTS. THERE SHALL BE NO TREES, SHRUBS, OR LANDSCAPING PLANTED AROUND THE FIRE HYDRANTS OR IN AREAS DESIGNATED AS FIRE LANES.
9. NEW OR RELOCATED FIRE HYDRANTS SHALL BE LOCATED SUCH THAT THE UNDERGROUND DRAIN (WEEP HOLE) IS AT LEAST: THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER MAIN, OR VACUUM TYPE SANITARY SEWER; SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY SANITARY SEWER AND WASTEWATER FORCE MAIN; AND TEN FEET FROM ANY ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM SUCH AS SEPTIC TANKS, DRAINFIELDS, AND GREASE TRAPS. ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS DO NOT INCLUDE PACKAGE SEWAGE TREATMENT FACILITIES AND PUBLIC WASTEWATER TREATMENT FACILITIES.
10. THE SEQUENCE OF TESTING AND DISINFECTION SHALL BE AS FOLLOWS: 1) CONDUCT FIRE FLOW, PRESSURE AND LEAKAGE TESTING; 2) PERFORM FLUSHING PER UTILITY REQUIREMENTS AND AWWA C651; 3) DISINFECT THE WATER MAIN, INCLUDING VALVES AND FITTINGS; AND 4) FLUSH AFTER DISINFECTION.
11. THE CONTRACTOR SHALL PROVIDE A POST-CONSTRUCTION FIRE FLOW TEST WITNESSED AND APPROVED BY THE ENGINEER AND THE UTILITY. HYDRANTS SHALL DELIVER A MINIMUM OF 1250 GPM WITH A RESIDUAL PRESSURE OF 20 PSI.
12. APPLY HYDROSTATIC TEST PRESSURE OF 200 PSI (FIRE MAINS) FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S SUGGESTED TIME DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.
13. APPLY LEAKAGE TEST PRESSURE OF 200 PSI (FIRE MAINS) MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5% DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE PUMP.
14. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGED, THREADED, OR WELDED JOINTS OR BURIED NON-POTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES.
15. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA $L = \frac{SDP \times 48000}{P}$ WHERE: L = MAXIMUM PERMISSIBLE LEAKAGE RATE, IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED; S = LENGTH OF LINE TESTED (IN FEET); D = NOMINAL INTERNAL DIAMETER (IN INCHES) OF THE PIPE; AND P = THE SQUARE ROOT OF THE ACTUAL PRESSURE IN PSIG ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AUTHORIZED TEST PRESSURE.
16. DISINFECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, HYDRANTS.

SANITARY SEWER SYSTEMS

1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE SEWER SYSTEM SHOWN ON THESE PLANS IS SADLER SQUARE LAND TRUST AND CITY OF FERNANDINA BEACH. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF CITY OF FERNANDINA BEACH.
2. INSTALL ALL SEWER MAINS AT A MINIMUM 36 INCHES OF COVER.
3. JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212 USING RUBBER GASKETS CONFORMING TO ASTM F477.
4. FITTINGS SHALL CONFORM TO THE SAME REQUIREMENTS AS THE PIPE. PROVIDE ADAPTERS AS REQUIRED TO JOIN PVC PIPE TO PIPE, FITTINGS AND EQUIPMENT OF OTHER MATERIALS. SOLVENT CEMENT SHALL BE AS RECOMMENDED BY THE PIPE MANUFACTURER.
5. SEWER PIPE SHALL BE COLOR CODED GREEN, STENCILED "SEWER LINE" (2" LETTERING ON TWO SIDES OF THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION).
6. INSTALL ADHESIVE IDENTIFICATION TAPE ALONG PIPELINE. TAPE SHALL BE MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH. TAPE COLOR AND LETTERING SHALL BE "SEWER LINE", BLACK PRINTING ON GREEN BACKGROUND. PLACE TAPE AS FOLLOWS: 2" PIPE - CENTER ALONG TOP HALF OF PIPE; 10" - 18" PIPE - PLACE ALONG BOTH SIDES OF THE TOP HALF OF PIPE; 20" PIPE AND LARGER - PLACE ON BOTH SIDES OF TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
7. INSTALL WARNING TAPE ALONG ALL SEWER PIPELINES. TAPE SHALL BE 6-INCH WIDE VINYL CONTINUOUS TAPE, COLORED GREEN WITH BLACK LETTERING CODED AND WORDED "CAUTION: SEWER BURIED BELOW". INSTALL ALONG PIPELINE, 2 FEET ABOVE PIPE, MINIMUM OF 1 FOOT BELOW GRADE.
8. CONNECTIONS TO EXISTING SEWER SHALL BE CONDUCTED IN SUCH A MANNER THAT THE EXISTING SEWER REMAINS IN OPERATION. PROVIDE BY PASS PUMPING OF EXISTING FLOWS OR COLLECT AND LEGALLY DISPOSE OF EXISTING SEWER FLOW AS NEEDED TO ACCOMMODATE CONSTRUCTION WHILE KEEPING EXISTING SEWER IN SERVICE.
9. PRIOR TO INSPECTIONS AND TESTING, CLEAN ALL INSTALLED LINES AND MANHOLES. TEST PROCEDURES SHALL BE APPROVED BY THE ENGINEER. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER AND UTILITY. NOTIFY THE ENGINEER AND THE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY WORK IS TO BE INSPECTED OR TESTED.
10. PROVIDE ALL EQUIPMENT FOR TESTING. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE OF SCALED TO THE NEAREST 0.1 PSI. GAGES, PUMPS, AND HOSES SHALL BE IN GOOD WORKING ORDER WITH NO NOTICEABLE LEAKS.
11. ALL SERVICE LATERALS SHALL BE COMPLETED PRIOR TO TESTING, AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS THE MAIN LINE.
12. PROVIDE LIGHT SOURCE AND MIRRORS FOR LAMPING OF SEWER. ANY SEWER IN WHICH THE DIRECT LIGHT OF A LAMP CANNOT BE VIEWED IN EITHER DIRECTION, FULL CIRCLE, THROUGH ADJACENT MANHOLES SHALL BE CONSIDERED UNSATISFACTORY, UNLESS THE LINE IS DESIGNED WITH HORIZONTAL DEFLECTIONS, AND SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION.
13. CONDUCT LOW PRESSURE AIR TESTING (4.0 PSI INITIAL PRESSURE) OF INSTALLED SEWER PIPING IN ACCORDANCE WITH ASTM F1417. MAXIMUM ALLOWABLE LEAKAGE IS 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE AREA BEING TESTED. ALLOWABLE AIR PRESSURE DROP DURING THE TEST IS 0.5 PSIG. MINIMUM REQUIRED TEST TIME (DURATION) IS: A) 4" PIPE = 1 MIN 53 SEC; B) 6" PIPE = 2 MIN 50 SEC, OR 0.427 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; C) 8" PIPE = 3 MIN 47 SEC, OR 0.760 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; D) 10" PIPE = 4 MIN 43 SEC, OR 1.187 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; E) 12" PIPE = 5 MIN 40 SEC, OR 1.709 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER.
14. CONDUCT DEFLECTION TESTING OF PIPELINE AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. MAXIMUM ALLOWABLE PIPE DEFLECTION IS 5%. MEASURE DEFLECTION BY MANUALLY PULLING A MANHOLE THROUGH THE PIPE. THE MINIMUM MANHOLE OUTLET DIAMETER SHALL BE IN ACCORDANCE WITH THE FOLLOWING: 6" SEWER = 5.45" MANHOLE; 8" SEWER = 7.28" MANHOLE; 10" SEWER = 9.08" MANHOLE; 12" SEWER = 10.79" MANHOLE; 15" SEWER = 13.20" MANHOLE; 18" SEWER = 16.13" MANHOLE; 21" SEWER = 19.00" MANHOLE; 24" SEWER = 21.38" MANHOLE; 27" SEWER = 24.08" MANHOLE.
15. DEFLECTION TESTING IS CONSIDERED SATISFACTORY IF THE MANHOLE CAN BE PULLED BY HAND THROUGH THE PIPE BEING TESTED. IF THE MANHOLE CANNOT BE PULLED THROUGH THE PIPE, REPLACE OR CORRECT THE PIPE AND RETEST UNTIL TESTING IS SATISFACTORY. ANY PIPE REMOVED OR CORRECTED DUE TO FAILING DEFLECTION TESTING SHALL ALSO BE RE-TESTED FOR LEAKAGE.

FORCE MAIN SYSTEMS

1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE FORCE MAIN SYSTEM SHOWN ON THESE PLANS IS CITY OF FERNANDINA BEACH. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF CITY OF FERNANDINA BEACH.
2. INSTALL ALL FORCE MAINS AT A MINIMUM 36 INCHES OF COVER.
3. DUCTILE IRON PIPE AND FITTINGS WITHIN 10 FEET OF GAS MAINS SHALL HAVE AN 8-MIL POLYETHYLENE WRAP IN ACCORDANCE WITH ANSI/AWWA C105/A21.5.
4. PVC PIPE JOINTS SHALL BE RUBBER GASKETED CONFORMING TO AWWA C900 OR C905. THE BELL SHALL BE INTEGRAL WITH THE PIPE AND OF EQUAL OR GREATER PRESSURE RATING. THE BELL OF PIPE AND FITTINGS USING PUSH-ON JOINTS SHALL HAVE AN INTEGRAL GROOVE TO RETAIN THE GASKET IN PLACE.
5. ALL FITTINGS SHALL BE MANUFACTURED OF DUCTILE IRON, CONFORMING TO ANSI/AWWA C110/A21.10 OR ANSI/AWWA C153/A21.53. ALL FULL BODY (C110/A21.10) FITTINGS SHALL BE PRESSURE RATED TO 250 PSI, MINIMUM. ALL COMPACT FITTINGS (C153/A21.53) SHALL BE PRESSURE RATED TO 350 PSI, MINIMUM.
6. INTERIOR LINING FOR PIPES AND FITTINGS SHALL BE EITHER MINIMUM 40 MILS DRY FILM THICKNESS (60 MILS NOMINAL) OF CERAMIC EPOXY LINING, AS MANUFACTURED UNDER THE NAME OF "PROTECTO 401", OR MINIMUM 40 MILS DRY FILM THICKNESS (60 MILS NOMINAL) OF FUSION BONDED EPOXY AND POLYETHYLENE LINING, AS MANUFACTURED UNDER THE NAME OF "POLYBOND PLUS", OR EQUAL. EXTERIOR COATING FOR BURIED PIPE AND FITTINGS SHALL BE A PETROLEUM ASPHALTIC COATING IN ACCORDANCE WITH ANSI/AWWA C110/A21.10. EXTERIOR COATING OF EXPOSED PIPE AND FITTINGS SHALL BE FACTORY APPLIED RUST INHIBITING EPOXY PRIMER, MINIMUM 3 MILS DRY FILM THICKNESS. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT (INTERMEDIATE COAT) SHALL BE 4.0-10.0 MIL DFT TNEMEC COLOR HI-BUILD EPOXOLINE II SERIES N69 OR APPROVED EQUAL, AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT TNEMEC ENDURASHIELD SERIES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
7. MECHANICAL AND PUSH ON JOINTS FOR DUCTILE IRON PIPE AND FITTINGS SHALL BE RUBBER GASKETED, CONFORMING TO ANSI/AWWA C111/A21.11. LUBRICANTS OTHER THAN THAT FURNISHED BY THE PIPE MANUFACTURER WITH THE PIPE SHALL NOT BE USED.
8. RESTRAINED JOINTS FOR DUCTILE IRON PIPE BELL JOINTS SHALL BE AMERICAN FAST GRIP GASKET, MCWANE SURE GRIP 350 GASKET, U.S. PIPE FIELD LOK 360 GASKET, OR EBAA IRON MEGA LUG SERIES 1100HD. RESTRAINED JOINTS FOR DUCTILE IRON PIPE AND FITTING MECHANICAL JOINTS SHALL BE EBAA IRON MEGA LUG SERIES 1100, STAR GRIP SERIES 3000, OR TYLER UNION TUF-GRIP SERIES 12D. LOCKING BELL JOINT RESTRAINT SHALL BE AMERICAN FLEX RING JOINT, AMERICAN LOK-RING JOINT, OR U.S. PIPE TR-FLEX. RESTRAINED JOINTS FOR PVC PIPE MECHANICAL JOINTS SHALL BE TYLER UNION SERIES 2000 TUF GRIP TLP, JCM SUR-GRIP BELL RESTRAINER, FORD UNI-FLANGE SERIES 1500 CIRCLE LOCK, OR EBAA IRON MEGA LUG SERIES 2000PV. RESTRAINED JOINTS FOR PVC PIPE PUSH ON JOINTS SHALL BE EBAA IRON MEGA LUG SERIES 1500 OR SERIES 1600 (2000 PVC), SERIES 2800 (C905 PVC), FORD UNI-FLANGE SERIES 1390, OR SMITH-BLAIR BELL-LOK SERIES 165. PIPE JOINTS SHALL BE RESTRAINED UPSTREAM AND DOWNSTREAM OF FITTINGS IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS OR THE TABLE SHOWN IN THE DRAWINGS, WHICHEVER IS GREATER.
9. INTERIOR LINING FOR VALVES 4 INCH AND LARGER SHALL BE EITHER MINIMUM 40 MILS DRY FILM THICKNESS (60 MILS NOMINAL) OF CERAMIC EPOXY LINING, AS MANUFACTURED UNDER THE NAME OF "PROTECTO 401", OR MINIMUM 40 MILS DRY FILM THICKNESS (60 MILS NOMINAL) OF FUSION BONDED EPOXY AND POLYETHYLENE LINING, AS MANUFACTURED UNDER THE NAME OF "POLYBOND PLUS", OR EQUAL. EXTERIOR COATING FOR BURIED VALVES SHALL BE RUST INHIBITING EPOXY PRIMER, FOLLOWED BY A COAL TAR EPOXY, TOTAL MINIMUM DRY FILM THICKNESS OF 16 MILS. APPLIED AT THE FACTORY. EXTERIOR COATING OF EXPOSED VALVES SHALL BE FACTORY APPLIED RUST INHIBITING EPOXY PRIMER, MINIMUM 3 MILS DRY FILM THICKNESS. AFTER INSTALLATION, EXTERIOR SURFACES SHALL BE PAINTED WITH A TWO COAT SYSTEM. THE FIRST COAT (INTERMEDIATE COAT) SHALL BE 4.0-10.0 MIL DFT TNEMEC COLOR HI-BUILD EPOXOLINE I SERIES N69 OR APPROVED EQUAL, AND THE FINAL COAT SHALL BE 2.0-3.0 MIL DFT TNEMEC ENDURASHIELD SERIES 73 OR APPROVED EQUAL. THE FINAL COAT PAINT COLOR SHALL BE AS SELECTED BY THE LOCAL UTILITY.
10. ALL FORCE MAIN VALVES SHALL BE CAST IRON SUITABLE FOR WASTEWATER SERVICE WITH PRESSURES UP TO 250 PSIG, AND SHALL BE QUARTER-TURN, NON-SUBJECT TO AIR LOCK, AND SHALL BE QUARTER-TURN, NON-SUBJECT TO AIR LOCK, AND TESTED IN ACCORDANCE WITH AWWA C517. PORT AREAS OF NOT LESS THAN 100% OF PIPE AREA SHALL BE SUPPLIED ON ALL VALVES. STANDARD PLUG VALVES SHALL BE CLOW F5412 / F5413, VALMATIC 5600 / 5800, DEZURICK SERIES PEC, M&H 1820, PRATT PV, OR APPROVED EQUAL.
11. TAPPING SLEEVES ARE TO BE 18-8 TYPE 304 STAINLESS STEEL AND STAINLESS STEEL OUTLET, AS MANUFACTURED BY JCM OR APPROVED EQUAL. TAPPING VALVES SHALL BE RESILIENT SEATED GATE VALVES AND SHALL CONFORM TO THE REQUIREMENTS OF AWWA C509. TAPPING VALVES SHALL BE AMERICAN FLOW CONTROL SERIES 2500, CLOW SERIES F-6100, OR MUELLER SERIES A2361.
12. AIR RELEASE VALVES SHALL BE COMBINATION CAPABLE OF DISCHARGING ACCUMULATED AIR IN THE LINE WHILE THE LINE IS OPERATING UNDER A PRESSURE OF 150 PSI. COAT MATERIAL SHALL BE STAINLESS STEEL. AIR RELEASE VALVES SHALL HAVE A STAINLESS STEEL BODY AND SHALL BE MANUFACTURED BY ARI (NO. ARI-D-20) OR VENT-O-MAT RSG SERIES. ENCLOSURES FOR AIR RELEASE VALVES SHALL BE POLYETHYLENE WITH STAINLESS STEEL HARDWARE, AND SHALL BE PROVIDED WITH A TAMPER PROOF LOCKING MECHANISM. ENCLOSURES SHALL BE AS MANUFACTURED BY WATER PLUS CORPORATION (MODEL 18285) OR APPROVED EQUAL, AND SHALL HAVE VENTS AND SHALL BE GREEN IN COLOR.
13. ALL BURIED VALVES SHALL BE PROVIDED WITH ADJUSTABLE VALVE BOXES APPROXIMATELY 5 INCHES IN DIAMETER WITH A MINIMUM THICKNESS OF 3/16 INCH CAST IRON. BOXES SHALL BE OF SUFFICIENT LENGTH TO OPERATE ALL VALVES BURIED IN THE GROUND, CONSISTING OF BASE, CENTER SECTION, AND TOP SECTION WITH COVER. VALVE BOXES LOCATED IN UNPAVED AREAS SHALL BE SLIP TYPE DESIGN TO PERMIT MOVEMENT OF THE TOP SECTION WITHOUT TRANSMITTING FORCES ONTO THE VALVE BODY. VALVE BOXES CAST INTO CONCRETE OR ASPHALT SURFACING SHALL HAVE BRASS COVERS. ALL VALVE BOX COVERS SHALL BE INTERNALLY CHAINED TO VALVE BOXES WITH AN APPROXIMATELY 1/8 INCH GALVANIZED CHAIN. VALVE BOX COVERS SHALL BE CAST WITH THE INSCRIPTION "SEWER".
14. PVC PIPE SHALL BE COLOR CODED GREEN AND STENOILED (0.75-INCH LETTERING ON THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION) "SEWER FORCE MAIN".
15. INSTALL IDENTIFICATION TAPE ALONG ALL DUCTILE IRON PIPE AND PVC PIPE, MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH, TEXT TO BE "SEWER FORCE MAIN". APPLY TAPE TO SURFACE OF PIPE, CONTINUOUSLY EXTENDING FROM JOINT TO JOINT. TAPE COLOR AND LETTERING SHALL BE BLACK PRINTING ON GREEN BACKGROUND. PLACE TAPE AS FOLLOWS: 2" - 8" PIPE - CENTER ALONG TOP HALF OF PIPE; 10" - 18" PIPE - PLACE ALONG BOTH SIDES OF THE TOP HALF OF PIPE; 20" PIPE AND LARGER - PLACE ON BOTH SIDES OF TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.
16. INSTALL WARNING TAPE ALONG ALL PIPELINES, PLACED 2 FEET ABOVE PIPE. TAPE SHALL BE 6-INCH WIDE VINYL CONTINUOUS TAPE. TAPE SHALL BE COLORED BROWN WITH BLACK LETTERING, CODED AND WORDED "CAUTION: FIBER GLASS MAIN BURIED BELOW".
17. INSTALL LOCATING WIRE ALONG ALL PVC PIPELINES. WIRE SHALL BE COLOR-CODED 10 GAUGE CONTINUOUS INSULATED WIRE. COLOR CODING TO WARN SIGNALS AND WARNING TAPE COLORS. INSTALL LOCATOR WIRE ALONG ALL PRESSURIZED PIPELINES 2" AND LARGER. LOOP WIRE INTO ALL VALVE BOXES. LOOPING TO OCCUR EVERY 500 FEET MINIMUM, WHERE THERE ARE NO VALVE BOXES TO ALLOW LOOPING, PROVIDE ACCESS BOXES PER UTILITY REQUIREMENTS. CHECK WIRE FOR ELECTRICAL CONTINUITY.
18. ALL CHANGES IN DIRECTION SHALL BE MADE WITH FITTINGS OR APPROVED JOINT DEFLECTION. BENDING OF PIPE, EXCEPT COPPER AND POLYETHYLENE, IS PROHIBITED. JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.
19. TEST PROCEDURES SHALL BE APPROVED BY THE ENGINEER. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER AND UTILITY. NOTIFY THE ENGINEER AND THE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY WORK IS TO BE INSPECTED OR TESTED.
20. PROVIDE ALL EQUIPMENT FOR TESTING. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE OF SCALED TO THE NEAREST 0.1 PSI. GAGES, PUMPS, AND HOSES SHALL BE IN GOOD WORKING ORDER WITH NO NOTICEABLE LEAKS.
21. APPLY HYDROSTATIC TEST PRESSURE OF 100 PSI FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S SUGGESTED TIME DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.
22. APPLY LEAKAGE TEST PRESSURE OF 100 PSI, MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5% DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE PUMP.
23. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGED, THREADED, OR WELDED JOINTS OR BURIED NON-POTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES.
24. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA $L = \frac{SDP \times 48000}{P}$ WHERE: L = MAXIMUM PERMISSIBLE LEAKAGE RATE, IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED; S = LENGTH OF LINE TESTED (IN FEET); D = NOMINAL INTERNAL DIAMETER (IN INCHES) OF THE PIPE; AND P = THE SQUARE ROOT OF THE ACTUAL PRESSURE IN PSIG ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AUTHORIZED TEST PRESSURE.
25. ALL APPARENT LEAKS DISCOVERED WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER SHALL BE LOCATED AND REPAIRED BY CONTRACTOR, REGARDLESS OF THE TOTAL LINE LEAKAGE RATE.

PAVING, SIDEWALKS, AND CURBING

1. MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
2. ROADWAY PAVING, BASE, AND SUBGRADE THICKNESSES SHALL BE IN ACCORDANCE WITH DETAILS ON THESE DRAWINGS.
3. SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREAS AS SHOWN ON THE CONSTRUCTION PLANS. HANDICAPPED RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND SHALL BE IN ACCORDANCE WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION.
4. CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.
5. FIELD COMPACTION DENSITY, STABILITY, AND THICKNESS TESTING FREQUENCIES OF SUB-BASE, BASE, AND ASPHALT SHALL BE TESTED ONCE EVERY 300 LINEAR FEET OF PAVING PER 24-FT WIDE STRIP, STAGGERED LEFT, CENTER AND RIGHT OF CENTERLINE. WHERE LESS THAN 300 LINEAR FEET OF SUB-BASE, BASE, AND ASPHALT IS PLACED IN ONE DAY, PROVIDE MIN. OF ONE TEST FOR EACH PER DAY'S CONSTRUCTION AT A LOCATION DESIGNATED BY THE ENGINEER. ASPHALT EXTRACTION GRADATION SHALL BE TESTED FROM GRAB SAMPLES COLLECTED ONCE EVERY 1800 SQUARE YARDS OF ASPHALT DELIVERED TO THE SITE (OR A MINIMUM OF ONCE PER DAY).

PRECAST STRUCTURES AND APPURTENANCES

1. ALL MANHOLES SHALL BE PRECAST CONSTRUCTION. THE MINIMUM SIZE DIAMETER OF MANHOLES SHALL BE 48" FOR SEWER LINES 24" IN DIAMETER OR LESS. INTEGRALLY CAST STEPS WITHIN PRECAST STRUCTURES ARE NOT ALLOWED.
2. BASES SHALL BE ONE-PIECE PRECAST BASE SECTIONS CONSISTING OF INTEGRALLY CAST SLAB, BOTTOM RING SECTION AND CONCRETE FLOW CHANNELS. BASE SECTIONS SHALL HAVE INTEGRAL INVERTS WITH GASKETS TO MATCH THE PIPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL INVERT ANGLES. PROVIDE OUTLET STUBS WITH JOINTS TO MATCH THE PIPE.
3. RISERS SHALL BE PRECAST REINFORCED CONCRETE PER ASTM C478, MANUFACTURED USING SULFATE RESISTANT CEMENT (ASTM C150, TYPE II). RISERS SHALL BE 48-INCH DIAMETER UNLESS OTHERWISE INDICATED AND SHALL HAVE A MINIMUM WALL THICKNESS OF 5 INCHES.
4. GASKETS FOR SEATING PRECAST SECTIONS SHALL BE COLD ADHESIVE PREFORMED PLASTIC GASKETS CONFORMING TO FDOT SPECIFICATION 942-2, UNLESS OTHERWISE INDICATED.
5. UNLESS OTHERWISE INDICATED, CONE TOP SECTIONS SHALL BE PRECAST, ECCENTRIC TYPE WITH 24-INCH DIAMETER TOP OPENING CONFORMING TO ASTM C478. PROVIDE 8-INCH MINIMUM THICKNESS FLAT SLAB TOPS WITH ECCENTRIC 24 INCH DIAMETER OPENING, UNLESS OTHERWISE INDICATED.
6. PROVIDE A FLEXIBLE WATERTIGHT SEAL OF THE PIPE TO THE MANHOLE. CONNECTION OF CONCRETE PIPE TO THE MANHOLE SHALL BE MADE WITH NON-SHRINK METALLIC GROUT. CONNECTION OF DUCTILE IRON OR PVC PIPE TO THE MANHOLE SHALL PROVIDE A WATERTIGHT CONNECTION PER ASTM C923. WHERE CONNECTORS ARE USED, THEY SHALL BE INSTALLED IN THE MANHOLE WALL BY ACTIVATING THE EXPANDING MECHANISM IN STRICT ACCORDANCE WITH THE RECOMMENDATION OF THE CONNECTOR MANUFACTURER. THE USE OF ADHESIVES OR LUBRICANTS FOR INSTALLATION OF RUBBER CONNECTORS IS PROHIBITED.
7. FRAMES AND COVERS SHALL BE GREY IRON PER ASTM A48, CLASS 30B AND SHALL BE U.S. FOUNDRY TYPE 227AS, TRAFFIC BEARING (ASHTO H-20 LOADING), UNLESS OTHERWISE NOTED IN THE DRAWINGS. CASTINGS SHALL BE SMOOTH, CLEAN, FREE FROM BLISTERS, BLOWHOLES, AND SHRINKAGE. RAISED LETTERING ON COVERS SHALL BE "STORM", "SEWER", OR AS DETAILED ON THE DRAWINGS.
8. PROVIDE INLETS, FRAMES, AND GRATES IN ACCORDANCE WITH DETAILS ON THE DRAWINGS. ALL FRAMES AND INLET GRATES SHALL BE PRODUCTS OF U.S. FOUNDRY & MANUFACTURING CORPORATION, OR EQUAL.
9. ALL INLET GRATES SHALL BE SECURED BY CHAIN AND EYEBOLT TO THE TOP OF THE STRUCTURE.
10. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED GRADE. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS SHALL BE 4" ABOVE FINISHED GRADE (UNLESS NOTED OTHERWISE).
11. ALL MANHOLES AND CLEAN OUTS CONSTRUCTED WITHIN PAVED AREAS SHALL BE INSTALLED WITH TRAFFIC BEARING RINGS AND COVERS.
12. MANHOLE COATINGS AND FINISHES SHALL BE:
- A. SANITARY SEWER MANHOLE INTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.
- B. INTERIOR OF MANHOLES WHICH RECEIVE FORCE MAIN DISCHARGE - INTEGRALLY ATTACHED INTERIOR LINER, FULL HEIGHT, FIBERGLASS LINER. LINER THICKNESS TO BE IN ACCORDANCE WITH THE DRAWINGS.
- C. EXTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.

STORM SEWER SYSTEMS

1. REINFORCED CONCRETE PIPE (RCP) JOINTS SHALL COMPLY WITH ASTM C443 AND FDOT SPECIFICATION SECTION 430, AND RUBBER GASKETS SHALL COMPLY WITH FDOT SPECIFICATION SECTION 942. MINIMUM COVER OVER THE PIPE, INCLUDING COVER OVER THE BELL OF THE PIPE WHERE APPLICABLE, SHALL BE 30 INCHES.
2. RCP PIPE SHALL NOT BE SHIPPED FROM MANUFACTURER UNTIL THE COMPRESSIVE STRENGTH OF THE PIPE HAS REACHED 4000 PSI AND A MINIMUM OF 5 DAYS HAVE PASSED SINCE THE MANUFACTURING OR REPAIR OF THE PIPE HAS BEEN COMPLETED.
3. UNDERDRAIN PIPE SHALL BE PERFORATED POLYVINYL CHLORIDE PIPE IN ACCORDANCE WITH ASTM F758. FILTER FABRIC UNDERDRAIN SOCK SHALL BE TYPE D-3 IN ACCORDANCE WITH SPECIFICATIONS SECTION 985.
4. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC. FILTER FABRIC SHALL BE IN ACCORDANCE WITH FDOT INDEX NO. 199, TYPE D-3, A.O.S. 70-100. INSTALL IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 430-001. PROVIDE MINIMUM 12" OVERLAP.
5. INSTALL POLYETHYLENE PIPE IN ACCORDANCE WITH ASTM D2321. BACKFILL AND COMPACT EVENLY ON EACH SIDE TO PREVENT DISPLACEMENT. MINIMUM COVER OVER POLYETHYLENE PIPE SHALL BE AS FOLLOWS: A) PIPE UNDER FLEXIBLE PAVEMENT, RIGID PAVEMENT, OR UNPAVED AREAS WHERE BEDDING IS SUITABLE SOILS AS DEFINED IN THE GENERAL NOTES: MINIMUM COVER SHALL BE 36 INCHES OR ONE PIPE DIAMETER, WHICHEVER IS GREATER; B) PIPE UNDER FLEXIBLE PAVEMENT, RIGID PAVEMENT, OR UNPAVED AREAS WHERE BEDDING IS MANUFACTURED AGGREGATES CLASS 1A OR 1B AS DEFINED IN ASTM D2321: MINIMUM COVER SHALL BE 30 INCHES OR ONE PIPE DIAMETER, WHICHEVER IS GREATER.
6. INSTALL UNDERDRAINS IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 440. INSTALL CLEANOUTS AS SHOWN ON THE DRAWINGS.
7. PRIOR TO INSPECTIONS AND TESTING, CLEAN ALL INSTALLED LINES AND STRUCTURES.

