



AGENDA - AMENDED
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
JANUARY 25, 2024
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 December 28, 2023.
- 5. NEW BUSINESS**
 - 5.1 TRC 2024-0001 - GULFSTREAM DESIGN GROUP, LLC, AGENT FOR THE CROSSINGS AT AMELIA LLC, 231 N FRONT STREET
Site Plan Review for 19-units hotel with sales office, associated parking + storm water facilities.
 - 5.2 TRC 2023-0042 - GILLETTE & ASSOCIATES, INC., AGENT FOR SPURGEON RICHARDSON
Site Plan Review for mixed-use structure with 33 residential units and commercial office space.
- 6. COMMITTEE BUSINESS**
- 7. ADJOURNMENT**

NEXT REGULAR TRC MEETING IS SCHEDULED FOR FEBRUARY 22, 2024

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.



**AGENDA
TECHNICAL REVIEW COMMITTEE
REGULAR MEETING
DECEMBER 28, 2023
10:00 AM
CITY HALL COMMISSION CHAMBERS**

1. CALL TO ORDER 10:00 A.M.

2. ROLL CALL

MEMBERS PRESENT:

Daphne Forehand (Planning)
Walter Gray (Utilities)
Michelle Forstrom (Code Enforcement)
Charlie George (Community Services)
Andre Desilet (Utilities)

David Neville (Arborist/Urban Forester)
Victoria Guadagnino (Stormwater/Street/Utilities)
Taylor Hartmann (Planning)
Jason Higginbotham (Fire)

MEMBERS ABSENT:

none

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF MINUTES

4.1 Approval of Minutes for the Regular Meeting of November 30, 2023.

ACTION TAKEN: A motion was made, by Member Forstrom, seconded by Member Guadagnino, to approve the Minutes for the Regular Meeting of November 30, 2023, as presented.

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

5. DISCUSSION ITEMS

6. NEW BUSINESS

6.1 TRC 2023-41 - SHAYCORE, LLC - 2707 SADLER ROAD
Site plan review - Clubhouse and Administration Renovation, Guest Room Interior Renovation and Repairs, Pool and Amenity Reconstruction.

Members relayed their comments to the applicant. Applicant will provide a 2nd submittal addressing all requests.

7. OLD BUSINESS

8. COMMITTEE BUSINESS

9. ADJOURNMENT 10:14 A.M.

Print

Technical Review Committee: Application - Submission #13022

Date Submitted: 1/4/2024

Technical Review Committee: Application

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

Fees



Initial submittal + two submittals of full site plans. \$400 + 2% of the project construction cost (whichever is greater) for up to a maximum of \$4,400.



3rd and subsequent resubmittals. 1/2 of original application fees



Engineering Review (Consultant Hourly Rate)

2024 Meeting Calendar



In observance of Thanksgiving on November 24, the TRC Regular Meeting is moved up to November 17.

IMPORTANT NOTES

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

****Please note that, unless otherwise indicated, the TRC meetings are scheduled as the following:**

TRC Applications are reviewed at 10:00 AM on the 4th Thursdays of each month in City Hall Chambers (204 Ash Street).**

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



Requirements for All Site Plans – see LDC section 11.01.04



Requirements for Subdivision Plats – see LDC section 11.01.05



Determination for Completeness & sufficiency – see LDC section 11.03.01



Review and Compliance Report by the Technical Review Committee – see LDC Section 11.03.02



Construction and Improvements – see LDC section 11.05.00



Amendments to Local Development Orders – see LDC section 11.06.00

The LDC is available for review at

www.fbf.us/LDC

Application Requirements



See Development Plan Submittal Checklist



All applications are subject to a determination of completeness as required by Land Development Code section 11.03.01.



A determination of completeness is a determination that all required documents and plans have been submitted, and whether all fees have been paid.



A determination of completeness is not a determination of compliance with substantive standards and criteria.

Key Contacts

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

 **TRC Departments**
Graphic

PROJECT INFORMATION

Submission Type****NOTICE***

3rd and all subsequent submissions will be charged a fee of 1/2 the original application fees.

Case Number***PROPERTY INFORMATION**

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

Site Address***City*****State*****Zip*****Parcel ID #(s)****Lot****Block****Subdivision****Zoning District****Future Land Use Designation*****Overlay District*****Size of Property (acres)*****Present Property Use*****Wetlands*****Flood Zone*****Coastal Construction Control Line (CCCL)*****OWNER OF RECORD**

As recorded with the Nassau County Property Appraiser

First Name*

Timothy

Last Name*

Poynter

Company (if applicable)

The Crossings at Amelia, LLC

Mailing Address*

960194 Gateway Blvd 101

City*

Fernandina Beach

State*

FL

Zip*

32034

Telephone Number*

904-236-9757

Email Address*

tpoynter@gmail.com

OWNER'S AGENT

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

First Name

Matthew

Last Name

Lahti

Company (if applicable)

Gulfstream Design Group, LLC

Mailing Address

2225 A1A S, Suite A2

City

St. Augustine

State

FL

Zip

32080

Telephone Number

904-794-4231

Email Address

lindsay@gulfstreamdesign.com

PROJECT INFORMATION

Project Type*	Project Name
Site Plan Review	Hotel Stacking
Proposed Access Road*	Rd Maintenance Jurisdiction*
Broome Street	City Maintained
Project Estimated Cost*	
300,000	
Description of Request*	
Proposed 19 unit hotel development with sales office; with associated parking and stormwater facilities.	

Site Plan Review Checklist



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



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



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



A vicinity map showing the location of the property.



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



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



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



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



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



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



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



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



Elevations of all proposed structures.



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



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



A tree survey showing protected trees, proposed replacement trees, if required, and landscaping and buffering. (See Section 4.05.00.)



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



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

provision of the LDC applicable to the underlying zoning district.

School Concurrency

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

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

Certification*

A summary block containing:

- ☒ Land use category from the Future Land Use Map in the comprehensive plan;
- ☐ By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.
- ☒ Zoning district;
- ☐ I acknowledge that I understand and have complied with all of the submittal requirements and procedures.
- ☐ Total acreage;
- ☐ Total square footage for non-residential uses;

Applicant First Name*

Applicant Last Name*

Matthew

Lant

Today's Date*

Upload Supporting Documentation*

1/4/2024

01.pdf

Upload 2

Upload 3

02.pdf

03.pdf

Upload 4

Upload 5

04

22-149 Drainage Report-R0.pdf

05

22-149 Hotel Stacking FB.pdf

Upload 6

Upload 7

06.pdf

07.pdf

City of FB logo

NEW Reflex

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

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

DEPARTMENT OF PLANNING & CONSERVATION

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

204 Ash Street | Fernandina Beach, FL 32034 | 904 310-3480 |

www.fbfl.us/planning

o Tree Protection Plan (Section 4.05.09.)

o Landscape Plan (Section 4.05.00.)

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

o Signage Plan (Section 5.03.00.)

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

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

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



Via Electronic Delivery
[\(kgibson@fbfl.org\)](mailto:kgibson@fbfl.org)

January 4, 2024

Ms. Kelly N. Gibson, AICP
Planning and Conservation Director
City of Fernandina Beach
204 Ash Street
Fernandina Beach, FL 32034

RE: **Hotel Stacking**
GDG: 22-149
Technical Review Committee Application

Dear Ms. Gibson:

On behalf of my client, please find the following documents in regard to the Technical Review Committee Application associated with the Hotel Stacking project.

- One (1) Set of Property Record Cards per Nassau County Property Appraiser
- One (1) Set of Project Maps
- One (1) Legal Description
- One (1) Gulfstream Design Group Agent Authorization for The Crossings at Amelia, LLC
- One (1) Stormwater Narrative
- One (1) Set of Signed and Sealed Civil Engineering Drawings
- One (1) Signed and Sealed Survey
- One (1) Set of Architectural and Landscape Drawings
- One (1) Geotechnical Report

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



LETTER OF OWNER AUTHORIZATION

Date: 10/25/2022
Project: Fernandina Pavilion
GDG #: 22-122

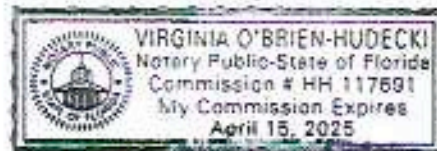
To Whom It May Concern:

Please be advised that **Gulfstream Design Group, LLC** is hereby authorized to act on behalf of **Poynter Family Holdings, LLP**, as the Civil Engineer for the above referenced project. In this regard, this letter authorizes, Gulfstream Design Group, LLC, to act as our agent for and with all regulatory agencies (SJRWMD, City of Fernandina Beach), as well as Nassau County departments and their respective personnel, in an effort to receive all governmental approvals and permits necessary for the construction and development of **Fernandina Pavilion** project located in City of Fernandina Beach, Florida.

By: 

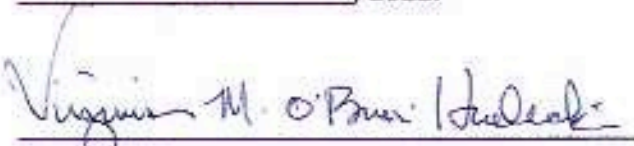
STATE OF FLORIDA
COUNTY OF NASSAU

Date: 10/27/22



The foregoing instrument was acknowledged before me this 27th day of October 2022 by TIM POYNTER. He/she is personally known to me or has produced FL DL as identification and did/did not take an oath.

WITNESS my hand and official seal in the County and State last aforesaid this 27th day of OCTOBER, 2022.


Notary Public

My commission expires: 4-15-25

Civil Site Design
2225 A1A S, Suite A2

Permitting
St. Augustine, Florida

Land Development
904.794.4231

Consulting
gulfstreamdesign.com

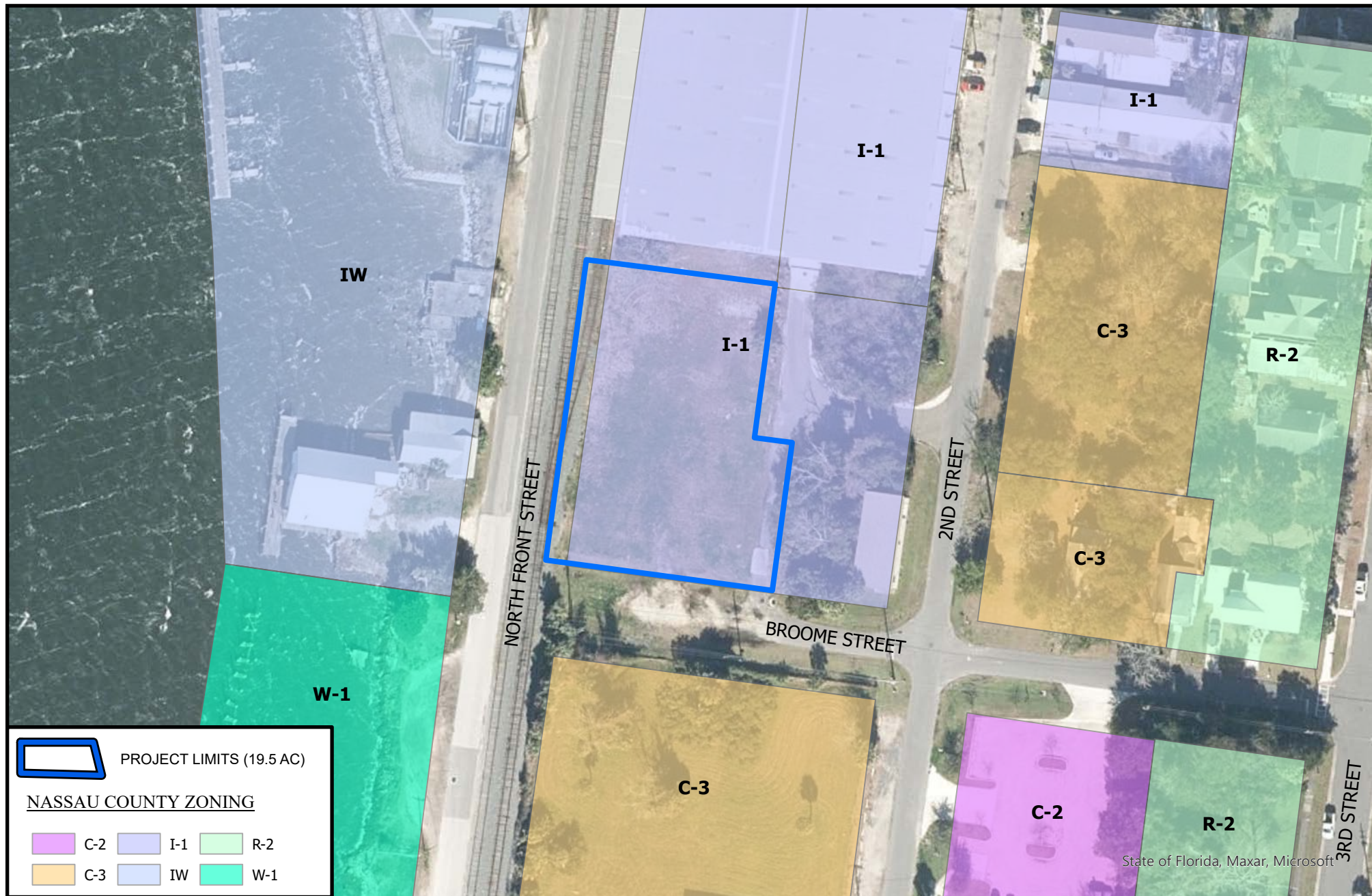
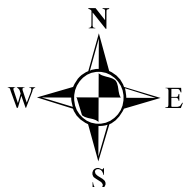


Image Source: ESRI 2020
Date: 10-19-2023
Project Number: 22-149

US Feet
0 55 110



EXISTING ZONING MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA

GULFSTREAM
DESIGN GROUP, LLC
Gulfstream Design Group, LLC
2225 A1A S, Suite A2
St. Augustine, FL 32080
904.794.4231



PROJECT LIMITS (19.5 AC)

Image Source: ESRI 2020
Date: 04-25-2023
Project Number: 22-149

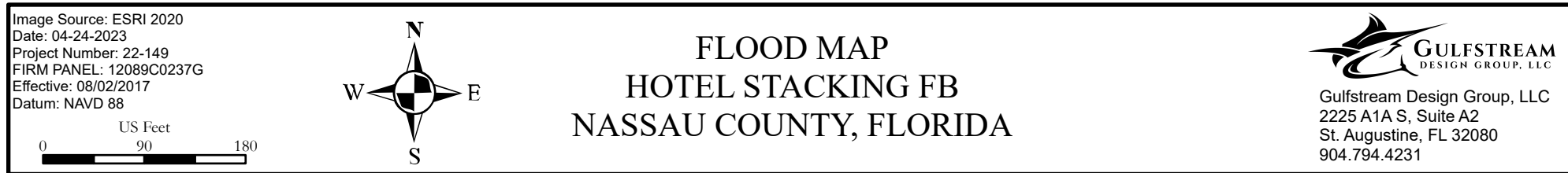
US Feet
0 112.5 225



AERIAL MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA



Gulfstream Design Group, LLC
2225 A1A S, Suite A2
St. Augustine, FL 32080
904.794.4231



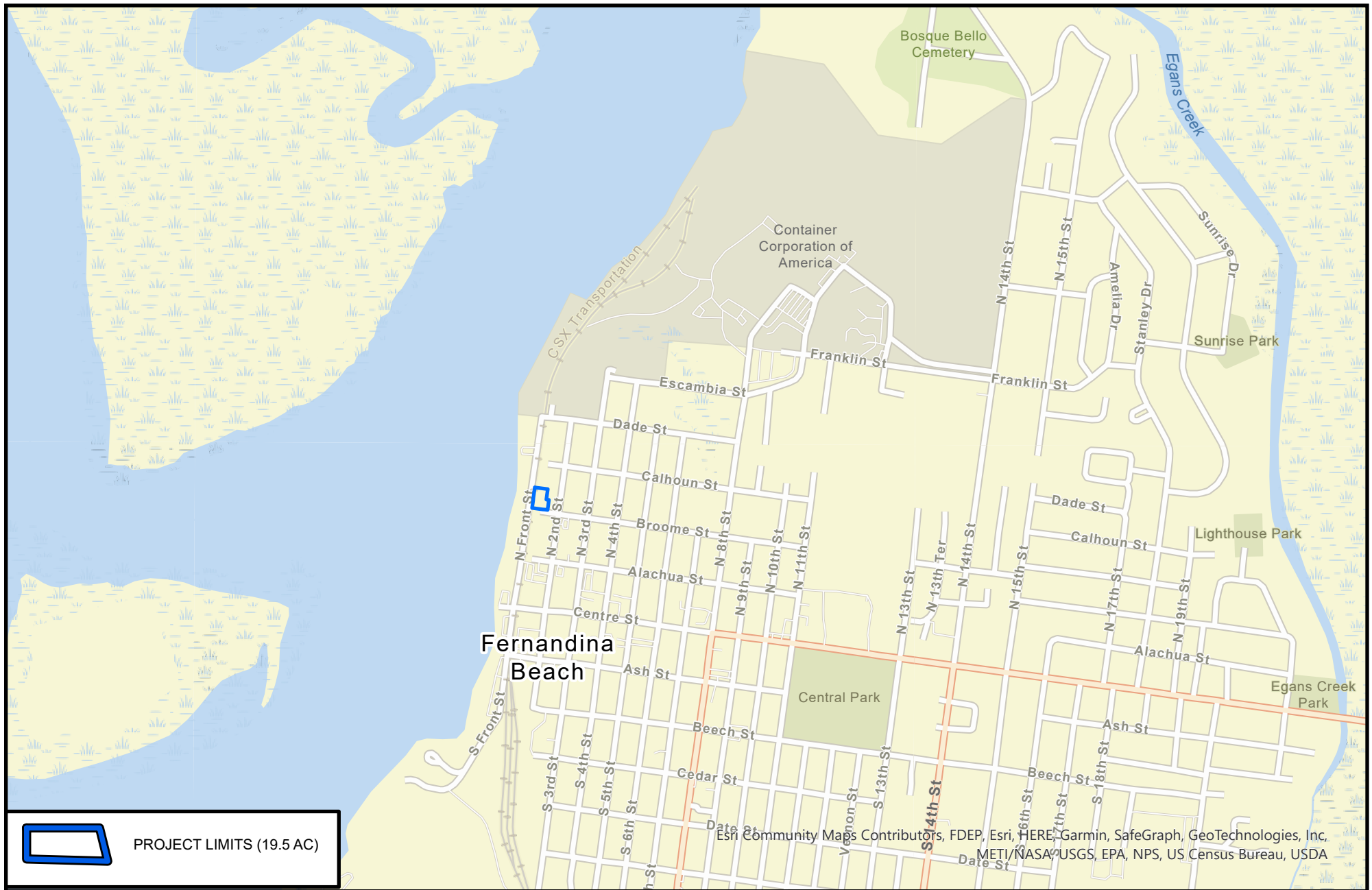
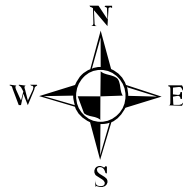




Image Source: ESRI 2020
Date: 04-25-2023
Project Number: 22-149

US Feet
0 90 180



SOILS MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA

GULFSTREAM
DESIGN GROUP, LLC

Gulfstream Design Group, LLC
2225 A1A S, Suite A2
St. Augustine, FL 32080
904.794.4231



Image Source: ESRI 2020
Date: 04-25-2023
Project Number: 22-149

US Feet
0 70 140



TOPO/LIDAR MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA

**GULFSTREAM**
DESIGN GROUP, LLC
Gulfstream Design Group, LLC
2225 A1A S, Suite A2
St. Augustine, FL 32080
904.794.4231

A. Michael Hickox, CFA
Cert. Res. RD1941

NASSAU COUNTY
PROPERTY APPRAISER

PROPERTY INFORMATION

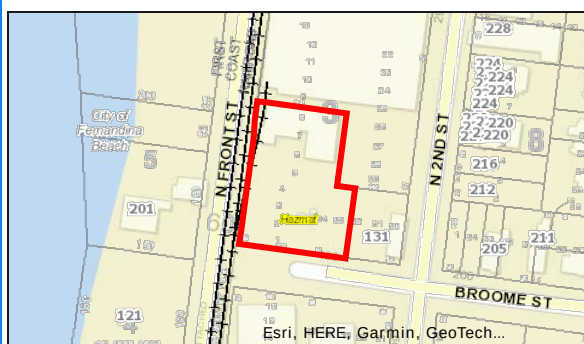
Parcel Number 00-00-31-1800-0003-0010
Owner Name THE CROSSINGS AT AMELIA LLC
Mailing Address 960194 GATEWAY BLVD 101
FERNANDINA BEACH, FL 32034
Location Address 231 FRONT ST N
FERNANDINA BEACH 32034
Tax District FERNANDINA BEACH
Milage 19.5052
Homestead No
Property Usage VACANT COM 001000
Deed Acres 0
Short Legal BLOCK 3 LOTS 1 THRU 8 33 & 34

2022 Certified Values

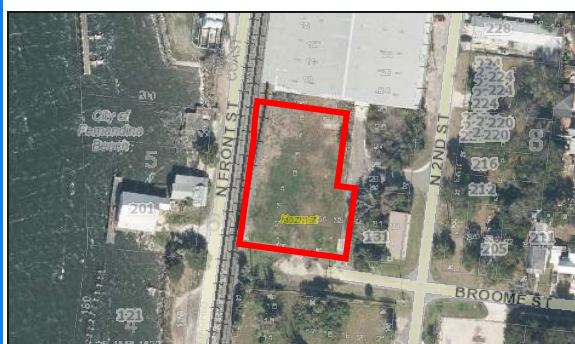
Land Value	\$346,192
(+) Improved Value	\$0
(=) Market Value	\$346,192
(-) Agricultural Classification	\$0
(-) SOH or Non-Hx* Capped Savings	\$0
(=) Assessed Value	\$346,192
(-) Homestead	\$0
(-) Additional Exemptions	\$0
(=) School Taxable Value	\$346,193
(-) Non-School HX & Other Exempt Value	\$0
(=) County Taxable Value	\$346,192

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

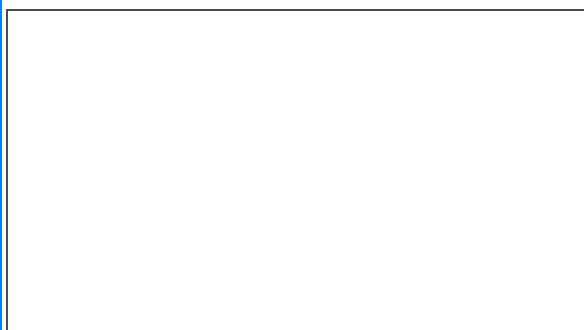
PARCEL MAP



2021 AERIAL MAP

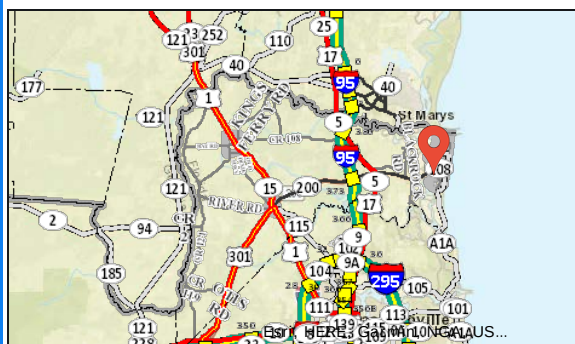


PROPERTY PHOTO



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

LOCATION MAP



BUILDING INFORMATION

Type	Total Area	Heated Area	Bedrooms	Baths	Primary Exterior	Secondary Exterior	Heating	Cooling	Actual Year Built
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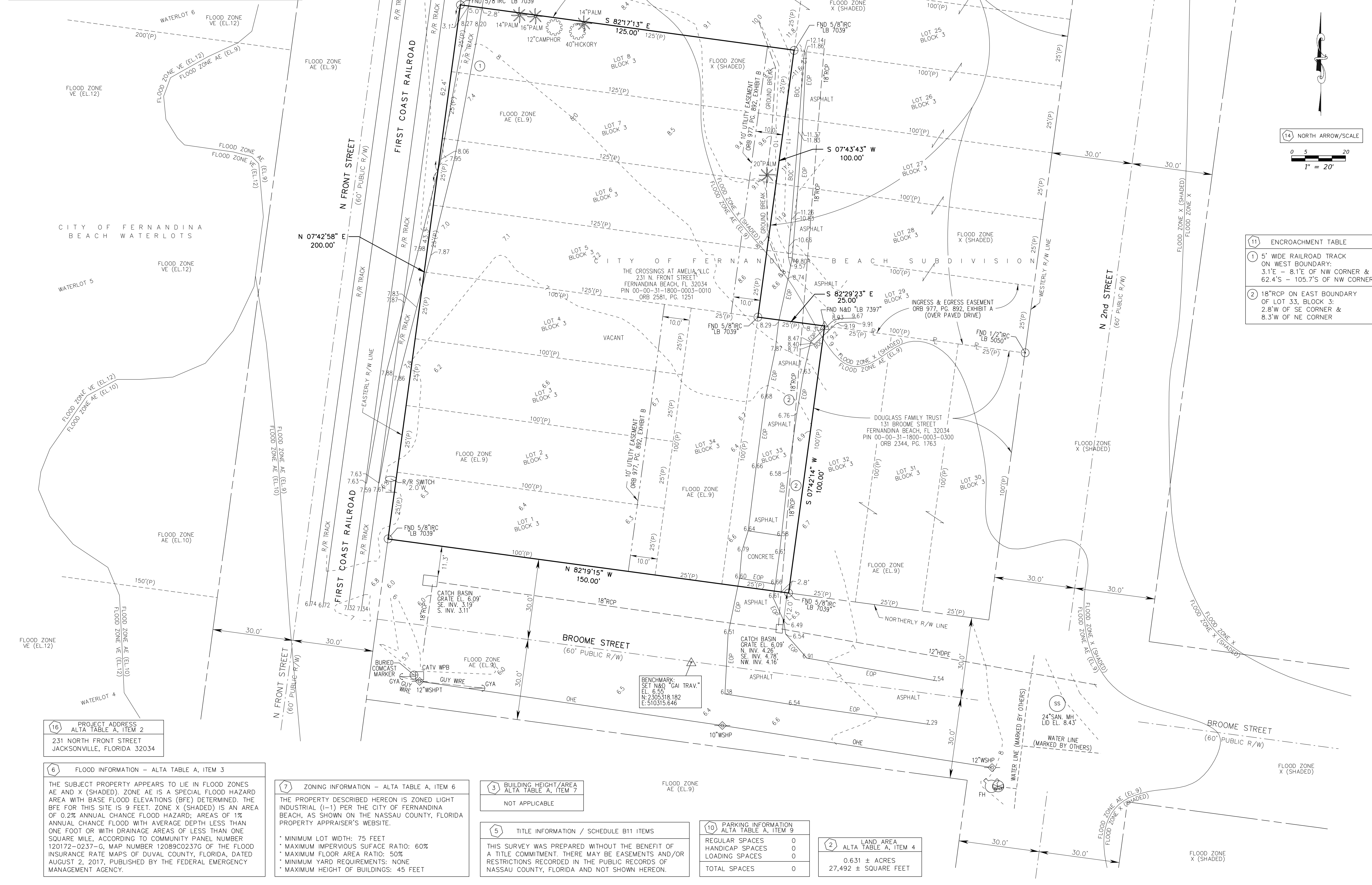
MISCELLANEOUS INFORMATION

Description	Dimensions L X W	Units	Year Built
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SALES INFORMATION

Sale Date	Book Page	Price	Instr	Qual	Imp	Grantor	Grantee
2022-08-02	2581 / 1251	\$800,000	SW	Q	N	HALL INVESTMENTS INC	THE CROSSINGS AT AMELIA LLC

2012-12-08	2110 / 1057	\$0	MS	U	N	FLORIDA PETROLEUM CORPORATION	HALL INVESTMENTS INC
1984-08-01	429 / 449	\$601,000	MS	U	Y		

[illegible]

①	TITLE/SURVEYOR'S DESCRIPTION
	LOTS 1, 2, 3, 4, 5, 6, 7, 8, 33, AND 34, BLOCK 3, FERNANDINA BEACH, FLORIDA AS SHOWN ON THE OFFICIAL PLAT OF FERNANDINA BEACH FLORIDA AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED REVISED AND RE-ISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901, FOR JOHNSON PETROLEUM COMPANY

(12)	LEGEND
BOC	BACK OF CURB
CATV	CABLE TELEVISION
EOP	ELEVATION
EH	EDGE OF PAVEMENT
FH	FIRE HYDRANT
FND	FOUND
GYA	GUY ANCHOR
HDPE	HIGH-DENSITY POLYETHYLENE
INV.	INVERT ELEVATION
NR	NON ROAD AND RAMP
MH	MANHOLE
N	NORTH
NAD	NAIL AND DISK
NW	NORTHWEST
OHE	OVERHEAD ELECTRIC LINE
ORB	OFFICIAL RECORDS BOOK
P	PLATED DATA
PG.	PAGE
PIV	PROPERTY IDENTIFICATION NUMBER
R	PROPERTY LINE
RCP	REINFORCED CONCRETE PIPE
R/R	ROADWAY
N	RIGHT-OF-WAY
S	SOUTH
SAN.	SANITARY SEWER
S.E.	SOUTHEAST
TRAV.	TRAVERSE
W	WEST
WRING	WRING PULL BOX
WSHP	WOOD SHARED UTILITY POLE
WSHPT	WOOD SHARED UTILITY POLE WITH TRANSFORMER
	FIRE HYDRANT
	WATER VALVE COVER
	PROPERTY OWNERSHIP HOOK
N: 2305.318 182 E: 510315.646	NORTHING AND EASTING HORIZONTAL STATE PLANE COORDINATES

KEY TO ALTA SURVEY	
1	TITLE/SURVEYOR'S DESCRIPTION
2	LAND AREA
3	BUILDING HEIGHT/AREA
4	BEARING BASIS
5	TITLE INFORMATION/ SCHEDULE BII ITEMS
6	FLOOD INFORMATION
7	ZONING INFORMATION
8	SURVEYOR'S NOTES
9	SURVEYOR'S CERTIFICATE
10	PARKING INFORMATION
11	ENCROACHMENT TABLE
12	LEGEND
13	VICINITY MAP
14	NORTH ARROW/SCALE
15	SURVEY DRAWING
16	PROJECT ADDRESS

11	ENCROACHMENT TABLE
1	5' WIDE RAILROAD TRACK ON WEST BOUNDARY: 3.1'E - 8.1'E OF NW CORNER & 62.4'S - 105.7'S OF NW CORNER
2	18"RCP ON EAST BOUNDARY OF LOT 33, BLOCK 3: 2.8'W OF SE CORNER & 8.3'W OF NE CORNER

4	BEARING BASIS
	BEARINGS SHOWN HEREON BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM 83/2011, WITH A BEARING OF NORTH 82°19'15" WEST ON THE NORTHERLY RIGHT-OF-WAY LINE OF BROOME STREET

8. SURVEYOR'S NOTES
1. ELEVATIONS SHOWN HEREON BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) , WITH AN ORIGINATING BENCHMARK BEING A SET NAIL AND DISK (STAMPED "GAI TERRY"), HAVING AN ELEVATION OF 6.55 FEET (SHOWN HEREON) (ALTA TABLE A, ITEM 5).
2. THERE ARE NO DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES (ALTA TABLE A, ITEM 10).
3. ON AND ABOVE GROUND IN ADDITION TO SUBSURFACE UTILITIES LOCATED BY THIS SURVEY, SUBSURFACE UTILITIES MAY EXIST AND NOT BE SHOWN HEREON (ALTA TABLE A, ITEM 11).
4. THERE WERE NO WETLAND DELINEATION MARKERS WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
5. PROPERTY LOCATED APPROXIMATELY 75 FEET NORTHWEST OF THE INTERSECTION OF BROOME STREET AND NORTH 22nd STREET (ALTA TABLE A, ITEM 14).
6. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDINGS ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK (ALTA TABLE A, ITEM 16).
7. NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK (ALTA TABLE A, ITEM 5).
8. SITE HAS DIRECT ACCESS TO BROOME STREET (A PUBLIC R/W). SITE IS CONTIGUOUS TO IT AND ALL ADJACENT PARCELS SHOWN HEREON AND THERE ARE NO GAPS, GORES, OR OVERLAPS ALONG THEIR COMMON BOUNDARIES.
9. PROPERTY BENEFITS FROM THAT PERPETUAL NON-EXCLUSIVE INGRESS AND EGRESS EASEMENT OVER PARCEL 29, BLOCK 3, LYING AND BEING IN THE CITY OF FERNANDINA BEACH, AS RECORDED IN OFFICIAL RECORDS BOOK 977, PAGE 892, EXHIBIT B, OF THE PUBLIC RECORDS OF NASSAU COUNTY, FLORIDA (SHOWN HEREON).
10. PROPERTY SUBJECT TO THAT TO 10 FOOT WIDE UTILITY EASEMENT DESCRIBED AS "THE EASTERLY TEN (10) FEET OF THE WESTERN PROPERTY LINE OF LOTS 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723,

9	SURVEYOR'S CERTIFICATE
TO: GULFSTREAM DESIGN GROUP, LLC	
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11(A)(B), 13, 14, 16, 17, 18, AND 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON AUGUST 21, 2023. <i>Joseph K. Lek</i> Sept. 13, 2023 DATE _____ JOSEPH K. LEK, P.S.M. CERT. NO. LB 6016	

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CERT. NO.
LB 3604

• ENGINEERING • PLANNING • SURVEYING • CEI SERVICES •

I HEREBY CERTIFY THAT THIS SURVEY MEETS THE STANDARD OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES, AND 5J-17 OF THE FLORIDA SURVEYING BOARD'S REGULATIONS.

CODE: Joseph X. Loh

JOSEPH K. LEK FLA. P.S.M. CERT. NO. LS 6016

NOT V

JOB NUMBER	<i>R230804</i>
MAP NUMBER	<i>T9728004</i>

Legal Description

LOTS 1, 2, 3, 4, 5, 6, 7, 8, 33, AND 34, BLOCK 3, FERNANDINA BEACH, FLORIDA AS SHOWN ON THE OFFICIAL PLAT OF FERNANDINA BEACH FLORIDA AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED REVISED AND RE-ISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901, FOR JOHNSON PETROLEUM COMPANY



Drainage Analysis and Stormwater Management Plan for Hotel Stacking @ Fernandina

Prepared for:

The Crossings at Amelia, LLC
960194 Gateway Blvd., Suite 101
Fernandina Beach, FL 32034

City of Fernandina Beach, Florida
St. Johns River Water Management District

Initial Issue: January 4, 2023

Project # 22-149

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Gulfstream Design Group, LLC

Matthew Lahti, P.E.
FL#71395
Date: 20240104
P.E. FL# 71395

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.

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Civil Site Design • Permitting • Land Development • Consulting

Table of Contents

1.0 Introduction.....	1
1.1 Background.....	1
1.2 Stormwater Management Facility Design Criteria	1
1.2.1 SJRWMD Design Criteria	1
1.2.2 City of Fernandina Beach Design Criteria	1
2.0 Pre-Developed Hydrologic Conditions	2
2.1 Existing Site Conditions	2
2.2 Soils	2
2.3 FEMA Flood Map Review.....	2
2.4 Pre-Developed Basin Characteristics.....	2
2.5 Pre-Developed Nutrient Loading	Error! Bookmark not defined.
3.0 Post-Developed Hydrologic Conditions	4
3.1 Post Developed Basin Description.....	4
3.2 Post-Developed Basin Characteristics	5
3.3 Post-Developed Nutrient Loading	Error! Bookmark not defined.
4.0 Study Results	6
4.1 Detention Requirements.....	6
4.2 ICPR Model Results	6
4.3 Nutrient Loading Analysis Summary	Error! Bookmark not defined.
5.0 Stormwater Management Design.....	7
5.1 Stormwater Conveyance Systems.....	7
5.2 Water Quality Structures.....	7
5.3 Sedimentation and Erosion Control Measures.....	7

ATTACHMENT A – MAPS

Location Map
Aerial Map
Flood map
Pre-Development Basin Map
Post Development Basin Map

ATTACHMENT B – REFERENCE MATERIAL

ATTACHMENT C – GEOTECHNICAL REPORT

Legacy Engineering, Inc.

ATTACHMENT D - CALCULATIONS

Time of Concentration
Pre-Developed Drainage Characteristics
Post-Developed Drainage Characteristics
Treatment Volume Calculations

ATTACHMENT E – MODEL RESULTS

ICPR Input & Results
PONDS Input & Results

1.0 Introduction

1.1 Background

This report describes the stormwater treatment system for Hotel Stacking at Fernandina, a hotel development with associated infrastructure. The project is located on a 0.63 acre parcel on the north side of Broome Street, approximately 75-ft west of North 2nd Street in Fernandina Beach, Florida. Specifically, the development includes the following Parcel ID according the Nassau County Property Appraisers Office, 00-00-31-1800-0003-0010.

The proposed stormwater treatment will incorporate a combination of dry retention below the raised buildings and an exfiltration trench below the parking surface which will discharge to the Broome 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

Dry retention and exfiltration is proposed for the stormwater treatment for this development. Methods obtained from the *Applicants Handbook: Volume II, Section 7.0* 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 Interconnected Channel and Pond Routing (ICPR) version 4.04 software. Recovery of the exfiltration system is evaluated using PONDS version 3.3 software.

1.2.2 City of Fernandina Beach Design Criteria

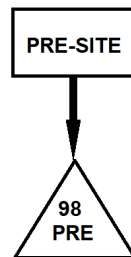
In addition to the storm analyses performed for the SJRWMD submittal, the City of Fernandina Beach requires an analysis of the 10-year, 24-hour storm event, per Land Development Code Section 3.05.03.

2.0 Pre-Developed Hydrologic Conditions

2.1 Existing Site Conditions

The property was previously developed as an industrial storage area with gravel driveway. The site (Basin “PRE-SITE”) drains from northeast to southwest towards the Broome Street right-of-way, where it is then collected into the Downtown Fernandina Beach drainage system (Node “98-PRE”).

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,” however, for purposes of maintaining consistency with the site with respect to the Downtown Fernandina Beach Conceptual ERP, the existing soils are assumed to exhibit HSG “D” soils. A site specific Geotechnical Exploration was performed Legacy Engineering, Inc. dated December 13, 2022. At the time of the exploration groundwater was encountered at depths ranging 2.5- to 3.1-feet below the ground surface. The seasonal high groundwater elevations were estimated to be about 6-inches above the observed water levels. 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 northeast to southwest, eventually reaching a drainage inlet at the western end of Broome Street, the drainage piping of which flows west towards North Front Street before discharging into the Intracoastal Waterway. A paved driveway exists on the site and the remainder of the site has been cleared and was previously the site of industrial storage yard which, for purposes of this drainage analysis are defined as “Open Space” with Poor 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

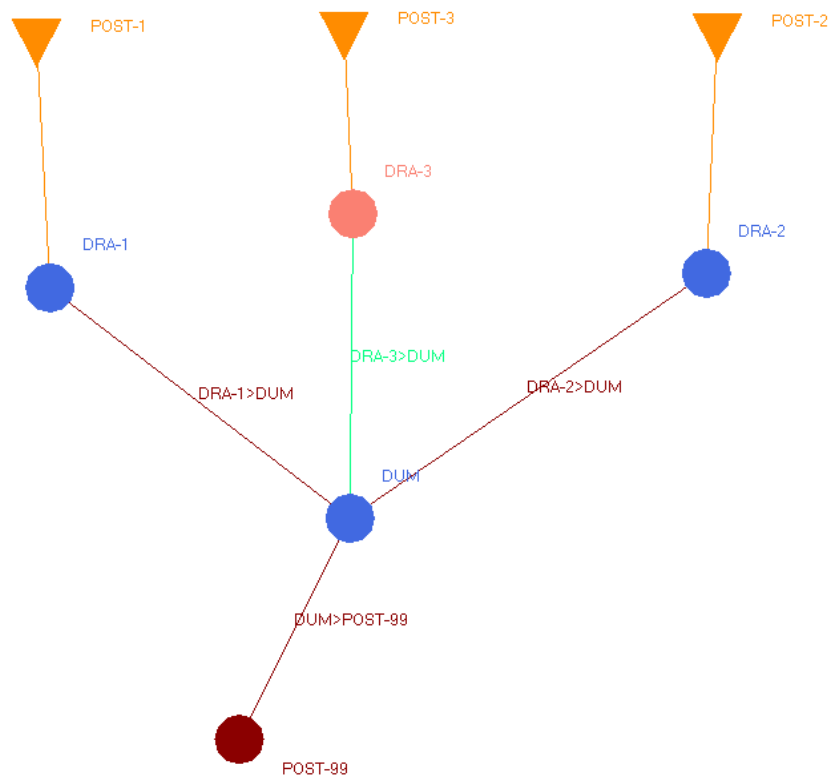
Basin Description	Area (acres)	Curve Number	Time of Concentration (min)
PRE-SITE	0.63	69.4	10

This data was then entered into the Streamline Technology's Interconnected Channel and Pond Routing (ICPR) version 4.07 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 and 10-year, 24-hour storm event to meet the City of Fernandina Beach requirements. Pre-Development modeling data is included in Attachment E – Model Results.

3.0 Post-Developed Hydrologic Conditions

3.1 Post Developed Basin Description

This project includes the construction of a several commercial buildings with associated parking and stormwater infrastructure. The proposed stormwater treatment system will consist of a combination of dry retention under the raised buildings and underground exfiltration system under the parking surface. One discharge control structure is proposed to connect the dry retention areas and exfiltration trench as well as provide an overflow into the Broome Street 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 Mean Higher-High Water (MHHW) level in the Intracoastal Waterway, 2.75-ft (NAVD88). The proposed dry retention and exfiltration systems will have a top of bank elevation of 7.50-ft, bottom elevation of 6.25-ft and the overflow weir will have a spillway elevation of 7.00-ft (NAVD 88). An underdrain system is proposed to provide drawdown of the system, the underdrains will have invert elevations ranging from 3.65-ft to 4.00-ft (NAVD88). 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 and 10-year, 24-Hour storm events 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 “D”. 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-1	0.29	72.1	10
POST-2	0.09	74.4	10
POST-3	0.25	77.4	10

This data was then entered into the Streamline Technology’s Interconnected Channel and Pond Routing (ICPR) version 4.07 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 and 10-Year, 24-Hour storm events to meet SJRWMD and City of Fernandina Beach requirements. Post-Development modeling data is included in Attachment E – Model Results.

4.0 Study Results

4.1 Detention Requirements

Dry retention and exfiltration 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. The three drainage facilities (DRA-1, DRA-2 and DRA-3) are all hydraulically connected and their cumulative treatment volume is summarized in Table 4.1.

Table 4-1: Treatment Volume Summary

Basin ID	Minimum TV (ac-ft)	Provided TV (ac-ft)
POST-1, POST-2, POST-3	0.068	0.091

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	0.78	0.05
10 Year-24 Hour Storm	1.61	0.65

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 Broome Street right-of-way are reduced during both the mean annual and 10-year 24 hour storm events for the development. Further, the site's minimum treatment volume must recover within 72 hours. The POND5 software was used to demonstrate the required recovery using an underdrain system. See the ICPR as well as the POND5 Model and Results in Attachment E.

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 retention and underground exfiltration systems will be collected and conveyed via a modified drainage inlet which will discharge to the Broome 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

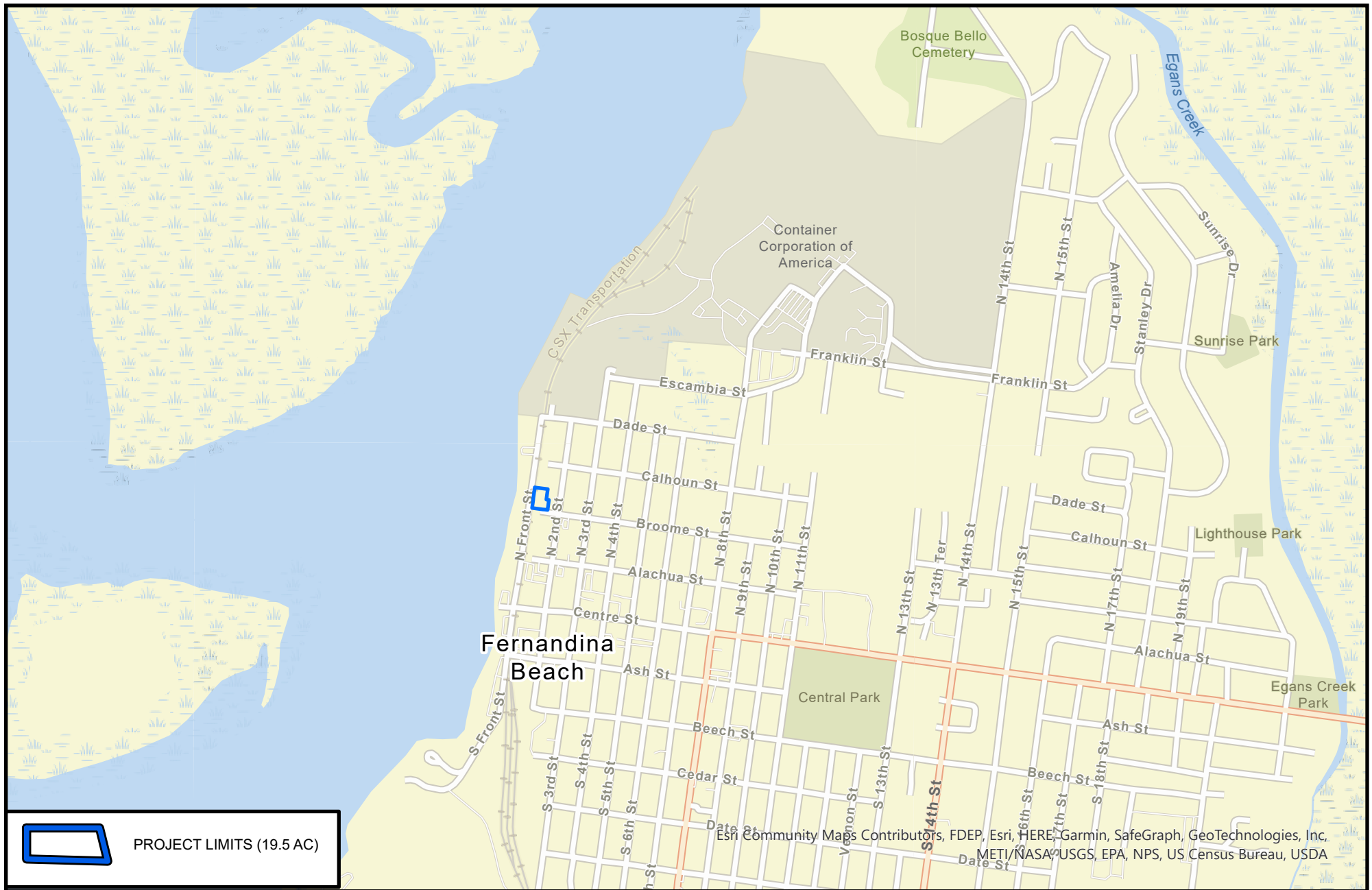
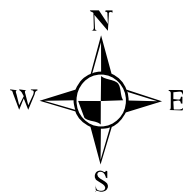


Image Source: ESRI 2020
 Date: 04-25-2023
 Project Number: 22-149

US Feet
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LOCATION MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA



Gulfstream Design Group, LLC
 2225 A1A S, Suite A2
 St. Augustine, FL 32080
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Esri Community Maps Contributors, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA/USGS, EPA, NPS, US Census Bureau, USDA



PROJECT LIMITS (19.5 AC)

Image Source: ESRI 2020
Date: 04-25-2023
Project Number: 22-149

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AERIAL MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA



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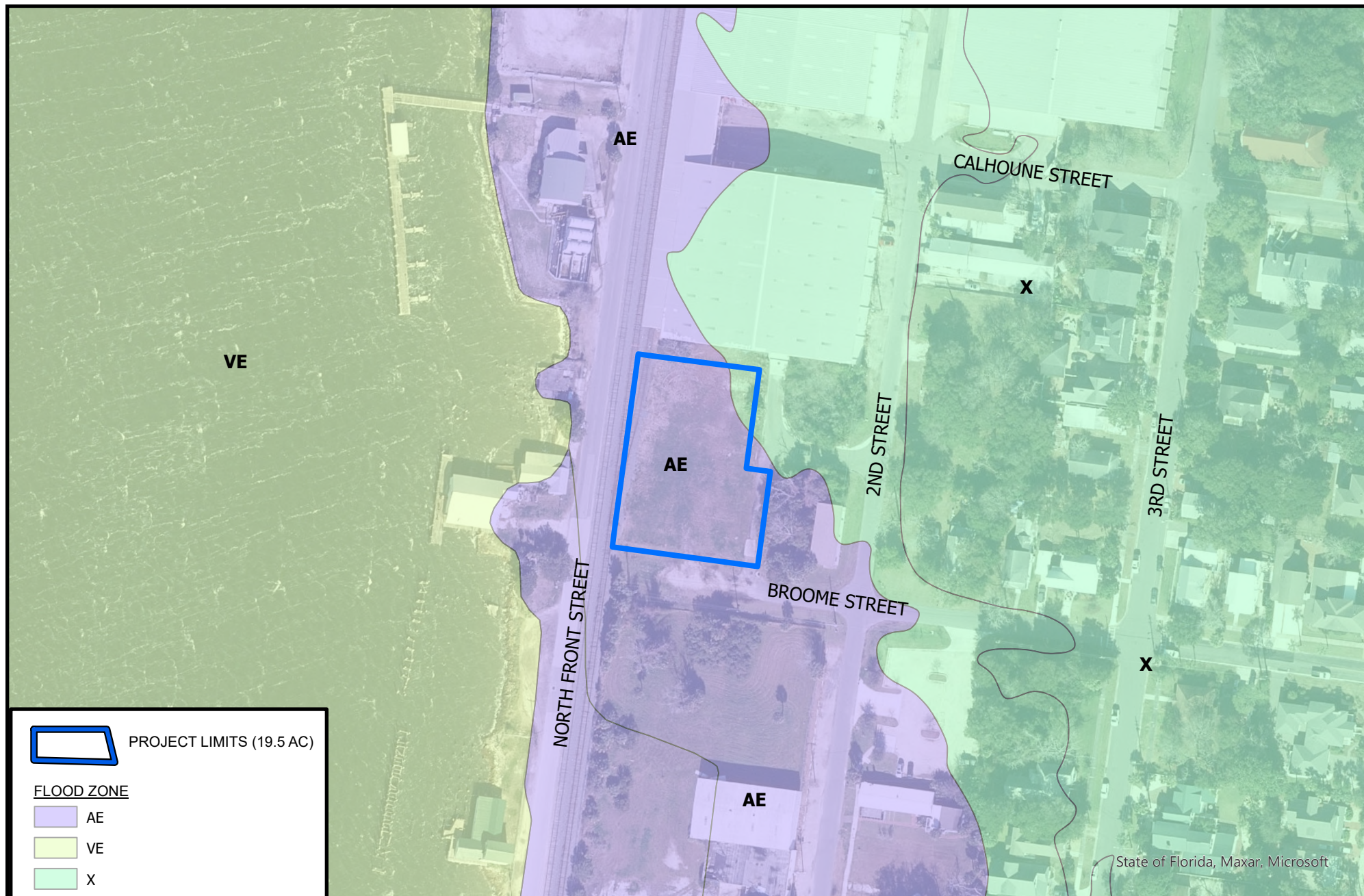
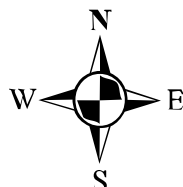


Image Source: ESRI 2020
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FIRM PANEL: 12089C0237G
Effective: 08/02/2017
Datum: NAVD 88

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FLOOD MAP HOTEL STACKING FB NASSAU COUNTY, FLORIDA

GULFSTREAM
DESIGN GROUP, LLC
Gulfstream Design Group, LLC
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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.

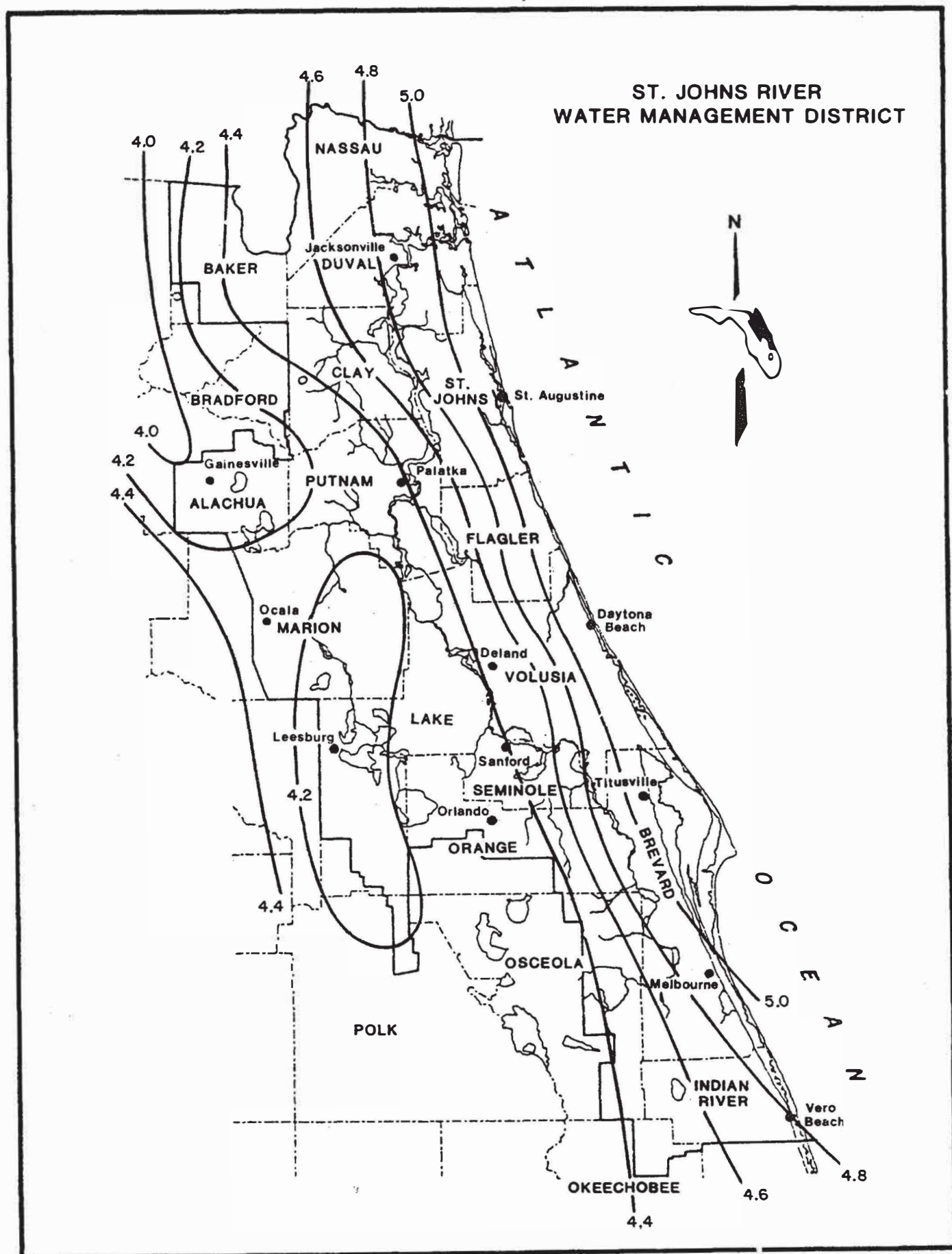
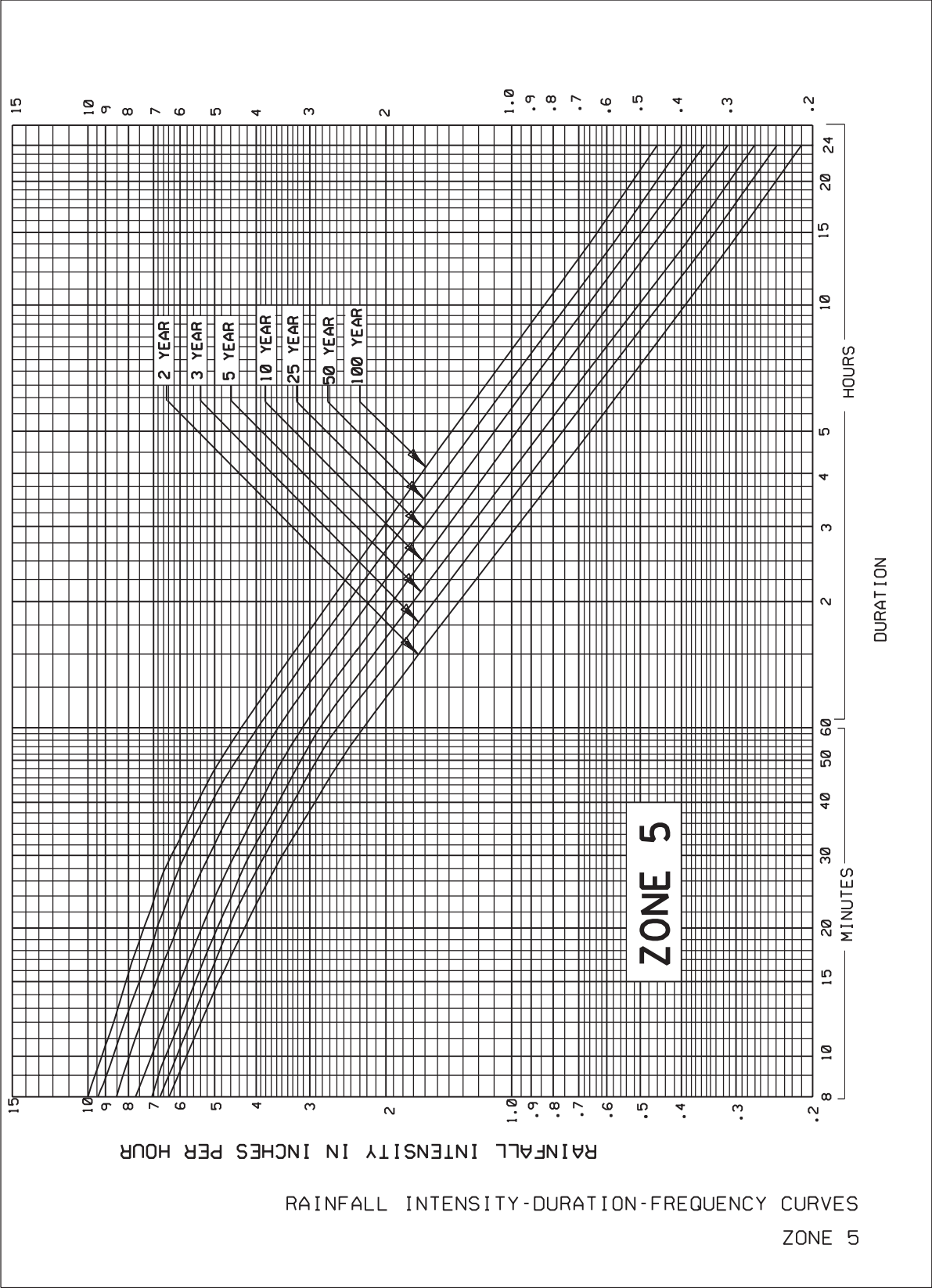
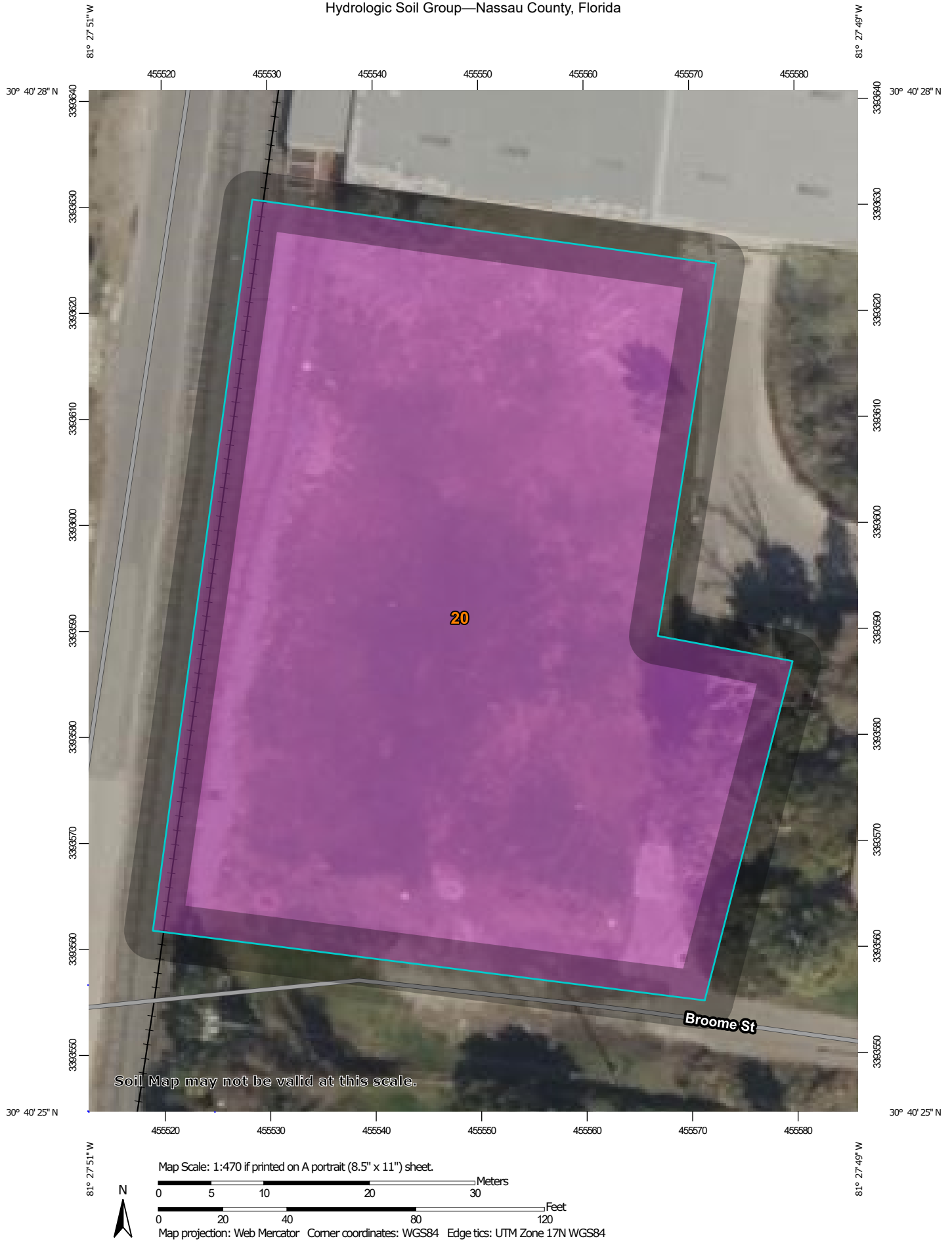


Figure 3. Mean Annual 24-Hour Maximum Rainfall for Northeast Florida, Inches.



Hydrologic Soil Group—Nassau County, Florida



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	0.8	100.0%
Totals for Area of Interest			0.8	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

ATTACHMENT C

GEOTECHNICAL REPORT

LEGACY

ENGINEERING, INC

Geotechnical & Materials Engineering and Testing

**REPORT OF GEOTECHNICAL EXPLORATION
FERNANDINA CONTAINER HOTEL
FERNANDINA BEACH, FLORIDA
LEGACY PROJECT NO. 22-1300.1**

Prepared for:

Mr. Chad Grimm
Dynamic Multifamily
2539 Hyde Park Road
Jacksonville, Florida 32210

Prepared by:

Legacy Engineering, Inc.
6415 Greenland Road
Jacksonville, Florida 32258
Phone: 904.721.1100
www.legacyengineeringinc.com

December 13, 2022

LEGACY

ENGINEERING, INC

Geotechnical & Materials Engineering and Testing

December 13, 2022

Mr. Chad Grimm
Dynamic Multifamily
2539 Hyde Park Road
Jacksonville, Florida 32210

Report of Geotechnical Exploration and Engineering Services
Fernandina Container Hotel
Fernandina Beach, Florida 32034
Legacy Project No. 22-1300.1

Dear Mr. Grimm:

As you have requested and authorized, Legacy Engineering, Inc. has completed a geotechnical exploration for the subject project. The exploration was performed to evaluate the general subsurface conditions within the proposed construction areas, and to provide guidelines to facilitate foundation support and earthwork preparation.

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

Sincerely:
Legacy Engineering, Inc.

Joseph Aganon, E.I.
Geotechnical Engineer

John E. Ellis, II, P.E.
Licensed, Florida No. 45202

Table of Contents

1.0	PROJECT INFORMATION	1
1.1	SITE LOCATION AND DESCRIPTION	1
1.2	PROJECT DESCRIPTION.....	1
2.0	FIELD EXPLORATION.....	1
2.1	SOIL BORINGS	1
3.0	LABORATORY TESTING	2
3.1	INDEX TESTING	2
4.0	GENERAL SUBSURFACE CONDITIONS	2
4.1	GENERAL SOIL PROFILE.....	2
4.2	GROUNDWATER LEVEL.....	2
5.0	BUILDING AREA RECOMMENDATIONS	3
5.1	GENERAL	3
5.2	BUILDING FOUNDATIONS	3
5.2.1	BEARING PRESSURE.....	4
5.2.2	FOUNDATION SIZE	4
5.2.3	BEARING DEPTH.....	4
5.2.4	BEARING MATERIAL.....	4
5.2.5	SETTLEMENT ESTIMATES	4
5.3	SITE PREPARATION FOR SHALLOW FOUNDATIONS.....	5
5.4	GENERAL EARTHWORK PRECAUTIONS	6
6.0	LIMITATIONS.....	7
APPENDIX A		I
<i>FIELD EXPLORATION PLAN</i>		<i>I</i>
<i>GENERALIZED SOIL PROFILES.....</i>		<i>I</i>
<i>TEST BORING RECORDS</i>		<i>I</i>
APPENDIX B		II
<i>KEY TO SOIL CLASSIFICATION</i>		<i>II</i>
<i>FIELD AND LABORATORY TEST PROCEDURES</i>		<i>II</i>

1.0 PROJECT INFORMATION

1.1 Site Location and Description

The site for the subject project is located northwest of the intersection of Broome Street and North 2nd Street in Fernandina Beach, Florida. The subject site is lightly vegetated with grass. To the east of the subject site along the east side of North 2nd Street are residential structures. Adjacent properties to the north are occupied by a single-story masonry and steel framed warehouse building. The existing railroad tracks and then the Amelia River are located to the west of the subject site.

1.2 Project Description

Project information was provided during correspondence with you. We were provided with a copy of the site plan dated May 13, 2022. The provided document shows the layout of the proposed construction, property boundary limits, and adjacent roadway. Based on the information provided to us, we understand the proposed project will consist of constructing a shipping container hotel at the subject site. The units will consist of a modified shipping container with a wood-framed extension/addition along the length of the container. The units will be constructed such that they will be off-grade and will be supported on conventional concrete footings and piers, or auger-grouted piling. Each of the off-grade units will be accessed with a wood-framed stairway. It is desired to perform a geotechnical exploration to provide recommendations for the support of the container hotel. We have not been provided with detailed loading information; therefore, we have assumed the wall, column, and floor slab loads will not exceed 3.0 klf, 40.0 kips, and 40 psf, respectively. We have assumed fill heights above the existing grades will be limited to 2 feet.

2.0 FIELD EXPLORATION

2.1 Soil Borings

In order to explore the subsurface conditions within the areas of the proposed structures, three (3) Standard Penetration Test (SPT) borings (B4 through B6) were conducted to depths of 25 feet below the existing grades with the exception of B4 being conducted to a depth of 50 feet. The borings were located using a differentially corrected Global Positioning System (GPS) unit and should be considered accurate to the degree implied by the method utilized. The borings were conducted in accordance with ASTM D 1586. The subsurface conditions encountered at each boring location, and the recorded groundwater levels, are presented on the Generalized Soil Profiles and Test Boring Records in Appendix A.

3.0 LABORATORY TESTING

3.1 Index Testing

Soil samples recovered during the field exploration were visually classified in accordance with ASTM D 2488 and limited laboratory testing consisting of fines, organic, and moisture content tests were performed to assist in classification and estimation of soil properties. The results of the testing are presented on the Test Boring Records in Appendix A.

4.0 GENERAL SUBSURFACE CONDITIONS

4.1 General Soil Profile

The boring locations and general subsurface conditions that were encountered are graphically illustrated on the Field Exploration Plan and Generalized Soil Profiles. A relatively detailed description of the encountered subsurface conditions is presented on the Test Boring Records. 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 encountered loose to very loose fine sands with silt (SP-SM) to depths of up to 12 feet below the existing ground surface, underlain with loose to very loose silty fine sands (SM) to the boring termination depths. As an exception, boring B5 encountered layers of firm and very loose fine sands with silt (SP-SM) containing some to many organic materials at depths of 3 to 4.5 feet and 7.5 to 12 feet below the existing ground surface. Due to the very loose soils encountered, boring B4 was extended to a depth of 50 feet below the existing ground surface to determine the bearing level for a deep foundation system if required. Boring B4 encountered dense fine sands at depths of 42.5 to 50 feet below the existing ground surface. Topsoils were encountered within the upper 2 to 6 inches at the boring locations.

4.2 Groundwater Level

The groundwater level was measured at the boring locations, subsequent to boring completion, at depths varying between 2.5 and 3.1 feet below the existing grades. The depth of the groundwater level encountered at each boring location is presented on the Generalized Soil Profiles and the Test Boring Records. The groundwater table will fluctuate depending on seasonal variations, adjacent construction, surface water runoff, etc. 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 very loose silty fine sands encountered at the depths of 11.5 feet and below will experience some settlement when exposed to fill heights of greater than 3 feet and/or heavy concentrated loads. We have previously observed excessive slab settlement on some of the port projects located just north of this site due to the heavy floor loads. These projects had similar subsurface soil conditions with organic soils and/or very loose silty fine sands and/or sandy silts located in the soil profile.

It is anticipated that the container units will be lightly loaded, and therefore will not produce loading conditions that will cause settlement of these very loose silty fine sands. For this project, it is our opinion that if the proposed fill heights can be maintained at 2 feet or less, then the units can be supported on conventional shallow foundations.

Another issue encountered at the site were the fine sands with silt and some organic materials encountered at boring B5 at depths of 3 to 4.5 feet below the existing ground surface. These soils should be over-excavated and removed from within the footing areas. However, they are located just below the existing groundwater levels, which should not allow these organic materials to decompose as opposed to organic materials which are located at or above the existing groundwater levels. These soils were also observed to be in a firm condition, which also reduces the possibility of future settlement. Since these shallow depth organic materials were only encountered at boring B5, we would recommend that some additional auger borings or test pits be performed in the areas of the future footing areas to determine if other organic materials may or may not be located within these areas. The additional soils exploration may determine if there are additional organic materials located within the upper soils or the soils exploration may demonstrate that the organic materials encountered at boring B5 were an anomaly.

5.2 Building Foundations

Based on the results of the subsurface exploration, we consider the subsurface conditions at the site adaptable for support of the proposed structure 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 12 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 structure 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 structure 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 structure.

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 assumed 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 structure to be approximately one 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, it is anticipated that differential settlements will be approximately one-half of the total settlement.

5.3 Site Preparation for Shallow Foundations

We recommend the following site preparation guidelines for the building area:

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, topsoil, and other deleterious materials within and 5 feet beyond the perimeter of the proposed structure. Expect initial clearing and grubbing to depths of approximately 6 inches. Over-excavate and remove any organic materials encountered within the footing areas and to a distance of at least 2 feet beyond the edge of the footings. Replace these over-excavated materials with compacted fill materials (See subsection 6 below).
4. Compact the exposed surface using a drum roller. The vibrator roller should have a minimum drum diameter of 4 feet and static weight of 7 tons. 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 and grubbing) within the building 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 2,500 square feet of the proposed building area (minimum of three locations).
6. Place structural fill in loose lifts not exceeding a thickness of 8 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 2,500 square feet of the 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.

5.4 General Earthwork Precautions

1. Test the compacted surface for density at a frequency of not less than one test per 10,000 square feet of pavement area (minimum three locations).
2. Place structural fill in loose lifts not exceeding 8 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, with the exception that densities of at least 98 percent should be obtained in the upper 12 inches below base course.

3. Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified, and the existing conditions of the structures be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures and Legacy Engineering, Inc. should be contacted immediately. It is recommended the vibratory roller remain a minimum of 75 feet from existing structures. Within this zone, use of a vibratory roller operating in the static mode is recommended.
4. Perform density tests within each lift of fill at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of three locations).
5. Place and compact base course until densities of at least 100 percent of the modified Proctor maximum dry density are achieved. Compaction operations should be conducted with the drum roller noted above.
6. Perform density tests within the base course at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of three locations).

6.0 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. Legacy Engineering, Inc. is not responsible for independent conclusions or interpretations based on the information presented in this report.

APPENDIX A

FIELD EXPLORATION PLAN
GENERALIZED SOIL PROFILES
TEST BORING RECORDS



Approximate Boring Locations



FIELD EXPLORATION PLAN

Reference

Plan Created Using Provided Plan

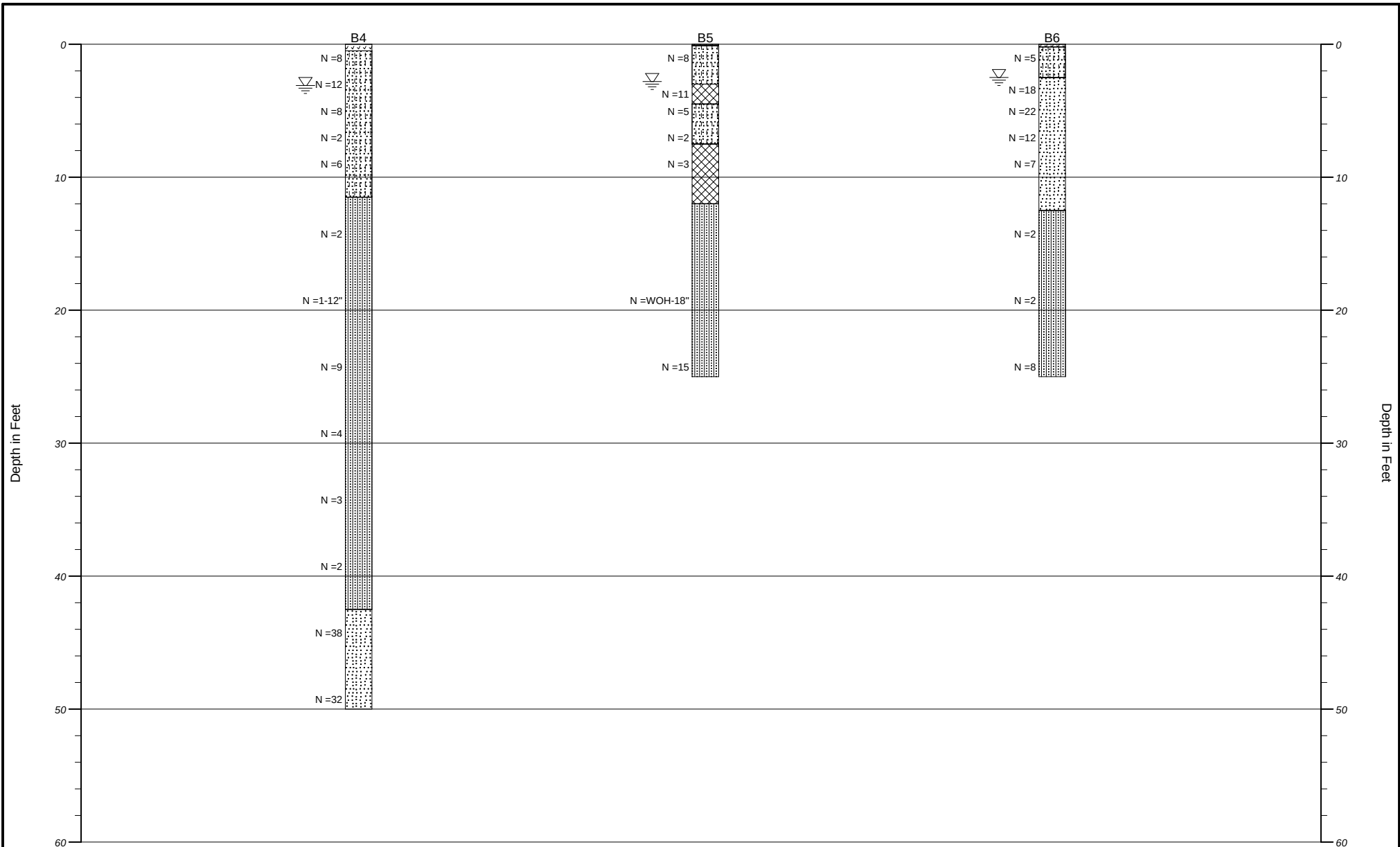
Field Exploration Plan
Container Hotel (GDG #22-122)
 Fernandina Beach, Florida

LEGACY
Engineering, Inc.
Geotechnical & Materials Engineering & Testing

Date: 12/08/2022

Proj. No.: 22-1300.1

Figure 1



Strata symbols



Topsoil



Fine SAND with Silt (SP-SM)



Silty Fine SAND (SM)



Fine SAND (SP)



Silty Fine SAND with Many Organic Materials (PT)



Ground Water Depth

Legacy Engineering, Inc.		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=10'	JEEII/JEEII	12/13/2022
Container Hotel (GDG #22-122)		
1231 Front Street Fenandina Beach, Florida		
PROJECT NO. 22-1300		FIGURE NUMBER 2

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ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B4

Sheet 1 of 4

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 3.1 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (6 Inches)			1	
	1	Loose to Firm Brown Fine SAND with Silt Trace Rock (SP-SM)		1	3	8
	2				5	
	3			2	5	12
	4				3	
	5			3	5	8
	6				3	
	7			4	2	2
	8				1	
	9			5	1	6
	10				3	
	11				4	
	12	Very Loose Gray Silty Fine SAND with Trace Shell (SM)				
	13					
	14			6	1	2
	15				1	

REMARKS:

BORING & SAMPLING: ASTM D1586/CORE DRILLING: ASTM D2113



Ground Water Table

BLOW COUNT IS THE NUMBER OF BLOWS OF 140 LB. HAMMER
FALLING 30 IN. REQUIRED TO DRIVE 1.4 IN. I.D. SAMPLER 1 FT.

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ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 2 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	16	Very Loose Gray Silty Fine SAND with Trace Shell (SM), Continued		7		1-12"
	17					
	18					
	19				1	
	20				1-12"	
	21					
	22					
	23					
	24					
	25					
	26	Fines Content: 14.3%		8		9
	27					
	28					
	29				4	
	30				5	
	31				4	
	32					
	33					
	34					
	35					
	36			9		4
	37				2	
	38				2	
	39				2	
	40					

LEGACY

TEST BORING RECORD

JOB NO. 22-1300

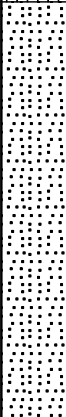
ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 3 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	32	Very Loose Gray Silty Fine SAND with Trace Shell (SM), Continued		10		3
	33					
	34				1	
	35			11	1	2
	36				2	
	37					
	38	Dense Gray Fine SAND (SP)		12	1	38
	39				1	
	40				1	
	41			13		
	42					
	43					
	44			14	5	
	45				15	
	46				23	

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

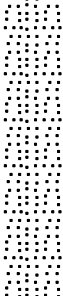
TEST BORING RECORD

JOB NO. 22-1300

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 4 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	47	Dense Gray Fine SAND (SP), Continued		13		32
	48					
	49				12	
	50				16	
	50	Boring Terminated at 50 Feet			16	
	51					
	52					
	53					
	54					
	55					
	56					
	57					
	58					
	59					
	60					
	61					
	62					

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B5

Sheet 1 of 2

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

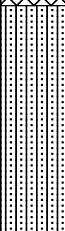
Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 2.8 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (2 Inches)			2	
	1	Loose to Firm Brown Fine SAND with Silt Trace Glass (SP-SM)		1	3 5 5 4 4	8
	2					
	3	Firm to Loose Dark Brown SAND with Silt and Some Organics (PT) Fines Content: 10.9% Organic Content: 7.2%		2	7 4 5	11
	4					
	5	Loose to Very Loose Dark Brown Fine SAND with Silt (SP-SM)		3	3 2 2	5
	6				1-12"	
	7			4	1 1	2
	8	Very Loose Dark Brown Fine SAND with Silt and Many Organics (PT) Fines Content: 8.8% Organic Content: 20.3% Fines Content: 9.8% Organic Content: 8.4%		5	1 2 1 2	3
	9					
	10					
	11					
	12	Very Loose to Firm Gray Silty Fine SAND with Trace Shells (SM)				
	13					
	14			6	1-12"	
	15					

Geotechnical & Materials Engineering and Testing

JOB NO. 22-1300

Project Container Hotel (GDG #22-122) Sheet 2 of 2

BORING NO. B5

Sheet 2 of 2

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST		
					BLOWS / 6-INCH	BLOW COUNT	
	16	Very Loose to Firm Gray Silty Fine SAND with Trace Shells (SM), Continued		7		WOH-18"	15
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26	Boring Terminated at 25 Feet					
	27						
	28						
	29						
	30						
	31						

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B6

Sheet 1 of 2

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 2.5 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (3 Inches)			1	
	1	Loose to Firm Brown Fine SAND with Silt Trace Rock (SP-SM)		1	2	5
	2				3	
	3				7	
	4				7	
	5	Firm to Loose Gray Fine SAND (SP)		2	9	18
	6				9	
	7				6	
	8				7	
	9				9	
	10			3	13	22
	11				8	
	12				5	
	13				6	
	14			4	6	12
	15				6	
	16				5	
	17				3	
	18			5	3	7
	19				4	
	20				3	
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LEGACY

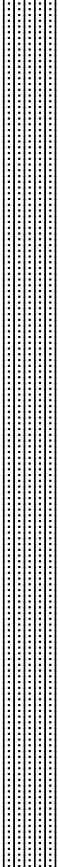
TEST BORING RECORD

JOB NO. 22-1300

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

Project Container Hotel (GDG #22-122) BORING NO. B6
Sheet 2 of 2

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	16	Very Loose To Loose Silty Fine SAND with Some Shells (SM), Continued		7		2
	17					
	18					
	19				1	
	20				1	
	21				1	
	22					
	23					
	24				2	
	25				3	
	25	Boring Terminated at 25 Feet		8	5	8
	26					
	27					
	28					
	29					
	30					
	31					

SUMMARY OF LABORATORY INDEX TEST RESULTS

Container Hotel (GDG #22-122)
Fernandina Beach, Florida
Legacy Engineering Project No. 22-1300.1

Boring No.	Sample No.	Depth Range, Feet		Fines Content ¹	Moisture Content ²	Organic Content ³	Unified Soil Classification
		From	To				
B4-8	8	23.5	28.5	14.3%	32.4%		SM
B5-2	2	2	4	10.9%	36.3%	7.2%	PT
B5-4	4	6	8	8.8%	99.9%	20.3%	PT
B5-5	5	8	13.5	9.8%	54.9%	8.4%	PT

Notes: 1. Fines content testing performed in accordance with ASTM D1140
2. Performed in accordance with ASTM D2216
3. Performed in accordance with ASTM D2974

APPENDIX B

KEY TO SOIL CLASSIFICATION

FIELD AND LABORATORY TEST PROCEDURES

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

KEY TO SOIL CLASSIFICATION

CORRELATION OF PENETRATION WITH RELATIVE DENSITY & CONSISTENCY

SANDS AND GRAVEL	
BLOW COUNT	RELATIVE DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-20	FIRM
21-30	VERY FIRM
31-50	DENSE
OVER 50	VERY DENSE

SILTS AND CLAYS	
BLOW COUNT	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	FIRM
9-15	STIFF
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.

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.

Moisture Content

The moisture content of the sample tested was determined in general accordance with ASTM D 2216. The moisture content is the actual moisture content of the sample as sampled in the field during the performance of the soil boring.

Fines Content

The percent fines of material passing the No. 200 mesh sieve of the sample tested was determined in general accordance with ASTM D 1140. The percent fines are the soil particles in the silt and clay size range.

Organics Content

The organics content of the sample tested was determined in general accordance with ASTM D 2974. The organics content is the percent of loss of material of an oven-dried sample of material after the sample has been heated in a muffle furnace to 440 °C.

ATTACHMENT D

CALCULATIONS

Drainage Calculations

HOTEL STACKING
FERNANDINA BEACH, FLORIDA
GDG #22-149

1/4/2024



2225 A1A S. Ste A2 • St. Augustine • Florida • 32080
904.794.4231 • www.gulfstreamdesign.com
Civil Site Design • Permitting
Land Development • Consulting



Project Name: HOTEL STACKING
Project No: GDG #22-149

Designer: TVB
Date: 1/4/2024

TIME OF CONCENTRATION CALCULATIONS

Stormwater Basin: PRE-SITE

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:	225 ft	n:	0.15		
High Pt:	9.70 ft	Slope:	0.0151 ft/ft		
Low Pt:	6.30 ft	P ₂ :	5 in/hr	2yr/24hr	
Surface:	Short grass prairie			T ₁ :	16.78 min

Time of concentration for shallow concentrated flow from SCS TR-55 velocity method.

Length:	ft	Slope:	0.000 ft/ft		
High Pt:	ft	Velocity:	0.000 ft/sec		
Low Pt:	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:	ft				
Velocity:	ft/sec				
				T ₄ :	0.00 min

T_C: 16.78 min



Project Name: HOTEL STACKING
Project No: GDG #22-149

Designer: TVB
Date: 1/4/2024

DRAINAGE CALCULATIONS

PRE Development Drainage Areas

	Area (sf)	Area (ac)	Impervious Area (ac)	Tc (MIN)	K	CN	"c"
PRE-BASIN-A	27,492	0.63	1291.00	26.6	323	69.4	0.14

PRE Development Curve Number & Runoff Coefficient

PRE-BASIN-A

Hydrologic Soil Group	Land Use	Area (SF)	Total Area (Ac.)	CN	Wtd. "CN"	C	Wtd. "C"
"A/D"	Impervious*	1291.00	0.03	98.0	4.6	0.95	0.04
"A/D"	Gravel Pkg		0.00	91.0	0.0	0.95	0.00
"A/D"	Pervious**	26201.00	0.60	68.0	64.8	0.10	0.10
		Total Area	0.63	CN =	69.4	"C"=	0.14



Project Name: HOTEL STACKING
Project No: GDG #22-149

Designer: TVB
Date: 1/4/2024

POST-DEVELOPED DRAINAGE BASIN CHARACTERISTICS

Post Development Drainage Areas

	Basin Area (sf)	Basin Area (ac)	Impervious Area	Tc (MIN) (min)	K	CN	"c"
POST-1	12,609	0.29	0.16	10.00	484.00	72.12	0.58
POST-2	4,130	0.09	0.06	10.00	484.00	74.36	0.20
POST-3	10,767	0.25	0.18	10.00	484.00	77.43	0.61
TOTAL	27,506	0.63	0.40				

Post Development Curve Number & Runoff Coefficient

POST-1

Hydrologic Soil Group	Land Use	Area (SF)	Total Area (Ac.)	CN	Wtd. "CN"	C	Wtd. "C"
"A/D"	Impervious*	7078.00	0.16	98.0	55.0	0.95	0.53
"A/D"	Pervious Pave	0.00	0.00	95.0	0.0	0.75	0.00
"A/D"	Pervious**	5531.00	0.13	39.0	17.1	0.10	0.04
		Total Area	0.29	CN =	72.1	"C"=	0.58

POST-2

Hydrologic Soil Group	Land Use	Area (SF)	Total Area (Ac.)	CN	Wtd. "CN"	C	Wtd. "C"
"A/D"	Impervious*	2475.00	0.06	98.0	58.7	0.95	0.19
"A/D"	Gravel Pkg	0.00	0.00	91.0	0.0	0.95	0.00
"A/D"	Pervious**	1655.00	0.04	39.0	15.6	0.10	0.01
		Total Area	0.09	CN =	74.4	"C"=	0.20

POST-3

Hydrologic Soil Group	Land Use	Area (SF)	Total Area (Ac.)	CN	Wtd. "CN"	C	Wtd. "C"
"A/D"	Impervious*	1229.00	0.03	98.0	11.2	0.95	0.09
"A/D"	Gravel Pkg	6562.00	0.15	91.0	55.5	0.95	0.49
"A/D"	Pervious**	2976.00	0.07	39.0	10.8	0.10	0.02
		Total Area	0.25	CN =	77.4	"C"=	0.61



Project Name: HOTEL STACKING
Project No: GDG #22-149

Designer: TVB
Date: 1/4/2024

STORM WATER MANAGEMENT FACILITY (SWMF) TREATMENT VOLUMES

POST BASIN

Required Treatment Volume (TV) [DRY RETENTION/EXFILTRATION]

Acres	Inches	Ac-ft.	
0.63	1.0	0.053	Required for first 1" runoff from drainage area
			OR
0.40	1.25	0.068	Required for 1.25" runoff from impervious area + 1/2" over total drainage area
	TV=	0.068	Ac. Ft.
		2952.750	

Stage/Storage Calculations

DRA-1 Dry Retention Area with 5:1 side slopes

	Elevation (ft.)	Pond Area (π)	Pond Area (Ac.)	VOLUME (Ac. Ft.)
Bottom	6.25	1,134	0.0260	0.0000
WEIR ELEV.	7.00	2,803	0.0643	0.0339
Top	7.50	3,821	0.0877	0.0719

DRA-2 Dry Retention Area with 5:1 side slopes

	Elevation (ft.)	Pond Area (π)	Pond Area (Ac.)	VOLUME (Ac. Ft.)
Bottom	6.25	424	0.0097	0.0000
WEIR ELEV.	7.00	987	0.0227	0.0121
Top	7.50	1,412	0.0324	0.0259

Exfiltration system consists of 12" crushed concrete @ 40% voids under 3" stabilized coquina sand @ 10% voids.

DRA-3

Paver Section Description	Elevation (ft.)	Paver Area (ft ²)	Incremental Volume (ft ³)	Incremental Volume (ft ³)	Cumulative Volume (ft ³)	Cumulative Volume (Ac.ft.)
Bottom	6.25	6500	0	0	0	0.0000
	6.75	6500	3250	1300	1300	0.0298
WEIR ELEV.	7.00	6500	1625	650	1950	0.0448
	7.25	6500	1625	650	2600	0.0597
f Coquina Parking	7.50	6500	1625	163	2763	0.0634

Required Treatment Volume: **0.068** ac-ft = 2952.8 ft³

Provided Treatment Volume: **0.091** ac-ft = 3955.5 ft³

ATTACHMENT E

MODEL RESULTS

Simple Basin: POST-1

Scenario: Scenario1
Node: DRA-1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2900 ac
Curve Number: 72.1
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Simple Basin: POST-2

Scenario: Scenario1
Node: DRA-2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.0900 ac
Curve Number: 74.4
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Simple Basin: POST-3

Scenario: Scenario1
Node: DRA-3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2500 ac
Curve Number: 77.4
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Simple Basin: PRE-SITE

Scenario: Scenario1
Node: PRE-98
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 16.8000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH323
Peaking Factor: 323.0
Area: 0.6300 ac
Curve Number: 69.4
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Node: DRA-1

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 6.25 ft
Warning Stage: 7.50 ft

Stage [ft]	Area [ac]	Area [ft2]
6.25	0.0260	1133
7.00	0.0643	2801
7.50	0.0877	3820

External Hydrograph

Comment:

Node: DRA-2

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 6.25 ft
Warning Stage: 7.50 ft

Stage [ft]	Area [ac]	Area [ft2]
6.25	0.0097	423
7.00	0.0227	989
7.50	0.0324	1411

Comment:

Node: DRA-3

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 6.25 ft
Warning Stage: 7.50 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
6.25	0.00	0
6.75	0.03	1298
7.00	0.04	1951
7.25	0.06	2601
7.50	0.06	2757

Comment:

Node: DUM

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 4.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
4.00	0.0004	17

Stage [ft]	Area [ac]	Area [ft2]
7.00	0.0004	17

Comment:

Node: POST-99

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 2.75 ft
Warning Stage: 2.75 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.75
0	0	0	72.0000	2.75

Comment:

Node: PRE-98

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 2.75 ft
Warning Stage: 2.75 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.75
0	0	0	72.0000	2.75

Comment:

Drop Structure Link: DRA-1>DUM

Scenario: Scenario1
From Node: DRA-1
To Node: DUM
Link Count: 1
Flow Direction: Both
Solution: Combine
Increments: 0
Pipe Count: 1

Upstream Pipe

Invert: 4.40 ft
Manning's N: 0.0150
Geometry: Circular
Max Depth: 1.00 ft
Bottom Clip
Default: 0.00 ft
Op Table:
Ref Node:

Downstream Pipe

Invert: 4.25 ft
Manning's N: 0.0150
Geometry: Circular
Max Depth: 1.00 ft
Default: 0.00 ft
Op Table:
Ref Node:

Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	60.00 ft	Top Clip			
FHWA Code:	7	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Circular
Invert:	6.50 ft
Control Elevation:	6.50 ft
Max Depth:	2.00 ft
Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link:	DRA-2>DUM	Upstream Pipe	Downstream Pipe		
Scenario:	Scenario1	Invert:	4.40 ft	Invert:	4.25 ft
From Node:	DRA-2	Manning's N:	0.0150	Manning's N:	0.0150
To Node:	DUM	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	1.00 ft	Max Depth:	1.00 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	42.00 ft	Top Clip			
FHWA Code:	7	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir: 1	Bottom Clip
Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Horizontal	Top Clip
Geometry Type: Circular	Default: 0.00 ft
Invert: 6.50 ft	Op Table:
Control Elevation: 6.50 ft	Ref Node:
Max Depth: 2.00 ft	Discharge Coefficients
	Weir Default: 3.200
	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Weir Comment:	

Drop Structure Comment:

Weir Link: DRA-3>DUM	
Scenario: Scenario1	Bottom Clip
From Node: DRA-3	Default: 0.00 ft
To Node: DUM	Op Table:
Link Count: 3	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Broad Crested Vertical	Op Table:
Geometry Type: Circular	Ref Node:
Invert: 6.25 ft	Discharge Coefficients
Control Elevation: 0.00 ft	Weir Default: 2.800
Max Depth: 0.50 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Comment:	

Drop Structure Link: DUM>POST-99		
Scenario: Scenario1	Upstream Pipe	Downstream Pipe
From Node: DUM	Invert: 4.00 ft	Invert: 3.75 ft
To Node: POST-99	Manning's N: 0.0120	Manning's N: 0.0120
Link Count: 1	Geometry: Circular	Geometry: Circular
Flow Direction: Both	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Solution: Combine	Bottom Clip	
Increments: 0	Default: 0.00 ft	Default: 0.00 ft
Pipe Count: 1	Op Table:	Op Table:
Damping: 0.0000 ft	Ref Node:	Ref Node:
Length: 46.00 ft	Manning's N: 0.0000	Manning's N: 0.0000
	Top Clip	

FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component

Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Sharp Crested Vertical	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	7.00 ft	Op Table:	
Control Elevation:	0.00 ft	Ref Node:	
Max Depth:	999.00 ft	Discharge Coefficients	
Max Width:	3.00 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Simulation: 10YR24HR

Scenario: Scenario1
Run Date/Time: 1/4/2024 1:44:09 PM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dflt Damping (2D): 0.0050 ft
Min Node Srf Area: 100 ft2
(2D):
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Smp/Man Basin Rain: Global
Opt:
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: MEAN ANNUAL

Scenario: Scenario1
Run Date/Time: 1/4/2024 1:44:17 PM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments**Hydrology**

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables**Resources**

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:
Impervious Set:
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	5.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

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]
DRA-1	10YR24HR	7.50	7.17	0.0010	1.11	0.32	3154
DRA-2	10YR24HR	7.50	7.17	0.0010	0.36	0.17	1132
DRA-3	10YR24HR	7.50	7.17	0.0010	1.09	0.30	2605
DUM	10YR24HR	0.00	7.17	0.0010	0.81	0.65	100
POST-99	10YR24HR	2.75	2.75	0.0000	0.65	0.00	0
PRE-98	10YR24HR	2.75	2.75	0.0000	1.61	0.00	0
DRA-1	MEAN ANNUAL	7.50	7.03	0.0009	0.58	0.36	2868
DRA-2	MEAN ANNUAL	7.50	7.03	0.0009	0.19	0.16	1016
DRA-3	MEAN ANNUAL	7.50	7.03	0.0010	1.04	0.20	2605
DUM	MEAN ANNUAL	0.00	7.03	0.0010	0.66	0.45	100
POST-99	MEAN ANNUAL	2.75	2.75	0.0000	0.05	0.00	0
PRE-98	MEAN ANNUAL	2.75	2.75	0.0000	0.78	0.00	0

PONDS Underdrain Analysis
Version 3.3.0051
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Devo Seereeram, Ph.D., P.E.

Job Information

Job Name: HOTEL STACKING FERNANDINA BEACH
Engineer: TVB
Date: 12-07-2023

Input Data

Area at top of pond, [ATOP]:	12850 ft ²
Depth of basin, [d]:	1.5 ft
Aquifer depth below pond bottom, [B]:	5 ft
Desired depth to water table below pond bottom, [R]:	.5 ft
Hydraulic conductivity of soil, [K]:	2 ft/day
Drain diameter, [D]:	4 in
Thickness of gravel envelope, [t]:	6 in
Thickness of soil cover, [H]:	2 ft
Treatment volume, [PAV]:	2955 ft ³
Recovery time, [T]:	3 days
Factor of safety, [FS]:	2
Background seepage, [qb]:	0 gpm
Vertical separation between pond bottom and tailwater, [TW]:	2.5 ft
Manning's n value for lateral drain pipe, [n1]:	.015
Manning's n value for main drain pipe, [n2]:	.015
Slope of lateral drains, [s1]:	.003 %
Slope of main drains, [s1]:	.002 %
Maximum length of single lateral drain, [l]:	60 ft
Maximum percentage of length of laterals connected to the main drain, [P]:	50 %

Results

Computed underdrain spacing, [S]:	27.02884 ft
Computed total length of laterals, [L]:	475.4181 ft
Computed flow rate through outfall, [Q]:	2.280093E-02 ft ³ /sec
Computed flow rate per lineal foot of lateral, [ql]:	4.795974E-05 ft ³ /sec/ft
Cumulative flow rate for the longest lateral, [qc]:	2.877584E-03 ft ³ /sec
Minimum theoretical diameter for longest lateral, [DI]:	2.608548 in
Minimum theoretical diameter for main pipe, [Dm]:	4.716571 in

PONDS Underdrain Analysis
Version 3.3.0051
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Notes

1. Laterals should be no farther than S/2 from the top of the basin.
2. A gravel envelope at least 3 inches thick is recommended around the underdrain pipes. If a gravel envelope is used, a filter fabric will be required around this envelope.
3. The underdrain pipe should have a filter fabric sock to prevent fines from moving into and clogging the perforated pipe.
4. Ensure outfall elevation for system will allow gravity flow without tailwater backpressure to the underdrains.
5. Theory is applicable where ground water flow is largely in a horizontal direction (i.e., natural gradients less than 1%).
6. Capped and sealed inspection and cleanout ports which extend to the ground surface are recommended at the following locations for each drain pipe:
 - a. the terminus
 - b. at every 400 feet or every bend of 45 or more degrees, whichever is shortest
7. Underdrain basin should be stabilized with permanent vegetative cover.

Warnings

None.

ENGINEERING PLANS FOR HOTEL STACKING FB CITY OF FERNANDINA BEACH, FLORIDA

PROJECT TEAM

LAND OWNER

THE CROSSINGS AT AMELIA LLC
960194 GATEWAY BLVD BLVD 101
FERNANDINA BEACH, FL 32034
PHONE: 904.415.6533
CONTACT: TIM POYNTER

GEOTECHNICAL ENGINEER:

LEGACY ENGINEERING, INC.
6415 GREENLAND ROAD
JACKSONVILLE, FL 32258
PHONE: 904.721.1100
CONTACT: JOSEPH AGANON, E.I.

ARCHITECT:

CHAD GRIMM STUDIOS
2539 HYDE PARK ROAD
JACKSONVILLE, FL 32210
PHONE: 904.236.9757
CONTACT: CHAD GRIMM

DEVELOPER/APPLICANT

THE CROSSINGS AT AMELIA LLC
960194 GATEWAY BLVD BLVD 101
FERNANDINA BEACH, FL 32034
PHONE: 904.415.6533
CONTACT: TIM POYNTER

SURVEYOR:

GAI CONSULTANTS
12574 FLAGLER CENTER BLVD, SUITE 202
JACKSONVILLE, FL 32258
PHONE: 904.363.1110
FAX: 904.363.1115
CONTACT: JOSEPH K. LEK

CIVIL ENGINEER:

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

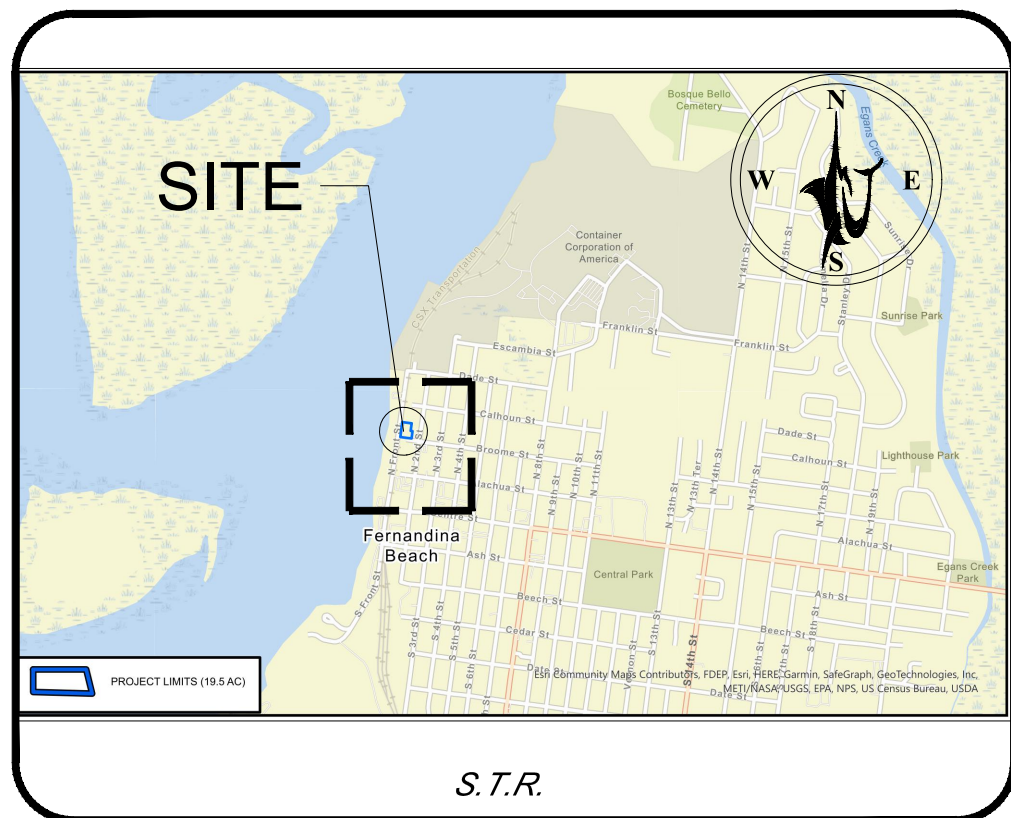
GENERAL NOTES:

- 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

231 FRONT STREET N

PARCEL ID # 00-00-31-1800-0003-0010



LOCATION MAP

SCALE: N.T.S.

PREPARED FOR

THE CROSSINGS AT AMELIA LLC
960194 GATEWAY BLVD 101
FERNANDINA BEACH, FLORIDA 32034
PHONE: (904) 415-6533
CONTACT: TIM POYNTER

PREPARED BY



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(NOT) FOR
CONSTRUCTION

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	SWPPP
4	DEMO PLAN
5	SITE PLAN
6	GRADING PLAN
7	DRAINAGE PLAN
8	UTILITY PLAN
9	CONSTRUCTION DETAILS 1
10	CONSTRUCTION DETAILS 2
11	LIFT STATION DETAIL

ENGINEERING PLANS BASED ON

PLAN TYPE	COMPANY NAME	REVISION	REVISION DATE
SURVEYOR	GAI CONSULTANTS		8/21/23
ARCHITECT	CHAD GRIMM STUDIOS		
LANDSCAPE ARCHITECT			
ENVIRONMENTAL			
GEOTECHNICAL ENGINEER	LEGACY ENGINEERING, INC		

FIRE SERVICES NOTE

CONTRACTOR SHALL PROVIDE AN UNOBSTRUCTED FIRE DEPARTMENT ACCESS ROAD, STABILIZED TO SUPPORT 80,000 LBS. AND PROVIDE TURNAROUND FOR A 50 FOOT FIRE APPARATUS. (NFPA 1, CHAPTER 18)

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED IN THE FLOOD ZONE "X" PER FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 120172-0237-G, 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.

REVISIONS

DESCRIPTION

NO. DATE BY

ENGINEERING PLANS
FOR
HOTEL STACKING FB
COVER SHEET
CITY OF FERNANDINA BEACH, FLORIDA



(NOT) FOR
CONSTRUCTION



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

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PROJECT NO: 22-149
ISSUE DATE: 01-04-2024
DRAFTED BY: JGD
DESIGNED BY: MHL
CHECKED BY: MHL

NOT VALID WITHOUT SEAL

Matthew H. Lahti, P.E.
Date: 8/21/23
P.E. FL # 71395
71395

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 GAI CONSULTANTS PROFESSIONAL SURVEYORS & MAPPERS DATED AUGUST 21, 2023. 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) AND SHOWN IN FEET. BENCHMARK GAI TRAV, ELEVATION BEING 6.55'.
- 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 DESCRIBED 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 WHICH INTERFERES WITH CONSTRUCTION, 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, F&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. THE CONTRACTOR SHALL 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 PRE-CONSTRUCTION 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 CITY OF FERNANDINA BEACH LAND DEVELOPMENT CODE OR THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), WHICHEVER IS MORE RESTRICTIVE.
- ALL WORK WITHIN THE CITY OF 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 THE 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 EXCAVATIONS, 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 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 CONFLICTS. THIS IS RECOMMENDED TO BE COMPLETED IN THE FORM OF FIELD STAKEOUT WHICH MAY INCLUDE: LOCATIONS OF BUILDINGS/BUILDING ELEMENTS (TO BE VERIFIED BY THE ENGINEER OF RECORD AND APPROVED ARCHITECTURAL PLANS), EDGES OF PAVEMENT, 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 CITY OF FERNANDINA BEACH WATER MANAGEMENT DISTRICT (SJRWMID). THE AS-BUILT SURVEY SHALL BE CERTIFIED BY AN 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 RECORDS 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 CITY OF 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 EXPLICIT 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 EXCAVATION, 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 CITY OF FERNANDINA BEACH 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, CITY OF FERNANDINA BEACH, FDEP, AND SJRWMD 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 CITY OF 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 # 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. 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, NWS610, 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 CITY OF 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 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 FOOT DESIGN MANUAL, LATEST EDITION, INDEX NO. 304 SHEETS 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 -
 - SLOPE SHALL NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - CURB RAMPS -
 - SLOPE SHALL NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET
 - LANDINGS -
 - MUST BE AT EACH END OF RAMPS, PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (2%) IN ANY DIRECTION
 - PATH OF TRAVEL ALONG ACCESSIBLE ROUTE -
 - 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 -
 - 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 SURFACES, CONTRACTOR MUST VERIFY ELEVATIONS SHOWN ON PLAN. PRIOR 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 II 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 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 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.
- 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 FOOT INDEX #430-022. MITERED END SECTIONS IN PONDS SHALL CONFORM TO FOOT INDEX #430-021. DITCH BOTTOM INLETS SHALL CONFORM TO FOOT INDEX #425-052. STORM MANHOLES SHALL CONFORM TO FOOT 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 CITY OF 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 INDEX NO. 425-010 AND 425-001 - TYPE J 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, RFI, PRODUCT SAMPLES, FIELD DATA, ETC. GULFSTREAM DESIGN GROUP, LLC, WILL NOT BE REQUIRED TO PERFORM 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 FACES SHALL BE FABRICATED ENTIRELY WITH TYPE "B" REFLECTIVE SHEETINGS.
- ALL PAVEMENT MARKINGS ARE TO BE PAINTED WITH THERMOPLASTIC PAINT IN ACCORDANCE WITH FOOT 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 FOOT 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" SHEETING (HIGHEST INTENSITY GRADE) ON MINIMUM 1/8" ALUMINUM PLATE. 18" X 48" SIGNS SHALL BE 100 GAIN MINIMUM. 30" X 48" SIGNS SHALL BE INSTALLED USING 3" X 12" ROUND ALUMINUM POSTS. ALL STOP SIGNS SHALL BE 30" OCTAGONAL INSTALLED ON 12" 3-LIFT "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 FOOT 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 CITY OF 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 CITY OF FERNANDINA BEACH WATER AND SEWER STANDARDS, SPECIFICATIONS AND DETAILS (LATEST EDITION). PLEASE NOTE THAT WORK DIRECTLY IMPACTING CITY OF FERNANDINA BEACH UTILITIES SHALL BE COORDINATED AS REQUIRED AND CONFORM TO THE CITY OF 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 CITY OF 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 CITY OF FERNANDINA BEACH AND FDEP STANDARDS.
- 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.
- 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.
 - SUBGRADE
 - BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NO MORE THAN 200 LINEAR FEET.

- BASE
 - 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:	TESTING INTERVAL:
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/ROADS)	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY	• ASHTO T180 • ASTM D1557 • ASHTO T191, T204, T238 • ASTM D1556, D2937, D2922	95% OF MAXIMUM DENSITY	EVERY 150 LF 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 SLOPE TYPE: EVERY 6" VERTICALLY FROM 6" BELOW THE STRUCTURE
SUBGRADE	BEARING VALUES	LB-R - FOOT	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 500 HORIZONTAL LF
	MAXIMUM DENSITY/OPTIMUM MOISTURE FIELD DENSITY AND THICKNESS	• ASHTO T180 • ASTM D1557 • ASHTO T191, T204, T238 • ASTM D1556, D2922	SEE TYPICAL PAVEMENT SECTION	• ONE PER 2,000 SF HORIZONTALLY • ONE PER SOURCE
BASE	BEARING VALUES	LB-R - FOOT	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 500 HORIZONTAL LF
	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, T96	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE • ONE PER 2,000 LF HORIZONTALLY
	ATTERBERG LIMIT	• ASHTO T90, • ASTM C136, D463, D424 • ASHTO T154 • ASTM D2172	SEE TYPICAL PAVEMENT SECTION	• ONE PER SOURCE
ASPHALTIC CONCRETE	MATERIALS QUALITY BITUMEN CONTENT, GRADATION FIELD DENSITY	• ASHTO T290, • ASTM D2922	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	• ASHTO T98-77 • ASTM C131-81	PER SPECIFICATIONS	• ONE PER SOURCE • ONE PER 2,000 LF HORIZONTALLY
ACCEPTED TESTING METHODS:				
• ASHTO T27-GRADATION (SIEVE TESTING) • ASHTO T96-GRADATION (LOS ANGELES MACHINE) • ASHTO T90-ATTERBERG LIMITS (PLAST 100%) • ASTM C136-GRADATION (SIEVE TESTING) • ASTM D2922-FIELD DENSITY (GRAVE COLLINDER) • ASTM D424-ATTERBERG LIMITS (PLAST 100%) • ASHTO T180-FIELD DENSITY (STANDARD PROCTOR) • ASHTO T191-FIELD DENSITY (MODIFIED PROCTOR) • ASHTO T96-77-DEGRADATION (LOS ANGELES MACHINE) • ASHTO T191-FIELD DENSITY (SAND CONE)				
• ASTM D1557-FIELD DENSITY (MODIFIED PROCTOR) • ASTM D2950-ASPHALT DENSITY (NUCLEAR) • ASHTO T191-FIELD DENSITY (MODIFIED PROCTOR) • ASTM C131-DEGRADATION (LOS ANGELES MACHINE) • ASTM D2922-FIELD DENSITY (GRAVE COLLINDER) • ASTM D2922-FIELD DENSITY (NUCLEAR) • FOOT LB-R-LIME ROCK BEARING RATIO				
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 INLET TO FOAM-MANVIL 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 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 AGENT BEGINNING 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. 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.
- 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 PIPE TYPING TO MEET TABLE C-300 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. THE PIPING AND ATTACHED APPURTENANCES SUBJECT TO SYSTEM WORKING 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.

FIRE HYDRANT NOTES:

- HYDRANTS ON THE SUPPLY SIDE OF A BACKFLOW PREVENTER AND OWNED AND MAINTAINED BY THE DEVELOPMENT ARE DEEMED PRIVATE AND SHALL BE COLORED RED WITH WHITE REFLECTIVE CAPS.
- HYDRANTS SHALL BE INSTALLED ON FLAT STONE OR CONCRETE SLABS OR OTHER APPROVED MATERIALS.
- HYDRANTS SHALL BE INSTALLED DO LARGE DIAMETER (4.5 INCH) OUTLET IS FACING THE ROADWAY.
- HYDRANTS SHALL BE INSTALLED SO CENTER OR LOWEST OUTLET IS MINIMUM 18 INCHES ABOVE FINAL

GENERAL NOTES
1. THE OWNER SHALL OBTAIN THE FDEP NPDES NOI 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 ADDITIONAL MEASURES 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. FDEP NPDES NOI MUST BE POSTED AT CONSTRUCTION SITE. PERMITEE MUST KEEP RECORDS 3 YEARS FROM DATE OF FINAL STABILIZATION. 5. CONTRACTOR IS RESPONSIBLE TO FOLLOW ALL REQUIREMENTS IN THE FDEP NPDES NOI 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/DIKES 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 DENUDED 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/DIKES 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 HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES 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 DIVERSION SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE CLEARING AND EROSION CONTROL PLAN.

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:

EROSION AND SEDIMENT CONTROLS STABILIZATION PRACTICES:

- SYNTHETIC BALE BARRIER: SYNTHETIC BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
 - WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
 - IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
 - WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
- FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
 - WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
 - 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.
- SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF SITE TO LIMIT THE AREA OF DISTURBANCE.
- STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE IN ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY. ANY EXCAVATED MATERIAL MUST REMAIN ON THE PROJECT SITE.
- 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.
- INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
- 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 SEEDED 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.
- TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 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.
- TEMPORARY GRASSING: THE SEEDED OR SEEDED 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 REGRASSING: IF AFTER 7 DAYS FROM SEEDING, THE TEMPORARY GRASSSED 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.
- PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
- PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SOD INSTALLED.

STRUCTURAL PRACTICES:

- 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.
- 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.
- OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION AND SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES AND SYNTHETIC BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
- 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 DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE 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 STRUCTURAL FILL. 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 OF 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 SWEEPED 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 TARP/PAVIN.

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 DENUDED 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 BREACHES 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 REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- 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.

- THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- 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.

NON-STORM WATER DISCHARGES:

- 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 DOWATERING 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	

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.

- GENERAL:**
- 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.

HAZARDOUS PRODUCTS:

- 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.

PRODUCT SPECIFIC PRACTICES:

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

- PETROLEUM PRODUCTS:**
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:**
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.

- PAINTS:**
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:**
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.

SPILL CONTROL PRACTICES:

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.

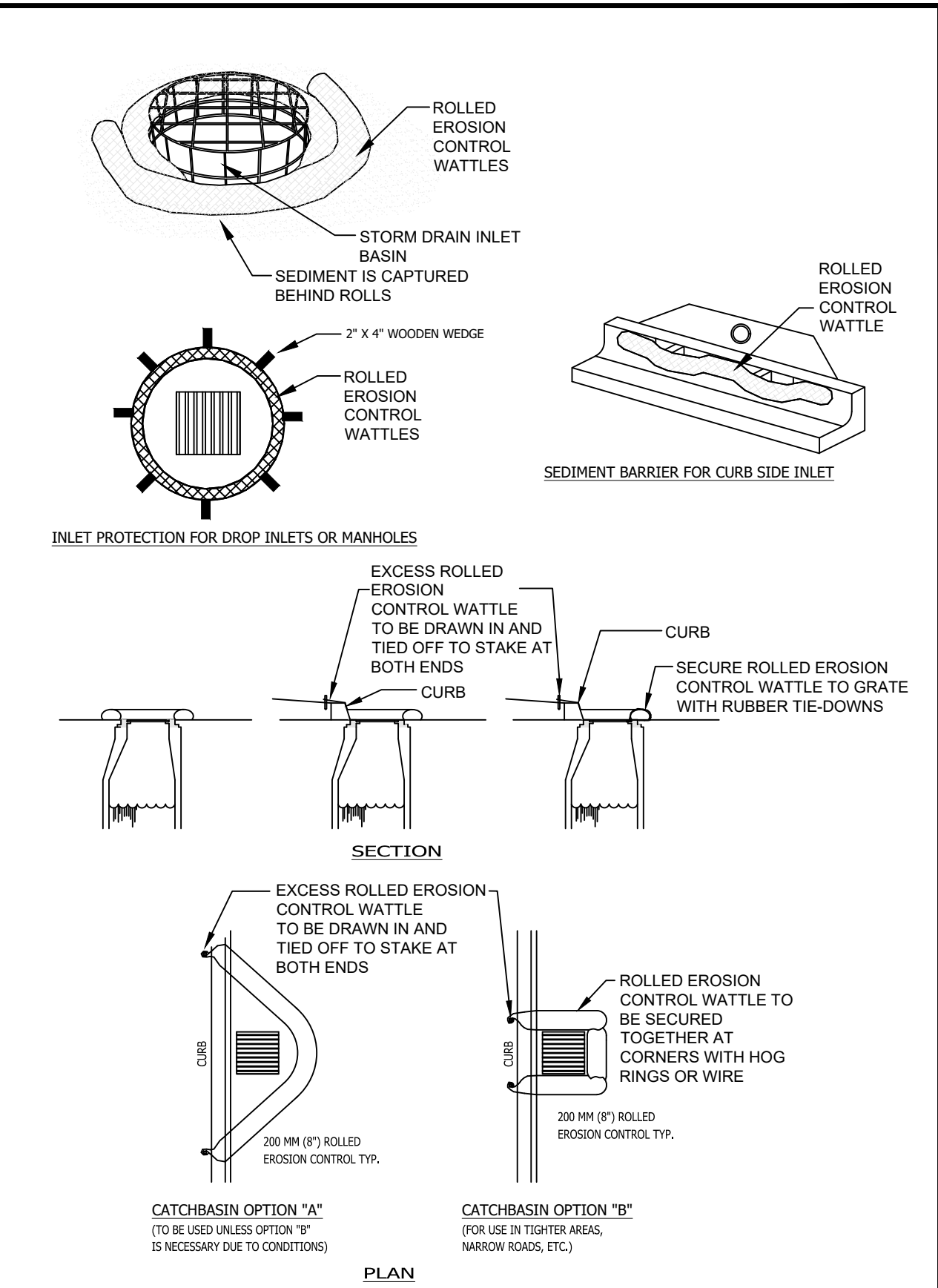
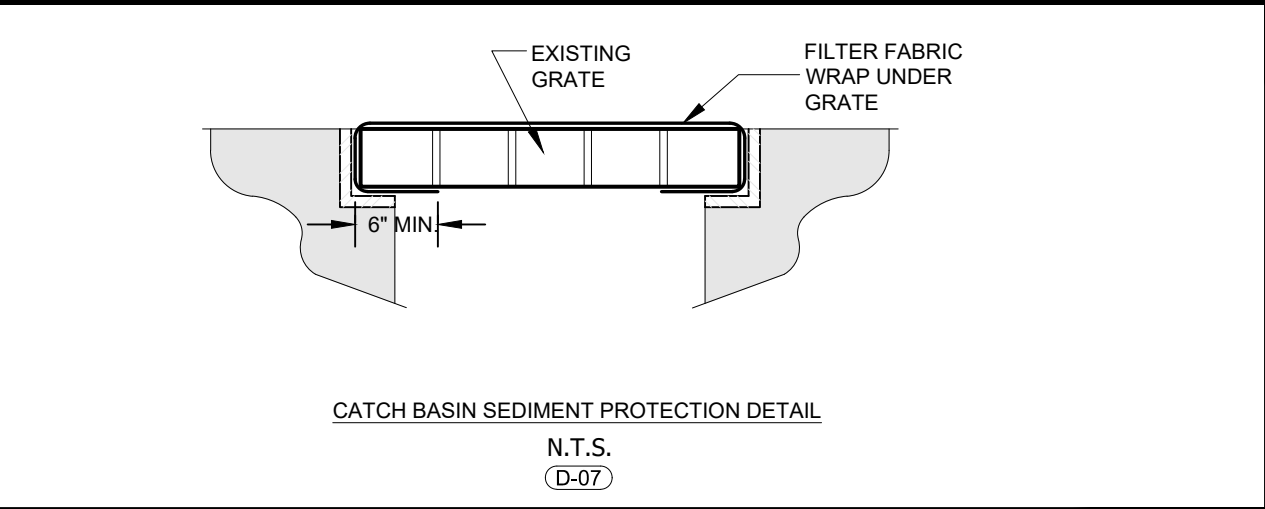
ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

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.

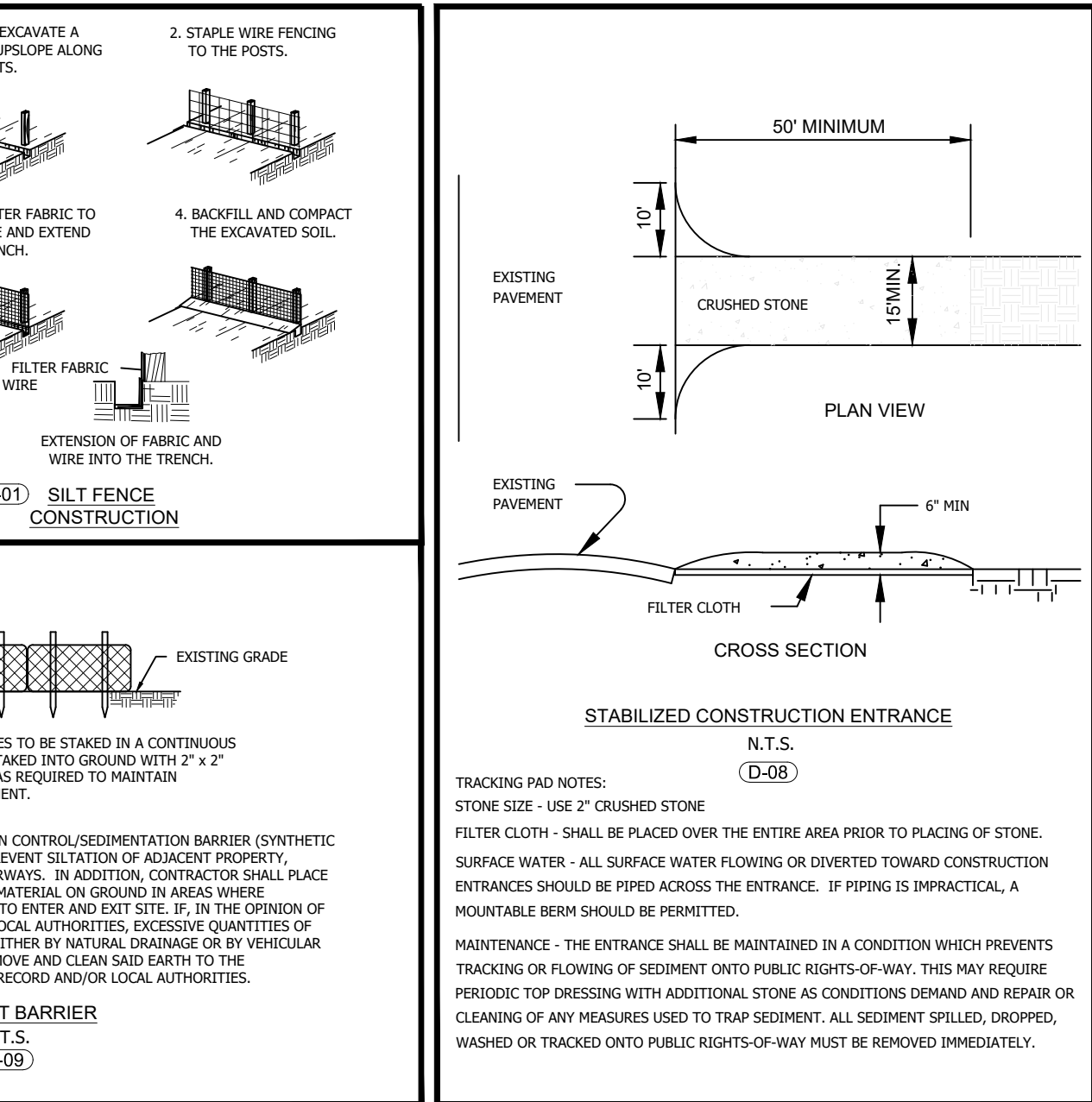
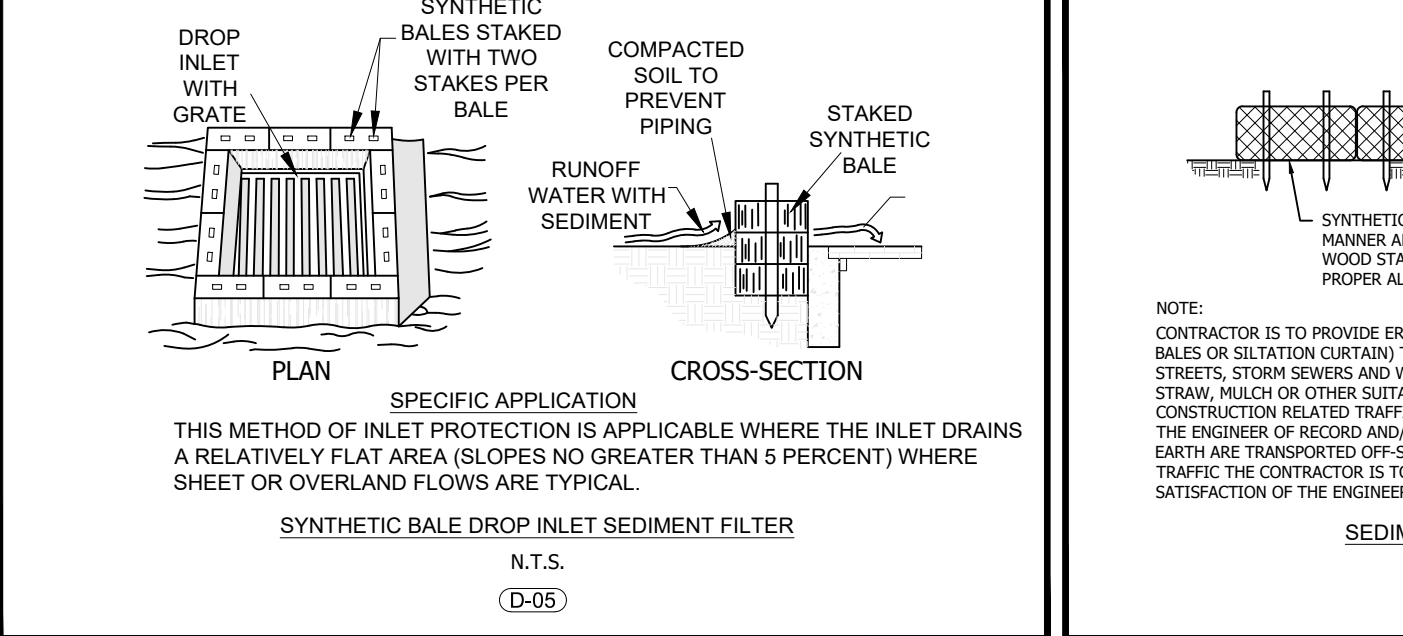
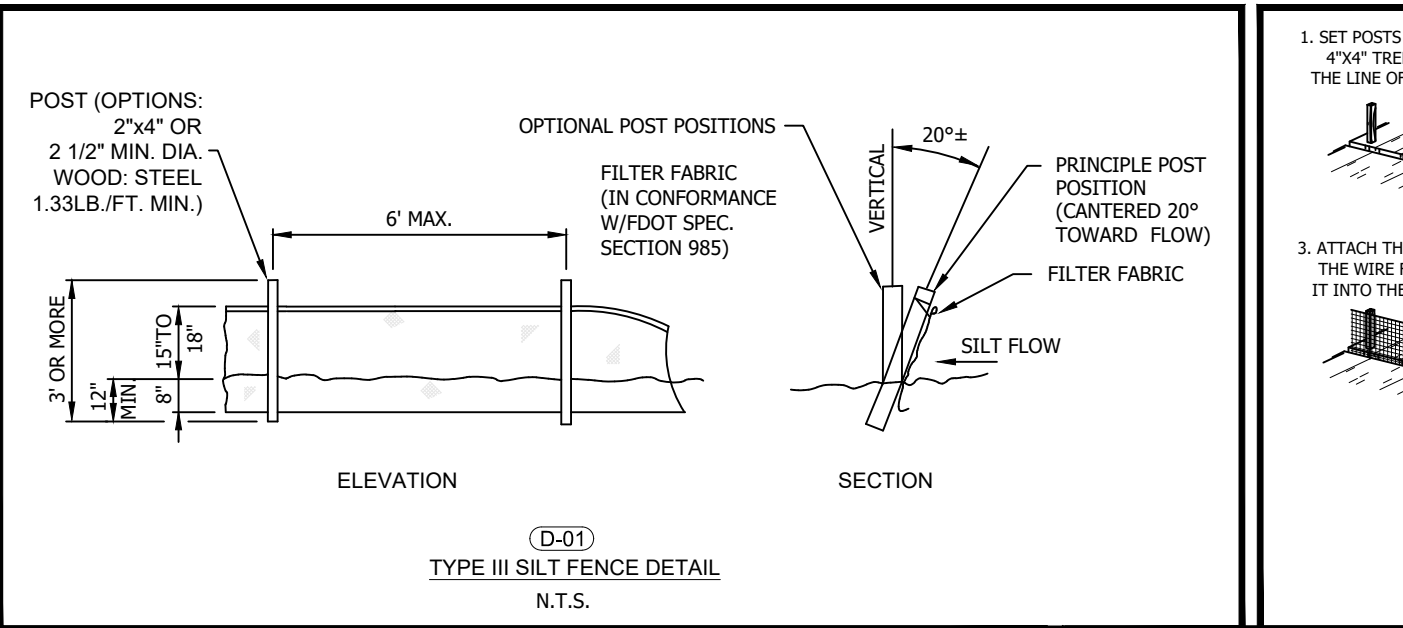
THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

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.



- NOTES**
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - SECURE ROLLED EROSION CONTROL PRODUCT TO GROUND AT EACH END.
 - ROLLS SHOULD BE INSPECTED AFTER EVERY SIGNIFICANT STORM EVENT TO CLEAR AND DISPOSE OF SEDIMENT AND DEBRIS.
 - USE 12" DIAMETER, 20' LONG WATTLE ROLLS FOR STANDARD CIRCULAR DRAINAGE STRUCTURES. PLACE THE ROLL AROUND THE STRUCTURE AND JOIN THE ENDS TOGETHER WITH HOG RINGS OR WIRE. USE 2"x2"x2" WOODEN WEDGES TO HOLD DOWN WATTLE ROLLS.

ROLLED EROSION AND SEDIMENTATION CONTROL PRODUCTS
N.T.S.
(D-06)



ENGINEERING PLANS FOR HOTEL STACKING FB SWPPP

CITY OF FERNANDINA BEACH, FLORIDA



(NOT) FOR CONSTRUCTION

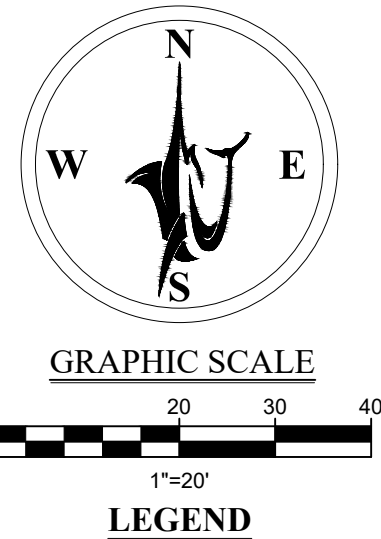
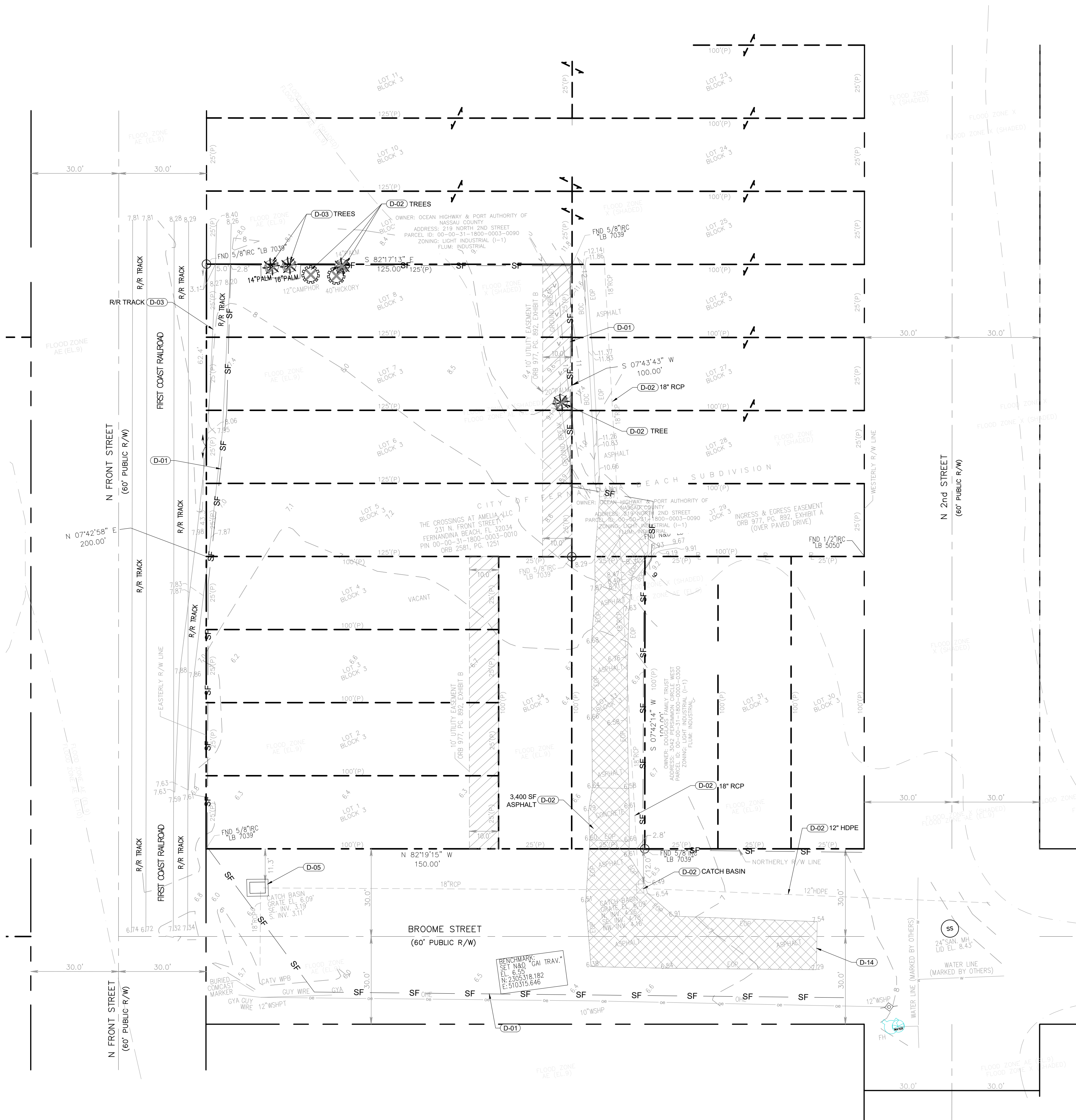


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- EXISTING**
- EXISTING PROPERTY LINE
 - EXISTING R/W LINE
 - - - 5 - - - EXISTING CONTOUR MAJOR
 - - - 3 - - - EXISTING CONTOUR MINOR
 - × 31.20 EXISTING GRADE ELEVATION
 - SF SILT FENCE
 - CONSTRUCTION ENTRANCE
 - SAWCUT & REMOVE EXISTING PAVEMENT/SIDEWALK/CURBING
 - Tree Protection
 - EXISTING TREE TO BE REMOVED
 - TREES TO REMAIN

- DEMOLITION KEY NOTES:** @-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-05 SYNTHETIC BALE DROP INLET SEDIMENT FILTER (SEE SHEET #3 SWPPP FOR DETAILS)
 - D-06 EXISTING INLET & PIPING TO BE REPLACED. SEE SHEET 7 FOR PROPOSED REPLACEMENT
 - D-14 SAWCUT & REMOVE EXISTING PAVEMENT FOR UTILITY SERVICE CONNECTIONS.
 - D-16 NO SOFT DIGS OR UTILITY LOCATES HAVE BEEN PERFORMED. CONTRACTOR TO VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION
 - D-17 EXISTING TREE TO REMAIN SEE LANDSCAPE PLANS FOR TREE PROTECTION DETAILS

- 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.
 - 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) ADJACENT TO CONSERVATION EASEMENTS AND WETLANDS OR UPLAND BUFFERS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORMWATER TREATMENT FACILITIES, (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 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. EXCAVATION AND OTHER PROCEDURES SUCH AS CLOSED-CIRCUIT TV MAY BE REQUIRED IN ORDER TO DETERMINE CONDITION.

- MAINTENANCE OF TRAFFIC NOTES**
- NOTIFY NASSAU COUNTY ENGINEERING SERVICES DEPARTMENT A MINIMUM OF 30 WORKING DAYS PRIOR TO IMPLEMENTATION OF MOT.
 - THERE SHALL BE NO LANE CLOSURES BETWEEN 7:00 AM AND 9:00 AM AND BETWEEN 4:00 PM AND 7:00 PM ON WEEKDAYS.
 - THE CONTRACTOR SHALL CONFIRM THAT EXISTING SIGNAGE WILL NOT POSE A CONFLICT FOR WORK ZONE TRAFFIC CONTROL. THE CONTRACTOR SHALL COVER OR REMOVE ALL SIGNING IN CONFLICT WITH THE TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS.
 - ACCESS TO SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
 - THE CONTRACTOR SHALL DEVELOP A SPECIFIC MAINTENANCE OF TRAFFIC PLAN FOR VEHICULAR TRAFFIC CONFORMING TO FDOT STANDARDS. THIS VEHICULAR MAINTENANCE OF TRAFFIC PLAN SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND TO THE NASSAU COUNTY ENGINEERING SERVICES DEPARTMENT A MINIMUM OF 5 DAYS PRIOR TO IMPLEMENTATION OF MOT.
 - THE CONTRACTOR SHALL DEVELOP A SPECIFIC MAINTENANCE OF TRAFFIC PLAN FOR PEDESTRIAN TRAFFIC CONFORMING TO FDOT STANDARD INDEX 102-660. THIS PEDESTRIAN MAINTENANCE OF TRAFFIC PLAN SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND TO THE NASSAU COUNTY ENGINEERING SERVICES DEPARTMENT A MINIMUM OF 5 DAYS PRIOR TO IMPLEMENTATION OF MOT.
 - CONTRACTOR TO ENSURE NASSAU COUNTY RIGHT-OF-WAY REMAINS FREE OF DIRT AND DEBRIS FOR DURATION OF CONSTRUCTION
 - CONTRACTOR TO PROVIDE MAINTENANCE SCHEDULE / APPROACH IN WRITING BEFORE SCHEDULING OF PRE-CONSTRUCTION MEETING.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING OFFSITE DRAINAGE FACILITIES AND PATTERNS THROUGHOUT THE DURATION OF CONSTRUCTION.

