



**AGENDA
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
DECEMBER 22, 2022
10:00 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 Regular Meeting of November 17, 2022.
- 5. OLD BUSINESS**
 - 5.1 TRC 2022-0027 - GULFSTREAM DESIGN GROUP, LLC, AGENT FOR I P HOLDINGS GROUP LLC, 101 N. 2ND STREET**
Site Plan Review for a Mixed-Use 10-room boutique hotel, restaurant + event venue w/ food truck parking.
 - 5.2 TRC 2022-0028 - TIM POYNTER, 116 N. 2nd Street**
Site plan review for the construction of a multi-use pavilion and pickleball courts.
- 6. ADJOURNMENT**

NEXT REGULAR TRC MEETING IS SCHEDULED FOR JANUARY 26, 2023

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 NOVEMBER 17, 2022
10:00 AM
CITY HALL COMMISSION CHAMBERS**

1. CALL TO ORDER 10:22 AM

2. ROLL CALL

Jason Higginbotham (Fire)
Daphne Forehand (Planning)
Andre Desilet (Stormwater/Utilities)
Don Kukla (Building)

David Neville (Arborist/Urban Forester)
Michelle Forstrom (Code Enforcement)
Victoria Guadagnino (Stormwater/Street/Utilities)
Salvatore Cumella (Chair)

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

4.1 Approval of Minutes from the Regular Meeting of October 27, 2022.

ACTION TAKEN: A motion was made by Member Forstrom seconded by Member Forehand to approve the Minutes as presented.

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

5. NEW BUSINESS

5.1 TRC 2022-0028 - TIM POYNTER, 116 N. 2nd Street
Site plan review for the construction of a multi-use pavilion and pickleball courts.

Planning: Present for this case were Tim Poynter, owner, Chad Grim and Matt Lahti, agents for the applicant. Ms. Forehand commented on the rear garden no being consistent and the wall sign exceeding the square footage. Mr. Grim explained the measurements, the over allowance, the logos and the considered signage, the driveway and the impervious material allowed according to the CRA guidelines requirements. Although the plans specify asphalt, the applicant said it will be gravel. It was stated that the pergola is not allowed within landscaping buffer and will be removed. Agents also spoke about buffers. Mr. Cumella explained that both fence and hedge are required per CRA Guidelines. Mr. Cumella also noted that the only way to deviate from requirements is to apply for a variance. He then explained the procedure for a variance.

Arborist: Mr. Neville explained the fees associated with tree removal and replacement requirements per inches and provided the applicant with the LDC Section. He also explained the Fee in Lieu procedure.

Code Enforcement: No comment.

Fire: The applicant provided information on planned exit locations as per occupancy classification comments from Member Higginbotham. The applicant will make necessary changes to address requirements.

DRAFT

Utilities/Stormwater: Ms. Guadagnino addressed locations of flares and noted that sidewalks should be replaced to specified thickness. She addressed the dumpster and its enclosure. There was discussion about parallel parking requirements along the street and that required streetscape remain consistent with adjacent properties. The applicant suggested the possibility of putting a No Parking sign. Ms. Guadagnino also addressed the drainage requirements.

Building: Ms. Kukla asked about the flooding aspect and the interceptor access.

Next Step: Mr. Cumella mentioned that a full resubmittal of plans be routed to all member and that if needed another TRC meeting will be scheduled. He encouraged the applicant to reach out to each member with questions.

6. COMMITTEE BUSINESS

7. ADJOURNMENT 10:55 AM

Sylvie McCann, Recording Secretary

Sal Cumella, Chair



Via Electronic Submittal

December 1, 2022

City of Fernandina Beach
204 Ash Street
Fernandina Beach, FL, 32034

RE: **Standard Marine**
GDG: **22-084**

Dear Staff:

On behalf of my client, Miranda Architects, LLC, please find the following documents in support of the site plan review request for the Standard Marine project.

- One (1) Stormwater Narrative provided by Gulfstream Design Group, LLC
- One (1) Geotechnical Report provided by Jackson Geotechnical Engineering, LLC
- One (1) Set of Architectural Plans provided by Miranda Architects
- One (1) Set of Sign and Sealed Civil Engineering Drawings provided by Gulfstream Design Group, LLC
- One (1) Set of Landscape and Irrigation Drawings

Planning

1. 7.01.01(E)(b): nonresidential driveways shall be 25 feet in width. When two or more uses share a driveway, the width may be increased to 35 feet.

GDG: So noted. This comment is to be waived by verbal agreement of the review committee staff from the October 27, 2022 TRC Meeting and will be addressed within the proposed variance.

2. Parking fee in lieu 8.01.01(F)(9): 10 rooms: 10 spots (including 1 ADA): \$18,000

GDG: Noted. Parking fee will be paid at the appropriate time.

3. The variance process is currently underway for signage and curb cuts.

GDG: So noted.

Fire Marshal:

1. Please indicate the type of occupancy or type of mixed occupancy, type of construction, and the height of the building.

GDG: Please refer to Sheet 6 of the civil plans provided by Gulfstream Design Group, LLC, and the Site Data Table has been updated with this information.



2. Please provide location and details of the fire suppression system's underground fire main, RPZ backflow preventor, and the Fire Department Connection (FDC). As well as the location of the riser room where the underground fire main terminates. No further comments. 10/24/22 JSH

GDG: Please refer to Sheet 8 of the civil plans. The firemain and appropriate fittings have been shown and called out.

Utilities, Stormwater, and Streets:

1. Direct connection to Alachua St Stormwater system will require a proportional share agreement for offsite stormwater treatment. This process is being finalized and will be approved by the City Commission in November.

GDG: So noted.

2. The existing storm structure at the Northeast corner of the building needs to be replaced. This and other offsite stormwater improvements will need to be coordinated with the City.

GDG: Please refer to Sheet 5 of the civil plans, the existing storm structure has been called out to be moved and a new structure has been added on Sheet 7.

3. Please indicate what surface the West side by the structure is. Area is identified as "SD-?" on sheet 6.

GDG: Please refer to the detail Sheet 9 of the civil plans to find the specifics on SD-18 ADA Detectible warning.

4. Existing ¾" water service is located where indicated on the plan. Upgrade to 1" meter will be evaluated. Location of any existing sewer service will be identified.

GDG: Noted, waiting on evaluation from Utility Reviewer.

5. Need to clarify the proposed seating for restaurant, as well as the use and square footages of all other areas for calculation of impact fees.

GDG: Please refer to updated Architectural plans by Miranda Architects, which clarifies uses and seating.

If you have any questions or require additional information, please do not hesitate to email me at matt@gulfstreamdesign.com.

Sincerely,

Matthew H. Lahti, P.E.

President

Gulfstream Design Group, LLC

ENGINEERING PLANS

FOR

STANDARD MARINE

NASSAU COUNTY, FLORIDA

PROJECT TEAM

LAND OWNER
IP HOLDINGS GROUP, LLC
316 ASH STREET
FERNANDINA BEACH, FL 32034
PHONE:
CONTACT:

SURVEYOR:
MANZIE & DRAKE LAND SURVEYING
117 SOUTH NINTH STREET
FERNANDINA BEACH, FL 32034
PHONE: 904.491.5700
CONTACT: MICHAEL A. MANZIE, P.L.S.

ARCHITECT:
MIRANDA ARCHITECTS
309 1/2 CENTRE STREET, SUITE 206
FERNANDINA BEACH, FL 32034
PHONE: 904.261.4586
CONTACT: JOSE MIRANDA, RA

DEVELOPER/APPLICANT
MIRANDA ARCHITECTS
309 1/2 CENTRE STREET, SUITE 206
FERNANDINA BEACH, FL 32034
PHONE: 904.261.4586
CONTACT: JOSE MIRANDA, RA

MECHANICAL ENGINEER
GREGORY ENGINEER INC
4567 DEEP RIVER PLACE
JACKSONVILLE, FL 32224
PHONE: 904.714.5188

LANDSCAPE ARCHITECT:
TRIM ALL LAWN SERVICES
942360 OLD NASSAUVILLE ROAD
FERNANDINA BEACH, FL 32034
PHONE: 904.491.3232
CONTACT: TOM ANDERSON

CIVIL ENGINEER:
GULFSTREAM DESIGN GROUP, LLC
2225 A1A S, SUITE A2
ST. AUGUSTINE, FL 32080
PHONE: 904.794.4231
CONTACT: MATT LAHTI, P.E.

GEOTECHNICAL ENGINEER:
JACKSON GEOTECHNICAL ENGINEERING
164 PLAZA DEL RIO DRIVE
SAINT AUGUSTINE, FL 32084
PHONE: 904.252.2292
CONTACT: JEFF JACKSON, P.E.

PRIVATE UTILITY COMPANIES

ELECTRIC/NATURAL GAS/PROPANE
FLORIDA PUBLIC UTILITIES
780 AMELIA ISLAND PARKWAY
FERNANDINA BEACH, FLORIDA 32034
PHONE: 800-427-7712

TV CABLE
COMCAST
5934 RICHARD ROAD
JACKSONVILLE, FL 32216
PHONE: 904-380-6341
CONTACT: JAMES GRAHAM

TELEPHONE
AT&T
735 MILL CREEK ROAD
JACKSONVILLE, FL 32211
PHONE: 904-727-1572
CONTACT: SCOTT HIGGINS

PUBLIC UTILITY PROVIDERS

WATER AND SEWER
CITY OF FERNANDINA BEACH UTILITY
DEPARTMENT
1180 SOUTH 5TH ST
FERNANDINA BEACH, FL 32034
CONTACT: ANDRE DESILET
PHONE: 904-310-3431

REGULATORY AGENCY

FDEP - WATER & SEWER
8800 BAYMEADOWS WAY, SUITE 100
JACKSONVILLE, FL 32256
CONTACT: JENNIFER LYLES
PHONE: (904) 256-1700

**ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT**
7775 BAYMEADOWS WAY W #102
JACKSONVILLE, FL 32256
CONTACT: EVERETT FRYE, P.E.
PHONE: (904) 448-7913

**CITY OF FERNANDINA
BEACH**
204 ASH STREET
FERNANDINA BEACH, FL 32034
CONTACT: KELLEY GIBSON, AICP
PHONE: (904) 310-3481

**NASSAU COUNTY ENGINEERING
SERVICES DEPARTMENT**
96161 NASSAU PLACE
YULEE, FL 32097
PHONE: (904) 530-6225

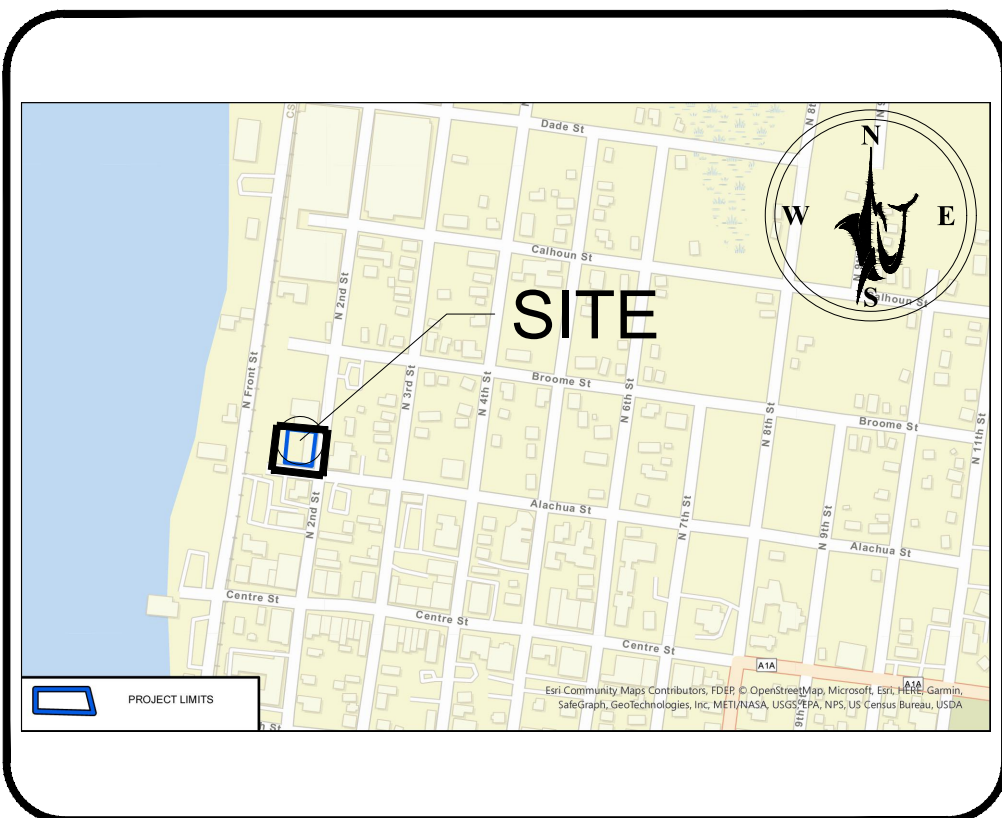
GENERAL NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.
- GULFSTREAM DESIGN GROUP AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR MISSIONS RESULTING FROM SURVEY INACCURACIES.
- ANY AND ALL WORK CONDUCTED WITHIN THE NASSAU COUNTY RIGHT-OF-WAYS MUST BE IN ACCORDANCE WITH THE APPLICABLE LAND DEVELOPMENT CODES.
- ALL ELEVATIONS SHOWN HEREIN ARE REFERENCED TO NORTH AMERICAN GEODETIC VERTICAL DATUM 1988 (NAVD 88).
- HORIZONTAL PROJECTION FOR THIS PLAN SET IS BASED ON NAD83 FLORIDA STATE PLANES, EAST ZONE, US FOOT.
- LEGAL DESCRIPTIONS - SEE SURVEY.

LOCATION OF SITE

101 N 2ND STREET

PARCEL ID # 00-00-31-1800-0002-0290



LOCATION MAP

SCALE: N.T.S.

PREPARED FOR

MIRANDA ARCHITECTS, INC.
309 1/2 CENTRE STREET, SUITE 206
FERNANDINA BEACH, FL 32034
PHONE: (904) 261-4586
CONTACT: JOSE MIRANDA

PREPARED BY



©GDG 2022
2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
Phone: (904) 794-4231
www.gulfstreamdesign.com

FOR PERMIT
REVIEW

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	STORMWATER POLLUTION PREVENTION PLAN
4	SURVEY PDF
5	DEMOLITION PLAN
6	SITE PLAN
7	PAVING, GRADING & DRAINAGE PLAN
8	UTILITY PLAN
9	CONSTRUCTION DETAILS
10	CONSTRUCTION DETAILS
11	CONSTRUCTION DETAILS
12	MAINTENANCE OF TRAFFIC PLAN

ENGINEERING PLANS BASED ON

PLAN TYPE	COMPANY NAME	REVISION	REVISION DATE
SURVEYOR	MANZIE & DRAKE LAND SURVEYING		11/29/2022
ARCHITECT	MIRANDA ARCHITECTS		09/22/2022
LANDSCAPE ARCHITECT	TRIM ALL LAWN SERVICES		11/29/2022
CITY OF FERNANDINA BEACH	CPH, INC.		10/2019
GEOTECHNICAL ENGINEER	JACKSON GEOTECHNICAL ENGINEERING		11/30/2022

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED IN THE FLOOD ZONE "AE" PER FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12089C 0237G, DATED AUGUST 2, 2017

This item has been digitally signed and sealed by Matthew H. Lahti, P.E. on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

NO.	DATE	BY	DESCRIPTION
1	11/20/22	JGD	PER CITY OF FERNANDINA BEACH COMMENTS
2			
3			
4			
5			
6			
7			
8			
9			

ENGINEERING PLANS
FOR
STANDARD MARINE
COVER SHEET
NASSAU COUNTY, FLORIDA



FOR PERMIT REVIEW



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

PROJECT NO: 22-084
ISSUE DATE: 10-13-22
DRAFTED BY: JGD
DESIGNED BY: MHL
CHECKED BY: MHL

NOT VALID WITHOUT SEAL
Matthew H. Lahti, P.E.
Digitally signed by Matthew H. Lahti, P.E. FL# 71395
Date: 2022.12.01
71395

THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH EACH NOTE LISTED WITHIN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EACH SUBCONTRACTOR IS FAMILIAR AND PRESENTLY AWARE OF THESE NOTES AND CONDITIONS ESTABLISHED BY GULFSTREAM DESIGN GROUP. THROUGHOUT THE ENTIRE PLAN SET AS LISTED ON THE COVER SHEET, THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY REVIEW THIS PLAN PACKAGE TO BE FULLY PREPARED TO PROVIDE ACCURATE BID PRICES AND SERVICES.

2. EXISTING SURVEY INFORMATION PROVIDED BY MANZIE & DRAKE LAND SURVEYING PROFESSIONAL SURVEYORS & MAPPERS DATED MAY 18, 2021, REVISION NOVEMBER 29, 2022. ALL INFORMATION WITHIN THIS PLAN SET HAS BEEN BASED OFF OF THE ABOVE REFERENCED SURVEY. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY OR LACK THEREOF.

3. ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAV8 88) AND SHOWN IN FEET. BENCHMARK AT THE SOUTHEAST CORNER OF STANDARD MARINE BUILDING. ELEVATION BEING 10.12'.

4. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS TO VERIFY IN WRITING WITH THE ENGINEER OF RECORD THAT THE DOCUMENTS BEING UTILIZED IN THE FIELD ARE INDEED THE MOST CURRENT AND ACCURATE VERSIONS. ADDITIONALLY, THE GEOTECHNICAL REPORT CORRESPONDING TO THIS PLAN SET IS A REQUIRED CONSTRUCTION DOCUMENTATION. WHICH INTERFERES WITH CONSTRUCTION. THE ENGINEER OF RECORD IN THE REPORT SHALL TAKE PRECEDENCE UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL PROVIDE THE ENGINEER OF RECORD IN WRITING WITH A TENTATIVE SCHEDULE OF CONSTRUCTION ACTIVITIES.

5. PRIOR TO THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL BECOME ACQUAINTED WITH THEMSELVES WITH ALL SITE CONDITIONS BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHOULD ADDITIONALLY ENSURE THEY ARE PROPERLY FAMILIARIZED WITH ALL MATERIALS REFERENCED FOR USE WITHIN THIS PLAN AND IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND CODE SECTION(S) THAT APPLY TO THIS PROJECT.

6. THE ENGINEER OF RECORD AND THE OWNER ASSUME NO RESPONSIBILITY IN THE SUPERVISION OR INSPECTION OF THE WORK INVOLVED IN THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE, TO THE OWNER'S SATISFACTION, THAT THE DRAWINGS AND SPECIFICATIONS ARE BEING PROPERLY INTERPRETED. THIS OBSERVATION AND CHECKING WILL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY FOR THE PERFORMANCE OF HIS WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.

7. THE CONTRACTOR SHALL EXERCISE CARE IN DIGGING AND OTHER WORK SO AS NOT TO DAMAGE EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO UNDERGROUND PIPES, UTILITIES, CONDUITS, SPRINKLERS, CONTROL CABLES AND HYDRANTS OF WATERING SYSTEMS, SURVEY BENCHMARKS/PROPERTY MONUMENTS, ETC. SHOULD ANY OVERHEAD OR UNDERGROUND OBSTRUCTION BE ENCOUNTERED WHICH INTERFERES WITH CONSTRUCTION, THE ENGINEER OF RECORD SHALL BE CONSULTED AND HE WILL HAVE THE OPPORTUNITY TO ADJUST THE LOCATION OF CONFLICT ITEMS TO CLEAR SUCH OBSTRUCTIONS.

8. THE CONTRACTOR SHALL CONTACT THE APPLICABLE FRANCHISE UTILITY COMPANY (IE: AT&T, TECO GAS, FPL, ETC. AS APPLICABLE) AND COORDINATE ANY CONSTRUCTION IN ADVANCE OF COMMENCING CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OF ANY DAMAGE CAUSED BY HIS WORK AT NO COST TO THE OWNER. ADDITIONALLY, THE CONTRACTOR SHOULD ENSURE THAT EXISTING STRUCTURES TO REMAIN ARE RESTORED TO THEIR ORIGINAL CONDITION, INCLUDING: PAVEMENTS, CONCRETES, LANDSCAPING, DRAINAGE, AND EROSION CONTROL. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS AND OR VIDEO FOOTAGE OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ENSURE PROPER DOCUMENTATION OF PRECONSTRUCTION CONDITIONS OF THE SITE AND TO AID IN ANY POSSIBLE CLAIMS DURING CONSTRUCTION. THIS INFORMATION SHOULD BE PROVIDED TO THE ENGINEER OF RECORD AND OWNER.

10. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NASSAU COUNTY LAND DEVELOPMENT CODE OR THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), WHICHEVER IS MORE RESTRICTIVE.

11. ALL WORK WITHIN THE NASSAU COUNTY RIGHT-OF-WAY MUST CONFORM TO MOST CURRENT LAND DEVELOPMENT CODE & STANDARDS AND SPECIFICATIONS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES, SHOWN OR NOT SHOWN, ON THESE PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES TO REMAIN AND COORDINATING THE RELOCATION (IF REQUIRED) OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGES TO EXISTING UTILITIES, IF UTILITIES OR OTHER UTILITIES ARE NOTED AND NOTED BEFORE THE CONTRACTOR PROCEEDS WITH THE EXTRA WORK. ADDITIONALLY, THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, AND NOTIFY THE ENGINEER OF RECORD IN WRITING REGARDING ANY POTENTIAL CONCERNS. THIS INFORMATION IS REQUIRED TO BE SUBMITTED TO THE NASSAU COUNTY FIELD STAKEHOLDER TO INCLUDE: CONSTRUCTION OPERATIONS, PLANNING, DESIGN, AND VERIFY THROUGH ENGINEER APPROVAL AND APPROVED ARCHITECTURAL PLANS). EDITION OF PAVEMENT, UTILITY SUB OUTLOCATIONS, ETC.

13. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER OF RECORD, ANY EXTRA WORK REQUESTED BY ANY REGULATORY AGENCY THAT IS NOT SHOWN ON THE PLANS. THIS WORK MUST BE APPROVED BY THE ENGINEER OF RECORD IN WRITING AND THE OWNER BEFORE THE CONTRACTOR PROCEEDS WITH THE EXTRA WORK. ADDITIONALLY, THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, AND NOTIFY THE ENGINEER OF RECORD IN WRITING REGARDING ANY POTENTIAL CONCERNS. THIS INFORMATION IS REQUIRED TO BE SUBMITTED TO THE NASSAU COUNTY FIELD STAKEHOLDER TO INCLUDE: CONSTRUCTION OPERATIONS, PLANNING, DESIGN, AND VERIFY THROUGH ENGINEER APPROVAL AND APPROVED ARCHITECTURAL PLANS). EDITION OF PAVEMENT, UTILITY SUB OUTLOCATIONS, ETC.

14. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL PERFORM SITE CLEAN-UP OPERATION FOR REMOVAL AND DISPOSAL OF ALL TRASH, DEBRIS, PIPE, EXCESS MATERIAL AND EQUIPMENT OFFSITE.

15. THE CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY, INCLUDING BENCHMARKS, TO OWNER AS REQUIRED BY THE NASSAU COUNTY, ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SRWMD), FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND ENGINEER OF RECORD. THE AS-BUILT SURVEY SHALL BE CERTIFIED BY A PROFESSIONAL LAND SURVEYOR. ENGINEER OF RECORD IS TO PROVIDE ENGINEERS' CERTIFICATION TO OWNER WITH AS-BUILT PLANS.

16. IN THE EVENT THAT UNEXPECTED ARCHEOLOGICAL RESOURCES ARE ENCOUNTERED DURING GROUND DISTURBING ACTIVITIES, ALL WORK SHALL HALT AND THE ENGINEER OF RECORD'S OFFICE SHALL BE CONTACTED IMMEDIATELY IN WRITING.

17. ALL MATERIALS AND LABOR ASSOCIATED ITEMS ARE TO BE WARRANTED BY THE CONTRACTOR FOR A TIME PERIOD OF ONE (1) CALENDAR YEAR UPON THE ACCEPTANCE OF THE PROJECT BY THE OWNER AND ALL APPLICABLE GOVERNMENT AGENCIES.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSURANCES, AND LICENSES PERTAINING TO THE WORK ILLUSTRATED IN THIS PLAN SET.

19. ANY POTENTIAL DISCREPANCIES WITHIN THIS PLAN SET THAT THE CONTRACTOR FINDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY IN WRITING.

20. ALL DISTURBED AREAS WITHIN THE NASSAU COUNTY RIGHT-OF-WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREAS DISTURBED (BERMUDA IN RURAL, CENTPEIDE IN UPLIFT STRIPS).

21. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY IN REGARDS TO CONSTRUCTION METHODS AND PROCEDURES EXERCISED BY THE CONTRACTOR. IT IS ASSUMED BY THE ENGINEER OF RECORD THAT THE CONTRACTOR SHALL OPERATE WITHIN THE BOUNDARIES OF ALL APPLICABLE SAFETY STANDARDS (REGARDING TRENCHING AND EXCAVATION OPERATIONS) WITH THE BEST INTEREST OF ALL EMPLOYEES TAKEN INTO CONSIDERATION. THE CONTRACTOR MUST CARRY THE NECESSARY STATUTORY LIABILITY AND WORKERS COMPENSATION INSURANCE. THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR UPHOLDING ANY OF THESE ITEMS. THE OWNER IS THE ONLY ENTITY WHICH MAY CHOOSE TO TAKE ACTION REGARDING THESE ITEMS. GULFSTREAM DESIGN GROUP DOES NOT HAVE THE AUTHORITY TO RELIEVE THE CONTRACTOR OF HIS DUTIES DUE TO VIOLATIONS OF THESE POLICIES.

22. THE USE OF THE WORD "CERTIFY" WITHIN THIS ENGINEERING PLAN SET, IMPLIES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE SUBJECT TOPIC. THIS HOWEVER, DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED.

23. BURNING OF ANY MATERIAL OR DEBRIS ONSITE IS PROHIBITED.

24. ALL ADJACENT PROPERTY OWNERS AND BUSINESSES ARE TO BE PROVIDED ACCESS TO THEIR SITES AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

25. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTORS FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF THE CONTRACTOR AND/OR OWNER FAILS TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD HARMLESS FOR ALL INJURIES AND DAMAGES THAT THE ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

CLEARING/DEMO AND EROSION CONTROL NOTES:

1. AREAS ADJACENT TO THE PROJECT AREA ARE TO BE PROTECTED AND LEFT UNDISTURBED UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DOCUMENTS.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES, EROSION CONTROL STRUCTURES, AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRADING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, FILTER FABRIC, SILT FENCES AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.

3. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED: (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES; (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS; (3) PRIOR TO ANY NASSAU COUNTY REQUIRED EROSION CONTROL MEASURES; (4) PRIOR TO THE PERMITTER OF EXISTING STORM WATER TREATMENT FACILITIES AND (5) AT ANY ADDITIONAL AREAS THAT NASSAU COUNTY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL OR EROSION IS BEING INTRODUCED. THESE MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. THESE REPRESENT THE MINIMUM REQUIREMENTS, NASSAU COUNTY, FDEP, AND SRWMD RESERVE THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED THROUGHOUT PROJECT CONSTRUCTION.

4. PRIOR TO, AND DURING, LAND CLEARING ACTIVITIES ALL PRESERVED TREES (AS PER THE NASSAU COUNTY APPROVED PLANS) WILL BE CLEARLY MARKED. THIS INCLUDES "TREE PROTECTION BARRICADES" WHICH SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES. "TREE PROTECTION BARRICADES" SHALL BE INSTALLED AT THE Drip Line OF THE SUBJECT TREE. ANY PROPOSED ACTIVITIES WITHIN THIS DRIP LINE MUST BE APPROVED BY THE APPLICABLE GOVERNMENT AGENCY.

23. THE OVERALL PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED, THE C

1. ALL DIMENSIONS ARE TO THE EDGES OF PAVEMENT UNLESS OTHERWISE NOTED.
2. SIDEWALKS ADJACENT TO PAVEMENT SURFACES ARE TO BE THICKENED EDGE SIDEWALKS.
3. ALL TYPE "F" CURBING SHALL HAVE A THREE (3) FOOT TRANSITION AT ALL TERMINUS LOCATIONS WHEN TYING BACK TO GRADE.
4. ALL TYPE "D" CURBING SHALL HAVE A ONE (1) FOOT TRANSITION AT ALL TERMINUS LOCATIONS WHEN TYING BACK TO GRADE.
5. THE CONTRACTOR SHALL LAUNCH EACH AREA OF WORK TO CHECK DIMENSIONING PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER DISCIPLINES. SHOULD ANY DISCREPANCIES EXIST, THE CONTRACTOR IS TO NOTIFY, IN WRITING, THE OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD IMMEDIATELY.

6. ALL AMERICANS WITH DISABILITIES ACT (ADA) RAMPS TO MEET CURRENT ADA CRITERIA AND INCLUDE A DETECTABLE WARNING. COLOR SELECTION FOR DETECTABLE WARNING TO BE COORDINATED WITH OWNER PRIOR TO ORDER AND PLACEMENT.
7. THE CONTRACTOR SHALL COORDINATE ANY OFF-SITE IMPROVEMENTS WITH NASSAU COUNTY 7 DAYS PRIOR TO CONSTRUCTION.
9. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOTED SEPARATELY HEREIN AND ARE TO BE SET DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EXISTING EASEMENTS BEFORE BEGINNING CONSTRUCTION.
11. ADA RAMPS SHALL BE INSTALLED AT ALL SIDEWALK/CURB INTERSECTIONS. ALL ADA RAMPS SHALL CONFORM TO DETAILS NOTES AND SPECIFICATIONS FROM THE FDOT DESIGN MANUAL, LATEST EDITION, INDEX NO. 304 SHEETS 1 THROUGH 8, AS APPLICABLE.

1. CONTRACTORS MUST EXERCISE CARE AND PRECISION WHEN CONSTRUCTING ADA ACCESSIBLE COMPONENTS OF THE PRESCRIBED WORK AS PERTAINING TO THIS PLAN SET. THESE COMPONENTS MUST COMPLY WITH THE CURRENT ADA STANDARDS FOR ACCESSIBILITY AND BE SUBJECT TO ADEQUATE ADHIERANCE APPROVAL. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO:
 - 1.1. PARKING SPACES AND AISLES -
 - 1.1.1. SLOPE SHALL NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - 1.2. CURB RAMPS -
 - 1.2.1. SLOPE SHALL NOT EXCEED 1:12 (8.33%) FOR A MAXIMUM OF SIX (6) FEET
 - 1.3. LANDINGS -
 - 1.3.1. MUST BE AT EACH END OF RAMPS, PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - 1.4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE -
 - 1.4.1. MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF A VEHICLE. THIS SLOPE MUST BE NO GREATER THAN 5% IN THE DIRECTION OF TRAVEL (LONGITUDINAL), AND MUST NOT EXCEED 2% IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 5%, ADA RAMP MUST ADHERE TO A MAXIMUM SLOPE OF 8.33%, FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST ALSO INCLUDE ADA HANDRAILS AND LEVEL LANDINGS ON EACH END THAT ARE CROSSED SLOPE NO MORE THAN 2% IN ANY DIRECTION.
 - 1.5. DOORWAYS -
 - 1.5.1. MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 2% TO ENSURE POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN FIVE (5) FEET LONG, UNLESS OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING DESIGN.

2. WHEN THE PROPOSED CONSTRUCTION INVOLVES REMEDIATION OF CONSTRUCTION ACTIVITIES REGARDING ADA COMPLIANCE OF EXISTING DRIVEWAYS OR SURFACES, CONTRACTOR MUST VERIFY ELEVATIONS SHOWN ON PLAN SHEETS ARE THE MOST RECENT. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IN WRITING IMMEDIATELY IF IT IS ENCOURAGED THAT THE CONTRACTOR MAY NOT NOTIFY THE ENGINEER OF RECORD OF ANY CONFLICTS AND/OR DISCREPANCIES IN THE FIELD THAT DIFFER FROM WHAT IS SHOWN ON THE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE MOST RECENT VERSION OF THE CONSTRUCTION IMPROVEMENTS MUST MEET ALL REQUIREMENTS SET FORTH BY THE MOST RECENT VERSION OF ADA REQUIREMENTS.
3. CONTRACTOR MUST VERIFY SLOPES PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES. IF THERE ARE ANY CONSTRUCTION CHANGES THAT EXIST, THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD IN WRITING IMMEDIATELY.
4. IT IS ENCOURAGED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODES AND FIELD INSPECTOR AFTER STAGING AND BEFORE COMMENCEMENT OF CONSTRUCTION.

1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN CENTERLINE OF DRAINAGE STRUCTURES AND TO END OF MITERED END SECTIONS.
2. ALL HP, HDPE OR RCP PIPE JOINTS TO BE WRAPPED WITH 4" WIDE "TYPE R" STRIPS OR EQUAL.
PIPE ABBREVIATIONS ARE DEFINED AS FOLLOWS:
PVC = POLYVINYL CHLORIDE PIPE
RCP = REINFORCED CONCRETE PIPE
HDPE = HIGH DENSITY POLYETHYLENE
HP = HIGH PERFORMANCE
3. ALL PIPE SHALL MEET MINIMUM SLOPE REQUIREMENTS FOR THEIR SPECIFIC TYPE. AT A MINIMUM THE FOLLOWING SLOPE SHALL BE MET THROUGHOUT THE SITE.
 - a. RCP SHALL BE A MINIMUM OF 0.30%
 - b. PVC SHALL BE A MINIMUM OF 0.80%
 - c. HDPE SHALL BE A MINIMUM OF 0.80%

5. DRAINAGE PIPE NOT LOCATED IN PAVED AREAS CAN BE PVC SDR-26 OR HDPE N-12 EQUIVALENT. STRUCTURES TO BE ADJUSTED ACCORDINGLY DEPENDING ON PIPE MATERIAL CHOSEN. THE CONTRACTOR MUST SUBMIT A REQUEST TO BE REVIEWED AND OBTAIN APPROVAL FROM THE OWNER AND THE ENGINEER OF RECORD BEFORE ANY SUBSTITUTIONS ARE ALLOWED.
6. UNLESS OTHERWISE STATED, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SLIT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M248 AND TYPE-S (SMOOTH INTERIOR WITH ANGULAR CORRELATIONS) WITH GASKET FOR SLIT TIGHT JOINTS). PVC PIPE FOR ROOF DRAIN CONNECTIONS MUST BE SDR 35 OR SCHEDULE 80 UNLESS INDICATED OTHERWISE. PVC PIPE AND FITTINGS MUST CONFORM TO ASTM D 3034, SDR 35, WITH PUSH ON OR RUBBER GASKETS. NO MATERIAL SUBSTITUTES WILL BE ALLOWED.
7. INSTALLATION OF PIPE SHOULD OCCUR ON A MINIMUM OF 8" STABILIZED MATERIAL FREE OF JAGGED MATERIAL. BACKFILL MATERIAL SHALL BE WELL GRADED AND MEET COVER VALUES AS SHOWN ON THE APPLICABLE PLAN SHEETS. STORM SEWER PIPES SHOULD BE PROTECTED BY A MINIMUM OF 18" OF FILL DURING CONSTRUCTION. DRAINAGE FROM OFFSITE ENTERING THE SITE VIA DITCH OR AN OPEN CUT PIPE MUST BE ACCOMMODATED FOR AND NOT UNDERSIRED DURING CONSTRUCTION ACTIVITIES. CONTRACTOR TO UTILIZE ALL NECESSARY EQUIPMENT TO ENSURE POSITIVE DRAINAGE.
8. ALL NON-PAVED DISTURBED AREAS TO BE SODDED AND STABILIZED WITHIN SEVEN (7) DAYS OF THE DISTURBANCE UNLESS OTHERWISE NOTED.
9. ALL PAVEMENT RETURN RADI SHALL BE MEASURED TO THE EDGE OF PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
10. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SEATED PROPERLY.
11. FIVE (5) FEET OF SOI IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
12. THE STORM DRAINAGE SYSTEM SHALL BE FREE OF DIRT, SAND AND DEBRIS PRIOR TO FINAL ACCEPTANCE.
13. MITERED END SECTIONS SHALL CONFORM TO FDOT INDEX #430-022. MITERED END SECTIONS IN PONDS SHALL CONFORM TO FDOT INDEX #430-021. DITCH BOTTOM INLETS SHALL CONFORM TO FDOT INDEX #425-052. STORM MANHOLES SHALL CONFORM TO FDOT INDEX #425-051.
14. THE CONTRACTOR IS TO COORDINATE THE CONFLICT POINTS AT UTILITY INTERSECTIONS AROUND THE SITE. CLEARANCES SHOULD BE MET IN ACCORDANCE WITH FDOT RULES AND PER THE NASSAU COUNTY STANDARDS NOTED IN THIS PLAN SET.
15. STORM STRUCTURE PIPES THAT EXCEED THE SIZING FOR TYPE C INLETS ARE TO BE CONSTRUCTED WITH ALTERNATE BOTTOMS WITH MINIMUM DIAMETERS TO ACCOMMODATE PIPE SIZES AND/or PIPE ANGLES PER FOOT INDEX NO. 425-010 AND 425-001 - TYPE J BOTTOM.
16. NYLOPLAST OR EQUAL SHALL BE USED WHERE NOTED AND SHALL ACCOMMODATE THE PIPE SIZING AND ANGLES NOTED. SHOULD THE PIPES NOT BE ABLE TO BE USED, THEN A TYPE "C" INLET SHALL BE SUBSTITUTED AT NO ADDITIONAL CHARGE TO THE OWNER.
17. PAVEMENT SHALL BE PLACED IN TWO EQUAL LIFTS. THE SECOND LIFT SHOULD BE PLACED AFTER THE FINAL CERTIFICATE OF OCCUPANCY UNLESS THE OWNER AND THE ENGINEER OF RECORD REQUESTS OTHERWISE IN WRITING.
18. ALL DISTURBED AREA THAT WILL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS REQUIRE EROSION CONTROL, TO ADDRESS RAIN DRIVEN AND WIND BLOWN SEDIMENT.
19. GULFSTREAM DESIGN GROUP, LLC, WILL REVIEW OR TAKE APPROPRIATE ACTION AS PERTAINING TO THE CONTRACTORS SUBMITTALS INCLUDING BUT NOT LIMITED TO: SHOP DRAWINGS, RPT, PROTECT SAMPLES, FIELD DATA, ETC. GULFSTREAM DESIGN GROUP, LLC, WILL NOT BE REQUIRED TO PERFORM A COMPLETE REVIEW ON A SUBMITTAL WHICH IS CONSIDERED TO BE "INCOMPLETE" BY THE ENGINEER OF RECORD. SUCH SUBMITTAL WILL BE REJECTED IN WRITING AND RETURNED TO THE CONTRACTOR.
20. THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER AND GEOTECHNICAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO PLACEMENT OF ANY CONCRETE PAVEMENT.
21. THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT ABUTMENTS OF CONCRETE AND ANY STRUCTURE.
22. THE CONTRACTOR IS THE RESPONSIBLE PARTY FOR MAINTAINING THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REQUIRED TESTING WITH THE GEOTECHNICAL ENGINEER. TESTING IS REQUIRED IN ACCORDANCE WITH THE TESTING SCHEDULE FOUND ON THIS SHEET UPON COMPLETION OF THE WORK, THE GEOTECHNICAL ENGINEER OF RECORD SHALL SUBMIT CERTIFICATES TO THE CIVIL ENGINEER OF RECORD AND THE OWNER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

1. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH FDOT ROADWAY AND TRAFFIC DESIGN STANDARD, LATEST EDITION.
2. ALL GROUND MOUNTED STOP, YIELD, WRONG WAY, DO NOT ENTER SIGN FACES SHALL BE FABRICATED ENTIRELY WITH TYPE 'B' REFLECTIVE SHEETING.
3. ALL PAVEMENT MARKINGS ARE TO BE PAINTED WITH THERMOPLASTIC PAINT IN ACCORDANCE WITH FDOT STANDARDS UNLESS OTHERWISE NOTED ON THE PLANS.
4. FOR SIGN DETAILS REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, LATEST EDITION.

4. ALL TRAFFIC CONTROL SIGNS MUST BE IN ACCORDANCE WITH MUTCD STANDARDS AND SPECIFICATIONS (LATEST EDITION VALID AT TIME OF PLAN APPROVAL) AND SHALL BE FABRICATED USING 3M BRAND "SCOTCOLITE" SHEETING (HIGH INTENSITY GRADE) ON MINIMUM .080 GA ALUMINUM BLANKS. ALL 36" X 48" SIGNS SHALL BE: 100 GA MINIMUM AND SHALL BE INSTALLED USING 2" X 12" ROUND ALUMINUM POSTS. ALL STOP SIGNS SHALL BE 36" OCTAGONAL, INSTALLED ON 12" 3 LBFT "U" CHANNEL POSTS ON 32"X12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR ALL SIGNS SMALLER THAN 36" X 48". ALL WARNING SIGNS SHALL BE 30"X 30". ALL SPEED LIMIT SIGNS SHALL BE 24" X 30".
7. SIGN PLACEMENT SHOWN IN PLANS IS APPROXIMATE. FINAL LOCATION SHALL BE AS DIRECTED BY ENGINEER OF RECORD, INSPECTOR(S) AND OWNER.
8. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/CRAACKS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER LATEST EDITION FDOT STANDARDS AND SPECIFICATIONS.
9. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE CONTINUOUS APPLICATION.
10. PROPOSED PAVEMENT MARKINGS SHALL ALIGN WITH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
11. ALL EXISTING CURB AND GUTTER AND SIDEWALK SHOWN TO BE REMOVED, WILL BE REMOVED AND REPLACED FROM JOINT TO JOINT.
12. ALL BROKEN/CRAACKED DRIVEWAYS MUST BE FULLY REMOVED AND REPLACED.

1. PROJECT LIES WITHIN NASSAU COUNTY UTILITY DEPARTMENT SERVICE AREA.
2. THE PROJECT LIES WITHIN TECO GAS SERVICE AREA.
3. WORK DIRECTLY IMPACTING TECO GAS MAINS SHALL BE COORDINATED AS REQUIRED AND CONFORM TO TECO GAS STANDARD SPECIFICATIONS AND DETAILS (LATEST EDITION).
4. ALL WATER, SEWER AND REUSE WORK TO CONFORM TO THE NASSAU COUNTY WATER AND SEWER STANDARDS, SPECIFICATIONS AND DETAILS (LATEST EDITION). PLEASE NOTE THAT WORK DIRECTLY IMPACTING NASSAU COUNTY UTILITIES SHALL BE COORDINATED AS REQUIRED AND CONFORM TO THE NASSAU COUNTY DESIGN SPECIFICATIONS AND DETAILS (LATEST EDITION).
5. COORDINATE UTILITY SIZE AND SERVICE LOCATION WITH ARCHITECT AND MECHANICAL, ELECTRICAL & PLUMBING (MEP) PLANS.
6. ALL CONNECTIONS TO SERVICE LINES TO BE ON SITE SIDE OF BACKFLOW OR CLEANOUT DEPENDING ON LINE TYPE.
7. CLEAN-OUTS SHALL BE INSTALLED SO THAT THEY ARE ACCESSIBLE FOR MAINTENANCE.
8. CLEAN-OUTS LOCATED IN WALKWAY SHALL BE INSTALLED WITH ADA COMPLIANT FLUSH MOUNT COVER. CLEAN-OUTS IN PAVED AREAS SHALL BE CONSTRUCTED WITH TRAFFIC RATED BOX AND COVER.
9. ALL ABANDONED UTILITIES FOUND WITHIN THE NASSAU COUNTY RIGHT-OF-WAY AND NOT SHOWN ON THESE PLAN SHEETS ARE TO BE REMOVED AND PROPERLY DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR PER NASSAU COUNTY AND FDEP STANDARDS.
10. ALL PRIMARY AND SECONDARY ELECTRICAL LOCATIONS ARE NOT SHOWN HEREON. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND COST WITH LAND OWNER AND ELECTRIC COMPANY. ADDITIONALLY, THE CONTRACTOR SHOULD VERIFY THE LOCATION AND COST OF ANY IRRIGATION CONDUITS.
11. THE CONTRACTOR SHALL PROVIDE TRANSFORMER PAD TO ALLOW FOR INSTALLATION FROM POWER COMPANY.
12. REFER ARCHITECTURAL AND MEP PLANS FOR ALL UTILITY SERVICE CONNECTION POINTS.

1. THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A THIRD PARTY TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE, AND SURFACE COURSE MATERIALS. TEST RESULTS MAY BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT RELATING TO THE SITE CONSTRUCTION SCOPE AGREED UPON BY ALL APPLICABLE PARTIES.
2. SCHEDULE OF ROAD CONSTRUCTION TESTING SHALL BE AS FOLLOWS:
 - 2.1. SUBGRADE
 - 2.1.1. BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NO MORE THAN 200 LINEAR FEET.

- 2.2. BASE
- 2.2.1. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NO MORE THAN 500 LINEAR FEET.
3. ALL TESTING SHALL BE TAKEN IN A STAGGERED PATTERN WITHIN THE EDGE OF PAVEMENT BOUNDARY.
4. IF ANY SAMPLES SHOULD BE EXAMINED AS "UNSATISFACTORY" PER THE STANDARDS OF THE GEOTECHNICAL ENGINEER OF RECORD, THE AREA OF CONCERN SHALL BE REWORKED AT THE CONTRACTORS EXPENSE UNTIL THE LEVEL OF "SATISFACTION" IS MET.
5. ALL PASSING TESTS SHALL BE PAID FOR BY THE OWNER AND ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

SCHEDULE OF TESTING:				
TEST ITEM:	TEST(S) TO BE PERFORMED:	TESTING METHOD(S):	REQUIREMENT:	TESTING INTERVAL:
EMBANKMENT	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• AASHTO T180 • ASTM D1557 • AASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY	ONE PER 2,000 SF HORIZONTALLY (ALTERNATING LIFT'S 6 INCHES)
UTILITY TRENCH BACKFILL (LOCATED BENEATH DRIVE AISLES/BUILDINGS)	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• AASHTO T180 • ASTM D1557 • AASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY	EVERY 150' OF PIPE FROM CONNECTOR.
BACKFILL OF STRUCTURES	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• AASHTO T180 • ASTM D1557 • AASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY	PER SOIL TYPE: EVERY 6" VERTICALLY FROM 6" BELOW THE STRUCTURE.
SUBGRADE	BEARING VALUES	LBR - FDOT	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 500 HORIZONTAL LF
	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY AND THICKNESS	• AASHTO T180 • ASTM D1557 • AASHTO T191,T238 • ASTM D1556, D2922	SEE TYPICAL PAVEMENT SECTION	• ONE PER 2,000 SF HORIZONTALLY • ONE PER SOURCE
BASE	BEARING VALUES	LBR - FDOT	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 500 HORIZONTAL LF
	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY AND THICKNESS	• AASHTO T180 • ASTM D1557 • AASHTO T191,T238 • ASTM D1556, D2922	SEE TYPICAL PAVEMENT SECTION	• ONE PER 2,000 SF HORIZONTALLY • ONE PER SOURCE
	GRADATION	• AASHTO T27, 196	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 2,000 SF HORIZONTALLY
	ATTERBERG LIMIT	• AASHTO T90, • ASTM C136, D423, D424	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE
ASPHALTIC CONCRETE	MATERIALS QUALITY BITUMEN CONTENT, GRADATION FIELD DENSITY.	• AASHTO T164 • ASTM D2172	PER GEOTECHNICAL SPECIFICATIONS	• ONE PER DAY, PER INSTALLATION
	FIELD DENSITY	• ASTM D2950-81	PER SPECIFICATIONS 98% OF LAB DENSITY	• ONE PER DAY • ONE EVERY 2,000 LF HORIZONTALLY
	LOS ANGELES ABRASION THICKNESS	• AASHTO T98-77 • ASTM C131-81	PER SPECIFICATIONS	• ONE PER SOURCE • ONE PER 2,000 LF HORIZONTALLY
ACCEPTED TESTING METHODS: • AASHTO T27-GRADATION (SIEVE TESTING) • AASHTO-T96-GRADATION-(LOS ANGELES MACHINE) • AASHTO-T90-ATTERBERG (LIMITS-(LIQUID LIMIT XXX)) • ASTM-C136-GRADATION (SIEVE TESTING) • ASTM-D423-ATTERBERG (LIMITS-(PLASTICITY INDEX)) • ASTM-D424-ATTERBERG (LIMITS-(PLASTICITY INDEX)) • AASHTO-T180-FIELD DENSITY-(STANDARD PNEUMATIC) • AASHTO-T164-ASPHALT BINDER (HOT MIX ASPHALT) • AASHTO-T96-77-DEGRADATION (LOS ANGELES MACHINE) • AASHTO-T293-FIELD DENSITY (SAND CONE) • ASTM D1555-FIELD DENSITY (MODIFIED PROCTOR) • ASTM-D2950-ASPHALT DENSITY-(NUCLEAR) • ASTM-D2172-ASPHALT BINDER-HOT (MIX ASPHALT) • ASTM-C131-GRADATION (LOS ANGELES MACHINE) • ASTM-D2937-FIELD DENSITY (DRIVE CYLINDER) • ASTM-D2922-FIELD DENSITY (NUCLEAR) • FDOT LBR-LIME ROCK BEARING RATION				
NOTES: 1. CONTRACTOR WILL ADHERE TO THE SPECIFIC RECOMMENDATION OF THE GEOTECHNICAL ENGINEER OF RECORD.				

1. FIRE PROTECTION FOR THE PURPOSE OF THESE PLANS IS ANY UNDERGROUND WATER LINE NOT OWNED AND MAINTAINED BY A PUBLIC UTILITY AS WELL AS ANY PRIVATE FIRE SERVICE MAIN AND PIPE AND ITS APPURTENANCES ON PRIVATE PROPERTY: (1) BETWEEN A SOURCE OF WATER AND THE BASE OF THE SYSTEM RISER FOR FOAM-MAKING FIRE PROTECTION RISERS, (2) BETWEEN A SOURCE OF WATER AND INLETS TO FOAM-MAKING SYSTEMS, (3) BETWEEN A SOURCE OF WATER AND THE BASE ELBOW OF PRIVATE HYDRANTS OR MONITOR NOZZLES AND (4) USED AS FIRE PUMP SUCTION AND DISCHARGE PIPING, (5) BEGINNING AT THE INLET SIDE OF THE CHECK VALVE ON A GRAVITY OR PRESSURE TANK.
2. THIS SHALL ALSO APPLY TO COMBINED SERVICE MAINS USED TO CARRY WATER FOR FIRE SERVICE AND OTHER USES, I.E. DOMESTIC.
3. STANDARD TO BE REFERENCED ARE TO BE THE MOST CURRENT AS ADOPTED BY THE FLORIDA FIRE PREVENTION CODE:
NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
NFPA 20, STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
NFPA 11, STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION
NFPA 16, STANDARD ON DELUGE FOAM-WATER SPRINKLER & FOAM-WATER SPRAY SYSTEMS
NFPA 1963 STANDARD FOR FIRE HOSE CONNECTIONS
4. ITEMS ON THE CONSTRUCTION PLANS SHALL INCLUDE BUT NOT LIMITED TO SCALE DRAWINGS AND DETAILS AND TO INCLUDE THE FOLLOWING ITEMS WHEN THEY ARE APPLICABLE TO THE SYSTEM BEING INSTALLED:
 1. NAME OF OWNER AND OCCUPANT.
 2. LOCATION, INCLUDING STREET ADDRESS.
 3. POINT OF COMPASS.
 4. A GRAPHIC REPRESENTATION OF THE SCALE USED ON ALL PLANS.
 5. NAME AND ADDRESS OF CONTRACTOR.
 6. SIZE AND LOCATION OF ALL WATER SUPPLIES.
 7. SIZE AND LOCATION OF ALL PIPING, WHEN POSSIBLE, THE CLASS AND TYPE AND DEPTH OF EXISTING PIPE, THE CLASS AND TYPE OF NEW PIPE TO BE INSTALLED, AND THE DEPTH TO WHICH IT IS TO BE BURIED.
 8. SIZE, TYPE AND LOCATION OF VALVES. INDICATE IF LOCATED IN PIT OR IF OPERATION IS BY POST INDICATOR OR KEY WRENCH THROUGH A CURB BOX.
 9. LOCATION OF ALL CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM, INCLUDING DETAIL OF CONNECTIONS.
 10. SPRINKLER AND STANDPIPE RISERS AND MONITOR NOZZLES TO BE SUPPLIED BY THE SYSTEM.
 11. ALL COMPONENTS MUST HAVE LISTING WITH FIRE PROTECTION PER NFPA 24.
 12. ALL FIRE HYDRANTS INSTALLED IN TAYLOR COUNTY MUST HAVE A SINGLE 4.5 INCH HOSE OUTLET AND TWO 2.5 INCH HOSE OUTLETS, ALL WITH MALE NH STANDARD THREADS, IN ACCORDANCE WITH NFPA 1963.

4. A COPY OF THESE APPROVED ENGINEERING PLANS SHALL ACCOMPANY A REQUIRED FIRE MARSHALL UNDERGROUND PERMIT SUBMITTED BY A CERTIFIED CONTRACTOR. THIS UNDERGROUND PERMIT WILL REQUIRE ADDITIONAL DETAILS AND SPECS AT THE TIME OF SUBMITTAL TO THE FIRE MARSHALL'S OFFICE.
5. CONTRACTORS INSTALLING THE UNDERGROUND PIPING IN ACCORDANCE WITH THE ABOVE REFERENCED STANDARDS FOR A FIRE PROTECTION SYSTEM USING WATER AS THE EXTINGUISHING AGENT BEGINNING AT THE POINT AT WHICH THE PIPING IS USED FOR PROTECTION AND EXITS NO MORE THAN 1 FOOT ABOVE THE FLOOR SHALL BE REQUIRED TO HAVE A CLASS I, II, OR V FIRE PROTECTION CONTRACTORS LICENSE PURSUANT TO CHAPTER 633, FLORIDA STATUTES. GENERAL CONTRACTORS ARE REMINDED THAT THEY ARE RESPONSIBLE FOR VERIFYING THAT THEIR SUBCONTRACTORS HOLD THE REQUIRED LICENSES. CONTRACTORS FOUND TO BE VIOLATING THIS REQUIREMENT MAY BE REPORTED TO THE DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION AND/OR THE STATE FIRE MARSHALL'S REGULATORY LICENSING SECTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE FIRE MARSHALL'S OFFICE PRIOR TO THE START OF SITE CONSTRUCTION IN ACCORDANCE WITH THE ABOVE REFERENCED STANDARDS.
7. NOTE: MINIMUM WORKING PRESSURE OF THE UNDERGROUND PIPING SHALL BE 150 PSI. NFPA 24 REQUIRES SPECIFIC PVC PIPING TO MEET TABLE C-900 WITH MANUFACTURING LISTING FOR FIRE PROTECTION.
8. ALL FIRE LINES MUST BE INSPECTED BY THE FIRE MARSHALL'S OFFICE PRIOR TO BACKFILL. THE CODE REQUIRES ALL JOINTS EXPOSED FOR INSPECTION WITH FILL IN BETWEEN JOINTS. ALL PIPING AND ATTACHED APPURTENANCES SUBJECT TO SYSTEM WORKING SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 90 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR TWO (2) HOURS.

REVISIONS		
NO.	DATE	BY
1	11/20/22	JGD PER CITY OF FERNANDINA BEACH COMMENTS
2	12/22/22	AKK
3	12/22/22	AKK
4	12/22/22	AKK
5	12/22/22	AKK
6	12/22/22	AKK
7	12/22/22	AKK
8	12/22/22	AKK
9	12/22/22	AKK

ENGINEERING PLANS FOR STANDARD MARINE GENERAL NOTES



FOR PERMIT REVIEW



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ISSUE DATE:	10-13-22
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

NOT VALID WITHOUT SEAL

GENERAL NOTES	
1.	THE OWNER SHALL OBTAIN THE FDEP NPDES NO PERMIT.
2.	THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE CLEARING AND EROSION CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE DAILY AND MONTHLY RECORDS REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS.
3.	ALL CONTRACTORS AND SUB-CONTRACTORS MUST SIGN THE SWPPP CERTIFICATION.
4.	PERMIT RECORDS MUST BE POSTED AT CONSTRUCTION SITE. PERMITTEE MUST KEEP RECORDS 3 YEARS FROM DATE OF FINAL STABILIZATION.
5.	CONTRACTOR IS RESPONSIBLE TO FOLLOW ALL REQUIREMENTS IN THE FDEP NPDES NO PERMIT, INCLUDING FILLING OUT ALL DAILY AND MONTHLY RECORDS AS OUTLINED IN APPROVED SWPPP REPORT AND SHALL SEND COPIES OF THESE RECORDS EACH MONTH TO THE OWNER AND ENGINEER OF RECORD.
6.	CONTRACTOR SHALL EXECUTE ALL APPLICABLE SWPPP FORMS IN ACCORDANCE WITH CITY OF PALM COAST STANDARDS.

SEQUENCE OF MAJOR EVENTS	
THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:	
1.	INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2.	INSTALL SILT FENCES AND SYNTHETIC BALES AS REQUIRED.
3.	CLEAR AND GRUB FOR DIVERSION SWALES/DENSES AND SEDIMENT BASIN IF REQUIRED.
4.	CONSTRUCT SEDIMENTATION BASIN IF REQUIRED.
5.	CONTINUE CLEARING AND GRUBBING.
6.	PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED.
7.	STABILIZE DENUDEED AREAS AND STOCKPILES AS SOON AS PRACTICABLE.
8.	COMPLETE GRADING.
9.	WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DENSES AND RESEED/SOD AS REQUIRED.

TIMING OF CONTROLS / MEASURES
AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND SYNTHETIC BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL, IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE TEMPORARILY OR PERMANENTLY SUSPENDED. STABILIZATION MEASURES WILL BE CEASED PERMANENTLY IN AN AREA THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE CLEARING AND EROSION CONTROL PLANS.

CONTROLS
IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE CLEARING AND EROSION CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE CLEARING AND EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS FOLLOWS:

1. SYNTHETIC BALE BARRIER: SYNTHETIC BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
 - A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
 - B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
 - C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
 - A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
 - B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. REFER TO THE DETAILS FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.
3. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF SITE TO LIMIT THE AREA OF DISTURBANCE.
4. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY. ANY EXCAVATED MATERIAL MUST REMAIN ON THE PROJECT SITE.
5. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES, UNLESS APPROVED BY THE ENGINEER OF RECORD.
6. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT WHEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
7. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 7 DAYS SHALL BE SEEDDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING, OR SOD.
8. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CONSTRUCTION ESTABLISHED IN PARAGRAPH 6 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
9. TEMPORARY GRASSING: THE SEEDED OR SEEDEN AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDRO MULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX AND AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
- TEMPORARY REGRESSING: IF AFTER 7 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER.
- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
11. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
12. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDDED AND MULCHED OR SOD INSTALLED.

1. TEMPORARY DIVERSION DIKE/TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY AND IT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS.
2. TEMPORARY SEDIMENT TRAP/ A SEDIMENT TRAP SHALL BE INSTALLED IN A DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. REFER TO DETAILS.
3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD BE OBSTRUCTED BY DEBRIS. THE PROTECTION SHALL BE CONSTRUCTED WITH STEEL OR WOOD FENCES AND SYNTHETIC BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DURING INITIAL FINAL STABILIZATION PER SITE. THE 3,600 CUBIC FEET OF STORAGE PER ACRE DURING INITIAL FINAL STABILIZATION FLOWS FROM OFFSITE AREA AND FLOWS FROM THE SITE. THE 3,600 CUBIC FEET OF STORAGE PER ACRE DURING INITIAL FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STABILIZATION. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

WASTE DISPOSAL.	
WASTE DISPOSAL:	
WASTE MATERIALS:	
ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.	
HAZARDOUS WASTE:	
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.	

WASTE DISPOSAL	
WASTE DISPOSAL:	
SANITARY WASTE:	
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.	
OFFSITE VEHICLE TRACKING:	
A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEP DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPULIN.	

MAINTENANCE / INSPECTION PROCEDURES	
EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE PRACTICES: THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.	

- NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDE AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER OF RECORD.
- ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
- ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
- BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
- SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
- DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BRANCHES PROMPTLY REPAIRED.
- TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.

- * THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- * PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- * WATER FROM WATER LINE FLUSHING.
- * PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
- * UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE. ALL SUCH DISCHARGES SHALL MEET STATE WATER QUALITY STANDARDS AND ALL NECESSARY PERMITS SHALL BE OBTAINED.

POLLUTION PREVENTION PLAN CERTIFICATION	
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION. IT IS DESIGNED IN ACCORDANCE WITH AN EXISTING SYSTEM AND QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION OBTAINED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE.	
SIGNED: _____	DATE: _____
MATTHEW H. LAHTI, P.E. PROFESSIONAL ENGINEER GULFSTREAM DESIGN GROUP, LLC	

MATTHEW H. LAHTI, P.E.
PROFESSIONAL ENGINEER
GULFSTREAM DESIGN GROUP, LLC

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM LARGE AND SMALL PROJECTS AND FOR THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

*LIST THE 24 HOUR CONTACT NUMBER AND PERSON(S) BELOW

SIGNATURE/DATE	COMPANY NAME/ADDRESS	RESPONSIBILITY

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES:

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

- * AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- * ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- * PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- * SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- * WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- * MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- * THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- * PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- * ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED. THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- * IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONLY AT DISCHARGE POINT PROVIDED. NO OFFSITE DISCHARGE WILL BE PERMITTED.

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS INCLUDE BUT ARE NOT LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (I.E. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

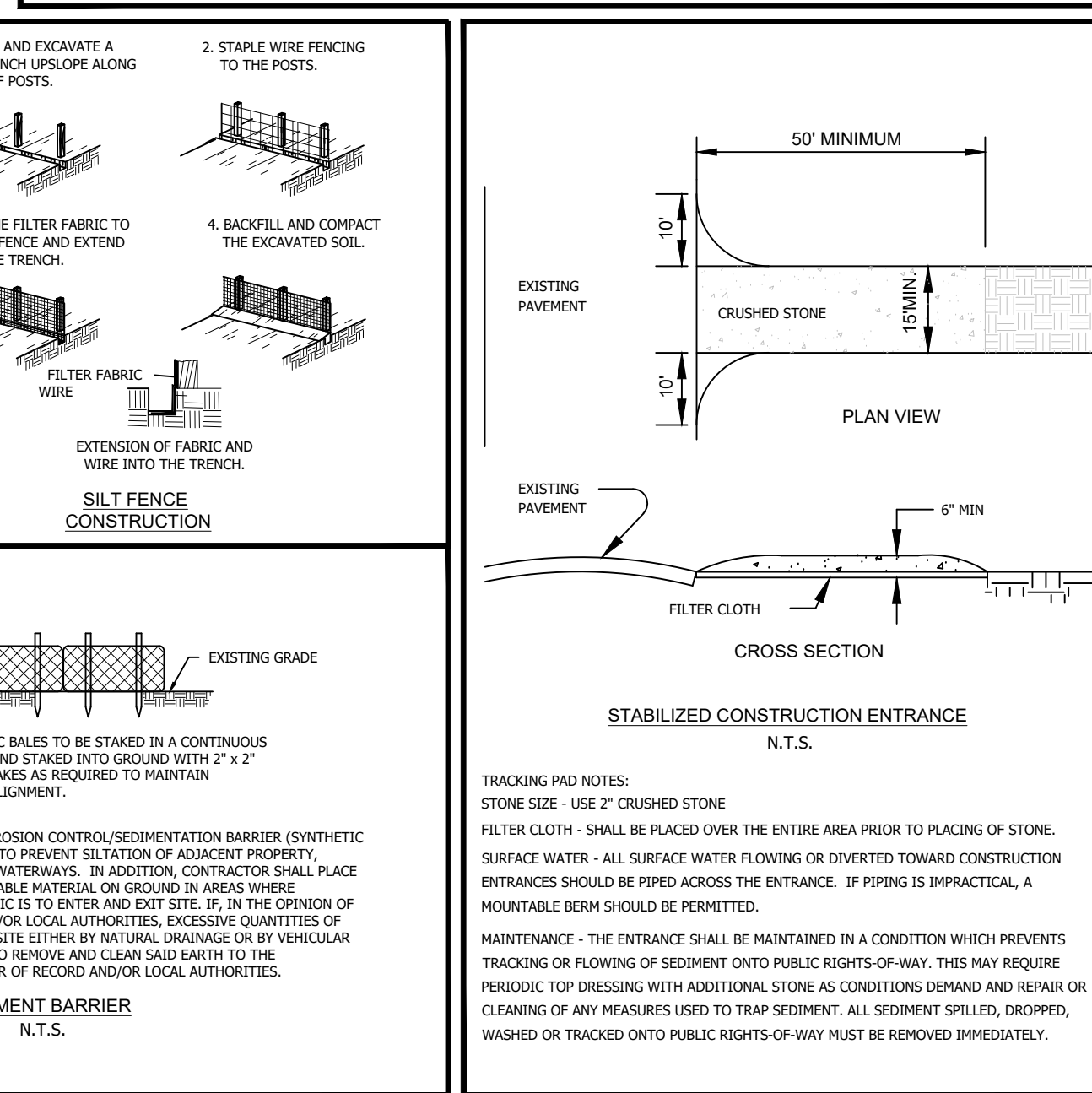
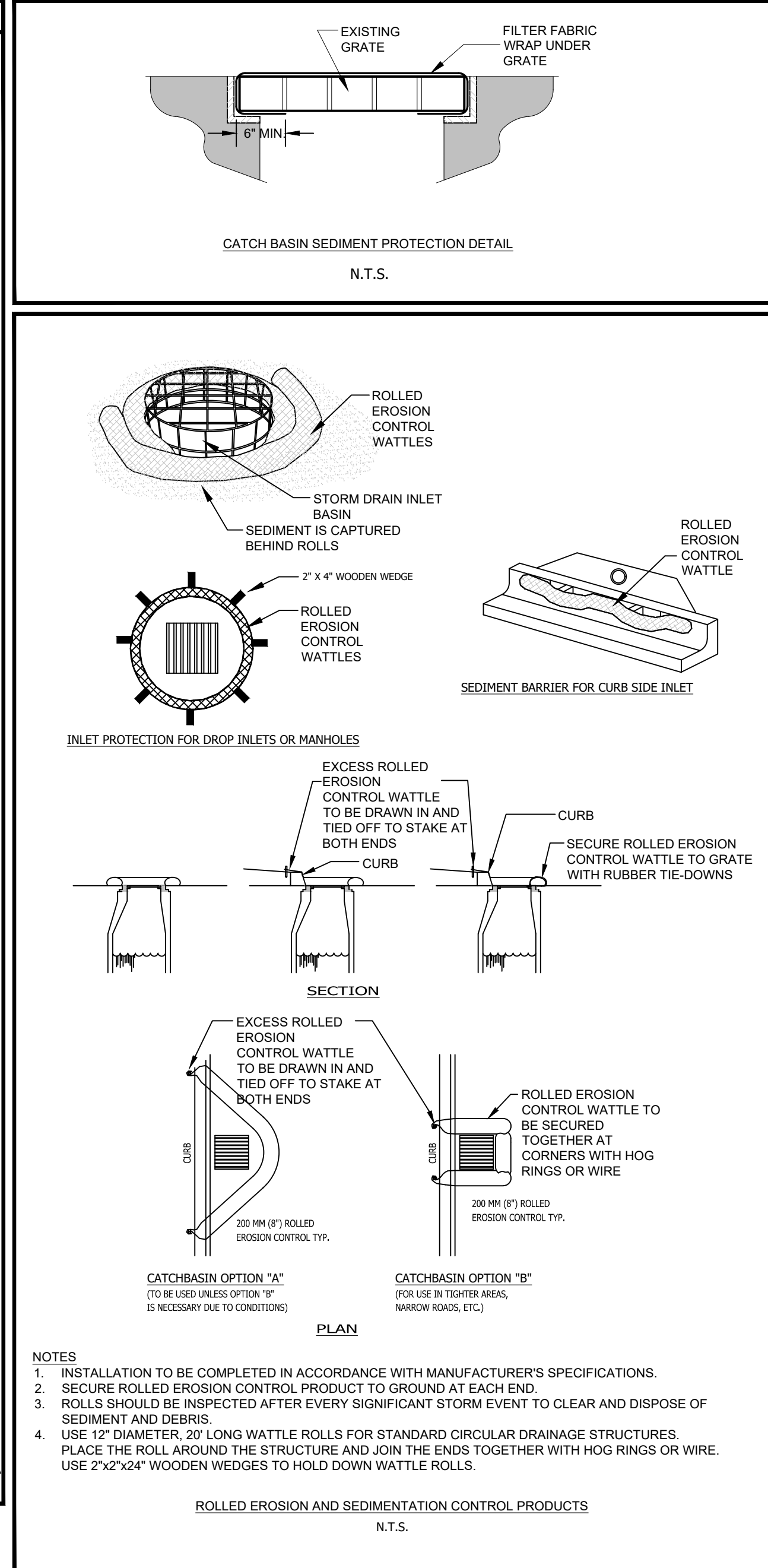
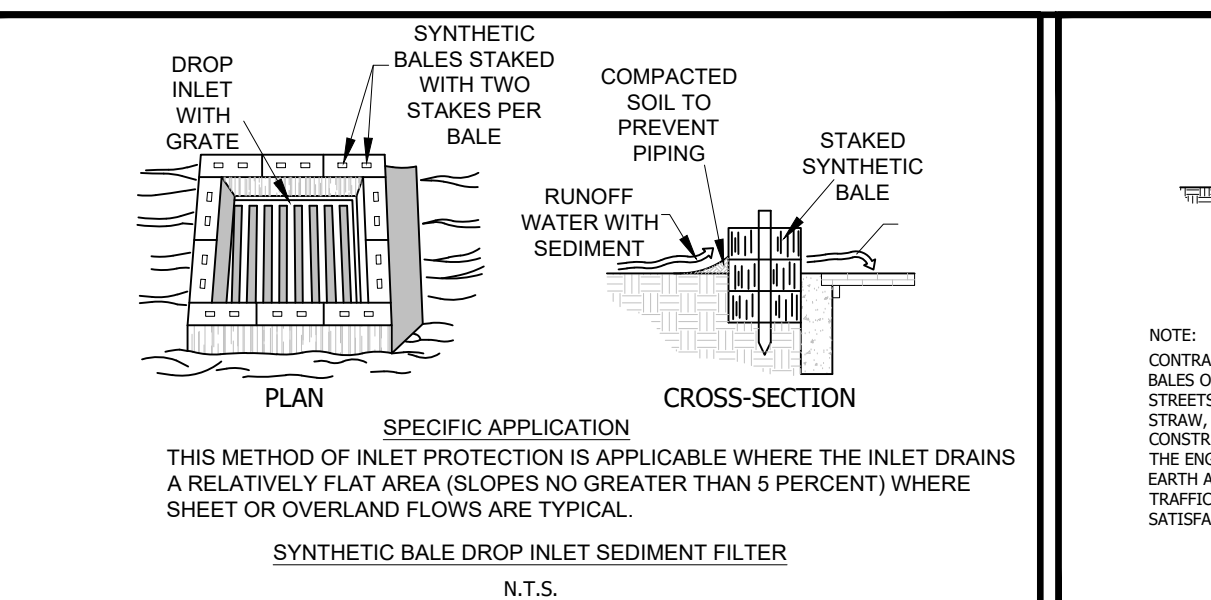
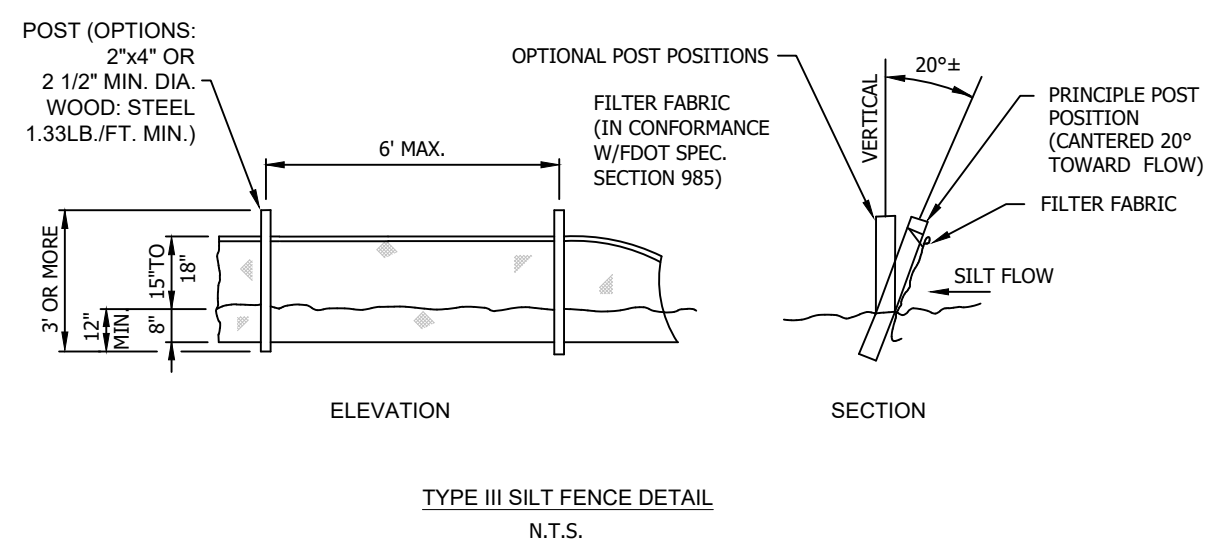
ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.



REVISIONS		
NO.	DATE	DESCRIPTION
1	11/30/22	JGD PER CITY OF FERNANDINA BEACH COMMENTS
2	1/2/23	1/2/23
3	1/2/23	1/2/23
4	1/2/23	1/2/23
5	1/2/23	1/2/23
6	1/2/23	1/2/23
7	1/2/23	1/2/23
8	1/2/23	1/2/23
9	1/2/23	1/2/23

ENGINEERING PLANS FOR STANDARD MARINE STORMWATER POLLUTION PREVENTION PLAN NASSAU COUNTY, FLORIDA



Know what's **below**.
Call before you dig

FOR PERMIT REVIEW



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ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO:	22-084
ISSUE DATE:	10-13-22
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

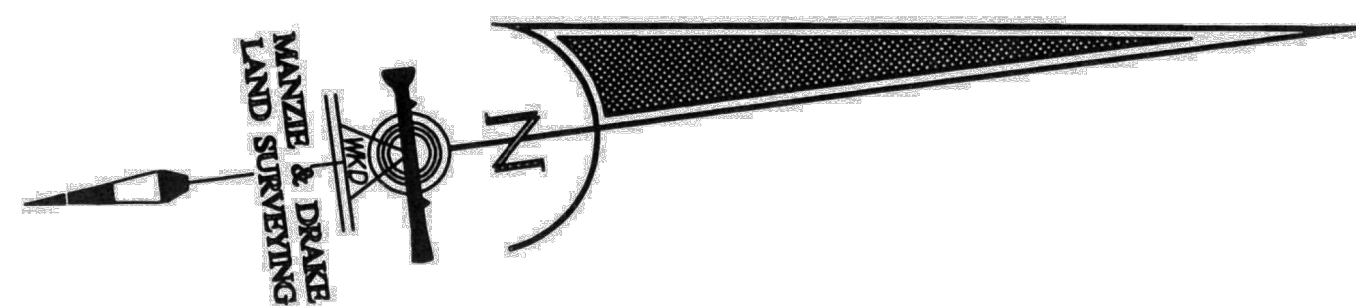
NOT VALID WITHOUT SEAL

MAP OF BOUNDARY SURVEY

ALL OF THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, LYING AND BEING IN THE CITY OF FERNANDINA BEACH (FORMERLY NAMED FERNANDINA), NASSAU COUNTY, FLORIDA, AS SHOWN ON THE OFFICIAL PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED, REVISED AND REISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901) KNOWN AND DESCRIBED AS FOLLOWS:

LOTS 29 THROUGH 33, BLOCK 2, CITY OF FERNANDINA BEACH, NASSAU COUNTY, FLORIDA.

CERTIFIED TO:
IP HOLDINGS GROUP, LLC
WOOD & SMITH, P.A.
FIRST AMERICAN TITLE INSURANCE COMPANY

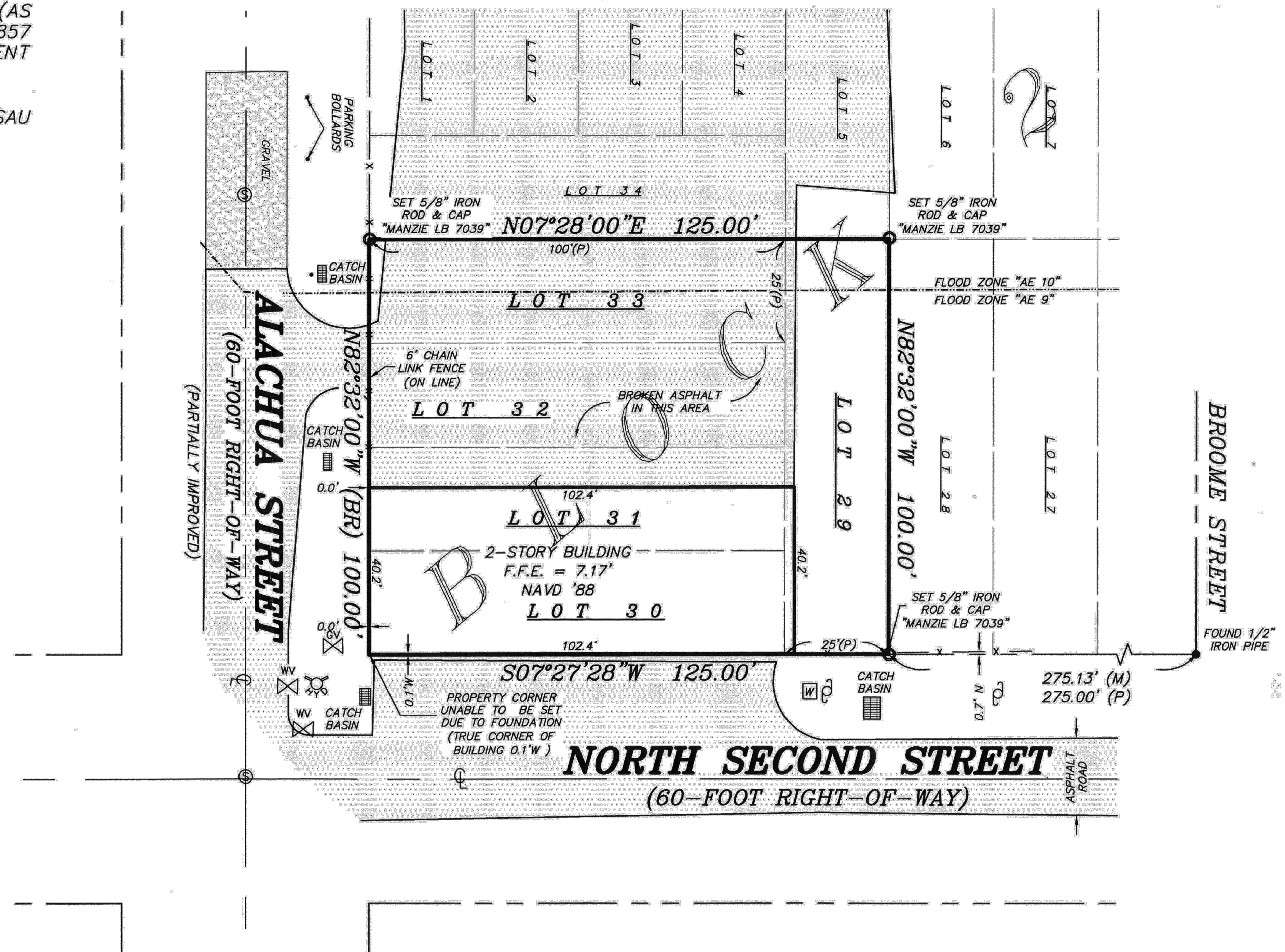


LEGEND

- ⊙ = CENTERLINE
- x-x- = CHAIN LINK FENCE
- F.F.E. = FINISHED FLOOR ELEVATION
- ⊗ = FIRE HYDRANT
- ⊙ = LIGHT POLE
- (M) = MEASURED
- (P) = PLAT
- ⊙ = SEWER MANHOLE
- ⊙ = TELEPHONE PEDESTAL
- ⊙ = WATER METER
- ⊙ = WOOD POWER POLE
- ⊙ = WATER VALVE
- ⊙ = GATE VALVE

SURVEY NOTES:

- 1) The "Legal Description" hereon is in accord with the description provided by the client
- 2) Underground Improvements were not located or shown.
- 3) Lands shown hereon were not abstracted by this office for easements, rights-of-way, ownership or other instruments of record.
- 4) Bearings shown hereon are based on an assumed bearing of N082°32'00"W for the northerly right-of-way line of Alachua Street. The bearing reference line is indicated as thus (BR).
- 5) The property shown hereon lies within flood zone "AE 9 & AE 10" as per F.E.M.A. Flood Insurance Rate Map, Panel "12089C 0237 G", Dated "08/02/2017". Flood Zone information listed above and shown on this survey is provided as a courtesy and is approximate at best. All data should be verified by Nassau County Building Department for accuracy. We assume no liability for its accuracy. Flood Zone information is not covered by the certification hereon and is not required to be shown per Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.



THE INFORMATION SHOWN HEREON MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

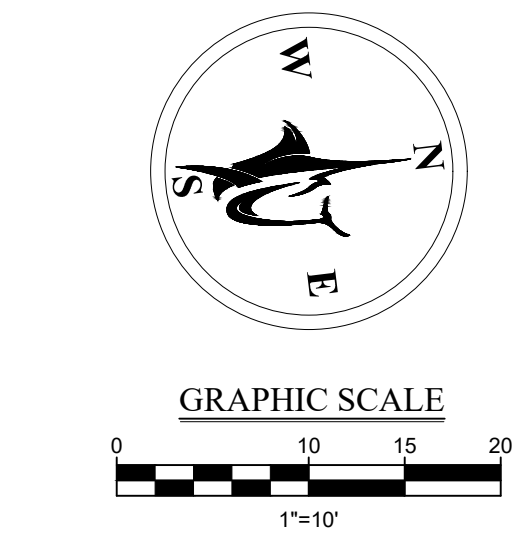
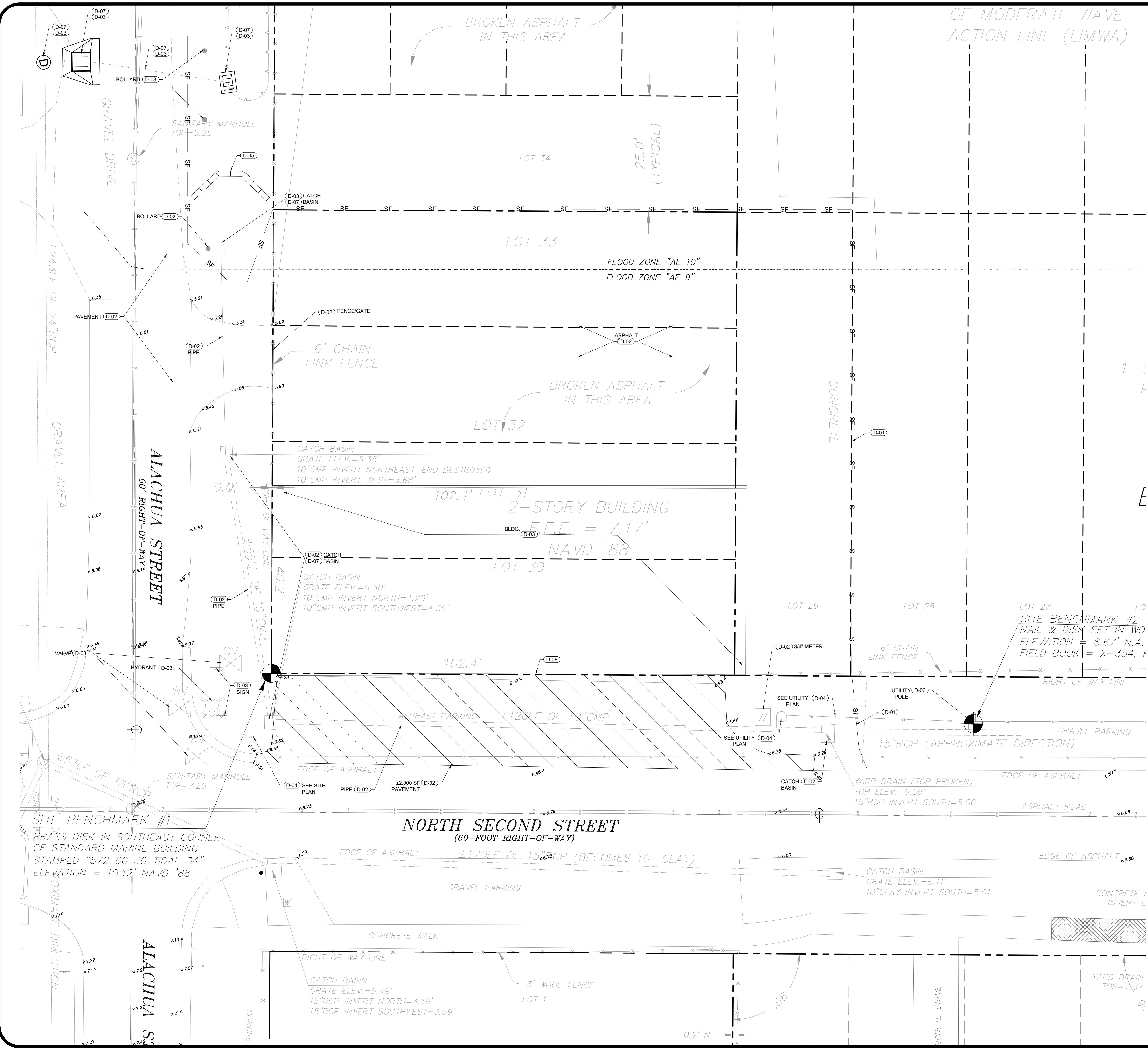
MICHAEL A. MANZIE, P.L.S. 4069
6/2/21

MANZIE & DRAKE LAND SURVEYING

117 South Ninth Street, Fernandina Beach, FL 32034
(904) 491-5700 www.ManzieAndDrake.com
Certificate of Authorization Number "LB 7039"

"OUR SIGHTS ARE ON THE FUTURE,
SET YOUR SITES ON US."

SCALE: 1"=30' JOB NO: 18929-29-33 DATE: 05/18/2021 CADD: LP
F.B. NO: X-328 PAGE NO: 67 FIELD CREW: JM FILE NO: A-5393



LEGEND

---	EXISTING PROPERTY LINE
---	EXISTING R/W LINE
SF	SILT FENCE
---	EXISTING CONTOUR
---	LOT LINES
[Symbol]	SYNTHETIC BALE BARRIER
[Symbol]	PAVEMENT TO BE REMOVED

DEMOLITION KEY NOTES: D-XX

D-01 TYPE III SILT FENCE (SEE SHEET 3 SWPPP FOR DETAILS)
D-02 EXISTING TO BE REMOVED
D-03 EXISTING TO REMAIN
D-04 EXISTING TO BE RELOCATED
D-05 SYNTHETIC BALE BARRIER (SEE SHEET 3 SWPPP FOR DETAILS)
D-07 SEE CITY OF FERNANDINA BEACH DESIGN PLANS BY CPH, INC. DATED 03-06-21
D-08 SAWCUT AND REMOVE PAVEMENT AT BUILDING EDGE.
D-09 CONTRACTOR TO VERIFY PIPE SIZE, TYPE AND ELEVATION AND EXTEND TO PROPOSED DRAINAGE STRUCTURE OR REMOVE AND REPLACE, AS NEEDED.

- EROSION CONTROL NOTES
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, FILTER FABRIC, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
 - CONTRACTOR SHALL STAKE AND VERIFY RIGHT-OF-WAY LINE AND AVOID PRIVATE PROPERTY CONFLICT WITH EXCAVATED DRILL PIT.
 - PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE COUNTY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, THE COUNTY RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED THROUGHOUT PROJECT CONSTRUCTION.
 - IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
 - ALL EXISTING CATCH BASINS ADJACENT TO THE SITE SHALL BE COVERED WITH FILTER FABRIC TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM. THE FILTER FABRIC SHALL BE INSPECTED AND MAINTAINED DAILY THROUGHOUT THE DURATION OF CONSTRUCTION.

- DEMOLITION AND CLEARING NOTES:
- ALL EXISTING WATER AND SEWER UTILITY SERVICES THAT WILL NO LONGER BE UTILIZED MUST BE PROPERLY ABANDONED BY CONTRACTOR BY CUTTING, CAPPING, AND REPAIRING SERVICE CONNECTIONS AT THE UTILITY MAIN LOCATIONS BY METHODS DIRECTED BY THE CITY INSPECTOR AND UNDER CITY INSPECTOR'S OBSERVATION. EXCAVATION MAY BE REQUIRED IN ORDER TO DETERMINE PROPER ABANDONMENT METHODS.
 - ALL EXISTING WATER AND SEWER UTILITY SERVICES INTENDED TO BE REUSED MUST BE INVESTIGATED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS AND/OR REPLACEMENT TO RENEW EXISTING POTABLE WATER SERVICES, AND SEWER SERVICE LATERALS. ALL UTILITIES MUST BE RETURNED TO GOOD WORKING ORDER. ALL INVESTIGATIVE AND REPAIR/REPLACEMENT METHODS WILL BE AS DIRECTED BY THE CITY INSPECTOR AND UNDER CITY INSPECTOR'S OBSERVATION. EXCAVATION AND OTHER PROCEDURES SUCH AS CLOSED-CIRCUIT TV MAY BE REQUIRED IN ORDER TO DETERMINE CONDITION.

ENGINEERING PLANS FOR STANDARD MARINE DEMOLITION PLAN



FOR PERMIT REVIEW

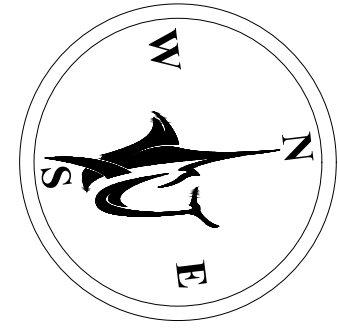


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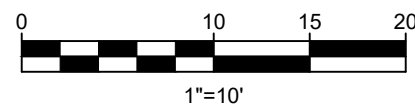
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GRAPHIC SCALE



LEGEND

- EXISTING PROPERTY LINE
- EXISTING R/W LINE
- EXISTING LOT LINE
- PROPOSED CURB & GUTTER
- PROPOSED BUILDING OUTLINE
- PROPOSED PEA GRAVEL
- PROPOSED PERVIOUS CONCRETE PAVERS
- PROPOSED PERVIOUS ARTIFICIAL TURF
- PROPOSED ASPHALT (OFF-SITE)
- PROPOSED CONCRETE
- ADA STRIPPING LANDING ZONE

SITE DETAILS (S-xx)

- SD-1 TYPE D CURB
- SD-7 TYPICAL SIDEWALK DETAIL
- SD-12 TYPICAL PAVEMENT SECTION
- SD-14 PARKING PAINT STRIPING
- SD-18 DETECTABLE WARNING DETAIL
- SD-20 WHEELCHAIR RAMP IN SIDEWALK
- SD-21 ACCESSIBLE PARKING SIGN
- SD-39 PATIO BRICK PAVEMENT SECTION

SITE KEY NOTES: (S-xx)

- S-01 PROPERTY LINE
- S-02 CONNECT TO SIDEWALK
- S-03 PERGOLA (BY OTHERS)
- S-04 FENCE/GATE (BY OTHERS)
- S-05 RELOCATE STOP SIGN
- S-06 PROPOSED WATER FEATURES (BY OTHERS)

GENERAL SITE NOTES:

- ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS OF THE ST. JOHNS COUNTY LAND DEVELOPMENT CODE.
- ALL DIMENSIONS ARE SHOWN TO FACE OF CURB UNLESS OTHERWISE NOTED.
- BUILDING DIMENSIONS FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS BY DR. HORTON, FOR EXACT DIMENSIONS. CIVIL PLANS REFERENCE EXTERIOR WALL DIMENSIONS. CONTRACTOR TO VERIFY FOUNDATION AND ROOF OVERHANG.
- ALL HANDICAP RAMPS SHALL MEET CURRENT ADA REQUIREMENTS AND INCLUDE DETECTABLE WARNING PER ST. JOHNS COUNTY REQUIREMENTS.
- CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC, IMMEDIATELY IF CONDITIONS DIFFER IN THE FIELD.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EXISTING EASEMENTS BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER, ANY EXTRA WORK REQUESTED BY ANY REGULATORY AGENCY THAT IS NOT SHOWN ON THE PLANS. THIS EXTRA WORK MUST BE APPROVED BY THE ENGINEER AND THE OWNER BEFORE THE CONTRACTOR PROCEEDS WITH THE EXTRA WORK.
- ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA BUILDING CODE - ACCESSIBILITY AND THE FAIR HOUSING ACT, WHEN APPLICABLE.

SITE DATA TABLE

GROSS PROPERTY AREA:	12,500.00 SF	0.29 AC
NET DEVELOPABLE PROJECT AREA:	12,500.00 SF	0.29 AC
EXISTING BUILDING FOOTPRINT AREA:	4,113 SF	0.09 AC
PROPOSED BUILDING FOOTPRINT AREA:	6,869 SF	0.16 AC
EXISTING PAVEMENT & SIDEWALK AREA:	6,074 SF	0.14 AC
PROPOSED PAVEMENT & SIDEWALK AREA:	1,299 SF	0.03 AC
PROPOSED PAVERS AREA:	1,218 SF	0.03 AC
PROPOSED GRAVEL AREA:	1,091.00 SF	0.03 AC
PROPOSED TURF AREA:	1,428.00 SF	0.03 AC
EXISTING TOTAL IMPERVIOUS AREA:	10,187.44 SF	0.23 AC
EXISTING TOTAL PERVIOUS AREA:	2,312.56 SF	0.05 AC
PROPOSED TOTAL IMPERVIOUS AREA:	8,168.00 SF	0.19 AC
PROPOSED TOTAL PERVIOUS AREA:	4,332.00 SF	0.10 AC
IMPERVIOUS SURFACE AREA RATIO:		81.50 %
FLOOR AREA RATIO:		32.90 %
PROPERTY ID NO:	00-00-31-1800-0002-0290	
ZONING:	C-3	
FLUM:	CENTRAL BUSINESS DISTRICT	
FEMA FIRM PANEL NUMBER	12089C 0237G	
BUILDING HEIGHT:		36'-0"
OCCUPANCY CLASS:	1ST & 3RD FLOOR - ASSEMBLY (A2)	2ND FLOOR - RESIDENTIAL (R2)
TYPE OF CONSTRUCTION:		V-A, FULLY SPRINKLERED

YIELD ANALYSIS PLAN
FOR
STANDARD MARINE
SITE PLAN

NASSAU COUNTY, FLORIDA



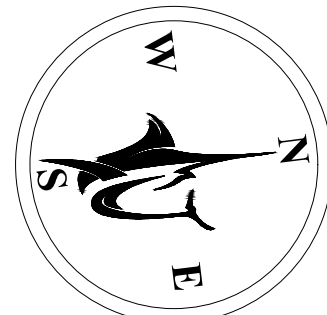
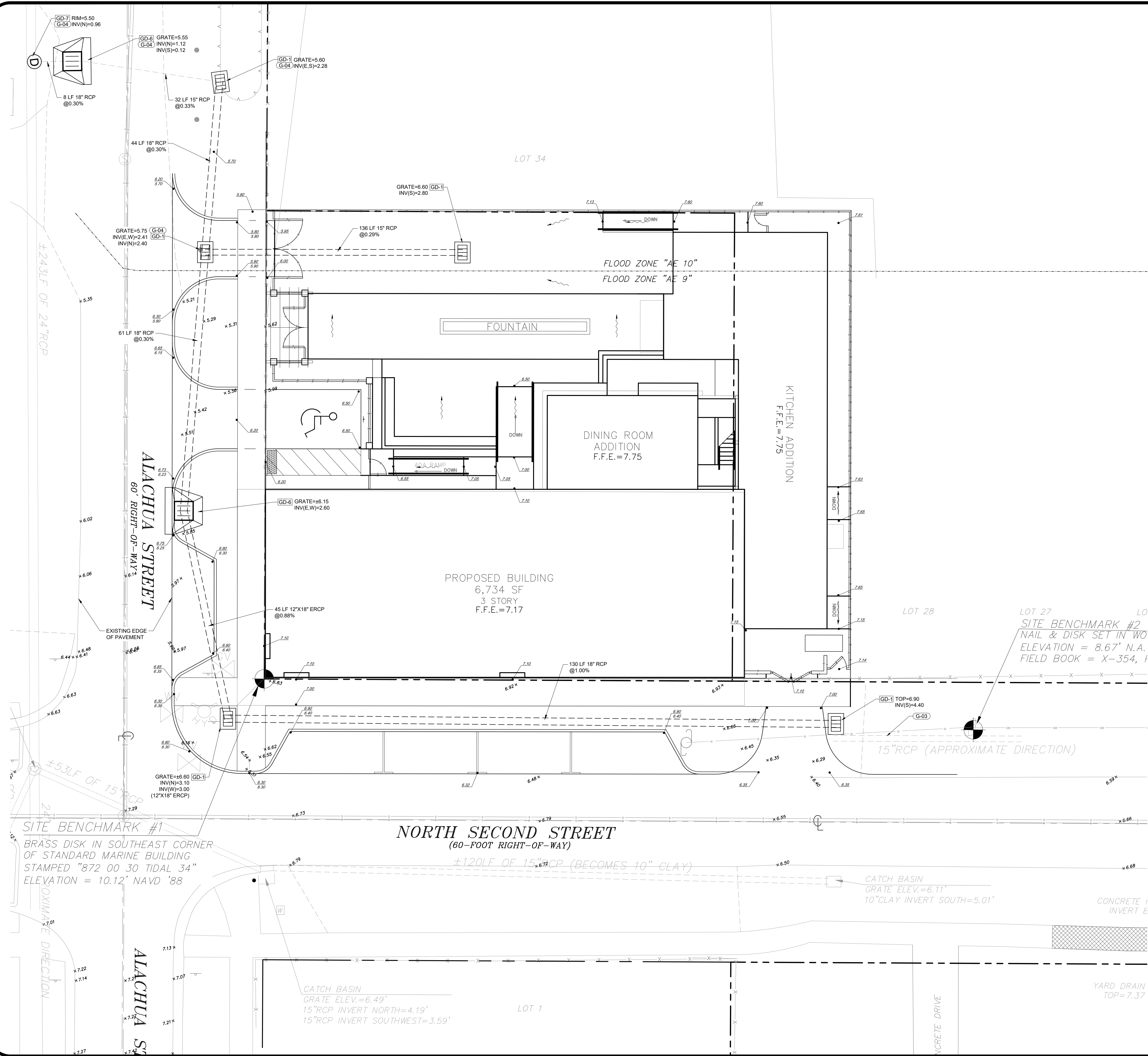
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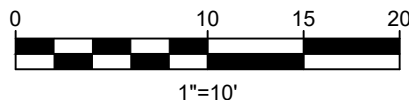
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GRAPHIC SCALE



LEGEND

- EXISTING PROPERTY LINE
- EXISTING R/W LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED BUILDING

- PROPOSED GRADE ELEVATION
- EXISTING GRADE ELEVATION
- FLOW ARROW
- CURB INLET
- TYPE C INLET
- STORM MANHOLE

GRADING & DRAINAGE DETAILS: (GD-XX)

- GD-1 TYPE 10" INLET
- GD-6 FDOT TYPE 9 CURB INLET
- GD-7 STORM DRAIN MANHOLE

GRADING & DRAINAGE KEY NOTES: (G-XX)

- G-01 TIE TO EXISTING ELEVATION
- G-03 CONTRACTOR TO VERIFY PIPE TYPE, SIZE AND ELEVATION AND EXTEND TO PROPOSED DRAINAGE STRUCTURE
- G-04 EXISTING STRUCTURES PER CITY OF FERNANDINA BEACH DESIGN PLANS BY CPH, INC. DATED 03-06-21.
- G-05 PROPORTIONAL SHARE AGREEMENT TO BE APPROVED BY CITY COMMISSION.

