



DEVELOPMENT REVIEW

Property Information

Property address or Location 951 112th ST FORT PIERCE FL 34450
 Parcel ID #(s) 2404-804-0020-000-0
 Project description PROPOSED DUPLEX

Application Type

- Site Plan Conditional Use w/New Construction Conceptual Development Plan
 Minor Amendment Major Amendment

Site Information

Non-Residential: Proposed Sq. Ft.: _____ Site Acreage: _____
 Residential: Proposed Units: 6 Proposed Sq. Ft.: 5,370 Site Acreage: 26,600

VINCENT MARCELLINO
Property Owner(s)

JOHN GEORGE GC
Applicant/Representative, Title, Company

5625 NW WAWAN CT
Street Address

686 OLD DIXIE HWY
Street Address

PORT ST LUCIE FL 34950
City State Zip

VERO BEACH FL 33962
City State Zip

954 914 5090
Phone Number

772 834 7001
Phone Number

HORIZON.PALMS@HOTMAIL.COM
Email Address

GEORGE.CONSTRUCTION3@GMAIL.COM
Email Address

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

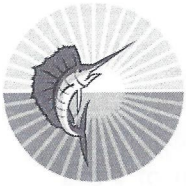
Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

<https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Rev>



DESIGN REVIEW

Property Information

Property address or Location 951 N 12th ST FORT PIERCE FL 34950
 Parcel ID #(s) 2A04-804-0020-000-0
 Project description PROPOSED DUPLEX

VINCENT MARCE LUND
 Property Owner(s)

John GEORGE G.C
 Applicant/Representative, Title, Company

5625 NW KAWWAN CT
 Street Address

686 OLD DIXIE HWY
 Street Address

PORT ST LUCIE FL 34986
 City State Zip

VERO BEACH FL 33962
 City State Zip

954 914 5090
 Phone Number

772 834 7001
 Phone Number

HORIZON-PALMS@HOTMAIL.COM
 Email Address

GEORGE.CONSTRUCTION@GMAIL.COM
 Email Address

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

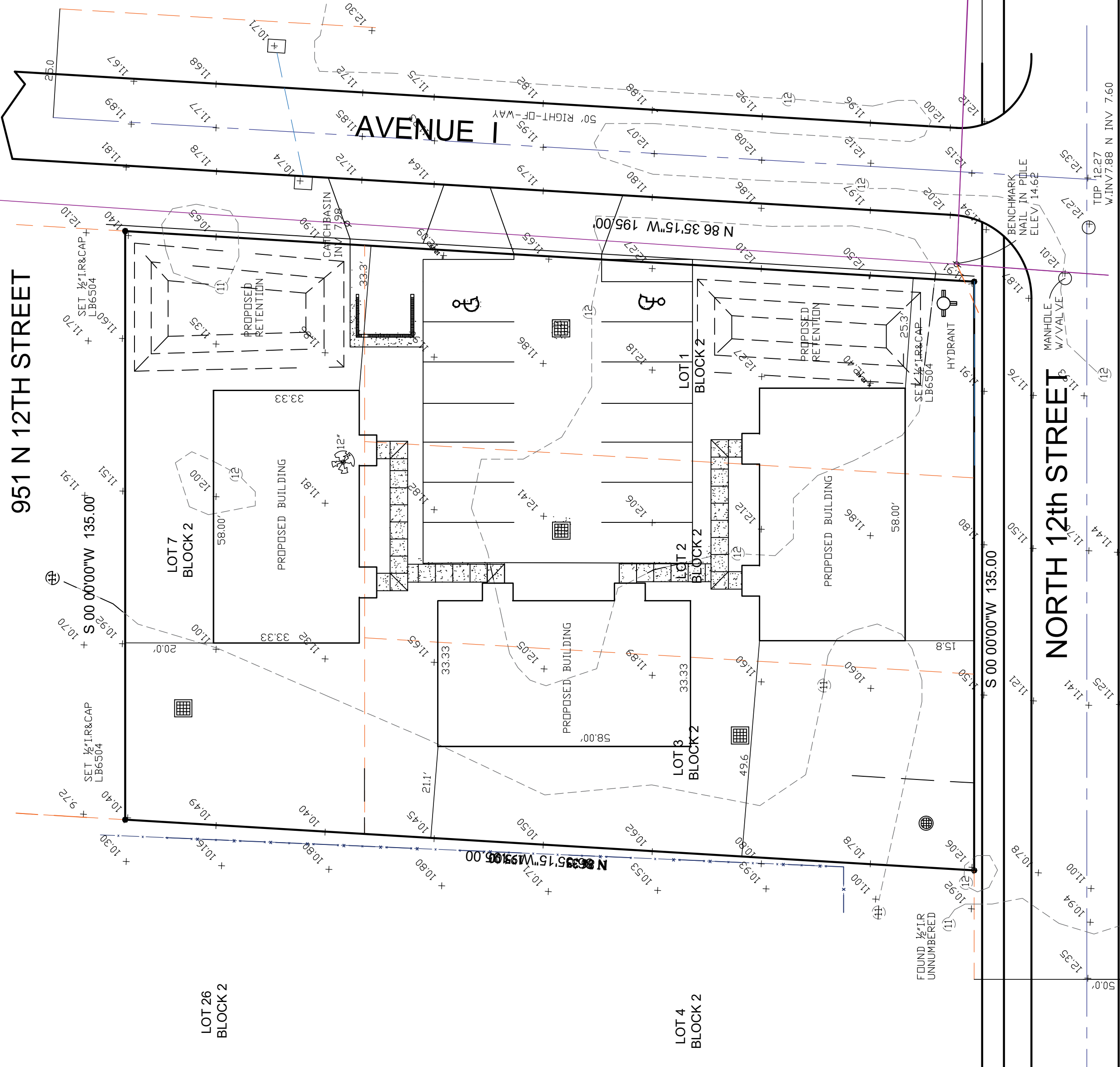
Property Owner(s) Signature(s)

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 CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM
 For more information, please refer to the website:
<https://www.cityoffortpiece.com/971/Application-Submittal-for-Technical-Rev1>

LOTS 2, 17 AND 18, BLOCK 1 OF THE PLAT OF NOBLES AND NOTTINGHAM SUBDIVISION AS RECORDED IN PLAT BOOK 4 PAGE 41 OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA

LOT 8
BLOCK 2

951 N 12TH STREET

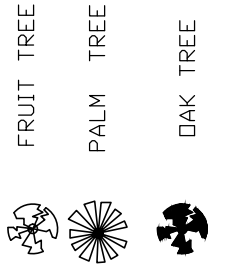


TOP 13.80
S JNW 933 W INV 10.71

50' RIGHT-OF-WAY

NORTH 12th STREET

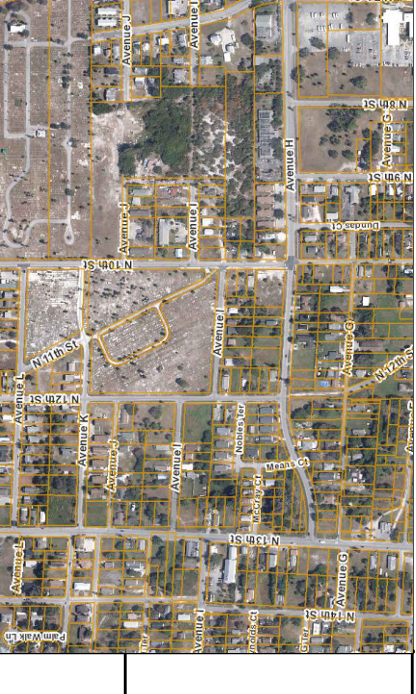
PROPOSED SURVEY SITE PLAN



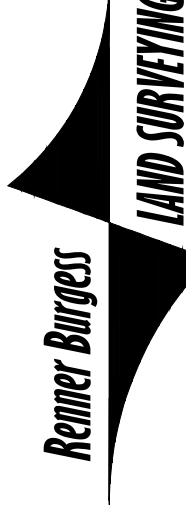
- 1) BEARINGS SHOWN HEREIN ARE ASSUMED
- 2) NO ABSTRACT OR TITLE SEARCH WAS PERFORMED TO DISCOVER THE EXISTENCE OF ANY EASEMENTS OR RESTRICTIONS OF RECORD.
- 3) ELEVATIONS SHOWN HEREIN ARE BASED ON NAVD 1988 ALL ELEVATIONS SHOWN HEREIN ARE RELATIVE THERETO
- 4) NO BELOW GROUND IMPROVEMENTS, PIPES, FOUNDATIONS OR UTILITIES HAVE BEEN LOCATED OR SHOWN ON THIS SURVEY.

OBS = official record book
 C.S. = official record book
 P.C.C. = point of compound curve
 P.I.C. = point of intersection
 P.T. = point of tangency
 C.A.P. = corrugated metal pipe
 L.S. = licensed business
 T.M. = transformer pad
 P.M. = permanent monument
 C.M. = concrete monument
 P.I. = point of intersection
 P.T. = point of tangency
 W.P. = wood privacy fence
 U.P. = utility easement
 ELEV = elevation
 P.M. = permanent reference monument
 P = plat
 B = block
 M = metes and bounds
 R = radius
 RP = radius point
 C = bearing base line
 L = length
 C.C. = concrete
 U.E. = utility easement
 A.U.M. = aluminum
 C.A.L.C. = calculated
 P.R.M. = permanent reference monument

NO 100-YEAR FLOOD ELEVATION GIVEN IN THIS AREA PER FEMA MAP 12110C078K, DATED 2-19-2020



NORTH
NOT TO SCALE
VICINITY
MAP



801 S.E. 6th Ave., Suite 203
Delray Beach, FL 33483
Phone: 243-4624
Fax: 243-4869

AUTHORIZATION NUMBER LB6504
 I HEREBY CERTIFY THAT THE SKETCH OF BOULDERING BY HARRY A. BURGESS FOR THE SURVEY OF LOTS 2, 17 AND 18, BLOCK 1 OF THE PLAT OF NOBLES AND NOTTINGHAM SUBDIVISION AS RECORDED IN PLAT BOOK 4 PAGE 41 OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA IS ACCURATE AND CORRECT.
 CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES
 Digitally signed by
 HARRY A. BURGESS
 Date: 2022.12.16 10:51:17
 REVISED
 FLOOD ZONE: X
 MAP NO: 121C 079 K
 MAP DATE: 2-19-2020
 DATE: 1-13-2022
 JOB NO: 7-20-05

NOT VALID UNLESS SEALED WITH EMBOSSED SURVEYOR'S SEAL

This Document Prepared By and Return to:
Melissa Harnage
St. Lucie Title Services, Inc.
800 Virginia Avenue, Suite 47
Fort Pierce, FL 34982

Parcel ID Number: 2404-804-0027-000/9

Warranty Deed

This Indenture, Made this 2nd day of October, 2020 A.D., Between
Antoinette Barker and Louise Robinson and Latonya Robinson

of the County of Wakulla, State of Florida, grantors, and
Vincent Marcellino

whose address is: 5625 NW Wawan Ct., Port St. Lucie, FL 34986

of the County of St. Lucie, State of Florida, grantee.

Witnesseth that the GRANTORS, for and in consideration of the sum of
-----TEN DOLLARS (\$10)----- DOLLARS,
and other good and valuable consideration to GRANTORS in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, have
granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate,
lying and being in the County of St. Lucie State of Florida to wit:

Lot 7, Block 2, Nobles and Nottingham, according to the Plat thereof
as recorded in Plat Book 4, page(s) 41, of the Public Records of St.
Lucie County, Florida.

The property herein conveyed is vacant and unimproved land and DOES NOT
constitute the HOMESTEAD property of the Grantor.

and the grantors do hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantors have hereunto set their hands and seals the day and year first above written.

Signed, sealed and delivered in our presence:

Mary Reinke
Printed Name: Mary Reinke
Witness

Antoinette Barker (Seal)
Printed Name: Antoinette Barker
P.O. Address: 29 Renegade Road, Crawfordville, FL 32327

Leah Roy
Printed Name: Leah Roy
Witness

STATE OF Florida
COUNTY OF Wakulla

The foregoing instrument was acknowledged before me by means of X physical presence or _____ online
notarization, this 1 day of October, 2020 by
Antoinette Barker

who are personally known to me or who have produced their Passport
_____ as identification.



SHANNON K LARSON
MY COMMISSION # GG 053824
EXPIRES: January 21, 2021
Bonded Thru Budget Notary Services

Shannon K Larson
Printed Name: Shannon K Larson
Notary Public
My Commission Expires: 1/21/21

Warranty Deed - Page 2

Parcel ID Number: 2404-804-0027-000/9

In Witness Whereof, the grantors have hereunto set their hands and seals the day and year first above written.

Signed, sealed and delivered in our presence:

Printed Name: Melissa Harnage
Witness

Printed Name: Ralph Walters
Witness

[Signature] (Seal)
Louise Robinson
P.O. Address: 2310 Avienda Avenue, Fort Pierce, FL 34946

[Signature] (Seal)
Latonya Robinson
P.O. Address: 2310 Avienda Avenue, Fort Pierce, FL 34946

STATE OF Florida
COUNTY OF St. Lucie

The foregoing instrument was acknowledged before me by means of physical presence or _____ online notarization, this 2 day of **October**, 2020 by **Louise Robinson and Latonya Robinson**

who are personally known to me or who have produced their _____ as identification.