ENGINEERING PLANS
FOR
HOTEL STACKING FB
DEMO PLAN

CITY OF FERNANDINA BEACH, FLORIDA



(NOT) FOR
CONSTRUCTION

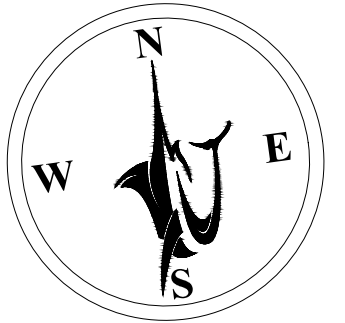
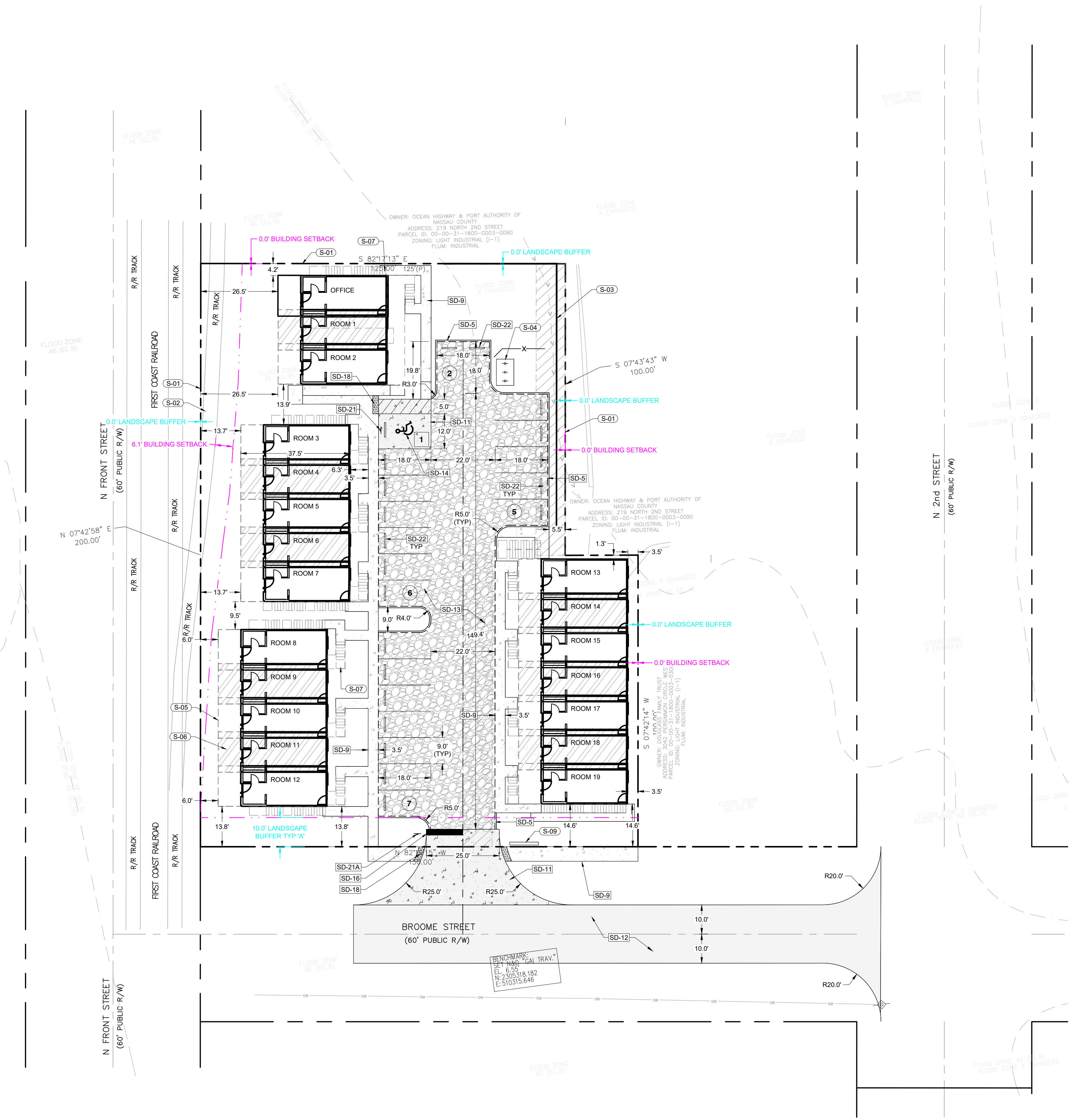


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LEGEND

EXISTING

- EXISTING PROPERTY LINE
- EXISTING R/W LINE
- EXISTING UTILITY EASEMENT

PROPOSED

- PROPOSED CURB
- PROPOSED CENTER LINE
- PROPOSED BUILDING OUTLINE
- PROPOSED CHAINLINK FENCE
- PROPOSED LOT LINE
- SETBACK DIMENSION
- BUFFER DIMENSION
- SILT FENCE
- STANDARD PARKING COUNT
- ADA PARKING COUNT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE PAVEMENT
- PROPOSED STANDARD DUTY ASPHALT PAVEMENT
- PROPOSED COMPACTED COQUINA
- UPPER LEVEL HOTEL UNIT

SITE KEY NOTES: S-XX

- S-01 PROPERTY LINE
- S-02 EXISTING RAILROAD TRACK
- S-03 PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- S-04 PROPOSED BICYCLE PARKING
- S-05 PROPOSED LOWER LEVEL HOTEL UNIT
- S-06 PROPOSED UPPER LEVEL HOTEL UNIT
- S-07 PROPOSED STAIRS
- S-08 EDGE OF WOODEN DECK
- S-09 SITE IDENTIFICATION SIGN

SITE DETAILS: SD-XX

- SD-5 6" RIBBON CURB
- SD-9 CONCRETE SIDEWALK
- SD-11 CONCRETE PAVEMENT SECTION
- SD-12 TYPICAL PAVEMENT SECTION
- SD-13 COMPACTED COQUINA SECTION
- SD-14 PARKING PAINT STRIPING
- SD-16 STOP BAR
- SD-18 DETECTABLE WARNING DETAIL
- SD-21 ACCESSIBLE PARKING SIGN
- SD-21A STOP SIGN R1-1
- SD-22 CONCRETE WHEELSTOP

- GENERAL SITE NOTES:**
- ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS OF THE CITY OF FERNANDINA BEACH 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 CITY OF FERNANDINA BEACH 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:	27,500 SF	0.63 AC
PROJECT AREA:	27,500 SF	0.63 AC
IMPERVIOUS AREA:	20,625 SF	0.47 AC
BUILDINGS:	4,240 SF	0.097 AC
PROPERTY ID NO: 00-00-31-1800-0003-0010		
ZONING: CENTRAL BUSINESS DISTRICT C-3		
FLUM: INDUSTRIAL		
FEMA FIRM PANEL NUMBER 12089C0237G		
IMPERVIOUS SURFACE AREA RATIO:		
MAXIMUM:		PROPOSED
75.00%		75.00%
MAXIMUM FLOOR AREA RATIO:		15.42%
200.00%		
BUILDING HEIGHT:		
MINIMUM:		PROPOSED:
30'		14'
FRONT YARD SETBACK (S)		
0'		4'
SIDE YARD SETBACK (E,W)		
0'		4'
REAR YARD SETBACK (N)		
10'		10'
SIDE YARD BUFFER (E,W)		
0'		0'
REAR YARD BUFFER (N)		
0'		0'

PARKING CALCULATIONS - CITY OF FERNANDINA BEACH					
USE	SPACE PER UNIT OR SF	UNITS, SEATS, ROOMS, SPACES	PROPOSED BUILDING AREA (SF)	REQUIRED PARKING SPACES	PROVIDED PARKING SPACES
HOTEL	1 / ROOM	19		19	19
OFFICE	1 / 300 SF		413	2	2
TOTAL PARKING SPACES				21	21
ADA PARKING SPACES *				1*	1*
* INCLUDED IN TOTAL PARKING COUNT					

REVISIONS		DESCRIPTION	
NO.	DATE	BY	
1			
2			
3			
4			
5			
6			
7			
8			
9			

ENGINEERING PLANS FOR
HOTEL STACKING FB
SITE PLAN
CITY OF FERNANDINA BEACH, FLORIDA



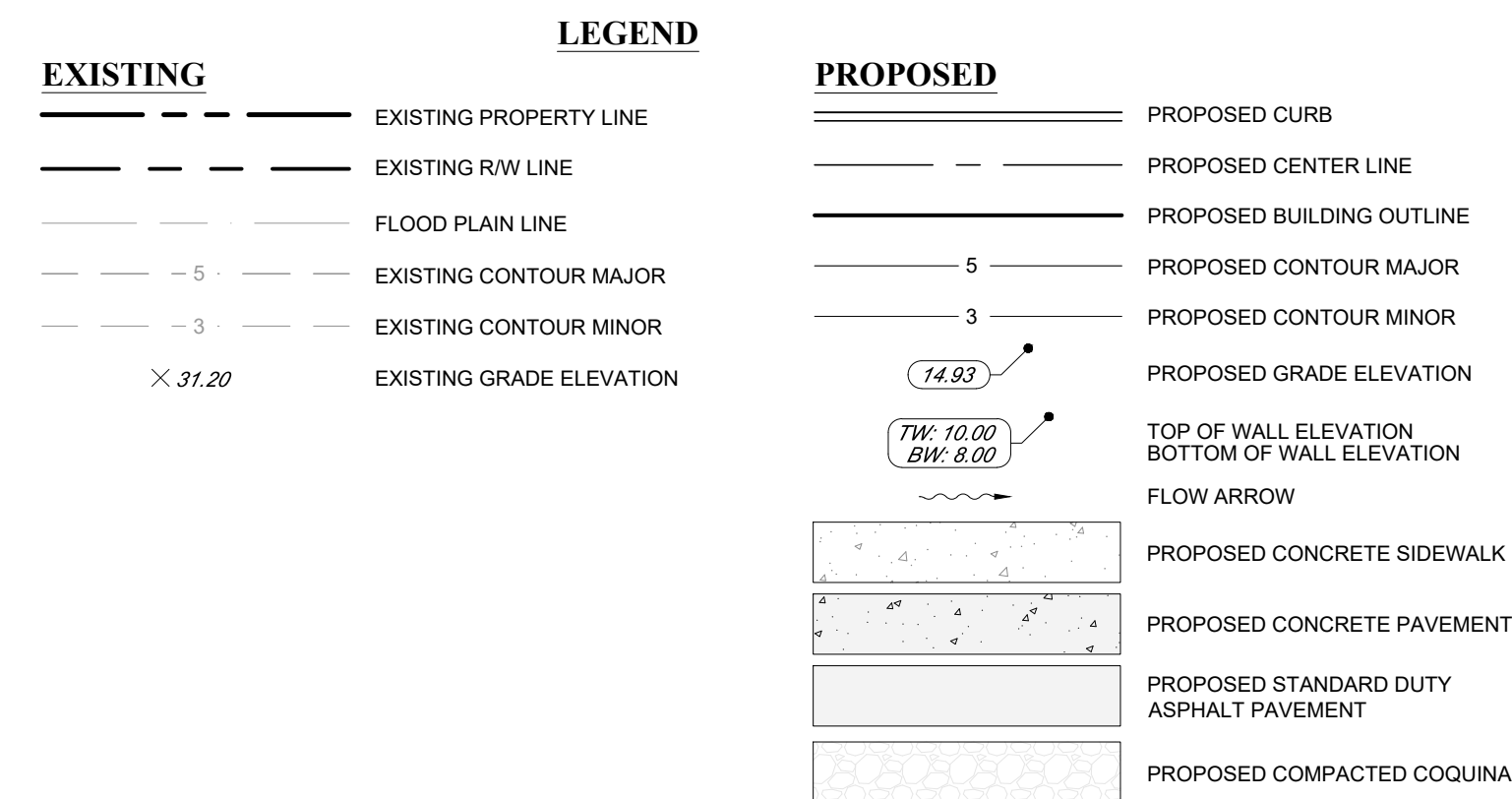
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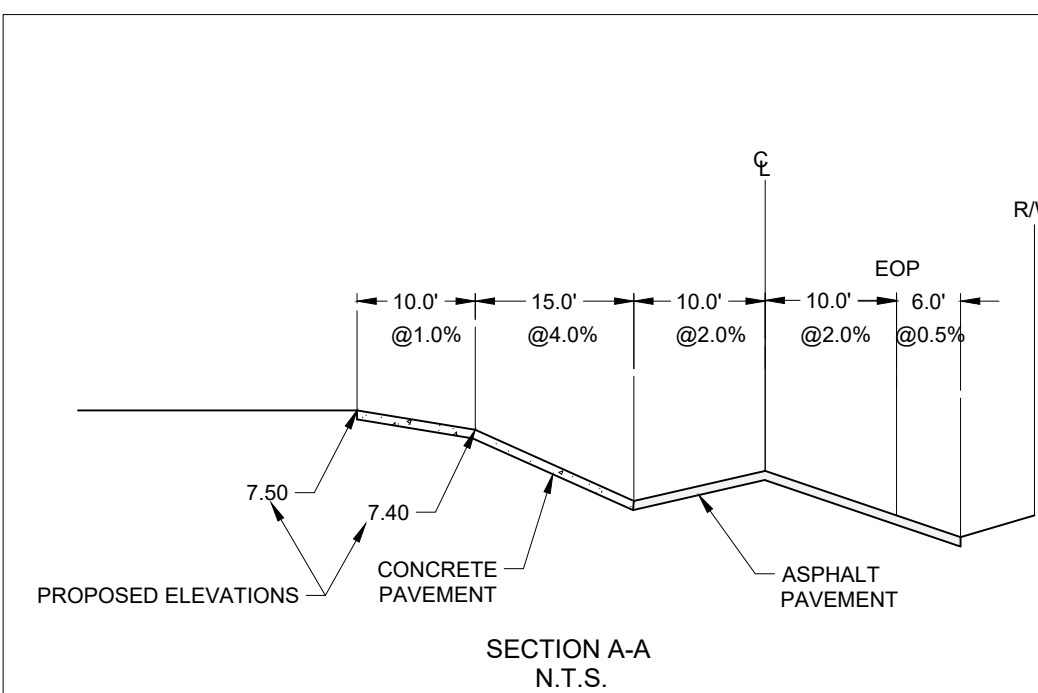
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1. ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
2. FIVE FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
3. CONTRACTOR SHALL STAKE EACH STAGE OF WORK, HORIZONTAL AND VERTICAL, IN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



REVISIONS				
NO.		DATE	BY	DESCRIPTION
1	1	11/1/00	WJW	ISSUED
2	2	11/1/00	WJW	ISSUED
3	3	11/1/00	WJW	ISSUED
4	4	11/1/00	WJW	ISSUED
5	5	11/1/00	WJW	ISSUED
6	6	11/1/00	WJW	ISSUED
7	7	11/1/00	WJW	ISSUED
8	8	11/1/00	WJW	ISSUED
9	9	11/1/00	WJW	ISSUED

**ENGINEERING PLANS
FOR
HOTEL STACKING FB
GRADING PLAN**

CITY OF FERNANDINA BEACH, FLORIDA



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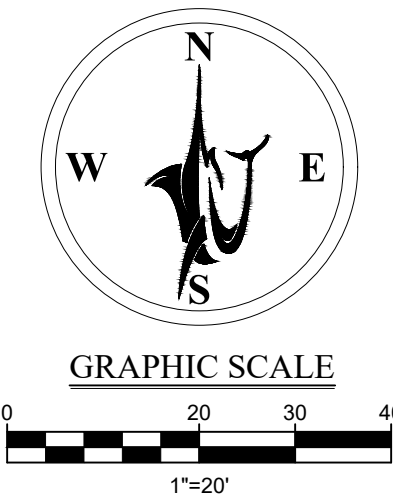
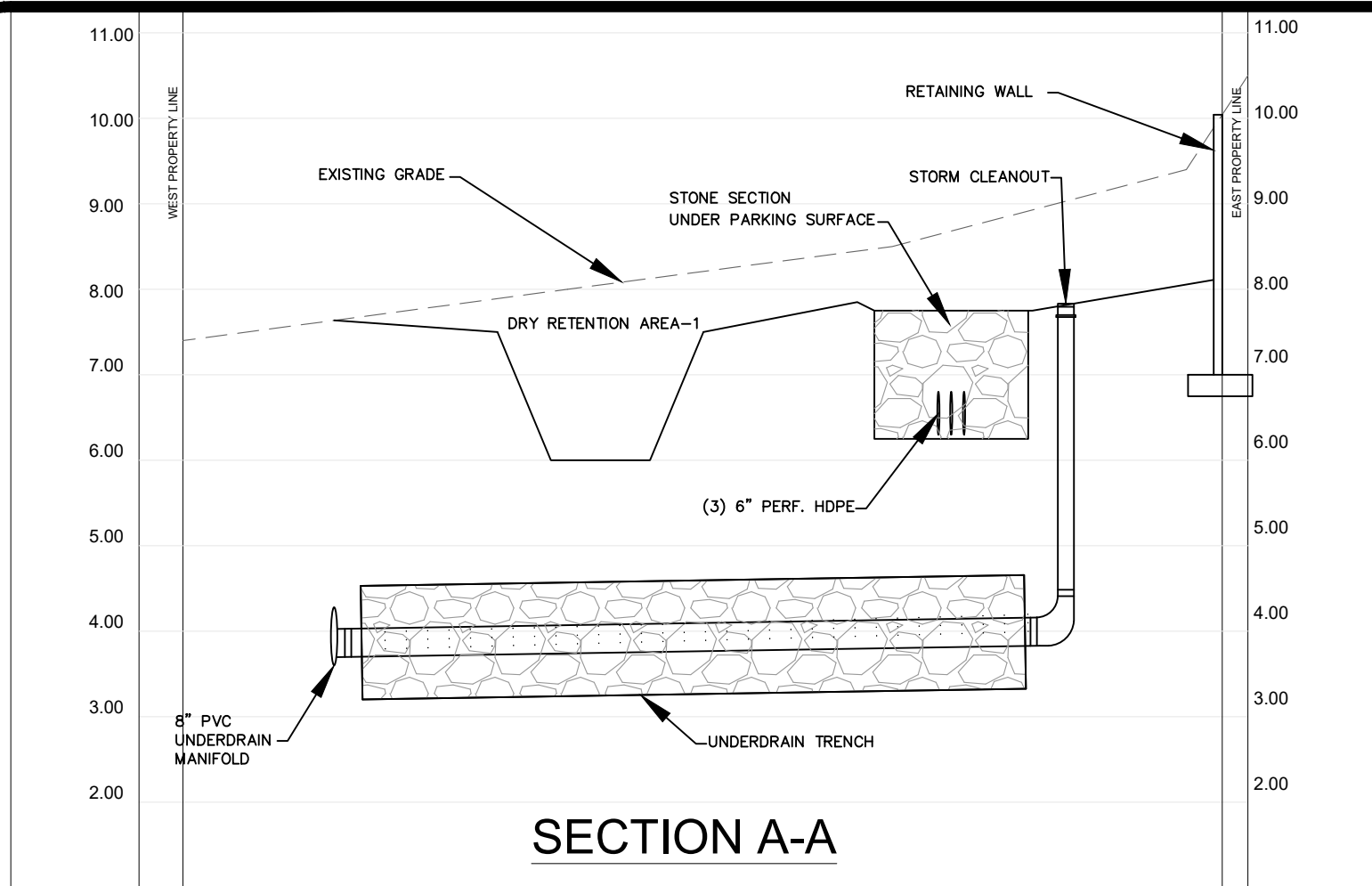


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EXISTING		LEGEND		PROPOSED	
---	EXISTING PROPERTY LINE	---	PROPOSED CURB & GUTTER	---	PROPOSED CURB & GUTTER
---	EXISTING RW LINE	---	PROPOSED CENTER LINE	---	PROPOSED CENTER LINE
---	EXISTING CONTOUR MAJOR	---	PROPOSED BUILDING OUTLINE	---	PROPOSED BUILDING OUTLINE
---	EXISTING CONTOUR MINOR	---	PROPOSED PRIVACY FENCE	---	PROPOSED PRIVACY FENCE
---	EXISTING BUILDING	---	PROPOSED CONTOUR MAJOR	---	PROPOSED CONTOUR MAJOR
---	EXISTING GRADE ELEVATION	---	PROPOSED CONTOUR MINOR	---	PROPOSED CONTOUR MINOR
---		---	SILT FENCE	---	SILT FENCE
---		---	STORM PIPE	---	STORM PIPE
---		---	TYPE C INLET	---	TYPE C INLET
---		---	STORM MANHOLE	---	STORM MANHOLE
---		---	YARD DRAIN	---	YARD DRAIN
---		---	STORM CLEANOUT	---	STORM CLEANOUT

DRAINAGE NOTES

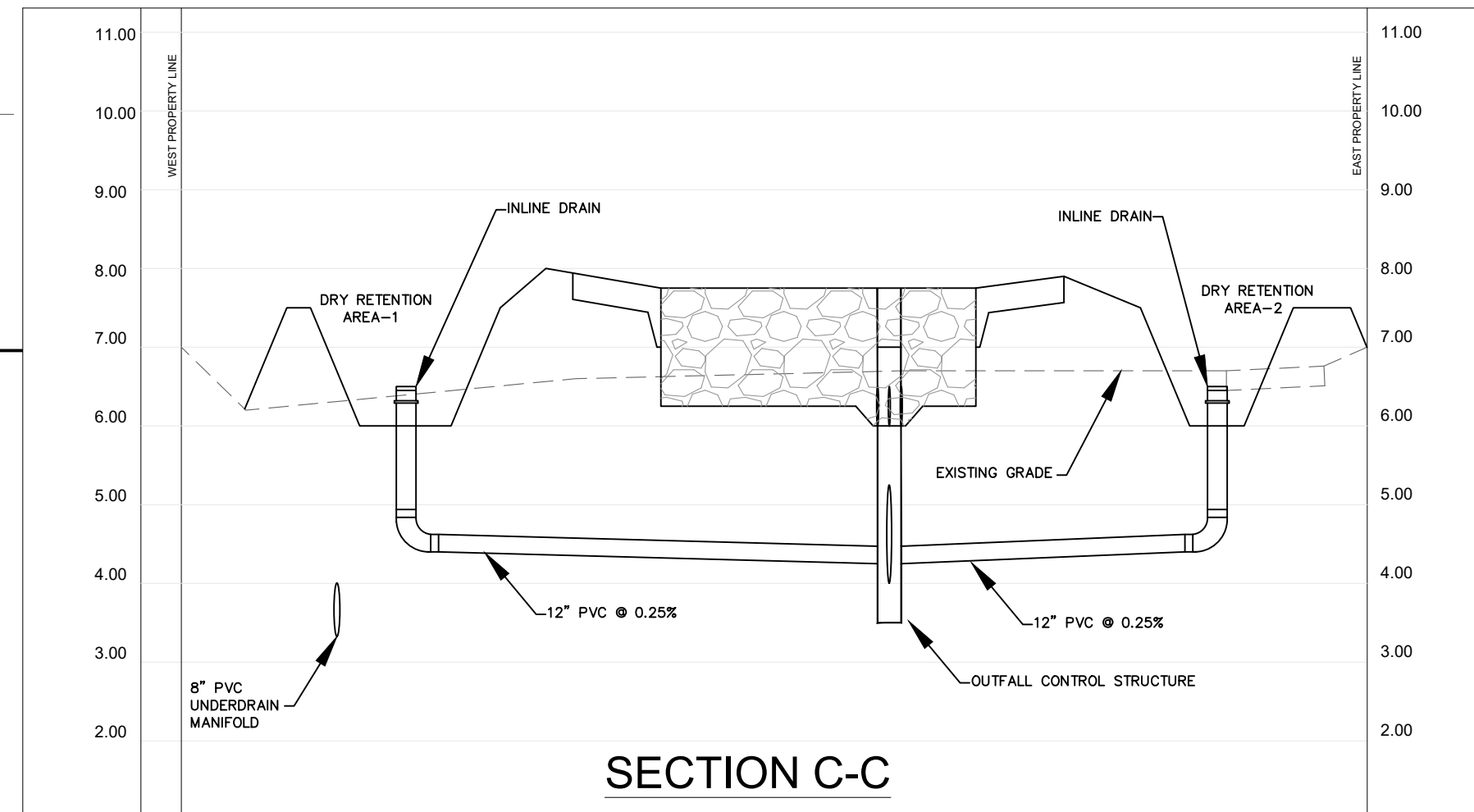
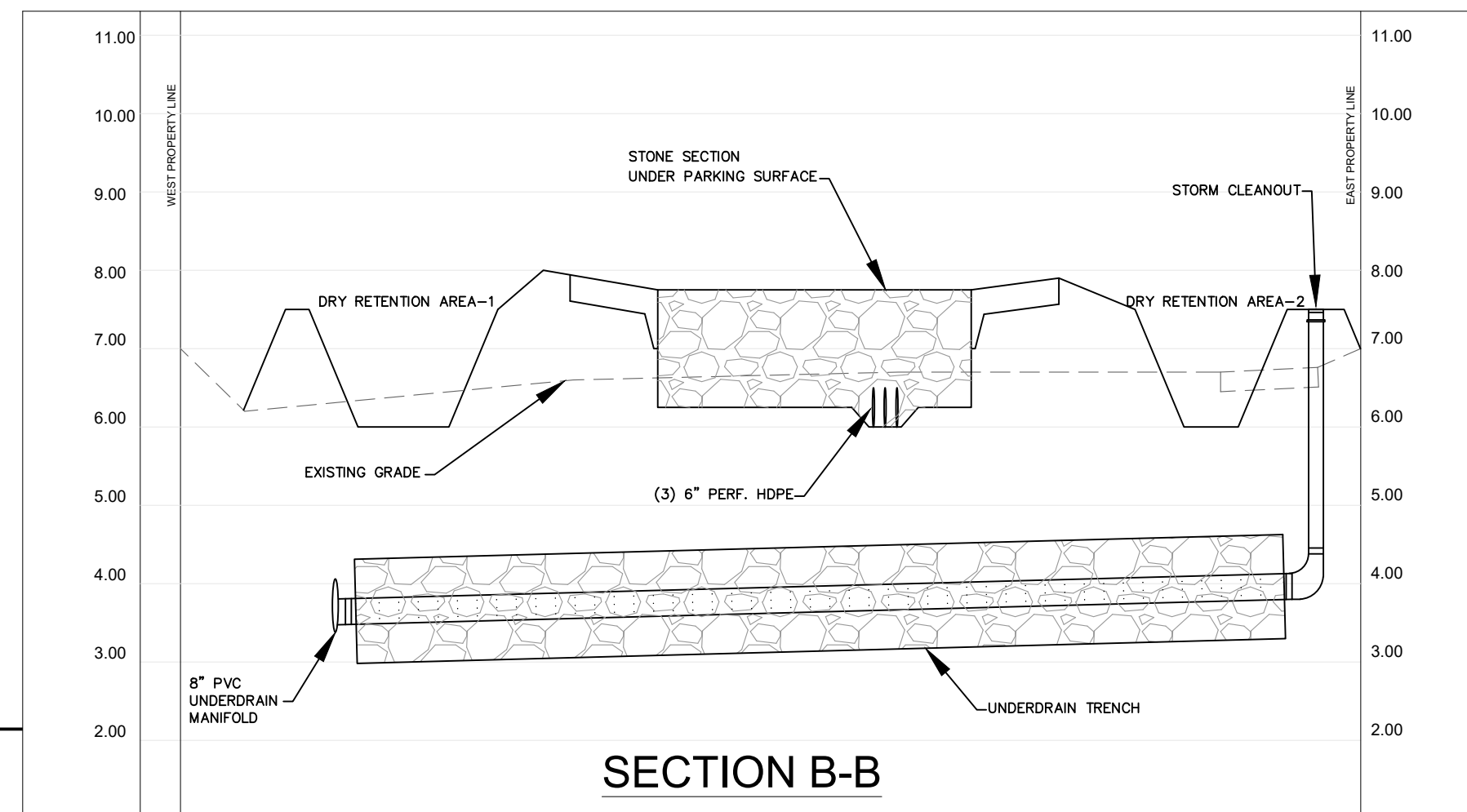
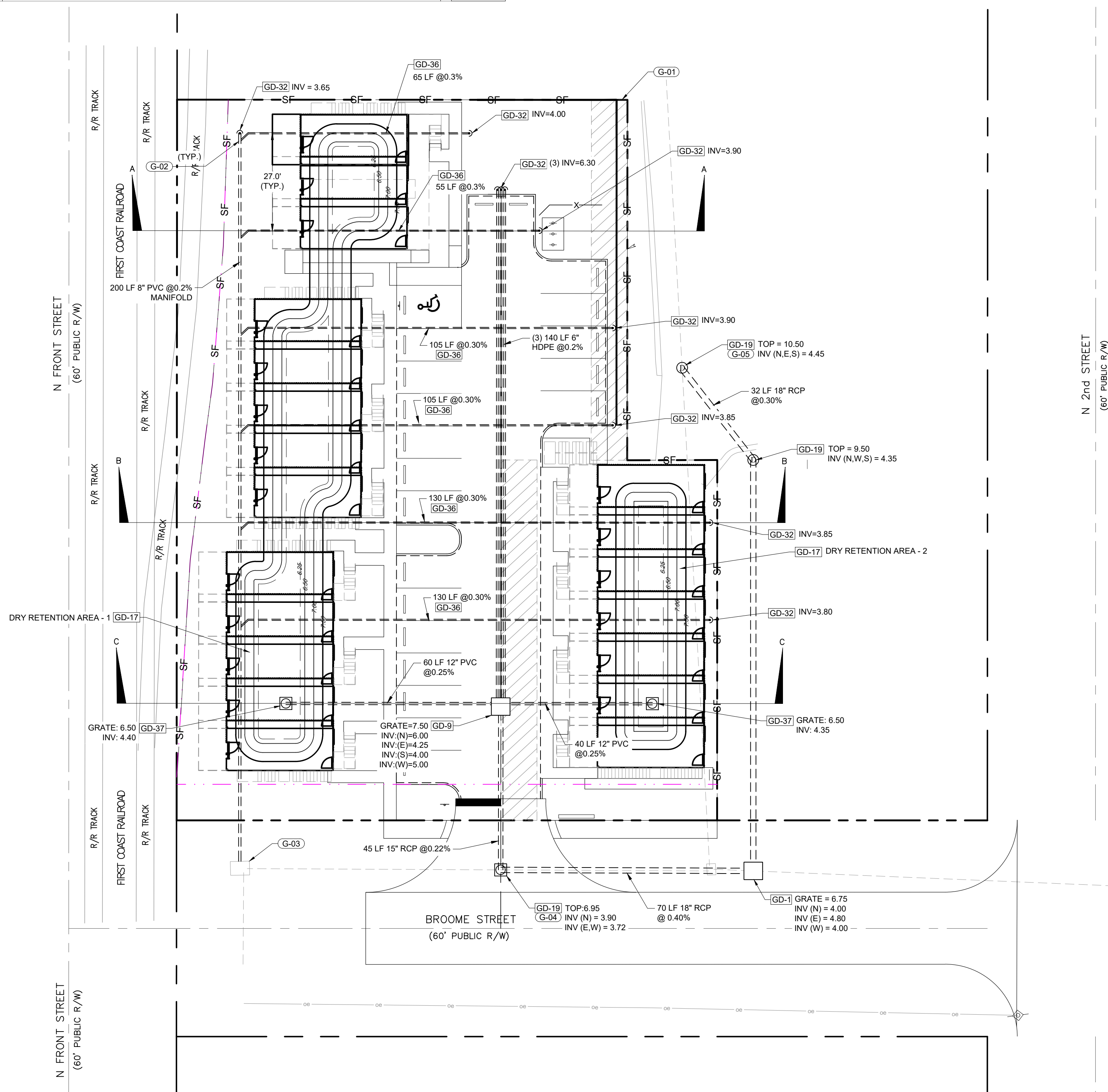
- PIPE LENGTHS SHOWN REPRESENT DISTANCES BETWEEN CENTERLINE OF DRAINAGE STRUCTURES AND TO END OF MITERED END SECTIONS.
- ALL NON-PAVED DISTURBED AREAS TO BE SEEDED AND STABILIZED UNLESS OTHERWISE NOTED.
- FIVE FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS, ETC.
- THE STORM 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.

DRAINAGE DETAILS

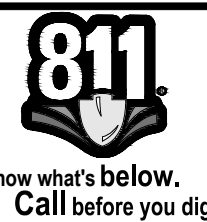
- GD-1 TYPE C INLET
GD-9 OUTFALL CONTROL STRUCTURE (MODIFIED TYPE E INLET)
GD-17 TYPICAL DRY RETENTION CROSS SECTION
GD-19 STORM MANHOLE
GD-32 STORM CLEANOUT
GD-36 UNDERDRAIN
GD-37 INLINE DRAIN

DRAINAGE KEY NOTES:

- G-01 SILT FENCE (SEE SHEET #4 SWPPP FOR DETAILS)
G-02 4" X 8" WYE
G-03 CONNECT PROPOSED 8" PVC TO EXISTING INLET AT INVERT ELEVATION = 3.23.
G-04 CONNECT PROPOSED DRAINAGE STRUCTURE TO EXISTING STORM PIPE. INVERT ELEVATIONS ARE BASED ON AVAILABLE SURVEY DATA. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO ORDERING PIPE CAST STRUCTURES.
G-05 INVERT ELEVATION OF THE EXISTING STORM PIPE IS ASSUMED. CONTRACTOR TO VERIFY AND ADJUST ELEVATIONS AS NECESSARY TO CONNECT TO EXISTING STORM PIPE.



ENGINEERING PLANS FOR HOTEL STACKING FB DRAINAGE PLAN CITY OF FERNANDINA BEACH, FLORIDA

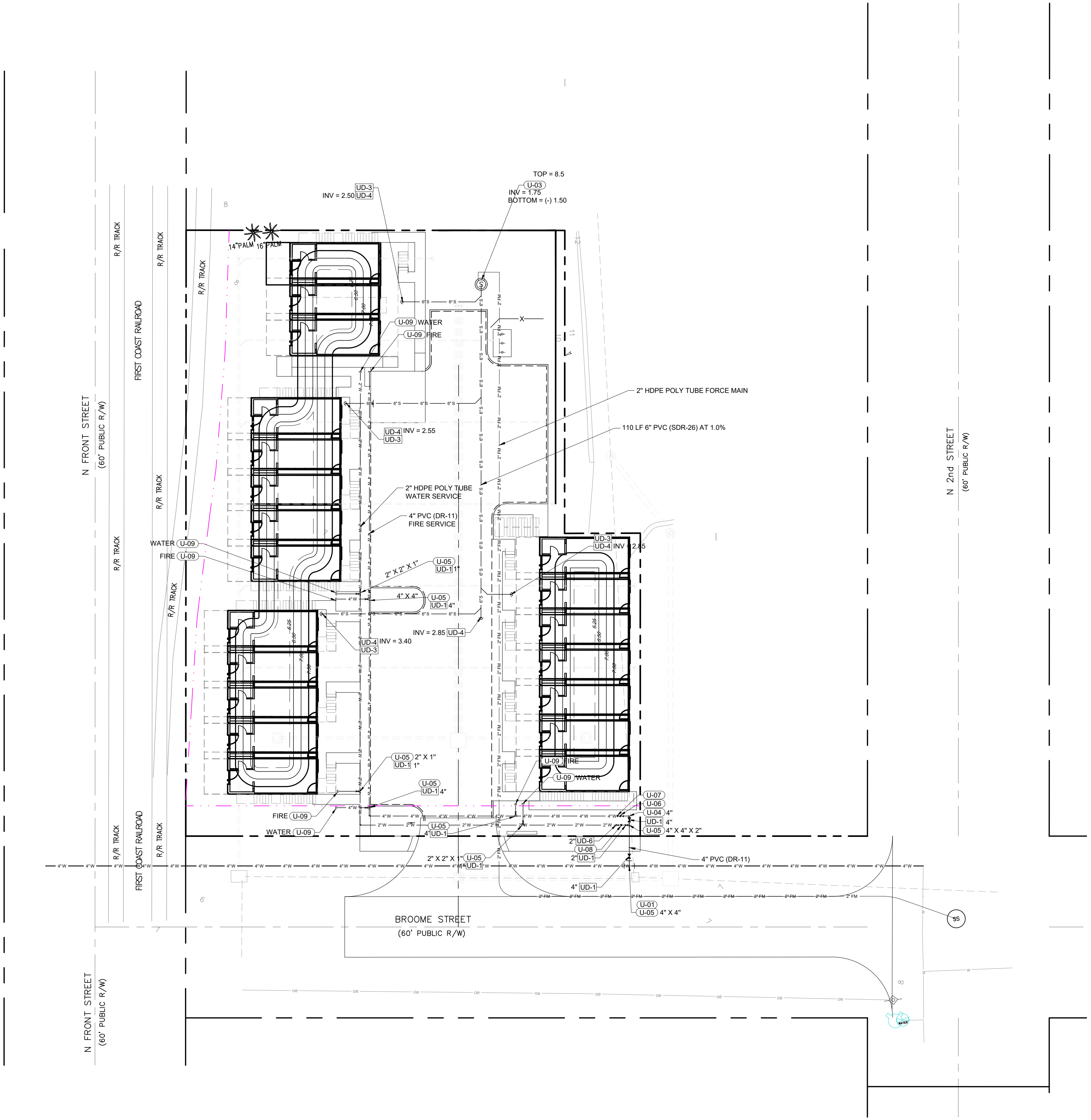


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LEGEND

PROPOSED

- PROPOSED CURB
- PROPOSED CENTER LINE
- PROPOSED BUILDING OUTLINE
- PROPOSED LOT LINE
- FIRE SERVICE (4" PVC DR-18)
- 6" S SANITARY SEWER SERVICE (6" PVC SDR-26)
- WATER SERVICE (2" HDPE POLY TUBE)
- SANITARY MANHOLE
- 6" SEWER SERVICE WITH CLEANOUT
- FIRE HYDRANT
- 2" WATER SERVICE W/ METER & BYPASS
- 2" FIRE SERVICE W/ DCDA & FDC

UTILITY DETAILS

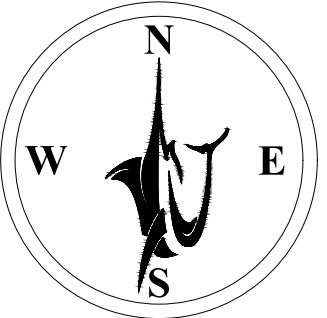
- UD-1 VALVE AND BOX
- UD-3 SANITARY SEWER SERVICE LATERAL
- UD-4 SANITARY SEWER CLEANOUT
- UD-6 REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
- UD-12 FIRE CONNECTION DETAIL

UTILITY KEY NOTES:

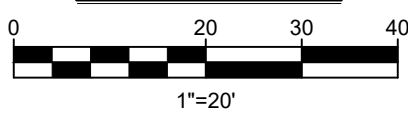
- U-01 CONNECT PROPOSED 4" WATER SERVICE TO EXISTING 4" PVC WATER MAIN (CONTRACTOR TO VERIFY EXACT LOCATION).
- U-02 CONNECT PROPOSED 2" FORCE MAIN TO EXISTING MANHOLE AT INVERT ELEVATION 3.00. CONTRACTOR TO LINE EXISTING MANHOLE WITH SPECTRA SHIELD OR APPROVED EQUIVALENT. PROPOSED LIFT STATION. SEE DETAILS ON SHEET 2.
- U-03 90° M.J. BEND (SEE SIZE ON PLAN).
- U-04 M.J. TEE (SEE SIZE ON PLAN).
- U-05 4" DOUBLE CHECK DETECTOR BACKFLOW PREVENTER (DCDA BFP).
- U-07 INSTALL FIRE DEPARTMENT CONNECTION ON DOUBLE CHECK DETECTOR BACKFLOW PREVENTER.
- U-08 2" POTABLE WATER METER.
- U-09 SEE ARCHITECTURAL PLANS FOR CONTINUATION.
- U-10 EXISTING FIRE HYDRANT.

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 MARSHALL.
- 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.
- ADJUST EXISTING WATER SERVICE AS NEEDED FOR STORM PIPE INSTALLATION.



GRAPHIC SCALE



ENGINEERING PLANS
FOR
HOTEL STACKING FB
UTILITY PLAN
CITY OF FERNANDINA BEACH, FLORIDA



(NOT) FOR
CONSTRUCTION

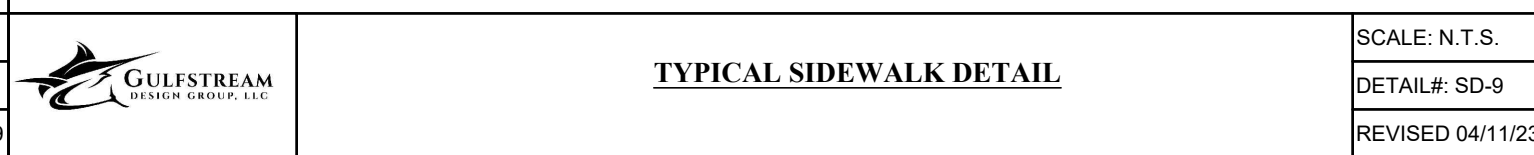
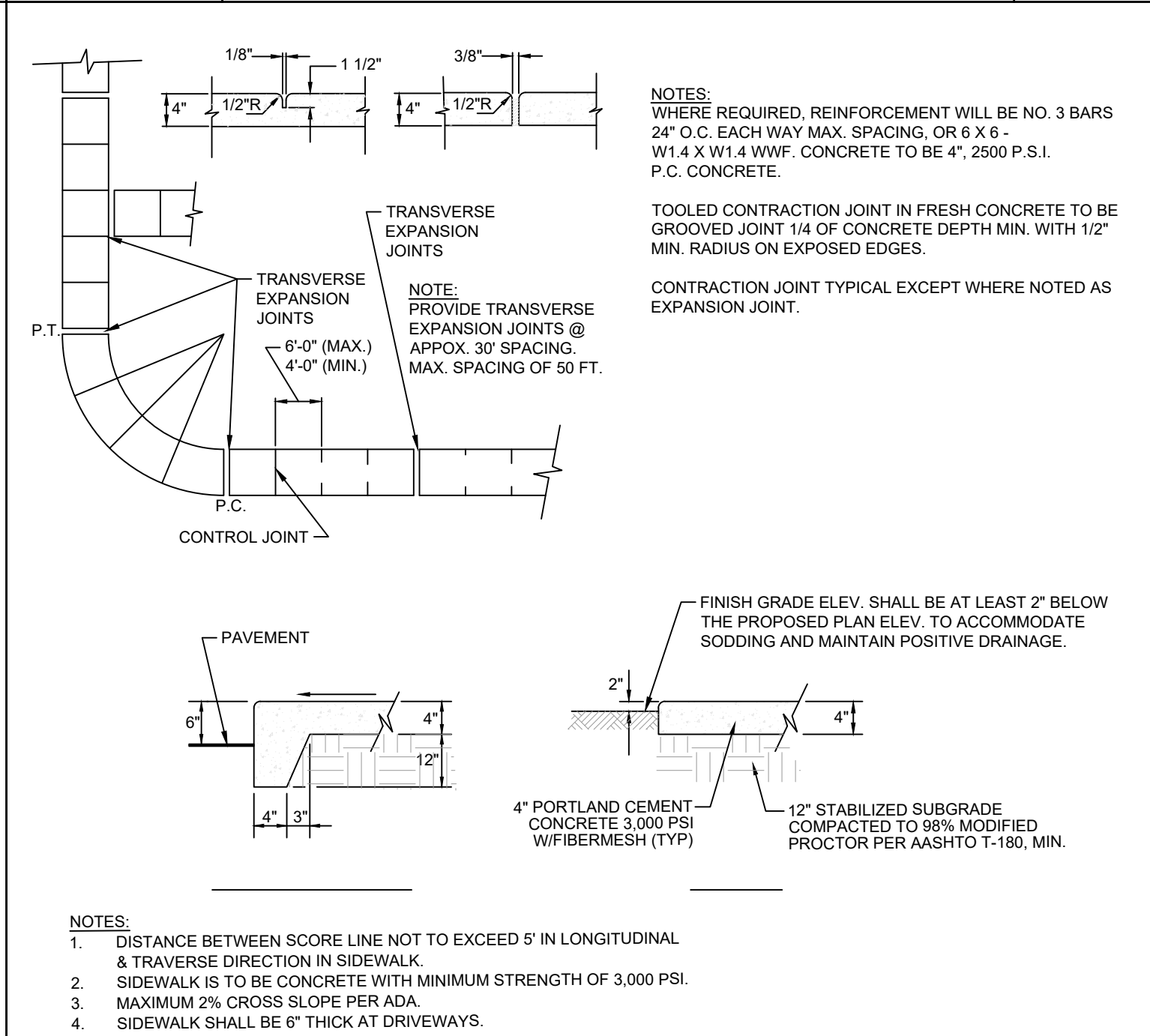
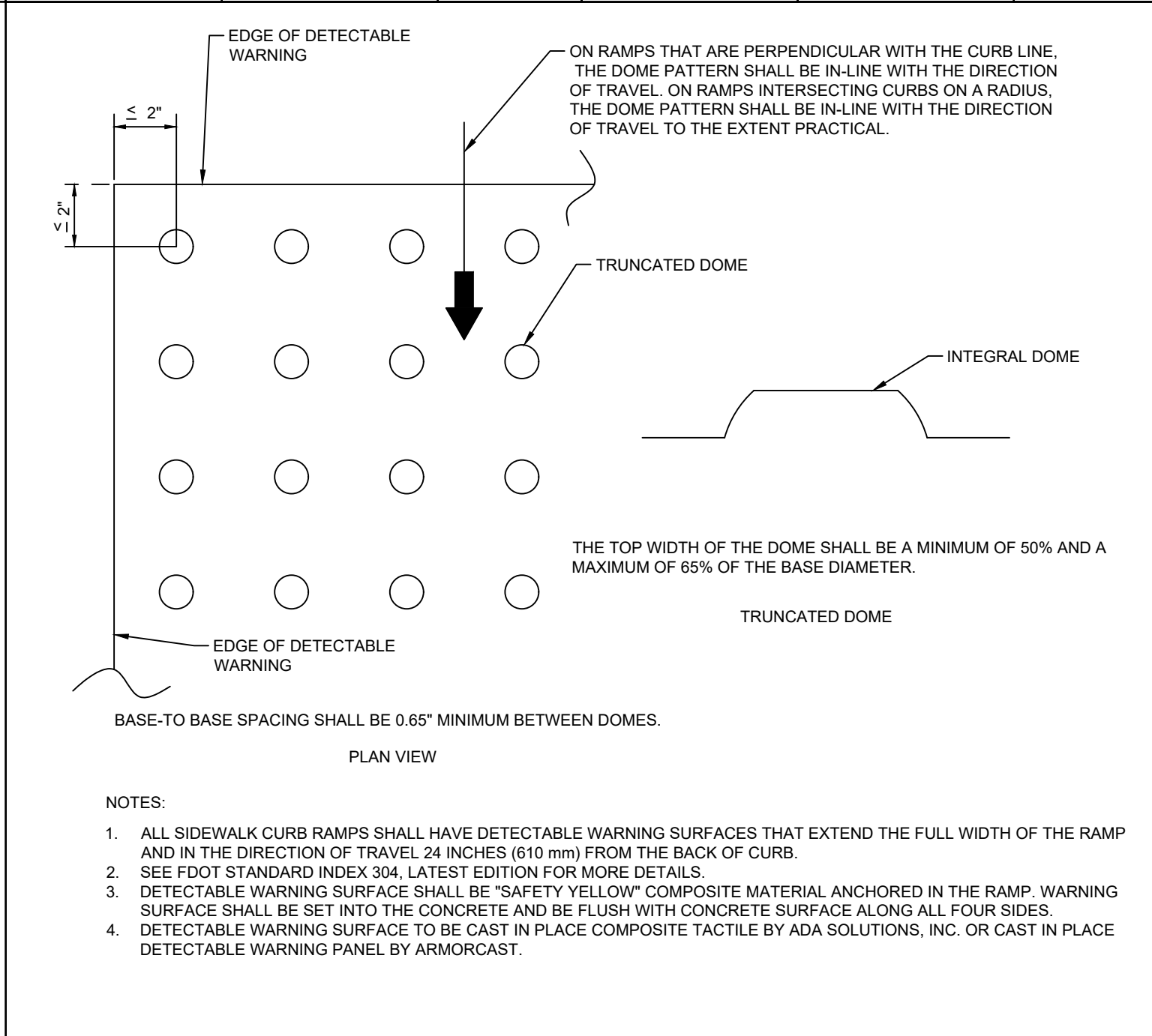
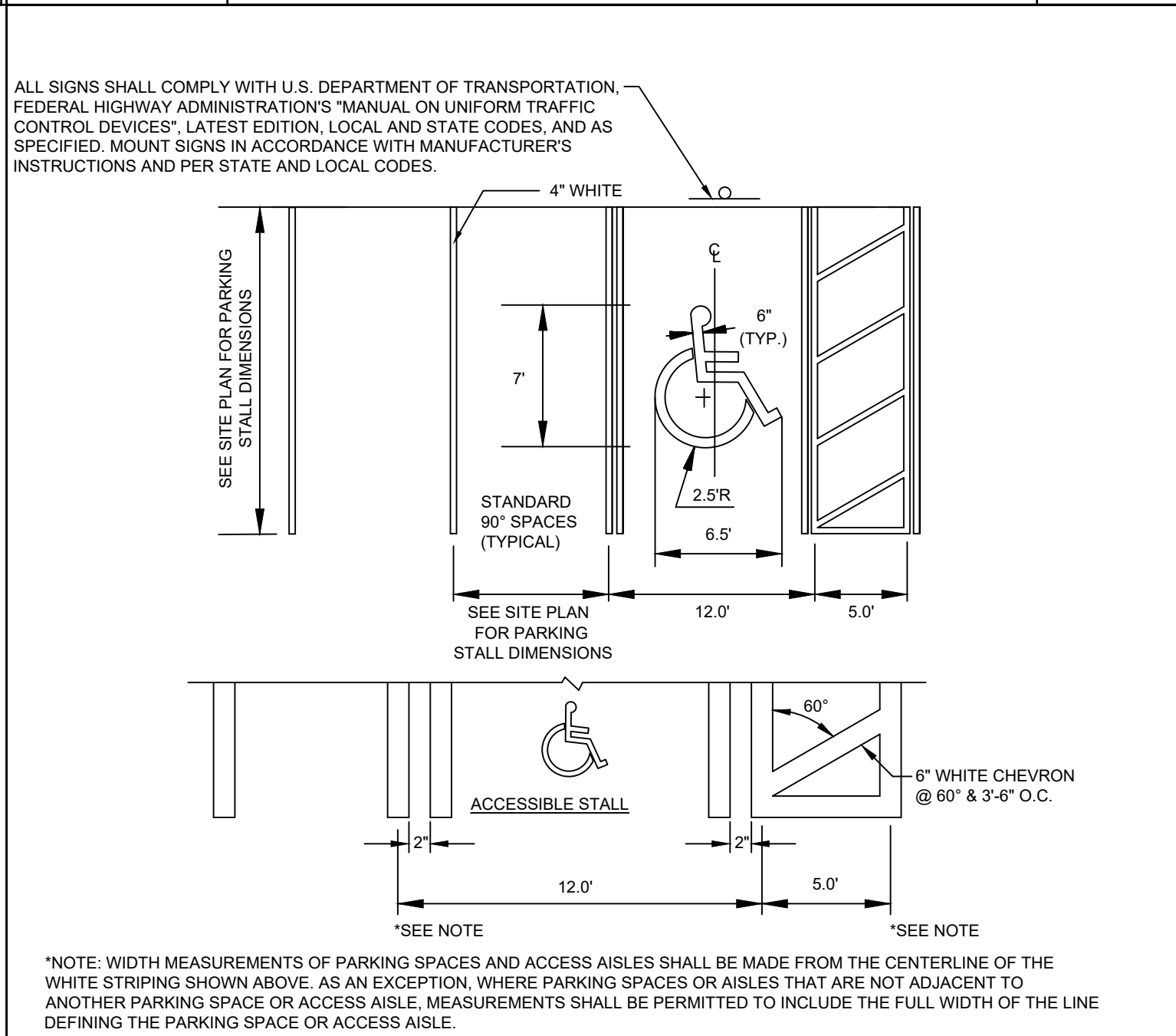
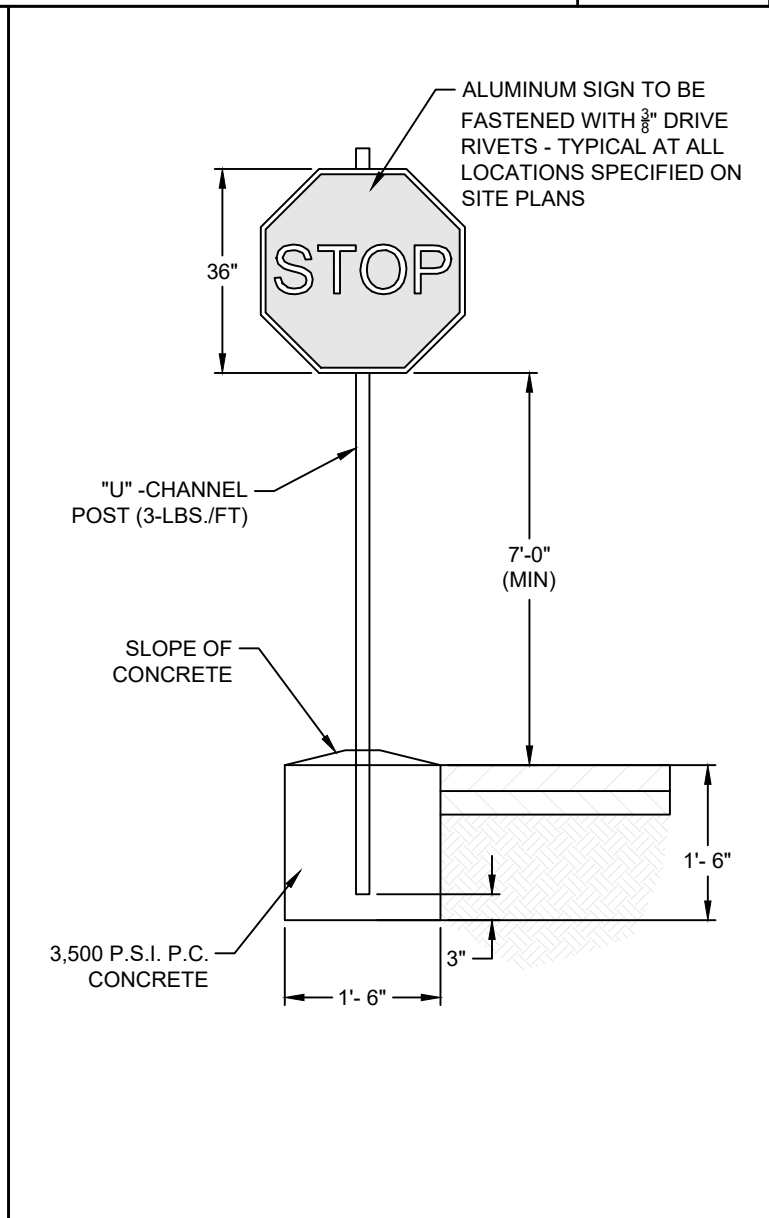
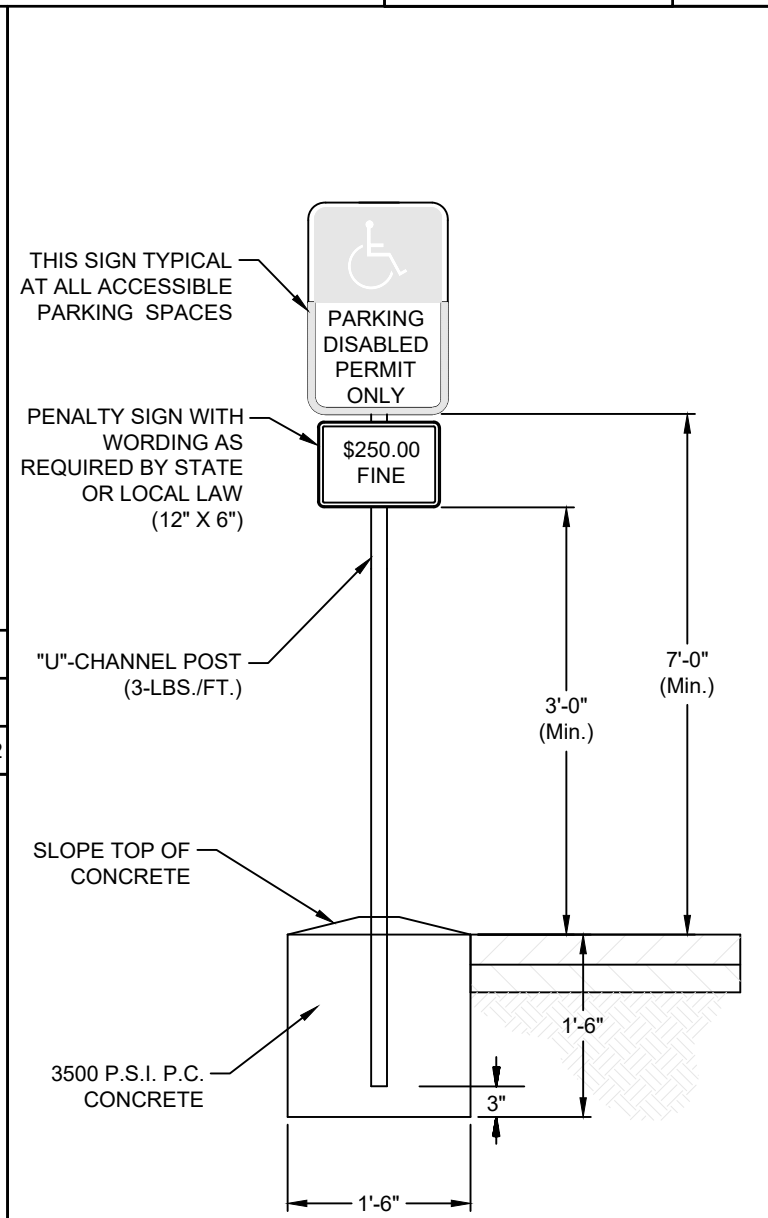
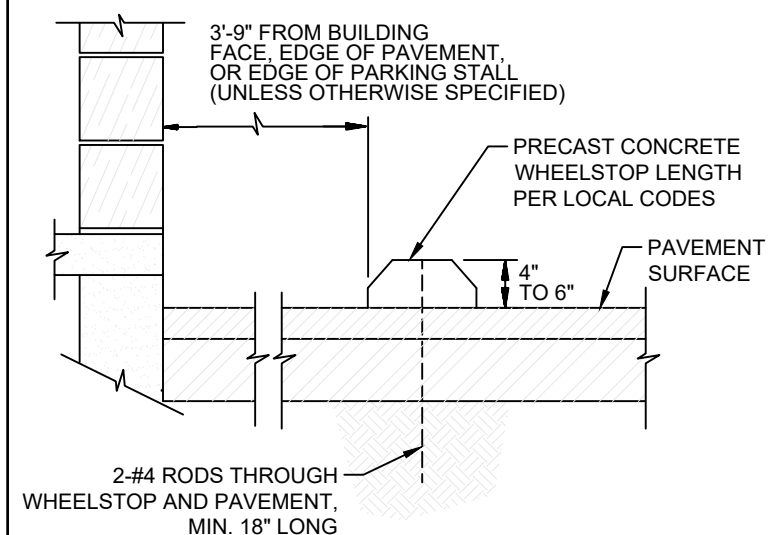
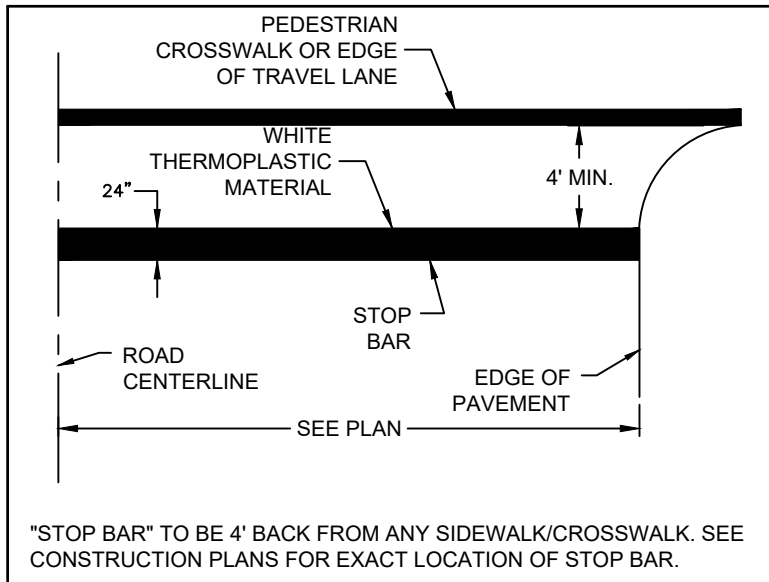
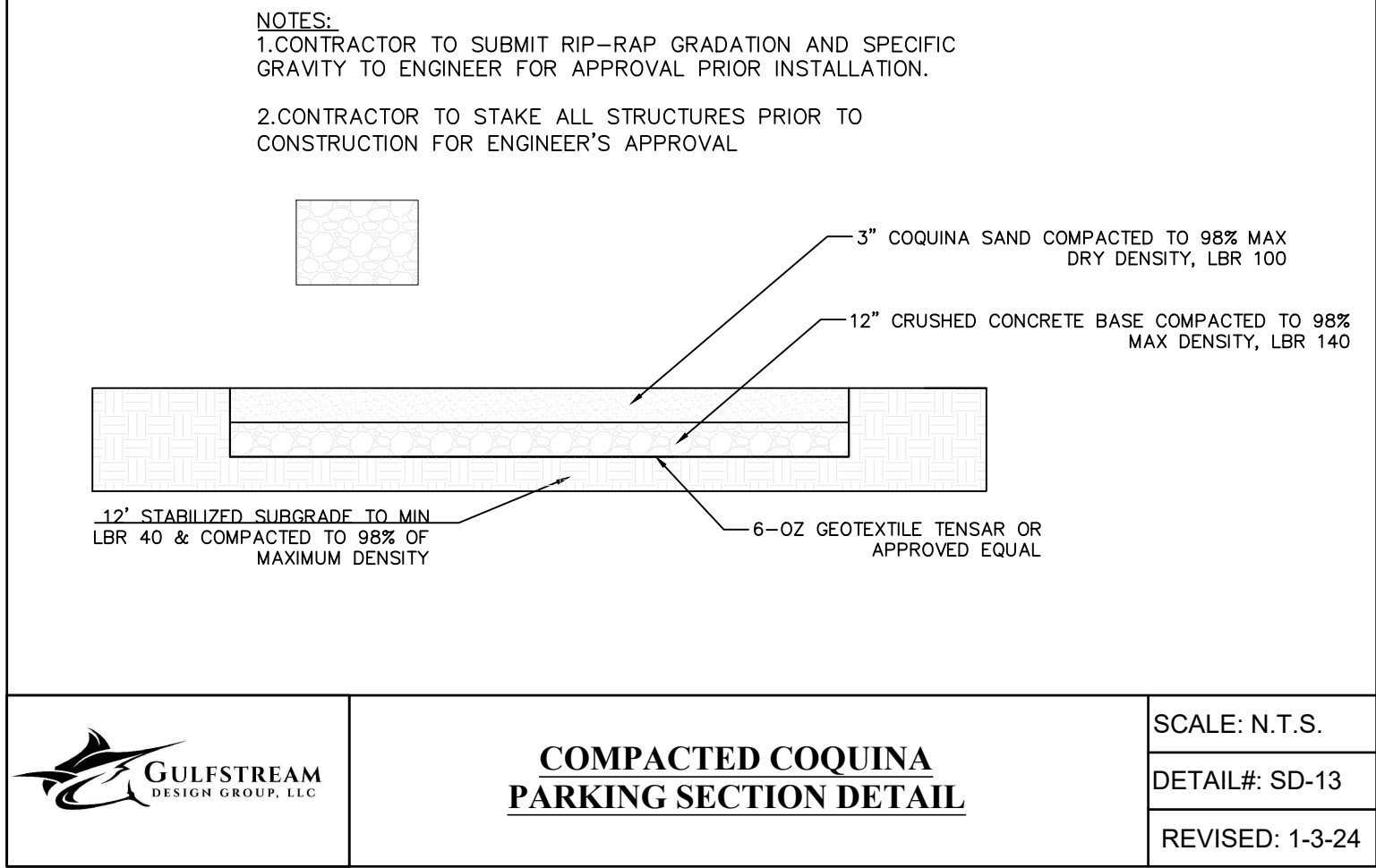


2225 A1A S, SUITE A2
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PROJECT NO:	22-149
ISSUE DATE:	01-04-2024
DRAFTED BY:	JGD
DESIGNED BY:	MHL
CHECKED BY:	MHL

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REVISIONS		DESCRIPTION	
NO.	DATE	BY	
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ENGINEERING PLANS
FOR
HOTEL STACKING FB
CONSTRUCTION DETAILS 1
CITY OF FERNANDINA BEACH, FLORIDA



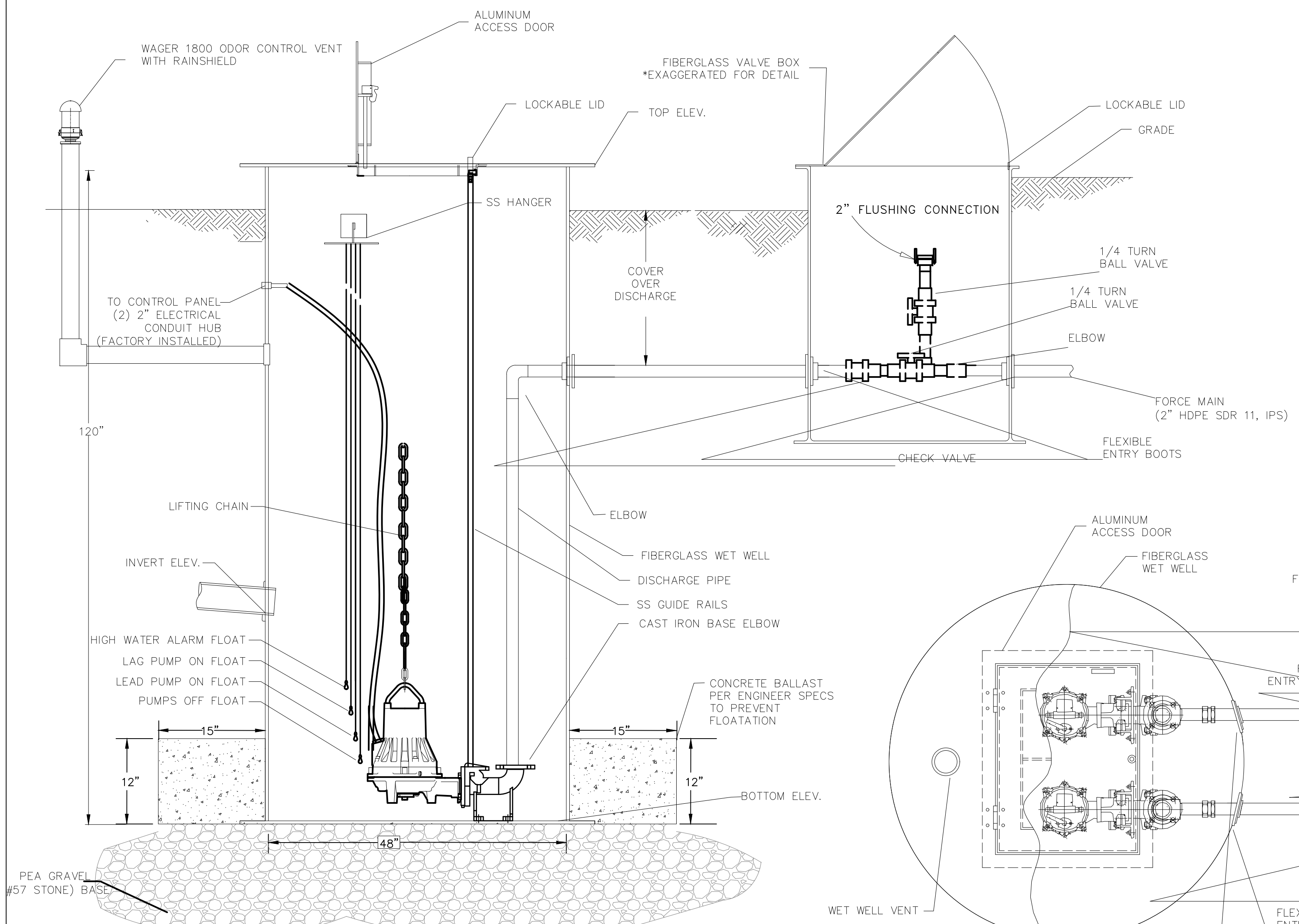
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PUMP INFO		SYSTEM INFO	
DESIGN FLOW (GPM)	17.5 GPM	AVERAGE DAILY FLOW (ADF)	1,360 GPD
DESIGN HEAD (TDH)	80.4 FEET	OPERATING HOURS	10
HORSEPOWER	2.3 HP	PEAKING FACTOR	4.0
VOLTAGE AND PHASE	230V 1PH		
RPM	3325	FORCE MAIN (FM) SIZE	2.0 INCH
MANUFACTURE	FLYGT	HIGHEST POINT OF FM	40.0
MODEL#	M3069 HT-1	LENGTH OF FM	550'
IMPELLER DIAMETER	130 mm	TIE IN PRESSURE	30' PSI
PUMP DISCHARGE SIZE	2.0 INCH		
STATION PIPING SIZE	2.0 INCH	REQUIRED STORAGE	30 MIN.

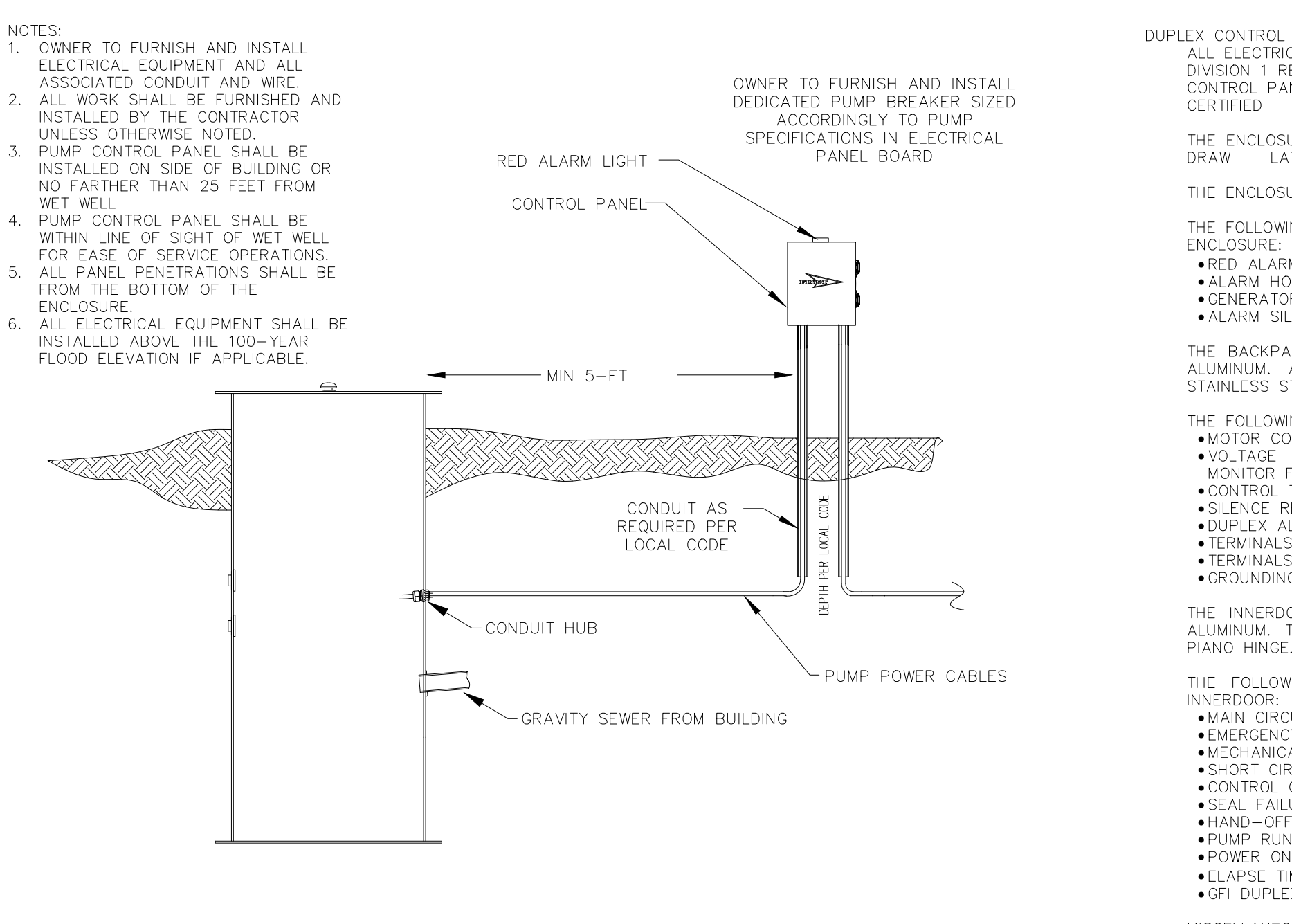
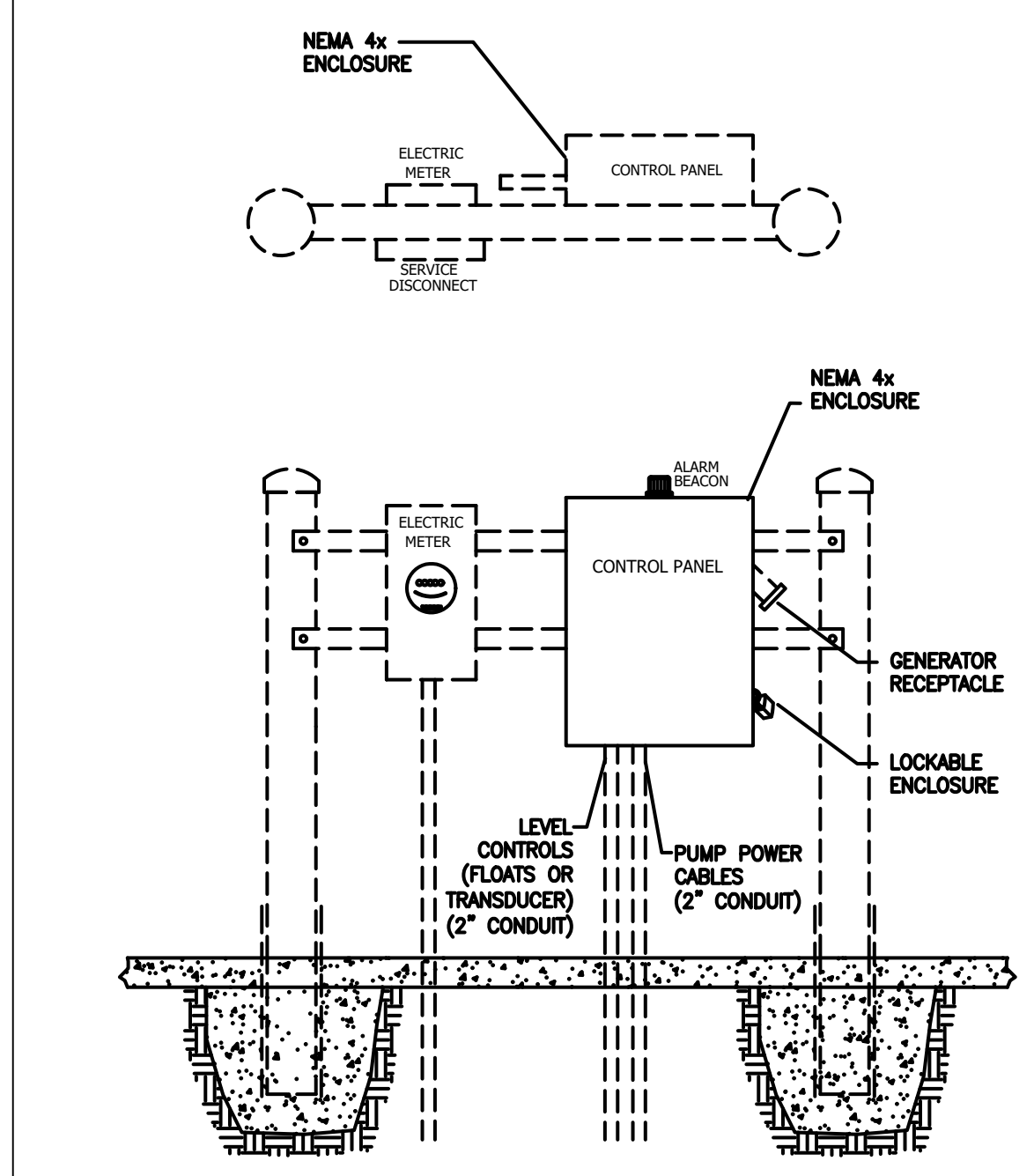
LIFT STATION SCHEDULE		
A	TOP OF WET WELL	8.50 FEET
B	INLET INVERT	1.75 FEET
C	HIGH WATER ALARM	1.25 FEET
D	LAG PUMP ON	0.75 FEET
E	LEAD PUMP ON	0.25 FEET
F	BOTH PUMPS OFF	-0.25 FEET
G	BOTTOM	-1.50 FEET
H	INLET PIPE SIZE	☐ 4" ☒ 6" ☐ 8" ☐ OTHER
I	INLET PIPE TYPE	☒ SCH-40 ☐ SDR-35
J	INLET TYPE	☒ GROMMET ☐ CAULKING HUB ☐ OTH
K	VALVE BOX	☒ YES ☐ NO
L	VALVE BOX PIPE	☐ SCH-40 ☒ SCH-80 ☐ HDPE SDR11
M	VENT TYPE	☒ STANDARD MUSHROOM VENT ☐ ODOR CONTROL VENT

LIFT STATION SIZE CHART		
DIAMETER (A)	HEIGHT (B)	COVER OVER DISCHARGE
☐ 36"	☐ 96"	☐ 12"
☒ 48"	☐ 102"	☐ 18"
☐ 60"	☐ 108"	☐ 24"
☐ 72"	☐ 114"	☒ 30"
☐ OTHER	☒ 120"	☐ 36"
	☐ 126"	☐ 48"
	☐ 132"	☐ OTHER
	☐ 138"	
	☐ 144"	
	☐ OTHER	
VALVE BOX SIZE		
☐ 32" WIDE X 30" LONG X 25" DEEP		
☒ 36" WIDE X 40" LONG X 36" DEEP		
☐ OTHER		

LIFT STATION SECTION VIEW

*NOTE VIEWS EXAGGERATED FOR DETAIL

N.T.S.