PAVING AND GRADING NOTES:

- ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
- FIVE FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
- CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC IMMEDIATELY IF FIELD CONDITIONS DIFFER.

DRAINAGE NOTES

- PIPE LENGTHS SHOWN REPRESENT DISTANCES BETWEEN CENTERLINE OF DRAINAGE STRUCTURES AND TO END OF MITERED END SECTIONS.
- ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
- FIVE FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
- THE STORM DRAINAGE SYSTEM SHALL BE FREE OF DIRT, SAND AND DEBRIS PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC IMMEDIATELY IF FIELD CONDITIONS DIFFER.

ENGINEERING PLANS
FOR
STANDARD MARINE
PAVING, GRADING & DRAINAGE PLAN

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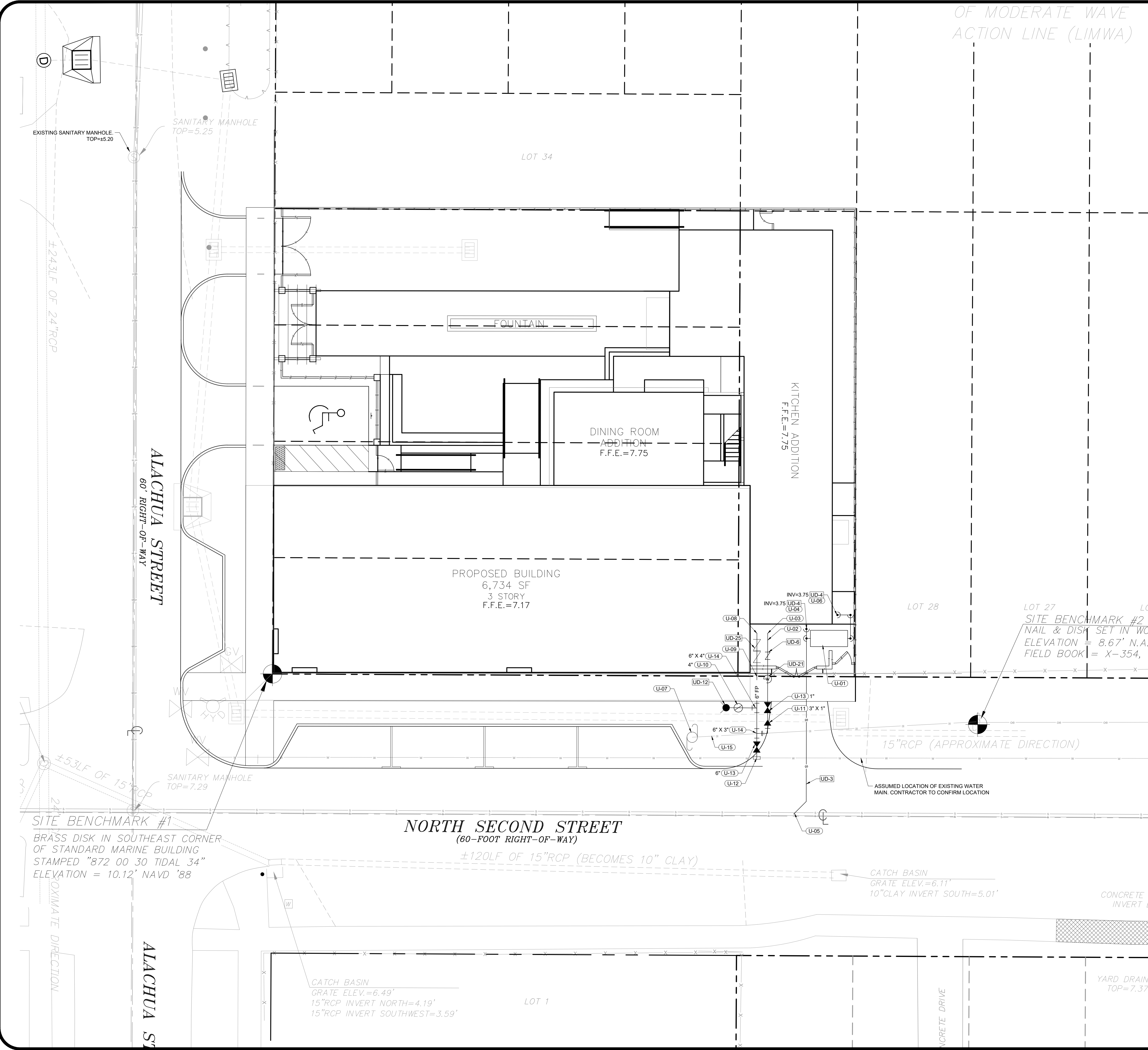
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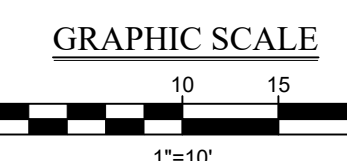
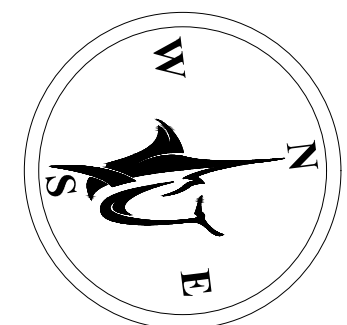
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OF MODERATE WAVE
ACTION LINE (LIMWA)



LEGEND

- EXISTING PROPERTY LINE
- STORM PIPE
- S --- SANITARY SEWER LATERAL (6" PVC SDR-26)
- W --- WATER SERVICE (1" POLYUBE)
- 6" PP --- 6" PP --- 6" PP --- WATER PROTECTION SERVICE (6" PVC DR-18)
- OVERHEAD ELECTRIC
- 6" SEWER SERVICE WITH CLEANOUT
- EXISTING FIRE HYDRANT
- Z Z 4" DOUBLE CHECK DETECTOR ASSEMBLY
- Z 1" WATER SERVICE WITH RPZ BFP
- FIRE DEPARTMENT CONNECTION
- (W) 1" WATER SERVICE W/METER

UTILITY DETAILS

- UD-3 SANITARY SEWER SERVICE LATERAL
- UD-4 SANITARY SEWER CLEANOUT
- UD-6 REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
- UD-12 FIRE DEPARTMENT CONNECTION DETAIL
- UD-21 WATER METER
- UD-25 DOUBLE CHECK DETECTOR

UTILITY KEY NOTES:

- U-01 GREASE TRAP (BY OTHERS)
- U-02 1" WATER SERVICE
- U-03 POTABLE WATER POINT OF CONNECTION AT BUILDING (SEE ARCHITECTURAL/MEP PLANS FOR CONTINUATION)
- U-04 SANITARY POINT OF CONNECTION AT BUILDING (SEE ARCHITECTURAL/MEP PLANS FOR CONTINUATION)
- U-05 CONNECT TO EXISTING GRAVITY SEWER MAIN IN NORTH SECOND STREET (CONTRACTOR TO CONFIRM LOCATION AND ELEVATION OF EXISTING SANITARY MAIN)
- U-06 GREASE TRAP CONNECTION AT BUILDING (SEE ARCHITECTURAL/MEP PLANS FOR CONTINUATION)
- U-07 APPROXIMATE RELOCATION OF POWER POLE (CONFIRM WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION)
- U-08 FIRE PROTECTION SERVICE CONNECTION TO BUILDING (SEE ARCHITECTURAL/MEP PLANS FOR CONTINUATION)
- U-09 6" FIRE PROTECTION (DR-18 PVC)
- U-10 CHECK VALVE
- U-11 REDUCER (SEE SIZE AT CALLOUT)
- U-12 CONNECT TO EXISTING WATER MAIN WITH 6" TAPPING SADDLE (CONTRACTOR TO CONFIRM LOCATION AND SIZE OF EXISTING WATER MAIN)
- U-13 GATE VALVE (SEE SIZE AT CALLOUT)
- U-14 M.J. TEE (SEE SIZE AT CALLOUT)
- U-15 CONTRACTOR TO COORDINATE WITH UTILITY COMPANY

GENERAL UTILITY NOTES:

- CONTRACTOR SHALL REFER TO GENERAL NOTES SHEET #2 IN THESE PLANS FOR ADDITIONAL SPECIFIC INFORMATION NOT SHOWN ON INDIVIDUAL PLAN SHEETS.
- ALL EXISTING UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE DATA AND MAY NOT HAVE BEEN SURVEYED OR FIELD LOCATED. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES VIA POTHOLING AND LOCATES PRIOR TO CONSTRUCTION.
- PLANS SUBJECT TO CHANGE BASED ON REVIEW BY REGULATORY AGENCIES.
- PIPE LENGTHS HEREIN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ANY UTILITY LOCATIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF FIELD CONDITIONS VARY GREATLY FROM THESE PLANS.
- THE CONTRACTOR SHALL FIELD STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. THE CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC IMMEDIATELY IF CONDITIONS DIFFER IN THE FIELD.
- ALL FIRE HYDRANTS SHALL OPEN COUNTER CLOCKWISE. LARGEST HOSE OUTLET NOT LESS THAN 18" ABOVE FINAL GRADE AND FACING ROADWAY.
- APPROVAL OF THESE PLANS DO NOT INCLUDE APPROVAL FOR PRIVATE UNDERGROUND WATER MAIN AND FIRE HYDRANTS. PRIVATE FIRE HYDRANTS SHALL BE RED AND PUBLIC FIRE HYDRANTS SHALL BE YELLOW.
- THE CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
- ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
- SUBMITTAL OF AS-BUILT SITE SURVEY, INCLUDING BENCHMARKS, IS REQUIRED PRIOR TO SCHEDULING A FINAL INSPECTION OF THE BUILDING BY THE BUILDING DEPARTMENT AND THE FIRE MARSHAL.
- CITY OF FERNANDINA BEACH DEVELOPMENT REVIEW INSPECTOR SHALL BE CONTACTED TWENTY-FOUR (24) HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND FIVE (5) DAYS PRIOR TO FINAL INSPECTION.
- WHERE PROPOSED UTILITIES CONFLICT OR CROSS, A MINIMUM 16" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE CLOSEST POINTS OF THE PROPOSED UTILITIES AND CROSSING POTABLE WATER SHALL BE KEPT ABOVE FORCEMAIN OR SANITARY SEWER.
- GATE VALVES SHALL NOT BE SPACED MORE THAN 500 FEET APART.

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**ENGINEERING PLANS
FOR
STANDARD MARINE
UTILITY PLAN**

NASSAU COUNTY, FLORIDA



FOR PERMIT REVIEW



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ENGINEERING PLANS
FOR
STANDARD MARINE
CONSTRUCTION DETAILS

NASSAU COUNTY, FLORIDA



Know what's below.
Call before you dig.

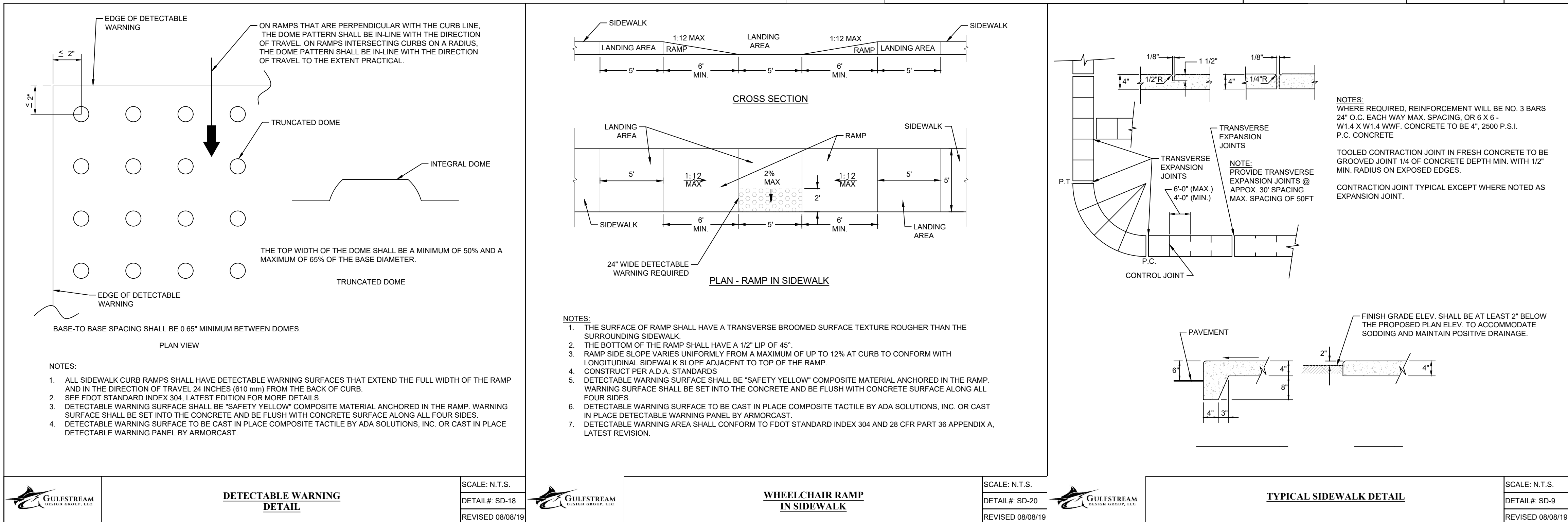
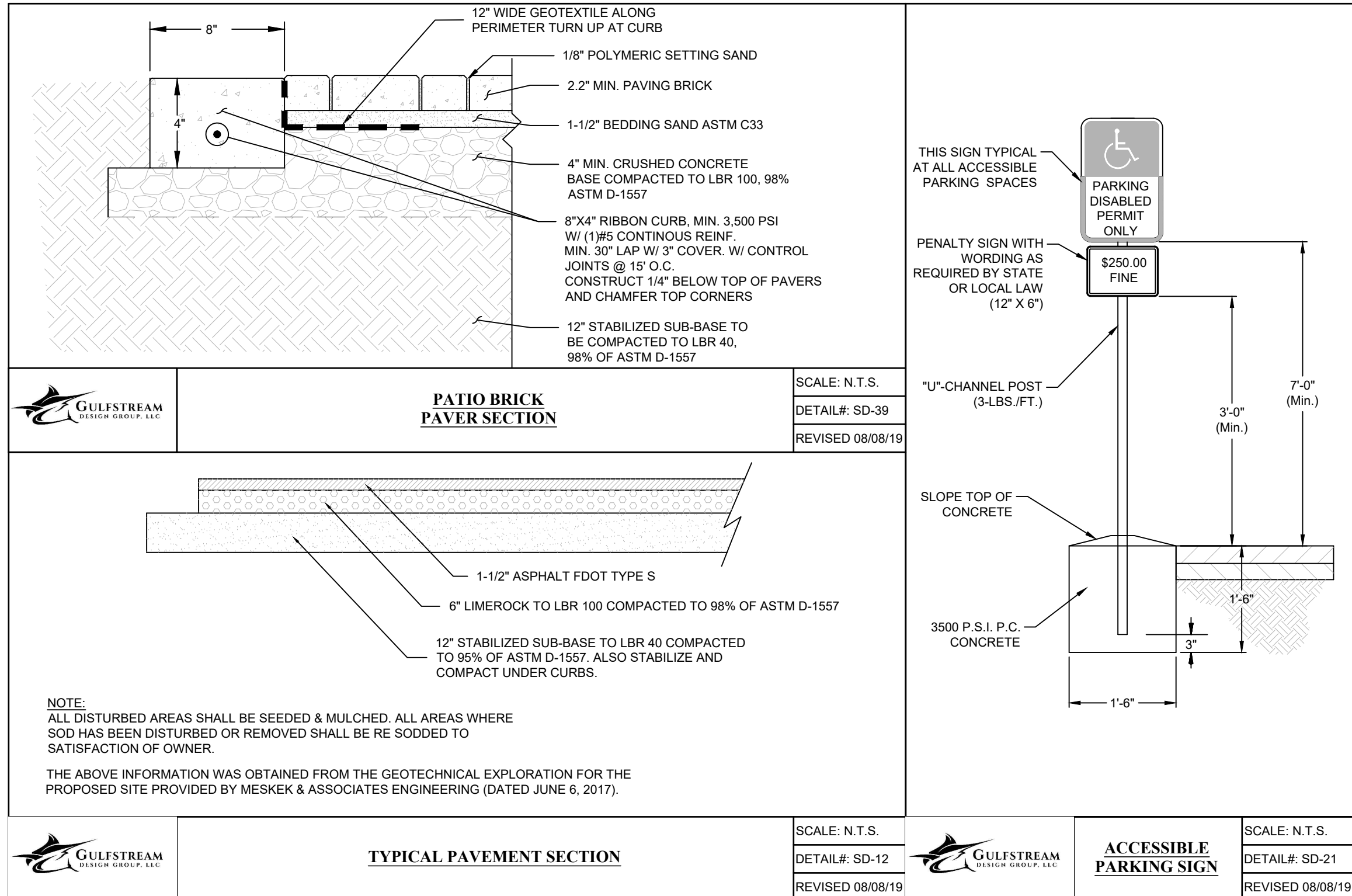
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1. All stormwater drainage facilities within Public Right-of-Way and paved areas, including Nassau County Right-of-Way, turn lanes, residential roadways, drive aisles for multi-family developments, and major drive aisles for commercial developments shall be laser profiled per FDOT Section 430.
2. A builder cannot modify the County's storm water management system including the pipes, inlets, area drains, ditches and related elements typically within the street or within a drainage easement without the prior written approval of the County Engineer or designee.
3. Drainage easements and ditches should remain free of stockpiled soil, sediment, mud, construction materials/waste, etc. at all times. Positive stormwater flow must be maintained throughout construction.
4. The contractor shall temporarily or permanently stabilize bare soil areas and soil stockpiles when the area is inactive for fourteen days or more or has reached finished grade.
5. Per Ordinance 99-17 Section 11.11.5.4, all gravity flow pipe installations shall have a soil tight joint performance unless specific site factors warrant watertight joint performance.
6. Per Ordinance 99-17 Section 10.6.5.1, immediately install additional Erosion Protection Sediment Control measures if sediment is leaving your site. Failure to contain sediment to your site may result in delayed inspections, notices of violation, citations, fines, penalties, and/or stop work orders.
7. Per 99-17 Section 10.1.2.a-e, stormwater management for a project shall not have adverse effects on adjacent properties, downstream structures, or rights of other landowners.

1. Per Nassau County Roadway and Drainage Standards, Ordinance 99-17 Section 12.2 and 12.4, a construction bond and 26-month maintenance bond will be required for all work within Nassau County Right-of-Way.
2. A pre-pave meeting is required prior to any paving operations within Nassau County ROW, residential subdivisions, or multi-family developments.
3. Approved mix designs shall be provided to Nassau County Construction Inspector 48 hours prior to pre-pave meeting or placement of concrete.

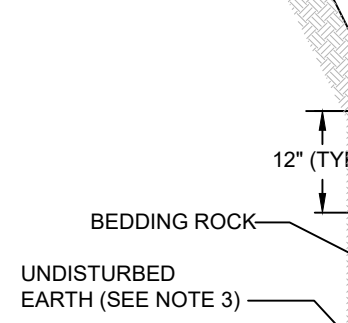
4. Contractor is required to have a Certified QC Asphalt Level II Technician during any asphalt operations within Nassau County ROW, residential subdivision, or multi-family developments.
5. All bases shall be primed in accordance with Ordinance 99-17 Section 11.5.2.3, Nassau County Standard Details, and FDOT Standard Specifications.
6. Signal and pavement markings shall be in compliance with Nassau County Standards, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans.
7. Maintenance of Traffic (MOT) shall be in compliance with FDOT Standard Index 600 Series.
8. All work, materials, and testing performed within Nassau County right-of-way and single-family/multi-family developments shall be in accordance with the current version of Nassau County's Ordinance 99-17 and all current Nassau County Standard Details.
9. Per Ordinance 99-17 Section 11.9.2, all pavement markings within Nassau County ROW shall be lead free thermoplastic meeting Nassau County and FDOT Standard Specification Latest Edition.
10. Removing pavement markings within Nassau County ROW shall be:
 - a. Grinding or hydro-blasting on weathered asphalt surfaces.
 - b. Hydro-blasting only on new asphalt surfaces.
 - c. Paint Blackout is prohibited.
11. Per Ordinance 99-17 Section 8.5.5, any damage to pavement resulting from construction or pavement marking removal within Public ROW not planned as part of the project shall be milled and overlaid for entire width of roadway and length of damage plus 50' in each direction.
12. All underground utilities, or appropriate conduit sleeves, that are to be installed under pavement must be installed prior to preparation of the subgrade for pavement.
13. Single Vertical Joints in roadway construction shall be avoided in Nassau County Right-of-Way using Nassau County Standard Detail #26.
14. All drainage structures shall have traffic bearing grates that meet or exceed the rating for the facilities expected traffic.
15. All concrete shall be a minimum of 3000 psi within Public Right-of-Way.

STORMWATER DRAINAGE & PAVING NOTES

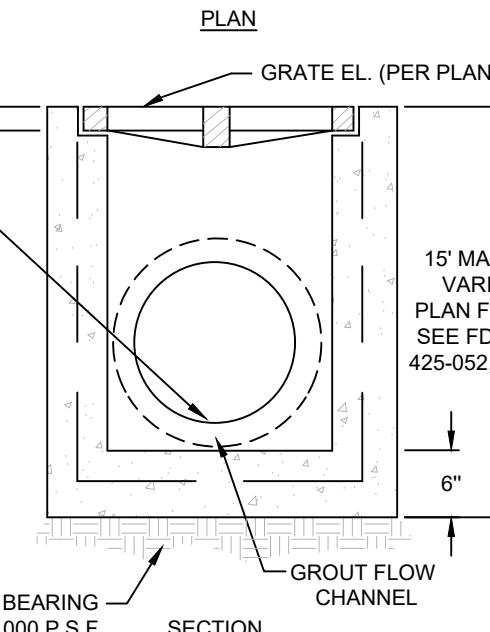
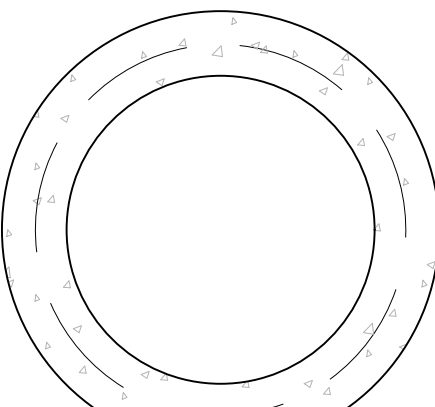


1. This inlet is primarily intended for locations with light to moderate flows where return of way does not permit the use of throat curb Inlets Types 1 through 6. The typical application is on curb returns to city streets. The inlet grate is suitable for pedestrian and bicycle traffic.
2. This inlet to be located outside of curb ramp area in vertical faced curbs such as Curb and Gutter Type F. Grate shall be oriented with vanes directed toward Predominant flow.
3. For structure bottoms see Index 425-010. For supplemental details see Index 425-001.
4. All steel in slab tops shall have 1/4" minimum cover unless otherwise shown. Tops shall be either cast-in-place or precast concrete.
5. For Alternate B applications, top slab openings shall be placed such that 2 edges of inlet frame will be located directly above bottom wall or riser wall.
6. When used on a structure with dimensions larger than those detailed above and risers are not applied, the top slab shall be constructed using Index 425-010 with the slab opening adjusted to 24"x36". The "Special Top Slab" on Index 425-010 is not permitted.
7. Frame may be adjusted with one to six courses of brick.
8. Vaned grates with approximately equal openings will be permitted that satisfy AASHTO HL-93 loading. Grates shall be reversible, right or left.


 FY 2020-21
 STANDARD PLANS



- NOTES**
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180
 2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180
 3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH PIPE BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE COUNTY.
 4. 15" MAXIMUM FOR PIPE DIAMETER LESS THAN 24" AND 24" MAXIMUM FOR PIPE DIAMETER 24" AND LARGER.
 5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
 6. PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
 7. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
 8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW PIPE. COUNTY INSPECTOR TO DETERMINE. IN THE FIELD, THE REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
 9. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND CONSTRUCTION SPECIFICATION.
 10. ALL TRENCHING SHALL BE IN ACCORDANCE WITH THE FLORIDA TRENCH SAFETY ACT.



- NOTES:
1. PRECAST IN ACCORDANCE WITH LATEST INDUSTRY STANDARDS.
 2. GROUT OR "RAM-NEK" JOINTS AS REQUIRED.
 3. CONCRETE DESIGN STRENGTH: 4,000 PSI
 4. PIPE MUST NOT BE IN CONSTRUCTION JOINT.
 5. TYPE II CEMENT TO BE USED.
 6. PIPES SHALL BE FLUSH WITH INSIDE WALL.
 7. SEE FDOT INDEX 201 FOR REINFORCEMENT BAR SCHEDULE.

Recommended Maximum Pipe Size:

2'-0" Wall-18" Pipe

3'-1" Wall-24" Pipe



TYPE "A"
BEDDING AND
TRENCHING

SCALE: N.T.S.
DETAIL#: GD-31
REVISED 08/08/19



STORM DRAIN
MANHOLE

SCALE: N.T.S.
DETAIL#: GD-7
REVISED 08/08/19



TYPE "C" INLET

SCALE: N.T.S.
DETAIL#: GD-1
REVISED 04/22/22

REVISIONS

**ENGINEERING PLANS
FOR
STANDARD MARINE
CONSTRUCTION DETAILS**
NASSAU COUNTY, FLORIDA



FOR PERMIT REVIEW



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

PROJECT NO:	22-084
ISSUE DATE:	10-13-22
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL
NOT VALID WITHOUT SEAL	

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NO.	DATE	BY	DESCRIPTION
1	11/20/22	JGD	PER CITY OF FERNANDINA BEACH COMMENTS
2			
3			
4			
5			
6			
7			
8			
9			

ENGINEERING PLANS

FOR

STANDARD MARINE

CONSTRUCTION DETAILS

NASSAU COUNTY, FLORIDA



Know what's below.
Call before you dig.

FOR PERMIT REVIEW

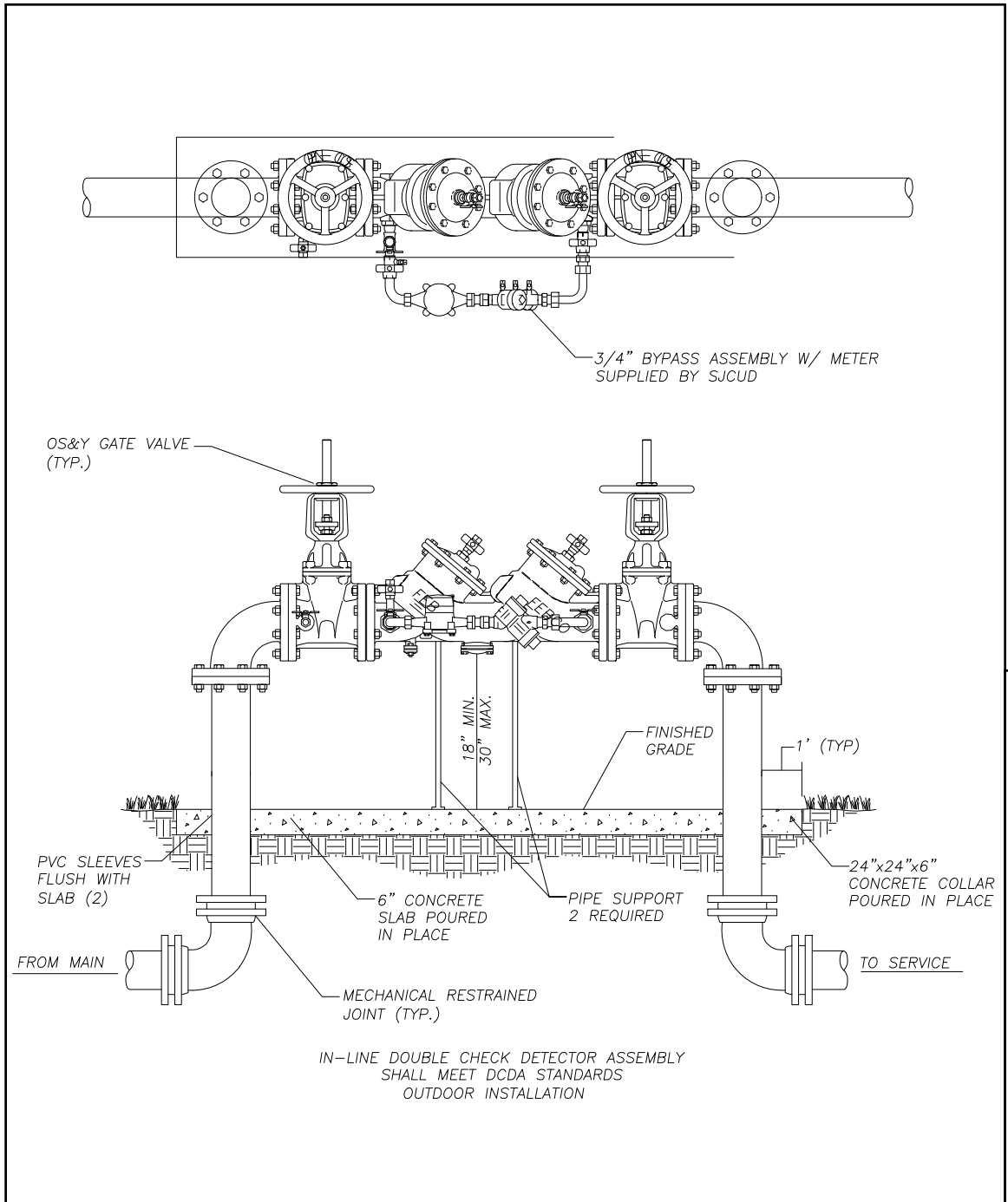


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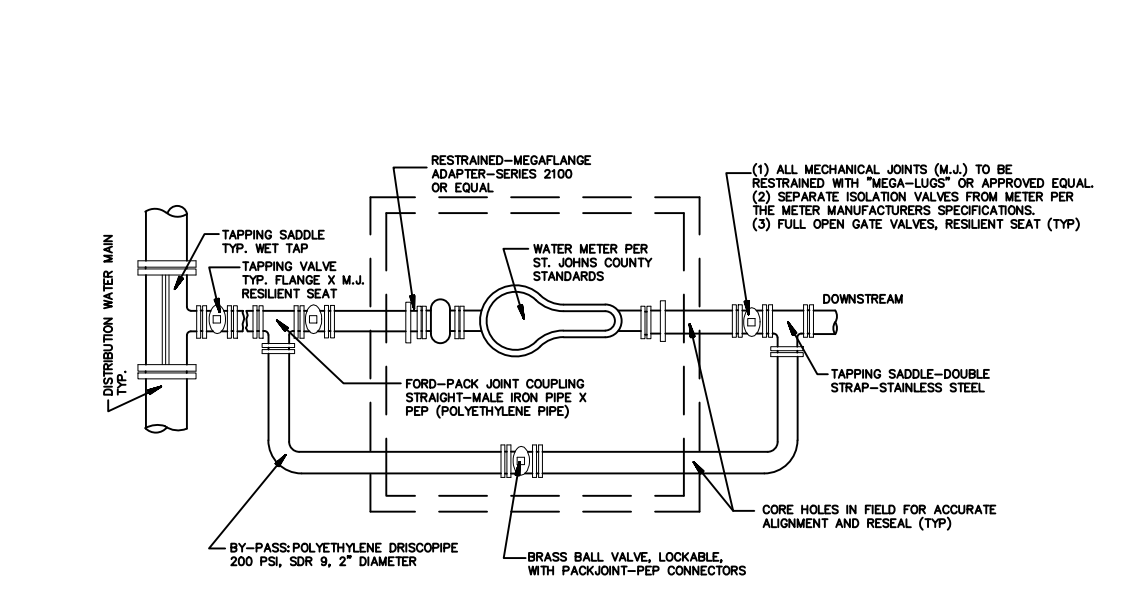
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PROJECT NO: 22-084
ISSUE DATE: 10-13-22
DRAFTED BY: JGD
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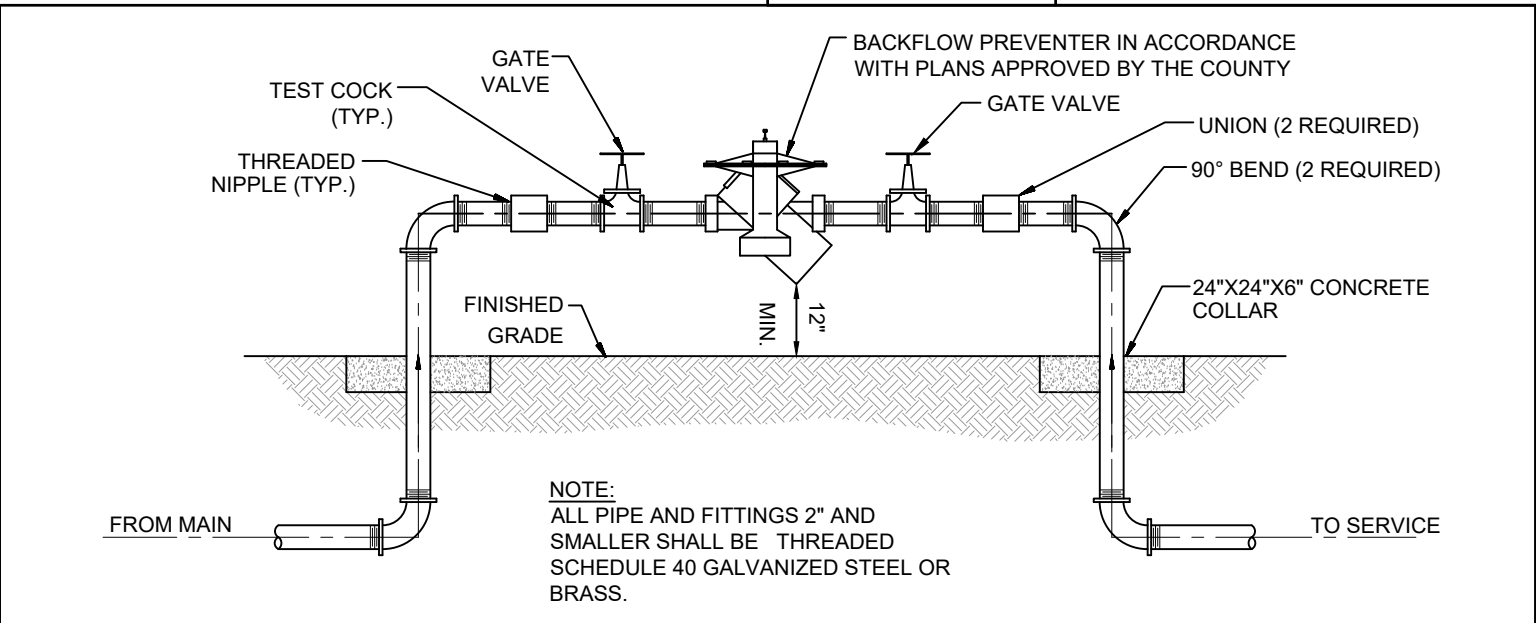
NOT VALID WITHOUT SEAL



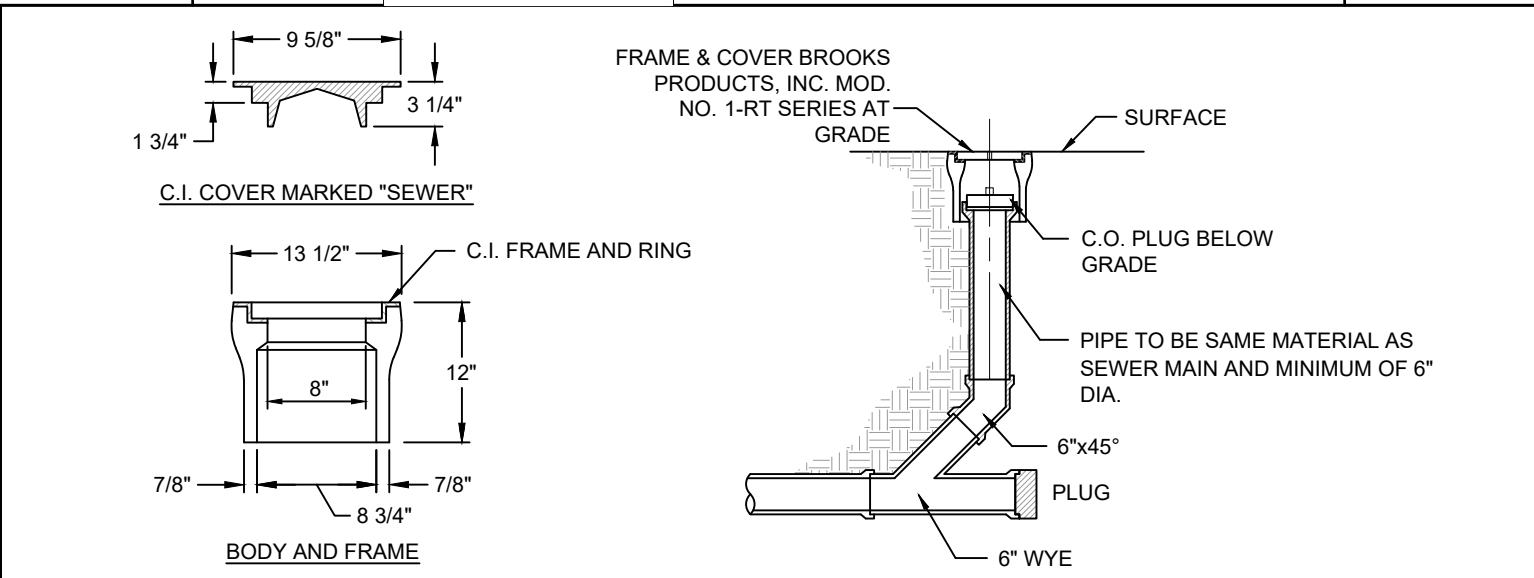
**DOUBLE CHECK
DETECTOR ASSEMBLY**
 SCALE: N.T.S.
 DETAIL#: UD-25
 REVISED 08/11/22



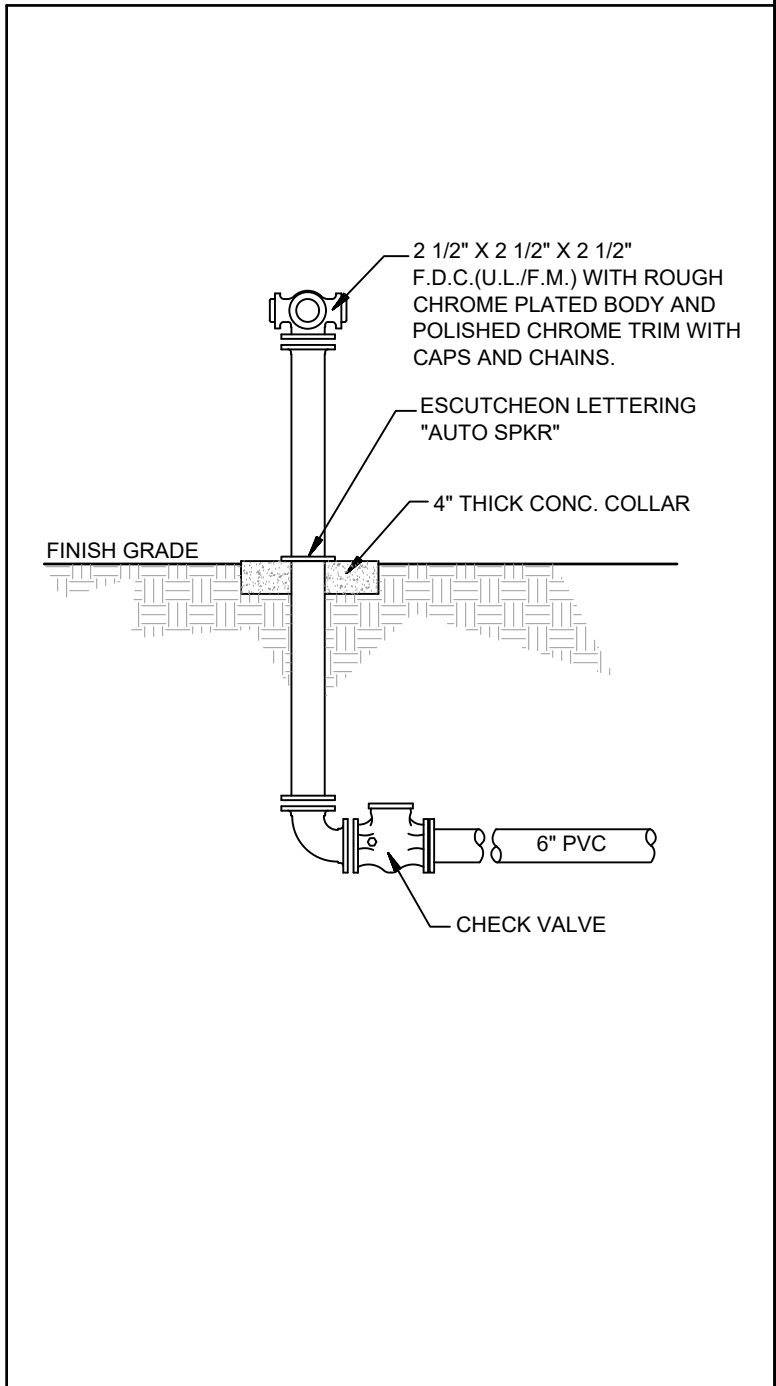
WATER METER
 SCALE: N.T.S.
 DETAIL#: UD-21
 REVISED 11/29/22



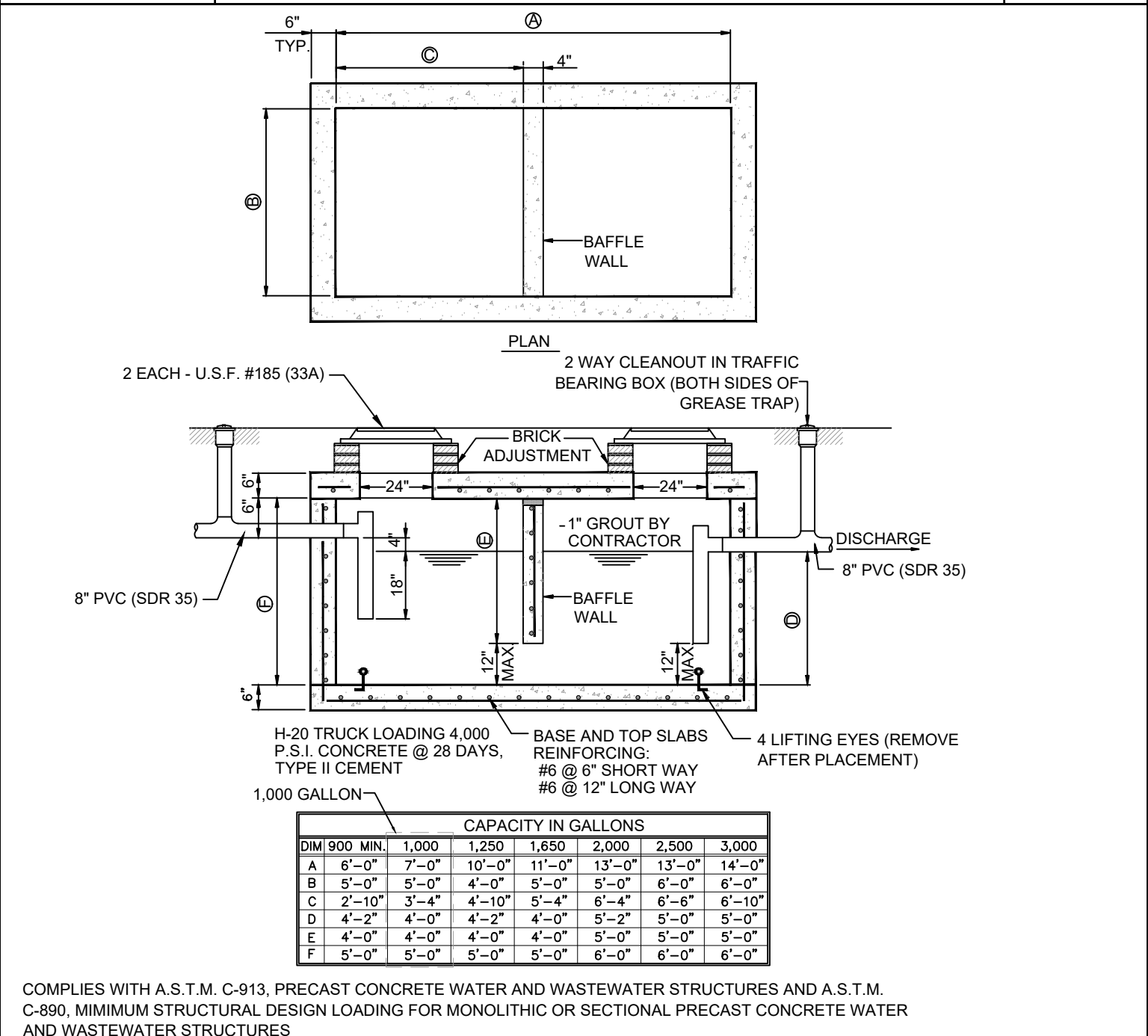
**REDUCED PRESSURE ZONE
BACKFLOW PREVENTER**
 SCALE: N.T.S.
 DETAIL#: UD-7
 REVISED 08/05/20



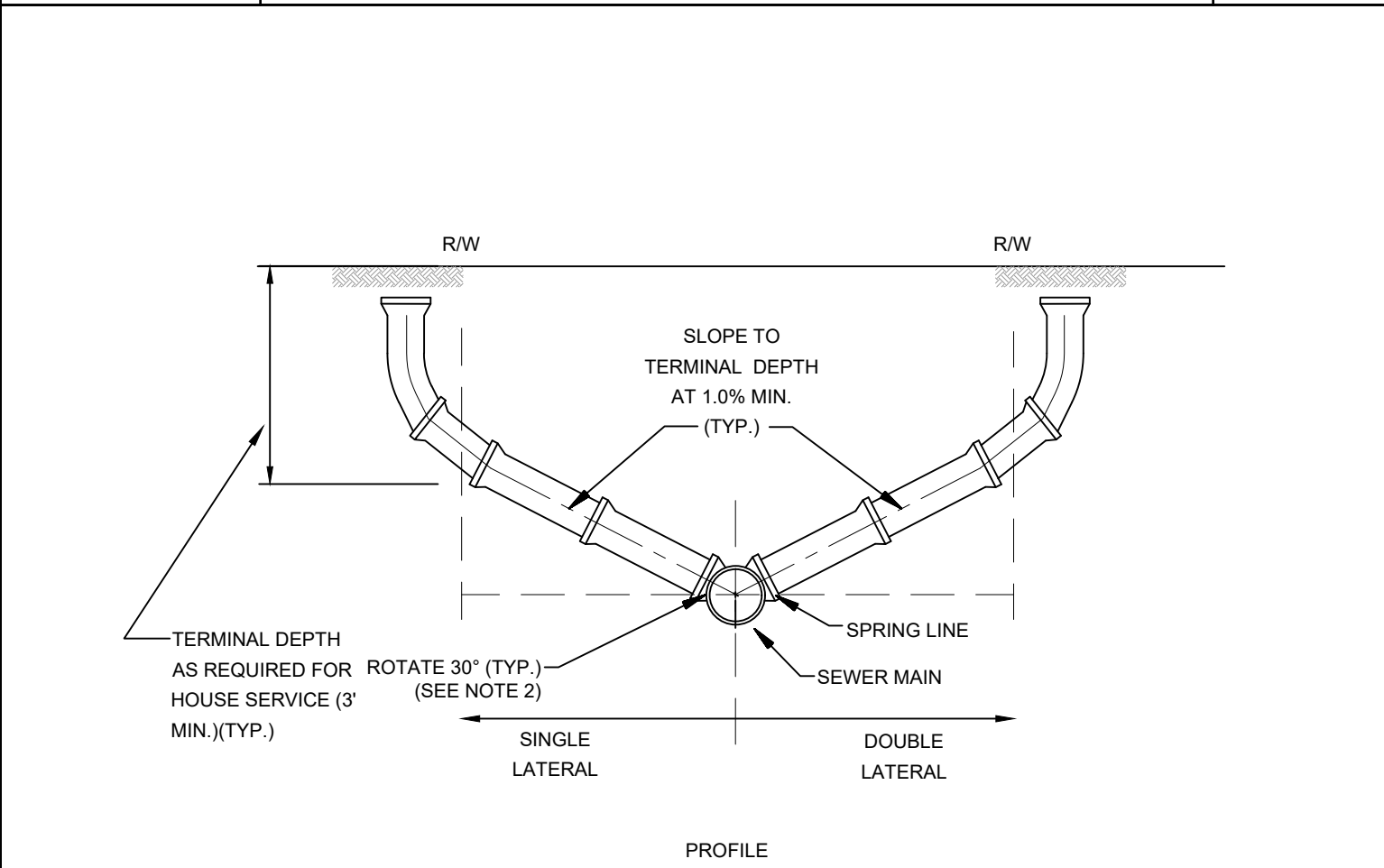
**SANITARY SEWER
CLEAN-OUT**
 SCALE: N.T.S.
 DETAIL#: UD-4
 REVISED 03/10/20



**FIRE DEPARTMENT
CONNECTION
DETAIL**
 SCALE: N.T.S.
 DETAIL#: UD-12
 REVISED 08/05/20

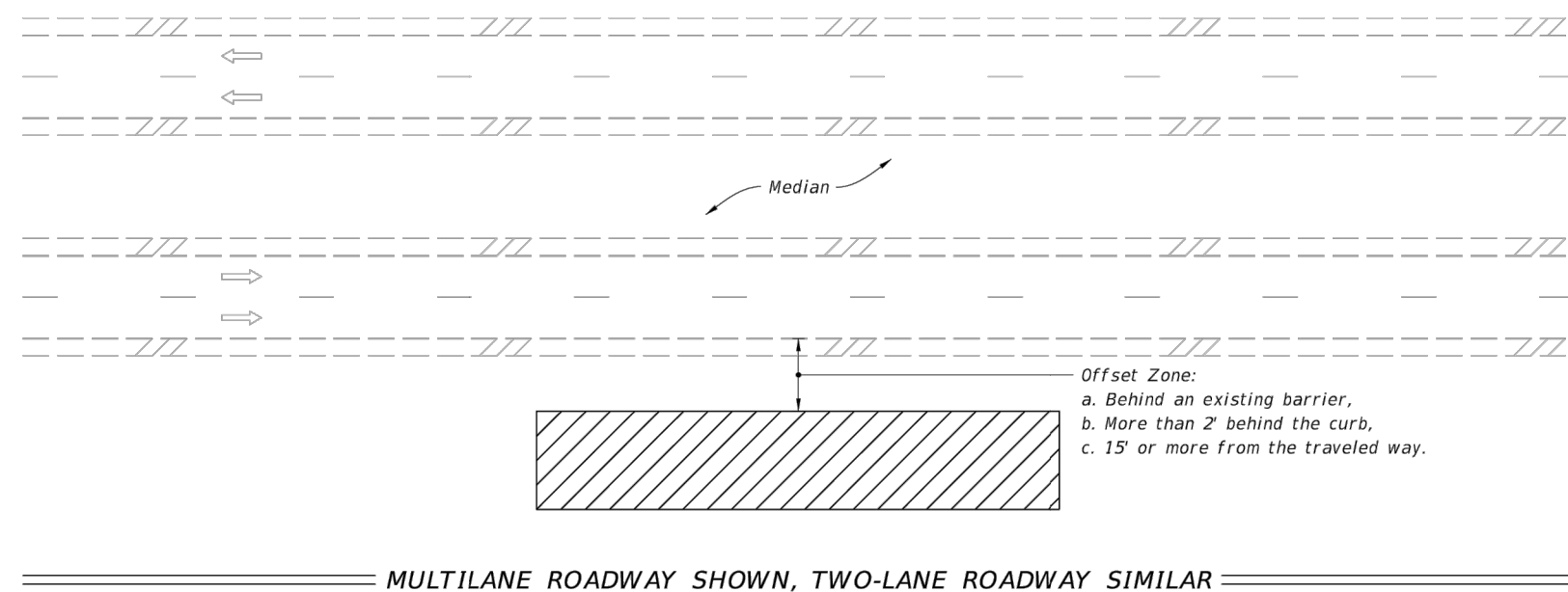


GREASE TRAP
 SCALE: N.T.S.
 DETAIL#: UD-8
 REVISED 08/05/20



**SANITARY SEWER
SERVICE LATERAL**
 SCALE: N.T.S.
 DETAIL#: UD-3
 REVISED 03/10/20

- NOTES:
- CLEAN-OUTS SHALL BE INSTALLED BY THE UTILITY CONTRACTOR IN ACCORDANCE WITH STD. PLUMBING CODE.
 - INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
 - WYE BRANCH FITTINGS SHALL BE USED FOR LATERAL CONNECTIONS TO THE MAIN.



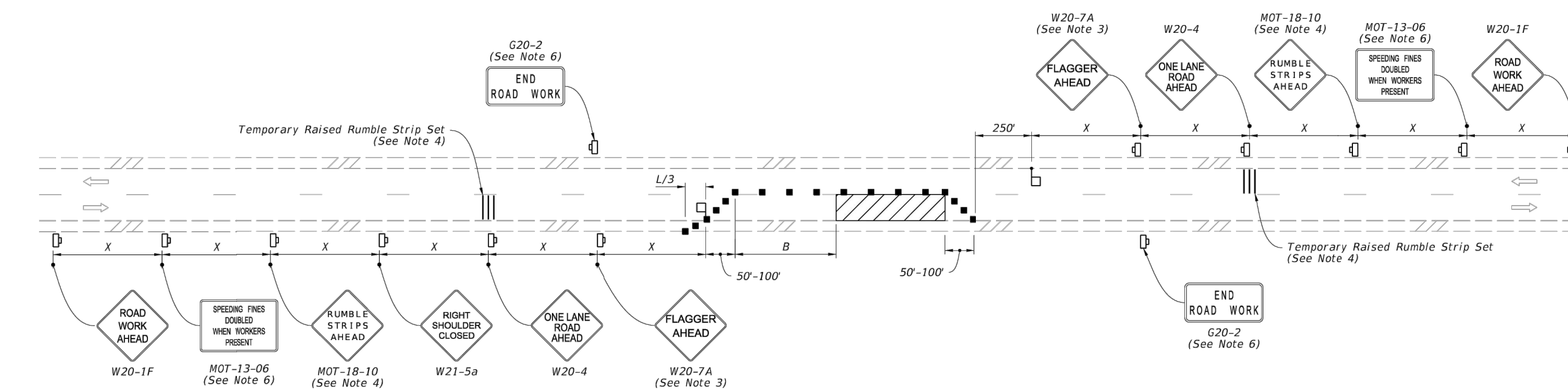
- NOTES:**
- This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work beyond the shoulder.
 - Use Index 102-602 when the work operation (excluding establishing and terminating the work area) requires that two or more work vehicles cross the Offset Zone in any one hour period.
 - Use Index 102-660 when Work Area encroaches a Sidewalk.

SYMBOLS:

Work Area

Lane Identification and Direction of Traffic

LAST REVISION	DESCRIPTION	FDOT	FY 2022-23	TWO-LANE AND MULTILANE ROADWAY, WORK BEYOND THE SHOULDER	INDEX	SHEET
11/01/20			STANDARD PLANS		102-601	1 of 1



- NOTES:**
- This Index applies to Two-Lane, Two-Way Roadways with work within the traveled way.
 - The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) along with the associated work zone sign spacing, may be omitted when the work operation will be in place for 24 hours or less.
 - Automated Flagging Assistance Devices (AFADs) may be used in accordance with Specification Sections 102, 990 and the AFAD vendor drawings.
 - If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 2.
 - If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.
- When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.

SYMBOLS:

Work Area

Channelizing Device (See Index 102-600)

Work Zone Sign

Flagger

Lane Identification and Direction of Traffic

LAST REVISION	DESCRIPTION	FDOT	FY 2022-23	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX	SHEET
11/01/21			STANDARD PLANS		102-603	1 of 2

- NOTE:**
- This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
 - L = Taper Length
X = Work Zone Sign Spacing
B = Buffer Length
See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
 - Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
 - When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
 - For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
 - The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
 - Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
 - Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
 - When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

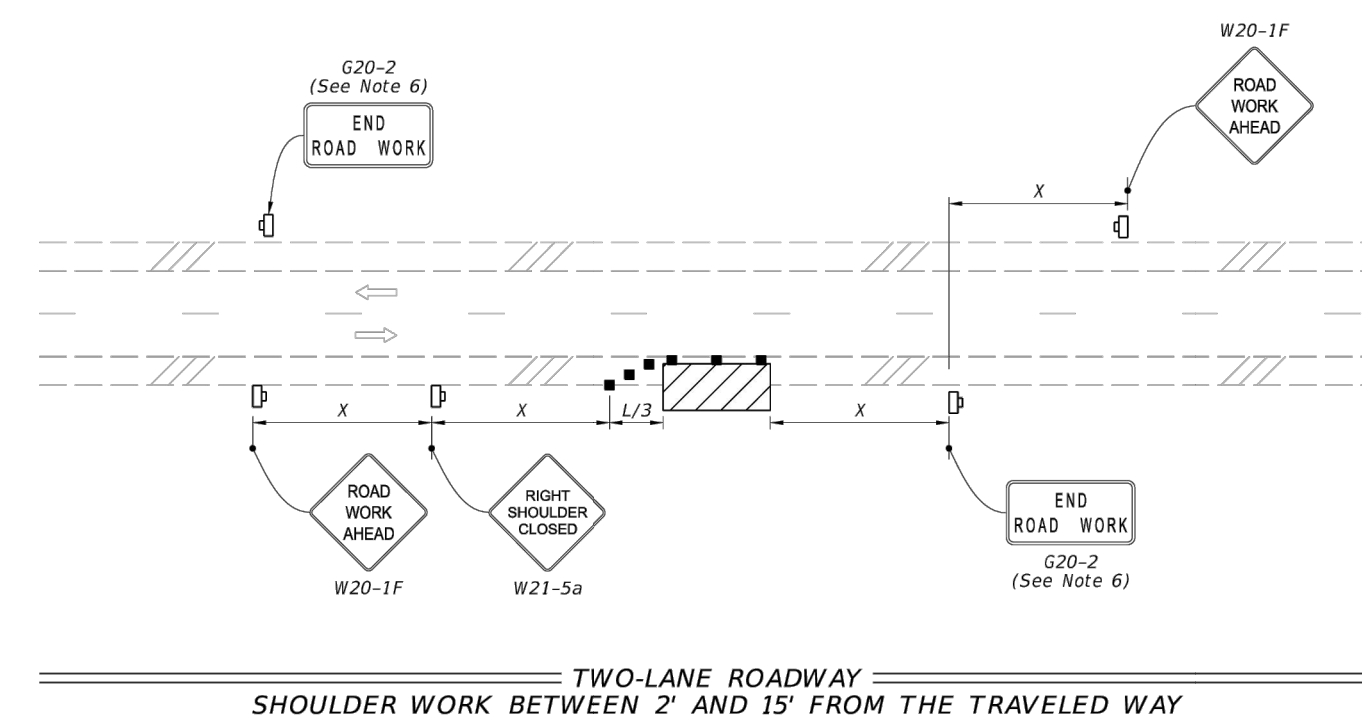
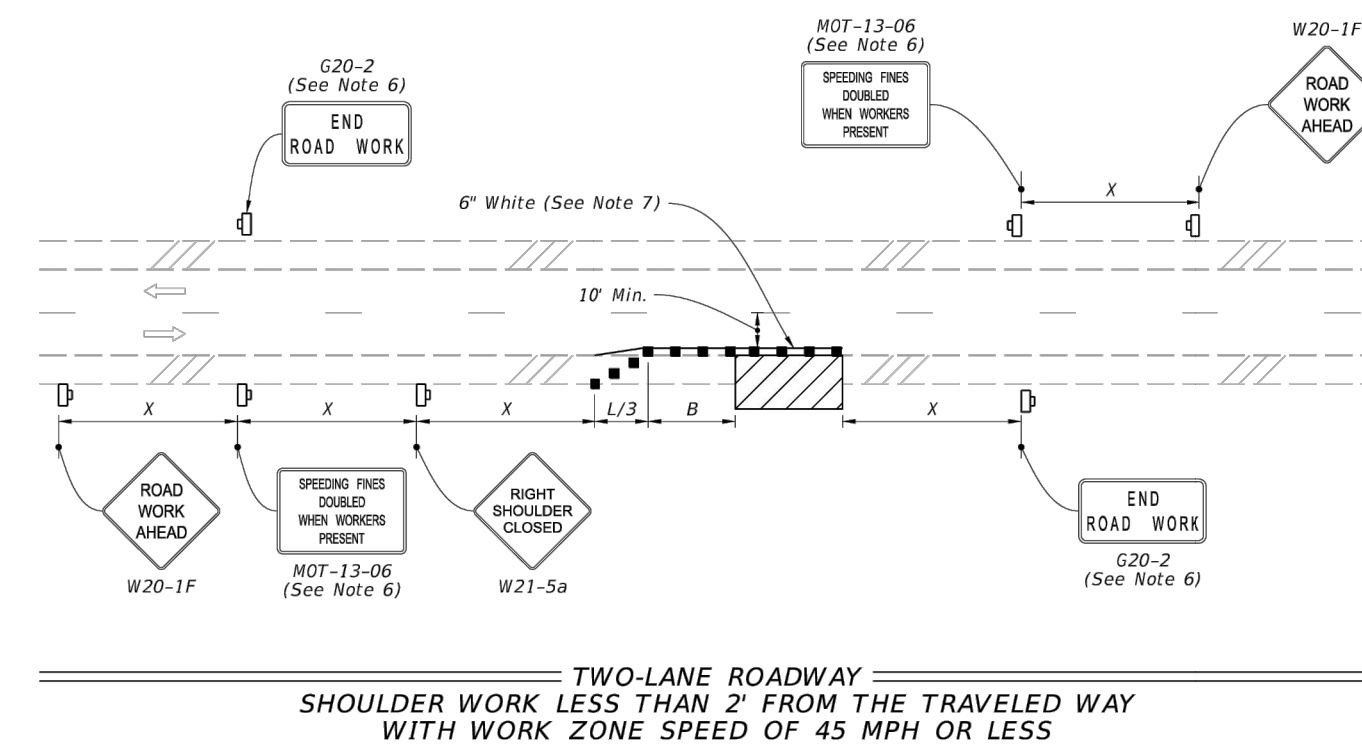
SYMBOLS:

Work Area

Channelizing Device (See Index 102-600)

Work Zone Sign

Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION	FDOT	FY 2022-23	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX	SHEET
11/01/21			STANDARD PLANS		102-602	1 of 2

- GENERAL NOTES:**
- This Index applies to two-lane, two-way roadways with work within or near the intersection.
 - X = Work Zone Sign Spacing
See Index 102-600 for "X" and channelizing device spacing values.
 - Optionally, use "Flagger Ahead" sign with text (W20-7A) instead of "Flagger Ahead" sign with symbol (W20-7).
 - If vehicles in a parking zone block the line of sight to TCZ signs, locate and post mount signs in accordance with Index 700-101.
 - If the work area extends across a crosswalk, close the crosswalk in accordance with Index 102-660.
 - District Traffic Operations Engineer must approve temporary signal phasing modifications prior to beginning of work.
 - For unsignalized intersections, use Temporary Raised Rumble Strips in accordance with Index 102-603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.
 - The "End Road Work" signs (G20-2) along with the associated work zone sign distances may be omitted when the work zone will be in place for 24 hours or less.
 - As an option to the "STOP" sign (R1-1) and Restricted Left/Right Turning Movement sign (R3-1 or R3-2), the "SIDE ROAD INTERSECTING THE WORK ZONE" flagging operation from Index 102-600 may be used.

SYMBOLS:

Work Area

Channelizing Device (See Index 102-600)

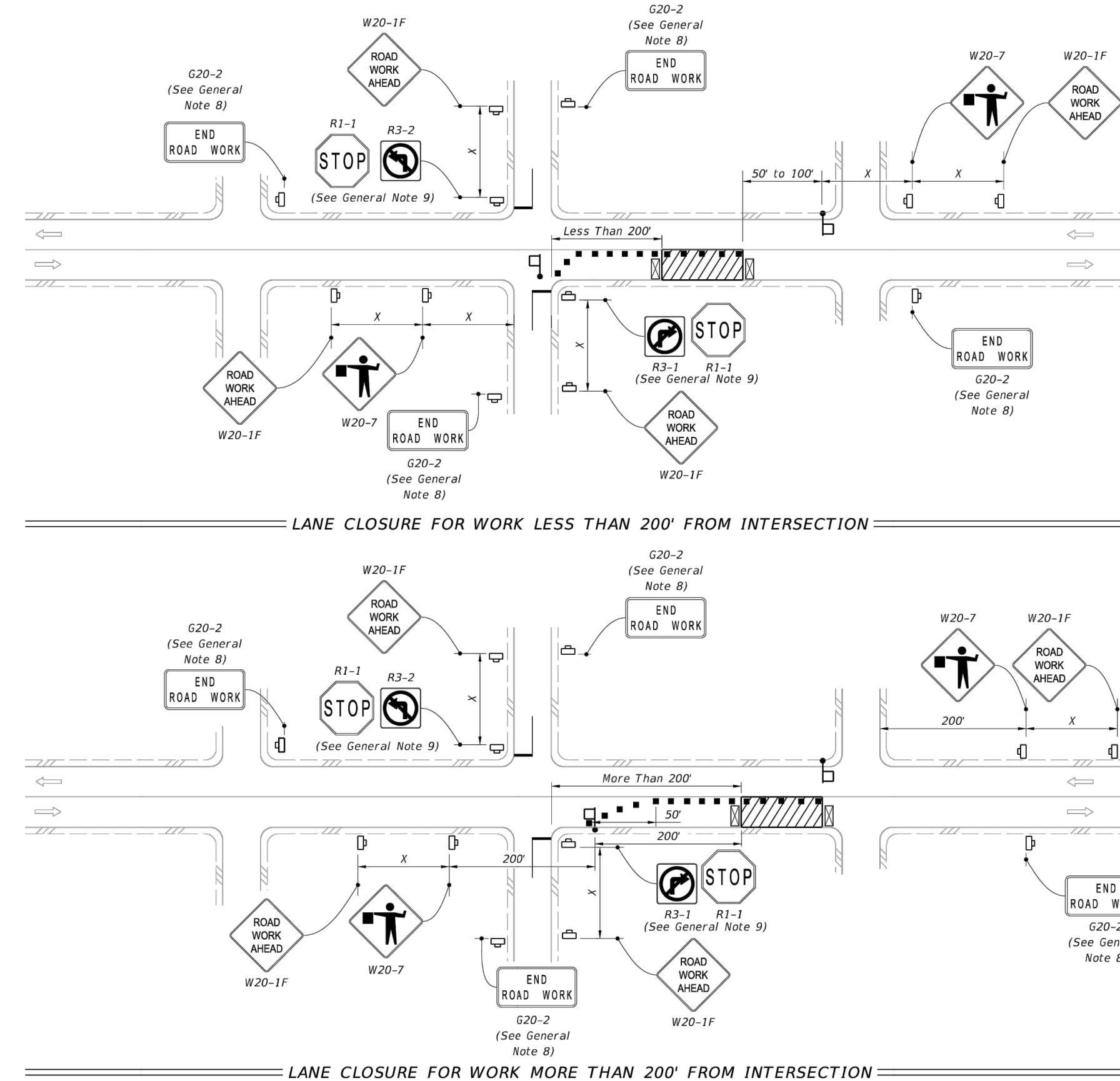
Work Zone Sign

Type III Barricade

Stop Bar

Flagger

Lane Identification and Direction of Traffic



LAST REVISION	DESCRIPTION	FDOT	FY 2022-23	TWO-LANE, TWO-WAY, INTERSECTION WORK	INDEX	SHEET
11/01/21			STANDARD PLANS		102-604	1 of 2

NO.	DATE	BY	DESCRIPTION
1	11/20/22	JGD	PER CITY OF FERNANDINA BEACH COMMENTS
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ENGINEERING PLANS FOR STANDARD MARINE MAINTENANCE OF TRAFFIC PLAN NASSAU COUNTY, FLORIDA



FOR PERMIT REVIEW



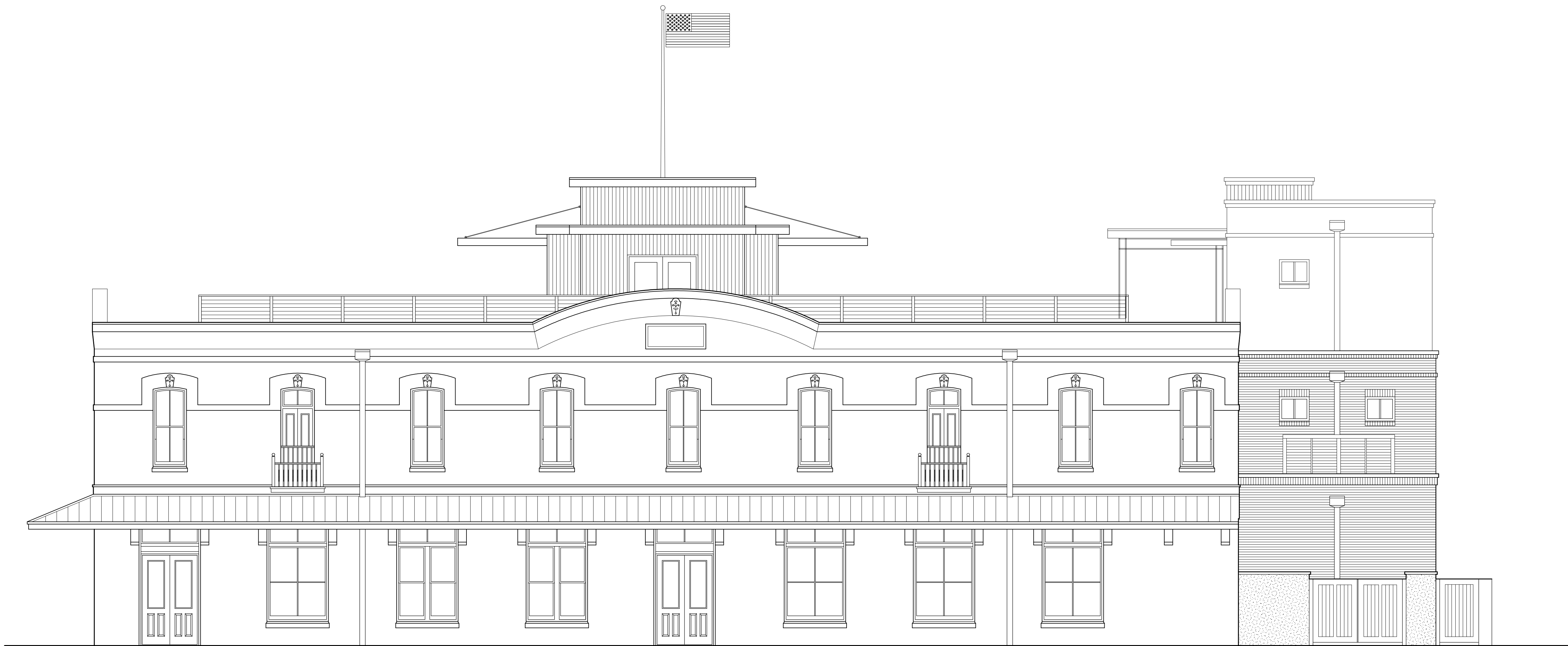
2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO: 22-084
ISSUE DATE: 10-13-22
DESIGNED BY: JGD
CHECKED BY: MHL
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ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET, FERNANDINA BEACH, FL 32034

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PROJECT INFORMATION

SCOPE OF WORK DESCRIPTION :
CHANGE OF OCCUPANCY AND ADDITIONS TO HISTORIC BUILDING AS
DEFINED BY THE FLORIDA BUILDING CODE -- EXISTING BUILDING , 7TH EDITION
(2020)

SQUARE FOOTAGE SUMMARY :

	EXISTING SF	NEW/ADDED SF	TOTAL SF
FIRST FLOOR	4,104 S.F.	2,623 S.F.	6,727 S.F.
SECOND FLOOR	4,104 S.F.	791 S.F.	4,895 S.F.
THIRD FLOOR	--	1,015 S.F.	1,015 S.F.
	8,208 S.F.	4,429 S.F.	12,637 S.F.
ROOF DECK AREA (OPEN)			2,303 S.F.
OUTSIDE STAIR AREA			558 S.F.

OCCUPANCY CLASSIFICATION :
1ST & 3RD FLOORS -- ASSEMBLY (A2)
2ND FLOOR -- RESIDENTIAL (R2)

TYPE OF CONSTRUCTION :
TYPE V-A, FULLY SPRINKLERED

OCCUPANT LOAD :
414 OCCUPANTS
SEE LIFE SAFETY PLAN FOR DETAILS

ZONING DISTRICT :
C-3, CENTRAL BUSINESS DISTRICT

OVERLAY ZONING :
DOWNTOWN FERNANDINA BEACH HISTORIC DISTRICT
COMMUNITY REDEVELOPMENT AREA (CRA)

FLOOD ZONE :
AE9 & AE10

BASE FLOOD ELEVATION :
12.4' NAVD

DESIGN TEAM

ARCHITECT	ELECTRICAL ENGINEER
MIRANDA ARCHITECTS 309 1/2 CENTRE ST., SUITE 206 FERNANDINA BEACH, FL 32034 P) 904-261-4586	SHAFFER ENGINEERING GROUP 12058 SAN JOSE BLVD, ST. 502 JACKSONVILLE, FL 32223 P) 904-239-3621
CIVIL ENGINEER	MECHANICAL ENGINEER
GULFSTREAM DESIGN GROUP 2225 A1A SOUTH, STE. A2 ST. AUGUSTINE, FL 32080 P) 904-794-4231	GREGORY ENGINEERING 4567 DEEP RIVER PLACE JACKSONVILLE, FL 32224 P) 904-714-5188
STRUCTURAL ENGINEER	FOOD SERVICE
PI-TECH INC. P.O. BOX 15268 FERNANDINA BEACH, FL 32035 P) 904-556-7087	JAX DESIGN GROUP 3948 SOUTH 3RD ST., #305 JACKSONVILLE BEACH, FL 32250 P) 904-543-7670

INDEX OF DRAWINGS

A0	INDEX OF DRAWINGS / PROJECT DATA	A8.0	1ST FLR LIFE SAFETY PLAN	F51	FOOD SERVICE	M1	MECHANICAL	H1	HOOD	P1	PLUMBING	E1	ELECTRICAL	C1	CIVIL
A1	ARCHITECTURAL SITE PLAN	A8.1	2ND FLR LIFE SAFETY PLAN	F52	FOOD SERVICE	M2	MECHANICAL	H2	HOOD	P2	PLUMBING	E2	ELECTRICAL	C2	CIVIL
A2.0	1ST FLOOR DEMOLITION PLAN	A8.3	3RD FLR LIFE SAFETY PLAN	F53	FOOD SERVICE	M3	MECHANICAL	H3	HOOD	P3	PLUMBING	E3	ELECTRICAL	C3	CIVIL
A2.1	2ND FLOOR DEMOLITION PLAN	A9.0	BUILDING CROSS SECTIONS	F54	FOOD SERVICE	M4	MECHANICAL	H4	HOOD	P4	PLUMBING	E4	ELECTRICAL	C4	CIVIL
A3.0	1ST FLOOR PLAN	A9.1	BUILDING CROSS SECTIONS	F55	FOOD SERVICE	M5	MECHANICAL	H5	HOOD	P5	PLUMBING	E5	ELECTRICAL	C5	CIVIL
A3.1	2ND FLOOR PLAN	A10.0	SECTIONS AND DETAILS	F56	FOOD SERVICE	M6	MECHANICAL	H6	HOOD	P6	PLUMBING	E6	ELECTRICAL	C6	CIVIL
A3.2	3RD FLOOR PLAN	A10.1	SECTIONS AND DETAILS	F57	FOOD SERVICE	M7	MECHANICAL	H7	HOOD	P7	PLUMBING	E7	ELECTRICAL	C7	CIVIL
A3.3	FLOOD BARRIER PLAN	A10.2	SECTIONS AND DETAILS	F58	FOOD SERVICE	M8	MECHANICAL	H8	HOOD	P8	PLUMBING	E8	ELECTRICAL	C8	CIVIL
A4.0	WINDOW, DOOR, FINISH SCHEDULES	A10.3	SECTIONS AND DETAILS			M9	MECHANICAL	H9	HOOD	P9	PLUMBING	E9	ELECTRICAL	C9	CIVIL
A4.1	WINDOW & DOOR ELEVATIONS	A10.4	SECTIONS AND DETAILS			M10	MECHANICAL	H10	HOOD	P10	PLUMBING	E10	ELECTRICAL	C10	CIVIL
A5.0	EAST ELEVATION	A10.5	SECTIONS AND DETAILS												
A5.1	SOUTH ELEVATION														
A5.2	WEST ELEVATION														
A5.3	NORTH ELEVATION														
A6.0	1ST FLOOR ROOF PLAN														
A6.1	2ND FLOOR ROOF PLAN														
A6.2	3RD FLOOR ROOF PLAN														
A7.0	1ST FLR REFLECTED CEILING PLAN														
A7.1	2ND FLR REFLECTED CEILING PLAN														
A7.2	3RD FLR REFLECTED CEILING PLAN														

ADAPTIVE RE-USE OF THE CH HUOT BUILDING (STANDARD MARINE)	PROJECT #5210726	DRAWN BY -- JLT	CHKD BY -- JLT	DATE -- 11-15-22
--	------------------	-----------------	----------------	------------------

MIRANDA ARCHITECTS
309 1/2 CENTRE STREET, SUITE 206
FERNANDINA BEACH, FL 32034
P) 904-261-4586

ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

COVER SHEET / PROJECT INFORMATION		REVISIONS		DATE	
#					

A0

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A1 STANDARD MARINE ARCH SITE PLAN
PROJECT #5210726
DRAWN BY --JLT
CHKD BY --JLT
DATE -- 11-22-22

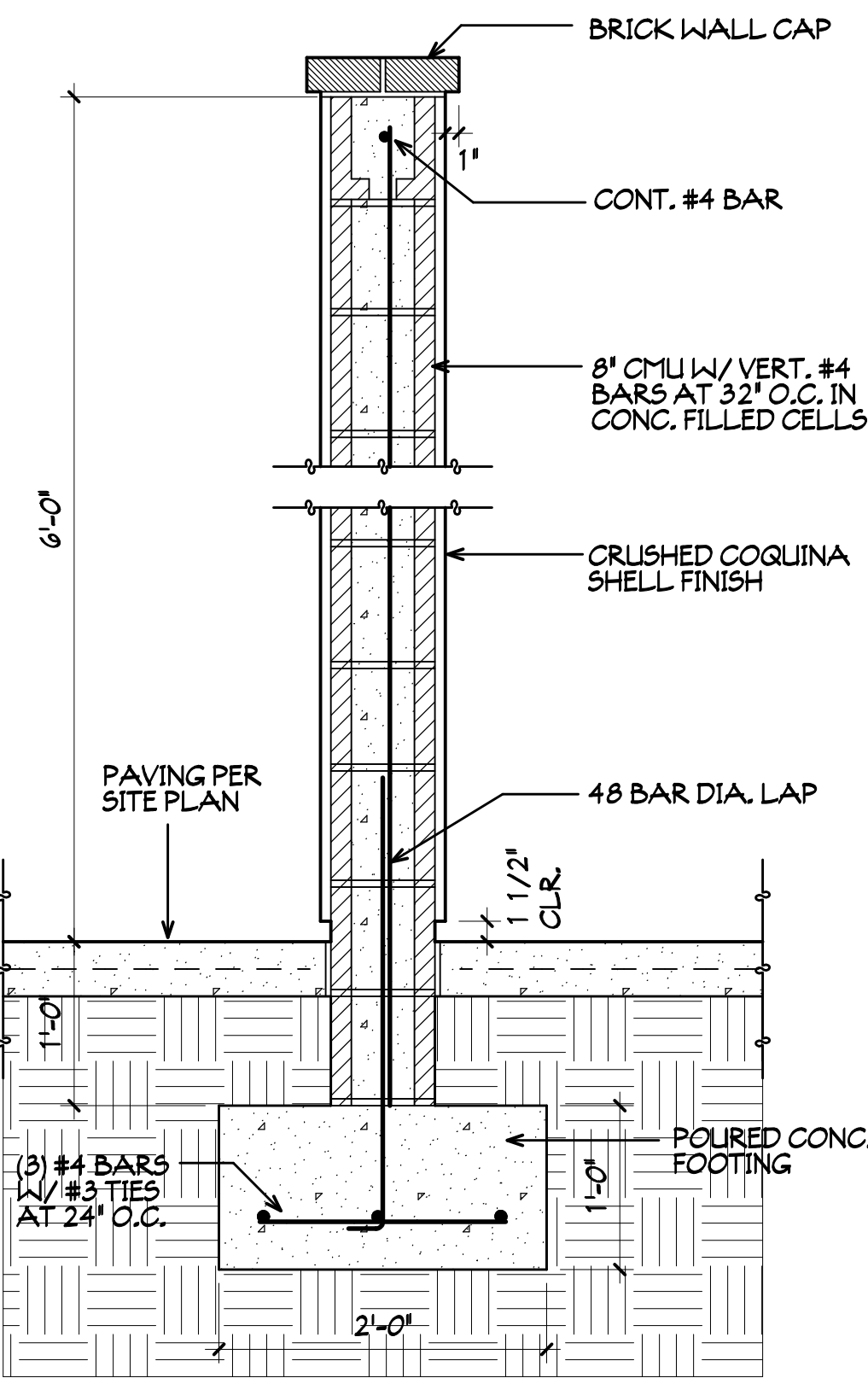
MIRANDA ARCHITECTS
300 1/2 CENTRE STREET, SUITE 208
FERNANDINA BEACH, FL 32034
804.261.4386 TEL.
FL REG. NO. 00000007



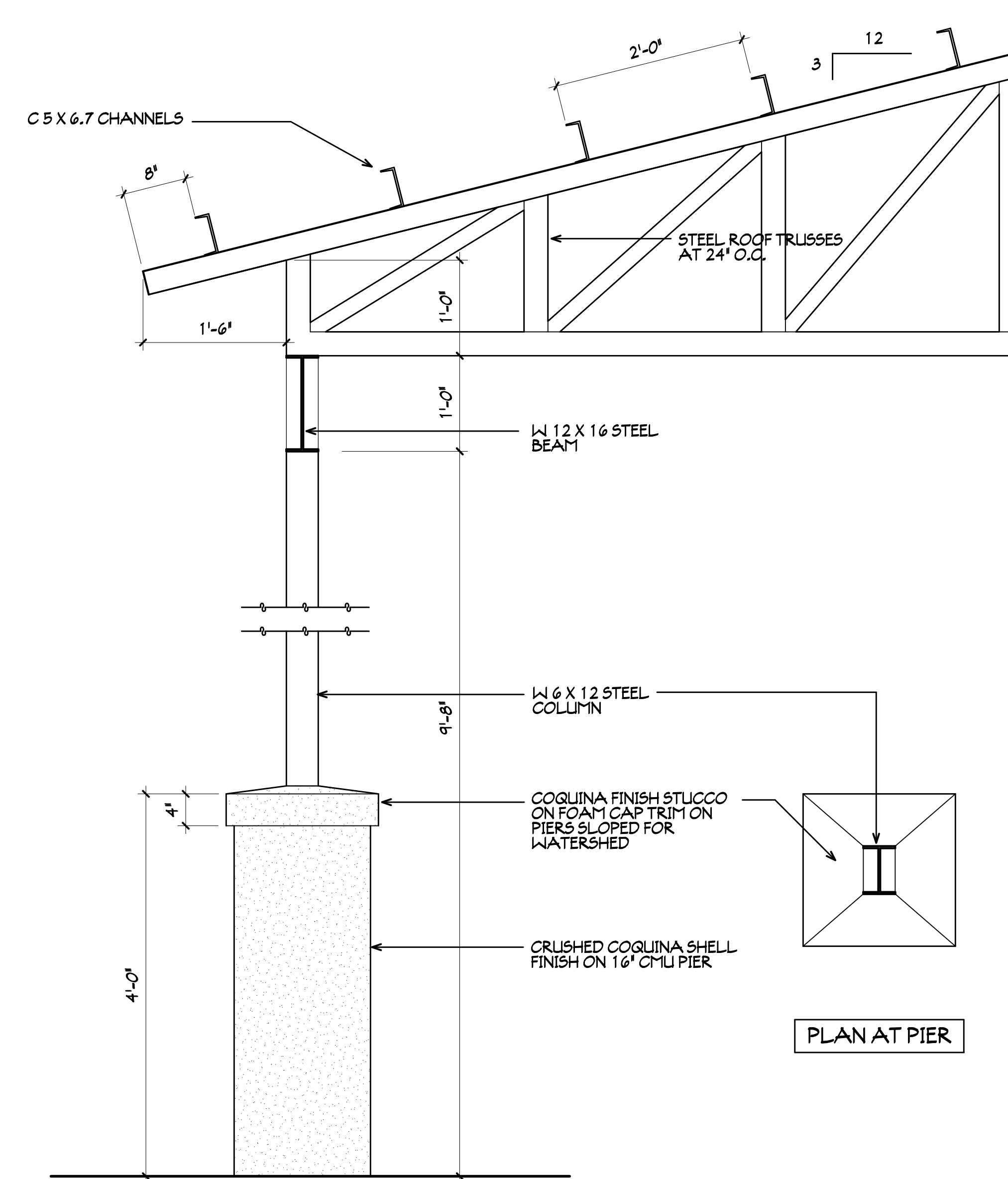
ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

#	ARCHITECTURAL SITE PLAN	
	REVISIONS	DATE

A1.0



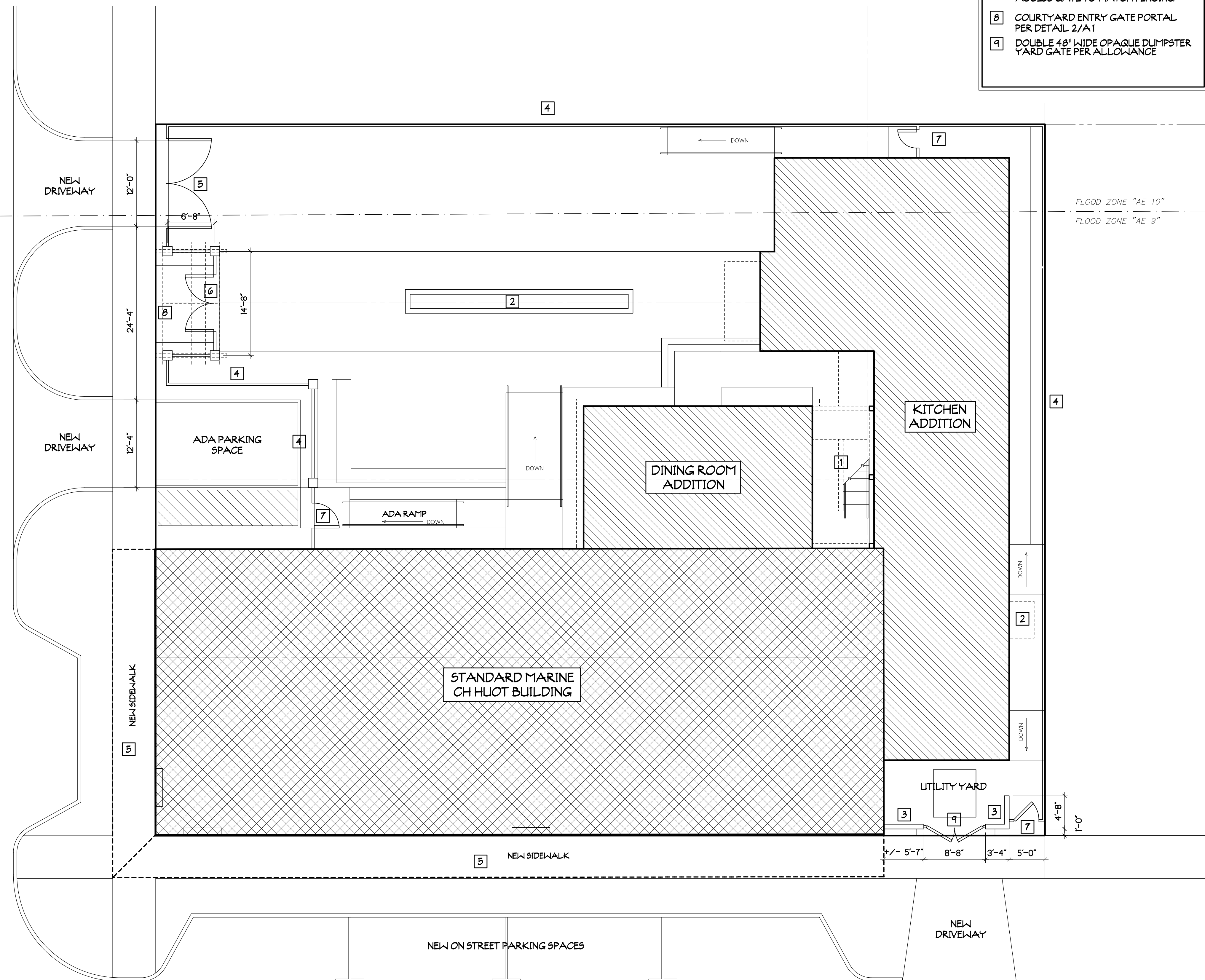
1 UTILITY YARD WALL 1"=1'-0"



2 ENTRY GATE PORTAL 1"=1'-0"

PLAN AT PIER

ALACHUA STREET
(60-FOOT RIGHT-OF-WAY)



NORTH SECOND STREET
(60-FOOT RIGHT-OF-WAY)

ARCHITECTURAL SITE PLAN

1/8"=1'-0"

DEMOLITION NOTES

1

REMOVE EXISTING WALL ASSEMBLY.

2

REMOVE EXISTING STAIR.

3

REMOVE EXISTING DOOR.

4

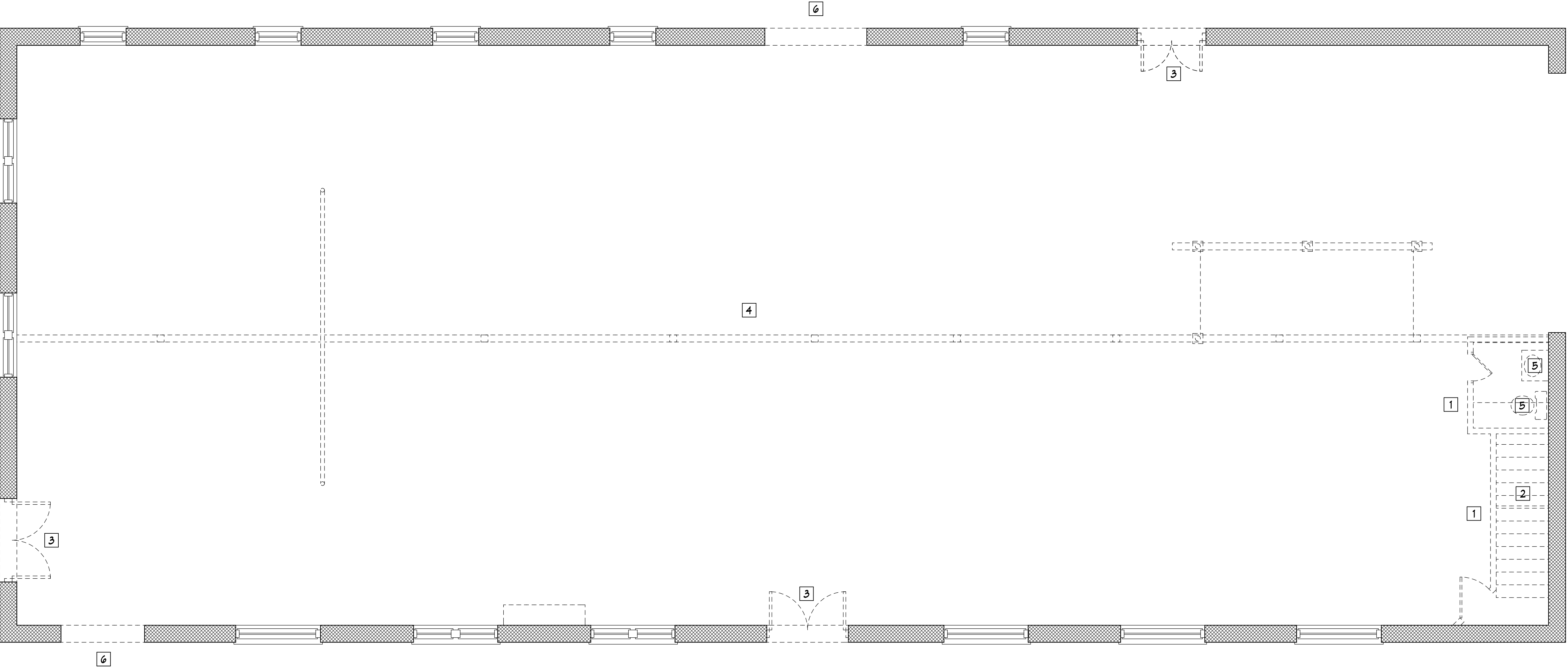
REMOVE EXISTING 2ND FLOOR SYSTEM. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS INCLUDING SHORING OF EXISTING EXTERIOR BRICK WALL ASSEMBLY.

5

REMOVE EXISTING PLUMBING FIXTURE.

6

REMOVE PORTION OF EXISTING BRICK WALL TO ACCOMMODATE NEW OPENING PER FLOOR PLAN.



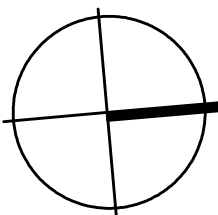
DEMOLITION PLAN LEGEND

EXISTING WALL/FEATURE TO REMAIN

EXISTING WALL/FEATURE TO BE REMOVED

1

DEMOLITION NOTE



FIRST FLOOR DEMOLITION PLAN

1/4"=1'-0"

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A2 STANDARD MARINE FLOOR PLANS

PROJECT #5210726

DRAWN BY -- JLT

CHKD BY -- JLT

DATE -- 11-15-22

MIRANDA ARCHITECTS
308 1/2 CENTRE STREET, SUITE 206
FERNANDINA, FL 32034
904.281.4508 TEL
FL REG. NO. 206687



ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

FIRST FLOOR DEMOLITION PLAN	
#	REVISIONS
DATE	

A2.0

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CHKD BY --JLM



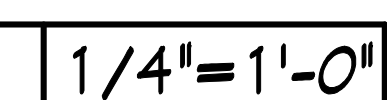
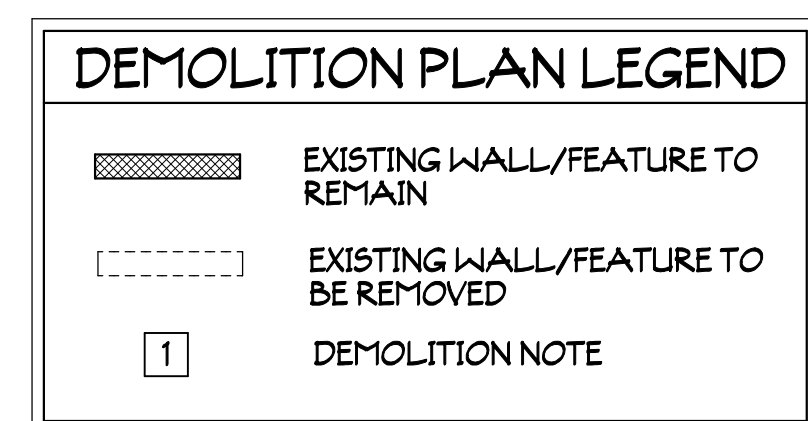
MIRANDA
CARE

ADAPTIVE RE-USE OF THE

DATE _____

A2.1

1	REMOVE EXISTING WALL ASSEMBLY.
2	REMOVE EXISTING STAIR.
3	REMOVE EXISTING DOOR.
4	REMOVE EXISTING ROOF SYSTEM. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS INCLUDING SHORING OF EXISTING EXTERIOR WOOD WALLS I/W/ BRICK VENER ASSEMBLY.
5	REMOVE PORTION OF EXISTING BRICK WALL TO ACCOMMODATE NEW OPENING PER FLOOR PLAN.
6	REMOVE EXISTING WINDOW AND SALVAGE FOR USE IN RESTORATION OF OLD WINDOWS.
7	REMOVE EXISTING INTERIOR WALL FINISH TO EXPOSE EXISTING WOOD FRAMED EXTERIOR WALLS.
8	REMOVE EXISTING FIREPLACE SURROUNDS AND MANTELS. SALVAGE FOR USE BY OWNER.