[Signature]

Printed Name: _____
Notary Public
My Commission Expires: _____



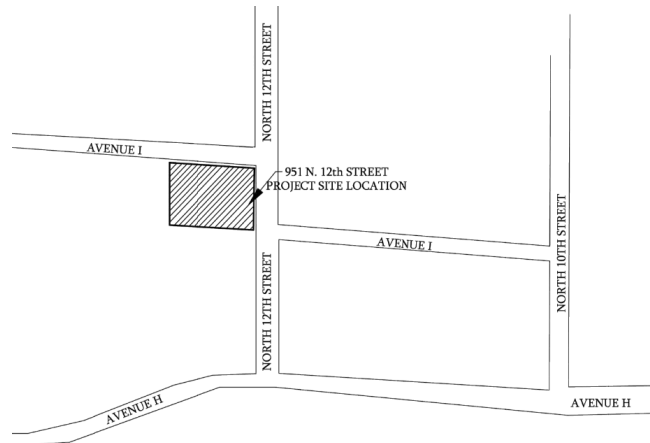
Drainage Analysis
951 N 12th St
City of Ft Pierce

This report assesses the drainage capacity of a 0.61-acre three-duplex with parking lot project in Fort Pierce, Florida. Using the required storm events, pre- and post-development runoff was analyzed, and the required water quality treatment volume was determined.


Estimated Required Attenuation:

- 100-year - 1-day - Finished Floor Elevation
 - Required Elevation = 13.03 (NAVD-88)
 - Provided Elevation = 13.60 (NAVD-88)
- 25-year - 3-day - Perimeter Berm Elevation
 - Pre-Developed Runoff = 0.36 ac-ft
 - Post-Developed Runoff = 0.42 ac-ft
 - Required On-Site Retention = 0.06 ac-ft
 - Required Elevation = 12.69 (NAVD-88)
 - Provided Elevation = 13.00 (NAVD-88)
- 10-year - 1-day - Parking Lot
 - Post-Developed Runoff = 0.18 ac-ft
 - Required Elevation = 12.21 (NAVD-88)
 - Provided Elevation = 13.40 (NAVD-88)

The proposed dry retention system is designed to fully contain the pre vs post runoff from the 25-3 storm event on-site, with a provided on-site retention volume of 0.55 ac-ft at an elevation of 13.00 feet (NAVD-88). Exceedance of this elevation will result in overflow into the adjacent road right-of-way, where runoff will be conveyed away from the site and into the nearest storm drain inlet. Detailed drainage calculations are available for review.



I certify that the drainage analysis presented in this report is accurate and meets the requirements of the applicable local and state regulations, including SFWMD and City of Fort Pierce Section 119.

 Dylan O'Berry, P.E.
Civil Engineer
Art of Engineering
Port St. Lucie, Florida
(772) 203-0664
dylan@artofengineering.net
<https://artofengineering.net>

**Pre-Development Land Use Calculations
Floodplain Analysis - Pre vs Post**

Project Name: 951 N 12th St Duplex Project Ft Pierce
 Project #: 2025-020
 Engineer: Dylan OBerry PE
 Date: 1/31/2025

Engineer:
 Revision Date:

Computation Type: Land Use & Stage-Storage
 Datum: NAVD

Average Ground Elevation (EL_{grnd}) = 11.50 ft-NAVD Source: Survey Topo
 Control Elevation (CE) = 9.50 ft-NAVD Source: USDA Soils

Site Land Use

	Exist Green Space	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Total
	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)
Percentage of On-Site	100.0%	0.0%	0.0%	0.00%	0.00%	0.0%	0.0%	0.00%	0.00%	
Total Areas (SF)	26,600 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	26,600 SF
Total Areas (A _t)	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Bldg. %	0.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bldg. Area (A _b)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pervious %	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%
Pervious Area (A _p)	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Impervious %	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Impervious Area (A _i)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open Water %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
Open Water Area (A _o)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Pre-Development Stage-Storage Calculations
Floodplain Analysis - Pre vs Post**

Storage Type: **Stage-Volume**
 Starting Stage = **10.00**
 Ending Stage = **14.00**
 Stage Increment = **0.10**

Name	Exist Green Space	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area
Area	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Elev	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
End Elev	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stage Feet	Linear Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Total Storage
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft
10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.80	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
10.90	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
11.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
11.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
11.20	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
11.30	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
11.40	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
11.50	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
11.60	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
11.70	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
11.80	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
11.90	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
12.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
12.10	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38
12.20	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
12.30	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
12.40	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
12.50	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.60	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
12.70	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
12.80	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79
12.90	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
13.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
13.10	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
13.20	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
13.30	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
13.40	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16
13.50	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22

**Pre-Development Stage-Area Calculations
Floodplain Analysis - Pre vs Post**

Storage Type: **Stage-Area**
 Starting Stage = **10.00**
 Ending Stage = **14.00**
 Stage Increment = **0.10**

Name	Exist Green Space	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area	Exist. Area
Area	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Elev	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
End Elev	12.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stage Feet	Linear Area	Vert Area	Vert Area	Vert Area	Vert Area	Vert Area	Vert Area	Vert Area	Vert Area	Total Area
NAVD	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac
10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.70	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
10.80	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
10.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
11.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14
11.10	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
11.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
11.30	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
11.40	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
11.50	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
11.60	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
11.70	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
11.80	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
11.90	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
12.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
12.10	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
12.20	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
12.30	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
12.40	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.50	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.60	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.70	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.80	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
12.90	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.10	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.20	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.30	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.40	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
13.50	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61

PRE-Development Stormwater Calculations

Floodplain Analysis - Pre vs Post

Project: 951 N 12th St Duplex Project Ft Pierce
 Project #: 2025-020

Revised: _____
 Engineer: Ilan OBerry I
 Date: 1/31/2025

Land Use Table

Use	Imp. (ac)	Bldg. (ac)	Pervious (ac)	Total (ac)
Basin =	0.00	0.00	0.61	0.61
TOTAL =	0.00	0.00	0.61	0.61

Find Curve Number:

Avg. Pervious Ground El. =	11.50
Control Elev. =	9.50
Distance to Water Table =	2.00

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
0.0	0.0	0.0	0.0
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9.0	6.8

Find the basin's soil classification and input below as "Soil Storage" using the above "Depth to W.T.".

Soil Type =	Flatwoods	
Max. Available Soil Storage (S_{max}) =	2.50	inches
Compaction Factor ($F_{compact}$) =	0%	(Use 25% for developed site)
Compacted Soil Storage ($S_{compact}$) =	2.50	inches
Available Soil Storage (S_{avail}) =	2.50	inches
Curve Number (CN) =	80	

$$\frac{(S_{max})(F_{compact})}{1000 / (S_{avail} + 10)}$$

Notes:

1. Soil Storage Table taken from Section 5.7.4.2 of the SFWMD ERP Applicant's Handbook Volume II.
2. Curve Number determination based on method presented in USDA NRCS Technical Release 55 (TR-55) "Urban Hydrology for Small Watersheds".

**Post-Development Stage-Storage Calculations
Floodplain Analysis - Post**

Storage Type: **Stage-Volume**
 Starting Stage = **11.00**
 Ending Stage = **14.00**
 Stage Increment = **0.10**

Name	Exist Green Space	Duplex	Pavement	Retention	Retention Sides	Prop	Prop	Prop	Prop	Prop	Total
Area	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	
Start Elev	10.60	13.60	12.30	11.30	11.30	0.00	0.00	0.00	0.00	0.00	
End Elev	12.40	0.00	13.40	0.00	12.30	0.00	0.00	0.00	0.00	0.00	
Stage	Linear Storage	Vert Storage	Linear Storage	Vert Storage	Linear Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Vert Storage	Total Storage
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft
11.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
11.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
11.20	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
11.30	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
11.40	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
11.50	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
11.60	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
11.70	0.10	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.11
11.80	0.12	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.14
11.90	0.15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.16
12.00	0.17	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.19
12.10	0.19	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.21
12.20	0.22	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.25
12.30	0.25	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.28
12.40	0.28	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.31
12.50	0.31	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.35
12.60	0.34	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.39
12.70	0.37	0.00	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.43
12.80	0.40	0.00	0.01	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.47
12.90	0.43	0.00	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.51
13.00	0.46	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.55
13.10	0.50	0.00	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.59
13.20	0.53	0.00	0.04	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.64
13.30	0.56	0.00	0.05	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.68
13.40	0.59	0.00	0.06	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.73
13.50	0.62	0.00	0.07	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.77
13.60	0.65	0.00	0.09	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.82
13.70	0.68	0.01	0.10	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.88
13.80	0.71	0.03	0.11	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.94
13.90	0.74	0.04	0.12	0.04	0.06	0.00	0.00	0.00	0.00	0.00	1.00
14.00	0.77	0.06	0.13	0.04	0.06	0.00	0.00	0.00	0.00	0.00	1.06

**Post-Development Stage-Area Calculations
Floodplain Analysis - Post**

Storage Type: **Stage-Area**
 Starting Stage = **10.00**
 Ending Stage = **16.00**
 Stage Increment = **0.20**

Name	Exist Green Space	Duplex	Pavement	Retention	Retention Sides	Prop	Prop	Prop	Prop	Prop	Total
Area	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	
Start Elev	10.60	13.60	12.30	11.30	11.30	0.00	0.00	0.00	0.00	0.00	
End Elev	12.40	0.00	13.40	0.00	12.30	0.00	0.00	0.00	0.00	0.00	
Stage	Linear	Vert	Linear	Vert	Linear	Vert	Vert	Vert	Vert	Vert	Total
Feet	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
NAVD	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac	Ac
10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.80	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
11.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
11.20	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
11.40	0.14	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.16
11.60	0.17	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.20
11.80	0.21	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.24
12.00	0.24	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.28
12.20	0.28	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.32
12.40	0.31	0.00	0.01	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.36
12.60	0.31	0.00	0.03	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.38
12.80	0.31	0.00	0.05	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.40
13.00	0.31	0.00	0.07	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.42
13.20	0.31	0.00	0.09	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.45
13.40	0.31	0.00	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.47
13.60	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
13.80	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
14.00	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
14.20	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
14.40	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
14.60	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
14.80	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
15.00	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
15.20	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
15.40	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
15.60	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
15.80	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61
16.00	0.31	0.14	0.11	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.61

Post-Development Stormwater Calculations

Floodplain Analysis - Post

Project: 951 N 12th St Duplex Project Ft Pierce
 Project #: 2025-020

Revised: _____
 Engineer: Ilan OBerry I
 Date: 1/31/2025

Land Use Table

Use	Imp. (ac)	Bldg. (ac)	Pervious (ac)	Total (ac)
Basin =	0.11	0.14	0.35	0.61
TOTAL =	0.11	0.14	0.35	0.61

Find Curve Number:

Avg. Pervious Ground El. =	11.51
Control Elev. =	9.50
Distance to Water Table =	2.01

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
0.0	0.0	0.0	0.0
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9.0	6.8

Find the basin's soil classification and input below as "Soil Storage" using the above "Depth to W.T.".

Soil Type =	Flatwoods	
Max. Available Soil Storage (S_{max}) =	2.54	inches
Compaction Factor ($F_{compact}$) =	25%	(Use 25% for developed site)
Compacted Soil Storage ($S_{compact}$) =	1.90	inches
Available Soil Storage (S_{avail}) =	1.10	inches
Curve Number (CN) =	90	$(S_{max})(F_{compact}) / (A_p)(S_{compact}) / (A_t) / 1000 / (S_{avail} + 10)$

Notes:

1. Soil Storage Table taken from Section 5.7.4.2 of the SFWMD ERP Applicant's Handbook Volume II.
2. Curve Number determination based on method presented in USDA NRCS Technical Release 55 (TR-55) "Urban Hydrology for Small Watersheds".

Estimated Required Attenuation
Floodplain Analysis - Pre vs Post

Project: 951 N 12th St Duplex Project Ft Pierce Revised: _____
Project #: 2025-020 Engineer: ylan OBerry PE
Date: 1/31/2025

Pre-Developed Runoff

10 Year - 1 Day

$$\begin{aligned} \text{Area, A (ac)} &= 0.61 \\ \text{Soil Storage, S (inches)} &= 2.50 \\ \text{Curve Number, CN} &= 1000/(S+10) \\ &= 80 \end{aligned}$$

10 Year - 1 Day Rainfall, P (inches) = 6 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

$$\begin{aligned} \text{Depth of Runoff, Q (inches)} &= (P - 0.2S)^2 / (P + 0.8S) \\ &= 3.781 \end{aligned}$$

$$\begin{aligned} \text{Volume, V (AC-FT)} &= A * Q \\ &= 0.192 \end{aligned}$$

Post Developed Runoff

10 Year - 1 Day

$$\begin{aligned} \text{Area, A (ac)} &= 0.61 \\ \text{Soil Storage, S (inches)} &= 1.10 \\ \text{Curve Number, CN} &= 1000/(S+10) = \\ &= 90 \end{aligned}$$

10 Year - 1 Day Rainfall, P (inches) = 6 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

$$\begin{aligned} \text{Depth of Runoff, Q (inches)} &= (P - 0.2S)^2 / (P + 0.8S) \\ &= 4.858 \end{aligned}$$

$$\begin{aligned} \text{Volume, V (AC-FT)} &= A * Q \\ &= 0.247 \end{aligned}$$

$$\text{10Y-1D Elevation} = \boxed{12.21} \text{ ft NAVD}$$

Estimated Required Attenuation
Floodplain Analysis - Pre vs Post

Project: 951 N 12th St Duplex Project Ft Pierce Revised: _____
Project #: 2025-020 Engineer: ylan OBerry PE
Date: 1/31/2025

Pre-Developed Runoff

25 Year - 3 Day

$$\begin{aligned} \text{Area, A (ac)} &= 0.61 \\ \text{Soil Storage, S (inches)} &= 2.50 \\ \text{Curve Number, CN} &= 1000/(S+10) \\ &= 80 \end{aligned}$$

25 Year - 3 Day Rainfall, P (inches) = 9.5 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

$$\begin{aligned} \text{Depth of Runoff, Q (inches)} &= (P - 0.2S)^2 / (P + 0.8S) \\ &= 7.04 \end{aligned}$$

$$\begin{aligned} \text{Volume, V (AC-FT)} &= A * Q \\ &= 0.36 \end{aligned}$$

Post Developed Runoff

25 Year - 3 Day

$$\begin{aligned} \text{Area, A (ac)} &= 0.61 \\ \text{Soil Storage, S (inches)} &= 1.10 \\ \text{Curve Number, CN} &= 1000/(S+10) = \\ &= 90 \end{aligned}$$