SIGNS AND PAVEMENT MARKINGS

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE LATEST IMPLEMENTED EDITION OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH RAISED PAVEMENT MARKERS (TYPE 911, 4" x 4"). RAISED PAVEMENT MARKERS ARE TO BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND FDOT STANDARD PLANS INDEX 706-001.
3. PARKING STALL PAVEMENT MARKINGS SHALL BE PAINTED. PAINT SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 971, NON-REFLECTIVE WHITE TRAFFIC PAINT, TWO COATS.
4. ALL ROADWAY TRAFFIC SIGNS SHALL BE MANUFACTURED USING HIGH INTENSITY RETROREFLECTIVE MATERIALS. THE BACK OF ALL FINISHED PANELS SHALL BE STENCILED WITH THE DATE OF FABRICATION, THE FABRICATOR'S INITIALS, AND THE NAME OF THE SHEETING IN THREE-INCH LETTERS.
5. INTERNAL SITE TRAFFIC SIGNS ARE NOT REQUIRED TO BE RETROREFLECTIVE.
6. THE CONTRACTOR SHALL VERIFY THE REQUIRED LENGTH OF THE SIGN COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.
7. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SIGNS, BASES, ANCHOR BOLTS, CONDUITS, WIRING, ETC.
8. ALL PAVEMENT MARKINGS REQUIRE LAYOUT APPROVAL IN THE FIELD BY THE ENGINEER PRIOR TO INSTALLATION.
9. PRIOR TO FINAL PAVEMENT MARKING INSTALLATION, A TWO WEEK CURE TIME OF THE ASPHALT IS REQUIRED.

JACKING AND BORING

1. STEEL CASING PIPE SHALL CONFORM TO ASTM A139, GRADE "B" WITH MINIMUM YIELD STRENGTH OF 35,000 PSI. INTERIOR LINING OF PIPE SHALL BE A COAL TAR LINING CONFORMING TO AWWA C203. EXTERIOR COATING OF PIPE SHALL BE MULTIPLE COATS OF HEAVY DUTY COAL TAR BASE COATING BUILT UP TO 30 MILS TOTAL DRY THICKNESS AND APPLIED IN ACCORDANCE WITH THE COATING MANUFACTURER'S RECOMMENDATIONS.
2. EACH SPACER SHALL BE 12 INCHES WIDE AND MANUFACTURED OF MINIMUM 14 GAUGE TYPE 304 STAINLESS STEEL OR 14 GAUGE STEEL WITH FUSION BONDED PVC COATING. SPACERS SHALL BE LINED WITH A 90 MIL PVC LINER. ALL NUTS AND BOLTS SHALL BE T-304 STAINLESS STEEL. EACH SPACER SHALL HAVE A MINIMUM OF 4 RUNNER SUPPORTS MANUFACTURED OF A HIGH MOLECULAR WEIGHT POLYMER PLASTIC. THE RUNNER SUPPORTS SHALL BE T304 STAINLESS STEEL, MINIMUM 10 GAUGE, OF ADEQUATE RIGIDITY TO POSITION THE CARRIER PIPE IN THE CENTER OF CASING WITH A MINIMUM TOP CLEARANCE OF 0.5 INCHES.
3. ADD ON SECTIONS OF CASING PIPE SHALL BE FULL-RING WELDED TO THE PRECEDING LENGTH, DEVELOPING WATER-TIGHT TOTAL PIPE-STRENGTH JOINTS. ALL WELDING OF STEEL PIPE SHALL BE DONE BY COMPETENT, EXPERIENCED WELDERS. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C206.
4. CASING PIPE WALL MINIMUM WALL THICKNESS SHALL BE AS FOLLOWS: 16" THROUGH 24" = 0.250"; 30" = 0.312"; 36" = 0.375"; 42" AND 48" = 0.500". AT RAILROAD CROSSINGS, CASING PIPE WALL THICKNESS SHALL BE AS FOLLOWS: 16" THROUGH 18" = 0.250"; 20" = 0.281"; 24" = 0.312"; 30" = 0.406"; 36" = 0.469". UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS, THE MINIMUM CASING PIPE DIAMETER SHALL BE BASED ON THE SIZE OF THE CARRIER PIPE NOMINAL DIAMETER AS FOLLOWS: WHERE CARRIER IS 6", THEN MINIMUM CASING IS 18"; WHERE CARRIER IS 8", THEN MINIMUM CASING IS 20"; WHERE CARRIER IS 10", THEN MINIMUM CASING IS 24"; WHERE CARRIER IS 12" OR 16", THEN MINIMUM CASING IS 30"; WHERE CARRIER IS 20", THEN MINIMUM CASING IS 36".
5. BORED INSTALLATIONS SHALL HAVE A HOLE DIAMETER WHICH SHALL NOT EXCEED THE O.D. OF THE CASING PIPE (INCLUDING COATING) BY MORE THAN ONE INCH. WHERE UNSTABLE SOIL CONDITIONS ARE FOUND TO EXIST, BORING OPERATIONS SHALL BE CONDUCTED IN SUCH MANNER AS NOT TO BE DETRIMENTAL TO THE FACILITY BEING CROSSED. IF EXCESSIVE VOIDS OR TOO LARGE A BORED HOLE RESULTS, OR IT IS NECESSARY TO ABANDON A BORED HOLE, PROMPT REMEDIAL MEASURES SHALL BE TAKEN BY THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CONTROLLING AGENCY OF THE FACILITY BEING CROSSED.
6. CORRECT LINE AND GRADE SHALL BE MAINTAINED. ADD ON SECTIONS OF CASING PIPE SHALL BE FULL RING WELDED TO THE PRECEDING LENGTH, DEVELOPING WATERTIGHT TOTAL PIPE STRENGTH JOINTS. FOLLOWING PLACEMENT OF THE CARRIER PIPE, MASONRY PLUGS SHALL BE INSTALLED AT EACH OPEN END, WITH A WEEP HOLE INSTALLED NEAR THE BOTTOM OF THE PLUG.
7. UNLESS OTHERWISE SHOWN ON THE PLANS, INSTALL CASING AT MINIMUM OF 36-INCH COVER.
8. CARRIER PIPES INSIDE OF STEEL CASING PIPE SHALL BE SUPPORTED BY CASING SPACERS. CARRIER PIPE JOINTS INSIDE OF STEEL CASING PIPE SHALL BE RESTRAINED.
9. SPACERS ALONG DUCTILE IRON CARRIER PIPE SHALL BE PLACED NO MORE THAN 2 FEET FROM THE END OF THE CASING, WITH SUBSEQUENT SPACER PLACEMENT AT INTERVALS OF NO MORE THAN 10 FEET.
10. SPACERS ALONG PVC CARRIER PIPE SHALL BE PLACED NEAR THE SPOOT END OF EACH SEGMENT OF PIPE. WHEN THE JOINT IS COMPLETE, THE SPACER SHALL BE IN CONTACT WITH THE JOINT RESTRAINT ASSEMBLY SO THAT THE SPACER PUSHES THE RESTRAINT ASSEMBLY. SUBSEQUENT SPACER PLACEMENT ALONG PVC PIPE SHALL BE AT INTERVALS OF NO MORE THAN 6 FEET.
11. THE USE OF WOOD SKIDS IN LIEU OF SPACERS IS NOT ALLOWED.
12. THE CARRIER MAY BE PUSHED OR PULLED (DEPENDING UPON PIPING MATERIAL, JOINT TYPE AND METHOD OF PIPE SUPPORT)

INTO THE CASING AS PIPE LENGTHS ARE ASSEMBLED. THE CARRIER SHALL BE ADEQUATELY BLOCKED ALL AROUND TO PREVENT ANY MOVEMENT AND TO ATTAIN THE SPECIFIED GRADE FOR GRAVITY LINES. THE PROPOSED METHOD OF CARRIER PIPE INSTALLATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO STARTING THE CROSSING.

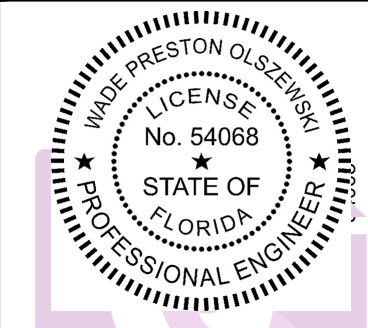
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Architect No. AA26000296
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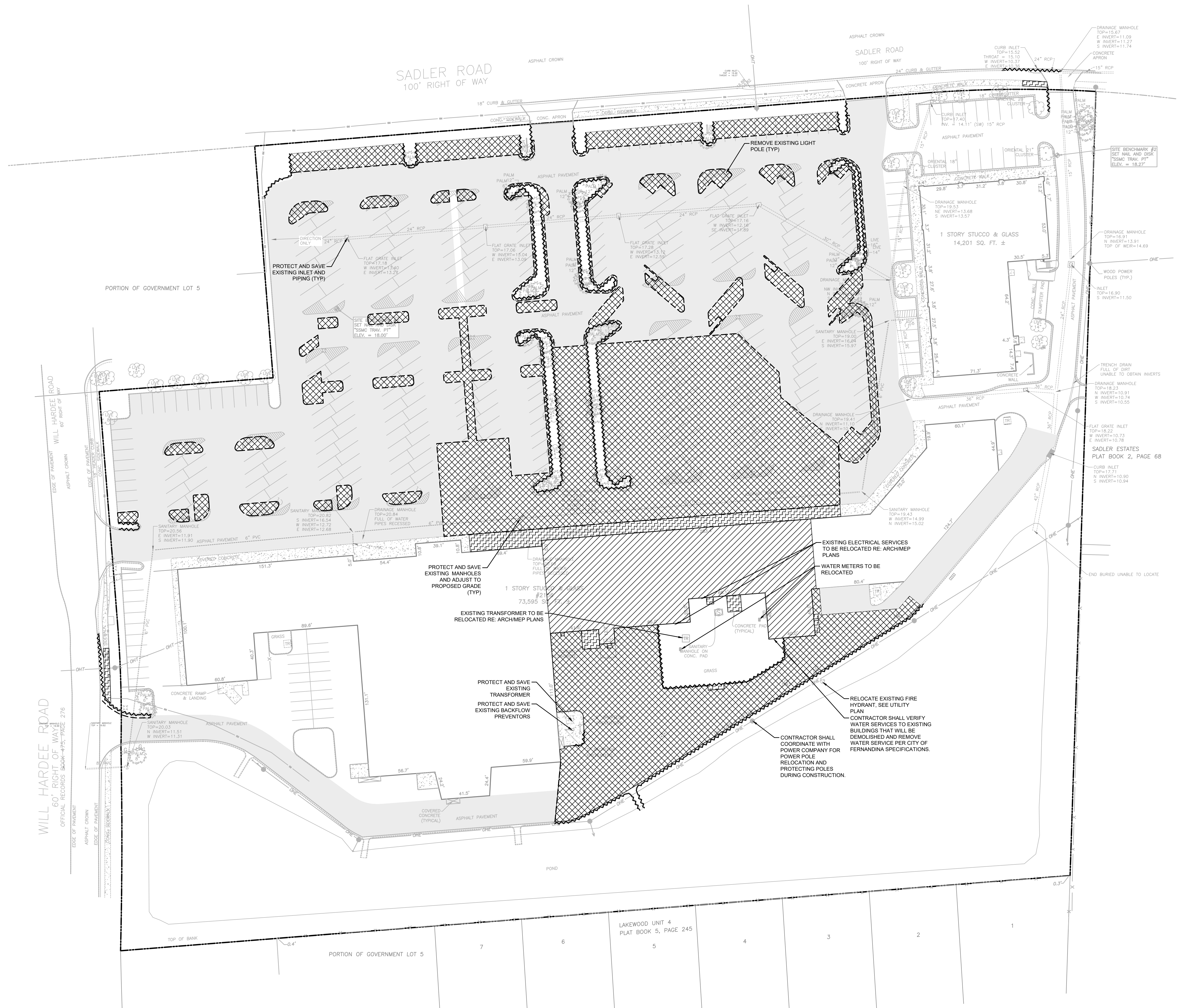
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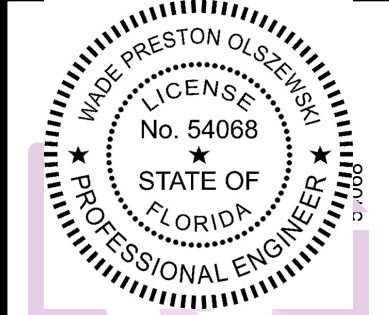


LEGEND

- APPROX. LIMITS OF DEMOLITION TO REMOVE EXISTING ASPHALT & BASE
- APPROX. LIMITS OF BUILDING DEMOLITION. REFER TO ARCH. PLANS FOR DETAILED BUILDING DEMOLITION.
- APPROX. LIMITS OF CONCRETE DEMOLITION.
- APPROX. LIMITS OF MILLING AND RESURFACING
- LIMITS OF CURBING REMOVAL
- SAW CUT LIMITS



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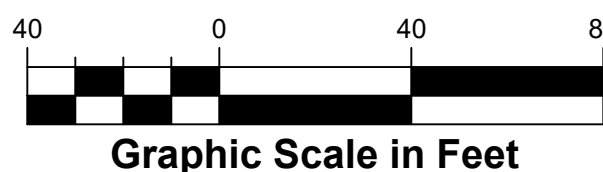
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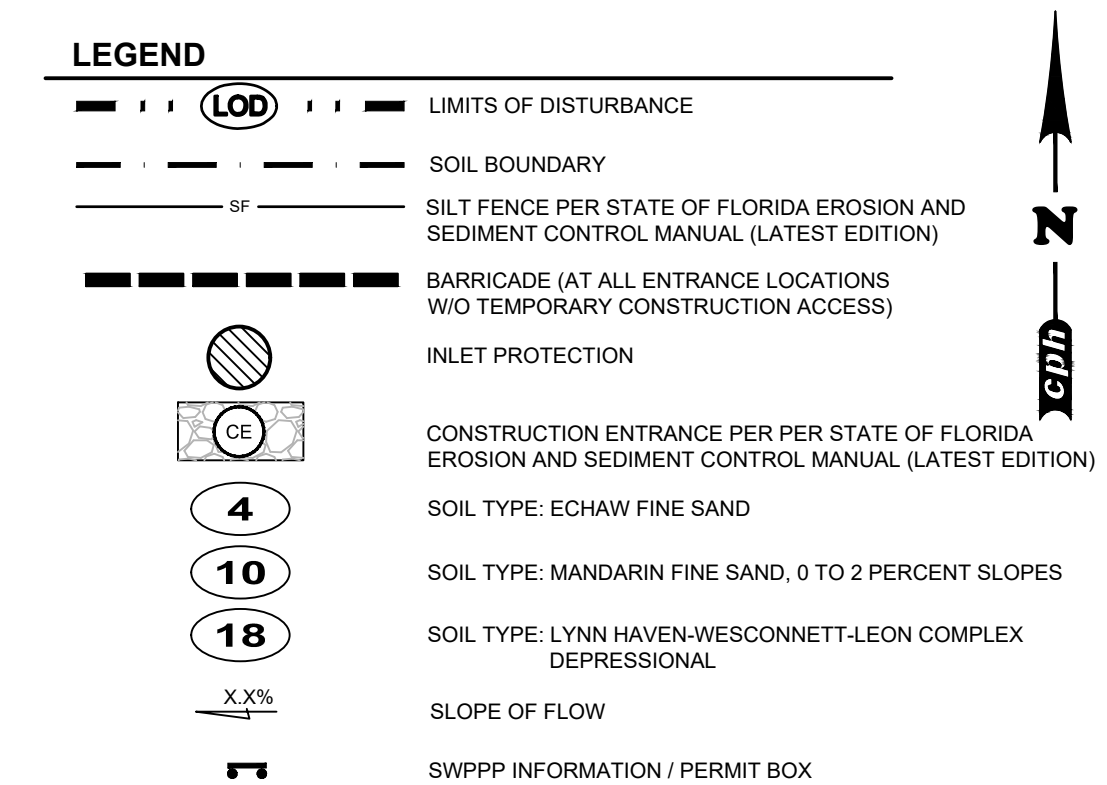
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Drawn: D. Schneider
Checked: W. Olszewski
Job No.: T3209
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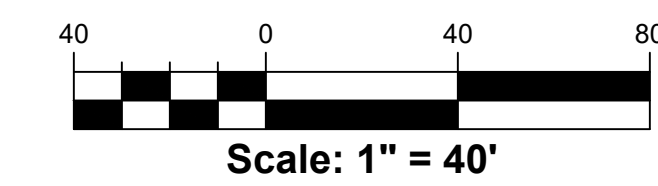
DEMOLITION PLAN
SLEIMAN ENTERPRISES
SADLER SQUARE
CITY OF FERNANDINA BEACH / FLORIDA

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CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS.
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ACREAGE SUMMARY	
TOTAL SITE AREA	12.45 A.C.
TOTAL DISTURBED AREA	10.10 A.C.



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No.	Date	Revision		

Designed: P. Ranucci	
Drawn: D. Schneider	
Checked: W. Olszewski	
Job No.: T3209	
Date: 08/10/21	© 2021

STORMWATER POLLUTION PREVENTION PLAN

SLEIMAN ENTERPRISES
SADLER SQUARE
CITY OF FERNANDINA BEACH / FLORIDA

THIS SHEET NOT VALID FOR
CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS.

Sheet No.
C1.1

STORMWATER POLLUTION PREVENTION NOTES

THESE PLANS HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN OBTAINING COVERAGE UNDER THE FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PERMIT REQUIREMENTS AND MODIFY THESE PLANS AS NEEDED TO BE IN COMPLIANCE WITH THE PERMIT REQUIREMENTS.

SITE DESCRIPTION

A. SITE LOCATION
THE SITE IS LOCATED AT 2100 SADLER SQUARE, IN THE CITY OF FERNANDINA BEACH, FLORIDA
SECTION 29, TOWNSHIP 3 NORTH, RANGE 28 EAST
LATITUDE: 30° 36'20.02"N LONGITUDE: 81° 25'22.65"W

B. SITE CONDITIONS & ACTIVITIES NARRATIVE:
THE EXISTING CONSTRUCTION OF THE SITE IS DEVELOPED. DURING CONSTRUCTION THE SITE WILL BE DISTURBED BUT REMAIN AT RELATIVELY THE SAME GRADE. THIS PROJECT WILL HAVE NO MAJOR EFFECT ON ANY OF THE ADJUTING PROPERTIES.

WETLANDS/BUFFERS

NO WETLANDS OR BUFFERS ARE ASSOCIATED WITH THIS PROJECT.

SWPPP INTENT

THE INTENT OF THIS SWPPP IS TO COMPLY WITH THE INTENT OF THE GENERIC PERMIT AND TO PREVENT THE RELEASE OF SOILS, TRASH, CHEMICALS, TOXINS AND OTHER POLLUTANTS, BY WATER, AIR, VEHICLE TRANSPORT OR OTHER MEANS THAT CAN IMPACT STORM WATER QUALITY. THE CONTRACTOR SHALL OBTAIN A COPY OF THE GENERIC PERMIT AND RETAIN ON-SITE FOR FUTURE REFERENCE. THE CONTRACTOR SHALL READ AND UNDERSTAND THE PERMIT, AND ENSURE THAT THE BMPs ARE INSTALLED AND THE EXECUTION OF THE WORK IS PERFORMED TO MEET THE INTENT OF THE GENERIC PERMIT AND THE SWPPP.

POTENTIAL SOURCES OF POLLUTION

THE POTENTIAL SOURCES OF POLLUTION THAT MAY REASONABLY BE EXPECTED TO AFFECT THE QUALITY OF STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES INCLUDE: EROSION, SEDIMENT, FERTILIZER, PESTICIDES, PLASTER, CLEANING SOLVENTS, ASPHALT, CONCRETE, GLUE, ADHESIVES, PAINTS, CURING COMPOUNDS, WOOD PRESERVATIVES, HYDRAULIC OIL FLUIDS, GASOLINE, DIESEL FUEL AND KEROSENE.

SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED AS A GUIDE FOR THE CONTRACTOR. THE CONTRACTOR SHALL SEQUENCE THE CONSTRUCTION AS NEEDED BASED ON BEST MEANS AND METHODS IN ORDER TO BE IN COMPLIANCE WITH STATE AND LOCAL REQUIREMENTS. THE INSTALLATION OR REMOVAL OF BMPs, EARTH DISTURBANCE, GRADING, TEMPORARY STABILIZATION AND PERMANENT STABILIZATION SHALL BE IMMEDIATELY NOTED IN THE SWPPP. PERMIT SECTION 10. ALL TEMPORARY BMPs SHALL BE REPAIRED AND MAINTAINED UNTIL STABILIZATION HAS OCCURRED AND THERE IS NO RISK OF DISCHARGE. TEMPORARILY SEED, IMMEDIATELY AND THROUGHOUT CONSTRUCTION, DENUDATED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

1. POST A COPY OF THE NOI OR LETTER FROM FDEP CONFIRMING COVERAGE UNDER THE GENERIC PERMIT, AND THE NAME AND PHONE NUMBER OF THE CONTRACTOR'S REPRESENTATIVE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL, INSTALLATION AND MAINTENANCE ON A 24 HOUR BASIS.
2. INSTALL PERIMETER CONTROLS IMMEDIATELY DOWNSTREAM OF THE PLANNED LOCATION OF THE CONSTRUCTION EXIT.
3. INSTALL STABILIZED CONSTRUCTION EXIT.
4. INSTALL PERIMETER CONTROLS. THE CONTRACTOR SHALL INSTALL THE REMAINING BMPs AS SHOWN AND AS REQUIRED TO MEET PERMIT REQUIREMENTS. SOME BMP INSTALLATIONS MAY NOT BE POSSIBLE AT THE BEGINNING OF THE PROJECT BUT MUST BE INSTALLED AS SOON AS POSSIBLE TO ENSURE COMPLIANCE.
5. INSTALL TEMPORARY STAGINGS AND STORAGE AREAS.
6. CONSTRUCT AND STABILIZE THE SEDIMENT BASINS AND SEDIMENT TRAPS WITH APPROPRIATE OUTFALL STRUCTURES, IF REQUIRED.
7. CONSTRUCT AND STABILIZE HYDRAULIC CONTROLS (DITCHES, SWALES, DIKES, CHECK DAMS, ETC.) IF REQUIRED.
8. BEGIN DEMOLITION, CLEARING AND GRUBBING OPERATIONS AS APPLICABLE.
9. BEGIN CONSTRUCTION OF SITE IMPROVEMENTS.
10. PAVE SITE AND STABILIZE PER PLAN.
11. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER SITE HAS ACHIEVED FINAL STABILIZATION.
12. SUBMIT NOTICE OF TERMINATION (NOT) ONCE ALL CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED PER PLAN.

GENERAL NOTES

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FILE "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES" (DEP FORM 62-621.300A(B)) OR LATEST VERSION TO FDEP TO THE FOLLOWING ADDRESS OR THROUGH THE FDEP ON-LINE SYSTEM AT LEAST TWO (2) DAYS BEFORE COMMENCEMENT OF CONSTRUCTION:

NPDES STORMWATER NOTICES CENTER, MS #2510 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2600 BLAIR STONE ROAD, TALLAHASSEE, FLORIDA 32309-2400

THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) WITHIN 14 CALENDAR DAYS AFTER THE SITE HAS ACHIEVED FINAL STABILIZATION (I.E. ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINAL STABILIZED). TEMPORARY BMPs HAVE BEEN REMOVED, AND STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE AUTHORIZED BY THE PERMIT HAVE BEEN ELIMINATED.

AN ENVIRONMENTAL RESOURCE PERMIT IS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL PROVIDE THE PERMIT INFORMATION ON THE NOI APPLICATION.

MS4 OPERATOR NAME (IF ANY): XXXXXX

THE CONTRACTOR SHALL PROVIDE A COPY OF THE NOI AND SUBSEQUENT NOT OR THE ACKNOWLEDGEMENT LETTERS FOR THE NOI OR NOT TO THE MS4 WITHIN 7 DAYS OF RECEIPT. THE CONTRACTOR SHALL ALSO COORDINATE WITH THE MS4 TO ENSURE THAT ALL SPECIFIC REQUIREMENTS ARE MET.

B. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES. SWALES SHALL BE CONSTRUCTED AS SHOWN ON PLANS.

C. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:

- I. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
- II. NEW AND EXISTING STORMWATER INLETS AND OUTFALL STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED IMMEDIATELY AS REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION.
- III. PERIMETER EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION HAS BEEN ESTABLISHED.

D. CLEARING AND GRUBBING OPERATIONS SHALL BE CONTROLLED SO AS TO MINIMIZE UNPROTECTED ERODIBLE AREAS EXPOSED TO WEATHER. GENERAL EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND OFF-SITE SEDIMENTATION. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHALL BE EMPLOYED PRIOR TO ANY CONSTRUCTION ACTIVITY.

E. THE CONTRACTOR SHALL FURNISH, INSTALL PER THE SEQUENCE OF CONSTRUCTION, MAINTAIN AND SUBSEQUENTLY REMOVE, ALL NECESSARY TEMPORARY BMPs. THE CONTRACTOR WILL FURNISH AND INSTALL ALL NECESSARY PERMANENT BMPs.

F. THE CONTRACTOR SHALL ADJUST, ADD OR MODIFY BMPs AS NECESSARY TO COMPLY WITH THE INTENT OF THE GENERIC NPDES PERMIT AND THE SWPPP FOR NO ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO ADJUSTING, ADDING OR MODIFYING BMPs THAT AFFECT THE HYDRAULICS OF THE SITE OR BEFORE ADDING BMPs NOT DETAILED IN THE SWPPP.

G. THE CONTRACTOR IS ADVISED THAT THE CONTRACT DRAWINGS ONLY INDICATE EROSION, SEDIMENT, AND TURBIDITY CONTROLS AT LOCATIONS DETERMINED IN THE DESIGN PROCESS. HOWEVER, THE CONTRACTOR IS REQUIRED TO PROVIDE ANY ADDITIONAL CONTROLS NECESSARY TO PREVENT THE POSSIBILITY OF SILTING ANY ADJACENT LOWLAND PARCEL OR RECEIVING WATER.

H. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL SYSTEM DESCRIBED WITHIN THE CONSTRUCTION MEASURES IS SHOWN TO REPRESENT THE MINIMUM ACCEPTABLE STANDARDS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDENT UPON THE STAGE OF CONSTRUCTION, THE SEVERITY OF THE RAINFALL EVENT AND/OR AS DEEMED NECESSARY AS A RESULT OF INSPECTION AND INSPECTION THROUGHOUT THE PROJECT AND AS NECESSARY FOR EACH SPECIFIC APPLICATION. IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO ASSURE THAT THE STORMWATER DISCHARGE FROM THE SITE DOES NOT EXCEED THE TOLERANCES ESTABLISHED BY ANY OF THE APPLICABLE JURISDICTIONAL AUTHORITIES.

- I. THE CONTRACTOR SHALL KEEP THE SWPPP CURRENT AT ALL TIMES. THE CONTRACTOR SHALL SIGN AND DATE ANY CHANGES TO THE SWPPP AND KEEP THEM AS ATTACHMENTS TO THE ORIGINAL PLAN. WHENEVER ANY OF THE FOLLOWING EVENTS OCCUR, THE CONTRACTOR SHALL UPDATE THE SWPPP WITHIN 7 DAYS:
 - II. THERE IS A CHANGE IN THE CONSTRUCTION OPERATION OR MAINTENANCE THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE FROM THE PROJECT
 - III. THERE IS A NEW DISCHARGE POINT OUR OUTFALL
 - IV. THERE IS A CHANGE IN THE LOCATION OF A DISCHARGE POINT OF OUTFALL
 - V. THERE IS A CHANGE IN THE LOCATION OF A DISCHARGE POINT OF OUTFALL
 - VI. THERE IS A NEW SUBCONTRACTOR IMPELEMENTING ANY PORTION OF THE SWPPP
 - VII. A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR GREATER THAN A REPORTABLE QUANTITY OCCURS DURING A 24-HOUR PERIOD

J. THE CONTRACTOR SHALL ENSURE THAT THE CONTRACTOR AND ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING SWPPP CONTROL MEASURES FILL OUT THE CONTRACTOR / SUBCONTRACTOR CERTIFICATION TABLE INCLUDED IN THIS SWPPP.