FLOOR PLAN LEGEND

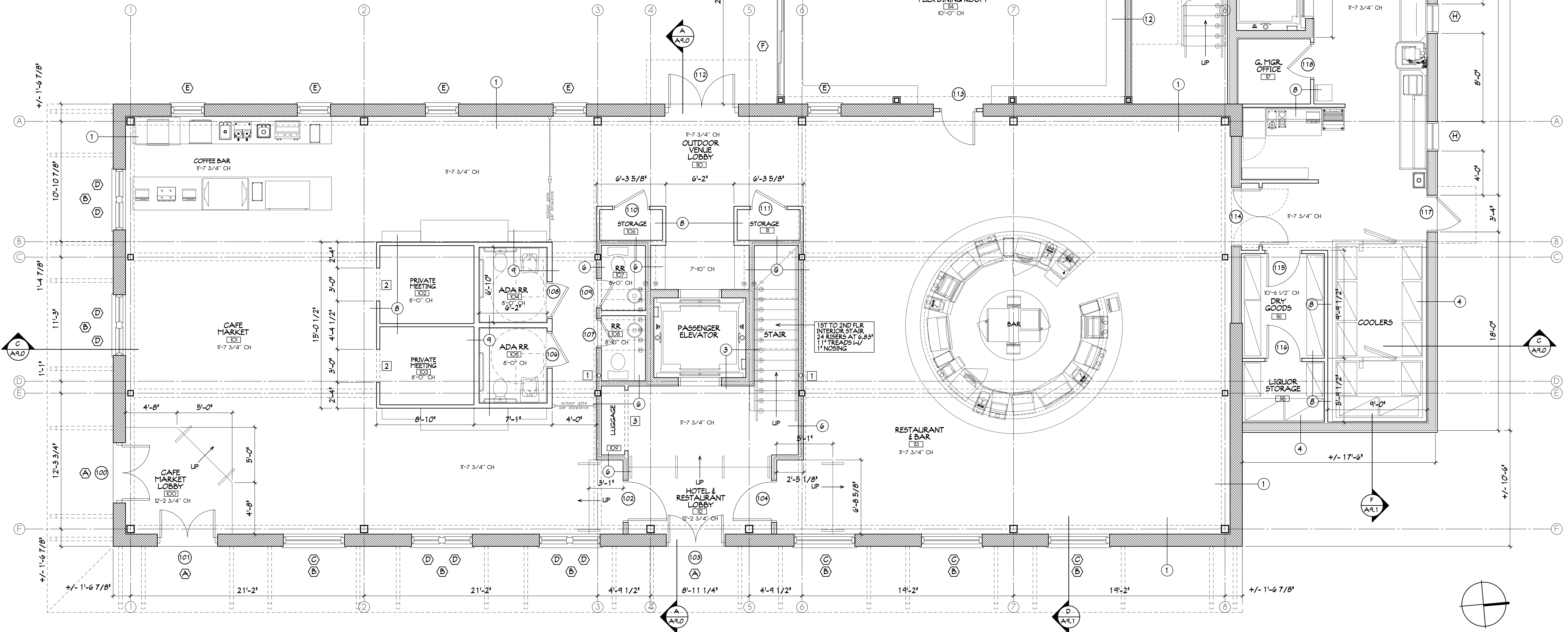
- EXISTING WALL ASSEMBLY
- NEW CMU WALL ASSEMBLY
- NEW FRAMED WALL ASSEMBLY
- NEW FIRE RATED WALL ASSEMBLY
- FEATURES ABOVE
- WINDOW SYMBOL
- DOOR SYMBOL
- WALL SECTION
- WALL TYPE PER SCHEDULE
- ROOM NUMBER
- COLUMN/POST PER STRUCT. DWGS.
- STRUCTURAL GRID
- HANDRAIL

FLOOR PLAN NOTES

- 4" PVC ROOF DRAIN LEADER
- 3'-0" WIDE X 7'-0" TALL CASED OPENING
- 5'-6" WIDE X 8'-0" TALL CASED OPENING

WALL TYPE SCHEDULE

WALL TYPE	WALL ASSEMBLY/CONSTRUCTION	FIRE RATING	U.L. ASSEMBLY	STC RATING
1	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON DOUBLE W/ THE BRICK WALL ASSEMBLY W/ EXPOSED BRICK INTERIOR FINISH	N/A	N/A	N/A
2	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON BRICK VENEER ON +/- 4" WOOD FRAMED WALLS, ADD INFILTRATION BARRIER, INSULATION AND 5/8" G.I.B. ON 3/4" METAL FURRING.	N/A	N/A	N/A
3	NEW CMU WALL -- (INTERIOR) 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS ON 7 5/8" CONCRETE BLOCK WALL ASSEMBLY.	1-HOUR	UL #U905 SIMILAR	N/A
4	NEW CONCRETE/CMU WALL -- (EXTERIOR) THIN BRICK VENEER OVER WATERPROOFING MEMBRANE ON 7 5/8" CMU WALL W/ 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THK. RIGID FOAM INSULATION STAIN.	1-HOUR	UL #U935	N/A
5	NEW CMU WALL -- (EXTERIOR) SAND FINISH STUCCO ON WATERPROOFING COATING ON 7 5/8" CMU WALL W/ 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THK. RIGID FOAM INSULATION STAIN.	1-HOUR	UL #U935	N/A
6	NEW FRAMED WALL ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. W/ UNFACED R-19 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U423	N/A
7	NEW FRAMED WALL -- (ACOUSTIC) ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. W/ UNFACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U425	54
8	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 3 5/8" METAL WALL STUDS AT MAX. 24" O.C. W/ UNFACED R-19 BATT INSULATION	N/A	N/A	N/A
9	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. W/ UNFACED R-11 BATT INSULATION	N/A	N/A	N/A
10	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 3 5/8" METAL WALL STUDS AT MAX. 24" O.C. W/ UNFACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B. ON 1/2" RESILIENT CHANNELS.	N/A	N/A	59
11	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 5 1/2" METAL WALL STUDS STAGGERED AT MAX. 24" O.C. ON 5 1/2" PLATE W/ UNFACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B.	N/A	N/A	62
12	NEW FRAMED WALL -- (EXTERIOR) METAL SIDING PANEL ON INFILTRATION BARRIER ON 5/8" DOCK BOARD SHEATHING ON 5 1/2" METAL STUDS AT 12" O.C. W/ R-19 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. INTERIOR FINISH.	1-HOUR	UL #U404	N/A



FIRST FLOOR PLAN

1/4" = 1'-0"

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AS STANDARD MARINE FLOOR PLAN
PROJECT # 5210726
DRAWN BY -- JLM
CHKD BY -- JLM
DATE -- 11-22-22

MIRANDA ARCHITECTS
309 1/2 CENTRE STREET, SUITE 206
FERNANDINA BEACH, FL 32034
904.264.586 TEL
FL REG. NO. 14000

ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

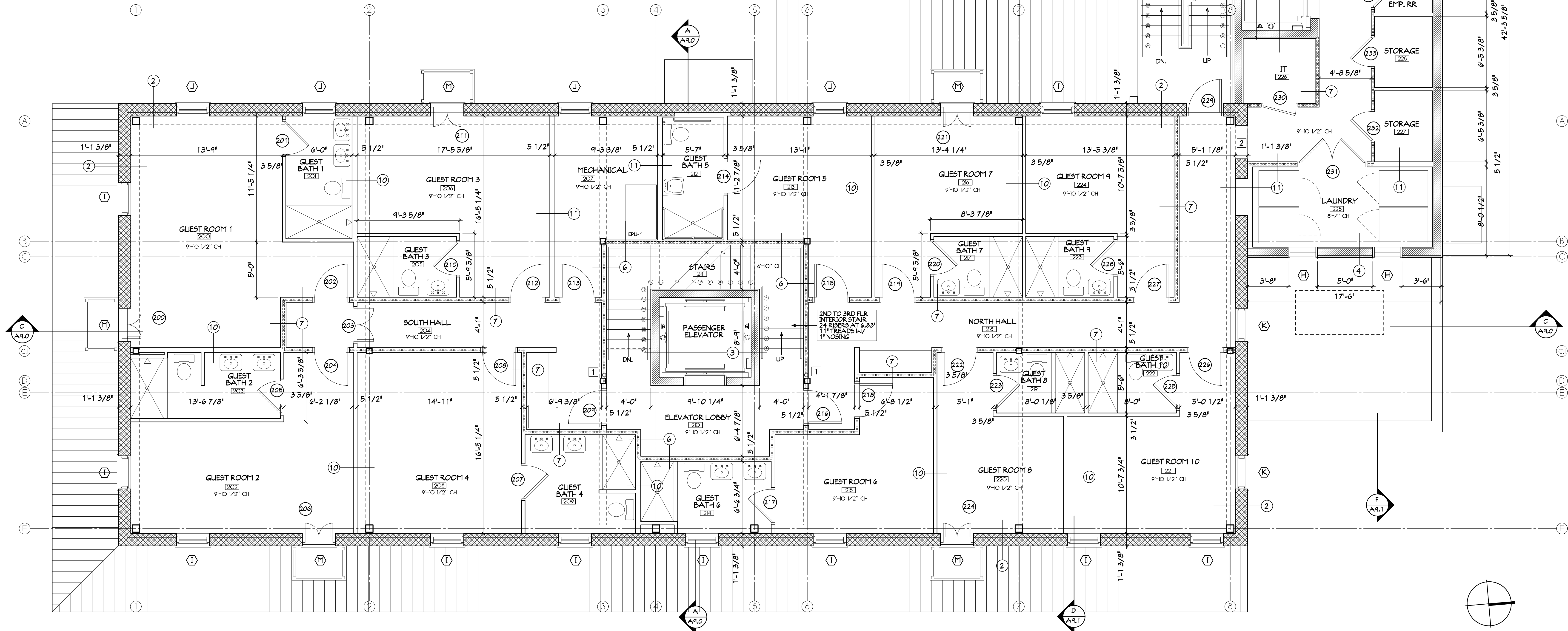
FIRST FLOOR PLAN	REVISIONS	DATE
#		

A3.0

FLOOR PLAN LEGEND	
	EXISTING WALL ASSEMBLY
	NEW CMU WALL ASSEMBLY
	NEW FRAMED WALL ASSEMBLY
	NEW FIRE RATED WALL ASSEMBLY
	FEATURES ABOVE
	WINDOW SYMBOL
	DOOR SYMBOL
	WALL SECTION
	WALL TYPE PER SCHEDULE
	ROOM NUMBER
	COLUMN/POST PER STRUCT. DWGS.
	STRUCTURAL GRID
	HANDRAIL

FLOOR PLAN NOTES	
1	4" PVC ROOF DRAIN LEADER
2	3'-0" WIDE X 8'-0" TALL CASSED OPENING
3	

WALL TYPE SCHEDULE				
WALL TYPE	WALL ASSEMBLY/CONSTRUCTION	FIRE RATING	U/L ASSEMBLY	STC RATING
1	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON DOUBLE 1/4" THICK BRICK WALL ASSEMBLY 1/4" EXPOSED BRICK INTERIOR FINISH	N/A	N/A	N/A
2	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON BRICK VENEER ON +/- 4" WOOD FRAMED WALLS. ADD INFILTRATION BARRIER, INSULATION AND 5/8" G.I.B. ON 3/4" METAL FURRING.	N/A	N/A	N/A
3	NEW CMU WALL -- (INTERIOR) 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS ON 7 5/8" CONCRETE BLOCK WALL ASSEMBLY.	1-HOUR	UL #U905 SIMILAR	N/A
4	NEW CONCRETE/CMU WALL -- (EXTERIOR) THIN BRICK VENEER OVER WATERPROOFING MEMBRANE ON 7 5/8" CMU WALL 1/4" 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THICK RIGID FOAM INSULATION BTWN.	1-HOUR	UL #U935	N/A
5	NEW CMU WALL -- (EXTERIOR) SAND FINISH STUCCO ON WATERPROOFING COATING ON 7 5/8" CMU WALL 1/4" 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THICK RIGID FOAM INSULATION BTWN.	1-HOUR	UL #U935	N/A
6	NEW FRAMED WALL ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U423	N/A
7	NEW FRAMED WALL -- (ACOUSTIC) ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U425	54
8	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 3 5/8" METAL WALL STUDS AT MAX. 24" O.C.	N/A	N/A	N/A
9	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION	N/A	N/A	N/A
10	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 3 5/8" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B. ON 1/2" RESILIENT CHANNELS.	N/A	N/A	59
11	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 3 5/8" METAL WALL STUDS STAGGERED AT MAX. 24" O.C. ON 5 1/2" PLATE 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B.	N/A	N/A	62
12	NEW FRAMED WALL -- (EXTERIOR) METAL SIDING PANEL ON INFILTRATION BARRIER ON 5/8" DUROCK SHEATHING ON 5 1/2" METAL STUDS AT 16" O.C. 1/4" R-11 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. INTERIOR FINISH.	1-HOUR	UL #U404	N/A



SECOND FLOOR PLAN

1/4"=1'-0"

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A3 STANDARD MARINE FLOOR PLANS			
PROJECT #5210726	DRAWN BY - JLT	CHKD BY - JLT	DATE - 11-15-22

MIRANDA'S ARCHITECTS
900 1/2 BRITTE STREET, SUITE 206
FERNALDA, FL 32034
904.261.4596 TEL
FL REG. NO. A00000000

MIRANDA'S ARCHITECTS

ADAPTIVE REUSE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNALDA BEACH, FL 32034

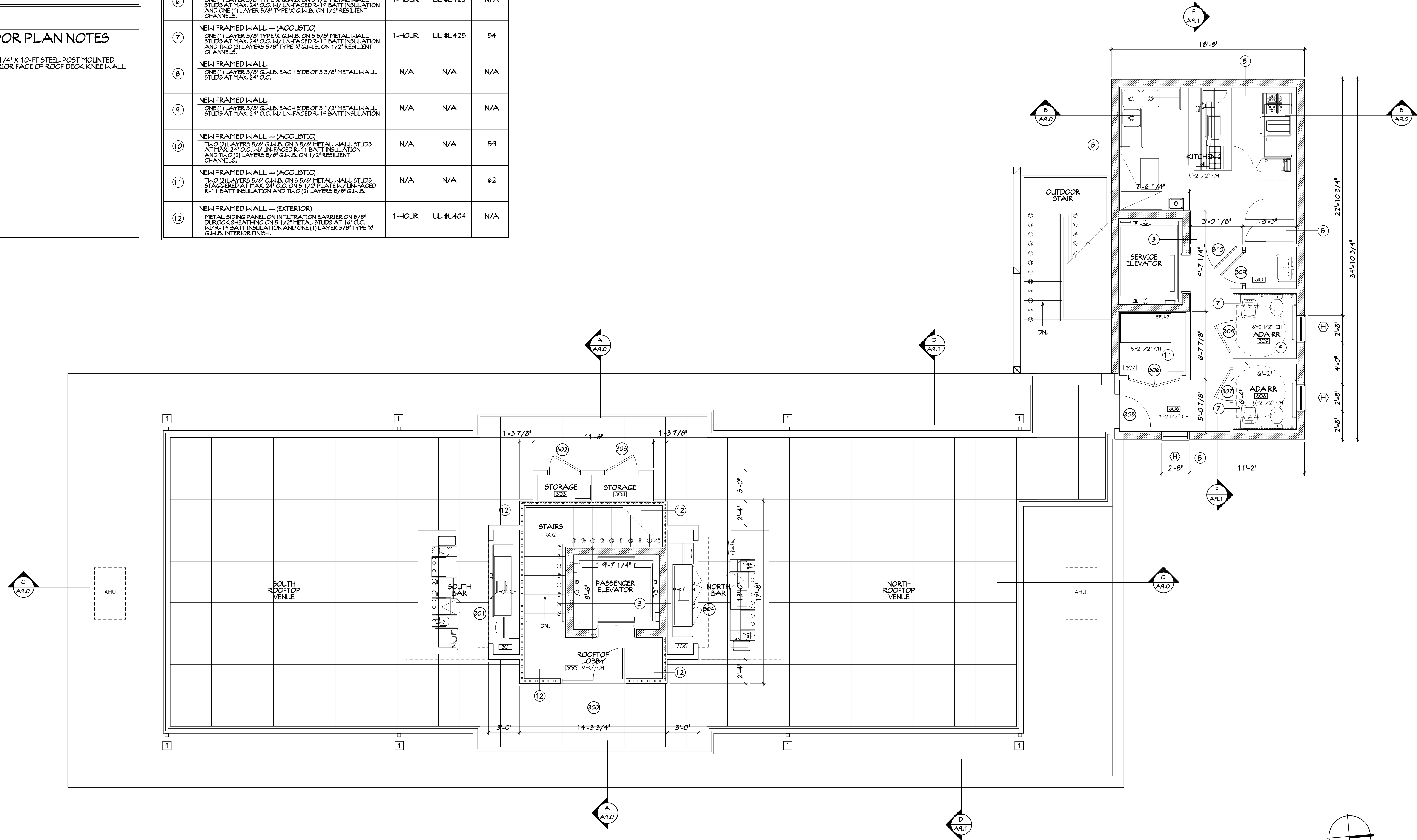
SECOND FLOOR PLAN	
REVISIONS	DATE
#	

A3.1

FLOOR PLAN LEGEND	
	EXISTING WALL ASSEMBLY
	NEW CMU WALL ASSEMBLY
	NEW FRAMED WALL ASSEMBLY
	NEW FIRE RATED WALL ASSEMBLY
	FEATURES ABOVE
	WINDOW SYMBOL
	DOOR SYMBOL
	WALL SECTION
	WALL TYPE PER SCHEDULE
	ROOM NUMBER
	COLUMN/POST PER STRUCT. DWGS.
	STRUCTURAL GRID
	HANDRAIL

FLOOR PLAN NOTES	
1	4" X 4" X 1/4" X 10-FT STEEL POST MOUNTED TO EXTERIOR FACE OF ROOF DECK KNEE WALL

WALL TYPE SCHEDULE				
WALL TYPE	WALL ASSEMBLY/CONSTRUCTION	FIRE RATING	U.L. ASSEMBLY	STC RATING
1	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON DOUBLE 1/2" THICK BRICK WALL ASSEMBLY 1/4" EXPOSED BRICK INTERIOR FINISH	N/A	N/A	N/A
2	EXISTING MASONRY WALL -- (EXTERIOR) EXTERIOR STUCCO FINISH ON BRICK VENEER ON +/- 4" WOOD FRAMED WALLS. ADD INFILTRATION BARRIER, INSULATION AND 5/8" G.I.B. ON 3/4" METAL FURRING.	N/A	N/A	N/A
3	NEW CMU WALL -- (INTERIOR) 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS ON 7 5/8" CONCRETE BLOCK WALL ASSEMBLY.	1-HOUR	UL #U905 SIMILAR	N/A
4	NEW CONCRETE/CMU WALL -- (EXTERIOR) THIN BRICK VENEER OVER WATERPROOFING MEMBRANE ON 7 5/8" CMU WALL 1/4" 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THICK RIGID FOAM INSULATION BTWN.	1-HOUR	UL #U935	N/A
5	NEW CMU WALL -- (EXTERIOR) SAND FINISH STUCCO ON WATERPROOFING COATING ON 7 5/8" CMU WALL 1/4" 5/8" G.I.B. ON 1 1/2" METAL FURRING CHANNELS AND 1 1/2" THICK RIGID FOAM INSULATION BTWN.	1-HOUR	UL #U935	N/A
6	NEW FRAMED WALL ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U423	N/A
7	NEW FRAMED WALL -- (ACOUSTIC) ONE (1) LAYER 5/8" TYPE 'X' G.I.B. ON 5 5/8" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" TYPE 'X' G.I.B. ON 1/2" RESILIENT CHANNELS.	1-HOUR	UL #U425	54
8	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 3 5/8" METAL WALL STUDS AT MAX. 24" O.C.	N/A	N/A	N/A
9	NEW FRAMED WALL ONE (1) LAYER 5/8" G.I.B. EACH SIDE OF 5 1/2" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION	N/A	N/A	N/A
10	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 3 5/8" METAL WALL STUDS AT MAX. 24" O.C. 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B. ON 1/2" RESILIENT CHANNELS.	N/A	N/A	59
11	NEW FRAMED WALL -- (ACOUSTIC) TWO (2) LAYERS 5/8" G.I.B. ON 3 5/8" METAL WALL STUDS STAGGERED AT MAX. 24" O.C. ON 5 1/2" PLATE 1/4" UN-FACED R-11 BATT INSULATION AND TWO (2) LAYERS 5/8" G.I.B.	N/A	N/A	62
12	NEW FRAMED WALL -- (EXTERIOR) METAL SIDING PANEL ON INFILTRATION BARRIER ON 5/8" DUROCK SHEATHING ON 5 1/2" METAL STUDS AT 16" O.C. 1/4" R-11 BATT INSULATION AND ONE (1) LAYER 5/8" TYPE 'X' G.I.B. INTERIOR FINISH.	1-HOUR	UL #U404	N/A



THIRD FLOOR / ROOF DECK PLAN

1/4"=1'-0"

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A3 STANDARD MARINE FLOOR PLANS			
PROJECT #5210726	DRAWN BY - JLT	CHKD BY - JLT	DATE - 11-15-22

MIRANDA ARCHITECTS
300 1/2 GRIFFIN STREET, SUITE 206
FERNALDA BEACH, FL 32034
TEL: 904.261.4596
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ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

THIRD FLOOR & ROOF DECK PLAN	
#	REVISIONS

FINISH SCHEDULE												
#	ROOM NAME	FLOORING			BASE		TRIM	WALLS			CEILING	
		TILE	STAINED CONCRETE	CARPET RUNNER/WOOD STEPS	CARPET	EPoxy FLOORING	NO BASE AT BACK WALLS	BASE BOARD PER INTERIOR TRIM ALLOWANCE	CASING PER INTERIOR TRIM ALLOWANCE	EXISTING BRICK WALLS	GYPSUM WALL BOARD (GWB)	EXISTING STUCCO ON BRICK WALLS
							BASE BOARD PER INTERIOR TRIM ALLOWANCE			STAINLESS STEEL AT KITCHEN HOOD	WOOD	GYPSUM WALL BOARD (GWB)
100	CAFE MARKET LOBBY	X					X	X	X		X	
101	CAFE MARKET	X	X				X	X		X	X	
102	PRIVATE MEETING						X	X	X			X
103	PRIVATE MEETING		X				X	X	X			X
104	ADA RESTROOM		X				X	X	X			X
105	ADA RESTROOM		X				X	X	X			X
106	STORAGE		X				X	X	X			X
107	RESTROOM		X				X	X	X			X
108	RESTROOM		X				X	X	X			X
109	LUGGAGE						X	X	X			X
110	OUTDOOR VENUE LOBBY		X				X	X	X	X	X	
111	STORAGE		X				X	X	X			X
112	HOTEL RESTAURANT LOBBY		X	X			X	X	X	X	X	
113	RESTAURANT/BAR	X	X				X	X	X	X	X	
114	FLEX DINING ROOM		X				X	X	X	X	X	
115	LIQUOR		X				X	X	X			X
116	DRY GOODS		X				X	X	X			X
117	GENERAL MANAGER OFFICE		X				X	X	X			X
118	CHEF OFFICE		X				X	X	X			X
119	KITCHEN		X				X	X	X	X	X	
120	BREAK ROOM		X				X	X	X			X
121	EMPLOYEE RESTROOM		X				X	X	X			X
122	VENUE BAR		X				X	X	X			X
123	STORAGE		X				X	X	X			X
124	ADA RESTROOM		X				X	X	X			X
125	ADA RESTROOM		X				X	X				X
200	GUEST ROOM 1			X			X	X		X		X
201	GUEST BATH 1	X					X	X	X			X
202	GUEST ROOM 2			X			X	X	X			X
203	GUEST BATH 2	X					X	X	X			X
204	SOUTH HALL			X			X	X	X			X
205	GUEST BATH 3	X					X	X	X			X
206	GUEST ROOM 4			X			X	X	X			X
207	MECHANICAL	X					X	X	X			X
208	GUEST ROOM 4			X			X	X	X			X
209	GUEST BATH 4	X					X	X	X			X
210	ELEVATOR LOBBY			X			X	X	X			X
211	STAIR			X			X	X	X			X
212	GUEST BATH 5	X					X	X	X			X
213	GUEST ROOM 5			X			X	X	X			X
214	GUEST BATH 6	X					X	X	X			X
215	GUEST ROOM 6			X			X	X	X			X
216	GUEST ROOM 7			X			X	X	X			X
217	GUEST BATH 7	X					X	X	X			X
218	NORTH HALL			X			X	X	X			X
219	GUEST BATH 8	X					X	X	X			X
220	GUEST ROOM 8			X			X	X	X			X
221	GUEST ROOM 10			X			X	X	X			X
222	GUEST BATH 10	X					X	X	X			X
223	GUEST BATH 9	X					X	X	X			X
224	GUEST ROOM 9			X			X	X	X			X
225	LAUNDRY	X					X	X	X			X
226	I.T.		X				X	X	X			X
227	STORAGE			X			X	X	X			X
228	STORAGE			X			X	X	X			X
229	EMPLOYEE RESTROOM	X					X	X	X			X
230	MEETING ROOM			X			X	X				X
300	ROOFTOP LOBBY						X	X		X		X
301	SOUTH BAR	X					X	X		X		X
302	STAIR			X			X	X	X			X
303	STORAGE	X					X	X	X			X
304	STORAGE	X					X	X	X			X
305	NORTH BAR	X					X	X	X			X
306	HALL	X					X	X	X			X
307	MECHANICAL	X					X	X	X			X
308	ADA RESTROOM	X					X	X	X			X
309	ADA RESTROOM	X					X	X	X			X
310	MOP SINK	X					X	X	X			X
311	KITCHEN 2				X		X	X		X	X	X

WINDOW SCHEDULE						
FRAME WIDTH	FRAME HEIGHT	WINDOW ELEVATION	WINDOW TYPE	MANUFACTURER MODEL/SERIES	GLAZING	
A +/-5'-2"	+/-2'-3 1/2"	A/A4.1	FIXED	RESTORED WINDOW		
B +/-5'-2"	+/-2'-3 1/2"	B/A4.1	FIXED	RESTORED WINDOW		
C +/-5'-2"	+/-6'-6 1/2"	C/A4.1	FIXED	RESTORED WINDOW		
D +/-2'-4 1/2"	+/-6'-6 1/2"	D/A4.1	FIXED	RESTORED WINDOW		
E +/-2'-8"	+/-2'-1 1/2"	E/A4.1	FIXED	RESTORED WINDOW		
F 9'-0"	6'-6"	F/A4.1	SLIDING	SOLAR INNOVATIONS		
G 9'-0"	6'-6"	G/A4.1	SLIDING	SOLAR INNOVATIONS		
H 2'-8"	2'-2"	H/A4.1	FIXED	SOLAR INNOVATIONS		
I +/-2'-8"	+/-6'-9"	I/A4.1	FIXED	RESTORED WINDOW		
J +/-2'-8"	+/-6'-7 1/2"	J/A4.1	FIXED	RESTORED WINDOW		
K +/-2'-8"	+/-6'-7 1/2"	K/A4.1	FIXED	RESTORED WINDOW		
L 2'-8"	3'-4"	L/A4.1	FIXED	SOLAR INNOVATIONS		
M VARIES	2'-8"	M/A4.1	FIXED		ARCH TOP TRANSOM	

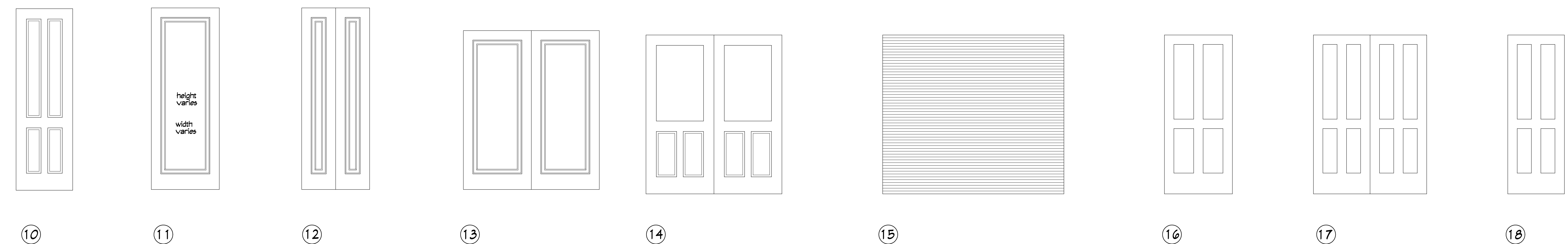
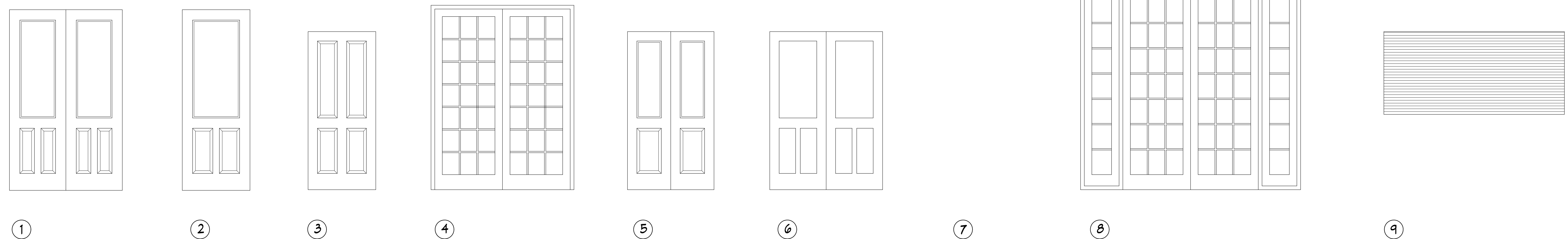
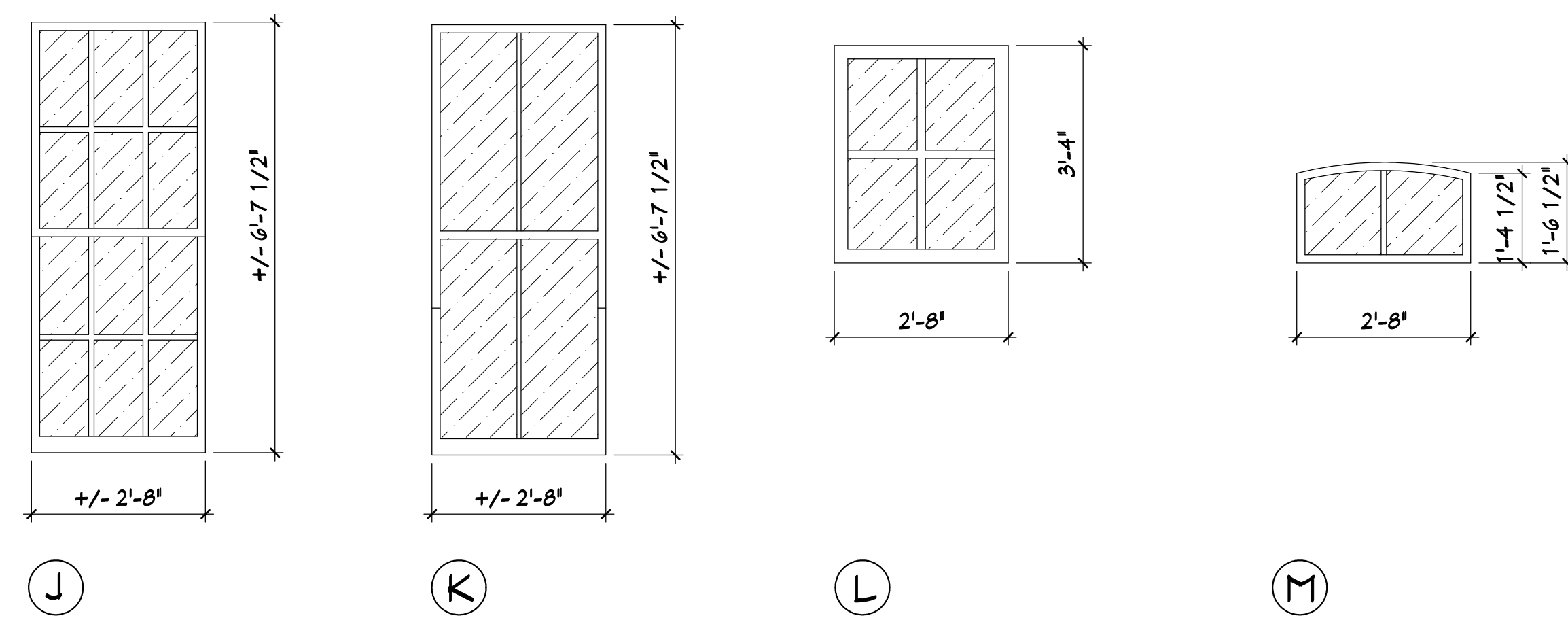
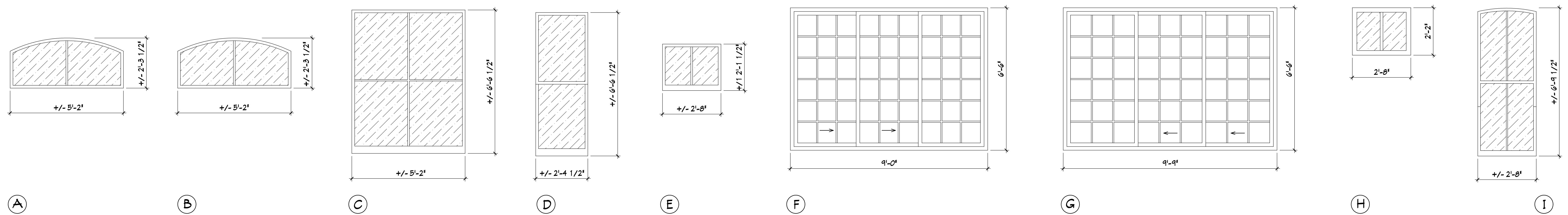
DOOR SCHEDULE						
DOOR SIZE	DOOR TYPE	DOOR ELEVATION	DOOR MANUFACTURER	NOTES	HARDWARE GROUP	
100 (2) 2'-6 X 8'-0"	1LGT/2P SWING		CUSTOM MAHOGANY			
101 (2) 2'-6 X 8'-0"	1LGT/2P SWING	1/A4.1	CUSTOM MAHOGANY			
102 3'-6" X 8'-0"	1 LGT/SWING			20-MIN FIRE RATED		
103 (2) 2'-6 X 8'-0"	1LGT/2P SWING	1/A4.1	CUSTOM MAHOGANY			
104 3'-6" X 8'-0"	1 LGT/SWING			20-MIN FIRE RATED		
105 2'-8" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
106 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
107 2'-4" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
108 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
109 2'-4" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
110 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
111 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
112 (2) 3'-0" X 8'-0"	6-LIGHT SWING		SOLAR INNOVATIONS			
113 3'-0" X 7'-0"	6-LIGHT SWING					
114 (2) 2'-6" X 7'-0"	DOUBLE ACTING					
115 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
116 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
117 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
118 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
119 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
120 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
121 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
122 (2) 3'-0" X 8'-10"	6-LIGHT SWING		SOLAR INNOVATIONS			
123 8'-0" X 3'-8"	ROLL DOWN SHUTTER		CORNELL			
124 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
125 2'-4" X 3'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
126 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
127 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
128 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
200 (2) 1'-3" X 7'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
201 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000		
202 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
203 (2) 1'-6" X 8'-0"	1 PANEL/SWING		TRUSTILE			
204 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
205 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
206 (2) 1'-3" X 7'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
207 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
208 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
209 3'-0" X 8'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
210 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
211 (2) 1'-3" X 7'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
212 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
213 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
214 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
215 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
216 3'-0" X 8'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
217 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
218 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
219 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
220 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
221 (2) 1'-3" X 7'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
222 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
223 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
224 (2) 1'-3" X 7'-0"	1LGT/1P SWING		CUSTOM MAHOGANY			
225 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
226 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
227 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
228 3'-0" X 8'-0"	1 PANEL/SWING		TRUSTILE			
229 3'-0" X 8'-0"	6 PANEL/SWING		STEELCRAFT			
230 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
231 (2) 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
232 2'-8" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
233 2'-8" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
234 2'-4" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
235 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE	MODEL TS1000, 20-MIN FIRE RATED		
300 (2) 3'-0" X 7'-0"	6-LIGHT SWING		SOLAR INNOVATIONS			
301 10'-0" X 7'-0"	ROLL DOWN SHUTTER		CORNELL			
302 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
303 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
304 10'-0" X 7'-0"	ROLL DOWN SHUTTER		CORNELL			
305 3'-0" X 7'-0"	6 PANEL/SWING		STEELCRAFT			
306 (2) 2'-6" X 7'-0"	1 PANEL/SWING		TRUSTILE			
307 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE			
308 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE			
309 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE			
310 3'-0" X 7'-0"	1 PANEL/SWING		TRUSTILE			

A4 STANDARD MARINE SCHEDULES				
PROJECT #5210726				
DRAWN BY - JLT				
CHKD BY - JLT				
DATE - 11-15-22				

MIRANDA ARCHITECTS	
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MIRANDA ARCHITECTS	

ADAPTIVE RE-USE OF THE	
CH HUOT BUILDING (STANDARD MARINE)	
101 NORTH 2ND STREET FERNANDINA BEACH, FL 32034	

WINDOW, DOOR, FINISH SCHEDULES	
REVISIONS	
#	DATE





EAST ELEVATION -- N. 2ND STREET

1/4"=1'-0"

AS STANDARD MARINE ELEVATIONS			
PROJECT #5210726			
DRAWN BY -- JLM			
CHKD BY -- JLM			
DATE -- 11-15-22			

MIRANDA ARCHITECTS

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904.281.4586 TEL
FL REG. NO. 204887

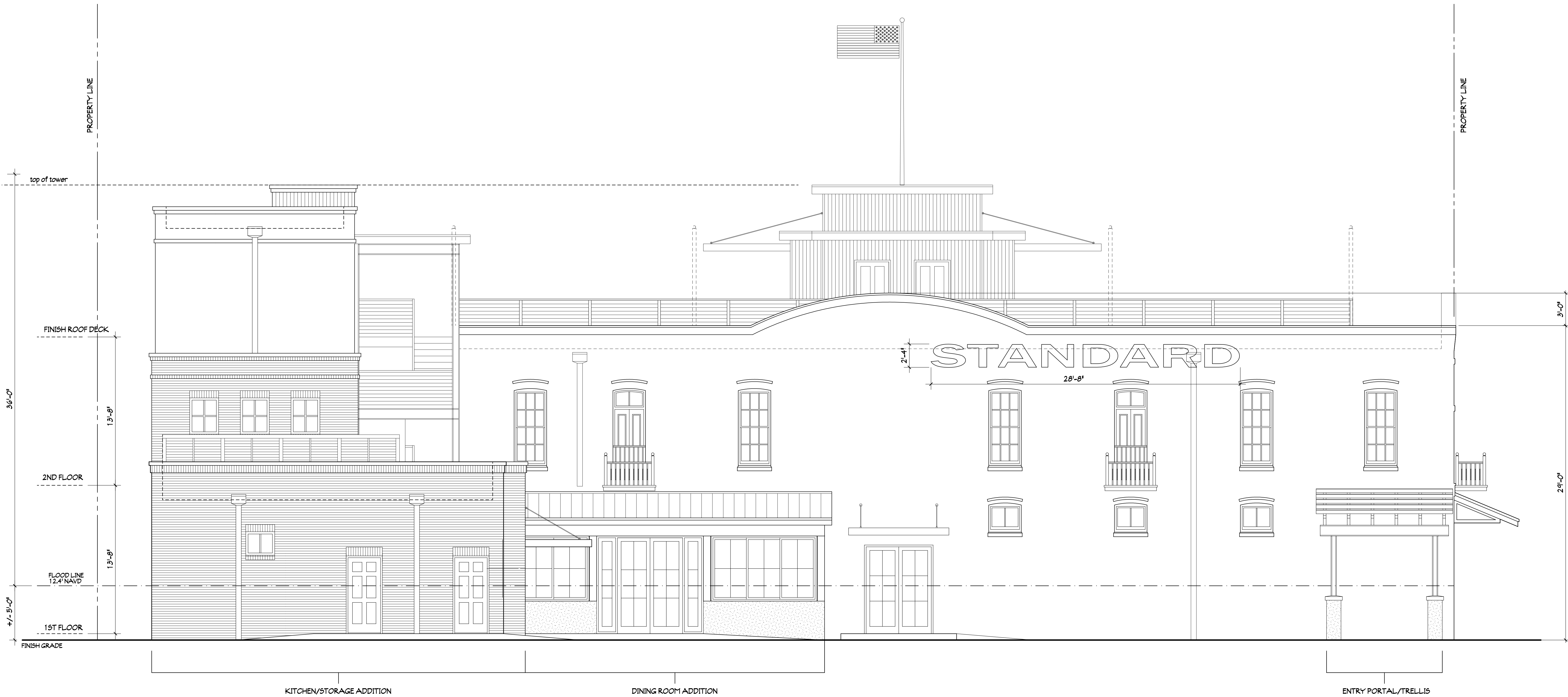


ADAPTIVE RE-USE OF THE

CH HUOT BUILDING (STANDARD MARINE)

101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

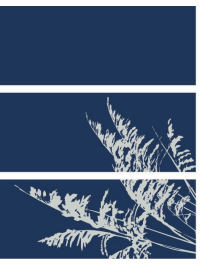
EAST ELEVATION		DATE
#	REVISIONS	



WEST ELEVATION

1/4"=1'-0"

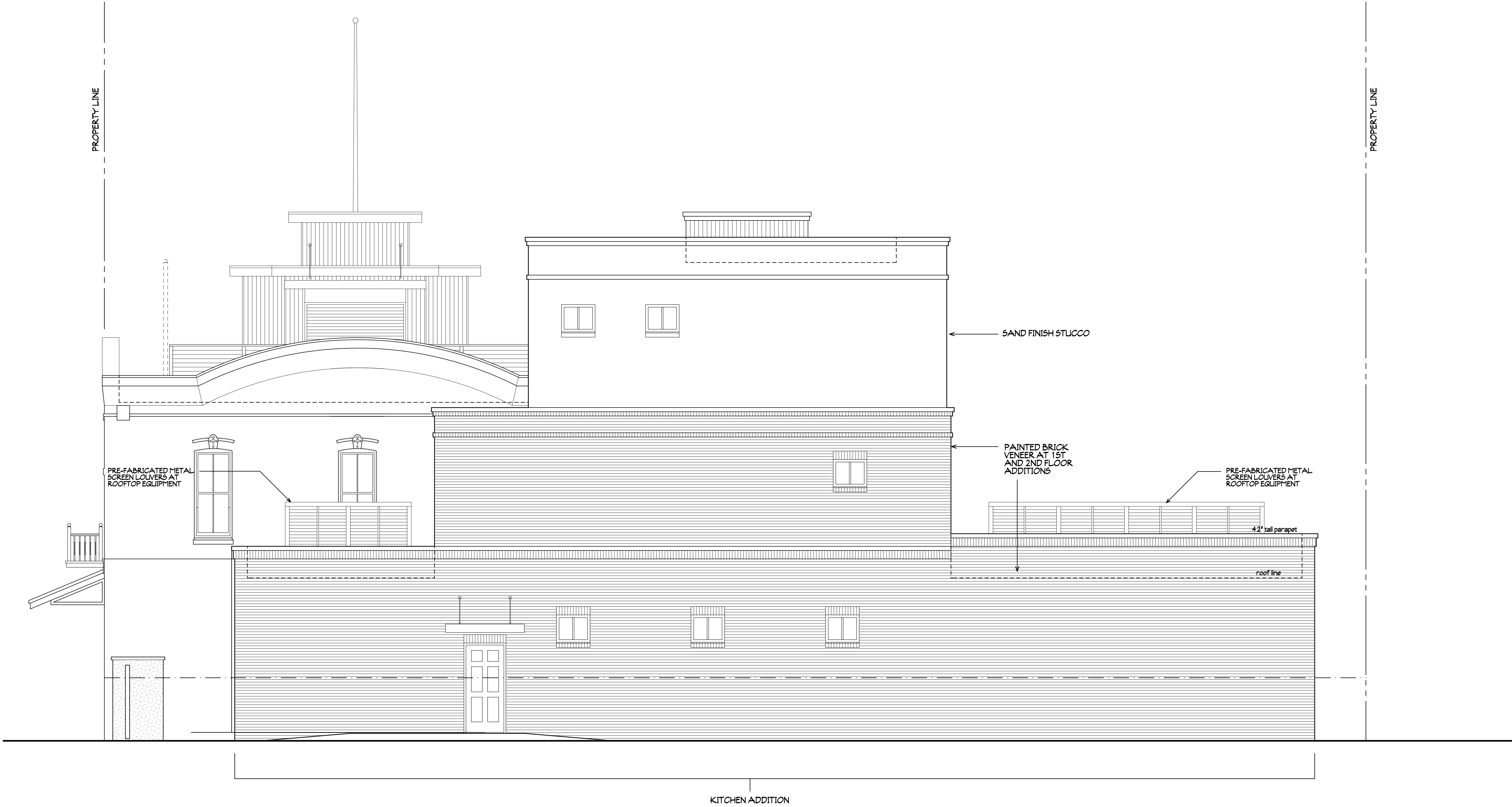
AS STANANDAYANE ELEVATIONS			
PROJECT #5210726			
DRAWN BY -- JLT			
CHKD BY -- JLT			
DATE -- 11-15-22			



**MIRANDA
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ADAPTIVE RE-USE OF THE
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FERNANDINA BEACH, FL 32034

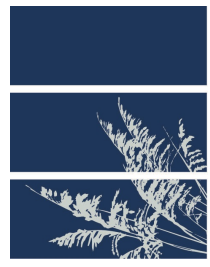
WEST ELEVATION		
#	REVISIONS	DATE



NORTH ELEVATION

1/4"=1'-0"

AS STANDARD MARINE ELEVATION	
PROJECT #5210726	
DRAWN BY -- JLT	
CHKD BY -- JLT	
DATE -- 11-15-22	



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ADAPTIVE RE-USE OF THE

CH HUOT BUILDING (STANDARD MARINE)

101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

NORTH ELEVATION	
#	DATE

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ROOF PLAN NOTES

1

2

ROOF PLAN LEGEND

—

ROOF LINE

- - - - -

WALLS BELOW

gutter

GLUTTERS

o ds

DOWNSPOUTS

RAIN COLLECTOR

OVERFLOW SCUPPER

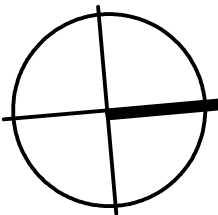
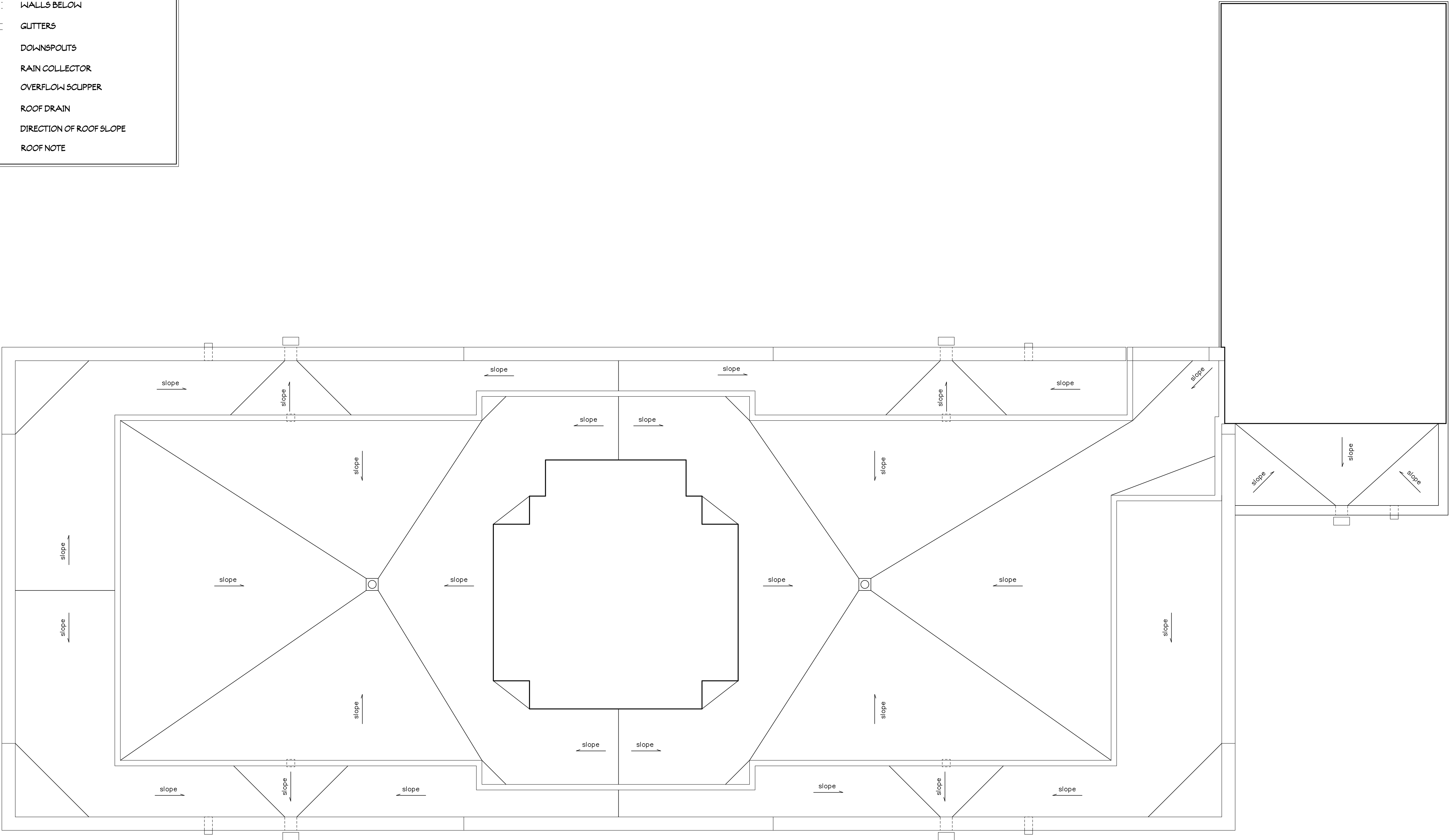
ROOF DRAIN

slope

DIRECTION OF ROOF SLOPE

1

ROOF NOTE



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A3 STANDARD MARINE FLOOR PLANS

PROJECT #5210726

DRAWN BY -- JLT

CHKD BY -- JLT

DATE -- 11-15-22

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ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

SECOND FLOOR ROOF PLAN	
#	REVISIONS
DATE	

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ROOF PLAN NOTES

1

2

ROOF PLAN LEGEND

—

ROOF LINE

WALLS BELOW

gutter

GLUTTERS

o ds

DOWNSPOUTS

RAIN COLLECTOR

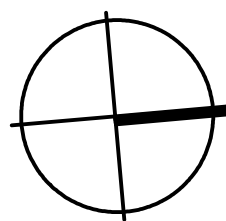
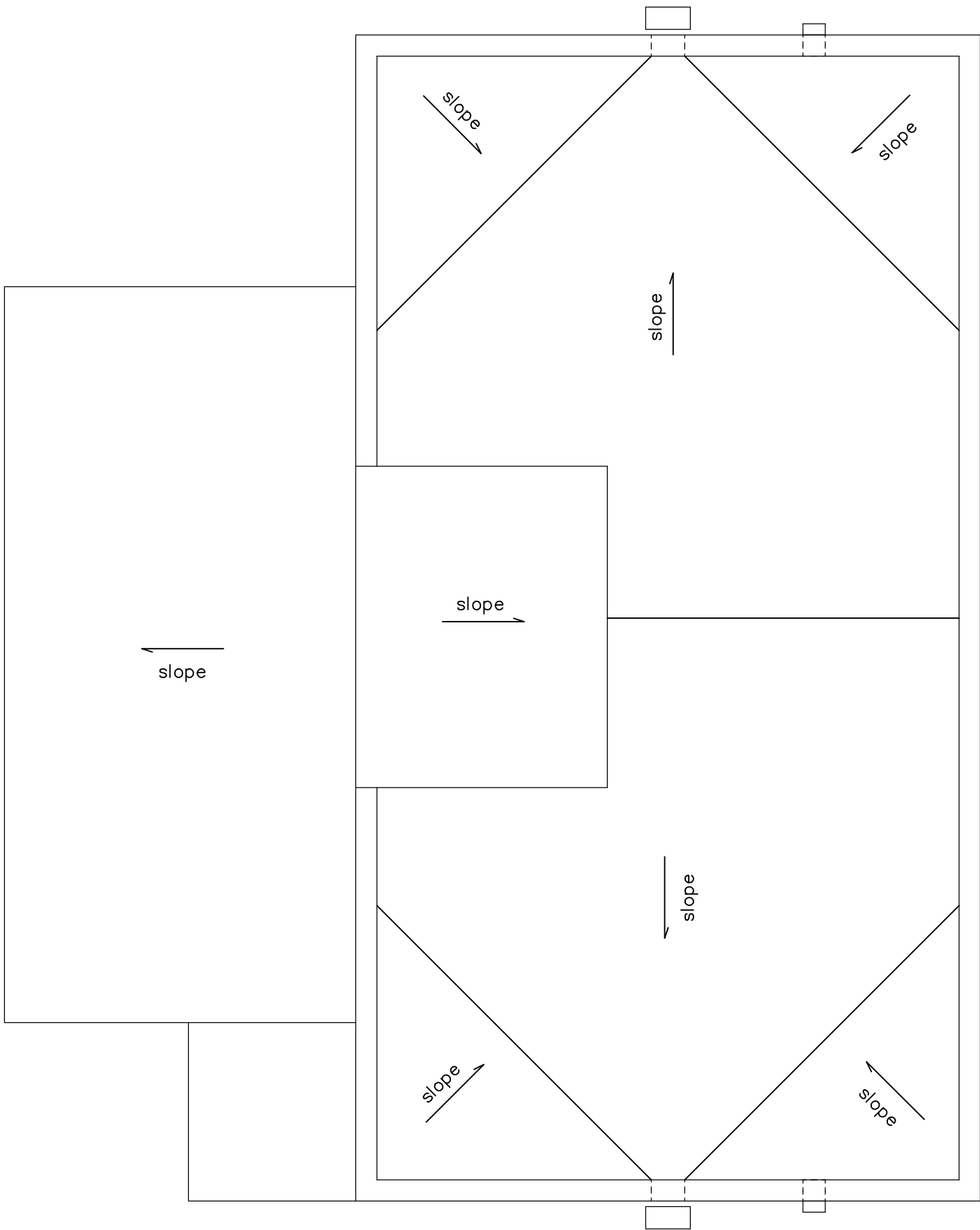
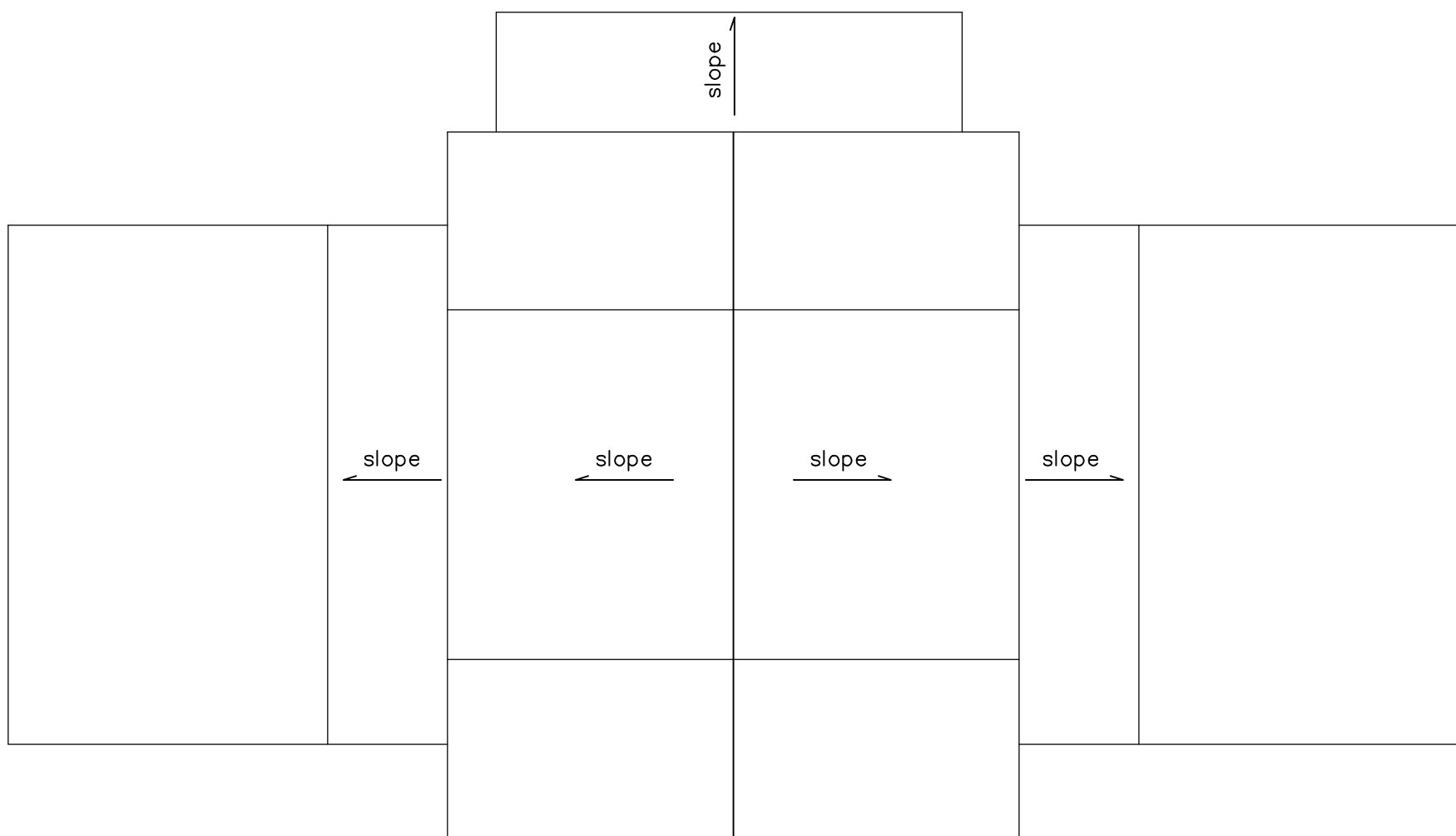
OVERFLOW SCUPPER

slope

DIRECTION OF ROOF SLOPE

1

ROOF NOTE



THIRD FLOOR ROOF PLAN

1/4"=1'-0"

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A3 STANDARD MARINE FLOOR PLANS

PROJECT #5210726

DRAWN BY -- JLT

CHKD BY -- JLT

DATE -- 11-15-22

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MIRANDA ARCHITECTS

ADAPTIVE RE-USE OF THE

CH HUOT BUILDING (STANDARD MARINE)

101 NORTH 2ND STREET
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THIRD FLOOR ROOF PLAN	
#	REVISIONS
DATE	

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A-2 STANDARD MARINE
FLOOR PLANS
PROJECT #5210726
DRAWN BY -- JLT
CHKD BY -- JLT
DATE -- 11-15-22

MIRANDA
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FERNANDINA, FL 32034
904.261.4595 TEL
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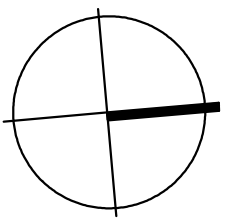
ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

1ST FLR. REFLECTED CEILING PLAN		REVISIONS	DATE
#			

A7.0

REFLECTED CLG PLAN LEGEND

- DRYWALL CEILING
(UNLESS OTHERWISE NOTED)
- WOOD CEILING
(UNLESS OTHERWISE NOTED)
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE
- RECESSED LIGHT FIXTURE
- SURFACE MTD. LIGHT FIXTURE
- FIRE SPRINKLER PENDANT



FIRST FLOOR REFLECTED CEILING PLAN

1/4"=1'-0"

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A-2 STANDARD MARINE FLOOR PLANS
PROJECT #5210726
DRAWN BY -- JLT
CHKD BY -- JLT
DATE -- 11-15-22

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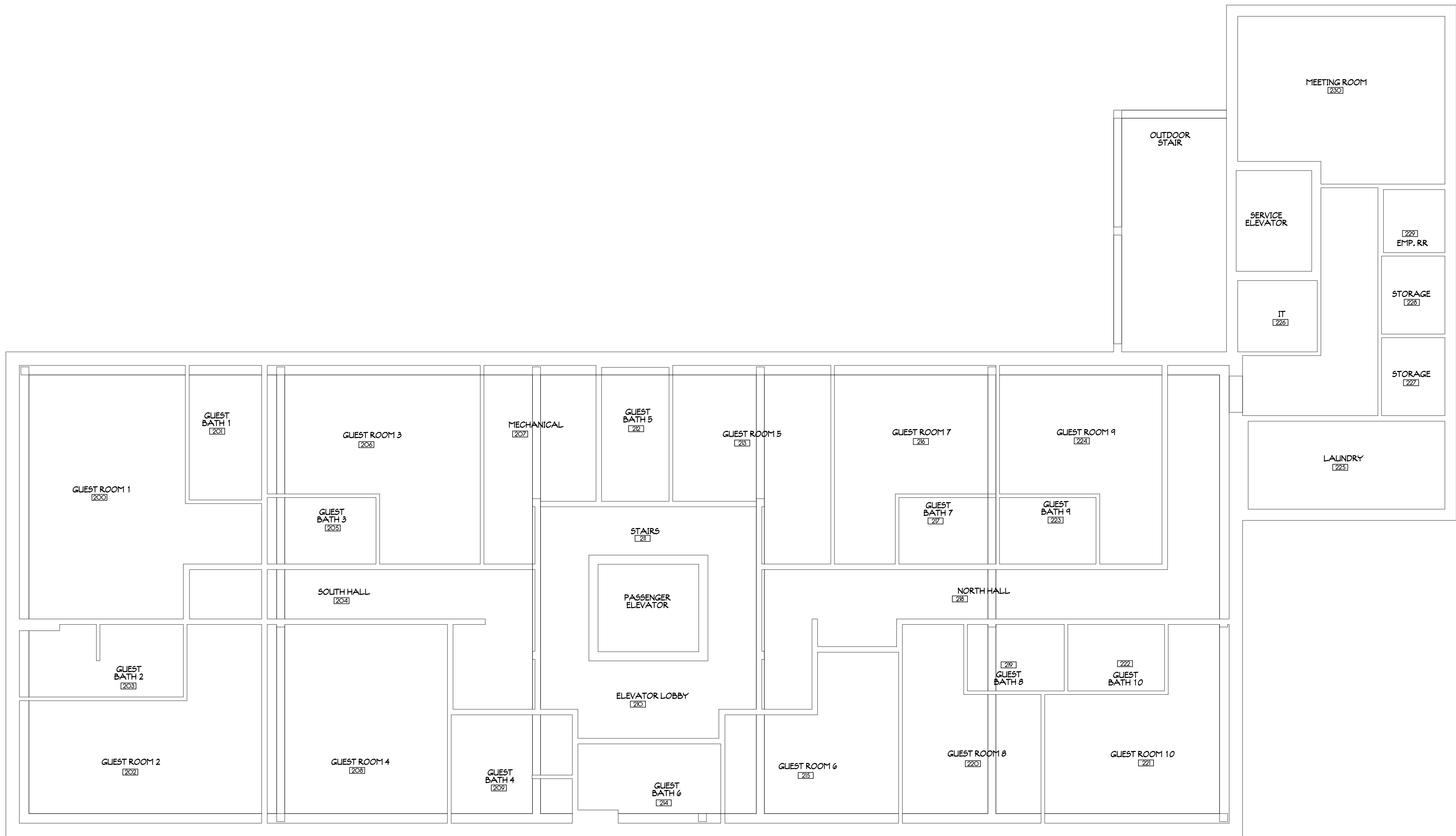
ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

2ND FLR. REFLECTED CEILING PLAN		REVISIONS	DATE
#			

A7.1

REFLECTED CLG PLAN LEGEND

	DRYWALL CEILING (UNLESS OTHERWISE NOTED)
	WOOD CEILING (UNLESS OTHERWISE NOTED)
	HVAC SUPPLY GRILLE
	HVAC RETURN GRILLE
	RECESSED LIGHT FIXTURE
	SURFACE MTD. LIGHT FIXTURE
	FIRE SPRINKLER PENDANT



SECOND FLOOR REFLECTED CEILING PLAN

1/4"=1'-0"

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A-2 STANDARD MARINE FLOOR PLANS
PROJECT # 5210726
DRAWN BY -- JLT
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DATE -- 11-15-22

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FERNANDINA, FL 32034
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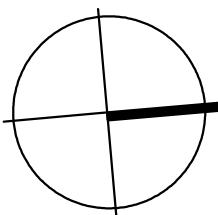
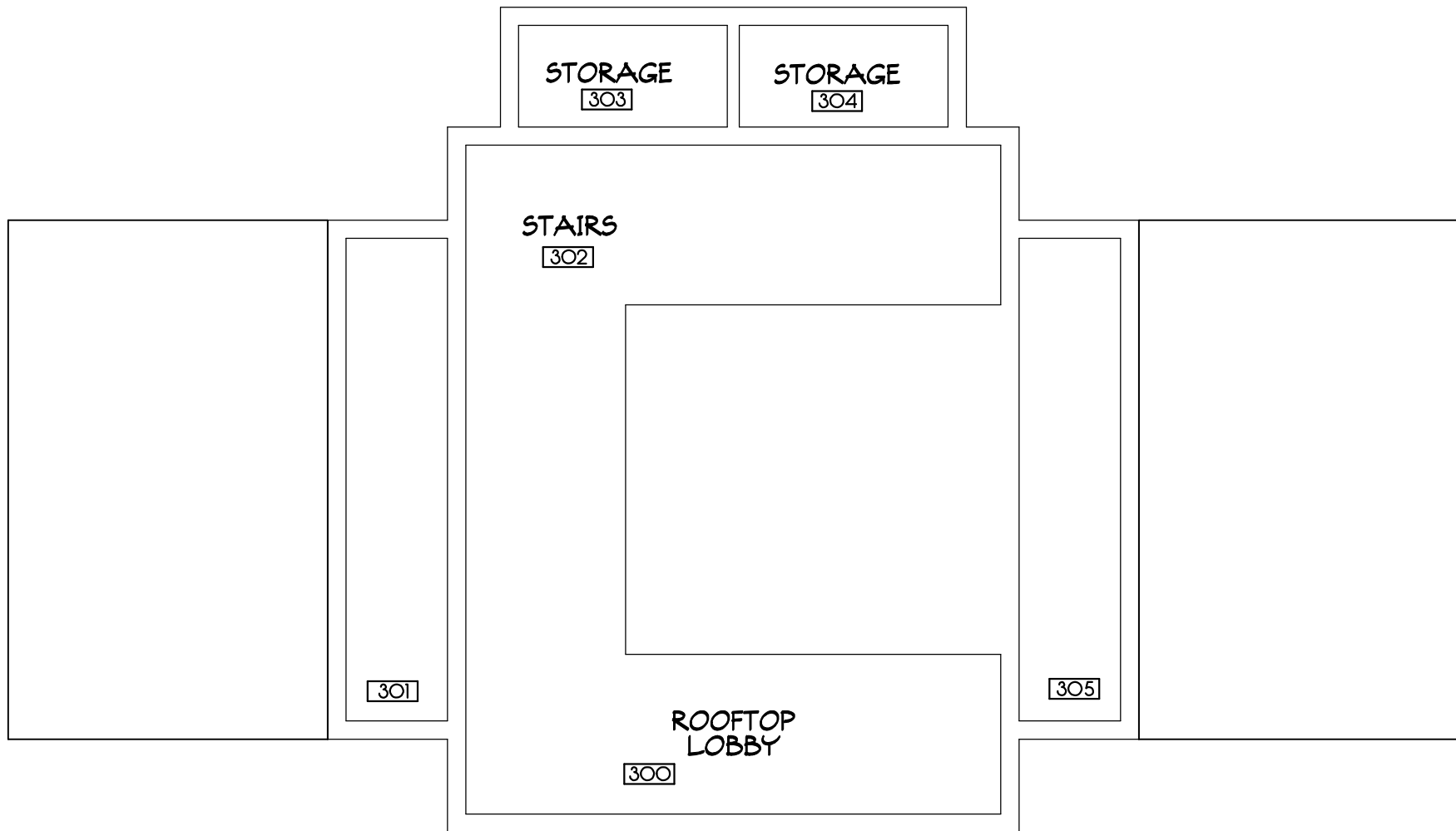
ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

3RD FLR. REFLECTED CEILING PLAN	
#	REVISIONS
DATE	

A7.2

REFLECTED CLG PLAN LEGEND

	DRYWALL CEILING (UNLESS OTHERWISE NOTED)
	WOOD CEILING (UNLESS OTHERWISE NOTED)
	HVAC SUPPLY GRILLE
	HVAC RETURN GRILLE
	RECESSED LIGHT FIXTURE
	SURFACE MTD. LIGHT FIXTURE
	FIRE SPRINKLER PENDANT



THIRD FLOOR REFLECTED CEILING PLAN

1/4"=1'-0"

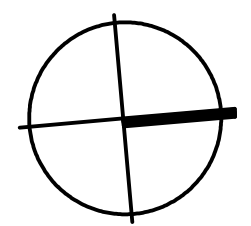
	EXIT DOOR W/ EGRESS UNIT DESIGNATION PER SCHEDULE
	EXIT SIGN
	EMERGENCY LIGHT AND/OR LIGHT W/ EMERGENCY BALLAST
	COMBINATION EXIT SIGN AND EMERGENCY LIGHT
O FE-1	WALL-MOUNTED FIRE EXTINGUISHER, # DESIGNATES TYPE/SIZE PER FIRE EXTINGUISHER SCHEDULE
78'	PATH OF TRAVEL TO EGRESS -- NUMBER INDICATES DISTANCE IN FEET ASSUMING FARTHEST DISTANCE TO EXIT

FE NO.	TYPE AND SIZE INFORMATION
FE-1	RATING: 2-A : 10-B : C SIZE: 7.5 LBS. AGENT: COMMERCIAL ABC DRY CHEMICAL
FE-2	RATING: CLASS - K SIZE: 6 LITER AGENT: POTASSIUM ACETATE
NOTES -- TYPE, SIZE AND LOCATION OF FIRE EXTINGUISHERS TO BE REVIEWED AND APPROVED BY LOCAL FIRE MARSHAL.	

1. TYPE OF CONSTRUCTION: TYPE V-A, SPRINKLERED
2. OCCUPANCY TYPE: MIXED USED
ASSEMBLY (A2) AND RESIDENTIAL (R2)

USE/FUNCTION	OCCUPANT LOAD CALCULATION
CAFE MARKET	ASSEMBLY SEATING AREA 1,186 NET SF / 15 NET SF = 80 OCCUPANTS
RESTAURANT/BAR/DINING	ASSEMBLY SEATING AREA 2,049 NET SF / 15 NET SF = 137 OCCUPANTS
LOBBY AREAS	ASSEMBLY STANDING AREA 354 NET SF / 15 NET SF = 24 OCCUPANTS
KITCHEN AREAS	KITCHEN 1,969 GROSS SF / 200 GROSS SF = 10 OCCUPANTS
STORAGE AREAS	STORAGE 238 GROSS SF / 300 GROSS SF = 1 OCCUPANT
TOTAL 1ST FLOOR OCCUPANT LOAD = 252 OCCUPANTS	

DOOR UNIT	REQUIRED CAPACITY	MIN. CLEARANCE REQ'D.	CLEARANCE PROVIDED	DOOR NOTES
A	42 OCCUPANTS	42 OCC. X .2' PERSON = 8.4 INCHES	56 INCHES	(2) 30" WIDE DOORS
B	42 OCCUPANTS	42 OCC. X .2' PERSON = 8.4 INCHES	56 INCHES	(2) 30" WIDE DOORS
C	150 OCCUPANTS	150 OCC. X .2' PERSON = 30 INCHES	56 INCHES	(2) 30" WIDE DOORS
D	70 OCCUPANTS	70 OCC. X .2' PERSON = 14 INCHES	32 INCHES	(1) 36" WIDE DOOR
E	150 OCCUPANTS	150 OCC. X .2' PERSON = 30 INCHES	64 INCHES	(2) 36" WIDE DOORS
F	40 OCCUPANTS	40 OCC. X .2' PERSON = 8 INCHES	64 INCHES	(2) 36" WIDE DOORS
G	6 OCCUPANTS	6 OCC. X .2' PERSON = 1.8 INCHES	32 INCHES	(1) 36" WIDE DOOR
H	6 OCCUPANTS	6 OCC. X .2' PERSON = 1.8 INCHES	32 INCHES	(1) 36" WIDE DOOR


$$1/4'' = 1' - 0''$$

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PROJECT # 5210726
DRAWN BY -- JLM
CHKD BY -- JLM
DATE -- 11-15-22

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ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

FIRST FLOOR LIFE SAFETY PLAN		
#	REVISIONS	DATE

A8.0

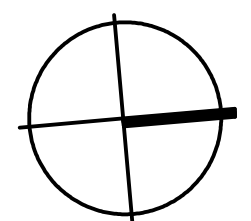
	EXIT DOOR W/ EGRESS UNIT DESIGNATION PER SCHEDULE
	EXIT SIGN
	EMERGENCY LIGHT AND/OR LIGHT W/ EMERGENCY BALLAST
	COMBINATION EXIT SIGN AND EMERGENCY LIGHT
	WALL-MOUNTED FIRE EXTINGUISHER, # DESIGNATES TYPE/SIZE PER FIRE EXTINGUISHER SCHEDULE
	PATH OF TRAVEL TO EGRESS -- NUMBER INDICATES DISTANCE IN FEET ASSUMING FARTHEST DISTANCE TO EXIT

FE NO.	TYPE AND SIZE INFORMATION
FE-1	RATING: 2-A : 10-B : C SIZE: 7.5 LBS. AGENT: COMMERCIAL ABC DRY CHEMICAL
FE-2	RATING: CLASS - K SIZE: 6 LITER AGENT: POTASSIUM ACETATE
NOTES -- TYPE, SIZE AND LOCATION OF FIRE EXTINGUISHERS TO BE REVIEWED AND APPROVED BY LOCAL FIRE MARSHAL.	

1. TYPE OF CONSTRUCTION: TYPE V-A, SPRINKLERED
2. OCCUPANCY TYPE: MIXED USED
ASSEMBLY (A2) AND RESIDENTIAL (R2)

USE/FUNCTION	OCCUPANT LOAD CALCULATION
RESIDENTIAL (HOTEL)	RESIDENTIAL GROSS AREA 4,815 SF/200 GROSS SF = 25 OCCUPANTS
TOTAL 2ND FLOOR OCCUPANT LOAD = 25 OCCUPANTS	

DOOR UNIT	REQUIRED CAPACITY	MIN. CLEARANCE REQ'D.	CLEARANCE PROVIDED	DOOR NOTES
A	13 OCCUPANTS	13 OCC. X .2' PERSON = 2.6 INCHES	32 INCHES	(1) 3/4" WIDE DOOR
B	13 OCCUPANTS	13 OCC. X .2' PERSON = 2.6 INCHES	32 INCHES	(1) 3/4" WIDE DOOR
C	25 OCCUPANTS	26 OCC. X .2' PERSON = 5.2 INCHES	32 INCHES	(1) 3/4" WIDE DOOR


$$1/4'' = 1' - 0''$$

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A2 STANDARD MARINE FLOOR PLANS	PROJECT # 52 10726	DRAWN BY -- JLM	CHKD BY -- JLM	DATE -- 11-15-22
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**MIRANDA
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FERNANDINA BEACH, FL 32034

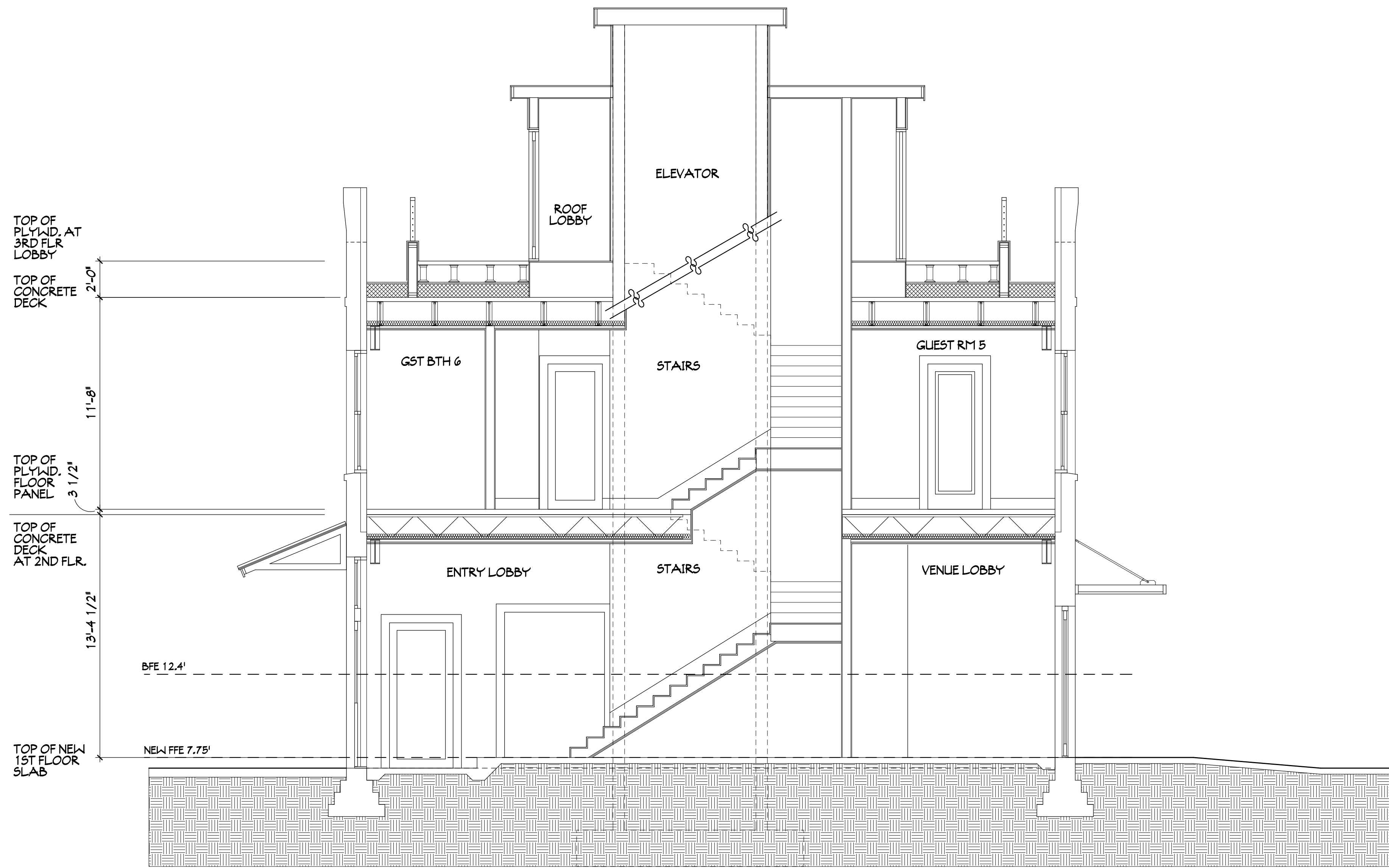


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architects

ADAPTIVE RE-USE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

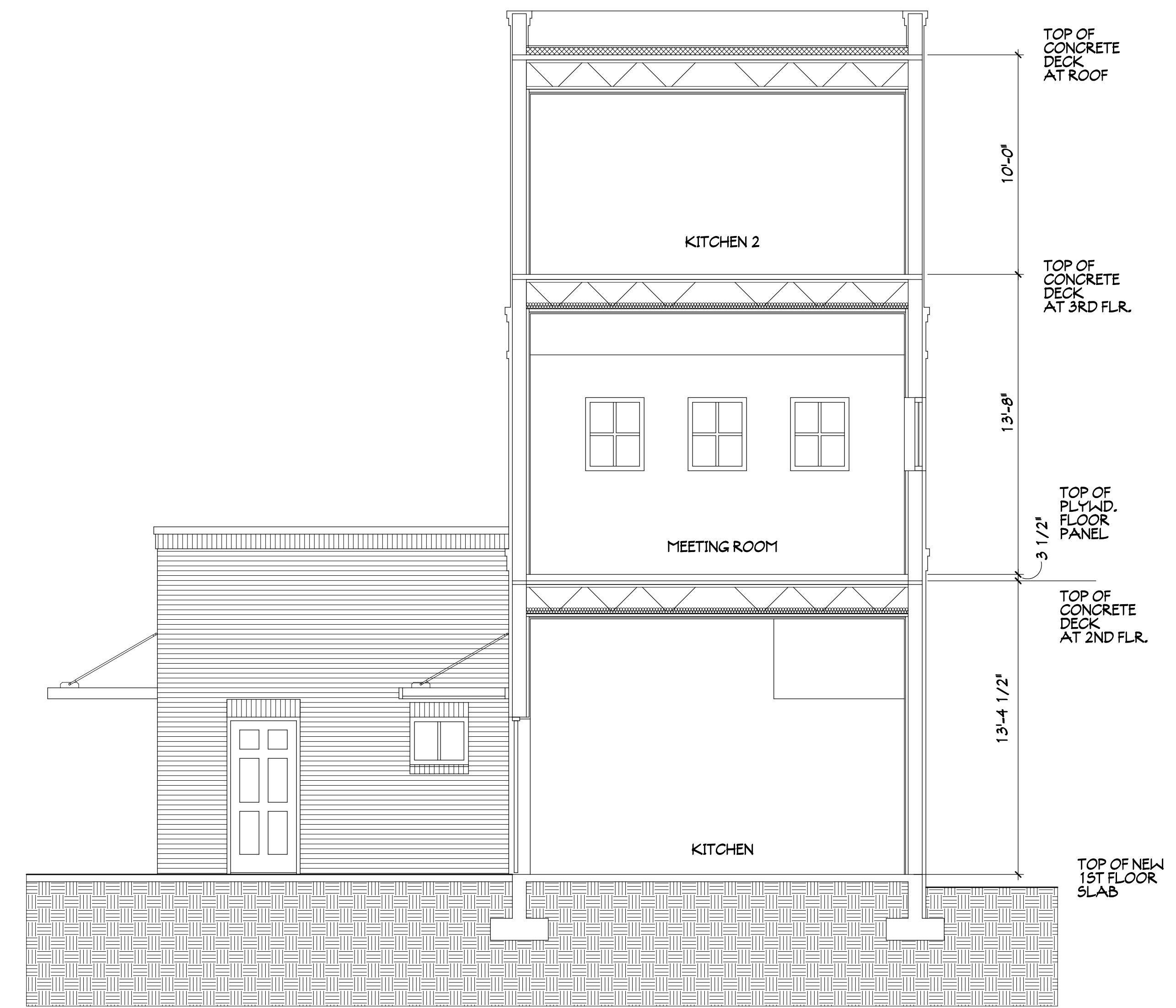
SECOND FLOOR LIFE SAFETY PLAN		
#	REVISIONS	DATE

A8.1



A BUILDING CROSS SECTION

1/4"=1'-0"



B BUILDING CROSS SECTION

1/4"=1'-0"



C BUILDING CROSS SECTION

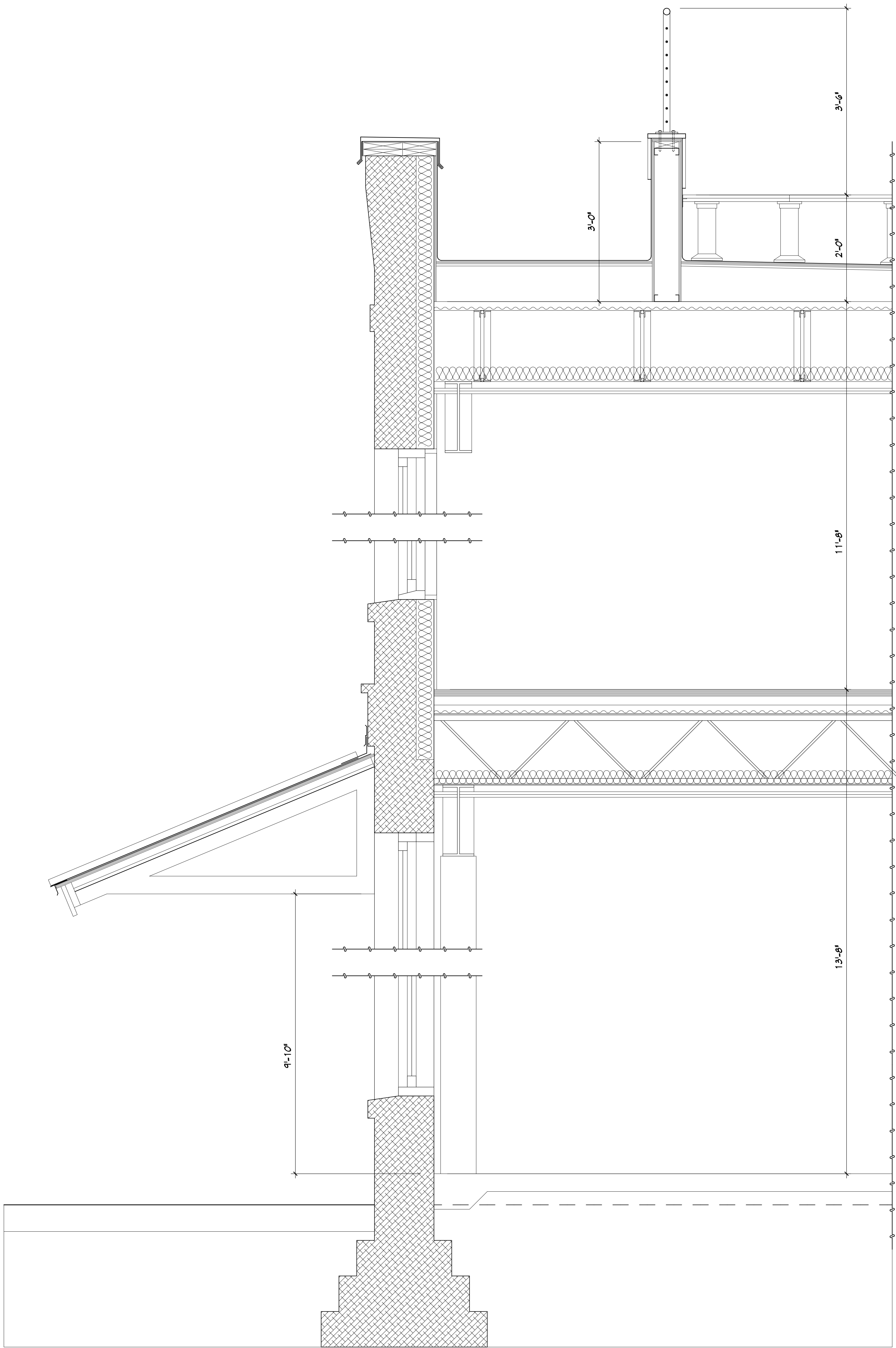
1/4"=1'-0"

ADAPTIVE RE-USE OF THE CH HUOT BUILDING (STANDARD MARINE)
PROJECT # 5210726
DRAWN BY -- JLM
CHKD BY -- JLM
DATE -- 11-15-22

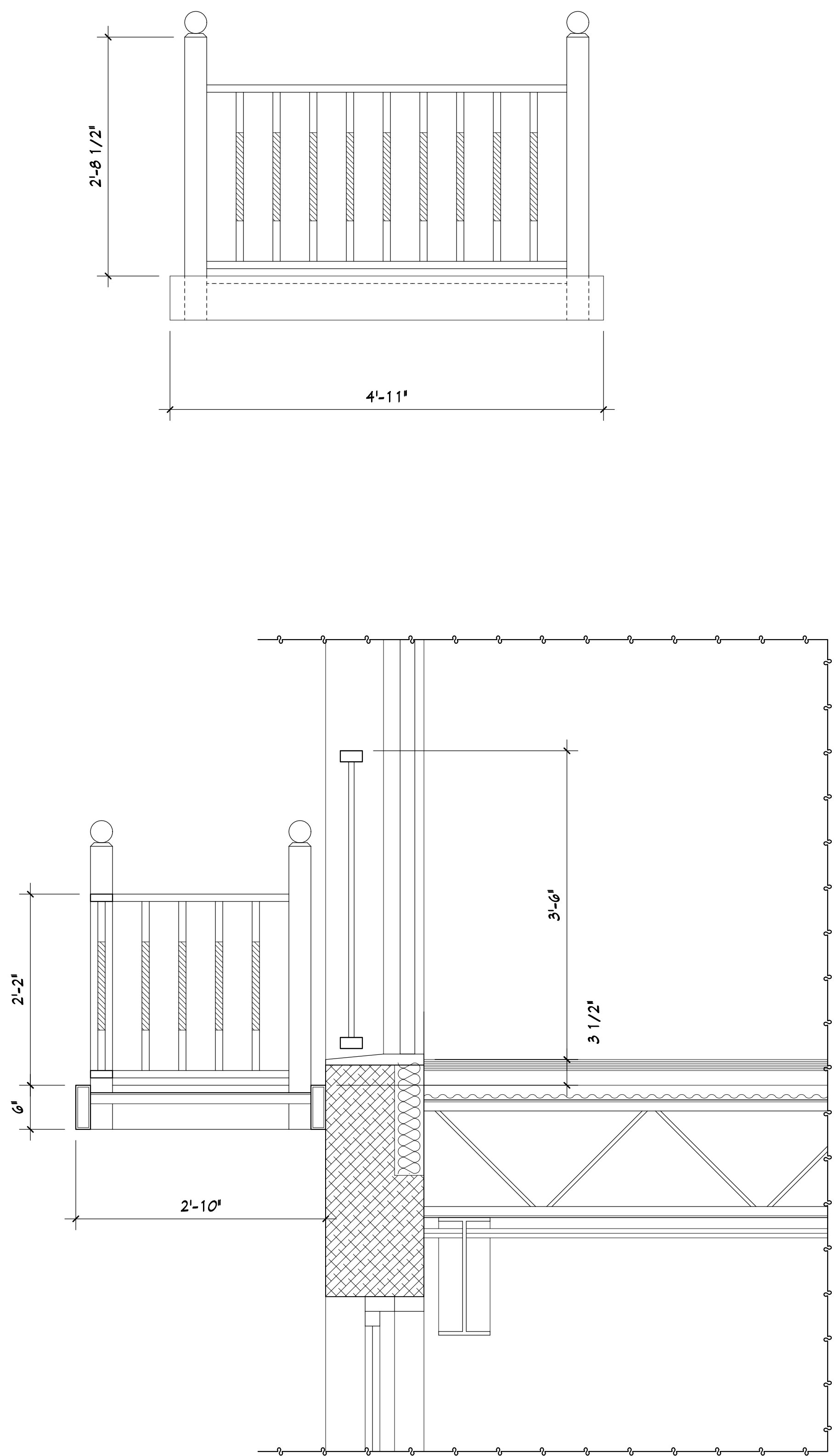
MIRANDA ARCHITECTS
308 1/2 CENTRE STREET, SUITE 208 FERNANDINA BEACH, FL 32034
904.261.4386 TEL 904.261.4386 FAX

ADAPTIVE RE-USE OF THE CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET FERNANDINA BEACH, FL 32034

BUILDING CROSS SECTIONS	REVISIONS	DATE
#		



1 SECTION AT EXISTING BUILDING W/ CANOPY 1"=1'-0"



2 SECTION AT EXISTING BUILDING W/ BALCONETTES 1"=1'-0"

SECTIONS AND DETAILS	
#	DATE

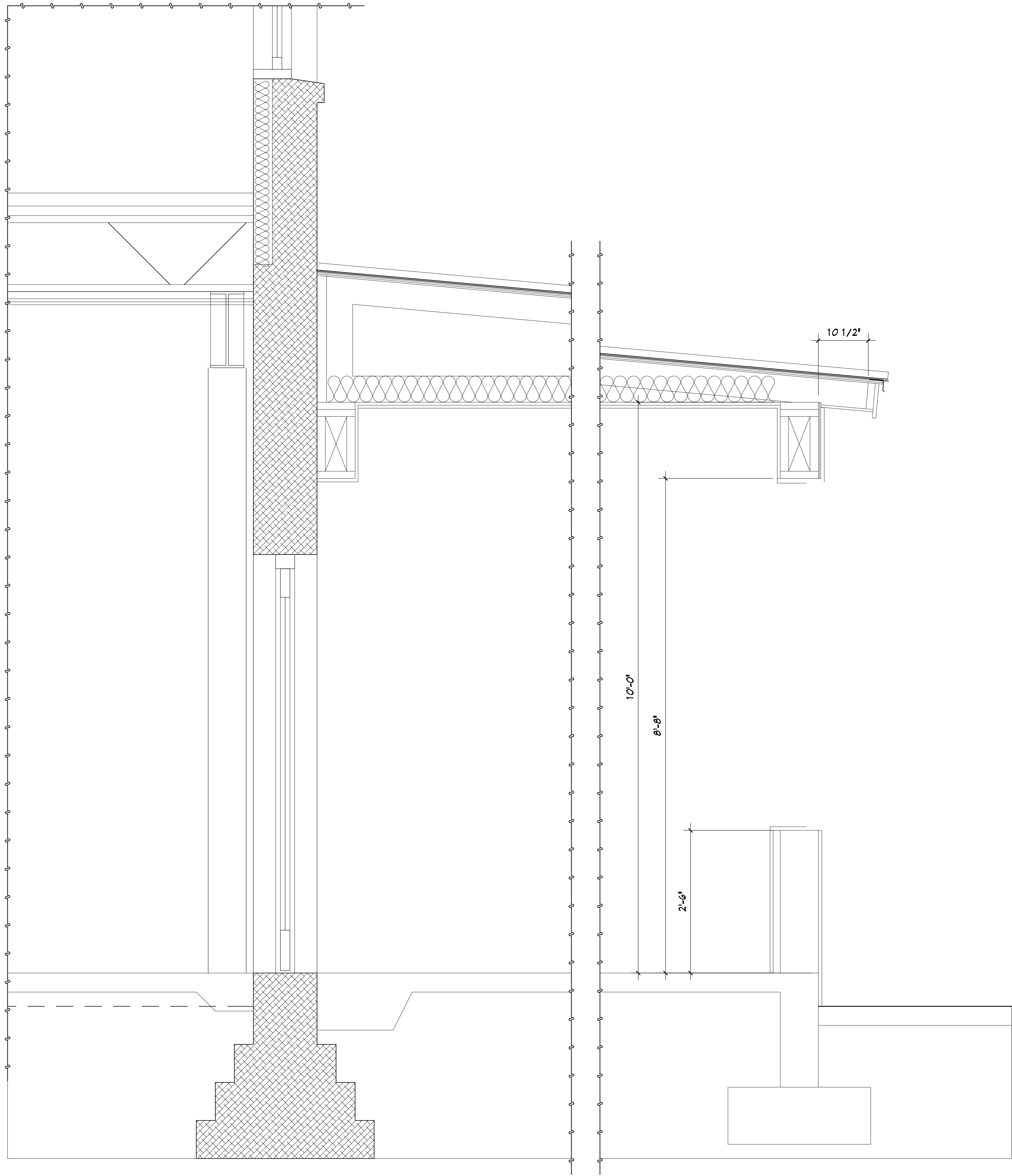
ADAPTIVE RE-USE OF THE
CHHUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034



**MIRANDA
ARCHITECTS**
309 1/2 CENTRE STREET, SUITE 208
FERNANDINA BEACH, FL 32034
904.281.4586 TEL.
FL. REG. NO. 2006007

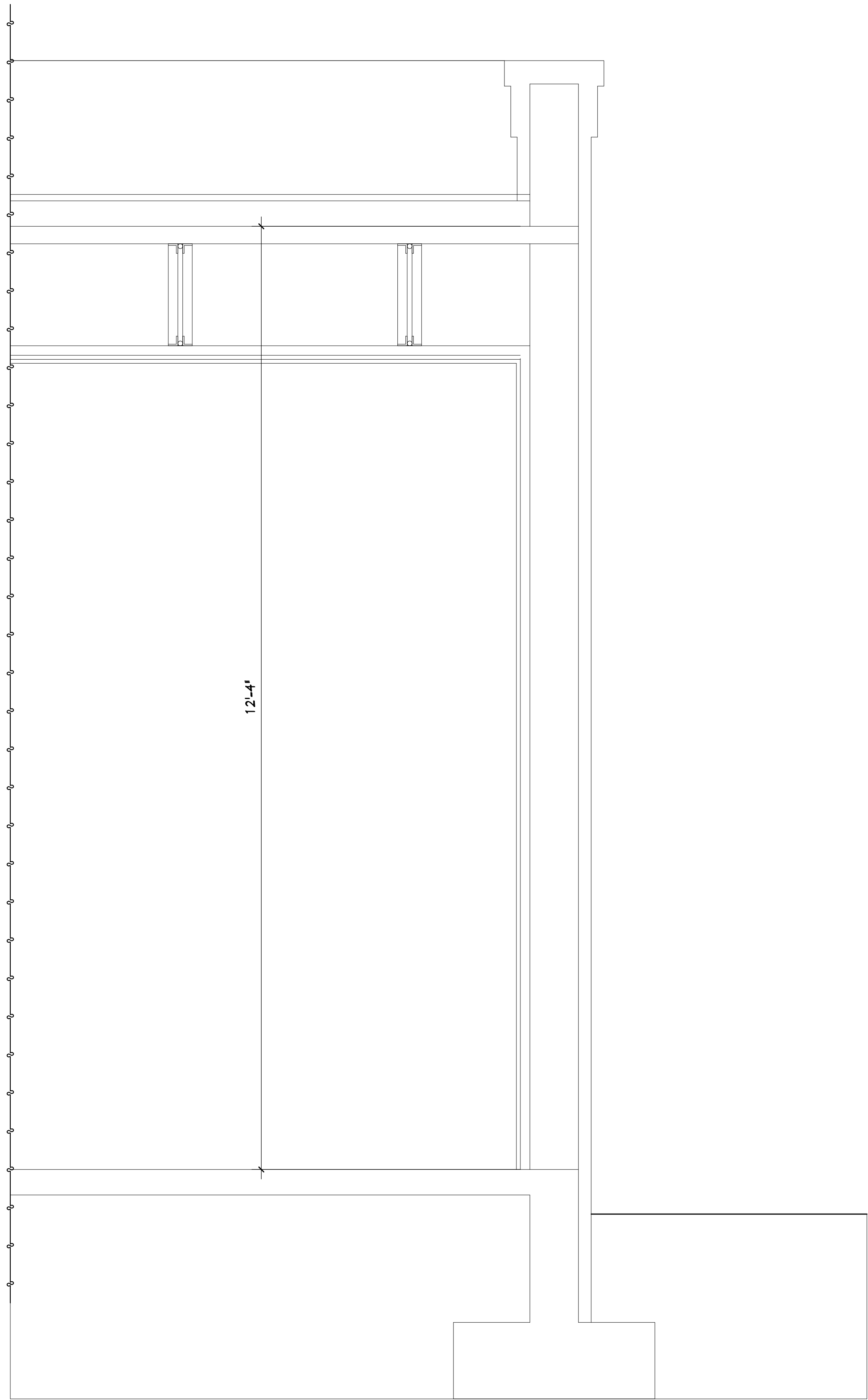
A10 STANDARD MARINE SECTIONS & DETAILS	
PROJECT #5210726	DRAWN BY -- JLT
CHKD BY -- JLT	DATE -- 11-15-22

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3 SECTION AT FLEX DINING ROOM ADDITION

1"=1'-0"



4 SECTION AT ONE STORY KITCHEN AND ROOFTOP AC UNIT

1"=1'-0"

SECTIONS AND DETAILS	
#	REVISIONS

ADAPTIVE RE-USE OF THE
CHHUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034



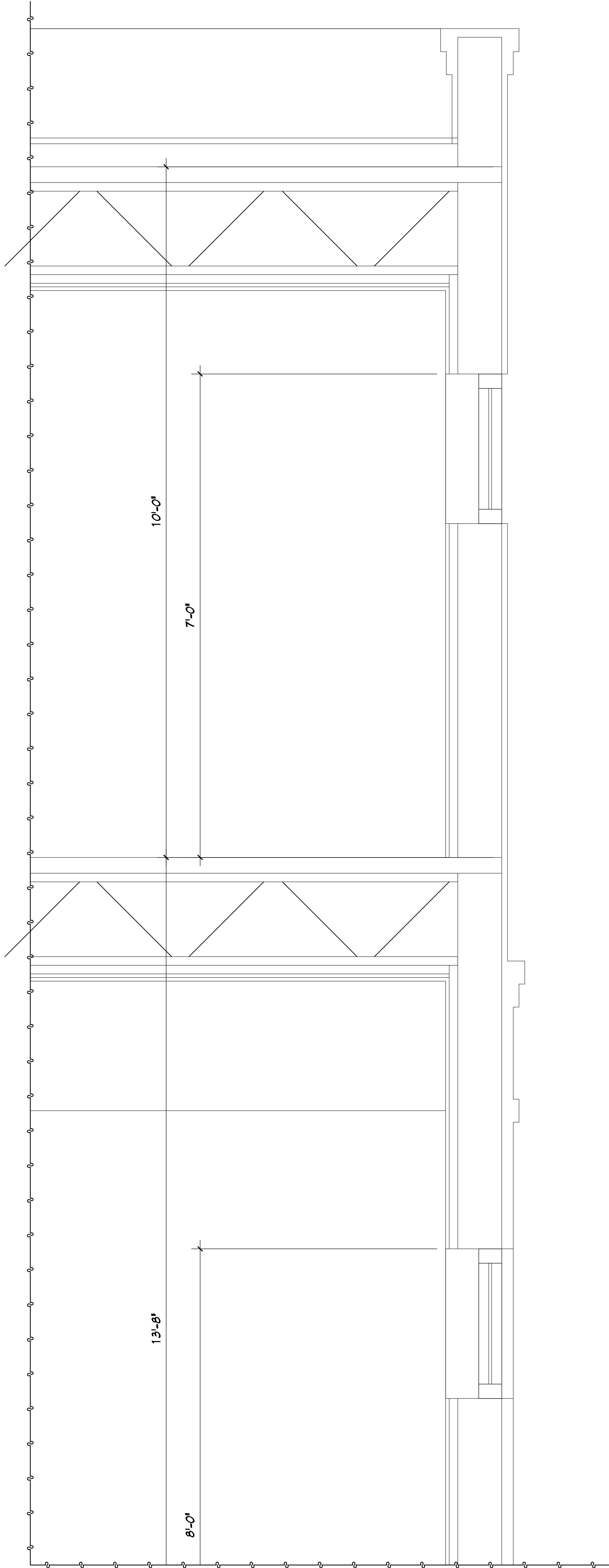
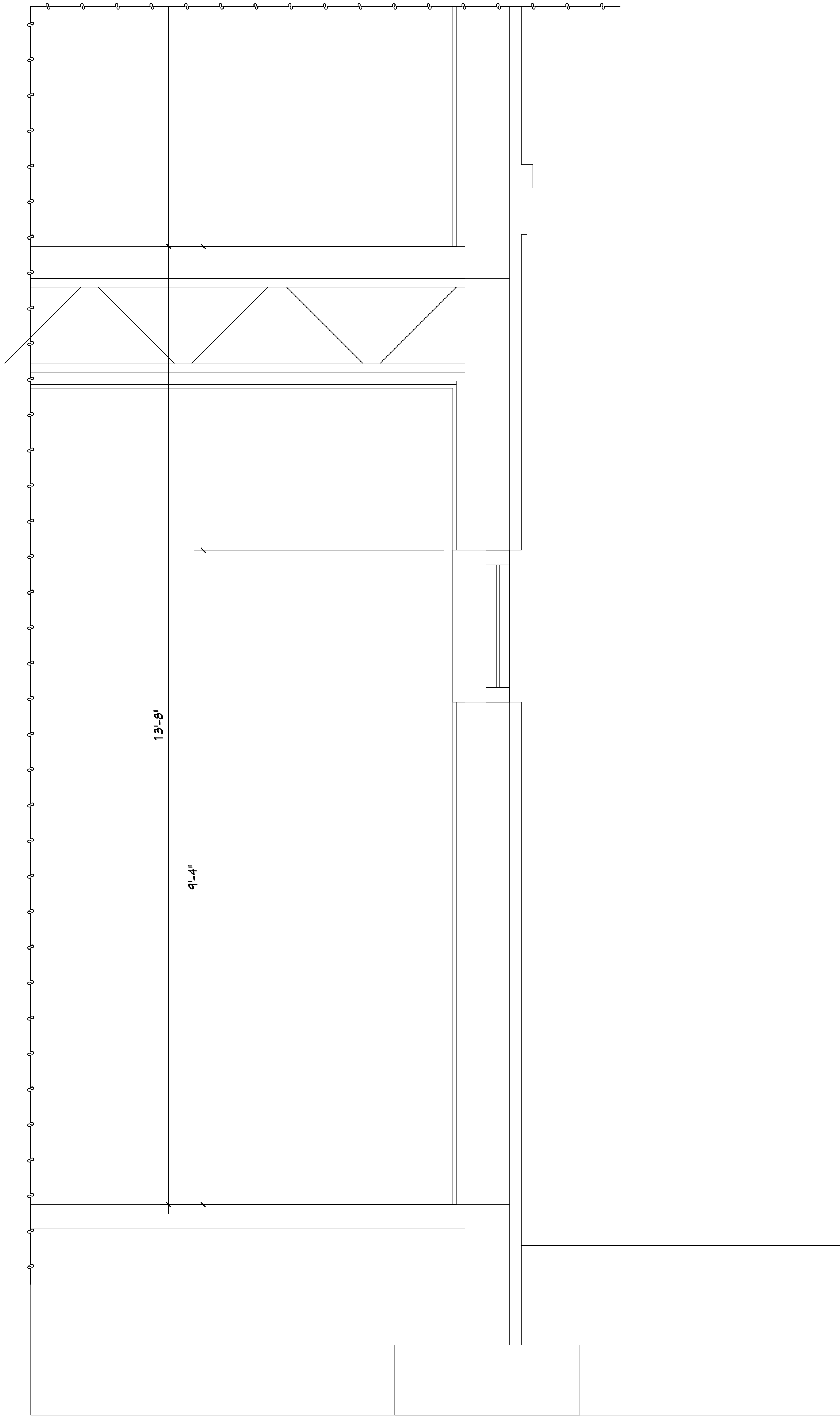
**MIRANDA
ARCHITECTS**
8817 CENTRE STREET, SUITE 208
FERNANDINA BEACH, FL 32034
304.281.6980 TEL
P.O. BOX 400000

A10.1 STANDARD MARINE SECTIONS & DETAILS	
PROJECT #	5210726
DRAWN BY	--JLT
CHKD BY	--JLT
DATE	11-15-22

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5 SECTION AT TYPICAL 3-STORY ADDITION

1"=1'-0"



SECTIONS AND DETAILS	
#	REVISIONS

DATE

ADAPTIVE RE-USE OF THE

CHHUOT BUILDING (STANDARD MARINE)

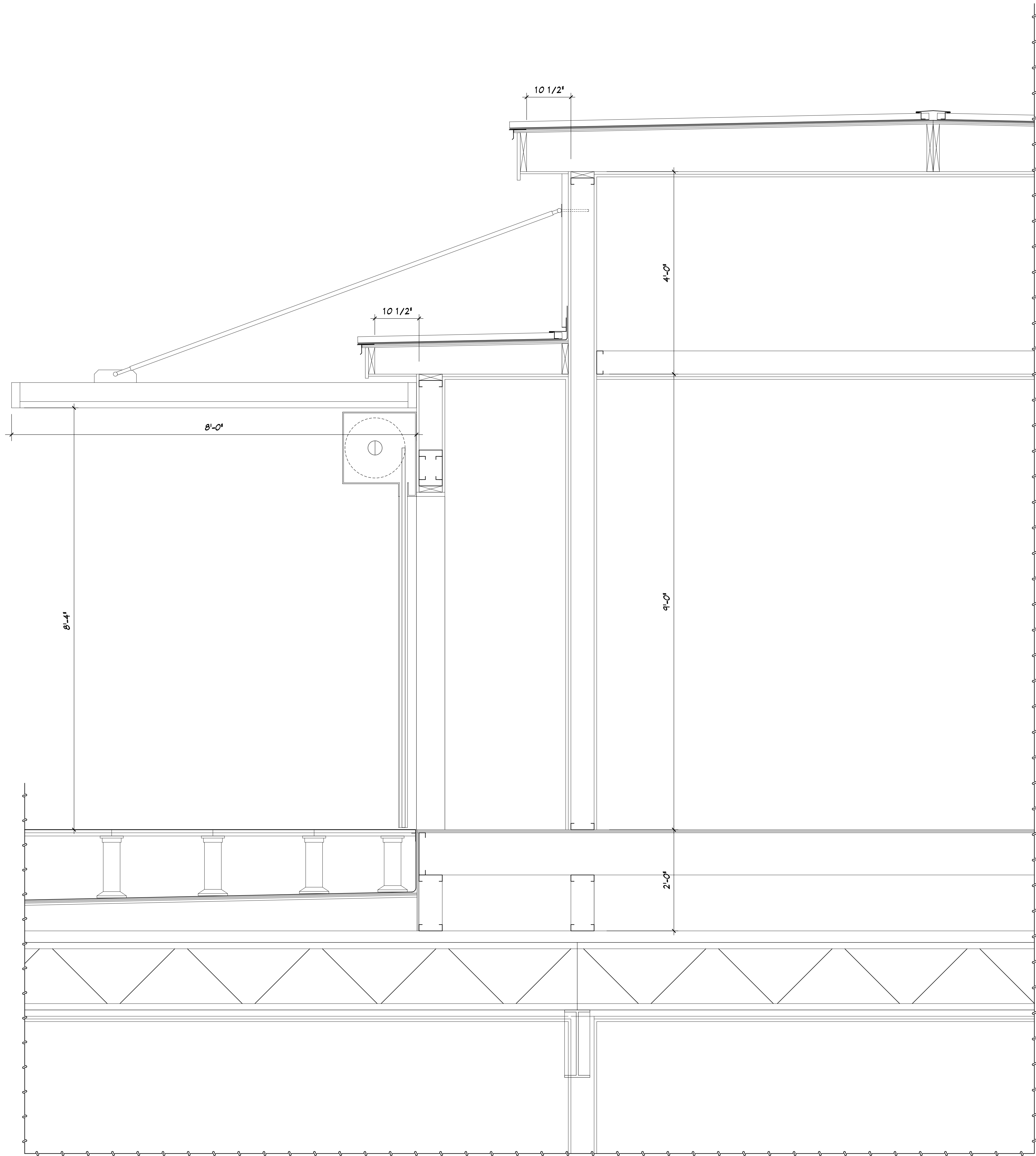
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FERNANDINA BEACH, FL 32034



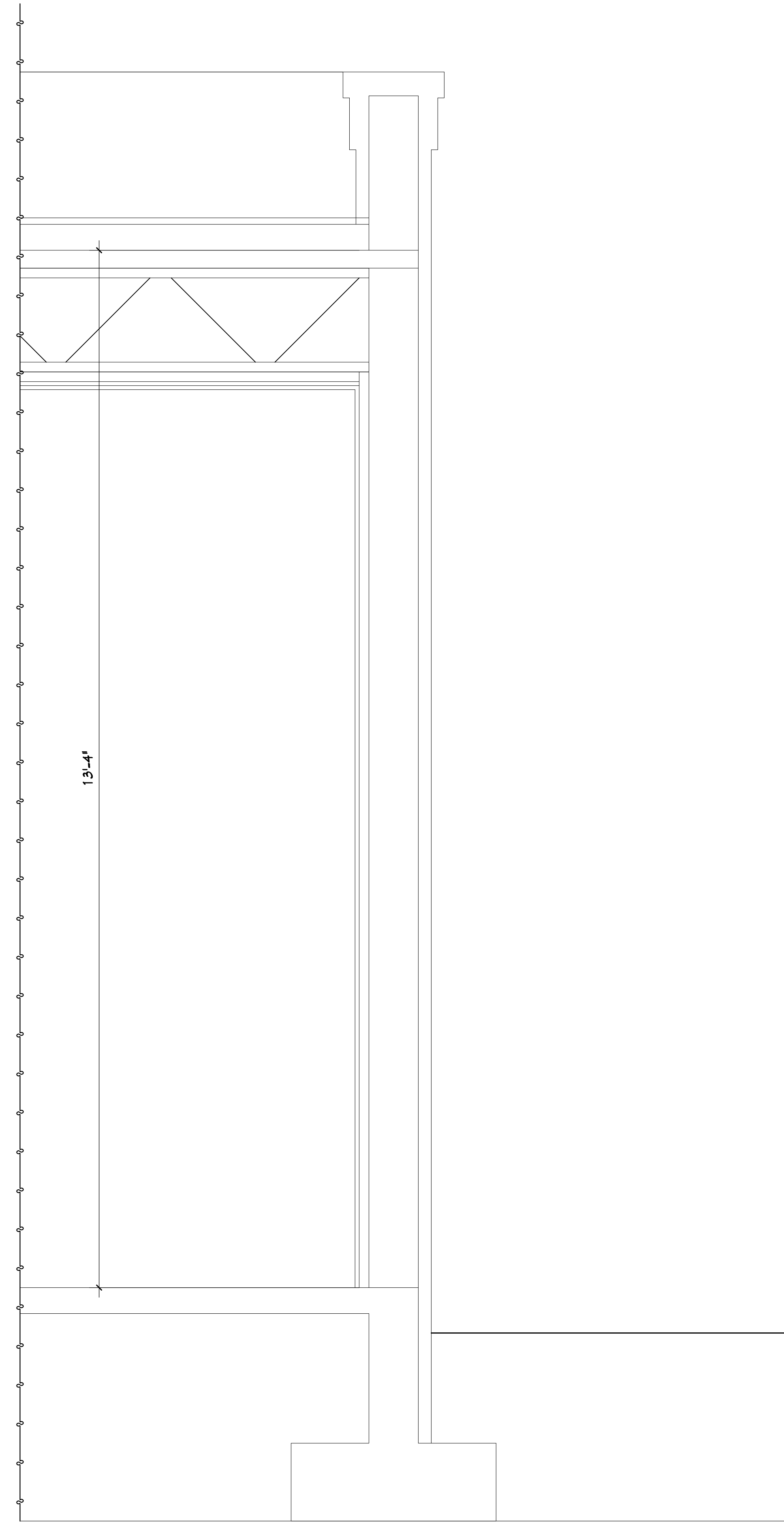
M I R A N D A
A R C H I T E C T S
309 1/2 CENTRE STREET, SUITE 208
FERNANDINA BEACH, FL 32034
904.268.4586 TEL
P.O. BOX 100074000

A10 STANDARD MARINE SECTIONS & DETAILS	
PROJECT #5210726	
DRAWN BY -- JLT	
CHKD BY -- JLT	
DATE -- 11-15-22	

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6 SECTION AT THIRD ROOF ADDITION 1"=1'-0"



7 SECTION AT TYPICAL ONE STORY ADDITION 1"=1'-0"

SECTIONS AND DETAILS	
#	REVISIONS

ADAPTIVE RE-USE OF THE
CHHUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034



**MIRANDA
ARCHITECTS**
309 1/2 CENTRE STREET, SUITE 208
FERNANDINA BEACH, FL 32034
904.281.4586 TEL
FL REG. NO. 2014007

A10 STANDARD MARINE SECTIONS & DETAILS
PROJECT # 210726
DRAWN BY -- JLT
CHKD BY -- JLT
DATE -- 11-15-22

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LEGEND				
	COMMON NAME	QTY	BOTANICAL NAME	SIZE
FLOWER, PERMANAL				
	JASMINE, CONFEDERATE	51	TRACHELOSPERMUM JASMINODES	3 GAL.
	LILY TURF	95	LIROPE MUSCARI	1 GAL. "SUPER BLUE"
	PENSTEMON, FIRECRACKER	19	PENSTEMON EATONI	EACH
SHRUB, EVERGREEN, BROADLEAF				
	PALM, CARDBOARD	24	ZAMIA MARTINA	7 GAL.
	PALM, LADY	9	RHAPIS EXCELSA	7 GAL.
	YEW, JAPANESE PODOCARPUS	39	PODOCARPUS MACROPHYLLUS	7 GAL.
TREE, EVERGREEN				
	DWARF CITRUS TREE, IMPROVED MEYER LEMON	2	CITRUS X MEYERI IMPROVED 'MEYER LEMON'	15 GAL.
	HOLLY FOSTER	7	LEX X ATTENUATA 'EAGLESTON'	45 GAL., SINGLE TRUNK
	PALM, MEDJOL DATE	4	PHENIX DACTYLIFERA MEDJOL	10' CLEAR TRUNK
CREEPING FIG				
		40	FICUS PUMILA	1 GAL.