25 Year - 3 Day Rainfall, P (inches) = 9.5 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

$$\begin{aligned} \text{Depth of Runoff, Q (inches)} &= (P - 0.2S)^2 / (P + 0.8S) \\ &= 8.30 \end{aligned}$$

$$\begin{aligned} \text{Volume, V (AC-FT)} &= A * Q \\ &= 0.42 \end{aligned}$$

25Y-3D Elevation = 12.69 ft NAVD

Estimated Required Attenuation
Floodplain Analysis - Pre vs Post

Project: 951 N 12th St Duplex Project Ft Pierce Revised: _____
Project #: 2025-020 Engineer: ylan OBerry PE
Date: 1/31/2025

Pre-Developed Runoff

100 Year - 1 Day

Area, A (ac) = 0.61
Soil Storage, S (inches) = 2.50
Curve Number, CN = $1000/(S+10)$
= 80

100 Year - 1 Day Rainfall, P (inches) = 12.23 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$
= 9.67

Volume, V (AC-FT) = A * Q
= 0.49

Post Developed Runoff

100 Year - 1 Day

Area, A (ac) = 0.61
Soil Storage, S (inches) = 1.10
Curve Number, CN = $1000/(S+10)$ =
90

100 Year - 1 Day Rainfall, P (inches) = 12.23 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II)

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$
= 11.00

Volume, V (AC-FT) = A * Q
= 0.56

25Y-3D Elevation = 13.03 ft NAVD



NOAA Atlas 14, Volume 9, Version 2
Location name: Fort Pierce, Florida, USA*
Latitude: 27.4583°, Longitude: -80.3355°
Elevation: 14 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.546 (0.441-0.684)	0.622 (0.502-0.779)	0.750 (0.602-0.942)	0.859 (0.686-1.08)	1.02 (0.785-1.33)	1.14 (0.860-1.51)	1.27 (0.922-1.72)	1.40 (0.976-1.96)	1.59 (1.06-2.28)	1.73 (1.12-2.52)
10-min	0.800 (0.646-1.00)	0.911 (0.735-1.14)	1.10 (0.882-1.38)	1.26 (1.00-1.59)	1.49 (1.15-1.94)	1.67 (1.26-2.21)	1.86 (1.35-2.52)	2.05 (1.43-2.87)	2.32 (1.55-3.33)	2.53 (1.64-3.69)
15-min	0.976 (0.788-1.22)	1.11 (0.896-1.39)	1.34 (1.08-1.68)	1.53 (1.23-1.94)	1.81 (1.40-2.37)	2.04 (1.54-2.70)	2.26 (1.65-3.08)	2.50 (1.74-3.50)	2.83 (1.89-4.07)	3.09 (2.00-4.50)
30-min	1.48 (1.20-1.85)	1.68 (1.36-2.11)	2.03 (1.63-2.54)	2.32 (1.85-2.93)	2.74 (2.12-3.58)	3.08 (2.32-4.08)	3.43 (2.49-4.66)	3.79 (2.64-5.30)	4.29 (2.87-6.16)	4.68 (3.04-6.82)
60-min	1.94 (1.56-2.43)	2.22 (1.79-2.78)	2.67 (2.15-3.36)	3.06 (2.44-3.85)	3.59 (2.77-4.67)	4.00 (3.01-5.29)	4.42 (3.21-5.99)	4.86 (3.37-6.76)	5.43 (3.62-7.78)	5.87 (3.81-8.55)
2-hr	2.40 (1.95-2.97)	2.75 (2.24-3.41)	3.32 (2.69-4.13)	3.79 (3.05-4.74)	4.44 (3.44-5.71)	4.93 (3.74-6.44)	5.42 (3.96-7.27)	5.92 (4.14-8.17)	6.57 (4.41-9.34)	7.06 (4.62-10.2)
3-hr	2.63 (2.15-3.24)	3.03 (2.47-3.74)	3.67 (2.99-4.54)	4.20 (3.40-5.22)	4.92 (3.84-6.30)	5.47 (4.17-7.11)	6.02 (4.42-8.02)	6.56 (4.61-9.01)	7.27 (4.91-10.3)	7.80 (5.13-11.2)
6-hr	3.03 (2.50-3.70)	3.50 (2.89-4.28)	4.30 (3.54-5.28)	4.98 (4.07-6.14)	5.94 (4.69-7.59)	6.70 (5.16-8.68)	7.47 (5.55-9.94)	8.28 (5.88-11.3)	9.36 (6.38-13.2)	10.2 (6.77-14.6)
12-hr	3.46 (2.88-4.18)	4.02 (3.34-4.87)	5.02 (4.16-6.10)	5.93 (4.89-7.24)	7.30 (5.85-9.34)	8.44 (6.58-10.9)	9.66 (7.26-12.8)	11.0 (7.89-15.0)	12.8 (8.85-18.1)	14.3 (9.58-20.4)
24-hr	3.93 (3.30-4.71)	4.65 (3.90-5.58)	5.95 (4.98-7.16)	7.14 (5.93-8.63)	8.94 (7.24-11.4)	10.5 (8.24-13.5)	12.1 (9.17-16.0)	13.9 (10.1-18.9)	16.4 (11.4-23.0)	18.4 (12.4-26.0)
2-day	4.54 (3.84-5.38)	5.48 (4.64-6.50)	7.10 (5.99-8.46)	8.53 (7.15-10.2)	10.6 (8.63-13.3)	12.3 (9.75-15.7)	14.1 (10.8-18.4)	16.0 (11.7-21.5)	18.6 (13.1-25.9)	20.7 (14.1-29.1)
3-day	5.10 (4.35-6.02)	6.07 (5.16-7.17)	7.73 (6.56-9.16)	9.19 (7.74-10.9)	11.3 (9.24-14.1)	13.0 (10.4-16.5)	14.8 (11.4-19.3)	16.7 (12.3-22.4)	19.4 (13.6-26.8)	21.5 (14.7-30.0)
4-day	5.61 (4.80-6.59)	6.56 (5.61-7.72)	8.21 (6.98-9.68)	9.65 (8.16-11.4)	11.7 (9.64-14.6)	13.5 (10.8-16.9)	15.3 (11.7-19.7)	17.2 (12.6-22.9)	19.8 (14.0-27.2)	21.9 (15.0-30.5)
7-day	6.85 (5.90-7.98)	7.80 (6.71-9.10)	9.43 (8.08-11.0)	10.9 (9.25-12.8)	12.9 (10.7-15.9)	14.6 (11.8-18.3)	16.4 (12.7-21.1)	18.3 (13.6-24.2)	20.9 (14.9-28.6)	23.0 (15.8-31.8)
10-day	7.88 (6.82-9.14)	8.88 (7.67-10.3)	10.6 (9.12-12.3)	12.1 (10.3-14.1)	14.2 (11.8-17.4)	16.0 (12.9-19.8)	17.8 (13.8-22.7)	19.7 (14.7-26.0)	22.4 (16.0-30.4)	24.4 (16.9-33.8)
20-day	10.7 (9.31-12.2)	12.0 (10.4-13.7)	14.1 (12.3-16.3)	16.0 (13.8-18.5)	18.6 (15.5-22.4)	20.7 (16.8-25.3)	22.8 (17.9-28.8)	25.0 (18.7-32.6)	28.0 (20.1-37.7)	30.3 (21.2-41.6)
30-day	12.9 (11.3-14.7)	14.5 (12.7-16.6)	17.1 (15.0-19.6)	19.3 (16.8-22.2)	22.3 (18.7-26.7)	24.7 (20.2-30.0)	27.1 (21.3-33.9)	29.5 (22.2-38.2)	32.8 (23.7-43.9)	35.2 (24.7-48.2)
45-day	15.7 (13.9-17.8)	17.7 (15.6-20.1)	20.9 (18.3-23.8)	23.5 (20.5-26.9)	27.0 (22.7-31.9)	29.6 (24.3-35.8)	32.3 (25.5-40.2)	34.9 (26.4-44.9)	38.4 (27.8-51.1)	40.9 (28.9-55.7)
60-day	18.1 (16.1-20.5)	20.4 (18.1-23.1)	24.0 (21.2-27.3)	26.9 (23.6-30.7)	30.8 (26.0-36.3)	33.7 (27.7-40.4)	36.5 (28.9-45.2)	39.2 (29.7-50.2)	42.7 (31.1-56.6)	45.3 (32.1-61.5)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

Custom Soil Resource Report Soil Map



Map Scale: 1:644 if printed on A landscape (11" x 8.5") sheet.

0 5 10 20 30 Meters

0 30 60 120 180 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



St. Lucie County, Florida

50—Waveland and Immokalee fine sands

Map Unit Setting

National map unit symbol: 1jpwd
Elevation: 0 to 200 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Waveland and similar soils: 45 percent
Immokalee and similar soils: 43 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waveland

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
Eg - 4 to 32 inches: sand
Bh1 - 32 to 40 inches: loamy sand
Bh2 - 40 to 53 inches: sand
Cg1 - 53 to 66 inches: sand
Cg2 - 66 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 31 to 50 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 0.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Custom Soil Resource Report

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Hydric soil rating: No

Description of Immokalee

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand

E - 6 to 35 inches: fine sand

Bh - 35 to 54 inches: fine sand

Cg - 54 to 72 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

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

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Hydric soil rating: No

Minor Components

Salerno

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Custom Soil Resource Report

Hydric soil rating: No

Lawnwood

Percent of map unit: 3 percent

Landform: Marine terraces on flatwoods

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)

Hydric soil rating: No

Electra

Percent of map unit: 3 percent

Landform: Knolls on marine terraces, rises on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: F155XY150FL - Sandy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G156BC131FL)

Hydric soil rating: No

Jonathan

Percent of map unit: 3 percent

Landform: Knolls on marine terraces, ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Ecological site: R155XY180FL - Sandy Scrub on Rises, Ridges, and Knolls of Mesic Uplands

Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G156BC121FL)

Hydric soil rating: No

Property Identification

Site Address: 951 N 12th ST
Sec/Town/Range: 04/35S/40E
Parcel ID: 2404-804-0020-000-0
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 17735
Map ID: 24/04S
Zoning: Medium Den

Ownership

Vincent Marcellino
8015 Plantation Lakes DR
Port St Lucie, FL 34986

Legal Description

NOBLES AND NOTTINGHAM S/D BLK 2 LOTS 1, 2, 3 AND 7 (0.61 AC - 26,600 SF)

Current Values

Just/Market Value: \$34,000
Assessed Value: \$31,570
Exemptions: \$0
Taxable Value: \$31,570



Property taxes are subject to change upon change of ownership.

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

Total Areas

Finished/Under Air (SF): 0
Gross Sketched Area (SF): 0
Land Size (acres): 0.61
Land Size (SF): 26,600

Taxes for this parcel: [SLC Tax Collector's Office](#)
Download TRIM for this parcel: [Download PDF](#)

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	160	160

Sources/links:



City Of Fort Pierce

100 North US 1

Fort Pierce, FL 34950

Ph. (772)467-3000

Planning and Zoning

Response Letter

OWNER: Devocean II, LLC **APPLICANT:** Dylan O'Berry, Art of Engineering

SITE PLAN: P18-087-A1 Go Team Industrial Park Storage Yard

From: Dylan O'Berry, Art of Engineering

Subject: Response to Review Comments - Minor Site Plan Amendment P18-087-A1 Go Team Industrial Park Storage Yard

Dear [Reviewer Name - If Available],

Please find below our responses to your review comments regarding the Minor Site Plan Amendment P18-087-A1 for the Go Team Industrial Park Storage Yard.

Responses:

1. **Electronic Copy of Certified Survey:** An electronic copy of the certified survey is attached.
2. **Plan Sheets C-2 & C-3:**
 - **a. Scale Correction:** The plans have been revised and plotted at the correct scale of 1" = 30'.
 - **b. 10' Landscape Strip - Avenue I:** The required 10' landscape strip between the parking lot and the Avenue I right-of-way has been added. Setback dimensions have also been provided to verify compliance.
 - **c. 15' Landscape Strip - Retention Area:** The required 15' landscape strip, measured from the top of the retention area to the Avenue I and North 12th Street

rights-of-way, has been added. Setback dimensions have been provided to verify compliance.

- **d. 10' Landscape Strip - Western Property Line:** A minimum 10' landscape strip between the retention area's top of bank and the western property line has been added. Setback dimensions have been provided to verify compliance.
 - **e. 26' Parking Lot Access Aisle:** The parking lot access aisle width has been corrected to a minimum of 26', as required by the City of Fort Pierce Code of Ordinances Section 125-315.
 - **f. Pedestrian Access - Dumpster Enclosure:** The required pedestrian access at the dumpster enclosure, as per the attached detail, has been added.
 - **g. Dumpster Enclosure Relocation:** The dumpster enclosure has been relocated to an appropriate on-site location. The separate driveway access for the dumpster has been removed.
3. **Plan Sheets LS-1 & LS-2:**
- **a. Landscaped Buffer Verification:** We have verified with Planning that a landscaped buffer is required along the rights-of-way of Avenue I and N. 12th Street, and the landscaping plans reflect this.
 - **b. Plan Sheet LS-2:** Plan Sheet LS-2 has been included in the revised submission.
 - **c. Tree/Plant Species Identification:** The tree/plant species have been identified as follows:
 - IM: [Insert species name for IM]
 - SA: [Insert species name for SA]
 - LO: [Insert species name for LO]
 - DH: [Insert species name for DH]
 - SS: [Insert species name for SS]
4. **Advisory Comments:**
- **a. Tree Mitigation Plan:** Prior to any site clearing activities, a copy of the tree mitigation plan, addressing impacts to the existing native trees located on site, will be provided.
 - **b. Drainage Plan Review:** We acknowledge that the drainage plan has been reviewed conceptually and will be reviewed in depth at the time of the DPCR application.