CONTROL PANEL RACK MOUNT

CONTROL PANEL WALL MOUNT

LIFT STATION PLAN VIEW



LIFT STATION

FOR EMERGENCY CONTACT:
MESSINA & ASSOCIATES, INC.
352-800-9758
OWNERS NAME
PHONE NUMBER

EMERGENCY CONTACT SIGN
N.T.S.

FASTENERS AND APPURTENANCES: ALL FASTENERS, LIFTING CABLES, FLOAT CAE BRACKET, HINGES, AND APPURTENANCES SHALL BE MADE OF 304SS MINIMUM.

- A 304SS SLIDE/LATCH ASSEMBLY SHALL BE PROVIDED FOR HOLDING T DOORS OPEN ON THE WET WELL AND VALVE BOX.
- SLIDE RAILS SHALL BE MADE OF SCH 40 304SS PIPE.
- PUMP LIFTING CABLES/CHAINS SHALL BE 304SS.
- PUMP LIFTING BALES SHALL BE MADE OF 304SS.

EXECUTION:
INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IN THE LOCATIONS SHOWN ON THE DRAWINGS.

CERTIFIED ELECTRICIAN SHALL MOUNT CONTROL PANEL AND CONNECT POW SERVICE TO PANEL PRIOR TO STARTUP AND FACTORY REP SITE VISIT.

INSPECTION AND TESTING:
A FACTORY REPRESENTATIVE FROM WATER RESOURCE TECHNOLOGIES, L 904-928-0700 SHALL BE PROVIDED FOR ONE TIME START-UP AND SHALL HA COMPLETE KNOWLEDGE OF THE PROPER OPERATION AND MAINTENANCE COMPLETE SYSTEM.

WATER RESOURCE TECHNOLOGIES, LLC 904-928-0700 WILL LAND MOTOR CAE WIRES TO CONTROL PANEL AT START UP.

THE PUMP CONTROLS AND PUMPS SHALL BE CHECKED FOR PROPER OPERATI AND ENSURE THAT ALL LEVEL CONTROLS ARE IN ACCORDANCE WITH THE PLA AND FULLY FUNCTIONING.

PUMP STATION SHALL BE VENTED PER MANUFACTURER'S RECOMMENDATIONS.

BASIN INSTALLATION INSTRUCTIONS:

- INSPECT ALL MATERIALS SUPPLIED TO ENSURE THERE ARE NO DAMAG DUE TO SHIPPING PRIOR TO INSTALLATION.
- EXCAVATE HOLE LARGE ENOUGH TO ACCOMMODATE BASIN, UNDERGROU PIPING, BACKFILL MATERIAL, AND ADEQUATE WORKING SPACE.
- PREPARE THE BOTTOM OF THE EXCAVATED HOLE WITH 6" OF BACKF MATERIAL OR CONCRETE PAD, CHECK BASE TO INSURE IT IS LEVEL A SMOOTH.
- INSTALL BASIN ON GRAVEL BASE OR CONCRETE PAD, ANCHOR NECESSARY.
- CONCRETE MAY BE PORED AROUND BASIN BOTTOM IF BALLAST IS REQUIR FOR BUOYANCY.
- BACKFILL WITH PEA GRAVEL 4" TO 6" AROUND THE ENTIRE PERIPHERY THE BASIN/COMPACTED BACKFILL MATERIAL IN 12" LIFTS. STOP A CONNECT PIPING AS REQUIRED.

RECOMMENDED BACKFILL MATERIAL:
GRAVEL OR STONE TO BE FREE FLOWING, NATURALLY ROUNDED AGGREGA WITH A PARTICLE SIZE OF NOT LESS THAN 3/8" OR LARGER THAN 3/4" DIAMETER.

ELECTRICAL NOTES:

- DISCONNECT IS REQUIRED WITHIN SIGHT OR 50' MAX FROM PANEL LOCATION.
- COORDINATE ALL ELECTRICAL WORK PRIOR TO CONSTRUCTION.
- PANEL SHALL BE MANUFACTURED TO UNDERWRITER'S LABORATORY STANDARDS AND LABELED ACCORDINGLY.
- EACH FLEXIBLE CABLE SHALL BE PROVIDED WITH A WATERTIGHT SEAL AND SEPARATE STRAIN RELIEF.
- ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL MEET THU REQUIREMENTS OF WEATHERPROOF EQUIPMENT NEMA 4X.
- A 110VOLT POWER RECEPTACLE WITH GROUND FAULT INTERRUPTION (GFI) PROTECTION SHALL BE AVAILABLE TO FACILITATE MAINTENANCE EITHER INSIDE THE CONTROL PANEL OR WITHIN 25 FEET OF CONTROL PANEL.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS WITH APPROPRIATI MATERIAL.
- CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT.
- NEUTRAL TO BE SUPPLIED FOR SINGLE PHASE AND THREE PHASE POWER.
- ELECTRICAL EQUIPMENT SHALL BE INSTALLED ABOVE THE 100-YEAR FLOOD ELEVATION (WHERE APPLICABLE).

REVISIONS

NO.	DATE	BY	DESCRIPTION
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ENGINEERING PLANS FOR

HOTEL STACKING FB

LIFT STATION DETAIL

CITY OF FERNANDINA BEACH, FLORIDA

811

Know what's below.
Call before you dig.

(NOT) FOR CONSTRUCTION

GULFSTREAM DESIGN GROUP, LLC

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PROJECT NO: 22-149
ISSUE DATE: 01-04-2024
DRAWN BY: JGD
DESIGNED BY: MHL
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11



GENERAL NOTES AND INFORMATION:

1. DO NOT SCALE DRAWINGS.
2. 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.
3. 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.
4. 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.
5. PROVIDE SHOP DRAWINGS / CUT SHEETS FOR APPROVAL TO ARCHITECT / OWNER FOR ALL MILLWORK PRIOR TO FABRICATION.
6. PROVIDE BLOCKING / REINFORCEMENT BEHIND ALL WALL MOUNTED MILLWORK.
7. VERIFY APPLIANCE / EQUIPMENT SPECIFICATIONS AND SIZES W/ OWNER PRIOR TO FABRICATING ADJACENT MILLWORK OR MILLWORK TO RECEIVE APPLIANCES.
8. KITCHEN EQUIPMENT SHOWN ARE BASIS-OF-DESIGN ONLY. COORDINATE ACTUAL PRODUCT SELECTIONS WITH OWNER / OWNER SUPPLIER.
9. CONTRACTOR SHALL VISIT THE SITE DURING BIDDING AND SHALL FAMILIARIZE HIM OR HERSELF WITH THE EXISTING CONDITIONS.
10. CONTRACTOR SHALL PROVIDE ALL NECESSARY PERMITS FOR THE WORK INDICATED.
11. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT BUILDING CODE AND CURRENT FLORIDA FIRE PREVENTION CODE.
12. WHERE APPLICABLE, ALL BLOCKING IN EXISTING FIRE RATED WALLS SHALL BE FIRE RETARDANT TREATED WOOD OR METAL STRAP TO PRESERVE ASSEMBLY FIRE RATING.
13. PROVIDE BLOCKING / REINFORCEMENT BEHIND ALL GRAB BAR LOCATIONS.
14. OWNER/CONTRACTOR SHALL COMMISSION A STRUCTURAL ENGINEER FOR ANY AND ALL WORK EFFECTING OR DESCRIBING LOAD-BEARING ASSEMBLIES. THE STRUCTURAL ENGINEER'S 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.

- C-1 COVER SHEET
- L/G-1 LAYOUT/GEOMETRY PLAN
- U-1 UTILITY PLAN
- L-1 LANDSCAPE PLAN
- L-2 LANDSCAPE SCHEDULE & DETAILS
- AR-1 ARCHITECTURE - UNIT PLANS / ELEVATIONS
- AR-2 ARCHITECTURE - EXT ELEV / DETAILS
- AR-3 ARCHITECTURE - SITE EXTERIOR ELEVATIONS
- AR-3A ARCHITECTURAL ELEVATIONS - COLOR
- AR-3B ARCHITECTURAL ELEVATIONS - COLOR
- AR-3C ARCHITECTURAL PERSPECTIVE - COLOR
- AR-4 OFFICE / ACCESSIBLE PLAN & ELEV
- AR-5 ROOF PLAN AND DETAILS
- AR-6 TYPICAL WALL SECTION
- AR-7 ROOM MATRIX
- AR-8 ELECTRICAL
- AR-9 CASE GOODS /MILLWORK

PARCEL INFORMATION:

- PROPERTY LOCATION: 231 FRONT STREET
- RE PARCEL #'S: 00-00-31-1800-0003-0010
- Land Use: Industrial
- Zoning: I-1
- Proposed Use: Lodging Accomodations w/o Restaurant/Lounge
- IBC Proposed Occupancy: - Residential R-1
- NFPA Proposed Occupancy: - Residential Board and C
- Wind Speed: 130MPH
- Roof: 20 psf live load
- Flood Elevation: 9.0
- Risk Category: II
- Exposure Category: D
- Construction Type: VB
- Sprinkler System: NFPA 13R

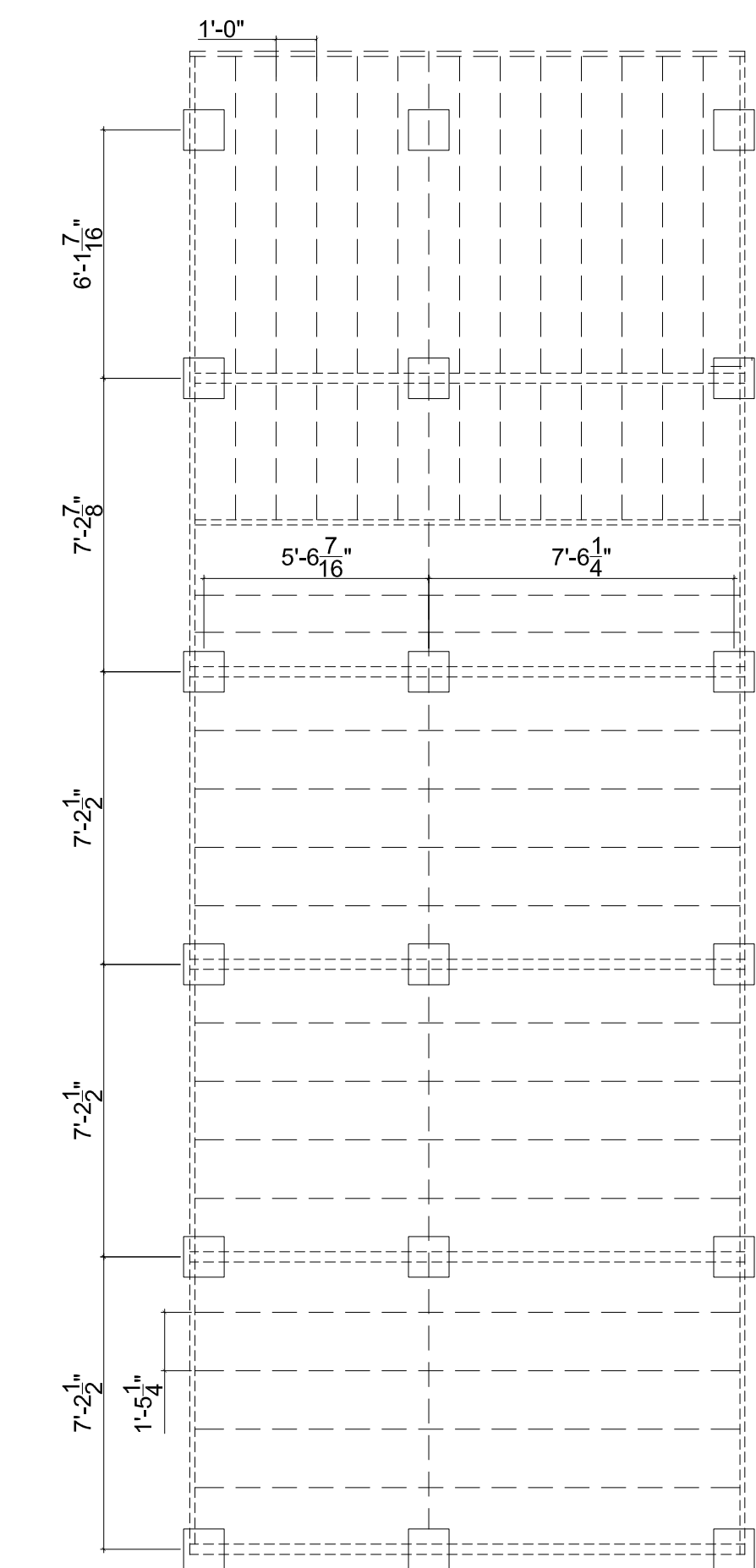
Container Hotel

Cover Sheet

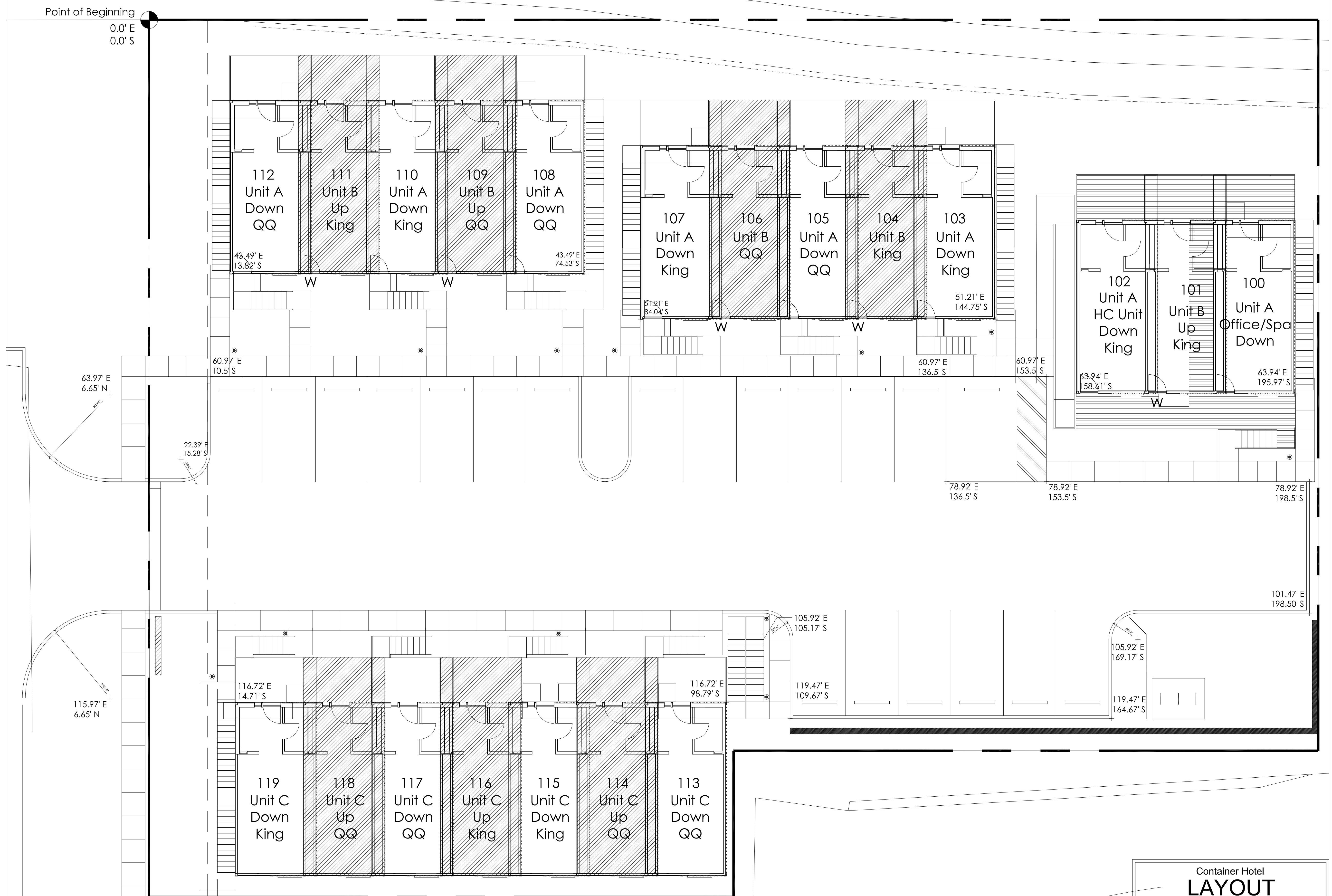
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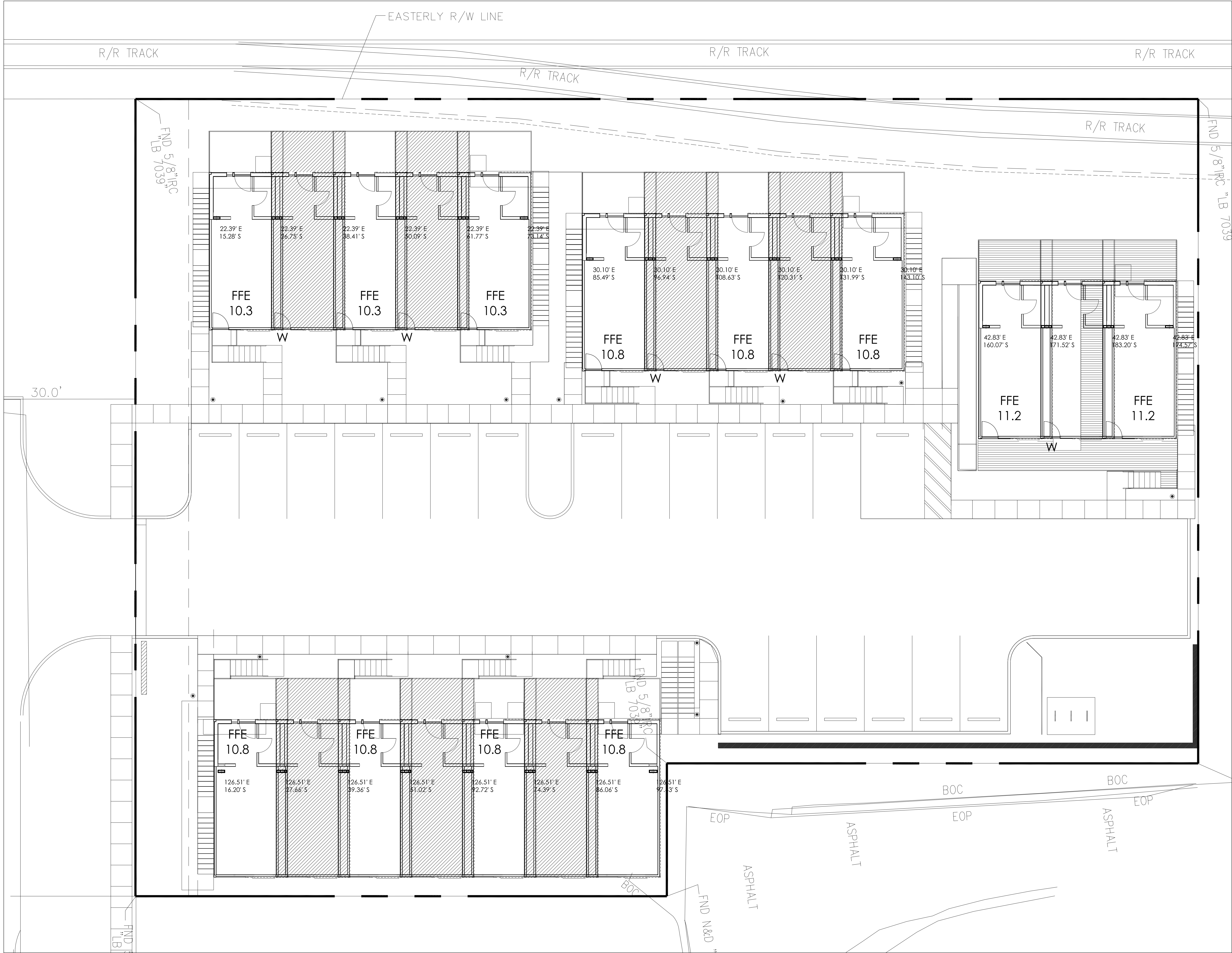
C-1

SHEET:
DATE: NOV 7, 2023



Foundation Plan Layout
scale: $\frac{3}{4}" = 1' - 0"$





Container Hotel

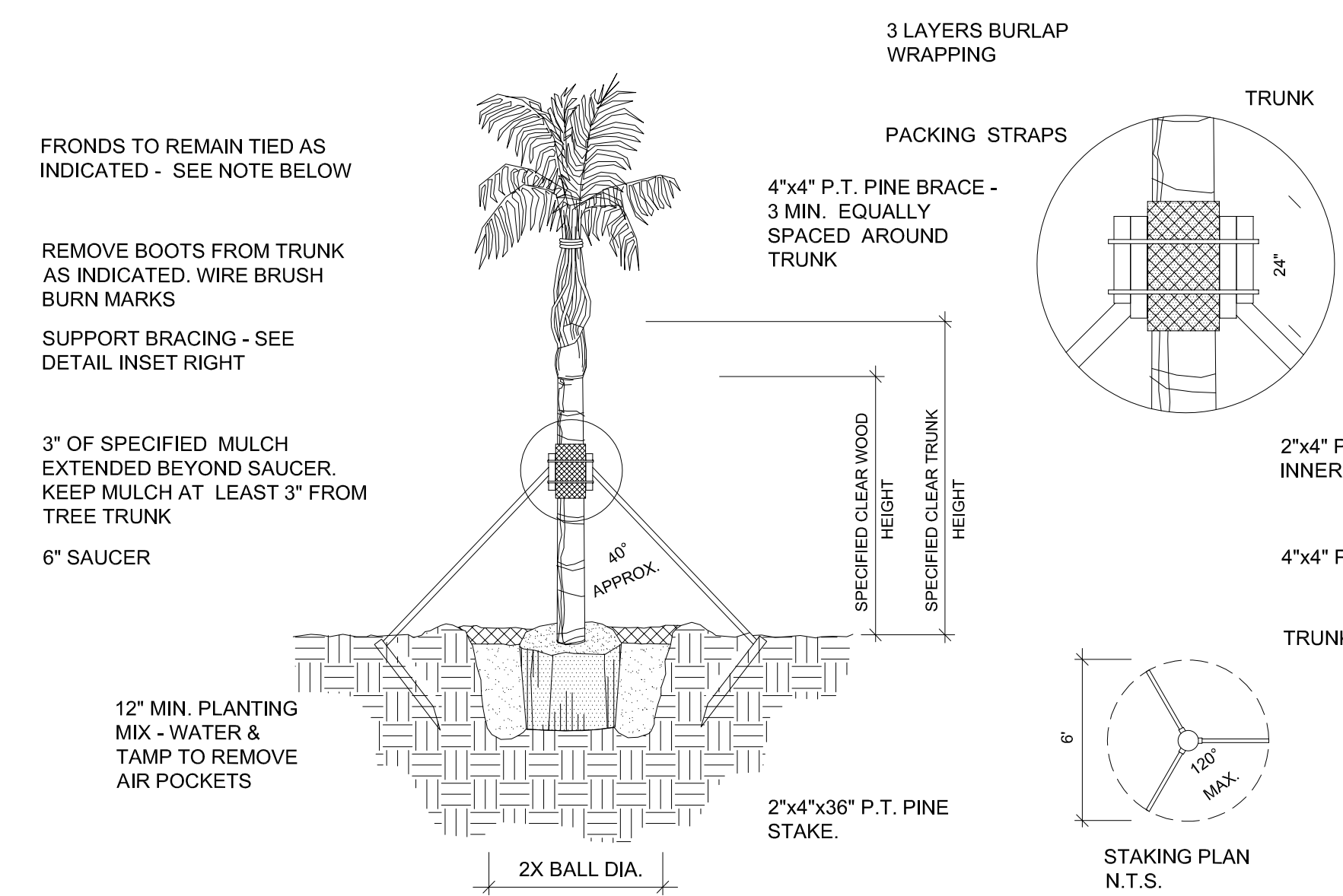
Utility
Riser Layout

REVISIONS			
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SHEET:

U-1

DATE: NOV 7, 2023



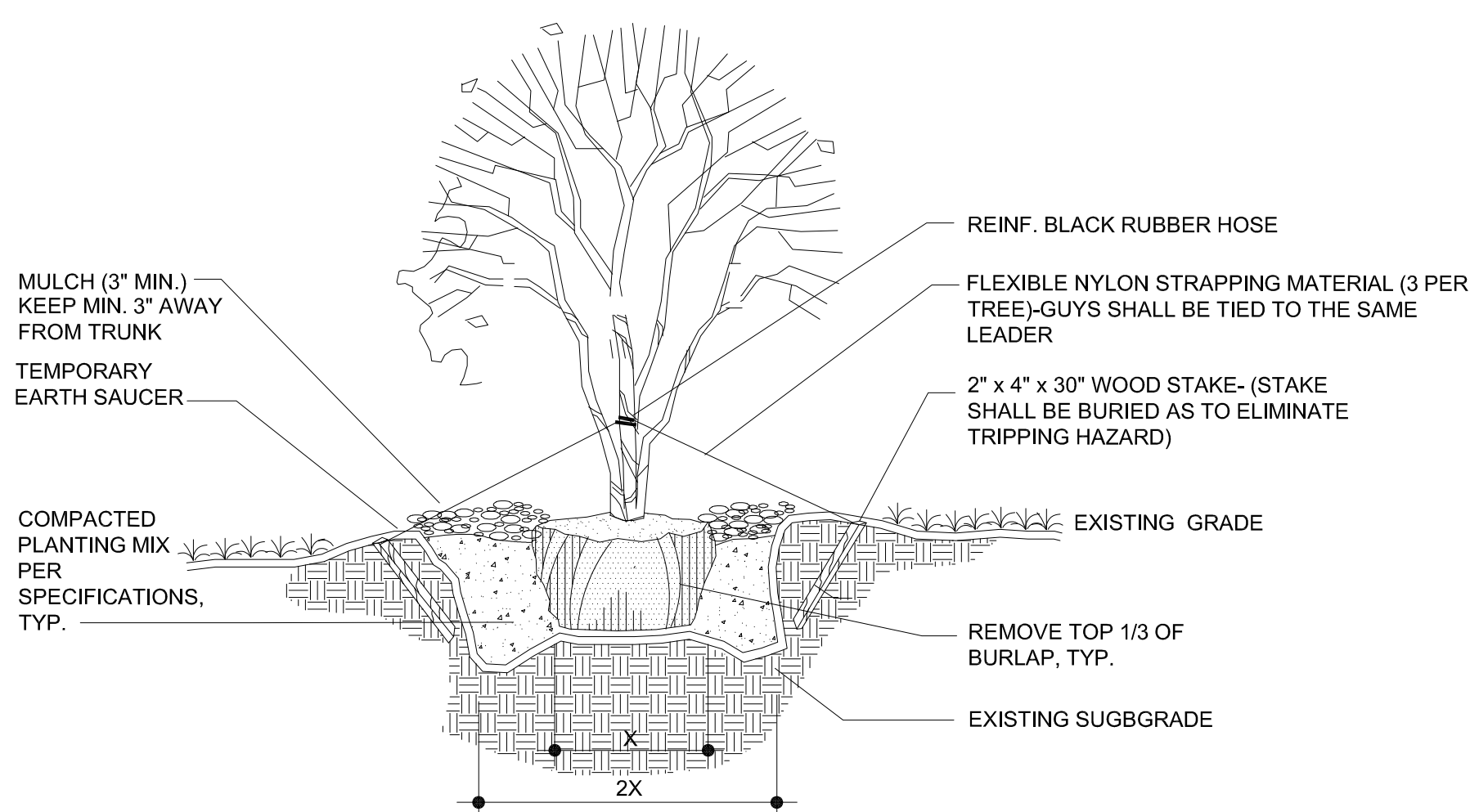
PALM FRONDS SHALL BE TIED UP UNTIL AFTER PLANTING. TIES SHALL BE REMOVED AS FOLLOWS: WASHINGTON PALM & QUEEN PALM - IMMEDIATELY; SABAL PALMS WHICH ARE NOT 'HURRICANE CUT' SHALL REMAIN TIED FOR SIX MONTHS. REMOVE ALL DEAD AND BROKEN FRONDS. NEVER CUT BUD.

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 NAIL INTO TRUNK.

PALM PLANTING- (ALL PALMS EXCLUDING PHOENIX PALMS)
N.T.S.



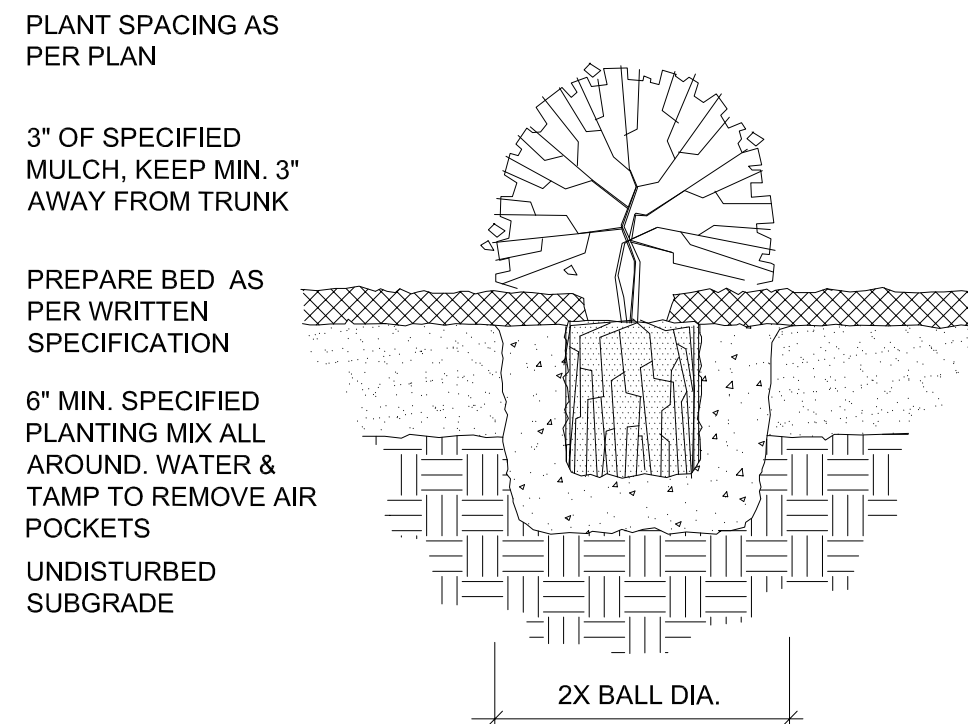
NOTES:

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.

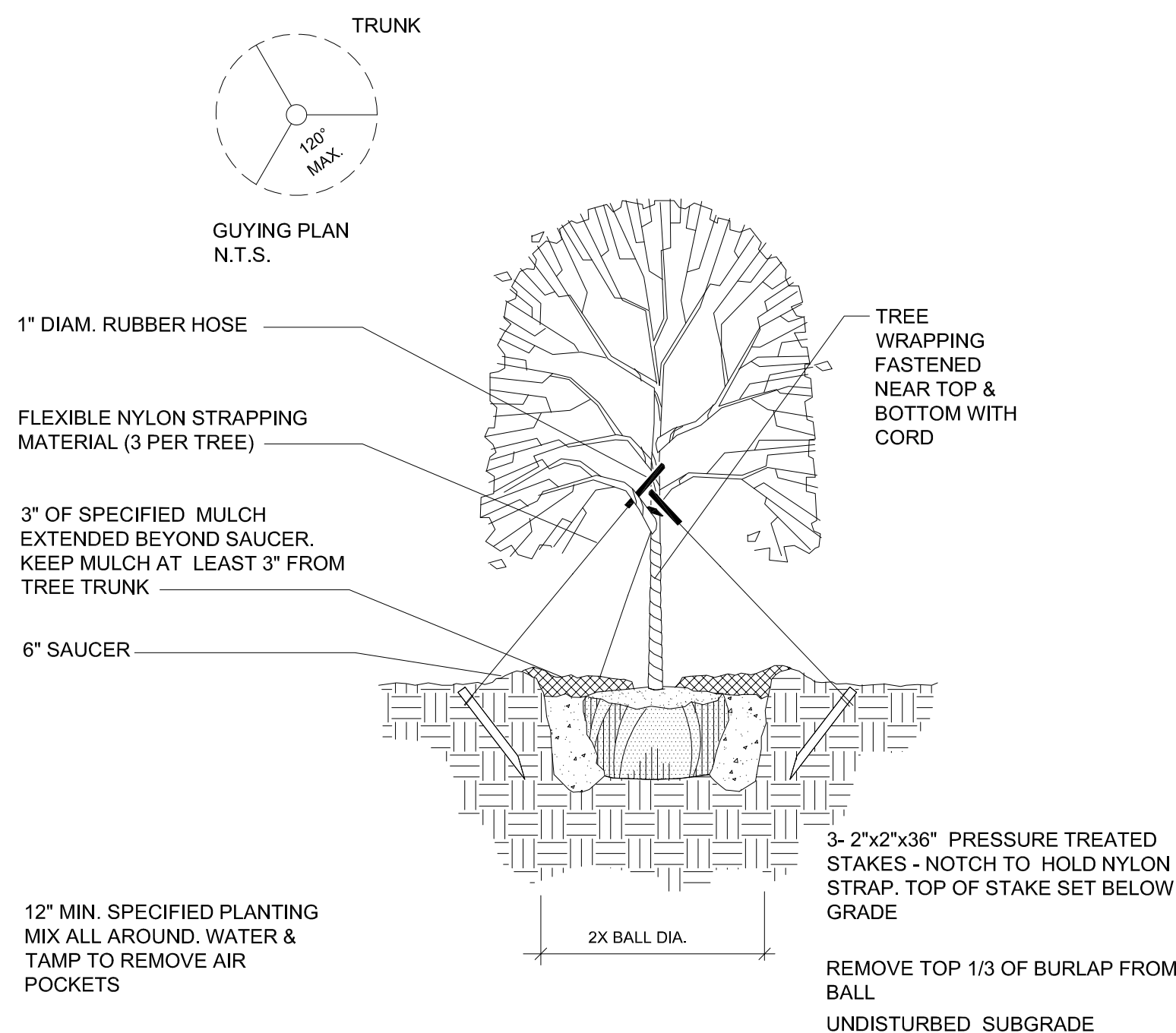
TREE PLANTING - MULTI TRUNK
N.T.S.



NOTES:

PLANT SO THAT TOP OF ROOT BALL IS FLUSH WITH FINISHED GRADE.

SHRUB PLANTING
N.T.S.



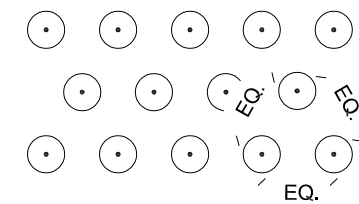
NOTES:

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.

TREE PLANTING - SINGLE TRUNK
N.T.S.

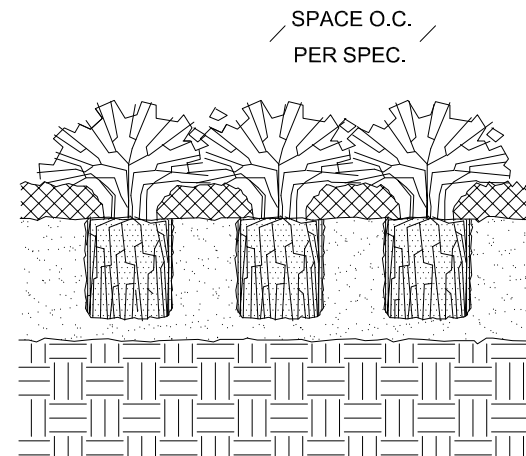


PLANT SPACING AS PER PLAN

3" OF SPECIFIED MULCH KEEP 2" FROM BASE

PREPARE BED AS PER WRITTEN SPECIFICATION

UNDISTURBED SUBGRADE



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.

GROUNDCOVER PLANTING
N.T.S.

LANDSCAPE SCHEDULE

	QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	COMMENTS	SPECIFICATIONS	SPACING	TOTAL PLANTED INCHES
	8	QV	QUERCUS VIRGINIANA	LIVE OAK		6" CAL, 16" HT, MIN., 100 GAL MIN. OR F.G.	AS SHOWN	48"
	5	LID	LAGERSTROEMIA INDICA 'CATAWBA	CATAWBA CRAPE MYRTLE		4" CAL 12' HT MIN.	AS SHOWN	20"
	2	SP	SABAL PALMETTO	CABBAGE PALM		8' CT, BOOTED	AS SHOWN	8"
	6	SP	SABAL PALMETTO	CABBAGE PALM		10' CT, BOOTED	AS SHOWN	48"
	5	SP	SABAL PALMETTO	CABBAGE PALM		12' CT, BOOTED	AS SHOWN	40"
	12	PM	PODOCARPUS MACROPHYLLUS	PODOCARPUS		4' HT, MIN. 7 GAL, 30" OC, TRIANGULATE, SHEER INTO HEDGES	AS SHOWN	
	25	ICR	ILEX CORNUTA	DWARF BURFORD HOLLY		3GAL, MIN. 36" HT	3' OC, TRIANGULATED / SHEER INTO HEDGE	
	40	MC	MUHLENBERGIA CAPILLARIS	MUHLY GRASS		3 GAL, FULL	30" OC,	
	20	PA	PANICUM AMAROIDES	BEACH PANIC GRASS		1 GAL	12" OC	
	7,100 SF	SOD	STENOTAPHRUM SECUNDATUM 'FLORATAM'	FLORATAM ST. AUGUSTINE		2"-3" THICK SOLID SOD, WEED FREE, FRESHLY CUT		
	750 SF	MULCH	MIXED HARDWOOD	MIXED HARDWOOD MULCH		3" DEPTH IN ALL PLANTING BEDS		
	8,615 SF	GRAVEL	3/8" CRUSHED STONE	3/8" CRUSHED STONE		3" DEPTH IN ALL BEDS		

Container Hotel

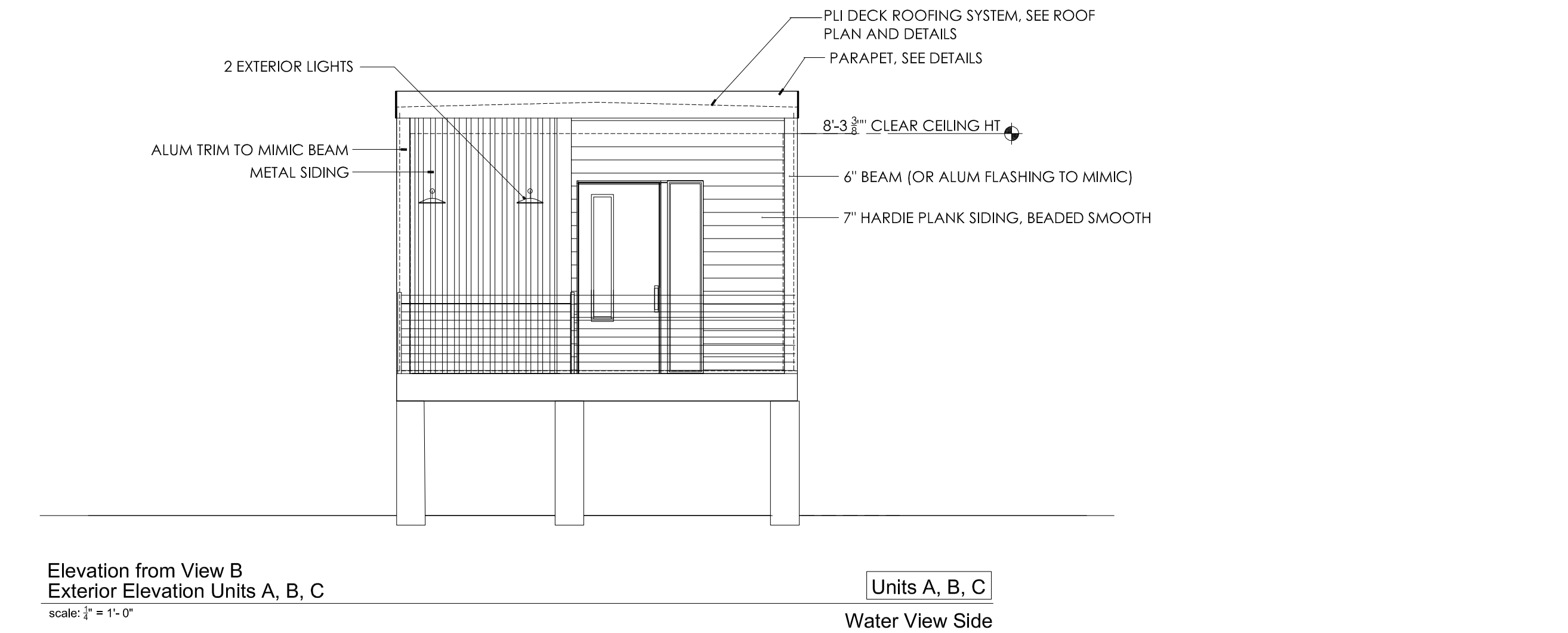
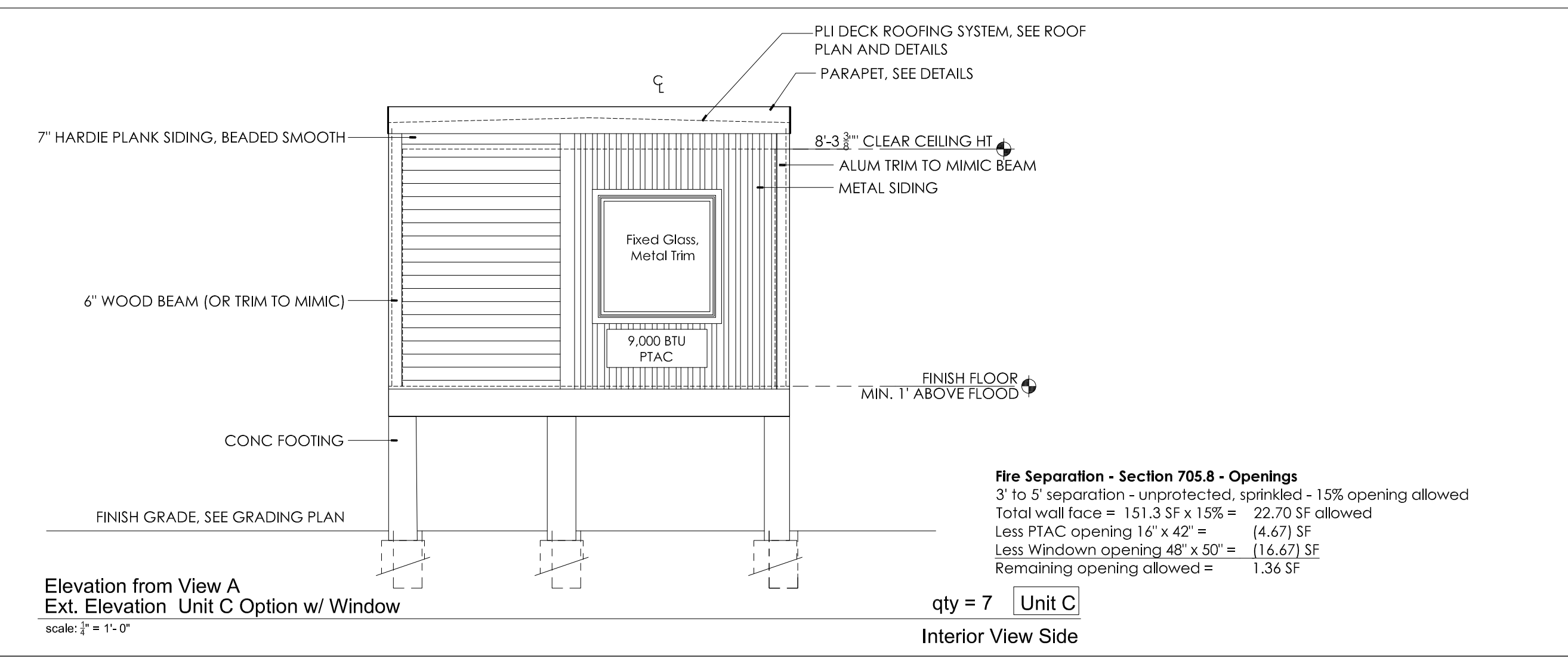
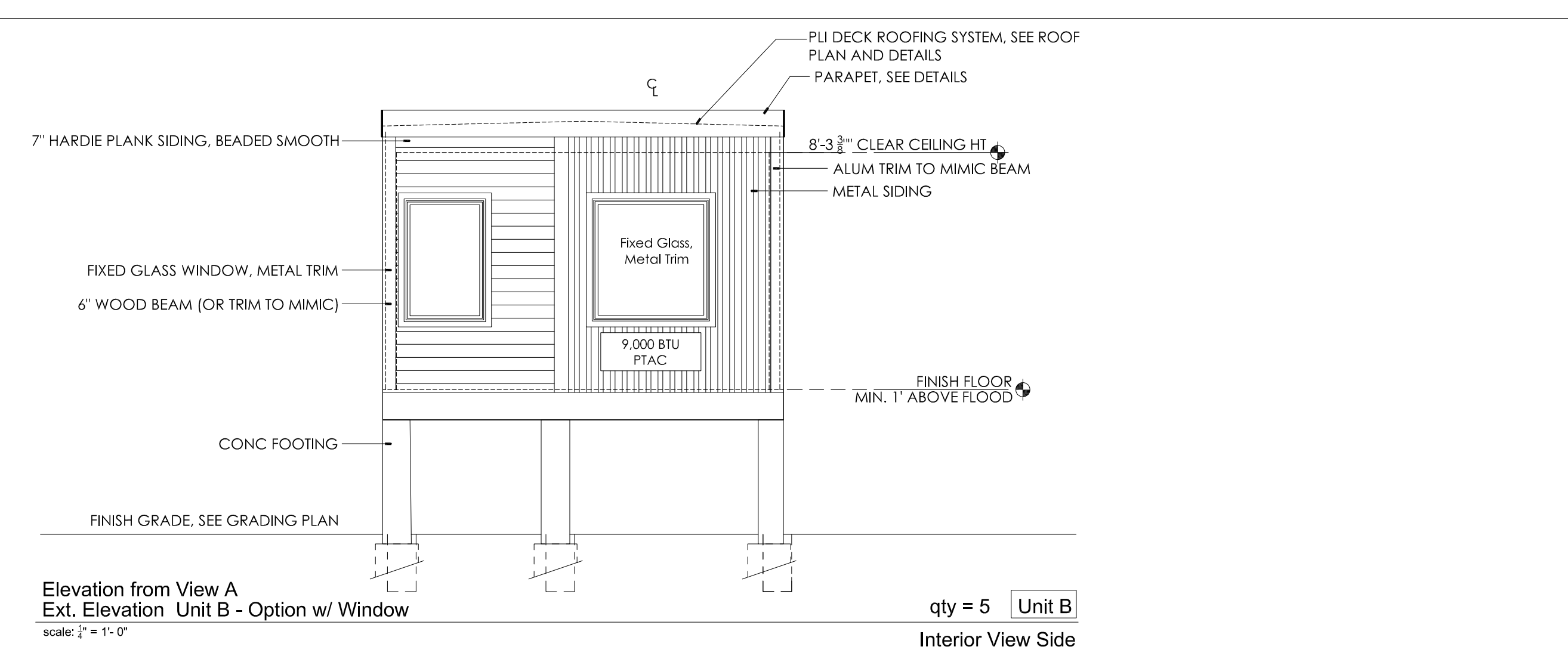
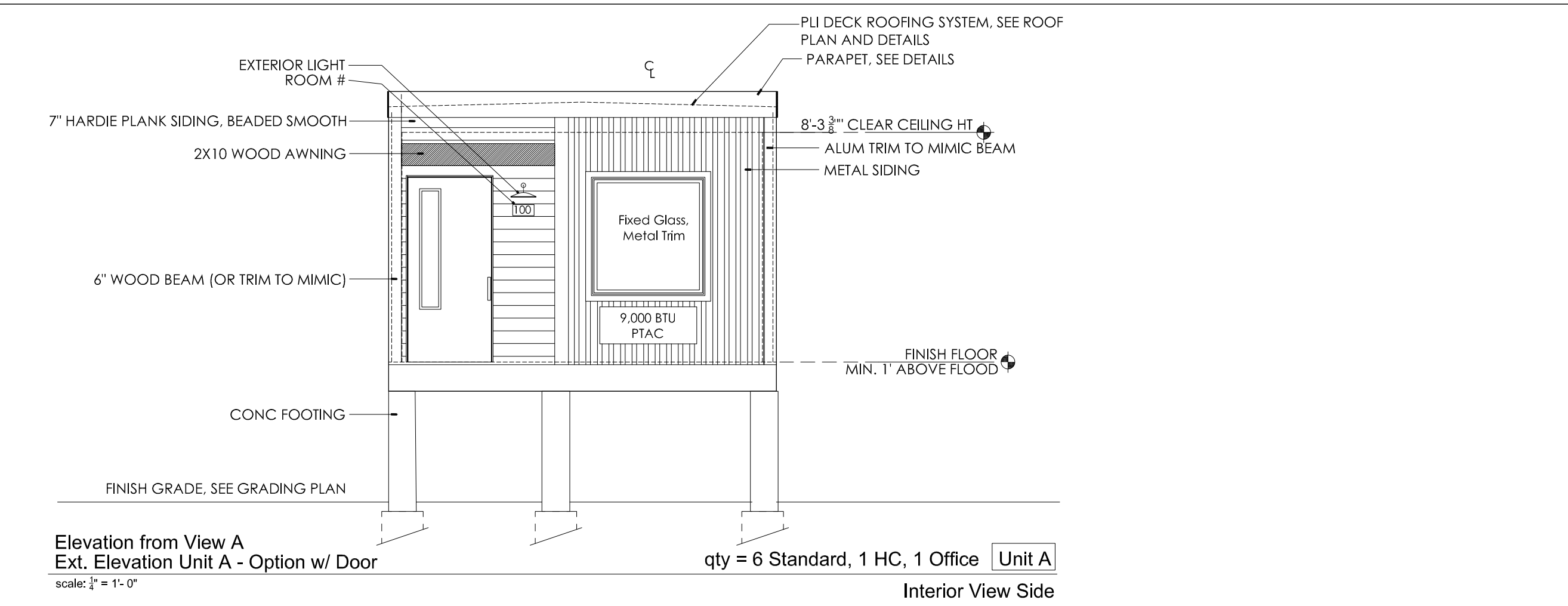
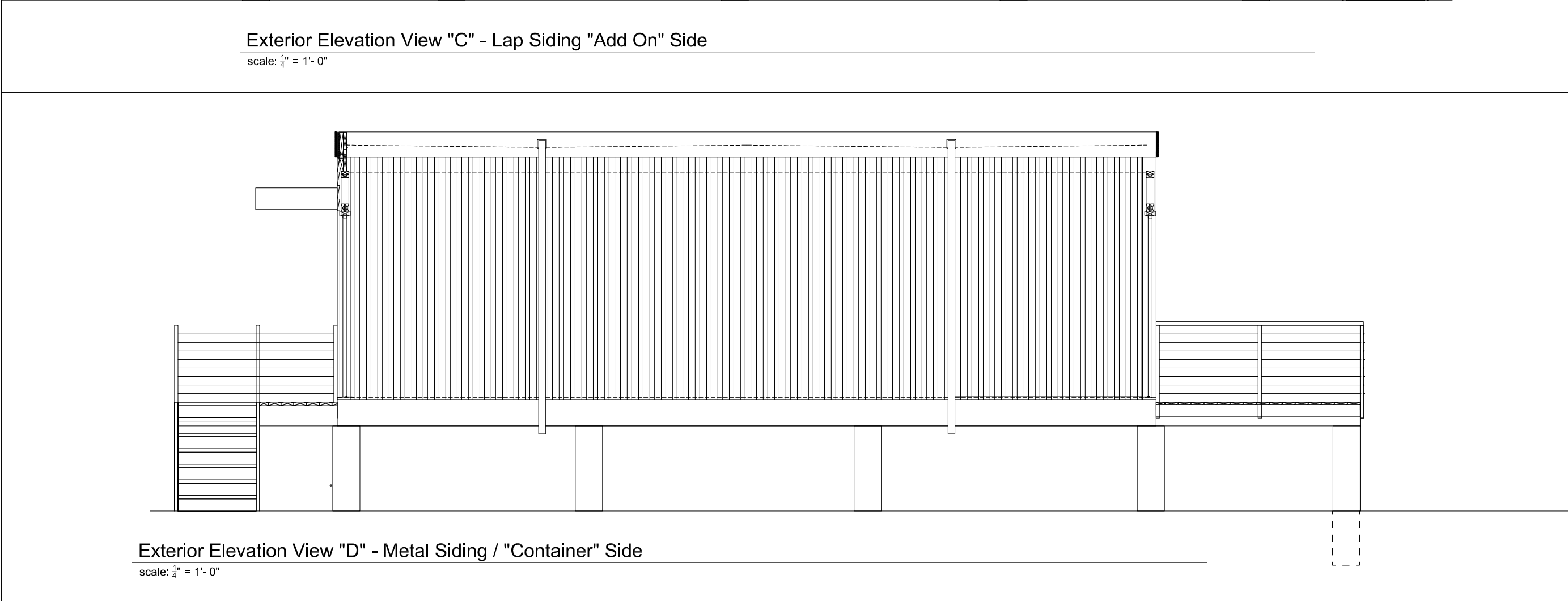
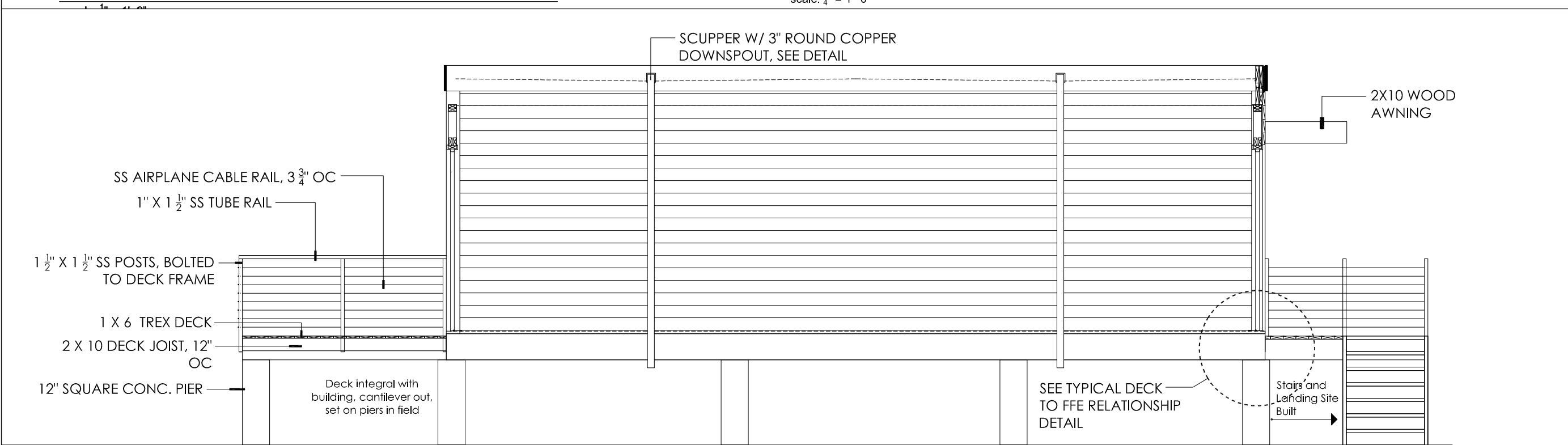
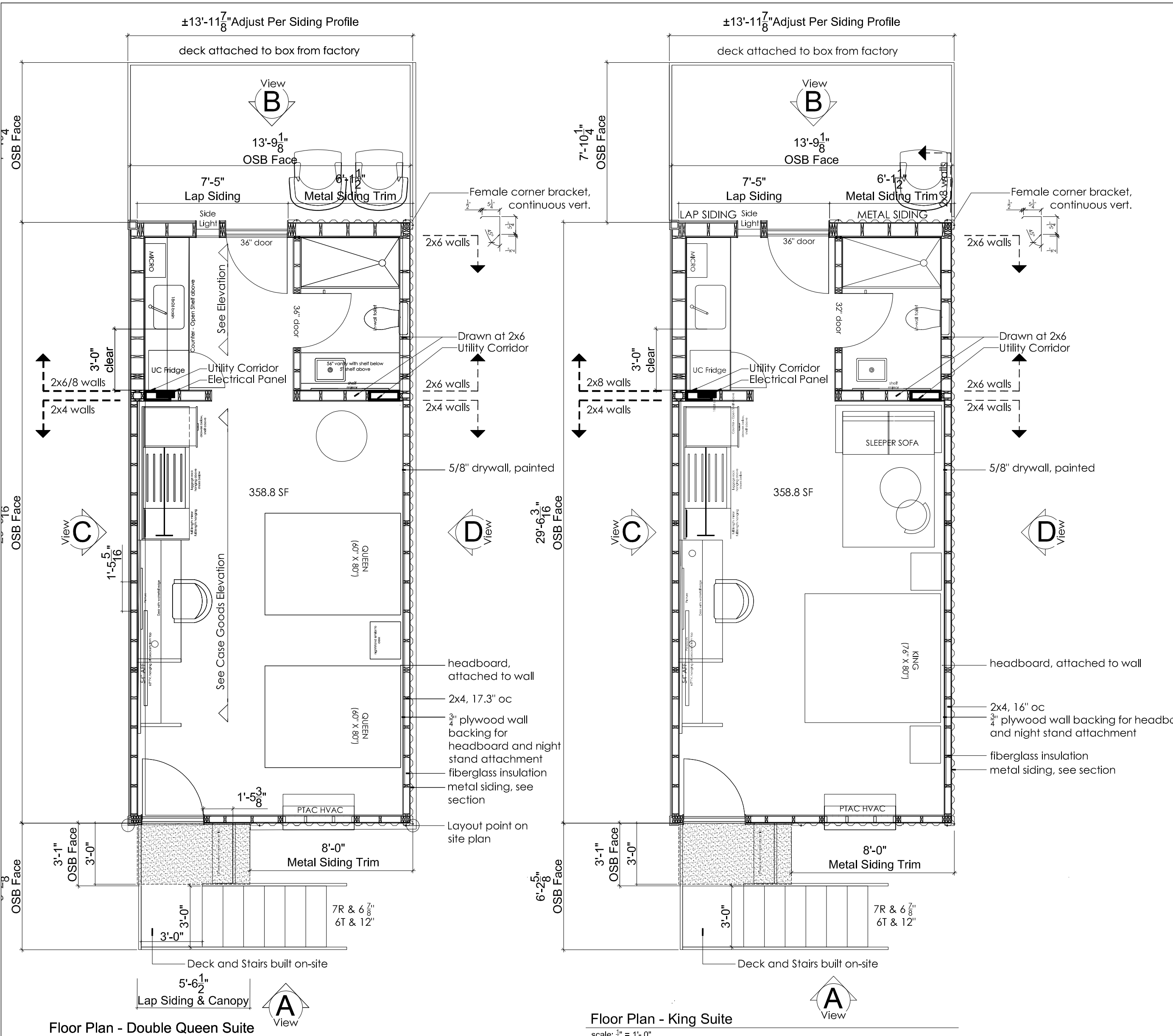
Landscape Schedule &Details

REVISIONS

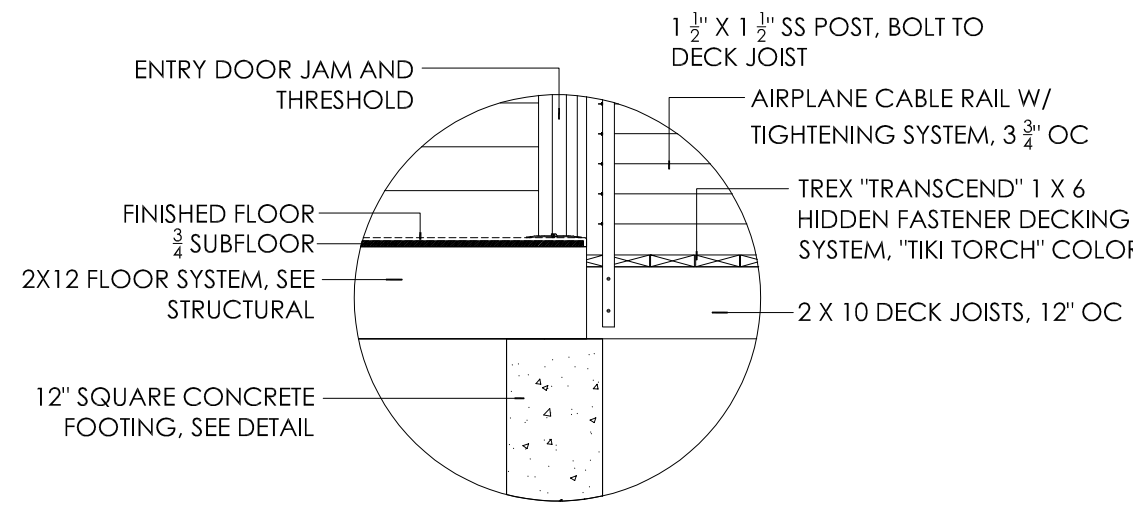
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DATE: NOV 7, 2023

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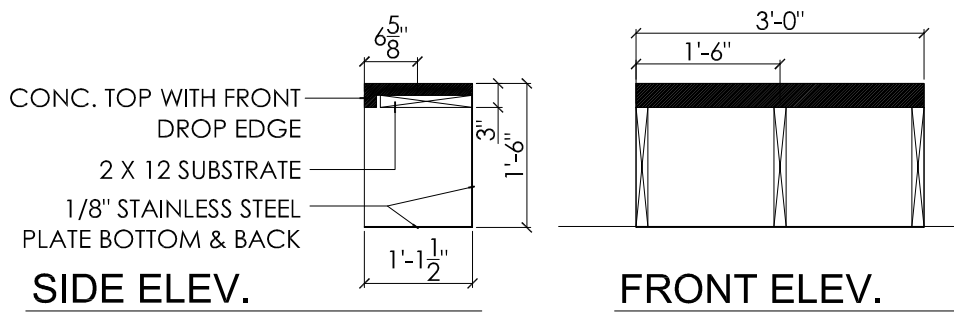


Container Hotel			
Unit Plans and Elevations			
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SHEET: DATE: NOV 7, 2023			



DECK AND FFE RELATIONSHIP

scale: $\frac{1}{2}" = 1' - 0"$

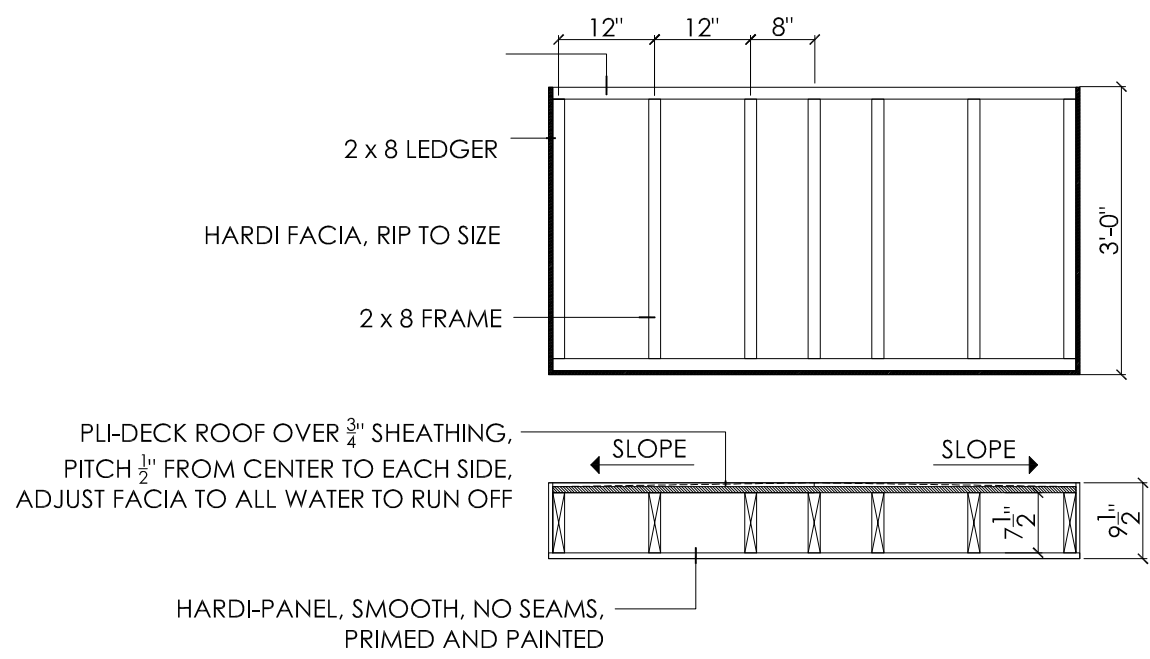


- Notes:
- All wood shall be pressure treated
 - All fasteners shall be galvanized or SS
 - Custom make Conc. Seal, use fiberglass reinforcement, stain "antique amber" by Scofield and seal.
 - Stainless Steel (SS) plate shall be grade 316

PLAN VIEW

BOOT BOX

scale: $\frac{1}{2}" = 1' - 0"$



CANOPY OVER DOOR DETAIL

scale: $\frac{1}{2}" = 1' - 0"$

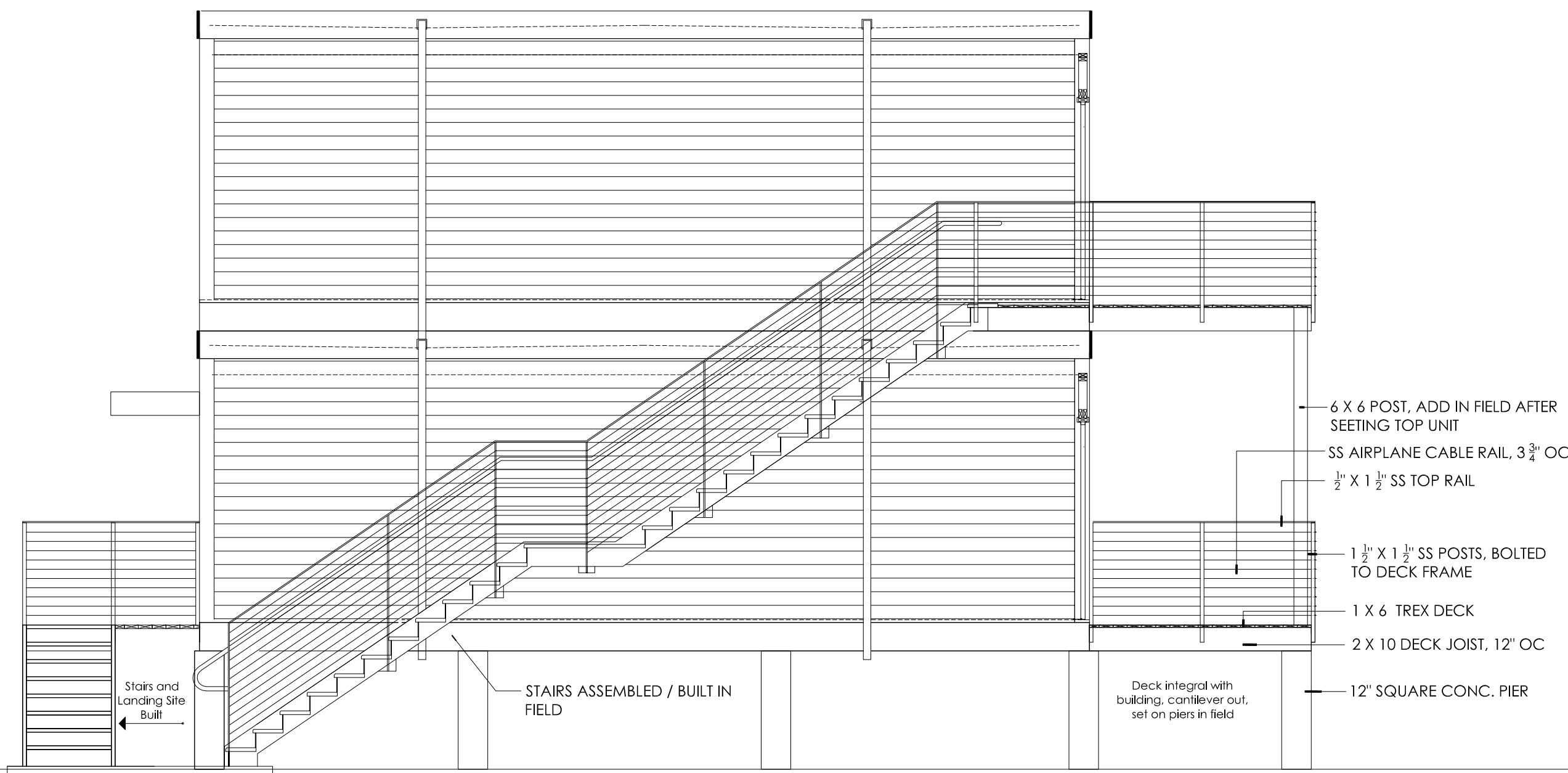
- Notes:
- All wood shall be pressure treated
 - All fasteners shall be galvanized
 - Prep and apply Pli-Deck roof per manuf. recommended applications



Front Elevation - Typical Stacked View
scale: $\frac{1}{2}" = 1' - 0"$



Exterior Elevation "C" - Wood Siding "Add On" Side
scale: $\frac{1}{2}" = 1' - 0"$