↑ 15-LED BRASS SPOT UPLIGHT, 2900 KELVIN BULB

LANDSCAPE NOTES:

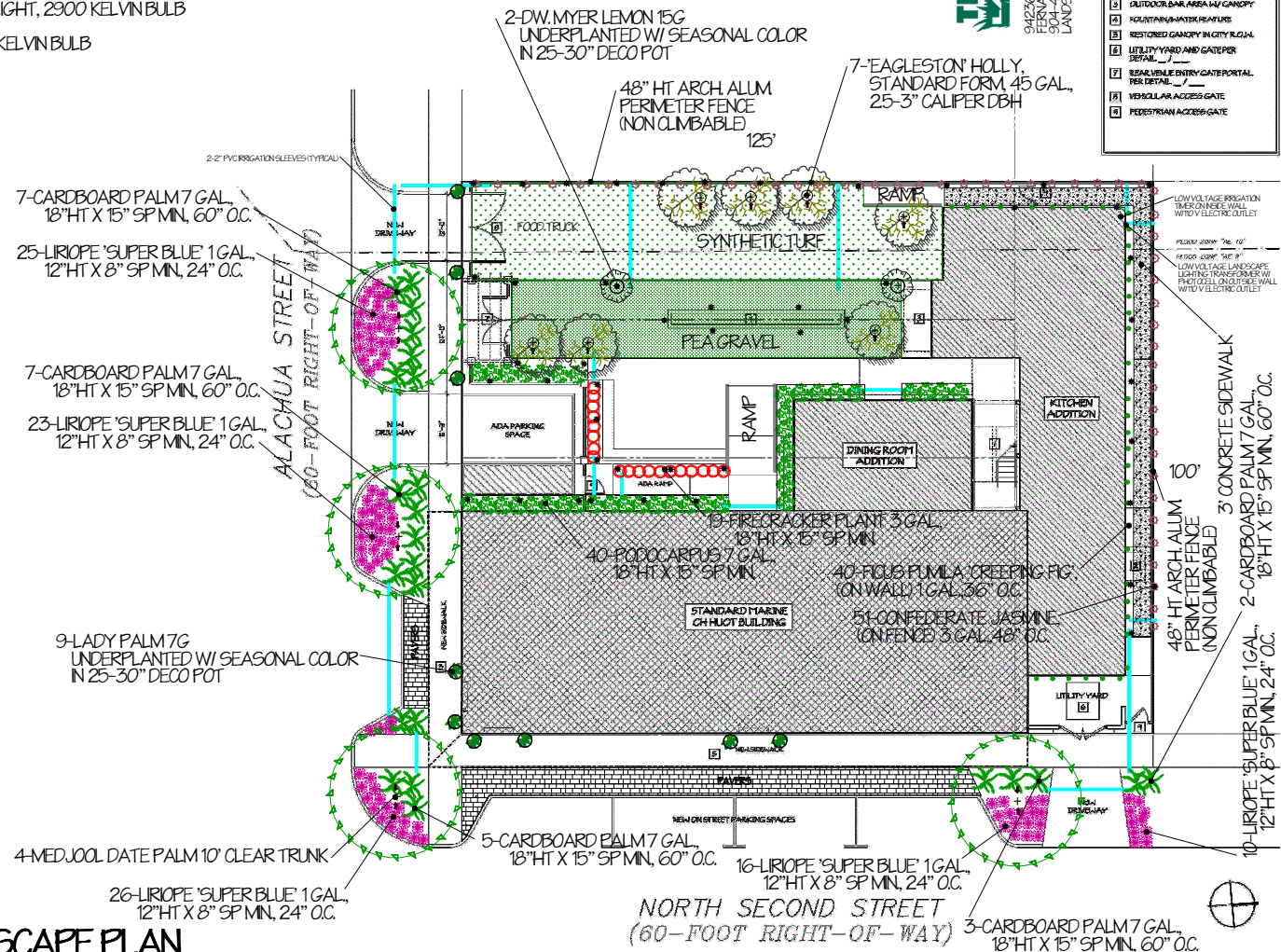
TREE CALCULATION

LANDSCAPE AREA REQUIRED (ZONING-C3 CENTRAL BUSINESS DISTRICT)

**TRIM ALL
LAWN SERVICE**

SITE PLAN LEGEND

	EXISTING BUILDING AS NOTED
	NEW ADDITION
	SITE NOTE



PRELIMINARY LANDSCAPE PLAN

10-12-22

ADAPTIVE REUSE OF THE
CH HUOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

A1.0

FLOOR PLAN LEGEND	
	EXISTING WALL ASSEMBLY
	NEW ON-CELL WALL ASSEMBLY
	NEW FRAMED WALL ASSEMBLY
	NEW FIRE RATED WALL ASSEMBLY
	FEATURE ABOVE
	WINDOW SYMBOL
	DOOR SYMBOL
	WALL SECTION
	WALL TYPE PER SCHEDULE
	ROOM NUMBER
	COLUMN/POST PER STRUCT. DWGS.
	STRUCTURAL GRID
	HATCHING

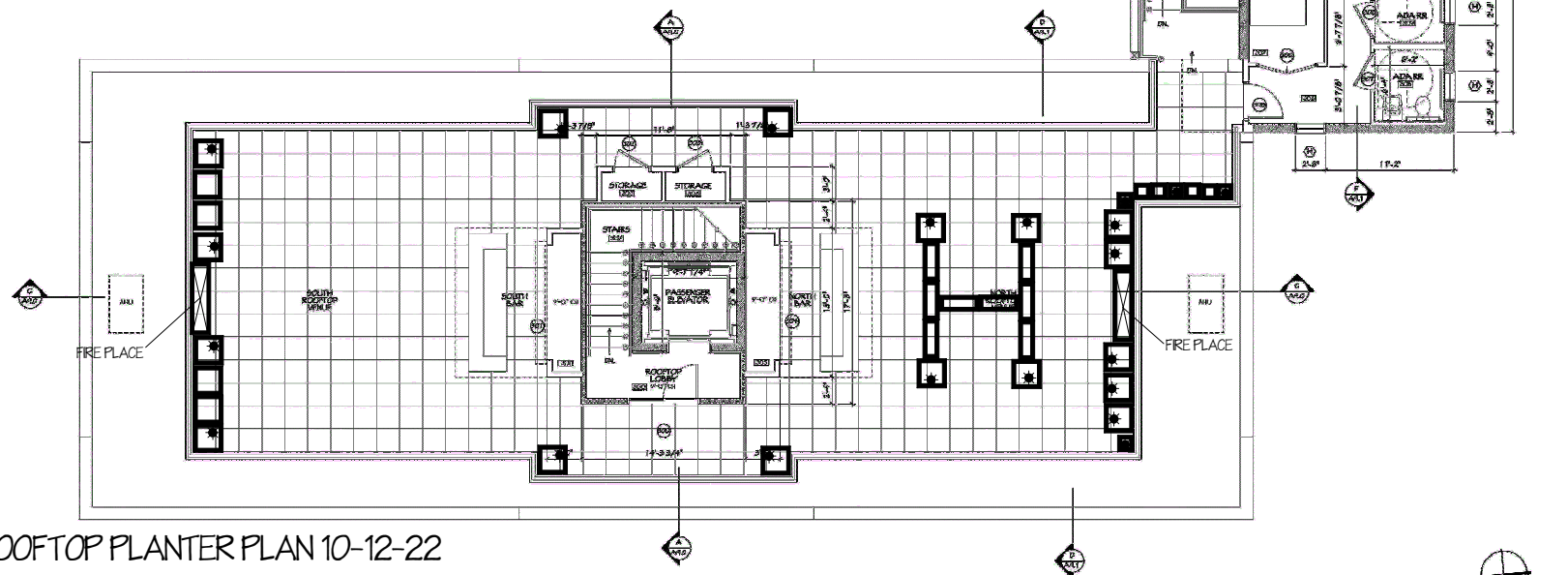
WALL TYPE SCHEDULE			
WALL TYPE	WALL ASSEMBLY/CONSTRUCTION	FIRE RATING	U/I ASSEMBLY
1	EXISTING MASONRY WALL - TYPE A TYPICAL 12" CONCRETE CMU WITH 1" EPS INSULATION AND 1/2" GYPSUM BOARD INTERIOR FINISH	N/A	N/A
2	EXISTING MASONRY WALL - TYPE B TYPICAL 12" CONCRETE CMU WITH 1" EPS INSULATION AND 1/2" GYPSUM BOARD INTERIOR FINISH	N/A	N/A
3	NEW ON-CELL WALL - TYPE A 8" EPS INSULATION WITH 1/2" GYPSUM BOARD INTERIOR FINISH	2-HOUR	UL-R1020
4	NEW ON-CELL WALL - TYPE B 8" EPS INSULATION WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
5	NEW ON-CELL WALL - TYPE C 8" EPS INSULATION WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
6	NEW FRAMED WALL - TYPE A 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
7	NEW FRAMED WALL - TYPE B 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
8	NEW FRAMED WALL - TYPE C 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
9	NEW FRAMED WALL - TYPE D 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
10	NEW FRAMED WALL - TYPE E 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
11	NEW FRAMED WALL - TYPE F 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
12	NEW FRAMED WALL - TYPE G 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
13	NEW FRAMED WALL - TYPE H 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
14	NEW FRAMED WALL - TYPE I 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020
15	NEW FRAMED WALL - TYPE J 2" X 4" STUDS WITH 1/2" GYPSUM BOARD INTERIOR FINISH	1-HOUR	UL-R1020

PLANTER LEGEND:

- 12'-MISSION SQUARE PLANTER, LONG BOX 38"W X 15"D X 16.5"H
LIRIOPE 'SUPER BLUE'/HORSETAIL/FIRECRACKER PLANT 3G
- 21'-MISSION SQUARE PLANTER, TALL BOX 31.5"W X 31.5"H
SEA GRAPE/SILVER SAW PALMETTO 7G
UNDERPLANTED W/ SEASONAL COLOR
- 8'-MISSION SQUARE PLANTER, TALL 15"W X 32"H
SEASONAL COLOR

LED LOW VOLTAGE LIGHTING LEGEND:

- 22-LED SINGLE TIERED BRASS PATHLIGHT, 2900 KELVIN BULB



ROOFTOP PLANTER PLAN 10-12-22

THIRD FLOOR/ROOF DECK PLAN

1/4"=1'-0"

TRIM ALL
LAWN SERVICE
342360 OLD NASSAUVILLE RD.
FERNANDINA BEACH, FL 32034
304-491-3232
LANDSCAPE DESIGN BY: TOM ANDERSON ASLA

DATE: 10-12-22
DESIGNED BY: T. ANDERSON
DRAWN BY: T. ANDERSON
CHECKED BY: T. ANDERSON
APPROVED BY: T. ANDERSON

MIRANDA ARCHITECTS 200 N. CENTRE STREET, SUITE 200 FERNANDINA BEACH, FL 32034 304-491-3232
--

ADAPTIVE REUSE OF THE
CHILLOT BUILDING (STANDARD MARINE)
101 NORTH 2ND STREET
FERNANDINA BEACH, FL 32034

THIRD FLOOR/ROOF DECK PLAN	DATE
REVISIONS	
1	

A3.2



Gulfstream Design Group, LLC
2225 A1A South, Suite A2
St. Augustine, FL 32080
Tel. 904.794.4231
www.gulfstreamdesign.com

STORMWATER MANAGEMENT SYSTEM NARRATIVE

Fernandina Beach – Standard Marine
GDG 22-084

INTRODUCTION

The proposed development site is located on Lots 29 – 33 of Block 2 on the corner of North Second Street and Alachua Street, Fernandina Beach, Florida. The development is on the west side of N 2nd St. The scope of work will include the remodeling of an existing building with the addition of a kitchen and dining room. The following narrative describes the existing and proposed site conditions as it relates to stormwater management.

EXISTING CONDITIONS

The project site is a 0.29 acre site within an commercial subdivision which has a master stormwater system to which each lot will connect it's stormwater collection system. The master stormwater treatment system is permitted under St. Johns River Water Management District Permit number 164740-1. The permitted stormwater calculations indicate that each commercial lot is allowed up to 75% impervious surface ratio (ISR). Standard Marine is located within Basin 3 and is provided a stormwater connection to a catch basin within the Alachua Street Right of Way. This site was permitted with an existing building and asphalt parking area amounting to approximately 100% impervious surface ratio. Please see the attached the CPH stormwater plans and conceptual permit.

PROPOSED CONSTRUCTION

The proposed construction will include 8,168 square foot of impervious material, made up of concrete pavement and building area. With the other material being semi-pervious totaling 3,737 square feet of turf, gravel, and pavers. The total impervious area of the proposed site is approximately 65% of the total area. The total proposed impervious area is within the maximum 75% ISR and well below the existing ISR that was established for this basin.

NUTRIENT LOADING

A Pollutant Loading Analysis is required for both Nitrogen and Phosphorous to meet the City's Downtown Conceptual Environmental Resource Permit. This analysis only evaluates the project site, and not the offsite properties which are to remain in their current condition. The land use in the post-development condition is Commercial which is the same use as the existing conditions. We don't believe that any further calculations are needed as the nutrient loading in the post-developed condition should meet that of the pre-developed condition, therefore until required to do so, we don't believe nutrient removal will be required to discharge to the City's master stormwater collection system.

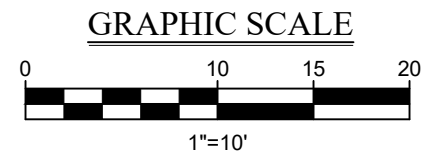
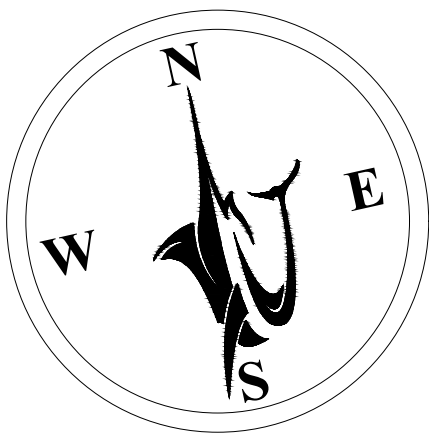
 Digitally signed by
Matthew Lahti, P.E. FL#
71395
Date: 2022.12.01 16:02:28
-05'00'

Mathew H. Lahti, P.E.
Gulfstream Design Group, LLC



Gulfstream Design Group, LLC
2225 A1A South, Suite A2
St. Augustine, FL 32080
Tel. 904.794.4231
www.gulfstreamdesign.com

ATTACHMENTS:



SITE DATA TABLE

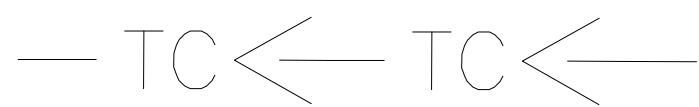
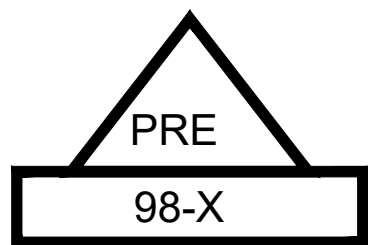
GROSS PROPERTY AREA:	12,500.00 SF	0.29 AC
NET DEVELOPABLE PROJECT AREA:	12,500.00 SF	0.29 AC
EXISTING BUILDING AREA:	4,108 SF	0.09 AC
EXISTING ASPHALT AREA:	6,136 SF	0.14 AC
EXISTING DIRT AREA:	2,256 SF	0.05 AC
TOTAL IMPERVIOUS AREA:	10,244.00 SF	0.24 AC
TOTAL PERVIOUS AREA:	2,256.00 SF	0.05 AC

LEGEND

BASIN - XXX-X

AREA = XX.XX Ac. ±
CN = XXX
Tc = XX.X Min.
K (SCS) = XXX

POND-XX



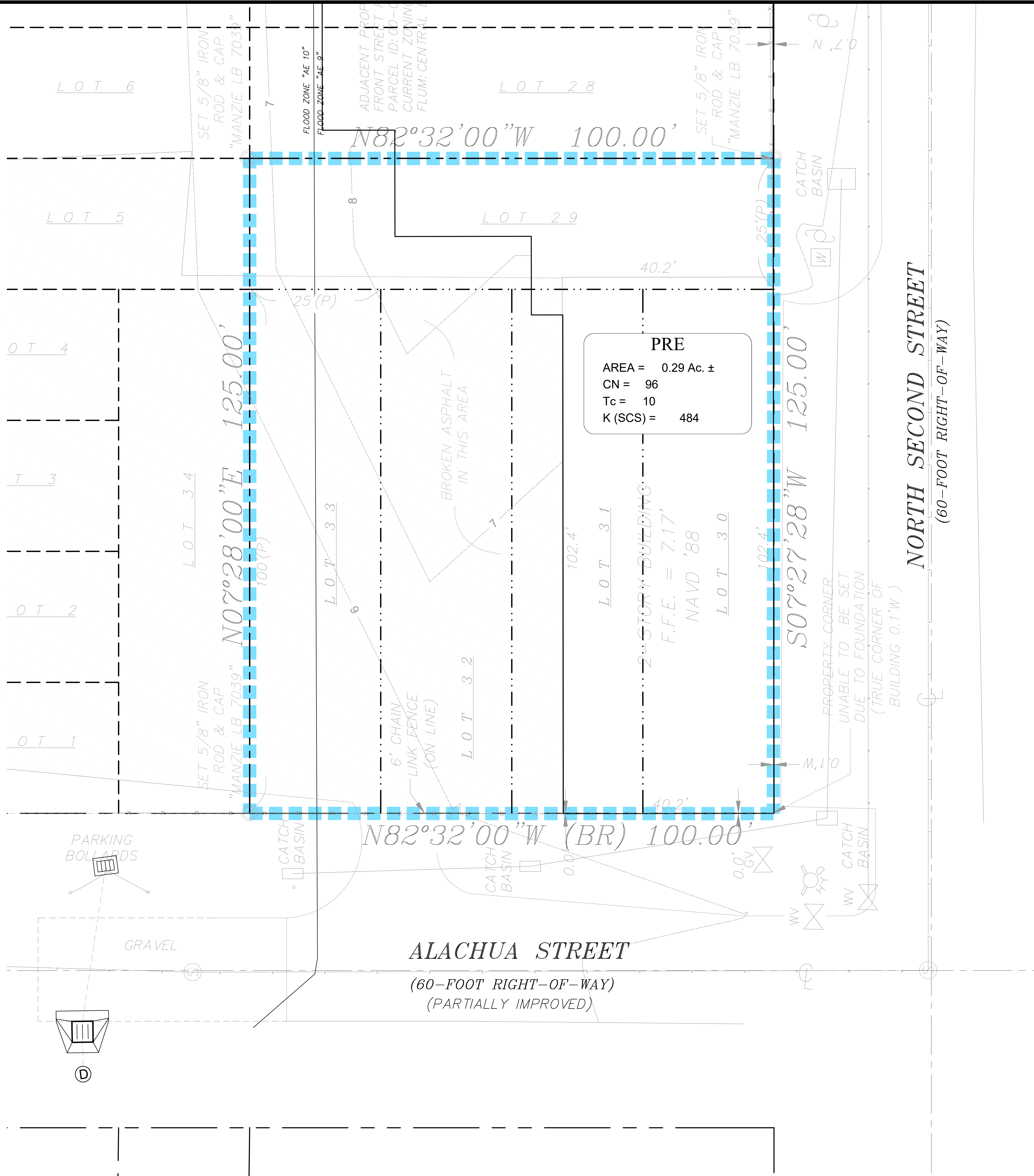
BASIN NAME & INFO

NODE NAME

OUTFALL

BASIN LIMITS

TO FLOW PATH



ENGINEERING PLANS
FOR
STANDARD MARINE
PRE-DEVELOPMENT BASIN MAP

DUVAL COUNTY, FLORIDA



FINAL ENGINEERING
PLANS



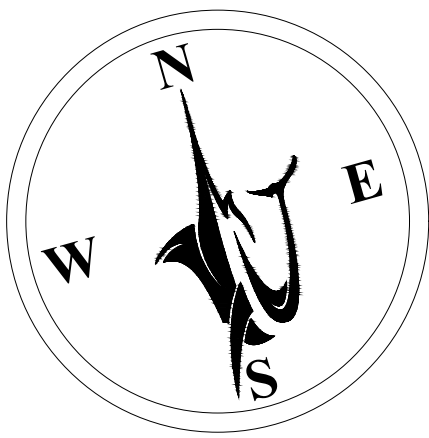
2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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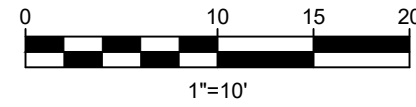
PROJECT NO: 22-084
ISSUE DATE: 11-30-2022
DRAFTED BY: RCM
DESIGNED BY: RCM
CHECKED BY: MHL

NOT VALID WITHOUT SEAL

PRE



GRAPHIC SCALE



SITE DATA TABLE

GROSS PROPERTY AREA:	12,500.00 SF	0.29 AC
NET DEVELOPABLE PROJECT AREA:	12,500.00 SF	0.29 AC
PROPOSED BUILDING AREA:	6,869 SF	0.16 AC
PROPOSED CONCRETE AREA:	1,299 SF	0.03 AC
PROPOSED GRAVEL AREA:	1,091 SF	0.03 AC
PROPOSED TURF AREA:	1,428 SF	0.03 AC
PROPOSED PAVER AREA:	1,218 SF	0.03 AC
TOTAL IMPERVIOUS AREA:	8,168.00 SF	0.19 AC
TOTAL PERVIOUS AREA:	4,332.00 SF	0.10 AC

LEGEND

BASIN - XXX-X

AREA = XX.XX Ac. ±
CN = XXX
Tc = XX.X Min.
K (SCS) = XXX

BASIN NAME & INFO

POND-XX

NODE NAME

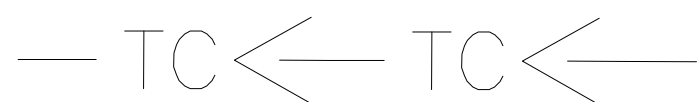
POST

99-X

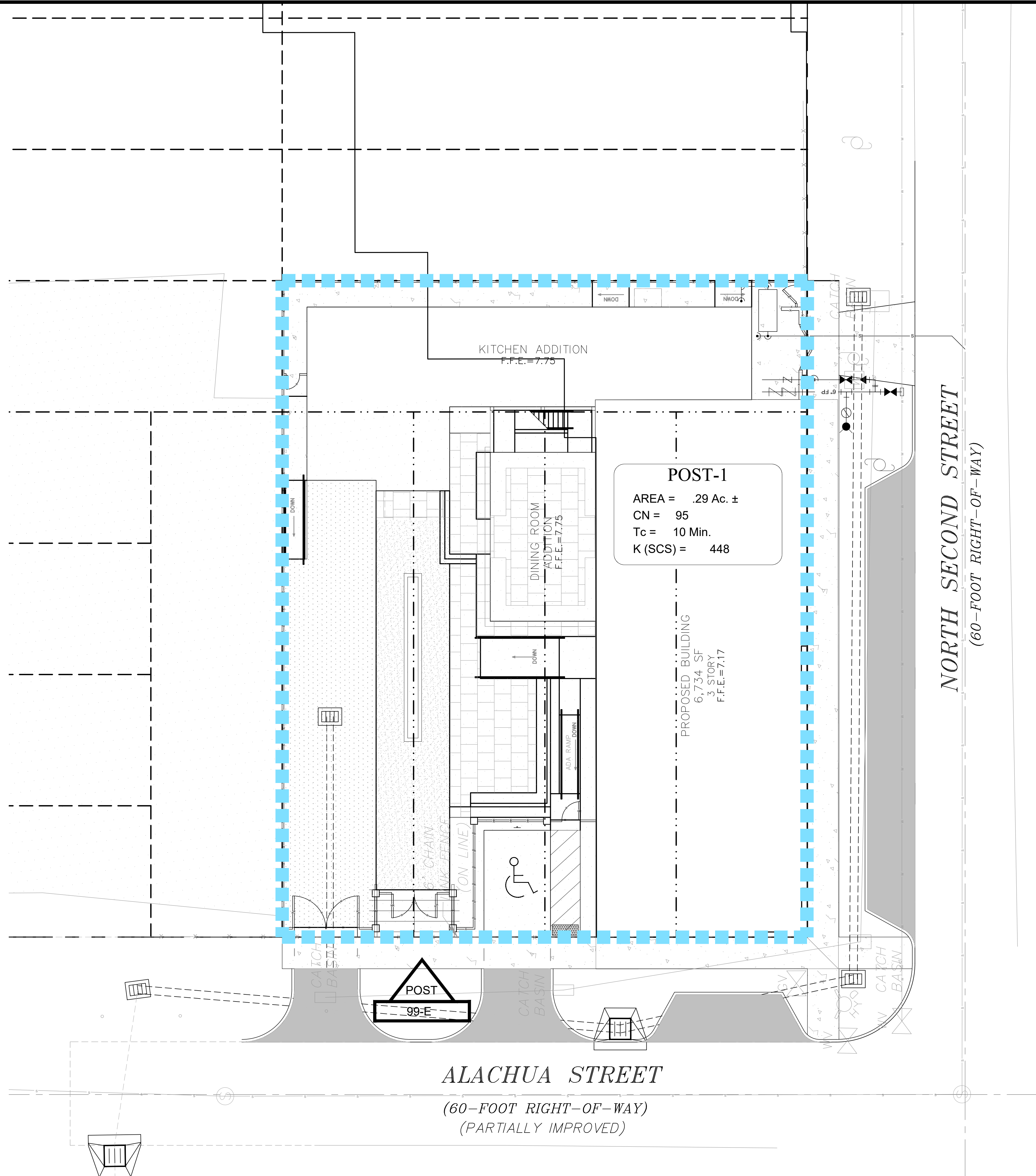
OUTFALL



BASIN LIMITS



TO FLOW PATH



REVISIONS

DESCRIPTION

NO. DATE BY

ENGINEERING PLANS
FOR
STANDARD MARINE
POST-DEVELOPMENT BASIN MAP
FERNANDINA BEACH, FLORIDA



30% PLANS



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO: 22-084
ISSUE DATE: 11-30-2022
DRAFTED BY: RCM
DESIGNED BY: MHL
CHECKED BY: MHL

NOT VALID WITHOUT SEAL

POST



St. Johns River Water Management District

Ann B. Shortelle, Ph.D., Executive Director

4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • 386-329-4500 • www.sjrwmd.com

April 8, 2021

City of Fernandina Beach
1181 S 5th Street
Fernandina Beach, FL 32034

SUBJECT: Permit Number 165699-1
Downtown Fernandina Beach Conceptual Permit

Dear Sir/Madam:

Enclosed is your individual permit issued by the St. Johns River Water Management District on April 8, 2021. This permit is a legal document and should be kept with your other important documents. Permit issuance does not relieve you from the responsibility of obtaining any necessary permits from any federal, state, or local agencies for your project.

Technical Staff Report:

If you wish to review a copy of the Technical Staff Report (TSR) that provides the District's staff analysis of your permit application, you may view the TSR by going to the Permitting section of the District's website at www.sjrwmd.com/permitting. Using the "search applications and permits" feature, you can use your permit number or project name to find information about the permit. When you see the results of your search, click on the permit number and then on the TSR folder.

Noticing Your Permit:

For noticing instructions, please refer to the noticing materials in this package regarding closing the point of entry for someone to challenge the issuance of your permit. Please note that if a timely petition for administrative hearing is filed, your permit will become nonfinal and any activities that you choose to undertake pursuant to your permit will be at your own risk. Please refer to the attached Notice of Rights to determine any legal rights you may have concerning the District's agency action.

Compliance with Permit Conditions:

To submit your required permit compliance information, go to the District's website at www.sjrwmd.com/permitting. Under the "Apply for a permit or submit compliance data" section, click to sign-in to your existing account or to create a new account. Select the "Compliance Submittal" tab, enter your permit number, and select "No Specific Date" for the Compliance Due Date Range. You will then be able to view all the compliance submittal requirements for your project. Select the compliance item that you are ready to submit and then attach the appropriate information or form. The forms to comply with your permit conditions are available at www.sjrwmd.com/permitting under the section "Handbooks, forms, fees, final orders". Click on forms to view all permit compliance forms, then scroll to the ERP application forms section and select the applicable compliance forms. Alternatively, if you have difficulty finding forms or need copies of the appropriate forms, please contact the Office of Business and Administrative Services at (386) 329-4570.

Transferring Your Permit:

Your permit requires you to notify the District within 30 days of any change in ownership or

GOVERNING BOARD

Douglas Burnett, CHAIRMAN
ST. AUGUSTINE

Doug Bournique
VERO BEACH

Rob Bradley, VICE CHAIRMAN
FLEMING ISLAND

Cole Oliver
MERRITT ISLAND

Susan Dolan, SECRETARY
SANFORD

J. Chris Peterson
WINTER PARK

Ron Howse, TREASURER
COCOA

Janet Price
FERNANDINA BEACH

control of the project or activity covered by the permit, or within 30 days of any change in ownership or control of the real property on which the permitted project or activity is located or occurs. You will need to provide the District with the information specified in rule 62-330.340, Florida Administrative Code (F.A.C.). Generally, this will require you to complete and submit Form 62-330.340(1), "Request to Transfer Permit," available at www.sjrwmd.com/permitting/permitforms.html.

Please note that a permittee is liable for compliance with the permit before the permit is transferred. The District, therefore, recommends that you request a permit transfer in advance in accordance with the applicable rules. You are encouraged to contact District staff for assistance with this process.

Thank you and please let us know if you have additional questions. For general questions contact e-permit@sjrwmd.com or (386) 329-4570.

Sincerely,



Michelle Reiber, Bureau Chief
Regulatory Services
St. Johns River Water Management District
525 Community College Parkway, S.E.
Palm Bay, FL 32909
(321) 409-2129

Enclosures: Permit
Notice of Rights
List of Newspapers for Publication

cc: District Permit File

Registered	Wade Olszewski
Professional	CPH, Inc.
Consultant:	5200 Belfort Rd
	Suite 220
	Jacksonville, FL 32256

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
Post Office Box 1429
Palatka, Florida 32178-1429

PERMIT NO: 165699-1

DATE ISSUED: April 8, 2021

PROJECT NAME: Downtown Fernandina Beach Conceptual Permit

A PERMIT AUTHORIZING:

Conceptual approval of a stormwater management system plan for a 104-acre project known as Downtown Fernandina Beach Urban Infill Conceptual Permit, as per calculations, plans and exhibits received by the District on March 19, 2021.

LOCATION:

SECTION(S): 21, 22, 23 TOWNSHIP(S): 3N RANGE(S): 28E
Nassau County

ISSUED TO:

City of Fernandina Beach
1181 S 5th Street
Fernandina Beach, FL 32034

The permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to the permittee any property rights nor any rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal, rule, or ordinance. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes.

PERMIT IS CONDITIONED UPON:

See conditions on attached "Exhibit A", dated April 8, 2021

AUTHORIZED BY: St. Johns River Water Management District
Division of Regulatory Services

By:



Christine Wentzel
Supervising Regulatory Scientist

"EXHIBIT A"
CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 165699-1
Downtown Fernandina Beach Conceptual Permit
DATE ISSUED April 08, 2021

1. This permit does not authorize any construction, alteration, maintenance, operation, removal, or abandonment, except where such activities are specifically authorized as the first phase of an individual permit or are authorized to occur in accordance with a general permit or exemption under Chapter 62-330, F.A.C.
2. This permit does not:
 - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
3. The permittee shall notify the Agency in writing:
 - a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, the name and contact information for the new owner.
4. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample, and test the project site to ensure conformity with the permit.
5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
6. This conceptual approval permit only authorizes design concepts for a master or future plan to construct, alter, operate, maintain, remove, or abandon projects that require a permit under Part IV of Chapter 373, F.S. It does not authorize any construction, alteration, operation, maintenance, removal, or abandonment, or the establishment and operation of a mitigation bank, or relieve the permit holder of any requirements to obtain such permits.
7. Subsequent applications to construct and operate activities shall be prepared and submitted using the applicable procedures in Rules 62-330.052, 62-330.054, 62-330.060, and 62-330.402 F.A.C., and sections 4.2.2, 4.2.3, 4.3, and 4.4 of Volume I. An application for conceptual approval for a mitigation bank shall also include the materials required by Chapter 62-342, F.A.C.
8. Issuance of this conceptual approval permit is a determination, within the level of detail provided in the application, that the activities approved in this permit are consistent with applicable rules at the time of issuance. This permit provides the conceptual approval permit holder with a rebuttable presumption, during the duration of this permit, that the engineering design and scientific principles upon which the conceptual approval permit approved herein are likely to meet applicable rule criteria for issuance of permits for subsequent phases of the project, provided all of the following are met at the time of receipt of a complete application to construct and operate the future phases:

- a. The application to construct and operate the future phases remains consistent with the designs and conditions of this permit. Primary areas for consistency comparisons include the size, location, and extent of the activities proposed, the type and nature of the activities, percent imperviousness, allowable discharge and points of discharge, location and extent of wetland and other surface water impacts, mitigation plans implemented or proposed, control elevations, extent of stormwater reuse, detention and retention volumes, and the extent of flood elevations.

If an application for construction of any portion of the land area covered by this permit is inconsistent with the design concepts and conditions approved herein, the application will be reviewed to determine the extent to which the inconsistency will affect the designs and conditions for the remainder of the lands contained in this permit. If the inconsistency will materially affect those designs and conditions, then the applicant must demonstrate that the holder of this permit agrees to that inconsistency. In such a case, the holder of the conceptual approval permit may:

1. Modify the conceptual approval permit to conform to the revised design;
 2. Abandon reliance on the conceptual approval permit; or
 3. Rely on those portions of the conceptual approval permit for only those areas that were not affected by the inconsistency.
- b. There are no changes to state water quality standards that would be affected by activities authorized in the conceptual approval permit that have not already been authorized for construction or operation.
 - c. There have been no amendments to Florida law governing special basin criteria that would affect future activities authorized by the conceptual approval permit that have not already been authorized for construction.
 - d. There are no substantive changes in the site characteristics that would affect whether the design concepts approved in the conceptual approval permit can continue to be reasonably expected to meet the conditions for authorizing construction of future phases. This shall include such things as changes in the designation of listed species, and changes to nesting, denning, and critical designation status of listed species that exist within the lands served by the project area.
9. If changes are proposed to the design of existing or future phases, or where there have been changes to state water quality standards, special basins, or site characteristics as described in conditions (8)(a) through (d), above, during the duration of this permit, the applicant must modify this permit if it wishes to continue to rely on this permit as a basis that reasonable assurance exists for the Agency to issue future construction or operation permits under the terms and conditions of this permit. If the permittee fails to do this, this conceptual approval permit can no longer be relied upon as a basis, in part or whole, under which permits to construct or operate future phases will be issued, and the Agency will reevaluate the terms and conditions of this permit at the time a permit application is received to construct the next phase of activities, or at the next requested extension of this permit's duration in accordance with subsection 62-330.056(11), F.A.C., whichever occurs first.
 10. This conceptual permit is valid for twenty years from the date of issuance. The permit shall be renewed at the request of the permittee for another 20 years, unless a shorter duration is requested, subject to activities remaining in compliance with this section and the terms and conditions of the general permit in rule 62-330.450, F.A.C.

11. An individual permit under this chapter is required for the construction, alteration, operation, maintenance, abandonment or removal of activities covered by this conceptual approval permit that involve work in wetlands or other surface waters. The following must occur before the Agency can determine that the general permit in rule 62-330.450, F.A.C. can be used to construct roads, parking areas, buildings and other structures within the project area authorized by the individual permit, or on lands served by a stormwater management system authorized by that individual permit:
 - (a) The individual permit must be obtained;
 - (b) Dredging and filling necessary to prepare the land for future construction, including construction of any required stormwater management systems, must be completed in accordance with the individual permit; and,
 - (c) Any mitigation required to offset adverse impacts from the work in wetlands or other surface waters must be initiated in conformance with the individual permit. When the applicant proposed the recording of a conservation over land as part of its mitigation, then a conservation easement acceptable to the agency must be recorded over the mitigation land consistent with the permitted mitigation plan. If the applicant proposed credits from a mitigation bank or regional offsite mitigation area as part of its mitigation, then such credits must be purchased consistent with the permitted mitigation plan.
12. If changes are proposed to the design of existing or future phases, or where there have been changes to state water quality standards, special basins, or site characteristics during the duration of the conceptual approval permit, the applicant must modify the conceptual approval permit if it wishes to continue to rely on it as a basis that reasonable assurance exists for the agency to issue future construction or operation permits under the terms and conditions of this section. If the permittee fails to do this, the conceptual approval permit can no longer be relied upon as a basis, in part or whole, under which permits to construct or operate future phases will be issued, and the agency will reevaluate the terms and conditions of the conceptual approval permit at the time a permit application is received to construct the next phase of activities included in the original conceptual approval permit, or at the next requested extension of the conceptual approval permit duration in accordance with subsection 62-330.056(11), F.A.C., whichever occurs first.
13. The urban infill area approved by this conceptual permit is depicted in the report received by the District on March 19, 2021.
14. The existing conditions pollutant loading analysis is approved pursuant to the engineering report received by the District on March 19, 2021.
15. This permit does not conceptually authorize impacts to wetland or other surface waters.

Notice Of Rights

1. A person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the St. Johns River Water Management District (District). Pursuant to Chapter 28-106 and Rule 40C-1.1007, Florida Administrative Code, the petition must be filed (received) either by delivery at the office of the District Clerk at District Headquarters, P. O. Box 1429, Palatka Florida 32178-1429 (4049 Reid St., Palatka, FL 32177) or by e-mail with the District Clerk at Clerk@sjrwmd.com, within twenty-six (26) days of the District depositing the notice of District decision in the mail (for those persons to whom the District mails actual notice), within twenty-one (21) days of the District emailing the notice of District decision (for those persons to whom the District emails actual notice), or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes, and Chapter 28-106, Florida Administrative Code. The District will not accept a petition sent by facsimile (fax), as explained in paragraph no. 4 below.
2. Please be advised that if you wish to dispute this District decision, mediation may be available and that choosing mediation does not affect your right to an administrative hearing. If you wish to request mediation, you must do so in a timely-filed petition. If all parties, including the District, agree to the details of the mediation procedure, in writing, within 10 days after the time period stated in the announcement for election of an administrative remedy under Sections 120.569 and 120.57, Florida Statutes, the time limitations imposed by Sections 120.569 and 120.57, Florida Statutes, shall be tolled to allow mediation of the disputed District decision. The mediation must be concluded within 60 days of the date of the parties' written agreement, or such other timeframe agreed to by the parties in writing. Any mediation agreement must include provisions for selecting a mediator, a statement that each party shall be responsible for paying its pro-rata share of the costs and fees associated with mediation, and the mediating parties' understanding regarding the confidentiality of discussions and documents introduced during mediation. If mediation results in settlement of the administrative dispute, the District will enter a final order consistent with the settlement agreement. If mediation terminates without settlement of the dispute, the District will notify all the parties in writing that the administrative hearing process under Sections 120.569 and 120.57, Florida Statutes, is resumed. Even if a party chooses not to engage in formal mediation, or if formal mediation does not result in a settlement agreement, the District will remain willing to engage in informal settlement discussions.
3. A person whose substantial interests are or may be affected has the right to an informal administrative hearing pursuant to Sections 120.569 and 120.57(2), Florida Statutes, where no material facts are in dispute. A petition for an informal hearing must also comply with the requirements set forth in Rule 28-106.301, Florida Administrative Code.

Notice Of Rights

4. A petition for an administrative hearing is deemed filed upon receipt of the complete petition by the District Clerk at the District Headquarters in Palatka, Florida during the District's regular business hours. The District's regular business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Petitions received by the District Clerk after the District's regular business hours shall be deemed filed as of 8:00 a.m. on the District's next regular business day. The District's acceptance of petitions filed by e-mail is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation (issued pursuant to Rule 28-101.001, Florida Administrative Code), which is available for viewing at www.sjrwmd.com. These conditions include, but are not limited to, the petition being in the form of a PDF or TIFF file and being capable of being stored and printed by the District. Further, pursuant to the District's Statement of Agency Organization and Operation, attempting to file a petition by facsimile is prohibited and shall not constitute filing.
5. Failure to file a petition for an administrative hearing within the requisite timeframe shall constitute a waiver of the right to an administrative hearing. (Rule 28-106.111, Florida Administrative Code).
6. The right to an administrative hearing and the relevant procedures to be followed are governed by Chapter 120, Florida Statutes, Chapter 28-106, Florida Administrative Code, and Rule 40C-1.1007, Florida Administrative Code. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means the District's final action may be different from the position taken by it in this notice. A person whose substantial interests are or may be affected by the District's final action has the right to become a party to the proceeding, in accordance with the requirements set forth above.
7. Pursuant to Section 120.68, Florida Statutes, a party to the proceeding before the District who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.
8. A District action is considered rendered, as referred to in paragraph no. 7 above, after it is signed on behalf of the District and filed by the District Clerk.
9. Failure to observe the relevant timeframes for filing a petition for judicial review as described in paragraph no. 7 above will result in waiver of that right to review.

NOTICING INFORMATION

Please be advised that the St. Johns River Water Management District will not publish a notice in the newspaper advising the public that it has issued a permit for this project.

Newspaper publication, using the District's notice form, notifies members of the public of their right to challenge the issuance of the permit. If proper notice is given by newspaper publication, then there is a 21-day time limit for someone to file a petition for an administrative hearing to challenge the issuance of the permit.

To close the point of entry for filing a petition, you may publish (at your own expense) a one-time notice of the District's decision in a newspaper of general circulation within the affected area as defined in Section 50.011 of the Florida Statutes. If you do not publish a newspaper notice to close the point of entry, the time to challenge the issuance of your permit will not expire and someone could file a petition even after your project is constructed.

A copy of the notice form and a partial list of newspapers of general circulation are attached for your convenience. However, you are not limited to those listed newspapers. If you choose to close the point of entry and the notice is published, the newspaper will return to you an affidavit of publication. In that event, it is important that you either submit a scanned copy of the affidavit by emailing it to compliancesupport@sjrwmd.com (preferred method) or send a copy of the original affidavit to:

Office of Business and Administrative Services
4049 Reid Street
Palatka, FL 32177

If you have any questions, please contact the Office of Business and Administrative Services at (386) 329-4570.

NOTICE OF AGENCY ACTION TAKEN BY THE
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Notice is given that the following permit was issued on _____:

(Name and address of applicant) _____
permit# _____. The project is located in _____ County, Section
_____, Township _____ South, Range _____ East. The permit authorizes a surface
water management system on _____ acres for
_____ known as
_____. The receiving water body is _____.

A person whose substantial interests are or may be affected has the right to request an administrative hearing by filing a written petition with the St. Johns River Water Management District (District). Pursuant to Chapter 28-106 and Rule 40C-1.1007, Florida Administrative Code (F.A.C.), the petition must be filed (received) either by delivery at the office of the District Clerk at District Headquarters, P.O. Box 1429, Palatka FL 32178-1429 (4049 Reid St, Palatka, FL 32177) or by e-mail with the District Clerk at Clerk@sjrwmd.com, within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail or email actual notice). A petition must comply with Sections 120.54(5)(b)4. and 120.569(2)(c), Florida Statutes (F.S.), and Chapter 28-106, F.A.C. The District will not accept a petition sent by facsimile (fax). Mediation pursuant to Section 120.573, F.S., may be available and choosing mediation does not affect your right to an administrative hearing.

A petition for an administrative hearing is deemed filed upon receipt of the complete petition by the District Clerk at the District Headquarters in Palatka, Florida during the District's regular business hours. The District's regular business hours are 8 a.m. – 5 p.m., excluding weekends and District holidays. Petitions received by the District Clerk after the District's regular business hours shall be deemed filed as of 8 a.m. on the District's next regular business day. The District's acceptance of petitions filed by e-mail is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation (issued pursuant to Rule 28-101.001, Florida Administrative Code), which is available for viewing at www.sjrwmd.com. These conditions include, but are not limited to, the petition being in the form of a PDF or TIFF file and being capable of being stored and printed by the District. Further, pursuant to the District's Statement of Agency Organization and Operation, attempting to file a petition by facsimile (fax) is prohibited and shall not constitute filing.

The right to an administrative hearing and the relevant procedures to be followed are governed by Chapter 120, Florida Statutes, Chapter 28-106, Florida Administrative Code, and Rule 40C-1.1007, Florida Administrative Code. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means the District's final action may be different from the position taken by it in this notice. **Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing. (Rule 28-106.111, F.A.C.).**

If you wish to do so, please visit www.sjrwmd.com/nor_dec/ to read the complete Notice of Rights to determine any legal rights you may have concerning the District's decision(s) on the permit application(s) described above. You can also request the Notice of Rights by contacting the Office of Business and Administrative Services , 4049 Reid St., Palatka, FL 32177-2529, tele. no 386-329-4570.

NEWSPAPER ADVERTISING

ALACHUA

The Alachua County Record, Legal Advertising
P. O. Box 806
Gainesville, FL 32602
352-377-2444/ fax 352-338-1986

BRADFORD

Bradford County Telegraph, Legal Advertising
P. O. Drawer A
Starke, FL 32901
904-964-6305/ fax 904-964-8628

CLAY

Clay Today, Legal Advertising
1560 Kinsley Ave., Suite 1
Orange Park, FL 32073
904-264-3200/ fax 904-264-3285

FLAGLER

Flagler Tribune, c/o News Journal
P. O. Box 2831
Daytona Beach, FL 32120-2831
386-681-2322

LAKE

Daily Commercial, Legal Advertising
P. O. Drawer 490007
Leesburg, FL 34749
352-365-8235/fax 352-365-1951

NASSAU

News-Leader, Legal Advertising
P. O. Box 766
Fernandina Beach, FL 32035
904-261-3696/fax 904-261-3698

ORANGE

Sentinel Communications, Legal Advertising
633 N. Orange Avenue
Orlando, FL 32801
407-420-5160/ fax 407-420-5011

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Palatka Daily News, Legal Advertising
P. O. Box 777
Palatka, FL 32178
386-312-5200/ fax 386-312-5209

SEMINOLE

Seminole Herald, Legal Advertising
300 North French Avenue
Sanford, FL 32771
407-323-9408

BAKER

Baker County Press, Legal Advertising
P. O. Box 598
Macclenny, FL 32063
904-259-2400/ fax 904-259-6502

BREVARD

Florida Today, Legal Advertising
P. O. Box 419000
Melbourne, FL 32941-9000
321-242-3832/ fax 321-242-6618

DUVAL

Daily Record, Legal Advertising
P. O. Box 1769
Jacksonville, FL 32201
904-356-2466 / fax 904-353-2628

INDIAN RIVER

Treasure Coast News, Legal Advertising
760 NW Enterprise Dr.
Port St. Lucie, FL 34986
772-283-5252

MARION

Ocala Star Banner, Legal Advertising
2121 SW 19th Avenue Road
Ocala, FL 34474
352-867-4010/fax 352-867-4126

OKEECHOBEE

Okeechobee News, Legal Advertising
P. O. Box 639
Okeechobee, FL 34973-0639
863-763-3134/fax 863-763-5901

OSCEOLA

Little Sentinel, Legal Advertising
633 N. Orange Avenue
Orlando, FL 32801
407-420-5160/ fax 407-420-5011

ST. JOHNS

St. Augustine Record, Legal Advertising
P. O. Box 1630
St. Augustine, FL 32085
904-819-3439

VOLUSIA

News Journal Corporation, Legal Advertising
P. O. Box 2831
Daytona Beach, FL 32120-2831
(386) 681-2322

Downtown Fernandina Beach Conceptual Permit

City of Fernandina Beach

Prepared for
St. Johns River Water Management District

December 2020



A Full Service Design Firm

CPH, Inc.
5200 Belfort Road, Suite 220
Jacksonville, FL 32256
(904) 332-0999

Wade Olszewski

54068

P.E. Number

December 7, 2020

Date

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- USGS Quad Map
- NRSCS Soils Map
- Pre-Development Basin Map
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- Basin 1 – Pollutant Loading Calculations
- Basin 2 – Pollutant Loading Calculations
- Basin 3 – Pollutant Loading Calculations
- Basin 4 – Pollutant Loading Calculations
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Appendix C – Compliance Demonstration Examples

- Example 1: Municipal Improvements Located in the Right-of-way to Serve the Respective Basin
- Example 2: Individual Lot Redevelopment

1.0 Introduction

1.1 Purpose and Scope

The City of Fernandina Beach proposes to obtain a conceptual Stormwater permit through the St. Johns River Water Management District (SJRWMD) for the redevelopment of a portion of Downtown Fernandina Beach. The basins covered in the conceptual permit will include the approximate area bounded by Calhoun Street, North 5th Street, Broome Street, North 6th Street, Alachua Street, North 7th Street, Centre Street, South 11th Street, Beech Street, the Amelia River, and Front Street. The total estimated basin area is approximately 104 Acres. The site is located in Section 28, Township 3N, and Range 28E. Please refer to the location map located in Appendix A.

The conceptual permit will establish the total amount of pollutants and runoff flow rate allowed for the Downtown Fernandina Beach basins, which discharge to the Amelia River. Individual sites will be required to obtain a general permit through SJRWMD before development demonstrating a net benefit to the basin. The pollutant loading and discharge rates from the site will be based upon the existing conditions prior to any new redevelopment in the Downtown Fernandina Beach basins. General permits and construction plans are not included with this portion of the process.

This submittal is for the approval of a SJRWMD Conceptual Environmental Resource Permit according to the rule 62-330.055, F.A.C. The City of Fernandina Beach will be the applicant.

2.0 Existing Conditions

2.1 Description

The existing site condition consists of approximately 104 Acres in a highly developed area. The impervious ratio is approximately 95% impervious. The existing drainage basins have been delineated on the Pre-Development Drainage Map. There are four (4) drainage basins within the property boundary. Pre-1 (40.54 Acres) sheet flows to a drainage network along Ash Street that flows west and discharges to the Amelia River. Pre-2 (19.83 Acres) sheet flows to a drainage network along Centre Street that flows west and discharges to the Amelia River. Pre-3 (39.75 Acres) sheet flows to a drainage network along Alachua Street that flows west and discharges to the Amelia River. Pre-4 (3.68 Acres) sheet flows west to the Amelia River.

Basins		
Basin No.	Area (Acres)	Impervious Area (Acres)
1	40.54	38.51
2	19.83	18.84
3	39.75	37.76
4	3.68	3.50

Table 1 -Downtown Fernandina Beach Basins

3.0 Proposed Conditions

3.1 Description

The proposed drainage basins are consistent with the existing drainage basins and have been delineated on the Post Development Map located in Appendix A. Redevelopment within the basins will require meeting their respective pre-development basin conditions for pollutant loading and outfall flow rates. Proposed development conditions will be addressed under separate permits, in compliance with this Conceptual permit.

4.0 Calculations

4.1 Stormwater Quality and Attenuation Requirements

4.1.1 Stormwater Quality

Pursuant to Rule 67-330.055, F.A.C., the pre-development pollutant load for phosphorus and nitrogen was established to be the basis for future development. As individual sites redevelop, these projects will be required to demonstrate a net positive benefit in pollutant loading generated by the basin.

The pre-development pollutant baseline loading was determined using BMP Trains software. The four (4) existing basins were subdivided according to land use.

Examples demonstrating compliance under this conceptual permit are provided in Appendix C. Example 1 demonstrates how a municipal project in the right-of-way will show net improvement for an entire basin to be covered under the Conceptual Permit by the addition of BMPs in the right-of-way in the drainage system connected to the ultimate outfall location. Example 2 demonstrates how an individual lot can show compliance with net improvement pollutant loading in a basin that does not have a BMP already in place in the right-of-way.

4.1.2 Stormwater Attenuation Requirements

Pursuant to Rule 67-330.055, F.A.C., the peak discharge rates were determined for the Downtown Fernandina Beach for the 25-year, 24-hour storm event. Attenuation for individual basins must be considered at point of connection, due to conveyance requirements.

Individual curve numbers were calculated for each basin. The time of concentration for each basin was assumed to be 10 minutes. Evaluation of the existing flow rate(s) to the point(s) of connection must be done as individual projects are permitted separately. All post-developed rates must be less or equal to existing rates.

ADICPR 3.0 was used to calculate the pre-development discharge rates for the 25-year, 24-hour storm event. Table 3 shows the pre-development discharge rates for each basin that must be met in the post-development condition of any project within a respective basin.

5.0 Conclusion

5.1 Pollutant Loading

The pre-development pollutant loadings are shown in Table-2 below. Each Basin has a Total Nitrogen (TN) and Total Phosphorus (TP) load value for the existing conditions, with no BMPs currently in place in the public right-of-ways and minimal BMP's previously permitted on a few individual lots. The existing conditions pollutant loadings are the Target Pollutant Loadings for each basin. Any new development in each basin must show compliance with this Conceptual Permit by showing a net improvement in both TN and TP values in the post-development condition, through the implementation of BMPs.

Target Pollutant Loading Table				
Pollutant	Basin 1	Basin 2	Basin 3	Basin 4
Nitrogen (kg/yr)	178.92	78.49	178.03	15.94
Phosphorus (kg/yr)	26.97	12.62	27.16	3.08

Table 2 – Target Pollutant Loadings for Downtown Fernandina Beach

Municipal projects occurring in the right-of-way of a basin covered under this Conceptual Permit may construct BMPs that provide a net improvement for the entire system draining to it, in that respective basin. If an individual property undergoes new development, after the municipal project is permitted, it may be exempt from providing a BMP for treatment if the sum of the pollutant loading in the post-condition and the municipal project pollutant loading are less than the Target Pollutant loadings of that Basin as shown in Table 2. Please refer to Appendix C for example calculations.

5.2 Stormwater Discharge

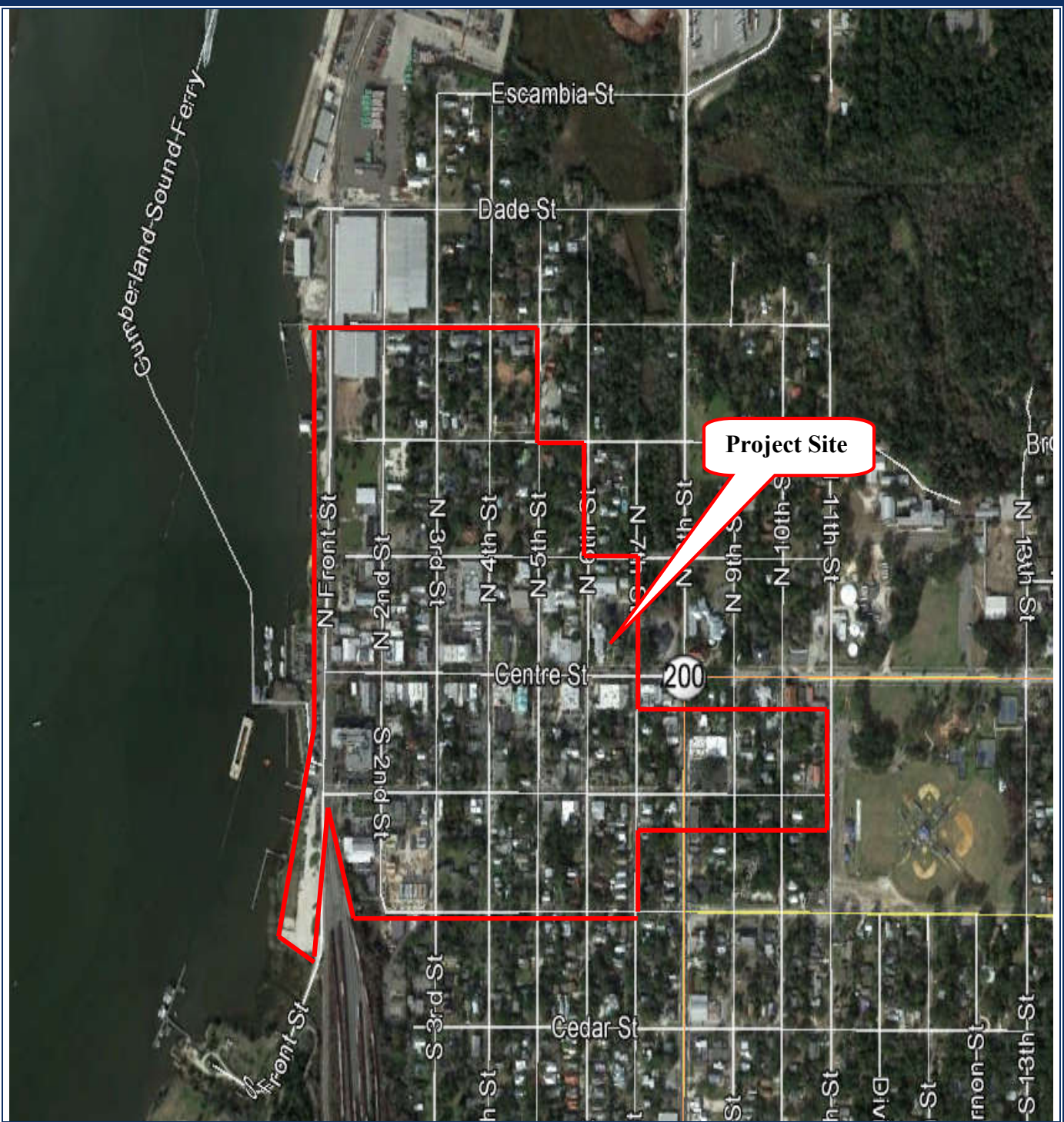
Stormwater discharge rates for the 25-year, 24-hour storm were evaluated for the pre-development conditions. Table 3 shows the discharge rates that must be met in the post-development conditions of each basin.

Existing Conditions Stormwater Discharge Rates				
25-Year 24-Hour Storm Event	Basin 1	Basin 2	Basin 3	Basin 4
Q (cfs)	251.46	123.09	246.1	22.86

Table 3 – Pre-Development Discharge Rates for the 25-Year, 24-Hour Storm Event

Appendix A

Basin Maps

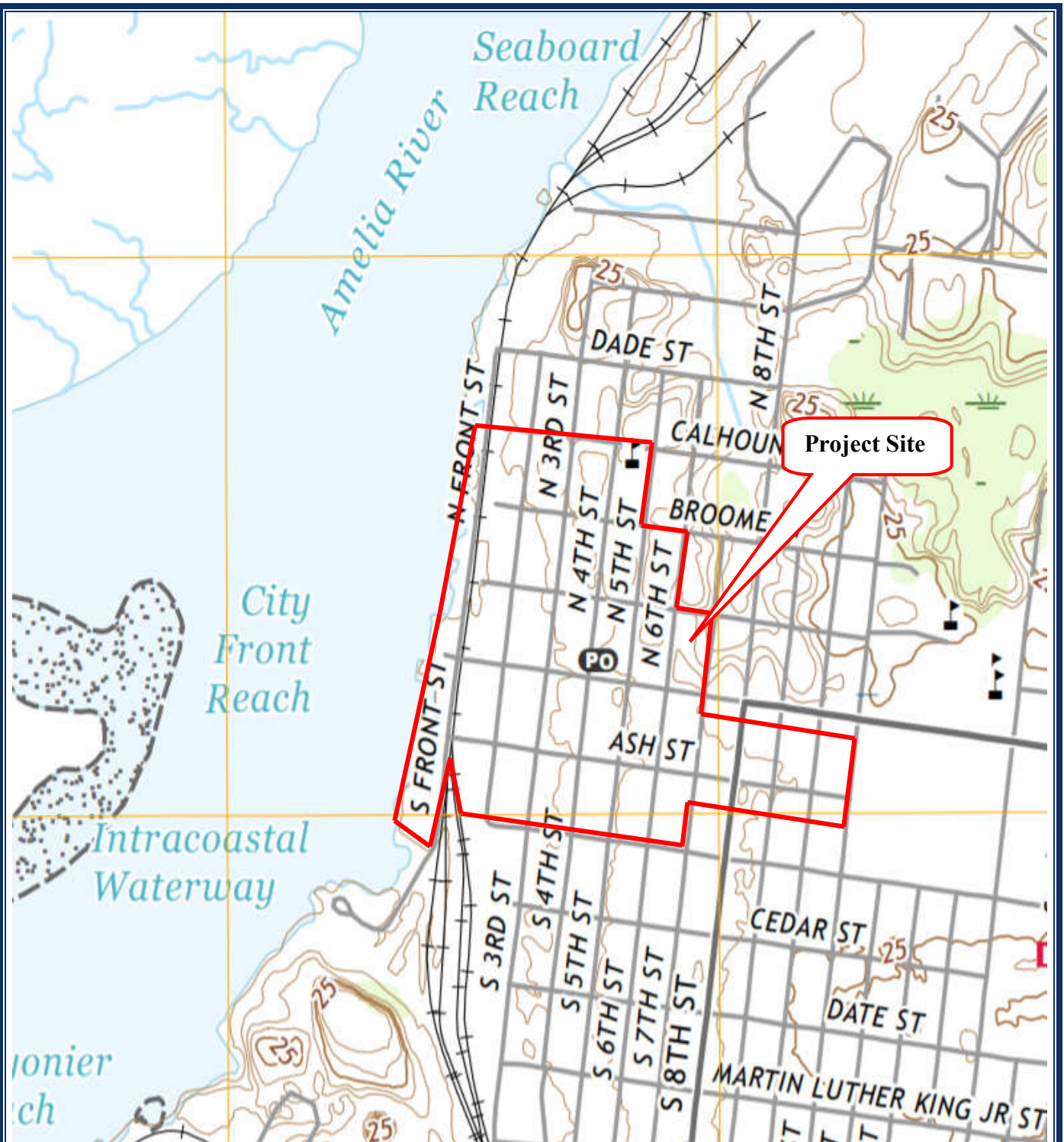


**Downtown Fernandina Beach
Conceptual Permit
Location Map**

Fernandina Beach, FL



Engineers
Architects
Planners
Landscape Architects
Transportation/Traffic
Surveyors
Environmental Scientists
Construction Management



**Downtown Fernandina Beach
Conceptual Permit
Quad Map**

Fernandina Beach, FL



Engineers
Architects
Planners
Landscape Architects
Transportation/Traffic
Surveyors
Environmental Scientists
Construction Management



United States
Department of
Agriculture

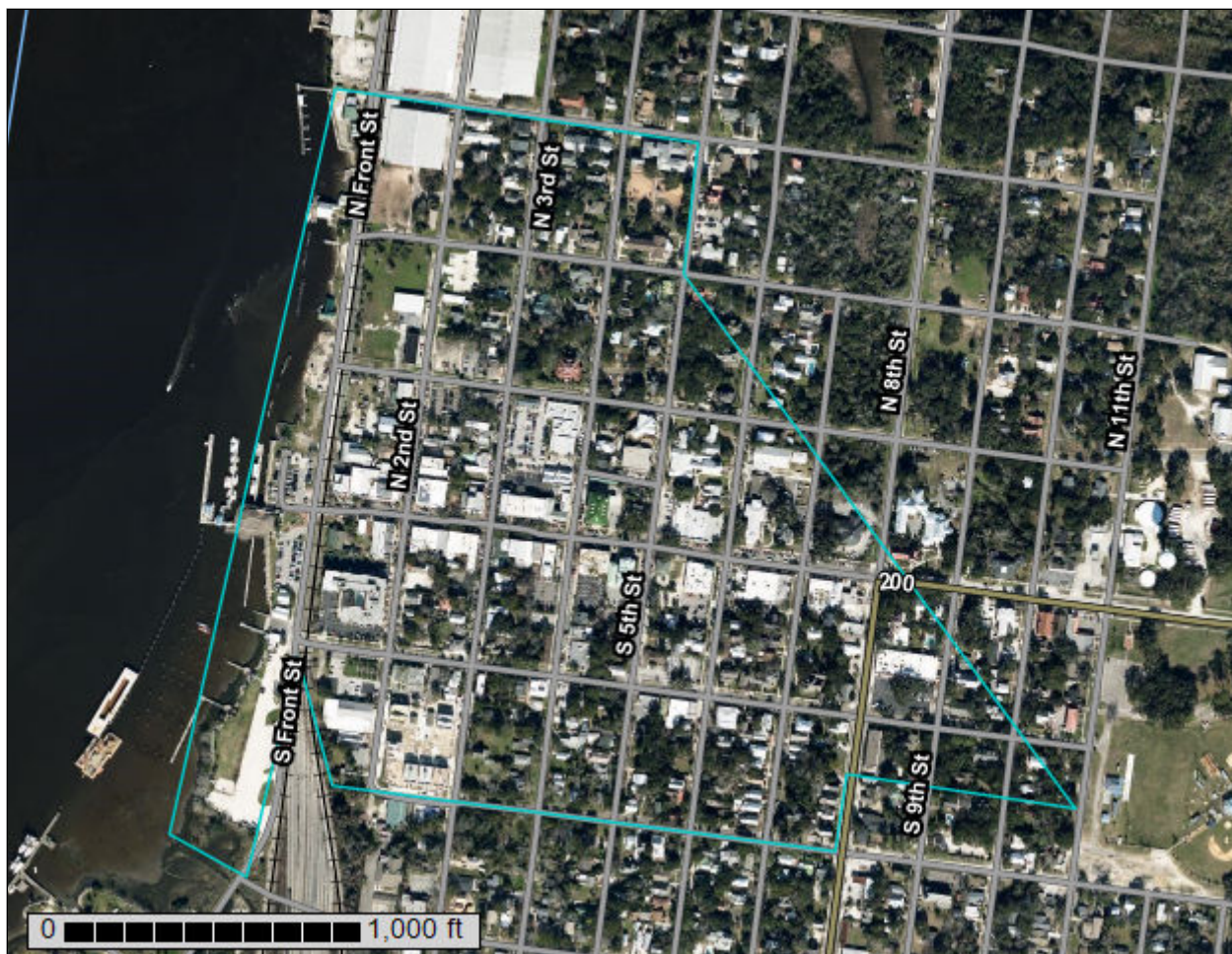
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Nassau County, Florida**

Downtown Fernandina Beach



November 12, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Nassau County, Florida
Survey Area Data: Version 20, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 21, 2018—Jan 6, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Arents, nearly level	0.2	0.2%
4	Echaw fine sand	12.1	11.5%
17	Urban land	40.5	38.3%
20	Ortega fine sand, 0 to 5 percent slopes	13.1	12.4%
24	Kingsferry fine sand	0.4	0.4%
27	Ridgewood fine sand, 0 to 5 percent slopes	0.0	0.0%
28	Tisonia mucky peat, tidal	1.7	1.6%
29	Resota fine sand, 0 to 5 percent slopes	11.9	11.2%
31	Kershaw fine sand, 2 to 8 percent slopes	20.0	18.9%
99	Water	5.8	5.5%
Totals for Area of Interest		105.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a

given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Nassau County, Florida

2—Arents, nearly level

Map Unit Setting

National map unit symbol: 4g99

Elevation: 0 to 110 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 305 to 335 days

Farmland classification: Not prime farmland

Map Unit Composition

Arents and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arents

Setting

Landform: Rises on marine terraces

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Altered marine deposits

Typical profile

AC - 0 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 50.02 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: A

Forage suitability group: Forage suitability group not assigned (G153AA999FL)

Other vegetative classification: Forage suitability group not assigned (G153AA999FL)

Hydric soil rating: No

4—Echaw fine sand

Map Unit Setting

National map unit symbol: 4gb0

Elevation: 0 to 130 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 305 to 335 days

Farmland classification: Not prime farmland

Map Unit Composition

Echaw and similar soils: 88 percent

Minor components: 12 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Echaw

Setting

Landform: Ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

E - 6 to 35 inches: fine sand

Bh - 35 to 38 inches: fine sand

E' - 38 to 78 inches: fine sand

Bh - 78 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: About 30 to 60 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)

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Other vegetative classification: North Florida Flatwoods (R153AY004FL), Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Minor Components

Leon, non-hydric

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Mandarin

Percent of map unit: 3 percent
Landform: Flats on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Resota

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sand Pine Scrub (R153AY001FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Lynn haven

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

17—Urban land

Map Unit Composition

Urban land: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Marine terraces
Landform position (three-dimensional): Interfluve, tal
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Unranked

20—Ortega fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 4g9b
Elevation: 0 to 500 feet
Mean annual precipitation: 47 to 55 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 305 to 335 days
Farmland classification: Not prime farmland

Map Unit Composition

Ortega and similar soils: 93 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ortega

Setting

Landform: Ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None

Custom Soil Resource Report

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R153AY002FL),

Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)

Hydric soil rating: No

Minor Components

Hurricane

Percent of map unit: 2 percent

Landform: Rises on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)

Hydric soil rating: No

Kershaw

Percent of map unit: 2 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve, side slope

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)

Hydric soil rating: No

Albany

Percent of map unit: 2 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve, talus

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)

Hydric soil rating: No

Ridgewood

Percent of map unit: 1 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)

Hydric soil rating: No

24—Kingsferry fine sand

Map Unit Setting

National map unit symbol: 4g9g

Elevation: 0 to 150 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 305 to 335 days

Farmland classification: Not prime farmland

Map Unit Composition

Kingsferry and similar soils: 89 percent

Minor components: 11 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kingsferry

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 34 inches: fine sand

Bh1 - 34 to 67 inches: fine sand

Bh2 - 67 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G153AA141FL)

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Other vegetative classification: North Florida Flatwoods (R153AY004FL), Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Minor Components

Lynn haven

Percent of map unit: 4 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Leon, non-hydric

Percent of map unit: 4 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Rutlege

Percent of map unit: 3 percent
Landform: Drainageways on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

27—Ridgewood fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 4g9k
Elevation: 0 to 150 feet
Mean annual precipitation: 47 to 55 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 305 to 335 days
Farmland classification: Not prime farmland

Map Unit Composition

Ridgewood and similar soils: 91 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ridgewood

Setting

Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
B/C - 7 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 18 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R153AY002FL), Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Minor Components

Centenary

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Ortega

Percent of map unit: 2 percent
Landform: Ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear

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Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)

Hydric soil rating: No

Pottsburg

Percent of map unit: 2 percent

Landform: Rises on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)

Hydric soil rating: No

Mandarin

Percent of map unit: 2 percent

Landform: Flats on marine terraces, rises on marine terraces

Landform position (three-dimensional): Interfluve, rise

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)

Hydric soil rating: No

28—Tisonia mucky peat, tidal

Map Unit Setting

National map unit symbol: 4g9l

Elevation: 0 to 150 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 305 to 335 days

Farmland classification: Not prime farmland

Map Unit Composition

Tisonia, tidal, and similar soils: 98 percent

Minor components: 2 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tisonia, Tidal

Setting

Landform: Tidal marshes on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Organic material over clayey alluvium

Typical profile

Oe - 0 to 40 inches: mucky peat

C - 40 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 35.0
Available water capacity: Very high (about 15.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A/D
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Salt Marsh (R153AY009FL), Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Yes

Minor Components

Maurepas

Percent of map unit: 1 percent
Landform: Flood plains on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Kingsland

Percent of map unit: 1 percent
Landform: Flood plains on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

29—Resota fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 4g9m
Elevation: 0 to 80 feet

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Mean annual precipitation: 47 to 55 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 305 to 335 days
Farmland classification: Not prime farmland

Map Unit Composition

Resota and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Resota

Setting

Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
E - 4 to 27 inches: fine sand
Bw - 27 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Other vegetative classification: Sand Pine Scrub (R153AY001FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Minor Components

Kureb

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, dunes on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sand Pine Scrub (R153AY001FL), Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)

Hydric soil rating: No

Ridgewood

Percent of map unit: 2 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands
(G153AA131FL)

Hydric soil rating: No

31—Kershaw fine sand, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: 4g9q

Elevation: 40 to 500 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 64 to 72 degrees F

Frost-free period: 305 to 335 days

Farmland classification: Not prime farmland

Map Unit Composition

Kershaw and similar soils: 98 percent

Minor components: 2 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kershaw

Setting

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (three-dimensional): Interfluve, side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: fine sand

C - 7 to 80 inches: fine sand

Properties and qualities

Slope: 2 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Custom Soil Resource Report

Available water capacity: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R153AY002FL),
Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)

Hydric soil rating: No

Minor Components

Ortega

Percent of map unit: 2 percent

Landform: Ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)

Hydric soil rating: No

99—Water

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

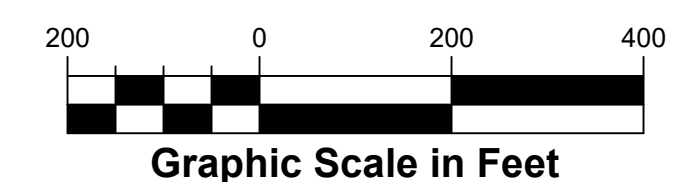
Interpretive groups

Land capability classification (irrigated): None specified

Forage suitability group: Forage suitability group not assigned (G153AA999FL)

Other vegetative classification: Forage suitability group not assigned (G153AA999FL)

Hydric soil rating: Unranked



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State of Florida Licenses:
Engineer No. 3215
Surveyor No. LB7143
Architect. No. AA26000926
Landscape No. LC000298

WADE P. OLSZEWSKI, P.E.
54068

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Designed: K. Sheffield	
Drawn: P. Ranucci	
Checked: W. Olszewski	
Job No.: F6704.1	
Date: 4/2020	© 2020

PRE DEVELOPMENT BASIN MAP

CITY OF FERNANDINA BEACH
DOWNTOWN DRAINAGE IMPROVEMENTS
CITY OF FERNANDINA BEACH / FLORIDA

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

Sheet No.