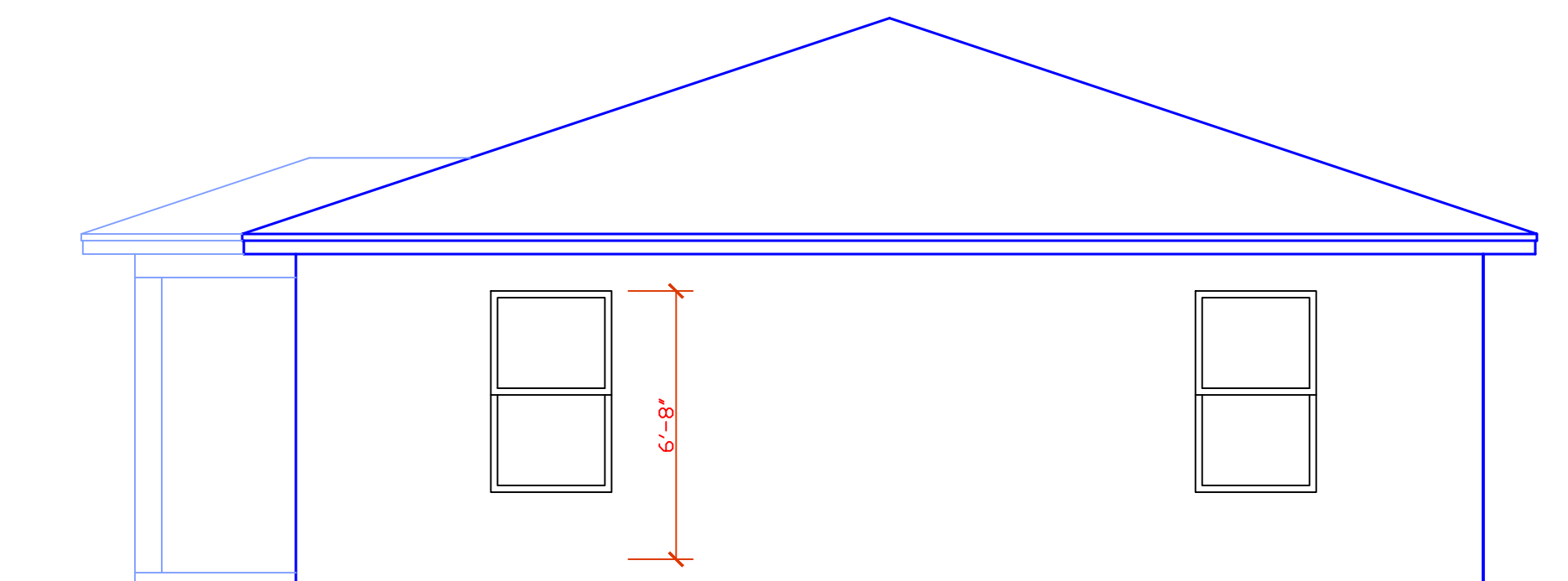
We believe that these revisions address all of your concerns. We respectfully request your approval of the revised Minor Site Plan Amendment P18-087-A1.

Thank you for your time and consideration.

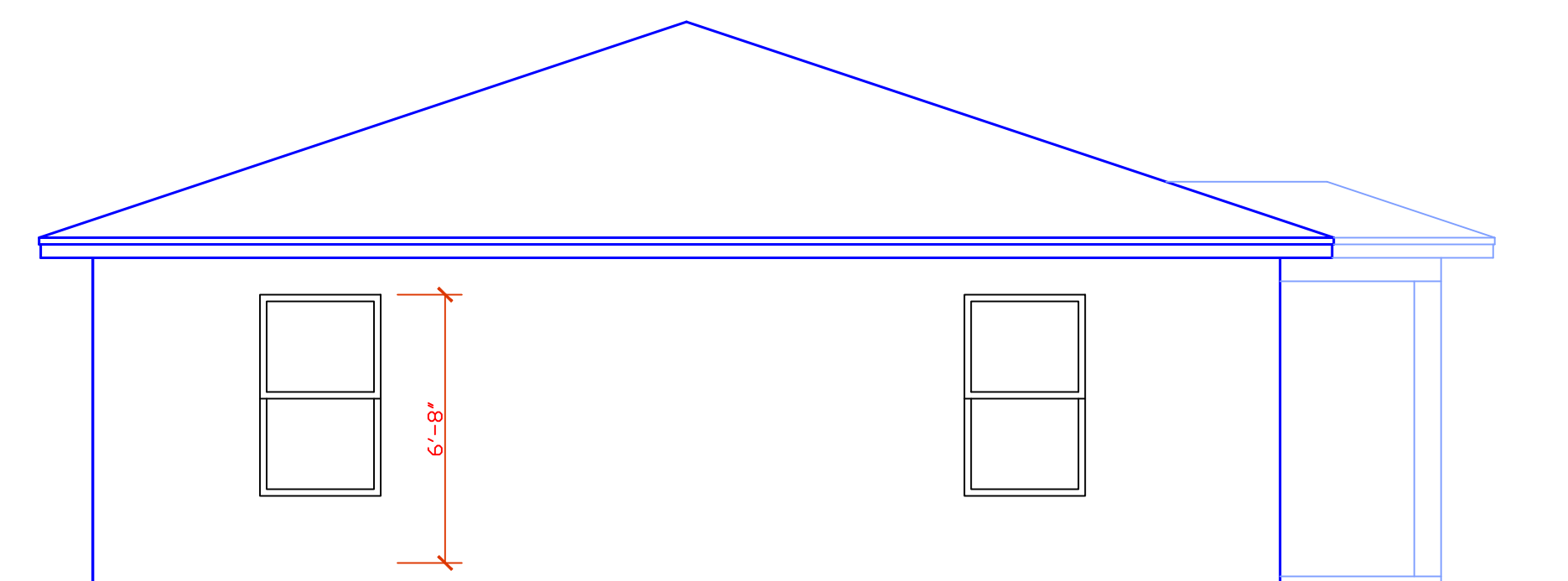
Sincerely,

Bart O'Brien, Office Manager
Art of Engineering, Inc.
2674 SE Ruffin Terrace
Port St Lucie, FL 34952
(772) 203-0664

manager@artofengineering.net
<https://www.artofengineering.net>



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



LEFT ELEVATION
SCALE: 1/4" = 1'-0"

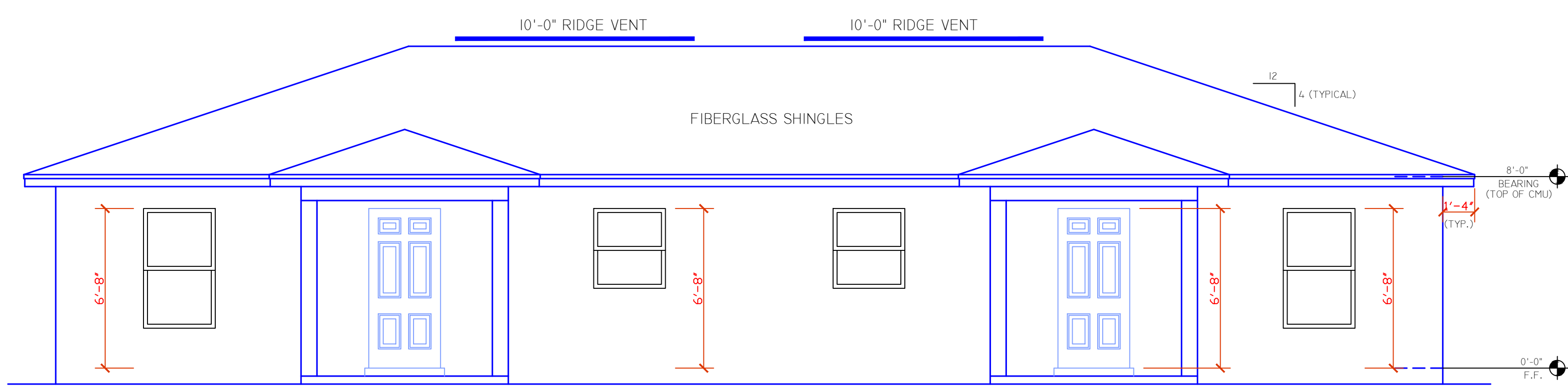
THE MAIN WIND RESISTANCE FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA RESIDENTIAL BUILDING CODE 7TH EDITION AND LATEST ADOPTED SUPPLEMENTS TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM WIND SPEED OF 170 MILES PER HOUR, EXPOSURE B STRUCTURE.

THE COMPONENTS AND CLADDING HAVE BEEN SELECTED AND THEIR USE INCORPORATED INTO THE DESIGN AND SPECIFICATIONS IN ACCORDANCE WITH THE 2020 FLORIDA RESIDENTIAL BUILDING CODE 7TH EDITION AND LATEST ADOPTED SUPPLEMENTS TO WITHSTAND THE WIND LOADS ASSOCIATED WITH A MINIMUM WIND SPEED OF 170 MILES PER HOUR, EXPOSURE B STRUCTURE.

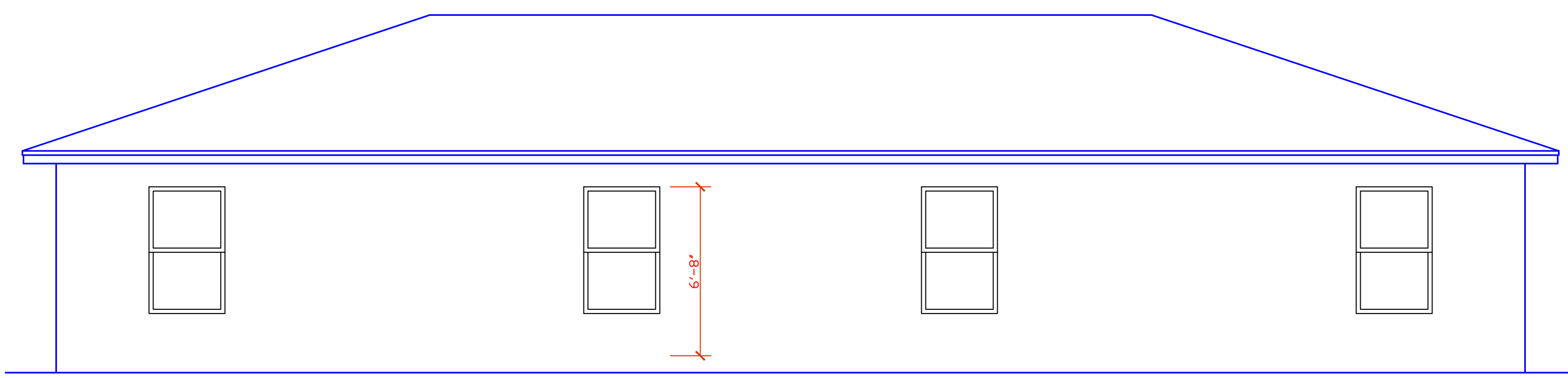
1. ULTIMATE WIND SPEED = 170 MILES PER HOUR/NOMINAL WIND SPEED = 132 MILES PER HOUR
2. WIND IMPORTANCE FACTOR = 1 / BUILDING CATEGORY = 2 / ENCLOSED (FULLY)
3. WIND EXPOSURE = EXPOSURE B
4. INTERNAL PRESSURE COEFFICIENT = + 0.18 / - 0.18
5. COMPONENTS & CLADDING = + 24.3 PSF / - 32.5 PSF

ALL DOOR AND WINDOW UNITS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS (WHERE APPLICABLE)

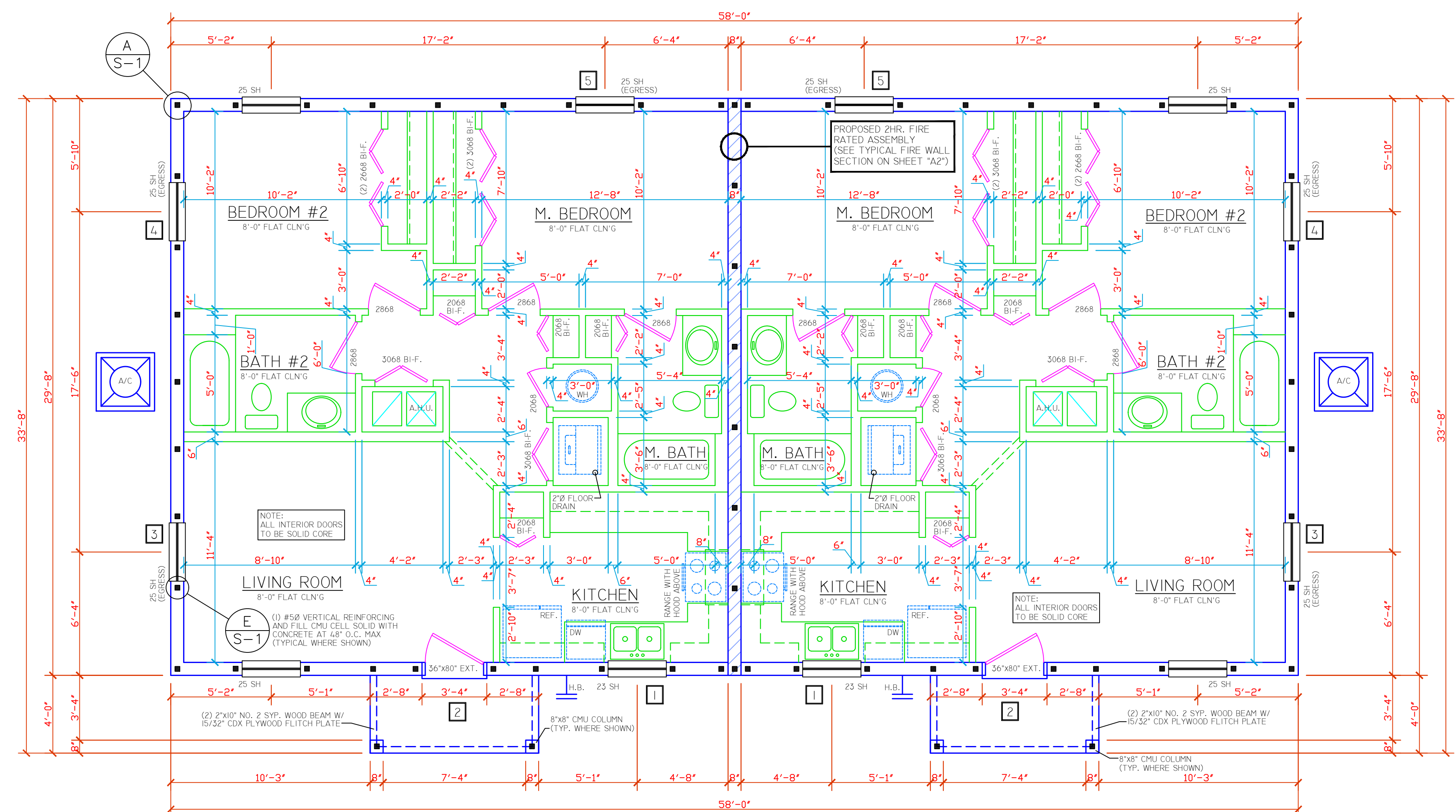
THIS STRUCTURE HAS BEEN DESIGNED AS A FULLY ENCLOSED STRUCTURE. THIS STRUCTURE IS LOCATED IN A WIND-BORNE DEBRIS ZONE PER FLORIDA BUILDING CODE. GLAZING PROTECTION (IMPACT GLASS AND/OR HURRICANE SHUTTERS) IS REQUIRED TO BE INSTALLED.