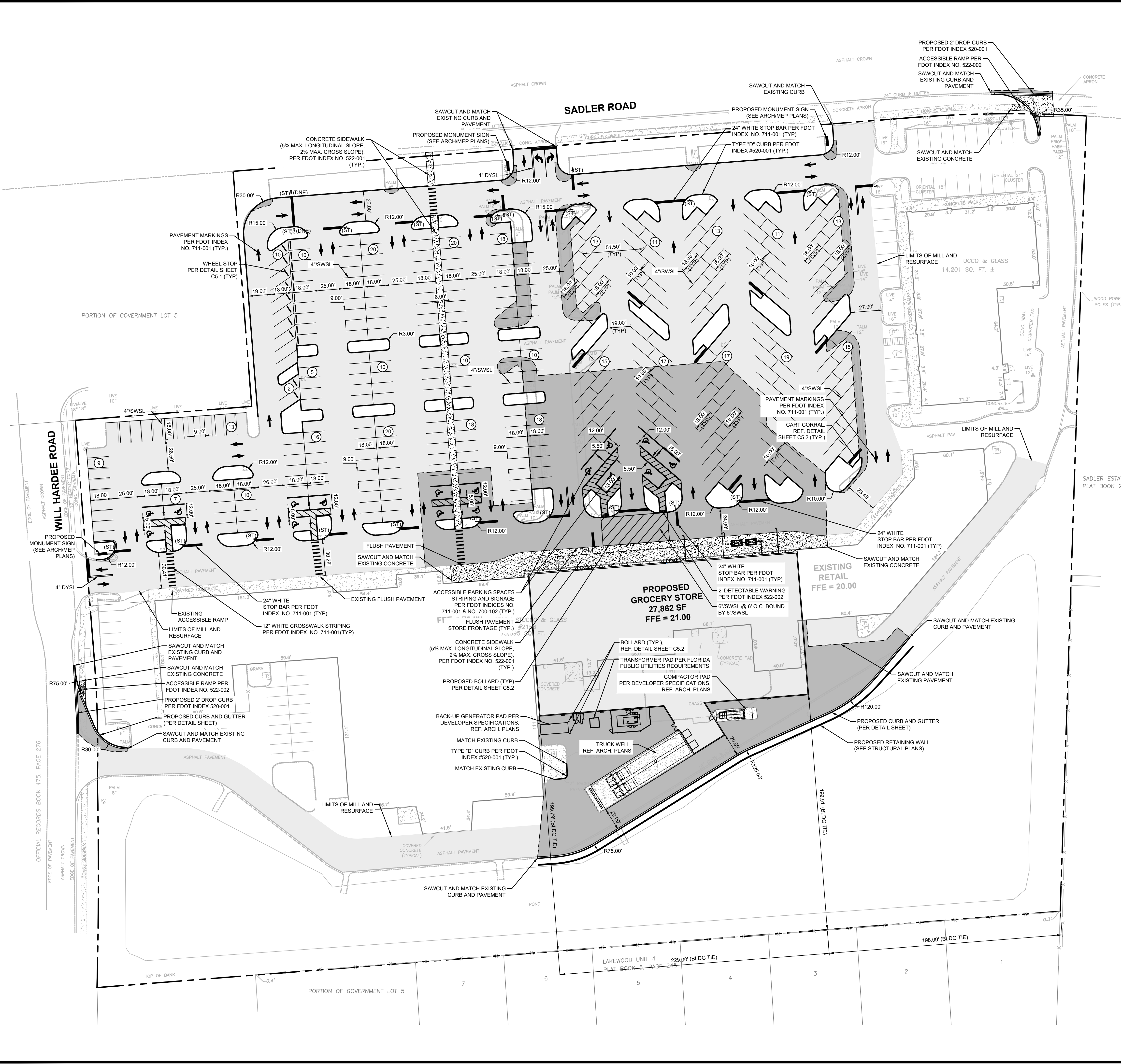
K. THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION SEQUENCE TABLE INCLUDING IN THIS SWPPP PRIOR TO PROCEEDING WITH THE INSTALLATION OF BMPs AND PRIOR TO GROUND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL COMPLETE THE TABLE WITH ANTICIPATED DATES IN WHICH THE BMP WILL BE UTILIZED OR THE ACTIVITY WILL OCCUR.

TURBIDITY

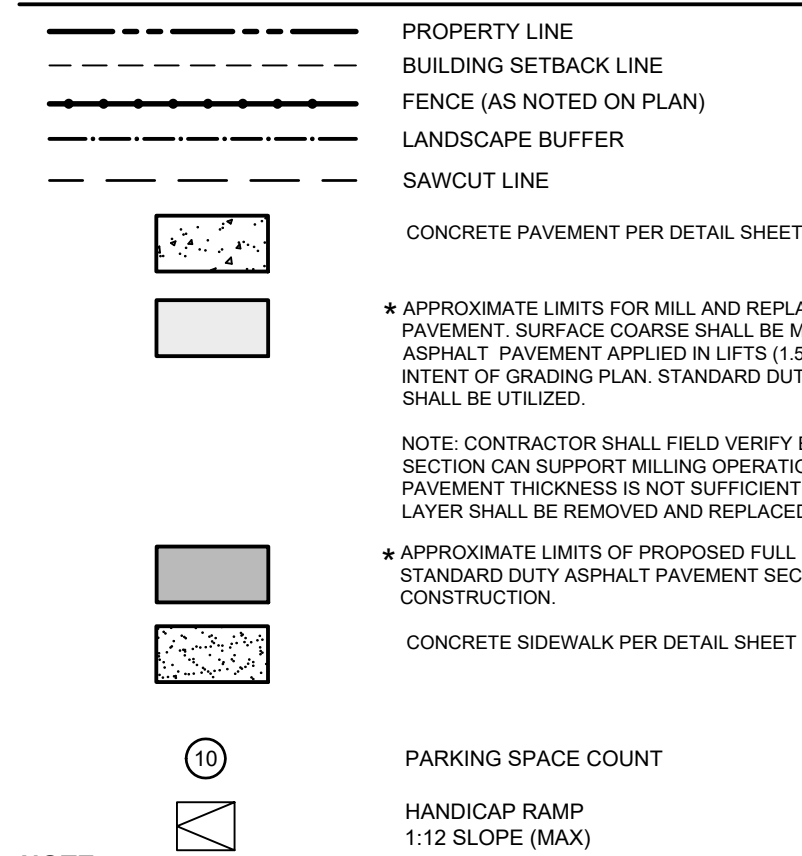
A. TURBIDITY REDUCTION TO NO MORE THAN 29 NTUs ABOVE BACKGROUND LEVEL PRIOR TO DISCHARGE OFF SITE.

B. CONTRACTOR TO FILE FOR A FDEP NOTICE OF INTENT (NOI) WITHIN 14 DAYS OF CONSTRUCTION COMPLETION.

STABILIZATION



LEGEND



NOTE:
ITEMS SHOWN SCREENED REPRESENT EXISTING
CONDITIONS. ITEMS SHOWN BOLD REPRESENT
PROPOSED CONDITIONS.

SITE DATA INFORMATION:

SITE PARCEL NUMBERS:

PARCEL NO 29-3N-28-0000-0004-0080 - 2100 SADLER SQUARE 541,886 S.F. (12.44 A.C.)

TOTAL	541,886 S.F. (12.44 A.C.)
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SECTION - 29 / TOWNSHIP - 3 N / RANGE - 28 E

ON-SITE LAND INFORMATION:

CURRENT LAND USE:	GENERAL COMMERCIAL
PROPOSED LAND USE:	GENERAL COMMERCIAL

CURRENT ZONING: C-2
PROPOSED ZONING: C-2

DEVELOPMENT TYPE: SHOPPING CENTER

ADJACENT LAND INFORMATION:

	NORTH	EAST	SOUTH	WEST
EXISTING LAND USE	ROW	C-2/PL-1	R-1	ROW
FUTURE LAND USE	ROW	C-2/PL-1	R-1	ROW
EXISTING ZONING	ROW	C-2/PL-1	R-1	ROW
PROPOSED ZONING	ROW	C-2/PL-1	R-1	ROW

FLOOD ZONE INFORMATION:

HAVING CONSULTED THE NATIONAL FLOOD INSURANCE PROGRAM, BY GRAPHIC PLOTTING ONLY, THE PROPERTY SHOWN HEREON LIES WITHIN ZONE: "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (F.I.R.M.) COMMUNITY PANEL NUMBER: 12089C-0239G, MAP REVISED DATE: AUGUST 2, 2017.

BUILDING INFORMATION:

BUILDING AREA: 27,862 S.F.

BUILDING USE: GROCERY

MAXIMUM BUILDING HEIGHT (CITY CODE):

ACTUAL BUILDING HEIGHT (ONE STORY):

MAXIMUM IMPERVIOUS SURFACE RATIO

PROVIDED IMPERVIOUS SURFACE RATIO

MAXIMUM FLOOR AREA RATIO (FAR) (CITY

FLOOR AREA RATIO (FAR) PROVIDED:

PERVIOUS / IMPERVIOUS AREAS:

<u>PRE DEVELOPMENT:</u>			
PERVIOUS AREA:	167,583 S.F.	(3.85 A.C.)	(30.90%)
IMPERVIOUS AREA:	374,764 S.F.	(8.60 A.C.)	(69.10%)
TOTAL SITE AREA:	542,347 S.F.	(12.45 A.C.)	(100.00%)

POST DEVELOPMENT:			
PERVIOUS AREA:	172,744 S.F.	(3.97 A.C.)	(31.89%)
IMPERVIOUS AREA:	369,603 S.F.	(8.48 A.C.)	(68.11%)
TOTAL SITE AREA:	542,347 S.F.	(12.45 A.C.)	(100.00%)

PARKING INFORMATION:

COMMERCIAL SHOPPING CENTER: 1 SPACE PER 300 SF OF FLOOR AREA

EXISTING CONDITION:
87,796 SF / 300 SF = REQUIRED: 293 SPACES
 PROVIDED: 388 SPACES

PROPOSED CONDITION:
97,674 SF / 300 SF = REQUIRED: 326 SPACES
PROPOSED: 430 SPACES (INCLUDING 18 ACCESSIBLE STALLS)

TOTAL SPACES PROVIDED = 430

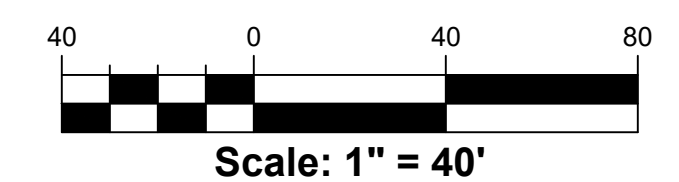
BLDG. SETBACKS AND LANDSCAPE BUFFERS:

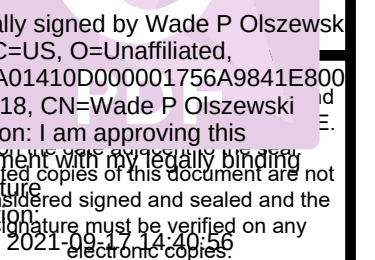
BLDG. SETBACKS:

	NORTH	SOUTH	EAST	WEST
REQUIRED:	0'	0'	0'	0'
PROVIDED :	359.63'	157.00'	219.17'	374.36'

LANDSCAPE BUFFERS:

	NORTH	SOUTH	EAST	WEST
REQUIRED:	10'	15'	0'	10'

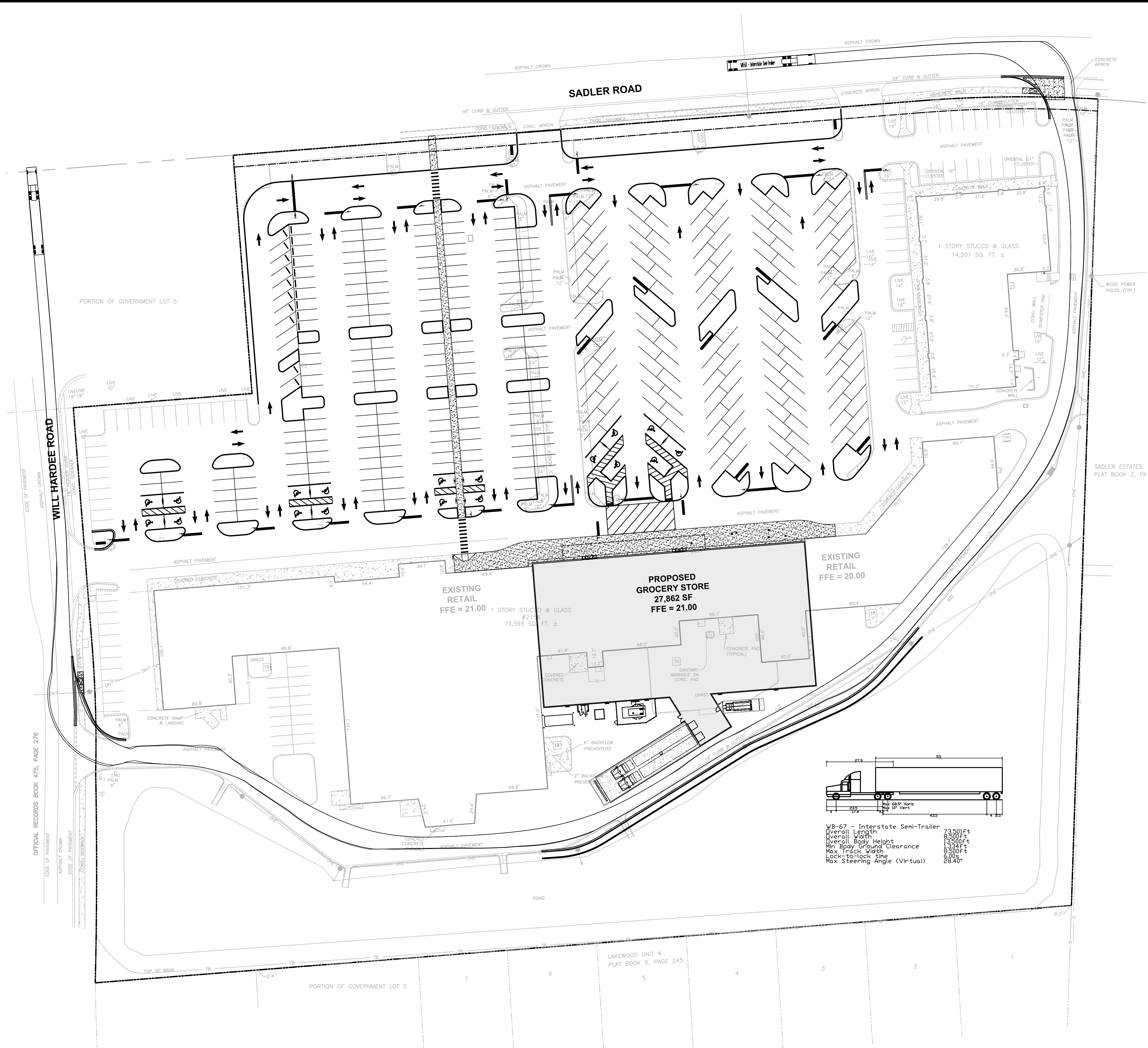
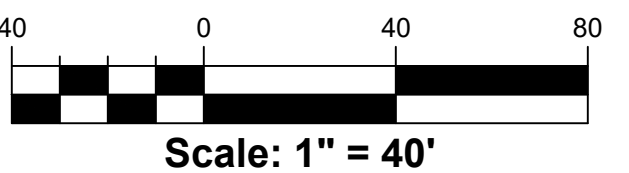


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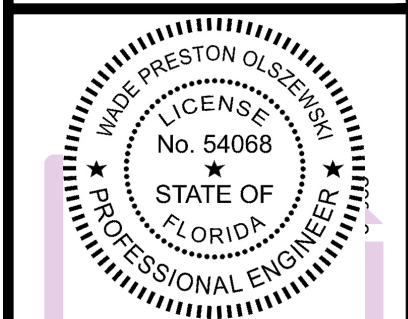
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CITY OF FERNANDINA BEACH / FLORIDA

Sheet No.
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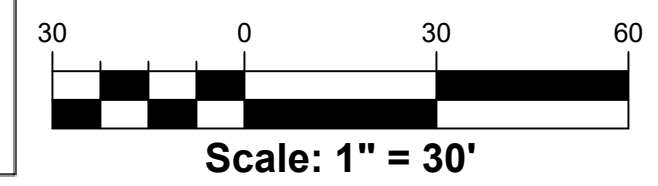
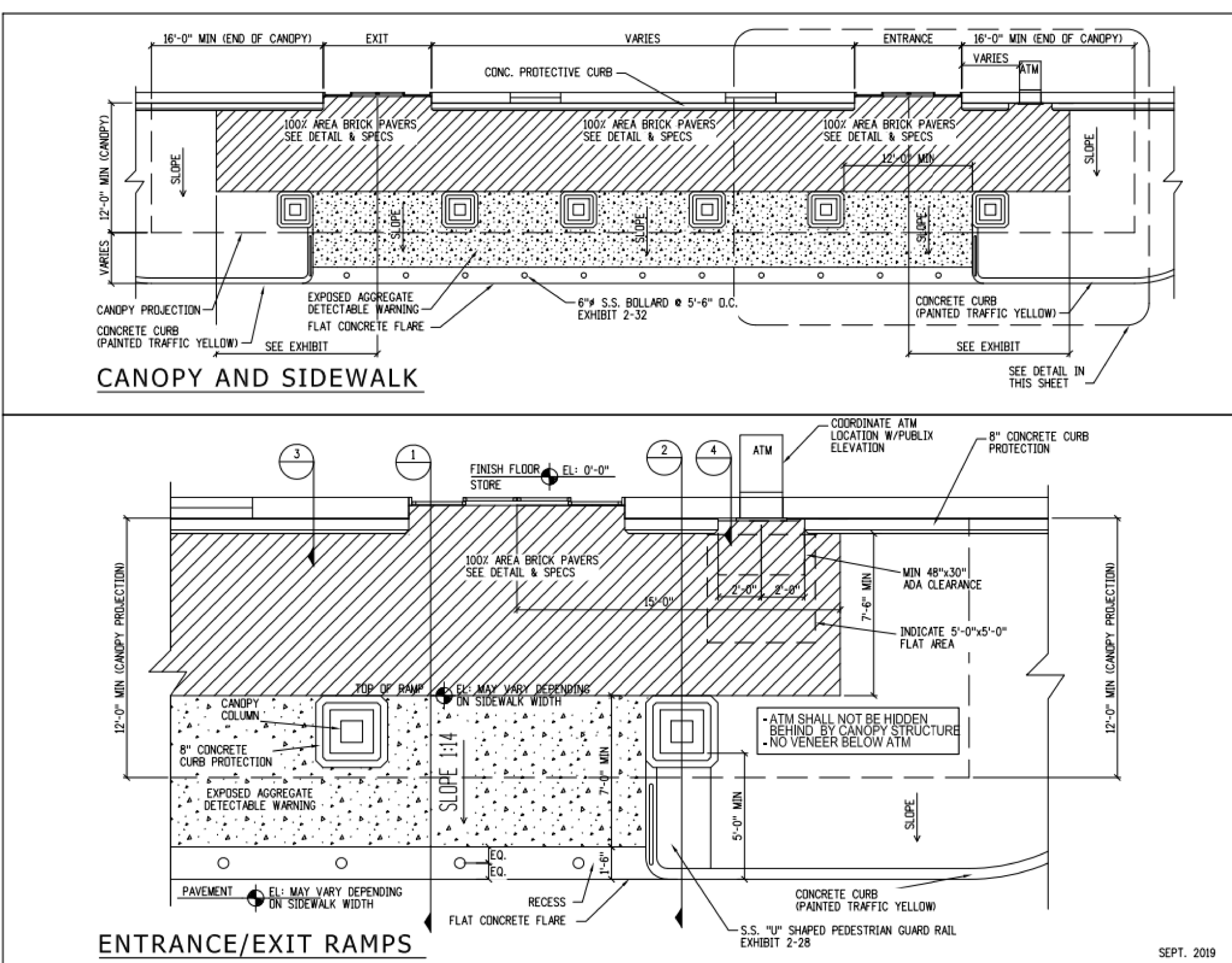
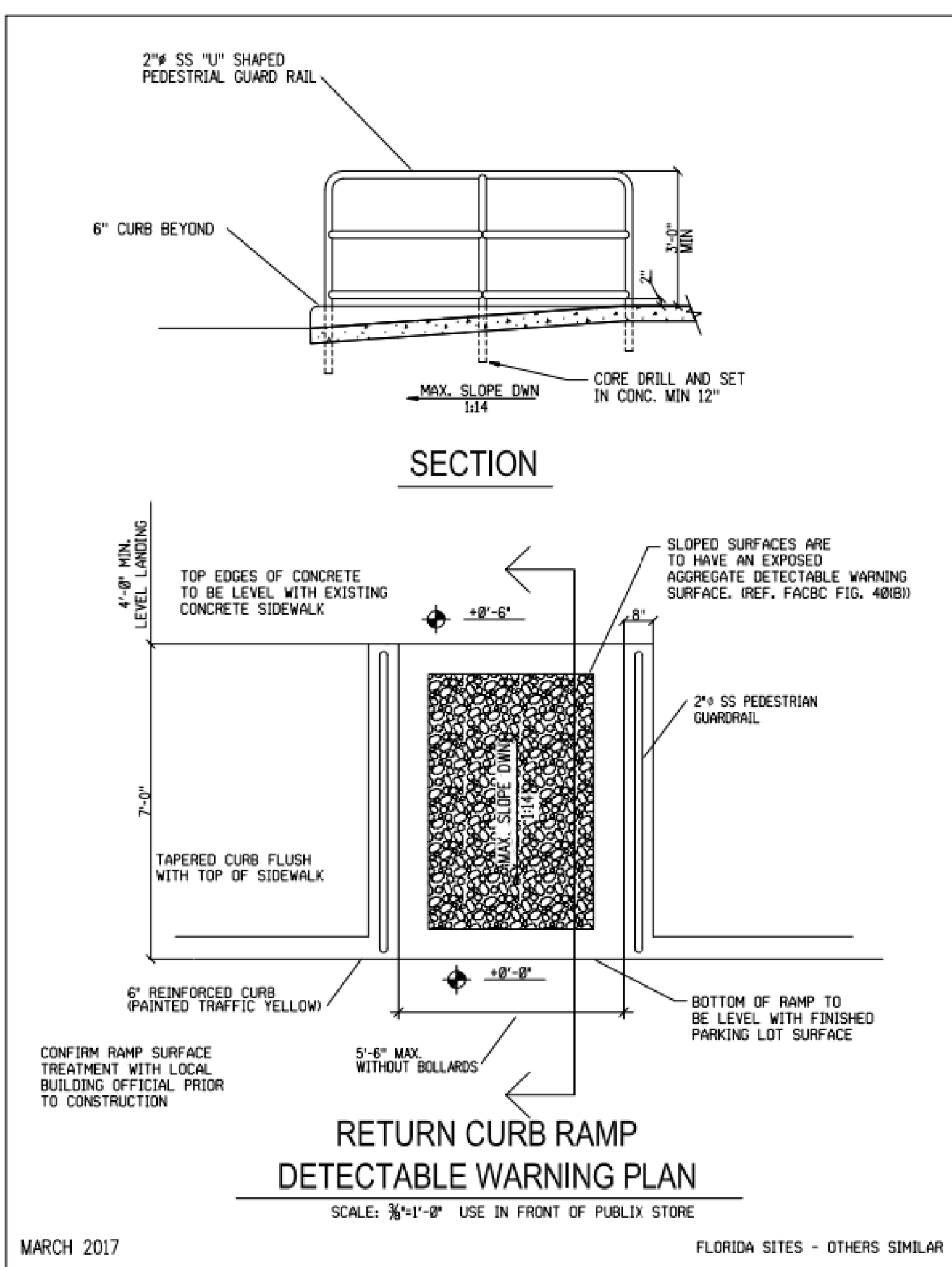
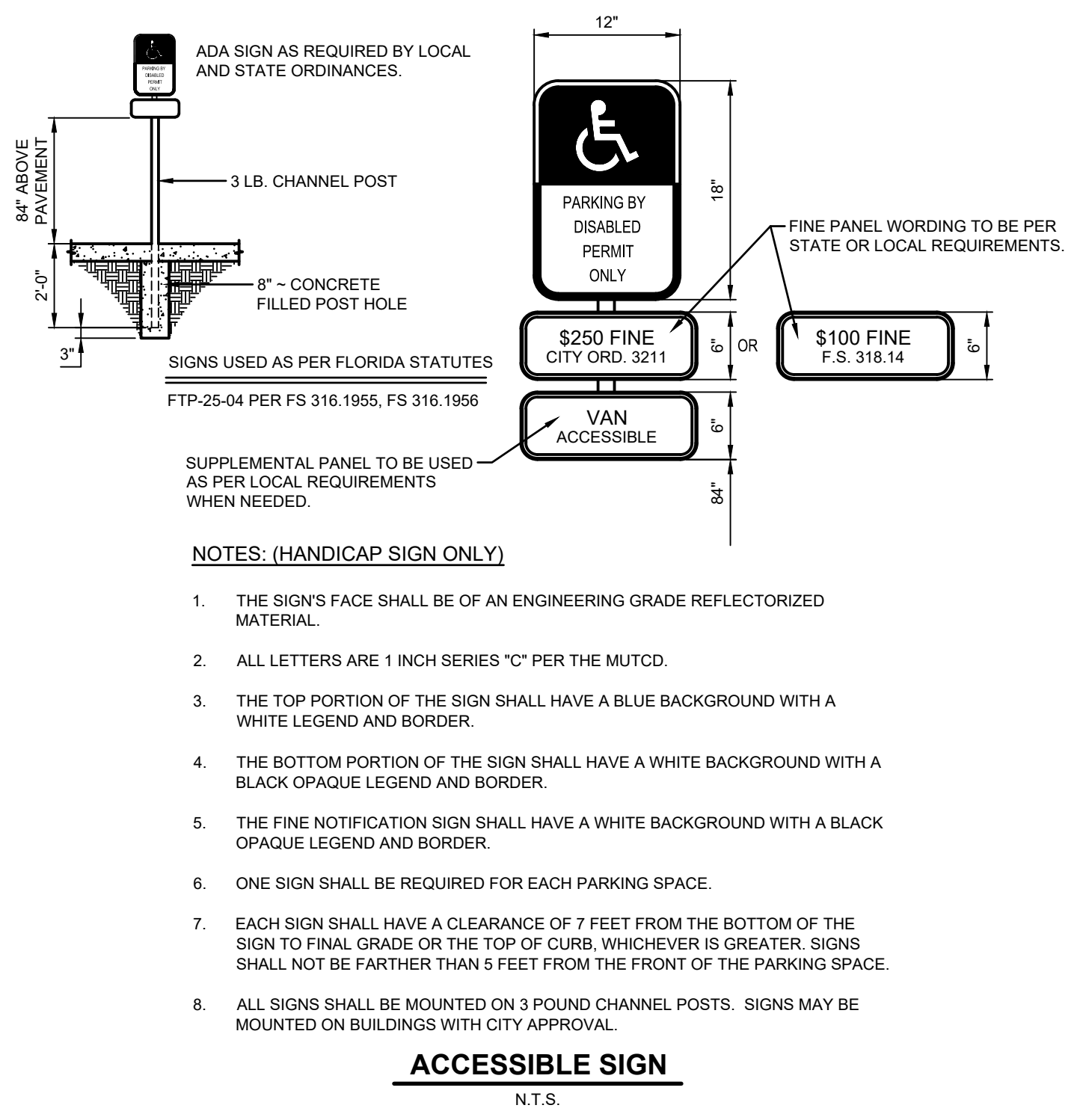
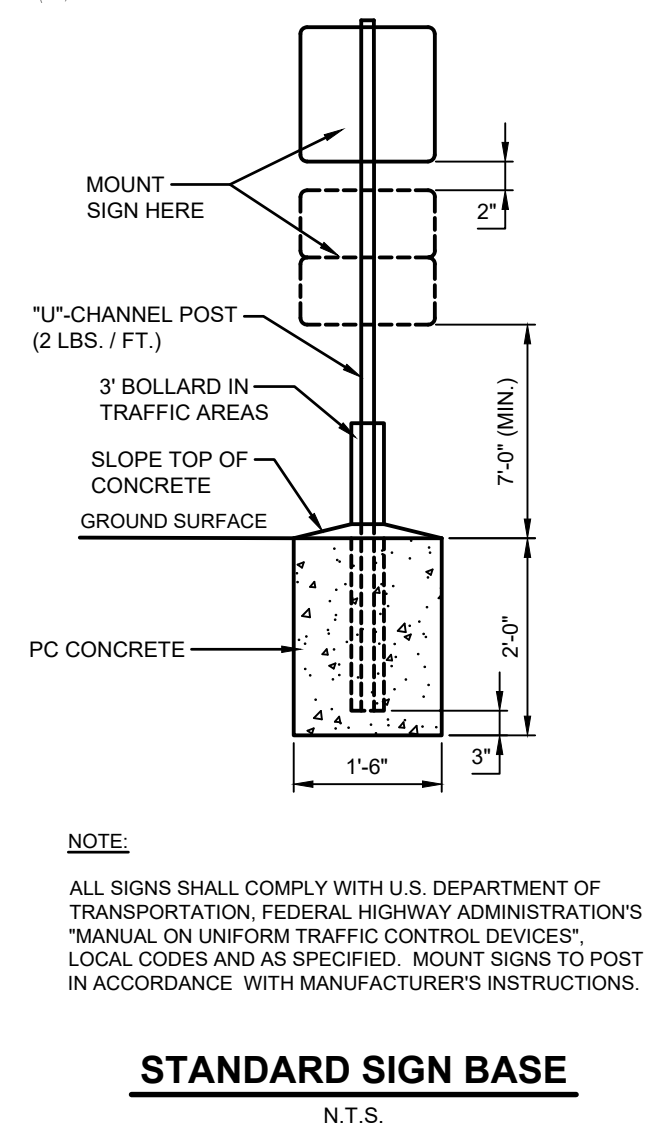
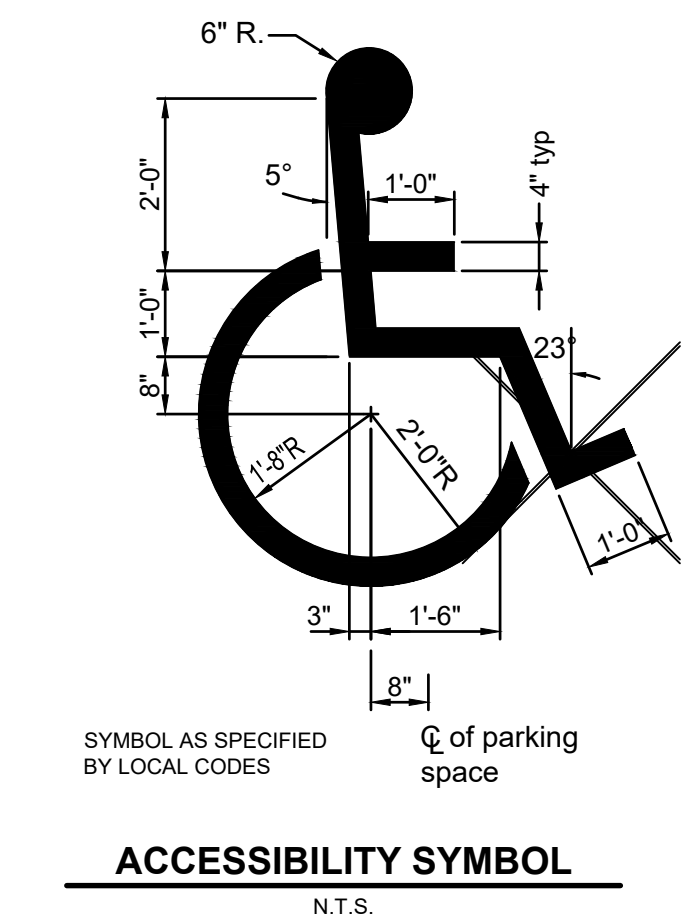
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Drawn: D. Schneider	
Checked: W. Olszewski	
Job No.: T3209	
Date: 08/10/21	© 2021

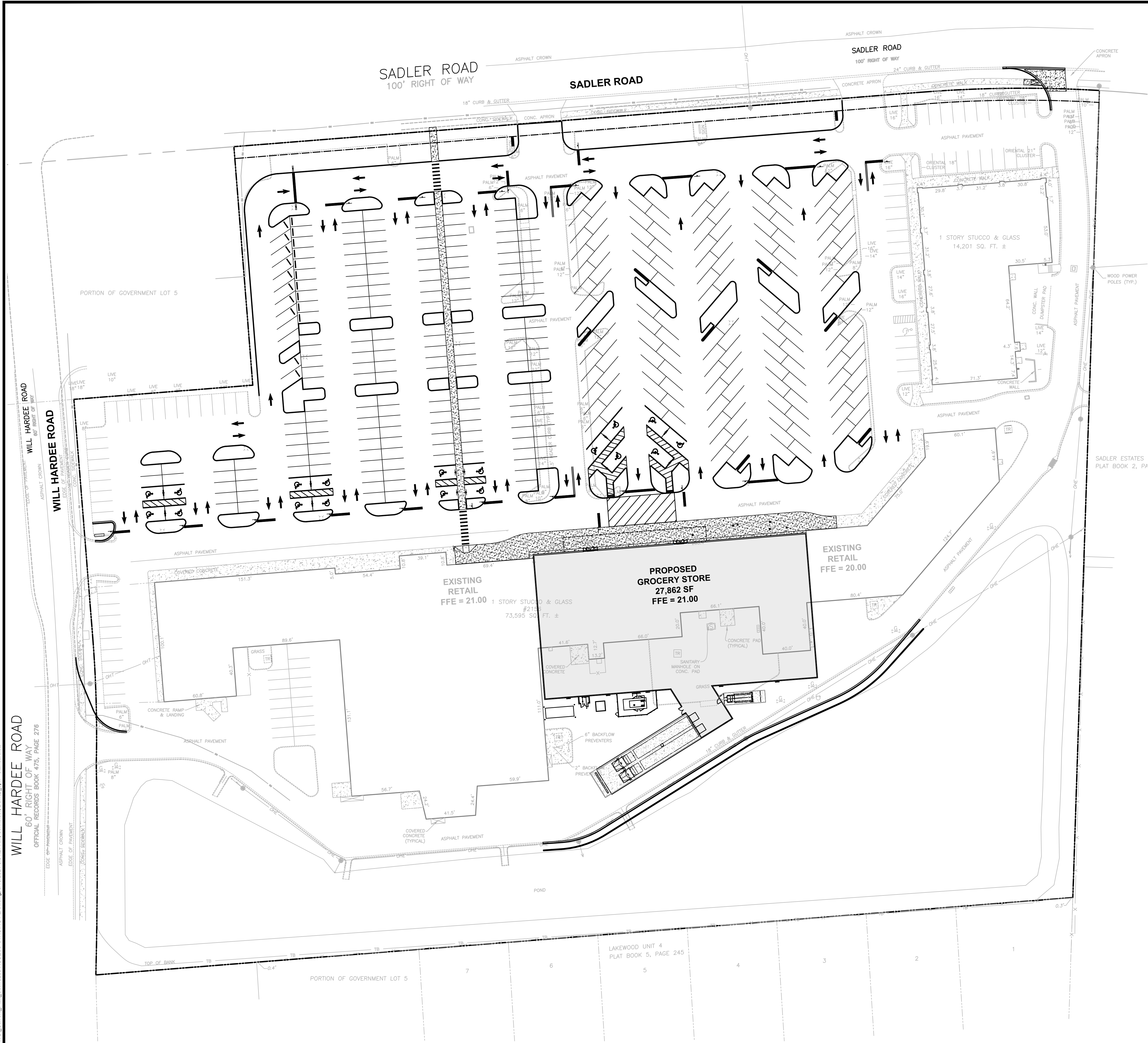
GRADING AND STORM DRAINAGE PLAN

SLEIMAN ENTERPRISES
SADLER SQUARE
CITY OF FERNANDINA BEACH / FLORIDA

THIS SHEET NOT VALID FOR
CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS.