PRE

Appendix B

Calculations

Pre-Development Curve Number Calculations

Downtown Fernandina Beach Conceptual Permit

Fernandina Beach, FL

Existing Conditions

Composite "CN" at Drainage Area Basin 1					
	Acreage	"CN"		Value	
Impervious	38.51	98.00	=	3773.98 (CN's Taken From Table 2.2a&c TR-55)	
Pervious	2.03	84.00	=	170.52 (Open Space - Fair Condition - Group D)	
Total Basin Acreage	40.54			3944.50	
Composite "CN"		3944.50	/	40.54	= 97.30 "CN"

Downtown Fernandina Beach Conceptual Permit

Fernandina Beach, FL

Existing Conditions

Composite "CN" at Drainage Area Basin 2					
	Acreage	"CN"		Value	
Impervious	18.84	98.00	=	1846.32	(CN's Taken From Table 2.2a&c TR-55)
Pervious	0.99	84.00	=	83.16	(Open Space - Fair Condition - Group D)
Total Basin Acreage	19.83			1929.48	
Composite "CN"		1929.48	/	19.83	= 97.30 "CN"

Downtown Fernandina Beach Conceptual Permit

Fernandina Beach, FL

Existing Conditions

Composite "CN" at Drainage Area Basin 3

	Acreage	"CN"	=	Value
Impervious	37.76	98.00	=	3700.48 (CN's Taken From Table 2.2a&c TR-55)
Pervious	1.99	84.00	=	167.16 (Open Space - Fair Condition - Group D)
Total Basin Acreage	39.75			3867.64
Composite "CN"		3867.64	/	39.75 = 97.30 "CN"

Downtown Fernandina Beach Conceptual Permit

Fernandina Beach, FL

Existing Conditions

Composite "CN" at Drainage Area Basin 4					
	Acreage	"CN"		Value	
Impervious	3.50	98.00	=	342.61	(CN's Taken From Table 2.2a&c TR-55)
Pervious	0.18	84.00	=	15.12	(Open Space - Fair Condition - Group D)
Total Basin Acreage	3.68			357.73	
Composite "CN"		357.73	/	3.68	= 97.30 "CN"

Basin 1 – Pollutant Loading Calculations

Complete Report Ver 4.1.0

Project: Basin 1

Date: 11/11/2020 2:15:49 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Commercial	Industrial	High Intensity Commercial	Residential	Right-of-Way
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	48.00	48.00	48.00	48.00	48.00

Pre-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	High-Intensity Commercial: TN=2.40 TP=0.345	Single-Family: TN=2.070 TP=0.327	Highway: TN=1.520 TP=0.200
Area (acres)	17.39	0.03	3.41	6.39	13.32
Rational Coefficient (0-1)	0.63	0.81	0.64	0.56	0.55
Non DCIA Curve Number	97.30	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	32.40	100.00	34.90	3.60	0.00
Nitrogen EMC (mg/l)	1.130	1.200	2.400	2.070	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.345	0.327	0.200
Runoff Volume (ac-ft/yr)	44.110	0.097	8.741	14.296	29.327
Nitrogen Loading (kg/yr)	61.458	0.144	25.865	36.488	54.964

Phosphorus Loading (kg/yr)	10.225	0.031	3.718	5.764	7.232
----------------------------	--------	-------	-------	-------	-------

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	High-Intensity Commercial: TN=2.40 TP=0.345	Single-Family: TN=2.070 TP=0.327	Highway: TN=1.520 TP=0.200
Area (acres)	17.39	0.03	3.41	6.39	13.32
Rational Coefficient (0-1)	0.63	0.81	0.64	0.56	0.55
Non DCIA Curve Number	97.30	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	32.40	100.00	34.90	3.60	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	2.400	2.070	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.345	0.327	0.200
Runoff Volume (ac-ft/yr)	44.110	0.097	8.741	14.296	29.327
Nitrogen Loading (kg/yr)	61.458	0.144	25.865	36.488	54.964
Phosphorus Loading (kg/yr)	10.225	0.031	3.718	5.764	7.232

Catchment Number: 1 Name: Commercial

Project: Basin 1

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 17.39

Contributing Area (acres) 17.390

Non-DCIA Curve Number 97.30

DCIA Percent 32.40

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

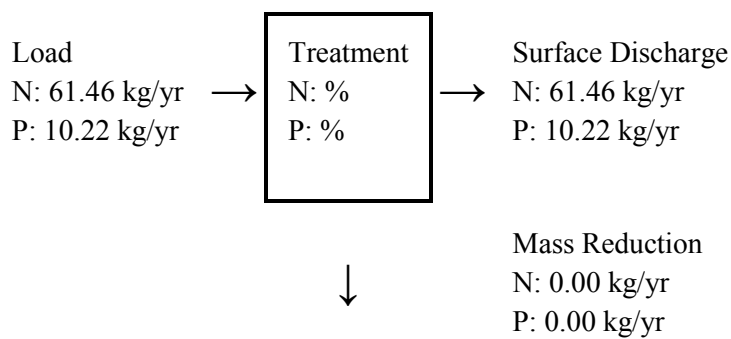
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

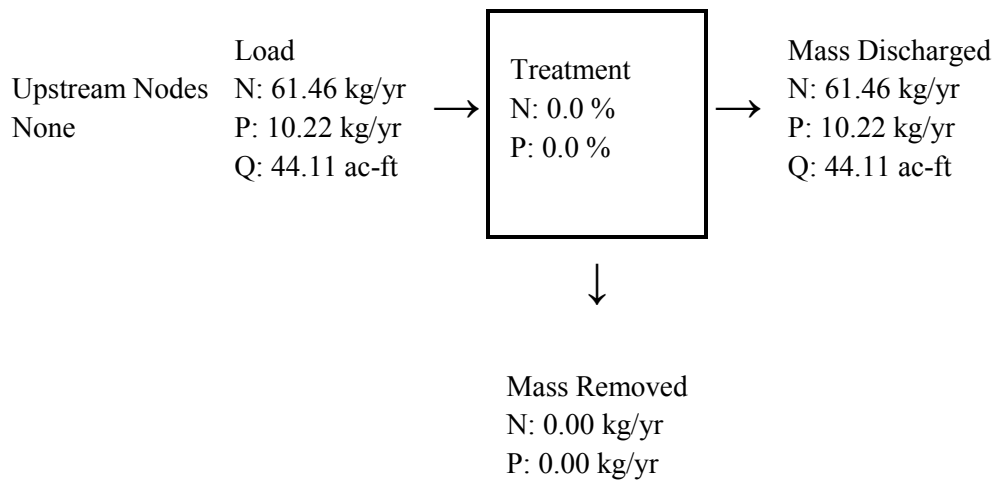
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Industrial

Project: Basin 1

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 0.03

Contributing Area (acres) 0.030

Non-DCIA Curve Number 97.30

DCIA Percent 100.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

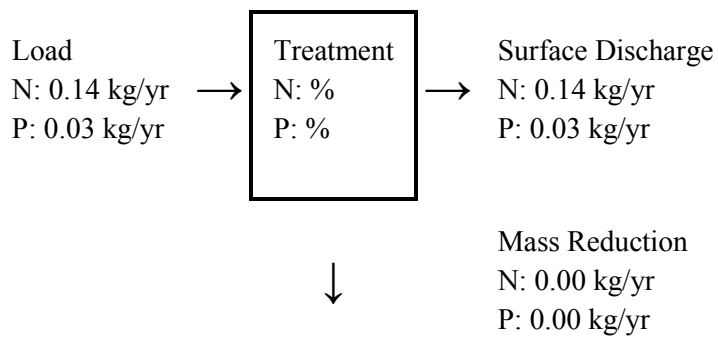
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

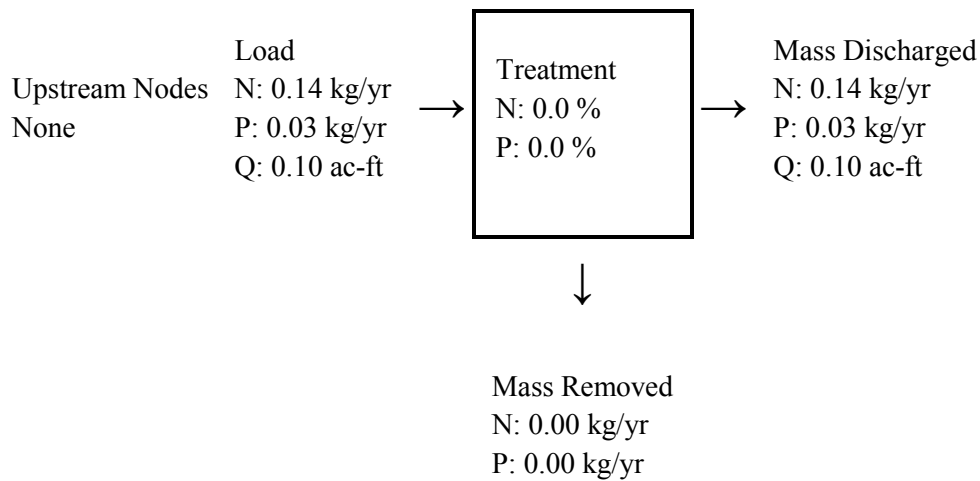
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: High Intensity Commercial

Project: Basin 1

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 3.41

Contributing Area (acres) 3.410

Non-DCIA Curve Number 97.30

DCIA Percent 34.90

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

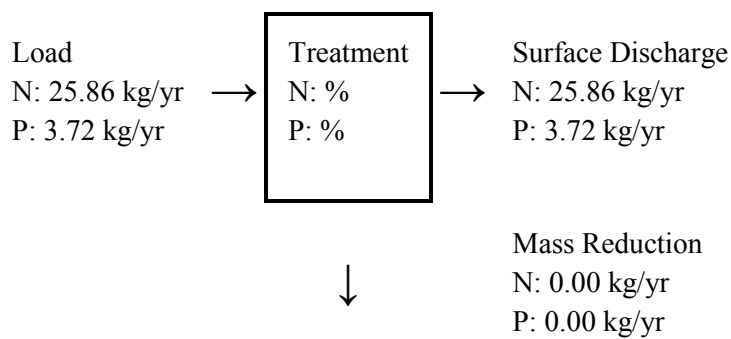
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

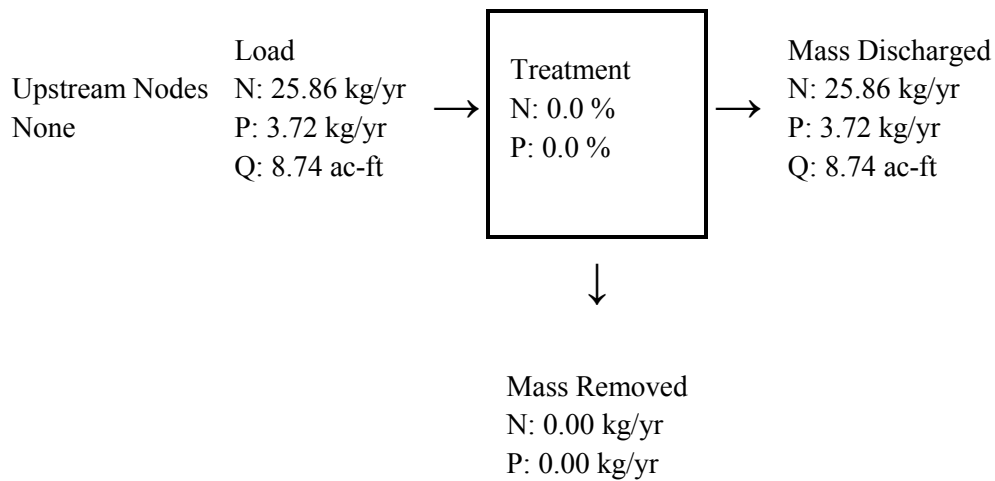
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Residential

Project: Basin 1

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 6.39

Contributing Area (acres) 6.390

Non-DCIA Curve Number 97.30

DCIA Percent 3.60

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

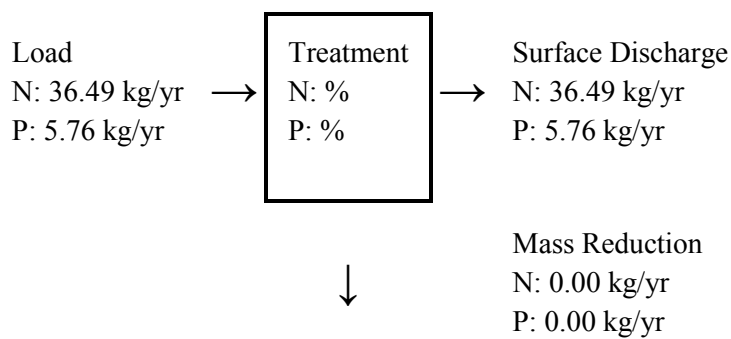
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

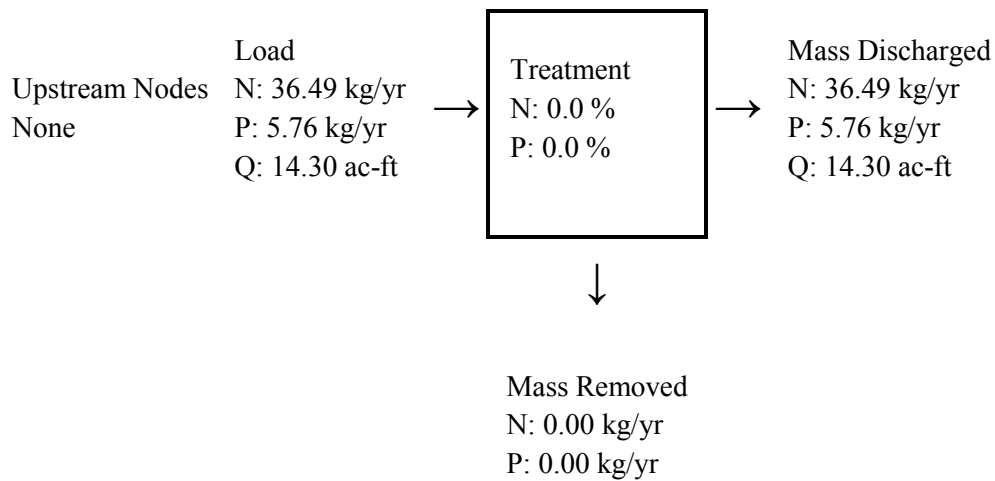
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Right-of-Way

Project: Basin 1

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 13.32

Contributing Area (acres) 13.320

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

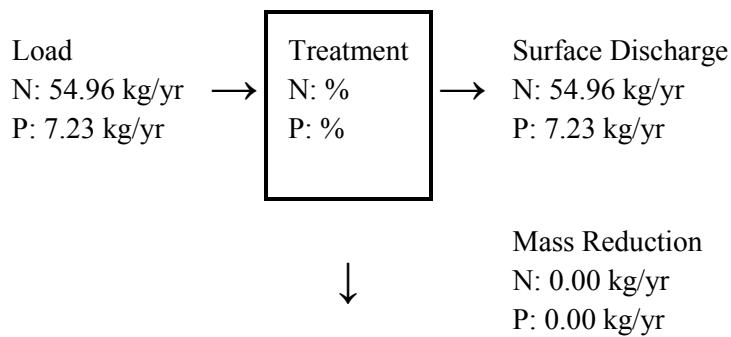
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

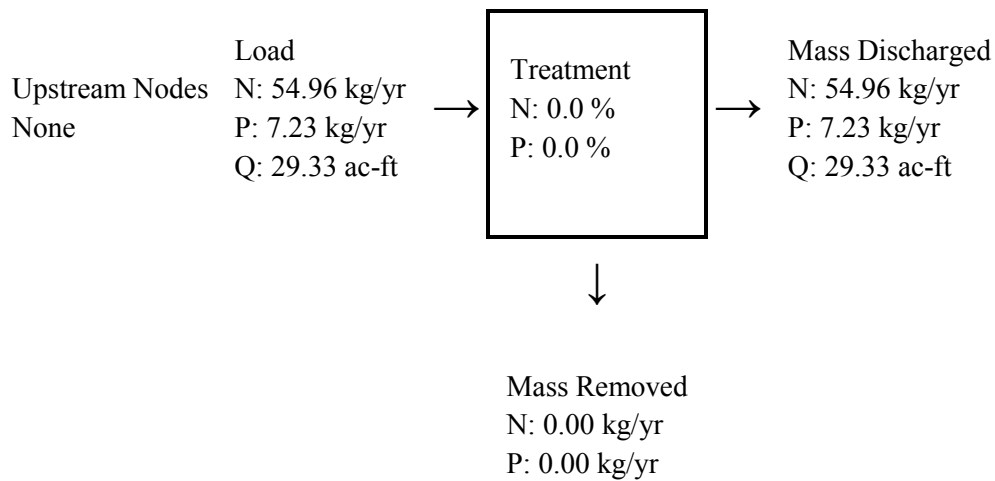
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Summary Treatment Report Version: 4.1.0

Project: Basin 1

Date: 11/11/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Commercial) None
Catchment 2 - (Industrial) None
Catchment 3 - (High Intensity Commercial) None
Catchment 4 - (Residential) None
Catchment 5 - (Right-of-Way) None

Routing Summary

Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet
Catchment 3 Routed to Outlet
Catchment 4 Routed to Outlet
Catchment 5 Routed to Outlet

Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	178.92 kg/yr	
Total N post load	178.92 kg/yr	
Target N load reduction	%	
Target N discharge load	178.92 kg/yr	
Percent N load reduction	%	
Provided N discharge load	178.92 kg/yr	394.52 lb/yr
Provided N load removed	kg/yr	lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	26.97 kg/yr	
Total P post load	26.97 kg/yr	
Target P load reduction	%	
Target P discharge load	26.97 kg/yr	
Percent P load reduction	%	
Provided P discharge load	26.97 kg/yr	59.47 lb/yr
Provided P load removed	kg/yr	lb/yr

From Pre-Condition Loads

Existing N Discharge	178.92 (kg/yr)
Existing P Discharge	26.97 (kg/yr)

Basin 2 – Pollutant Loading Calculations

Complete Report Ver 4.1.0

Project: Basin 2

Date: 11/11/2020 2:35:45 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Commercial	Industrial	Right-of-Way
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	48.00	48.00	48.00

Pre-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Highway: TN=1.520 TP=0.200
Area (acres)	11.58	1.94	6.31
Rational Coefficient (0-1)	0.67	0.81	0.55
Non DCIA Curve Number	97.30	97.30	97.30
DCIA Percent (0-100)	45.90	100.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.200
Runoff Volume (ac-ft/yr)	30.982	6.278	13.893
Nitrogen Loading (kg/yr)	43.166	9.289	26.038
Phosphorus Loading (kg/yr)	7.182	2.013	3.426

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Highway: TN=1.520 TP=0.200
Area (acres)	11.58	1.94	6.31
Rational Coefficient (0-1)	0.67	0.81	0.55
Non DCIA Curve Number	97.30	97.30	97.30
DCIA Percent (0-100)	45.90	100.00	0.00
Wet Pond Area (ac)	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.200
Runoff Volume (ac- ft/yr)	30.982	6.278	13.893
Nitrogen Loading (kg/yr)	43.166	9.289	26.038
Phosphorus Loading (kg/yr)	7.182	2.013	3.426

Catchment Number: 1 Name: Commercial

Project: Basin 2

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 11.58

Contributing Area (acres) 11.580

Non-DCIA Curve Number 97.30

DCIA Percent 45.90

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

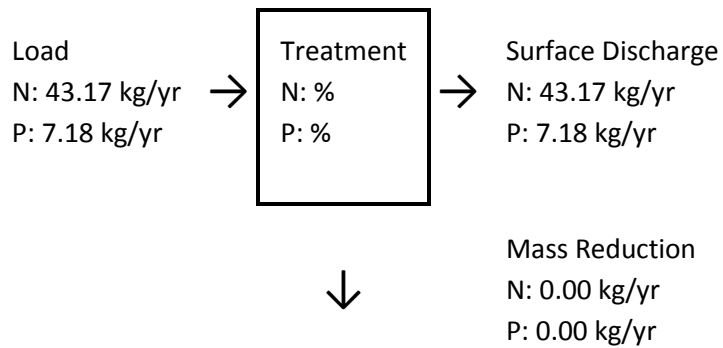
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

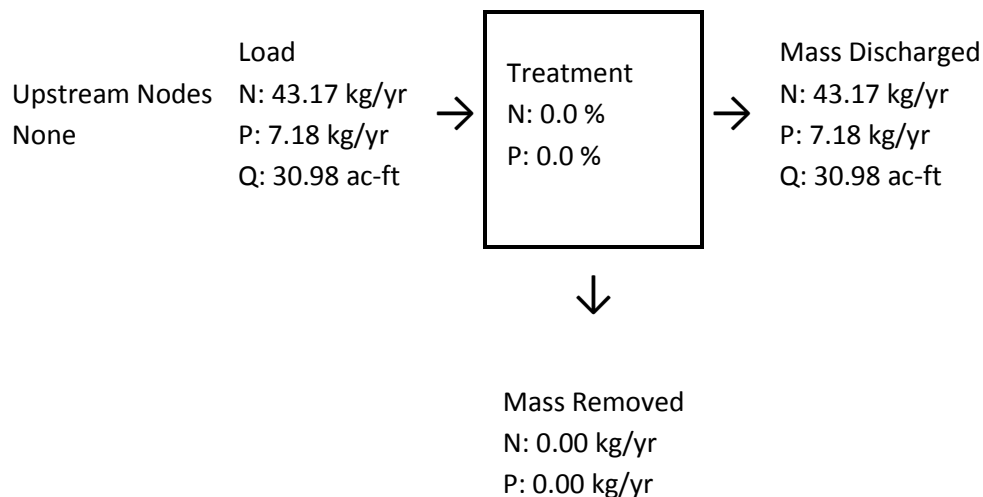
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Industrial

Project: Basin 2

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 1.94

Contributing Area (acres) 1.940

Non-DCIA Curve Number 97.30

DCIA Percent 100.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

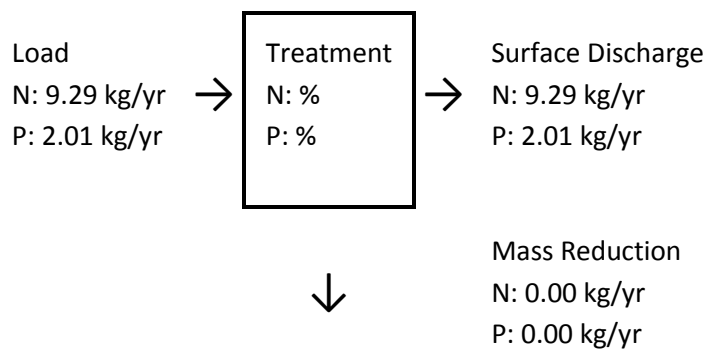
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

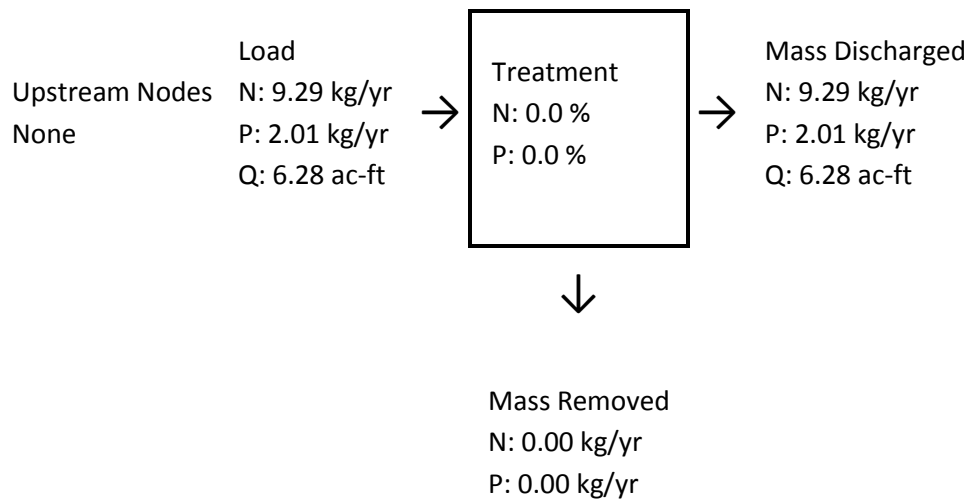
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Right-of-Way

Project: Basin 2

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 6.31

Contributing Area (acres) 6.310

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

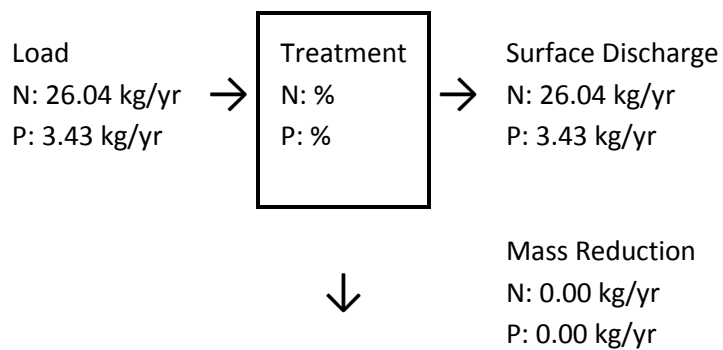
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

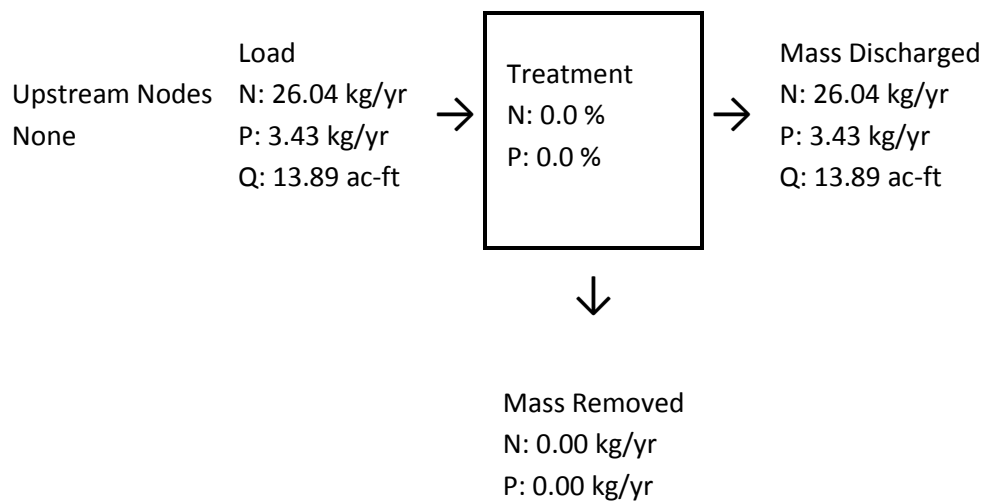
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Summary Treatment Report Version: 4.1.0

Project: Basin 2

Date:11/11/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Commercial) None

Catchment 2 - (Industrial) None

Catchment 3 - (Right-of-Way) None

Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Routing Summary

Catchment 1 Routed to Outlet

Catchment 2 Routed to Outlet

Catchment 3 Routed to Outlet

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	78.49 kg/yr	
Total N post load	78.49 kg/yr	
Target N load reduction	%	
Target N discharge load	78.49 kg/yr	
Percent N load reduction	%	
Provided N discharge load	78.49 kg/yr	173.08 lb/yr
Provided N load removed	kg/yr	lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	12.62 kg/yr	
Total P post load	12.62 kg/yr	
Target P load reduction	%	
Target P discharge load	12.62 kg/yr	
Percent P load reduction	%	
Provided P discharge load	12.62 kg/yr	27.83 lb/yr
Provided P load removed	kg/yr	lb/yr

From Pre-Condition Loads

Existing N Discharge	78.49 (kg/yr)
Existing P Discharge	12.62 (kg/yr)

Basin 3 – Pollutant Loading Calculations

Complete Report Ver 4.1.0

Project: Basin 3

Date: 11/11/2020 3:45:39 PM

Site and Catchment Information Analysis: Net Improvement

Catchment Name	Commercial	Industrial	Residential	High Intensity Commercial	Right-of-Way
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	48.00	48.00	48.00	48.00	48.00

Pre-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Single-Family: TN=2.070 TP=0.327	High-Intensity Commercial: TN=2.40 TP=0.345	Highway: TN=1.520 TP=0.200
Area (acres)	8.11	3.21	11.49	0.18	16.76
Rational Coefficient (0-1)	0.68	0.56	0.57	0.55	0.55
Non DCIA Curve Number	97.30	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	50.40	1.90	6.20	0.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	2.070	2.400	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.327	0.345	0.200
Runoff Volume (ac-ft/yr)	22.081	7.128	26.009	0.396	36.901
Nitrogen Loading (kg/yr)	30.765	10.546	66.384	1.173	69.158

Phosphorus Loading (kg/yr)	5.118	2.285	10.487	0.169	9.100
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Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Single-Family: TN=2.070 TP=0.327	High-Intensity Commercial: TN=2.40 TP=0.345	Highway: TN=1.520 TP=0.200
Area (acres)	8.11	3.21	11.49	0.18	16.76
Rational Coefficient (0-1)	0.68	0.56	0.57	0.55	0.55
Non DCIA Curve Number	97.30	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	50.40	1.90	6.20	0.00	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	2.070	2.400	1.520
Phosphorus EMC (mg/l)	0.188	0.260	0.327	0.345	0.200
Runoff Volume (ac-ft/yr)	22.081	7.128	26.009	0.396	36.901
Nitrogen Loading (kg/yr)	30.765	10.546	66.384	1.173	69.158
Phosphorus Loading (kg/yr)	5.118	2.285	10.487	0.169	9.100

Catchment Number: 1 Name: Commercial

Project: Basin 3

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 8.11

Contributing Area (acres) 8.110

Non-DCIA Curve Number 97.30

DCIA Percent 50.40

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

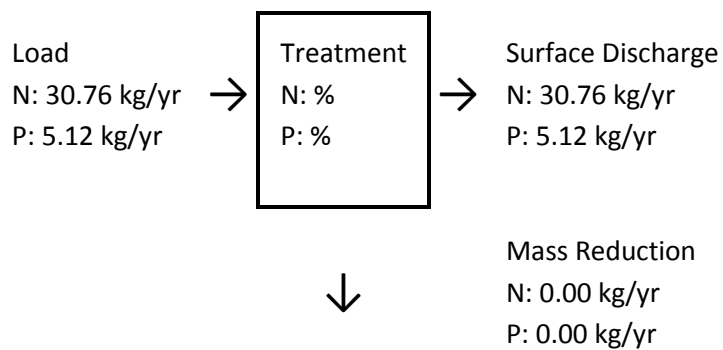
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

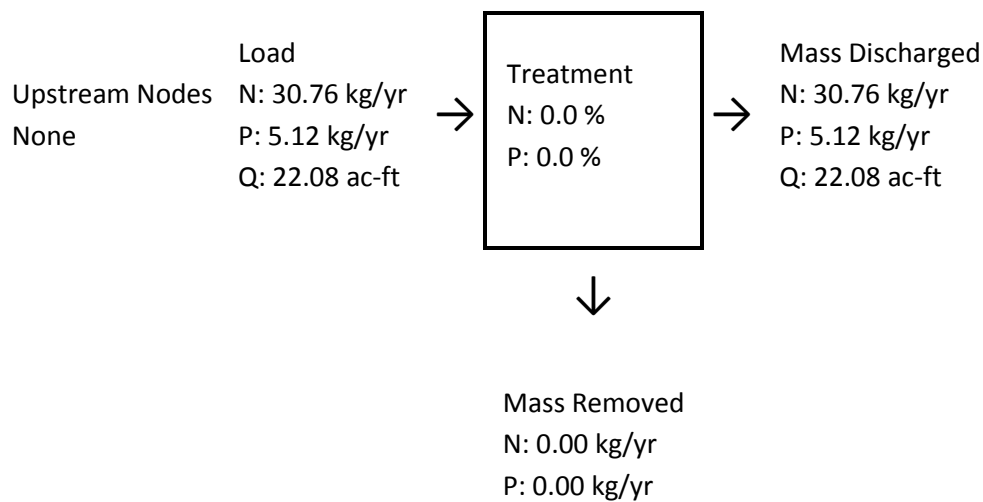
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Industrial

Project: Basin 3

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 3.21

Contributing Area (acres) 3.210

Non-DCIA Curve Number 97.30

DCIA Percent 1.90

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

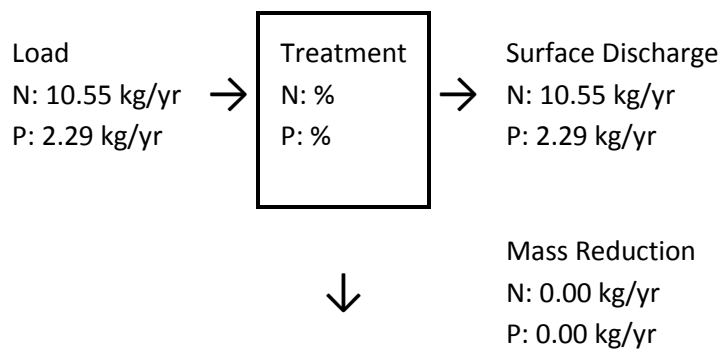
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

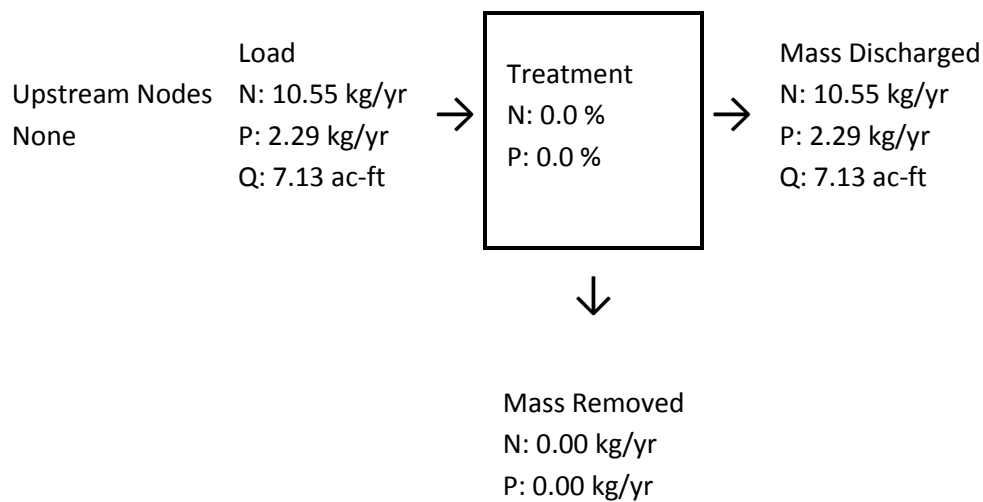
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Residential

Project: Basin 3

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 11.49

Contributing Area (acres) 11.490

Non-DCIA Curve Number 97.30

DCIA Percent 6.20

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

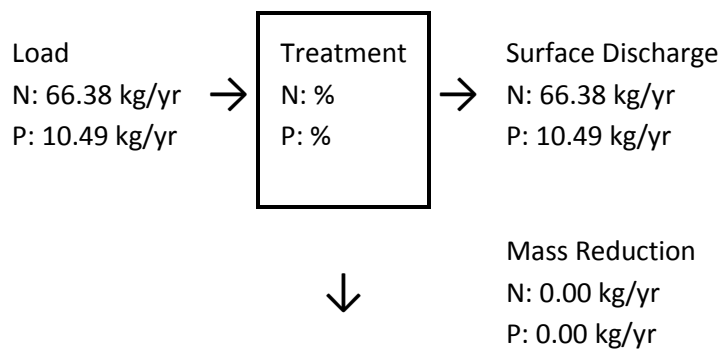
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

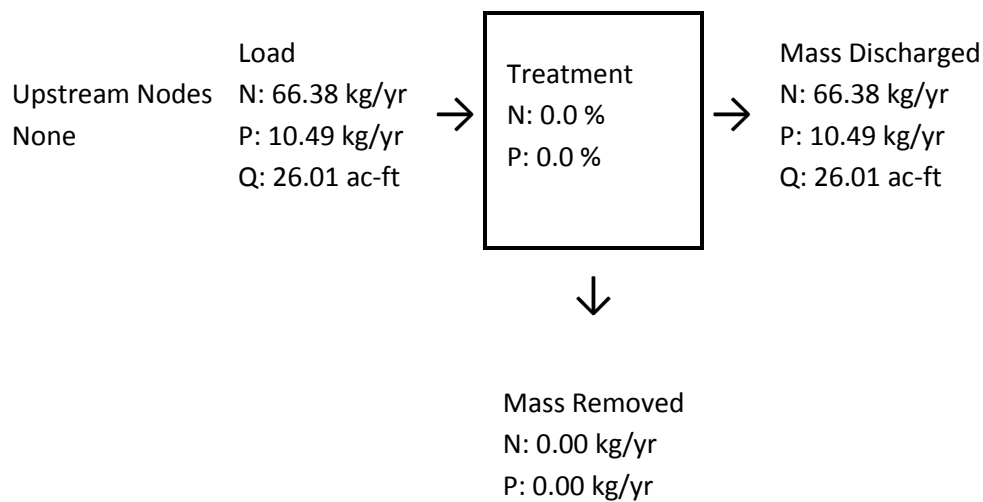
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: High Intensity Commercial

Project: Basin 3

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 0.18

Contributing Area (acres) 0.180

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

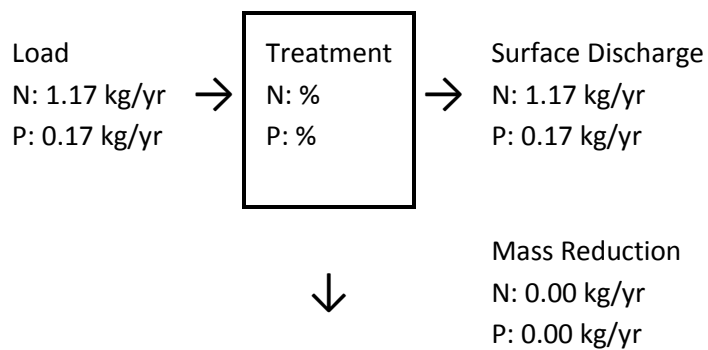
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

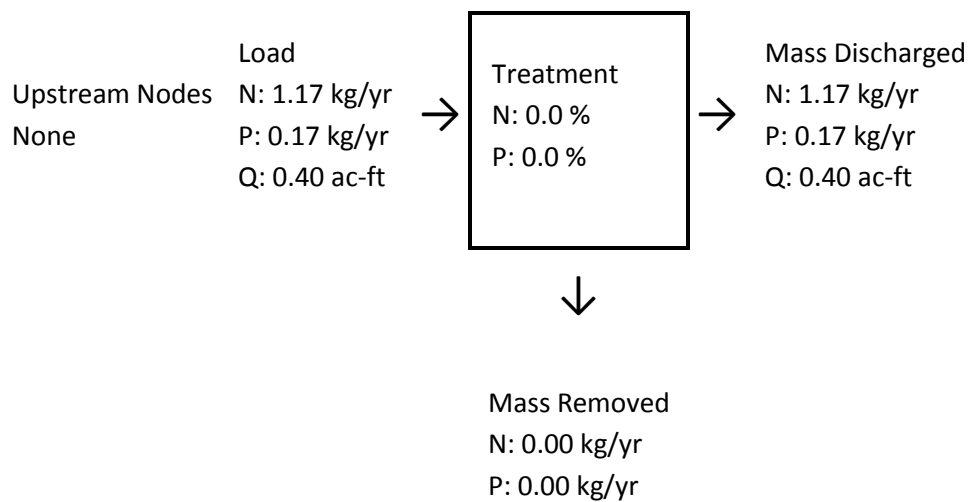
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Right-of-Way

Project: Basin 3

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 16.76

Contributing Area (acres) 16.760

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

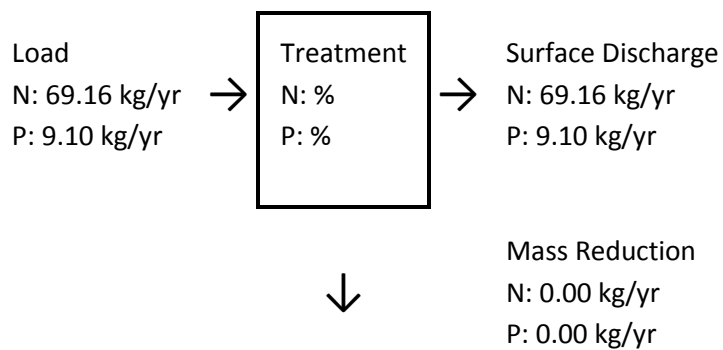
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

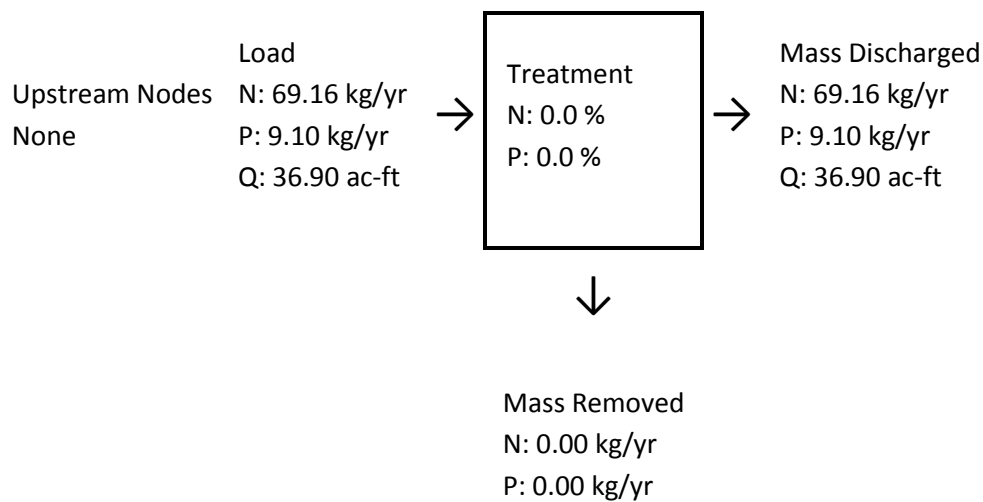
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Summary Treatment Report Version: 4.1.0

Project: Basin 3

Date:11/11/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Commercial) None
Catchment 2 - (Industrial) None
Catchment 3 - (Residential) None
Catchment 4 - (High Intensity Commercial) None
Catchment 5 - (Right-of-Way) None

Routing Summary

Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet
Catchment 3 Routed to Outlet
Catchment 4 Routed to Outlet
Catchment 5 Routed to Outlet

Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	178.03 kg/yr	
Total N post load	178.03 kg/yr	
Target N load reduction	%	
Target N discharge load	178.03 kg/yr	
Percent N load reduction	%	
Provided N discharge load	178.03 kg/yr	392.55 lb/yr
Provided N load removed	kg/yr	lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	27.159 kg/yr	
Total P post load	27.159 kg/yr	
Target P load reduction	%	
Target P discharge load	27.159 kg/yr	
Percent P load reduction	%	
Provided P discharge load	27.159 kg/yr	59.88 lb/yr
Provided P load removed	kg/yr	lb/yr

From Pre-Condition Loads

Existing N Discharge	178.03 (kg/yr)
Existing P Discharge	27.159 (kg/yr)

Basin 4 – Pollutant Loading Calculations

Complete Report Ver 4.1.0

Project: Basin 4

Date: 11/11/2020 3:24:45 PM

Site and Catchment Information Analysis: Net Improvement

Catchment Name	Industrial	Right-of-Way
Rainfall Zone	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	48.00	48.00

Pre-Condition Landuse Information

Landuse	Light Industrial: TN=1.200 TP=0.260 Highway: TN=1.520 TP=0.200	
Area (acres)	2.63	1.05
Rational Coefficient (0-1)	0.75	0.55
Non DCIA Curve Number	97.30	97.30
DCIA Percent (0-100)	75.30	0.00
Nitrogen EMC (mg/l)	1.200	1.520
Phosphorus EMC (mg/l)	0.260	0.200
Runoff Volume (ac-ft/yr)	7.843	2.312
Nitrogen Loading (kg/yr)	11.605	4.333
Phosphorus Loading (kg/yr)	2.514	0.570

Post-Condition Landuse Information

Landuse	Light Industrial: TN=1.200 TP=0.260 Highway: TN=1.520 TP=0.200	
Area (acres)	2.63	1.05
Rational Coefficient (0-1)	0.75	0.55
Non DCIA Curve Number	97.30	97.30
DCIA Percent (0-100)	75.30	0.00

Wet Pond Area (ac)	0.00	0.00
Nitrogen EMC (mg/l)	1.200	1.520
Phosphorus EMC (mg/l)	0.260	0.200
Runoff Volume (ac-ft/yr)	7.843	2.312
Nitrogen Loading (kg/yr)	11.605	4.333
Phosphorus Loading (kg/yr)	2.514	0.570

Catchment Number: 1 Name: Industrial

Project: Basin 4

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 2.63

Contributing Area (acres) 2.630

Non-DCIA Curve Number 97.30

DCIA Percent 75.30

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

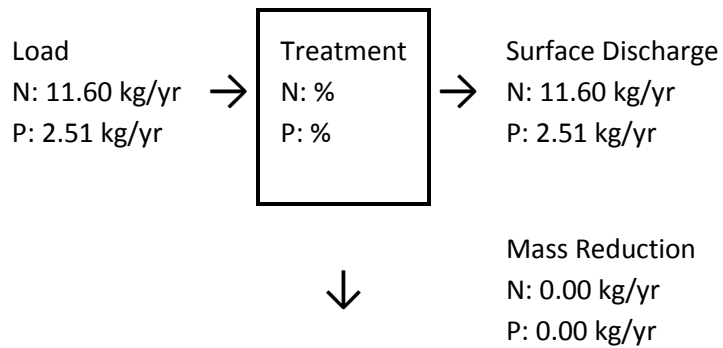
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

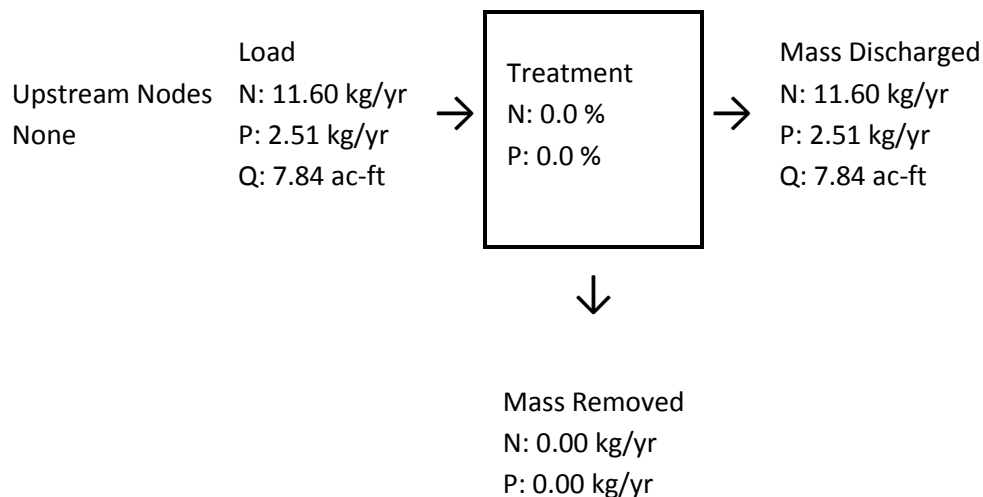
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Right-of-Way

Project: Basin 4

Date: 11/11/2020

None Design

Watershed Characteristics

Catchment Area (acres) 1.05

Contributing Area (acres) 1.050

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

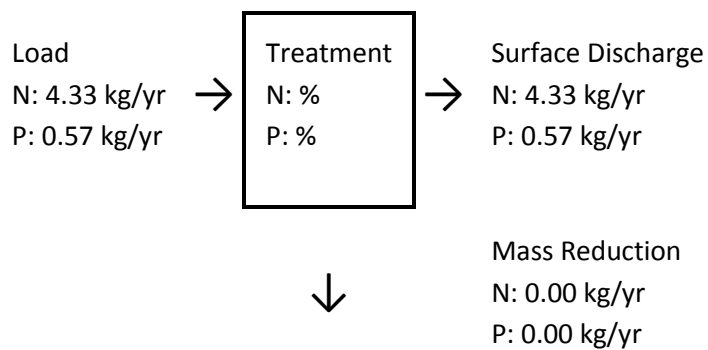
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

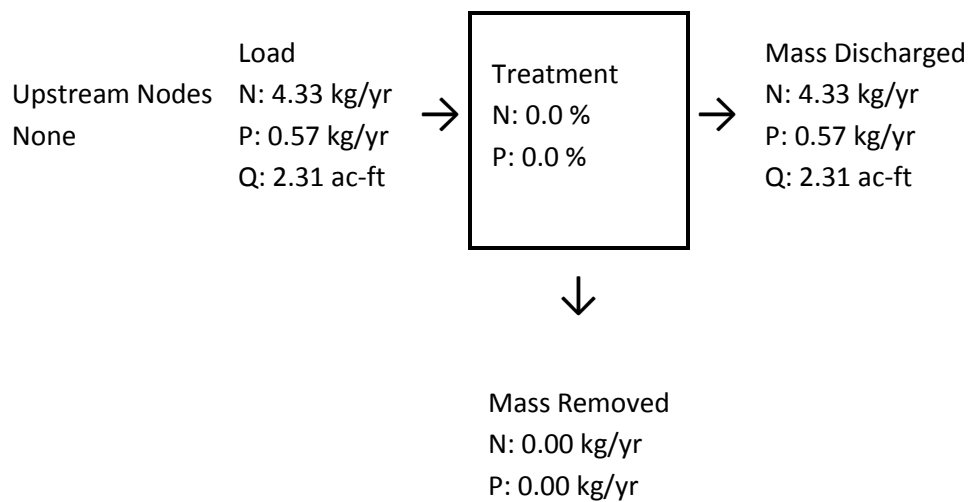
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Summary Treatment Report Version: 4.1.0

Project: Basin 4

Date:11/11/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Industrial) None

Catchment 2 - (Right-of-Way) None

Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Routing Summary

Catchment 1 Routed to Outlet

Catchment 2 Routed to Outlet

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	15.94 kg/yr	
Total N post load	15.94 kg/yr	
Target N load reduction	%	
Target N discharge load	15.94 kg/yr	
Percent N load reduction	%	
Provided N discharge load	15.94 kg/yr	35.14 lb/yr
Provided N load removed	kg/yr	lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	3.084 kg/yr	
Total P post load	3.084 kg/yr	
Target P load reduction	%	
Target P discharge load	3.084 kg/yr	
Percent P load reduction	%	
Provided P discharge load	3.084 kg/yr	6.8 lb/yr
Provided P load removed	kg/yr	lb/yr

From Pre-Condition Loads

Existing N Discharge	15.94 (kg/yr)
Existing P Discharge	3.084 (kg/yr)

Peak Discharge Calculations

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==== Basins =====

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Name: Basin 1	Node: Basin 1	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh484	Peaking Factor: 484.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 40.540	Time Shift(hrs): 0.00	
Curve Number: 97.30	Max Allowable Q(cfs): 999999.000	
DCIA(%): 17.49		

Name: Basin 2	Node: Basin 2	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh484	Peaking Factor: 484.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 19.830	Time Shift(hrs): 0.00	
Curve Number: 97.30	Max Allowable Q(cfs): 999999.000	
DCIA(%): 36.61		

Name: Basin 3	Node: Basin 3	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh484	Peaking Factor: 484.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 39.750	Time Shift(hrs): 0.00	
Curve Number: 97.30	Max Allowable Q(cfs): 999999.000	
DCIA(%): 12.25		

Name: Basin 4	Node: Basin 4	Status: Onsite
Group: BASE	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh484	Peaking Factor: 484.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 3.680	Time Shift(hrs): 0.00	
Curve Number: 97.30	Max Allowable Q(cfs): 999999.000	
DCIA(%): 53.80		

=====

==== Hydrology Simulations =====

=====

Name: 25-Year 24-Hour
Filename: J:\F6704\CIVIL\DOCUMENTS\PERMITS\SJRWMD\CONCEPTUAL PERMIT\ICPR\25-Year 24-Hour.R32
Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 8.50

Time(hrs)	Print Inc(min)
-----	-----
24.000	5.00

Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
25-Year 24-Hour	Basin 1	BASE	12.00	251.46	8.204	1207314
25-Year 24-Hour	Basin 2	BASE	12.00	123.09	8.247	593634
25-Year 24-Hour	Basin 3	BASE	12.00	246.51	8.192	1182094
25-Year 24-Hour	Basin 4	BASE	12.00	22.86	8.285	110679

Appendix C

Compliance Demonstration Examples

The following examples help clarify how the net improvement pollutant loading requirements apply in different situations involving new development in Downtown Fernandina Beach.

Example 1: Municipal Improvements Located in the Right-of-way to Serve the Respective Basin

C-1.1 Scope of Project

The City of Fernandina is proposing to construct a Stormwater pump station located at the downstream end of the existing Stormwater sewer system along Alachua Street to pump Stormwater under the railroad and into the Amelia River. The proposed project also consists of the expansion of the Alachua Street right-of-way from North Front Street to North 2nd Street. The existing system is located in Basin 3 of the Pre-Development Basin Map located in Appendix A.

C-1.2 Pre-Development Pollutant Loading

The existing and proposed pollutant loadings were evaluated using BMP Trains. There are no BMPs in the existing condition. See Table C-1.2 for pollutant loading in the Pre and Post conditions.

C-1.3 Post-Development Pollutant Loading

Three BMPs were selected for this site: permeable pavers, tree wells, and a Hydro International 2nd Generation Baffle Box. The site will ultimately receive all of the Stormwater in Basin 3 and discharge through one outlet point. The Stormwater from Basin 3 will sheet flow into an existing inlet and pipe system that gravity flows along Alachua Street toward Amelia River. In the section of the Alachua Street right-of-way between North Front Street and North 2nd Street, a storm vault and pump station is proposed to intercept the gravity flow and stage up in the storm vault until it is pumped under the CSX railroad tracks and into the Amelia River. The purpose is to counteract Stormwater flooding issues Basin 3 experiences during larger storm events. In order to treat the Stormwater runoff from this basin, the proposed Stormwater vault will house a Hydro International 2nd Generation Baffle Box. Per Hydro International, the Baffle Box provides treatment of 15.5% Total Phosphorus and 19% Total Nitrogen. The permeable pavers and tree wells are proposed within the Alachua Street expansion area. Table C-1.1 provides the BMP parameters used in BMP Trains for the proposed project.

Post-Development BMPTrains Inputs	
BMP	Parameters
Permeable Pavers	- Surface Area of Pavers = 0.16 Acres - <u>Layer Thickness</u> Permeable Paver = 6 in 57 Rock = 6 in #4 rock = 16 in
Tree Wells	- Vegetated Area (Tree Well) depth (ft) = 4 ft - Tree Well Storage (above media + canopy capture) = 2 ft - Vegetated Area (Tree Well) length = 5 ft - Vegetated Area (Tree Well) length = 5 ft - Sustainable water storage capacity of the soil (ft) = 0.25 - Number of Tree Wells in Watershed = 10 - Retention Depth for Provided Hydraulic Capture Efficiency

	(in) = 0.012 - Retention
2nd Generation Baffle Box	- User Defined BMP - Provided Nitrogen Treatment Efficiency (%) = 19% - Provided Phosphorus Treatment Efficiency (%) = 16%

Table C-1.1 – BMP Parameter inputs for BMPTrains, Post-Development Condition

C-1.4 Conclusions

As shown in Table C-1.2, there is a net improvement from pre to post-development; therefore, the requirements of this Conceptual Permit have been met.

Pollutant Loading Results from BMP Trains			
Pollutant	Basin 3 Pre-Development (Target Pollutant Loadings)	Basin 3 Post-Development	Net Improvement
Nitrogen	177.4 (kg/yr)	143.7 (kg/yr)	33.7 (kg/yr)
Phosphorus	27.081 (kg/yr)	22.884 (kg/yr)	4.197 (kg/yr)

Table C-1.2 – Pre and Post-Development Pollutant Loading Results from BMP Trains

The net improvement in pollutant loading provided by the proposed BMPs would allow for future development in Basin 3 to be covered under the net improvement requirement of this Conceptual Permit. New or redevelopment projects would not be required to provide BMPs for treatment purposes so long as the sum of the post-development loads of the respective project and the post-development loads of this municipal project do not exceed the pre-development loads of Basin 3, Target Pollutant Loadings. This is because the municipal project is already providing pollutant treatment for the entire Basin it serves, therefore individual lot redevelopment could be exempt from providing their own BMPs if its post-development pollutant loading does not exceed the Net Improvement values provided in Table C-1.2.

The net improvement pollutant loading values can be viewed as the allowable pollutant loading for Basin 3 without having to implement new BMPs. Any new development or redevelopment projects in the basin must prove they do not exceed the allowable pollutant loading. To prove compliance with this Conceptual Permit, any project occurring in the Basin after the Municipal Project will sum pollutant loading increases from the post-development condition with the post-development condition of the Municipal Project. If the sum of the new project pollutant loadings with any predecessor project pollutant loadings remains under the approved pre-development Basin pollutant loadings, Target Pollutant Loadings of this Conceptual Permit, the new project is exempt from providing additional BMPs. If the sum of the new project pollutant loadings with any predecessor project pollutant loadings exceeds the approved pre-development Basin pollutant loadings of this Conceptual Permit, the new project must provide BMPs for a net improvement in pollutant loading. An example scenario is provided below for clarification.

Per this Conceptual Permit, Pre and Post-Development discharge rates for this basin would also need to be evaluated to prove no increase in the post is made. Stormwater attenuation examples are not included as part of this Conceptual Permit.

Scenario 1 for Example 1

A commercial lot is slated for redevelopment in Basin 3. The land use will remain the same but there is an increase in impervious area. The Municipal Project from Example 1 has already been constructed and no other pollutant loading increases have occurred in Basin 3. The Scenario 1 project increases its Total Nitrogen by 1.45 (kg/yr) and Total Phosphorus by 0.42 (kg/yr), as determined by a BMP Trains analysis. The post-development pollutant loadings do not exceed the net improvement provided by the Municipal Project from Example 1, therefore no BMPs are required for the Scenario 1 project. See Table C-1.3 for a breakdown of the pollutant loading calculations. The new Basin 3 pollutant loadings, Sum of Post-Development Pollutant Loadings in Table C-3, account for Scenario 1 project and will now be updated for future projects to show compliance.

Pollutant Loading for Basin 3 – Scenario 1 Consideration				
Pollutant	Basin 3 Pre-Development (Target Pollutant Loading)	Basin 3 Post-Development (Municipal Project)	Scenario 1 Project	Sum of Post-Development Pollutant Loadings
Nitrogen	177.4 (kg/yr)	143.7 (kg/yr)	1.45 (kg/yr)	145.15 (kg/yr)
Phosphorus	27.081 (kg/yr)	22.884 (kg/yr)	0.42 (kg/yr)	22.46 (kg/yr)

Table C-1.3 –Scenario 1 Project Compliance Demonstration with the Conceptual Permit

Summary Treatment Report Version: 4.1.0

Project: Basin 3 – Example 1

Date: 11/10/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Commercial) None
Catchment 2 - (Industrial) None
Catchment 3 - (Right-of-Way) User Defined BMP
Catchment 4 - (Residential) None

Routing Summary

Catchment 1 Routed to Catchment 3
Catchment 2 Routed to Catchment 3
Catchment 3 Routed to Outlet
Catchment 4 Routed to Catchment 3

Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	177.4 kg/yr	
Total N post load	177.4 kg/yr	
Target N load reduction	%	
Target N discharge load	177.4 kg/yr	
Percent N load reduction	19 %	
Provided N discharge load	143.7 kg/yr	316.85 lb/yr
Provided N load removed	33.71 kg/yr	74.32 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	27.081 kg/yr	
Total P post load	27.081 kg/yr	
Target P load reduction	%	
Target P discharge load	27.081 kg/yr	
Percent P load reduction	16 %	
Provided P discharge load	22.884 kg/yr	50.46 lb/yr
Provided P load removed	4.198 kg/yr	9.256 lb/yr

From Pre-Condition Loads

Existing N Discharge	177.4 (kg/yr)
Existing P Discharge	27.081 (kg/yr)

Complete Report Ver 4.1.0

Project: Basin 3 – Example 1
Date: 11/10/2020 4:26:03 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Commercial	Industrial	Right-of-Way	Residential
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	48.00	48.00	48.00	48.00

Pre-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Highway: TN=1.520 TP=0.200	Single-Family: TN=2.070 TP=0.327
Area (acres)	8.29	3.21	16.76	11.49
Rational Coefficient (0-1)	0.68	0.56	0.55	0.57
Non DCIA Curve Number	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	49.30	1.90	0.00	6.20
Nitrogen EMC (mg/l)	1.130	1.200	1.520	2.070
Phosphorus EMC (mg/l)	0.188	0.260	0.200	0.327
Runoff Volume (ac-ft/yr)	22.475	7.128	36.901	26.009
Nitrogen Loading (kg/yr)	31.314	10.546	69.158	66.384
Phosphorus Loading (kg/yr)	5.210	2.285	9.100	10.487

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188	Light Industrial: TN=1.200 TP=0.260	Highway: TN=1.520 TP=0.200	Single-Family: TN=2.070 TP=0.327
Area (acres)	8.29	3.21	16.76	11.49
Rational Coefficient (0-1)	0.68	0.56	0.55	0.57
Non DCIA Curve Number	97.30	97.30	97.30	97.30
DCIA Percent (0-100)	49.30	1.90	0.00	6.20
Wet Pond Area (ac)	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.130	1.200	1.520	2.070
Phosphorus EMC (mg/l)	0.188	0.260	0.200	0.327
Runoff Volume (ac-ft/yr)	22.475	7.128	36.901	26.009
Nitrogen Loading (kg/yr)	31.314	10.546	69.158	66.384
Phosphorus Loading (kg/yr)	5.210	2.285	9.100	10.487

Catchment Number: 1 Name: Commercial

Project: Basin 3

Date: 11/10/2020

None Design

Watershed Characteristics

Catchment Area (acres) 8.29

Contributing Area (acres) 8.290

Non-DCIA Curve Number 97.30

DCIA Percent 49.30

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

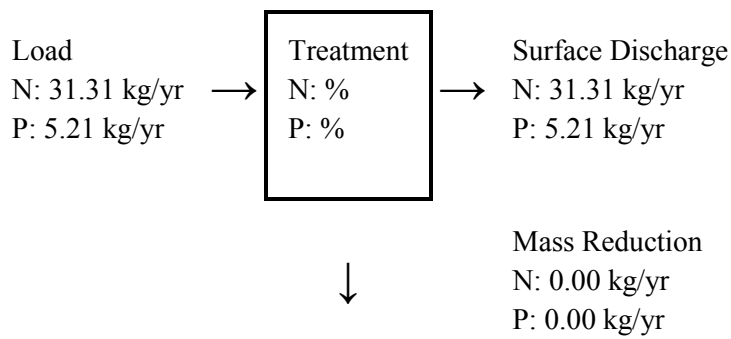
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

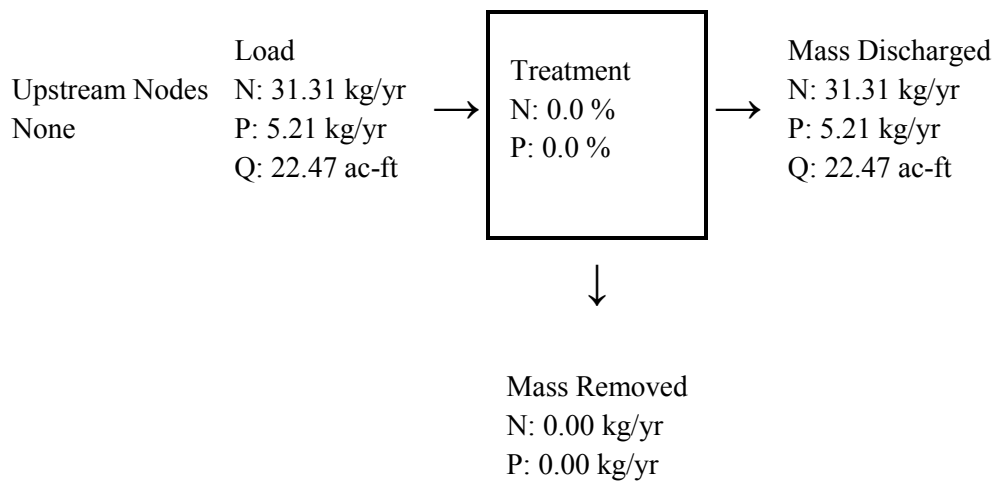
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Industrial

Project: Basin 3

Date: 11/10/2020

None Design

Watershed Characteristics

Catchment Area (acres) 3.21

Contributing Area (acres) 3.210

Non-DCIA Curve Number 97.30

DCIA Percent 1.90

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

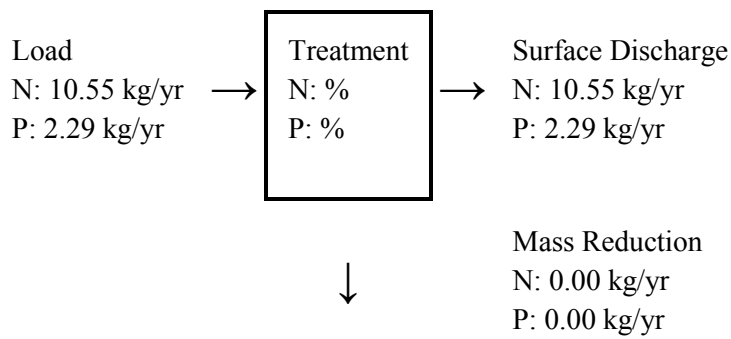
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

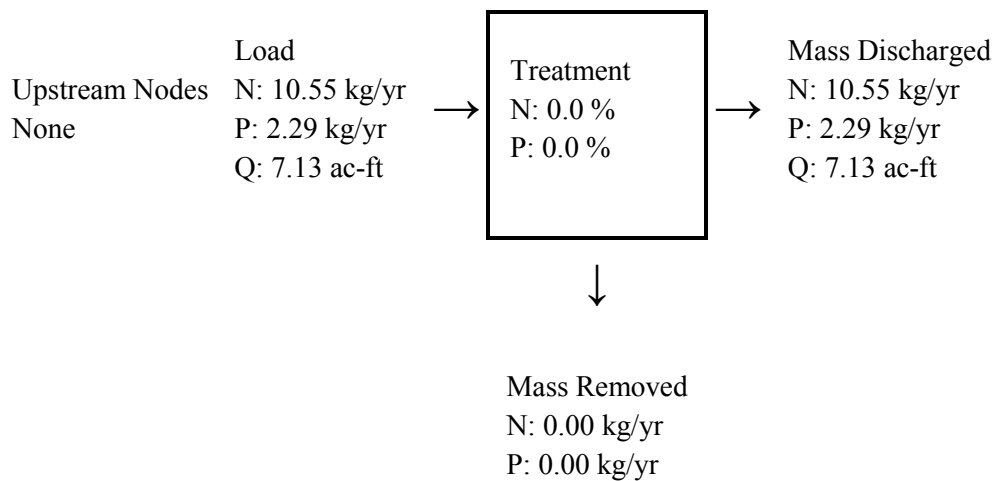
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Right-of-Way

Project: Basin 3

Date: 11/10/2020

User Defined BMP Design

Contributing Catchment Area (acres) 16.760

Provided Nitrogen Treatment Efficiency (%) 19

Provided Phosphorus Treatment Efficiency (%) 16

Watershed Characteristics

Catchment Area (acres) 16.76

Contributing Area (acres) 16.760

Non-DCIA Curve Number 97.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%) 19

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%) 16

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%)

Media P Reduction (%)

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

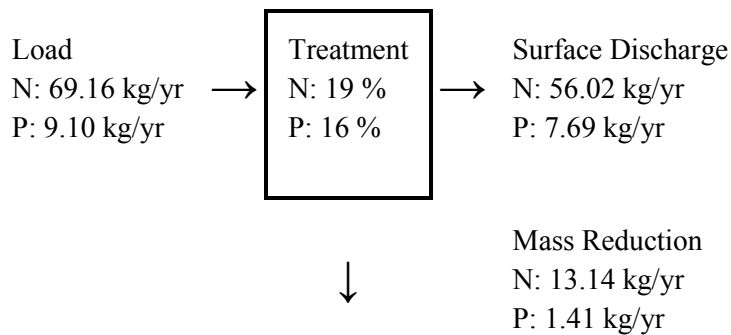
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

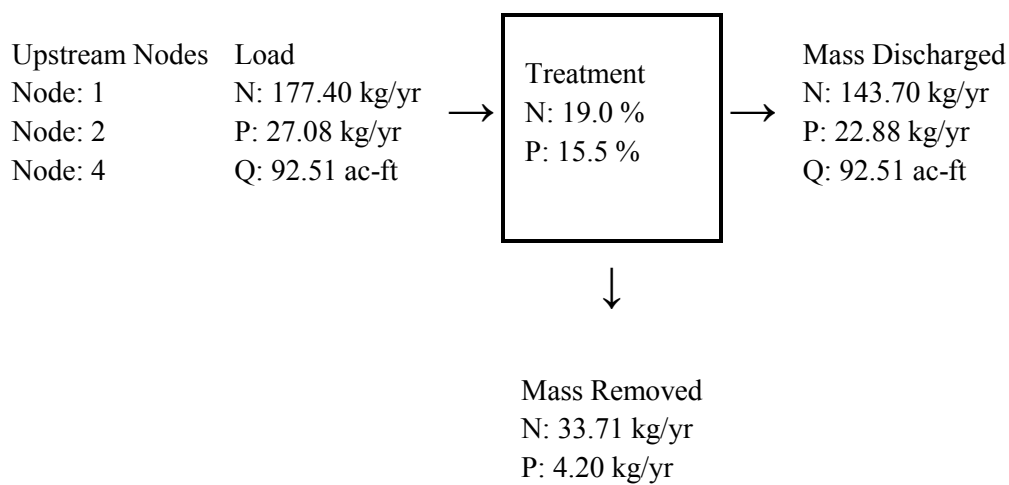
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for User Defined BMP (stand-alone)



Load Diagram for User Defined BMP (As Used In Routing)



Catchment Number: 4 Name: Residential

Project: Basin 3

Date: 11/10/2020

None Design

Watershed Characteristics

Catchment Area (acres) 11.49

Contributing Area (acres) 11.490

Non-DCIA Curve Number 97.30

DCIA Percent 6.20

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)

Provided TN Treatment Efficiency (%)

Required TP Treatment Efficiency (%)

Provided TP Treatment Efficiency (%)

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%) 0.000

Media P Reduction (%) 0.000

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

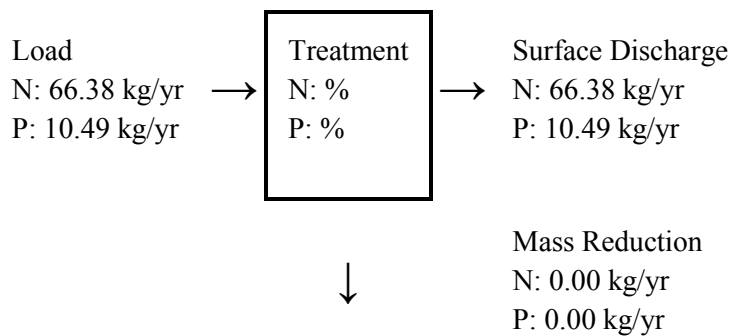
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

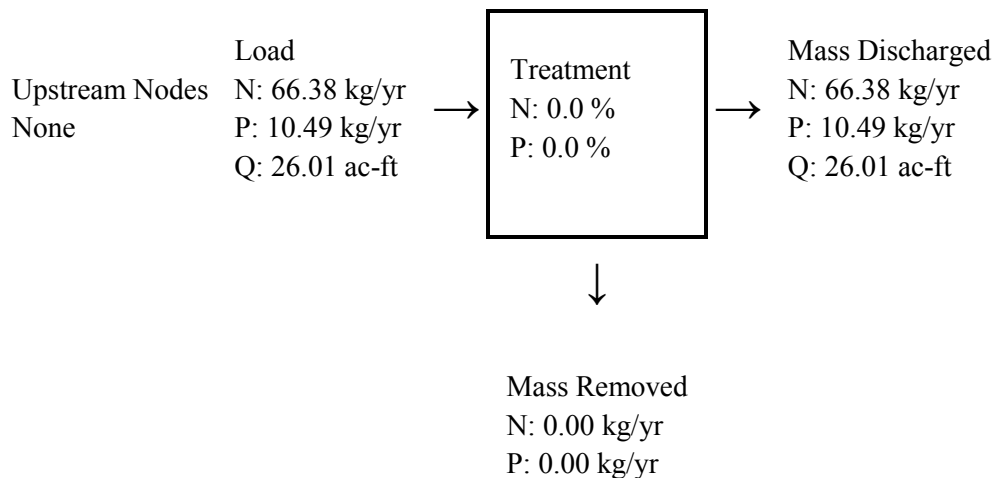
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Example 2: Individual Lot Redevelopment

In this example, an individual lot located in Basin 1 that proposes to undergo redevelopment must prove a net improvement in pollutant loading as described in this Conceptual Permit. To do so, the lot must consider the pre-development pollutant loading. There are no existing BMPs in the right-of-way of Basin 1 so pollutant loading would be considered only for the lot being redeveloped, rather than the entire Basin. If the individual lot shows a net improvement in pollutant loading then it has met the requirement of this Conceptual Permit.

C-2.1 Scope of Project

A 1-Acre commercial property located in Basin 1 is looking to demo and reconstruct its existing building and parking lot area. The existing building is 17,500 SF (0.40 Acres) and the existing parking lot is 21,780 SF (0.50 Acres). The site is proposing to increase the parking lot area by 2200 SF (0.05 Acres). Site design for pre and post-development are provided below in Table C-2.1. The curve number (CN) was calculated based on a CN value of 98 for impervious cover and 84 for pervious cover.

Design Criteria		
	Pre-Development	Post-Development
Impervious Cover (Acres)	0.90	0.95
Pervious Cover (Acres)	0.10	0.05
DCIA %	0	0
Curve Number	96.6	97.4

Table C-2.1 –Example 2 Design Criteria

C-2.2 Pre-Development Pollutant Loading

The existing and proposed pollutant loadings were evaluated using BMP Trains. There are no BMPs in the existing condition. See Table C-2.3 for pollutant loading in the Pre and Post conditions.

C-2.3 Post-Development Pollutant Loading

Due to the increase in impervious area, the pollutant loadings will also increase in the post-development condition. In order to meet the requirements of this Conceptual Permit, the individual site will need to provide pollutant treatment through the use of BMPs. For this example, pervious pavers have been selected as the site BMP. Pre and Post-Development conditions were analyzed in BMP Trains to show compliance with a net improvement in pollutant loading. See Table C-2.3 for results.

Post-Development BMP Trains Inputs	
BMP	Parameters
Permeable Pavers	- Surface Area of Pavers = 0.10 Acres - <u>Layer Thickness</u> Permeable Paver = 6 in 57 Rock = 6 in #4 rock = 16 in

Table C-2.2 – BMP Parameter inputs for BMP Trains, Post-Development Condition

C-2.4 Conclusions

As shown in Table C-2.3, there is a net improvement from pre to post-development; therefore, the requirements of this Conceptual Permit have been met.

Pollutant Loading Results from BMP Trains			
Pollutant	Pre-Development	Post-Development	Net Improvement
Nitrogen (kg/yr)	2.82	1.59	1.23
Phosphorus (kg/yr)	0.47	0.34	0.13

Table C-2.3 – Pollutant Loading Results for Example 2

Per this Conceptual Permit, Pre and Post-Development discharge rates for this basin would also need to be evaluated to prove no increase in the post is made. Stormwater attenuation examples are not included as part of this Conceptual Permit.

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Project: Example 2 - Individual Lot Redevelopment

Date: 11/12/2020 1:35:04 PM

Site and Catchment Information Analysis: Net Improvement

Catchment Name	Individual Lot
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	48.00

Pre-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188
Area (acres)	1.00
Rational Coefficient (0-1)	0.51
Non DCIA Curve Number	96.60
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.130
Phosphorus EMC (mg/l)	0.188
Runoff Volume (ac-ft/yr)	2.023
Nitrogen Loading (kg/yr)	2.819
Phosphorus Loading (kg/yr)	0.469

Post-Condition Landuse Information

Landuse	Light Industrial: TN=1.200 TP=0.260
Area (acres)	1.00
Rational Coefficient (0-1)	0.56
Non DCIA Curve Number	97.40
DCIA Percent (0-100)	0.00

Wet Pond Area (ac)	0.00
Nitrogen EMC (mg/l)	1.200
Phosphorus EMC (mg/l)	0.260
Runoff Volume (ac-ft/yr)	2.227
Nitrogen Loading (kg/yr)	3.295
Phosphorus Loading (kg/yr)	0.714

Catchment Number: 1 Name: Individual Lot

Project: Example 2 - Individual Lot Redevelopment

Date: 11/12/2020

Pervious Pavement Design

Surface Area of Pavement (acres) 0.100

Retention Volume (ac-ft) 0.043

Treatment Volume (in over watershed) 0.570

Pavement Type	Thickness (in)	Storage (in)	Storage (ac-ft)
Permeable Pavers	6.00	0.600	0.005
#57 rock(non-calcareous)	6.00	1.260	0.011
#4 rock	16.00	3.840	0.032
Total		5.700	0.048

Watershed Characteristics

Catchment Area (acres) 1.00

Contributing Area (acres) 0.900

Non-DCIA Curve Number 97.40

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 48.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 14

Provided TN Treatment Efficiency (%) 52

Required TP Treatment Efficiency (%) 34

Provided TP Treatment Efficiency (%) 52

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%)

Media P Reduction (%)

Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000

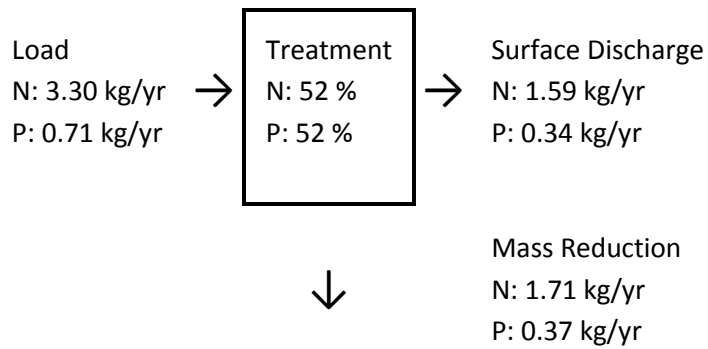
TN Mass Load (kg/yr) 1.710

TN Concentration (mg/L) 0.000

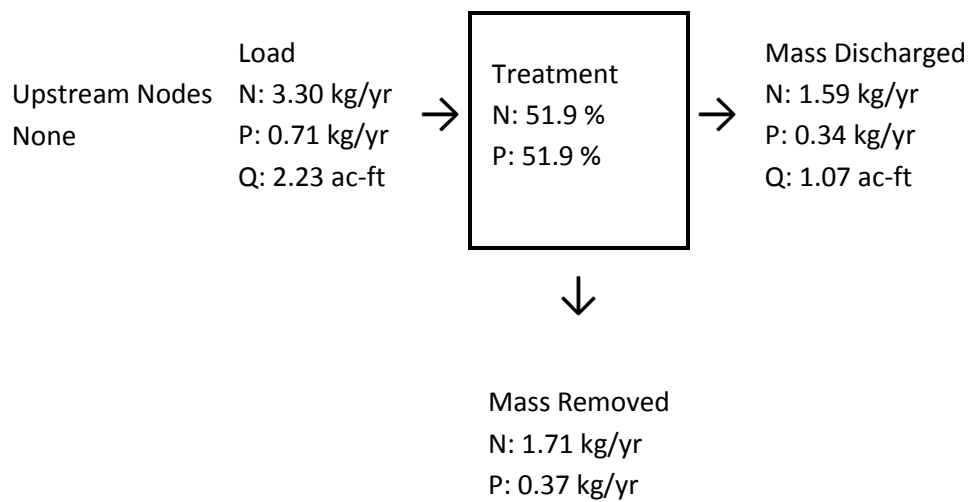
TP Mass Load (kg/yr) 0.370

TP Concentration (mg/L) 0.000

Load Diagram for Pervious Pavement (stand-alone)



Load Diagram for Pervious Pavement (As Used In Routing)



Summary Treatment Report Version: 4.1.0

Project: Example 2 - Individual Lot
Redevelopment

Date:11/12/2020

Analysis Type: Net Improvement

BMP Types:

Catchment 1 - (Individual Lot) Pervious Pavement
Based on % removal values to the nearest percent

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Routing Summary

Catchment 1 Routed to Outlet

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	2.82 kg/yr	
Total N post load	3.3 kg/yr	
Target N load reduction	14 %	
Target N discharge load	2.82 kg/yr	
Percent N load reduction	52 %	
Provided N discharge load	1.59 kg/yr	3.5 lb/yr
Provided N load removed	1.71 kg/yr	3.77 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	.469 kg/yr	
Total P post load	.714 kg/yr	
Target P load reduction	34 %	
Target P discharge load	.469 kg/yr	
Percent P load reduction	52 %	
Provided P discharge load	.344 kg/yr	.76 lb/yr
Provided P load removed	.37 kg/yr	.817 lb/yr

From Pre-Condition Loads

Existing N Discharge	2.82 (kg/yr)
Existing P Discharge	.469 (kg/yr)

JACKSON GEOTECHNICAL ENGINEERING, LLC

Consulting Geotechnical Engineers

**REPORT OF GEOTECHNICAL EXPLORATION
STANDARD MARINE
FERNANDINA BEACH, FLORIDA
JGE PROJECT NO. 22-336.1**

Prepared for:

Miranda Architects, LLC
301 ½ Center Street
Fernandina Beach, Florida 32034

Prepared by:

Jackson Geotechnical Engineering
164 Plaza Del Rio Drive
St. Augustine, Florida 32084
Phone: 904-252-2292

November 30, 2022

JACKSON GEOTECHNICAL ENGINEERING, LLC

Consulting Geotechnical Engineers

November 30, 2022

Mr. Jose Miranda
Miranda Architects, LLC
301 ½ Center Street
Fernandina Beach, Florida 32034

Report of Geotechnical Exploration and Engineering Services
Standard Marine
Fernandina Beach, Florida
JGE Project No. 22-336.1

Dear Mr. Miranda:

As requested, Jackson Geotechnical Engineering has completed a geotechnical exploration for the subject project. The exploration was performed to evaluate the general subsurface conditions within the area of the proposed construction, and to provide guidelines to facilitate foundation support, earthwork preparation, paving and drainage design.

We appreciate this opportunity to be of service as your geotechnical consultant on this phase of the project. Please contact us if you have any questions, or if we may be of any further service.

Sincerely:
Jackson Geotechnical Engineering, LLC.

Jeff S. Jackson, P.E.
Licensed, Florida 51979

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1.0 PROJECT INFORMATION

1.1 Site Location and Description

The site for the subject project is located within the northwest quadrant of the intersection of 2nd Street and Alachua Street in Fernandina Beach, Florida. The site is occupied with a two-story building with adjacent paving. The backyard area is cleared, with vegetation consisting of grass and a few scattered palm trees. The property adjacent to the north is occupied with a one-story building structure. This building structure appears to be connected to the building on the subject property. The property adjacent to the west is cleared. Based on visual observation, and provided topography, the ground surface slopes gently downward towards the west.

1.2 Project Description

Project information was provided to us during discussions with Mr. Ryan McDonald, E.I., of Gulfstream Design Group. We have been provided with a copy of the following drawings which were utilized in the preparation of this report.

- Aerial Map of the subject site prepared by Gulfstream Design Group, undated.
- Drawing A1.0, prepared by Miranda Architects, dated October 27, 2022.
- Topographic Survey of the site prepared CPH, dated March 4th, 2019.

The provided drawings show the layout of the proposed construction, layout of the existing construction, adjacent roadways, topographical elevations, and proposed boring locations.

Based on the information provided to us, we understand the proposed project will consist of modifying the existing building and adjacent areas to comprise a restaurant facility. We anticipate construction possibly including building additions, or small stand-alone, one-story structures. Structural modification to the interior of the building may also be performed. Pervious pavers as well as artificial turf may be utilized in parking areas.

Structural loading information was not provided; therefore, we have assumed maximum wall and column loads will not exceed 2.5 klf and 40 kips, respectively. We have assumed maximum fill heights will be one foot above existing grade or less.

2.0 FIELD EXPLORATION

In order to explore the subsurface conditions within the general area of proposed building construction, we located and performed 2 Standard Penetration Test (SPT) borings (B-1 and B-2) to a depth of 25 feet each below existing grade. In the area of the proposed artificial turf and/or paver areas, we performed 1 auger boring (A-1) to a depth of 6 feet below the ground surface. The borings were located by referencing existing site features, and utilizing GPS methods, and should be considered accurate to the degree implied by the methods utilized. The SPT and auger borings were conducted in accordance with ASTM D 1586 and ASTM D 1452, respectively. The locations of the borings, and the subsurface

conditions encountered at each boring location, are presented in Appendix A on the Boring Location Plan and Subsurface Profiles, respectively.

3.0 LABORATORY TESTING

Soil samples recovered during the field exploration were visually classified in accordance with ASTM D 2488. The results of the classification testing are presented on the Subsurface Profiles in Appendix A.

4.0 GENERAL SUBSURFACE CONDITIONS

4.1 General Soil Profile

The boring locations and general subsurface conditions that were encountered are presented on the Boring Location Plan and Subsurface Profiles. When reviewing these records, it should be understood the soil conditions may change significantly between the boring locations. The following discussion summarizes the soil conditions encountered.

In general, the SPT borings (B-1 and B-2) encountered loose fine sand (SP) within the upper approximate 4 feet underlain by very loose to medium dense fine sand with silt (SP-SM) extending to depths of approximately 8 to 10 feet. Below these strata, the borings encountered medium dense fine sand (SP) extending to a depth of approximately 13 feet, which in-turn was underlain by layers of soft silt (MH) and loose very silty fine sand (SM) extending to the boring termination depths of 25 feet. As an exception to the above, surficial very loose silty fine sand with pieces of glass and stones were encountered within the upper approximate 4 feet at the location of Boring B-2. Boring B-1 was performed through asphalt pavement consisting of 0.88 inches of asphalt and 5 inches of limerock base course.

Auger boring A-1 encountered surficial fine sand with charred wood and stones in the upper approximate 2.5 feet underlain by fine sand (SP) extending to a depth of approximately 5 feet. Silty fine sand with many organic materials (PT) was then encountered to the boring termination depth of 6 feet.

4.2 Groundwater Level

The groundwater level was measured at the boring locations, subsequent to boring completion, at depths varying between 2.8 and 3 feet below existing grade. The depth of the groundwater level encountered at each boring location is presented on the Subsurface Profiles.

The groundwater table will fluctuate depending on tidal influences, seasonal variations, adjacent construction, surface water runoff, etc. Our estimate of the normal seasonal high groundwater level at each boring location is presented on the Subsurface Profiles in Appendix A. Our estimates are based on the results of the soil borings, review of available published literature, and information provided for this study. Should rainfall intensity

exceed normal quantities, or should other variables that affect the seasonal high groundwater level be altered, the groundwater profile at the site could change significantly.

5.0 BUILDING AREA RECOMMENDATIONS

5.1 General

The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. If the structural loads, construction locations, or grading information change from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes.

Please report to us any conditions encountered during construction that were not observed during the performance of the borings. We will review, and provide additional evaluation as required.

The site exhibits soils with significant amounts of debris generally within the upper approximate 2.5 to 4 feet. These soil conditions are typically indicative of uncontrolled filling operations. As a result, undercutting of the poor soil conditions, where present, and replacement with suitable structural soils will be required. Poor surficial soil conditions were encountered at the location of Boring B-2 extending to 4 feet. It should be anticipated that poor soil conditions will be present at various locations throughout the site. The treatment of poor soil conditions is further discussed in Section 5.3.

Borings A-1, conducted within the proposed paver/turf area, also encountered similar poor soil conditions. Due to encountering poor surficial soil conditions at multiple locations, we suggest conducting additional auger borings, or backhoe-excavated test pits, to delineate the vertical and horizontal extent of the unsuitable soils. The results of the additional exploration will allow a better quantity estimate during the bid process for the over-excavation of unsuitable materials.

5.2 Building Foundations

Based on the results of the subsurface exploration, we consider the subsurface conditions at the site adaptable for support of proposed structures and additions when constructed on a properly designed shallow foundation system. Provided the soils are prepared in accordance with the Site Preparation Section of this report, the following parameters may be used for foundation design.

5.2.1 Bearing Pressure

The maximum allowable net soil bearing pressure for shallow foundations should not exceed 2,500 pounds per square foot (psf). Net bearing pressure is defined as the soil bearing pressure at the base of the foundation in excess of the natural overburden pressure. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

5.2.2 Foundation Size

The minimum widths recommended for any isolated column footing and continuous wall footings are 24 inches and 18 inches, respectively. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

5.2.3 Bearing Depth

The exterior foundations should bear at a depth of at least 12 inches below the exterior final grades and the interior footings should bear at a depth of at least 12 inches below the finish floor elevation to provide confinement to the bearing level soils. We recommend stormwater and surface water be diverted away from the building exterior, both during and after construction, to reduce the possibility of erosion adjacent to the exterior footings.

5.2.4 Bearing Material

The foundations may bear on either the compacted suitable in-place natural soils or compacted structural fill. The bearing level soils, after compaction, should exhibit densities of at least 95 percent of the maximum dry density as determined by ASTM D 1557 (Modified Proctor), to the depth described subsequently in the Site Preparation section of the report. In addition to compaction, the bearing soils must exhibit stability and be free of “pumping” conditions.

5.2.5 Settlement Estimates

Post-construction settlement of the building structures and/or additions will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundations; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from offsite sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structures/additions are based upon the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlement of the structures/additions.

Due to the sandy nature of the surficial soils, following the compaction operations, we expect a significant portion of settlement to be elastic in nature. This settlement is expected to occur relatively quickly, upon application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the maximum structural loads presented in this report, and the field and laboratory test data which we have correlated to the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the proposed structures and/or additions to be approximately one-half inch or less.

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. Based on the subsurface conditions as determined by the borings, and the recommended earthwork preparation, it is anticipated that differential settlements within the limits of the proposed structural construction will be approximately one-half the total settlement.

Please note that differential settlement between the existing structure and proposed additions will be equivalent to the total settlement of the addition. The structural engineer should take into account the differential settlement between exiting and proposed buildings to prevent settlement and subsequent cracking of the existing building.

5.3 Site Preparation for Shallow Foundations

We recommend the following site preparation guidelines for the building construction areas:

1. Prior to construction, the location of existing underground utility lines within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may subsequently lead to excessive settlement of the overlying structure.
2. Implement temporary groundwater control measures, as required. The groundwater should be maintained at least two feet below the depth of excavation required and two feet below compacted surfaces. Temporary groundwater control measures should be the responsibility of the contractor.
3. Strip the proposed construction limits of all grass, roots, building demolition debris, topsoil, and other potentially deleterious materials from within, and extending at least 5 feet beyond, the perimeter of the proposed building construction. Expect initial clearing and grubbing of vegetated areas to average depths of approximately 9 to 12 inches. During stripping operations, roots with a diameter greater than 0.5 inches, stumps, and roots in a concentrated state, should be completely removed.

Over-excavate soils containing significant amounts of debris, and excessively loose soils. These conditions were encountered at the location of Boring B-2. At this location, the upper 4 feet of soils were comprised of very loose silty fine sand with pieces of glass and stone. Also, similar soils unsuitable for support of proposed structures were encountered within the upper 2.5 feet at the location of Boring A-1. Unsuitable soils should be over-excavated from within, and extending a horizontal distance of at least 5 feet beyond, the proposed building construction limits. As mentioned above, we recommend conducting test pits or auger borings at the site to better observe the poor soil conditions, and provide refined recommendations regarding their over-excavation and replacement.

4. Subsequent to clearing, stripping, and over-excavation operations, compact the exposed surface using a drum roller (operated in static mode – vibration turned off) having a minimum static, at-drum weight of 5 tons and a drum diameter of at least 4 feet. It is recommended that repeated passes of the roller be made in one direction, followed by repeated passes of the roller in a direction perpendicular to the initial passes. The upper two feet of soils below the exposed surface (after stripping, grubbing, and over-excavation) within the building construction areas should be improved to achieve a minimum compaction requirement of 95% of the Modified Proctor Test (ASTM D 1557). We recommend the soils, at the time of compaction, exhibit moisture contents within 2 percent of the optimum moisture content as determined by the Modified Proctor Test (ASTM D 1557).

Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

5. Test the compacted surface for density at a minimum of one location per 5,000 square feet of proposed building area (minimum of three locations per area).
6. Place structural fill in loose lifts not exceeding a thickness of 12 inches and compact until finished subgrade is achieved. Structural fill and backfill is typically defined as non-plastic, inorganic, granular soil having less than 10 percent material passing the No. 200 mesh sieve and containing less than 4 percent organic material. Typically, the material should exhibit moisture contents within 2 percent of the Modified Proctor optimum moisture content (ASTM D 1557) during the compaction operations. Compaction should continue until densities of at least 95 percent of the Modified Proctor maximum dry density (ASTM D 1557) have been achieved within each foot of the compacted structural fill.
7. Perform density tests within each lift of fill at a minimum of one location per 5,000 square feet of proposed building area (minimum of three locations).

8. Excavate, compact and test footing excavations for density to a depth of one foot below bearing level. We recommend that you test one out of every four column footings and perform one test per every 100 linear feet of wall footing. Compaction operations in confined areas, such as footing excavations, can best be performed with a lightweight vibratory sled or other hand-held compaction equipment.

6.0 PERMEABLE PARKING AND DRIVE SURFACES

6.1 General

We understand the subject project will utilize permeable pavers and artificial turf. Typically, permeable surfaces for the subject application would consist of open-cell concrete pavers (such as Tremron Eco 4040) or interlocking pavers (such as Tremron Eco 3143). The permeable paver systems provide the strength at the surface for support of vehicles while at the same time allows water from rainfall to pass through and percolate into the ground. Relatively thick layers of stone can be utilized below the surface if additional water storage capacity is required.

As mentioned above, artificial turf may be utilized as well. The artificial turf, like the pavers, will be required to support minimal food truck traffic. There is no relatively rigid surficial components, such as pavers, to help support the load. As a result, the artificial turf section will rely solely on the subgrade soils to support vehicular loads.

In the following sections, we have presented our recommendations to guide site preparation in the paver and turf areas. Manufacturer's recommendations should be followed for the placement of the wearing surface materials.

6.2 Site Preparation for Paver and Turf Areas

We recommend the following site preparation guidelines for the paver and turf areas:

1. Over-excavate soils with significant amounts of debris, such as encountered at Boring A-1 location. Boring A-1 encountered unsuitable soils within the upper approximate 2.5 feet below the ground surface. The depth of unsuitable soils will vary at adjacent locations.

Install temporary groundwater control measures, as required. We recommend maintaining the groundwater level at a depth of at least two feet below the excavation depth, and two feet below compacted surfaces.

2. Subsequent to over-excavation operations, compact the exposed surface with tracked equipment until densities in the range of 95 to 97 percent of the modified Proctor maximum dry density (ASTM D 1557) are achieved within the upper one foot below the exposed surface. Compaction in excess of 97 percent is not recommended in order to preclude excessively-low permeability values.

Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

3. Test the compacted surface for density at a frequency of not less than 4 locations.
4. Place structural fill in loose lifts not exceeding 12 inches and compact until finished subgrade is achieved. Structural fill and backfill for this application are defined as non-plastic, inorganic, granular soil having less than 5 percent material passing the No. 200 mesh sieve and containing less than 0.5 percent organic material. The material should exhibit the specified permeability at the given compaction level.

It is recommended the contractor verify the permeability of backfill meets project specifications prior to purchase and import to the site. We recommend the permeability, as specified by the drainage engineer, be verified at a compaction rate of 97 percent.

5. Perform density tests within each lift of fill at a frequency of not less than 4 tests per lift.
6. Place aggregate/bedding soils, and overlying wearing surface (pavers and turf) in accordance with manufacturers recommendations.

6.3 Paver and Turf Support

Our recommendations for permeable paver and turf sections are presented below. Detailed traffic loading conditions were not available; therefore, we have provided sections which can accommodate loading conditions typical of the subject project.

6.3.1 Pervious Pavers

- 2 inches of No. 8 stone
- 4 inches of No. 57 Stone
- 6 inches of No. 2 Stone
- Compacted subgrade, in accordance with Section 6.2 above.

Note: Place woven geotextile, TC Mirafi Rs280i, between the 57 stone and No. 2 stone.

6.3.2 Artificial Turf

- 4 inches of No. 8 stone
- 4 inches of No. 57 Stone
- 6 inches of No. 2 Stone
- Compacted subgrade, in accordance with Section 6.2 above.

- Notes:
- (1) Place woven geotextile, TC Mirafi Rs280i, between the 57 stone and the No. 2 stone.
 - (2) Installation of the turf onto prepared subgrade should meet or exceed manufacturer's recommendations. Sand and fines should be prevented from migrating into the stone.

7.0 LIMITATIONS

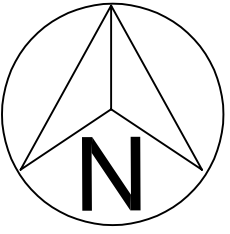
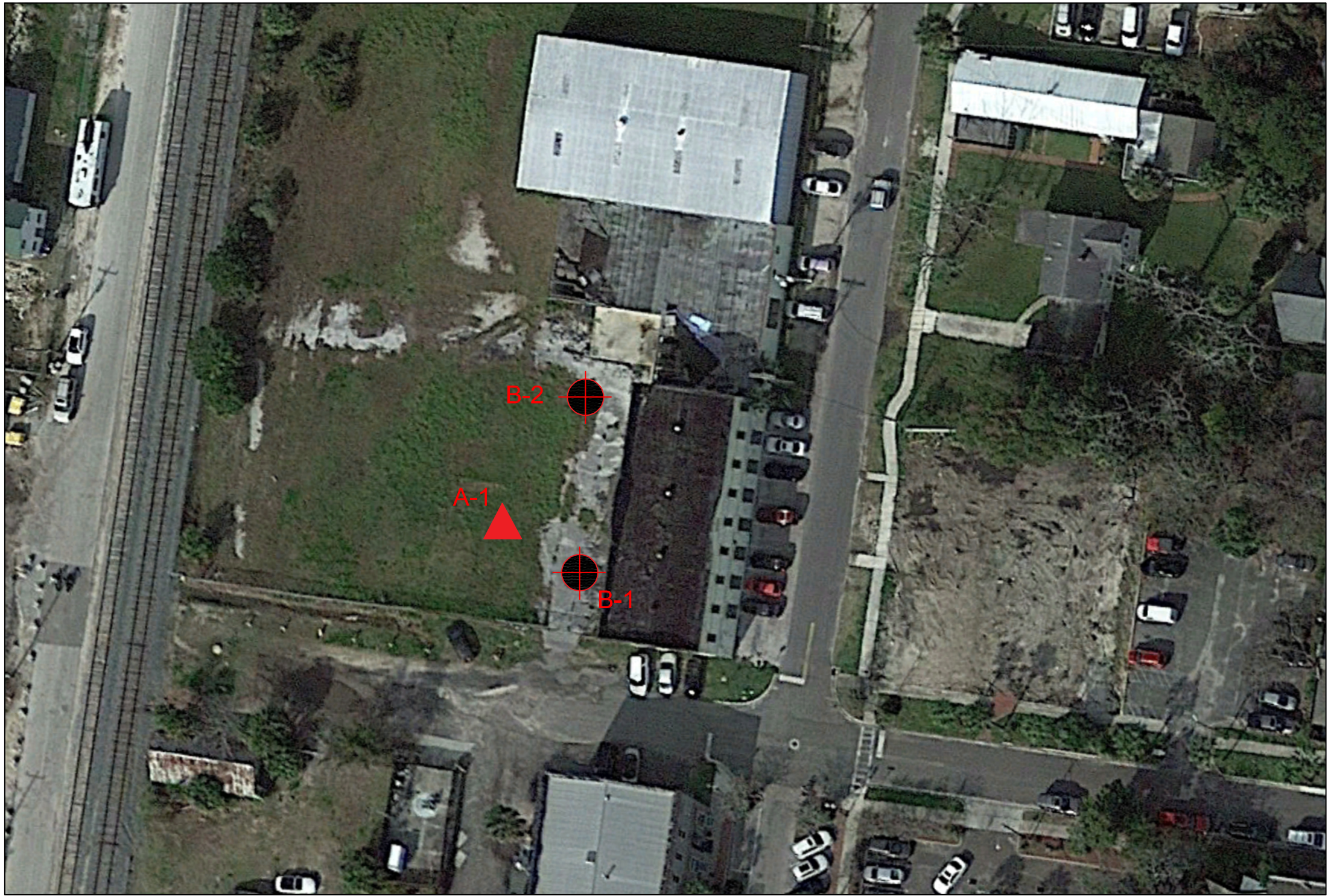
We have conducted the geotechnical engineering in accordance with principles and practices normally accepted in the geotechnical engineering profession. Our analysis and recommendations are dependent on the information provided to us. Jackson Geotechnical Engineering is not responsible for independent conclusions or interpretations based on the information presented in this report.

The recommendations provided in this report are specific to the proposed construction. Significant changes to the site design and construction, as described in this report, would nullify the provided recommendations.

APPENDIX A

BORING LOCATION PLAN

SUBSURFACE PROFILES



SPT Boring Location



Auger Boring Location

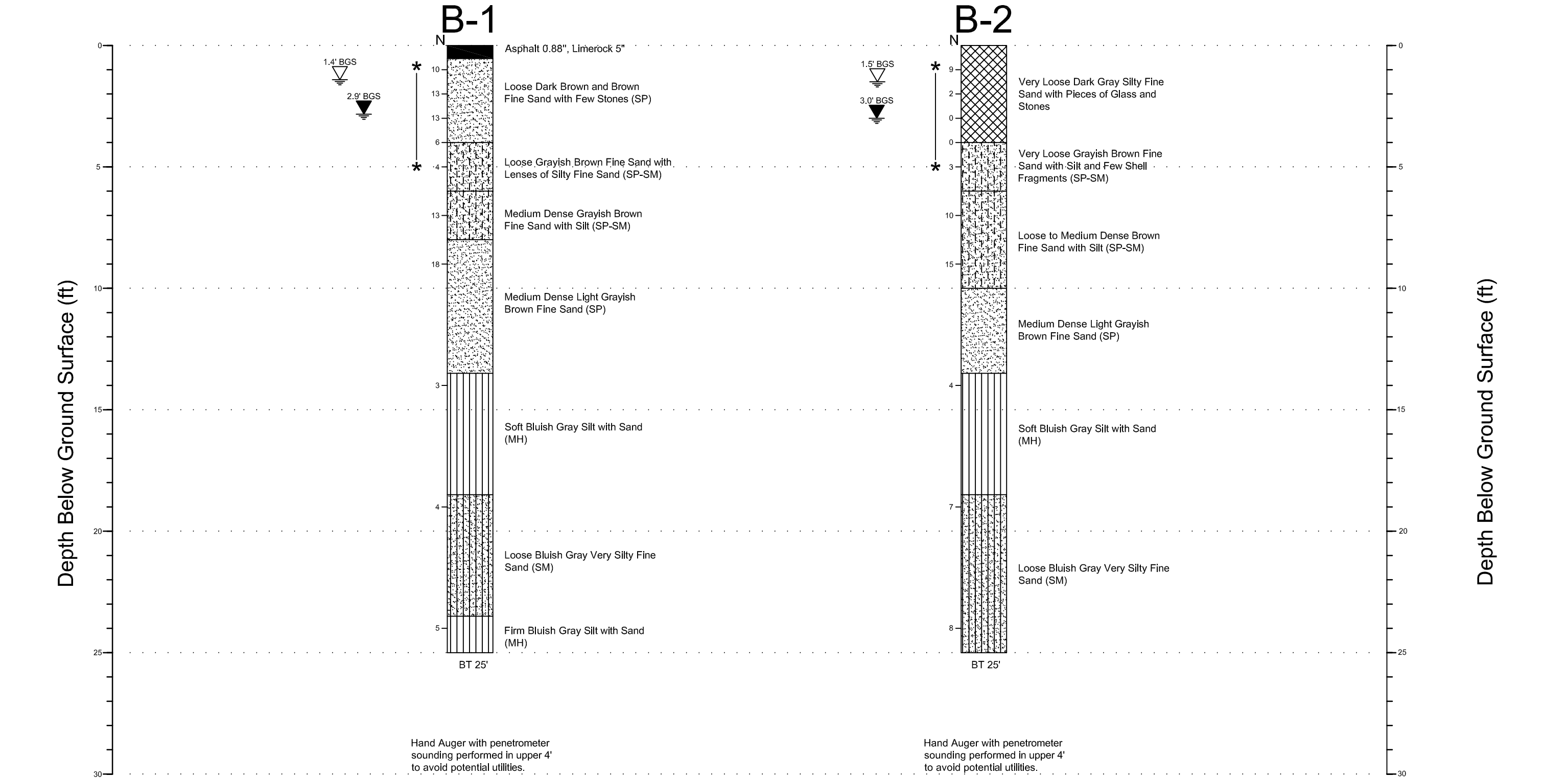
Jackson Geotechnical Engineering
Boring Location Plan
Standard Marine

November 28, 2022

Drawn by: MJ

Project No. 22-336

Figure 1



Jackson Geotechnical Engineering

Subsurface Profiles

Standard Marine

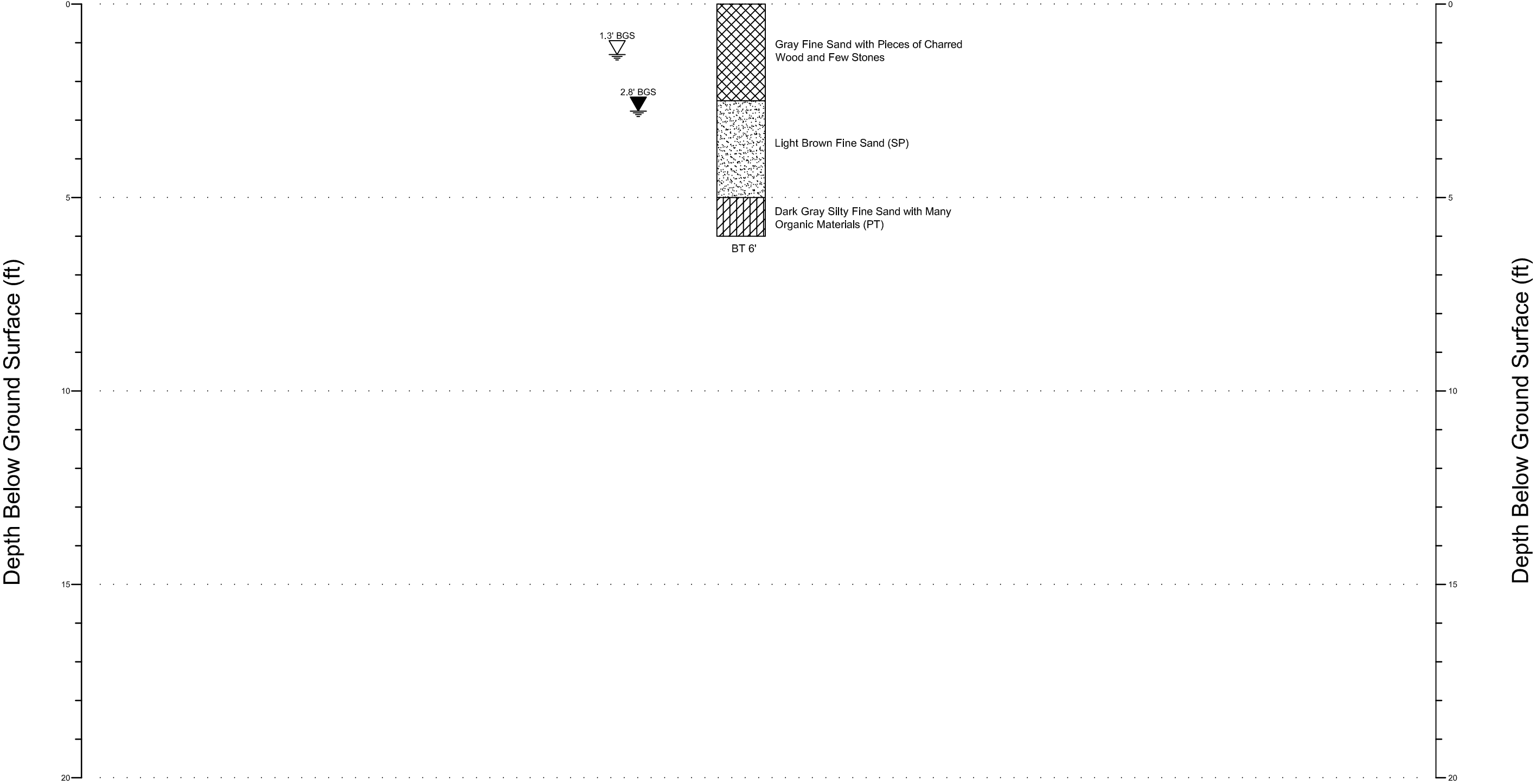
November 30, 2022

Drawn by: MJ

Project No. 22-336

Figure 2

A-1



Fine Sand (SP)

Silty Fine Sand with Many Organic Materials (PT)

Fine Sand with Charred Wood and Stones

Seasonal High Groundwater Table
Estimated Below Existing Ground Surface

Groundwater Table
Measured Below Ground Surface

BT

Boring Terminated

BGS

Below Ground Surface

Jackson Geotechnical Engineering	
Subsurface Profiles	
Standard Marine	
November 28, 2022	Drawn by: MJ
Project No. 22-336	Figure 3

APPENDIX B

KEY TO SOIL CLASSIFICATION

FIELD AND LABORATORY TEST PROCEDURES

JACKSON GEOTECHNICAL ENGINEERING

Consulting Geotechnical Engineers

KEY TO SOIL CLASSIFICATION

CORRELATION OF PENETRATION WITH RELATIVE DENSITY & CONSISTENCY

SANDS AND GRAVEL	
BLOW COUNT	RELATIVE DENSITY
0-3	VERY LOOSE
4-10	LOOSE
11-30	MEDIUM DENSE
31-50	DENSE
OVER 50	VERY DENSE

SILTS AND CLAYS	
BLOW COUNT	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	FIRM
16-30	VERY STIFF
31-50	HARD
OVER 50	VERY HARD

PARTICLE SIZE IDENTIFICATION (UNIFIED CLASSIFICATION SYSTEM)

CATEGORY	DIMENSIONS
Boulders	Diameter exceeds 12 inches
Cobbles	3 to 12 inches
Gravel	Coarse – 0.75 to 3 inches in diameter Fine – 4.76 mm to 0.75 inch diameter
Sand	Coarse – 2.0 mm to 4.76 mm diameter Medium – 0.42 mm to 2.0 mm diameter Fine – 0.074 mm to 0.42 mm diameter
Silt and Clay	Less than 0.074 mm (invisible to the naked eye)

MODIFIERS

These modifiers provide our estimate of the amount of minor constituent
(sand, silt, or clay size particles) in the soil sample

PERCENTAGE OF MINOR CONSTITUENT	MODIFIERS
0% to 5%	No Modifier
5 % to 12 %	With Silt, With Clay
12% to 30%	Silty, Clayey, Sandy
30% to 50%	Very Silty, Very Clayey, Very Sandy

APPROXIMATE CONTENT OF OTHER COMPONENTS (SHELL, GRAVEL, ETC.)	MODIFIERS	APPROXIMATE CONTENT OF ORGANIC COMPONENTS
0% to 5%	TRACE	1 to 2%
5% to 12%	FEW	2% to 4%
12% to 30%	SOME	4% to 8%
30% to 50%	MANY	>8%

FIELD AND LABORATORY TEST PROCEDURES

Penetration Borings

The penetration borings were made in general accordance with ASTM D 1586-67, "Penetration Test and Split-Barrel Sampling of Soils". Each boring was advanced to the water table by augering and, after encountering the groundwater table, further advanced with a rotary drilling technique that uses a circulating bentonite fluid for borehole flushing and stability. At two-foot intervals within the upper 10 feet and at five-foot intervals thereafter, the drilling tools were removed from the borehole and a split-barrel sampler inserted to the borehole bottom. The sampler was then driven 18 inches into the material using a 140-pound SPT hammer falling, on the average, 30 inches per hammer blow. The number of hammer blows for the final 12 inches of penetration is termed the "penetration resistance, blow count, or N-value". This value is an index to several in-place geotechnical properties of the material tested, such as relative density and Young's Modulus.