FRONT ELEVATION
SCALE: 1/4" = 1'-0"



REAR ELEVATION
SCALE: 1/4" = 1'-0"



FLOOR PLAN
SCALE: 1/4" = 1'-0"

AREA TABULATION (0-10-20)

LIVING	860 SQ.FT.
ENTRY	25 SQ.FT.
TOTAL	885 SQ.FT.

UNIT "102"

UNIT "101"

AREA TABULATION (0-10-20)

LIVING	860 SQ.FT.
ENTRY	25 SQ.FT.
TOTAL	885 SQ.FT.

BUILDING INFORMATION

Design Wind Speed	Nominal
Wind Velocity (mph)	170
Exposure	B
Internal Pressure	Enclosed
Height above ground (ft.) (H)	0.0
Standard Wall Height (ft.)	8.0
Mean Roof Height (ft.)	15.0
Building Width (ft.)	58.0
Building Length (ft.)	33.2
Roof Slope (α/12)	4.0
Roof Angle (degrees)	18.43
Wind Edge Slope (ft.)	3.37
End Zone (ft.)	6.73

ASCE 7-16
Wall Openings
(all wall openings: windows, doors, shutters, etc)

Wind Load Program
2001 - 2018 ©
Windloadcalc.com
Fast Member Solutions

WIND LOAD DESIGN INFORMATION

INFO	APPLYING WIND LOAD FOR:	ZONE	OPENING ELEVATION (ft.)	WIDTH (ft.)	LENGTH (ft.)	EFFECTIVE WIND AREA (sq.ft.)	Nominal Wind Load Pressures	
							MAXIMUM POSITIVE PRESSURE (psf)	MAXIMUM NEGATIVE PRESSURE (psf)
WALL OPENING INFORMATION	1	4	4	3.2	3.3	10.6	31.1	-33.7
	2	4	4	3.0	6.7	20.0	29.8	-32.4
	3	4	4	3.2	5.2	16.6	30.2	-32.8
	4	4	4	3.2	5.2	16.6	30.2	-32.8

ATTIC VENTILATION CALCULATION UNIT "A" AND "B"

REQUIRED ATTIC VENTILATION IS 1/150 SQ. FT. OF THE TOTAL CEILING SQUARE FOOTAGE. BASED ON AN APPROXIMATE CEILING SQUARE FOOTAGE OF 895 SQ. FT. A TOTAL OF 5.9 SQ. FT. OF ATTIC VENTILATION IS REQUIRED. OWNER/BUILDER SHALL INSTALL A CONTINUOUS VENT STRIP IN STUCCO SOFFIT PROVIDING 6.8 +/- SQ. FT. OF VENTILATION. OWNER/BUILDER SHALL ALSO INSTALL 10'-0" OF RIDGE VENTS PROVIDING +/- 1.2 SQ. FT. OF VENTILATION.

TOTAL PROVIDED VENTILATION = 8.0 SQ. FT. EXCEEDS THE REQUIRED 5.9 SQ. FT. OF VENTILATION REQUIRED.

NOTE: CALCULATIONS FOR CONTINUOUS VENT IS BASED ON A VENT PROVIDING 9 SQ. IN OF VENTILATION PER LINEAR FT.

NOTE: CALCULATIONS FOR OFF-RIDGE VENTS IS BASED ON AN OFF-RIDGE VENT PROVIDING .12 SQ. FT. OF VENTILATION PER VENT.

TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE FOLLOWING PLANS COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE 2020 FLORIDA RESIDENTIAL BUILDING CODE 7TH EDITION AND LATEST ADOPTED SUPPLEMENTS

DESIGN CRITERIA

FULLY ENCLOSED
WIND SPEED 170 MPH
EXPOSURE B
BUILDING CATEGORY TWO (2)

GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER/BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER/BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

Edward F Shinskie Jr.
Digitally signed by Edward F Shinskie Jr.
Date: 2021.03.02 14:58:29 -05'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY EDWARD F. SHINSKIE, PE ON THE DATE AND/OR TIME STAMP SHOWN USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPY.

REVISIONS

ISSUED: 3-1-21

2115 PALM BAY ROAD STE. 6
PALM BAY, FL 32909
TEL. (321) 724-0740
FAX. (321) 914-4206
EMAIL: DFR@FEDC.COM
@FEDC.COM

FEDC
ENGINEERING AND DESIGN CONCEPTS, INC.

-DUPEX FOR- MARCELLINO
BUILDING 2
951 N. 12TH ST. FORT PIERCE, FL 34950

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

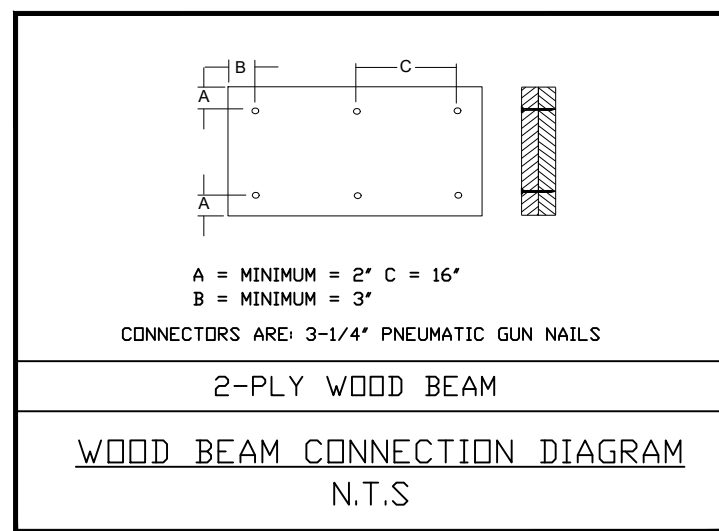
AI
SHEET 1 OF 7
DRAWN BY DANIEL FRECHETTE

R703.4 FLASHING.
APPROVED METAL FLASHING, VINYL FLASHING, SELF-ADHERED MEMBRANES AND MECHANICALLY ATTACHED FLEXIBLE FLASHING SHALL BE APPLIED SHINGLE-FASHION OR IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. METAL FLASHING SHALL BE CORROSION RESISTANT. FLUID-APPLIED MEMBRANES USED AS FLASHING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL FLASHING SHALL BE APPLIED IN A MANNER TO PREVENT THE ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH ANMA 711. ALL EXTERIOR FENESTRATION PRODUCTS SHALL BE SEALED AT THE JUNCTURE WITH THE BUILDING WALL WITH A SEALANT COMPLYING WITH ANMA 800 OR ASTM C920 CLASS 25 GRADE NS OR GREATER FOR PROPER JOINT EXPANSION AND CONTRACTION. ASTM C881, ANMA 716 OR OTHER APPROVED STANDARDS AS APPROPRIATE FOR THE TYPE OF SEALANT. FLUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH ANMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

- EXTERIOR WINDOW AND DOOR OPENINGS FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER COMPLYING WITH SECTION 703.2 FOR SUBSEQUENT DRAINAGE. MECHANICALLY ATTACHED FLEXIBLE FLASHINGS SHALL COMPLY WITH ANMA 716. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING: THE FENESTRATION MANUFACTURER'S INSTALLATION AND FLASHING INSTRUCTIONS; OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURER'S INSTRUCTIONS, IN ACCORDANCE WITH THE FLASHING MANUFACTURER'S INSTRUCTIONS. WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE SILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES.
- IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL.
- IN ACCORDANCE WITH OTHER APPROVED METHODS.
- IN ACCORDANCE WITH FMA/ANMA 100, FMA/ANMA 200, FMA/ANMA 250, FMA/ANMA/ADMA 300 OR FMA/ANMA/ADMA 400.
- AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.
- UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
- CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.
- WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
- AT WALL AND ROOF INTERSECTIONS.
- AT BUILT-IN GUTTERS.

NOTE:
COORDINATE ALL ROUGH PLUMBING LOCATIONS WITH OWNER SELECTED FIXTURES PRIOR TO CONSTRUCTION.

NOTE:
COORDINATE ALL ROUGH OPENINGS FOR EXTERIOR DOORS AND WINDOWS WITH MANUFACTURER'S SPECS.



WINDOW AND DOOR BUCK INSTALLATION (MASONRY)

MASONRY	TAP-CONS	PAF'S	PDN'S
ROUGH OPENG.	BUCK TO HEAD AND JAMB		
UP TO 8'-0"	3/16" @ 16" O.C.	.145 @ 8" O.C.	.120 @ 6" O.C.
8'-1" TO 10'-0"	3/16" @ 12" O.C.	.145 @ 6" O.C.	.120 @ 6" O.C.
10'-1" TO 12'-0"	3/16" @ 8" O.C.	.145 @ 4" O.C.	.120 @ 4" O.C.
12'-1" AND BEYOND	BY DESIGN		BY DESIGN

LEGEND
PAF = POWDER ACTUATED FASTENERS
PDN = PNEUMATICALLY DRIVEN FASTENERS
NOTES:
* MAINTAIN 3" EDGE CLEARANCE FOR PAF'S
* EMBED PAF'S 1.25" MIN. INTO CMU OR CONC.
* EMBED TAP-CONS 1.50" MIN. INTO CMU OR CONC.
NOTE: FDM SEAL AT ALL BUCKS, WINDOWS AND DOORS
NOTE: IF DOOR/WINDOW BUCK IS LESS THAN 1-1/2" DOOR/WINDOW MUST BE ANCHORED THROUGH JAMB INTO THE STRUCTURAL SUBSTRATE
NOTE: WINDOWS AND DOORS SHALL BE ANCHORED PER MANUFACTURER'S SPECIFICATIONS

CABINETRY NOTE:
CABINET LAYOUT SHOWN AT KITCHEN, BATHROOMS, AND ANY OTHER LOCATIONS ARE DIAGRAMMATIC ONLY. COORDINATE FINAL CABINET DESIGN W/OWNER/BUILDER PRIOR TO ANY FABRICATION/INSTALLATION.

NOTE:
DRAWINGS INDICATES APPLIED EXTERIOR FINISH OVER APPROVED WATER BARRIER OVER WOOD FRAMING MEMBERS. OWNER IS RESPONSIBLE TO INSTALL ALL REQUIRED SEALANT, FLASHING, ETC TO MAINTAIN WATERPROOF BARRIER TO PREVENT MOISTURE INFILTRATION INTO STRUCTURE. OWNER IS RESPONSIBLE FOR PERIODIC MAINTAINANCE AND UPKEEP OF EXTERIOR APPLIED FINISH TO MAINTAIN WATERPROOF INTEGRITY TO PREVENT DAMAGE TO INTERIOR COMPONENTS.