Sheet No.
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LEGEND

	PROPERTY LINE
	MAINTAIN EXISTING PUBLIC ACCESS AT ALL TIMES WITH ADJUSTMENT AS NEEDED
	CONSTRUCTION FENCE (CONTRACTOR TO PROVIDE GATES AND ADJUST FENCES AS NEEDED TO MAINTAIN TENANT ACCESS)

NOTE:
ITEMS SHOWN SCREENED REPRESENT EXISTING
CONDITIONS. ITEMS SHOWN BOLD REPRESENT
PROPOSED CONDITIONS.

GENERAL NOTES:

1. CONTRACTOR TO KEEP PARKING LOT CLEAN OF MUD AND DEBRIS FROM CONSTRUCTION ACTIVITIES.
2. FENCE GATES TO BE LOCATED AWAY FROM END OF STAGE OR AS DIRECTED BY THE OWNER. CHAIN LINK FENCE SHALL BE WITH FRONT SHADE CLOTH BY HENDEE ENTERPRISES, INC., OR APPROVED EQUIVALENT. GATES SHALL BE (2) 8' GATES WITH LOCK. CONTRACTOR TO PROVIDE OWNER WITH CODE OR KEY TO ALL LOCKS.
3. CONTRACTOR TO REMOVE (GRIND OR BEAD BLAST) PAVEMENT MARKINGS WHEN REQUIRED.
4. CONTRACTOR SHALL COORDINATE WITH THE FIRE MARSHALL REGARDING FIRE ACCESS DURING ALL CONSTRUCTION ACTIVITIES.
5. CONTRACTOR SHALL MAINTAIN SAFE PEDESTRIAN ACCESS IN FRONT OF RETAIL STORES STORE AT ALL TIMES DURING NORMAL OPERATIONAL HOURS.
6. CONTRACTOR SHALL SECURE ALL EQUIPMENT AND SUPPLIES WITHIN STAGING AREA AS DIRECTED BY THE OWNER. APPROPRIATE SIGNAGE SHALL BE DISPLAYED ALONG PERIMETER OF THE STAGING AREA DURING THE CONSTRUCTION.
7. FINAL CONSTRUCTION PHASES SHALL BE COORDINATED THROUGH THE OWNER 2 WEEKS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
8. CONTRACTOR SHALL MAINTAIN TRUCK DELIVERY ACCESS AT ALL TIMES TO OPERATING RETAIL STORES.
9. CONTRACTOR IS ONLY ALLOWED TO CLOSE ONE VEHICULAR ENTRANCE ANYTIME DURING CONSTRUCTION. CONTRACTOR SHALL INFORM OWNER AND ANY AFFECTED BUSINESS AT LEAST 48 HOUR PRIOR TO CLOSING ENTRANCE.
10. CONSTRUCTION OF PARKING LOT SHALL NOT INTERRUPT THE PARKING LOT LIGHTING SYSTEM. CONTRACTOR SHALL MAINTAIN PARKING LOT LIGHTING AT ALL TIMES EXCEPT WITHIN THE AREAS UNDER CONSTRUCTION.
11. CONTRACTOR SHALL RELOCATE EXISTING HANDICAP PARKING SPACES AT EACH PHASE TO ENSURE ENOUGH HANDICAP PARKING SPACES AT ALL TIMES FOR OPERATING RETAIL STORES.
12. CONTRACTOR TO REMOVE ALL CONSTRUCTION DEBRIS, MUD, TEMPORARY FENCING, ETC. UPON COMPLETION OF FINAL CONSTRUCTION.
13. CONTRACTOR SHALL INSTALL TEMPORARY SAFETY FENCE AROUND PERIMETER OF EACH PHASE OF CONSTRUCTION AREA. FENCING SHALL MEET ALL REQUIREMENTS OF THE LOCAL JURISDICTION
14. CONTRACTOR SHALL CONDUCT THE SITE WORK CONSTRUCTION IN A WAY TO MAINTAIN CUSTOMER PARKING AND MINIMIZE INCONVENIENCE.
15. CONTRACTOR SHALL RE-STRIPE THE ENTIRE PARKING LOT ONCE ALL CONSTRUCTION IS COMPLETE. INCLUDING PREVIOUSLY STRIPED AREA. PRIOR TO RE-STRIPING, REMOVE TEMPORARY ADA STRIPING.
16. CONTRACTOR SHALL MAKE NECESSARY REPAIRS TO ANY PAVING AND/OR CURB & GUTTER DAMAGED DURING CONSTRUCTION.
17. CONTRACTOR SHALL ADJUST TEMPORARY FENCE FOR THE BUILDING CONSTRUCTION PER BUILDING PHASING PLAN BY ARCHITECTS.
18. RELOCATION OF STAGING AREA TO BE APPROVED BY OWNER.
19. CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS TO ALL OUTPARCELS DURING THEIR NORMAL OPERATIONAL HOURS.
20. CONTRACTOR TO MAINTAIN UTILITY SERVICE TO ALL OPERATING BUSINESSES THROUGHOUT ALL PHASES OF CONSTRUCTION.
21. CONTRACTOR TO INSTALL AND MAINTAIN SILT FENCE TO THE EXTENT CALLED FOR ON THE SWPPP (SHEET C-4) FOR THE DURATION OF CONSTRUCTION ACTIVITIES.
22. CONTRACTOR TO DEVELOP AND MAINTAIN ON SITE AN MOT (MAINTENANCE OF TRAFFIC) PLAN FOR EACH PHASE OF CONSTRUCTION.
23. CONTRACTOR TO CONSTRUCT AND MAINTAIN ONE CONSTRUCTION SIGN (MAX. 325F) DETAILED THE PROJECT TO THE PUBLIC.

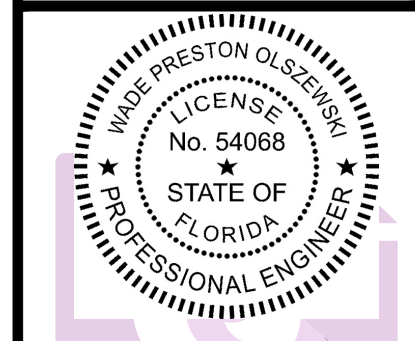
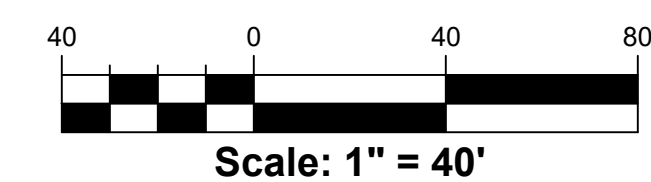
CONSTRUCTION SEQUENCE:

PHASE I NOTES:

1. CONTRACTOR SHALL INSTALL TEMPORARY FENCE TO ENCLOSE CONSTRUCTION AREA AS NOTED ON THIS PLAN. PROVIDE (2) 45° ANGLES AT CORNERS WHERE 90° ANGLES WILL OBSTRUCT THE VIEW OF PEDESTRIAN AND VEHICULAR TRAFFIC.
2. INSTALL TEMPORARY SIGNAGE AS REQUIRED FOR PUBLIC SAFETY AND TO MAINTAIN TRAFFIC FLOW.
3. INSTALL AND/OR ADJUST EROSION CONTROL DEVICES AS REQUIRED.
4. DEMOLISH EXISTING STRUCTURES SCHEDULED FOR REMOVAL.
5. BEGIN CONSTRUCTION OF NEW STRUCTURES.
6. CONSTRUCT UTILITY IMPROVEMENTS.
7. CONSTRUCT REAR DRIVE AND PARKING LOT IMPROVEMENTS.
8. REMOVE TEMPORARY FENCE AND TEMPORARY SIGNAGE ONCE CONSTRUCTION OF PHASE IS COMPLETE.
9. PHASE I SHALL BE COMPLETE WHEN PUBLIC IS OPENED.

PHASE II NOTES:

1. CONTRACTOR SHALL INSTALL TEMPORARY FENCE TO ENCLOSE CONSTRUCTION AREA AS NOTED ON THIS PLAN. PROVIDE (2) 45° ANGLES AT CORNERS WHERE 90° ANGLES WILL OBSTRUCT THE VIEW OF PEDESTRIAN AND VEHICULAR TRAFFIC.
2. INSTALL TEMPORARY SIGNAGE AS REQUIRED FOR PUBLIC SAFETY AND TO MAINTAIN TRAFFIC FLOW.
3. INSTALL AND/OR ADJUST EROSION CONTROL DEVICES AS REQUIRED.
4. BEGIN CONSTRUCTION OF FACADE IMPROVEMENTS.
5. CONSTRUCT PARKING LOT IMPROVEMENTS
6. CONSTRUCT MADRID BOULEVARD IMPROVEMENTS.
7. REMOVE TEMPORARY FENCE AND TEMPORARY SIGNAGE ONCE CONSTRUCTION OF PHASE II IS COMPLETE.
8. PHASE II SHALL BE COMPLETE WHEN WORK IS COMPLETE WITHIN PHASE II AREA.



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Designed: P. Ranucci	
Drawn: D. Schneider	
Checked: W. Olszewski	
Job No.: T3209	
Date: 08/10/21	© 2021

TEMPORARY SITE ACCESS AND STAGING PLAN

SLEIMAN ENTERPRISES
SADLER SQUARE
CITY OF FERNANDINA BEACH / FLORIDA

THIS SHEET NOT VALID FOR
CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS.

Sheet No.
C1.3C



SCALE: HORIZ.: 1" = 20', VERT.: 1" = 2'

NOTES:

1. SEE SHEET C-5.1 FOR PAVEMENT MATERIALS
2. SOD/SEED ALL SIDE SLOPES AND ALL DISTURBED AREAS

NOTE:
ITEMS SHOWN SCREENED REPRESENT EXISTING
CONDITIONS. ITEMS SHOWN BOLD REPRESENT
PROPOSED CONDITIONS.

STORMWATER PIPE

RCP PIPE SHALL COMPLY WITH ASTM C76
 ERCP PIPE SHALL COMPLY WITH ASTM C507
 HDPE PIPE SHALL COMPLY WITH ASTM D3350
 PVC PIPE SHALL COMPLY WITH ASTM D3034, SDR 35

GRADING NOTES:

1. GRADING SHOWN ON THESE PLANS IS PROVIDED TO THE CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. THE CONTRACTOR SHALL BE EXPECTED TO GRADE THE ENTIRE SITE TO ENSURE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. THE FOLLOWING MINIMUM SLOPES SHALL BE PROVIDED BY THE CONTRACTOR:

b. CONCRETE PAVEMENT: MIN. 1% SLOPE

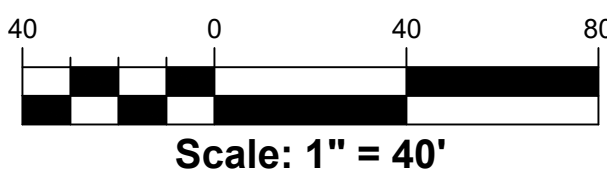
2. STRUCTURE BOTTOMS SHALL BE TYPE 'P' BOTTOMS PER FDOT REQUIREMENTS, UNLESS PIPE SIZE AND LOCATION REQUIRE A TYPE 'J' BOTTOM. CONTRACTOR SHALL REVIEW DESIGN AND PROVIDE APPROPRIATELY SIZED BOTTOMS PER FDOT REQUIREMENTS.

8. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ADA AREAS ARE CONSTRUCTED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION. IF THE CONTRACTOR DETERMINES THAT ANY INFORMATION SHOWN ON THIS PLAN MAY NOT BE IN COMPLIANCE THEY SHALL NOTIFY THE ENGINEER PRIOR TO THE WORK BEING COMPLETED.

PROPOSED DOWNSPOUT SCHEDULE	
STRUCTURE NUMBER	TYPE
DS-1	4 L.F. 10" STORM @ 1.00% MIN. SEE ARCHMEP PLANS FOR BUILDING CONNECTION (TYP. OF 5)
DS-2	6" WYE W/CLEANOUT F.L. = 15.25
DS-3	35 L.F. 10" STORM @ 1.00% MIN
DS-4	6" WYE W/CLEANOUT F.L. = 15.25
DS-5	35 L.F. 10" STORM @ 1.00%
DS-6	2 - 10" WYE
DS-7	30 L.F. 12" STORM @ 1.00%
DS-8	6" WYE W/CLEANOUT F.L. = 14.60
DS-9	45 L.F. 12" STORM @ 1.00%
DS-10	6" WYE W/CLEANOUT F.L. = 14.15
DS-11	37 L.F. 10" STORM @ 1.08%
DS-12	6" WYE W/CLEANOUT F.L. = 13.75
DS-13	48 L.F. 12" STORM @ 1.00%
DS-14	15 L.F. 6" STORM @ 1.00% CONNECT TO TRENCH DRAIN AT TRUCK WELLS AND DS-13 WITH 12"x10" WYE
DS-15	6" WYE W/CLEANOUT F.L. = 14.50
DS-16	54 L.F. 10" STORM @ 1.09%
DS-17	6" WYE W/CLEANOUT F.L. = 13.90
DS-18	27 L.F. 10" STORM @ 1.11%

STORM STRUCTURE SCHEDULE			
STRUCTURE NUMBER	TYPE	RIM ELEVATION	INVERTS
S-1	TYPE "C" INLET PER FDOT INDEX NO. 425-052	17.13	F.L. S.E. = 10.65 F.L. W. = 13.25 (12')
S-2	15" MES PER FDOT INDEX NO. 430-021	N/A	F.L. = 10.50
S-3	TYPE "C" INLET PER FDOT INDEX NO. 425-052	17.50	F.L. S.E. = 10.65 F.L. N.W. = 13.30 (10') F.L. W. = 15.20 (2')
S-4	15" MES PER FDOT INDEX NO. 430-021	N/A	F.L. = 10.50
S-5	TRUCK WELL CATCH BASIN WITH 6" DRAIN LINE. SEE ARCH/MEP PLANS	16.75	F.L. S.E. = 14.00±
S-6	4" DIA. MANHOLE PER FDOT WITH SUMP PUMP. SEE DETAIL SHEET	18.50	F.L. N.W. = 14.00
S-7	REMOVE EXISTING CURB INLET TOP AND INSTALL TYPE "V" GUTTER INLET PER FDOT INDEX NO. 425-041	15.40	F.L. W. = 10.37 (EXIST) F.L. E. = 10.36 (EXIST)

NOTE:
ALL GRADES TO BE MATCH EXISTING
UNLESS OTHERWISE NOTED ON PLAN
EXISTING DRAINAGE PATTERNS AND
BASINS TO BE MAINTAINED



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OU=A01410D000001756A9841E800
0018, CN=Wade P Olszewski
Reason: I am approving this
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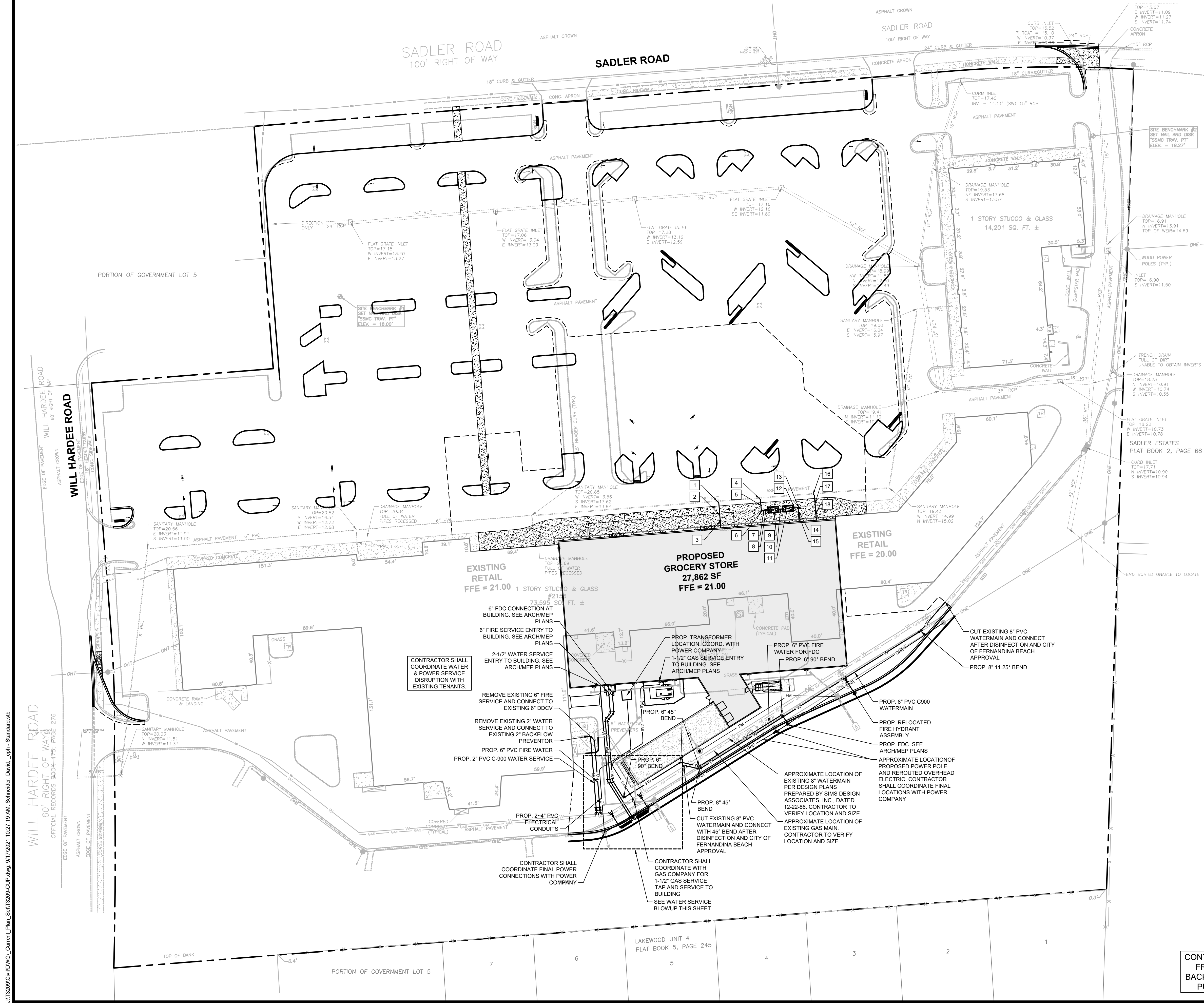
Designed: P. Ranucci	
Drawn: D. Schneider	
Checked: W. Olszewski	
Job No.: T3209	
Date: 08/10/21	© 2021

GRADING AND STORM DRAINAGE PLAN

SLEIMAN ENTERPRISES
SADLER SQUARE
CITY OF FERNANDINA BEACH / FLORIDA

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Sheet No.
C1.4

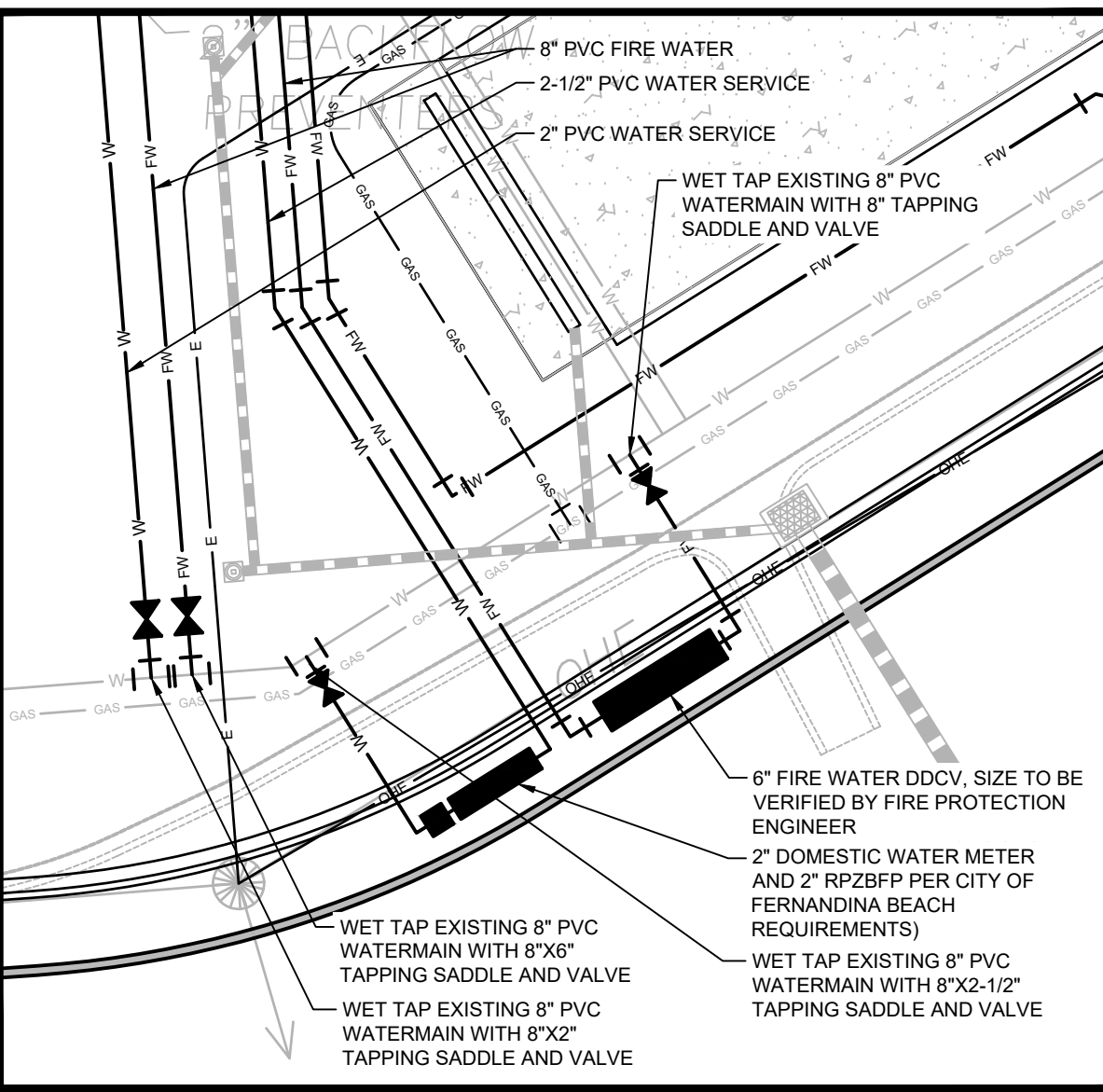


PROPOSED LEGEND	
---	PROPERTY LINE
---	EASEMENT
E	ELECTRIC LINE
T	TELEPHONE LINE
FW	FIRE WATER
OHE	OVERHEAD ELECTRIC
S	SANITARY SEWER
W	WATER MAIN
FM	FORCEMAIN
X	SANITARY SEWER STRUCTURE INDICATOR
C.O.	CLEAN OUT
HYDRANT	FIRE HYDRANT
FDCT	FIRE DEPARTMENT CONNECTION
WTF	WATER LINE FITTINGS
GV	GATE VALVE
R	REDUCER
PC1	PIPE CROSSING

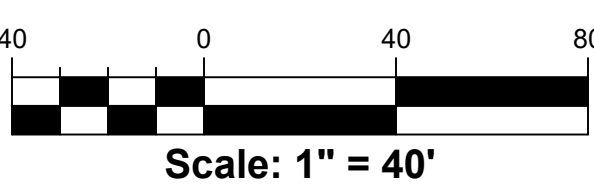
NOTE:
ITEMS SHOWN SCREENED REPRESENT EXISTING CONDITIONS. ITEMS SHOWN IN BOLD REPRESENT PROPOSED CONDITIONS.

UTILITY LINE MATERIALS
POTABLE WATER LINE
1/2" - 2" POLYETHYLENE SHALL CONFORM TO AWWA C901, SDR 9
2" PVC SHALL CONFORM TO ASTM D1784 AND D1785, SCH. 80
4" - 30" PVC SHALL CONFORM TO AWWA C900, DR 18
GRAVITY SEWER LINE
4"-12" PVC SHALL CONFORM TO ASTM D3034, SDR 26
WASTEWATER FORCEMAIN LINE
2" - 3" PVC SHALL CONFORM TO ASTM D1784 AND D1785, SCH. 80
4" - 12" PVC SHALL CONFORM TO AWWA C900, DR 18

SANITARY SEWER SCHEDULE			
NUMBER	TYPE	TOP ELEVATION	INVERTS
1	CUT EXISTING 8" SEWER LINE AND INSTALL 6" WYE	N/A	14.34±
2	16 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
3	6" TWO-WAY CLEAN OUT (5' FROM BLDG) SEE ARCHMFP PLANS	20.95±	14.50
4	CUT EXISTING 8" SEWER LINE AND INSTALL 6" WYE	N/A	14.50±
5	11 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
6	6" WYE W/CLEAN OUT	20.85±	14.61
7	4 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
8	6" CLEAN OUT	20.85±	14.65
9	1,250 GALLON GREASE PER PUBLIC SPECIFICATION.	20.85±	INFLOW INV. = 14.92 OUTFLOW INV. = 14.67
10	4 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.25%	N/A	N/A
11	1,250 GALLON GREASE PER PUBLIC SPECIFICATION.	20.85±	INFLOW INV. = 15.22 OUTFLOW INV. = 14.97
12	4 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
13	6" WYE W/CLEAN OUT	20.90±	15.26
14	6 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
15	6" TWO-WAY CLEAN OUT (5' FROM BLDG) SEE ARCHMFP PLANS	20.95±	15.32
16	CUT EXISTING 8" SEWER LINE AND INSTALL 6" WYE	N/A	14.70±
17	16 L.F. ~ 6" SDR 26 PVC SANITARY SEWER @ 1.00%	N/A	N/A
18	6" TWO-WAY CLEAN OUT (5' FROM BLDG) SEE ARCHMFP PLANS	20.95±	14.86



CONTRACTOR SHALL PROVIDE FREEZE PROTECTION ON BACKFLOW PREVENTERS PER PUBLIC SPECIFICATIONS



Digitally signed by Wade P. Olaszewski
C=US, O=Unaffiliated,
OU=A01410D00001756A9841E800
00D18, CN=Wade P. Olaszewski
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any errors or omissions in the
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verified on any date: 2021-08-10 10:27:19 AM

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Designed: P. Ranucci
Drawn: D. Schneider
Checked: W. Olaszewski
Job No.: T3209
Date: 08/10/21 © 2021



- ### TYPE D CURB DETAIL

* FOR LOW POINT OF MIAMI CURB.
** FOR LOW POINT OF TYPE F CURB.