After driving the sampler 18 inches (or less, if in hard rock or rock-like material) at each test interval, the sampler was retrieved from the borehole and a representative sample of the material within the split-barrel was placed in a watertight container and sealed. After completing the drilling operations, the samples for each boring were transported to our laboratory where our Geotechnical Engineer examined them in order to verify the driller's field classifications. The samples will be kept in our laboratory for a period of two months after submittal of formal written report, unless otherwise directed by the Client.

Auger Borings

The auger borings were performed using a continuous flight auger attached to a rotary drill rig or manually using a post-hole auger; and thus in general accordance with ASTM D 1452-80, "Soil Investigation and Sampling by Auger Borings". Representative samples of the soils brought to the ground surface by the augering process were placed in watertight containers and sealed. After completing the drilling operations, the samples for each boring were transported to the laboratory where the Geotechnical Engineer examined them in order to verify the driller's field classifications. The samples will be kept in our laboratory for a period of two months after submittal of formal written report, unless otherwise directed by the Client.

Soil Classification

Soil samples obtained from the performance of the borings were transported to our laboratory for observation and review. An engineer, registered in the State of Florida and familiar with local geological conditions, conducted the review and classified the soils in accordance with ASTM 2488. The results of the soil classification are presented on the boring records.



Ms. Jenny Schaffer
316 Ash Street
Fernandina Beach, FL 32034

Sent Via Email to Project Team

Applicant Name: Jenny Schaffer
Project Description: Standard Marine
Location: 101 N. 2nd Street
TRC Case Number: TRC 2022-0027

Ms. Schaffer,

The City of Fernandina Beach received your request for a site plan review on October 13, 2022. All submitted documents provided were routed to the Technical Review Committee (TRC). The comments provided as part of this site plan review are valid for six months from the date of issuance.

Please resubmit response documents to address each comment in a narrative form and through an amended site plan. The next available TRC meeting is Thursday, December 22, 2022, at 10 am. This project is currently scheduled to appear on the agenda. All reviewers will be present to discuss any questions you have concerning the comments provided herein.

If you have any questions, please contact Sal Cumella at scumella@fbfl.org or 904-310-3480.

Sincerely,

Salvatore Cumella, Senior Planner



2ND ROUND REVIEW COMMENTS:

Planning:

- No comments

Code Enforcement:

- No Comments per MF

Building:

- No comments received as of 12/15/22

Fire Marshal:

- No comments per JH

Utilities, Stormwater, and Streets:

- No comments received as of 12/15/22



Via Electronic Submittal

December 1, 2022

City of Fernandina Beach
29 N 3rd Street
Fernandina Beach, FL, 32034

RE: **Fernandina Pavilion**
GDG: **22-122**

Dear Staff:

On behalf of my client, Poynter Family Holdings, LLLP, please find the following documents in support of the site plan review request for the Fernandina Pavilion project.

- One (1) Stormwater Narrative
- One (1) Set of Drainage Calculations
- One (1) Set of Sign and Sealed Civil Engineering Drawings provided by Gulfstream Design Group, LLC
- One (1) Set of Architectural and Landscape Drawings

Planning:

1. Rear garden area not consistent with HDC approval. Will need revision through HDC.

GDG: So noted. Please refer to Architectural Plans by Dynamic Multifamily which addresses the rear garden.

2. Wall sign exceeds allowable square footage: 8.01.03(A)(6)

GDG: Please refer to Architectural Plans by Dynamic Multifamily.

3. Exceeding maximum sign allowance 8.01.03(A)

GDG: Please refer to Architectural Plans by Dynamic Multifamily.

4. CRA Guidelines Section 5, Page 8: Impervious material required for driveway

GDG: So noted, driveway material has been changed to gravel. Please see sheet 6 of the Civil Engineering Plans provided by Gulfstream Design Group.

5. Pergola is not permissible within landscaping buffer: LDC 4.05.12(I).

GDG: Pergola has been removed from landscape buffer. Please see attached Architectural Plans by Dynamic Multifamily.



6. Type C Buffer: 4.05.12 (B). 2 shade trees, 4 understory trees, continuous unbroken hedge planted in a double staggered row to form a solid visual screen within one year of planting

GDG: Landscape has been updated per comment, please see attached Architectural plans by Dynamic Multifamily.

Fire Marshal:

1. Please provide the intended occupancy classification for this project and the maximum occupant load for the pavilion. Even though there are no walls to the pavilion, egress is being limited to two exits that are located next to each other on the N 2nd Street side.

GDG: Please refer to Architectural plans by Dynamic Multifamily.

2. Will there be enough exits provided for the anticipated occupant load?

GDG: Exits have been provided to meet anticipated occupant load. Please see updated Architectural Plans.

3. No other comments regarding fire department access or water supply. However, until I know the proposed occupancy classification, I cannot advise if other fire protection features will be required per the Florida Fire Prevention Code.

GDG: So noted, occupancy classification is called out in Architectural Plans.

Utilities, Stormwater, and Streets:

1. Add 3' flare to each side of driveway and note to saw cut existing asphalt at connection.

GDG: Please refer to the civil plan provided by Gulfstream Design Group on sheet 6 to see that a 3' flare has been added to each side of the driveway. Please see Sheet 5 where the saw cut note has been added.

2. Note that sidewalk within driveway shall be replaced at specified thickness and ADA required cross slope maintained.

GDG: Please see attached civil plans (sheet 5) where this note has been added.

3. Clarify if dumpster or roll off containers will be used for site. If dumpster is planned, identify path for garbage truck.

GDG: Dumpster area will use roll off containers, please see Sheet 6 of the civil plans.

4. Identify cross-hatching on east of site on page 7.

GDG: The cross-hatch has been added to the legend on Sheet 7 of the civil plans.



5. Topographic information indicates that the adjacent property to the east drains towards the subject parcel. Provide sufficient grading information to demonstrate that the offsite drainage is accommodated. Update drainage calculations as necessary to include offsite drainage area.

GDG: A bypass trench drain is proposed to connect to the proposed outfall piping.

6. Include Street scape improvements to match established downtown areas including parallel parking along property frontage. City will provide any required trees for street tree planting.

GDG: Please refer to sheet 5 of the civil plans where this note has been added.

7. Proposed drainage contemplates the utilization of capacity in municipal infrastructure. This will require permitting through the SJRWMD under the referenced conceptual permit as well as an agreement with the City.

GDG: This site now provides onsite stormwater treatment system therefore, will not require any treatment capacity within the municipal system.

8. Drainage plan calls out perforated ADS sock pipe, but no detail provided. A properly constructed french drain system can reduce the required offsite capacity needed for the project. Please include appropriate details and include in drainage modeling.

GDG: Details are provided in the Construction Plans and are consistent with the enclosed stormwater analysis.

9. Drainage calculations need to include pre vs post runoff calculations for the Mean annual and 10yr storm events as well as nutrient loading calculations as required in the conceptual permit.

GDG: Please see the enclosed Stormwater Analysis for the treatment and nutrient loading calculations.

Arborist:

1. Removing 25 trees: 150 per tree= \$3750 tree removal fee

GDG: So noted. The updated survey identifies 28 trees onsite, of which all will be removed during construction (sheet 5 of the civil plans).

2. Total inches removed: 266 - requires replanting of 133" or 53 trees (2.5" min requirement at time of planting).

GDG: So noted, please see updated Landscape plans within the Architectural set by Dynamic Multifamily. The plans indicate that some trees have been deemed unhealthy and should not count towards mitigation. Also the updated survey shows Camphor trees which will not count towards mitigation.



3. OR fee in lieu up to 66 1/2".

GDG: So noted.

If you have any questions or require additional information, please do not hesitate to email me at matt@gulfstreamdesign.com.

Sincerely,

A handwritten signature in blue ink that reads 'Matthew H. Lahti'.

Matthew H. Lahti, P.E.

President

Gulfstream Design Group, LLC

ENGINEERING PLANS FOR FERNANDINA PAVILION NASSAU COUNTY, FLORIDA

PROJECT TEAM

LAND OWNER
POYNTER FAMILY HOLDINGS, LLLP
3967 FIRST AVENUE
FERNANDINA BEACH, FL 32034
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CONTACT: TIMOTHY POYNTER

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CIVIL ENGINEER:
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PRIVATE UTILITY COMPANIES

ELECTRIC/NATURAL GAS/PROPANE
FLORIDA PUBLIC UTILITIES
780 AMELIA ISLAND PARKWAY
FERNANDINA BEACH, FLORIDA 32034
PHONE: 800-427-7712

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COMCAST
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JACKSONVILLE, FL 32216
PHONE: 904-380-6341
CONTACT: JAMES GRAHAM

TELEPHONE
AT&T
735 MILL CREEK ROAD
JACKSONVILLE, FL 32211
PHONE: 904-727-1572
CONTACT: SCOTT HIGGINS

PUBLIC UTILITY PROVIDERS

WATER AND SEWER
CITY OF FERNANDINA BEACH UTILITY
DEPARTMENT
1180 SOUTH 5TH ST
FERNANDINA BEACH, FL 32034
CONTACT: ANDRE DESILET
PHONE: 904-310-3431

REGULATORY AGENCY

FDEP - WATER & SEWER
8800 BAYMEADOWS WAY, SUITE 100
JACKSONVILLE, FL 32256
CONTACT: JENNIFER LYLES
PHONE: (904) 256-1700

**ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT**
7775 BAYMEADOWS WAY W #102
JACKSONVILLE, FL 32256
CONTACT: EVERETT FRYE, P.E.
PHONE: (904) 448-7913

**CITY OF FERNANDINA
BEACH**
204 ASH STREET
FERNANDINA BEACH, FL 32034
CONTACT: KELLEY GIBSON, AICP
PHONE: (904) 310-3481

**NASSAU COUNTY ENGINEERING
SERVICES DEPARTMENT**
96161 NASSAU PLACE
YULEE, FL 32097
PHONE: (904) 530-6225

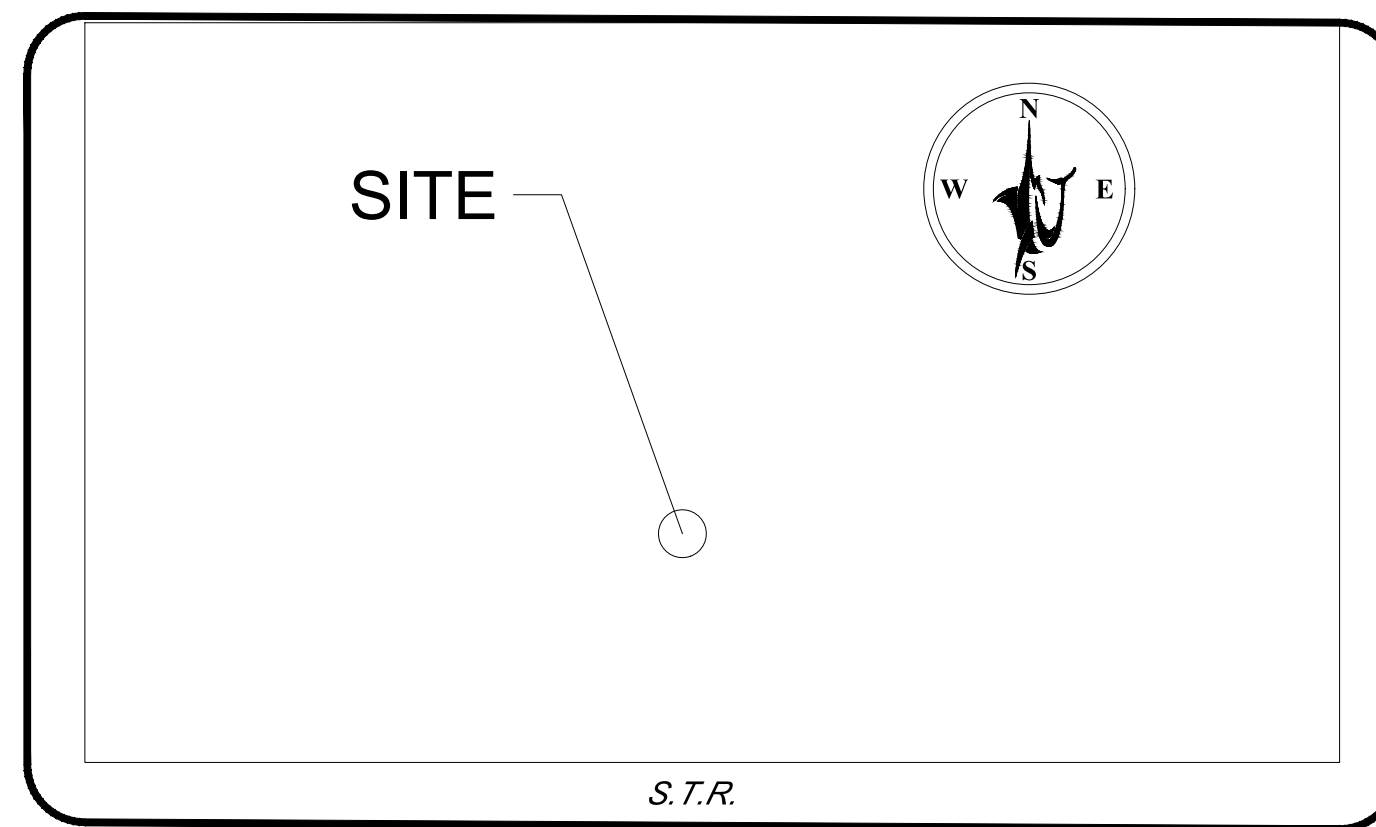
GENERAL NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.
- GULFSTREAM DESIGN GROUP AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR MISSIONS RESULTING FROM SURVEY INACCURACIES.
- ANY AND ALL WORK CONDUCTED WITHIN THE NASSAU COUNTY RIGHT-OF-WAYS MUST BE IN ACCORDANCE WITH THE APPLICABLE LAND DEVELOPMENT CODES.
- ALL ELEVATIONS SHOWN HEREIN ARE REFERENCED TO NORTH AMERICAN GEODETIC VERTICAL DATUM 1988 (NAVD 88).
- HORIZONTAL PROJECTION FOR THIS PLAN SET IS BASED ON NAD83 FLORIDA STATE PLANES, EAST ZONE, US FOOT.
- LEGAL DESCRIPTIONS - SEE SURVEY.

LOCATION OF SITE

NORTH 2ND STREET

PARCEL ID # 00-00-31-1800-0000-0040



LOCATION MAP

SCALE: N.T.S.

PREPARED FOR

POYNTER FAMILY HOLDINGS, LLLP
3967 FIRST AVENUE
FERNANDINA BEACH, FL 32034
PHONE: (904) 236-9757
CONTACT: CHAD GRIMM

PREPARED BY



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ST. AUGUSTINE, FLORIDA 32080
Phone: (904) 794-4231
www.gulfstreamdesign.com

60% PLANS

SHEET INDEX

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES
3	STORMWATER POLLUTION PREVENTION PLAN
4	SURVEY PDF
5	DEMOLITION PLAN
6	SITE PLAN
7	PAVING, GRADING & DRAINAGE PLAN
8	UTILITY PLAN
9	CONSTRUCTION DETAILS

ENGINEERING PLANS BASED ON

PLAN TYPE	COMPANY NAME	REVISION	REVISION DATE
SURVEYOR	MANZIE & DRAKE LAND SURVEYING		11/29/22
ARCHITECT	CHAD GRIMM STUDIOS		11/28/22
LANDSCAPE ARCHITECT			
ENVIRONMENTAL			
GEOTECHNICAL ENGINEER	LEGACY ENGINEERING, INC.		TBD

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED IN THE FLOOD ZONE "X" AND AE 9' PER FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12089C 0237G, DATED AUGUST 2,2017

This item has been digitally signed and sealed by Matthew H Lahti, PE# 71395 on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

NO.	DATE	BY	DESCRIPTION
1	11/20/22	JGD	PER CITY OF FERNANDINA BEACH COMMENTS
2			
3			
4			
5			
6			
7			
8			
9			

ENGINEERING PLANS
FOR
FERNANDINA PAVILION
COVER SHEET
NASSAU COUNTY, FLORIDA



60% PLANS



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO:	22-122
ISSUE DATE:	10-27-22
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

NOT VALID WITHOUT SEAL

Matthew Lahti,
P.E. FL# 71395
Digitally signed by Matthew
Lahti, P.E. FL# 71395
Date: 2022.10.27 17:04:53
-05'00'

GENERAL NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH EACH NOTE LISTED WITHIN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EACH SUBCONTRACTOR IS FAMILIAR AND PRESENTLY AWARE OF THESE NOTES AND CONDITIONS AS ESTABLISHED BY GULFSTREAM DESIGN GROUP, LLC THROUGHOUT THE ENTIRE PLAN SET AS LISTED ON THE COVER SHEET. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY REVIEW THIS PLAN PACKAGE TO BE FULLY PREPARED TO PROVIDE ACCURATE BID PRICES AND SERVICES.
- EXISTING SURVEY INFORMATION PROVIDED BY MANZE & DRAKE LAND SURVEYING PROFESSIONAL, SURVEYORS & MAPPERS DATED AUGUST 19, 2021, REVISED NOVEMBER 29, 2022. ALL INFORMATION WITHIN THIS PLAN SET HAS BEEN BASED OFF OF THE ABOVE REFERENCED SURVEY. THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY OR LACK THEREOF.
- ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAV8 88) AND SHOWN IN FEET. BENCHMARK #2 SET IN WOOD POWER POLE, ELEVATION BEING 8.67'.
- PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS TO VERIFY IN WRITING WITH THE ENGINEER OF RECORD THAT THE DOCUMENTS BEING UTILIZED IN THE FIELD ARE INDEED THE MOST CURRENT AND ACCURATE VERSIONS. ADDITIONALLY, THE GEOTECHNICAL REPORT CORRESPONDING TO THIS PLAN SET IS A REQUIRED CONSTRUCTION DOCUMENT, MEANING THE ENGINEERING DESIGN PLANS AND RECOMMENDATIONS AS DESIGNED IN THE REPORT SHALL TAKE PRECEDENCE UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL PROVIDE THE ENGINEER OF RECORD IN WRITING WITH A TENTATIVE SCHEDULE OF CONSTRUCTION ACTIVITIES.
- PRIOR TO THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL BECOME ACQUAINTED WITH THEMSELVES WITH ALL SITE CONDITIONS BOTH ABOVE AND BELOW GROUND. THE CONTRACTOR SHOULD ADDITIONALLY ENSURE THEY ARE PROPERLY FAMILIARIZED WITH ALL MATERIALS REFERENCED FOR USE WITHIN THIS PLAN AND IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND CODE SECTION(S) THAT APPLY TO THIS PROJECT.
- THE ENGINEER OF RECORD AND THE OWNER ASSUME NO RESPONSIBILITY IN THE SUPERVISION OR INSPECTION OF THE WORK INVOLVED IN THE EXECUTION OF THIS CONTRACT BEYOND OBSERVATION TO ENSURE, TO THE OWNER'S SATISFACTION, THAT THE DRAWINGS AND SPECIFICATIONS ARE BEING PROPERLY INTERPRETED. THIS OBSERVATION AND CHECKING WILL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY FOR THE PERFORMANCE OF HIS WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.
- THE CONTRACTOR SHALL EXERCISE CARE IN DIGGING AND OTHER WORK SO AS NOT TO DAMAGE EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO UNDERGROUND PIPES, UTILITIES, CONDUITS, SPRINKLERS, CONTROL CABLES AND HYDRANTS OF WATERING SYSTEMS, SURVEY BENCHMARKS/PROPERTY MONUMENTS, ETC. SHOULD ANY OVERHEAD OR UNDERGROUND OBSTRUCTION BE ENCOUNTERED WHILE CONSTRUCTING, THE ENGINEER OF RECORD OR THE ENGINEER OF RECORD SHALL BE CONSULTED AND WILL HAVE THE OPPORTUNITY TO ADJUST THE LOCATION OF CONFLICT ITEMS TO CLEAR SUCH OBSTRUCTIONS.
- THE CONTRACTOR SHALL CONTACT THE APPLICABLE FRANCHISE UTILITY COMPANY (IE: AT&T, TECO GAS, FPL&L, ETC. AS APPLICABLE) AND COORDINATE ANY CONSTRUCTION IN ADVANCE OF COMMENCING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OF ANY DAMAGE CAUSED BY HIS WORK AT NO COST TO THE OWNER. ADDITIONALLY, THE CONTRACTOR SHOULD ENSURE THAT EXISTING STRUCTURES TO REMAIN ARE RESTORED TO THEIR ORIGINAL CONDITION, INCLUDING: PAVEMENTS, CONCRETES, LANDSCAPING, DRAINAGE, AND UTILITIES. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS AND/OR VIDEO FOOTAGE OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ENSURE PROPER DOCUMENTATION OF PRECONSTRUCTION CONDITIONS OF THE SITE AND TO AID IN ANY POSSIBLE CONFLICTS DURING CONSTRUCTION. THIS INFORMATION SHOULD BE PROVIDED TO THE ENGINEER OF RECORD AND OWNER.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FERNANDINA BEACH LAND DEVELOPMENT CODE OR THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), WHICHEVER IS MORE RESTRICTIVE.
- ALL WORK WITHIN THE FERNANDINA BEACH RIGHT-OF-WAY MUST CONFORM TO MOST CURRENT LAND DEVELOPMENT CODE & STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES, SHOWN OR NOT SHOWN, ON THESE PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES TO REMAIN AND COORDINATING THE RELOCATION (IF REQUIRED) OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGES TO EXISTING UTILITIES. IF UTILITIES OR OTHER IMPROVEMENTS NOT SHOWN ON THE DRAWINGS ARE FOUND DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER OF RECORD IN WRITING AND THE OWNER'S REPRESENTATIVE FOR INSTRUCTIONS AS TO FURTHER ACTION. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR ANY AND ALL DAMAGE ARISING FROM HIS OPERATIONS SUBSEQUENT TO DISCOVERY OF SUCH UTILITIES NOT SHOWN ON DRAWINGS.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER OF RECORD, ANY EXTRA WORK REQUESTED BY ANY REGULATORY AGENCY THAT IS NOT SHOWN ON THE PLANS. THIS WORK MUST BE APPROVED BY THE ENGINEER OF RECORD IN WRITING AND BEFORE THE CONTRACTOR PROCEEDS WITH THE EXTRA WORK. ADDITIONALLY, THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, AND NOTIFY THE ENGINEER OF RECORD IN WRITING REGARDING ANY POTENTIAL CONFLICTS. THIS IS RECOMMENDED TO BE COMPLETED IN THE FORM OF FIELD STAKEOUT WHICH INCLUDES LOCATIONS OF BUILDINGS/PAVEMENT ELEMENTS TO BE VERIFIED THROUGH ENGINEER OF RECORD AND APPROVED ARCHITECTURAL PLANS), EDGES OF BUILDING, UTILITY STUB OUT LOCATIONS, ETC.
- PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL PERFORM SITE CLEAN-UP OPERATION FOR REMOVAL AND DISPOSAL OF ALL TRASH, DEBRIS, PIPE, EXCESS MATERIAL AND EQUIPMENT OFFSITE.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY, INCLUDING BENCHMARKS, TO OWNER AS REQUIRED BY THE FERNANDINA BEACH, ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SRJWMD), FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND ENGINEER OF RECORD. THE AS-BUILT SURVEY SHALL BE CERTIFIED BY A PROFESSIONAL LAND SURVEYOR. ENGINEER OF RECORD IS TO PROVIDE ENGINEER'S CERTIFICATION TO OWNER WITH AS-BUILT PLANS.
- IN THE EVENT THAT UNEXPECTED ARCHEOLOGICAL RESOURCES ARE ENCOUNTERED DURING GROUND DISTURBING ACTIVITIES, ALL WORK SHALL HALT AND THE ENGINEER OF RECORD'S OFFICE SHALL BE CONTACTED IMMEDIATELY IN WRITING.
- ALL MATERIALS AND LABOR ASSOCIATED ITEMS ARE TO BE WARRANTED BY THE CONTRACTOR FOR A TIME PERIOD OF ONE (1) CALENDAR YEAR UPON THE ACCEPTANCE OF THE PROJECT BY THE OWNER AND ALL APPLICABLE GOVERNMENT AGENCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSURANCES, AND LICENSES PERTAINING TO THE WORK ILLUSTRATED IN THIS PLAN SET.
- ANY POTENTIAL DISCREPANCIES WITHIN THIS PLAN SET THAT THE CONTRACTOR FINDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY IN WRITING.
- ALL DISTURBED AREAS WITHIN THE FERNANDINA BEACH RIGHT-OF-WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREAS DISTURBED (BERMUDA IN RURAL, CENTPEDE IN UTILITY STRIPS).
- THE ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY IN REGARDS TO CONSTRUCTION METHODS AND PROCEDURES EXERCISED BY THE CONTRACTOR. IT IS ASSUMED BY THE ENGINEER OF RECORD THAT THE CONTRACTOR SHALL OPERATE WITHIN THE BOUNDARIES OF ALL APPLICABLE SAFETY STANDARDS (REGARDING TRENCHING AND EXCAVATION OPERATIONS) WITH THE BEST INTEREST OF ALL EMPLOYEES TAKEN INTO CONSIDERATION. THE CONTRACTOR MUST CARRY THE REQUIRED STATUTORY LIABILITY AND WORKERS COMPENSATION INSURANCE. THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR UPHOLDING ANY OF THESE ITEMS. THE OWNER IS THE ONLY ENTITY WHICH MAY CHOOSE TO TAKE ACTION REGARDING THESE ITEMS. GULFSTREAM DESIGN GROUP DOES NOT HAVE THE AUTHORITY TO RELIEVE THE CONTRACTOR OF HIS DUTIES DUE TO VIOLATIONS OF THESE POLICIES.
- THE USE OF THE WORD "CERTIFY" WITHIN THIS ENGINEERING PLAN SET, IMPLIES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE SUBJECT TOPIC. THIS HOWEVER, DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY (EXPRESSED OR IMPLIED).
- BURNING OF ANY MATERIAL OR DEBRIS ONSITE IS PROHIBITED.
- ALL ADJACENT PROPERTY OWNERS AND BUSINESSES ARE TO BE PROVIDED ACCESS TO THEIR SITES AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTORS FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF THE CONTRACTOR AND/OR OWNER FAILS TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD HARMLESS FOR ALL INJURIES AND DAMAGES THAT THE ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

CLEARING/DEMO AND EROSION CONTROL NOTES:

- AREAS ADJACENT TO THE PROJECT AREA ARE TO BE PROTECTED AND LEFT UNDISTURBED UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DOCUMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES, EROSION CONTROL STRUCTURES, AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, FILTER FABRIC, SILT FENCES AND FLOATING TURBIDITY BARRIERS. FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
- PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED: (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES AND (5) AT ANY ADDITIONAL AREAS THAT FERNANDINA BEACH DEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, FERNANDINA BEACH, FDEP, AND SRJWMD RESERVE THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED THROUGHOUT PROJECT CONSTRUCTION.
- PRIOR TO, AND DURING, LAND CLEARING ACTIVITIES ALL PRESERVED TREES (AS PER THE FERNANDINA BEACH APPROVED PLANS) WILL BE CLEARLY MARKED. THIS INCLUDES "TREE PROTECTION BARRICADES" WHICH SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES. "TREE PROTECTION BARRICADES" SHALL BE INSTALLED AT THE DRIP LINE OF THE SUBJECT TREE. ANY PROPOSED ACTIVITIES WITHIN THIS DRIP LINE MUST BE APPROVED BY THE APPLICABLE GOVERNMENT AGENCY.
- ONLY SUPPORTIVE LANDSCAPING ELEMENTS MAY BE ATTACHED TO PRESERVED OR PLANTED TREES, NO SIGNAGE, PERMITS, AND/OR STAKES MAY BE ATTACHED TO A TREE ON THE SUBJECT PROPERTY.
- ANY TREE THAT IS DAMAGED DURING THE TIME OF CONSTRUCTION SHALL BE CONSIDERED "REMOVED" AND SHALL BE REPLACED BY THE CONTRACTOR WITH NO COST TO THE OWNER.

- THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THESE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.
- ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF NEW CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
- FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY UNDER SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER.
- IF ANY UNSUITABLE MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING ASHTO T-180 MODIFIED PROTECTOR METHOD AND AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER OF RECORD.
- ALL EXISTING CATCH BASINS ADJACENT TO THE SITE SHALL BE COVERED WITH FILTER FABRIC TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM. THE FILTER FABRIC SHALL BE INSPECTED AND MAINTAINED DAILY THROUGHOUT THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR IS REQUIRED TO USE THE RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER ON THE PROJECT FOR FINAL FILL COMPACTION AND DENSITY SPECIFICATIONS THROUGHOUT THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AN EROSION CONTROL AND DEWATERING PLAN 14 DAYS PRIOR TO THE PRECONSTRUCTION CONFERENCE. THE PROPOSED PLANS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CRITERIA SET FORTH IN THE FOOT STANDARD SPECIFICATIONS FOR ROADS, FDEP LAND DEVELOPMENT MANUAL, AND SJRWMD APPLICANTS HANDBOOK.
- EROSION CONTROL AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION. THEY SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION, AS STRUCTURES AND ELEMENTS ARE ADDED TO THE PROJECT SITE. STAKE OUT MUST BE PERFORMED UNDER SUPERVISION OF A LICENSED SURVEYOR IN THE STATE OF FLORIDA.
- SILT FENCE SHALL BE INSTALLED ALONG THE CLEARING LIMITS. GRAPHICAL REPRESENTATION OF CLEARING LIMITS AND SILT FENCE IS EXAGGERATED FOR PICTORIAL PURPOSES ONLY.
- SILT FENCE SHALL BE PLACED AROUND THE PERIMETER OF THE ENTIRE SITE TO BE CLEARED.
- WHERE MUCK OR OTHER ORGANIC MATERIAL IS REMOVED, IT SHALL BE REPLACED BY GOOD QUALITY NEW BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED IN WRITING BY THE ENGINEER OF RECORD AND THE GEOTECHNICAL ENGINEER OF RECORD. THE ORGANIC MATERIAL SHALL THEN BE USED AS TOP DRESSING WHEN MIXED WITH CLEAN BACKFILL SOIL AND APPROVED BY THE OWNER AND ENGINEER.
- CONTRACTOR SHALL SOD ALL DISTURBED AREAS UNLESS OTHERWISE NOTED.
- CONTRACTOR MUST REFER TO STORMWATER POLLUTION PREVENTION PLAN ON SHEET 3 SWPPP AND ABIDE BY ALL CONDITIONS.
- WITHIN 48 HOURS PRIOR TO CLEARING, THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE NPDES NOTICE OF COMMENCEMENT AND NOTICE OF TERMINATION APPLICATIONS TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR SHALL PROVIDE A COPY OF THESE DOCUMENTS TO THE OWNER AND THE ENGINEER OF RECORD AS WELL AS A COPY OF THE NOTICE LETTER PROVIDED BY THE FDEP. PLEASE CONTACT NPDES STORMWATER NOTICES CENTER, MS#2510, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2600 BLAIR STONE ROAD, TALLAHASSEE, FL 32399-2400 FOR FURTHER INFORMATION.
- ALL EXISTING CURB AND GUTTER AND SIDEWALK SHOWN TO BE REMOVED, WILL BE REMOVED AND REPLACED JOINT TO JOINT.
- ALL BROKEN/CRACKED DRIVEWAYS MUST BE FULLY REMOVED AND REPLACED.
- THE OVERALL PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED. THE CONTRACTORS BID SHOULD INCLUDE THE ANTICIPATED COST OF THIS ITEM.

SITE LAYOUT NOTES:

- ALL DIMENSIONS ARE TO THE EDGES OF PAVEMENT UNLESS OTHERWISE NOTED.
- SIDEWALKS ADJACENT TO PAVEMENT SURFACES ARE TO BE THICKENED EDGE SIDEWALKS.
- ALL TYPE "F" CURBING SHALL HAVE A THREE (3) FOOT TRANSITION AT ALL TERMINUS LOCATIONS WHEN TYING BACK TO GRADE.
- ALL TYPE "D" CURBING SHALL HAVE A ONE (1) FOOT TRANSITION AT ALL TERMINUS LOCATIONS WHEN TYING BACK TO GRADE.
- THE CONTRACTOR SHALL LAYOUT EACH AREA OF WORK TO CHECK DIMENSIONING PRIOR TO CONSTRUCTION AND COORDINATE WITH OTHER DISCIPLINES. SHOULD ANY DISCREPANCIES EXIST, THE CONTRACTOR IS TO NOTIFY, IN WRITING, THE OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD IMMEDIATELY.
- ALL AMERICANS WITH DISABILITIES ACT (ADA) RAMPS TO MEET CURRENT ADA CRITERIA AND INCLUDE A DETECTABLE WARNING. COLOR SELECTION FOR DETECTABLE WARNING TO BE COORDINATED WITH OWNER PRIOR TO ORDER AND PLACEMENT.
- THE CONTRACTOR SHALL COORDINATE ANY OFF-SITE IMPROVEMENTS WITH FERNANDINA BEACH 7 DAYS PRIOR TO CONSTRUCTION.
- WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EXISTING EASEMENTS BEFORE BEGINNING CONSTRUCTION.
- ADA RAMPS SHALL BE INSTALLED AT ALL SIDEWALK-CURB INTERSECTIONS. ALL ADA RAMPS SHALL CONFORM TO DETAILS, NOTES AND SPECIFICATIONS FROM THE FDOT DESIGN MANUAL, LATEST EDITION, INDEX NO. 304 SPECIES 1 THROUGH 8, AS APPLICABLE.

ADA GUIDANCE TO CONTRACTOR:

- CONTRACTORS MUST EXERCISE CARE AND PRECISION WHEN CONSTRUCTING ADA ACCESSIBLE COMPONENTS OF THE PRESCRIBED WORK AS PERTAINING TO THIS PLAN SET. THESE COMPONENTS MUST COMPLY WITH THE CURRENT ADA STANDARDS AT THE TIME OF PLAN APPROVAL. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO:
 - PARKING SPACES AND AISLES
 - 1.1.1. SLOPE SHALL NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - 1.2. CURB RAMPS -
 - 1.2.1. SLOPE SHALL NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET
 - 1.3. LANDINGS -
 - 1.3.1. MUST BE AT EACH END OF RAMPS, PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - 1.4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE -
 - 1.4.1. MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF A VEHICLE. THIS SLOPE MUST BE NO GREATER THAN 5% IN THE DIRECTION OF TRAVEL (LONGITUDINAL), AND MUST NOT EXCEED 2% IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 5%, ADA RAMP MUST ADHERE TO A MAXIMUM SLOPE OF 8.3% FOR A MAXIMUM RISE OF 2.5 FEET. MUST BE PROVIDED. THE RAMP MUST ALSO INCLUDE ADA HANDRAILS AND LEVEL LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 2% IN ANY DIRECTION
 - DOORWAYS
 - 1.5.1. MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 2% TO ENSURE POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN FIVE (5) FEET LONG, UNLESS OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING DESIGN
- WHEN THE PROPOSED CONSTRUCTION INVOLVES REMEDIATION OF CONSTRUCTION ACTIVITIES REGARDING ADA COMPONENTS FROM EXISTING DOORWAYS OR FACIACES, CONTRACTOR MUST VERIFY ELEVATIONS SHOWN ON PLAN REFER TO THE MOST RECENT VERSION OF THE ADA CODE TO CONFIRM DESIGN REQUIREMENTS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD OF ANY CONFLICTS AND/OR DISCREPANCIES IN THE FIELD THAT DIFFER FROM WHAT IS ILLUSTRATED ON THE PLAN SET, IN WRITING, BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. ALL CONSTRUCTION IMPROVEMENTS MUST MEET ALL REQUIREMENTS SET FORTH BY THE MOST RECENT VERSION OF ADA REQUIREMENTS.
- CONTRACTOR MUST VERIFY SLOPES PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES. IF THERE ARE ANY NON-COMFORMANCES THAT EXIST, THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD IN WRITING IMMEDIATELY.
- IT IS ENCOURAGED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODES AND FIELD INSPECTOR AFTER STAGING AND BEFORE COMMENCEMENT OF CONSTRUCTION.

PAVING, GRADING, AND DRAINAGE NOTES:

- PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN CENTERLINE OF DRAINAGE STRUCTURES AND TO END OF MITERED END SECTIONS.
- ALL HP, HDPE OR RCP PIPE JOINTS TO BE WRAPPED WITH 4" WIDE "TYPE R" STRIPS OR EQUAL. PIPE ABBREVIATIONS ARE DEFINED AS FOLLOWS:
 - PVC = POLYVINYL CHLORIDE PIPE
 - RCP = REINFORCED CONCRETE PIPE
 - HDPE = HIGH DENSITY POLYETHYLENE
 - HP = HIGH PERFORMANCE
- ALL PIPE SHALL MEET MINIMUM SLOPE REQUIREMENTS FOR THEIR SPECIFIC TYPE. AT A MINIMUM THE FOLLOWING SHOULD BE MET THROUGHOUT THE SITE.
 - RCP SHALL BE A MINIMUM OF 0.30%
 - PVC SHALL BE A MINIMUM OF 0.80%
 - HDPE SHALL BE A MINIMUM OF 0.80%

- DRAINAGE PIPE NOT LOCATED IN PAVED AREAS CAN BE PVC SDR-26 OR HDPE N-12 EQUIVALENT. STRUCTURES TO BE ADJUSTED ACCORDINGLY DEPENDING ON PIPE MATERIAL CHOSEN. THE CONTRACTOR MUST SUBMIT A REQUEST IN WRITING AND OBTAIN APPROVAL FROM THE OWNER AND THE ENGINEER OF RECORD BEFORE ANY SUBSTITUTIONS ARE ALLOWED.
- UNLESS OTHERWISE STATED, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO ASHTO M249 AND TYPE-S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT TIGHT JOINTS). PVC PIPE FOR ROOF DRAIN CONNECTIONS) MUST BE SDR 26 OR SCHEDULE 80 UNLESS INDICATED OTHERWISE. PVC PIPE AND FITTINGS MUST CONFORM TO ASTM D 3034, SDR 35, WITH PUSH ON OR RUBBER GASKETS. NO MATERIAL SUBSTITUTES WILL BE ALLOWED.
- INSTALLATION OF PIPE SHOULD OCCUR ON A MINIMUM OF 8" STABILIZED MATERIAL FREE OF JAGGED MATERIAL. BACKFILL MATERIAL SHALL BE WELL GRADED AND MEET COVER VALUES AS SHOWN ON THE APPLICABLE PLAN SHEETS. STORM SEWER PIPES SHALL BE PROTECTED BY A MINIMUM OF 18" OF FILL DURING CONSTRUCTION. DRAINAGE FROM OFF SITE ENTERING THE SITE VIA DITCH OR AN OPEN CUT PIPE MUST BE ACCOMMODATED FOR AND NOT HINDERED DURING CONSTRUCTION ACTIVITIES. CONTRACTOR TO UTILIZE ALL NECESSARY EQUIPMENT TO ENSURE POSITIVE DRAINAGE.
- ALL NON-PAVED DISTURBED AREAS TO BE SODDED AND STABILIZED WITHIN SEVEN (7) DAYS OF THE DISTURBANCE UNLESS OTHERWISE NOTED.
- ALL PAVEMENT RETURN RADII SHALL BE MEASURED TO THE EDGE OF PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
- DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SEATED PROPERLY.
- FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
- THE STORM DRAINAGE SYSTEM SHALL BE FREE OF DIRT, SAND AND DEBRIS PRIOR TO FINAL ACCEPTANCE.
- MITERED END SECTIONS SHALL CONFORM TO FDOT INDEX #430-022. MITERED END SECTIONS IN PONDS SHALL CONFORM TO FDOT INDEX #430-021. DITCH BOTTOM INLETS SHALL CONFORM TO FDOT INDEX #425-052. STORM MANHOLES SHALL CONFORM TO FDOT INDEX #425-001.
- THE CONTRACTOR IS TO COORDINATE THE CONFLICT POINTS AT UTILITY INTERFACES AROUND THE SITE. CLEARANCES SHOULD BE MET IN ACCORDANCE WITH FDEP RULES AND PER THE FERNANDINA BEACH STANDARDS NOTED IN THIS PLAN SET.
- STORM STRUCTURE PIPES THAT EXCEED THE SIZING FOR TYPE C INLETS ARE TO BE CONSTRUCTED WITH ALTERNATE BOTTOMS WITH MINIMUM DIAMETERS TO ACCOMMODATE PIPE SIZES AND/OR PIPE ANGLES PER FOOT INNO. 425-010 AND 425-001 - TYPE I BOTTOM.
- NYLOPLAST OR EQUAL SHALL BE USED WHERE NOTED AND SHALL ACCOMMODATE THE PIPE SIZING AND ANGLES NOTED. SHOULD THE PIPES NOT BE ABLE TO BE ACCOMMODATED, THEN A TYPE "C" INLET SHALL BE SUBSTITUTED AT NO ADDITIONAL CHARGE TO THE OWNER.
- PAVEMENT SHALL BE PLACED IN TWO EQUAL LIFTS. THE SECOND LIFT SHOULD BE PLACED AFTER THE FINAL CERTIFICATE OF OCCUPANCY UNLESS THE OWNER AND THE ENGINEER OF RECORD REQUESTS OTHERWISE IN WRITING.
- ALL DISTURBED AREA THAT WILL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS REQUIRE EROSION CONTROL, TO ADDRESS RAIN DRIVEN AND WIND BLOWN SEDIMENT.
- GULFSTREAM DESIGN GROUP, LLC. WILL REVIEW OR TAKE APPROPRIATE ACTION AS PERTAINING TO THE CONTRACTORS SUBMITTALS INCLUDING BUT NOT LIMITED TO: SHOP DRAWINGS, RCP, PRODUCT SAMPLES, FIELD DATA, ETC. GULFSTREAM DESIGN GROUP, LLC. WILL NOT BE REQUIRED TO PERFORM A COMPLETE REVIEW ON A SUBMITTAL WHICH IS CONSIDERED TO BE "INCOMPLETE" BY THE ENGINEER OF RECORD. SUCH SUBMITTAL WILL BE REJECTED IN WRITING AND RETURNED TO THE CONTRACTOR.
- THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER AND GEOTECHNICAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO PLACEMENT OF ANY CONCRETE PAVEMENT.
- THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT ABUTMENTS OF CONCRETE AND ANY STRUCTURE.
- THE CONTRACTOR IS THE RESPONSIBLE PARTY FOR MAINTAINING THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REQUIRED TESTING WITH THE GEOTECHNICAL ENGINEER. TESTING IS REQUIRED IN ACCORDANCE WITH THE TESTING SCHEDULE FOUND ON THIS SHEET UPON COMPLETION OF THE WORK. THE GEOTECHNICAL ENGINEER OF RECORD SHALL SUBMIT CERTIFICATES TO THE CIVIL ENGINEER OF RECORD AND THE OWNER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

SIGNAGE AND PAVEMENT MARKINGS NOTES:

- ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH FOOT ROADWAY AND TRAFFIC DESIGN STANDARD, LATEST EDITION.
- ALL GROUND MOUNTED STOP, YIELD, WRONG WAY, DO NOT ENTER SIGN FACINGS SHALL BE FABRICATED ENTIRELY WITH TYPE "B" REFLECTIVE SHEETING.
- ALL PAVEMENT MARKINGS ARE TO BE PAINTED WITH THERMOPLASTIC PAINT IN ACCORDANCE WITH FDOT STANDARDS UNLESS OTHERWISE NOTED ON THE PLANS.
- FOR SIGN DETAILS REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PUBLISHED BY U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, LATEST EDITION.
- ALL PAVEMENT MARGINS TO BE IN ACCORDANCE WITH FDOT INDEX NO. 711-001. THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING TEMPORARY PAVEMENT MARKINGS UNTIL THE FINAL SURFACE COURSE HAS CURED (MINIMUM THIRTY (30) DAYS AFTER FINAL SURFACE COURSE PAVEMENT).
- ALL TRAFFIC CONTROL SIGNS MUST BE IN ACCORDANCE WITH MUTCD STANDARDS AND SPECIFICATIONS (LATEST EDITION VALID AT TIME OF PLAN APPROVAL) AND SHALL BE FABRICATED USING 3M BRAND "SCOTOLITE" SHEETINGS (HIGH INTENSITY GRADING) ON MINIMUM .089 GA ALUMINUM BLANKS. ALL 36" X 48" SIGNS SHALL BE 100 GA MINIMUM AND SHALL BE INSTALLED USING 3" X 12" ROUND ALUMINUM POSTS. ALL STOP SIGNS SHALL BE 36" OCTAGONAL INSTALLED ON 12", 3 LB/FT "U" CHANNEL POSTS ON 3'X12" ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR ALL SIGNS SMALLER THAN 36" X 48". ALL WARNING SIGNS SHALL BE 30" X 30". ALL SPEED LIMIT SIGNS SHALL BE 24" X 30".
- SIGN PLACEMENT SHOWN IN PLANS IS APPROXIMATE. FINAL LOCATION SHALL BE AS DIRECTED BY ENGINEER OF RECORD, INSPECTOR(S) AND OWNER.
- REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER LATEST EDITION FDOT STANDARDS AND SPECIFICATIONS.
- ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE CONTINUOUS APPLICATION.
- PROPOSED PAVEMENT MARKINGS SHALL ALIGN WITH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
- ALL EXISTING CURB AND GUTTER AND SIDEWALK SHOWN TO BE REMOVED, WILL BE REMOVED AND REPLACED FROM JOINT TO JOINT.
- ALL BROKEN/CRACKED DRIVEWAYS MUST BE FULLY REMOVED AND REPLACED.

OVERALL UTILITY NOTES:

- PROJECT LIES WITHIN FERNANDINA BEACH UTILITY DEPARTMENT SERVICE AREA.
- THE PROJECT LIES WITHIN TECO GAS SERVICE AREA.
- WORK DIRECTLY IMPACTING TECO GAS MAINS SHALL BE COORDINATED AS REQUIRED AND CONFORM TO TECO GAS STANDARD SPECIFICATIONS AND DETAILS (LATEST EDITION).
- ALL WATER, SEWER AND REUSE WORK TO CONFORM TO THE FERNANDINA BEACH WATER AND SEWER STANDARDS, SPECIFICATIONS AND DETAILS (LATEST EDITION). PLEASE NOTE THAT WORK DIRECTLY IMPACTING FERNANDINA BEACH UTILITIES SHALL BE COORDINATED AS REQUIRED AND CONFORM TO THE FERNANDINA BEACH DESIGN SPECIFICATIONS AND DETAILS (LATEST EDITION).
- COORDINATE UTILITY SIZE AND SERVICE LOCATION WITH ARCHITECT AND MECHANICAL, ELECTRICAL & PLUMBING (MEP) PLANS.
- ALL CONNECTIONS TO SERVICE LINES TO BE ON SITE SIDE OF BACKFLOW OR CLEANOUT DEPENDING ON LINE TYPE.
- CLEAN-OUTS SHALL BE INSTALLED SO THAT THEY ARE ACCESSIBLE FOR MAINTENANCE.
- CLEAN-OUTS LOCATED IN WALKWAY SHALL BE INSTALLED WITH ADA COMPLIANT FLUSH MOUNT COVER. CLEAN-OUTS IN PAVED AREAS SHALL BE CONSTRUCTED WITH TRAFFIC RATED BOX AND COVER.
- ALL ABANDONED UTILITIES FOUND WITHIN THE FERNANDINA BEACH RIGHT-OF-WAY AND NOT SHOWN ON THESE PLAN SHEETS ARE TO BE REMOVED AND PROPERLY DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR PER FERNANDINA BEACH AND FDEP STANDARDS.
- ALL PRIMARY AND SECONDARY ELECTRICAL LOCATIONS ARE NOT SHOWN HEREON. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION AND COST OF ANY ELECTRICAL COMPANY. ADDITIONALLY, THE CONTRACTOR SHOULD VERIFY THE LOCATION AND COST OF ANY IRRIGATION CONDUITS.
- THE CONTRACTOR SHALL PROVIDE TRANSFORMER PAD TO ALLOW FOR INSTALLATION FROM POWER COMPANY.
- REFERENCE ARCHITECTURAL AND MEP PLANS FOR ALL UTILITY SERVICE CONNECTION POINTS.

OVERALL TESTING NOTES:

- THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A THIRD PARTY TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE, AND SURFACE COURSE MATERIALS. TEST RESULTS MAY BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT RELATING TO THE SITE CONSTRUCTION SCOPE AGREED UPON BY ALL APPLICABLE PARTIES.
- SCHEDULE OF ROAD CONSTRUCTION TESTING SHALL BE AS FOLLOWS:
 - SUBGRADE

- 2.1.1. BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NO MORE THAN 200 LINEAR FEET.
- 2.2. BASE
- 2.2.1. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NO MORE THAN 500 LINEAR FEET.
- ALL TESTING SHALL BE TAKEN IN A STAGGERED PATTERN WITHIN THE EDGE OF PAVEMENT BOUNDARY.
- IF ANY SAMPLES SHOULD BE EXAMINED AS "UNSATISFACTORY" PER THE STANDARDS OF THE GEOTECHNICAL ENGINEER OF RECORD, THE AREA OF CONCERN SHALL BE REWORKED AT THE CONTRACTORS EXPENSE UNTIL THE LEVEL OF "SATISFACTION" IS MET.
- ALL PASSING TESTS SHALL BE PAID FOR BY THE OWNER AND ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

SCHEDULE OF TESTING:			
TEST ITEM:	TEST(S) TO BE PERFORMED:	TESTING METHOD(S):	REQUIREMENT:
EMBANKMENT	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• ASHTO T180 • ASTM D1557 • ASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY ONE PER 2,000 SF HORIZONTALLY (ALTERNATING LIFTS 6 INCHES)
UTILITY TRENCH BACKFILL (LOCATED BENEATH DRIVE AISLES/ROADWAYS)	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• ASHTO T180 • ASTM D1557 • ASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY EVERY 150 L OF PIPE FROM CONNECTOR.
BACKFILL OF STRUCTURES	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• ASHTO T180 • ASTM D1557 • ASHTO T191,T204,T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY PER SOIL TYPE: EVERY 6" VERTICALLY FROM 6" BELOW THE STRUCTURE.
SUBGRADE	BEARING VALUES	LBR - FOOT	SEE TYPICAL PAVEMENT SECTION • ONE PER SOURCE • ONE PER 500' HORIZONTAL LF
BASE	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY AND THICKNESS	• ASHTO T180 • ASTM D1557 • ASHTO T191,T238 • ASTM D1556, D2922	SEE TYPICAL PAVEMENT SECTION • ONE PER 2,000 SF HORIZONTALLY • ONE PER SOURCE
	BEARING VALUES	LBR - FOOT	SEE TYPICAL PAVEMENT SECTION • ONE PER SOURCE • ONE PER 500' HORIZONTAL LF
ASPHALTIC CONCRETE	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY AND THICKNESS	• ASHTO T180 • ASTM D1557 • ASHTO T191,T238 • ASTM D1556, D2922	SEE TYPICAL PAVEMENT SECTION • ONE PER 2,000 SF HORIZONTALLY • ONE PER SOURCE
	GRADATION	• ASHTO T27, 196	SEE TYPICAL PAVEMENT SECTION • ONE PER SOURCE
	ATTEMBERG LIMIT	• ASHTO T90, • ASTM C136, D423, D424 • ASHTO T295	SEE TYPICAL PAVEMENT SECTION • ONE PER SOURCE
FIELD DENSITY	MATERIALS QUALITY BITUMEN CONTENT, GRADATION FIELD DENSITY.	• ASHTO T190, • ASTM C136, D423, D424 • ASHTO T295	PER GEOTECHNICAL SPECIFICATIONS • ONE PER DAY, PER INSTALLATION
	LOS ANGELES ABRASION THICKNESS	• ASTM D2950-81 • ASHTO T298-77 • ASTM C131-81	PER SPECIFICATIONS 98% OF LAB DENSITY • ONE PER DAY • ONE EVERY 2,000 LF HORIZONTALLY • ONE PER SOURCE • ONE PER 2,000 LF HORIZONTALLY
NOTES:			
1. CONTRACTOR WILL ADHERE TO THE SPECIFIC RECOMMENDATION OF THE GEOTECHNICAL ENGINEER OF RECORD.			

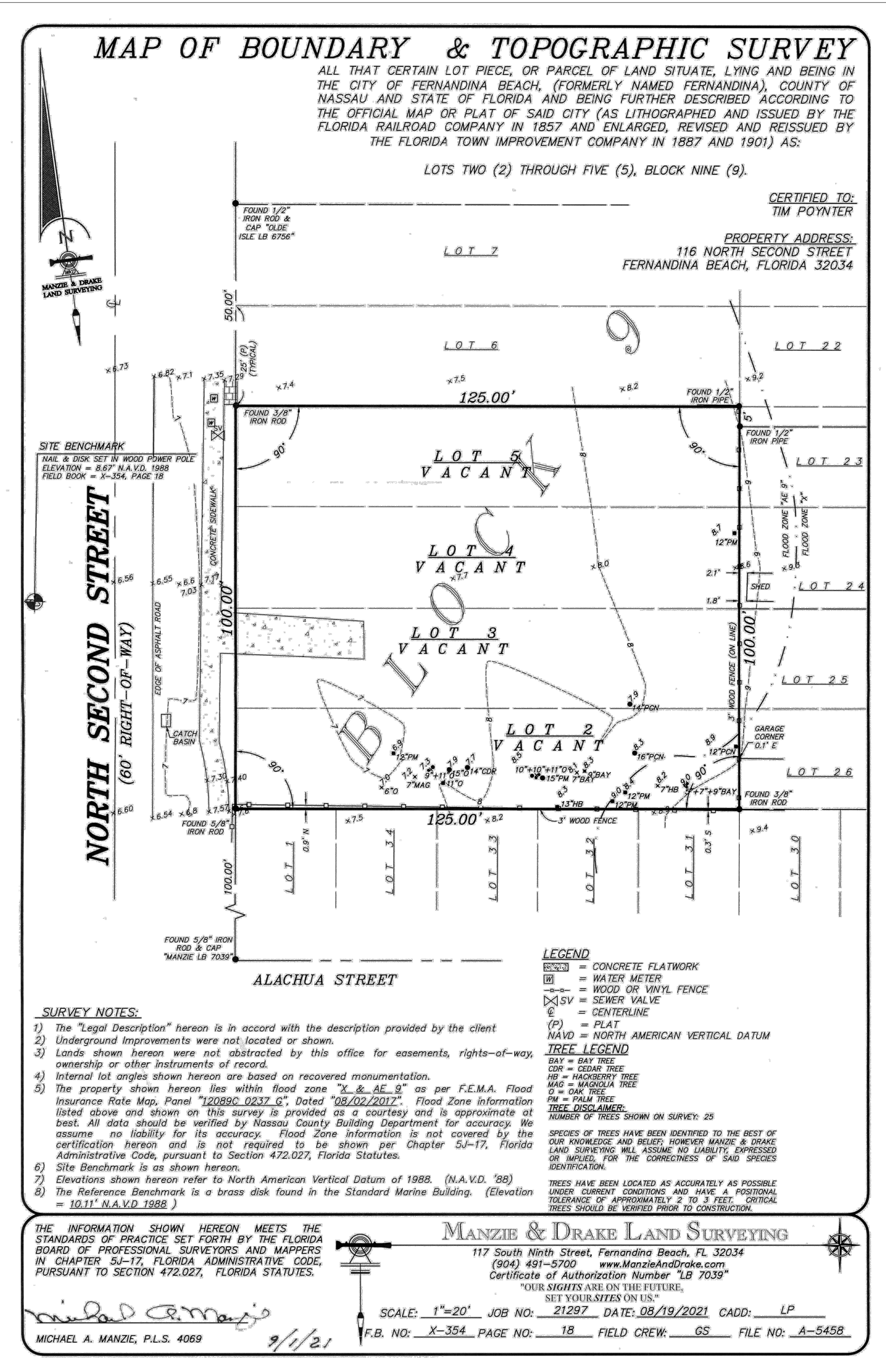
FIRE PROTECTION NOTES:

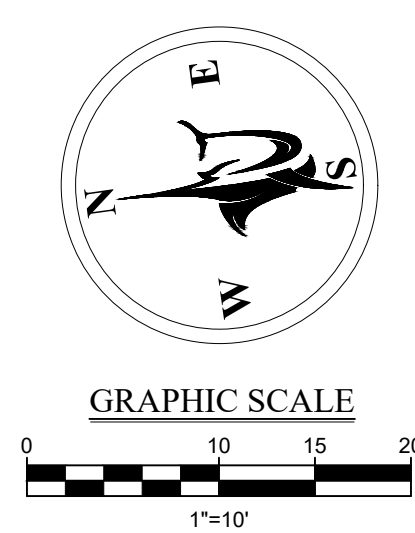
- FIRE PROTECTION FOR THE PURPOSE OF THESE PLANS IS ANY UNDERGROUND WATER LINE NOT OWNED AND MAINTAINED BY A PUBLIC UTILITY AS WELL AS ANY PRIVATE FIRE SERVICE MAIN AND PIPE AND ITS APPURTENANCES ON PRIVATE PROPERTY: (1) BETWEEN A SOURCE OF WATER AND THE BASE OF THE SYSTEM RISER FOR WATER-BASED FIRE PROTECTION SYSTEMS, (2) BETWEEN A SOURCE OF WATER AND INLETS TO FOAM-WATER SYSTEMS, (3) BETWEEN A SOURCE OF WATER AND THE BASE ELBOW OF PRIVATE HYDRANTS OR MONITOR NOZZLES AND (4) USED AS FIRE PUMP SUCTION AND DISCHARGE PIPING, (5) BEGINNING AT THE INLET SIDE OF THE CHECK VALVE ON A GRAVITY OR PRESSURE TANK.
- THIS SHALL ALSO APPLY TO COMBINED SERVICE MAINS USED TO CARRY WATER FOR FIRE SERVICE AND OTHER USES. IE: DOMESTIC.
- STANDARDS TO BE REFERENCED ARE TO BE THE MOST CURRENT AS ADOPTED BY THE FLORIDA FIRE PREVENTION CODE:
 - NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
 - NFPA 20, STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
 - NFPA 22, STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION
 - NFPA 16, STANDARD ON DELUGE FOAM-WATER SPRINKLER & FOAM-WATER SPRAY SYSTEMS
 - NFPA 1963 STANDARD FOR FIRE HOSE CONNECTIONS
- ITEMS ON THE CONSTRUCTION PLANS SHALL INCLUDE BUT NOT LIMITED TO SCALE DRAWINGS AND DETAILS AND TO INCLUDE THE FOLLOWING ITEMS WHEN THEY ARE APPLICABLE TO THE SYSTEM BEING INSTALLED:
 - NAME OF OWNER AND OCCUPANT
 - LOCATION, INCLUDING STREET ADDRESS.
 - POINT OF COMPASS.
 - A GRAPHIC REPRESENTATION OF THE SCALE USED ON ALL PLANS.
 - NAME AND ADDRESS OF CONTRACTOR.
 - SIZE AND LOCATION OF ALL WATER SUPPLIES.
 - SIZE AND LOCATION OF ALL PIPING, WHERE POSSIBLE, THE CLASS AND TYPE AND DEPTH OF EXISTING PIPE, THE CLASS AND TYPE OF NEW PIPE TO BE INSTALLED, AND THE DEPTH TO WHICH IT IS TO BE BURIED.
 - SIZE, TYPE AND LOCATION OF VALVES. INDICATE IF LOCATED IN PIT OR IF OPERATION IS BY POST INDICATOR OR KEY WRENCH THROUGH A CURB BOX.
 - LOCATION OF FIRE DEPARTMENT CONNECTIONS, IF PART OF PRIVATE FIRE SERVICE MAIN SYSTEM, INCLUDING DETAIL OF CONNECTIONS.
 - SPRINKLER AND STANDPIPE RISERS AND MONITOR NOZZLES TO BE SUPPLIED BY THE SYSTEM.
 - ALL COMPONENTS MUST HAVE LISTING WITH FIRE PROTECTION PER NFPA 24.
 - ALL FIRE HYDRANTS INSTALLED IN TAYLOR COUNTY MUST HAVE A SINGLE 4.5 INCH HOSE OUTLET AND TWO 2.5 INCH HOSE OUTLETS, ALL WITH MALE NH STANDARD THREADS, IN ACCORDANCE WITH NFPA 1963.
- A COPY OF THESE APPROVED ENGINEERING PLANS SHALL ACCOMPANY A REQUIRED FIRE MARSHALL UNDERGROUND PERMIT SUBMITTED BY A CERTIFIED CONTRACTOR. THIS UNDERGROUND PERMIT WILL REQUIRE ADDITIONAL DETAILS AND SPECS AT THE TIME OF SUBMITTAL TO THE FIRE MARSHALL'S OFFICE.
- CONTRACTORS INSTALLING THE UNDERGROUND PIPING IN ACCORDANCE WITH THE ABOVE REFERENCE STANDARDS FOR A FIRE PROTECTION SYSTEM USING WATER AS THE EXTINGUISHING AGENT BEGINNINGS AT THE POINT AT WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND ENDING NO MORE THAN 1 FOOT ABOVE THE FLOOR SHALL BE REQUIRED TO HAVE A CLASS I, II, OR V FIRE PROTECTION CONTRACTORS LICENSE PURSUANT TO CHAPTER 633, FLORIDA STATUTES. GENERAL CONTRACTORS ARE REMINDED THAT THEY ARE RESPONSIBLE FOR VERIFYING THAT THEIR SUBCONTRACTORS HOLD THE REQUIRED LICENSES AND ARE NOT VIOLATING THE REQUIREMENT MAY BE REPORTED TO THE DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION AND/OR THE STATE FIRE MARSHALL'S REGULATORY LICENSING SECTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE FIRE MARSHALL'S OFFICE PRIOR TO THE START OF SITE CONSTRUCTION IN ACCORDANCE WITH THE ABOVE REFERENCED STANDARDS.
- NOTE: MINIMUM WORKING PRESSURE OF THE UNDERGROUND PIPING SHALL BE 150 PSI. NFPA 24 REQUIRES SPECIFIC PVC PIPING TO MEET TABLE C-900 WITH MANUFACTURING LISTING FOR FIRE PROTECTION.
- ALL FIRE LINES MUST BE INSPECTED BY THE FIRE MARSHALL'S OFFICE PRIOR TO BACKFILL. THE CODE REQUIRES ALL JOINTS EXPOSED FOR INSPECTION WITH FILL IN BETWEEN JOINTS. ALL PIPING AND ATTACHED APPURTENANCES SUBJECT TO SYSTEM WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR TWO (2) HOURS.

REVISIONS											
NO.	DATE	BY	DESCRIPTION	NO.	DATE	BY	DESCRIPTION	NO.	DATE	BY	DESCRIPTION
1	11/20/22		ISSUED PER CITY OF FERNANDINA BEACH COMMENTS	2				3			
4				5				6			
7				8				9			
10				11				12			

ENGINEERING PLANS FOR FERNANDINA PAVILION GENERAL NOTES NASSAU COUNTY, FLORIDA







 EXISTING PROPERTY LINE
 EXISTING R/W LINE
 SILT FENCE
 EXISTING TREE TO BE REMOVED

D-01	TYPE III SILT FENCE (SEE SHEET #3 SWPPP FOR DETAILS)
D-02	EXISTING TO BE REMOVED
D-03	EXISTING TO REMAIN
D-04	EXISTING TO BE REPLACED (SEE NOTE #4 THIS SHEET)
D-05	SYNTHETIC BALE INLET PROTECTION (SEE SHEET #3 SWPPP FOR DETAILS)
D-06	SAWCUT EXISTING ASPHALT

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION, BARBED WIRE, FENCES, AND OTHER STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, FILTER FABRIC, SILT FILL, AND FLOTTONS TO PREVENT EROSION. IF FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. THESE MEASURES SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
2. CONTRACTOR SHALL STAKE AND VERIFY RIGHT-OF-WAY LINE AND AVOID PRIVATE PROPERTY CONFLICT WITH EXCAVATED DRILL PIT.
3. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL DRAINAGE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE COUNTY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THE INSTALLATION CONDITION SHALL BE SUCH THAT WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFORESAID LOCATIONS, WHERE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS FOR EROSION RESISTANCE. THE CONTRACTOR SHALL TAKE ADDITIONAL MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED THROUGHOUT PROJECT CONSTRUCTION.
4. IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BLENDED, COMPACTED AND TESTED USING AASHTO T-160 MODIFIED PROCTOR METHOD.
5. ALL EXISTING CATCH BASINS ADJACENT TO THE SITE SHALL BE COVERED WITH FILTER FABRIC TO PREVENT SEDIMENTS FROM ENTERING THE SITE. THE FILTER FABRIC SHALL BE INSPECTED AND MAINTAINED DAILY THROUGHOUT THE DURATION OF CONSTRUCTION.

1. ALL EXISTING WATER AND SEWER UTILITY SERVICES THAT WILL, NO LONGER BE UTILIZED MUST BE PROPERLY ABANDONED BY CONTRACTOR BY CUTTING, CAPPING, AND REPAIRING SERVICE CONNECTIONS AT THE UTILITY LOCATIONS IN ACCORDANCE WITH THE CITY OF CHICAGO REQUIREMENTS UNDER CITY INSPECTOR'S OBSERVATION. EXCAVATION MAY BE REQUIRED IN ORDER TO DETERMINE PROPER ABANDONMENT METHODS.
2. ALL EXISTING WATER AND SEWER UTILITY SERVICES INTENDED TO BE REUSED MUST BE INVESTIGATED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT TO NEW EXISTING POTABLE WATER SERVICES, AND SEWER SERVICE LATERALS. ALL UTILITIES MUST BE RETURNED TO GOOD WORKING ORDER. ALL INVESTIGATIVE AND REPAIR/REPLACEMENT WORK SHALL BE OBSERVED BY THE CITY INSPECTOR AND UNDER CITY INSPECTOR'S OBSERVATION. EXCAVATION AND OTHER PROCEDURES SUCH AS CLOSED-CIRCUIT TV MAY BE REQUIRED IN ORDER TO DETERMINE CONDITION.
3. ALL EXISTING TREES ON SITE ARE TO BE REMOVED. (25 TREES / 268 INCHES. SEE LANDSCAPE PLAN)
4. SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK IN THIS AREA TO THE NEAREST EXPANSION JOINT. REPLACE WITH SURFACE AND JOINTS TO MATCH EXISTING. 8" THICK WITH FIBER TO WITHSTAND VEHICULAR TRAFFIC. CROSS SLOPE 2% MATCH EXISTING FOR DRAINAGE AND ACCESSIBILITY. PROVIDE EXPANSION JOINT AND SEALANT WHERE RECONNECTS WITH EXISTING SIDEWALK.

REVISIONS		
NO.	DATE	BY
1	11/30/22	JGD
PER CITY OF FERNANDINA BEACH COMMENTS		
2	1/24/23	XXXXXX
3	1/24/23	XXXXXX
4	1/24/23	XXXXXX
5	1/24/23	XXXXXX
6	1/24/23	XXXXXX
7	1/24/23	XXXXXX
8	1/24/23	XXXXXX
9	1/24/23	XXXXXX

**ENGINEERING PLANS
FOR
FERNANDINA PAVILION
DEMOLITION PLAN
NASSAU COUNTY, FLORIDA**



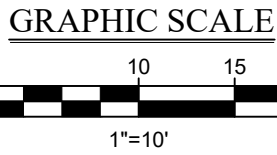
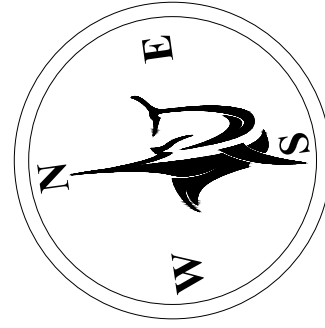
60% PLANS



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO:	22-122
ISSUE DATE:	10-27-22
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL
NOT VALID WITHOUT SEAL	



LEGEND

- EXISTING PROPERTY LINE
- EXISTING R/W LINE
- EXISTING LOT LINE
- PROPOSED BUILDING OUTLINE
- PROPOSED SIDEWALK
- PROPOSED GARDEN TURF
- PROPOSED GRAVEL

SITE DETAILS

- SD-7A CONCRETE SIDEWALK
- SD-52 TYPICAL GRAVEL SECTION

SITE KEY NOTES:

- S-01 PROPERTY LINE
- S-02 CONNECT TO EXISTING SIDEWALK
- S-03 PERGOLA (SEE ARCHITECTURAL PLANS FOR DETAILS)
- S-04 FENCE/GATE (SEE ARCHITECTURAL PLANS FOR DETAILS)
- S-05 DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
- S-06 ARCHITECTURAL/GARDEN FEATURES (SEE ARCHITECTURAL/LANDSCAPE PLANS FOR DETAILS)
- S-07 PAVEMENT/CONCRETE SIDEWALK (SEE ARCHITECTURAL IMPROVEMENT PLANS OR DETAILS)
- S-08 EXISTING SIDEWALK
- S-09 PRIVACY FENCE (SEE ARCHITECTURAL IMPROVEMENT PLANS FOR DETAILS)

GENERAL SITE NOTES:

- ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS OF THE NASSAU COUNTY LAND DEVELOPMENT CODE.
- ALL DIMENSIONS ARE SHOWN TO FACE OF CURB UNLESS OTHERWISE NOTED.
- BUILDING DIMENSIONS FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS BY CHAD GRIMM STUDIOS, FOR EXACT DIMENSIONS. CIVIL PLANS REFERENCE EXTERIOR WALL DIMENSIONS. CONTRACTOR TO VERIFY FOUNDATION AND ROOF OVERHANG.
- ALL HANDICAP RAMPS SHALL MEET CURRENT ADA REQUIREMENTS AND INCLUDE DETECTABLE WARNING PER NASSAU COUNTY REQUIREMENTS.
- CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC, IMMEDIATELY IF CONDITIONS DIFFER IN THE FIELD.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS AND/OR EXISTING EASEMENTS BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER, ANY EXTRA WORK REQUESTED BY ANY REGULATORY AGENCY THAT IS NOT SHOWN ON THE PLANS. THIS EXTRA WORK MUST BE APPROVED BY THE ENGINEER AND THE OWNER BEFORE THE CONTRACTOR PROCEEDS WITH THE EXTRA WORK.
- ALL ELEMENTS THAT ARE PLACES OF PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES ON THE SITE (INCLUDING ACCESSIBLE ROUTES AND PARKING) SHALL MEET THE REQUIREMENTS OF "FLORIDA AMERICANS WITH DISABILITIES ACCESSIBILITY IMPLEMENTATION ACT", ADA STANDARDS FOR ACCESSIBLE DESIGN, FLORIDA BUILDING CODE - ACCESSIBILITY AND THE FAIR HOUSING ACT, WHEN APPLICABLE.
- STREETSCAPE TO MATCH DOWNTOWN AREA. COUNTY WILL PROVIDE ANY REQUIRED TREES FOR STREET PLANTING.

SITE DATA TABLE		
GROSS PROPERTY AREA:	12,500.00 SF	0.29 AC
NET DEVELOPABLE PROJECT AREA:	12,500.00 SF	0.29 AC
PROPOSED BUILDING FOOTPRINT AREA:	7,755 SF	0.18 AC
PROPOSED PAVEMENT & SIDEWALK AREA:	835 SF	0.02 AC
PROPOSED TOTAL IMPERVIOUS AREA:	8,590.00 SF	0.20 AC
PROPOSED TOTAL PERVIOUS AREA:	491.36 SF	0.01 AC
IMPERVIOUS SURFACE AREA RATIO:		68.7%
FLOOR AREA RATIO:		62.0%
PROPERTY ID NO:	00-00-31-1800-0000-0020, 00-00-31-1800-0000-0030, 00-00-31-1800-0000-0040, 00-00-31-1800-0000-0050	
ZONING:	C-3	
FLUM:	CENTRAL BUSINESS DISTRICT	
FEMA FIRM PANEL NUMBER	12089C 0237G	

ENGINEERING PLANS
FOR
FERNANDINA PAVILION
SITE PLAN
NASSAU COUNTY, FLORIDA

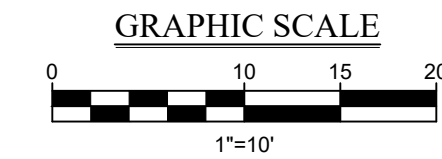


60% PLANS



2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

PROJECT NO: 22-122
ISSUE DATE: 10-27-22
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CHECKED BY: MHL
NOT VALID WITHOUT SEAL



EXISTING PROPERTY LINE

EXISTING RW LINE

EXISTING CONTOUR MAJOR

EXISTING CONTOUR MINOR

PROPOSED CONTOUR MAJOR

PROPOSED CONTOUR MINOR

PROPOSED BUILDING

STORM SEWER

PROPOSED GRADE ELEVATION

EXISTING GRADE ELEVATION

FLOW ARROW

PROPOSED STANDARD DUTY ASPHALT PAVEMENT

PROPOSED CONCRETE SIDEWALK

GD-1	TYPE "C" INLET
GD-2	TYPE "D" INLET
GD-5	STANDARD YARD DRAIN

G-01	TIE TO EXISTING ELEVATION
G-02	RECONSTRUCT 15" RCP TO EXISTING INVERT & CONNECT AT INVERT 3.60.
G-03	CONNECT FRENCH DRAIN PIPE TO SOLID PIPE USING ADS CONNECTOR

1. ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
2. FIVE FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
3. CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC, IMMEDIATELY IF FIELD CONDITIONS DIFFER.

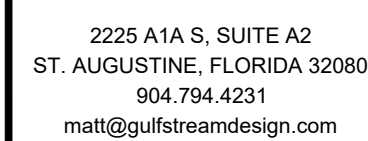
1. PIPE LINES SHOWN REPRESENT DISTANCES BETWEEN CENTERLINE OF DRAINAGE STRUCTURES AND TO END OF MITERED END SECTIONS.
2. ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
3. FIVE FEET OF SO2 IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
4. THE STORM DRAINAGE SYSTEM SHALL BE FREE OF DIRT, SAND AND DEBRIS PRIOR TO FINAL ACCEPTANCE.
5. CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CHANGES EXIST. CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC, IMMEDIATELY IF FIELD CONDITIONS DIFFER.

ROADWAY AND DRAINAGE STANDARDS NASSAU COUNTY ENGINEERING SERVICES DEPARTMENT	REVISION DATES		STORMWATER DRAINAGE & PAVING NOTES	NOTE SHEET: 2
				DWG:
				ISSUED: 12/09/2020

**ENGINEERING PLANS
FOR
FERNANDINA PAVILION
PAVING, GRADING & DRAINAGE PLAN
NASSAU COUNTY, FLORIDA**



60% PLANS



PROJECT NO:	22-122
ISSUE DATE:	10-27-2
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

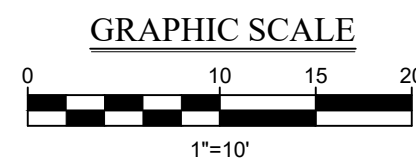
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[illegible]

[illegible]

1. *Journal of the American Medical Association*, 2000; 284: 2689-2694.

7



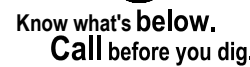
	EXISTING PROPERTY LINE
	STORM SEWER MAIN
	SANITARY SEWER LATERAL
	WATER SERVICE
	6" SEWER SERVICE WITH CLEANOUT
	EXISTING FIRE HYDRANT
	1" WATER SERVICE WITH RPZ BFP

UD-3	SANITARY SEWER SERVICE LATERAL (PVC SDR-26, @ 1.0%)
UD-4	SANITARY SEWER CLEANOUT
UD-6	REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
UD-8	GREASE TRAP (500 GAL.)

U-02	1" WATER SERVICE. CONNECT TO EXISTING WATER METER.
U-03	CONTRACTOR TO CONFIRM SIZE AND LOCATION OF POTABLE WATER POINT OF CONNECTION AT BUILDING (SEE ARCHITECTURAL PLANS FOR CONTINUATION)
U-04	SANITARY POINT OF CONNECTION AT BUILDING (SEE ARCHITECTURAL PLANS FOR CONTINUATION)
U-05	CONNECT TO EXISTING GRAVITY SEWER MAIN IN NORTH SECOND STREET AT ASSUMED ELEVATION 2.95. (CONTRACTOR TO CONFIRM LOCATION AND ELEVATION)
U-06	PAVEMENT REPAIR PER CITY OF FERNANDINA BEACH REQUIREMENTS

1. CONTRACTOR SHALL REFER TO GENERAL NOTES SHEET #2 IN THESE PLANS FOR ADDITIONAL SPECIFIC INFORMATION NOT SHOWN ON INDIVIDUAL PLAN SHEETS.
2. ALL EXISTING UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE DATA AND MAY NOT HAVE BEEN SURVEYED OR FIELD LOCATED. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES VIA POT-HOLING AND LOCATES PRIOR TO CONSTRUCTION.
3. PLANS SUBJECT TO CHANGE BASED ON REVIEW BY REGULATORY AGENCIES.
4. PIPE LENGTHS HEREIN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ANY UTILITY LOCATIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF FIELD CONDITIONS VARY GREATLY FROM THESE PLANS.
5. THE CONTRACTOR SHALL FIELD STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN ADVANCE OF CONSTRUCTION TO ENSURE THAT NO CONFLICTS EXIST. THE CONTRACTOR SHALL NOTIFY GULFSTREAM DESIGN GROUP, LLC IMMEDIATELY IF CONDITIONS DIFFER IN THE FIELD.
6. ALL FIRE HYDRANTS SHALL OPEN COUNTER CLOCKWISE. LARGEST HOSE OUTLET NOT LESS THAN 18" ABOVE FINAL GRADE AND FACING ROADWAY.
7. APPROVAL OF THESE PLANS DO NOT INCLUDE APPROVAL FOR PRIVATE UNDERGROUND WATER MAIN AND FIRE HYDRANTS. PRIVATE FIRE HYDRANTS SHALL BE RED AND PUBLIC FIRE HYDRANTS SHALL BE YELLOW.
8. THE CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
9. ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
10. SUBMITTAL OF AS-BUILT SITE SURVEY, INCLUDING BENCHMARKS, IS REQUIRED PRIOR TO SCHEDULING A FINAL INSPECTION OF THE BUILDING BY THE BUILDING DEPARTMENT AND THE FIRE MARSHALL.
11. CITY OF FERNANDINA BEACH DEVELOPMENT REVIEW INSPECTOR SHALL BE CONTACTED TWENTY-FOUR (24) HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND FIVE (5) DAYS PRIOR TO FINAL INSPECTION.
12. WHERE PROPOSED UTILITIES CONFLICT OR CROSS, A MINIMUM 16" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE CLOSEST POINTS OF THE PROPOSED UTILITIES AND CROSSING POTABLE WATER SHALL BE KEPT ABOVE FORMALIN OR SANITARY SEWER.
13. GATE VALVES SHALL NOT BE SPACED MORE THAN 500 FEET APART.

ENGINEERING PLANS
FOR
FERNANDINA PAVILION
UTILITY PLAN
NASSAU COUNTY, FLORIDA



60% PLANS



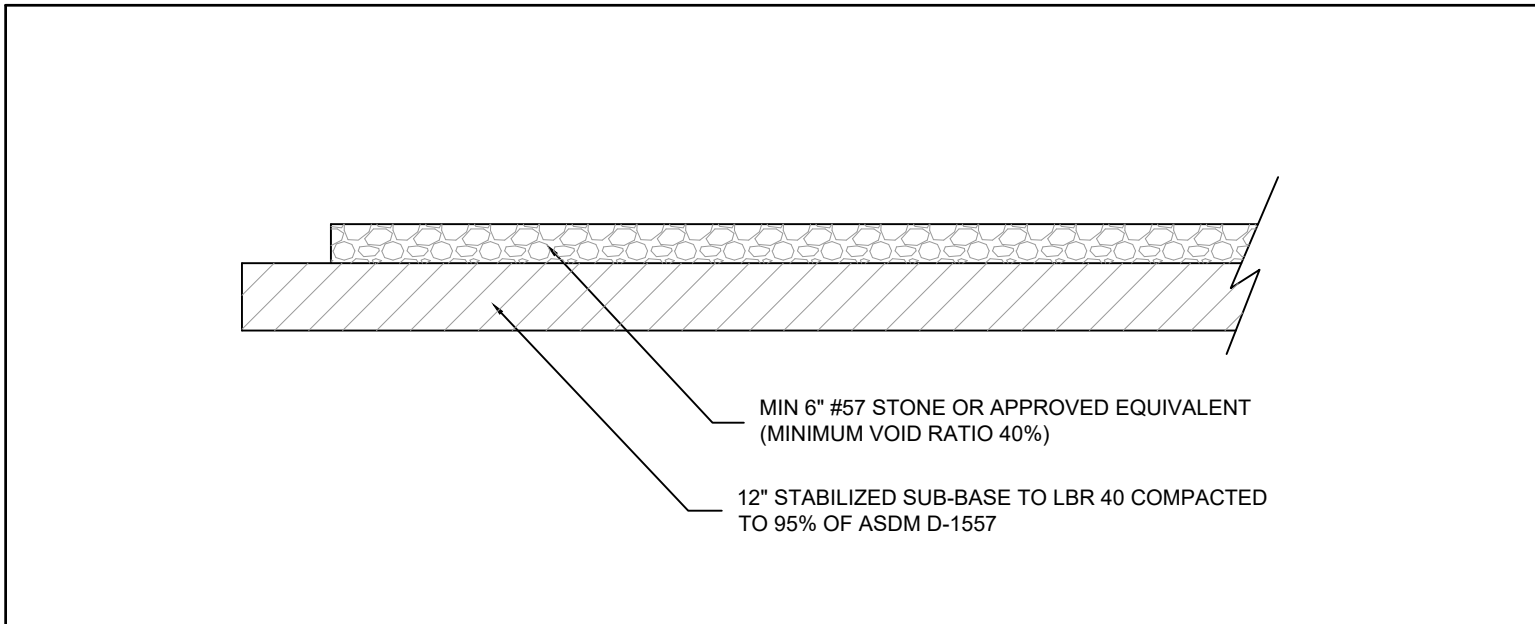
2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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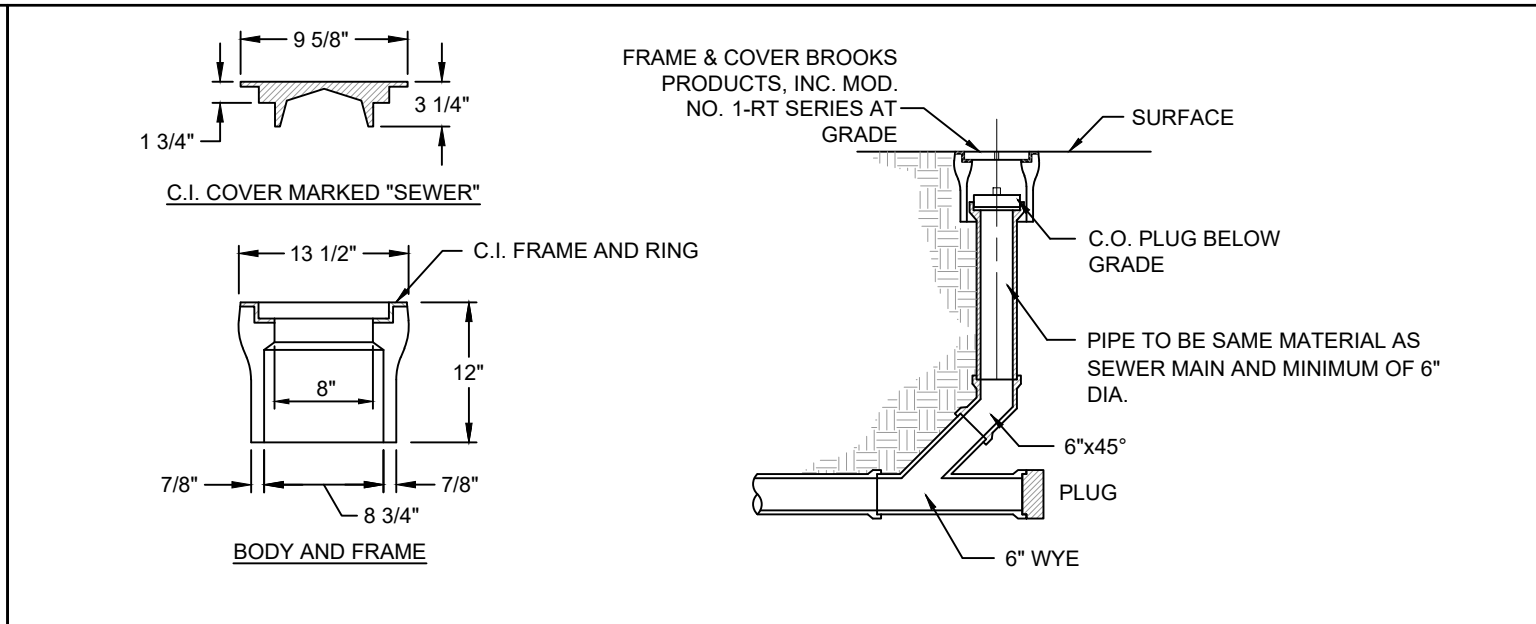
PROJECT NO:	22-122
ISSUE DATE:	10-27-2
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

NOT VALID WITHOUT SEAL

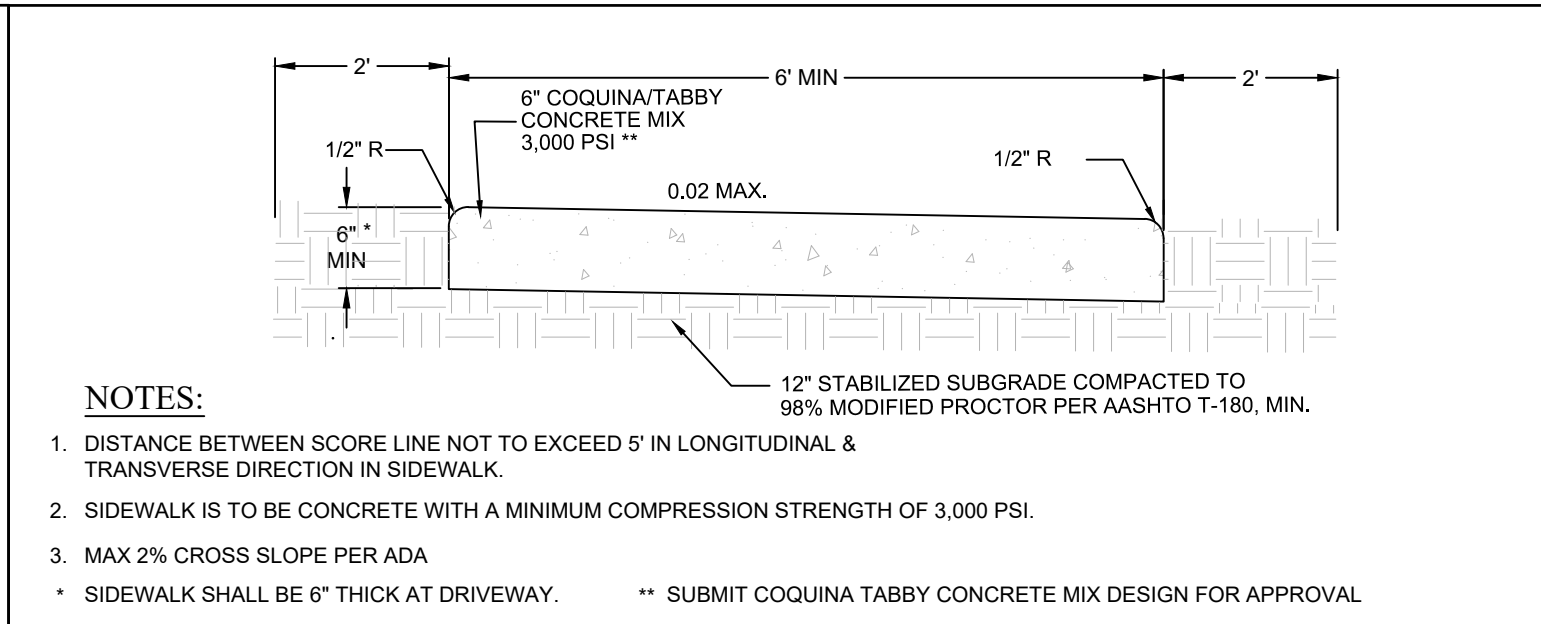
N:\011 Gulfstream Project Files\22-122 Fernandina Pavilion Construction Set\22-122 Detail Sheets\22-122 Detail Sheets.dwg, She Details: 12/1/2022 4:39:52 PM, JGD



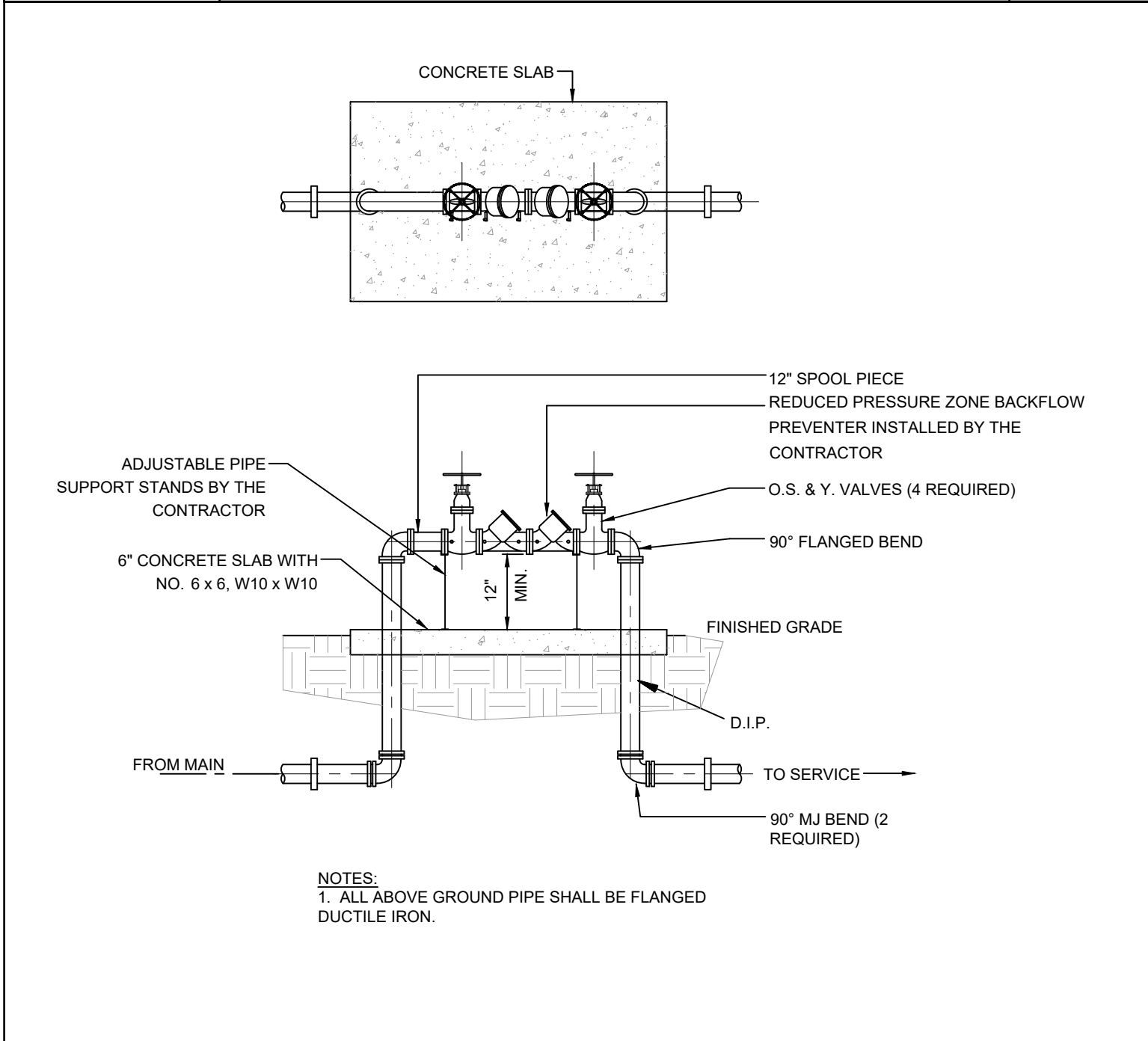
TYPICAL GRAVEL SECTION
SCALE: N.T.S.
DETAIL#: SD-52
REVISED 11/09/21



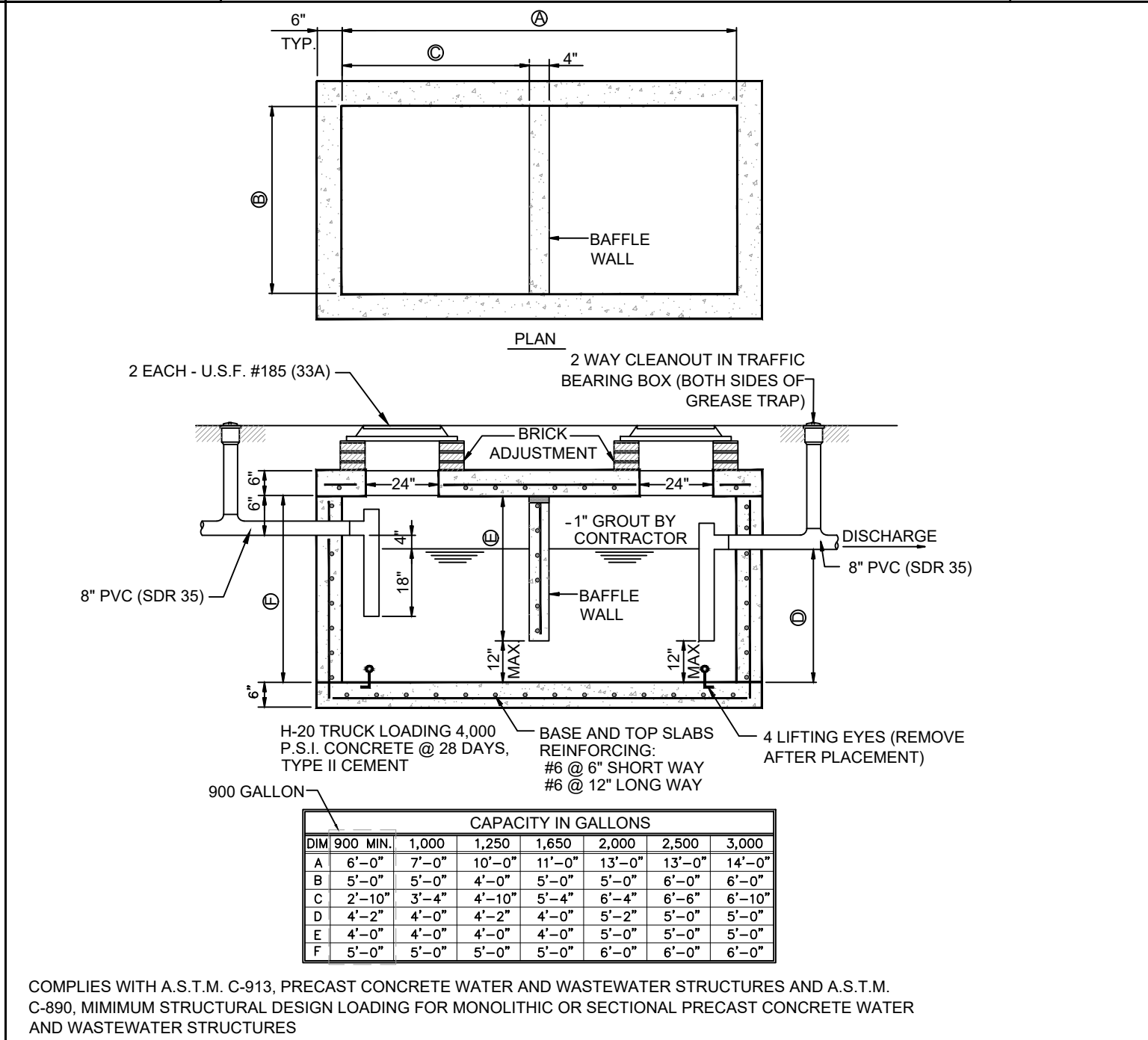
SANITARY SEWER CLEAN-OUT
SCALE: N.T.S.
DETAIL#: UD-4
REVISED 03/10/20



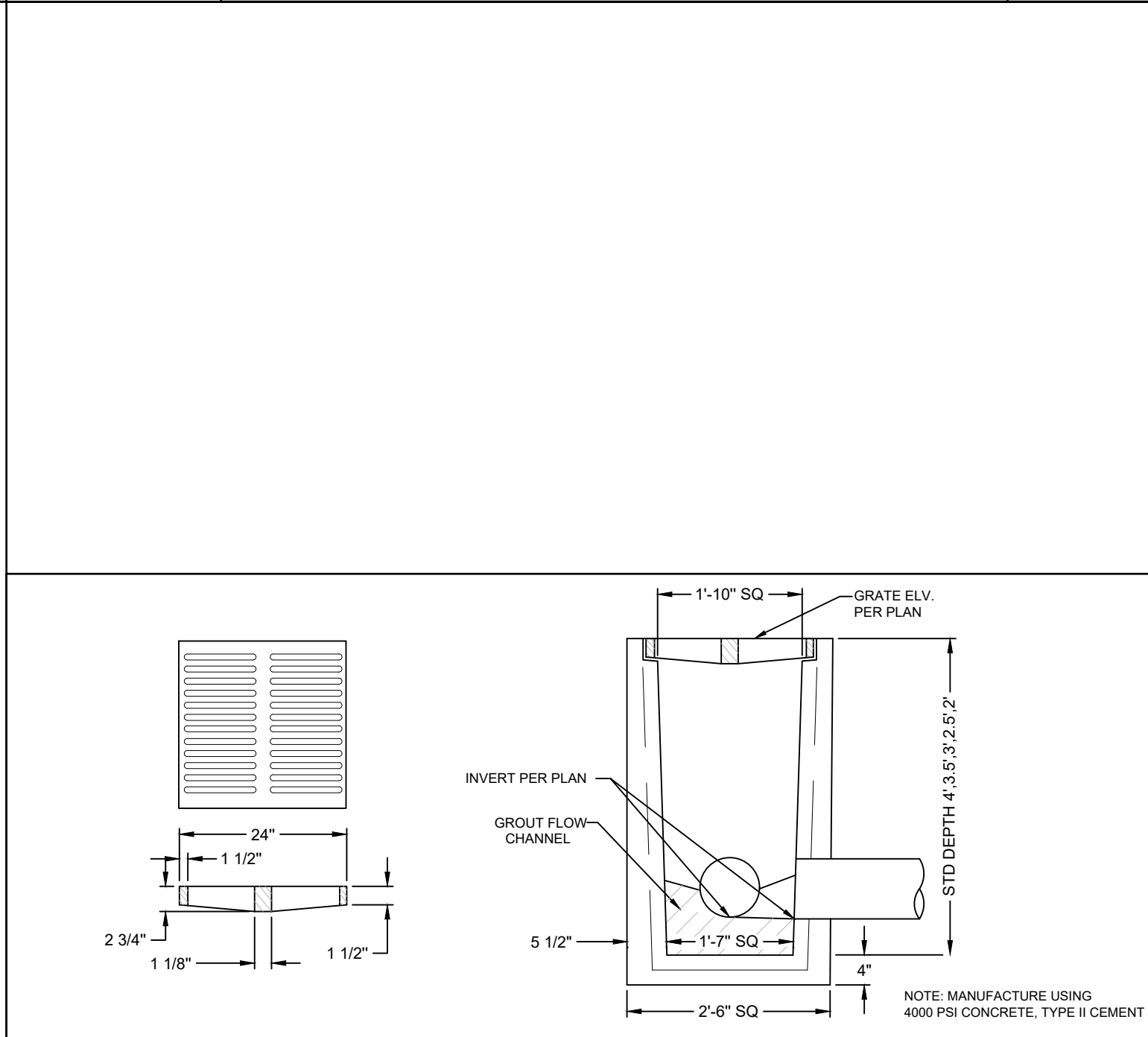
CONCRETE SIDEWALK
SCALE: N.T.S.
DETAIL#: SD-7A
REVISED 12/06/21