Exterior Elevation "D" - "Container" Side
scale: $\frac{1}{2}" = 1' - 0"$

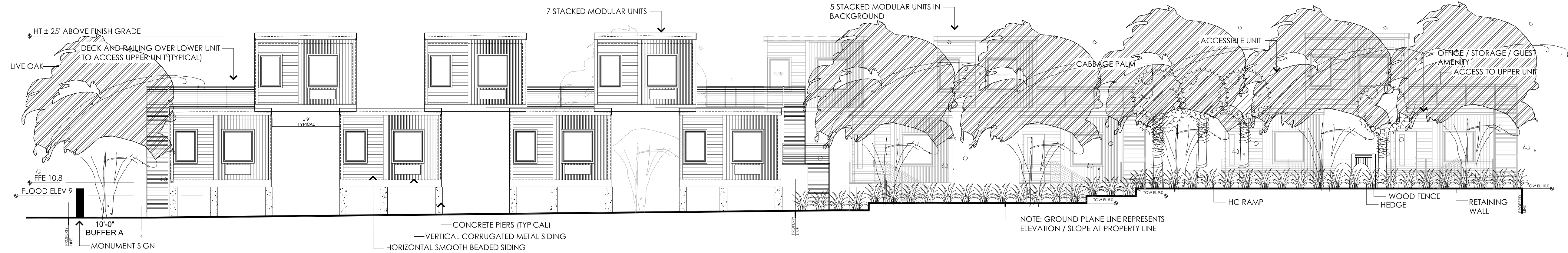
Container Hotel

Stacked Unit Exterior Elevations

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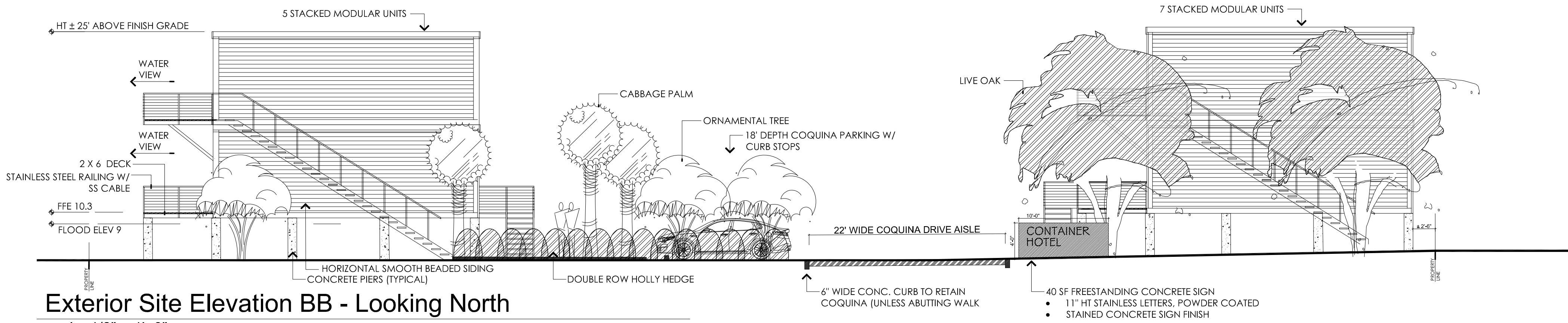
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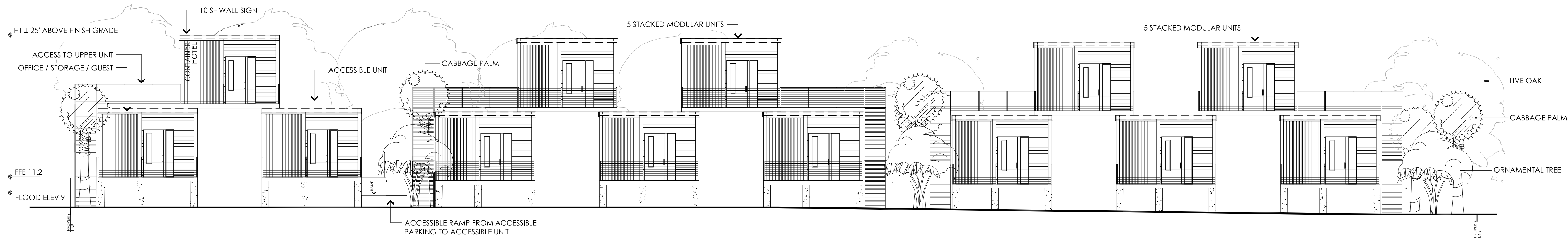
Exterior Site Elevation AA - Looking West

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



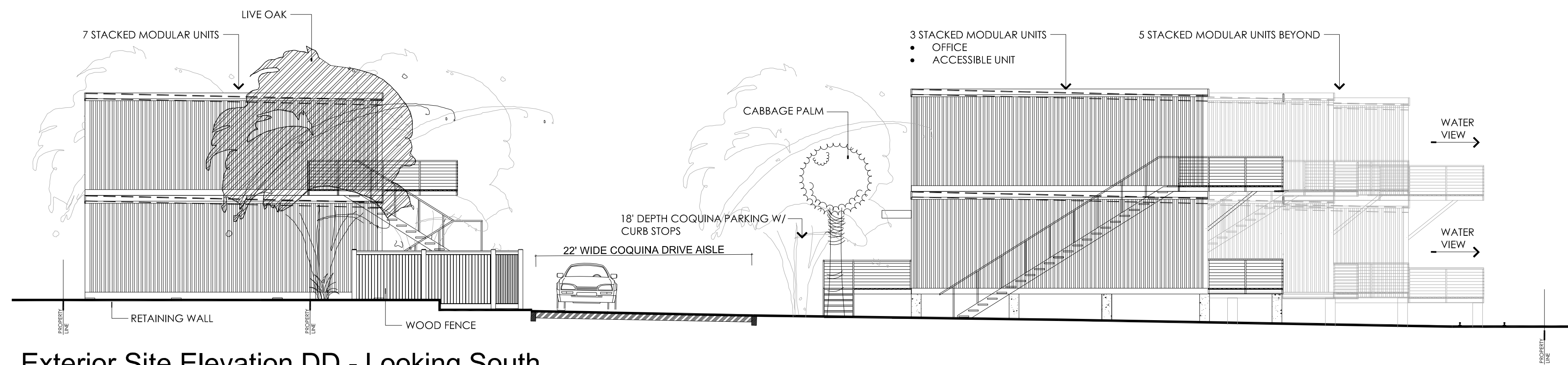
Exterior Site Elevation BB - Looking North

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



Exterior Site Elevation CC - Looking East

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



Exterior Site Elevation DD - Looking South

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

Container Hotel

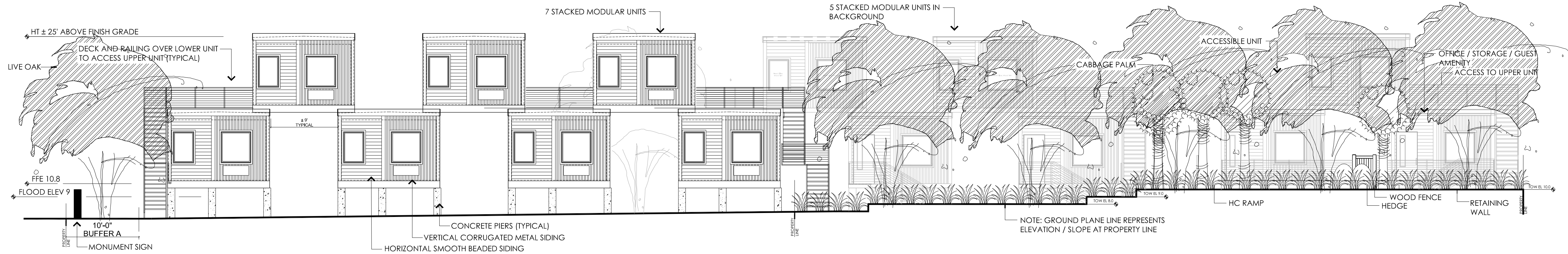
Site
Exterior Elevations

REVISIONS

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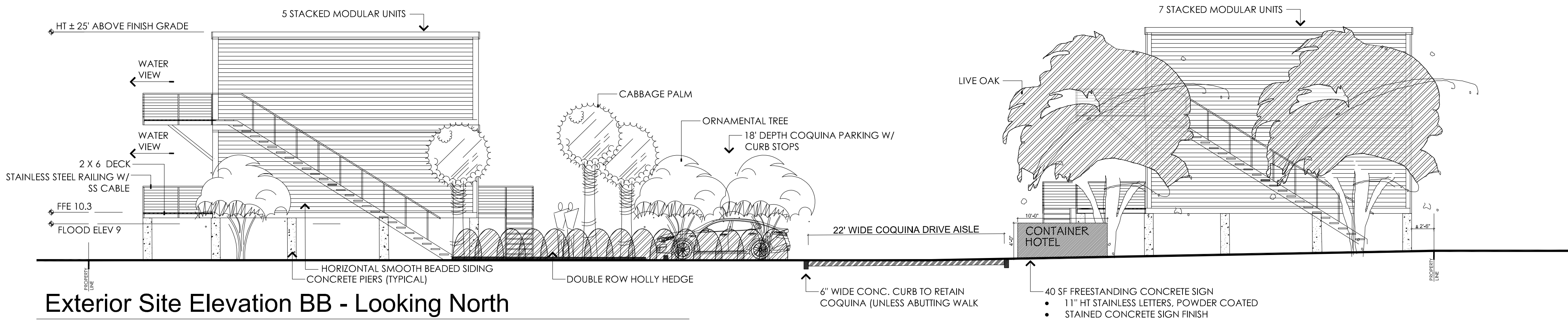
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SHEET:
DATE: NOV 7, 2023



Exterior Site Elevation AA - Looking West

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



Exterior Site Elevation BB - Looking North

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

Container Hotel

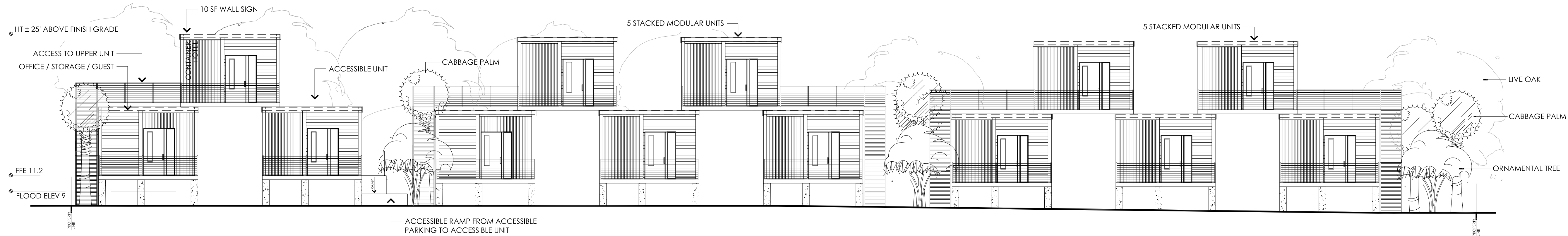
Site
Exterior Elevations

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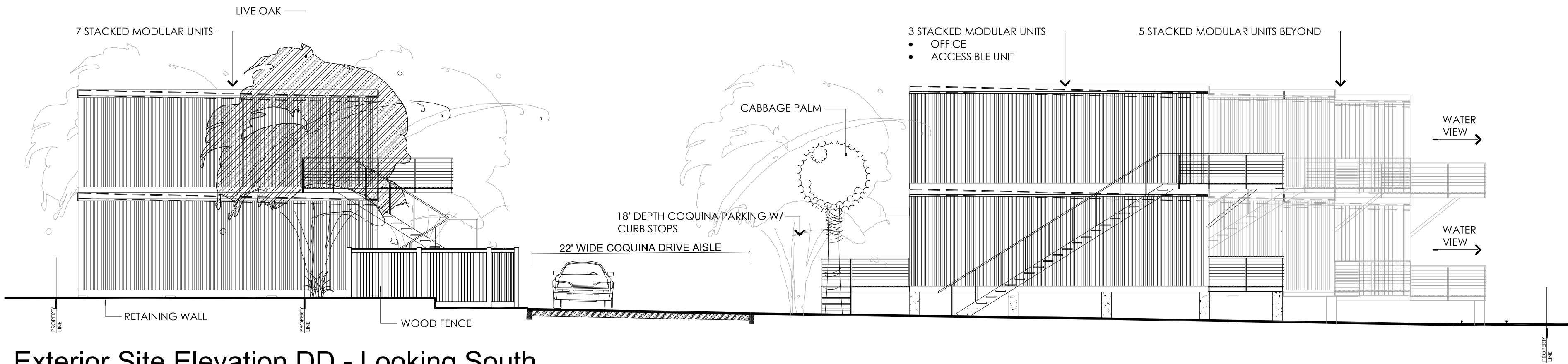
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SHEET:
DATE: NOV 7, 2023



Exterior Site Elevation CC - Looking East

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



Exterior Site Elevation DD - Looking South

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

Container Hotel

Site
Exterior Elevations

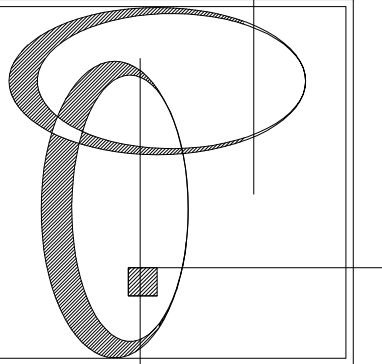
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SHEET:
DATE: NOV 7, 2023




CHAD GRIMM STUDIOS
2539 HYDE PARK ROAD
JACKSONVILLE FL 32210
(904) 236-9757



Container Hotel

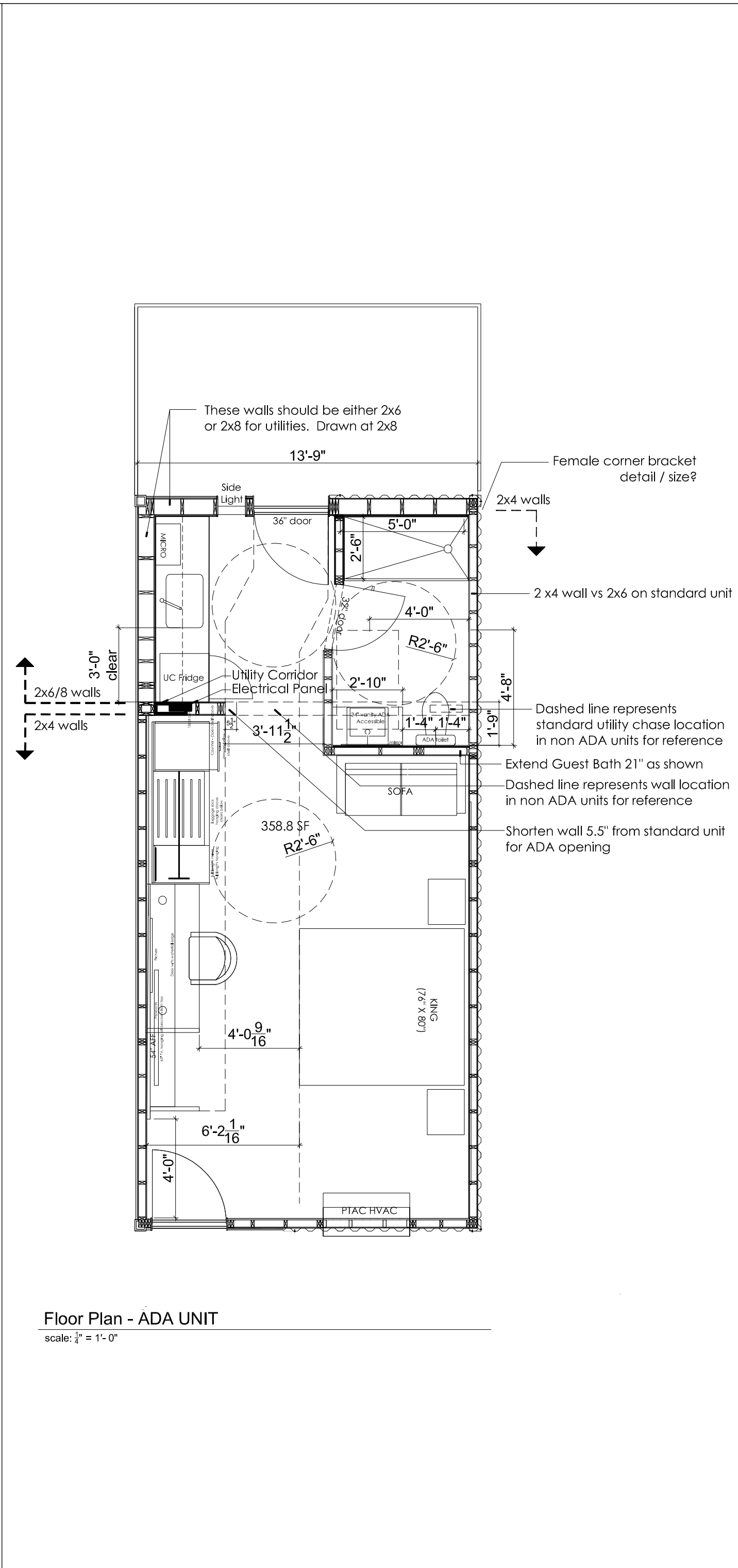
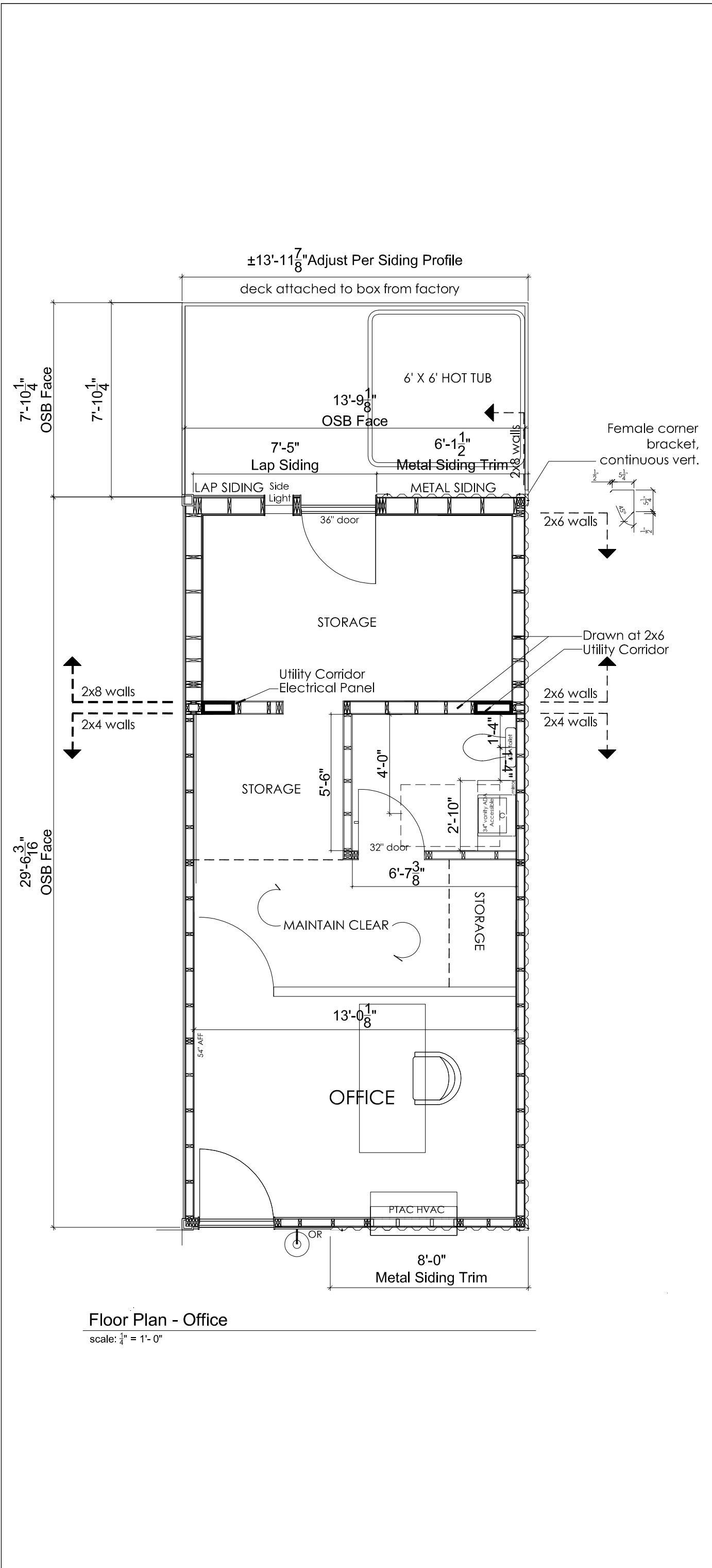
Perspective Views

REVISIONS

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DATE: NOV 7, 2023



THIS PROJECT SHALL COMPLY WITH ALL LOCAL, STATE & FEDERAL ACCESSIBILITY CODES/STANDARDS. IF THIS CONFLICT EXISTS BETWEEN ANY OF THE STANDARDS, THEN THE MOST STRINGENT CODE SHALL APPLY.

ENTRANCES

- IF ALL PUBLIC ENTRANCES ARE NOT ACCESSIBLE, PROVIDE AN INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN AT THE ACCESSIBLE ENTRANCE AND ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS TO THE ACCESSIBLE ENTRANCE.
- EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3' IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32".
- WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
- LATCHING AND LOCKING DEVICES THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
- HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR.
- THE MINIMUM REQUIRED MANEUVERING CLEARANCES ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE CLEAR, AND THE FLOOR SURFACE SHALL NOT EXCEED 2%.
- THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY, CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED FINISH TO THE FULL DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CAUSING A TRAP OR HAZARDOUS CONDITION, WHERE NARROW FRAME DOORS ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
- MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 LBS FOR EXTERIOR DOORS AND 5 LBS FOR INTERIOR DOORS, SUCH PUSH OR PULL FORCE SHALL BE APPLIED AT RIGHT ANGLES TO DOORS AND AT THE CENTER PANEL OF SLIDING OR FOLDING DOORS, COMPENSATING DEVICES OR AUTOMATIC DOOR OPENERS SHALL BE PROVIDED TO MEET THE REQUIREMENTS IF THE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 POUNDS.

DOORS

- PROVIDE DOOR (LEVER) HARDWARE ON ALL DOORS.
- PROVIDE PANIC HARDWARE ON EXIT DOORS FROM PUBLIC ASSEMBLY AREAS.

FLOORS AND LEVELS

- IN BUILDINGS AND FACILITIES, FLOORS OF A GIVEN STORY SHALL BE A COMMON LEVEL THROUGHOUT, OR SHALL BE CONNECTED BY PEDESTRIAN RAMPS, STAIRS, ELEVATORS OR SPECIAL ACCESS LIFTS.
- FLOOR SURFACES SHALL BE SLIP-RESISTANT.

CORRIDORS AND AISLES

- EVERY CORRIDOR SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE NOT LESS IN WIDTH THAN 44".
- EVERY PORTION OF EVERY BUILDING IN WHICH ARE INSTALLED SEATS, TABLES, MERCHANDISE, EQUIPMENT OR SIMILAR MATERIALS SHALL BE PROVIDED WITH AISLES LEADING TO AN EXIT.
- EVERY AISLE SHALL BE NOT LESS THAN 3' WIDE IF SERVING ONLY ONE SIDE, AND NOT LESS THAN 3'-6" WIDE IF SERVING BOTH SIDES, 54" MINIMUM CLEAR WIDTH SHALL BE ASSURED AT THE POINT FARTHEST FROM AN EXIT, CROSS AISLE OR FOYER AND SHALL BE INCREASED BY 1-1/2" FOR EACH 5' IN LENGTH TOWARD THE EXIT, CROSS AISLE OR FOYER.

SANITARY FACILITIES

- WHEN SANITARY FACILITIES ARE LOCATED ON ACCESSIBLE FLOORS OF A BUILDING, THEY SHALL BE MADE ACCESSIBLE TO THE PHYSICALLY DISABLED.
- WHERE SEPARATE FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS OF EACH SEX, SEPARATE FACILITIES SHALL BE PROVIDED FOR DISABLED PERSONS OF EACH SEX ALSO; WHERE UNISEX FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS, SUCH UNISEX FACILITIES MAY BE PROVIDED FOR THE DISABLED.
- ALL DOORWAYS LEADING TO SANITARY FACILITIES SHALL HAVE 32" CLEAR UNOBSTRUCTED OPENINGS.
- PROVIDE SIGNAGE AS SHOWN IN THIS SET.

- ON THE WALL ADJACENT TO THE MEN'S AND WOMEN'S SANITARY FACILITIES BRAILLE SIGNAGE SHALL BE PROVIDED. LETTERS BE RAISED 1/32" UPPER CASE AND ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE 5/16" MINIMUM HIGH, PICTOGRAMS MINIMUM 8" HIGH, CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND. THE SIGN SHALL BE LOCATED SO THAT A MINIMUM CLEAR SPACE OF 36" IS MAINTAINED TO THE RIGHT OF THE SIGN. THE SIGN CHARACTER IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45° OPEN POSITION, MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTER OF THE SIGN.
- WATER CLOSET COMPARTMENTS SHALL BE EQUIPPED WITH A DOOR THAT IS SELF CLOSING, AND SHALL HAVE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32" WHEN LOCATED AT THE END AND 34" WHEN LOCATED AT THE SIDE. TOILET TO REOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

TOILET ROOM FIXTURES AND ACCESSORIES

- TOILET FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. CONTROLS FOR THE FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS, MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS.
- WHERE URINALS ARE PROVIDED, AT LEAST ONE WITH A RIM PROJECTING A MINIMUM OF 13.5" FROM THE WALL AND AT A MAXIMUM OF 17" ABOVE THE FLOOR SHALL BE PROVIDED.
- FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS PER FOOT.
- LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 29" FROM THE FLOOR TO THE BOTTOM OF THE APRON WITH KNEE CLEARANCE UNDER THE FRONT UP EXTENDING A MINIMUM OF 30" IN WIDTH WITH 8" MINIMUM DEPTH AT THE TOP. TOE CLEARANCE SHALL BE THE SAME WIDTH AND SHALL BE A MINIMUM OF 9" HIGH FROM THE FLOOR AND A MINIMUM OF 17" DEEP FROM THE FRONT OF THE LAVATORY.
- A PROJECTION OF A LAVATORY BOWL INTO THE 8" CLEAR SPACE, THEREBY REDUCING THE CLEAR HEIGHT SHALL BE NO MORE THAN 1/2" OR LESS THAN 1/4". THE PROJECTION SHALL BE THE MINIMUM REQUIREMENT FOR PROVIDING KNEE CLEARANCE, A MAXIMUM HEIGHT OF 34" TO THE TOP OF THE LAVATORY IS REQUIRED.
- HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED, THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
- FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO MORE THAN 5 POUNDS. LEVER OPERATED, PUSH TYPE AND OPERATING MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

THE GRAB BARS SHALL BE LOCATED ON EACH SIDE, OR ONE SIDE AND THE BACK OF THE PHYSICALLY DISABLED TOILET STALL OR COMPARTMENT AND SHALL BE SECURELY ATTACHED TO THE WALL ABOVE AND PARALLEL TO THE FLOOR TO THE TOP OF THE BAR. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

2. GRAB BARS AT THE WALL SHALL BE AT LEAST 42" LONG, INSTALLED 12" FROM THE REAR WALL, AND GRAB BARS AT THE BACK SHALL BE NOT LESS THAN 36" LONG, & EXTENDING 12" MINIMUM ON ONE SIDE OF THE WATER CLOSET CENTERLINE AND 24" MINIMUM ON THE OTHER SIDE.

3. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1 1/4" TO 1 3/4" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.

4. IF THE GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2".

5. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS.

6. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

7. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".

8. GRAB BAR, TUB AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES SHALL BE DESIGNED FOR 250 POUNDS PER LINEAR FOOT LOAD.

9. THE SPACE BETWEEN THE GRAB BAR & PROJECTING OBJECTS BELOW SHALL BE 12" MINIMUM. THE SPACE BETWEEN THE GRAB BAR & PROJECTING OBJECTS ABOVE SHALL BE 12" MINIMUM.

ADDITIONAL REQUIREMENTS

1. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 15" ABOVE THE FLOOR OR WORKING PLATFORM.

2. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, HEATING, VENTILATING AND AIR CONDITIONING SHALL BE NOT LESS THAN 36" NOR MORE THAN 48" ABOVE THE FLOOR OR WORKING PLATFORM.

3. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE INSTALLED PER BUILDING CODE & FIRE DEPARTMENT REQUIREMENTS.

4. IF EMERGENCY WARNING SYSTEMS ARE REQUIRED, THEY SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL BE A FREQUENCY OF NOT MORE THAN 60 FLARES PER MINUTE.

SIGNS & IDENTIFICATION NOTE

1. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO PHYSICALLY DISABLED PERSONS AS SET FORTH IN ADA AND AS SPECIFICALLY REQUIRED IN THIS SECTION THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO. 15050 IN FEDERAL STANDARD 595.

2. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.

3. CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPER CASE X. LOWER CASE CHARACTERS ARE PERMITTED. FOR SIGNS SUSPENDED OR PROJECTED ABOVE THE FINISH FLOOR THE MINIMUM CHARACTER HEIGHT SHALL BE 5".

4. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

5. WHEN RAISED CHARACTERS OR SYMBOLS ARE USED, THEY SHALL CONFORM TO THE FOLLOWING:

A) LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.

B) RAISED CHARACTERS OR SYMBOLS SHALL BE A MINIMUM OF 5/8" HIGH.

C) PICTORIAL SYMBOL SIGNS (PICTOGRAMS) SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE A MINIMUM OF 8" IN HEIGHT.

6. CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE SYMBOLS ARE SPECIFICALLY REQUIRED IN AREAS PORTIONS OF THESE REGULATIONS. DOTS SHALL BE 1" ON CENTERS IN EACH CELL WITH 3" SPACE BETWEEN CELLS. DOTS SHALL BE RAISED 3/32" ABOVE THE BACKGROUND.

7. WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCOMPANIED BY BRAILLE. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE ENTRANCE TO THE ROOM OR SPACE WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE. INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTERLINE OF THE SIGN. SIGN SHALL BE MOUNTED SO IT IS OUT OF THE REACH OF ANY PERSON UNDER 6'10" MINIMUM. CENTER ON THE TACTILE CHARACTER IS PROVIDED BEYOND THE ARC OF ANY DOOR SWINGING BETWEEN THE CLOSED POSITION & 45 DEGREE OPEN POSITION.

TABLES AND SEATING DISTRIBUTION NOTES:

1. AT LEAST 5% OF ALL SEATING AND STANDING SPACES ARE TO BE ACCESSIBLE AND LOCATED ON AN ACCESSIBLE ROUTE. THE ACCESSIBLE TABLES AND SEATS ARE ALSO REQUIRED TO BE DISTRIBUTED THROUGHOUT ALL DINING AREAS.

2. MINIMUM ROUTE TO SEATING LOCATIONS

A) A 36" MINIMUM WIDE ACCESSIBLE ROUTE IS REQUIRED TO CONNECT THE ACCESSIBLE TABLES TO EACH OF THE RESTAURANT ELEMENTS

B) THE 36" ROUTE SHOULD TAKE INTO ACCOUNT CUSTOMERS SEATED AT THE TABLES. IT SHOULD NOT BE MEASURED WITH THE SEATS PUSHED COMPLETELY UNDER THE TABLES.

3. MINIMUM NUMBER OF ACCESSIBLE TABLES

A) A MINIMUM OF 5% OF SEATING AND STANDING LOCATIONS ARE REQUIRED TO BE ACCESSIBLE. THIS IS BASED ON THE TOTAL NUMBER OF SEATS OR STANDING TABLE SPACES AND MULTIPLYING BY .05.

4. SEATING DISPERSION

A) THE ACCESSIBLE TABLES ARE REQUIRED TO BE DISPERSED THROUGHOUT THE VARIOUS TYPES OF DINING AREAS INCLUDING PLAYPLACE SEATING AND PARTY ROOMS.

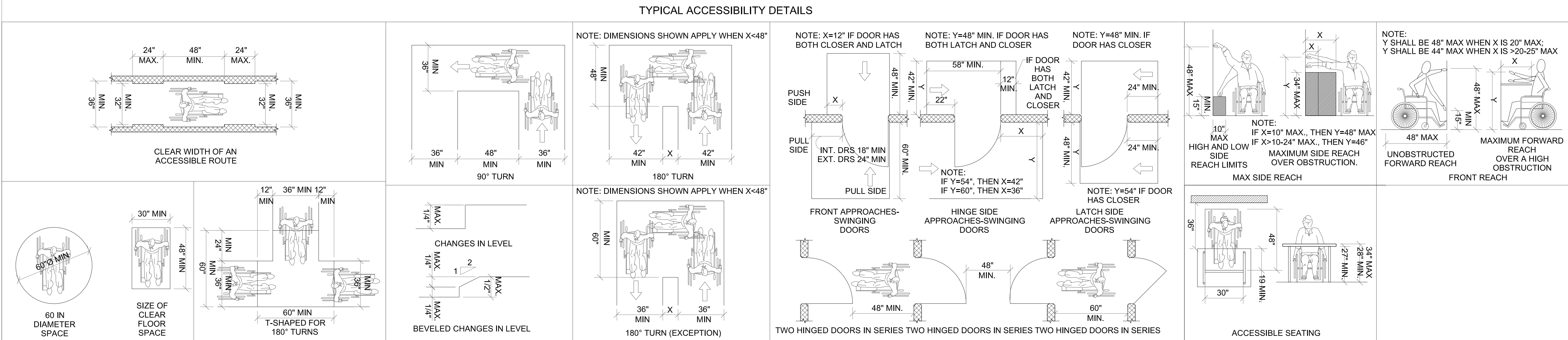
B) SEATING DISPERSION IS PROVIDED IN DINING AREA FOR CUSTOMERS USE. AN OUTLET MUST BE PROVIDED AT AN ACCESSIBLE TABLE.

C) IF TELEVISIONS ARE PROVIDED IN DINING AREA, A LINE OF SIGHT MUST BE PROVIDED TO THE TELEVISION FROM AN ACCESSIBLE TABLE.

D) THE OPEN SPACES AT THE ENDS OF BOOTHS IS NOT AN ACCESSIBLE ACCESSIBLE SEATING LOCATION.

E) SEATING CHAIRS MAY BE POSITIONED AT AN ACCESSIBLE SEATING LOCATION FOR USE BY AMBULATORY CUSTOMERS.

5. REQUIRED KNEE SPACE UNDER ACCESSIBLE TABLES TO BE MINIMUM OF 27" HIGH, 30" WIDE AND 19" DEEP. TABLE TOP HEIGHT TO BE BETWEEN 28" & 34" AFF.

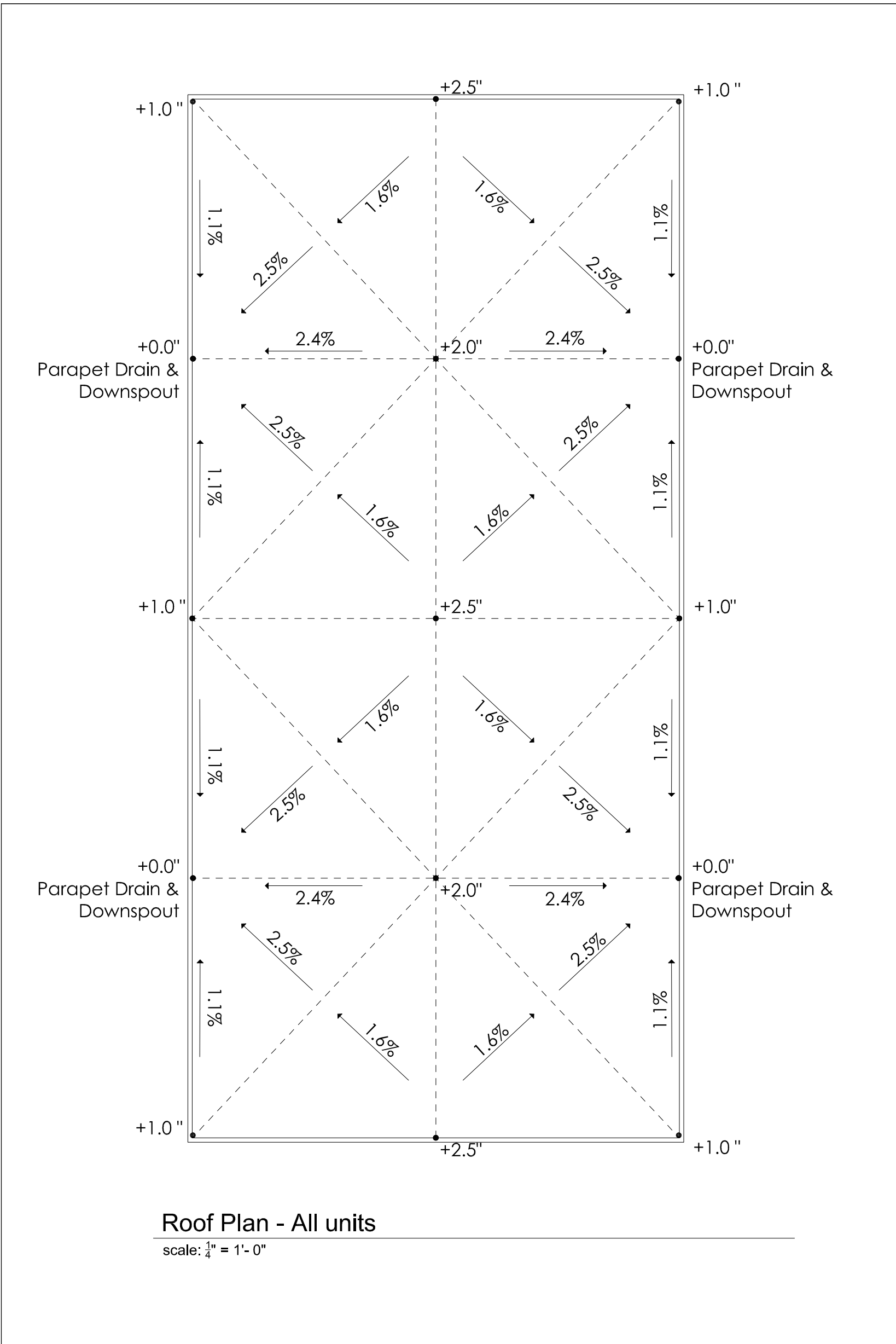


Office and Accessible Room Plan and Elevation

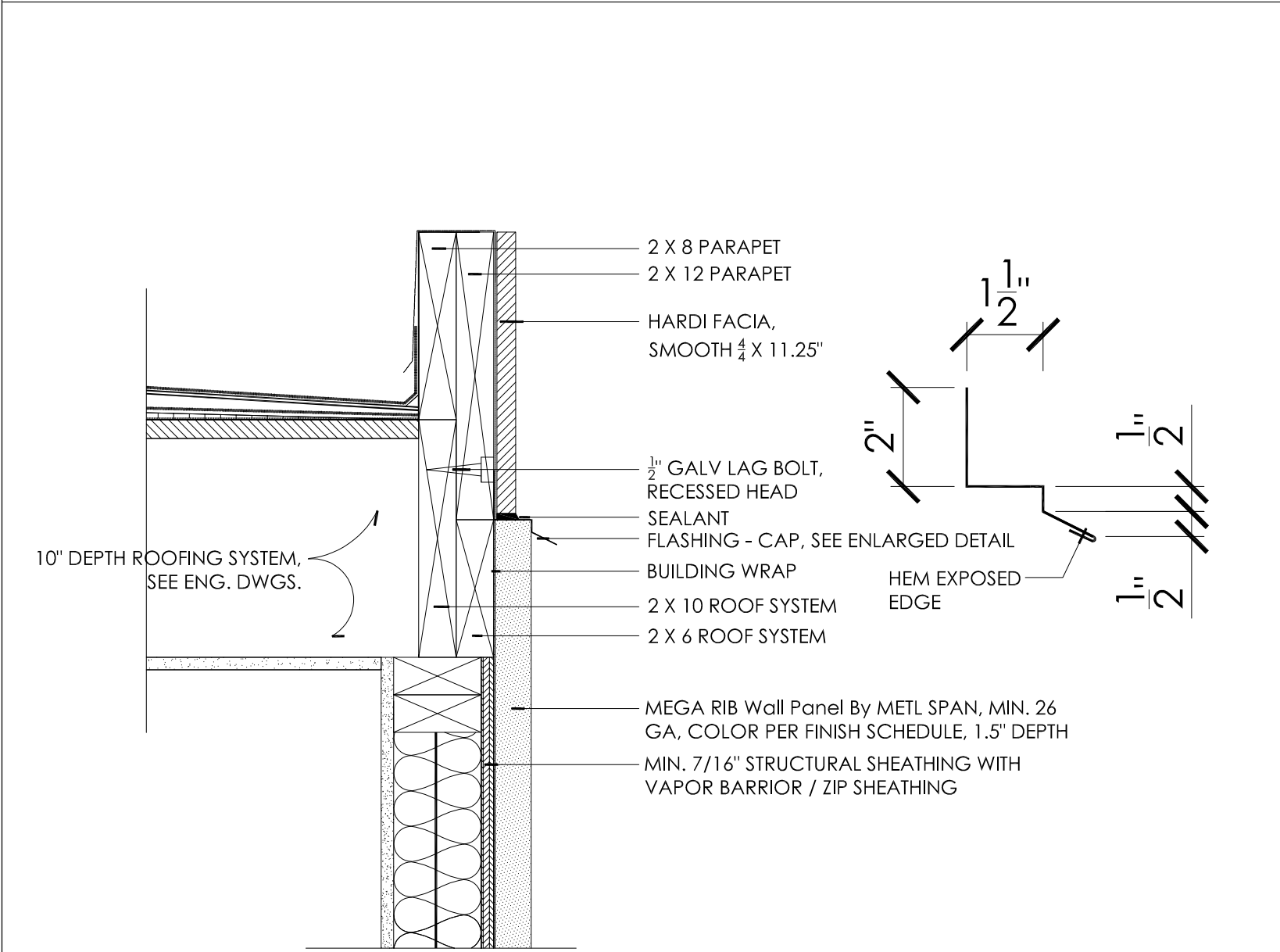
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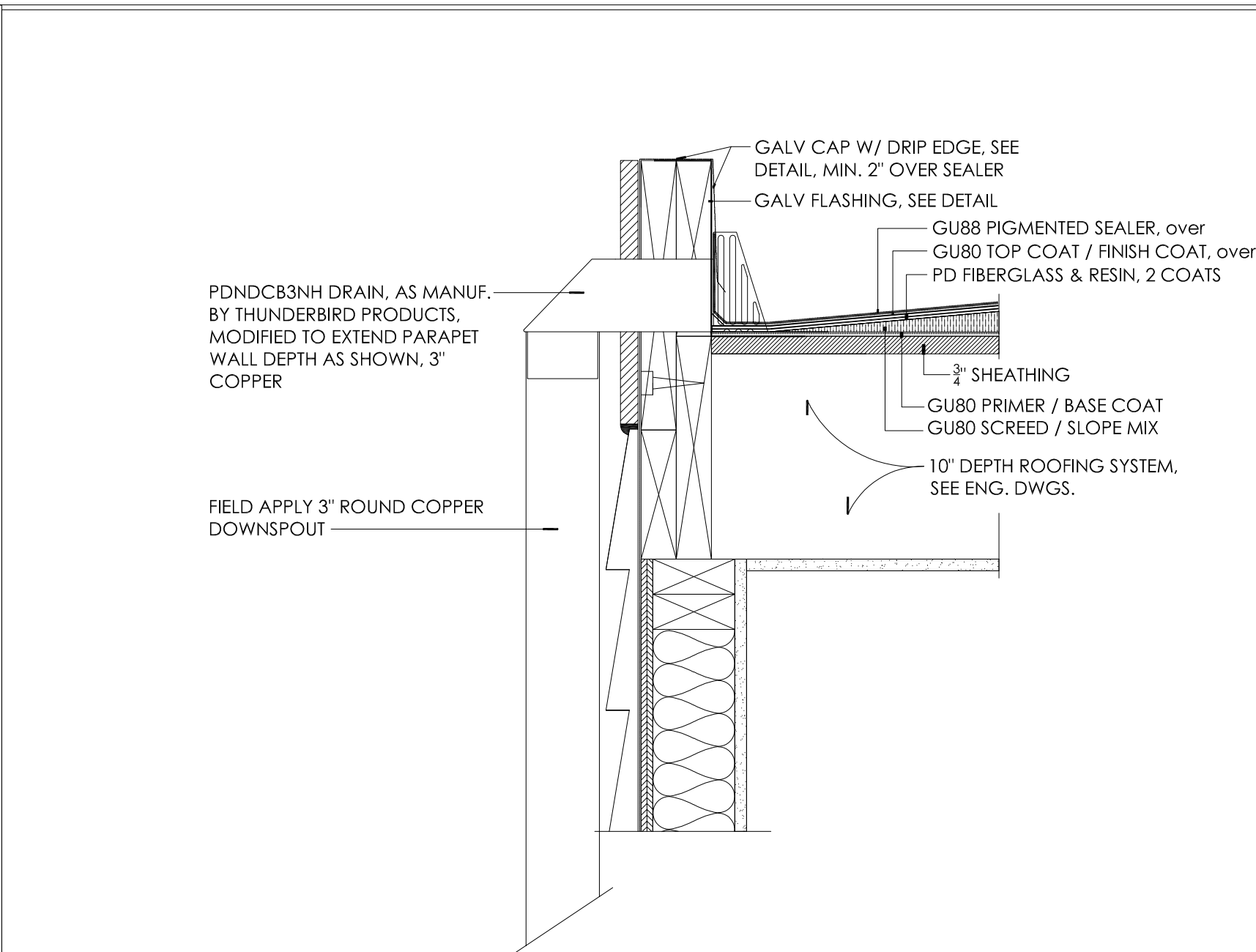
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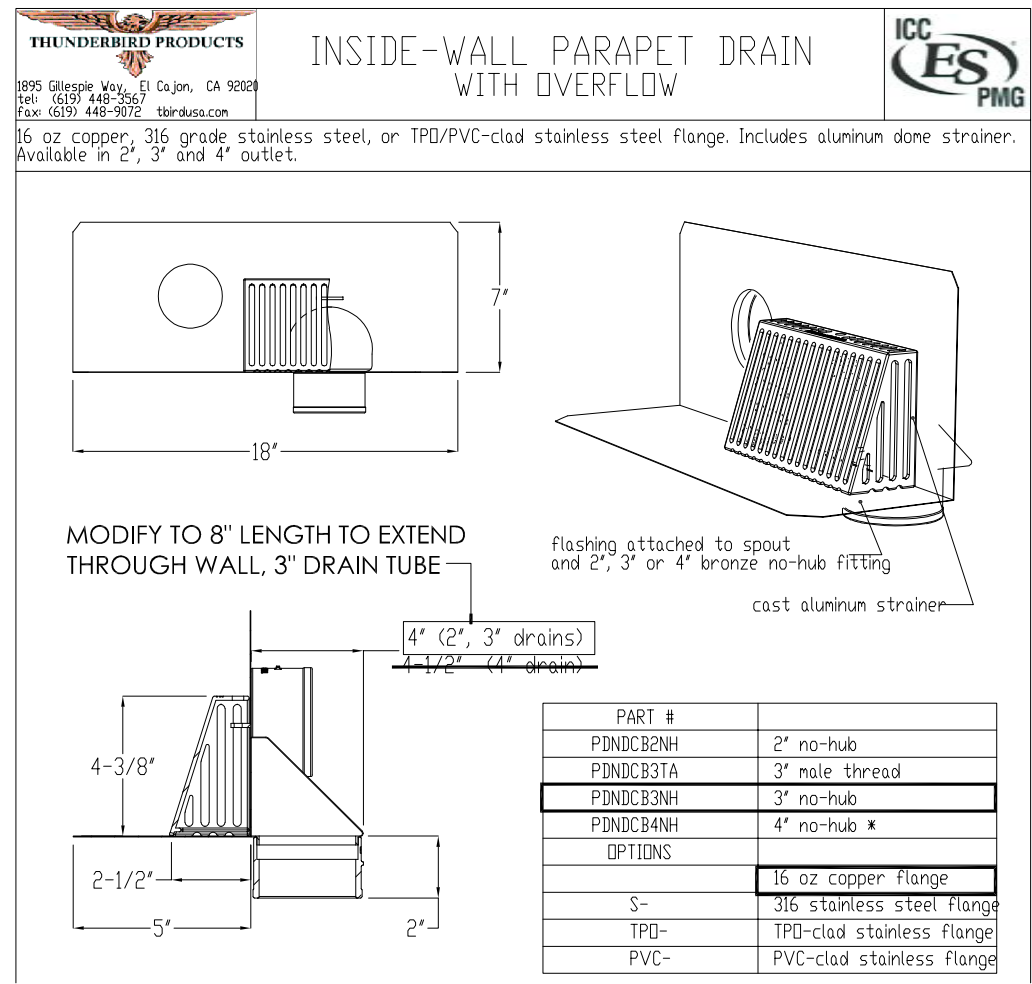
Roof Plan - All units
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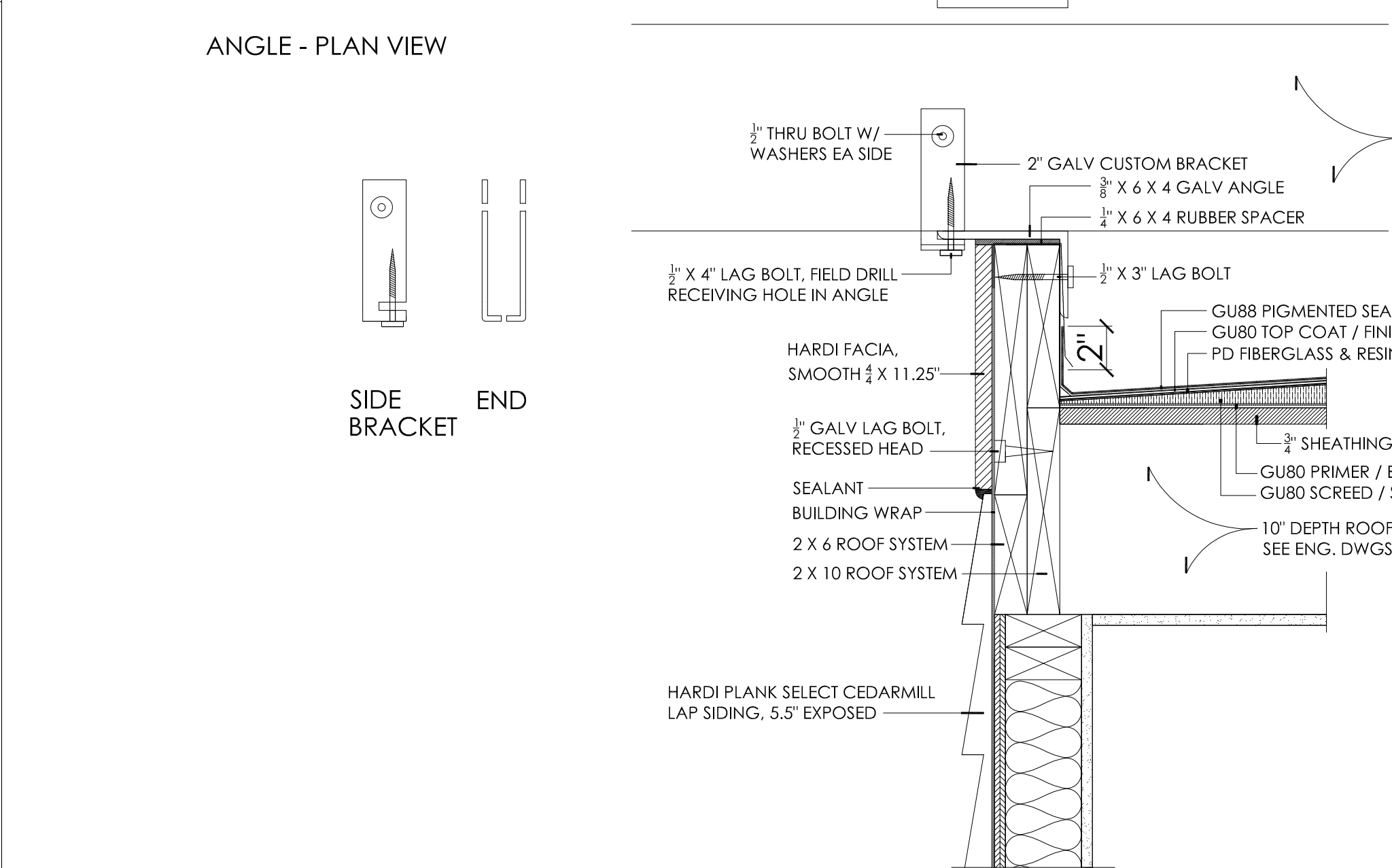
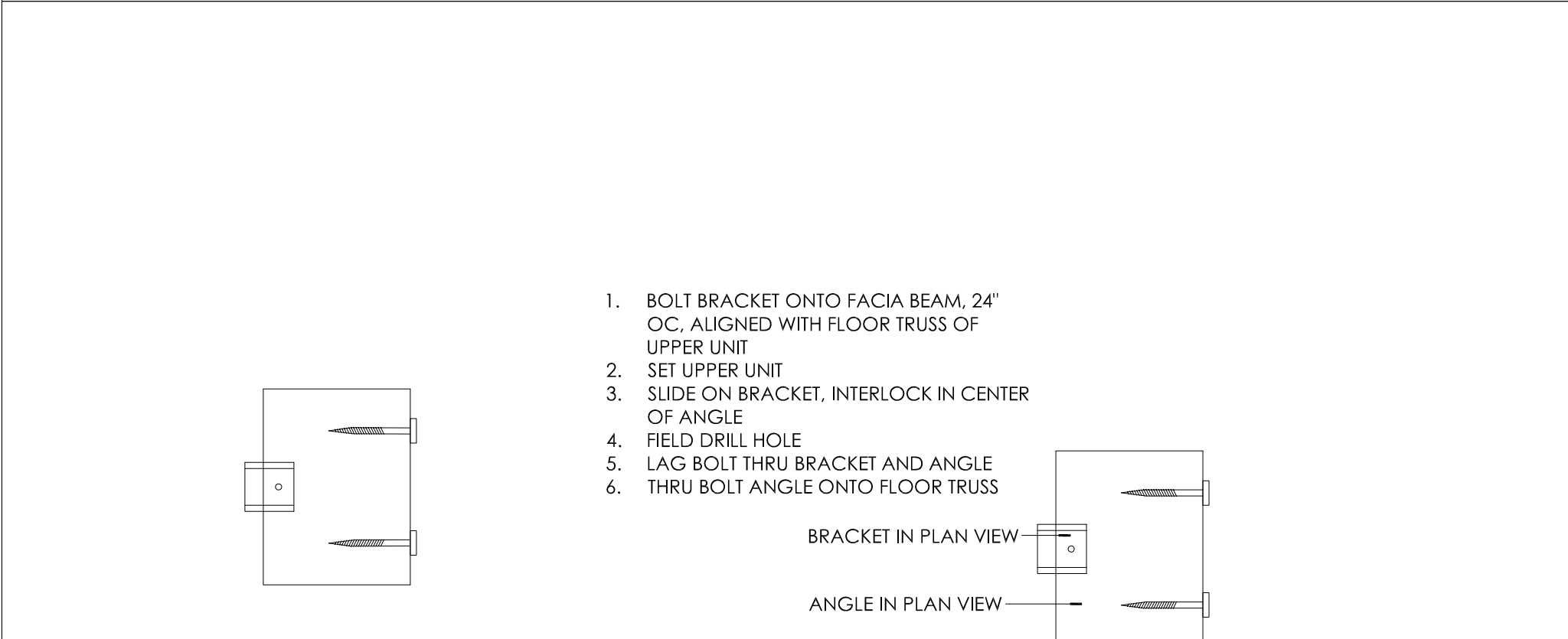
PARAPET DETAIL - Metal Siding
scale: 1" = 1'-0"



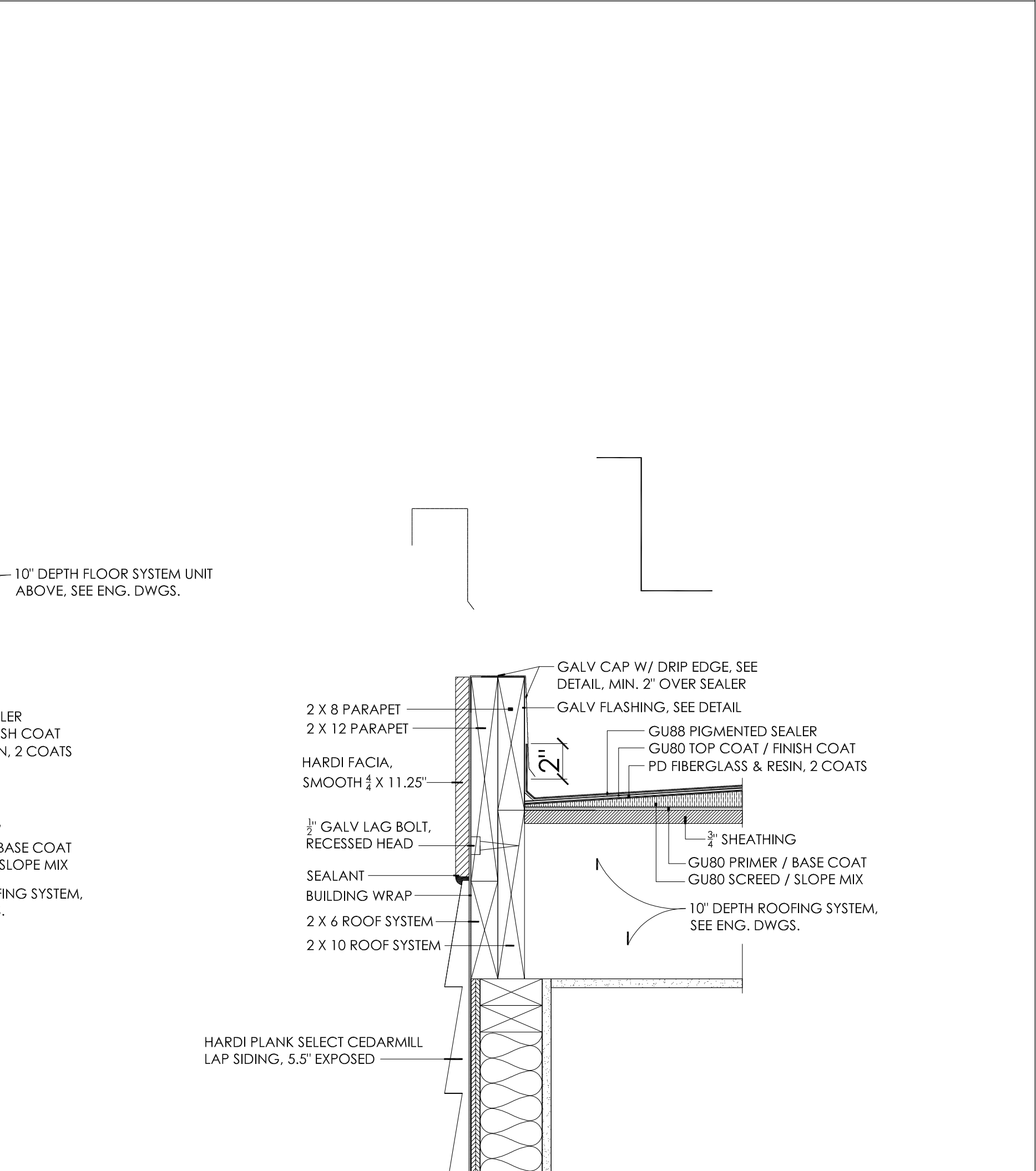
PARAPET DETAIL - W/ DRAIN
scale: 1" = 1'-0"



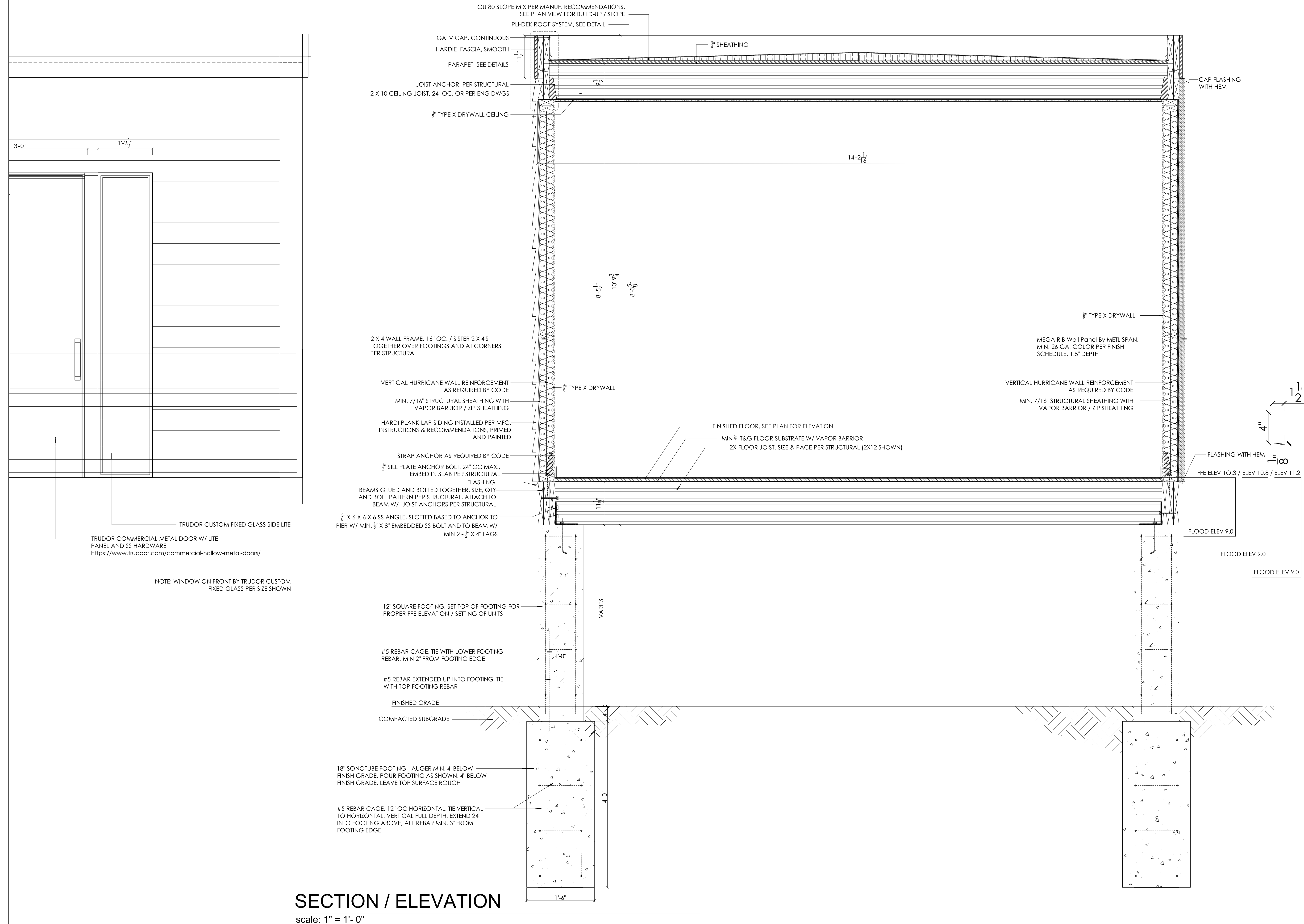
PARAPET DRAIN CUT SHEET
scale: NTS



UPPER UNIT CONNECTION DETAIL
scale: 1" = 1'-0"
PROVIDE EACH SIDE, 24" OC



PARAPET DETAIL - Lap Siding
scale: 1" = 1'-0"



SECTION / ELEVATION

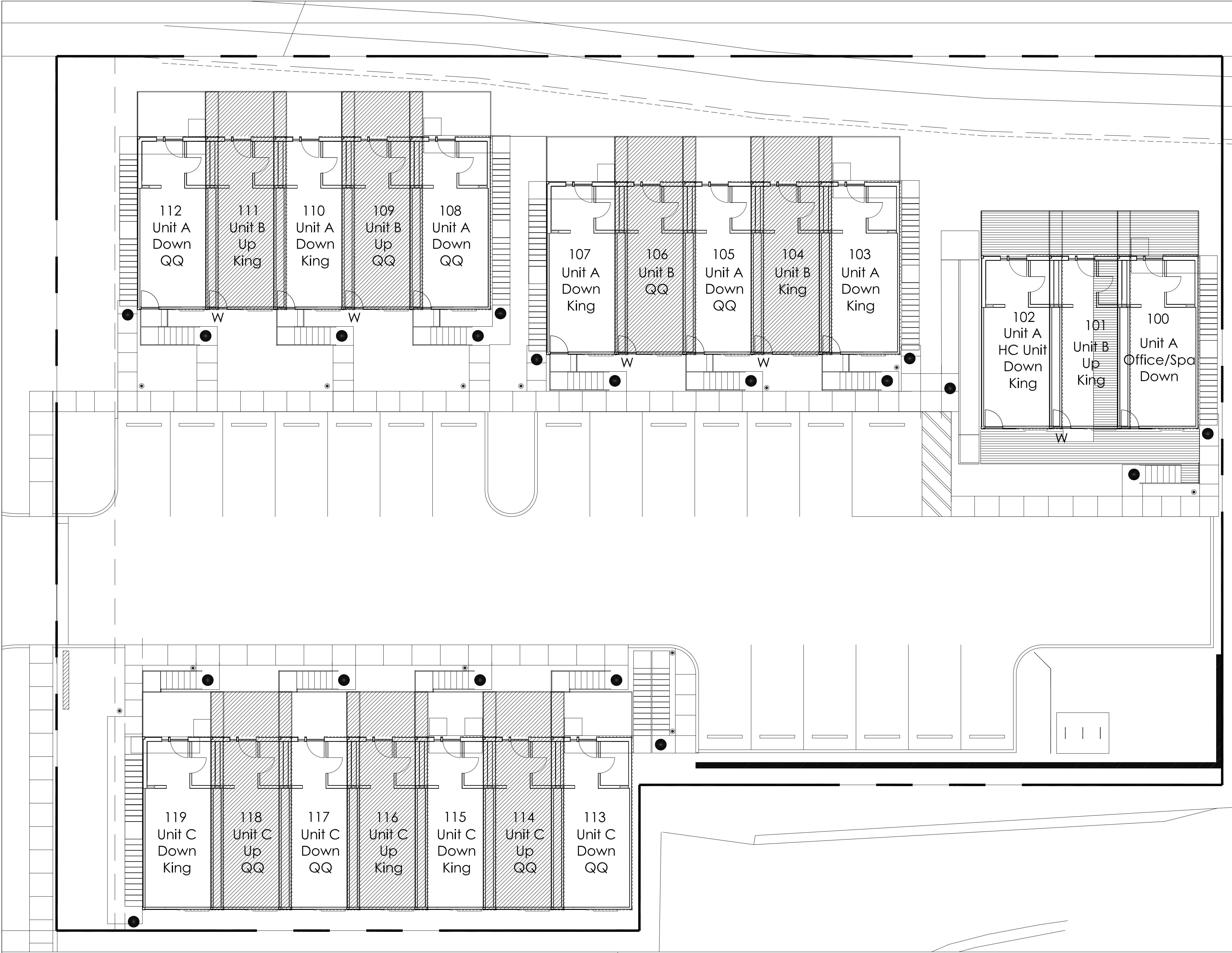
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Container Hotel