- SPILL TYPE CURB AND GUTTER**

* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

- ## STANDARD CONCRETE CURB AND GUTTER

ELEVATION VIEW

NOTE:
STRIPING TO BE SOLID WHITE.

CROSS WALK STRIPING DETAIL

WHEEL STOP

N.T.S.

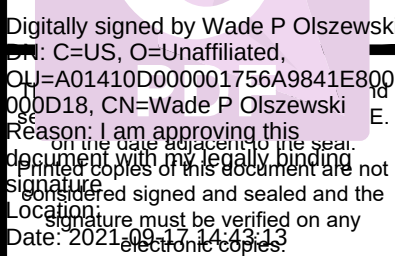


A Full Service

A & E Firm

**5200 Belfort Road, Suite 220
Jacksonville, FL 32256
Ph: 904.332.0999**

Plans Prepared By:
CPH, Inc.
State of Florida Licenses:
Engineer No. 3215
Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000298

[illegible]

Designed: P. Ranucci

Drawn: D. Schneider

Checked: W. Olszewski

Job No.: T3209

Date: 08/10/21

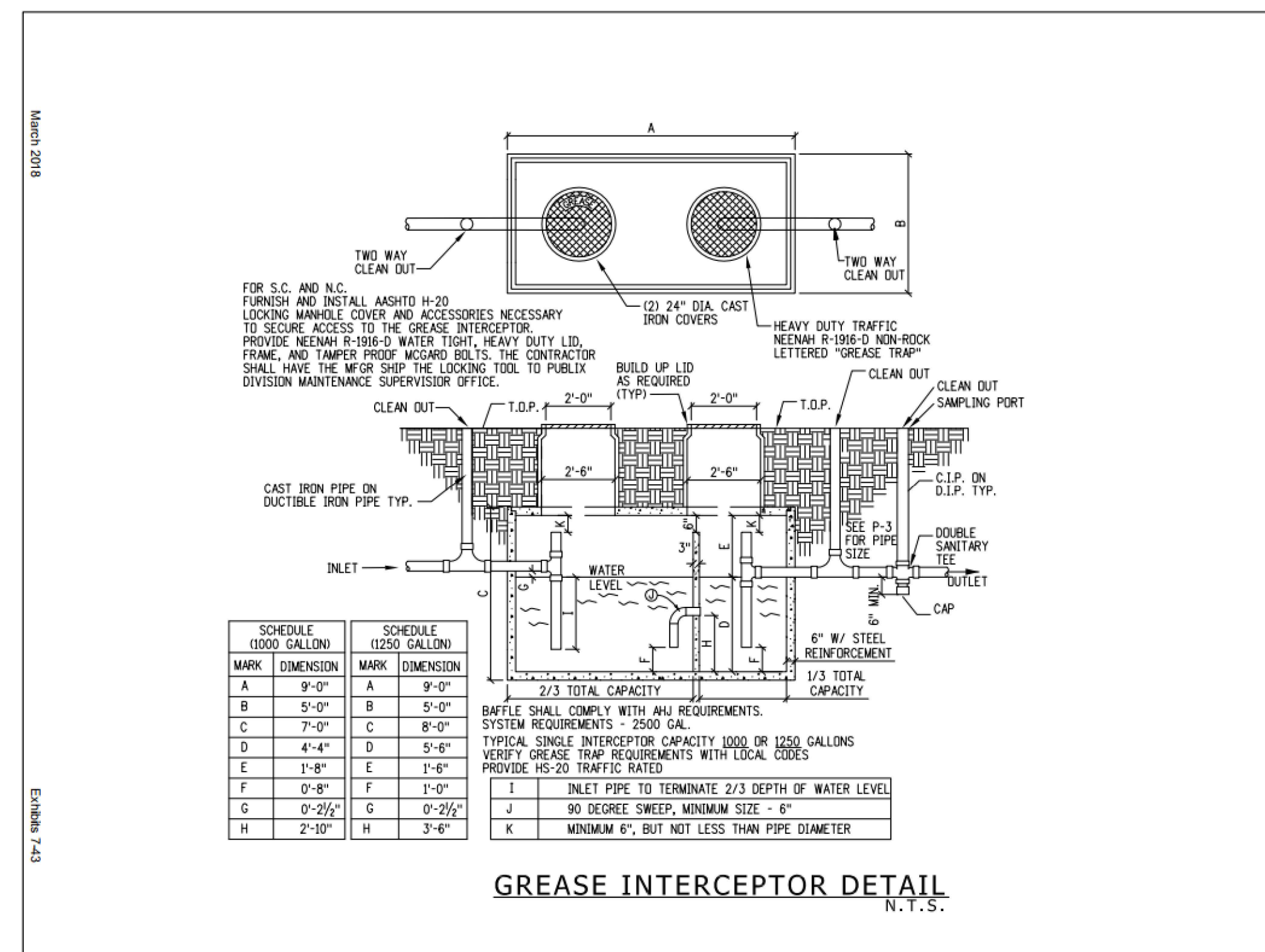
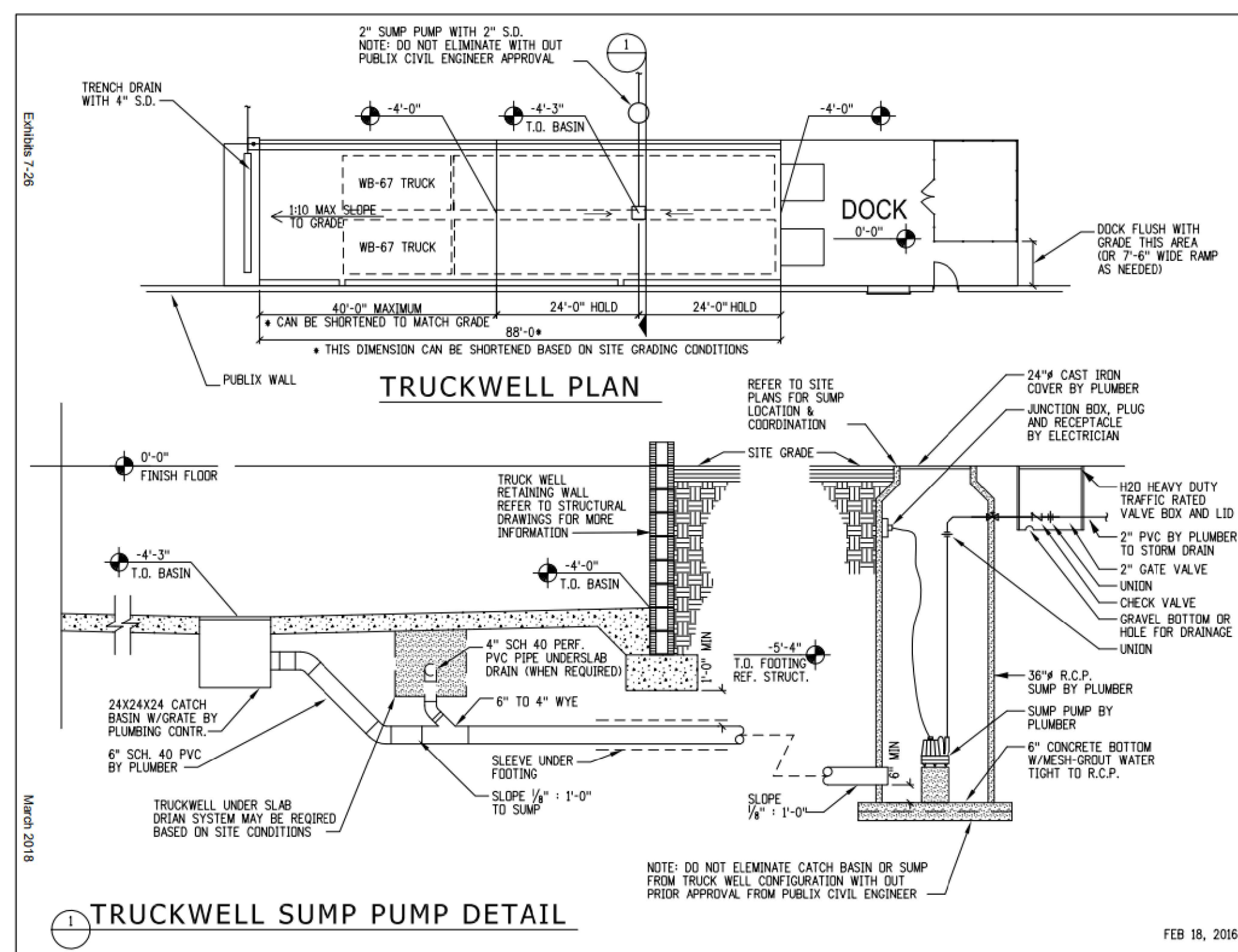
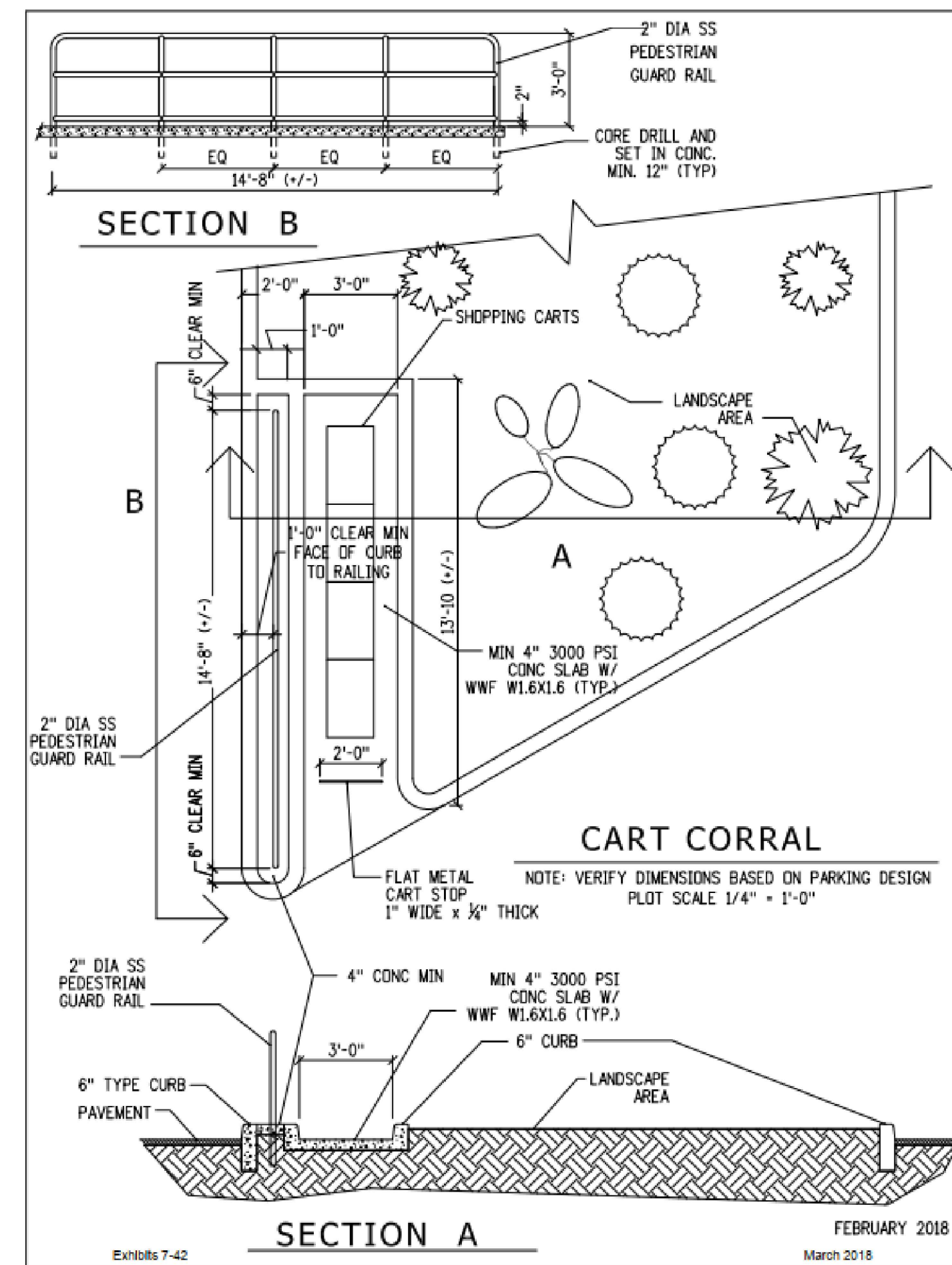
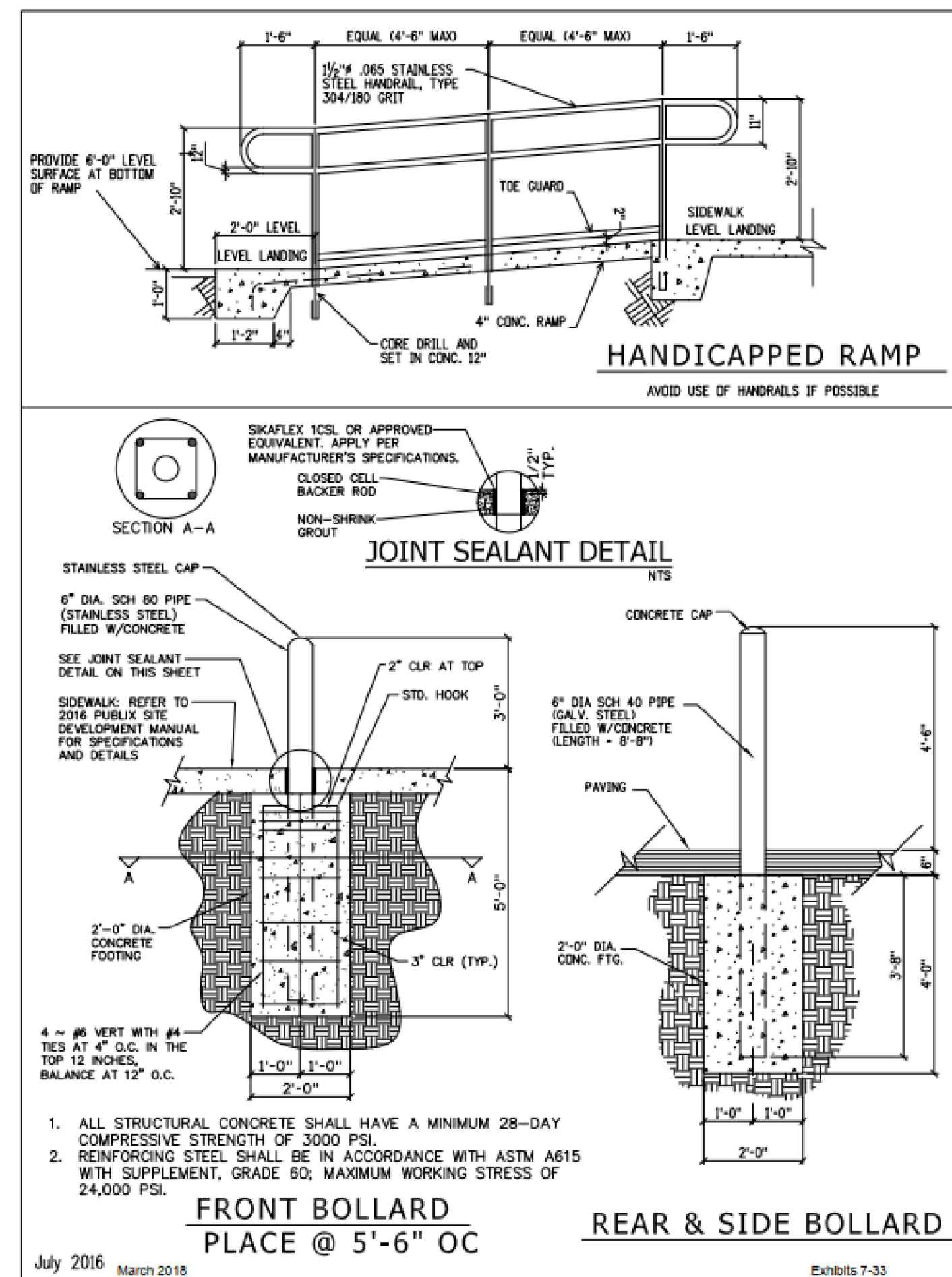
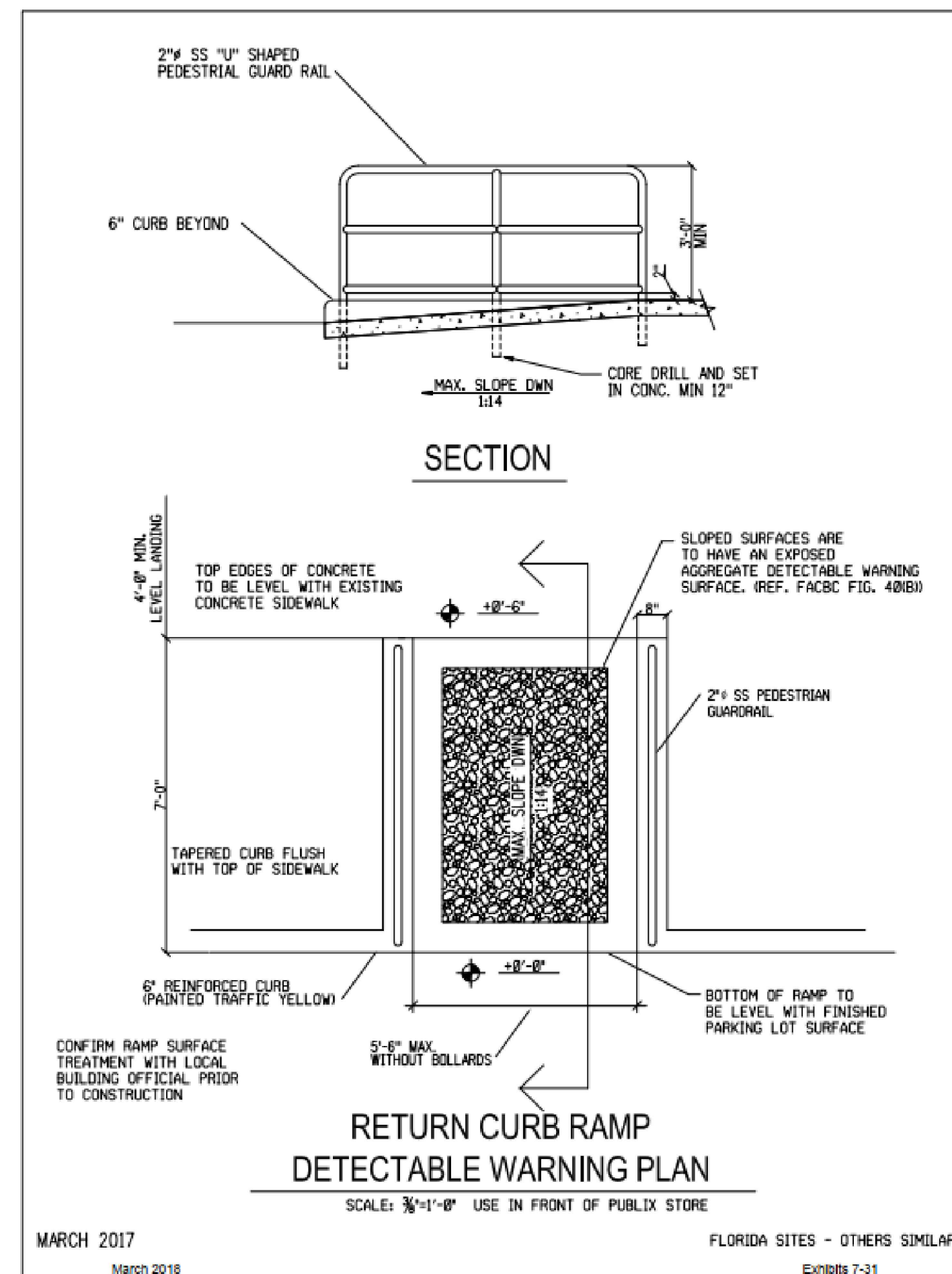
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CONSTRUCTION DETAILS SHEET

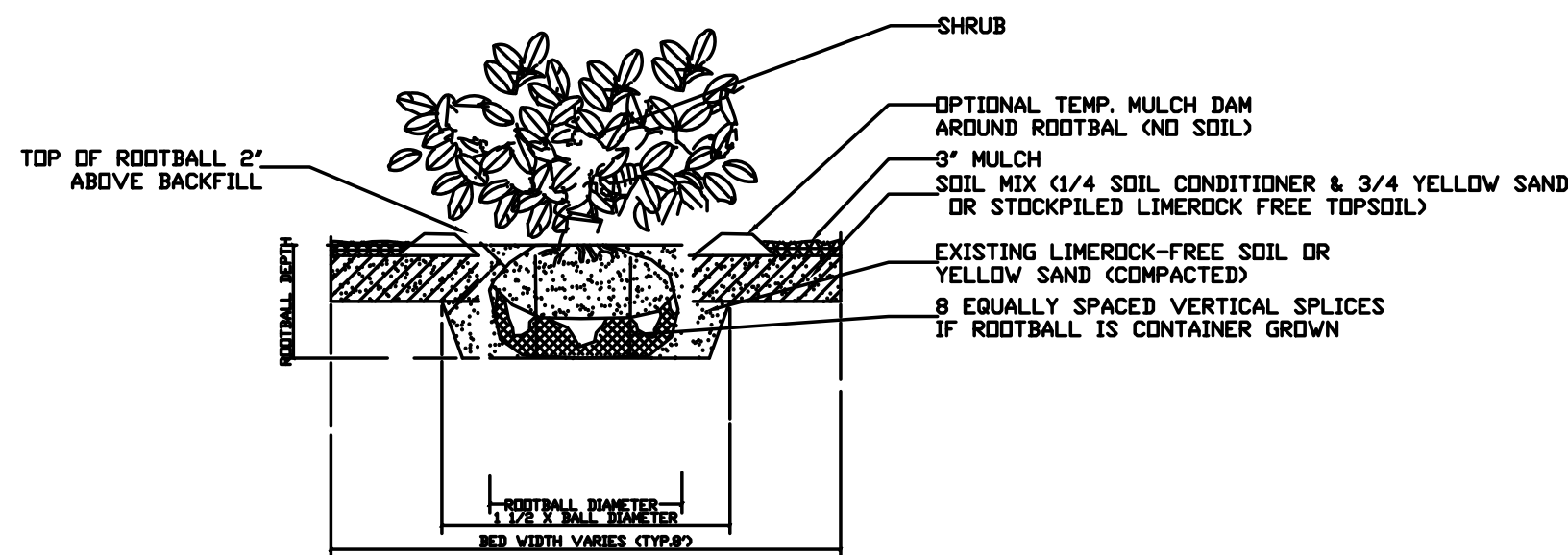
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Sheet No.
C5.1



LANDSCAPE REQUIREMENTS					
PROPERTY	FRONTAGE/ AREA	GREEN AREA REQUIRED SF	GREEN AREA PROV'D SF	TREES REQ'D / SHADE REQ'D	SHRUBS REQ'D
INTERIOR VUA 10%	247,792 SF	24779	17718	62	
24779 x .25 = 6195/9				1/ 400	688
STREET FRONTAGE 10'					
NORTH	609 LF	6090	12747	30	
609 /3				1/ 20	203
WEST	242 LF	2420	2272	12	
242 /3				1/ 20	80
ADJACENT PROPERTY					
EAST 0'	390 LF	0	7646	8	
390/ 3				1/ 50	130
NORTH 0'	150 LF	0	953	3	
150/ 3				1/ 50	50
WEST 0'	200 LF	0	993	4	
200/ 3				1/ 50	70
TOTAL		33289	40383	63/ 47	1221



NOT TO SCALE

DRAWING NO.



OWNER'S AUTHORIZATION FOR AGENT REPRESENTATION

I /WE Property Management Support Inc, Trustee of Sadler Square Land Trust
(print name of property owner(s))

hereby authorize: Wade Olszewski
(print name of agent)

to represent me/us in processing an application for: TRC
(type of application)

on our behalf. In authorizing the agent to represent me/us, I/we, as owner/owners, attest that the application is made in good faith and that any information contained in the application is accurate and complete.

(Signature of owner)

(Signature of owner)

(Print name of owner)

(Print name of owner)

STATE OF FLORIDA

COUNTY OF NASSAU

Sworn to (or affirmed) and subscribed before me by means of ☒ physical presence or ☐ online notarization, this 18th day

of September, 2021, by Michael W. Herzberg.

Barbara A Humphrey
Notary Public

Barbara A Humphrey
Printed Name

3/25/25
My Commission Expires

Personally Known X OR Produced Identification _____ ID Produced: _____





A. Michael Hickox, CFA

Cert. Res. RD1941

NASSAU COUNTY

PROPERTY APPRAISER





PROPERTY INFORMATION

Parcel Number 29-3N-28-0000-0004-0080

Owner Name

PROPERTY MANAGEMENT SUPPORT

Mailing Address

INC TRUSTEE OF SADLER SQUARE

LAND TRUST

1 SLEIMAN PARKWAY STE #270

JACKSONVILLE, FL 32216

Location Address

2100 SADLER SQ

FERNANDINA BEACH 32034

Tax District

FERNANDINA BEACH

Millage

19.5052

Homestead

No

Property Usage

COMMUNITY 001600

Deed Acres

0

Short Legal

PT OF GOV'T LOT 5 OR 1548/1576 FOOD LION LEASED PROPERTY

2021 Preliminary Values

Land Value

\$1,491,109

(+) Improved Value

\$3,226,418

(=) Market Value

\$4,717,527

(-) Agricultural Classification

\$0

(-) SOH or Non-Hx* Capped Savings

\$0

(=) Assessed Value

\$4,717,527

(-) Homestead

\$0

(-) Additional Exemptions

\$0

(=) School Taxable Value

\$4,717,527

(-) Non-School HX & Other Exempt Value

\$0

(=) County Taxable Value

\$4,717,527

Note - *10% Cap does not apply to School Taxable Value

Property Search

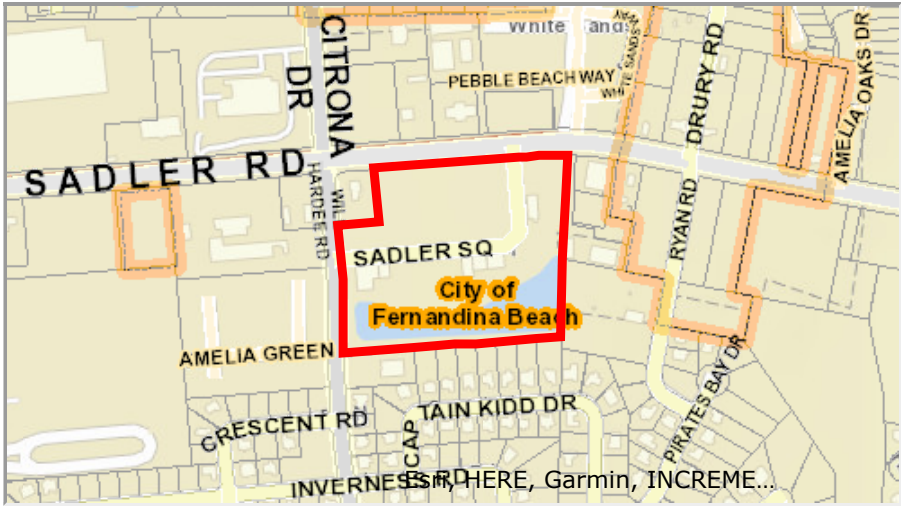
Map This Parcel

GIS Report

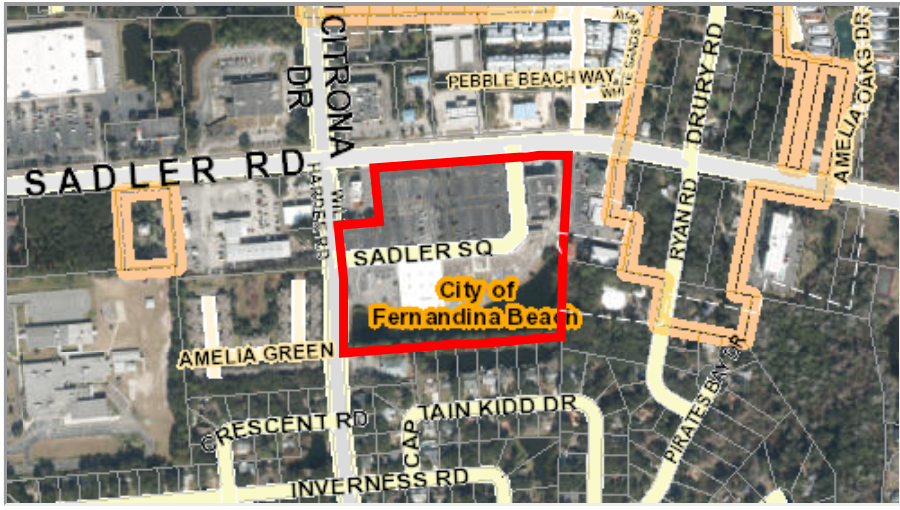
Property Record Card

Print Friendly Page

PARCEL MAP



2021 AERIAL MAP



PROPERTY PHOTO



3/13/2020

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If this picture is incorrect, please email info@nassauflpa.com

LOCATION MAP



BUILDING INFORMATION

Type	Total Area	Heated Area	Bedrooms	Baths	Primary Exterior	Secondary Exterior	Heating	Cooling	Actual Year Built	Building Sketch
SHOP COMTY	12790	11440	0	0	CONC BLOCK	CB STUCCO	AIR DUCTED	AIR DUCTED	1987	
SHOP COMTY	34172	30084	0	0	CONC BLOCK	GLASS THRM	AIR DUCTED	AIR DUCTED	1987	
SHOP COMTY	32964	28644	0	0	CONC BLOCK		AIR DUCTED		1987	



MISCELLANEOUS INFORMATION

https://maps.nassauflpa.com/NassauDetails/ParcelSearchResults.html?PIN=29-3N-28-0000-0004-0080

1/2

Description	Dimensions L X W	Units	Year Built
CONCRETE B	0 X 0	706	1987
CONCRETE B	0 X 0	550	1987
ASPHALT D	0 X 0	254167	1987
ST LGHT UN	0 X 0	21	1987
CONC CURB	0 X 0	4526	1987

SALES INFORMATION

Sale Date	Book Page	Price	Instr	Qual	Imp	Grantor	Grantee
2008-01-31	1548 / 1576	\$100	WD	U	Y	SOUTHEASTERN PROPERTY INVESTMENTS LLC TRUSTEE	PROPERTY MANAGEMENT SUPPORT INC TRUSTEE
2006-05-16	1412 / 959	\$5,425,000	WD	U	Y	QUINLIVAN J MARK &	SOUTHEASTERN PROPERTY INVESTMENTS LLC TRUSTEE
2006-05-16	1412 / 959	\$5,425,000	WD	Q	Y	QUINLIVAN J MARK ETAL	SOUTHEASTERN PROPERTY INVESTMENTS LLC TRUSTEE
2004-12-20	1282 / 746	\$4,500,000	WD	Q	Y	TRANSCONTINENTAL SADLER	QUINLIVAN J MARK ETAL
1999-04-14	878 / 1453	\$100	WD	U	Y	TRANSCONTINENTAL REALTY INVESTORS INC	TRANSCONTINENTAL SADLER SQUARE INC
1993-11-24	692 / 1735	\$3,225,000	WD	U	Y	SADLER SQUARE PARTNERS	TRANSCONTINENTAL REALTY
1989-11-06	583 / 119	\$1,875,000	WD	U	Y	FIRST FEDERAL SAVING	SADLER SQUARE PARTNR
1989-11-06	583 / 119	\$1,875,000	WD	U	Y	FIRST FEDERAL SAVINS	SADLER SQUARE PARTNR
1989-06-09	571 / 872	\$4,200,000	WD	U	Y	SADLER SQUARE LTD	1ST FEDERAL SAVINGS
1989-06-02	571 / 872	\$4,200,000	WD	U	Y	SADLER SQUARE LTD	1ST FEDERAL SAVINGS
1987-05-11	517 / 256	\$975,000	WD	Q	N	SADLER DEV CO	SADLER SQUARE LTD

ENGINEERING PLANS

FOR

MCJUNKIN STATION

FOR

ARTISAN HOMES

MCJUNKIN STATION

FOR

ARTISAN HOMES

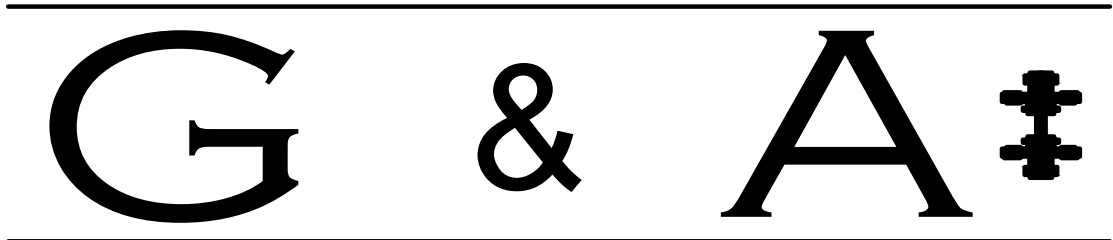
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GILLETTE & ASSOCIATES, INC.