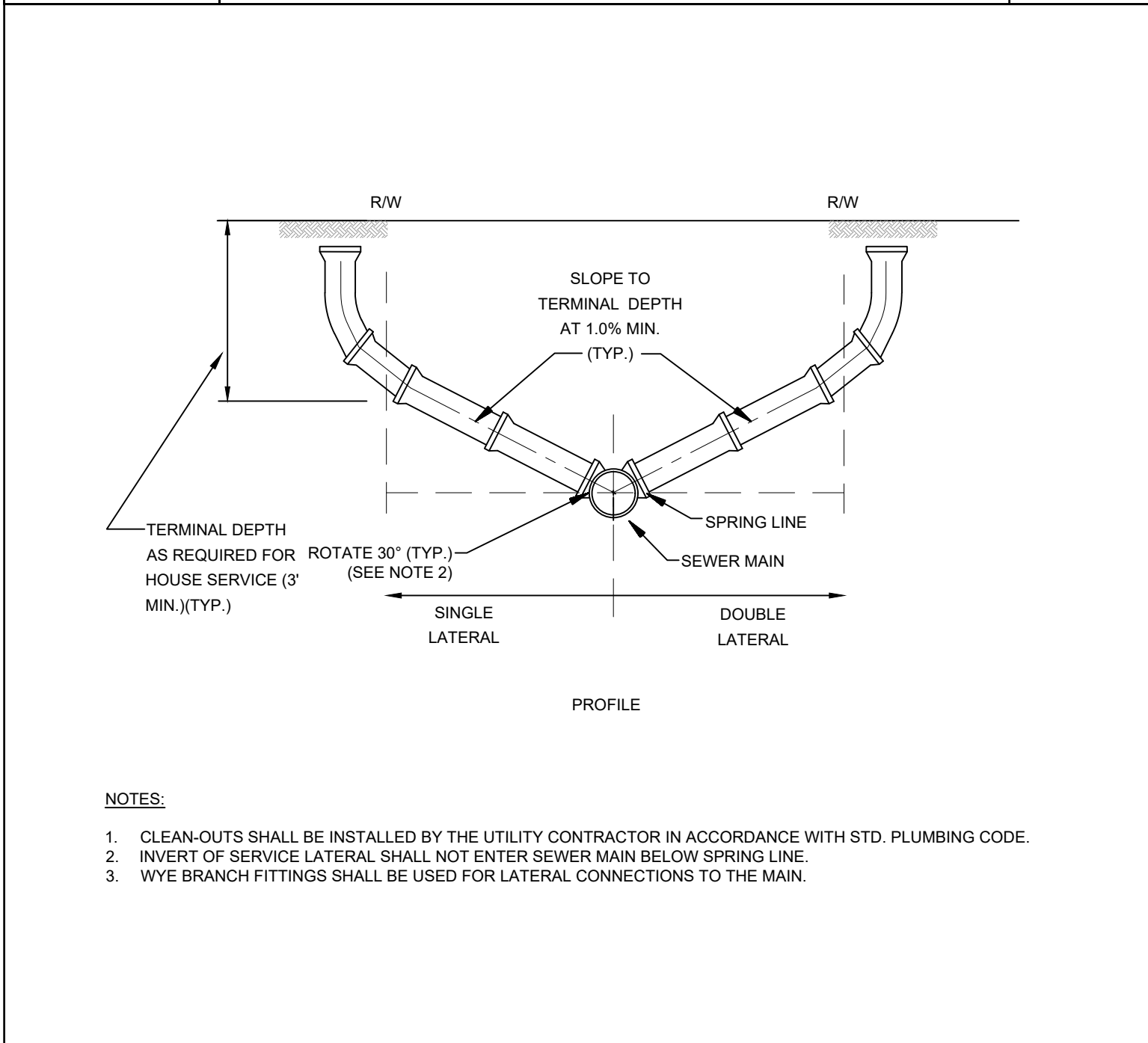
REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
SCALE: N.T.S.
DETAIL#: UD-6
REVISED 08/08/19



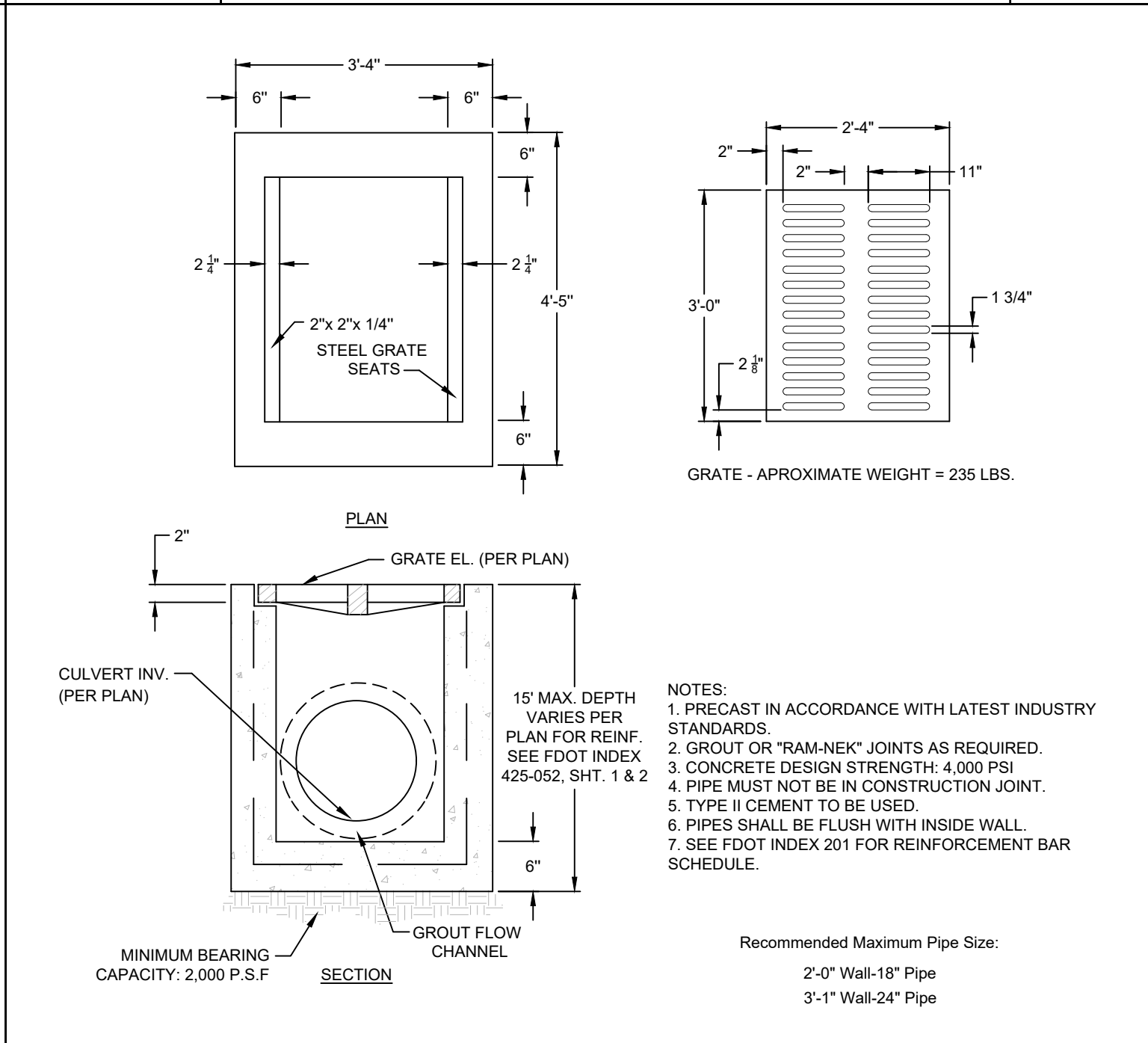
GREASE TRAP
SCALE: N.T.S.
DETAIL#: UD-8
REVISED 08/05/20



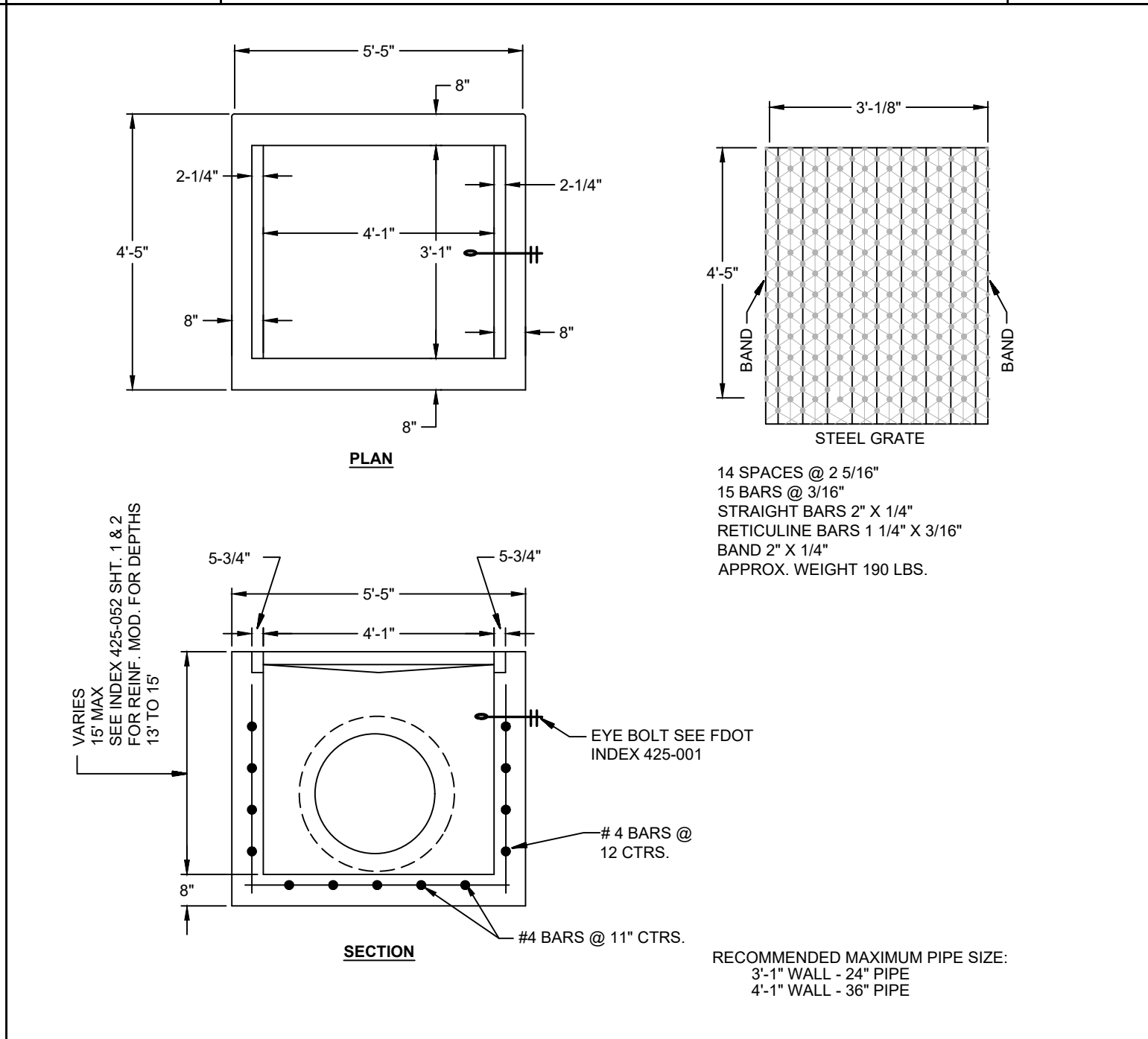
STANDARD YARD DRAIN
SCALE: N.T.S.
DETAIL#: GD-5
REVISED 02/24/20



SANITARY SEWER SERVICE LATERAL
SCALE: N.T.S.
DETAIL#: UD-3
REVISED 03/10/20



TYPE "C" INLET
SCALE: N.T.S.
DETAIL#: GD-1
REVISED 04/22/22



TYPE "D" INLET
SCALE: N.T.S.
DETAIL#: GD-2
REVISED 04/22/22

REVISIONS		DATE	BY	DESCRIPTION
1		11/20/22	JGD	PER CITY OF FERNANDINA BEACH COMMENTS
2				
3				
4				
5				
6				
7				
8				
9				

**ENGINEERING PLANS
FOR
FERNANDINA PAVILION
CONSTRUCTION DETAILS**
NASSAU COUNTY, FLORIDA



60% PLANS



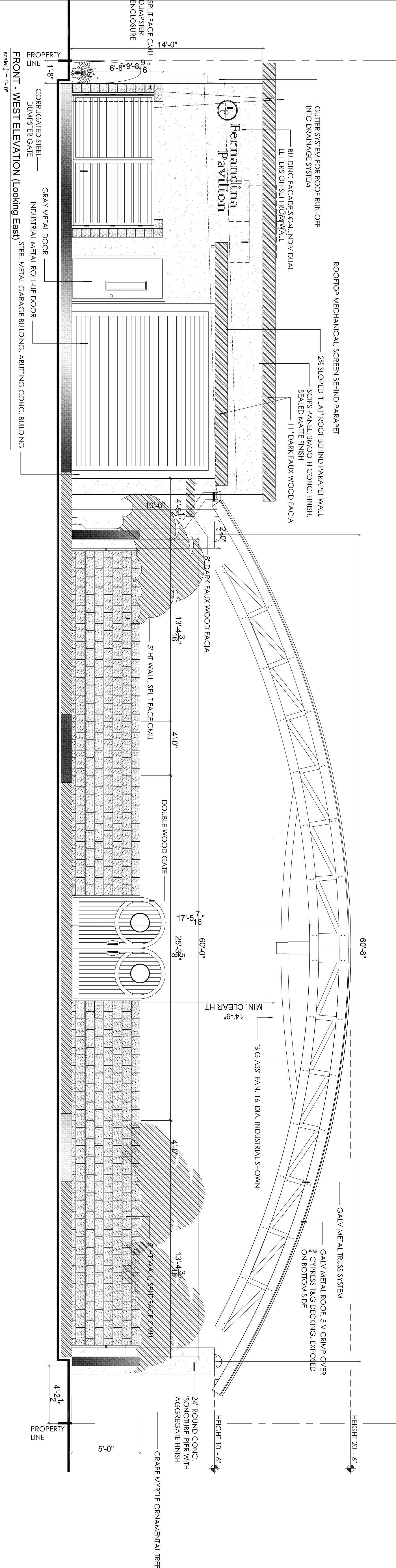
2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

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PROJECT NO: 22-122
ISSUE DATE: 10-27-22
DRAFTED BY: JGD
DESIGNED BY: MHL
CHECKED BY: MHL
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MULTI USE PAVILION

116 NORTH 2ND ST



GENERAL NOTES AND INFORMATION:

- DO NOT SCALE DRAWINGS.
- IF THE CONTRACTOR DISCOVERS DISCREPANCIES BETWEEN DRAWINGS AND THE CONDITIONS FOUND ON-SITE, CONFLICTING INFORMATION BETWEEN DRAWINGS, AND/OR CONFLICTING INFORMATION BETWEEN DRAWINGS OF THE VARIOUS DISCIPLINES, THE CONTRACTOR SHALL IMMEDIATELY CONSULT THE ARCHITECT / OWNER BEFORE PROCEEDING WITH THE WORK. SHOULD THE CONTRACTOR PROCEED WITH WORK BASED ON ASSUMED INTENT, CONFLICTING INFORMATION, AND/OR INCOMPLETE INFORMATION, HE/SHE DOES SO AT HIS/HER OWN RISK AND MAY BE HELD LIABLE FOR BOTH THE UNAPPROVED WORK AND ANY WORK TO RESTORE CONDITIONS TO THEIR ORIGINAL / INTENDED STATE.
- THESE DRAWINGS ARE BASED ON THE REASONABLY AVAILABLE INFORMATION AND READILY VISIBLE CONDITIONS AT THE TIME OF THE ARCHITECT'S SURVEY AND/ OR BEGINNING OF THE ARCHITECT'S WORK. THE CONTRACTOR SHALL IMMEDIATELY CONSULT THE ARCHITECT IF, UPON DIGGING OR IN THE CASE OF A REMODEL OR DEMOLITION, REMOVING EXISTING ELEMENTS, STRUCTURES, EQUIPMENT, AND/OR ASSEMBLIES AND UNDOCUMENTED CONDITIONS ARE DISCOVERED.
- MECHANICAL DUCT SIZING, VENT SIZING AND QUANTITY PER HVAC ENGINEER OR SUB CONTRACTOR. DESIGN SHOWN INDICATES INTENT TO ALIGN DIFFUSERS, NOT A SYSTEM DESIGN. SYSTEM TO BE DESIGNED BY ENGINEER OR QUALIFIED INSTALLER. CONSULT ARCHITECT IF NUMBER OF DIFFUSERS VARIES FROM NUMBERS SHOWN, TYP.
- PROVIDE SHOP DRAWINGS / CUT SHEETS FOR APPROVAL TO ARCHITECT / OWNER FOR ALL MILLWORK PRIOR TO FABRICATION.
- PROVIDE BLOCKING / REINFORCEMENT BEHIND ALL WALL MOUNTED MILLWORK.
- VERIFY APPLIANCE / EQUIPMENT SPECIFICATIONS AND SIZES W/ OWNER PRIOR TO FABRICATING ADJACENT MILLWORK OR MILLWORK TO RECEIVE APPLIANCES.
- KITCHEN EQUIPMENT SHOWN ARE BASIS-OF-DESIGN ONLY. COORDINATE ACTUAL PRODUCT SELECTIONS WITH OWNER / OWNER SUPPLIER.
- CONTRACTOR SHALL VISIT THE SITE DURING BIDDING AND SHALL FAMILIARIZE HIM OR HERSELF WITH THE EXISTING CONDITIONS.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY PERMITS FOR THE WORK INDICATED.
- ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT BUILDING CODE AND CURRENT FLORIDA FIRE PREVENTION CODE.
- WHERE APPLICABLE, ALL BLOCKING IN EXISTING FIRE RATED WALLS SHALL BE FIRE RETARDANT TREATED WOOD OR METAL STRAP TO PRESERVE ASSEMBLY FIRE RATING.
- PROVIDE BLOCKING / REINFORCEMENT BEHIND ALL GRAB BAR LOCATIONS.
- OWNER/CONTRACTOR SHALL COMMISSION A STRUCTURAL ENGINEER FOR ANY AND ALL WORK EFFECTING OR DESCRIBING LOAD-BEARING ASSEMBLIES, THE STRUCTURAL ENGINEERS WORK IN REGARD TO MEMBER SIZES, STRUCTURAL CONNECTIONS, MEMBER SPANS, FOUNDATION ASSEMBLY, AND ALL OTHER ASPECTS OF THE WORK BEARING THE LOADS NECESSARY FOR THE SAFE AND FUNCTIONAL SOUNDNESS OF THE BUILDING SHALL SUPERSEDE THESE DRAWINGS AND BE IN COMPLIANCE WITH FLORIDA RESIDENTIAL BUILDING CODE.

DRAWING LIST

- C-1 COVER SHEET
- S-1 SURVEY
- SP-1 SITE PLAN
- SL-1 SITE LAYOUT PLAN
- SL-2 SITE LAYOUT - FOOTINGS
- GD-1 GRADING AND DRAINAGE PLAN
- TR-1 DEMOLITION & TREE REMOVAL PLAN
- LS-1 LIFE SAFETY
- AR-1 ARCHITECTURE - GARAGE/DUMPSTER
- AR-2 ARCHITECTURE - KITCHEN
- AR-3 ARCHITECTURE - PAVILION
- AR-4 ARCHITECTURE - ELEVATIONS
- AR-5 ARCHITECTURE - ELEVATIONS
- AR-6 DETAILS
- LA-1 LANDSCAPE PLAN
- LA-2 LANDSCAPE DETAILS
- LA-3 LANDSCAPE SPECIFICATIONS
- LI-1 LIGHTING PLAN

PARCEL INFORMATION:

PROPERTY LOCATION:
116 NORTH 2ND STREET

RE PARCEL #S:
00-00-1800-0009-0020
00-00-1800-0009-0030
00-00-1800-0009-0040
00-00-1800-0009-0050

Land Use: CBD
Zoning: C-3
Proposed Use: Clubs, Public or Private;
Community and Recreation
IBC Proposed Use: - Assembly
NFPA Proposed Use - Not Required
Offstreet Parking - Not Required

Fernandina Pavilion
116 NORTH 2ND ST

COVER SHEET

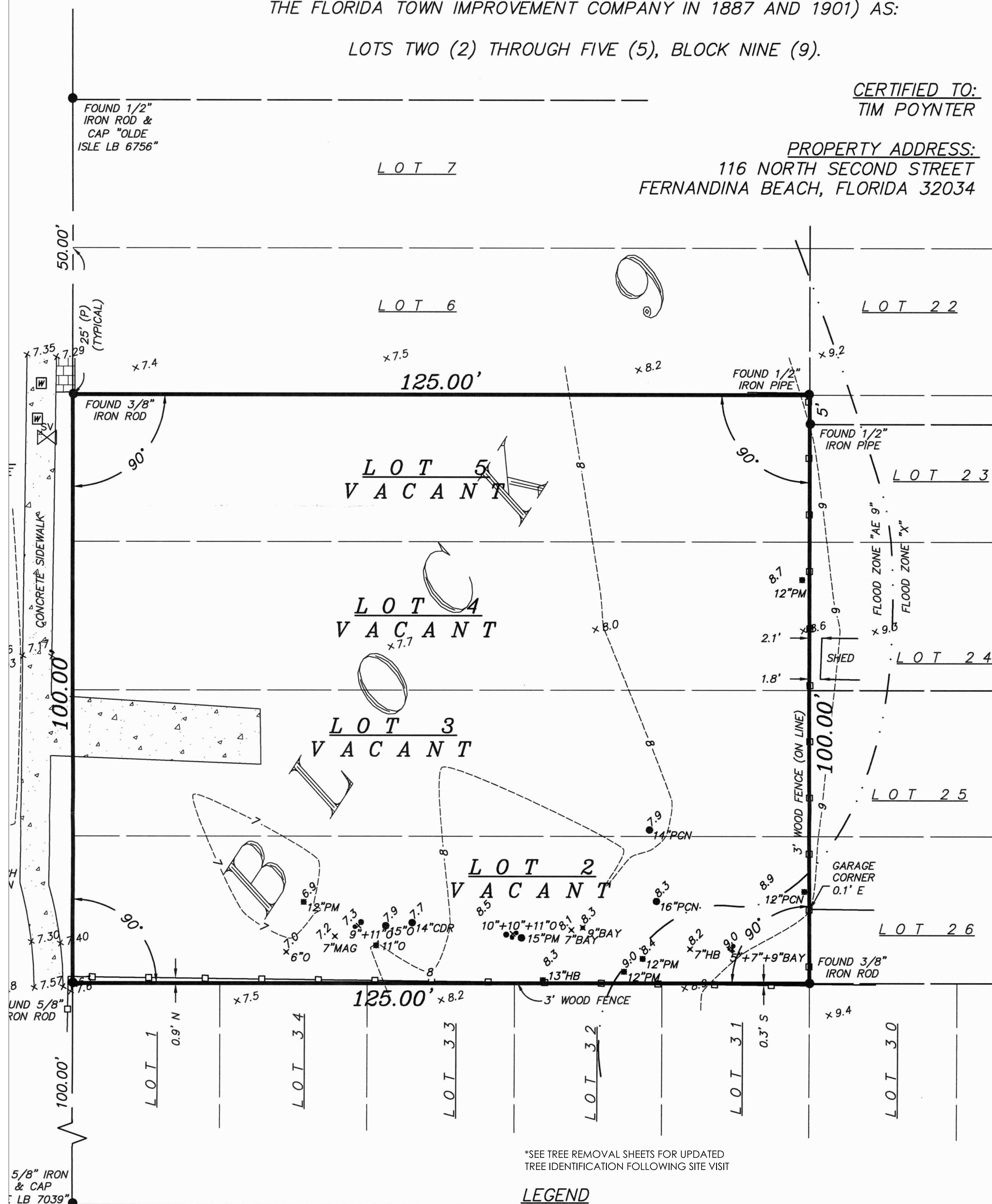
REVISIONS		
no.	description	by date

ALL THAT CERTAIN LOT PIECE, OR PARCEL OF LAND SITUATE, LYING AND BEING IN THE CITY OF FERNANDINA BEACH, (FORMERLY NAMED FERNANDINA), COUNTY OF NASSAU AND STATE OF FLORIDA AND BEING FURTHER DESCRIBED ACCORDING TO THE OFFICIAL MAP OR PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED, REVISED AND REISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901) AS:

LOTS TWO (2) THROUGH FIVE (5), BLOCK NINE (9).

CERTIFIED TO:
TIM POYNTER

PROPERTY ADDRESS:
116 NORTH SECOND STREET
FERNANDINA BEACH, FLORIDA 32034



*SEE TREE REMOVAL SHEETS FOR UPDATED
TREE IDENTIFICATION FOLLOWING SITE VISIT

LEGEND

-  = CONCRETE FLATWORK
 = WATER METER
 = WOOD OR VINYL FENCE
 SV = SEWER VALVE
 = CENTERLINE

(P) = PLAT

NAVD = NORTH AMERICAN VERTICAL DATUM

TREE LEGEND

BAY = BAY TREE
CDR = CEDAR TREE
HB = HACKBERRY TREE
MAG = MAGNOLIA TREE
O = OAK TREE
PM = PALM TREE

TREE DISCLAIMER:

NUMBER OF TREES SHOWN ON SURVEY: 25

SPECIES OF TREES HAVE BEEN IDENTIFIED TO THE BEST OF OUR KNOWLEDGE AND BELIEF; HOWEVER MANZIE & DRAKE LAND SURVEYING WILL ASSUME NO LIABILITY, EXPRESSED OR IMPLIED, FOR THE CORRECTNESS OF SAID SPECIES IDENTIFICATION.

TREES HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE UNDER CURRENT CONDITIONS AND HAVE A POSITIONAL TOLERANCE OF APPROXIMATELY 2 TO 3 FEET. CRITICAL TREES SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

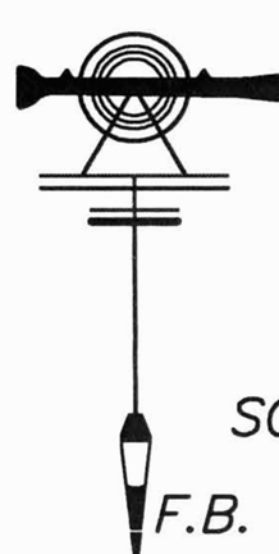
accord with the description provided by the client located or shown.
abstracted by this office for easements, rights-of-way, record.

based on recovered monumentation.

within flood zone "X & AE 9" as per F.E.M.A. Flood 0237 G", Dated "08/02/2017". Flood Zone information is provided as a courtesy and is approximate at Nassau County Building Department for accuracy. We note that Flood Zone information is not covered by the requirements to be shown per Chapter 5J-17, Florida Statutes, 472.027, Florida Statutes.

North American Vertical Datum of 1988. (N.A.V.D. '88)
disk found in the Standard Marine Building. (Elevation

MEETS THE
BY THE FLORIDA
AND MAPPERS
STRATIVE CODE,
IDA STATUTES.



MANZIE & DRAKE LAND SURVEYING

117 South Ninth Street, Fernandina Beach, FL 32034
(904) 491-5700 www.ManzieAndDrake.com
Certificate of Authorization Number "LB 7039"

"OUR *SIGHTS* ARE ON THE FUTURE,
SET YOUR *SITES* ON US."

SCALE: 1"=20' JOB NO: 21297 DATE: 08/19/2021 CADD: LP

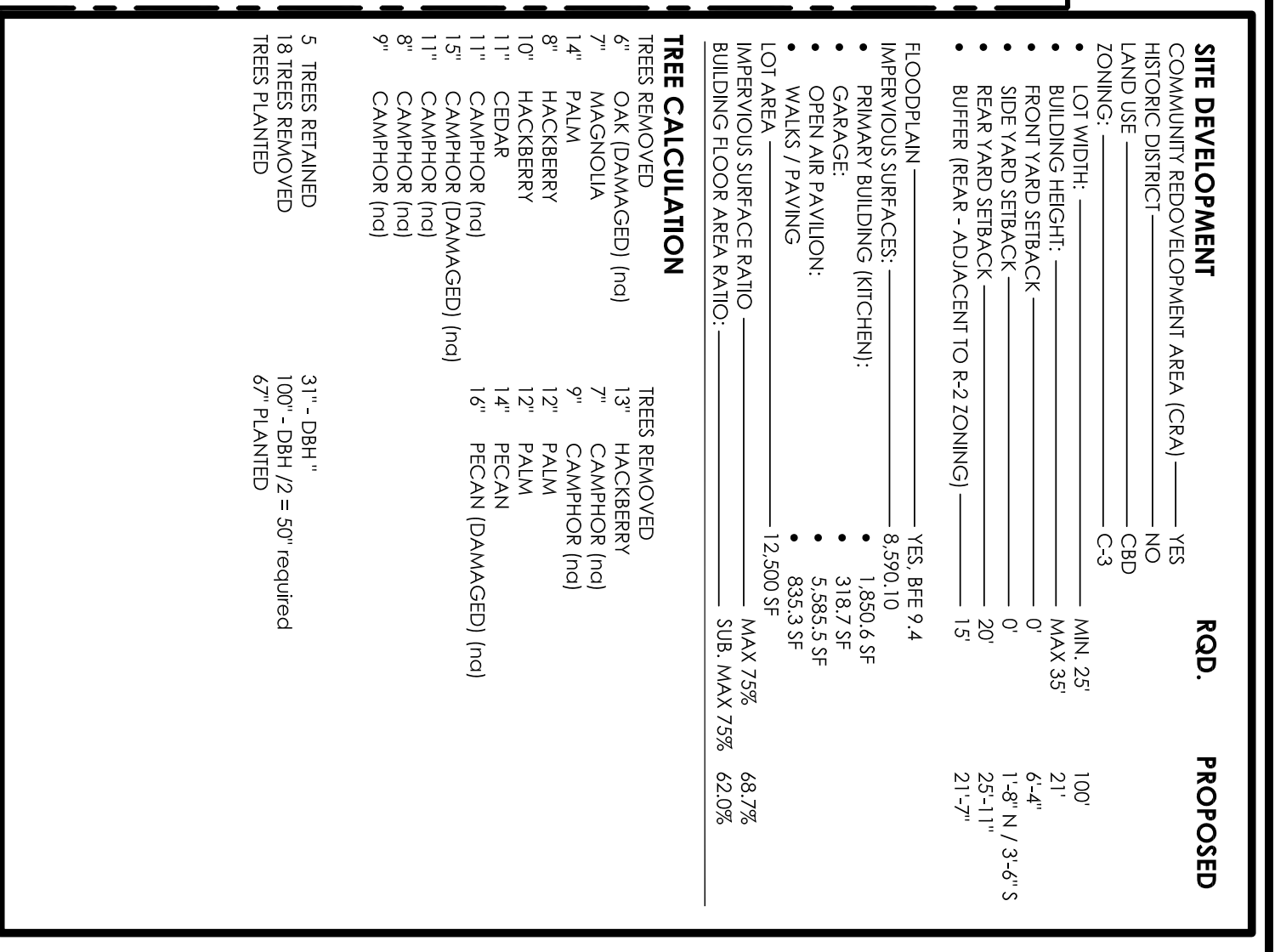
F.B. NO: X-354 PAGE NO: 18 FIELD CREW: GS FILE NO: A-5458

9/1/21

**Fernandina Pavilion
116 NORTH 2ND ST
SURVEY**

S-
SHEET:
DATE: NOVEMBER 27 2022

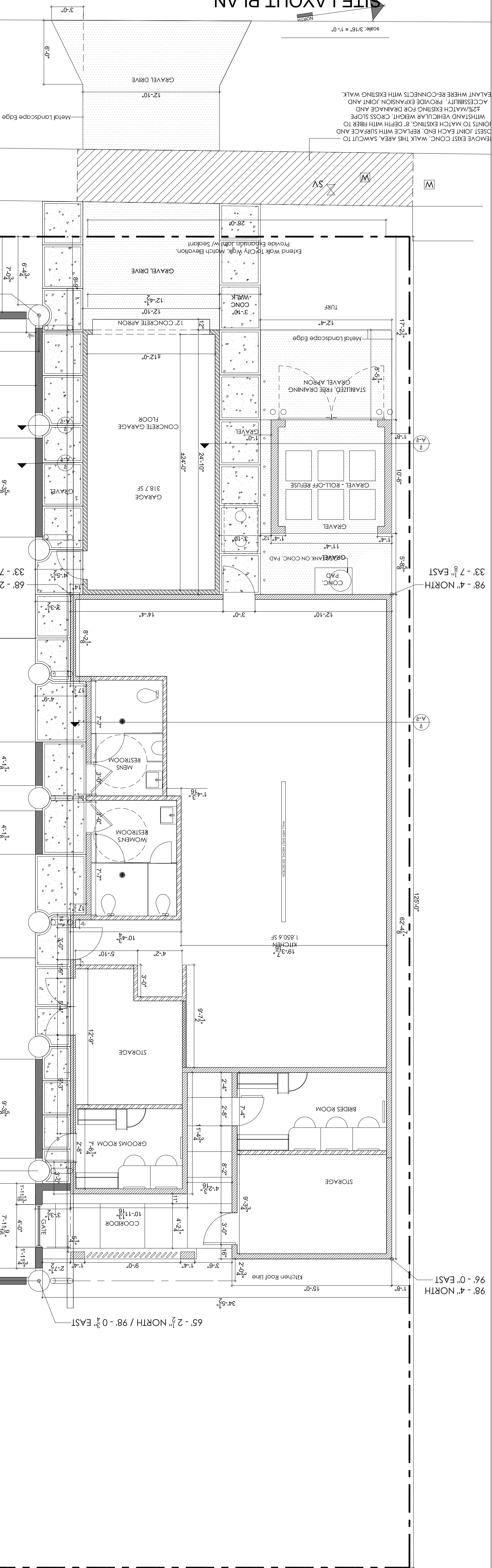
QTY	COMMON NAME	BOTANICAL NAME	SIZE	NOTES
1	Box Elder	<i>Achras glaberrima</i>	20 x 2.5 x 3" cel	
1	Black Olive	<i>Canarium</i>	15 x 6.7" H	multi-trunk
1	Italian Cypress	<i>Cupressus sempervirens</i>	15 x 6.7" H	
1	Shrublet Juniper	<i>Juniperus scopulorum</i> 'Sky rocket'	7 gal 3.0 L	
11	Blueberry	<i>Vaccinium corymbosum</i>	15 gal 6 m. H	
7	Black Nettle Design	Carex fascis three part	1 gal	
7	Turf	<i>Phlox subulata</i>	1 gal	
7	Red poppies	<i>Prostrata</i>	Soil	
		Prostrata up	7 gal 3.0 L	
		Prostrata up		Plant 30" oc, 100 poppies



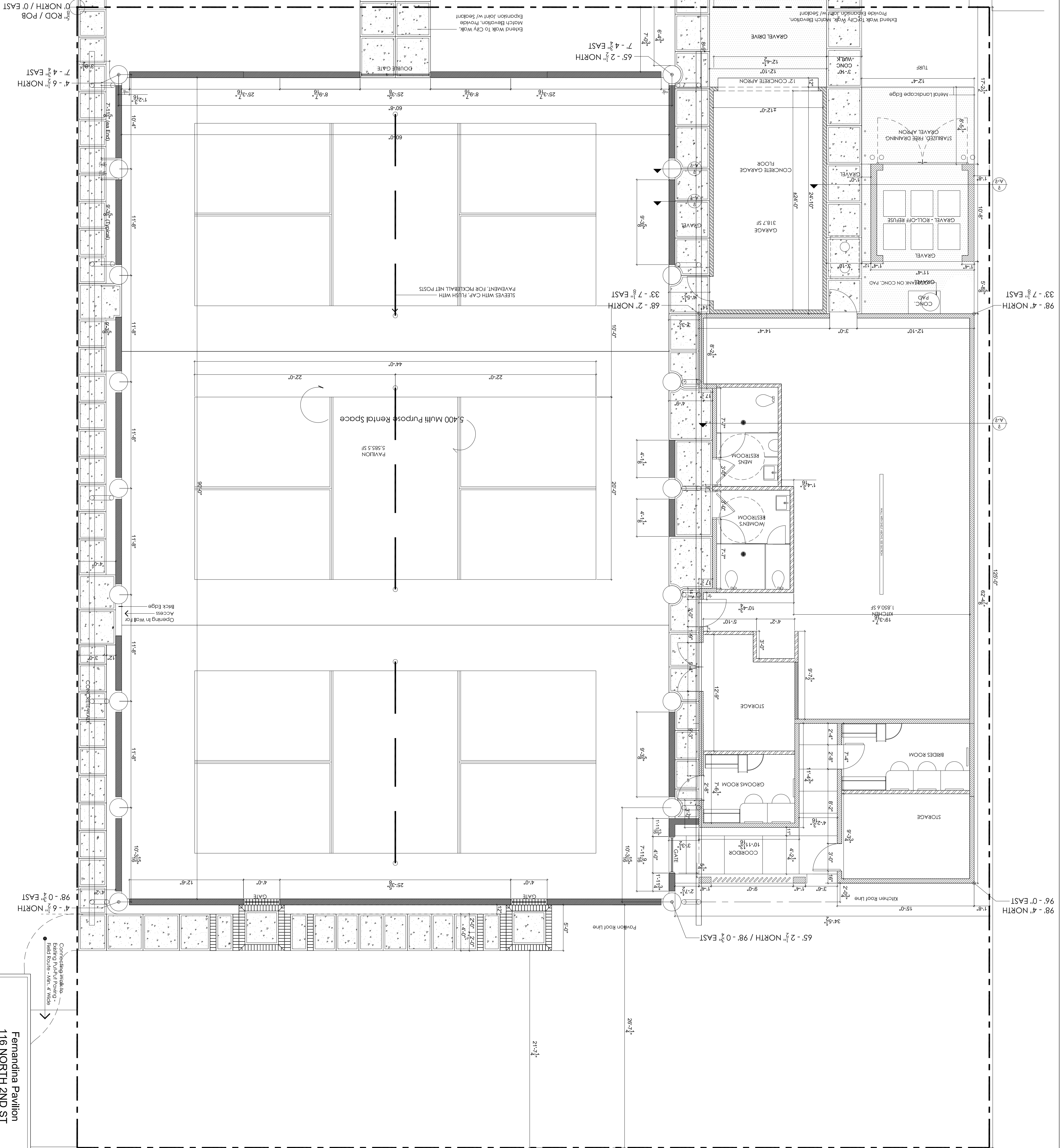
SITE LAYOUT PLAN

Scale: 3/16" = 1'-0"

REMOVE EXIST CONC. WALK THIS AREA, SAWCUT TO
BEST JOINT EACH END, REPLACE WITH FIBER TO
JOINTS TO MATCH EXISTING, 8" DEPTH WITH FIBER TO
WITHIN 2" OF JOINTS, 1" CROSS SLOPE
422" MATCH EXISTING FOR DRAINAGE AND
ACCESSIBILITY. PROVIDE EXPANSION JOINT AND
FLANT WHERE RE-CONNECTS WITH EXISTING WALK.



Catch



Fernandina Pavilion
116 NORTH 2ND ST
SITE LAYOUT PLAN

SHEET:
DATE: NOVEMBER 27, 2022
SL-1

SITE LAYOUT - FOOTING

scale: 3/16" = 1'-0"

NORTH

EDGE EXISTING ASPHALT ROAD

Catch Basin



AS

98' - 4" NORTH - 33' - 7 $\frac{1}{8}$ " EAST

33' - 7 1/8" EAST

STEEVES WITH CAP, FLUSH WITH PAVEMENT, FOR PICKLEBALL NET POSTS

98' - 4" NORTH
96' - 0" EAST —

65' - 2 1/2" NORTH / 98' - 0 3/4" EAST-

— 65' - 2 $\frac{1}{2}$ " NORTH
7' - 4 $\frac{2}{3}$ " EAST

4' - 6 1/2" NORTH
7' - 4 3/4" EAST

8.2" ROD / POB
0' NORTH / 0' EAST

90.06

CONCRETE WALL

ATE

DATE _____

Fernandina Pavilion
116 NORTH 2ND ST

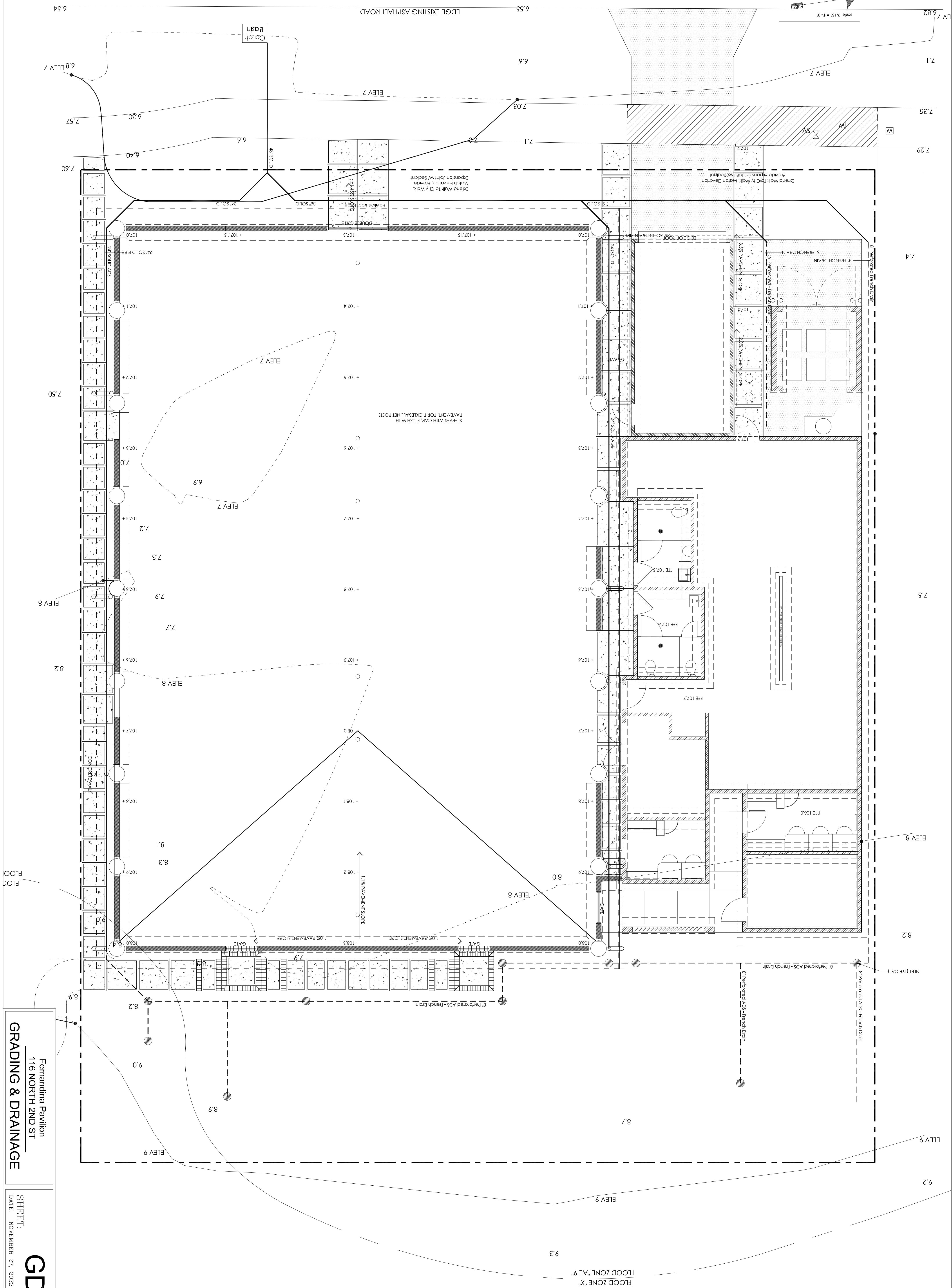
SITE LAYOUT - FOOTING

SHEET:
DATE: NO

NOVEMBER 27, 2022

SL-2

GRADING & DRAINAGE

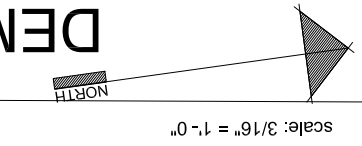


Fernandina Pavilion
116 NORTH 2ND ST

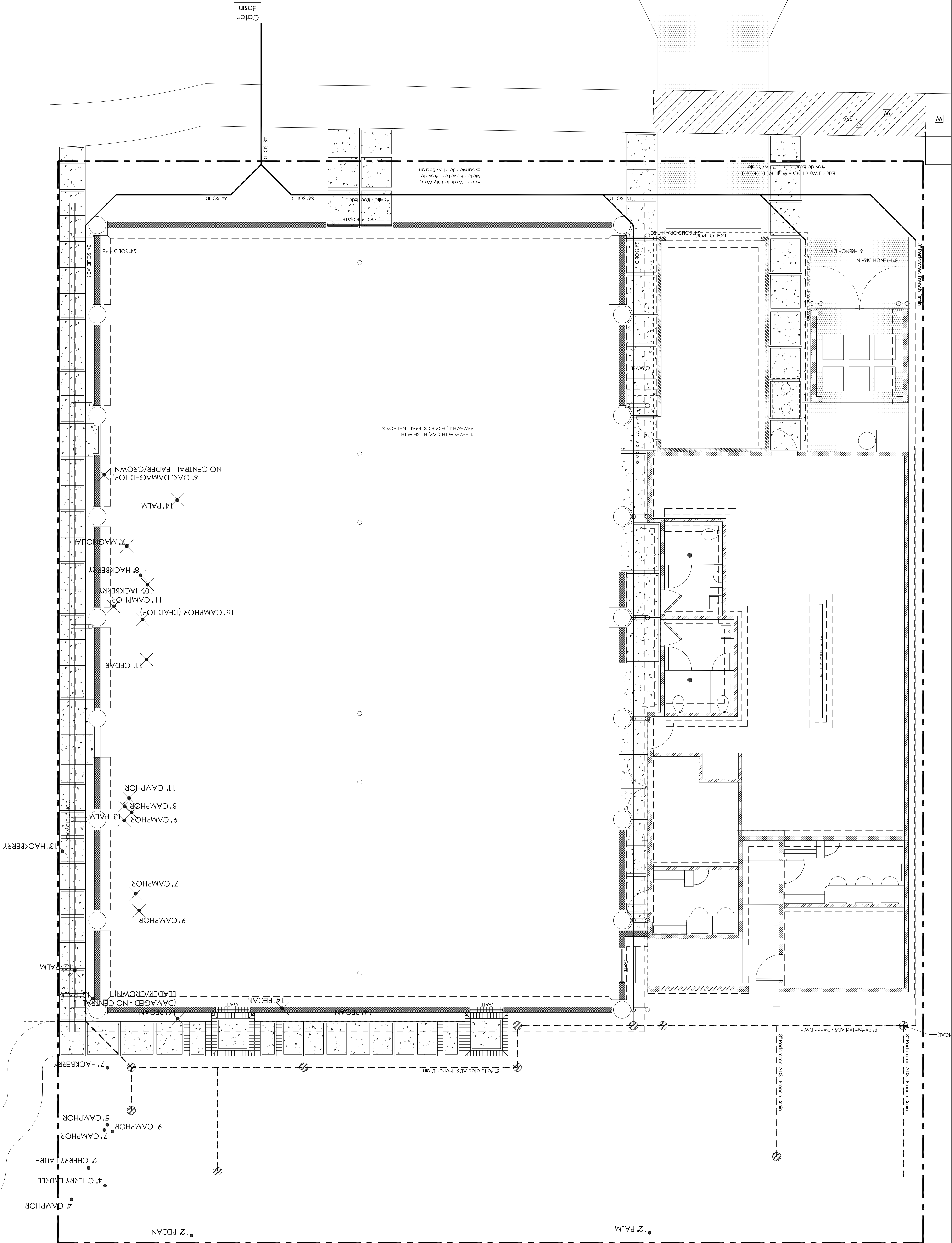
GRADING & DRAINAGE

GD-1
SHEET:
DATE: NOVEMBER 27, 2022

DEMOLITION / TREE REMOVAL



EDGE EXISTING ASPHALT ROAD



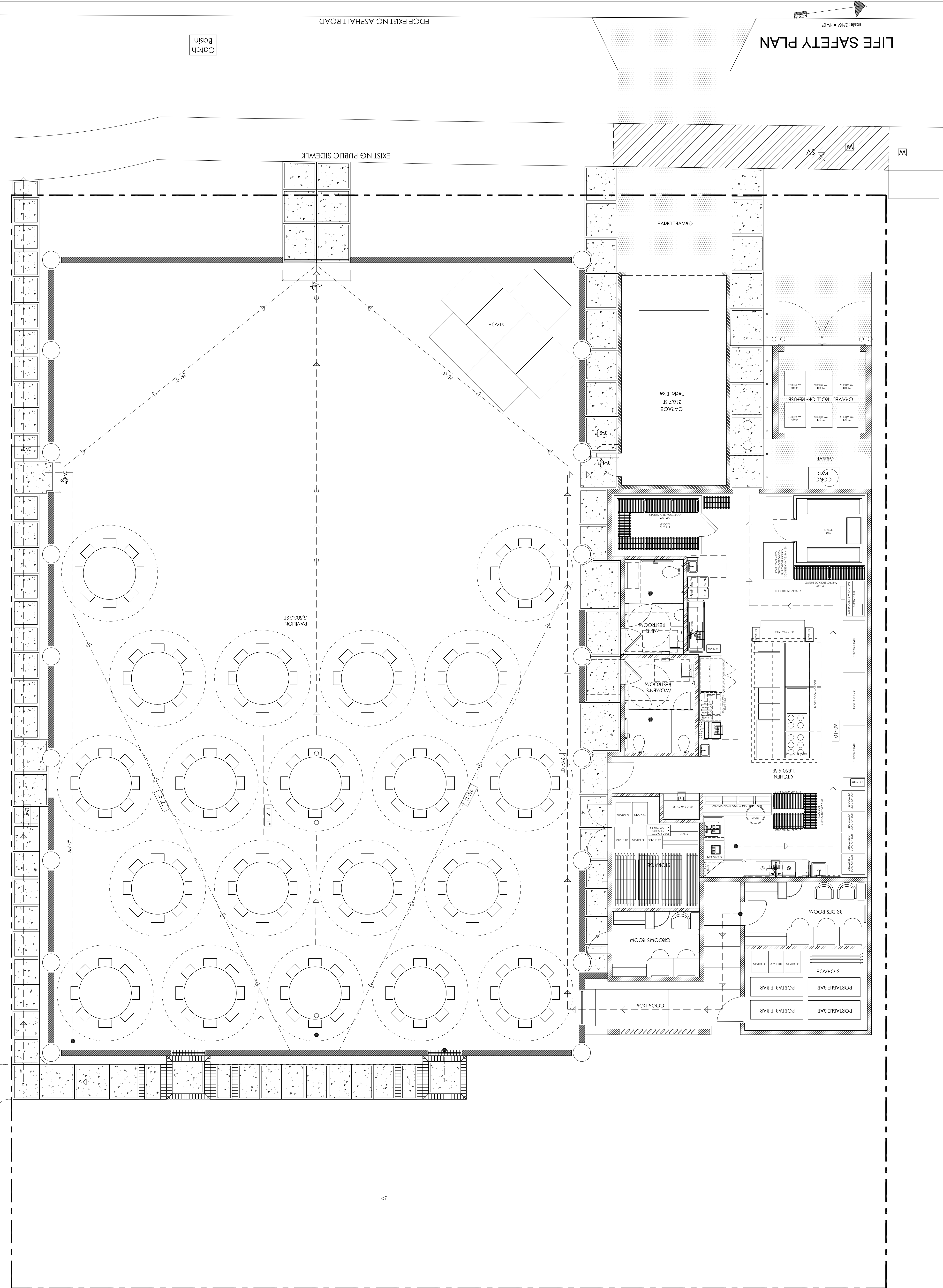
TREE CALCULATION

6'	OAK (DAMAGED) (no)	13'	HACKBERRY
7'	MAGNOLIA	7'	CAMPHOR (no)
14'	PALM	9'	CAMPHOR (no)
10'	HACKBERRY	12'	PALM
11'	CEDAR	14'	PECAN
11'	CAMPHOR (no)	16'	PECAN (DAMAGED) (no)
15'	CAMPHOR (DAMAGED) (no)		
11'	CAMPHOR (no)		
8'	CAMPHOR (no)		
9'	CAMPHOR (no)		

5 TREES RETAINED	31" - DBH "
18 TREES REMOVED	100' - DBH 12 = 90" required
18 TREES PLANTED	67" PLANTED

Fernandina Pavilion
116 NORTH 2ND ST
DEMOLITION / TREE REMOVAL

SHEET:
DATE: NOVEMBER 27, 2022
TR-1



PARCEL INFORMATION:

PROPERTY LOCATION:
116 NORTH 2ND STREET

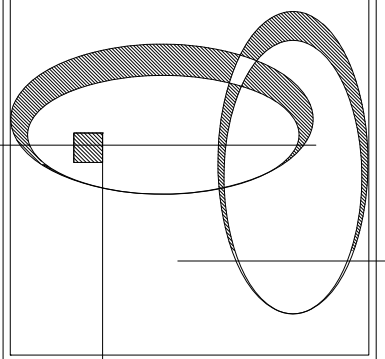
RE PARCELS #1'S:
20-000-1800-0009-0000
00-00-1800-0009-0040
00-00-1800-0009-0050

Long Use: C3D
Proposed Use: Clubs, Public or Private
Community and Recreation
IBC Proposed Use: Assembly A-2
Maximum Occupancy: 373
Official Posting: Not Required

MAXIMUM OCCUPANTS ALLOWED: 373
PROGRAMMED MAXIMUM OCCUPANTS: 225

Fernandina Pavilion
116 NORTH 2ND ST
LIFE SAFETY

SHEET:
DATE: NOVEMBER 28, 2022
LS-1



Fernandina Pavilion
116 NORTH 2ND ST

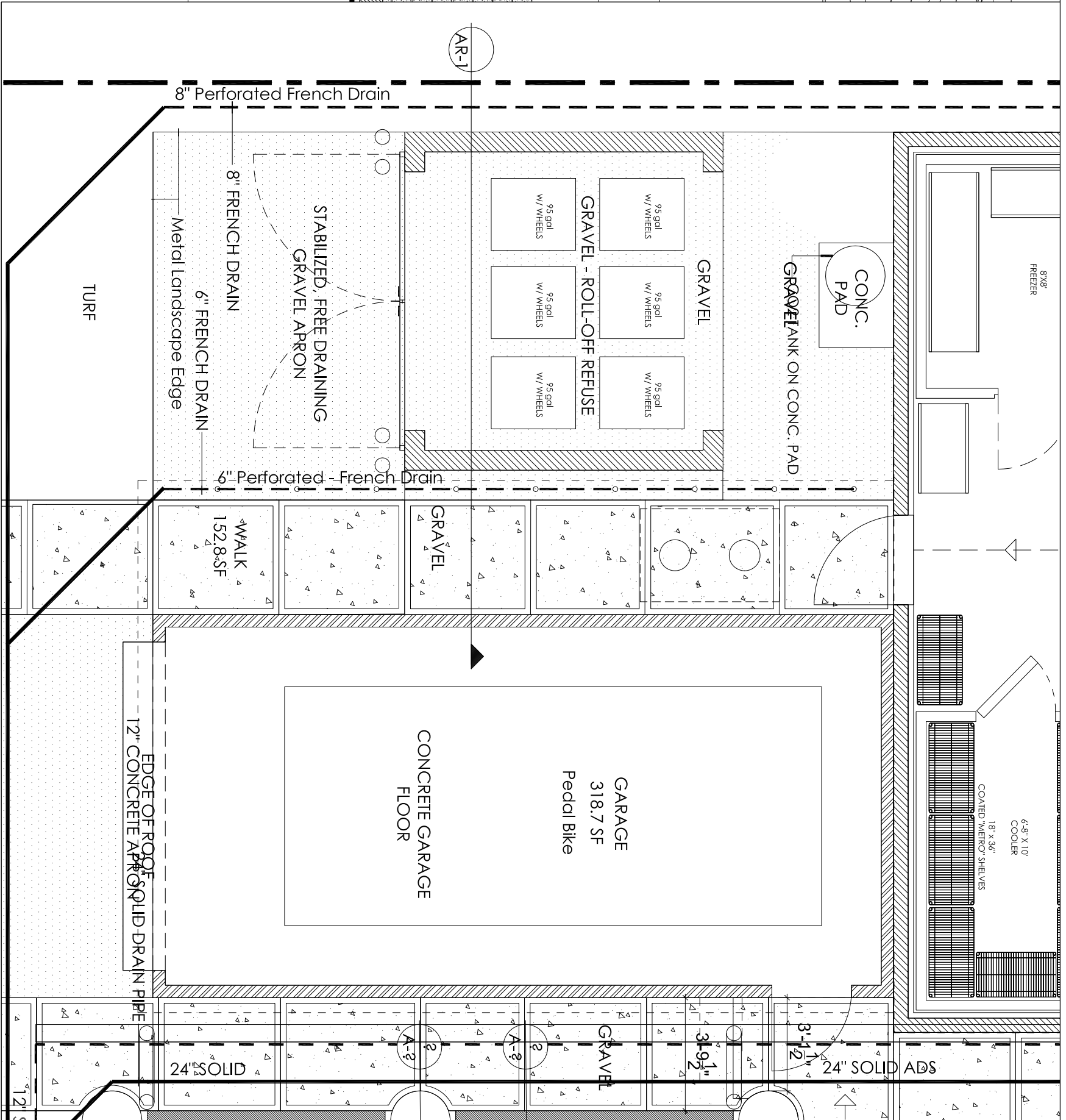
ARCHITECTURE
GARAGE / DUMPSTER

REVISIONS			
no.	description	by	date

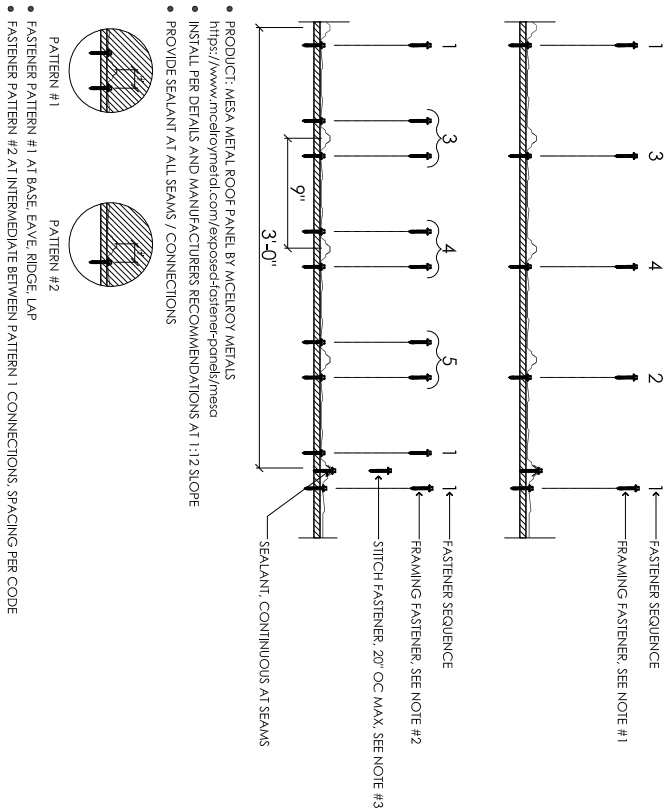
AR-1

SHEET:
DATE: NOVEMBER 27, 2022

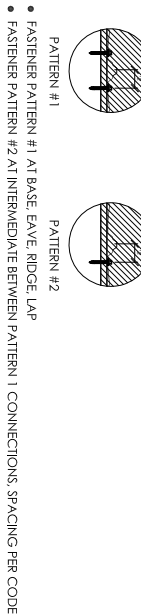
PLAN VIEW - DUMPSTER & GARAGE
SCALE: $\frac{1}{4}" = 1'-0"$



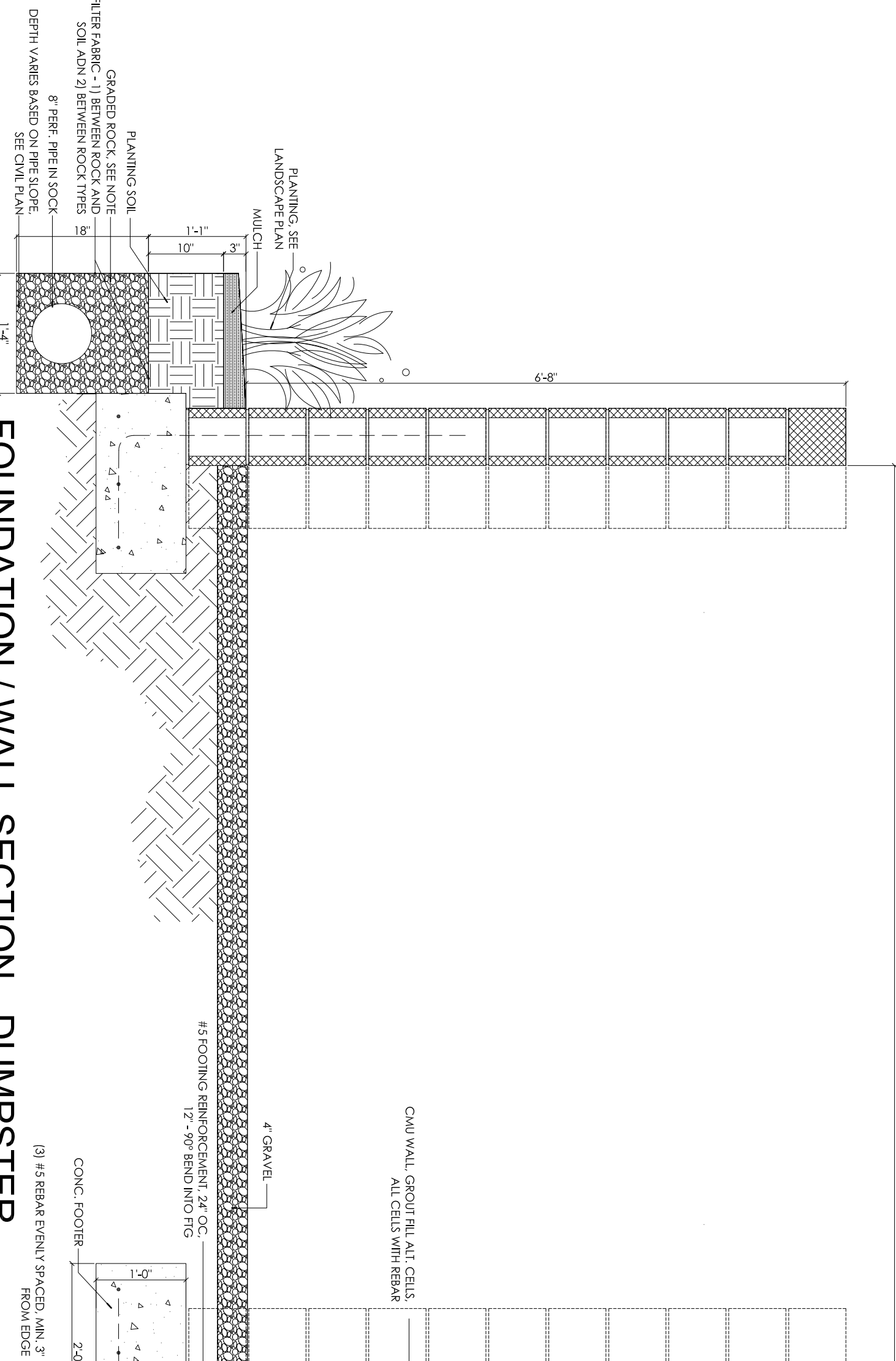
FASCIA W/ BUILT IN
GUTTER
scale: $\frac{1}{2}" = 1'-0"$



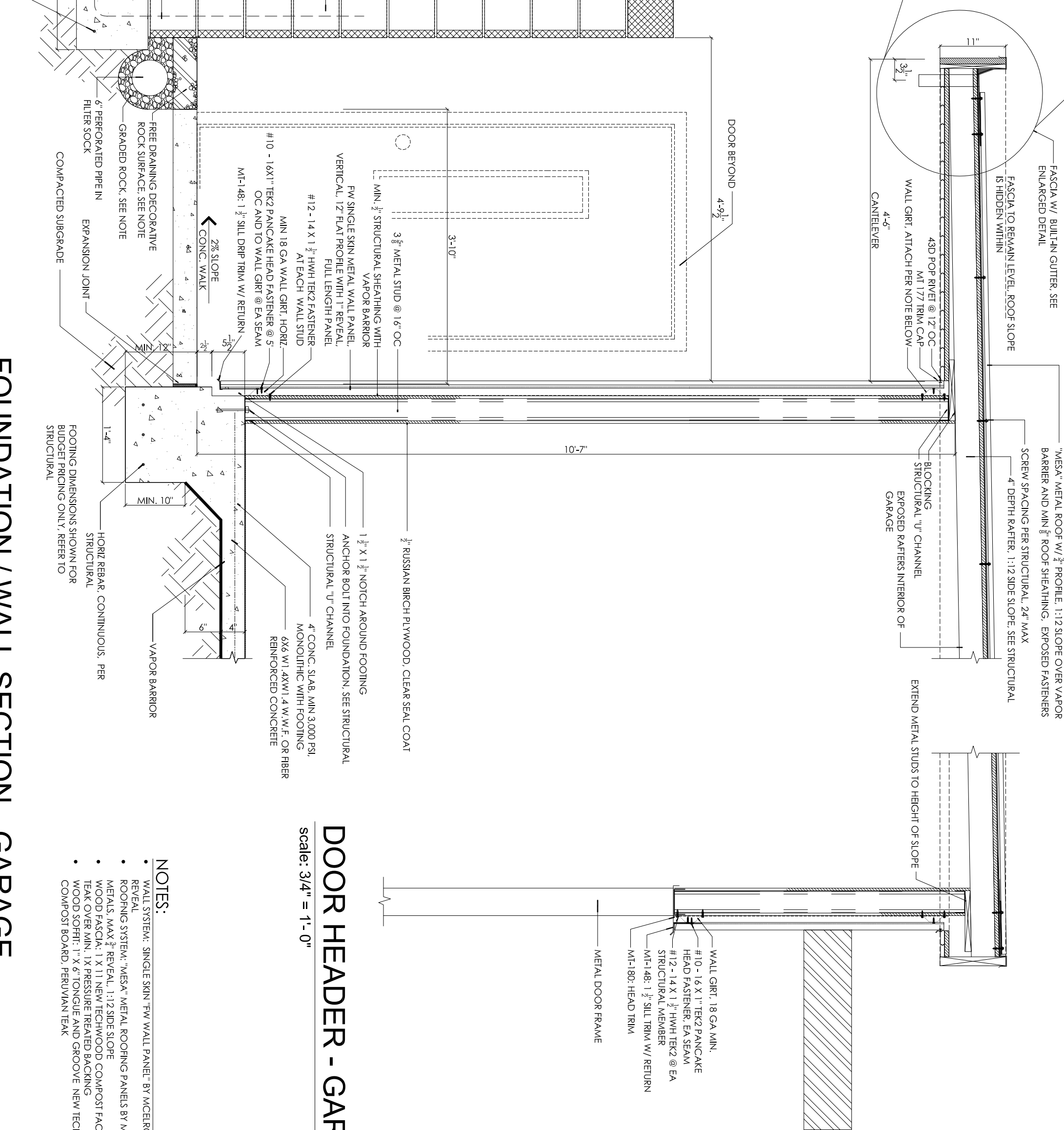
METAL ROOF FASTENER DETAIL
scale: $\frac{1}{2}" = 1'-0"$



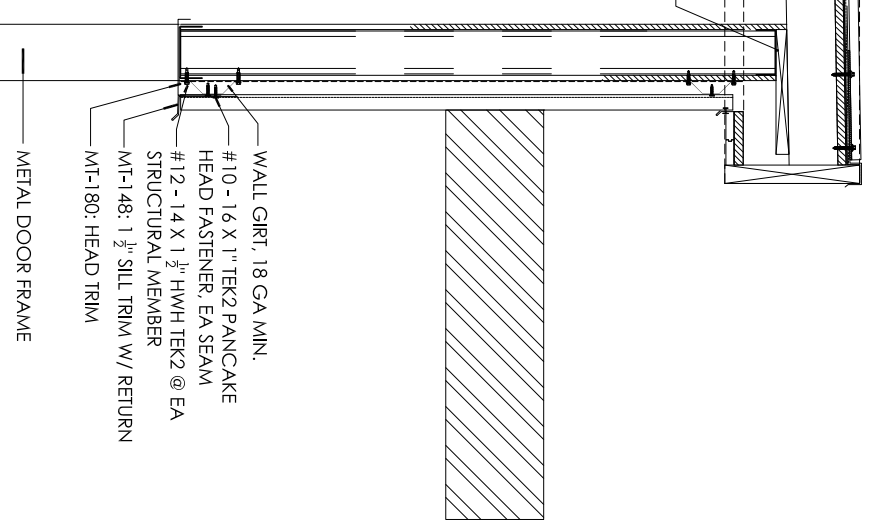
FOUNDATION / WALL SECTION - DUMPSTER
scale: $\frac{3}{4}" = 1'-0"$



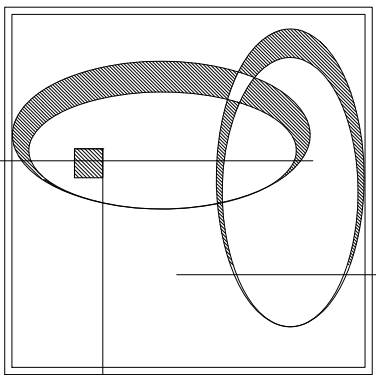
FOUNDATION / WALL SECTION - GARAGE
scale: $\frac{3}{4}" = 1'-0"$



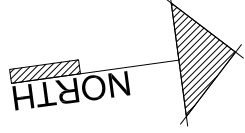
DOOR HEADER - GARAGE
scale: $\frac{3}{4}" = 1'-0"$



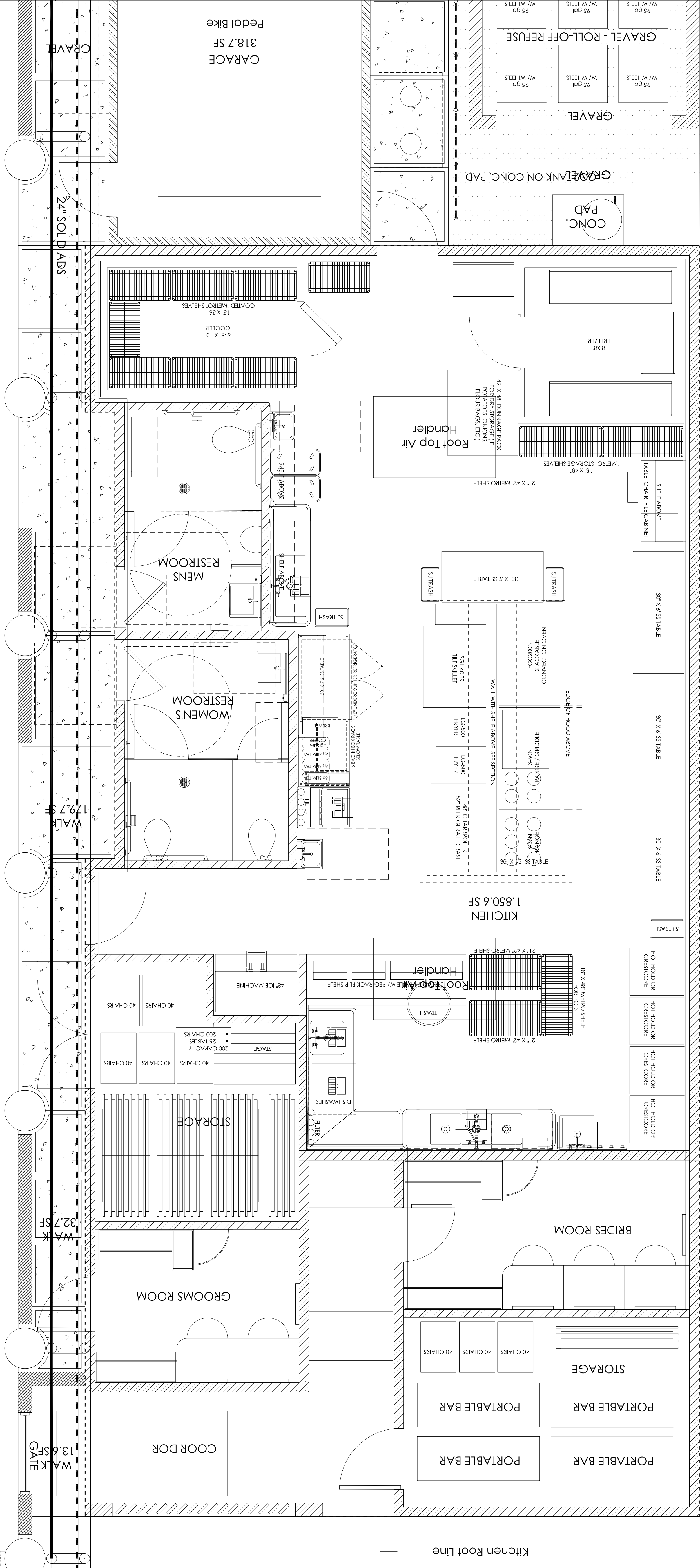
- NOTES:
- WALL SYSTEM: SINGLE EBM TYP WALL PANEL BY AGCEROY METALS W/ 1\"/>
 - REVEAL: 1\"/>
 - METALS: MAX 2\"/>
 - WOOD: MAX 4\"/>
 - WOOD JOINT: 1\"/>



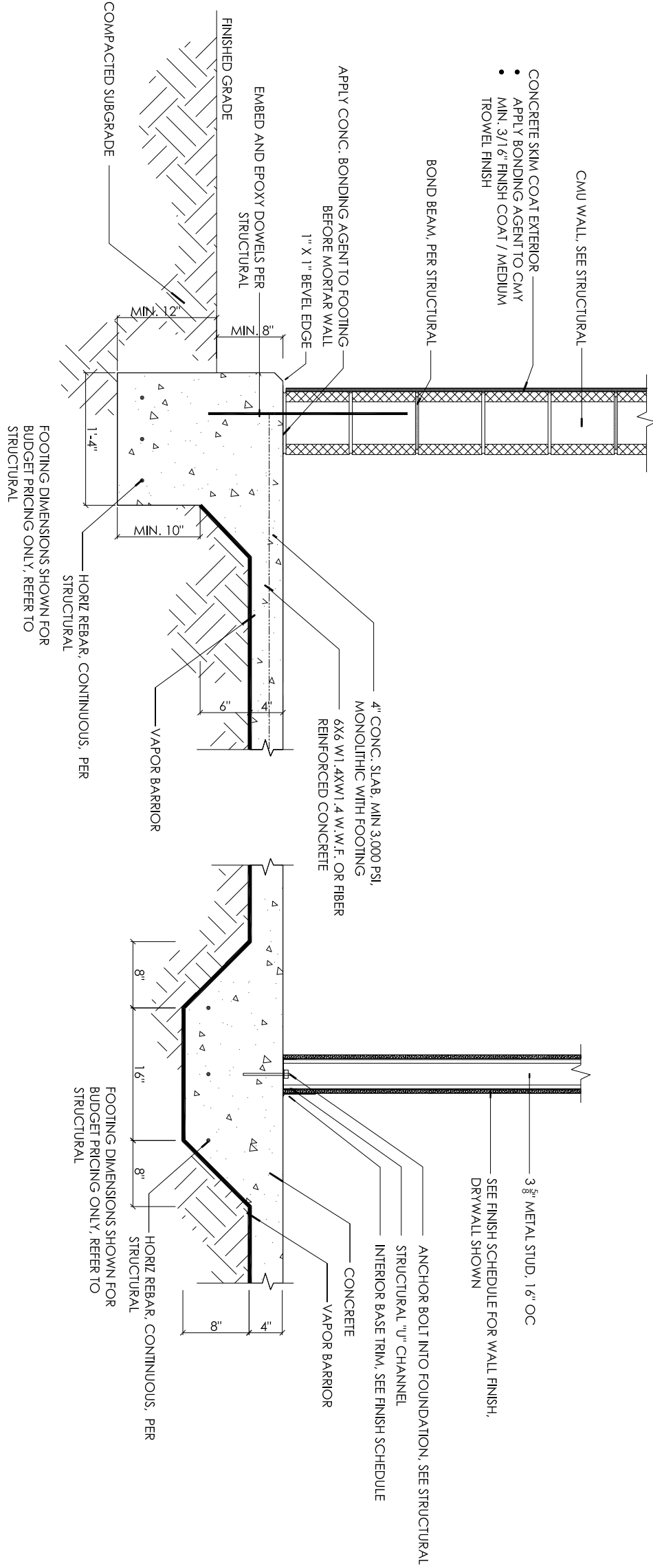
CHAD GRIMM STUDIOS
2539 HYDE PARK ROAD
JACKSONVILLE, FL 32210
(904) 236-9757



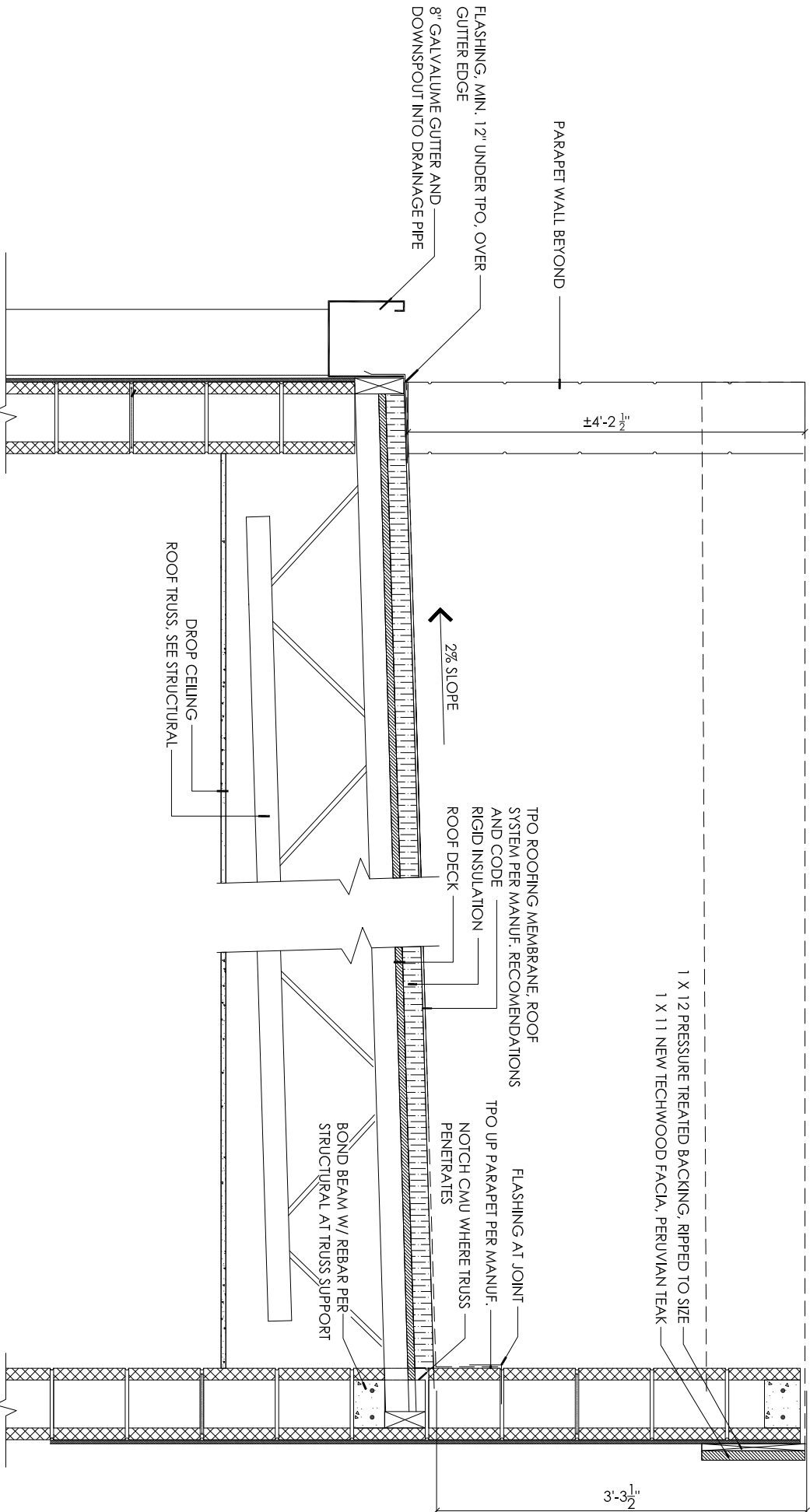
PLAN VIEW - KITCHEN
SCALE: 3/8" = 1'-0"



- CMU WALL SYSTEM - KITCHEN
- INTERIOR FRAME BEARING WALL
- FRAME / ARCH WALL PANE SYSTEM - GARAGE
- PARTIAL HT CMU WALL SYSTEM - PAVILION & DUMPSTER



FOUNDATION / WALL SECTION - KITCHEN
scale: 3/4" = 1'-0"



TYPICAL ROOF SECTION
scale: 3/4" = 1'-0"

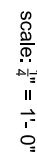
Fernandina Pavilion
116 NORTH 2ND ST

ARCHITECTURE
KITCHEN

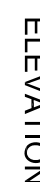
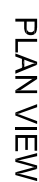
REVISIONS		
no.	description	by date



2539 HYDE PARK ROAD
JACKSONVILLE FL 32210
(904) 236-9757



scale: $1\frac{1}{2}'' = 1'-0''$



scale: 1 $\frac{1}{2}$ inch = 1'-0"

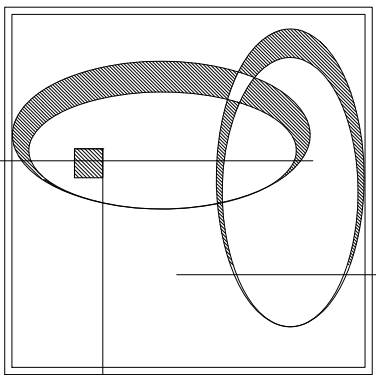


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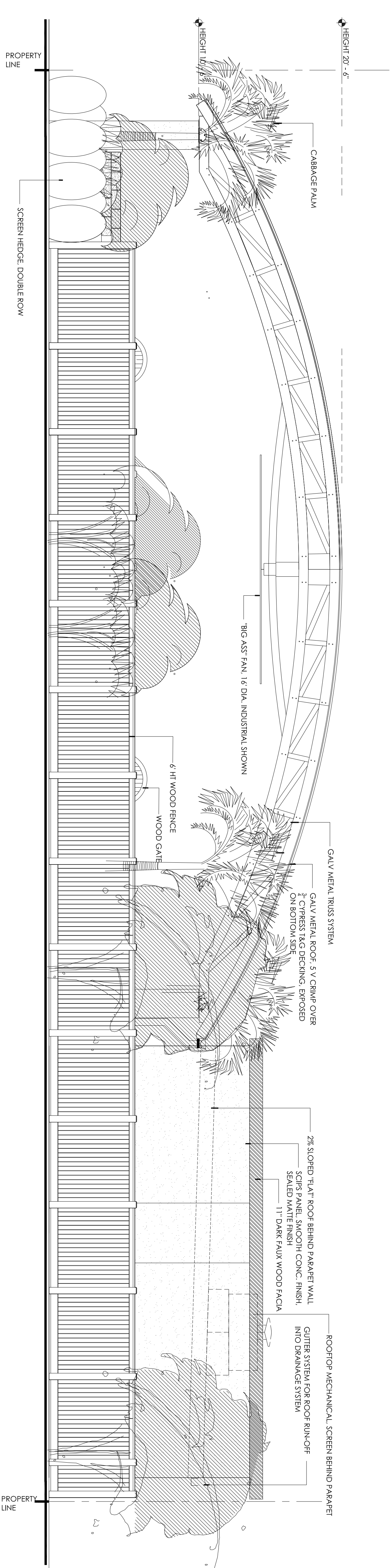
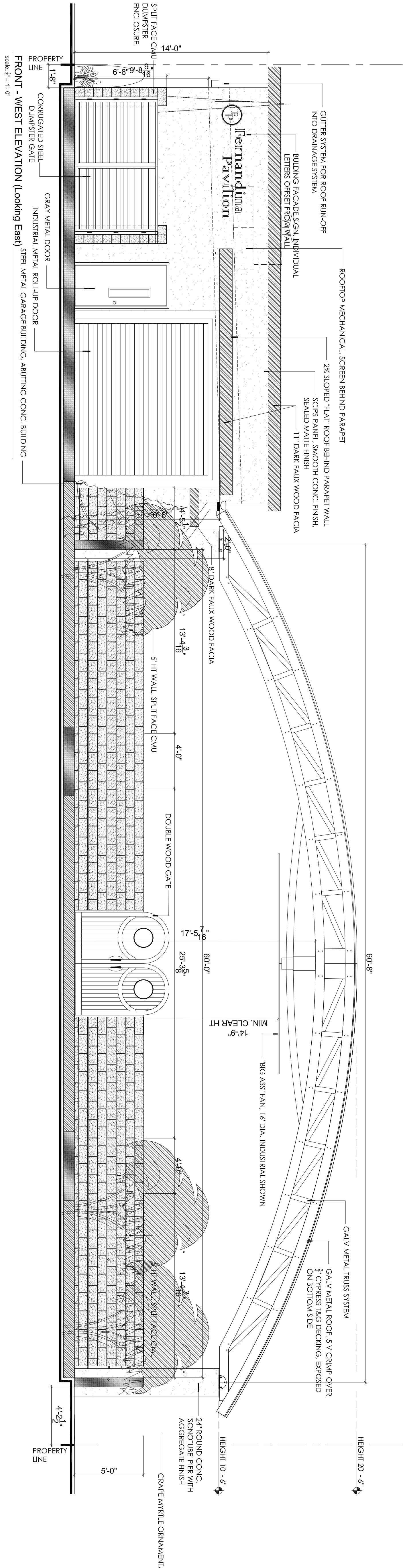


scale: 3/4" = 1'-0"

ARCHITECTURE
PAVILION



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JACKSONVILLE, FL 32210
(904) 236-9757



Fernandina Pavilion
116 NORTH 2ND ST

ARCHITECTURE EXT. ELEVATIONS

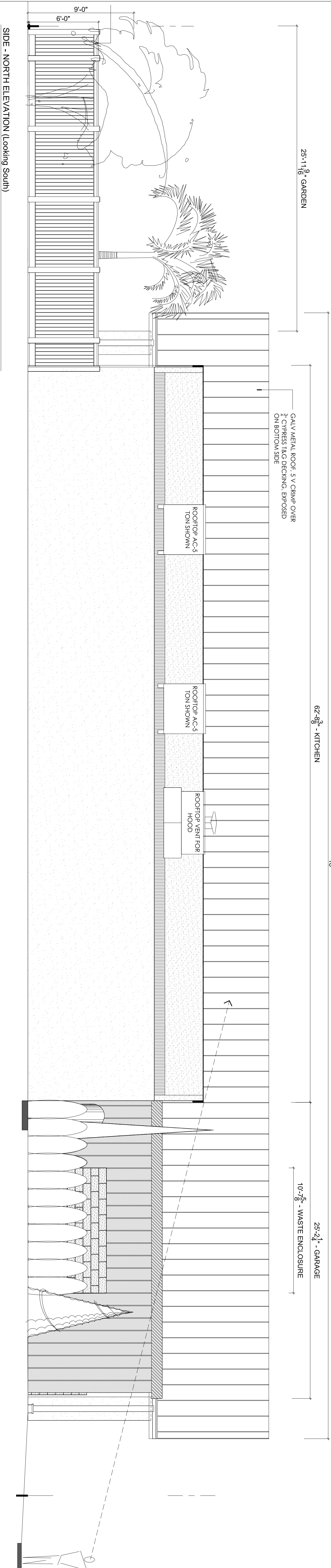
REVISIONS

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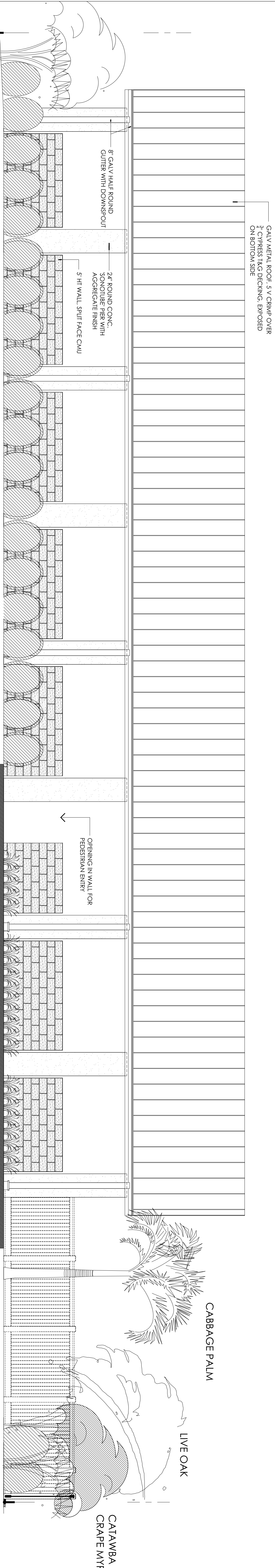
AR-4

DATE: NOVEMBER 27, 2022



SIDE - NORTH ELEVATION (Looking South)

scale: 1" = 1'-0"



SIDE - SOUTH ELEVATION (Looking North)

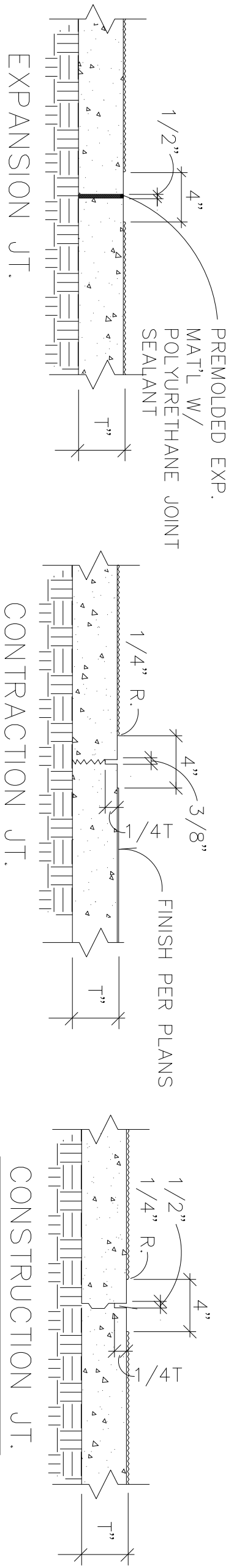
scale: 1" = 1'-0"

Fermandina Pavilion
116 NORTH 2ND ST

EXT. ELEVATIONS

SHEET:
DATE: NOVEMBER 27, 2022

AR-5



EXPANSION JT.

CONTRACTION JT.

CONSTRUCTION JT.

AS SHOWN ON DRAWINGS

SCORED JTS.

USE WHERE SEPARATE
POUR WOULD OCCUR

1. SPACING OF ALL JOINTS TO BE AS SHOWN
ON PLANS AND/OR SPECIFICATIONS

2. EXPANSION JOINTS REQUIRED WHERE ABUTTING ALL
STRUCTURES, BACK OF CURBS AND WITHIN WALKS AT
30' OC MAX

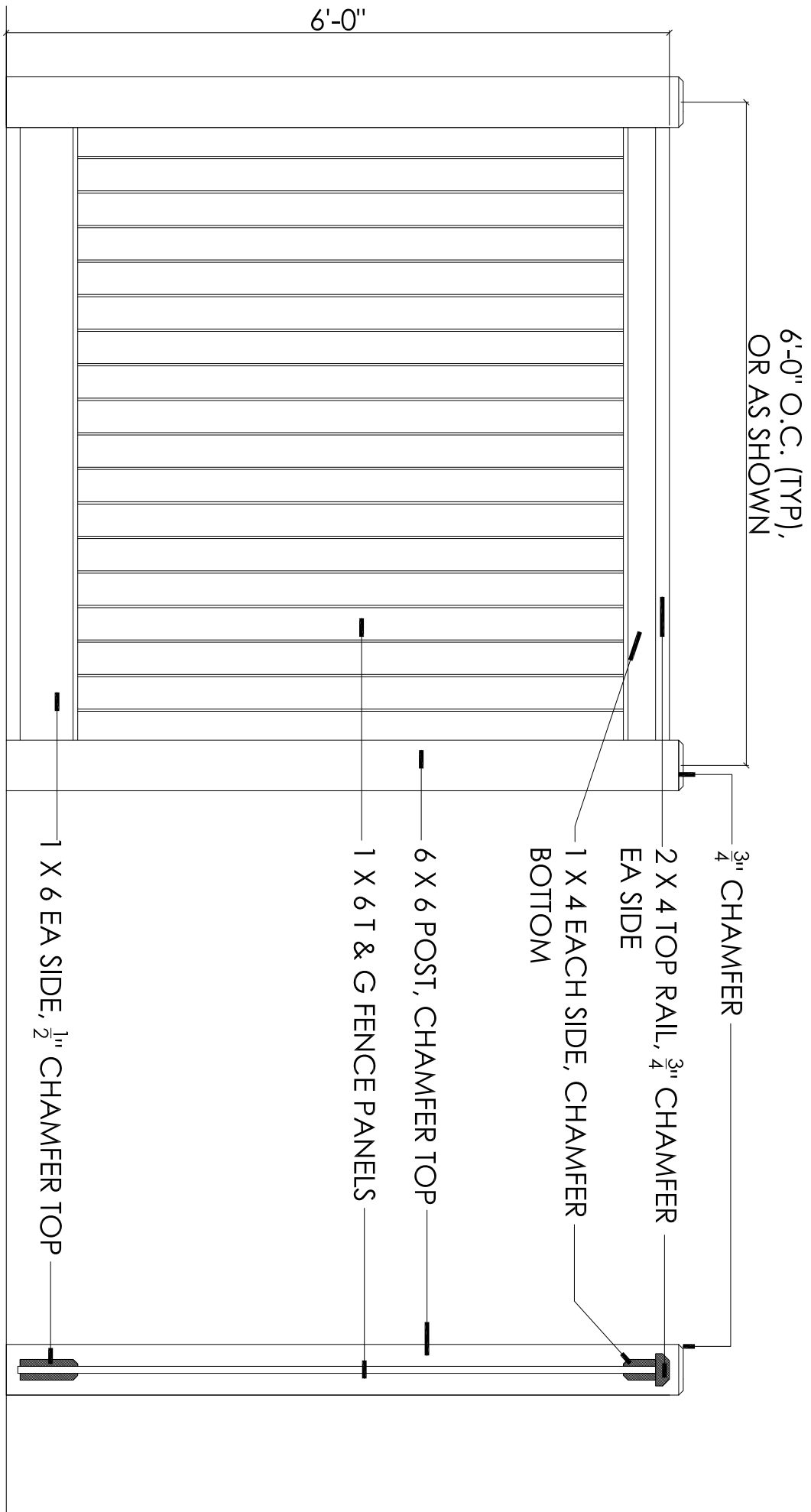
3. LAYOUT OF JOINTING IS AN INTEGRAL DESIGN ELEMENT
AND SHALL BE LAYED PER PLAN/DIMENSIONS AS SHOWN

General Conc. Walkway Notes

PAYEMENT THICKNESS (INCHES)	RECOMMENDED MAX. JOINT SPACING (FEET)
3.5	6
4.0	10
4.5	10
5.0	12
6.0	15
OVER 6.0	15

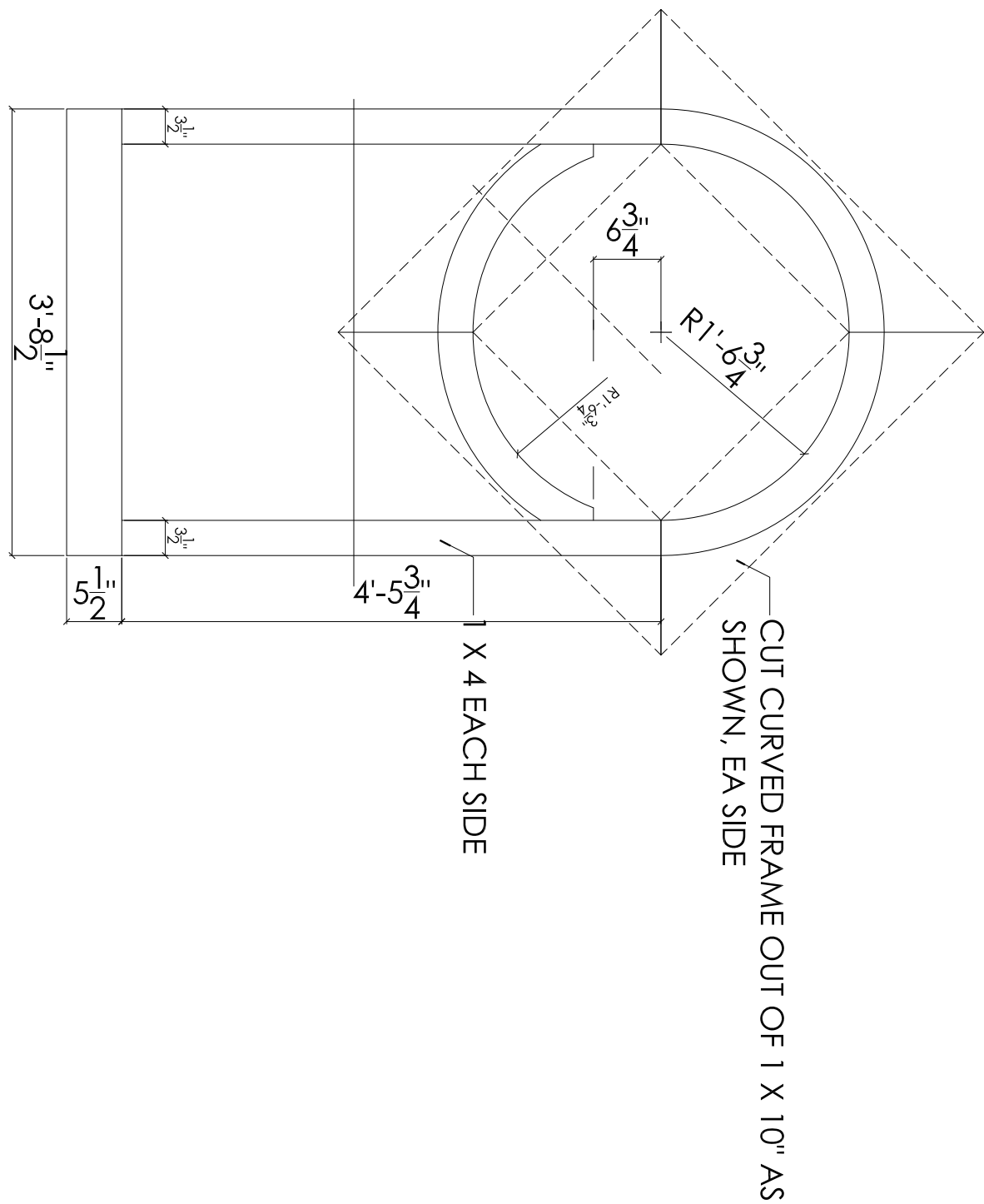
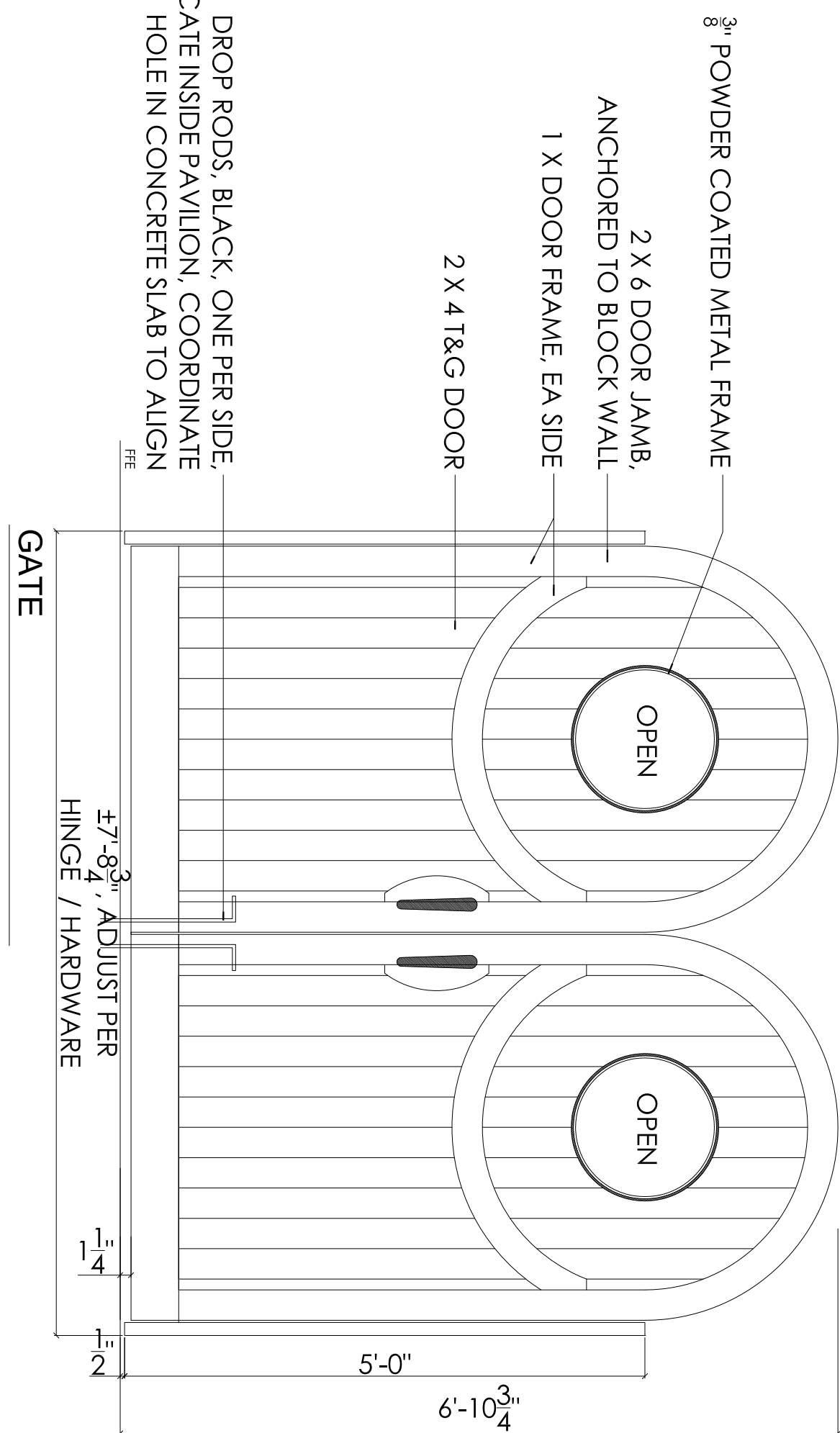
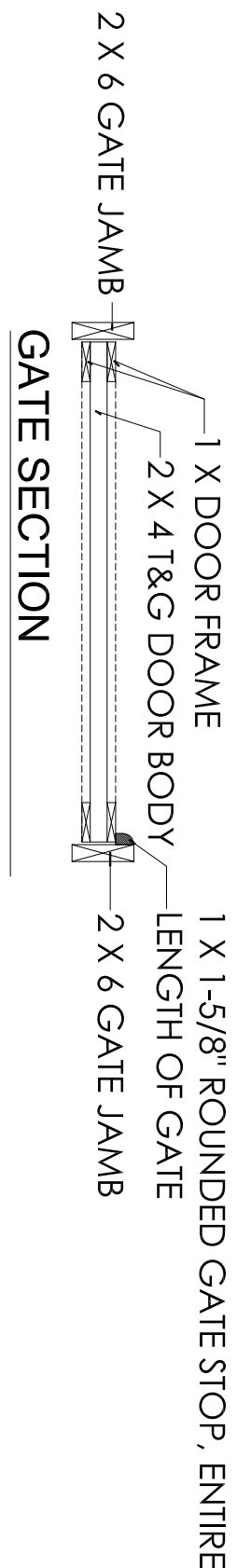
ALL CONCRETE CURBS SHOWN ON THESE PLANS
SHALL HAVE SAWCUT JOINTS @ 10' O.C. AND
EXPANSION JOINTS @ 40' O.C. MAX.
CONTROL JOINTS SHALL BE CUT 4-12 HOURS
AFTER POUR MAX.