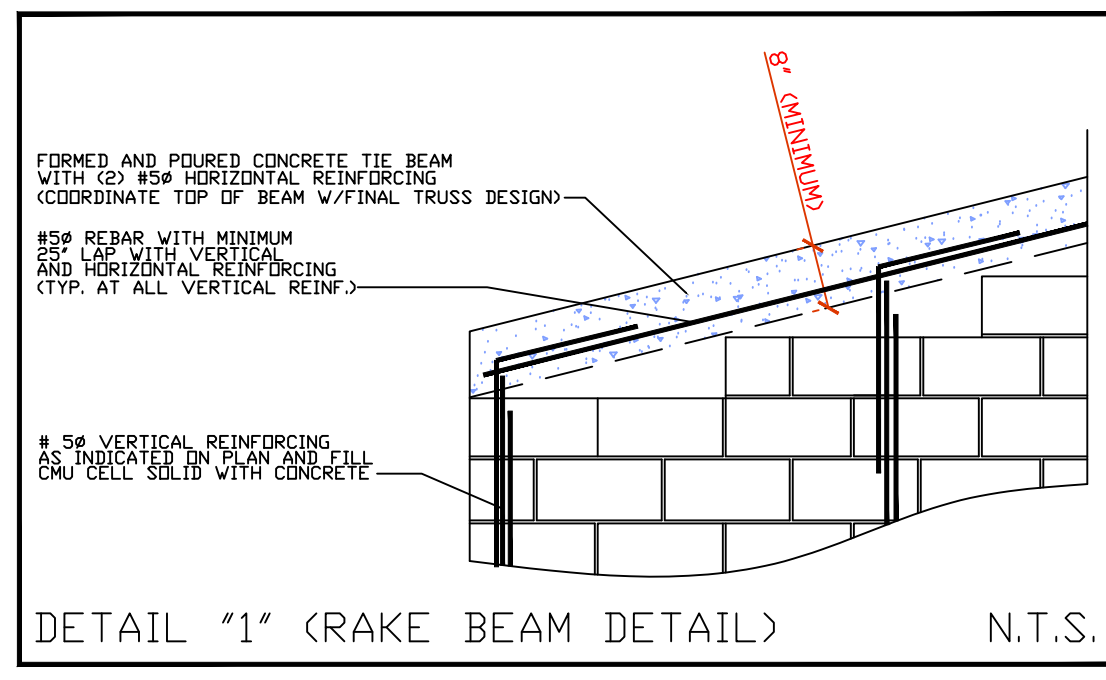
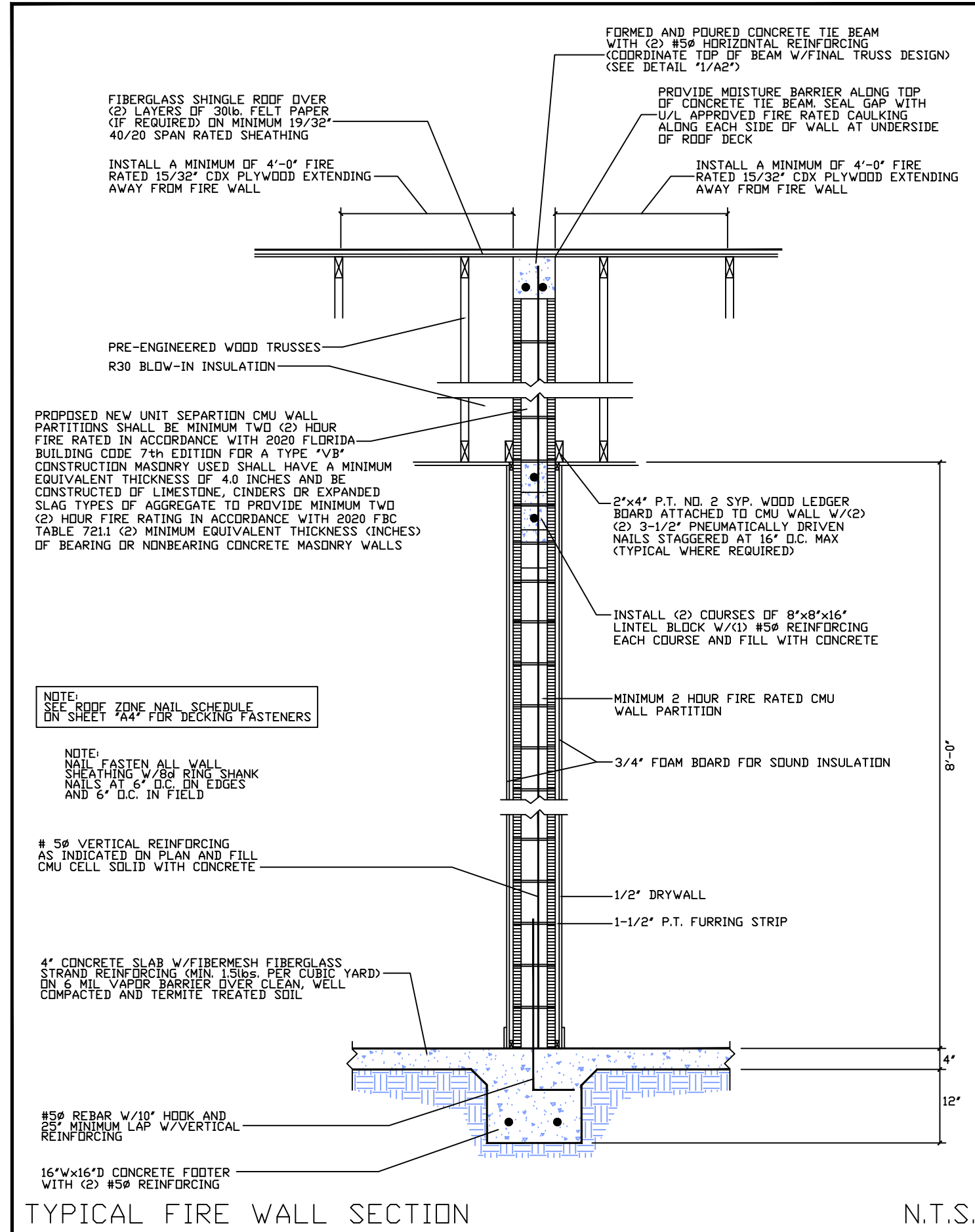
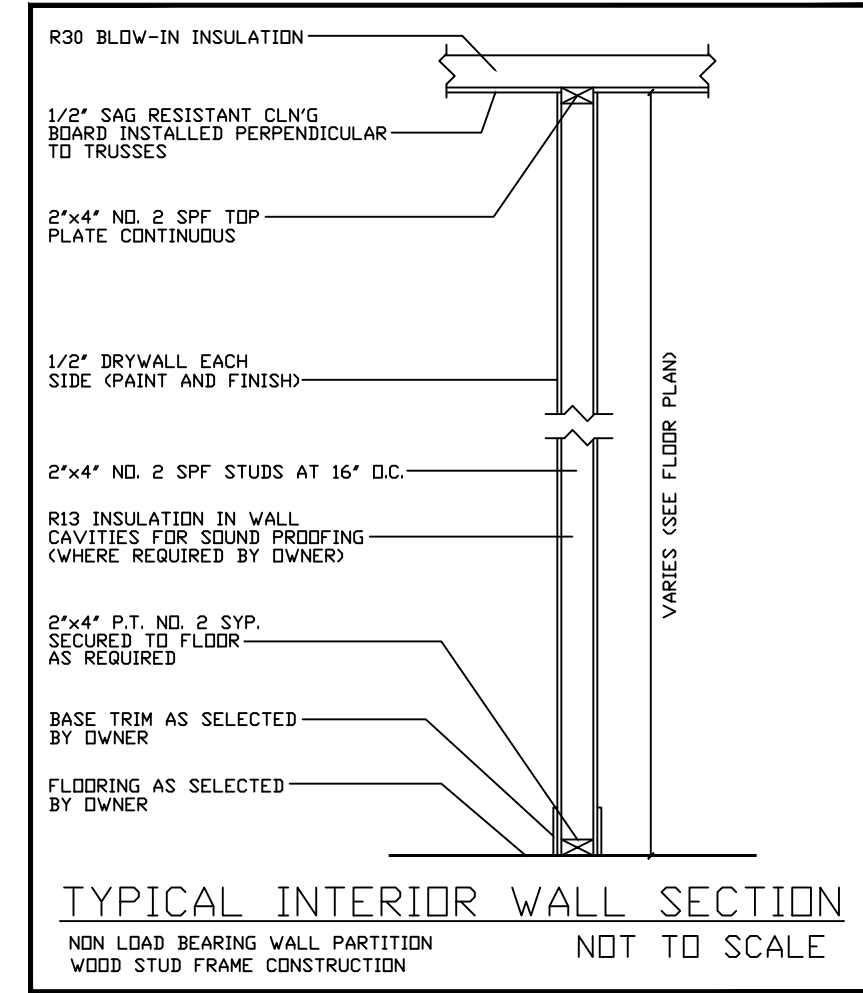


TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (in pounds per square foot)

USE	LIVE LOAD
Uninhabitable attics without storage ^b	10
Uninhabitable attics with limited storage ^{b, c}	20
Habitable attics and attics served with fixed stairs	30
Balconies (exterior) and decks ^e	40
Fire escapes	40
Guardrails and handrails ^d	200 ^h
Guardrail in-fill components ^f	50 ^h
Passenger vehicle garages ^a	50 ^g
Rooms other than sleeping room	40
Sleeping rooms	30
Stairs	40 ^c

TABLE R301.6 MINIMUM ROOF LIVE LOADS IN POUNDS-FORCE PER SQUARE FOOT OF HORIZONTAL PROJECTION

ROOF SLOPE	TRIBUTARY LOADED AREA IN SQUARE FEET FOR ANY STRUCTURAL MEMBER		
	0 to 200	201 to 600	Over 600
Flat or rise less than 4 inches per foot (1:3)	20	16	12
Rise 4 inches per foot (1:3) to less than 12 inches per foot (1:1)	16	14	12
Rise 12 inches per foot (1:1) and greater	12	12	12

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND/ SNOW LOAD (psf)	WIND DESIGN SPEED (mph)	SEISMIC CATEGORY	SUBJECT TO DAMAGE FROM FLOODING	WINTER ICE BARRIER DESIGN REQUIREMENT	FLOOD HAZARD	AIR TEMPERATURE	MEAN ANNUAL RAINFALL (in)
NA	See Fig. R301.2(4)	NA	Negligible	NA	Very Low	NA	NA

TABLE R903.2.1 METAL FLASHING MATERIAL

MATERIAL	GAGE MINIMUM THICKNESS (INCHES)	GAGE	WEIGHT (lbs per sq ft)
Copper	0.024		1 (16 oz)
Aluminum	0.024		
Stainless steel		28	
Galvanized steel	0.0179	26 (zinc coated G90)	26 (zinc coated G50)
Aluminum zinc coated steel	0.0179	26 (AZ50 alum zinc)	26 (AZ50 alum zinc)
Zinc alloy	0.027		
Lead			2.5 (40 oz)
Painted terne			1.25 (20 oz)

GENERAL NOTES
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3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER/BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.
DO NOT SCALE DRAWINGS

Edward F Shinskie Jr.
Digitally signed by Edward F Shinskie Jr.
Date: 2021.03.02 14:59:13 -05'00'

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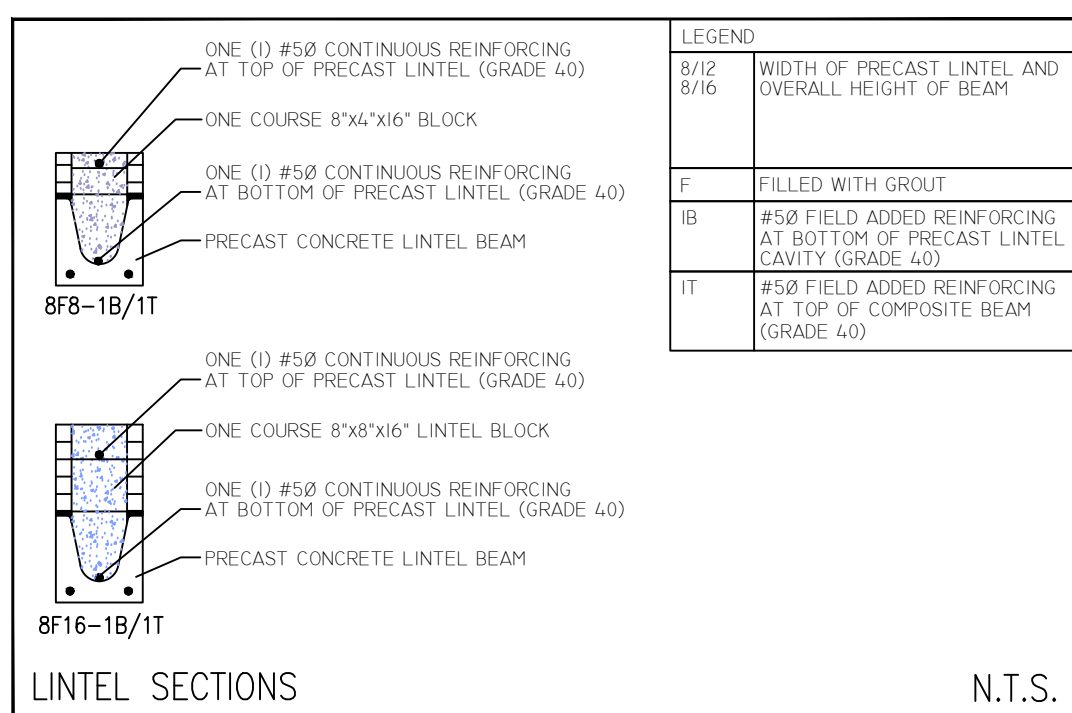
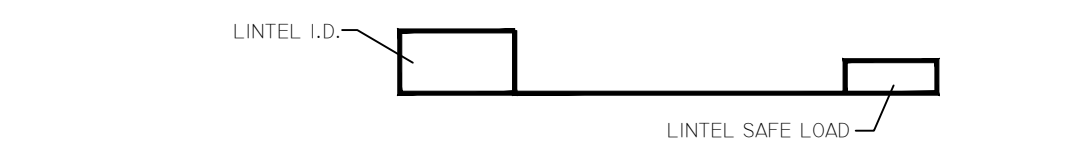
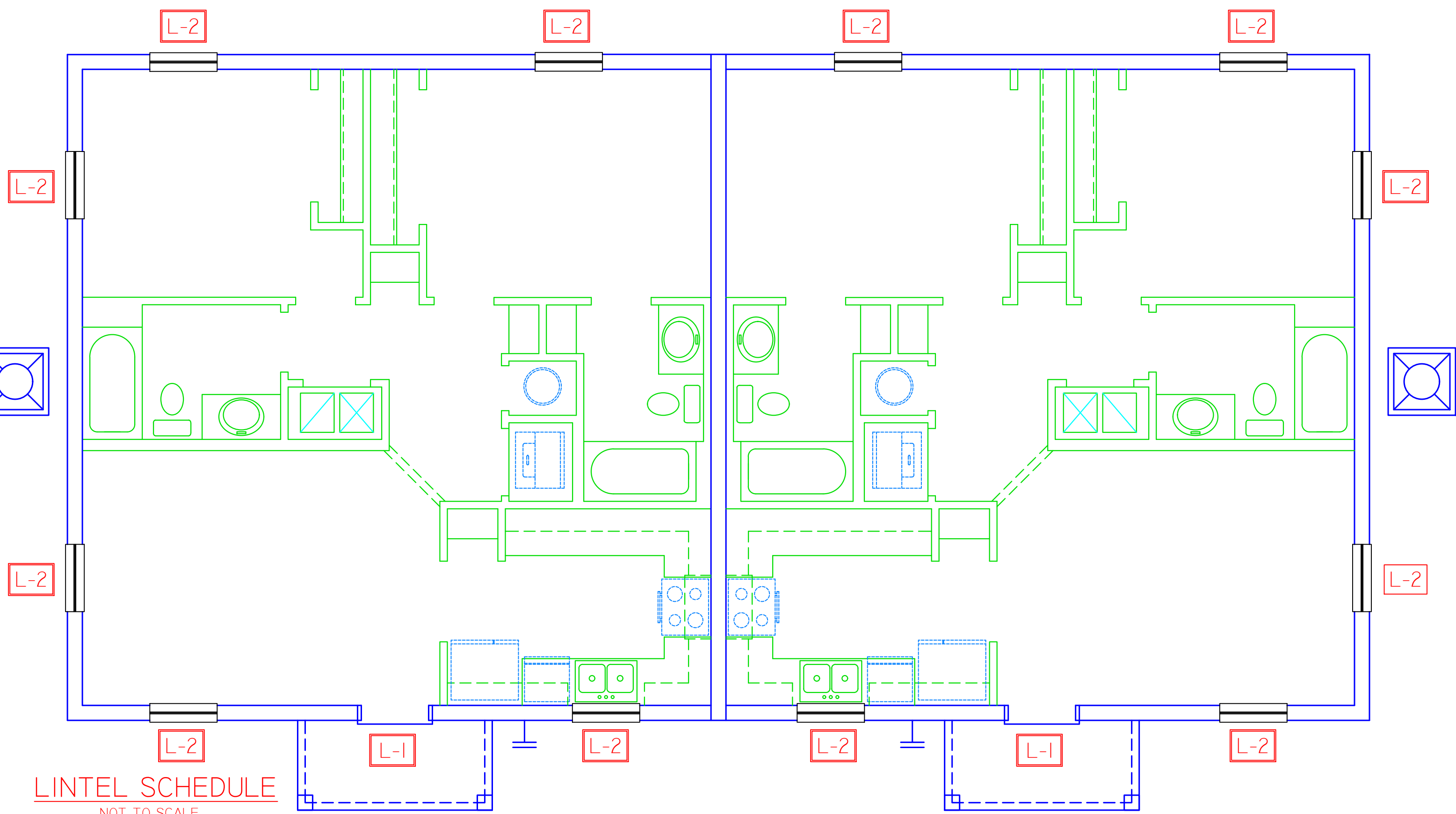
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A2
SHEET 2 OF 7
DRAWN BY:
DANIEL FRECHETTE