CIVIL & ENVIRONMENTAL ENGINEERING
MECHANICAL & STRUCTURAL ENGINEERING
PERMITTING & CONSTRUCTION MANAGEMENT

20 SOUTH 4TH STREET AMELIA ISLAND, FLORIDA 32034
PHONE: 904/261-8819

PERMITTING AGENCIES
CITY OF FERNANDINA BEACH

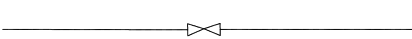
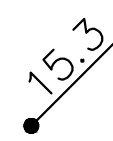
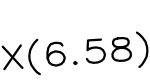
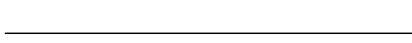


INDEX		
PAGE #	SHEET	DESCRIPTION
1	CVR	COVER SHEET
2	PRE-1	PREDEVELOPMENT PLAN
3	GE-1	GEOMETRY PLAN
4	GE-2	ENLARGED GEOMETRY PLAN
5	DR-1	DRAINAGE PLAN
6	LS-1	LANDSCAPE PLAN
7	DT-1	MISCELLANEOUS DETAILS

ISSUE DATE: JUNE 29, 2021
REVISION DATE: AUGUST 27, 2021



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Date:
2021.08.27
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GENERAL NOTES			INDEX			
SITE / GEOMETRY		WATER NOTES		PAGE #	SHEET	DESCRIPTION
1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTOR'S PRICE FOR PERFORMING THE WORK.		19. WHEN DEWATERING CAPACITY REQUIRES A PERMIT (CUP), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.		1	CVR	COVER SHEET
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THIS PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO CONSTRUCTION OF THE PROJECT. ALL COSTS ASSOCIATED WITH PRELIMINARY INVESTIGATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.		20. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY HAZARD. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WHERE PARALLEL WATER AND SEWER MAINS HAVE LESS THAN 10 FOOT HORIZONTAL SEPARATION, 20 FOOT LENGTHS OF C900 (DR18) WATER QUALITY PIPE SHALL BE USED WITH THE JOINTS STAGGERED AT 10 FOOT INTERVALS. THE PIPES SHALL BE PLACED IN SEPARATE TRENCHES WITH THE WATER MAIN AT LEAST 18 INCHES ABOVE THE SEWER.		2	IN-1	INDEX SHEET
3. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER.		21. WATER MAINS CROSSING SANITARY HAZARDS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN. WHERE WATER AND SEWER MAINS CROSS WITH BETWEEN 18 INCHES AND 6 INCHES OF VERTICAL CLEARANCE, A 20 FOOT SECTION OF C900 (DR18) WATER QUALITY PIPE SHALL BE CENTERED ON THE POINT OF THE CROSSING. THE CONTRACTOR SHALL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER PIPES IS TO BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIAMETER.		3	PRE-1	PREDEVELOPMENT PLAN
4. ELEVATIONS ARE BASED ON NAVD DATUM OF 1988.		22. NO WATER MAIN PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER MANHOLE.		4	GE-1	GEOMETRY PLAN
5. TOPOGRAPHIC AND BOUNDARY INFORMATION WAS PROVIDED BY: A & J LAND SURVEYING (904-346-1733).		23. BLANK		5	GE-2	ENLARGED GEOMETRY PLAN
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING, RIGHT-OF-WAY PERMITS NOT PROVIDED AND INSURANCE REQUIRED FOR THE PROJECT.		24. TRACER WIRE SHALL BE PROVIDED ON ALL WATER MAINS AND FORCE MAINS. TRACER WIRE SHALL BE #10 UF SOLID COPPER WIRE, COATED, AND SUITABLE FOR BURIAL. COATING SHALL BE BLUE FOR WATER AND GREEN FOR SEWER MAIN CONNECTIONS. WIRE SHALL BE ATTACHED DIRECTLY TO TOP OF PIPE AND BROUGHT INTO EACH VALVE BOX AND COILED TO ALLOW FOR EASY ACCESS AND EXTENSION ABOVE FINISHED GRADE FOR ATTACHMENT OF LOCATING EQUIPMENT.		6	DR-1	DRAINAGE PLAN
7. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY, COUNTY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.		25. ALL PIPE LENGTHS ARE APPROXIMATE DIMENSIONS, ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH TYPICAL SECTIONS AND DETAILS AS SHOWN ON THE MISCELLANEOUS DETAILS SHEET AND IN ACCORDANCE WITH THE SPECIFICATIONS.		7	LS-1	LANDSCAPE PLAN
8. THE CONTRACTOR SHALL ADVISE THE OWNER'S AUTHORIZED REPRESENTATIVE OF PLANNED WORK SCHEDULE. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.		26. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT.		8	DT-1	MISCELLANEDUS DETAILS
9. "AS-BUILT" DRAWINGS - AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION, AND SUBMITTAL OF AS-BUILT DRAWINGS.		27. GRADES SHOWN ON PLANS ARE EDGE OF PAVEMENT FINISHED GRADES UNLESS OTHERWISE NOTED.		9	DT-2	WATER DETAILS
10. "AS-BUILT" RECORD DATA AND INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. RECORD DRAWINGS SHALL BE SUPPLIED TO THE ENGINEER.		28. SHOULD THE SURFACE OR SUBSURFACE CONDITIONS VARY FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.		10	DT-3	SEWER DETAILS
11. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.		29. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFICALLY STATED. ALL DISTURBED AREAS WITHIN THE NASSAU COUNTY RIGHT OF WAY SHALL BE COVERED WITH BERMUDA SOD.		FIRE NOTES		
12. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR ON A DAILY BASIS.		30. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF SEDIMENT-LADEN RUNOFF RESULTING FROM STORM EVENTS DURING THE CONSTRUCTION PHASE. EROSION CONTROL FACILITIES SHOULD BE INSTALLED EARLY DURING THE CONSTRUCTION PERIOD SO AS TO PREVENT THE TRANSPORT OF SEDIMENT INTO SURFACE WATERS. RE-VEGETATION AND STABILIZATION OF DISTURBED AREAS SHOULD BE ACCOMPLISHED IMMEDIATELY TO REDUCE THE POTENTIAL FOR FURTHER SOIL EROSION.				
13. ALL EXCESS SUITABLE AND UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER.		31. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND COUNTY/CITY BEFORE COMMENCING WORK.				
14. ALL EXISTING TREES LISTED TO REMAIN SHALL BE PRESERVED AND PROTECTED.		32. MINIMUM COVER OVER PIPES SHALL BE 36" UNLESS OTHERWISE INDICATED.				
15. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, AND IMPROVEMENTS ON THE DRAWINGS ARE BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO ACTUAL FIELD LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THE DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITY IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR REPAIRS OR PAYMENTS FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS, AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH THEY SHALL CONNECT.		33. ALL UNDERGROUND UTILITY COMPANIES SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.				
16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER ON ALL MATERIALS, FOR REVIEW AND APPROVAL, PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STRUCTURE.		34. IN ADDITION TO THE SPECIFICATIONS AND DETAILS PROVIDED FOR THIS CONTRACT, THE NASSAU COUNTY STANDARD DETAILS AND SPECIFICATIONS (LATEST REVISION) SHALL ALSO BE USED FOR ANY ITEMS NOT COVERED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A SET OF STANDARD DETAILS AND SPECIFICATIONS FROM NASSAU COUNTY.				
17A. UNSUITABLE MATERIALS UNDER WATER, SEWER, OR STORM PIPE AND/OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL COMPACTED TO 98% OF IT'S MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557).		35. BACKFILL MATERIAL SHALL BE COMPACTED TO 100% (2%) PER CITY OF FB REQUIREMENTS UNDER EXISTING AND PROPOSED ROADWAYS.				
17B. ALL FINISH FLOORS SHOWN ON THE PLANS ARE MINIMUM ELEVATIONS		36. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.				
18. ALL WATER & SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES.		37. STATIONING REFERS TO THE CENTERLINE OF THE ROADWAY EXCEPT AS NOTED ON PLANS. WHERE PAVEMENT SPLITS, THE STATIONING FOLLOWS THE INSIDE EDGE OF PAVEMENT UNTIL ROADWAY TRANSITIONS BACK TO THE TYPICAL ROADWAY SECTION				
18. ALL CONSTRUCTION, MATERIAL, AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH CITY OF FB AND COUNTY STANDARDS		38. ALL CONSTRUCTION, MATERIAL, AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH CITY OF FB AND COUNTY STANDARDS				
LEGEND			SEWER NOTES			
 EXISTING VALVE		 PROPOSED SPOT ELEVATION		1. THE CONTRACTOR SHALL PROVIDE, TO THE ENGINEER OF RECORD, A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES PRIOR TO THE PLACEMENT OF THE LIME ROCK BASE COURSE. THIS SCHEDULE TO BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS-BUILT" DRAWINGS FOR THIS PROJECT.		
 EXISTING WATER LINE		 DRAINAGE STRUCTURE		2. SANITARY SEWER SERVICES SHALL BE 6"PVC WITH A MINIMUM SLOPE OF 0.006 FEET PER FOOT AND SHALL BE TERMINATED AT THE RIGHT-OF-WAY LINE WITH A DEPTH OF 24" TO 48" FROM THE FINAL FINISHED GRADE OF THE DEVELOPED LOTS. DEPTHS GREATER THAN 48" FROM FINAL FINISHED GRADE SHALL BE READJUSTED BY THE DEVELOPER AT HIS COST.		
 EXISTING SANITARY SEWER		 PIPE		3. GRAVITY SEWER TO BE CLEANED & TV TESTED BY DEVELOPER AT DEVELOPER'S EXPENSE		
 EXISTING FIRE HYDRANT		 EXISTING SPOT ELEVATION		4. ALL MANHOLE FRAMES AND COVERS TO BE ADJUSTED TO FINAL FINISHED GRADE.		
 PROPOSED SANITARY SEWER				5. A SEPARATE SEWER SERVICE (6" MIN.) SHALL BE PROVIDED TO THE RIGHT-OF-WAY FOR EACH LOT BEING SERVED. AN "S" SHALL BE ETCHED INTO THE CURB DIRECTLY OVER EACH SERVICE LINE OR IN THE STREET SIDE OF A SIDEWALK IN LINE WITH THE CLEANOUT.		
 PROPOSED WATER LINE				6. GRAVITY SEWER TO BE GREEN IN COLOR		
 PROPOSED FIRE HYDRANT				7. NEW GRAVITY SEWER SYSTEM SHALL BE PLUGGED AT NEAREST EXISTING DOWNSTREAM MANHOLE AND SHALL NOT BE REMOVED WITHOUT AUTHORIZATION FROM THE UTILITY COMPANY. EXISTING MANHOLES TO BE COREBORED AND ARRANGEMENTS MADE TO BE REFURBISHED WITH COMPATIBLE MATERIALS IF THE EXISTING MANHOLE IS ALLOWED TO BE USED.		
 EXISTING EDGE OF PAVEMENT				8. FINISHED FLOOR ELEVATIONS SHALL BE GREATER (HIGHER) THAN THE ELEVATION OF THE MANHOLE NEAREST THE SERVICE LATERAL IN ORDER TO AVOID A POTENTIAL BACKUP OF SEWERAGE IN THE HOUSE OR BUILDING.		
 EXISTING PROPERTY LINE				9. ALL GRAVITY SEWER PIPE TO A 10 FOOT DEPTH OF COVER SHALL BE SDR-26 PVC PIPE (MINIMUM). GRAVITY SEWER PIPE WITH COVER OF 15 FEET (AND IN EASEMENTS) AND GREATER SHALL BE C900 - DR18. JOINT SHALL BE OF THE BELL AND SPIGOT TYPE AND MEET THE REQUIREMENTS OF THE PIPE REFERRED BEING USED.		
				10. WHEN A PROPERTY LINE CAN NOT BE DEFINED, THE SEWER CLEANOUT SHALL BE PLACED IN AN UNPAVED AREA AT A DISTANCE NO GREATER THAN 30 FEET FROM THE SEWER MAIN.		
				11. NOTE: DR-18 TO BE USED ON SEWER LINE CROSSING WHERE STORM DRAIN IS WITHIN 24 INCHES ABOVE GRAVITY ALSO JOINT TO BE CENTERED AT CROSSING		
				12. ALL MANHOLES TO HAVE MINIMUM 24" HINGED RING AND COVER EAST JORDAN OR APPROVED EQUIVALENT		
				13. SEWER PLUGS USED DURING THE CONSTRUCTION OR CONNECTION TO A SYSTEM SHALL HAVE THE CONTRACTOR'S NAME PERMANENTLY STAMPED.		
				14. THE MANHOLE LINER SHALL BE SPECTRA SHIELD OR APPROVED EQUIVALENT.		
				15. IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) REQUIREMENTS, LEAKAGE TESTING SHALL BE PERFORMED ON ALL SEGMENTS OF THE SEWER SYSTEM. TESTING MAY INCLUDE APPROPRIATE WATER OR LOW PRESSURE AIR TESTING. TEST METHODS SHALL TAKE INTO CONSIDERATION THE RANGE IN GROUNDWATER ELEVATIONS DURING THE TEST AND ANTICIPATED DURING THE DESIGNED LIFE OF THE SEWER. NO LEAKAGE ALLOWED IN SYSTEM.		
				16. ALL FORCE MAIN PIPING TO BE DR-18 GREEN OR BROWN.		
				17. CONTACT JOHN MANDRICK, COFB UTILITY DIRECTOR AT (904-310-3420) FOR PRE-CONSTRUCTION AND COORDINATION MEETING PRIOR TO WORK COMMENCING.		

NOTE: SOME DETAILS IN THESE DRAWINGS ARE TO BE CONSIDERED TYPICAL AND MAY NOT BE CALLED OUT ON PLANS. CONTRACTOR SHALL BECOME FAMILIAR WITH AND FOLLOW ALL DETAILS DURING CONSTRUCTION IN ALL TYPICAL AREAS.

REGISTERED DESIGN PROFESSIONAL

Digitally signed by ASAR R. GILLETTE Date: 2021.08.27 12:32:33 -04'00'

ASAR R. GILLETTE, P.E. FLORIDA P.E. NO. 56177

REVISION

DATE

ITEM

TRC COMMENTS

REVISION

1

06/29/21

TRC SUBMITTAL

08/27/21

TRC COMMENTS

GILLETTE & ASSOCIATES, INC.

CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING

CERTIFICATE OF AUTHORIZATION NO. 9332

ASAR R. GILLETTE, P.E. * FL. PE. NO. 56177

20 S. 4th STREET * FERNANDINA BEACH, FL 32034

PHONE: 904-261-8819 * www.gilletteassociates.com

ARTISAN HOMES

MCJUNKIN STATION

21 North 2nd Street

Fernandina Beach, Florida 32034

ISSUE DATE: 6/29/21

INDEX SHEET

North

Elev Key/Sheet

IN-1

Page 2 of 10

PROPERTY INFORMATION:

- PID#: (LOTS 22-26) 00-00-31-1800-0001-0080
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-9
- ZONING: C-3
- FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL

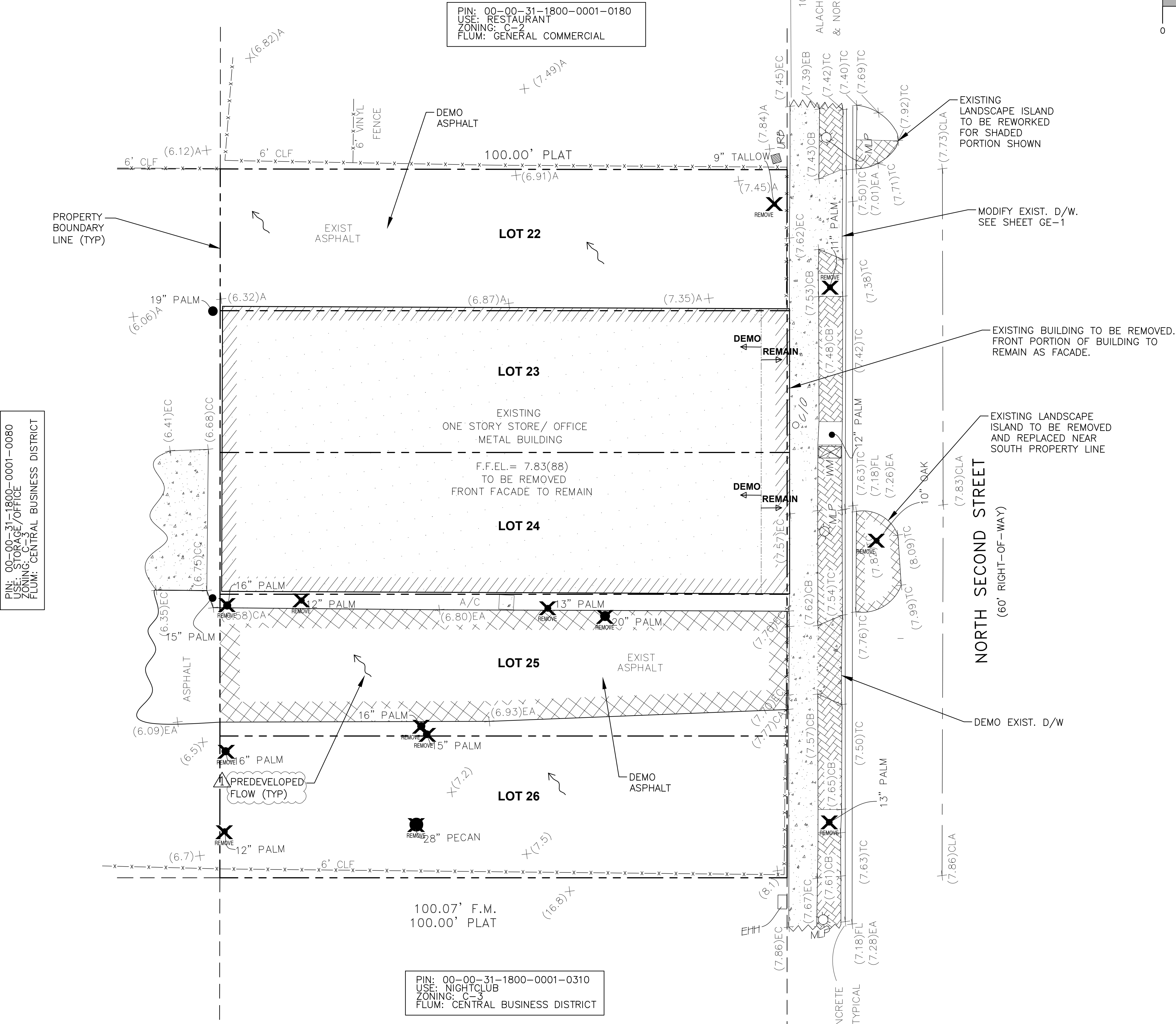
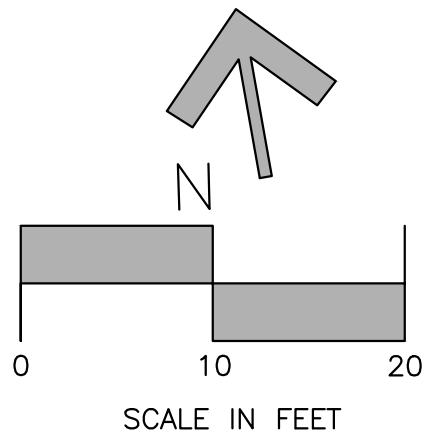
LOTS:

- LENGTH: 100 FT
- WIDTH: 25 FT
- AREA: 2,500 SF

ISSUE FOR CONSTRUCTION IF APPROVED BY C.O.F.B.

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REGISTERED DESIGN PROFESSIONAL
Digitally signed
by ASA R
GILLETTE
Date: 2021.08.27
12:34:31 -0400
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 96177



LEGEND	
	CONCRETE
	PAVERS

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING
CERTIFICATE OF AUTHORIZATION NO. 9332
ASA R. GILLETTE, P.E. * FL. PE. NO. 96177
20 S. 4th STREET * FERNANDINA BEACH, FL 32034
PHONE: 904-261-8819 * www.gilletteassociates.com

ARTISAN HOMES
MCJUNKIN STATION
21 North 2nd Street
Fernandina Beach, Florida 32034

ISSUE DATE: 6/29/21
PREDEVELOPED
SITE PLAN
North / Elev Key Sheet
PRE-1
Page 3 of 10

PROPERTY INFORMATION:

- PID#: (LOTS 22-26) 00-00-31-1800-0001-0080
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: AE-9
- ZONING: C-3
- FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL
- B.F.E. = 9'-0"
- D.F.E. = 11'-4"

LOTS:

- LENGTH: 100 FT
- WIDTH: 25 FT
- AREA: 2,500 SF

SETBACK REQUIREMENTS:

- FRONT: 0 FEET
- SIDES: 0 FEET
- REAR: 0 FEET

UTILITIES:

- WATER: CITY OF FERNANDINA BEACH
- SEWER: CITY OF FERNANDINA BEACH
- POWER: F.P.U.

LANDSCAPE BUFFER:

- NONE REQUIRED

DEVELOPMENT REQUIREMENTS:

- MAXIMUM IMPERVIOUS AREA: 100.0%
- PROPOSED IMPERVIOUS AREA (PER LOT)
 - LOT 22: 2,115 SF = 84.6%
 - LOT 23: 2,056 SF = 82.2%
 - LOT 24: 2,110 SF = 84.4%
 - LOT 25: 1,958 SF = 78.3%
 - LOT 26: 2,121 SF = 84.8%

BUILDINGS:

- PROPOSED HOUSE: 2,840 SF
- BUILDING SHELL CONSTRUCTION: MASONRY
- CONSTRUCTION TYPE: V
- MAXIMUM BUILDING HEIGHT: 45 FT
- PROPOSED BUILDING HEIGHT: 42 FT

EXISTING PROP. EL. (4-CORNER AVERAGE):