3000 PSI CONC.



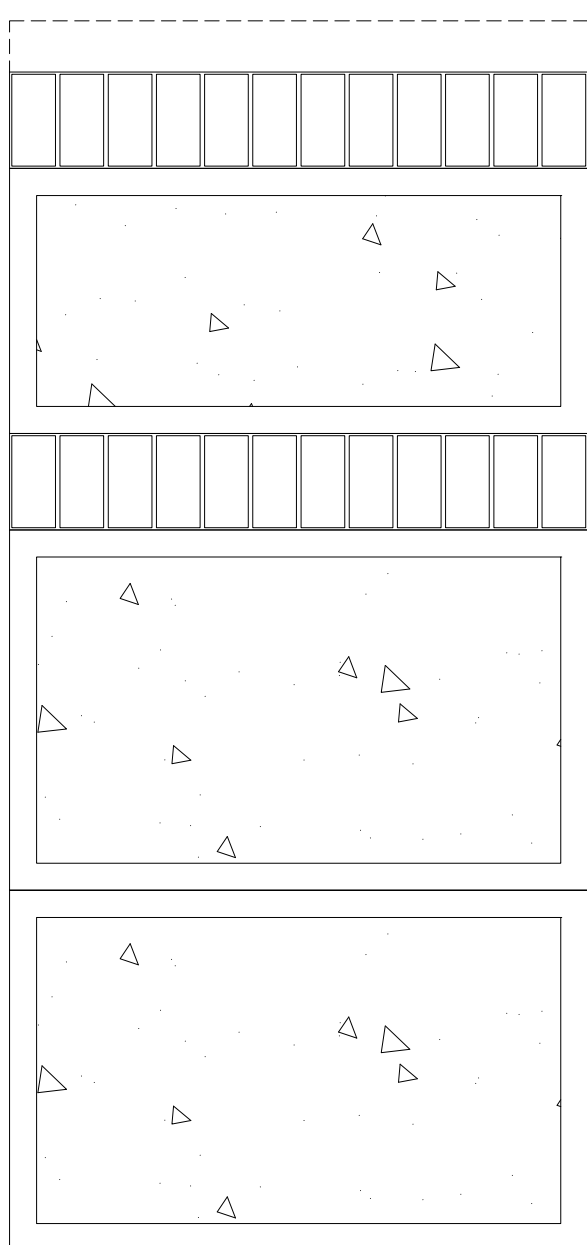
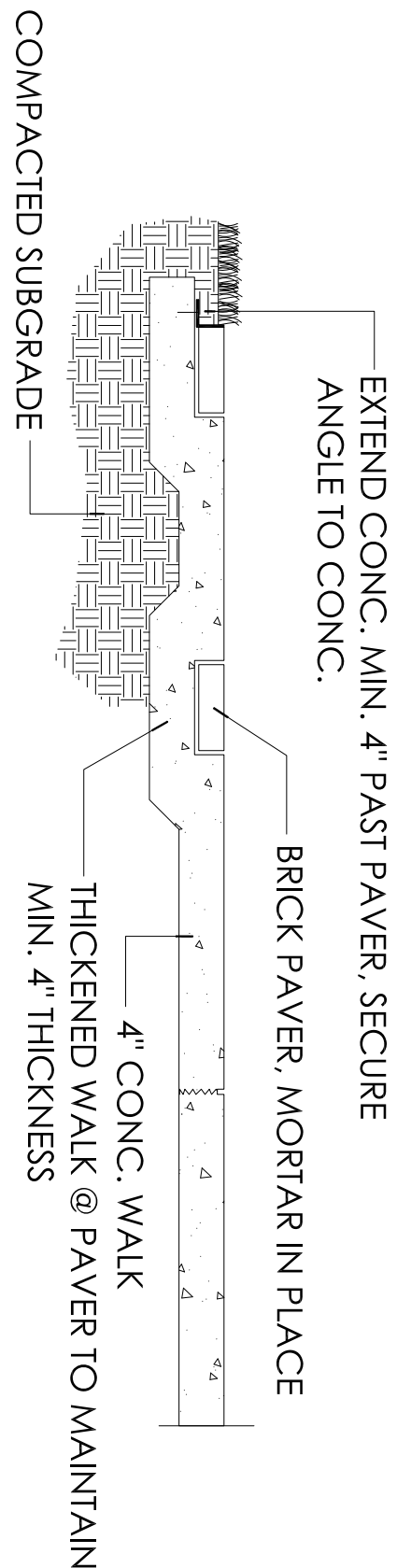
PRIVACY WOOD FENCE

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



PEDESTRIAN GATE - DOUBLE GATE

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

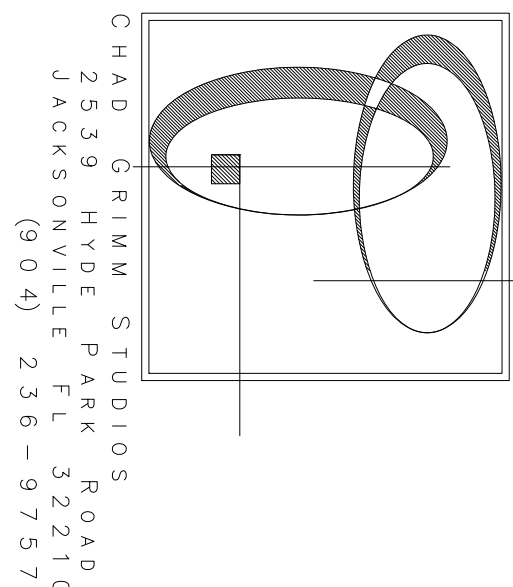


NOTES:

- REFER TO PLANS FOR PAVING PATTERNS
- PAVERS SHALL BE 4" x 8" x 2 1/4" BRICK PAVERS, MEDIUM IRONSPOT #77, BY ENDCOTT, www.endcott.com
- ANGLE EDGE RESTRAINT SHALL BE ALUMINUM, 3/8" x 2 1/4" ANGLE, MILL FINISH, AS MANUF BY PERMALOC, OR APPROVED EQUAL
- CURVE EDGE RESTRAING EVENLY AND SMOOTHLY WITH CURVE OF WALK. GROUT FILL BETWEEN EDGE OF RESTRAINT AND BRICK PAVR

BRICK PAVR IN WALK DETAIL

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



CHAD GRIMM STUDIOS
2539 HYDE PARK ROAD
JACKSONVILLE, FL 32210
(904) 236-9757

Fernandina Pavilion
116 NORTH 2ND ST

ARCHITECTURE DETAILS

REVISIONS			
no.	description	by	date

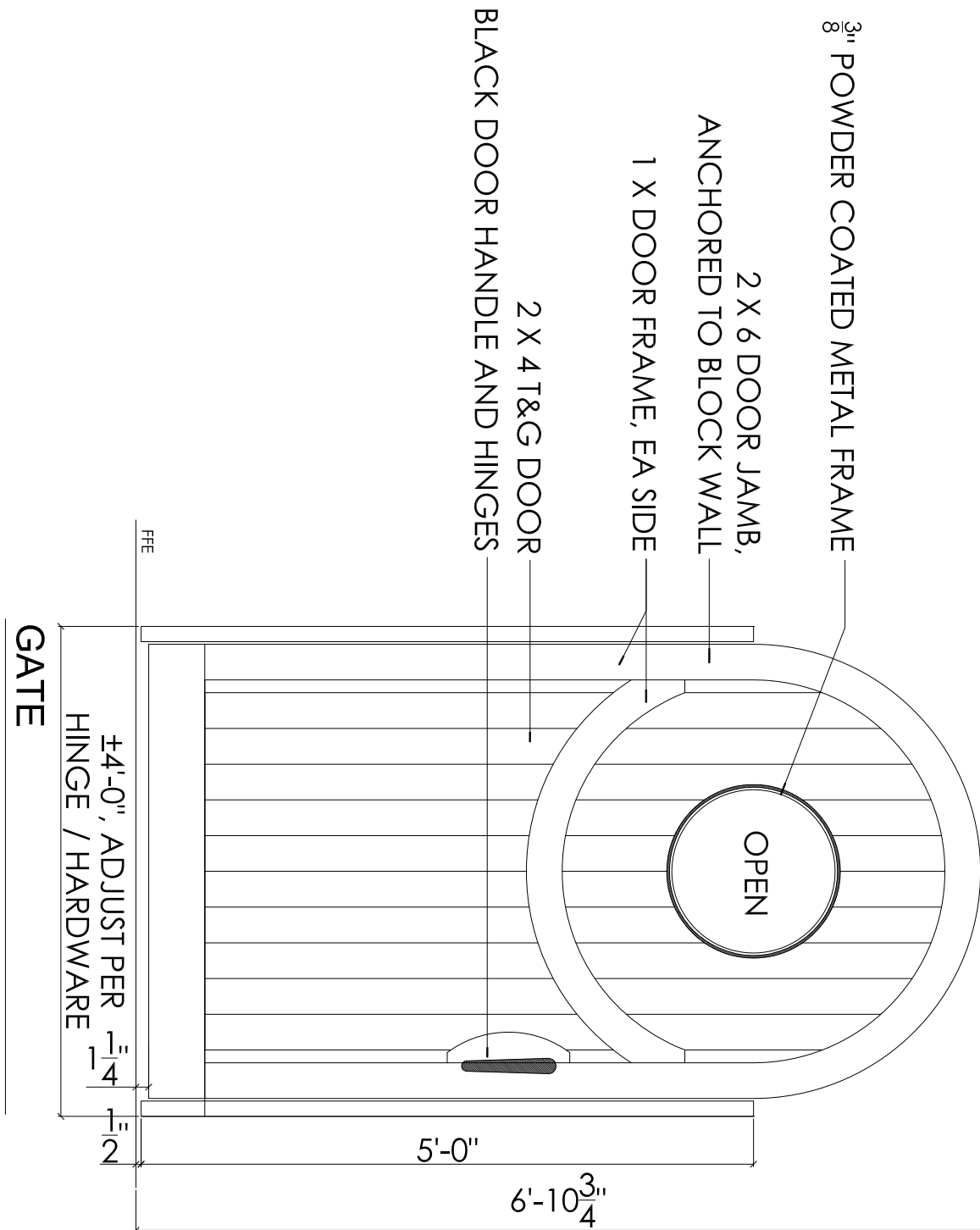
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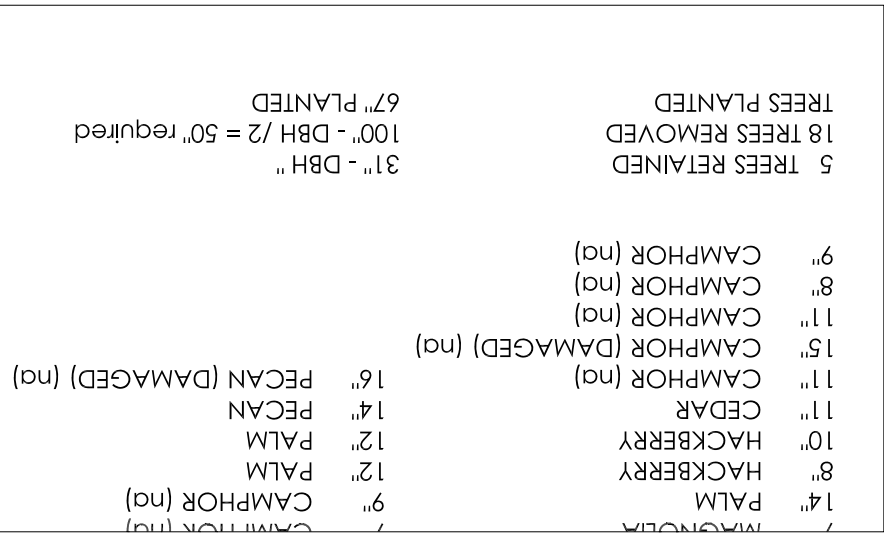
AR-6

DATE: NOVEMBER 27, 2022

PEDESTRIAN GATE - SINGLE GATE

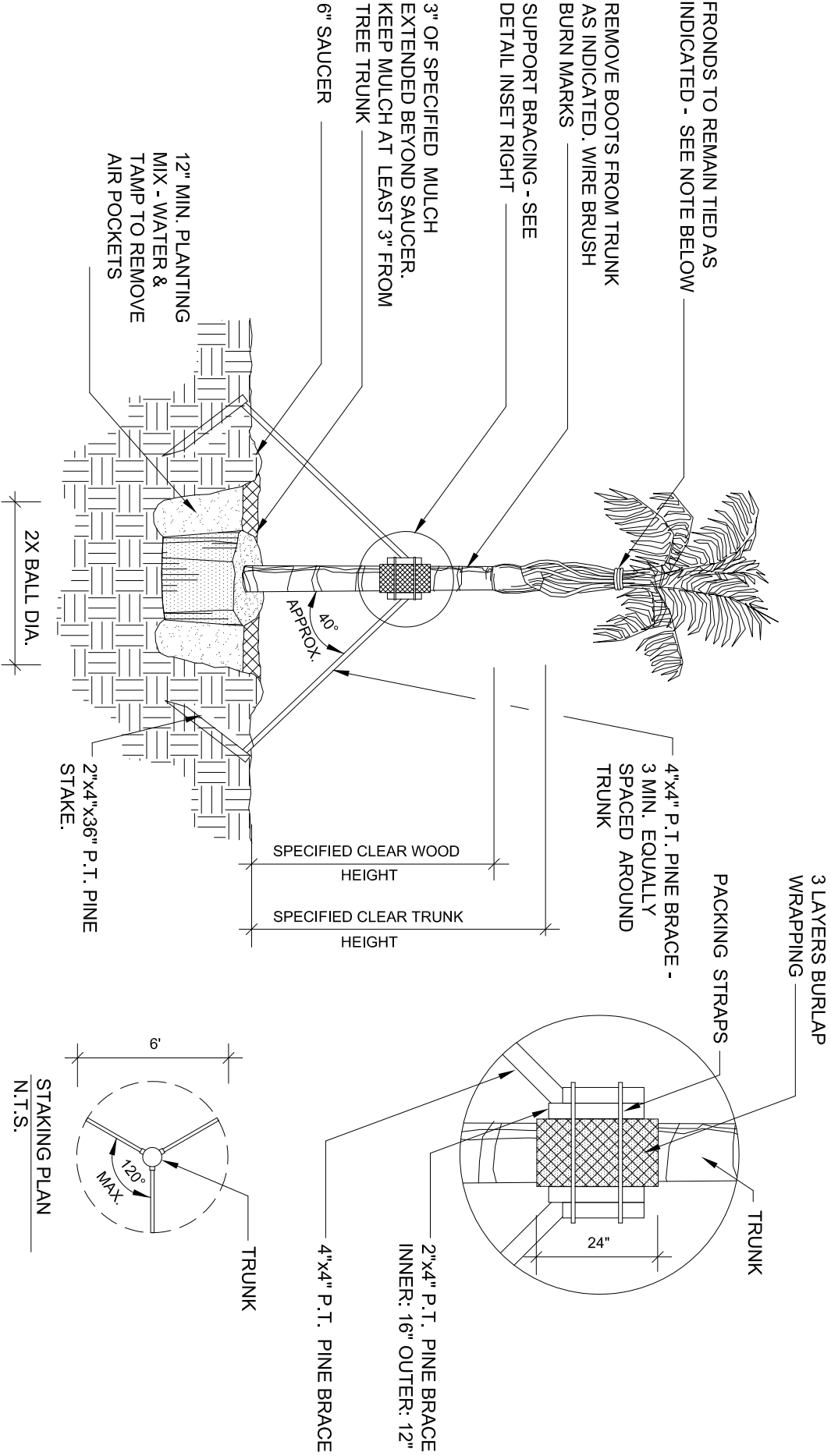
scale: 3/4" = 1'-0"





QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	COMMENTS	SPECIFICATIONS	SPACING	TOTAL PLANTED INCHES
2	OV	DIURORUS VIRGINIANA	LIVE OAK		6" GAL, 16" HT. MIN., 100 GAL MIN. OR F.G.	AS SHOWN	128"
7	LID	LOECERISSTROPHIA INDICA 'CAYAMBA	CAYAMBA CRAPPE MYRTLE		2" GAL, 12" HT. MIN.	AS SHOWN	28"
2	SP	SABAL PALMETTO	CABBAGE PALM		8" CL, BOOIED	AS SHOWN	8"
2	SP	SABAL PALMETTO	CABBAGE PALM		12" CL, BOOIED	AS SHOWN	16"
1	JCS	GUNREPRESSUS SCMPFRIVIRENS	ITALIAN CYPRRESS		6" HT. MIN. 15 GAL	AS SHOWN	
1	JCS	JUNIPERUS VIRGINIANA 'SKYROCKET'	SKYROCKET JUNIPER		4" HT. MIN. 7 GAL	AS SHOWN	
11	ICSP	LELY CERNITIA 'SKY PENCIL'	SKY PENCIL HOLLY		3" GAL, 36" MIN HT	AS SHOWN	
71	CFBZ	CAREX FLACCA 'BLUE ZINER'	BLUE ZINER SEDGE		1" GAL, 1 FULL	AS SHOWN	
23	ICR	LELY CONMITA 'ROTUNDA'	ROTUNDA HOLLY		3" GAL, MIN. 36" HT	AS SHOWN	
12	GU	GAEODIA JASMINOIDES	GAEODIA		3" GAL, FULL	AS SHOWN	
23	PT	PILOTORHIZA TORBIRA	PILOTORHIZA		3" GAL, FULL	AS SHOWN	
2,650 SF	500	STENOPLATHUM SECUNDATUM 'FLORATUM'	MIXED HARDWOOD		2"-3" THICK SOILD SOID SOD, WEED FREE, FRESHLY CUT	AS SHOWN	
850 SF	MULCH		MIXED HARDWOOD MULCH		2" DEPTH IN ALL PLANTING BEDS	AS SHOWN	
64	PLANTED					AS SHOWN	

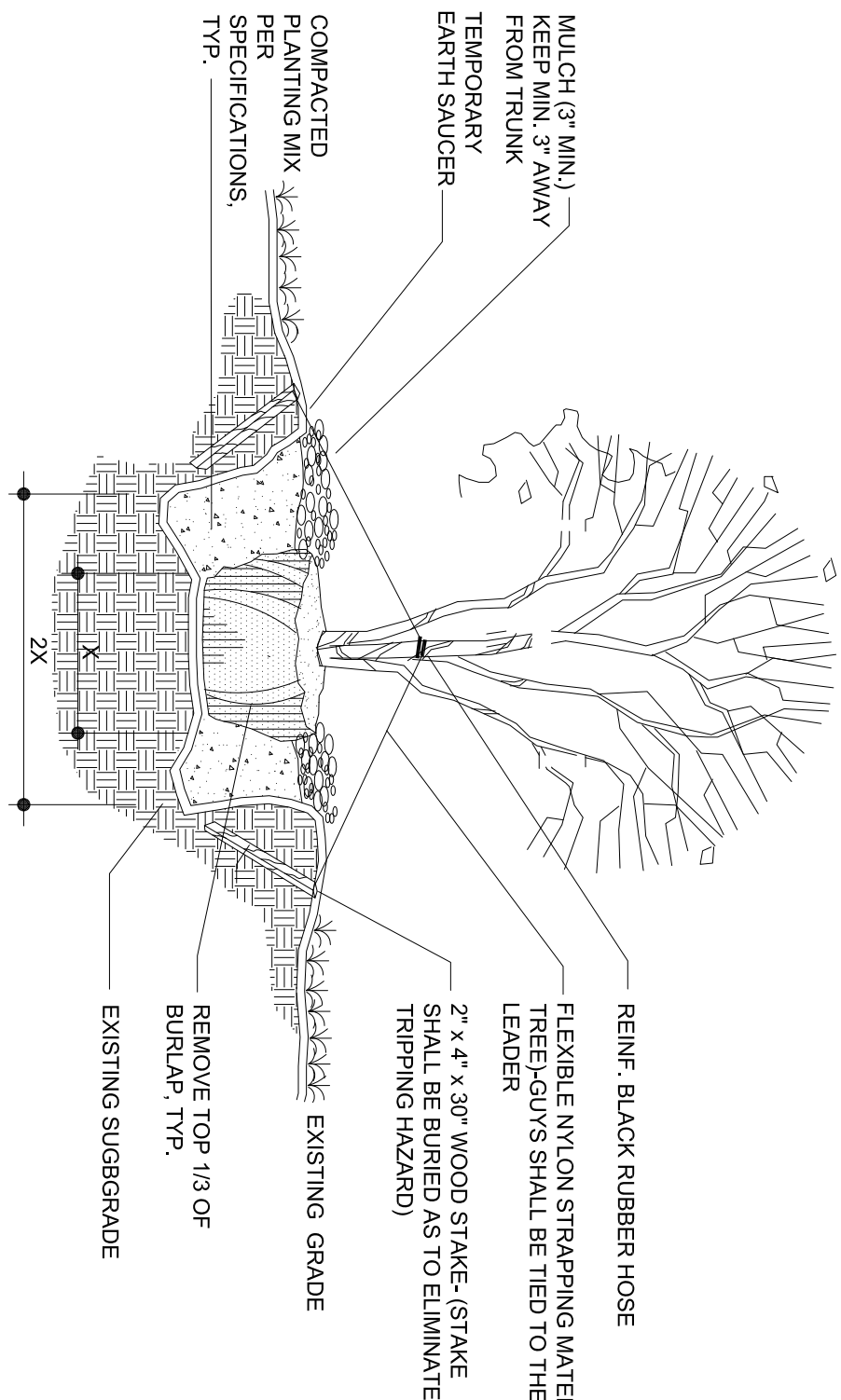
LANDSCAPE SCHEDULE



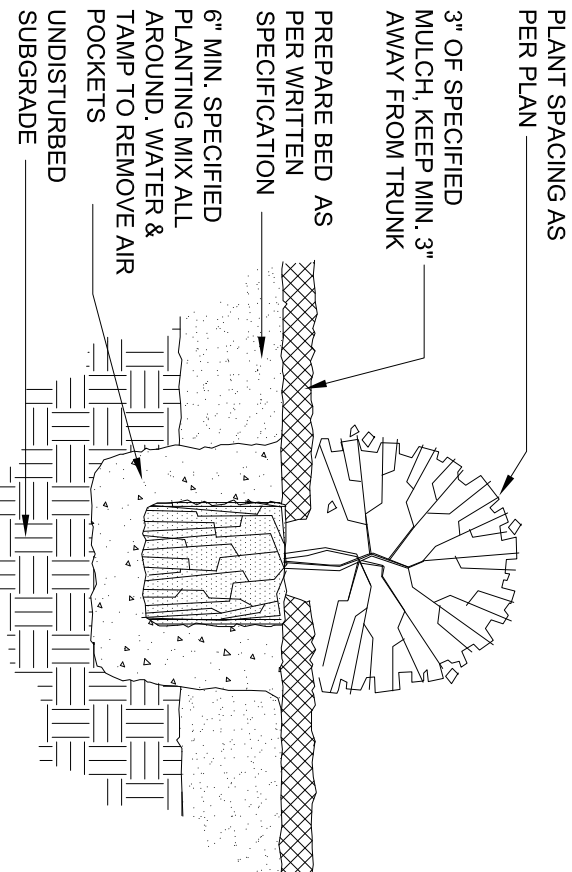
- NOTES:
- PALM FRONDS SHALL BE TIED UP UNTIL AFTER PLANTING. TIES SHALL BE REMOVED AS FOLLOWS: WASHINGTON PALM & QUEEN PALM - IMMEDIATELY; SABAL PALMS WHICH ARE NOT HURRICANE CUT SHALL REMAIN TIED FOR SIX MONTHS. REMOVE ALL DEAD AND BROKEN FRONDS. NEVER CUT TIED.
 - ALL TRUNKS SHALL BE PREPARED PRIOR TO DELIVERY. SABAL AND WASHINGTON PALMS SHALL BE BOOTED OR SHAVED AS SPECIFIED.
 - PLANT TOP OF ROOT BALL 2" ABOVE FINISHED GRADE; BOTTOM OF ROOT BALL SHALL BE SEATED DIRECTLY ON UNDISTURBED SUBGRADE.
 - NEVER MUL INTO TRUNK.

PALM PLANTING- (ALL PALMS EXCLUDING PHOENIX PALMS)

N.T.S.



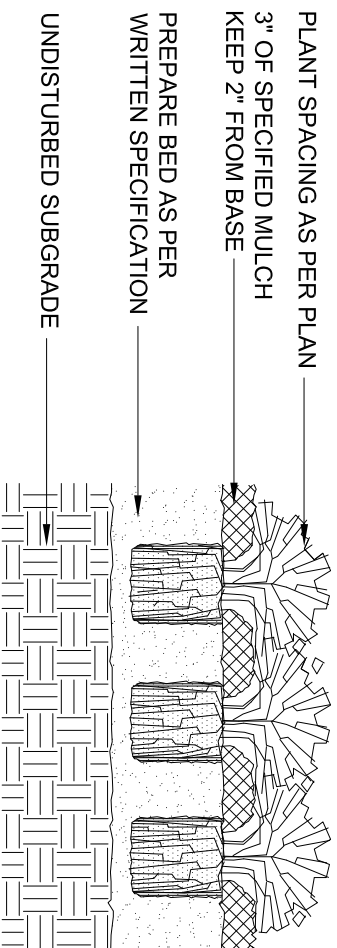
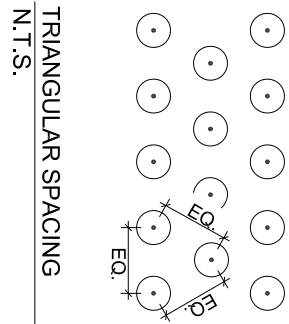
- NOTES:
- PLANT TOP OF ROOT BALL 2" ABOVE FINISHED GRADE.
 - BOTTOM OF ROOT BALL SHALL BE SEATED DIRECTLY ON UNDISTURBED SUBGRADE.
 - STAKE ABOVE FIRST STRONG BRANCHES AND AS NECESSARY FOR FIRM SUPPORT.



- NOTES:
- PLANT SO THAT TOP OF ROOT BALL IS FLUSH WITH FINISHED GRADE.

SHRUB PLANTING

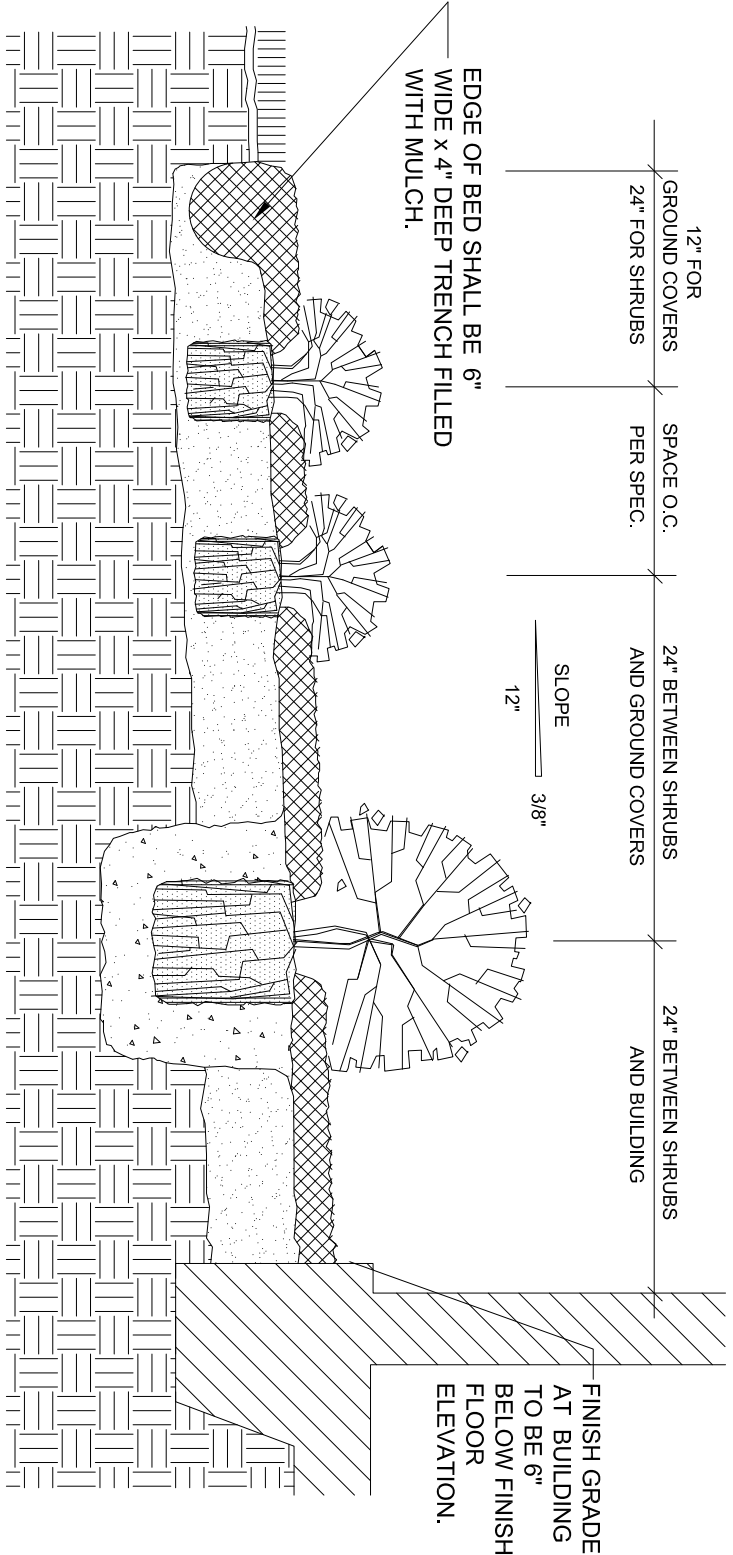
N.T.S.



- NOTES:
- GROUND COVER PLANTS ARE TO BE SPACED AS INDICATED ON PLANTING PLAN.
 - 3" MIN. SPECIFIED PLANTING MIX UNDER AND AROUND - WATER AND TAMP TO AIR POCKETS.

GROUND COVER PLANTING

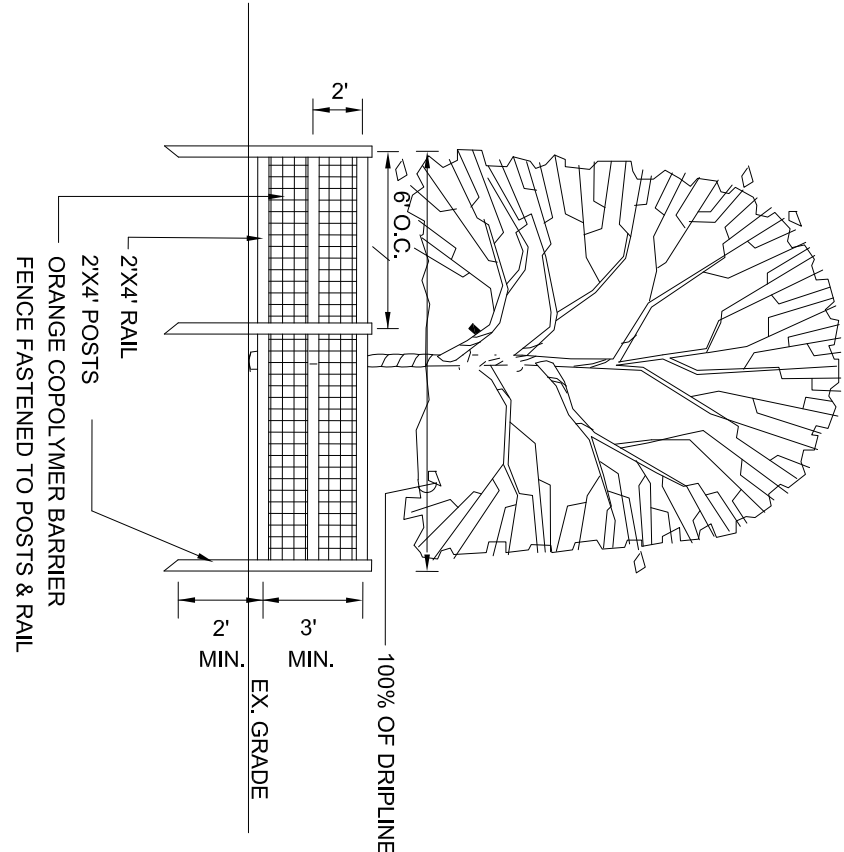
N.T.S.



- NOTES:
- FINISH GRADE AT BUILDING TO BE 6" BELOW FINISH FLOOR ELEVATION.
 - BED GRADE TO SLOPE AT 30% PER FOOT AWAY FROM BUILDING.
 - SEE DETAILS AND SPECIFICATIONS FOR PLANTING INSTRUCTIONS.

BED PREPARATION

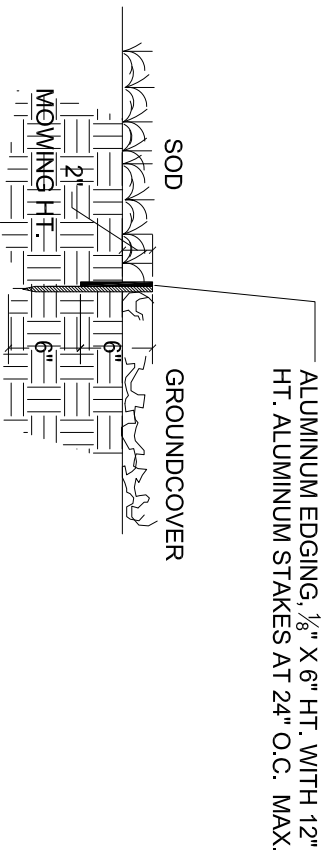
N.T.S.



- NOTES:
- 1) THIS BARRICADE IS TO BE IN PLACE PRIOR TO LAND CLEARING OR CONSTRUCTION ACTIVITIES.
 - 2) THE PROTECTED TREES TO BE SAVED SHALL BE PROVIDED WITH A PROTECTED TREE BARRICADE FENCE THAT INCLUDES SIGN OF DRAIN LINE AND LESS THAN 50% OF THE EXISTING CANOPY RADIUS OF THE DRIP LINE ADJUSTED AS NEEDED. (SOLIDC 4-01.05G)
 - 3) WHERE EXISTING TREES TO REMAIN ARE BEHIND SILT FENCE, TREE PROTECTION BARRICADE NOT REQUIRED.
 - 4) CONTRACTOR NOT ALLOWED TO WORK, STORE MATERIALS, OR DISTURB AREA BEHIND SILT FENCE & TREE PROTECTION BARRICADE.

TREE PROTECTION BARRICADE DETAIL

N.T.S.



METAL EDGING DETAIL

N.T.S.

NOTE:
CONTRACTOR SHALL REFER TO LANDSCAPE SPECIFICATIONS FOR
ADDITIONAL INFORMATION.

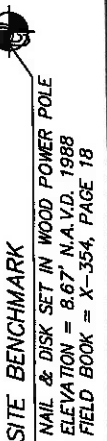
Fernandina Pavilion
116 NORTH 2ND ST
LANDSCAPE DETAILS

SHEET:
DATE: NOVEMBER 27, 2022

LA-2

LOTS TWO (2) THROUGH FIVE (5), BLOCK NINE (9).

PROPERTY ADDRESS:
116 NORTH SECOND STREET
FERNANDINA BEACH, FLORIDA 32034



- 1) The "Legal Description" hereon is in accord with the description provided by the client
- 2) Underground Improvements were not located or shown.
- 3) Lands shown hereon were not abstracted by this office for easements, rights-of-way, ownership or other instruments of record.
- 4) Internal lot angles shown hereon are based on recovered monumentation.
- 5) The property shown hereon lies within flood zone "X & AE 9" as per F.E.M.A. Flood Insurance Rate Map, Panel "12089C 0237 G", Dated "08/02/2017". Flood Zone information listed above and shown on this survey is provided as a courtesy and is approximate at best. All data should be verified by Nassau County Building Department for accuracy. We assume no liability for its accuracy. Flood Zone information is not covered by the certification hereon and is not required to be shown per Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.
- 6) Site Benchmark is as shown hereon.
- 7) Elevations shown hereon refer to North American Vertical Datum of 1988. (N.A.V.D. '88)
- 8) The Reference Benchmark is a brass disk found in the Standard Marine Building. (Elevation = 10.11' N.A.V.D 1988)

TREES HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE UNDER CURRENT CONDITIONS AND HAVE A POSITIONAL TOLERANCE OF APPROXIMATELY 2 TO 3 FEET. CRITICAL TREES SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.

F.B. NO: X-354 PAGE NO: 18 FIELD CREW: GS FILE NO: A-5458

12/1/22





Drainage Analysis and Stormwater Management Plan for Fernandina Beach Pavilion

Prepared for:

Poynter Family Holdings, LLLP
3967 First Avenue
Fernandina Beach, FL 32034

**City of Fernandina Beach, Florida
St. Johns River Water Management District**

Initial Issue: December 1, 2022

Project # 22-122

Matthew Lahti, PE
Principal, FL#71395

Teresa V. Benton, PE
Project Engineer, FL#56987

Gulfstream Design Group, LLC

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Flood map	Post-Developed Drainage Characteristics
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Post Development Basin Map	
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Legacy Engineering, Inc.	

1.0 Introduction

1.1 Background

This report describes the stormwater treatment system for the Fernandina Beach Pavilion, a proposed commercial development with associated infrastructure. The project is located on a 0.29 acre parcel on the east side of North Second Street, approximately 100-ft north of Alachua Street in Fernandina Beach, Florida. Specifically, the development includes the following Parcel IDs according the Nassau County Property Appraisers Office:

00-00-31-1800-0000-0020

00-00-31-1800-0000-0030

00-00-31-1800-0000-0050

The proposed stormwater treatment will incorporate an exfiltration trench below a courtyard which will discharge to the North Second Street right-of-way. The project will be constructed in one phase and will provide for offsite drainage areas to bypass the site's stormwater treatment system. This report analyzes the stormwater treatment system to satisfy the requirements of the St. Johns River Water Management District (SJRWMD) Environmental Resource Permit Section E, as well as the City of Fernandina Beach Land Development Code.

See the Vicinity, Aerial, Pre- and Post-Development Maps in Attachment A.

1.2 Stormwater Management Facility Design Criteria

Exfiltration is proposed for the stormwater treatment for this development. Methods obtained from the *Applicants Handbook: Volume II* published by the St. Johns River Water Management District (SJRWMD) October 1, 2013 were used to determine the required treatment volumes and system recovery for the stormwater management facilities, as well as the City of Fernandina Beach requirements.

1.2.1 SJRWMD Design Criteria

In accordance with SJRWMD requirements, this hydrologic analysis is based on the SCS Curve Number methodology. A topographic survey and USGS soil data was used to evaluate the existing conditions for the site. Design rainfall depths were obtained from isopluvial maps published by the SJRWMD (Rao, 1988) for the mean annual, 24-hour storm event. See attached isopluvial maps in Attachment B. The SCS Type II Florida Modified storm was used as the design rainfall distribution. Hydraulic modelling of the treatment system is provided utilizing Streamline Technology's Advanced Interconnected Channel and Pond Routing (Ad-ICPR) version 3.02 software. Recovery of the exfiltration system is evaluated using POND5 version 3.3 software.

1.2.2 City of Fernandina Beach Design Criteria

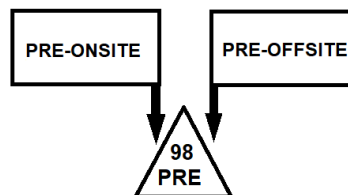
In addition to the storm analyses performed for the SJRWMD submittal, the City of Fernandina Beach requires a nutrient loading analysis to meet the Downtown Fernandina Beach's Conceptual ERP 165699-1 to demonstrate that this proposed development provides a net improvement from the pre-developed nutrient loading.

2.0 Pre-Developed Hydrologic Conditions

2.1 Existing Site Conditions

The property was previously developed as a single family residence with paved driveway. The site (Basin “PRE-SITE”) drains from east to west towards the North Second Street right-of-way, where it is then collected into the Downtown Fernandina Beach drainage system (Node “98-PRE”). Offsite residential lands to the east (Basin “PRE-OFFSITE”) also drains through the project site with a high point at North Third Street and low point at the shared rear property line.

The following diagram depicts the nodal diagram of the proposed pre-developed drainage system and connectivity to the receiving waters. Drainage basins are shown on the Pre-Development Drainage Map in Attachment A.



See the attached USGS map and Pre-Developed Basin Map in Attachment A.

2.2 Soils

Based on the USDA NRCS Soil Survey of Nassau County, Florida, the site has soils that are classified as Ortega Fine Sand, which is classified as Hydrologic Soil Group (HSG) “A”. A site specific Geotechnical Exploration was performed **Legacy Engineering, Inc. dated XXXX**. At the time of the exploration groundwater was encountered at depths ranging **3.0- to 4.0-feet** below the ground surface and provide estimated seasonal high groundwater elevations based on the topographic survey. See the attached Geotechnical Report in Attachment B.

2.3 FEMA Flood Map Review

We reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for Fernandina Beach, Florida, for this project. The project area is located on Panel No. 12089C0237G, dated August 2, 2017, which indicates that the project area is located within Flood Zones X and AE-9.

2.4 Pre-Developed Basin Characteristics

The project site drains from east to west, eventually reaching a drainage inlet near the southwest corner of the property, the drainage piping of which flows south towards Alachua Street into the Downtown Fernandina Beach collection system. The residences directly east of the project site have a high point at the Third Street right-of-way and drain west, through the project site. The existing impervious areas on the onsite and offsite basins consist of residential buildings and paved driveways. All other areas of the site are defined as “Open Space” with Fair Cover.

Runoff curve numbers are based on the cover descriptions and hydrologic soil groups of the site. Based on these coefficients and associated areas, composite runoff coefficients were determined. A summary of the pre-developed drainage basin characteristics is presented in the Table 2-1.

Table 2-1: Pre-Developed Area Summary

Basin Description	Area (acres)	Curve Number	Time of Concentration (min)
PRE-ONSITE	0.29	57.7	10
PRE-OFFSITE	0.23	71.5	10

This data was then entered into the Streamline Technology's Advanced Interconnected Channel and Pond Routing (Ad-ICPR) version 3.02 software and evaluated by the SCS Method. A model was established with the area, CN, time of concentration, and storage within the exfiltration system, to evaluate the resulting flows for the entire contributing basins to their respective receiving waters. We evaluated the model for the Mean Annual 24-Hour storm event to meet SJRWMD requirements. Pre-Development modeling data is included in Attachment E – Model Results.

2.5 Pre-Developed Nutrient Loading

A Pollutant Loading Analysis is required for both Nitrogen and Phosphorous to meet the City's Downtown Conceptual Environmental Resource Permit. This analysis only evaluates the project site, and not the offsite properties which are to remain in their current condition. The land use in the pre-development condition is single family residence. The Non-DCIA curve number was calculated to for pre-development land use to enter into the BMP Trains program. See Attachment D for these calculations and Attachment G for Nutrient Loading and Removal Analyses. Table 2-2 summarizes the data input and resulting nutrient loading for the pre-developed site.

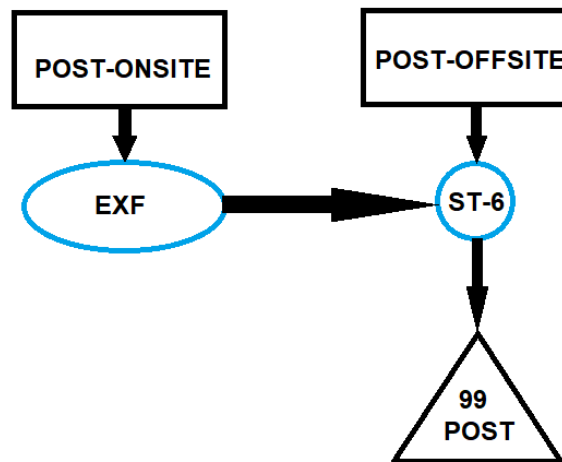
Table 2-2: Pre-Developed Nutrient Loading Summary

Basin ID	% DCIA	NON-DCIA Curve Number	TOTAL N LOADING (kg/yr)	TOTAL P LOADING (kg/yr)
PRE-ONSITE	2.5%	56.7	0.131	0.021

3.0 Post-Developed Hydrologic Conditions

3.1 Post Developed Basin Description

This project includes the construction of a covered pavilion and commercial building with associated pedestrian and stormwater infrastructure. The proposed stormwater treatment system will consist of an underground exfiltration system which will treat the onsite basin. The offsite basin will be provided a trench drain which will drain to a bypass pipe along the project's southern property line. The site's stormwater treatment system will connect to the bypass pipe at drainage structure "ST-6" which will connect to the North 2nd Street's stormwater collection system (Node "99-POST"). The following nodal diagram depicts the connectivity of the post-developed drainage system.



The tailwater condition for the stormwater system is based on the existing invert pipe elevation of the inlet at the corner of Alachua Street and North 2nd Street, elevation 3.60-ft (NAVD 88). The proposed outfall structure located behind the proposed pavilion will consist of a concrete overflow weir with a spillway elevation of 6.00-ft (NAVD 88). Drainage basins are shown on the Post-Development Drainage Map in Attachment A. Results of the stormwater model identify the peak stages and flow rates for the Mean Annual 24-Hour storm event and reported in Section 4.

3.2 Post-Developed Basin Characteristics

The post-development runoff factors for the contributing areas were determined from the CN values assigned for the delineated land use types (Impervious, Gravel and Open Space "Good") for the hydrologic soil group classification "A". Based on these coefficients and associated areas, composite runoff coefficients were calculated for both Phases 1 and 2 (See Drainage Calculations in Attachment D).

A summary of this data is presented in the Table 3-1.

Table 3-1: Post-Developed Area Summary

Sub Basin Description	Area (acres)	Composite Runoff Factor - CN	Time of Concentration (min)
POST-ONSITE	0.29	83.0	10
POST-OFFSITE	0.23	71.5	10

This data was then entered into the Streamline Technology's Advanced Interconnected Channel and Pond Routing (Ad-ICPR) version 3.02 software and evaluated by the SCS Method. A model was established with the area, CN, time of concentration, and slope defined, to evaluate the resulting flows for the entire contributing basin. We evaluated the model for the Mean Annual 24-Hour storm events to meet SJRWMD requirements. Post-Development modeling data is included in Attachment E – Model Results.

3.3 Post-Developed Nutrient Loading

A Pollutant Loading Analysis is required for both Nitrogen and Phosphorous to meet the City's Downtown Conceptual Environmental Resource Permit. This analysis only evaluates the project site, and not the offsite properties which are to remain in their current condition. The land use in the post-development condition is Low-Intensity Commercial. The Non-DCIA curve number was calculated to for post-development land use to enter into the BMP Trains Version 4.3.2 program. The exfiltration trench system treatment design was entered and the BMP Trains program calculates the nutrient removal of this system. See Attachment D for these calculations and Attachment G for Nutrient Loading and Removal Analyses. Table 3-3 summarizes the data input and resulting nutrient loading for the post-developed site.

Table 3-3: Post-Developed Nutrient Loading Summary

Basin ID	% DCIA	NON-DCIA Curve Number	TOTAL N LOADING (kg/yr)	TOTAL P LOADING (kg/yr)
POST-ONSITE	68.1%	51.5	0.899	0.150

The nutrient loading in the post-developed condition exceeds that of the pre-developed condition, therefore a Best Management Practice is required to provide nutrient removal before discharging to the City's master stormwater collection system.

4.0 Study Results

4.1 Detention Requirements

Exfiltration under the proposed parking areas is proposed for the site's stormwater treatment system. The SJRWMD criteria for exfiltration is to provide 1.25-inches over the total impervious area plus 0.5" over the total drainage area, or 1" over the total drainage area, whichever is greater. Table 4.1 summarizes the required and provided treatment volumes for development.

Table 4-1: Treatment Volume Summary

Basin ID	Minimum TV (ac-ft)	Provided TV (ac-ft)
POST-ONSITE	0.0343	0.0348

4.2 ICPR Model Results

The post-developed basin characteristics and treatment volumes listed above are detailed in Attachment D – Drainage Calculations. This data was then entered into the ICPR model to evaluate the peak runoff rates for pre- and post-developed conditions. Table 4.2 summarizes the peak flows to the receiving waters, "PRE-98" and "POST-99" during the design storms.

Table 4-2: Pre-/Post-Developed Peak Flows

Storm Event	PRE-98 Q (cfs)	POST-99 Q (cfs)
Mean Annual Storm	0.58	0.35

This Drainage Analysis and Stormwater Management Plan study shows that sufficient treatment volume has been provided in the exfiltration trench and that the peak flows from the site into the North 2nd Street right-of-way are reduced during both the mean annual 24 hour storm event for the development. Further, the site's minimum treatment volume must recover within 72 hours. The PONDS software was used to demonstrate the required recovery using the geotechnical data provided by Legacy Engineering, using a safety factor of 2.0. See the ICPR as well as the PONDS Model and Results in Attachment E.

4.3 Nutrient Loading Analysis Summary

A pre- and post-developed analysis was performed using BMP Trains 4.3.2, for the project site as required by the Downtown Fernandina Beach Conceptual ERP. The post developed BMP includes an exfiltration trench to provide nutrient removal before discharging to the City's collection system. A complete report from the BMP Trains Ver. 4.3.2 program as well as calculations used in the data entry are provided in Attachment G and is summarized in Table 4-3.

Table 4-1: Treatment Volume Summary

Pre Discharge N Loading (kg/yr)	Post Discharge N Loading (kg/yr)	Pre Discharge P Loading (kg/yr)	Post Discharge P Loading (kg/yr)
0.13	0.11	0.021	0.018

5.0 Stormwater Management Design

Development of the site should consider storm water management systems that minimize the impacts to adjoining properties. The methods to accomplish a low impact should not cause considerable economic hardship. These methods should consider using the best management practices for sedimentation and erosion control during construction and after the development has been completed. These methods will be discussed in two parts. The first part is the management of storm water conveyance systems and detention. The second part will be sedimentation and erosion control measures and practices.

5.1 Stormwater Conveyance Systems

Following grading and drainage improvements for the proposed site development, the site will drain directly into the exfiltration section under the rear courtyard areas. Runoff from the underground exfiltration system will be collected and conveyed via underdrain piping to a modified drainage inlet which will then discharge to North 2nd Street collection system.

5.2 Water Quality Structures

The proposed control structure is a modified Type E inlet.

5.3 Sedimentation and Erosion Control Measures

Sedimentation and erosion control measures used during and after construction will add environmental value to the proposed project. The following general recommendations for sedimentation and erosion control management are suggested.

Before the construction phase begins, all silt fence and construction exit shall be in place.

- ❑ Silt fence and hay bales should be constructed to DOT and/or County standards. Silt fencing and hay bales provide a barrier to prevent sediment from leaving the construction site.
- ❑ A construction exit consisting of a crushed stone pad located will be located at the construction exit to provide a place for removing mud from tires thereby protecting public streets from mud being tracked off the construction site.
- ❑ During the construction phase check dams, construction road stabilization, inlet sediment traps, and storm drain outlet protection should be in place, maintained and repaired as needed.
- ❑ All disturbed area should be stabilized with temporary seeding establishing a temporary vegetative cover with fast growing grass, and control of surface air movement of dust on the construction site should be maintained during the construction phase.
- ❑ Check dams are a small temporary barrier of dam constructed across a swale, drainage ditch, or area of concentrated flow to slow down storm water flow below erosive velocities. Construction road stabilization consist of travel ways constructed as part of a construction

plan including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes that are stabilized with gravel to minimize the amount mud being tracked within the construction site.

- ❑ Inlet sediment traps are an impounding area created by excavating around a storm drain drop inlet.
- ❑ Storm drain outlet protection is a paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated storm water runoff.

After construction permanent erosion and sediment control structures should be maintained and repaired. Such devices are the detention ponds, vegetated natural buffers, and permanent vegetation.

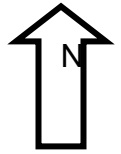
- ❑ Conveyance swales should be cleared and mowed to maintain flow and volume.
- ❑ Outlet control device on the stormwater treatment system should be cleared of debris obstructing the storm water flow.
- ❑ Permanent vegetation should be maintained to control the erosive flow of storm water on sloped areas and mulch refreshed to provide a storm water break.

END OF REPORT

ATTACHMENT A

MAPS

VICINITY MAP

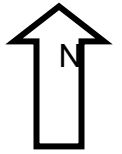


VICINITY MAP
FERNANDINA BEACH PAVILION
GDG# 22-122

116 N 2ND STREET
FERNANDINA BEACH, FLORIDA

MAP SOURCE:
NASSAUFLPA.COM

AERIAL MAP



**NOTE: THE RESIDENTIAL STRUCTURE HAS BEEN DEMOLISHED SINCE THIS
AERIAL PHOTO WAS TAKEN**



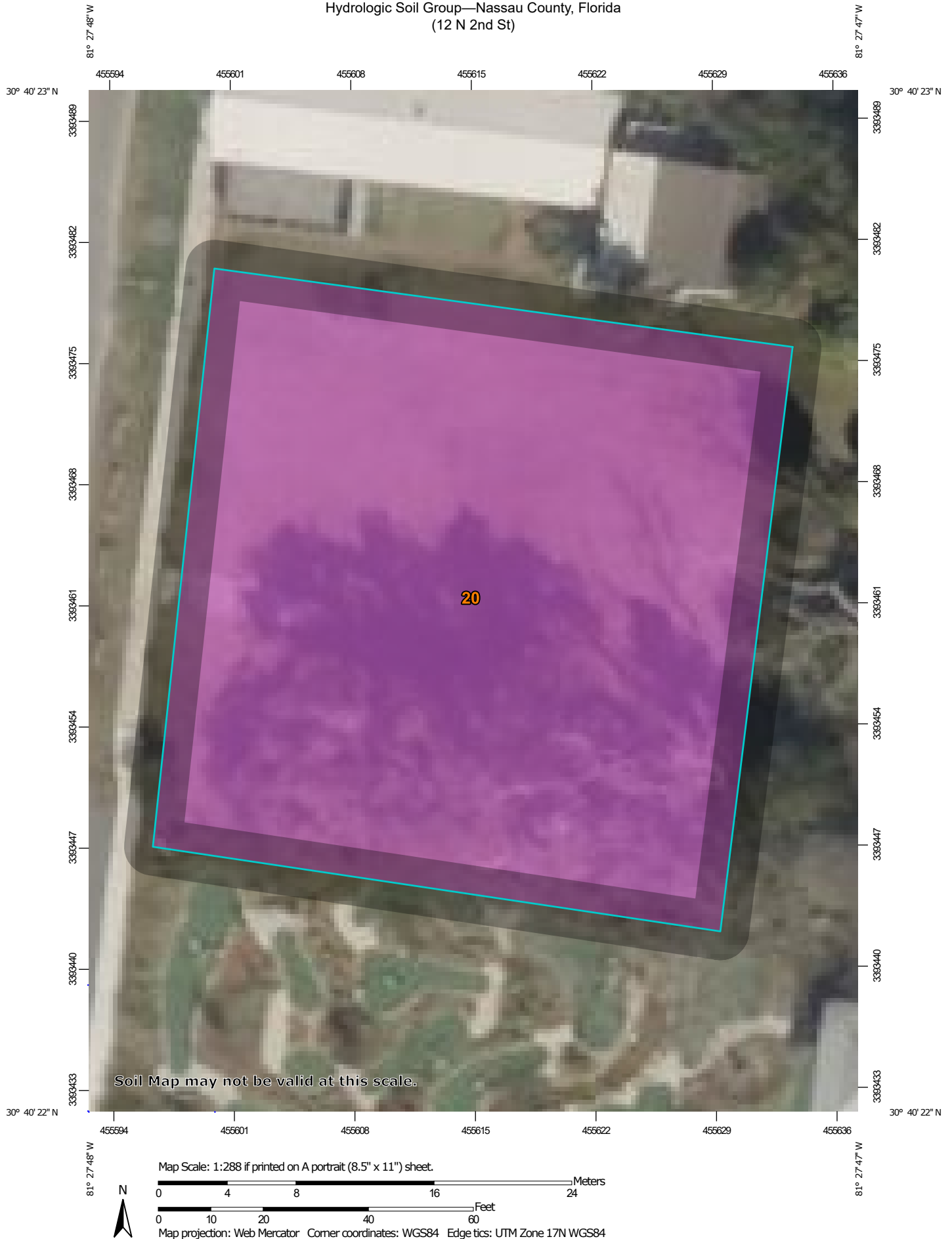
2225 Anastasia Blvd. • Suite A2 • St Augustine • FL • 32080
Phone: 904.794.4231 • www.gulfstreamdesign.com

AERIAL MAP
FERNANDINA BEACH PAVILION
GDG# 22-122

116 N 2ND STREET
FERNANDINA BEACH, FLORIDA

MAP SOURCE:
GOOGLE MAPS

Hydrologic Soil Group—Nassau County, Florida
(12 N 2nd St)



Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
20	Ortega fine sand, 0 to 5 percent slopes	A	0.3	100.0%
Totals for Area of Interest			0.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

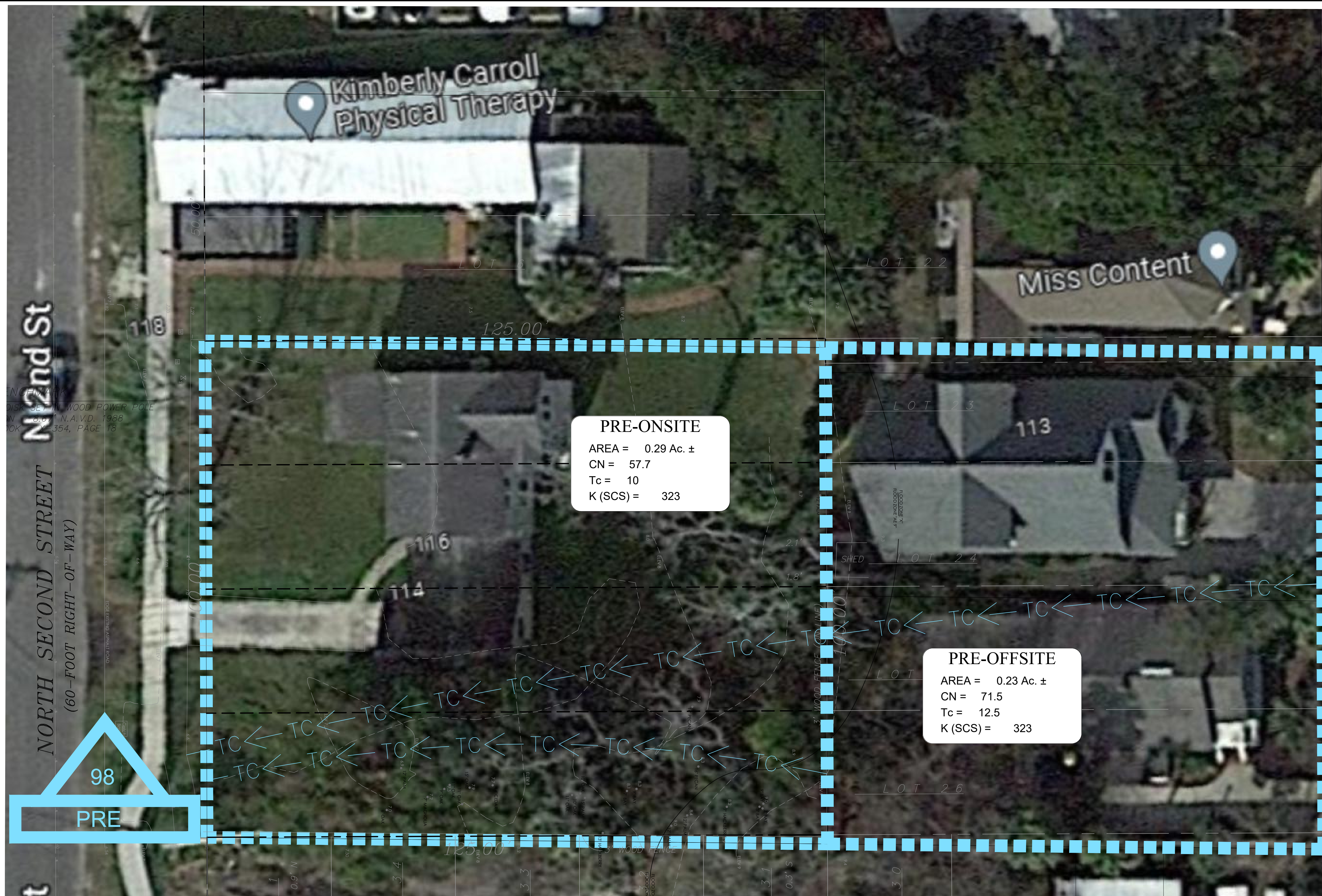
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified



PRE
98-X

BASIN LIMITS

AREA = XX.XX Ac. ±
CN = XXX
Tc = XX.X Min.
K (SCS) = XXX

BASIN NAME & INFO

— TC < — TC < — TIME OF CONCENTRATION FLOW PATH

REVIEWS		DESCRIPTION	
NO.	DATE	BY	
1	11-1-2000	XXXXXX	
2	11-1-2000	XXXXXX	
3	XXXXXX	XXXXXX	
4	XXXXXX	XXXXXX	
5	XXXXXX	XXXXXX	
6	XXXXXX	XXXXXX	
7	XXXXXX	XXXXXX	
8	XXXXXX	XXXXXX	

**ENGINEERING PLANS
FOR
THE PAVILION
PRE-DEVELOPMENT BASIN MAP**
DUVAL COUNTY, FLORIDA



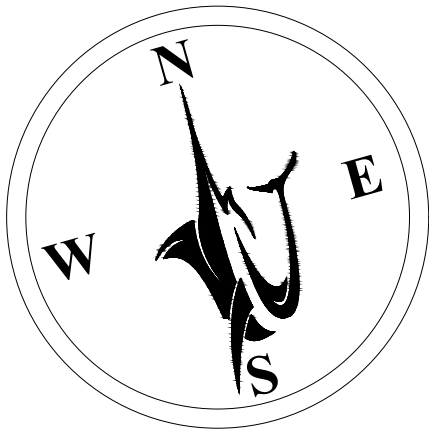
FINAL ENGINEERING PLANS

2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 320
904.794.4231
matt@gulfstreamdesign.com

PROJECT NO:	22-122
ISSUE DATE:	12-01-2023
DRAFTED BY:	TVB
DESIGNED BY:	TVBXXX
CHECKED BY:	MHL

NOT VALID WITHOUT SEAL

PRE



NORTH SECOND STREET
(60-FOOT RIGHT-OF-WAY)

99
POST

POST-ONSITE

AREA = 0.29 Ac. ±
CN = 83
Tc = 10
K (SCS) = 484

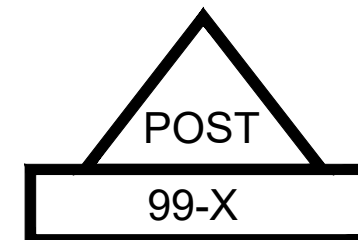
EXF

POST-OFFSITE

AREA = 0.23 Ac. ±
CN = 71.5
Tc = 12.5
K (SCS) = 323

ST-6

LEGEND



OUTFALL



BASIN LIMITS



NODE NAME

BASIN - XXX-X

AREA = XX.XX Ac. ±
CN = XXX
Tc = XX.X Min.
K (SCS) = XXX

BASIN NAME & INFO

REVISIONS

NO.	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			

ENGINEERING PLANS

FOR

THE PAVILION

POST-DEVELOPMENT BASIN MAP

DUVAL COUNTY, FLORIDA



FINAL ENGINEERING
PLANS

2225 A1A S, SUITE A2
ST. AUGUSTINE, FLORIDA 32080
904.794.4231
matt@gulfstreamdesign.com

PROJECT NO: 22-122
ISSUE DATE: 12-01-2022
DRAFTED BY: TVB
DESIGNED BY: TVB
CHECKED BY: MHL

NOT VALID WITHOUT SEAL

PRE

ATTACHMENT B

REFERENCE MATERIAL

Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
<i>Developing urban areas</i>					
Newly graded areas					
(pervious areas only, no vegetation) ^{5/}		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

¹ Average runoff condition, and $I_a = 0.2S$.² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

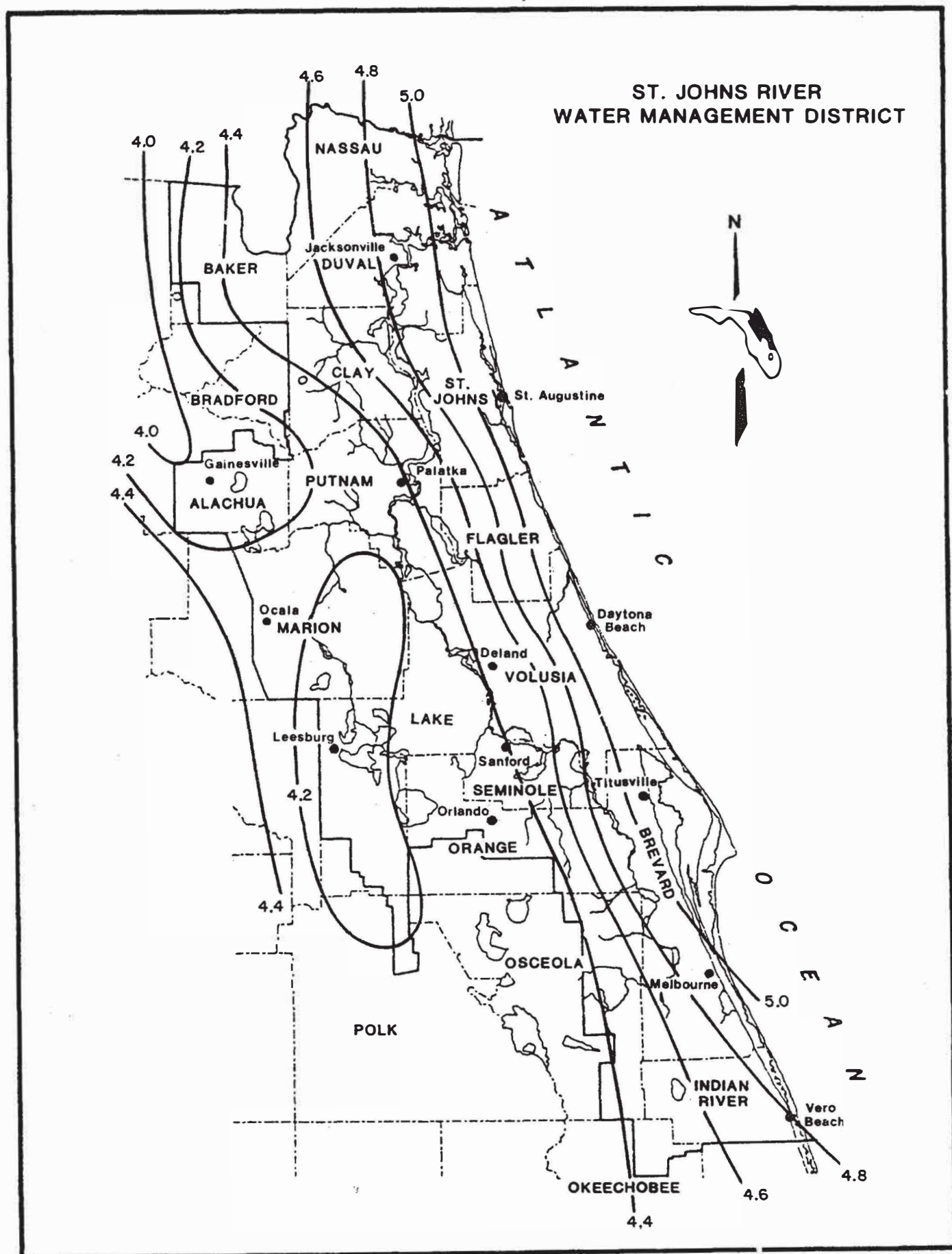


Figure 3. Mean Annual 24-Hour Maximum Rainfall for Northeast Florida, Inches.

ATTACHMENT C

GEOTECHNICAL REPORT

ATTACHMENT D

CALCULATIONS

Drainage Calculations

FERNANDINA BEACH PAVILION

GDG #22-122

12/1/2022

TVB/MHL



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904.794.4231 • www.gulfstreamdesign.com
Civil Site Design • Permitting
Land Development • Consulting



Project Name: Fernandina Beach Pavilion
Project No: GDG #22-122

Designer: TVB
Date: 10/6/2022

TIME OF CONCENTRATION CALCULATIONS

Stormwater Basin: PRE-ONSITE

Time of concentration for sheet flow from Manning-Kinematic wave equation (1976)

$$T_c = 0.007 * (n * L)^{0.8} / (P_2^{0.5} * S^{0.4})$$

Length:	125 ft	n:	0.15		
High Pt:	9.00 ft	Slope:	0.0192 ft/ft		
Low Pt:	6.60 ft	P ₂ :	5 in/hr	2yr/24hr	
Surface:	Short grass prairie			T ₁ :	9.52 min

Time of concentration for shallow concentrated flow from SCS TR-55 velocity method.

Length:	0 ft	Slope:	0.000 ft/ft		
High Pt:	0.0 ft	Velocity:	0.000 ft/sec		
Low Pt:	0.0 ft				
Surface:	Unpaved			T ₂ :	0.00 min

Time of concentration for Rect./Vee/Trap.channel from Manning's Equation.

Length:	0 ft	Depth:	0.0 ft		
High Pt:	0.0 ft	Bottom:	0.0 ft		
Low Pt:	0.0 ft	Side Slope:	0 ft/ft		
Slope:	0.000 ft/ft	Type:	Rectangular		
Surface:	Clean	R _H :	0.00 ft		
n:	0.022	Velocity:	0.000 ft/sec		
				T ₃ :	0.00 min

Time of concentration for Storm Sewer flow assuming fps velocity.

Length:	0 ft				
Velocity:	ft/sec				
				T ₄ :	0.00 min

T_c: 9.52 min
Use 10 Minutes



Project Name: Fernandina Beach Pavilion
Project No: GDG #22-122

Designer: TVB
Date: 10/6/2022

TIME OF CONCENTRATION CALCULATIONS

Stormwater Basin: PRE-OFFSITE

Time of concentration for sheet flow from Manning-Kinematic wave equation (1976)

$$T_C = 0.007 * (n * L)^{0.8} / (P_2^{0.5} * S^{0.4})$$

Length:	200 ft	n:	0.15		
High Pt:	12.00 ft	Slope:	0.0250 ft/ft		
Low Pt:	7.00 ft	P ₂ :	5 in/hr	2yr/24hr	
Surface:	Short grass prairie			T ₁ :	12.48 min

Time of concentration for shallow concentrated flow from SCS TR-55 velocity method.

Length:	0 ft	Slope:	0.000 ft/ft		
High Pt:	0.0 ft	Velocity:	0.000 ft/sec		
Low Pt:	0.0 ft				
Surface:	Unpaved			T ₂ :	0.00 min

Time of concentration for Rect./Vee/Trap.channel from Manning's Equation.

Length:	0 ft	Depth:	0.0 ft		
High Pt:	0.0 ft	Bottom:	0.0 ft		
Low Pt:	0.0 ft	Side Slope:	0 ft/ft		
Slope:	0.000 ft/ft	Type:	Rectangular		
Surface:	Clean	R _H :	0.00 ft		
n:	0.022	Velocity:	0.000 ft/sec		
				T ₃ :	0.00 min

Time of concentration for Storm Sewer flow assuming fps velocity.

Length:	0 ft				
Velocity:	ft/sec				
				T ₄ :	0.00 min

T_C: 12.48 min



Project Name: FERNANDINA BEACH PAVILION
Project No: GDG #22-122

Designer: RCM
Date: 10.25.22

DRAINAGE CALCULATIONS

PRE-ONSITE	12,500	0.287
TOTAL	12,500	0.29

PRE Development Drainage Areas

	Area (sf)	Area (ac)	Impervious Area (ac)	Tc (MIN)	K	CN
PRE-ONSITE	12,500	0.287	0.05	31.3	256	57.7
PRE-OFFSITE	10,000	0.23	0.00	31.3	256	71.5
TOTAL		0.29	0.05	31.3		

PRE Development Curve Number & Runoff Coefficient

PRE-ONSITE	Land Use	Area (sf)	Area (ac)	CN	Composite CN
HSG "A"	Open Space (Fair)	10,275	0.24	49	40.3
	Impervious	2,225	0.05	98	17.4
					57.7

PRE-OFFSITE	Land Use	Area (sf)	Area (ac)	CN	Composite CN
HSG "A"	Open Space (Fair)	5,400	0.12	49	26.5
	Impervious	4,600	0.11	98	45.1
					71.5

NON-DCIA BASIN CALCULATIONS:

	(A)	(B)	(C)	D)=(C)/(A	(E)	
BASIN ID	AREA (ac)	TOTAL IMP (ac)	DCIA (ac)	%DCIA	TOTAL NON-DCIA (ac)	NON-DCIA CN
PRE	0.29	Area (ac)	0.01	2.5%	0.28	71.54

PRE	Land Use	Area	CN	weighted "CN"
HSG "A"	Open Space (Fair)	0.12	49	26.5
HSG "A"	Non-DCIA Imp (B-C)	0.11	98	45.1
	TOTAL (E)	0.23		71.5



Project Name: FERNANDINA BEACH PAVILION
Project No: GDG #22-122

Designer: RCM
Date: 10.25.22

POST-DEVELOPED DRAINAGE BASIN CHARACTERISTICS

Post Development Drainage Areas

	Basin Area (sf)	Basin Area Impervious (ac)	Area (ac)	Tc (min)	CN
POST-ONSITE	12,500	0.29	0.21	10.00	83.0
POST-OFFSITE	10,000	0.23	0.11	10.0	71.5

Post Development Curve Number & Runoff Coefficient Calculations

POST-ONSITE	Land Use	Area (sf)	Area (ac)	CN	Wtd CN
HSG "A"	Open Space (Good)	3,144	0.07	39	9.8
	Gravel	327	0.01	91	2.4
HSG "A"	Impervious	9,029	0.21	98	70.8
			0.29		83.0

NON-DCIA BASIN CALCULATIONS:

POST-OFFSITE	Land Use	Area (sf)	Area (ac)	CN	Wtd CN
HSG "A"	Open Space (Fair)	5,400	0.12	49	26.5
	Impervious	4,600	0.11	98	45.1
					71.5

	(A)	(B)	(C)	(D)=(C)/(A)	(E)	
BASIN ID	AREA (ac)	TOTAL IMP (ac)	DCIA (ac)	%DCIA	TOTAL NON-DCIA (ac)	NON- DCIA CN
POST	0.29	0.21	0.20	68.1%	0.09	51.49

POST	Land Use	Area	CN	weighted "CN"
HSG "A"	Open Space (Good)	0.07	39	30.7
HSG "A"	C)	0.02	98	20.7
	TOTAL (E)	0.09		51.5



Project Name: FERNANDINA BEACH PAVILION
Project No: GDG #22-122

Designer: RCM
Date: 12/1/2022

STORM WATER MANAGEMENT FACILITY (SWMF) TREATMENT VOLUMES

"POND": Required Treatment Volume (TV) [WET DETENTION]

Treating "POST-ON-1", "POST-ON-2", "POST-OFF-1"

Acres	Inches	Ac-ft.	
0.29	1.00	0.024	Required for first 1.0" runoff from drainage area
			or,
0.215	1.25	0.034	1.25" runoff from impervious area + 1/2" over
	TV=	0.034	Ac. Ft.

EXF-1 PIPE DIAMETER (in): 12 # OF ROWS: 10
TRENCH HEIGHT (in): 27.0 TRENCH WIDTH (ft): 15.8

Stage/Storage TRENCH LENGTH (ft): 80
Elevation **VOLUME** **VOLUME**
(ft.) (cf) (Ac. Ft.)

Bottom	3.75	-	0.0000
of trench	4.50	380.0	0.0087
	5.00	758.5	0.0174
	5.50	1,263.7	0.0290
	6.00	1,517.0	0.0348

72 HR RECOVERY DATA

STAGE 2 $V_r - V_u$ (af): 0.000
STAGE 2 Elev (ft): 4.249
 h_2 (ft): 0.499

Required Treatment Volume SJRWMD: **0.0343** ac-ft @ elev 5.96

Provided Treatment Volume: **0.0348** ac-ft @ elev 6.00

ATTACHMENT E

MODEL RESULTS

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EXF	MEAN ANNUAL	7.25	6.08	0.0010	0.82	0.19	884
GROUNDWATER	MEAN ANNUAL	2.75	2.75	0.0000	0.08	0.00	0
POST-99	MEAN ANNUAL	3.60	3.60	0.0000	0.35	0.00	0
PRE-98	MEAN ANNUAL	3.60	3.60	0.0000	0.58	0.00	0
ST-6	MEAN ANNUAL	7.25	5.31	0.0010	0.35	0.35	144

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Retention Pond Recovery - Refined Method
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Project Data

Project Name: FERNANDINA BEACH PAVILION
Simulation Description: TREATMENT VOLUME RECOVERY
Project Number: 22-122
Engineer : TVB
Supervising Engineer: MHL
Date: 12-01-2022

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): -5.00
Water Table Elevation, [WT] (ft datum): 2.75
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 25.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 8.0
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 1280.0

Geometry Data

Equivalent Pond Length, [L] (ft): 80.0
Equivalent Pond Width, [W] (ft): 16.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft²)
3.75	1280.0
6.00	1280.0

Discharge Structures

Discharge Structure #1 is inactive
Discharge Structure #2 is inactive
Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: 1495 ft³ slug load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 1495

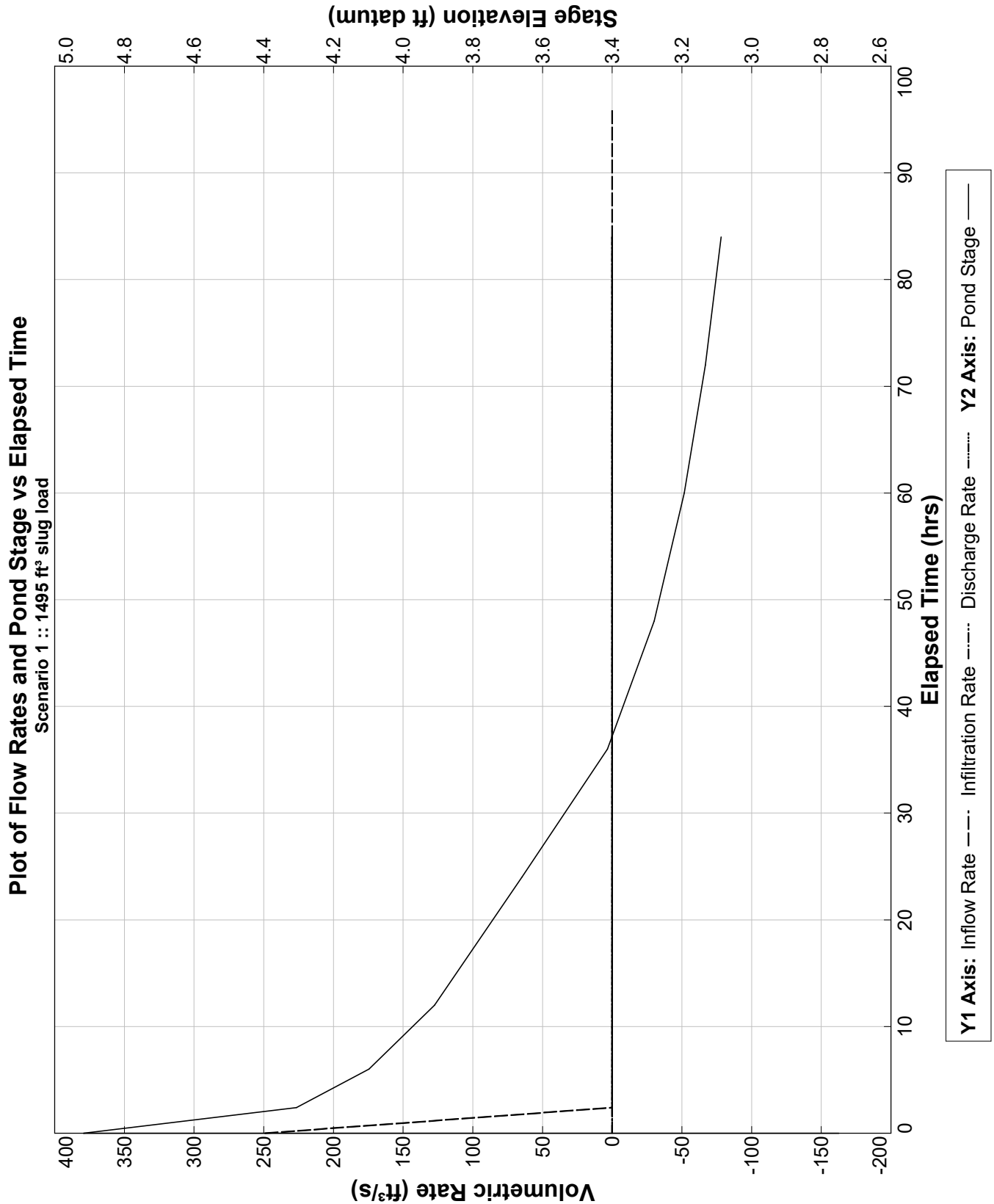
Initial ground water level (ft datum) 2.75 (default)

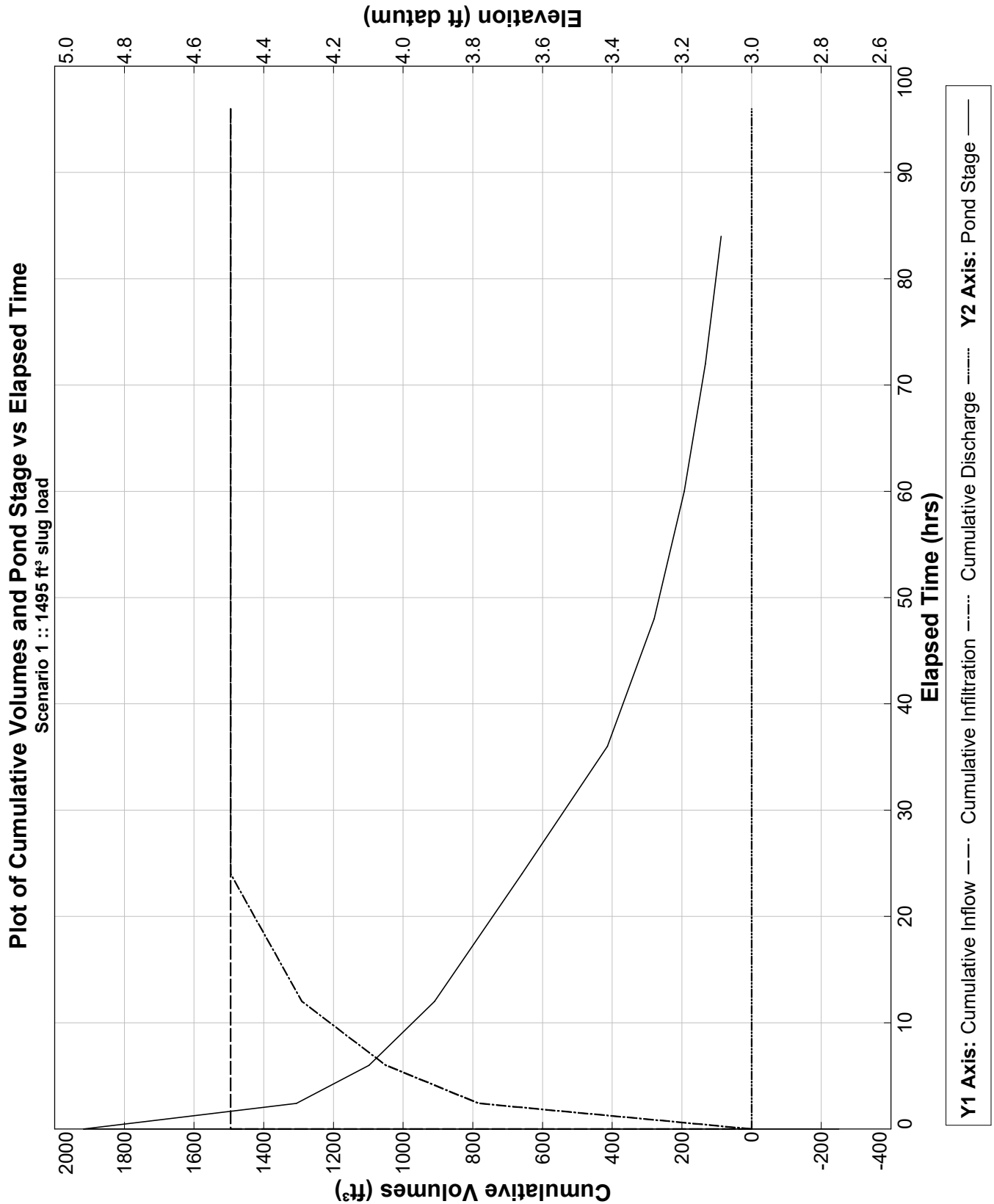
<u>Time After Storm Event (days)</u>	<u>Time After Storm Event (days)</u>
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

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Summary of Results :: Scenario 1 :: 1495 ft³ slug load

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	2.75		
Maximum	0.002	4.92		
Inflow				
Rate - Maximum - Positive	0.002		249.1667	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			1495.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			1495.0
Infiltration				
Rate - Maximum - Positive	0.002		0.1185	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.000			1495.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			1495.0
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	36.000	3.41		1495.0
72 Hour Stage and Infiltration Volume	72.000	3.13		1495.0





Complete Report (not including cost) Ver 4.3.5

Project: Fernandina Pavilion

Date: 12/1/2022 1:21:07 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Pavilion Site
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	48.00

Pre-Condition Landuse Information

Landuse	Single-Family: TN=2.070 TP=0.327
Area (acres)	0.29
Rational Coefficient (0-1)	0.04
Non DCIA Curve Number	56.70
DCIA Percent (0-100)	2.50
Nitrogen EMC (mg/l)	2.070
Phosphorus EMC (mg/l)	0.327
Runoff Volume (ac-ft/yr)	0.051
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	0.131
Phosphorus Loading (kg/yr)	0.021

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188
Area (acres)	0.29
Rational Coefficient (0-1)	0.56
Non DCIA Curve Number	51.50
DCIA Percent (0-100)	68.10
Wet Pond Area (ac)	0.00
Nitrogen EMC (mg/l)	1.130
Phosphorus EMC (mg/l)	0.188
Runoff Volume (ac-ft/yr)	0.646
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000

Nitrogen Loading (kg/yr)	0.899
Phosphorus Loading (kg/yr)	0.150

Catchment Number: 1 Name: Pavilion Site

Project: Fernandina Pavilion

Date: 12/1/2022

Exfiltration Trench Design

Pipe Span (in)	12.0
Pipe Rise (in)	12.0
Pipe Length (ft)	800.0
Trench Width (ft)	1.5
Trench Depth (ft)	2.3
Trench Length (ft)	800.0
Aggregate Void %	0.40
Storage Volume (Ac-ft)	0.03
Retention Depth (in over CA)	1.384

Watershed Characteristics

Catchment Area (acres)	0.29
Contributing Area (acres)	0.290
Non-DCIA Curve Number	51.50
DCIA Percent	68.10
Rainfall Zone	Florida Zone 2
Rainfall (in)	48.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	85
Provided TN Treatment Efficiency (%)	88
Required TP Treatment Efficiency (%)	86
Provided TP Treatment Efficiency (%)	88

Media Mix Information

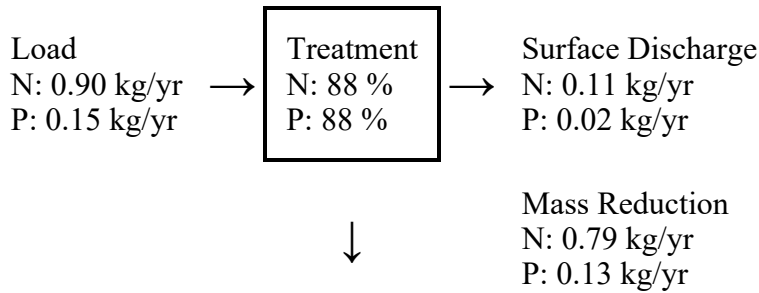
Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

Groundwater Discharge (Stand-Alone)

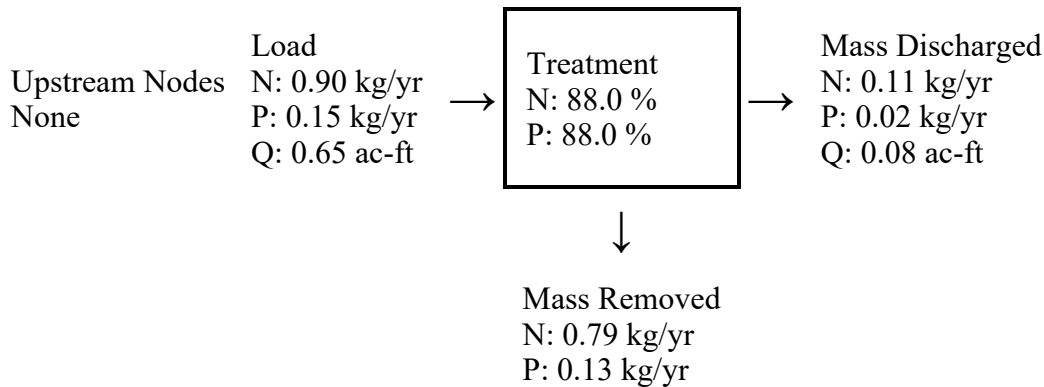
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.792

TN Concentration (mg/L) 0.000
 TP Mass Load (kg/yr) 0.132
 TP Concentration (mg/L) 0.000

Load Diagram for Exfiltration Trench (stand-alone)



Load Diagram for Exfiltration (As Used In Routing)



Summary Treatment Report Version: 4.3.5

Project: Fernandina Pavilion

Analysis Type: Net Improvement
BMP Types:

Date: 12/1/2022

Catchment 1 - (Pavilion Site)
 Exfiltration Trench
 Based on % removal values to the
 nearest percent

Routing Summary
 Catchment 1 Routed to Outlet

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

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	.13 kg/yr	
Total N post load	.9 kg/yr	
Target N load reduction	85 %	
Target N discharge load	.13 kg/yr	
Percent N load reduction	88 %	
Provided N discharge load	.11 kg/yr	.24 lb/yr
Provided N load removed	.79 kg/yr	1.75 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	.021 kg/yr	
Total P post load	.15 kg/yr	
Target P load reduction	86 %	
Target P discharge load	.021 kg/yr	
Percent P load reduction	88 %	
Provided P discharge load	.018 kg/yr	.04 lb/yr
Provided P load removed	.132 kg/yr	.29 lb/yr



Mr. Tim Poynter
29 N. 3rd Street
Fernandina Beach, FL 32034

Sent Via Email to Project Team

Applicant Name: Poynter Family Holdings, LLP.
Project Description: The Pavilion
Location: 116 N. 2nd Street
TRC Case Number: TRC 2022-0028

Mr. Poynter,

The City of Fernandina Beach received your request for site plan review on December 1, 2022. All submitted documents provided were routed to the Technical Review Committee (TRC). The comments provided as part of this site plan review are valid for six months from the date of issuance.

Please resubmit response documents to address each comment in a narrative form and through an amended site plan. The next available TRC meeting is Thursday, December 22, 2022, at 10 am. This project is currently scheduled to appear on the agenda. All reviewers will be present to discuss any questions you have concerning the comments provided herein.

If you have any questions, please contact us at TRCinfo@fbfl.city or 904-310-3480.

Sincerely,

A handwritten signature in blue ink, which appears to read "Salvatore J. Cumella".

Salvatore J. Cumella, Senior Planner



TRC Reviewers: After reviewing proposed plans...

- If you have comments that need to be addressed in a resubmittal, please check the first box and enter comments in the bulletized list, or
- If you have no comments or the applicant has satisfactorily addressed all of your previous comments, please check the second box and add your name and date. This is your "sign off" for issuance of the Local Development Order (LDO) once all departments have signed off.

2ND ROUND REVIEW COMMENTS:**PLANNING**

☐ The Planning & Conservation Department has reviewed the submittal and noted the following comments:

- As previously referenced, type C 15' buffer required.
- 4.05.03 A.(2): Camphor trees cannot remain (removal will not require mitigation).

☐ All previous comments have been addressed and the Department of Planning & Conservation approves issuance of a local development order.

Name of Approver: Daphne Forehand

Today's Date: 12/15/22

BUILDING

☐ The Building Department has reviewed the submittal and noted the following comments:

- No comments Received as of 12/15/22

☐ All previous comments have been addressed and the Building Department approves issuance of a local development order.

Name of Approver: N/A

Today's Date: 12/15/22

UTILITIES, STORMWATER, & STREETS

☒ The Public Works Department has reviewed the submittal and noted the following comments:

- Specific comments were discussed with applicants. They indicated a redesign for the stormwater system is in process and will be submitted.

☐ All previous comments have been addressed and the Public Works Department approves issuance of a local development order.

Name of Approver: Victoria Guadagnino

Today's Date: 12/15/22

CODE ENFORCEMENT

☐ The Code Enforcement Department has reviewed the submittal and noted the following comments:

- Enter comments here



☒ All previous comments have been addressed and the Code Enforcement Department approves issuance of a local development order.

Name of Approver: Michelle Forstrom

Today's Date: 12/15/22

FIRE

☐ The Fire Department has reviewed the submittal and noted the following comments:

- [Enter comments here](#)

☒ All previous comments have been addressed and the Fire Department approves issuance of a local development order.

Name of Approver: Jason Higginbotham

Today's Date: 12/15/22