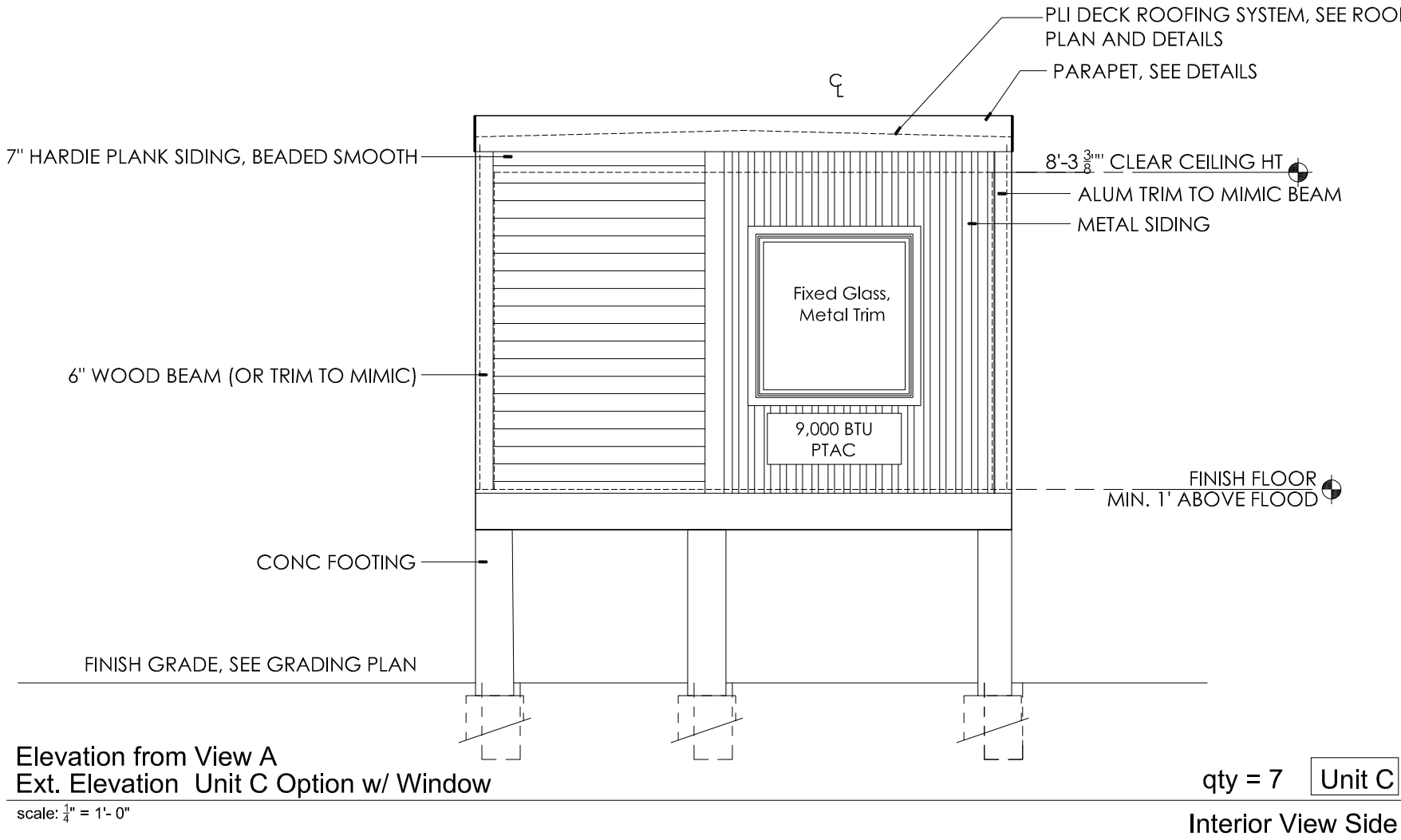
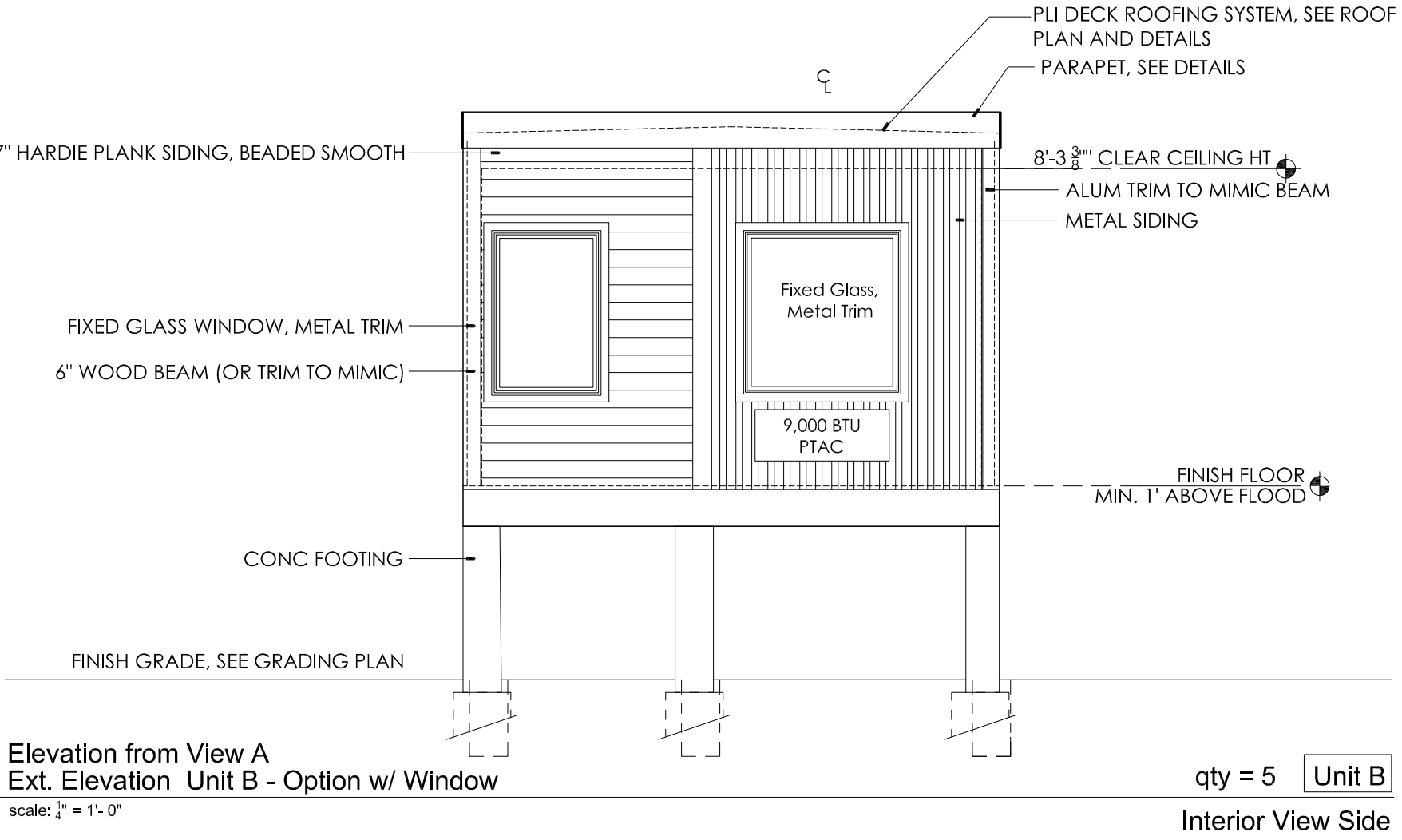
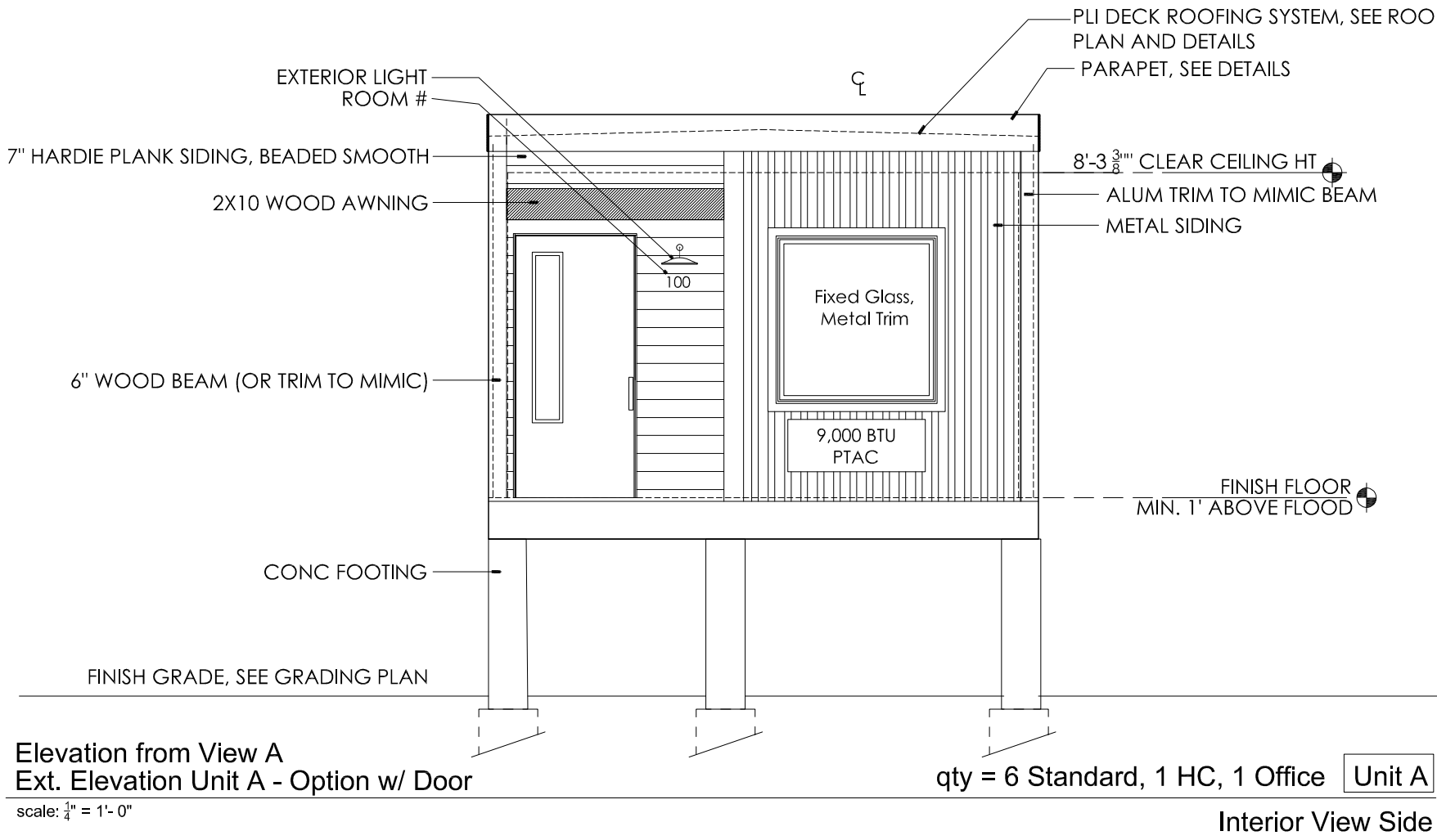
TYPICAL WALL SECTION

REVISIONS			
no.	description	by	date

SHEET: AR-6
DATE: NOV 7, 2023



Number	Type	Location	Base Unit Type	Lap Siding Color (Hardie Standard Colors)	Metal Siding Color (Standard Color)	Window and Door Trim Color	Siding trim and Fascia Color
100	Office	Down	A	Sunlight Blue	Pewter	Pewter	SW 9541 Snow White
101	King	Up	B	Filtered Gold	Pewter	Pewter	SW 9541 Snow White
102	HC King	Down	A	Coffee With Cream	Pewter	Pewter	SW 9541 Snow White
103	King	Down	A	Rose Dust	Pewter	Pewter	SW 9541 Snow White
104	King	Up	B	Misty Emerald	Pewter	Pewter	SW 9541 Snow White
105	QQ	Down	A	Sunlight Blue	Pewter	Pewter	SW 9541 Snow White
106	QQ	Up	B	Coffee With Cream	Pewter	Pewter	SW 9541 Snow White
107	King	Down	A	Filtered Gold	Pewter	Pewter	SW 9541 Snow White
108	QQ	Down	A	Coffee With Cream	Pewter	Pewter	SW 9541 Snow White
109	QQ	Up	B	Sunlight Blue	Pewter	Pewter	SW 9541 Snow White
110	King	Down	A	Rose Dust	Pewter	Pewter	SW 9541 Snow White
111	King	Up	B	Filtered Gold	Pewter	Pewter	SW 9541 Snow White
112	QQ	Down	A	Misty Emerald	Pewter	Pewter	SW 9541 Snow White
113	QQ	Down	C	Sunlight Blue	Pewter	Pewter	SW 9541 Snow White
114	QQ	Up	C	Rose Dust	Pewter	Pewter	SW 9541 Snow White
115	King	Down	C	Filtered Gold	Pewter	Pewter	SW 9541 Snow White
116	King	Up	C	Sunlight Blue	Pewter	Pewter	SW 9541 Snow White
117	QQ	Down	C	Rose Dust	Pewter	Pewter	SW 9541 Snow White
118	QQ	Up	C	Filtered Gold	Pewter	Pewter	SW 9541 Snow White
119	King	Down	C	Misty Emerald	Pewter	Pewter	SW 9541 Snow White

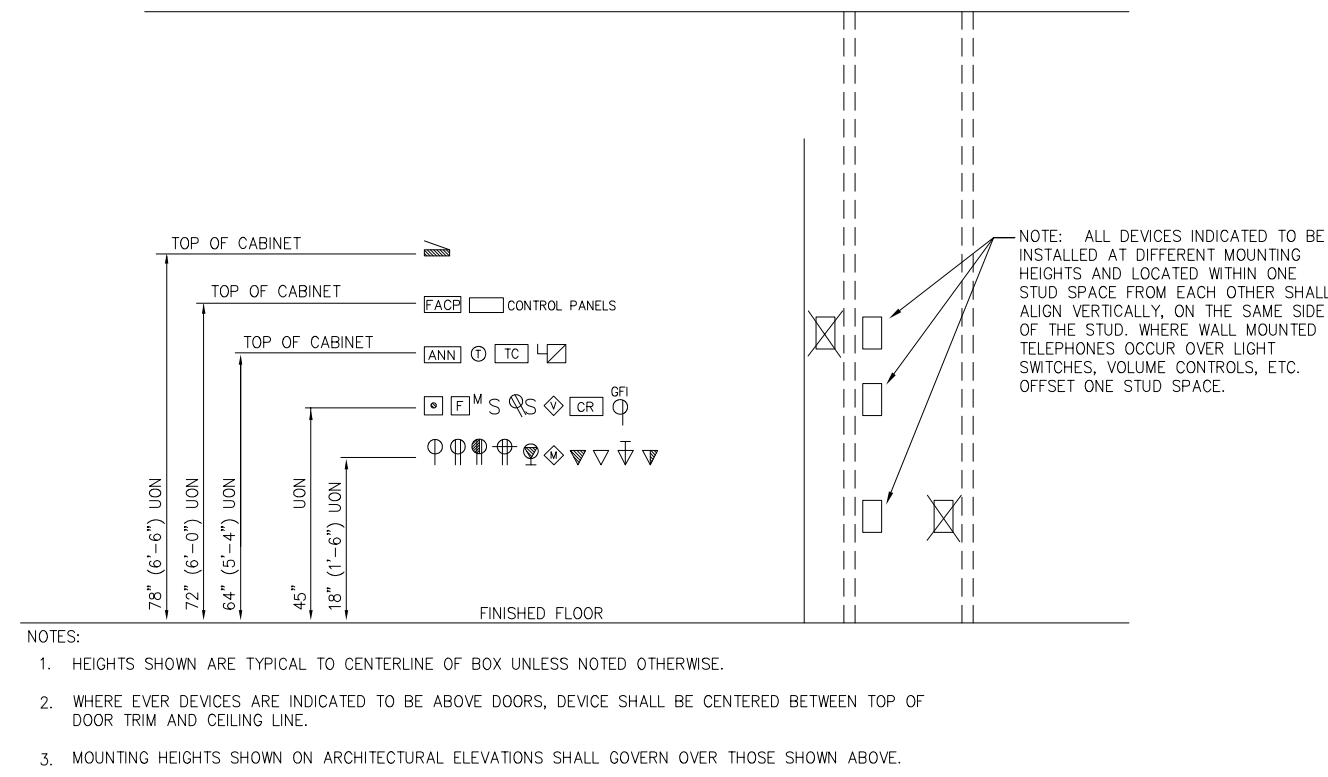


Fire Separation - Section 705.8 - Openings
3' to 5' separation - unprotected, sprinkled - 15% opening allowed
Total wall face = 151.3 SF x 15% = 22.70 SF allowed
Less PTAC opening 16' x 42" = (4.67) SF
Less Windown opening 48" x 50" = (16.67) SF
Remaining opening allowed = 1.36 SF

Container Hotel
**ROOM
MATRIX**

AR-7

SHEET:
DATE: NOV. 7, 2023



Typical Device Mounting Heights
scale: NTC

Electrical Legend

- S — Single Pole Switch
- S3 — Three Way Switch
- S2 — Ceiling Fan / Light Dual Switch
- SD — Dimmer Switch
- SR — Switched Receptacle
- Se — Receptacle Special
- ⊕ — Quad Receptacle
- ⊖ — Duplex Receptacle

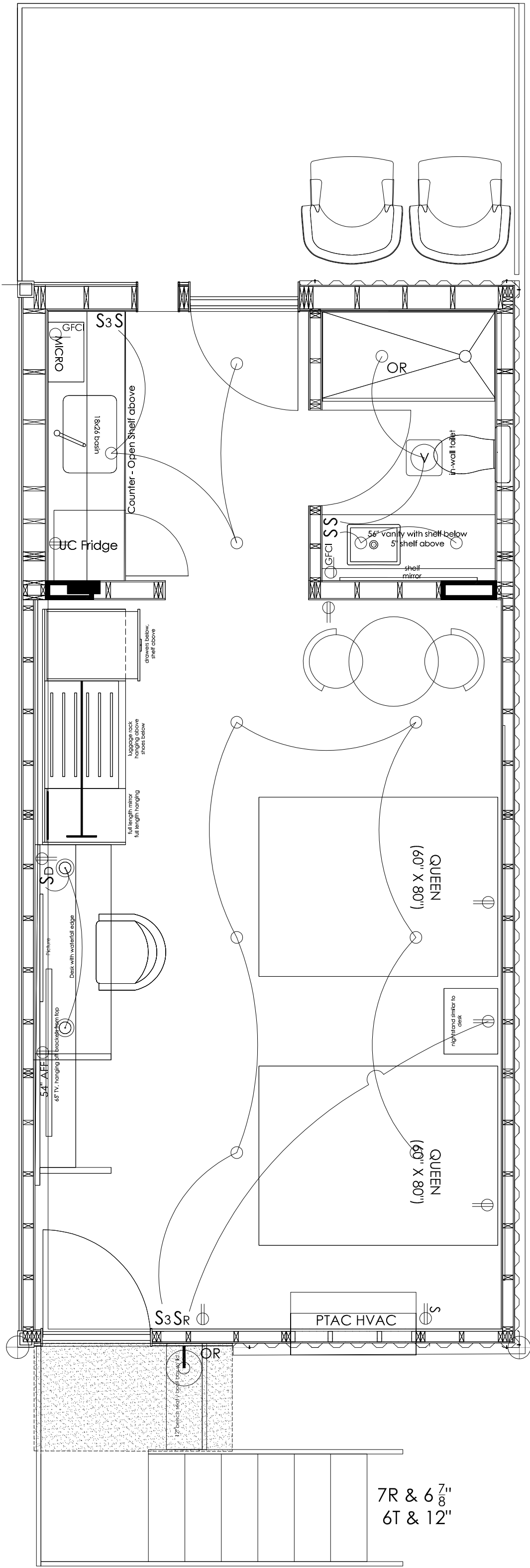
- FLOOR — Floor Mount Duplex Receptacle
- GFCI — GFCI Duplex Receptacle
- ⊕ — Adjustable Art Light (interior)
- — Can Light (interior)
- OR — Outdoor Rated Can Light
- ⊙ — Pendant Light (interior)

- Light Fixture / OR = Outdoor Rated
- Ceiling Fan with Switched Light

- ⊕ — Utility Light
- Light Above Vanity

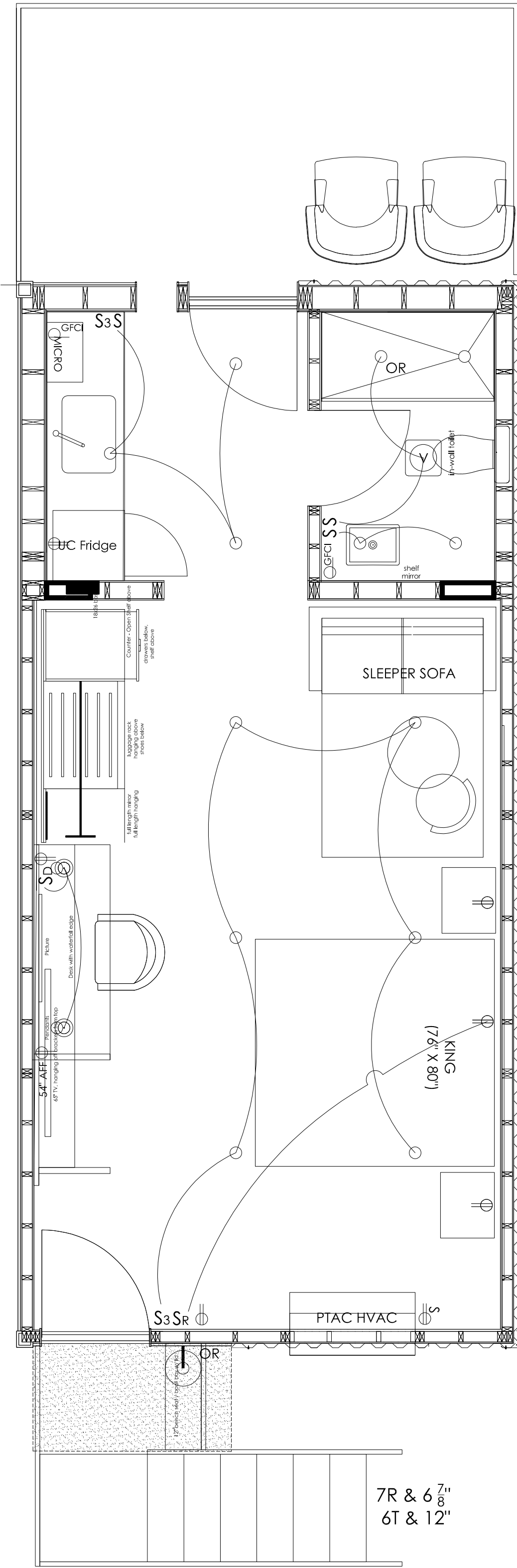
- SD — 120 V Comb Smoke & CO Detector, Nest or approved equal

- A — Elec Panel (panel A)
- V — COMBI LIGHT / VENT FAN



Floor Plan - Double Queen Suite

scale: 1/4" = 1'-0"



Floor Plan - King Suite

scale: 1/4" = 1'-0"

Container Hotel

Electrical

REVISIONS			
no.	description	by	date

SHEET:
DATE: NOV 7, 2023

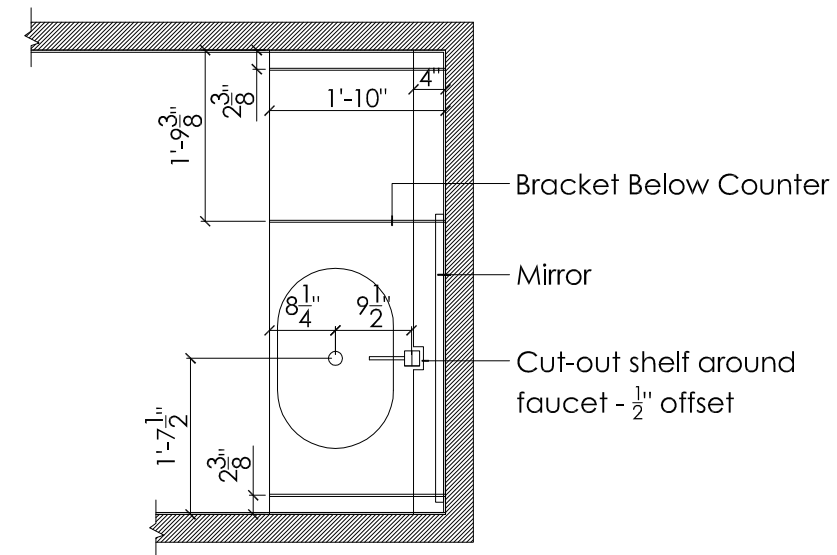
AR-8



scale: 1/2" = 1'- 0"



scale: 1/2" = 1'- 0"



scale: 1/2" = 1'- 0"

Container Hotel

CASE GOODS/MILLWORK

REVISIONS			
no.	description	by	date

AR-9

SHEET:
 DATE: NOV 7, 2023

LEGACY

ENGINEERING, INC

Geotechnical & Materials Engineering and Testing

**REPORT OF GEOTECHNICAL EXPLORATION
FERNANDINA CONTAINER HOTEL
FERNANDINA BEACH, FLORIDA
LEGACY PROJECT NO. 22-1300.1**

Prepared for:

Mr. Chad Grimm
Dynamic Multifamily
2539 Hyde Park Road
Jacksonville, Florida 32210

Prepared by:

Legacy Engineering, Inc.
6415 Greenland Road
Jacksonville, Florida 32258
Phone: 904.721.1100
www.legacyengineeringinc.com

December 13, 2022

LEGACY

ENGINEERING, INC

Geotechnical & Materials Engineering and Testing

December 13, 2022

Mr. Chad Grimm
Dynamic Multifamily
2539 Hyde Park Road
Jacksonville, Florida 32210

Report of Geotechnical Exploration and Engineering Services
Fernandina Container Hotel
Fernandina Beach, Florida 32034
Legacy Project No. 22-1300.1

Dear Mr. Grimm:

As you have requested and authorized, Legacy Engineering, Inc. has completed a geotechnical exploration for the subject project. The exploration was performed to evaluate the general subsurface conditions within the proposed construction areas, and to provide guidelines to facilitate foundation support and earthwork preparation.

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

Sincerely:
Legacy Engineering, Inc.

 Digitally signed by
Joseph Aganon
Date: 2022.12.13
14:58:31 -05'00'

Joseph Aganon, E.I.
Geotechnical Engineer



Digitally signed
by John E. Ellis,
II, P.E., S.I.
Date: 2022.12.13
12:00:06 -05'00'

John E. Ellis, II, P.E.
Licensed, Florida No. 45202

Table of Contents

1.0	PROJECT INFORMATION	1
1.1	SITE LOCATION AND DESCRIPTION	1
1.2	PROJECT DESCRIPTION.....	1
2.0	FIELD EXPLORATION.....	1
2.1	SOIL BORINGS	1
3.0	LABORATORY TESTING	2
3.1	INDEX TESTING	2
4.0	GENERAL SUBSURFACE CONDITIONS	2
4.1	GENERAL SOIL PROFILE.....	2
4.2	GROUNDWATER LEVEL.....	2
5.0	BUILDING AREA RECOMMENDATIONS	3
5.1	GENERAL	3
5.2	BUILDING FOUNDATIONS	3
5.2.1	BEARING PRESSURE.....	4
5.2.2	FOUNDATION SIZE	4
5.2.3	BEARING DEPTH.....	4
5.2.4	BEARING MATERIAL.....	4
5.2.5	SETTLEMENT ESTIMATES	4
5.3	SITE PREPARATION FOR SHALLOW FOUNDATIONS.....	5
5.4	GENERAL EARTHWORK PRECAUTIONS	6
6.0	LIMITATIONS.....	7
APPENDIX A		I
<i>FIELD EXPLORATION PLAN</i>		<i>I</i>
<i>GENERALIZED SOIL PROFILES.....</i>		<i>I</i>
<i>TEST BORING RECORDS</i>		<i>I</i>
APPENDIX B		II
<i>KEY TO SOIL CLASSIFICATION</i>		<i>II</i>
<i>FIELD AND LABORATORY TEST PROCEDURES</i>		<i>II</i>

1.0 PROJECT INFORMATION

1.1 Site Location and Description

The site for the subject project is located northwest of the intersection of Broome Street and North 2nd Street in Fernandina Beach, Florida. The subject site is lightly vegetated with grass. To the east of the subject site along the east side of North 2nd Street are residential structures. Adjacent properties to the north are occupied by a single-story masonry and steel framed warehouse building. The existing railroad tracks and then the Amelia River are located to the west of the subject site.

1.2 Project Description

Project information was provided during correspondence with you. We were provided with a copy of the site plan dated May 13, 2022. The provided document shows the layout of the proposed construction, property boundary limits, and adjacent roadway. Based on the information provided to us, we understand the proposed project will consist of constructing a shipping container hotel at the subject site. The units will consist of a modified shipping container with a wood-framed extension/addition along the length of the container. The units will be constructed such that they will be off-grade and will be supported on conventional concrete footings and piers, or auger-grouted piling. Each of the off-grade units will be accessed with a wood-framed stairway. It is desired to perform a geotechnical exploration to provide recommendations for the support of the container hotel. We have not been provided with detailed loading information; therefore, we have assumed the wall, column, and floor slab loads will not exceed 3.0 klf, 40.0 kips, and 40 psf, respectively. We have assumed fill heights above the existing grades will be limited to 2 feet.

2.0 FIELD EXPLORATION

2.1 Soil Borings

In order to explore the subsurface conditions within the areas of the proposed structures, three (3) Standard Penetration Test (SPT) borings (B4 through B6) were conducted to depths of 25 feet below the existing grades with the exception of B4 being conducted to a depth of 50 feet. The borings were located using a differentially corrected Global Positioning System (GPS) unit and should be considered accurate to the degree implied by the method utilized. The borings were conducted in accordance with ASTM D 1586. The subsurface conditions encountered at each boring location, and the recorded groundwater levels, are presented on the Generalized Soil Profiles and Test Boring Records in Appendix A.

3.0 LABORATORY TESTING

3.1 Index Testing

Soil samples recovered during the field exploration were visually classified in accordance with ASTM D 2488 and limited laboratory testing consisting of fines, organic, and moisture content tests were performed to assist in classification and estimation of soil properties. The results of the testing are presented on the Test Boring Records in Appendix A.

4.0 GENERAL SUBSURFACE CONDITIONS

4.1 General Soil Profile

The boring locations and general subsurface conditions that were encountered are graphically illustrated on the Field Exploration Plan and Generalized Soil Profiles. A relatively detailed description of the encountered subsurface conditions is presented on the Test Boring Records. 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 encountered loose to very loose fine sands with silt (SP-SM) to depths of up to 12 feet below the existing ground surface, underlain with loose to very loose silty fine sands (SM) to the boring termination depths. As an exception, boring B5 encountered layers of firm and very loose fine sands with silt (SP-SM) containing some to many organic materials at depths of 3 to 4.5 feet and 7.5 to 12 feet below the existing ground surface. Due to the very loose soils encountered, boring B4 was extended to a depth of 50 feet below the existing ground surface to determine the bearing level for a deep foundation system if required. Boring B4 encountered dense fine sands at depths of 42.5 to 50 feet below the existing ground surface. Topsoils were encountered within the upper 2 to 6 inches at the boring locations.

4.2 Groundwater Level

The groundwater level was measured at the boring locations, subsequent to boring completion, at depths varying between 2.5 and 3.1 feet below the existing grades. The depth of the groundwater level encountered at each boring location is presented on the Generalized Soil Profiles and the Test Boring Records. The groundwater table will fluctuate depending on seasonal variations, adjacent construction, surface water runoff, etc. 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 very loose silty fine sands encountered at the depths of 11.5 feet and below will experience some settlement when exposed to fill heights of greater than 3 feet and/or heavy concentrated loads. We have previously observed excessive slab settlement on some of the port projects located just north of this site due to the heavy floor loads. These projects had similar subsurface soil conditions with organic soils and/or very loose silty fine sands and/or sandy silts located in the soil profile.

It is anticipated that the container units will be lightly loaded, and therefore will not produce loading conditions that will cause settlement of these very loose silty fine sands. For this project, it is our opinion that if the proposed fill heights can be maintained at 2 feet or less, then the units can be supported on conventional shallow foundations.

Another issue encountered at the site were the fine sands with silt and some organic materials encountered at boring B5 at depths of 3 to 4.5 feet below the existing ground surface. These soils should be over-excavated and removed from within the footing areas. However, they are located just below the existing groundwater levels, which should not allow these organic materials to decompose as opposed to organic materials which are located at or above the existing groundwater levels. These soils were also observed to be in a firm condition, which also reduces the possibility of future settlement. Since these shallow depth organic materials were only encountered at boring B5, we would recommend that some additional auger borings or test pits be performed in the areas of the future footing areas to determine if other organic materials may or may not be located within these areas. The additional soils exploration may determine if there are additional organic materials located within the upper soils or the soils exploration may demonstrate that the organic materials encountered at boring B5 were an anomaly.

5.2 Building Foundations

Based on the results of the subsurface exploration, we consider the subsurface conditions at the site adaptable for support of the proposed structure 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 12 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 structure 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 structure 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 structure.

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 assumed 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 structure to be approximately one 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, it is anticipated that differential settlements will be approximately one-half of the total settlement.

5.3 Site Preparation for Shallow Foundations

We recommend the following site preparation guidelines for the building area:

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, topsoil, and other deleterious materials within and 5 feet beyond the perimeter of the proposed structure. Expect initial clearing and grubbing to depths of approximately 6 inches. Over-excavate and remove any organic materials encountered within the footing areas and to a distance of at least 2 feet beyond the edge of the footings. Replace these over-excavated materials with compacted fill materials (See subsection 6 below).
4. Compact the exposed surface using a drum roller. The vibrator roller should have a minimum drum diameter of 4 feet and static weight of 7 tons. 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 and grubbing) within the building 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 2,500 square feet of the proposed building area (minimum of three locations).
6. Place structural fill in loose lifts not exceeding a thickness of 8 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 2,500 square feet of the 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.

5.4 General Earthwork Precautions

1. Test the compacted surface for density at a frequency of not less than one test per 10,000 square feet of pavement area (minimum three locations).
2. Place structural fill in loose lifts not exceeding 8 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, with the exception that densities of at least 98 percent should be obtained in the upper 12 inches below base course.

3. Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified, and the existing conditions of the structures be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures and Legacy Engineering, Inc. should be contacted immediately. It is recommended the vibratory roller remain a minimum of 75 feet from existing structures. Within this zone, use of a vibratory roller operating in the static mode is recommended.
4. Perform density tests within each lift of fill at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of three locations).
5. Place and compact base course until densities of at least 100 percent of the modified Proctor maximum dry density are achieved. Compaction operations should be conducted with the drum roller noted above.
6. Perform density tests within the base course at a frequency of not less than one test per 10,000 square feet of pavement area (minimum of three locations).

6.0 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. Legacy Engineering, Inc. is not responsible for independent conclusions or interpretations based on the information presented in this report.

APPENDIX A

FIELD EXPLORATION PLAN
GENERALIZED SOIL PROFILES
TEST BORING RECORDS



Approximate Boring Locations



FIELD EXPLORATION PLAN

Reference

Plan Created Using Provided Plan

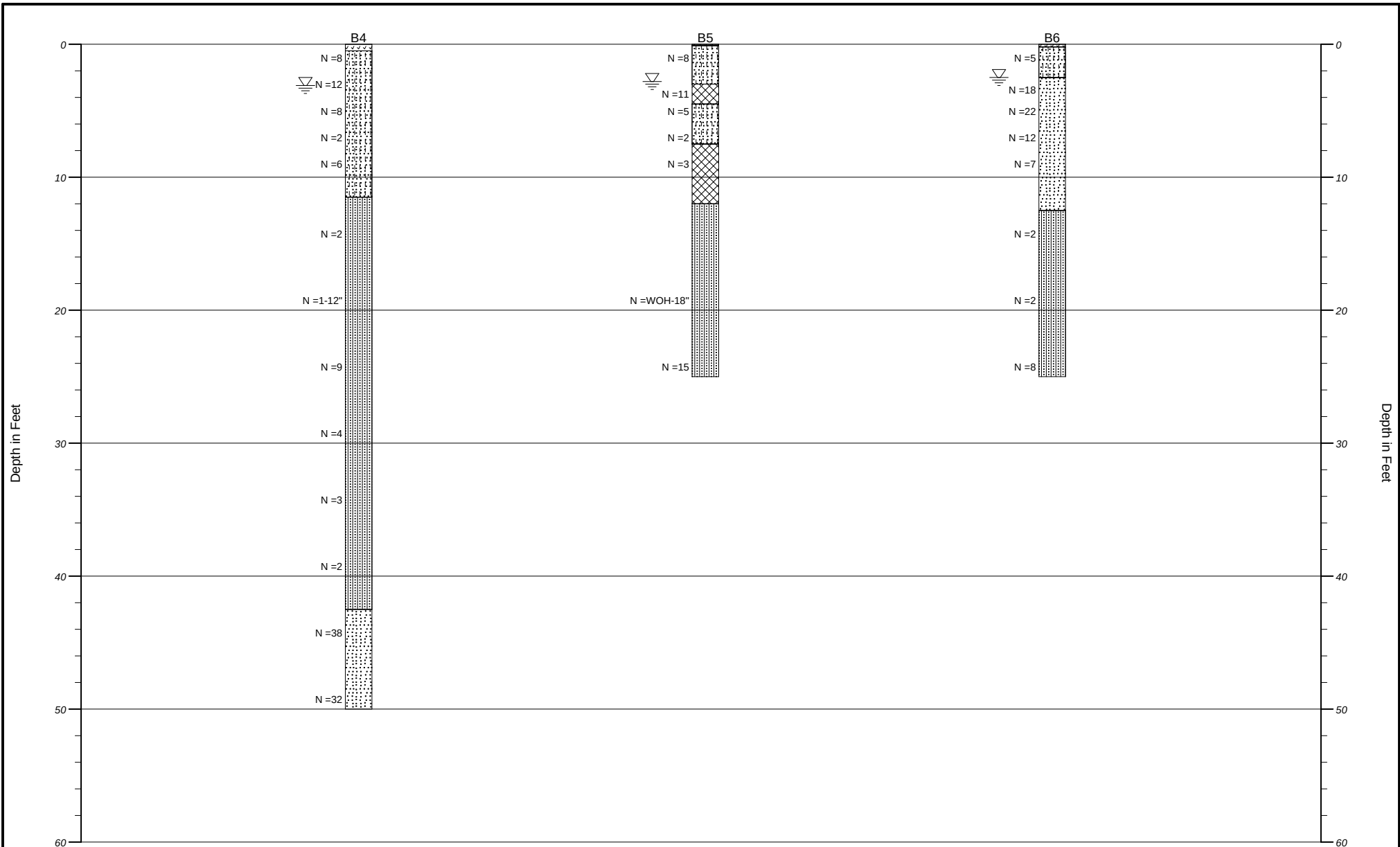
Field Exploration Plan
Container Hotel (GDG #22-122)
 Fernandina Beach, Florida

LEGACY
Engineering, Inc.
Geotechnical & Materials Engineering & Testing

Date: 12/08/2022

Proj. No.: 22-1300.1

Figure 1



Strata symbols



Topsoil



Fine SAND with Silt (SP-SM)



Silty Fine SAND (SM)



Fine SAND (SP)



Silty Fine SAND with Many Organic Materials (PT)



Ground Water Depth

Legacy Engineering, Inc.		
GENERALIZED SOIL PROFILE		
HORIZONTAL SCALE:	DRAWN BY/APPROVED BY	DATE DRAWN
VERTICAL SCALE: 1"=10'	JEEII/JEEII	12/13/2022
Container Hotel (GDG #22-122)		
1231 Front Street Fenandina Beach, Florida		
PROJECT NO. 22-1300		FIGURE NUMBER 2

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B4

Sheet 1 of 4

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 3.1 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (6 Inches)			1	
	1	Loose to Firm Brown Fine SAND with Silt Trace Rock (SP-SM)		1	3	8
	2				5	
	3			2	5	12
	4				3	
	5			3	5	8
	6				3	
	7			4	2	2
	8				1	
	9			5	1	6
	10				3	
	11				4	
	12	Very Loose Gray Silty Fine SAND with Trace Shell (SM)				
	13					
	14			6	WOH-6"	
	15				1	2

REMARKS:

BORING & SAMPLING: ASTM D1586/CORE DRILLING: ASTM D2113



Ground Water Table

BLOW COUNT IS THE NUMBER OF BLOWS OF 140 LB. HAMMER
FALLING 30 IN. REQUIRED TO DRIVE 1.4 IN. I.D. SAMPLER 1 FT.

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 2 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	16	Very Loose Gray Silty Fine SAND with Trace Shell (SM), Continued				
	17					
	18					
	19			7	1 1-12"	1-12"
	20					
	21					
	22					
	23					
	24			8	4 5 4	9
	25					
	26	Fines Content: 14.3%				
	27					
	28					
	29			9	2 2 2	4
	30					
	31					

LEGACY

TEST BORING RECORD

JOB NO. 22-1300

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 3 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	32	Very Loose Gray Silty Fine SAND with Trace Shell (SM), Continued		10		3
	33					
	34				1	
	35			11	1	2
	36				2	
	37			12		38
	38					
	39					
	40					
	41					
	42	Dense Gray Fine SAND (SP)		13		
	43					
	44			14	5	
	45				15	
	46				23	

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

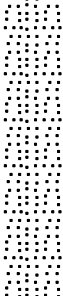
TEST BORING RECORD

JOB NO. 22-1300

Project Container Hotel (GDG #22-122)

BORING NO. B4

Sheet 4 of 4

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	47	Dense Gray Fine SAND (SP), Continued		13		32
	48					
	49				12	
	50				16	
	50	Boring Terminated at 50 Feet		13	16	32
	51					
	52					
	53					
	54					
	55					
	56					
	57					
	58					
	59					
	60					
	61					
	62					

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ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B5

Sheet 1 of 2

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

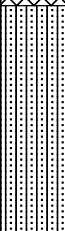
Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 2.8 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (2 Inches)			2	
	1	Loose to Firm Brown Fine SAND with Silt Trace Glass (SP-SM)		1	3 5 5 4 4	8
	2					
	3	Firm to Loose Dark Brown SAND with Silt and Some Organics (PT) Fines Content: 10.9% Organic Content: 7.2%		2	7 4 5	11
	4					
	5	Loose to Very Loose Dark Brown Fine SAND with Silt (SP-SM)		3	3 2 2	5
	6				1-12"	
	7			4	1 1	2
	8	Very Loose Dark Brown Fine SAND with Silt and Many Organics (PT) Fines Content: 8.8% Organic Content: 20.3% Fines Content: 9.8% Organic Content: 8.4%		5	1 2 1 2	3
	9					
	10					
	11					
	12	Very Loose to Firm Gray Silty Fine SAND with Trace Shells (SM)				
	13					
	14			6	1-12"	
	15					

Geotechnical & Materials Engineering and Testing

JOB NO. 22-1300

Project Container Hotel (GDG #22-122) Sheet 2 of 2

BORING NO. B5

Sheet 2 of 2

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	16	Very Loose to Firm Gray Silty Fine SAND with Trace Shells (SM), Continued				WOH-18"
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26	Boring Terminated at 25 Feet				15
	27					
	28					
	29					
	30					
	31					

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ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

TEST BORING RECORD

JOB NO. 22-1300

BORING NO. B6

Sheet 1 of 2

Boring Begun 11/23/2022

Boring Completed 11/23/2022

Driller Christian R.

Engineer John E. Ellis II

Project Container Hotel (GDG #22-122)

Boring Location 1231 Front Street Fernandina Beach, Florida

Ground Elevation N/A Datum N/A Groundwater Depth 2.5 Feet

Length of Casing Set 5 Feet Casing Size 4 Inches

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	0	Topsoil (3 Inches)			1	
	1	Loose to Firm Brown Fine SAND with Silt Trace Rock (SP-SM)		1	2	5
					3	
	2				7	
					7	
	3	Firm to Loose Gray Fine SAND (SP)		2	9	18
					9	
	4				6	
					7	
	5			3	9	22
					13	
	6				8	
					5	
	7			4	6	12
					6	
	8				5	
					3	
	9			5	3	7
					3	
	10				4	
					3	
	11					
	12					
	13					
	14	Very Loose To Loose Silty Fine SAND with Some Shells (SM)		6	1	2
					1	
	15				1	

REMARKS:

BORING & SAMPLING: ASTM D1586/CORE DRILLING: ASTM D2113



Ground Water Table

BLOW COUNT IS THE NUMBER OF BLOWS OF 140 LB. HAMMER
FALLING 30 IN. REQUIRED TO DRIVE 1.4 IN. I.D. SAMPLER 1 FT.

LEGACY

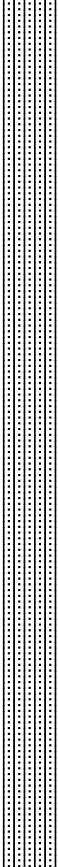
TEST BORING RECORD

JOB NO. 22-1300

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

Project Container Hotel (GDG #22-122) BORING NO. B6
Sheet 2 of 2

ELEV. (FT)	DEPTH (FT)	MATERIAL DESCRIPTION	SOIL SYMBOL	SAMPLE NO.	STANDARD PENETRATION TEST	
					BLOWS / 6-INCH	BLOW COUNT
	16	Very Loose To Loose Silty Fine SAND with Some Shells (SM), Continued		7		2
	17					
	18					
	19				1	
	20				1	
	21				1	
	22					
	23					
	24				2	
	25				3	
	25	Boring Terminated at 25 Feet		8	5	8
	26					
	27					
	28					
	29					
	30					
	31					

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

LEGACY ENGINEERING, INC
6415 GREENLAND ROAD
JACKSONVILLE, FL 32258

904-721-1100 OFFICE
904-722-1100 FAX

SUMMARY OF LABORATORY INDEX TEST RESULTS

Container Hotel (GDG #22-122)
Fernandina Beach, Florida
Legacy Engineering Project No. 22-1300.1

Boring No.	Sample No.	Depth Range, Feet		Fines Content ¹	Moisture Content ²	Organic Content ³	Unified Soil Classification
		From	To				
B4-8	8	23.5	28.5	14.3%	32.4%		SM
B5-2	2	2	4	10.9%	36.3%	7.2%	PT
B5-4	4	6	8	8.8%	99.9%	20.3%	PT
B5-5	5	8	13.5	9.8%	54.9%	8.4%	PT

Notes: 1. Fines content testing performed in accordance with ASTM D1140

2. Performed in accordance with ASTM D2216

3. Performed in accordance with ASTM D2974

APPENDIX B

KEY TO SOIL CLASSIFICATION

FIELD AND LABORATORY TEST PROCEDURES

LEGACY

ENGINEERING, INC.

Geotechnical & Materials Engineering and Testing

KEY TO SOIL CLASSIFICATION

CORRELATION OF PENETRATION WITH RELATIVE DENSITY & CONSISTENCY

SANDS AND GRAVEL	
BLOW COUNT	RELATIVE DENSITY
0-4	VERY LOOSE
5-10	LOOSE
11-20	FIRM
21-30	VERY FIRM
31-50	DENSE
OVER 50	VERY DENSE

SILTS AND CLAYS	
BLOW COUNT	CONSISTENCY
0-2	VERY SOFT
3-4	SOFT
5-8	FIRM
9-15	STIFF
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.

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.

Moisture Content

The moisture content of the sample tested was determined in general accordance with ASTM D 2216. The moisture content is the actual moisture content of the sample as sampled in the field during the performance of the soil boring.

Fines Content

The percent fines of material passing the No. 200 mesh sieve of the sample tested was determined in general accordance with ASTM D 1140. The percent fines are the soil particles in the silt and clay size range.

Organics Content

The organics content of the sample tested was determined in general accordance with ASTM D 2974. The organics content is the percent of loss of material of an oven-dried sample of material after the sample has been heated in a muffle furnace to 440 °C.



Timothy Poynter
The Crossings at Amelia, LLC.
960194 Gateway Blvd 101
Fernandina Beach, FL 32034

Sent Via Email to Project Team

Applicant Name: **Matthew Lahti; Gulfstream Design Group, LLC**
Project Description: **Change of Use – Hotel**
Location: 231 Front Street
PIN(s): 00-00-31-1800-0003-0010
TRC Case Number: **TRC 2024-0001**

Mr. Lahti,

The City of Fernandina Beach received your request for site plan review on January 5, 2024. 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, January 25, 2024, 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,

Daphne Forehand
TRC Coordinator



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. This is your “sign off” for issuance of the Local Development Order (LDO) once all departments have signed off.
- Add name of reviewer and today’s date

1ST ROUND REVIEW COMMENTS:**PLANNING**

☒ The Planning & Conservation Department has reviewed the submittal and noted the following comments:

- Landscape plan (L-1) shows 13 palms (3 = 1), 1 holly, and 8 oaks totaling 13 shade trees being planted. This lot requires 17 shade trees. Crape myrtles do not count as shade trees. Please revise showing an additional 4 shade trees being planted. Dn 1/8/24

OR

☐ All previous comments have been addressed and the Department of Planning & Conservation approves issuance of a local development order.

Name of Reviewer: Planning Staff

Today’s Date: Select Date

BUILDING

☐ The Building Department has reviewed the submittal and noted the following comments:

- Enter comments here

OR

☐ All previous comments have been addressed and the Building Department approves issuance of a local development order.

Name of Reviewer: First Last

Today’s Date: Select Date

UTILITIES, STORMWATER, & STREETS

☒ The Public Works Department has reviewed the submittal and noted the following comments:

- Please provide the cut/fill volume for the proposed site grading. The net fill and compensatory storage needs to be evaluated for flood plain compliance.
- Please clarify why the existing 18” RCP is being replaced with a 15” RCP (GD-1 to GD-19).
- Please provide a detail for the infiltration system below the parking area demonstrating filter fabric installed around the perimeter to preserve void space.



- The Geotech Report indicates that the observed water table is 2.5' to 3.1' but does not provide a specific estimate for the seasonal high-water level. Please have the Geotechnical engineer include this instead of the provided language regarding "significant change".
- It appears some of the elements for the underdrain/infiltration extend below the observed water level. Please clarify this.
- Please note that the lift station shall remain privately owned and maintained.
- Additional information will be provided to determine if gravity sewer would be an option.

OR

☐ All previous comments have been addressed and the Public Works Department approves issuance of a local development order.

Name of Reviewer: Victoria Guadagnino

Today's Date: Friday, January 12, 2024

CODE ENFORCEMENT

☒ The Code Enforcement Department has reviewed the submittal and noted the following comments:

- No comments provided as of 1/19/24

OR

☐ All previous comments have been addressed and the Code Enforcement Department approves issuance of a local development order.

Name of Reviewer: First Last

Today's Date: Select Date

FIRE

☒ The Fire Department has reviewed the submittal and noted the following comments:

- No Comments

OR

☐ All previous comments have been addressed and the Fire Department approves issuance of a local development order.

Name of Reviewer: Jason Higginbotham

Today's Date: Thursday, January 11, 2024

Print

Technical Review Committee: Application - Submission #12986

Date Submitted: 12/21/2023

Technical Review Committee: Application

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

Fees

☐

Initial submittal + two submittals of full site plans. \$400 + 2% of the project construction cost (whichever is greater) for up to a maximum of \$4,400.

☐

3rd and subsequent resubmittals. 1/2 of original application fees

☐

Engineering Review (Consultant Hourly Rate)

2024 Meeting Calendar



In observance of Thanksgiving on November 24, the TRC Regular Meeting is moved up to November 17.

IMPORTANT NOTES

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

****Please note that, unless otherwise indicated, the TRC meetings are scheduled as the following:**

TRC Applications are reviewed at 10:00 AM on the 4th Thursdays of each month in City Hall Chambers (204 Ash Street).**

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

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

The LDC is available for review at

www.fbf.us/LDC

Application Requirements

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

Key Contacts

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

 **TRC Departments**
Graphic

PROJECT INFORMATION

Submission Type*

Initial Submittal ▼

NOTICE

3rd and all subsequent submissions will be charged a fee of 1/2 the original application fees.

Case Number***PROPERTY INFORMATION**

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

Site Address***City*****State*****Zip*****Parcel ID #(s)****Lot****Block****Subdivision****Zoning District**

C-3 ▼

Future Land Use Designation*

Central Business District ▼

Overlay District*

None ▼

Size of Property (acres)***Present Property Use*****Wetlands***

No ▼

Flood Zone*

X, area of minimal fl ▼

Coastal Construction Control Line (CCCL)*

No ▼

OWNER OF RECORD

As recorded with the Nassau County Property Appraiser

First Name*

Spurgeon

Last Name*

Richardson

Company (if applicable)

Park Place on Atlantic, LLC

Mailing Address*

608 Ocean Club Court

City*

Fernandina Beach

State*

FL

Zip*

32034

Telephone Number*

904-261-8819

Email Address*

spurgeon.richardson@gmail.com

OWNER'S AGENT

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

First Name

Asa

Last Name

Gillette

Company (if applicable)

Gillette & Associates, Inc.

Mailing Address

31 South 4th Street, Suite 1

City

Fernandina Beach

State

Florida

Zip

32034

Telephone Number

9042618819

Email Address

tricia@gilletteassociates.com

PROJECT INFORMATION

Project Type*

Site Plan Review▼

Project Name

Park Place on Atlantic

Proposed Access Road*

North 11th Street

Rd Maintenance Jurisdiction*

City Maintained▼

Project Estimated Cost*

450,000

Description of Request*

3 story-33 residential units and the 4th floor to be 9, 993 sf of commercial office space

Site Plan Review Checklist



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



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



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



A vicinity map showing the location of the property.



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



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



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



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



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



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



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



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



Elevations of all proposed structures.



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



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



A tree survey showing protected trees, proposed replacement trees, if required, and landscaping and buffering. (See Section 4.05.00.)



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



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

provision of the LDC applicable to the underlying zoning district.

School Concurrency

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

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

Certification*

A summary block containing:

- ☒ Land use category from the Future Land Use Map in the comprehensive plan;
- ☐ By signing below, I certify that the information contained in this application is true and correct to the best of my knowledge at the time of the application.
- ☒ Zoning district;
- ☐ I acknowledge that I understand and have complied with all of the submittal requirements and procedures.
- ☐ Total acreage;
- ☐ Total square footage for non-residential uses;

Applicant First Name*

Gillette

Applicant Last Name*

and Associates

Today's Date*

12/21/2023

Upload Supporting Documentation*

Park Place site EYM 12.20.2023.pdf

Upload 2

19986.pdf

Upload 3

Park Place Drainage Report_121523.pdf

Upload 4

Deed.pdf

Upload 5

Deed 2.pdf

Upload 6

sunbiz.pdf

Upload 7

Shall contain the information

City of FB logo

NEW Reflex

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

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

DEPARTMENT OF PLANNING & CONSERVATION

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

204 Ash Street | Fernandina Beach, FL 32034 | 904 310-3480 |

www.fbfl.us/planning

o Tree Protection Plan (Section 4.05.09.)

o Landscape Plan (Section 4.05.00.)

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

o Signage Plan (Section 5.03.00.)

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

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

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



Gillette & Associates, Inc.

Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

AGENT AUTHORIZATION

I, Spurgeon Richardson of Park Place on Atlantic Ave. LLC, the owner the following property(s) do hereby authorize, Gillette & Associates, Inc. to act as my Agent in conjunction with all site plan applications and any other Local, State and/or Federal development permits necessary for development of the following property, without any further notice.

Property Id Number(s): 00-00-31-1800-0052-0062; 00-00-31-1800-0052-0061

Location: 1015 Atlantic Ave and 21 North 11th St. Fernandina Beach

[Signature]
Signature

12/26/2023
Date

904-588-2598
Telephone Number

STATE OF FLORIDA
COUNTY OF Nassau

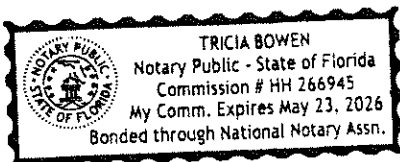
Subscribed and sworn to before me this 26th day of December,
2023.

Who is personally known to me ☒ or has produced identification

Tricia Bowen
Notary Public: Signature

Tricia Bowen
Printed Name

My Commission Expires: 5/23/26



31 SOUTH 4TH STREET • AMELIA ISLAND, FLORIDA 32034 PHONE: (904) 261-8819

Prepared By: Andrea E. Lennon, P.A.
3391 South Fletcher Avenue

Amelia Island, Florida 32034; Title to the
lands described herein have not been
examined by this firm and no warranty
or representation; Expressed or implied,
is given to the marketability or condition
of the title to the property, the quality of
lands included thereto, the location of the
boundaries or the existence of liens,
encumbrances or unpaid taxes.

Parcel ID No: 00-00-31-1800-0052-0061

Quit Claim Deed

Made this **December 3, 2021** by **Gloria Kanahale, Individually and as Successor Trustee of the Fernandina Land Trust**, 1281 N Ocean Drive Suite #114, Singer Island, Florida 33404 hereinafter called the grantor, to **Park Place on Atlantic Ave, LLC, a Florida limited liability company** whose post office address is: **21 N. 11th St., Fernandina Beach, Florida 32034** hereinafter called the grantee:

(Whenever used herein the term "grantor" and "grantee" include all the parties to this instrument and the heirs, legal re-presentatives and assigns of individuals, and the successors and assigns of corporations)

Witneseth, that the grantor, for and in consideration of the sum of \$ TEN AND NO/100 DOLLARS (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, does hereby remise, release, and quit claim unto the grantee forever, all the right, title, interest, claim and demand which the said grantor has in and to, all that certain land situate in Nassau County, Florida, viz:

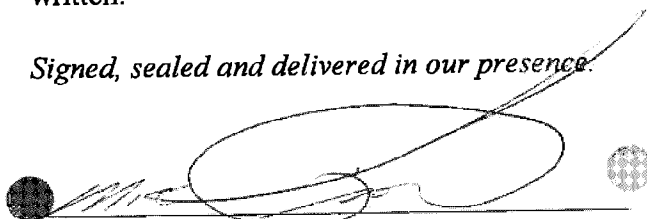
THAT CERTAIN PARCEL OF LAND SITUATE, LYING AND BEING IN THE CITY OF FERNANDINA BEACH, COUNTY OF NASSAU AND STATE OF FLORIDA, AND KNOWN AND DESCRIBED ON THE OFFICIAL PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED, REVISED AND RE-ISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901), BEING THE NORTH ½ OF LOT 6, BLOCK 52, OF THE CITY OF FERNANDINA BEACH, FLORIDA.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of the said grantor, either in law or equity, to the only proper use, benefit and behoof of the said grantee forever.

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written.

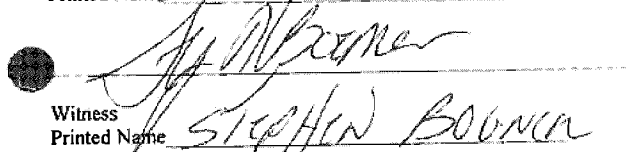
Signed, sealed and delivered in our presence.



Witness

Printed Name

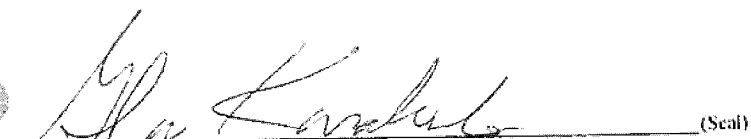
Michael A. Lobato



Witness

Printed Name

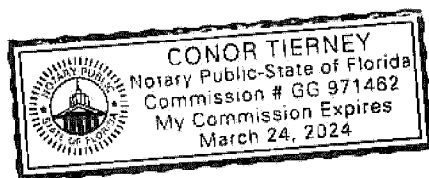
Stephen Bounca

 (Seal)
**Gloria Kanahale, Individually and as Successor Trustee
of the Fernandina Land Trust**

State of Florida

County of Palm Beach

The foregoing instrument was acknowledged before me by means of [X] physical presence or [] online notarization, this 3rd day, of December, 2021, by **Gloria Kanahale, Individually and as Successor Trustee of the Fernandina Land Trust**, who has produced driver license as identification.




Notary Public
Print Name: Conor Tierney
My Commission Expires: 03/24/2024

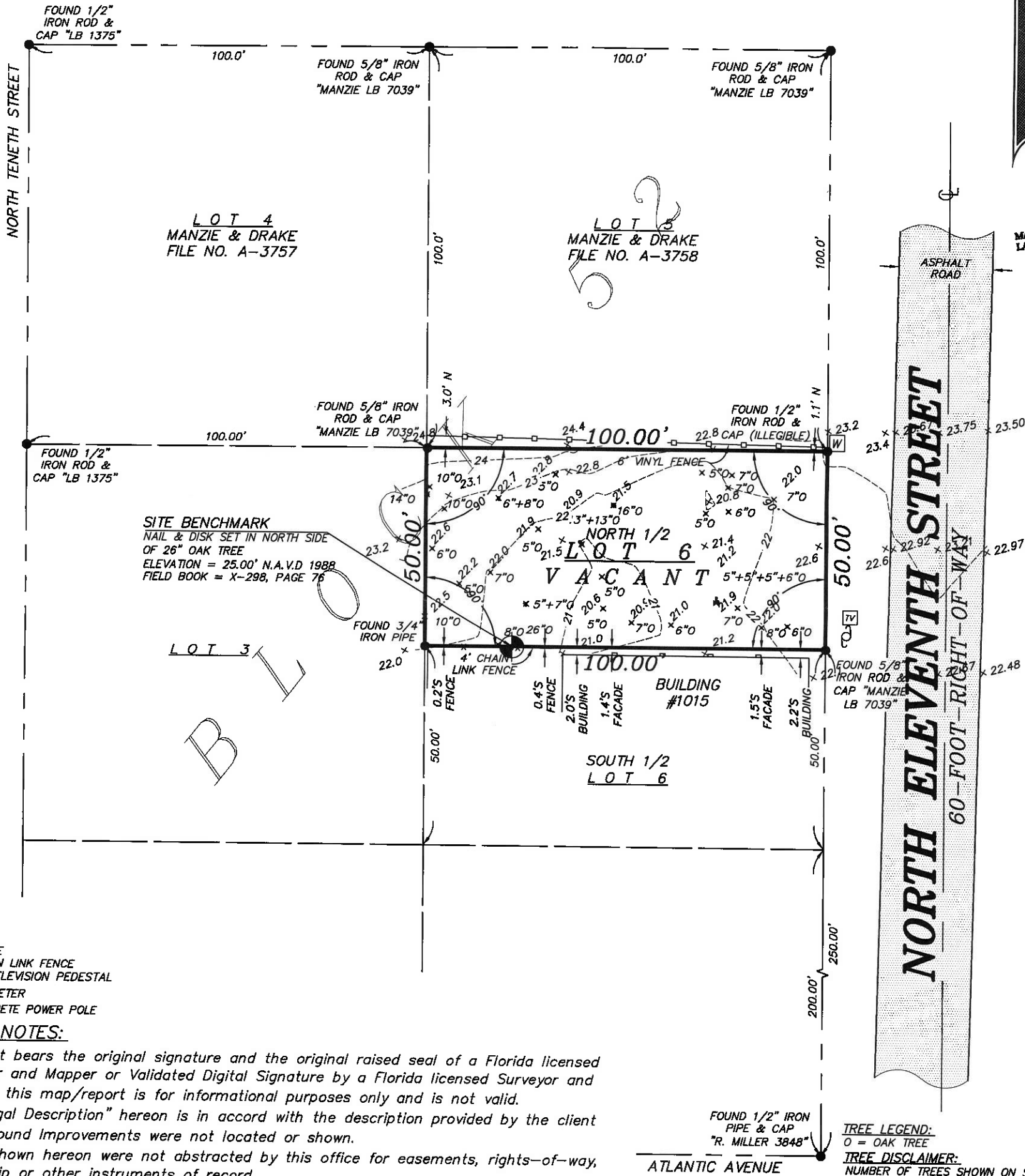
MAP OF BOUNDARY & TOPOGRAPHIC SURVEY

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 KNOWN AND DESCRIBED 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), AS:
THE NORTH 1/2 (N1/2) OF LOT SIX (6), IN BLOCK FIFTY-TWO (52).

CERTIFIED TO:
FIRST AMERICAN LAND TITLE COMPANY
ANDREA F. LENNON, P.A.
SWEETPEA HOLDINGS, LLC
PETER TRIOLO
GLORIA KANNALELE

ALACHUA STREET

60-FOOT-RIGHT-OF-WAY



- LEGEND**
- ℄ = CENTERLINE
 - x-x- = CHAIN LINK FENCE
 - TV = CABLE TELEVISION PEDESTAL
 - W = WATER METER
 - ⊙ = CONCRETE POWER POLE

- SURVEY NOTES:**
- 1) Unless it bears the original signature and the original raised seal of a Florida licensed Surveyor and Mapper or Validated Digital Signature by a Florida licensed Surveyor and Mapper, this map/report is for informational purposes only and is not valid.
 - 2) The "Legal Description" hereon is in accord with the description provided by the client
 - 3) Underground Improvements were not located or shown.
 - 4) Lands shown hereon were not abstracted by this office for easements, rights-of-way, ownership or other instruments of record.
 - 5) Internal lot angles are based on recovered monumentation.
 - 6) The property shown hereon lies within flood zone X per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 12089C 0237 G, dated 08/02/2017.
 - 7) Site Benchmark is as shown hereon.
 - 8) Elevations shown hereon refer to North American Vertical Datum of 1988. (N.A.V.D. '88)
 - 9) The Reference Benchmark is a nail & disk "Manzie LB 7039" found in the north side of a wood power pole at the southwest corner of Lot 4. (Elevation = 28.82' N.A.V.D. 1988)

TREE LEGEND:
O = OAK TREE
TREE DISCLAIMER:
NUMBER OF TREES SHOWN ON SURVEY: 34

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.

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

MICHAEL A. MANZIE, P.L.S. 4069

11/7/23

MANZIE & DRAKE LAND SURVEYING

117 South Ninth Street, Fernandina Beach, FL 32034
(904) 491-5700 FAX (904) 491-5777

Certificate of Authorization Number "LB 7039"

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

SCALE: 1"=30' JOB NO: 19986 DATE: 11/04/2023 CADD: LP
F.B. NO: X-298 PAGE NO: 76 FIELD CREW: JM FILE NO: A-4306

Prepared by and Return to:
Andrea F. Lennon, P.A.
Andrea F. Lennon, P.A.
3391 South Fletcher Avenue
Fernandina Beach, Florida 32034
Our File Number: 21-700

For official use by Clerk's office only

STATE OF Florida) **SPECIAL WARRANTY DEED**
COUNTY OF Nassau)
)

THIS INDENTURE, made this **December 3, 2021**, between **AI Partners LLC, a Georgia limited liability company**, whose mailing address is: 44 Beachwood Road, Fernandina Beach, Florida 32034, party of the first part, and **Park Place on Atlantic Ave, LLC, a Florida limited liability company**, whose mailing address is: 415 Lasalle Suite #300A, Chicago, Illinois 60654, party of the second part,

WITNESSETH:

First party, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other valuable considerations, receipt whereof is hereby acknowledged, does hereby grant, bargain, sell, aliens, remises, releases, conveys and confirms unto second party/parties, his/her/their heirs and assigns, the following described property, to wit:

ALL THOSE CERTAIN LOTS, PIECES OR PARCELS OF LAND SITUATE, LYING AND BEING IN THE CITY OF FERNANDINA BEACH, COUNTY OF NASSAU AND STATE OF FLORIDA, AND KNOWN AND DESCRIBED ON THE OFFICIAL PLAT OF SAID CITY (AS LITHOGRAPHED AND ISSUED BY THE FLORIDA RAILROAD COMPANY IN 1857 AND ENLARGED, REVISED AND RE-ISSUED BY THE FLORIDA TOWN IMPROVEMENT COMPANY IN 1887 AND 1901), AS:

ALL OF LOT 7, THE EASTERLY 93 FEET OF LOT 8 AND THE SOUTH 1/2 OF LOT 6, BLOCK 52, OF THE CITY OF FERNANDINA BEACH, FLORIDA.

Subject, however, to all covenants, conditions, restrictions, reservations, limitations, easements and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any.

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

TO HAVE AND TO HOLD the same in fee simple forever.

AND the party of the first part hereby covenants with said party of the second part, that it is lawfully seized of said land in fee simple: that it has good right and lawful authority to sell and convey said land; that it hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under the party of the first part.

IN WITNESS WHEREOF, first party has signed and sealed these present the date set forth on December 3, 2021.

Signed, sealed and delivered
in the presence of:

**AI Partners LLC, a Georgia limited liability
company**

Mallory M. Carroll
Witness signature

Mallory M. Carroll
Print witness name

Meghann M. Allen
Witness signature

Meghann M. Allen
Print witness name

By: Robert Thomas Burns

Print Name: Robert Thomas Burns

Title: Manager

State of Florida
County of Nassau

The foregoing instrument was acknowledged before me by means of [X] physical presence or [] online notarization, this 3rd day of December, 2021 by Robert Thomas Burns, Manager of AI Partners LLC, a Georgia limited liability company who has produced FL Driver's License as identification.

Meghann M. Allen
Notary Public

Print Notary Name

My Commission Expires: _____

Notary Seal





Civil & Environmental Engineering • Mechanical & Structural Engineering • Construction Management

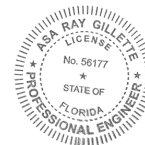
STORMWATER MANAGEMENT EVALUATION

**Park Place on Atlantic
Park Place on Atlantic, LLC
Fernandina Beach, Florida**

BY

**Gillette & Associates, Inc.
20 South 4th Street
Fernandina Beach, FL**

Issue Date: December 15th, 2023



Digitally signed by Asa R. Gillette
DN: cn=Asa R. Gillette, c=US,
o=Gillette & Associates, Inc.,
email=asa@gilletteassociates.com
Date: 2023.12.20 13:44:41 -05'00'

PROJECT DESCRIPTION

The proposed project consists of a (33) unit Condominium, and all associated paved areas incorporated. This project will be constructed on a 0.67-acre parcel of land in Fernandina Beach, Florida. The site will be served by an underdrain gallery system. The system is designed to provide stormwater treatment for the site & new improvements to the site.

EXISTING CONDITIONS

The existing project site contained a vacant gas station, commercial building and associated paved impervious developments. The predeveloped site ranges in elevation from 22.8' +/- to 19.1' +/-, sloping from north to south.

DRAINAGE ANALYSIS

The analysis was conducted for the entire 0.67 acres of improved area. The drainage area is serviced by a Stormtech underdrain gallery, consisting of (120) SC-310 chambers. All run-off from proposed condominium is to be captured and conveyed through gutter and downspout. Additional runoff from grade is to sheet flow to the nearest drainage structure as depicted on the drawings. Details of the underdrain gallery system are included in the Pond Calculations section of this report and on the drawings.

The underdrain gallery system was modeled in MODRET with infiltration volume runoff data being used for development analysis. The MODRET pond calculations were set to meet a 10-year 24-hour storm event. Data from the Geotech Report & geotechnical borings was used in MODRET simulations. The geotechnical borings encountered the groundwater level at 8.00-feet below the surface. The seasonal high groundwater level was calculated at 6.00-feet below the surface, with the surface elevation at 21.00-feet at the time of the boring findings. For the MODRET calculations we used a seasonal high groundwater elevation of 15.00-feet.

Summary of Design:**Post-Development**

Total Drainage Area	0.67 Acres
Top of Chamber Stone Elevation	20.00 ft
Bottom of Chamber Stone Elevation	17.67 ft
Predeveloped (cfs)	3.0400 cfs
Postdeveloped (cfs)	2.0267 cfs

Summary of Design - 10 Year Storm Event

Max Infiltration Rate:	3.599 ft/day
Max Stage Elevation Pond:	19.083 ft
Top of Chamber Stone Elevation:	20.000 ft
Pond Recovery Time:	70.287 hrs
Outfall:	North 11 th Street

DRY POND CALCULATIONS

Park Place 11th Street- Vault System Pre-Developed

Basin Calculations

Basin 1

Composite Cn

Total Drainage Area = 29293.00 SF

Impervious Area = 19490.00 SF

Pond Area = 0.00 SF

Pervious Area = 9803.00 SF

Impervious Cn = 98.0

Pond Cn = 100.0

Pervious Cn = 74.0

Composite Cn = 89.9

Time of Concentration, Tc

Minimum Time of Concentration = 10 min.

Length of Overland Flow @ 1ft/sec. = 300 ft.

Length of Pipe Flow @ 2.5 ft/sec. = 0 ft.

Tc = 15 min.

Park Place 11th Street- Vault System Post Developed

Basin Calculations

Basin 1

Composite Cn
 Total Drainage Area = 29293.00 SF
 Impervious Area = 26502.00 SF 90%
 Pond Area = 0.00 SF
 Pervious Area = 2791.00 SF

 Impervious Cn = 98.0
 Pond Cn = 100.0
 Pervious Cn = 74.0

 Composite Cn = 95.7

Time of Concentration, Tc

Minimum Time of Concentration = 10 min.
 Length of Overland Flow @ 1ft/sec. = 150 ft.
 Length of Pipe Flow @ 2.5 ft/sec. = 0 ft.

 Tc = 13 min.

Pond Information

SWALE 1 3:1 GRADE			
(ft.)		Area (SF)	Volume (CF)
20.00	TOB	2728.00	3720.00
19.67		2728.00	3340.00
18.92	WEIR	2728.00	2236.00
18.67		2728.00	1716.00
17.67		2728.00	95.00

Treatment Volume Required, TVR

TVR = $0.5" * (1/12") * \text{Total Drainage Area}$ = 1220.54 CF
 or
 TVR = $1" * (1/12") * \text{Total Impervious Drainage Area}$ = 2208.50 CF

 TVR = 2208.50 CF

Treatment Volume Provided, TVP

TVP = Vol @ Weir = 2236.00 Ac.-ft.

Pond Geometry Checks

Depth = 2.33 ft.
 Mean Depth = 1.13 ft.
 Average length = 111 ft.
 Average width = 25 ft.
 Ave Length to Width Ratio = 4.4 :1

STORMTAB CALCULATIONS

Gillette & Associates, Inc.

STORM SEWER TABULATION FORM

PROJ #:
PROJECT: Park Place Atlantic
COUNTY: Nassau

DATE: 12/15/23
BY: AB
SHEET 1
OF 1

MINOR LOSSES HAVE BEEN CONSIDERED

STRUCT. NO.	STRUCT. TYPE	LINE TYPE	LINE LENGTH (FT)	DRAINAGE AREA (ACRES)		SUBTOTAL CA	TIME OF CONC. (MIN)	TIME OF FLOW IN SECTION (MIN)	i (IN/HR)	TOTAL CA	TOTAL RUNOFF (CFS)	INLET ELEV. (FT)	H.G. ELEV.			DIA. (IN.)	SLOPE (%)	V (FPS)	CAPACITY (CFS)	NOTES & REMARKS n= <u>0.013</u> ZONE: <u>4</u> FREQUENCY: <u>10</u>
				CROWN ELEV.																
				INVERT ELEV.																
				UPPER END	LOWER END								FALL (FT.)							
				INCRMNT	SUBTOTAL															
S-1	C.B.	HP	146	0.13	0.13	0.12	10.00	0.81	7.01	0.12	0.82	20.50	19.56	19.53	0.03	15	0.02	0.7	0.8	
S-2													19.00	18.53	0.47					
													17.75	17.28	0.47		0.32	3.0	3.7	
S-2	C.B.	HP	29	0.13	0.26	0.23	10.81	0.16	6.82	0.23	1.60	20.50	19.53	19.47	0.06	15	0.06	1.3	1.6	
S-3													18.53	18.43	0.09					
													17.28	17.18	0.09		0.32	3.0	3.7	
S-3	M.H.	HP	51	0.00	0.26	0.23	10.97	0.28	6.78	0.23	1.59	20.80	19.47	19.40	0.07	15	0.06	1.3	1.6	
S-4													18.43	18.27	0.17					
													17.18	17.02	0.17		0.32	3.0	3.7	
S-4	M.H.	HP	25	0.00	0.26	0.23	11.25	0.14	6.72	0.23	1.57	20.80	19.40	19.35	0.05	15	0.06	1.3	1.6	
S-5													18.27	18.18	0.08					
													17.02	16.93	0.08		0.32	3.0	3.7	
S-5	C.B.	HP	24	0.17	0.60	0.54	11.39	0.13	6.69	0.54	3.61	20.50	19.35	19.08	0.27	15	0.31	2.9	3.6	
S-6													18.18	18.11	0.08					
													16.93	16.86	0.08		0.32	3.0	3.7	Tailwater 19.08
S-7	C.B.	HP	19	0.17	0.17	0.15	10.00	0.11	7.01	0.15	1.07	20.50	19.38	19.35	0.03	15	0.03	0.9	1.1	
S-6													18.18	18.12	0.06					
													16.93	16.87	0.06		0.32	3.0	3.7	

MODRET

HYDROGRAPH DATA INPUT - SCS UNIT METHOD

Project Name : Park Place Atlantic 10-yr pre
Rainfall Distribution : SCS Type II (24 hrs)

Contributing Basin Area

0.67 ac.

SCS Curve Number

89.90

Time of Concentration

15.00 min.