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS									
		SAFE LOAD - POUNDS PER LINEAR FOOT							
LENGTH	TYPE	8F8-10		8F16-10		8F20-10		8F32-10	
		8F8-10	8F16-10	8F20-10	8F32-10	8F8-10	8F16-10	8F20-10	8F32-10
2'-10" (34")	PRECAST	2231	3069	4005	6113	7547	8974	10394	11809
3'-6" (42")	PRECAST	2231	3069	4005	6113	7547	8974	10394	11809
4'-0" (48")	PRECAST (RECESSED LINTEL)	1966	2561	3251	4820	5961	7034	8107	9180
4'-0" (48")	PRECAST	1966	2561	3251	4820	5961	7034	8107	9180
4'-6" (54")	PRECAST	1599	1969	2110	2931	3753	4576	5400	6224
5'-4" (64")	PRECAST	1217	1349	1438	1999	2560	3123	3686	4249
5'-10" (70")	PRECAST	1062	1165	1173	1631	2090	2549	3009	3470
6'-6" (78")	PRECAST	908	1238	2177	3480	5381	8360	10394	12418
7'-6" (90")	PRECAST	743	1011	1729	2632	4005	5888	7771	9654
9'-4" (112")	PRECAST	554	699	1160	1625	2564	3486	4408	5330
10'-6" (126")	PRECAST	475	752	1245	1843	2564	3486	4408	5330
11'-4" (136")	PRECAST	362	643	1052	1533	2093	2781	3469	4157
12'-0" (144")	PRECAST	337	540	873	1254	1684	2193	2805	3552
13'-4" (160")	PRECAST	296	471	755	1075	1428	1838	2316	2883
14'-0" (168")	PRECAST	279	424	706	1002	1326	1697	2127	2630
14'-8" (176")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
15'-4" (184")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
17'-4" (208")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
19'-4" (232")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
21'-4" (256")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
22'-0" (264")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR
24'-0" (288")	PRESTRESSED	N.R.	NR	NR	NR	NR	NR	NR	NR

SAFE UPLIFT LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS									
		SAFE LOAD - POUNDS PER LINEAR FOOT							
LENGTH	TYPE	8F8-11		8F16-11		8F20-11		8F32-11	
		8F8-11	8F16-11	8F20-11	8F32-11	8F8-11	8F16-11	8F20-11	8F32-11
2'-10" (34")	PRECAST	1972	3173	4460	5747	7034	8321	9608	10895
3'-6" (42")	PRECAST	1569	2524	3547	4569	5591	6613	7636	8659
4'-0" (48")	PRECAST (RECESSED LINTEL)	904	2192	3079	3966	4853	5740	6627	7514
4'-0" (48")	PRECAST	904	2192	3079	3966	4853	5740	6627	7514
4'-6" (54")	PRECAST	1207	1940	2724	3508	4292	5077	5861	6645
5'-4" (64")	PRECAST	1016	1632	2290	2949	3607	4265	4924	5583
5'-10" (70")	PRECAST	829	1492	2093	2694	3295	3897	4498	5099
6'-6" (78")	PRECAST	635	1340	1880	2419	2959	3498	4038	4578
7'-6" (90")	PRECAST	591	1186	1634	2102	2571	3039	3508	3977
9'-4" (112")	PRECAST	459	851	1256	1705	2084	2463	2842	3221
10'-6" (126")	PRECAST	330	686	1183	1526	1865	2204	2544	2883
11'-4" (136")	PRECAST	279	540	873	1254	1684	2193	2805	3552
12'-0" (144")	PRECAST	254	471	755	1075	1428	1838	2316	2883
13'-4" (160")	PRECAST	213	424	706	1002	1326	1697	2127	2630
14'-0" (168")	PRECAST	196	381	643	908	1218	1569	1969	2418
14'-8" (176")	PRESTRESSED	179	337	540	755	1002	1326	1697	2127
15'-4" (184")	PRESTRESSED	162	294	471	643	829	1016	1202	1389
17'-4" (208")	PRESTRESSED	121	221	354	509	664	819	974	1129
19'-4" (232")	PRESTRESSED	80	142	230	369	531	713	895	1077
21'-4" (256")	PRESTRESSED	59	101	179	281	341	412	483	554
22'-0" (264")	PRESTRESSED	54	93	162	264	324	384	444	504
24'-0" (288")	PRESTRESSED	42	72	121	199	249	299	349	399



SPECIFICATIONS

ENGINEERING

PRODUCT DESCRIPTION
High strength precast concrete lintels designed to be unfilled or filled to form a composite reinforced beam using concrete masonry units.

MATERIALS

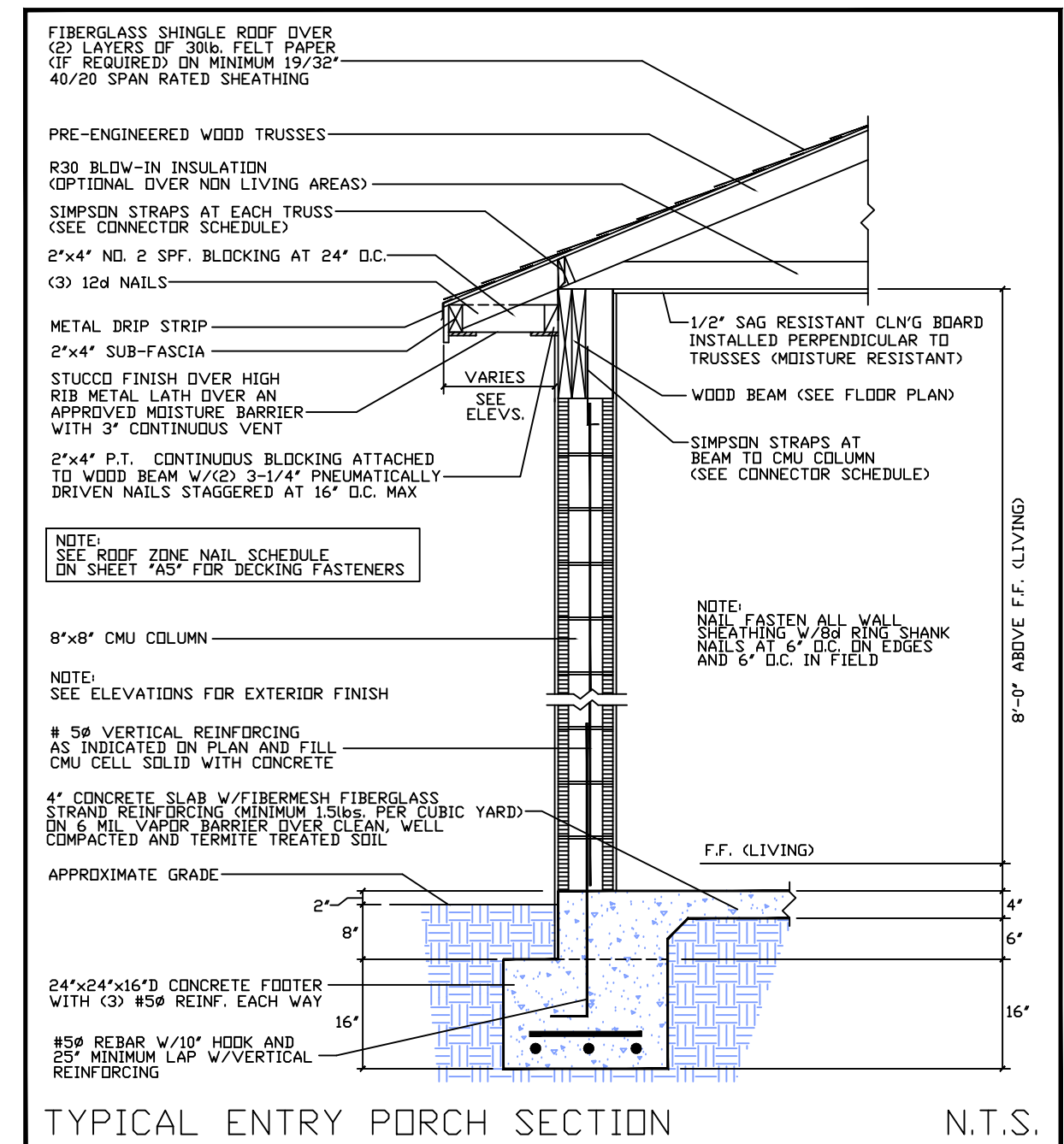
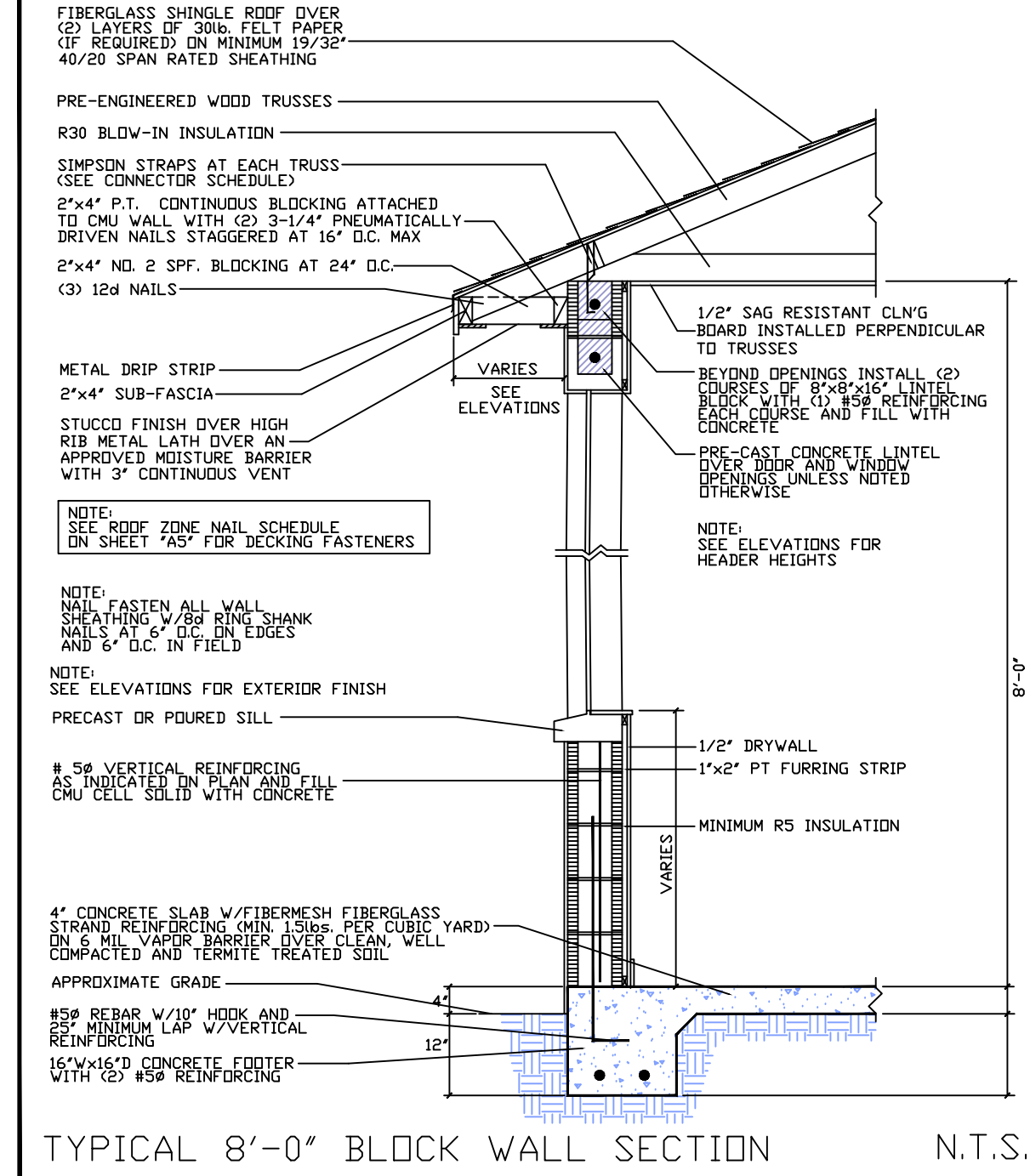
- Pc 8" precast lintels = 3000 psi
- Pc 8" prestressed 8" and 12" precast lintels = 6000 psi
- Pc 4" precast lintels = 3000 psi
- Grout per ASTM C476 Fg = 3000 psi w/ maximum 3/8" inch aggregate and 0 to 1% air.
- Concrete masonry units (CMU) per ASTM C90 with minimum net area compressive strength = 1900 psi
- Rebar per ASTM A618 Grade 60
- Prestressing strand per ASTM A421 Grade 270 low relaxation
- 7/32 inch wire per ASTM A420
- Norbar per ASTM C278 Type II or S