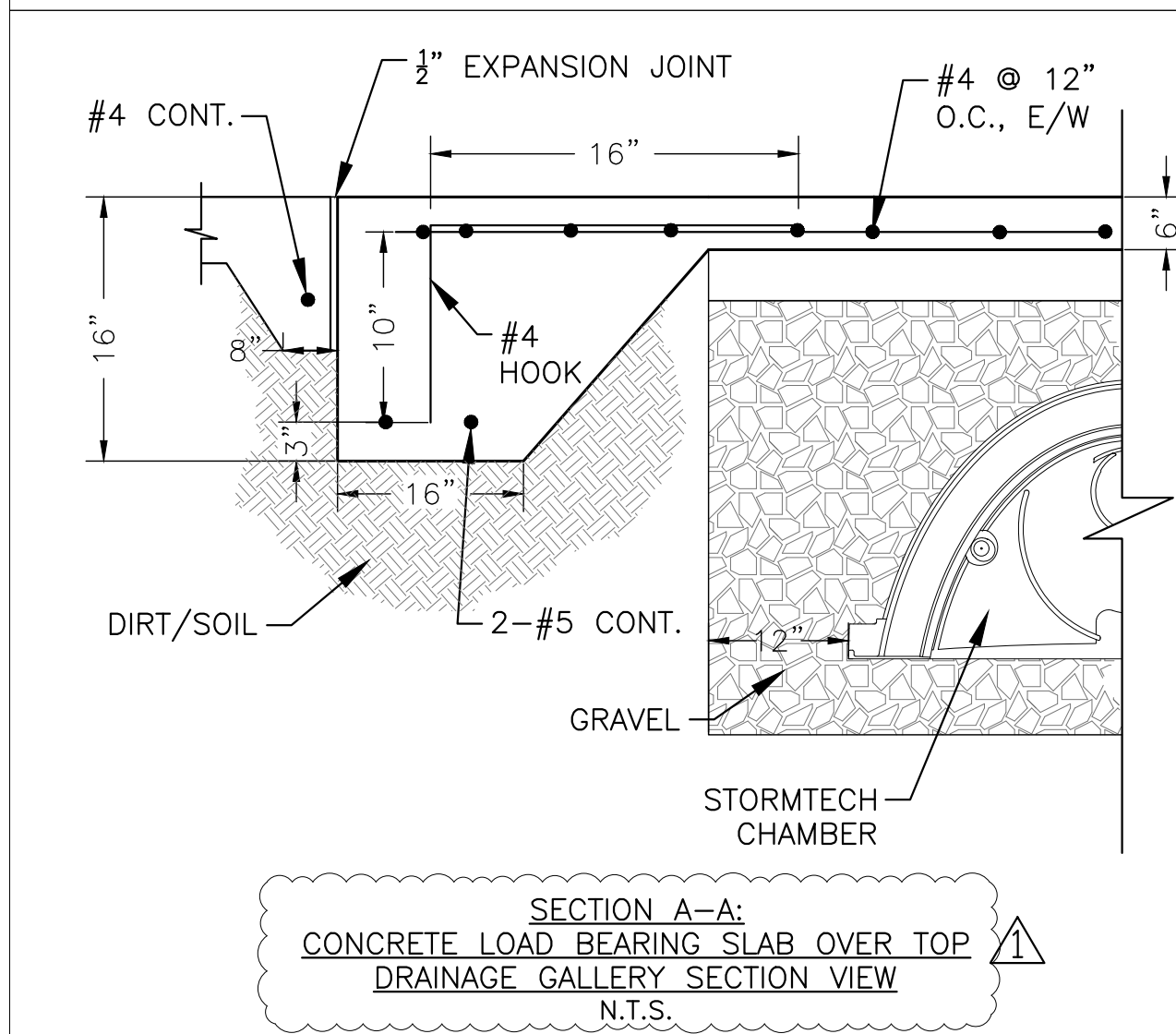
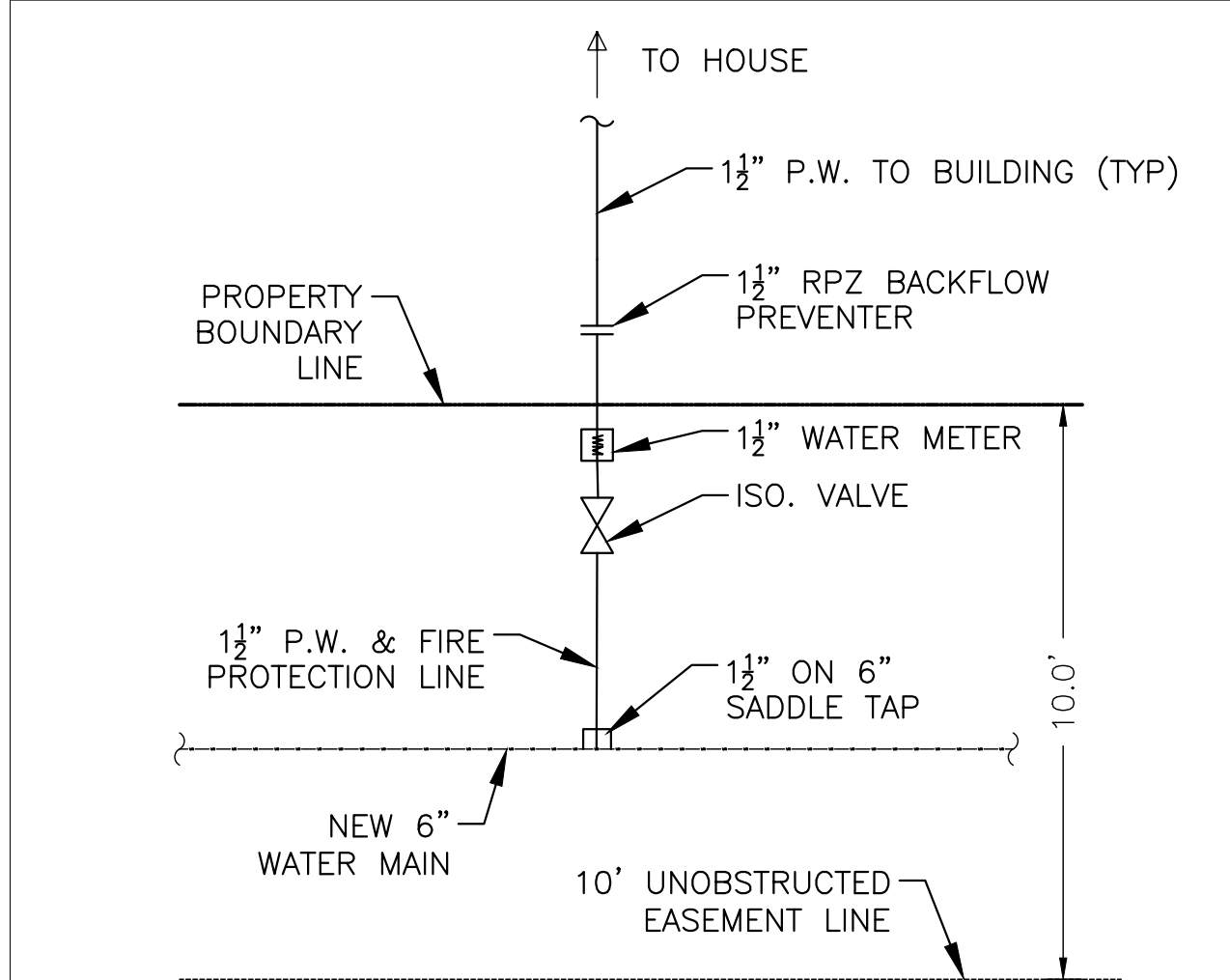
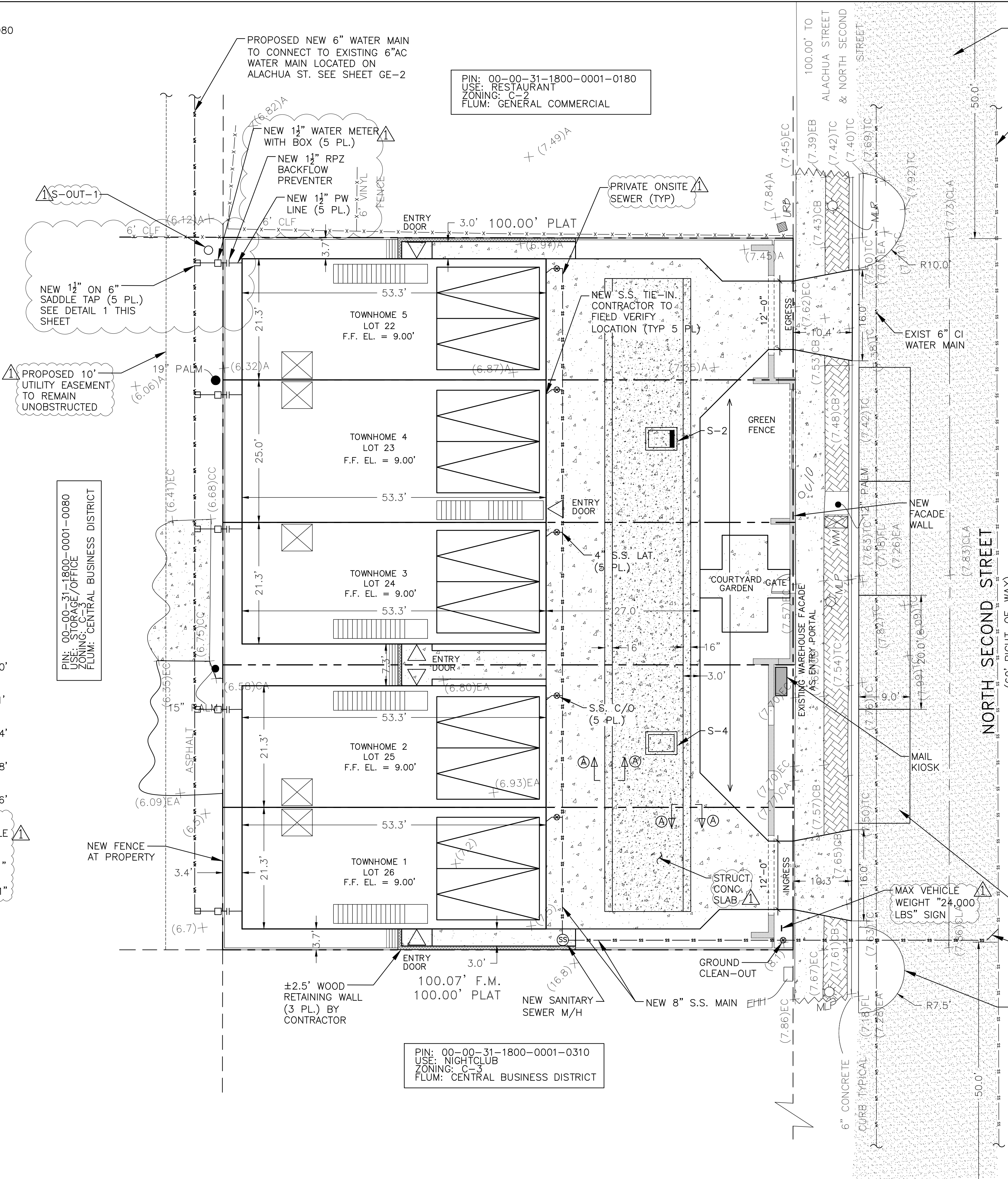
- LOT 22: $6.35+6.90+6.91+6.25 = 26.41/4 = 6.60'$
MAXIMUM BLDG. HEIGHT = $6.60' + 45' = 51.60'$
- LOT 23: $6.35+6.90+6.90+6.70 = 26.85/4 = 6.71'$
MAXIMUM BLDG. HEIGHT = $6.71' + 45' = 51.71'$
- LOT 24: $6.70+6.90+6.95+6.80 = 27.35/4 = 6.84'$
MAXIMUM BLDG. HEIGHT = $6.84' + 45' = 51.84'$
- LOT 25: $6.65+6.90+6.95+6.60 = 27.10/4 = 6.78'$
MAXIMUM BLDG. HEIGHT = $6.78' + 45' = 51.78'$
- LOT 26: $6.60+6.95+7.50+6.80 = 27.85/4 = 6.96'$
MAXIMUM BLDG. HEIGHT = $6.96' + 45' = 51.96'$

NOTE:

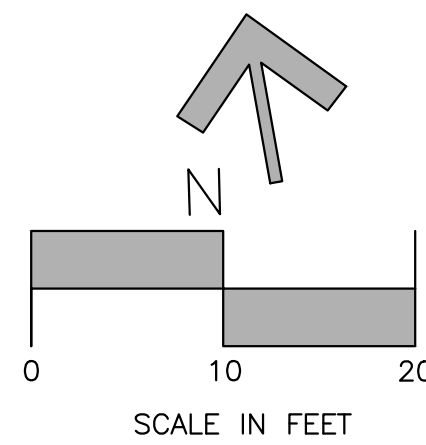
- FOR EACH TOWNHOME 1ST FLOOR IS NOT LIVEABLE SPACE. FINISHED FLOOR ELEVATION IS 9.0'
- FOR EACH TOWNHOME 2ND FLOOR IS LIVABLE SPACE WITH A FINISHED FLOOR ELEVATION OF 18'-1"
- FOR EACH TOWNHOME 3RD FLOOR IS LIVABLE SPACE WITH A FINISHED FLOOR ELEVATION OF 30'-1"

LEGEND

- CONCRETE
- PAVERS



ISSUE FOR CONSTRUCTION IF APPROVED BY C.O.F.B.



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REGISTERED DESIGN PROFESSIONAL
Digitally signed by ASAR R. GILLETTE
Date: 2021.08.27 12:35:04 -0400
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 96177

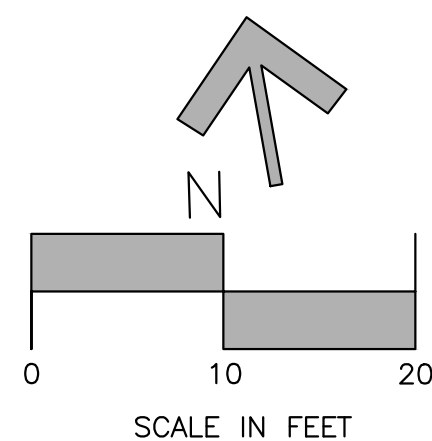
REV	DATE	ITEM
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1	08/27/21	TRC COMMENTS REVISION 1

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING
CERTIFICATE OF AUTHORIZATION NO. 9332
ASA R. GILLETTE, P.E. * FL. PE. NO. 96177

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PHONE: 904-261-8819 * www.gilletteassociates.com

ARTISAN HOMES
MCJUNKIN STATION
21 North 2nd Street
Fernandina Beach, Florida 32034

ISSUE DATE: 6/29/21
GEOMETRY PLAN
North / Elev Key Sheet
GE-1
Page 4 of 10



ISSUE FOR CONSTRUCTION IF APPROVED BY C.O.F.B.

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REGISTERED DESIGN PROFESSIONAL

Digitally signed by ASA R GILLETTE Date: 2021.08.27 12:35:32 -0400

ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 96177

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0	06/29/21	TRC SUBMITTAL
1	08/27/21	TRC COMMENTS REVISION 1

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ARTISAN HOMES

MCJUNKIN STATION

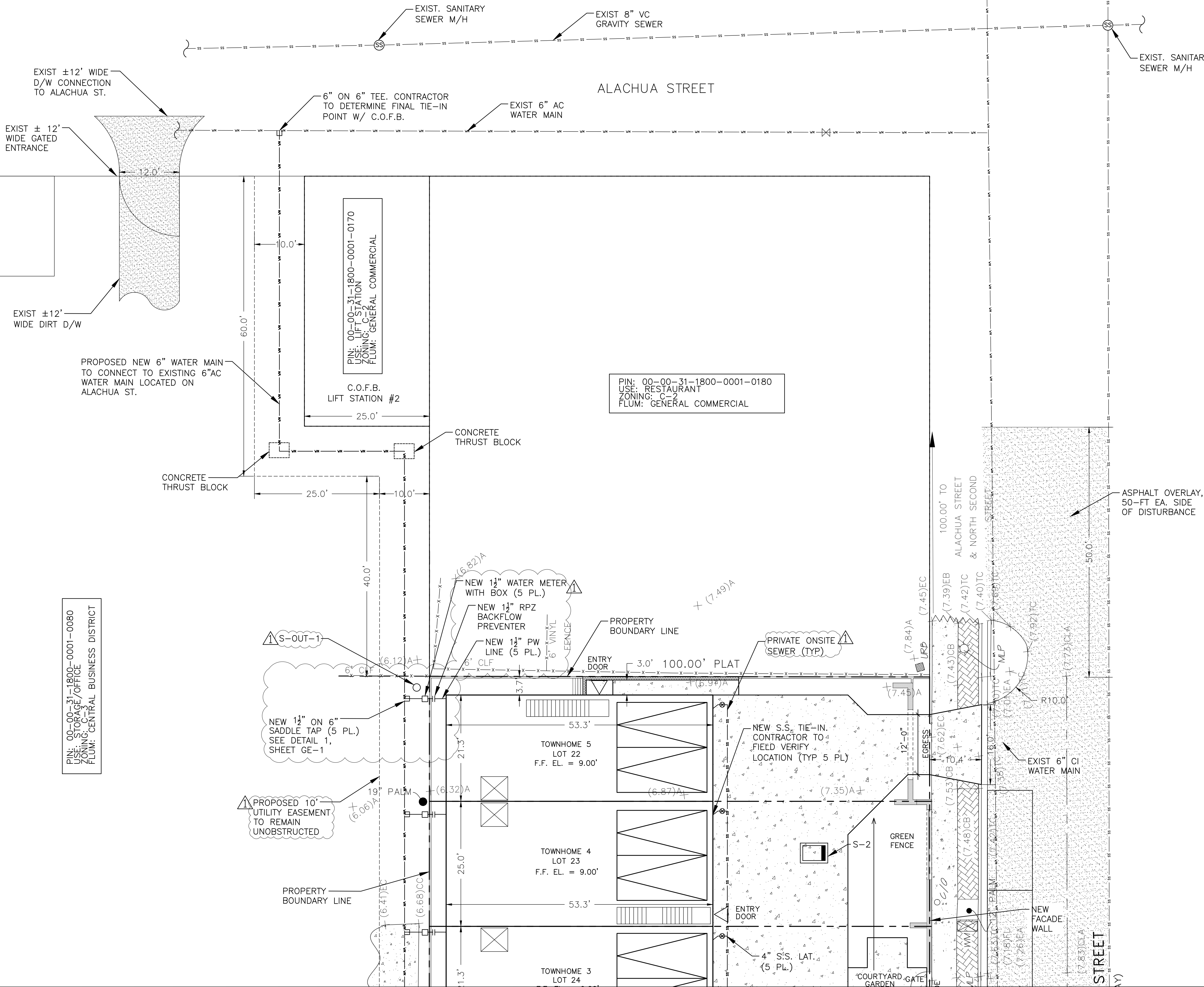
21 North 2nd Street
Fernandina Beach, Florida 32034

ISSUE DATE: 6/29/21

ENLARGED
GEOMETRY PLAN

North / Elev Key Sheet

GE-2
Page 5 of 10



DRAINAGE CALCULATIONS:

COMBINED LOT CALCS:

DRAINAGE AREA: 12,500 SF
IMPERVIOUS AREA: 10,360 SF

TOTAL LOT RUNOFF:
(12,500 SF)*(0.5")*(1/12 FT/IN) = 521 C.F.

TOTAL IMPERVIOUS AREA RUNOFF:
(10,360 SF)*(1.0")*(1/12 FT/IN) = 864 C.F.

TOTAL TREATMENT VOLUME REQUIRED: 864 C.F.
TOTAL TREATMENT VOLUME PROVIDED: 1215 C.F.

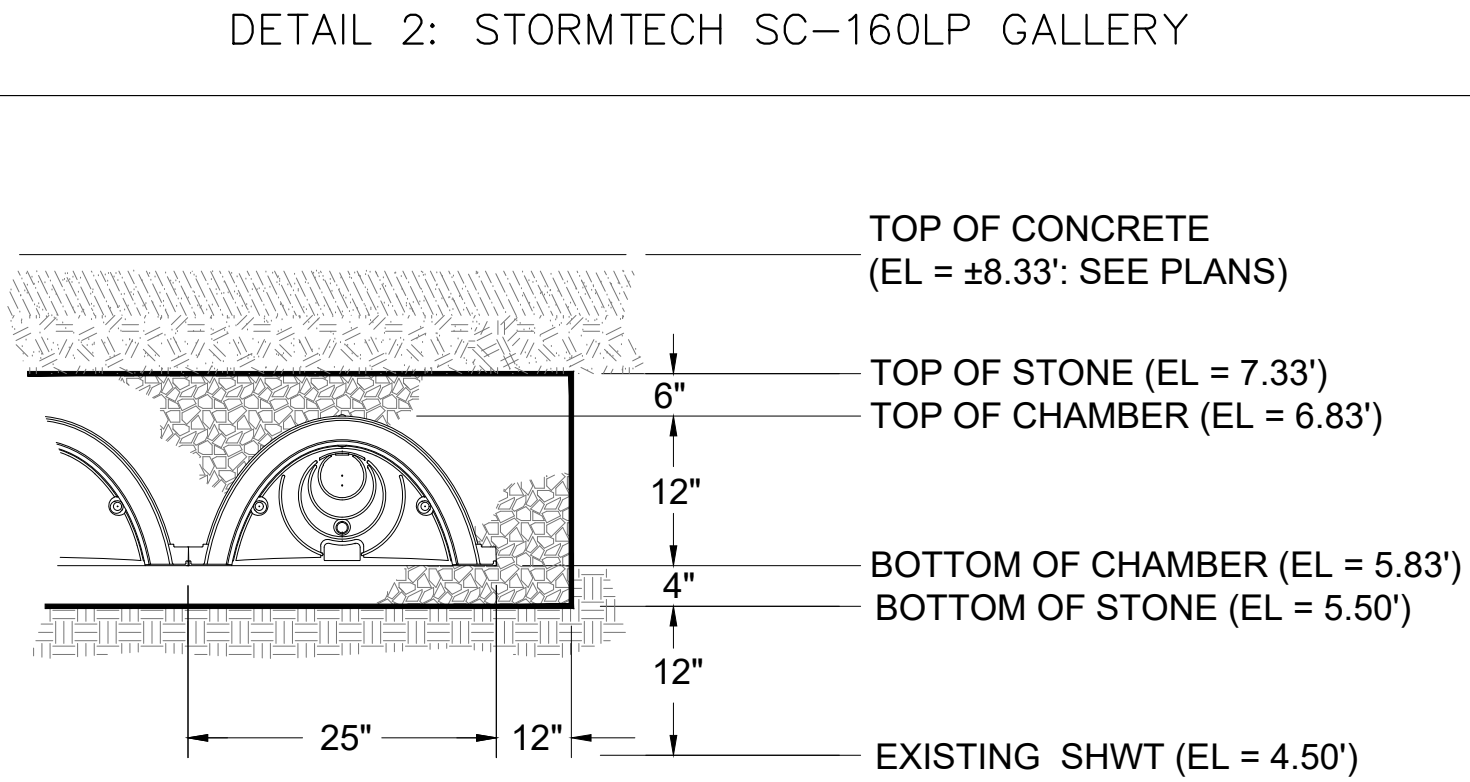
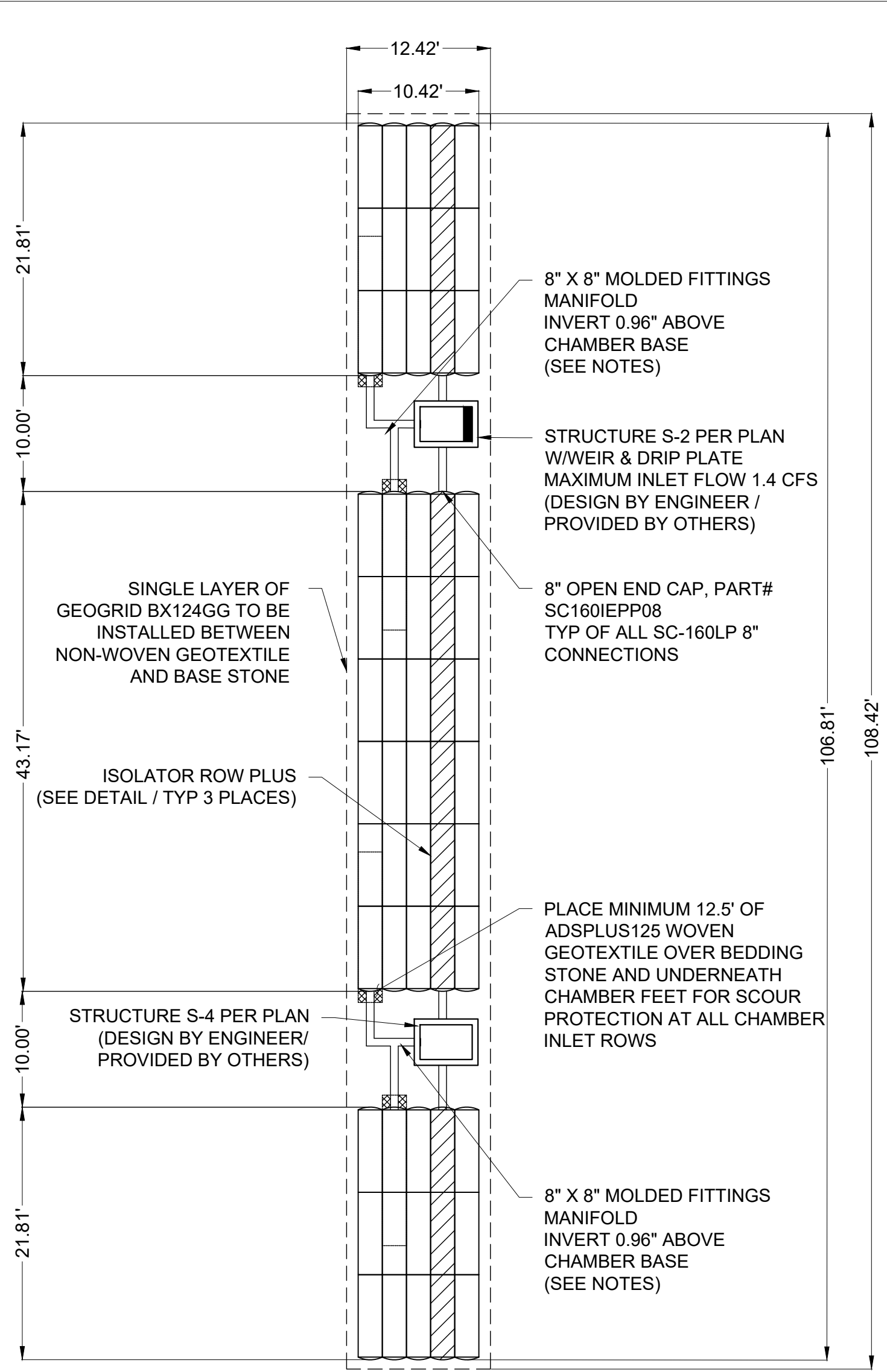
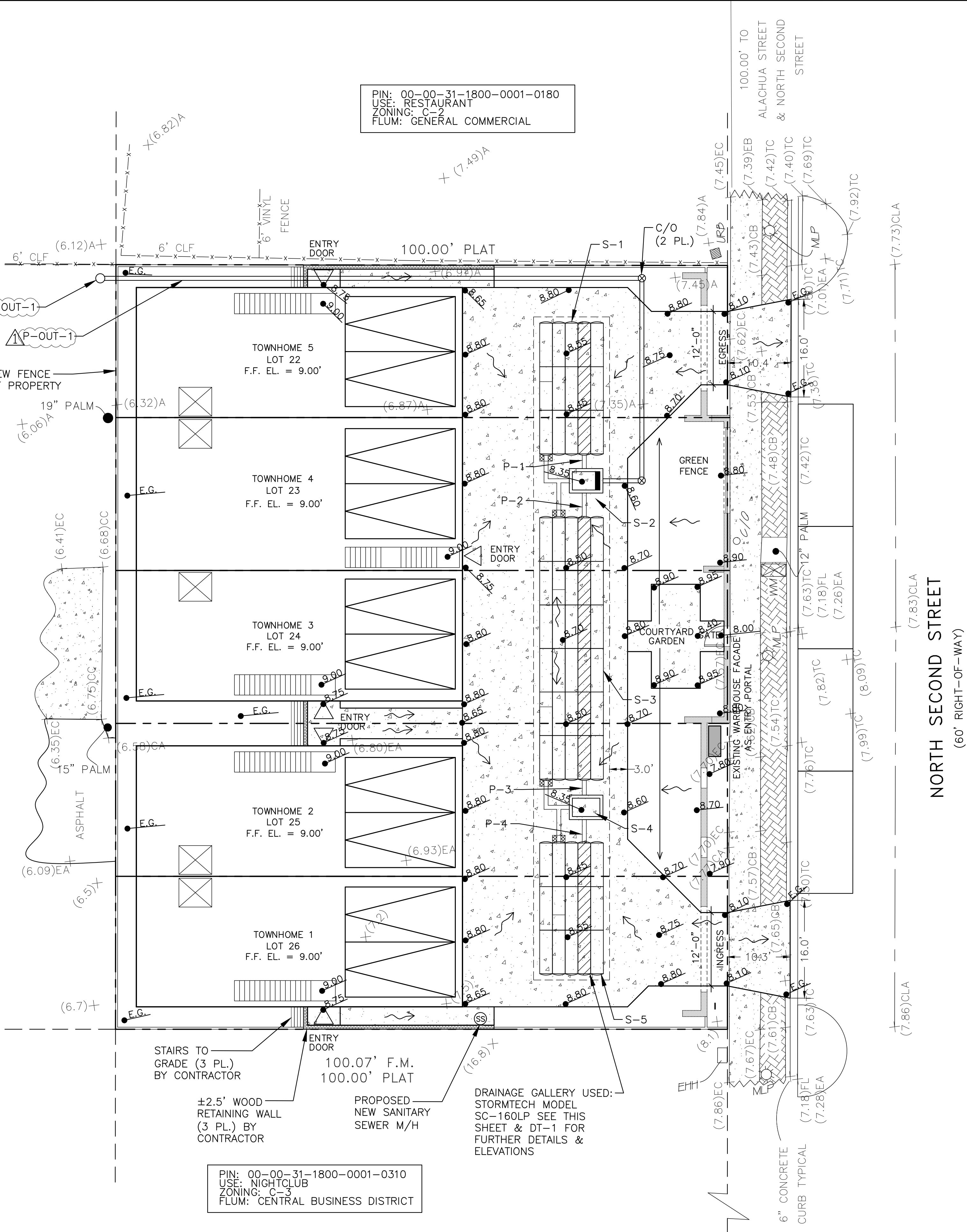
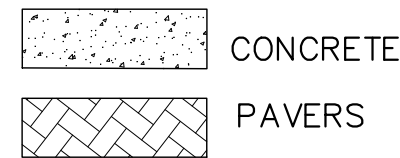
DRAINAGE NOTES:

- DRAINAGE GALLERY SHOWN IS THE STORMTECH MODEL SC-160LP
- ALL ROOF RUNOFF TO BE DIRECTED TO NEAREST STRUCTURE
- 1ST/GROUND FLOOR IS UNINHABITABLE

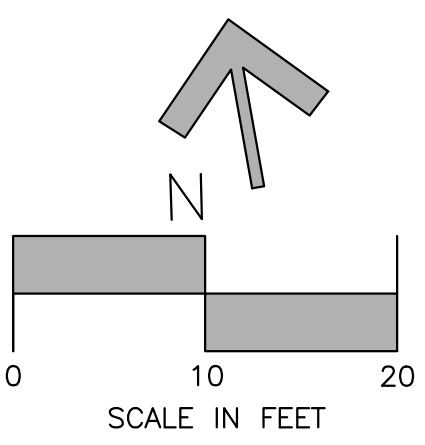
STRUCTURE TABLE						
NAME	TYPE	TOP/ INLET ELEV.	N	S	E	W
S-1	DRAINAGE GALLERY	-	-	-	-	-
S-2	TYPE E INLET	8.35	5.83	5.83	6.05	5.91
S-3	DRAINAGE GALLERY	-	-	-	-	-
S-4	TYPE E INLET	8.35	5.83	5.83	-	5.91
S-5	DRAINAGE GALLERY	-	-	-	-	-
S-OUT-1	NYOPLAST YARD DRAIN	6.15	-	-	4.65	-

PIPE TABLE					
NAME	TYPE	DIAMETER	LENGTH	FROM	TO
P-1	HP STORM	8"	2.0'	S-1	S-2
P-2	HP STORM	8"	2.5'	S-2	S-3
P-3	HP STORM	8"	2.0'	S-3	S-4
P-4	HP STORM	8"	2.5'	S-4	S-5
P-OUT-1	HP STORM	8"	130'	S-2	S-OUT-1

LEGEND



ISSUE FOR CONSTRUCTION IF APPROVED BY C.O.F.B.



NOTE: SOME DETAILS IN THESE DRAWINGS ARE TO BE CONSIDERED TYPICAL AND MAY NOT BE CALLED OUT ON PLANS. CONTRACTOR SHALL BECOME FAMILIAR WITH AND FOLLOW ALL DETAILS DURING CONSTRUCTION IN ALL TYPICAL AREAS.