Rainfall Depth

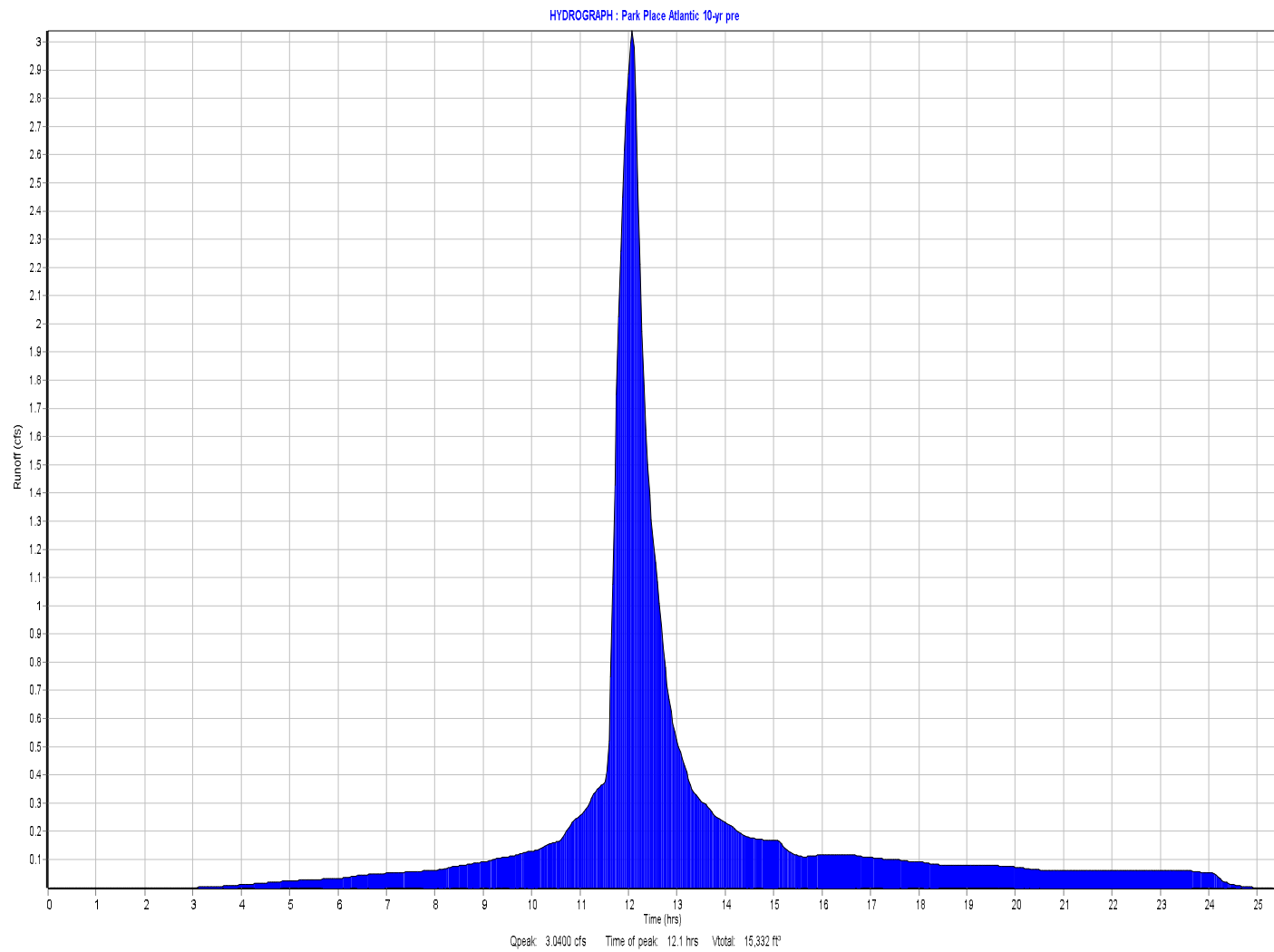
7.50 in.

Shape Factor

323

Percent DCIA

0.00 %



MODRET

SUMMARY OF UNSATURATED & SATURATED INPUT PARAMETERS

PROJECT NAME : Park Place Atlantic 10yr Treatment
HYDROGRAPH RUNOFF DATA USED
UNSATURATED ANALYSIS EXCLUDED

Pond Bottom Area	2,728.00 ft ²
Pond Volume between Bottom & DHWL	3,720.00 ft ³
Pond Length to Width Ratio (L/W)	4.44
Elevation of Effective Aquifer Base	0.00 ft
Elevation of Seasonal High Groundwater Table	15.00 ft
Elevation of Starting Water Level	17.67 ft
Elevation of Pond Bottom	17.67 ft
Is there overflow ?	Y
Avg. Effective Storage Coefficient of Soil for Unsaturated Analysis	0.22
Unsaturated Vertical Hydraulic Conductivity	15.20 ft/d
Factor of Safety	2.00
Saturated Horizontal Hydraulic Conductivity	2.20 ft/d
Avg. Effective Storage Coefficient of Soil for Saturated Analysis	0.18
Avg. Effective Storage Coefficient of Pond/Exfiltration Trench	1.00
Time Increment During Storm Event	1.00 hrs
Time Increment After Storm Event	12.00 hrs
Total Number of Increments After Storm Event	6.00

Runoff Hydrograph File Name: SCS-10yr.SCS

Time of Peak Runoff: 12.03 hrs

Rate of Peak Runoff: 3.79 cfs

Hydraulic Control Features:

	Top	Bottom	Left	Right
Groundwater Control Features - Y/N	N	N	N	N
Distance to Edge of Pond	0.00	0.00	0.00	0.00
Elevation of Water Level	0.00	0.00	0.00	0.00
Impervious Barrier - Y/N	N	N	N	N
Elevation of Barrier Bottom	0.00	0.00	0.00	0.00

MODRET

ELEVATION VS OVERFLOW RELATIONSHIP

PROJECT NAME : Park Place Atlantic 10yr Treatment
Structure Type: SHARP CRESTED

Crest Elevation	18.92 ft
Crest Length	9.00 ft
Coefficient of Discharge	3.31
Weir Flow Exponent	1.50
Number of Contractions	0.00
Design High Water Level Elevation	20.00 ft

MODRET

SUMMARY OF RESULTS

PROJECT NAME : Park Place Atlantic 10yr Treatment

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft ³)
00.00 - 0.03	15.000	0.000 *		
			0.00000	
0.03	15.000	0.07525		
			0.06651	
1.05	17.670	0.05777		0.00
			0.04903	
2.07	17.670	0.04475		0.00
			0.04047	
3.09	17.670	0.03833		0.00
			0.03620	
4.11	17.724	0.03550		0.00
			0.03481	
5.13	17.825	0.03444		0.00
			0.03408	
6.15	17.928	0.03446		0.00
			0.03485	
7.17	18.072	0.03531		0.00
			0.03577	
8.19	18.226	0.03715		0.00
			0.03853	
9.21	18.446	0.04071		0.00
			0.04290	
10.23	18.741	0.04330		0.00
			0.04370	
11.25	18.941	0.04199		603.86
			0.04028	
12.27	19.083	0.04147		7,900.10
			0.04266	
13.29	18.992	0.03811		10,037.00

MODRET

SUMMARY OF RESULTS

PROJECT NAME : Park Place Atlantic 10yr Treatment

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft ³)
			0.03355	
14.31	18.949	0.03284		10,873.00
			0.03213	
15.33	18.937	0.03161		11,369.00
			0.03108	
16.35	18.931	0.03060		11,683.00
			0.03011	
17.37	18.930	0.02962		11,978.00
			0.02913	
18.39	18.928	0.02872		12,212.00
			0.02831	
19.41	18.927	0.02813		12,406.00
			0.02795	
20.43	18.926	0.02748		12,572.00
			0.02701	
21.45	18.924	0.02681		12,697.00
			0.02662	
22.47	18.924	0.02645		12,821.00
			0.02629	
23.49	18.924	0.02582		12,951.00
			0.02535	
24.51	18.922	0.02469		12,999.00
			0.01682	
36.51	18.466	0.01473		12,999.00
			0.01264	
48.51	18.124	0.01134		12,999.00
			0.01005	
60.51	17.853	0.00917		12,999.00

MODRET

SUMMARY OF RESULTS

PROJECT NAME : Park Place Atlantic 10yr Treatment

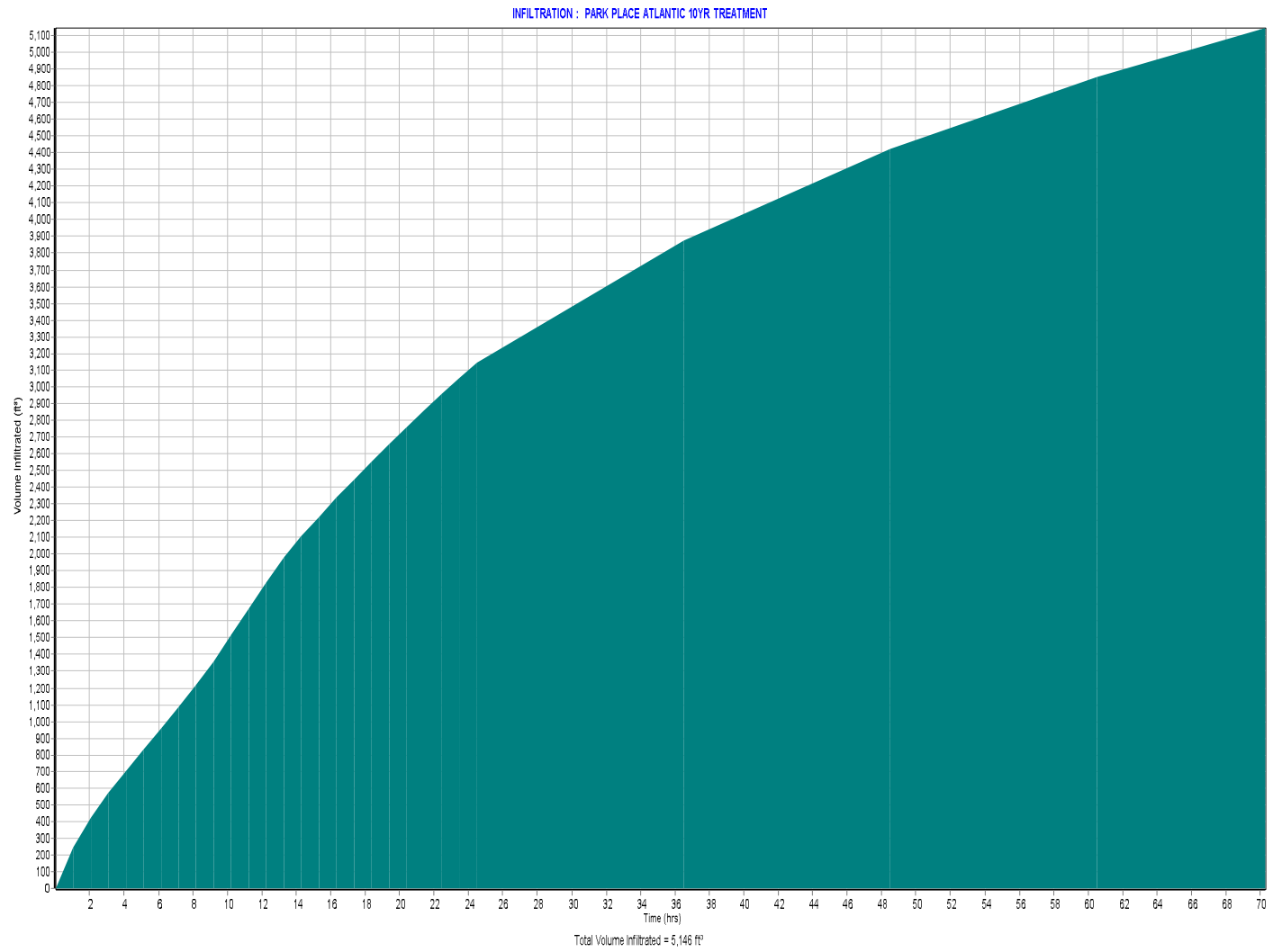
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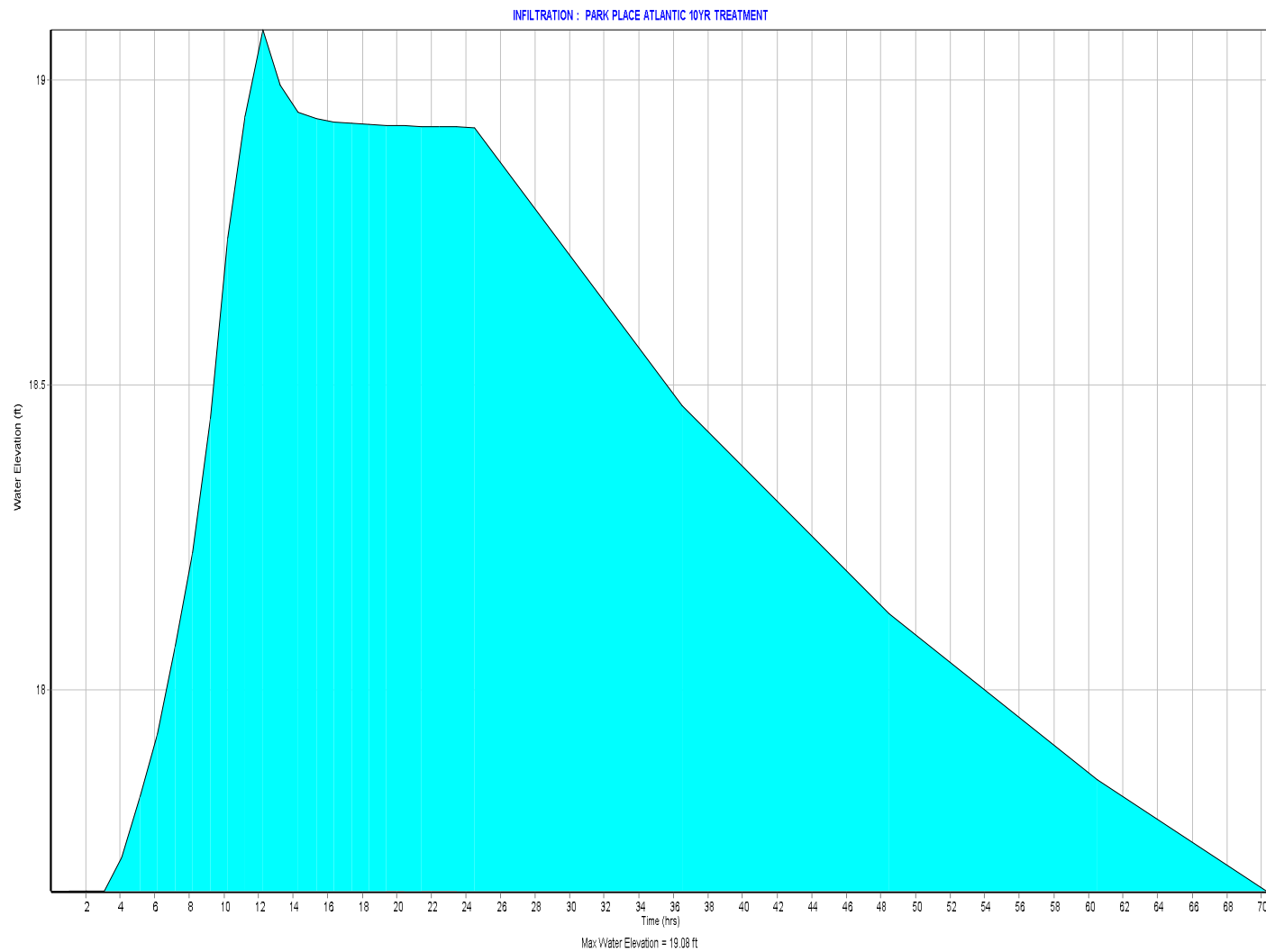
Maximum Water Elevation: 19.083 feet @ 12.27 hours

Recovery @ 70.287 hours

* Time increment when there is no runoff

Maximum Infiltration Rate: 3.599 ft/day





GEOTECHNICAL REPORT



OF JAX, INC.

March 28, 2018

GILLETTE & ASSOCIATES
20 South 4th Street
Amelia Island, Florida 32034

Attn: Mr. Asa Gillette, P.E.

Re: Report of Supplemental Infiltration and Hydraulic Conductivity Testing
Proposed Fernandina Beach Condos - Stormwater Management Facility
NW Quadrant of Atlantic Avenue and North 11th Street
Fernandina Beach, Florida
AGES Job No. J17910A, Report No. 001

Ladies & Gentlemen:

AGES OF JAX (AGES), INC. has completed the requested supplemental testing in stormwater management facility area of subject site. This report includes a summary of the background information, a description of the supplemental testing performed and the results obtained.

PROJECT BACKGROUND INFORMATION

General project information has been provided by Mr. John Bonvouloir of Capital Builders of Amelia, Inc. and Mr. Asa Gillette P.E. during recent phone conversations and email correspondence. We also received Email correspondence from Mr. Bonvouloir, dated November 20, 2017, which contained: (1) A Site Selection Document, dated November 3, 2017, prepared by Architecture and Design, and (2) A Boundary Survey, undated, prepared by Bassett & Bassett, Inc. which provides the existing site boundaries, existing site features and general aspects of the proposed site development.

Based upon the information provided, we understand that Capital Builders of Amelia, Inc. is planning a commercial development to be located in the northwest quadrant of the intersection of Atlantic Avenue and North Eleventh Street in Fernandina Beach, Florida. The proposed development will include a stormwater management facility which will consist of either an exfiltration trench and/or storm water vault.

SUPPLEMENTAL GEOTECHNICAL EXPLORATION

During the period of March 6 through 17, 2018, **AGES** field crews performed the requested supplemental testing. We drilled one 17 foot auger boring to determine soil type and groundwater level. Adjacent to the boring location, we installed an approximately 17-foot deep temporary 2" diameter monitoring well (TMW1). A rising head borehole "slug" tests was performed in the well to determine the saturated horizontal hydraulic conductivity (Khsat) of the surface aquifer. One double ring infiltration test (DRI1) was conducted adjacent to the well location to determine the vertical unsaturated hydraulic conductivity i.e infiltration rate (Kvunsat) in the vadose zone.

AGES of JAX, Inc.

P O Box 24008, Jacksonville FL 32241-4008
9556 Historic Kings Road South, Suite 201 • Jacksonville, Florida 32257-2010
(904) 886-0766 • (904) 880-5190 (FAX)

The test locations are shown on the attached Field Exploration Plan. Auger boring results are and well construction details are shown on the attached Temporary Well Completion Log. Rising Head "Slug Test" data and Infiltration Test Data are presented in the attachments.

STORMWATER MANAGEMENT FACILITY TEST RESULTS

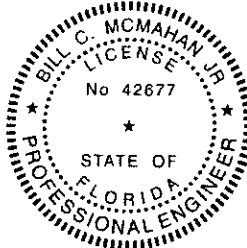
The borings/tests performed in the proposed dry stormwater treatment pond area encountered permeable sands extending to the maximum boring termination depth of 17 feet. The groundwater level was encountered 8 feet below the ground surface. The seasonal high groundwater level is estimated to be 6 feet below the existing ground surface. The fillable porosity of the sand deposit is estimated to be 0.22. The saturated horizontal hydraulic conductivity (the average of the falling and rising head hydraulic conductivity tests) of the surface sand stratum was calculated to 1.1 ft/day. The average unsaturated vertical hydraulic conductivity (infiltration rate) was measured to be 7.6 inches/hour.

CLOSURE

We appreciate the opportunity to be of service as the geotechnical consultant during this phase of your project. Should you have any questions concerning this report or if we may be of any further service to you, please feel free to contact us.

Very truly yours,

AGES of JAX, INC.

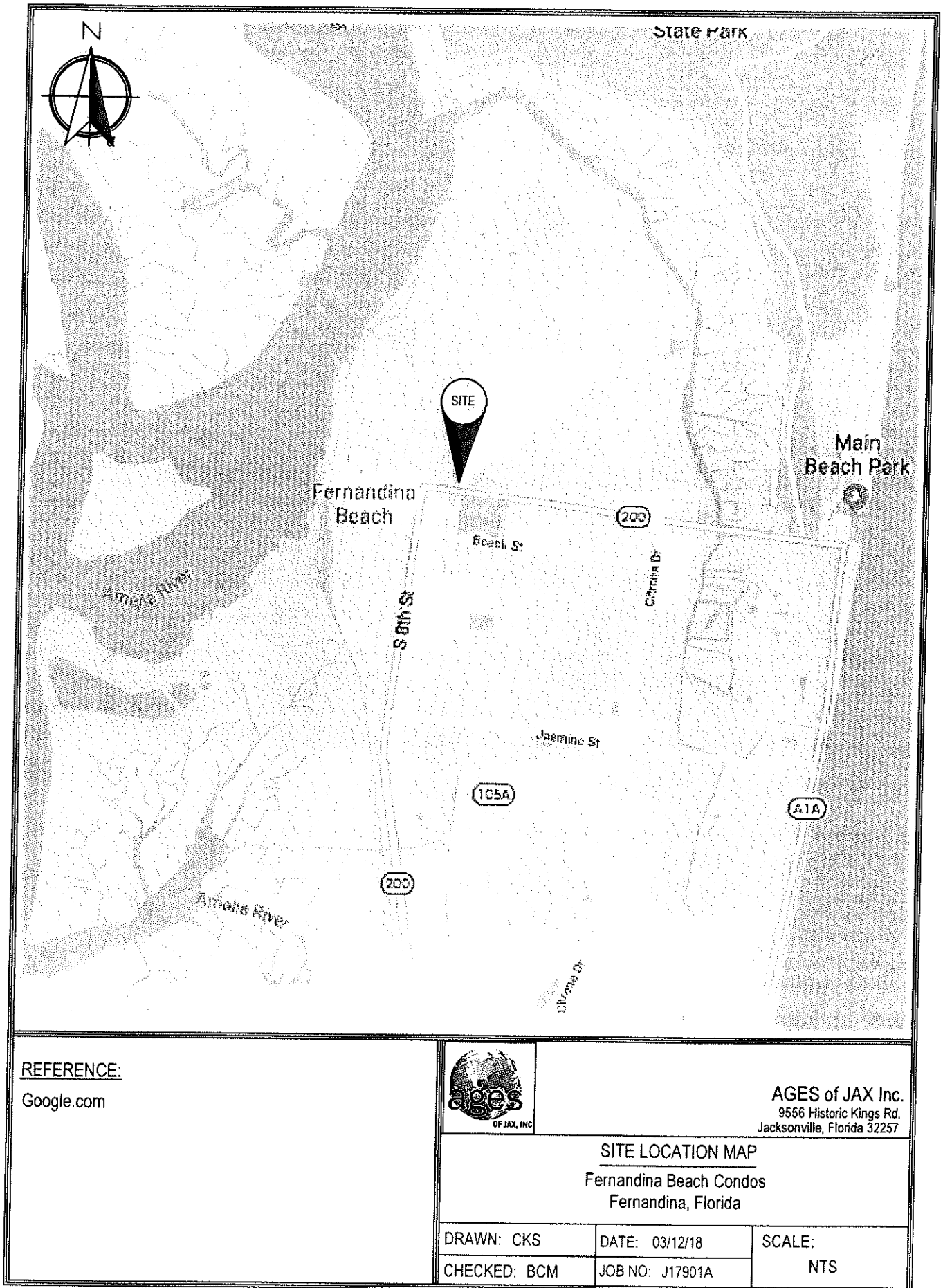


Digitally signed by Bill
C. McMahan Jr., PE
Date: 2018.03.28
11:04:04 -04'00'
Adobe Acrobat
version:
2018.011.20038

Bill C. McMahan, Jr., P.E.
Principal Engineer
Registered, Florida No. 42677

DATA ATTACHMENTS

Site Location Map
Field Exploration Plan
Key to Soil Classification
Temporary Well Completion Log
Double Ring Infiltration Test Results Sheet
Rising Head Hydraulic Conductivity Test Results Sheet



REFERENCE:

Google.com



AGES of JAX Inc.
9556 Historic Kings Rd.
Jacksonville, Florida 32257

SITE LOCATION MAP

Fernandina Beach Condos
Fernandina, Florida

DRAWN: CKS

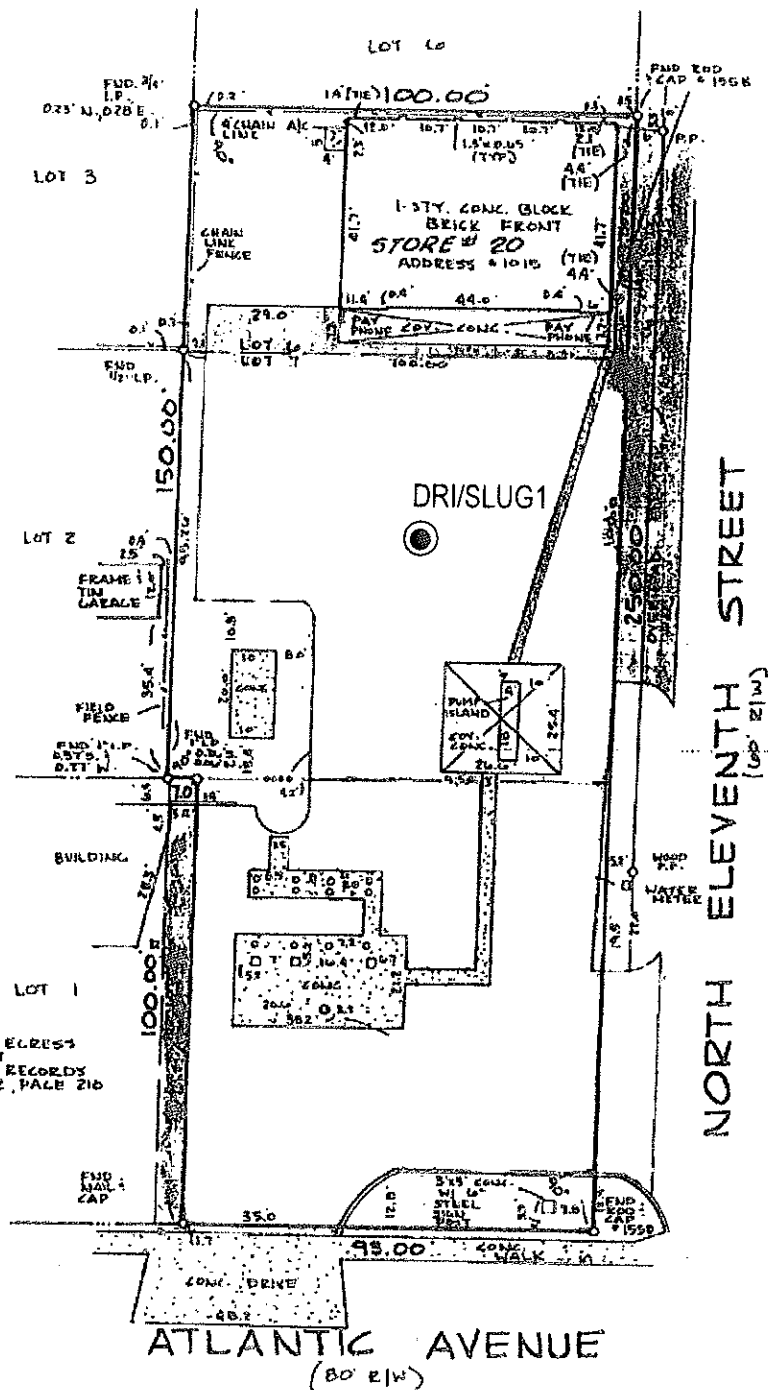
DATE: 03/12/18

SCALE:

CHECKED: BCM

JOB NO: J17901A

NTS



LEGEND:

- Double Ring and TMW1 Test Location (approximate)

REFERENCE:

Site Plan, Undated, Provided by Client.

NOTES:

The boring locations were established by AGES personnel using handheld GPS Locator Units. Boring locations as shown on this plan are approximate.



AGES of JAX Inc.
9556 Historic Kings Rd.
Jacksonville, Florida 32257

FIELD EXPLORATION PLAN

Fernandina Beach Condos
Fernandina Beach, Florida

DRAWN: CKS

DATE: 03/12/18

SCALE:

CHECKED: BCM

JOB NO: J17901A

1"=40'

KEY TO SOIL CLASSIFICATION

CORRELATION OF N-VALUE WITH RELATIVE DENSITY & CONSISTENCY

SANDS AND GRAVEL	
NO. OF BLOWS, N*	RELATIVE DENSITY
0 - 4	VERY LOOSE
5 - 10	LOOSE
11 - 20	FIRM
21 - 30	VERY FIRM
31 - 50	DENSE
OVER 50	VERY DENSE

SILTS AND CLAYS	
NO. OF BLOWS, N*	CONSISTENCY
0 - 2	VERY SOFT
3 - 4	SOFT
5 - 8	FIRM
9 - 15	STIFF
16 - 30	VERY STIFF
31 - 50	HARD
OVER 50	VERY HARD

PARTICLE SIZE IDENTIFICATION (UNIFIED SOIL CLASSIFICATION SYSTEM)

CATEGORY	DIMENSIONS
Boulders	Diameter exceeds 12 inches
Cobbles	3 to 12 inches
Gravel	Coarse - 0.75 to 3 inches in diameter
Sand	Coarse - 2.0 mm to 4.76 mm diameter Medium - 0.42 mm to 2.0 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 constituents (sand silt or clay size particles) in the soil sample.

PERCENTAGE OF MINOR CONSTITUENT	MODIFIERS
5% to 12%	Slightly Silty, Slightly Clayey, Slightly Sandy Silty, Clayey, Sandy Very Silty, Very Clayey, Very Sandy
12% to 30%	
30% to 50%	

These modifiers provide our estimate of the amount of other components in the soil sample.

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



TEMPORARY WELL COMPLETION LOG

CLIENT: Amelia Island Investors JOB NO: J17801A WELL NO: TMW1
 JOB NAME: Fernandina Beach Condos DRILLED BY: N. and A. Wheeler
 LOCATION: N 30.87107° , W 81.45651° ENGINEER: B. McMahan
 DATE INSTALLED: 03/08/18
 PURPOSE: MONITOR WELL ☒ TEST WELL ☐ OBSERVATION WELL ☐
 WATER SUPPLY ☐ OTHER ☐

CONSTRUCTION DATAELEVATION DATA

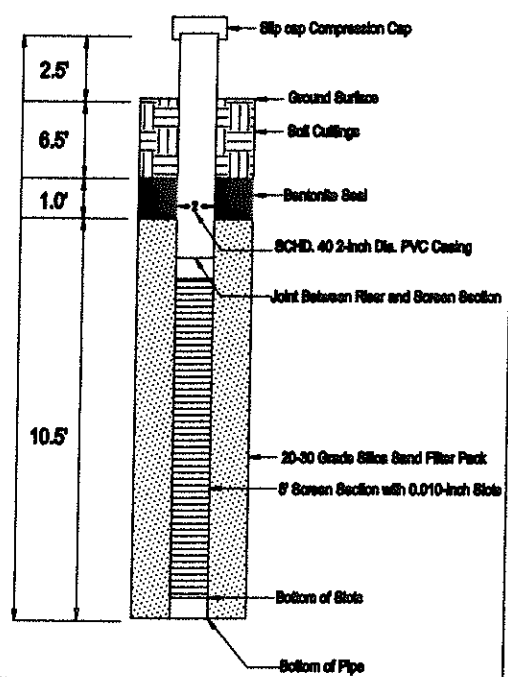
DRILLING METHOD: 8" Hollow Stem Auger
 WELL TYPE: ☒ OPEN HOLE ☐
 SCREEN/GRAVEL PACK ☐ WELL POINT ☐
 PIEZOMETER ☐
 OTHER _____
 WELL DEPTH: 17.5 feet

GROUND ELEVATION (FT): 0.0'
 TOP OF CASING STICKUP (FT): 2.5'
 CASING ELEVATION (FT): +2.5'
 SURVEYED BY: Estimate

WELL MATERIAL:	CASING/SCREEN/OPEN HOLE		
	PVC	Slotted PVC	NA
CASING DIAMETER (INS):	2.0"	2.0"	NA
INTERVAL (FT BOS):	+2.5' - 10.0'	10.0' - 18.5'	NA
BOREHOLE DIA. (INS):	8.0"	8.0"	NA
SLOT SIZE (INS):	NA	0.01"	NA

MATERIAL TYPE:	ANNULUS MATERIAL		
	Soil Cuttings	Bentonite Seal	20/30 Grade Sand
INTERVAL (FT BOS):	2.5' - 8.0'	8.0' - 9.0'	9.0' - 20.5'
LENGTH (FT):	5.5'	1.0'	11.5'

WELL DIAGRAM



HYDROGEOLOGIC DATA

COMPLETION FORMATION: NA
 SPECIFIC CAPACITY: NA
 TRANSMISSIVITY: NA
 STORAGE COEFFICIENT/SPECIFIC YIELD: NA
 DEPTH TO WATER (FT): NA
 DATE/TIME: NA

COMMENTS

From	To	Soil Description
0.0'	0.5'	Asphalt - 1" Limerock - 7"
0.5'	1.0'	Dark Brown Silty Fine SAND (SM/A-2-4)
1.0'	8.0'	Brown Fine SAND (SP/A-3)
8.0'	18.0'	Light Brown Fine SAND (SP/A-3)

GWL: 8.0' (Below Ground Surface)

DOUBLE RING INFILTRATION TEST RESULTS



OF JAX, INC.

PROJECT: Fernandina Beach Condos
 LOCATION: Fernandina Beach, Florida
 JOB NUMBER: J17901A
 TEST NUMBER: DRI1
 LAT/LONG: N30.67105°, W81.45651°

REPORT DATE: 03/12/18
 TEST DATE: 03/07/18
 FIELD PERSONNEL: R. Epps
 METHOD: ASTM D3385
 WATER HEAD: 8"
 TEST DEPTH: 6"

SUMMARY OF TEST DATA & RESULTS

INNER RING SIZE (INCHES): 12
 OUTER RING SIZE (INCHES): 24
 AVERAGE INFILTRATION RATE (IN/HR): 7.6
 STEADY STATE INFILTRATION RATE (IN/HR): 8.5

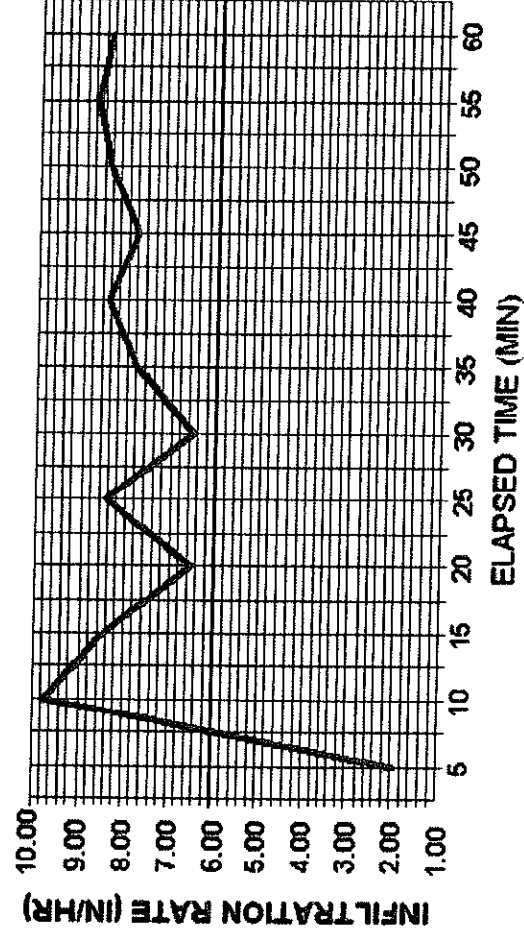
ELAPSED TIME (MINUTES)	WATER QUANTITY (ML)	INFILTRATION RATE (IN/HOUR)
5	300	1.9
10	1500	9.7
15	1300	8.4
20	1000	6.5
25	1300	8.4
30	1000	6.5
35	1200	7.8
40	1300	8.4
45	1200	7.8
50	1300	8.4
55	1350	8.7
60	1300	8.4

SOIL PROFILE

Depth(Ft) Soil Description (USCS/AASHTO Classification)

0.0 - 0.5 Asphalt - 1" Limerock - 7"
 0.5 - 1.0 Dark Brown Silty Fine SAND (SM/A-2.4)
 1.0 - 8.0 Brown Fine SAND (SP/A-3)
 8.0 - 18.0 Light Brown Fine SAND (SP/A-3)
 A.B.T. GWL = 8.0 feet

INFILTRATION RATE VS TIME



Estimated Seasonal High GWL = 6.0 feet



INSITU RISING HEAD HYDRAULIC CONDUCTIVITY TEST

Fernandina Beach Condos Stormwater Pond
 Fernandina Beach, Florida
 AGES Job No. J17901A

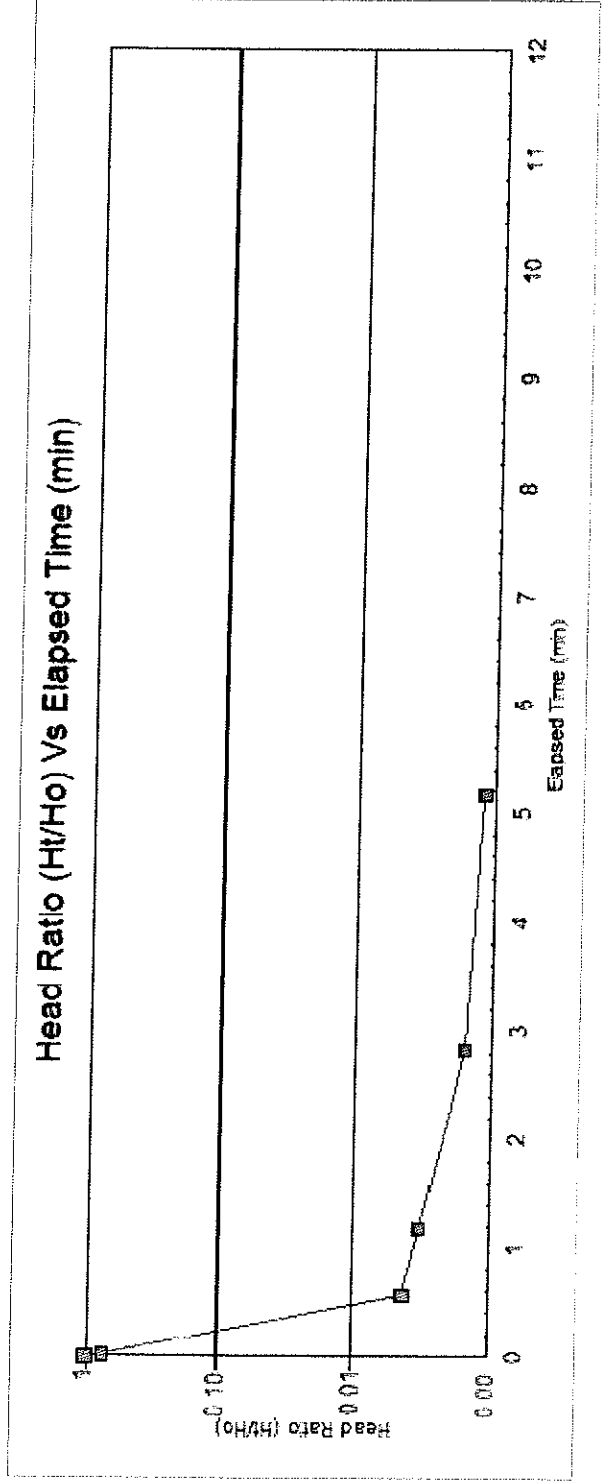
Governing Equation (NAVFAC)

$$K_{hsat} = \frac{r^2}{2L} \ln\left(\frac{L}{R}\right) \left[\ln\left(\frac{H_1}{H_2}\right) / ((t_2 - t_1)) \right]$$

Date Performed 03/16/18
 Performed by D. Anderson

Well Data	
Well ID	TMW1
Well Radius - R (ft)	0.08
Saturated Screen Length - L (ft)	8.73
Well Stickup (ft)	2.33
Well Depth below TOC	20.33
Depth to Static GW below TOC	11.2469
Initial Drawdown Depth below TOC	11.9615

Field Data			Depth Below TOC (ft)	Head (Ht)	Head Ratio Ht/Ho
min	sec	min			
0	0	0.0	11.962	0.71464	1.00
0	1	0.0	11.781	0.53451	0.75
0	34	0.6	11.250	0.00318	0.00
1	11	1.2	11.249	0.00245	0.00
2	50	2.8	11.248	0.00117	0.00
5	10	5.2	11.248	0.00088	0.00
Results: Insitu Horizontal Hydraulic Conductivity (k)					
0.000759	ft/min	1.09	ft/day	3.9E-04	cm/sec





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Detail by Entity Name

Florida Limited Liability Company
PARK PLACE ON ATLANTIC, LLC

Filing Information

Document Number	L23000230238
FEI/EIN Number	NONE
Date Filed	05/10/2023
Effective Date	05/09/2023
State	FL
Status	ACTIVE

Principal Address

608 OCEAN CLUB COURT
FERNANDINA BEACH, FL 32034 UN

Mailing Address

608 OCEAN CLUB COURT
FERNANDINA BEACH, FL 32034 UN

Registered Agent Name & Address

MARTIN, JOSHUA
960185 GATEWAY BOULEVARD
201
FERNANDINA BEACH, FL 32034

Authorized Person(s) Detail

Name & Address

Title MGR

RICHARDSON, SPURGEON
608 OCEAN CLUB COURT
FERNANDINA BEACH, FL 32034

Annual Reports

No Annual Reports Filed

Document Images

[05/10/2023 -- Florida Limited Liability](#)

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ENGINEERING PLANS

FOR

PARK PLACE ON ATLANTIC

FOR

PARK PLACE ON ATLANTIC, LLC

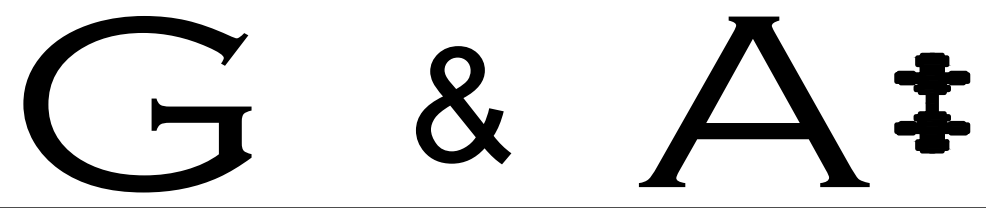
GILLETTE & ASSOCIATES, INC.

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

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

PERMITTING AGENCIES:

CITY OF FERNANDINA BEACH
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



ISSUE DATE: DECEMBER 19, 2023

G&A Project
No.: XX-XX-XX

PARK PLACE ON ATLANTIC

FOR

PARK PLACE ON ATLANTIC, LLC

RELEASED FOR CONSTRUCTION BY



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



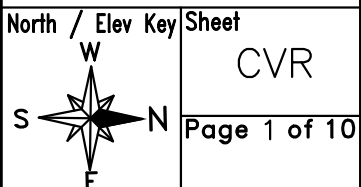
REV	DATE	ITEM
A	12/19/23	TRC SUBMITTAL #1
B		
C		
D		
E		

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING
CERTIFICATE OF AUTHORIZATION NO. 0332
ASA R. GILLETTE, P.E. * FL. PE NO. 56177
20 S. 4th STREET * FERNANDINA BEACH, FL 32034
PHONE: 904-261-8819 * www.gilletteassociates.com

PARK PLACE ON ATLANTIC
PARK PLACE ON ATLANTIC, LLC
1015 ATLANTIC AVENUE,
FERNANDINA BEACH, FLORIDA 32034

ISSUE DATE: 12/19/23

COVER SHEET



GENERAL NOTES		INDEX																																		
SITE / GEOMETRY		WATER NOTES																																		
1. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTOR'S PRICE FOR PERFORMING THE WORK. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THIS PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO CONSTRUCTION OF THE PROJECT. ALL COSTS ASSOCIATED WITH PRELIMINARY INVESTIGATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 3. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER. 4. ELEVATIONS ARE BASED ON NAVD DATUM OF 1988. 5. TOPOGRAPHIC AND BOUNDARY INFORMATION WAS PROVIDED BY: MANZIE & DRAKE LAND SURVEYING, INC. (904-491-5700). 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING, RIGHT-OF-WAY PERMITS NOT PROVIDED AND INSURANCE REQUIRED FOR THE PROJECT. 7. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN CITY, COUNTY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR. 8. THE CONTRACTOR SHALL ADVISE THE OWNER'S AUTHORIZED REPRESENTATIVE OF PLANNED WORK SCHEDULE. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND THE OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION. 9. "AS-BUILT" DRAWINGS - AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION, AND SUBMITTAL OF AS-BUILT DRAWINGS. 10. "AS-BUILT" RECORD DATA AND INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. RECORD DRAWINGS SHALL BE SUPPLIED TO THE ENGINEER. 11. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT. 12. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR ON A DAILY BASIS. 13. ALL EXCESS SUITABLE AND UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER. 14. ALL EXISTING TREES LISTED TO REMAIN SHALL BE PRESERVED AND PROTECTED. 15. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES, AND IMPROVEMENTS ON THE DRAWINGS ARE BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO ACTUAL FIELD LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF THE DISCREPANCY. THE DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITY IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR REPAIRS OR PAYMENTS FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS, AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH THEY SHALL CONNECT. 16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER ON ALL MATERIALS, FOR REVIEW AND APPROVAL, PRIOR TO PURCHASE OR CONSTRUCTION OF ANY UTILITY OR STRUCTURE. 17A. UNSUITABLE MATERIALS UNDER WATER, SEWER, OR STORM PIPE AND/OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL COMPACTED TO 98% OF ITS MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557). 17B. ALL FINISH FLOORS SHOWN ON THE PLANS ARE MINIMUM ELEVATIONS 18. ALL WATER & SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489 FLORIDA STATUTES.	19. WHEN DEWATERING CAPACITY REQUIRES A PERMIT (CUP), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT. 20. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY HAZARD. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. WHERE PARALLEL WATER AND SEWER MAINS HAVE LESS THAN 10 FOOT HORIZONTAL SEPARATION, 20 FOOT LENGTHS OF C900 (DR18) WATER QUALITY PIPE SHALL BE USED WITH THE JOINTS STAGGERED AT 10 FOOT INTERVALS. THE PIPES SHALL BE PLACED IN SEPARATE TRENCHES WITH THE WATER MAIN AT LEAST 18 INCHES ABOVE THE SEWER. 21. WATER MAINS CROSSING SANITARY HAZARDS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN. WHERE WATER AND SEWER MAINS CROSS WITH BETWEEN 18 INCHES AND 6 INCHES OF VERTICAL CLEARANCE, A 20 FOOT SECTION OF C900 (DR18) WATER QUALITY PIPE SHALL BE CENTERED ON THE POINT OF THE CROSSING. THE CONTRACTOR SHALL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER PIPES IS TO BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIAMETER. 22. NO WATER MAIN PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER MANHOLE. 23. TRACER WIRE SHALL BE PROVIDED ON ALL WATER MAINS AND FORCE MAINS. TRACER WIRE SHALL BE #10 UF SOLID COPPER WIRE, COATED, AND SUITABLE FOR BURIAL. COATING SHALL BE BLUE FOR WATER AND GREEN FOR SEWER MAIN CONNECTIONS. WIRE SHALL BE ATTACHED DIRECTLY TO TOP OF PIPE AND BROUGHT INTO EACH VALVE BOX AND COILED TO ALLOW FOR EASY ACCESS AND EXTENSION ABOVE FINISHED GRADE FOR ATTACHMENT OF LOCATING EQUIPMENT. 24. ALL PIPE LENGTHS ARE APPROXIMATE DIMENSIONS, ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED TO CONFORM WITH TYPICAL SECTIONS AND DETAILS AS SHOWN ON THE MISCELLANEOUS DETAILS SHEET AND IN ACCORDANCE WITH THE SPECIFICATIONS. 25. ALL UNDERGROUND UTILITIES MUST BE INSTALLED PRIOR TO PREPARATION OF SUBGRADE FOR PAVEMENT. 26. GRADES SHOWN ON PLANS ARE EDGE OF PAVEMENT FINISHED GRADES UNLESS OTHERWISE NOTED. 27. SHOULD THE SURFACE OR SUBSURFACE CONDITIONS VARY FROM WHAT IS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. 28. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFICALLY STATED. ALL DISTURBED AREAS WITHIN THE NASSAU COUNTY RIGHT OF WAY SHALL BE COVERED WITH BERMUDA SOD. 29. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF SEDIMENT-LADEN RUNOFF RESULTING FROM STORM EVENTS DURING THE CONSTRUCTION PHASE. EROSION CONTROL FACILITIES SHOULD BE INSTALLED EARLY DURING THE CONSTRUCTION PERIOD SO AS TO PREVENT THE TRANSPORT OF SEDIMENT INTO SURFACE WATERS. RE-VEGETATION AND STABILIZATION OF DISTURBED AREAS SHOULD BE ACCOMPLISHED IMMEDIATELY TO REDUCE THE POTENTIAL FOR FURTHER SOIL EROSION. 30. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND COUNTY/CITY BEFORE COMMENCING WORK. 31. MINIMUM COVER OVER PIPES SHALL BE 36" UNLESS OTHERWISE INDICATED. 32. ALL UNDERGROUND UTILITY COMPANIES SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION. 33. IN ADDITION TO THE SPECIFICATIONS AND DETAILS PROVIDED FOR THIS CONTRACT, THE NASSAU COUNTY STANDARD DETAILS AND SPECIFICATIONS (LATEST REVISION) SHALL ALSO BE USED FOR ANY ITEMS NOT COVERED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A SET OF STANDARD DETAILS AND SPECIFICATIONS FROM NASSAU COUNTY. 34. BACKFILL MATERIAL SHALL BE COMPACTED TO 100% (2%) PER CITY OF FB REQUIREMENTS UNDER EXISTING AND PROPOSED ROADWAYS. 35. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER. 36. STATIONING REFERS TO THE CENTERLINE OF THE ROADWAY EXCEPT AS NOTED ON PLANS. WHERE PAVEMENT SPLITS, THE STATIONING FOLLOWS THE INSIDE EDGE OF PAVEMENT UNTIL ROADWAY TRANSITIONS BACK TO THE TYPICAL ROADWAY SECTION 37. ALL CONSTRUCTION, MATERIAL, AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH CITY OF FB AND COUNTY STANDARDS	1. WATER MAINS SHALL HAVE A MINIMUM OF 36" COVER UNDER PAVEMENT OR 30" COVER FROM FINISHED GRADE UNLESS OTHERWISE SHOWN. ALL WATER MAINS SHALL BE FLUSHED IN ACCORDANCE WITH, AND UNDER THE DIRECTION OF THE UTILITY COMPANY. 2. THRUST RESTRAINTS ARE REQUIRED IN ACCORDANCE WITH THE UTILITY COMPANY STANDARDS WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS AND TEES. 3. TIE RODS SHALL BE INSTALLED ON ALL VALVES LOCATED AT FITTINGS. ALL 10" AND LARGER VALVES AND LARGER SHALL REQUIRE (4) TIE RODS. MEGA LUG JOINT RESTRAINTS MAY BE USED IN LIEU OF THRUST BLOCKS OR TIE RODS. 4. UNLESS OTHERWISE NOTED, WATER MAINS ARE TO BE PVC DR18, DR-25, C-900 (BLUE), CLASS 150. 5. ALL WATER MAINS SHALL BE BACTERIOLOGICAL AND PRESSURE TESTED IN ACCORDANCE WITH AWWA C-600. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER MAINS HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE. THE UTILITY COMPANY'S AUTHORIZED REPRESENTATIVE MUST BE NOTIFIED 48 HOURS PRIOR TO PERFORMING THE PRESSURE TEST AND MUST BE PRESENT. 6. THE CONTRACTOR SHALL AVOID SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WATER SERVICE TO MEET THE SYSTEM DEMANDS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED CUSTOMERS OF THE UTILITY A MINIMUM OF 48 HOURS IN ADVANCE OF ANY INTERRUPTION OF SERVICE. BOIL WATER NOTICES SHALL BE DELIVERED IN ACCORDANCE WITH THE UTILITY COMPANY BOIL WATER NOTICE REQUIREMENTS. 7. ALL MAIN FLUSHING POINTS SHALL BE SAME SIZE AS MAIN UP TO 8 INCH WATER MAINS. FLUSHING POINTS FOR MAINS LARGER THAN 8 INCH SHALL BE REDUCED TO 8 INCH. 8. ALL WATER MAINS SHALL BE DISINFECTED USING LIQUID CHLORINE OR HYPOCHLORITES IN ACCORDANCE TO AWWA C651-86. WATER IN MAIN SHALL MAINTAIN A CHLORINE RESIDUAL OF 50 MG/L FOR A MINIMUM OF 24 HOURS. WATER MAIN SHALL NOT BE PLACED IN SERVICE UNTIL CLEARANCE HAS BEEN PROVIDED BY THE APPROPRIATE REGULATING AGENCY AND CITY OFFERNANDINA BEACH UTILITIES DEPARTMENT. 9. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. BASED ON APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS, AND SOLVENT RESISTANT GASKET MATERIAL SUCH AS FLUOROCARBON SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED. ANY CONTAMINATED SOIL THAT IS EXCAVATED SHALL BE PLACED ON AN IMPERMEABLE MAT AND COVERED WITH A WATER PROOF COVERING. THE PROPER AUTHORITIES WILL BE NOTIFIED AND THE CONTAMINATED SOIL HELD FOR PROPER DISPOSAL. 10. 2" FLUSHING HYDRANTS SHALL BE INSTALLED AT ALL DEAD END LINES AND MAIN LINE STUB-OUTS. 11. A SEPARATE WATER SERVICE SHALL BE REQUIRED FOR EACH UNIT SERVED AND SHALL BE INSTALLED 3 FEET EITHER SIDE OF PROPERTY LINE. ALL WATER SERVICES SHALL BE MARKED WITH A "W" ETCHED ON THE CURB. ALL VALVES SHALL BE MARKED WITH A "V" ETCHED ON THE CURB. 12. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARDS. 13. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED AT THE CONSUMER'S METER OR AT THE PROPERTY LINE WHEN A METER IS NOT USED. 14. BACKFLOW PREVENTION ASSEMBLIES SHALL BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN. TEST RESULTS SHALL BE SUBMITTED TO AND APPROVED BY THE UTILITY COMPANY PRIOR TO ACCEPTANCE OF INSTALLATION. 15. MAXIMUM DEPTH ON WATER SERVICES TO METER TO BE 36". 16. CONTACT ANDRE DESILET, COFB UTILITY DIRECTOR AT (904-310-3431) FOR PRE-CONSTRUCTION AND COORDINATION MEETING PRIOR TO WORK COMMENCING.	<table><tr><th>PAGE #</th><th>SHEET</th><th>DESCRIPTION</th></tr><tr><td>1</td><td>CVR</td><td>COVER SHEET</td></tr><tr><td>2</td><td>IN-1</td><td>INDEX SHEET</td></tr><tr><td>3</td><td>PRE-1</td><td>PREDEVELOPMENT PLAN</td></tr><tr><td>4</td><td>GE-1</td><td>GEOMETRY PLAN</td></tr><tr><td>5</td><td>UT-1</td><td>UTILITY PLAN</td></tr><tr><td>6</td><td>DR-1</td><td>DRAINAGE PLAN</td></tr><tr><td>7</td><td>LS-1</td><td>LANDSCAPE PLAN</td></tr><tr><td>8</td><td>DT-1</td><td>LANDSCAPE DETAILS</td></tr><tr><td>9</td><td>DT-2</td><td>MISC. DETAILS</td></tr><tr><td>10</td><td>DT-3</td><td>DRAINAGE DETAILS</td></tr></table>	PAGE #	SHEET	DESCRIPTION	1	CVR	COVER SHEET	2	IN-1	INDEX SHEET	3	PRE-1	PREDEVELOPMENT PLAN	4	GE-1	GEOMETRY PLAN	5	UT-1	UTILITY PLAN	6	DR-1	DRAINAGE PLAN	7	LS-1	LANDSCAPE PLAN	8	DT-1	LANDSCAPE DETAILS	9	DT-2	MISC. DETAILS	10	DT-3	DRAINAGE DETAILS
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EXISTING VALVE WM EXISTING WATER LINE SS EXISTING SANITARY SEWER EXISTING FIRE HYDRANT SS PROPOSED SANITARY SEWER WM PROPOSED WATER LINE PROPOSED FIRE HYDRANT EXISTING EDGE OF PAVEMENT EXISTING PROPERTY LINE 15.3 PROPOSED SPOT ELEVATION S-5 DRAINAGE STRUCTURE P-1 PIPE x(6.58) EXISTING SPOT ELEVATION	1. THE CONTRACTOR SHALL PROVIDE, TO THE ENGINEER OF RECORD , A SCHEDULE OF INVERT ELEVATIONS OF ALL SANITARY MANHOLES PRIOR TO THE PLACEMENT OF THE LIME ROCK BASE COURSE. THIS SCHEDULE TO BE PROVIDED BY THE REGISTERED LAND SURVEYOR SUBMITTING THE "AS-BUILT" DRAWINGS FOR THIS PROJECT. 2. SANITARY SEWER SERVICES SHALL BE 6"PVC WITH A MINIMUM SLOPE OF 0.006 FEET PER FOOT AND SHALL BE TERMINATED AT THE RIGHT-OF-WAY LINE WITH A DEPTH OF 24" TO 48" FROM THE FINAL FINISHED GRADE OF THE DEVELOPED LOTS. DEPTHS GREATER THAN 48" FROM FINAL FINISHED GRADE SHALL BE READJUSTED BY THE DEVELOPER AT HIS COST. 3. GRAVITY SEWER TO BE CLEANED & TV TESTED BY DEVELOPER AT DEVELOPER'S EXPENSE 4. ALL MANHOLE FRAMES AND COVERS TO BE ADJUSTED TO FINAL FINISHED GRADE. 5. A SEPARATE SEWER SERVICE (6" MIN.) SHALL BE PROVIDED TO THE RIGHT-OF-WAY FOR EACH LOT BEING SERVED. AN "S" SHALL BE ETCHED INTO THE CURB DIRECTLY OVER EACH SERVICE LINE OR IN THE STREET SIDE OF A SIDEWALK IN LINE WITH THE CLEANOUT. 6. GRAVITY SEWER TO BE GREEN IN COLOR 7. NEW GRAVITY SEWER SYSTEM SHALL BE PLUGGED AT NEAREST EXISTING DOWNSTREAM MANHOLE AND SHALL NOT BE REMOVED WITHOUT AUTHORIZATION FROM THE UTILITY COMPANY. EXISTING MANHOLES TO BE COREBORED AND ARRANGEMENTS MADE TO BE REFURBISHED WITH COMPATIBLE MATERIALS IF THE EXISTING MANHOLE IS ALLOWED TO BE USED. 8. FINISHED FLOOR ELEVATIONS SHALL BE GREATER (HIGHER) THAN THE ELEVATION OF THE MANHOLE NEAREST THE SERVICE LATERAL IN ORDER TO AVOID A POTENTIAL BACKUP OF SEWERAGE IN THE HOUSE OR BUILDING. 9. ALL GRAVITY SEWER PIPE TO A 10 FOOT DEPTH OF COVER SHALL BE SDR-26 PVC PIPE (MINIMUM). GRAVITY SEWER PIPE WITH COVER OF 15 FEET (AND IN EASEMENTS) AND GREATER SHALL BE C900 - DR18. JOINT SHALL BE OF THE BELL AND SPIGOT TYPE AND MEET THE REQUIREMENTS OF THE PIPE REFERRED BEING USED. 10. WHEN A PROPERTY LINE CAN NOT BE DEFINED, THE SEWER CLEANOUT SHALL BE PLACED IN AN UNPAVED AREA AT A DISTANCE NO GREATER THAN 30 FEET FROM THE SEWER MAIN. 11. NOTE: DR-18 TO BE USED ON SEWER LINE CROSSING WHERE STORM DRAIN IS WITHIN 24 INCHES ABOVE GRAVITY ALSO JOINT TO BE CENTERED AT CROSSING 12. ALL MANHOLES TO HAVE MINIMUM 24" HINGED RING AND COVER EAST JORDAN OR APPROVED EQUIVALENT 13. SEWER PLUGS USED DURING THE CONSTRUCTION OR CONNECTION TO A SYSTEM SHALL HAVE THE CONTRACTOR'S NAME PERMANENTLY STAMPED. 14. THE MANHOLE LINER SHALL BE SPECTRA SHIELD OR APPROVED EQUIVALENT. 15. IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) REQUIREMENTS, LEAKAGE TESTING SHALL BE PERFORMED ON ALL SEGMENTS OF THE SEWER SYSTEM. TESTING MAY INCLUDE APPROPRIATE WATER OR LOW PRESSURE AIR TESTING. TEST METHODS SHALL TAKE INTO CONSIDERATION THE RANGE IN GROUNDWATER ELEVATIONS DURING THE TEST AND ANTICIPATED DURING THE DESIGNED LIFE OF THE SEWER. NO LEAKAGE ALLOWED IN SYSTEM. 16. ALL FORCE MAIN PIPING TO BE DR-18 GREEN OR BROWN. 17. CONTACT ANDRE DESILET, COFB UTILITY DIRECTOR AT (904-310-3431) FOR PRE-CONSTRUCTION AND COORDINATION MEETING PRIOR TO WORK COMMENCING.																																			

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REGISTERED DESIGN PROFESSIONAL

Florida Registered Professional Engineer

ASA R. Gillette, P.E.

License No. 56177

Professional Seal

ASA R. Gillette, P.E.

License No. 56177

12/19/23

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12

PROPERTY INFORMATION:

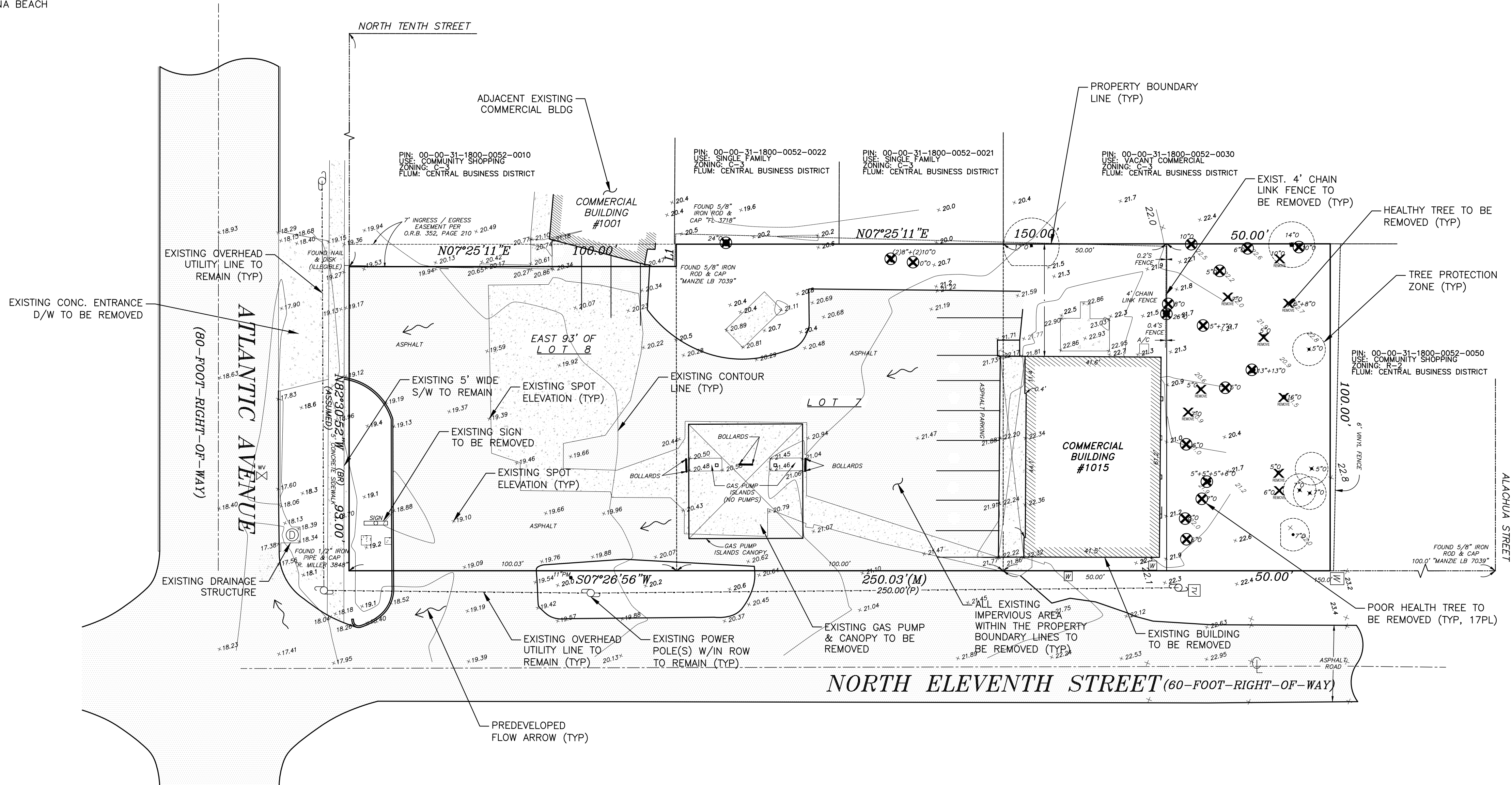
- PID#: 00-00-31-1800-0052-0062
00-00-31-1800-0052-0061
 - ACREAGE: 0.67 ACRES (29,293 SF)
 - LOCATION: FERNANDINA BEACH, FL
 - FLOOD ZONE: X
 - ZONING: C-3
 - FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
 - PROPOSED USE: RESIDENTIAL UNITS
- DEVELOPMENT REQUIREMENTS:
- MAX IMPERVIOUS AREA: 75.0%
 - EXISTING IMPERVIOUS AREA: 66.5% (19,490 SF)
 - MAX BUILDING HEIGHT: 45-FT

SETBACK REQUIREMENTS:

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

UTILITIES:

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



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REGISTERED DESIGN PROFESSIONAL
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

REV	DATE	ITEM
A	12/19/23	TRC SUBMITTAL #1
B		
C		
D		
E		

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL & STRUCTURAL ENGINEERING
CERTIFICATE OF AUTHORIZATION NO. 9332
ASA R. GILLETTE, P.E. * FL PE NO. 56177
20 S. 4th STREET * FERNANDINA BEACH, FL 32034
PHONE: 904-261-8819 * www.gilletteassociates.com

PARK PLACE ON ATLANTIC
PARK PLACE ON ATLANTIC, LLC
1015 ATLANTIC AVENUE,
FERNANDINA BEACH, FLORIDA 32034

ISSUE DATE: 12/19/23

PREDEVELOPED
SITE PLAN

North / Elev Key Sheet
PRE-1
Page 3 of 10

PROPERTY INFORMATION:

- PID#: 00-00-31-1800-0052-0062
00-00-31-1800-0052-0061
- ACREAGE: 0.67 ACRES (29,293 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: X
- ZONING: C-3
- FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
- PROPOSED USE: RESIDENTIAL UNITS

DEVELOPMENT REQUIREMENTS:

- MAX BUILDING HEIGHT: 45-FT
- PROPOSED BUILDING HEIGHT: ±44-FT
- MAX IMPERVIOUS AREA: 75.0%
- PROPOSED IMPERVIOUS AREA: 74.50%

FOUR CORNER AVERAGE GRADE:

22.7' + 22.4' + 19.5' + 19.1'/4 = 20.93'
BUILDING FINISHED FLOOR ELEVATION = 22.00'
PROPOSED BUILDING HEIGHT = 43.93'

SETBACK REQUIREMENTS:

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

UTILITIES:

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

FIRE NOTES:

- EXISTING HYDRANT LOCATED ON CORNER OF SOUTH 11TH STREET AND ATLANTIC AVE.