REGISTERED DESIGN PROFESSIONAL
Digitally signed
by ASA R
GILLETTE
Date: 2021.08.27
12:35:59 -0400
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 96177

REV	DATE	ITEM
0	06/29/21	TRC SUBMITAL
1	08/27/21	TRC COMMENTS REVISION 1

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING
CERTIFICATE OF AUTHORIZATION NO. 9332
ASA R. GILLETTE, P.E. * FL PE NO. 96177
20 S. 4th STREET * FERNANDINA BEACH, FL 32034
PHONE: 904-261-8819 * www.gilletteassociates.com

ARTISAN HOMES
MCJUNKIN STATION
21 North 2nd Street
Fernandina Beach, Florida 32034

TOTAL TREE PRESERVATION DATA						
TREE ID NO.	SPECIES	SIZE (DBH)	HEALTHY? (Y/N)	MITIGABLE DBH	SAVED? (Y/N)	SAVED DBH
101	TALLOW	9	N	0	N	0
102	PALM	16	Y	5	N	0
103	PALM	12	Y	4	N	0
104	PALM	13	Y	5	N	0
105	PALM	20	Y	7	N	0
106	PALM	16	Y	5	N	0
107	PALM	15	Y	5	N	0
108	PALM	16	Y	5	N	0
109	PALM	12	Y	4	N	0
110	PECAN	28	Y	28	N	0
TOTALS				68		0

TOTAL TREE MITIGATION DATA	
PRE-DEVELOPMENT PROTECTED DBH	68"
REQUIRED REPLACEMENT DBH (50% PROTECTED DBH)	34"
SAVED DBH	0"
PLANTED DBH	34"
POST-DEVELOPMENT TOTAL DBH	34"
DBH TOWARDS TREE FUND	34"

NEW PLANT/MATERIAL SCHEDULE				
SYMBOL	QTY.	KEY	SPECIES	SIZE/REMARKS
	2	LD	QUERCUS VIRGINIANA LIVE OAK	4.0" DBH AND 8' HT. MIN. (CANOPY TREE)
	8	FG	CORNUS FLORIDA FLOWERING DOGWOOD	3.0" DBH AND 8' HT. MIN. (UNDERSTORY TREE)
	6	PT	ARECACEAE PALM TREE	3.0" DBH MIN.
	315± SF	-	MUHLENBERGIA CAPILLARIS MUHLY GRASS	
	850± SF	-	BOUTELLOUA DACTYLOIDES BUFFALO GRASS	

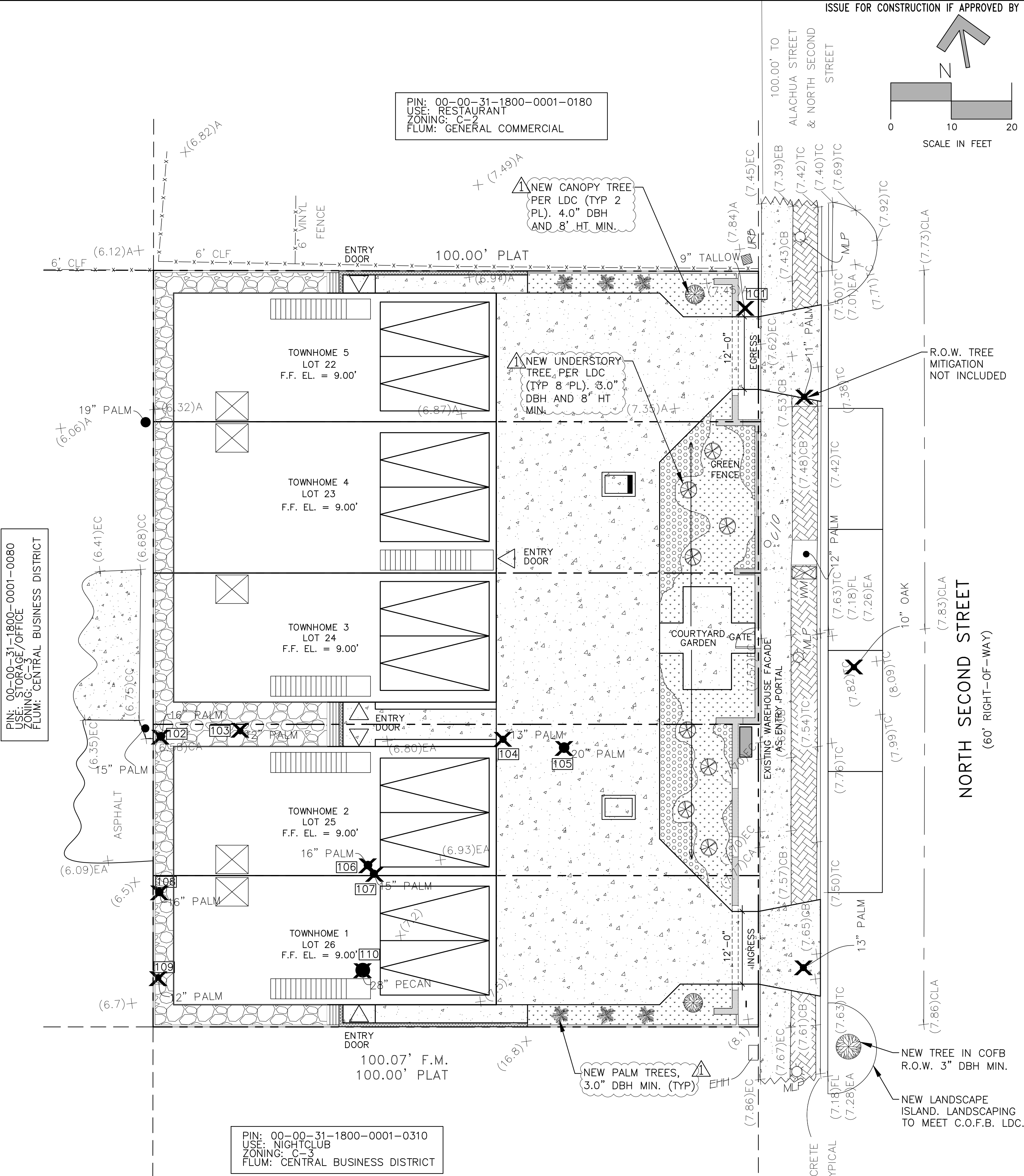
LANDSCAPE NOTES:

— NO LANDSCAPE BUFFER REQUIRED

— PALM TREES ARE MITIGATED AS 1/3 OF DBH SHOWN.
PLANTED PALM TREES SHALL COUNT AS 3:1 DBH FOR
CANOPY TREE EQUIVALENT

"A & J LAND SURVEYORS, INC. CERTIFIES ONLY TO THE
SIZE AND LOCATION OF THE TREES SHOWN HEREON.
HOWEVER, THE SURVEYOR DOES NOT CERTIFY TO THE
EXACT SPECIES OF THE TREES SHOWN HEREON AS THIS
IS OUTSIDE THE SURVEYOR'S AREA OF EXPERTISE"

LEGEND



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Digitally signed by ASA R GILLETTE
Date: 2021.08.27 12:36:33 -0400
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

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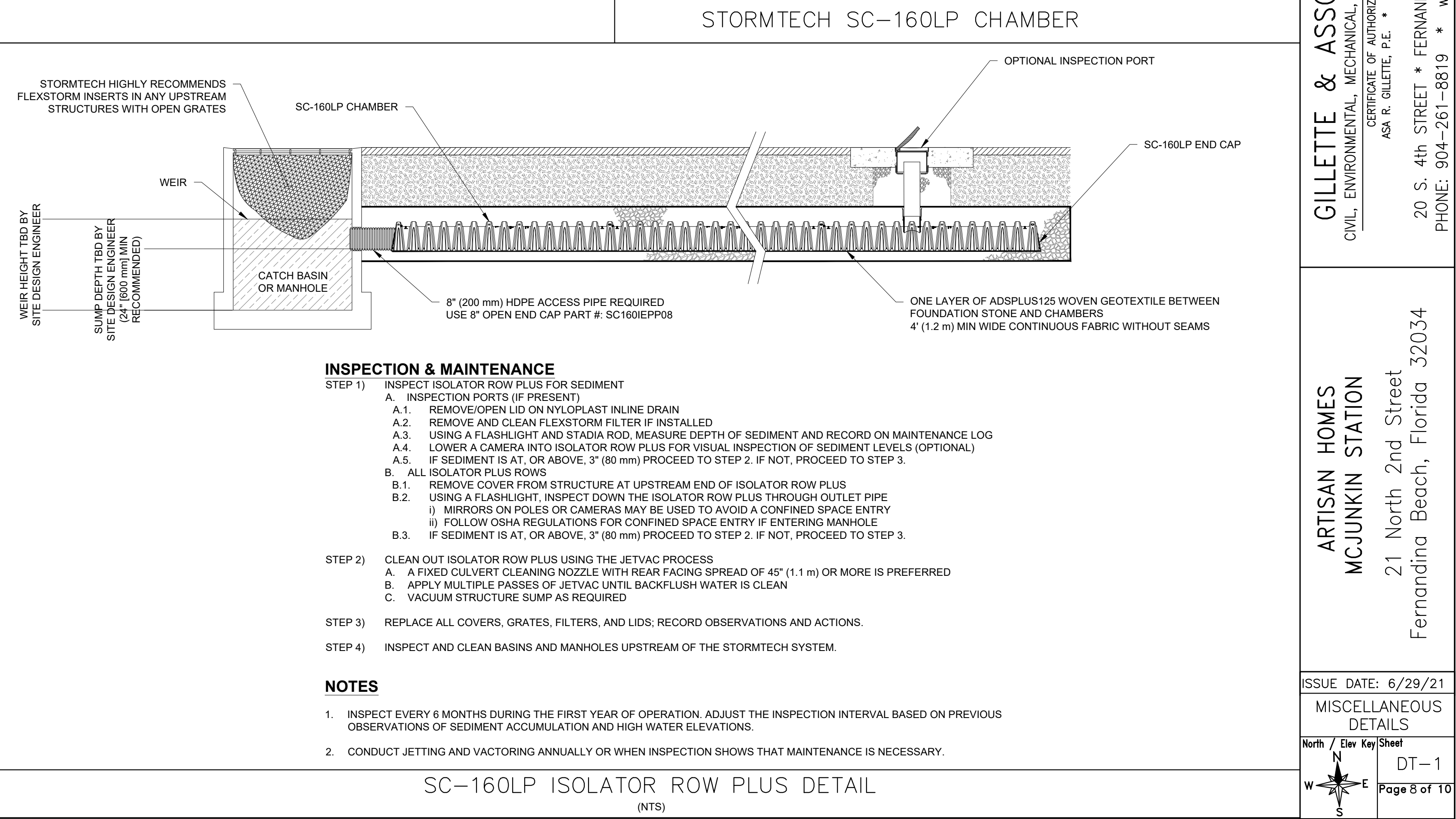
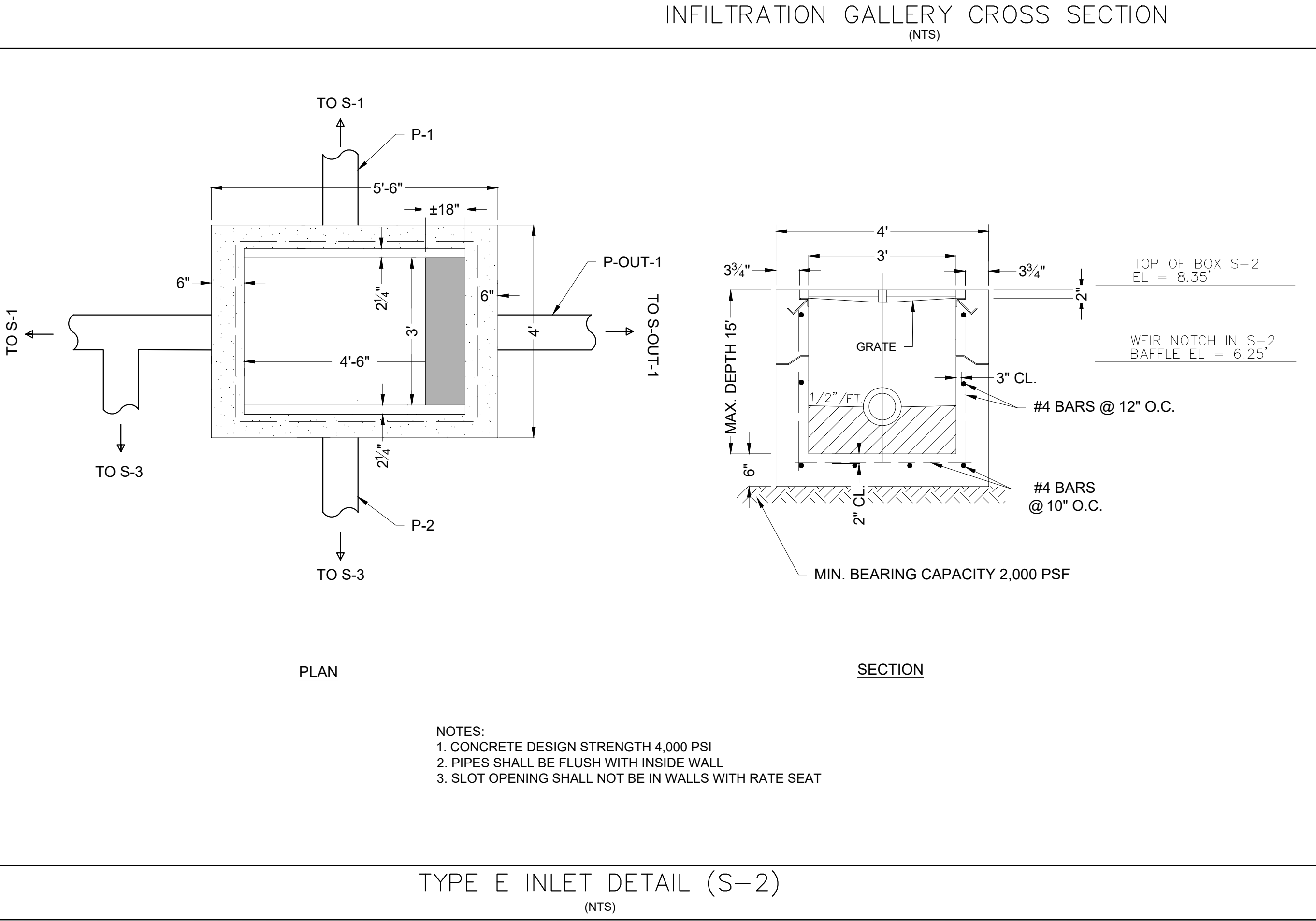
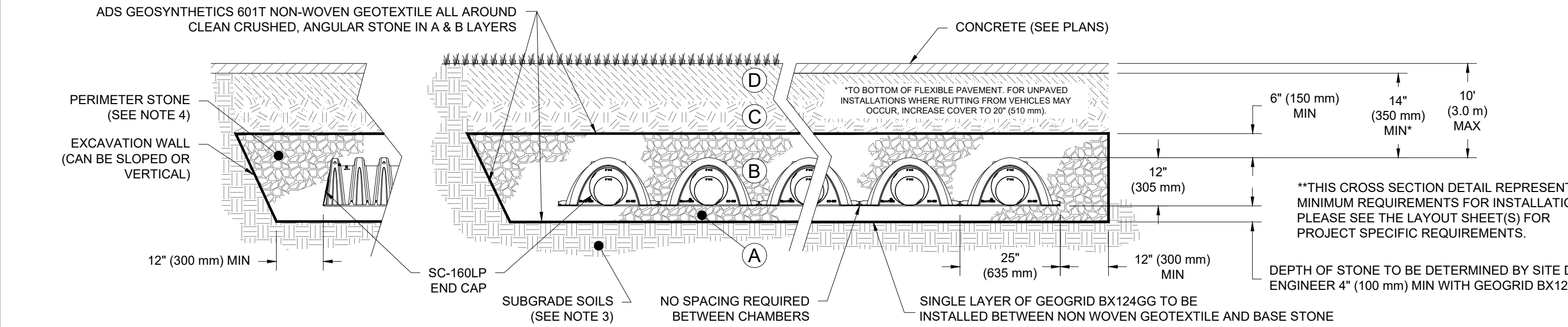
ISSUE DATE: 6/29/21

LANDSCAPE PLAN

North / Elev KeySheet
W N E S
LS-1
Page 7 of 10

ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS				
MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



- NOTES:**
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
 - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
 - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 - REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 1.5"
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

PROPOSED LAYOUT

60	STORMTECH SC-160LP CHAMBERS
30	STORMTECH SC-160LP END CAPS
6	STONE ABOVE (in)
4	STONE BELOW (in)* 4" BASE STONE REQUIRES SINGLE LAYER OF GEOGRID BX124GG TO BE INSTALLED BETWEEN NON WOVEN GEOTEXTILE AND BASE STONE
40	% STONE VOID

INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)

1215	SYSTEM AREA (ft²)
1,321	SYSTEM PERIMETER (ft)
238	

PROPOSED ELEVATIONS

8.50	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
8.00	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
8.00	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
8.00	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
7.33	TOP OF STONE
6.83	TOP OF SC-160LP CHAMBER
5.91	8" ISOLATOR ROW PLUS CONNECTION INVERT
5.91	8" X 8" MANIFOLD INVERT
5.83	BOTTOM OF SC-160LP CHAMBER
5.50	BOTTOM OF STONE

ISSUE FOR CONSTRUCTION IF APPROVED BY C.O.F.B.

SC-160LP TECHNICAL SPECIFICATION
NTS

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	25.0" X 12.0" X 85.4" (635 mm X 305 mm X 2169 mm)
CHAMBER STORAGE	6.85 CUBIC FEET (0.19 m³)
MINIMUM INSTALLED STORAGE*	16.0 CUBIC FEET (0.45 m³)
WEIGHT	24.0 lbs. (10.9 kg)

*ASSUMES 6" (152 mm) ABOVE, 6" (152 mm) BELOW, AND STONE BETWEEN CHAMBERS WITH 40% STONE POROSITY.

PART #	STUB	A
SC160EPP	6" (150 mm)	0.66" (16 mm)
	8" (200 mm)	0.80" (20 mm)
SC160EPP08	8" (200 mm)	0.96" (24 mm)

ALL STUBS ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL.

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REGISTERED DESIGN PROFESSIONAL
Digitally signed by ASA R GILLETTE
Date: 2021.06.27 12:37:04 -04'00'
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 96177

ITEM
DATE
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06/29/21
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TRC SUBMITTAL
TRC COMMENTS
REVISION 1

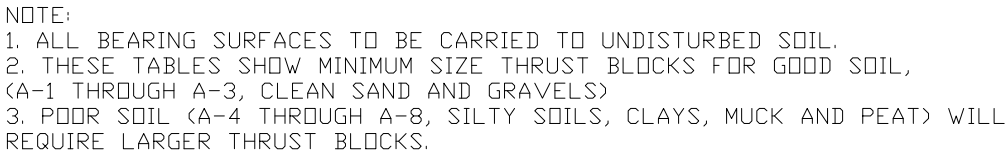
08/27/21

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MISCELLANEOUS DETAILS
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Page 8 of 10

SC-160LP ISOLATOR ROW PLUS DETAIL (NTS)



TIE RODS

BELL RESTRAINT REQUIREMENTS

RESTRAINED JOINT (TYP.) SIZE AS REQUIRED.

LESS THAN 20"

4" CONCRETE

JOIST OF PIPE CENTERED @ CROSSING

36" MIN.

SEE NOTES

6" MIN.

MECHANICAL JOINT 11 1/4" OR 45° BENDS (SIZE VARIES)

FULL LENGTH OF PIPE CENTERED AT CROSSING. SEE NOTES.

EXISTING UTILITY PIPE

10" MIN. 10" MIN.

PIPE

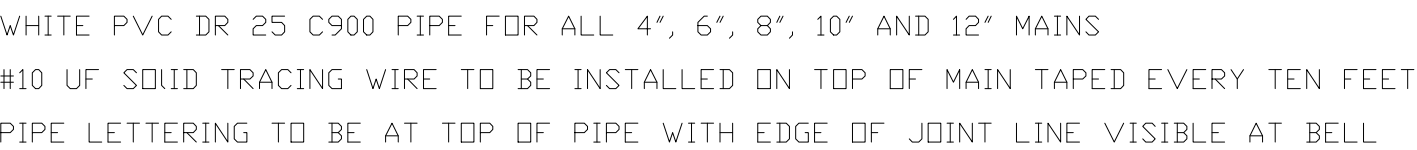
NTS

NOTES:

1. IF EXISTING UTILITY PIPE IS A WATER MAIN 6-INCHES OF SEPARATION IS REQUIRED.
2. IF EXISTING UTILITY PIPE IS A FORCE MAIN, SANITARY SEWER LINE, OR DRAINAGE PIPE, 12-INCHES OF SEPARATION IS REQUIRED.

THE LENGTH OF THE PIPE TO RESTRAINED EACH SIDE OF THE BEND SHALL BE IN ACCORDANCE WITH TABLE FOR MECHANICAL RESTRAINT DEVICE, ALL JOINTS 20' MIN. EACH SIDE OF EXIST. PIPE SHALL BE MECHANICALLY RESTRAINED.

- NOTES:
1. IF EXISTING UTILITY PIPE IS A WATER MAIN 6-INCHES OF SEPARATION IS REQUIRED.
 2. IF EXISTING UTILITY PIPE IS A FORCE MAIN, SANITARY SEWER LINE OR DRAINAGE PIPE, 18 INCHES OF SEPARATION IS REQUIRED. IF THIS IS IMPOSSIBLE AND EXISTING UTILITY MAIN IS C900, C905 OR D.I. PIPE, SEPARATION CAN BE REDUCED TO 6-INCHES. A FULL 20FT. PIPE SHALL BE CENTERED UNDER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR 18-INCH OR 6-INCH SEPARATIONS.
 3. LOCATING WIRING REQUIRED. SEE DETAIL W-44.

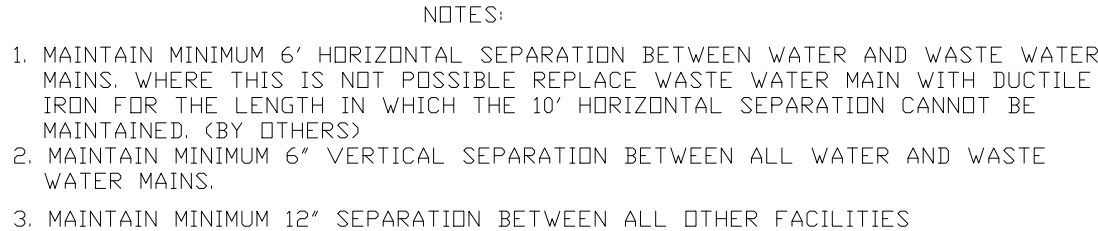


LARGE WATER SERVICE
DOUBLE CHECK AND REDUCED PRESSURE
BACKFLOW PREVENTION
SINGLE SERVICE: 2 1/2" - 10"



THE LENGTH OF THE PIPE TO RESTRAINED EACH SIDE OF THE BEND SHALL BE IN ACCORDANCE WITH TABLE FOR MECHANICAL RESTRAINT DEVICE, ALL JOINTS 20' MIN. EACH SIDE OF EXIST. PIPE SHALL BE MECHANICALLY RESTRAINED.

- NOTES:
1. IF EXISTING UTILITY PIPE IS A WATER MAIN
6-INCHES OF SEPARATION IS REQUIRED.
 2. IF EXISTING UTILITY PIPE IS A FORCE MAIN,
SANITARY SEWER LINE OR DRAINAGE PIPE, 18
INCHES OF SEPARATION IS REQUIRED, IF THIS
IS IMPOSSIBLE AND EXISTING UTILITY MAIN IS C900, C905
OR D.I. PIPE, SEPARATION CAN BE REDUCED TO
6-INCHES, A FULL 20FT. PIPE SHALL BE CENTERED UNDER EXISTING
UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING
FOR 18-INCH OR 6-INCH SEPARATIONS.
 3. LOCATING WIRING REQUIRED, SEE DETAIL W-44.



HORIZONTAL AND VERTICAL CLEARANCES BETWEEN WATER AND SEWER MAINS

CONTRACTORS ARE REQUIRED TO PAINT NEW HYDRANTS SAFETY YELLOW AND MARK HYDRANTS THE TOPS AND NOZZLE CAPS SHALL BE PAINTED WITH THE FOLLOWING CAPACITY INDICATOR COLOR SCHEME:

BLUE (SW4079)	1500GPM AND HIGHER
GREEN (SW4085)	1000-1499 GPM
DRANGE (SW4083)	500-999 GPM
RED (SW4081)	LESS THAN 500 GPM

IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER MAINS BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.

IT IS REQUIRED THAT ALL NEW AND RELOCATED WATER MAINS BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 AND RULE 62-555.345, F.A.C..

ALL WATER MAINS WILL BE CONSTRUCTED WITH BLUE C900-DR25 PIPE.
ALL WATER SERVICES WILL CONSTRUCTED WITH WHITE PVC SCHEDULE
80 PIPE. BLUE SPRAY PAINT WILL BE APPLIED TO THE TOP SURFACE.
JOINT RESTRAINTS MAY BE USED IN PLACE OF THRUST BLOCKS ON C900, DR25 PIPE
WITH APPROVAL OF THE CITY UTILITIES DEPARTMENT.

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REGISTERED DESIGN PROFESSIONAL

Digitally signed
by ASAR
GILLETTE
Date: 2021.08.27
12:37:32 -04'00'

RAY GILLETTE
STATE OF
FLORIDA
No. 93177
Professional Seal
P. 08264
P. 08264

ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

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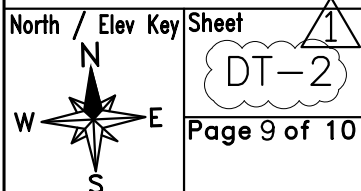
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MISCELLANEOUS DETAILS



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O.D.+18"MAX. O.D.+12"MIN. O.D. O.D. O.D. 1/2 COMPACTED GRANULAR MATERIAL O.D.+18"MAX. O.D.+12"MIN. O.D. O.D. O.D. 3/4, 4"MIN. COMPACTED GRANULAR MATERIAL TYPE I SHAPED BOTTOM W/TAMPED TYPE II COMPACTED GRANULAR BEDDING CLASS "B"			STD. CLEANOUT COVER W/THREADED PLUG FINISHED DEVELOPMENT GRADE VARIES (SEE NOTE 2) FINISHED CONSTRUCTION GRADE 2 TO 4.5 FEET MAX (SEE NOTE 1) TO GRAVITY SEWER FROM HOUSE(BY OTHERS) 6"X6" PVC WYE BRANCH OR 6"X6" PVC SANITARY TEE PVC STOPPER SHALL BE REMOVED FOR HOUSE LATERIAL TIE-IN BROOKS I-RT SERIES BOX WITH C.I. COVER NOTE: 1. DEPTH OF CLEANOUT SHALL BE SET BY DISTANCE TO HOUSE CONNECTION @ 1/4" PER FOOT, PLUS ONE FOOT. 2. CONTRACTOR TO COORDINATE DEPTH WITH DEVELOPER.			ANNULAR SPACE SHALL BE SEALED AT BOTH ENDS WITH 12" THICK CLASS "C" CONCRETE WATER MAIN WATER MAIN SAND CUSHION GRAVITY SEWER MAIN GRAVITY SEWER MAIN STEEL CASING STEEL CASING 10' 10' NOTE: 1. SEWER MAIN SHALL BE ENCASED AS SHOWN ON THE ABOVE DETAIL WHERE LESS THAN 18 INCHES OF VERTICAL CLEARANCE IS MAINTAINED BETWEEN WATER MAIN AND SEWER MAIN. 2. CLASS 51 STEEL CASING SHALL BE SIZED FOR 2 INCHES PLUS THE OUTSIDE DIAMETER OF THE CARRIER PIPE JOINT. 3. THE ABOVE DETAIL APPLIES TO WATER MAINS 2 INCH DIAMETER AND LARGER.		
BEDDING DETAILS			CLEANOUT					
FERNCO PVC TRANSITION FITTING OR APPROVED EQUAL C.I. OR V.C. PIPE PVC PIPE STAINLESS STEEL BAND CLASS C-301 OR C-305			6"PVG MIN. S=0.006 CLEANOUT FROM HOUSE (SEE NOTE #3) 4'-0" TERMINATE SEWER SERVICE INSIDE PROPERTY LINE WITH CLEANOUT. GRAVITY SEWER MAIN 6"PVG 45° (MAX) NOTE: 1. SEWER SERVICE SHALL BE INSTALLED 4'-0" INSIDE PROPERTY LINES. 2. TEMPORARY 4"x4"x8" POST, PAINTED RED AT TOP, TO BE INSTALLED FOR AIDING IN THE PROTECTION OF SEWER CLEAN OUTS. THE POST SHALL EXTEND 4' ABOVE GRADE. 3. CONNECTION FROM HOUSE TO UWF SYSTEMS SHALL BE A HARD CONNECTION. FLEXIBLE CONNECTIONS SHALL NOT BE USED.			ENCASEMENT AT WATER LINE		
C.I. TO PVC COUPLING ADAPTER			TYPICAL SEWER SERVICE					
GRAVITY SEWER STANDARD SPECIFICATIONS 1. ALL MANHOLES SHALL BE PRECAST CONCRETE AND CONFORM TO ASTM C-478 STANDARDS. MANHOLE CONES AND RISERS SHALL BE CONSTRUCTED OF 4,00 PSI, TYPE II CEMENT WITH RIVER ROCK OR GRANITE AGGREGATE. 2. ALL PIPES SHALL BE CONNECTED TO THE MANHOLE USING A LOCK JOINT FLEXIBLE MANHOLE SLEEVE (ASTM C-923) OR APPROVED EQUAL. 3. THE EXTERIOR AND INTERIOR OF THE MANHOLE SHALL BE COATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS WITH FABERTITE AS MANUFACTURED BY BRIGGS BITUMINOUS COMPOSITION COMPANY. 4. AN INSIDE PVC DROP MANHOLE (TYPE "B") SHALL BE REQUIRED FOR MANHOLES WHICH HAVE A DISTANCE OF 18 INCHES OR GREATER BETWEEN INFLUENT PIPE INVERT AND EFFLUENT PIPE INVERT. ALL OTHER DROPS SHALL HAVE A SLIDE CONSTRUCTED TO DIRECT THE FLOW INTO THE INVERT CHANNEL. 5. SEWER SERVICES SHALL BE CAST IRON IF 2FEET OF GROUND COVER CANNOT BE MAINTAINED OVER THE SERVICE LINE. 6. ALL DUCTILE IRON SEWER PIPE, WHERE SPECIFIED, SHALL BE CLASS 51 AND COMPLY WITH ANSI/AWWA C150/A21.50 AND ANSI/AWWA C151/A21.51. DUCTILE IRON PIPE SHALL BE PROVIDED WITH A FACTORY APPLIED INTERIOR POLYETHYLINE LINING IN ACCORDANCE WITH ANSI/ASTM D1248. 7. THE MAXIMUM NUMBER OF DIPS IS ONE, 1-INCH DIP PER 135 LF OF PIPE. NO MORE THAN ONE DIP PER 135 LF OF PIPE. A DIP IS DEFINED AS A CHANGE IN ELEVATION OF 0.5" OR GREATER.								
ARTISAN HOMES MCJUNKIN STATION 21 North 2nd Street Fernandina Beach, Florida 32034			ISSUE DATE: 6/29/21 MISCELLANEOUS DETAILS North / Elev Key/Sheet DT-3 Page 1 of 10					