BUILDING NOTES:

1ST FLOOR = 0 UNITS

2ND FLOOR = 12 RESIDENTIAL UNITS

- (2) TYPE A UNIT(S)
- (2) TYPE B UNIT(S)
- (2) TYPE C UNIT(S)
- (2) TYPE D UNIT(S)
- (2) TYPE E UNIT(S)
- (2) TYPE F UNIT(S)
- (0) TYPE G UNIT(S)

3RD FLOOR = 12 RESIDENTIAL UNITS

- (2) TYPE A UNIT(S)
- (2) TYPE B UNIT(S)
- (2) TYPE C UNIT(S)
- (2) TYPE D UNIT(S)
- (2) TYPE E UNIT(S)
- (2) TYPE F UNIT(S)
- (0) TYPE G UNIT(S)

*4TH FLOOR = 9 RESIDENTIAL UNITS

- (2) TYPE A UNIT(S)
- (2) TYPE B UNIT(S)
- (2) TYPE C UNIT(S)
- (2) TYPE D UNIT(S)
- (0) TYPE E UNIT(S)
- (2) TYPE F UNIT(S)
- (1) TYPE G UNIT(S)

* = 4TH FLOOR TO HAVE ONE (1) ±500SF PUBLIC COMMERCIAL OFFICE FOR MIXED USE ASPECT

TYPE A UNIT = 1,249 SF
TYPE B UNIT = 1,244 SF
TYPE C UNIT = 1,240 SF
TYPE D UNIT = 1,248 SF
TYPE E UNIT = 1,247 SF
TYPE F UNIT = 1,251 SF
TYPE G UNIT = 2,504 SF

PARKING NOTES:

MULTI-FAMILY DWELLING IN C-3 ZONING:

- [LDC 6.02.33(C):]
- (2) SPACES FOR UNITS OVER 1,250 SF
- (1.5) SPACES FOR UNITS 1,001-1,250 SF
- (1) SPACE FOR UNITS 1,000 SF OR UNDER

[LDC 7.01.04(A):]

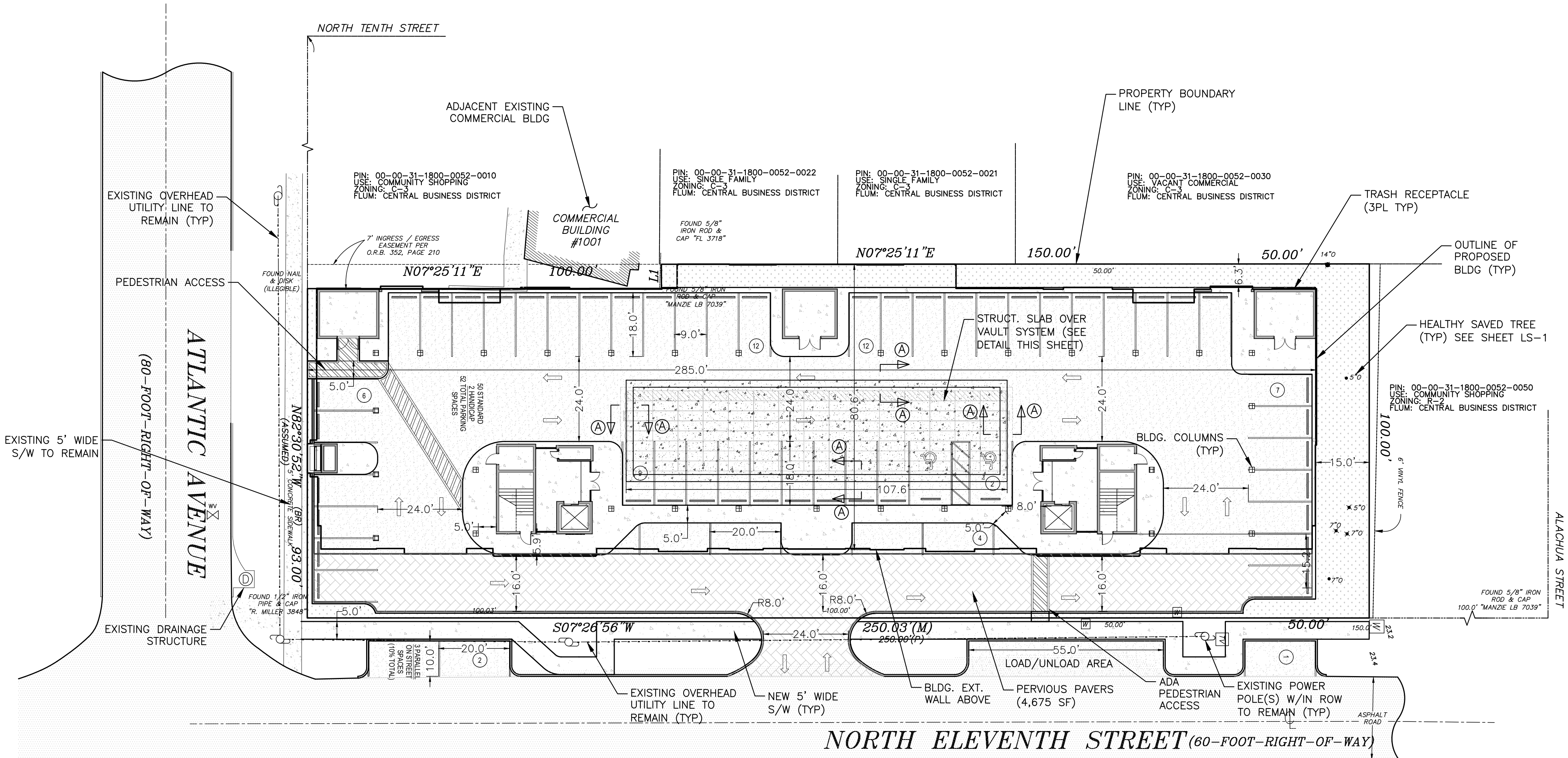
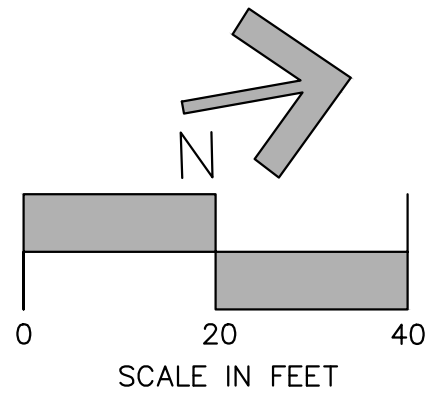
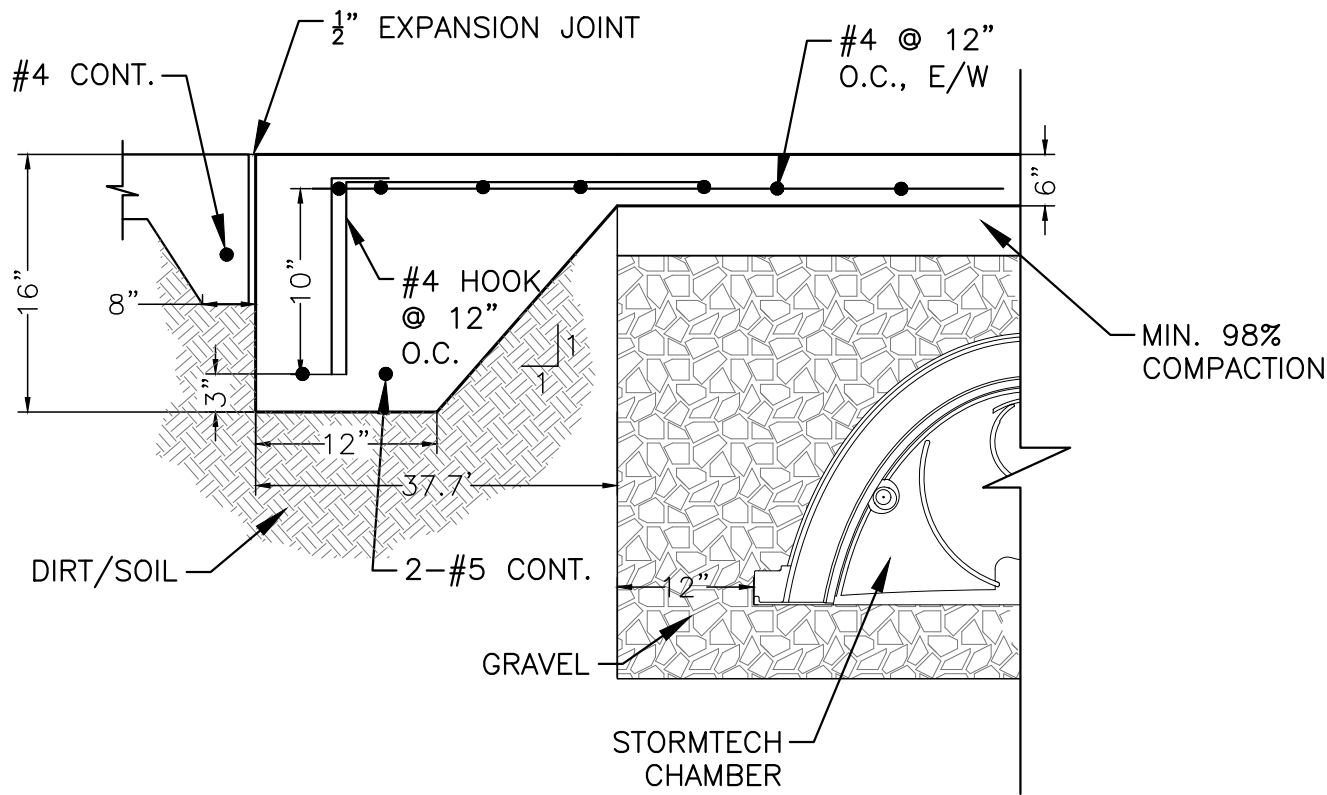
1 PARKING SPACE/300SF OF COMMERCIAL SPACE

±500 SF OFFICE/300 SF = 2 SPOTS REQ'D

REQ'D PARKING PER FLOOR:

- 1ST FLOOR = 0 SPOTS
- 2ND FLOOR = 19.0 SPOTS
- 3RD FLOOR = 19.0 SPOTS
- 4TH FLOOR = 16.0 SPOTS

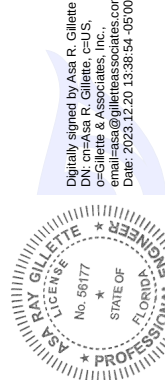
TOTAL PARKING SPOTS REQ'D = 54
TOTAL PARKING SPOTS PROVIDED = 55



PIN: 00-00-31-1800-0217-0WWL
USE: MUNICIPAL
ZONING: PL-1
FLUM: PUBLIC & INSTITUTIONAL

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ISSUE DATE: 12/19/23

GEOMETRY
SITE PLAN

North / Elev Key Sheet
S W N
CE-1
Page 4 of 10

LEGEND

CONCRETE ASPHALT

PROPERTY INFORMATION:

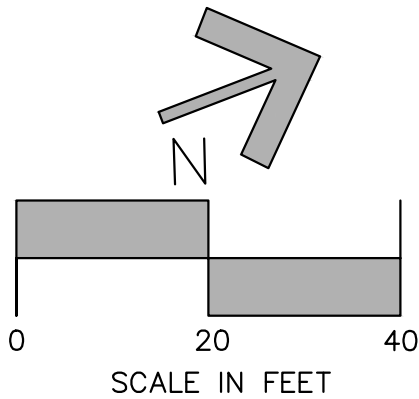
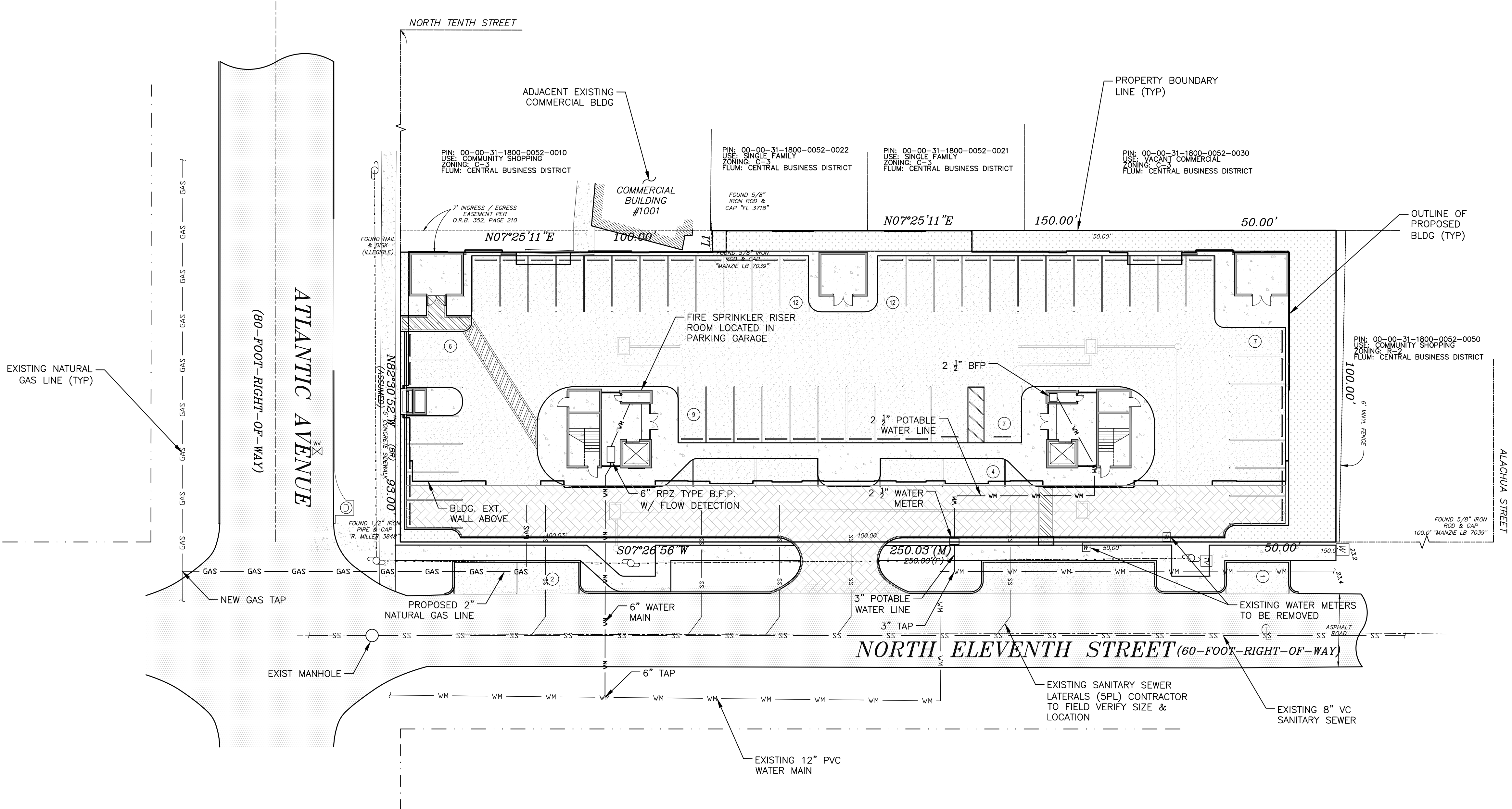
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- FLOOD ZONE: X
- ZONING: C-3
- FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
- PROPOSED USE: RESIDENTIAL UNITS

UTILITIES:

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

UTILITY NOTES:

- EXISTING WATER MAIN AND GRAVITY SEWER LOCATION TO BE FIELD VERIFIED BY CONTRACTOR.
- COORDINATE WITH ANDRE DESILET AT COFB (904-310-3431) FOR UTILITY CONNECTIONS
- NORTH ELEVENTH STREET WILL BE REPAIRED IN ACCORDANCE WITH COFB ORDINANCES. MIN. 30'-FT ASPHALT OVERLAY EA. SIDE OF ALL CUTS.



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UTILITY PLAN

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- ZONING: C-3
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- PROPOSED USE: RESIDENTIAL UNITS

DEVELOPMENT REQUIREMENTS:

- MAX IMPERVIOUS AREA: 75.0%
- PROPOSED IMPERVIOUS AREA: 74.50%
- MAX BUILDING HEIGHT: 45-FT
- PROPOSED BUILDING HEIGHT: ±44-FT

SETBACK REQUIREMENTS:

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

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

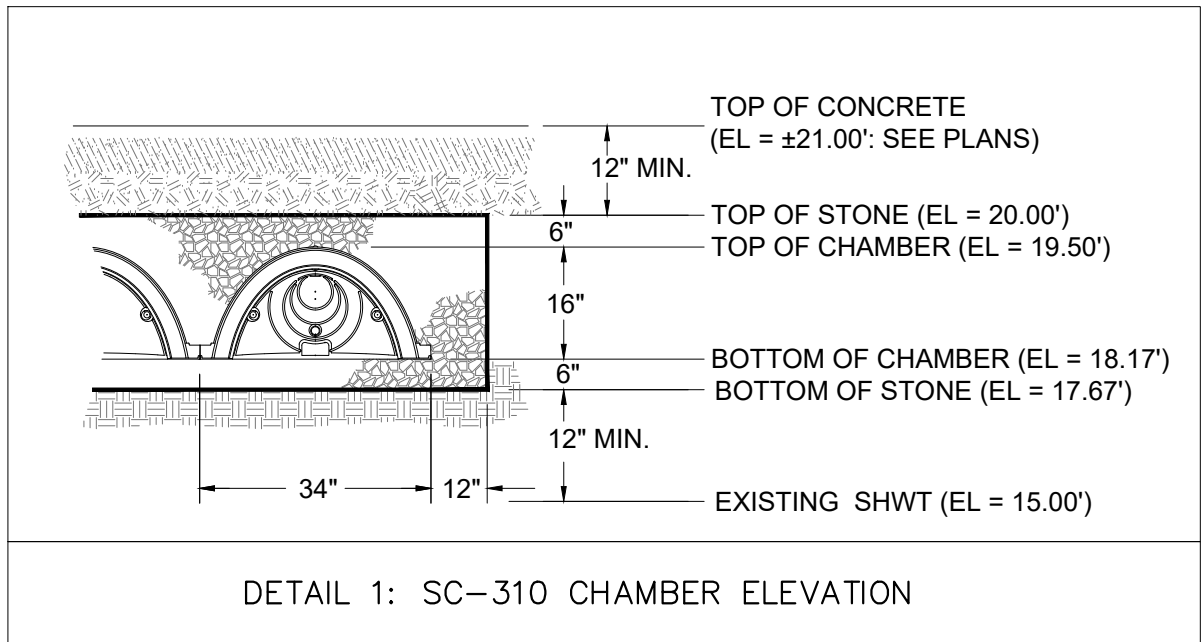
FIRE NOTES:

- EXISTING HYDRANT LOCATED ON CORNER OF SOUTH 11TH STREET AND ATLANTIC AVE.

DRAINAGE NOTES:

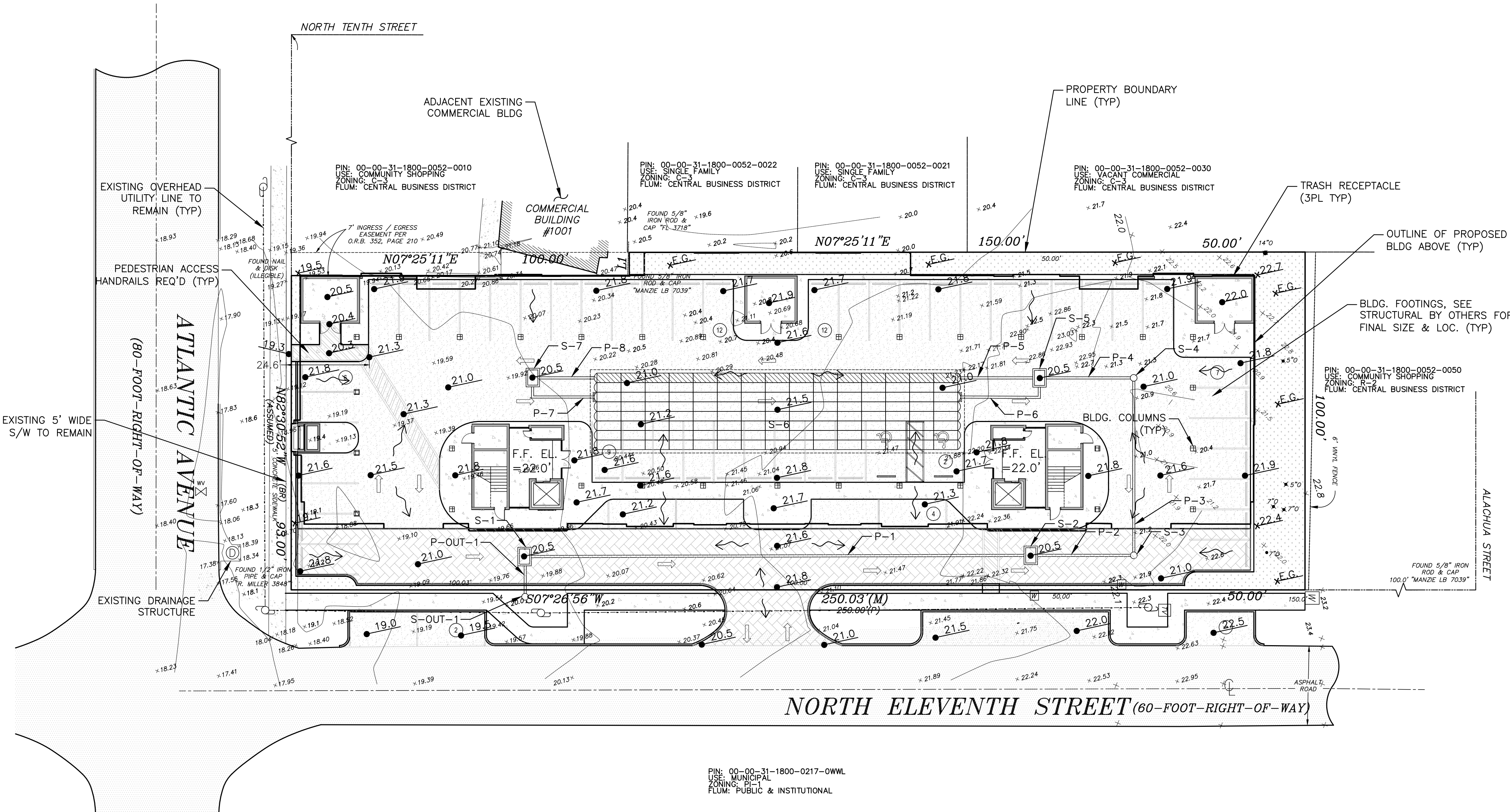
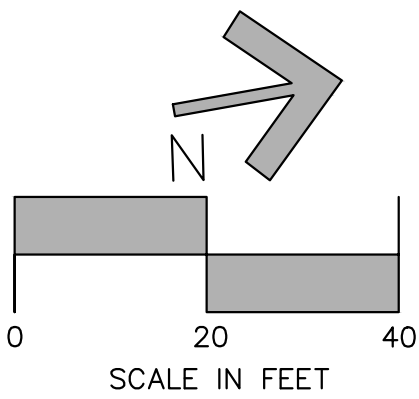
- ALL ROOF RUNOFF TO BE DIRECTED TO UNDERDRAIN GALLERY THROUGH MEANS OF GUTTER & DOWNSPOUT OR ROOF DRAINS

- SEE DRAINAGE DETAILS SHEET DT-2 & DT-3



STRUCTURE TABLE						
NAME	TYPE	TOP / INLET ELEV.	INVERT ELEVATION			
			N	S	E	W
S-1	TYPE E INLET	20.50	17.75	-	18.00	-
S-2	TYPE E INLET	20.50	17.28	17.28	-	-
S-3	24"Ø MANHOLE	20.80	-	17.18	-	17.18
S-4	24"Ø MANHOLE	20.80	-	17.02	17.02	-
S-5	TYPE E INLET	20.50	16.93	16.93	16.93	-
S-6	TYPE E INLET	21.00	16.86	16.86	-	-
S-7	TYPE E INLET	20.50	16.93	-	16.93	-
S-OUT-1	24"Ø NYLOPLAST BUBBLE-UP	19.80	-	-	-	18.50

PIPE TABLE					
NAME	TYPE	DIAMETER	LENGTH	FROM	TO
P-1	HP STORM	15"	146'	S-1	S-2
P-2	HP STORM	15"	28'	S-2	S-3
P-3	HP STORM	15"	51'	S-3	S-4
P-4	HP STORM	15"	25'	S-4	S-5
P-5	HP STORM	15"	22'	S-5	S-6
P-6	HP STORM	15"	27'	S-5	S-6
P-7	HP STORM	15"	24'	S-7	S-6
P-8	HP STORM	15"	17'	S-7	S-6
P-OUT-1	HP STORM	15"	9'	S-6	S-OUT-1



LEGEND	
	CONCRETE
	ASPHALT

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

REGISTERED DESIGN PROFESSIONAL

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

REV	DATE	ITEM
A	12/19/23	TRC SUBMITTAL #1
B		
C		
D		
E		

GILLETTE & ASSOCIATES, INC.

CIVIL, ENVIRONMENTAL, MECHANICAL & STRUCTURAL ENGINEERING

CERTIFICATE OF AUTHORIZATION NO. 9332
ASA R. GILLETTE, P.E. * FL PE NO. 96177

20 S. 4th STREET * FERNANDINA BEACH, FL 32034
PHONE: 904-261-8819 * www.gilletteassociates.com

PARK PLACE ON ATLANTIC

PARK PLACE ON ATLANTIC, LLC

1015 ATLANTIC AVENUE,
FERNANDINA BEACH, FLORIDA 32034

ISSUE DATE: 12/19/23

DRAINAGE PLAN

North / Elev Key Sheet

DR-1

Page 6 of 10

PROPERTY INFORMATION:

- PID#: 00-00-31-1800-0052-0062
00-00-31-1800-0052-0061
- ACREAGE: 0.67 ACRES (29,293 SF)
- LOCATION: FERNANDINA BEACH, FL
- FLOOD ZONE: X
- ZONING: C-3
- FUTURE LAND USE: CENTRAL BUSINESS DISTRICT
- PROPOSED USE: RESIDENTIAL UNITS

SETBACK REQUIREMENTS:

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

LDC 4.05.11(E) REQUIREMENT:

"STREET TREES PLANTED TO MEET REQUIREMENTS OF THIS SECTION MUST BE SHADE TREES AND SHALL BE PLANTED AT A RATE OF ONE (1) TREE FOR EVERY 50 FEET OF SITE/LOT FRONTAGE ALONG THE RIGHT-OF-WAY OR EVERY 30 FEET ON CENTER IN MEDIANS.

— STREET TREES REQUIREMENT:

- (1) SHADE TREE/ 50 L.F.
- NORTH 11ST FRONTAGE = 400 FEET
- 300 / 50 = 6 TREES REQ'D
- PROVIDED STREET TREES = (18) PALM TREES*
- *3 PALMS = 1 SHADE TREE

LANDSCAPE BUFFER REQUIREMENTS

EAST PROPERTY LINE:
REQUIRED BUFFER: NONE

NORTH PROPERTY LINE:
ADJACENT ZONING: R-2, RESIDENTIAL
REQUIRED BUFFER: TYPE C, 15 FEET MIN.
REQUIRED TREES PER 100 FT OF FRONTAGE:

- 2 SHADE TREES
- 4 UNDERSTORY TREES
- PLANTED TREES MUST BE A MINIMUM OF 3" CAL
- CONTINUOUS HEDGE, SOLID VISUAL SCREENING

FRONTAGE LENGTH: 100 FT
REQUIRED TREE PLANTINGS:

- (2) SHADE TREES
- (4) UNDERSTORY TREES

PROPOSED TREE PLANTINGS:

- (2) SHADE TREES
- (4) UNDERSTORY TREES

SOUTH PROPERTY LINE:
REQUIRED BUFFER: NONE

WEST PROPERTY LINE:
REQUIRED BUFFER: NONE

TREE PLANTING

ALL TREES PLANTED SHALL BE STAKED OR GUYED FOR A PERIOD OF AT LEAST SIX (6) MONTHS IN ACCORDANCE WITH THE DETAILS ON SHEET DT-1

MITIGATION FOR IMPACT TO PROTECTED TREES WITHIN TREE PROTECTION ZONE

— UTILIZE ISA CERTIFIED ARBORIST TO CLEANLY CUT PROTRUDING ROOTS AT LIMITS OF DISTURBANCE TO THE REQUIRED DEPTH. TEARING OR RIPPING OF ROOTS IS STRICTLY PROHIBITED.

— BACKFILL AREAS OF SOIL DISTURBANCE WITH TOPSOIL NATIVE TO THE SITE AND AMENDED WITH 5% PINE BARK COMPOST BY VOLUME. WATER-IN IMMEDIATELY TO PROVIDE A SURFACE LEVEL WITH FINISHED GRADE.

— PROVIDE 3" MULCH LAYER TO THE EXTENT OF THE DRIP LINE.

LDC 4.05.06(A) REQUIREMENT:

— MIXED USE DEVELOPMENT IN C3 ZONING:

"MINIMUM LANDSCAPED AREA:

AT LEAST TWENTY (20) PERCENT OF THE TOTAL GROSS LAND AREA OF A DEVELOPMENT SITE SHALL BE LANDSCAPED EXCEPT WITHIN THE CENTRAL BUSINESS DISTRICT / C-3 ZONED AND THE 8TH STREET MIXED USE (MU8)/MU-B ZONING PROPERTIES WHERE A MINIMUM OF 10% OF THE TOTAL GROSS LAND AREA SHALL BE LANDSCAPED.

10% * 29,293 SF = 2,929 SF

PROPOSED LANDSCAPED AREA: 3,323 SF

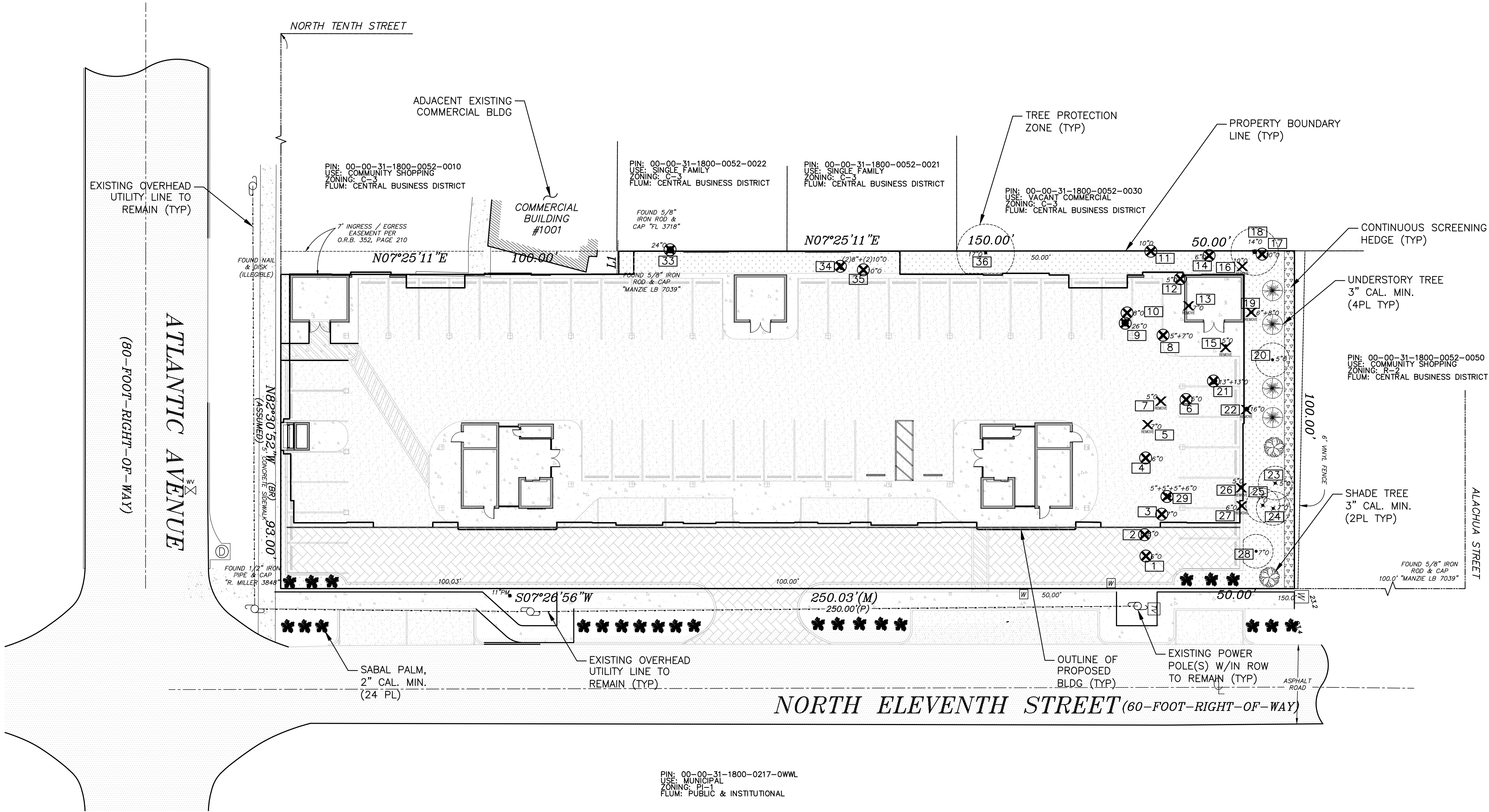
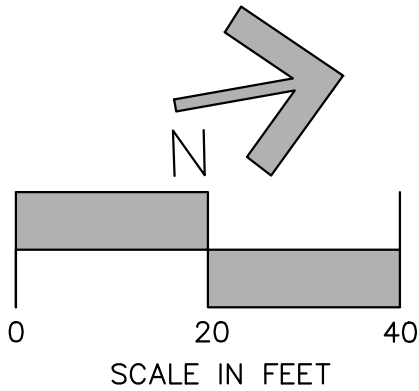
PLANT SCHEDULE				
SYMBOL	QTY.	KEY	SPECIES	SIZE/REMARKS
			COMMON NAME	
	1	SM	MAGNOLIA GRANDIFLORA	3' CAL MIN.
	1	LD	SDUTHERN MAGNOLIA	3' CAL MIN.
	2	CM	LIVE OAK	3' CAL MIN.
	2	LB	LAGERSTRÆMIA SPP.	3' CAL MIN.
	2	CP	CREPE MYRTLE	3' CAL MIN.
	2	CP	GORDONIA IASIANTHUS	3' CAL MIN.
	24	CP	LOBLOLLY BAY	2' CAL MIN.
	24	CP	SABAL PALMETTO	2' CAL MIN.
			CABBAGE PALM	2' CAL MIN.

TREE MITIGATION NOTES:

— SEE SHEET DT-1 FOR FULL TREE INVENTORY
MITIGATION CALCULATIONS AND LANDSCAPE
DETAILS

— TREES SHOWN WITH A TREE PROTECTION
ZONE (TPZ) AROUND THEM ARE CONSIDERED
SAVED TREES.

— (3) PALM TREES = (1) SHADE TREE



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REGISTERED DESIGN PROFESSIONAL
Civil Engineering
ASA R. GILLETTE, P.E.
FLORIDA P.E. NO. 56177

REV	DATE	ITEM
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PARK PLACE ON ATLANTIC
PARK PLACE ON ATLANTIC, LLC
1015 ATLANTIC AVENUE,
FERNANDINA BEACH, FLORIDA 32034

ISSUE DATE: 12/19/23

LANDSCAPE
PLAN

North / Elev Key Sheet
S N
LS-1
Page 7 of 10

TREE PRESERVATION & CREDIT TABLE						
TREE NO.	SPECIES	DBH	HEALTH STATUS	MITIGABLE DBH	PRESERVED? (Y/N)	SAVED DBH APPLIED
1	FLORIDA MAHOGANY	6	4	0	N	0
2	FLORIDA MAHOGANY	8	4	0	N	0
3	FLORIDA MAHOGANY	7	4	0	N	0
4	FLORIDA MAHOGANY	6	4	0	N	0
5	LAUREL	7	2	7	N	0
6	HOLLY	5	4	0	N	0
7	LAUREL	5	3	5	N	0
8	HACKBERRY (2)	12	4	0	N	0
9	LAUREL	26	4	0	N	0
10	HOLLY	8	5	0	N	0
11	BLACK GUM	10	4	0	N	0
12	HOLLY	5	4	0	N	0
13	LAUREL	7	3	7	N	0
14	HOLLY	6	5	0	N	0
15	LAUREL	5	2	5	N	0
16	LAUREL	10	2	10	N	0
17	BLACK GUM	10	4	0	N	0
18	HACKBERRY	14	1	14	Y	14
19	HACKBERRY (2)	14	3	14	N	0
20	CRAB APPLE	5	1	5	N	0
21	LAUREL (2)	26	4	0	N	0
22	LAUREL	16	2	16	N	0
23	LAUREL	5	2	5	Y	5
24	LAUREL	7	2	7	Y	7
25	LAUREL	7	2	7	Y	7
26	LAUREL	5	1	5	N	0
27	LAUREL	6	2	6	N	0
28	LAUREL	7	3	7	Y	7
29	FLORIDA MAHOGANY (4)	21	4	0	N	0
33	HACKBERRY	24	4	0	N	0
34	HACKBERRY (4)	36	4	0	N	0
35	HACKBERRY	10	4	0	N	0
36	LAUREL	17	3	17	Y	17
PREDEVELOPED TOTAL DBH		363				
PREDEVELOPED TOTAL MITIGABLE PROTECTED DBH		137				
REQUIRED PRESERVATION DBH (50% PROTECTED DBH)		69				
SAVED DBH		57				
PLANTED DBH		24				
POST-DEVELOPMENT TOTAL DBH		81				
DBH TOWARDS TREE FUND		0				

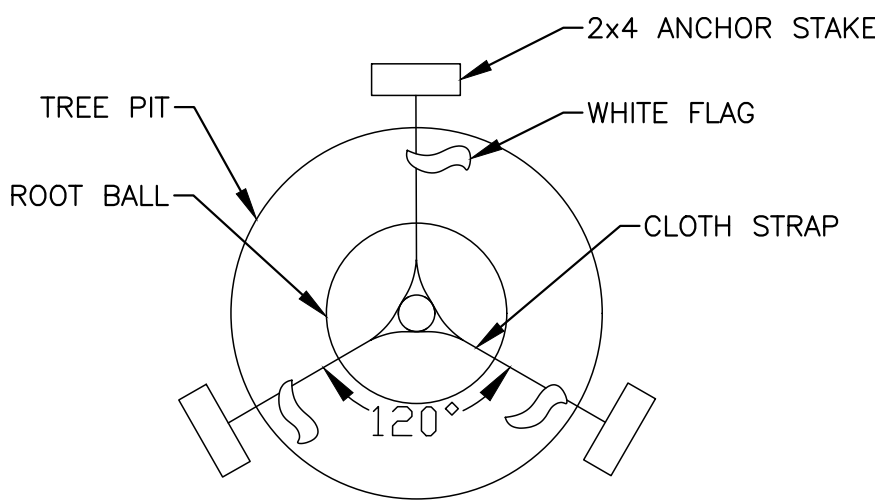
PLANT MATERIAL NOTES
ALL INSTALLED TREES, SHRUBS AND GROUNDCOVERS SHALL CONFORM TO THE STANDARDS FOR FLORIDA GRADE #1 OR BETTER ACCORDING TO THE CURRENT EDITION OF "GRADES AND STANDARDS FOR NURSERY PLANTS" PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY. SYNTHETIC OR ARTIFICIAL TREES, SHRUBS, GROUNDCOVERS OR VINES ARE NOT ACCEPTABLE SUBSTITUTES. IN CHOOSING PLANT MATERIALS, CONSIDERATION SHOULD BE GIVEN TO THE AMOUNT OF SUN OR SHADE, THE WETNESS OR DRYNESS OF THE SOIL, THE EFFECTS OF SALT SPRAY (WHERE APPLICABLE), THE AMOUNT OF IRRIGATION REQUIRED AND THE MATURE SIZE AND SPATIAL NEEDS OF PLANTS CHOSEN.

HEALTH STATUS CODES		
STATUS CODE	MITIGABLE? (Y/N)	HEALTH STATUS
1	Y	NO APPARENT DEFECT
2	Y	MINOR DEFECT
3	Y	COULD KEEP TREE BUT HAS DEFECTS
4	N	POOR HEALTH AND SUGGEST REMOVAL
5	N	SEVERE DEFECT AND SHOULD BE REMOVED

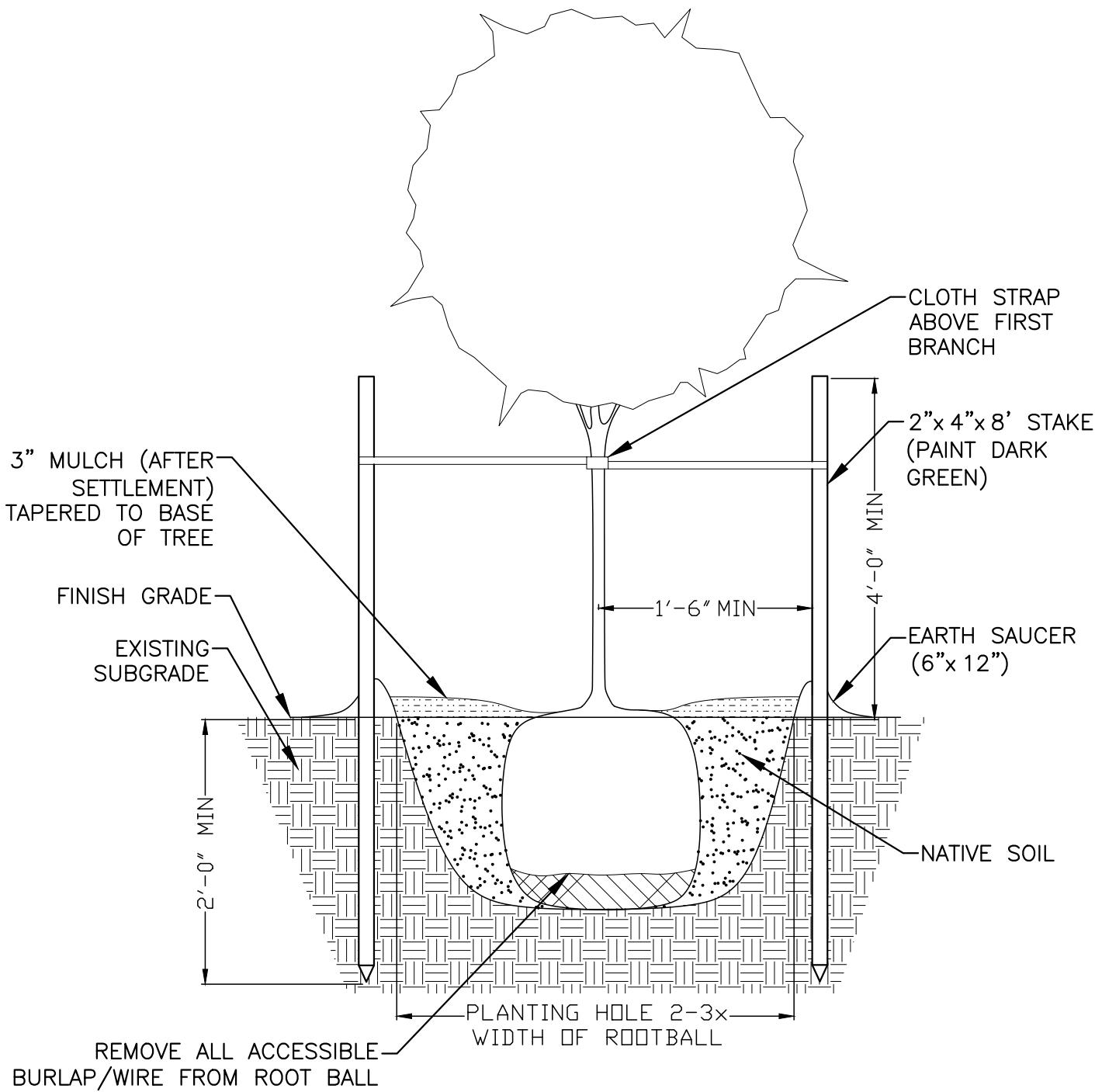
I, Early Y. McCall, am a certified arborist through the International Society of Arboriculture and my certification number is FL 6200A. I hereby attest that I have approved this tree protection and/or replacement plan. This includes not only the evaluation of individual trees, but also review of the complete construction plan set and the techniques that will be utilized to mitigate impacts to protected trees. Further, I attest that best practices, as supported by the International Society of Arboriculture, are being implemented to avoid and mitigate impacts to protected trees.

Signed,

Early Y. McCall



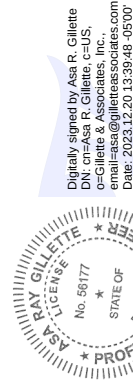
DETAIL 2
TREE STAKING PLAN



DETAIL 3
TREE PLANTING ELEVATION

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REGISTERED DESIGN PROFESSIONAL



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

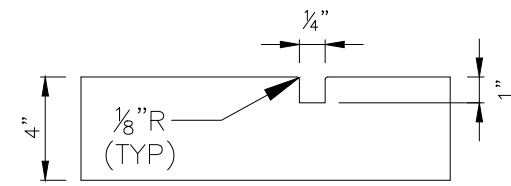
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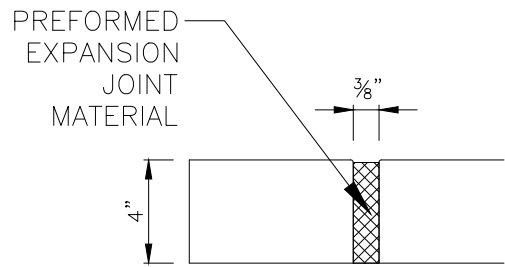
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PARK PLACE ON ATLANTIC, LLC
1015 ATLANTIC AVENUE,
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LANDSCAPE
DETAILS

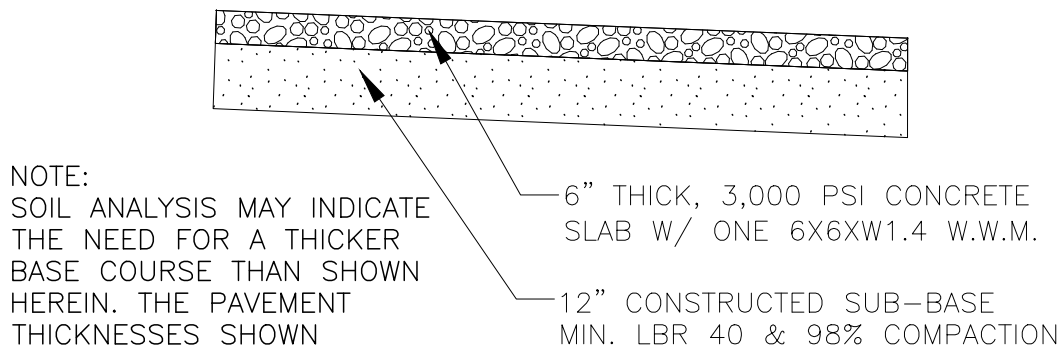


DUMMY JOINT



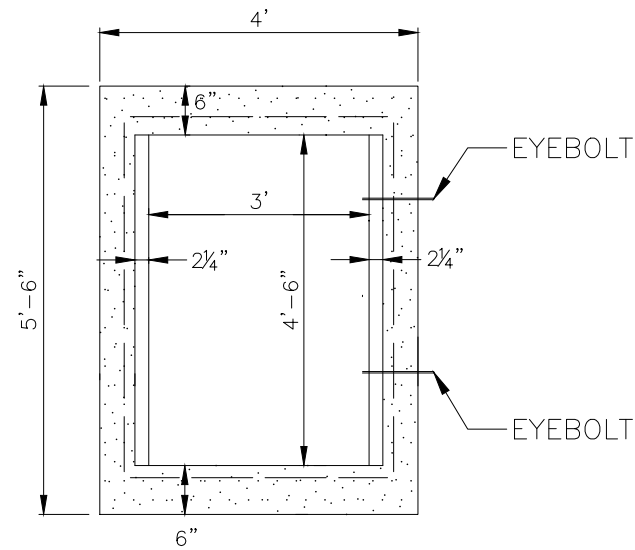
EXPANSION JOINT

SIDEWALK JOINT DETAILS

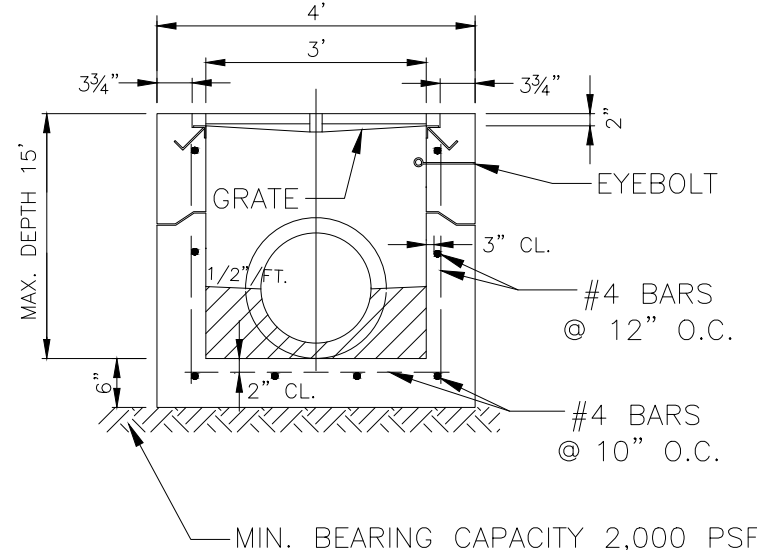


NOTE:
SOIL ANALYSIS MAY INDICATE THE NEED FOR A THICKER BASE COURSE THAN SHOWN HEREIN. THE PAVEMENT THICKNESSES SHOWN HEREIN ARE NOT INTENDED TO BE ABSOLUTE, BUT ARE PRELIMINARY CRITERIA AND MAY BE MODIFIED TO ACCOMMODATE THE BEARING CAPACITIES OF VARIOUS SUBGRADES.

TYPICAL CONCRETE DETAIL



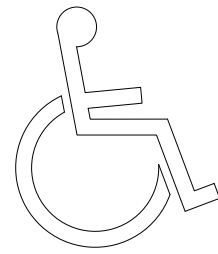
PLAN



SECTION

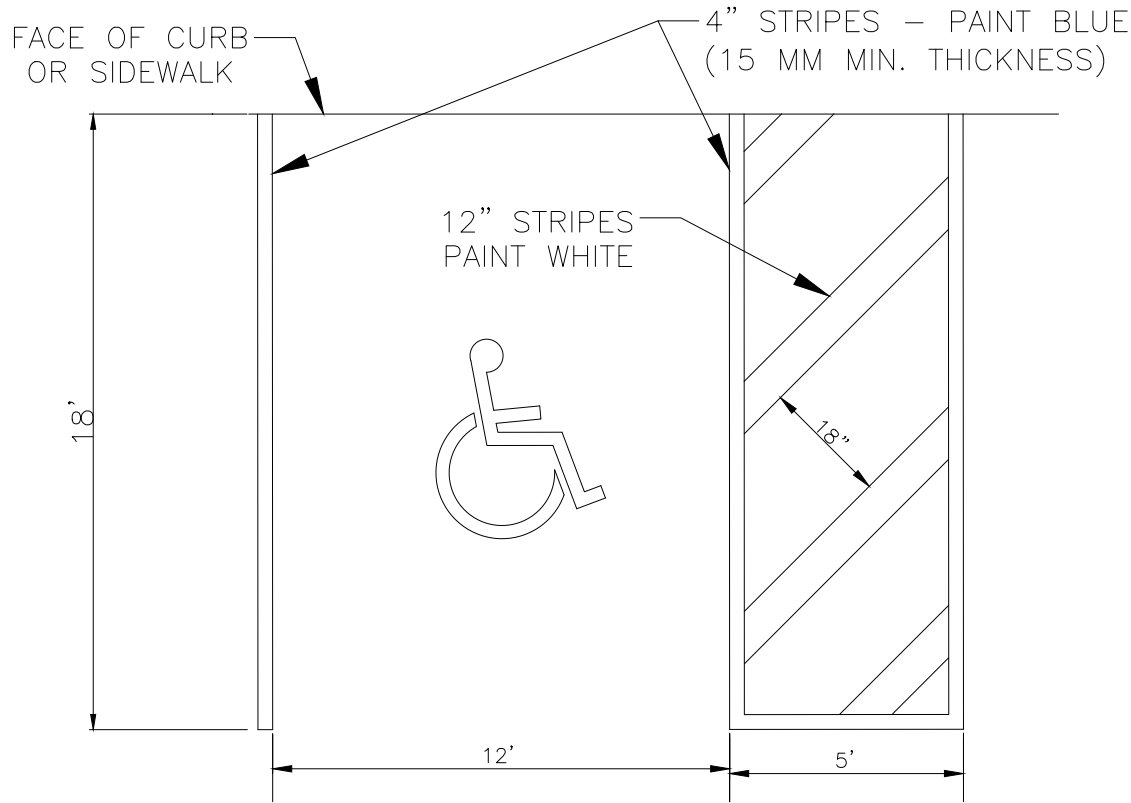
- NOTES:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
 2. PIPES SHALL BE FLUSH WITH INSIDE WALL
 3. SLOT OPENING SHALL NOT BE IN WALLS WITH RATE SEAT

TYPICAL TYPE E INLET DETAIL

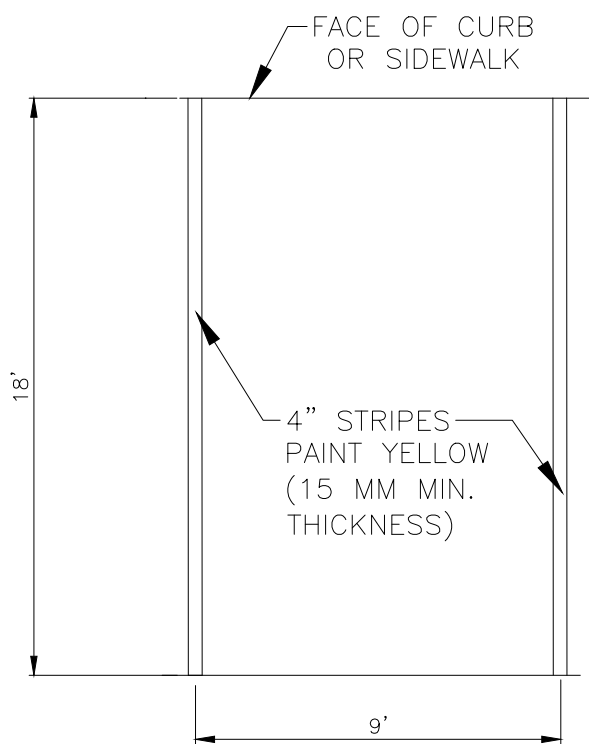


NOTE: PAINT SYMBOL ABOVE ONTO PAVED SURFACE WITH (2) COATS OF HANDI-CAP BLUE PAINT MANUFACTURED AS PER DEPT. OF TRANS. SPECS.

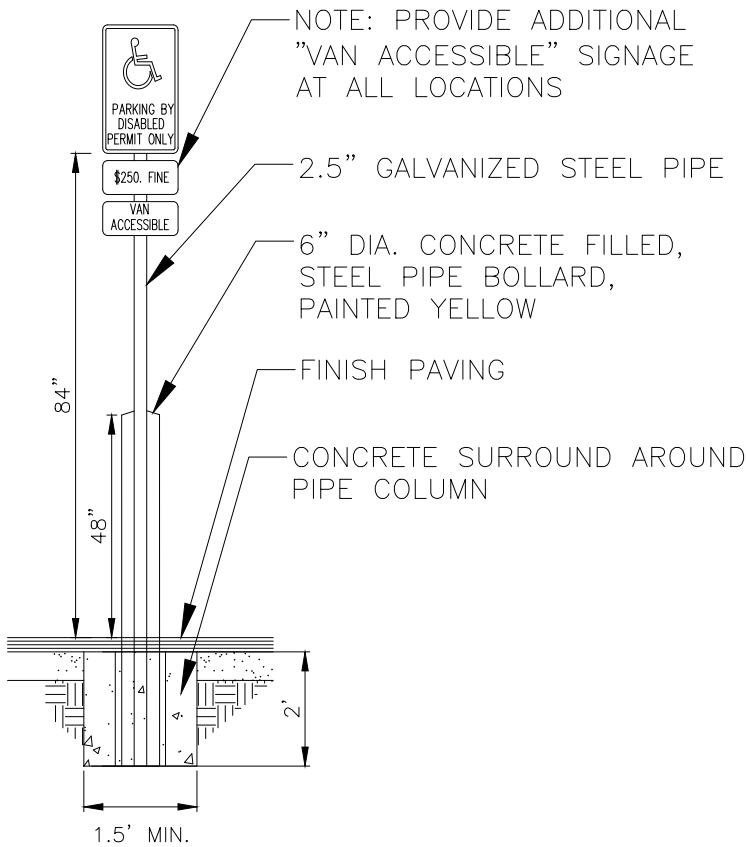
HANDICAPPED SYMBOL



TYPICAL DISABLED PARKING

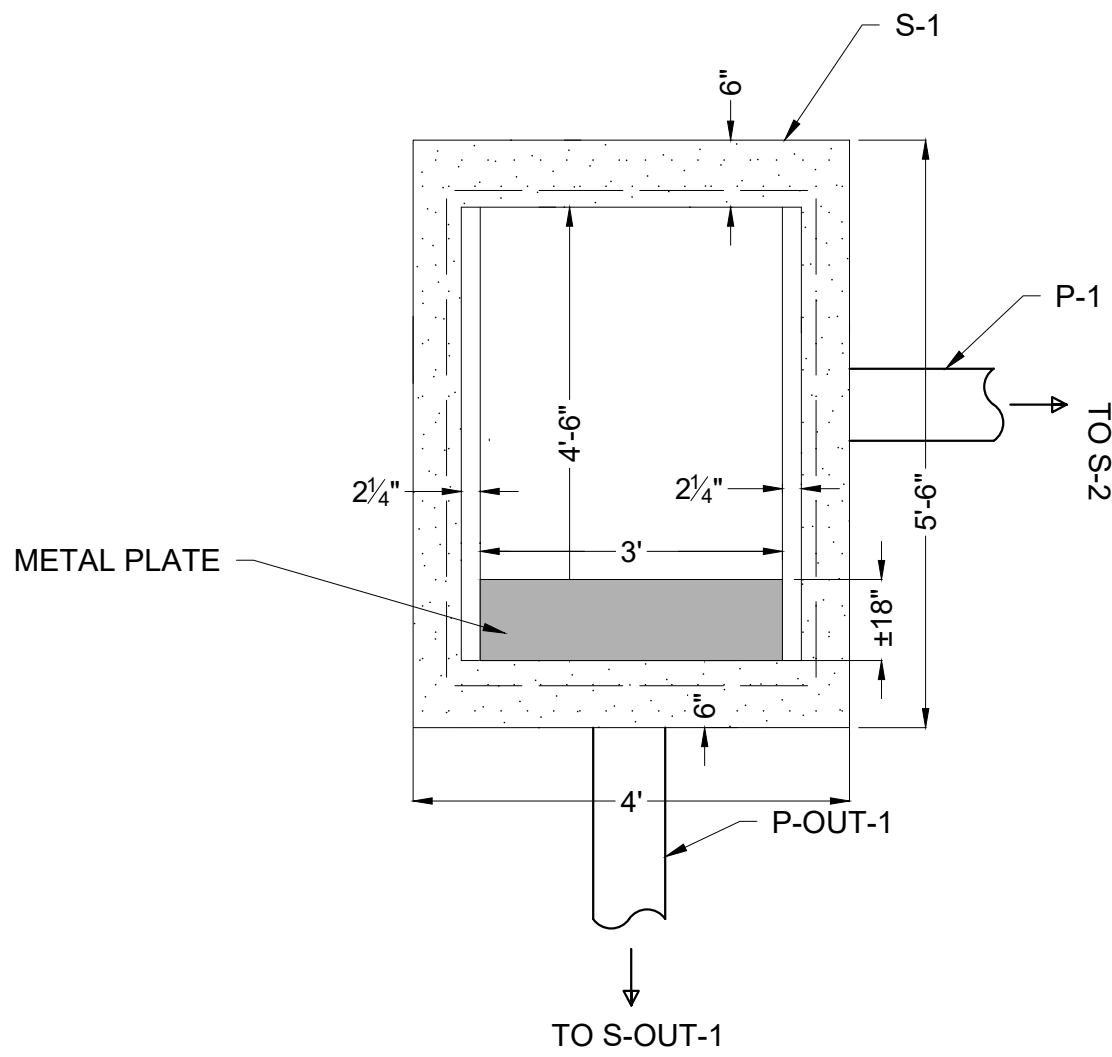


TYPICAL PARKING DETAIL



- NOTES:
1. ALL SIGNS SHOWN SHALL CONFORM TO FEDERAL ACCESSIBILITY SPECIFICATIONS.
 2. ALL SIGNS SHOWN SHALL BE REFLECTORIZED TO SHOW THE SAME COLOR BY NIGHT AS BY DAY.
 3. ALL SIGNS SHALL BE SECURELY MOUNTED ON GALVANIZED STEEL CHANNEL POSTS.
 4. INSTALL QUANTITY AND AT LOCATIONS REQUIRED BY CODE AND/OR AS INDICATED ON DRAWINGS. CONFIRM ALL HANDICAPPED SIGNAGE CODES.

HANDICAP SIGN DETAIL



PLAN

- NOTES:
1. CONCRETE DESIGN STRENGTH 4,000 PSI
 2. PIPES SHALL BE FLUSH WITH INSIDE WALL
 3. SLOT OPENING SHALL NOT BE IN WALLS WITH RATE SEAT

OUTFALL STRUCTURE

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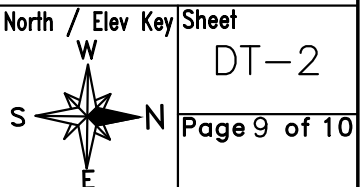
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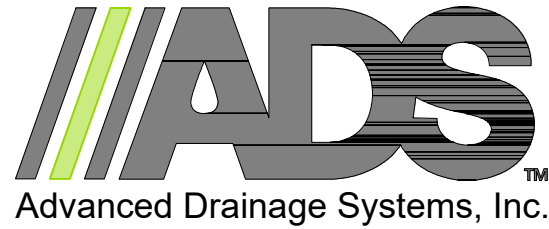
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MISC. DETAILS





SC-310 STORMTECH CHAMBER SPECIFICATIONS

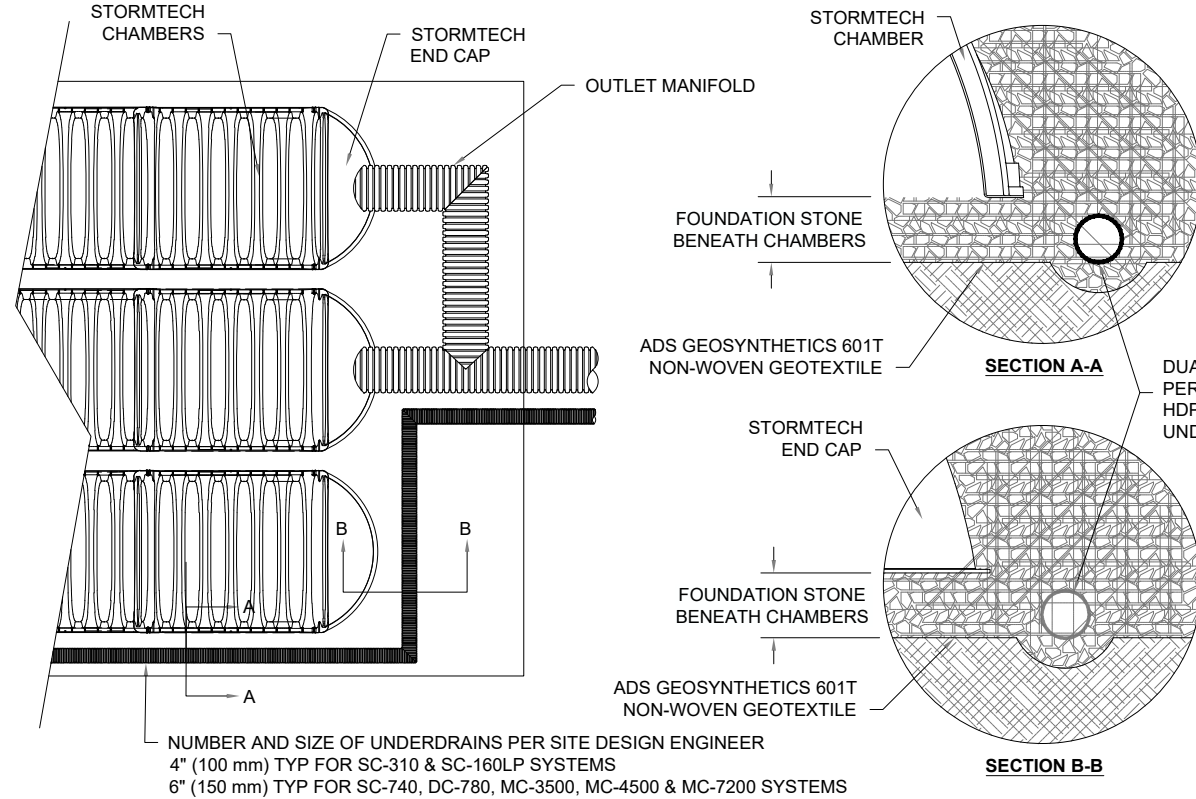
- CHAMBERS SHALL BE STORMTECH SC-310.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION DESIGN TRUCK".
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

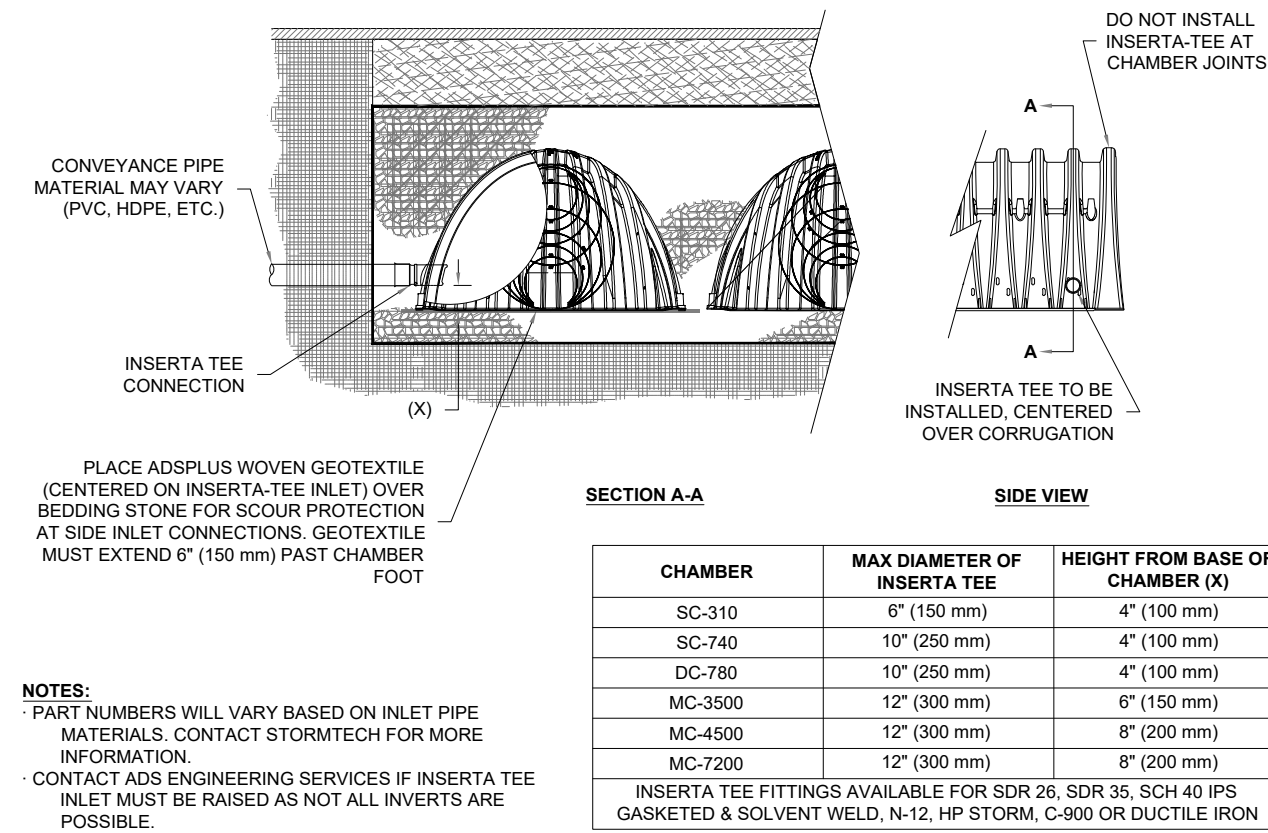
- STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HSE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

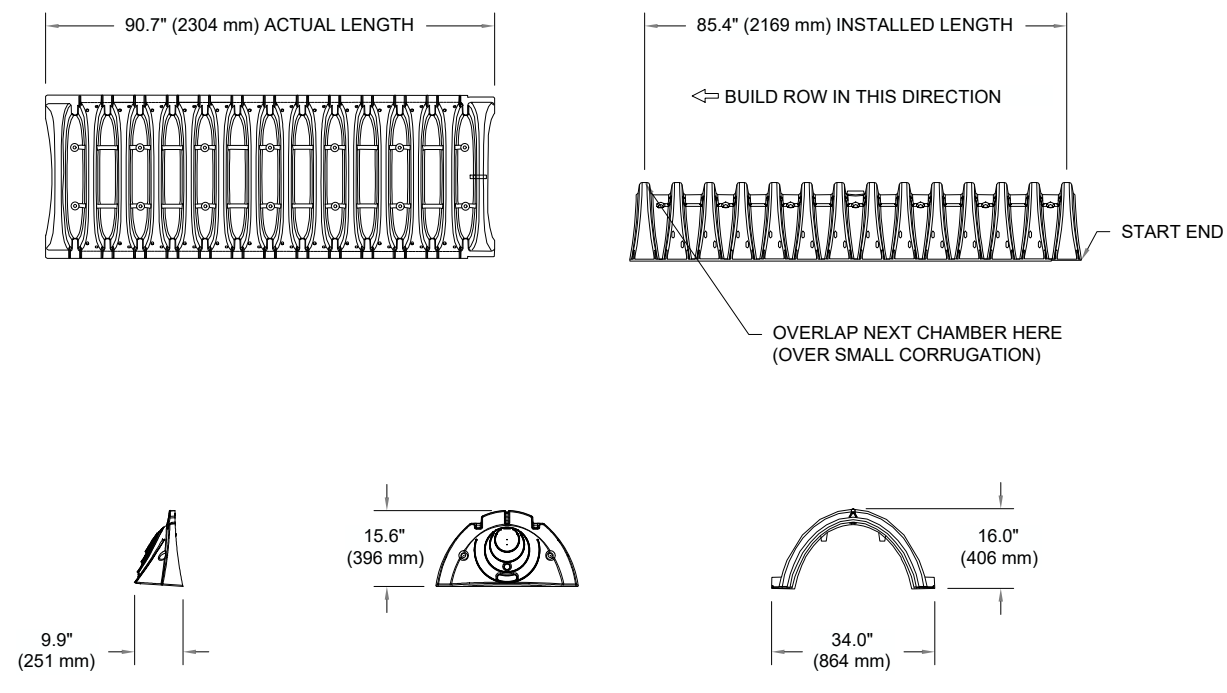


5 UNDERDRAIN DETAIL



- NOTES:
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
 - CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH) 34.0" X 16.0" X 85.4" (864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE 14.7 CUBIC FEET (0.42 m³)
MINIMUM INSTALLED STORAGE* 31.0 CUBIC FEET (0.88 m³)
WEIGHT 35.0 lbs. (16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	—
SC310EPE06B / SC310EPE06BPC	—	—	—	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	—
SC310EPE08B / SC310EPE08BPC	—	—	—	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	—
SC310EPE10B / SC310EPE10BPC	—	—	—	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	—	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

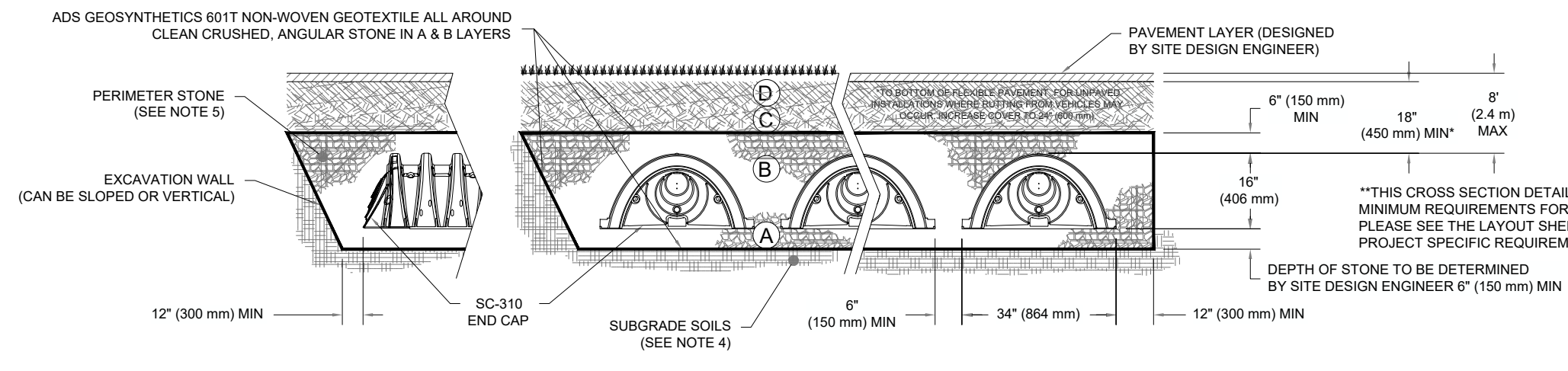
NOTE: ALL DIMENSIONS ARE NOMINAL.

2 SC-310 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE 2.3

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



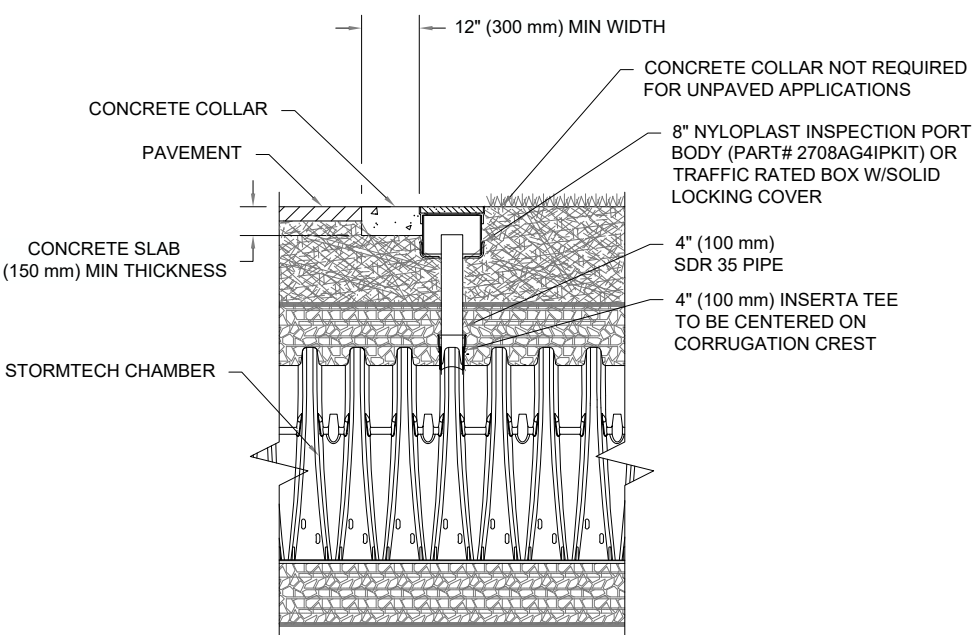
NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT² (AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1

SC-310 CROSS SECTION DETAIL

3 SC-310 ISOLATOR ROW PLUS DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- B.3. IF MIRRORS OR POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- B.4. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 40" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

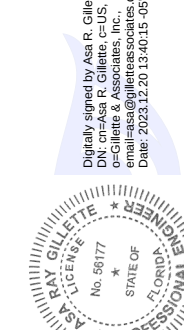
NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

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

REGISTERED DESIGN PROFESSIONAL



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

REV	DATE	ITEM	TRC SUBMITTAL #1
A	12/19/23		
B			
C			
D			
E			

GILLETTE & ASSOCIATES, INC.
CIVIL, ENVIRONMENTAL, MECHANICAL, & STRUCTURAL ENGINEERING

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ISSUE DATE: 12/19/23

DRAINAGE
DETAILS

North / Elev Key Sheet

DT-3

Page 0 of 10