GENERAL NOTES

- Provide full mortar head and bed joints.
- Shore filled lintels as required.
- Installation of lintels must comply with architectural and/or structural drawings.
- U-lintels are manufactured with 5/16" long notches at ends to accommodate vertical cell reinforcing and grouting.
- Reference the CAST-ORC Lintel Deflection Graph brochure for lintel deflection information.
- Bottom field added rebar to be located at the bottom of lintel cavity.
- 7/32 inch diameter wire stirrups are welded to the bottom steel for mechanical anchorage.
- Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.
- Safe load ratings based on rational design analysis per ACI 308 and ACI 308.1I.
- Product Approval: Mon. Dade County, Florida Nos. 03-06053 and 03-06054, Florida Certificate of Product Approval number FJ036.
- The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C926 or other approved coating.
- Lintels loaded structurally with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation:
Applied vertical load + Applied horizontal load < 1.0
Safe vertical load + Safe horizontal load
- For composite lintel heights not shown, use safe load from next lower height.
- For lintel lengths not shown, use safe load from next longest length.
- All safe loads in units of pounds per linear foot.
- All safe loads based on evenly supported spans.
- The number in the parenthesis indicates the percent reduction for grade 40 field added rebar.
- The #7 rebar may be substituted for two #5 rebars in 8" lintels only.
- The designer may evaluate concentrated loads from the safe load tables by calculating the resultant resisting moment and shear at 4'-away from the face of support.

SAFE LOAD TABLE NOTES

- All values based on minimum 4 inch nominal bearing. Exception: Safe loads for unfilled lintels must be reduced by 20% if bearing length is less than 4x12 inches.
- NR = Not Rated.
- Safe loads are superimposed allowable load.
- Safe loads based on Grade 40 or Grade 60 field rebar.
- Additional lateral load capacity can be obtained by the designer by providing additional reinforced masonry above the precast lintel. See Reinforced CMU on Page 4.
- The #7 rebar may be substituted for two #5 rebars in 8" lintels only.
- The designer may evaluate concentrated loads from the safe load tables by calculating the resultant resisting moment and shear at 4'-away from the face of support.



GENERAL NOTES

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- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

Edward F. Shinskie Jr.
Digitally signed by Edward F. Shinskie Jr.
Date: 2021.03.02 15:00:07 -05'00'

REVISIONS

1	
2	
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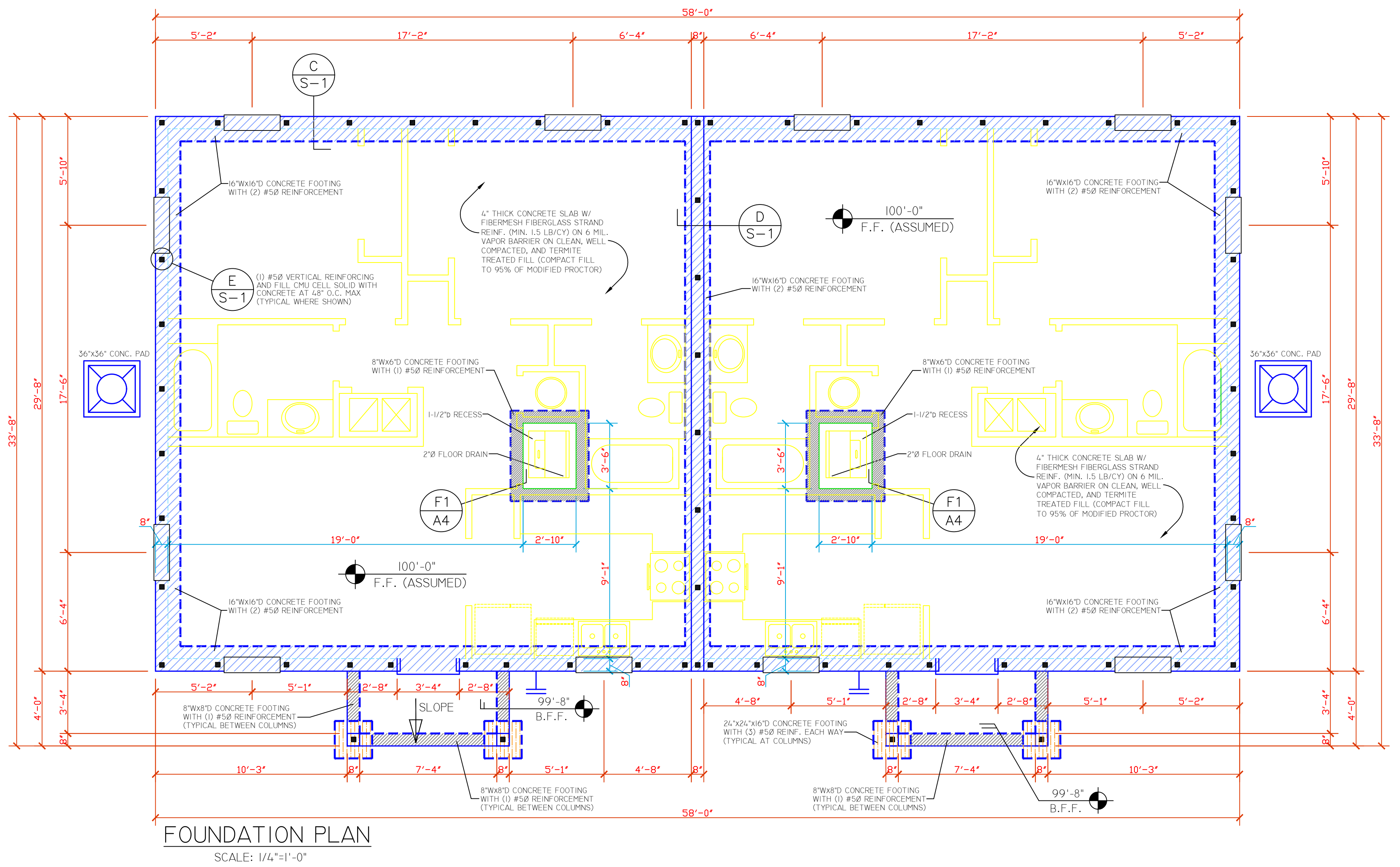
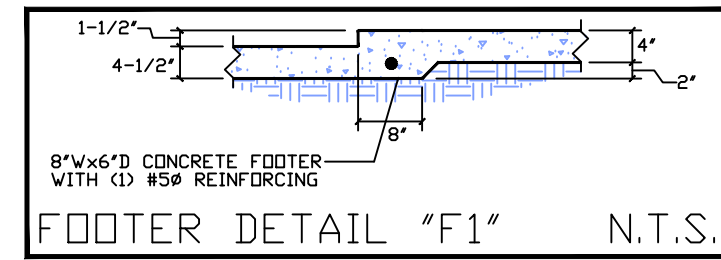
A3
SHEET 3 OF 7
DRAWN BY: DANIEL FRECHETTE

SITE PREPARATION NOTES:

THE PROPOSED BUILDING AREA, PLUS A MINIMUM MARGIN OF FIVE FEET BEYOND THE PROPOSED BUILDING LIMITS SHALL BE STRIPPED AND GRUBBED OF SURFACE DEBRIS, INCLUDING VEGETATION, ROOTS AND ORGANIC MATTER AND ANY REMNANTS OF PREVIOUS CONSTRUCTION SUCH AS OLD FOOTINGS AND SLABS.

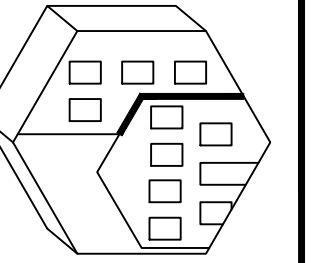
THE BUILDING AND PAVEMENT AREAS SHALL BE FILLED TO THE DESIRED GRADES. THE HORIZONTAL PORTION OF THE BUILDING PAD SHALL EXTEND A MINIMUM FIVE FEET BEYOND THE BUILDING AND PAVEMENT AREAS. CLEAN IMPORTED FILL MATERIAL SHALL BE PLACED IN MAXIMUM LOOSE LAYERS OF 12 INCH LIFTS IN THICKNESS. EACH LIFT SHALL BE COMPACTED TO 95% OF A MODIFIED PROCTOR.

FIELD DENSITY TESTS AND ON-SITE INSPECTION ARE REQUIRED TO BE PERFORMED, BY A STATE OF FLORIDA LICENSED GEOTECHNICAL ENGINEER, AT APPROPRIATE TIMES DURING THE EARTH WORK OPERATIONS IN ORDER TO VERIFY THAT THE SITE PREPARATIONS HAVE BEEN PROPERLY CONSTRUCTED. A MINIMUM SOIL BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT IS REQUIRED.



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FLORIDA PE# 47515
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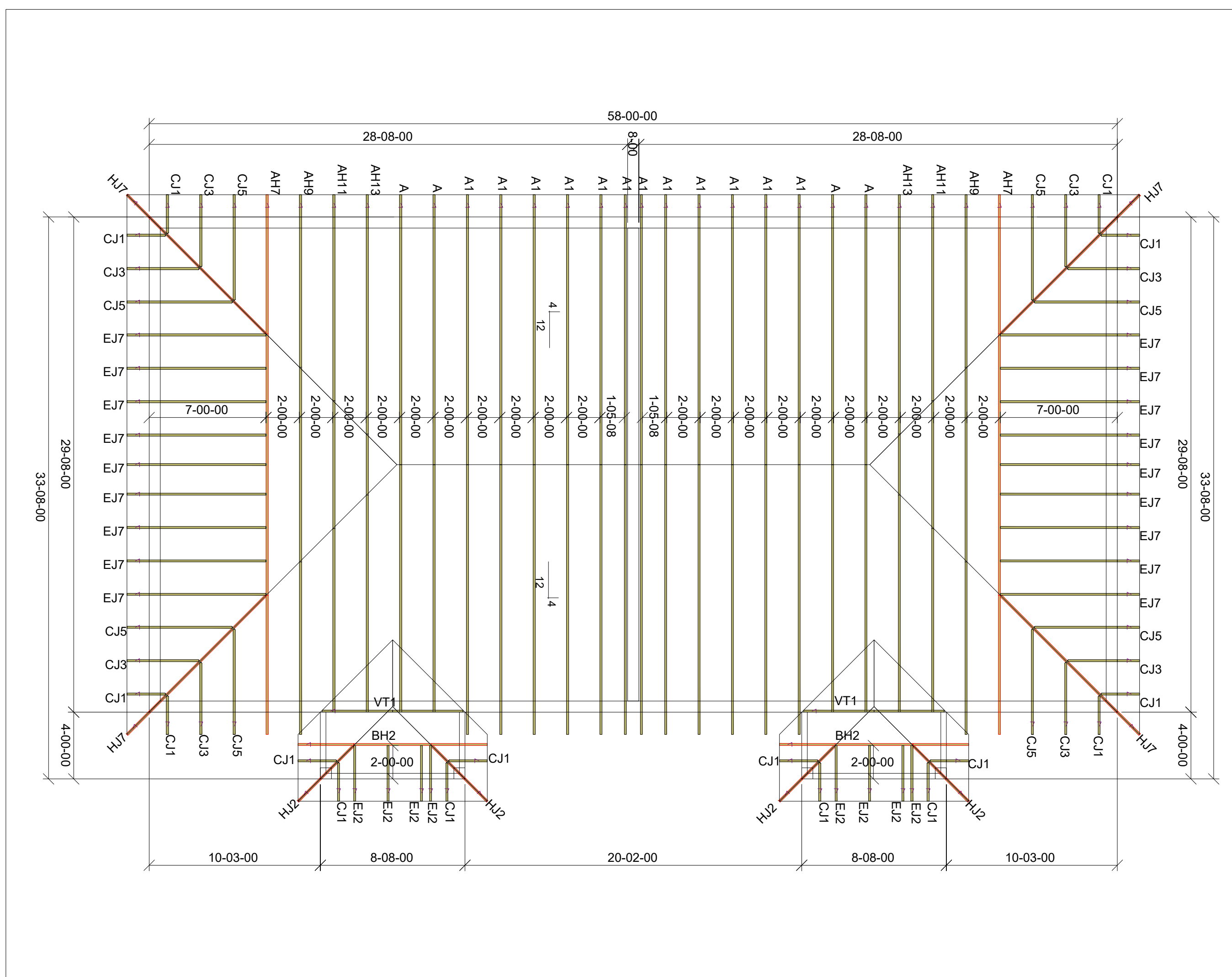
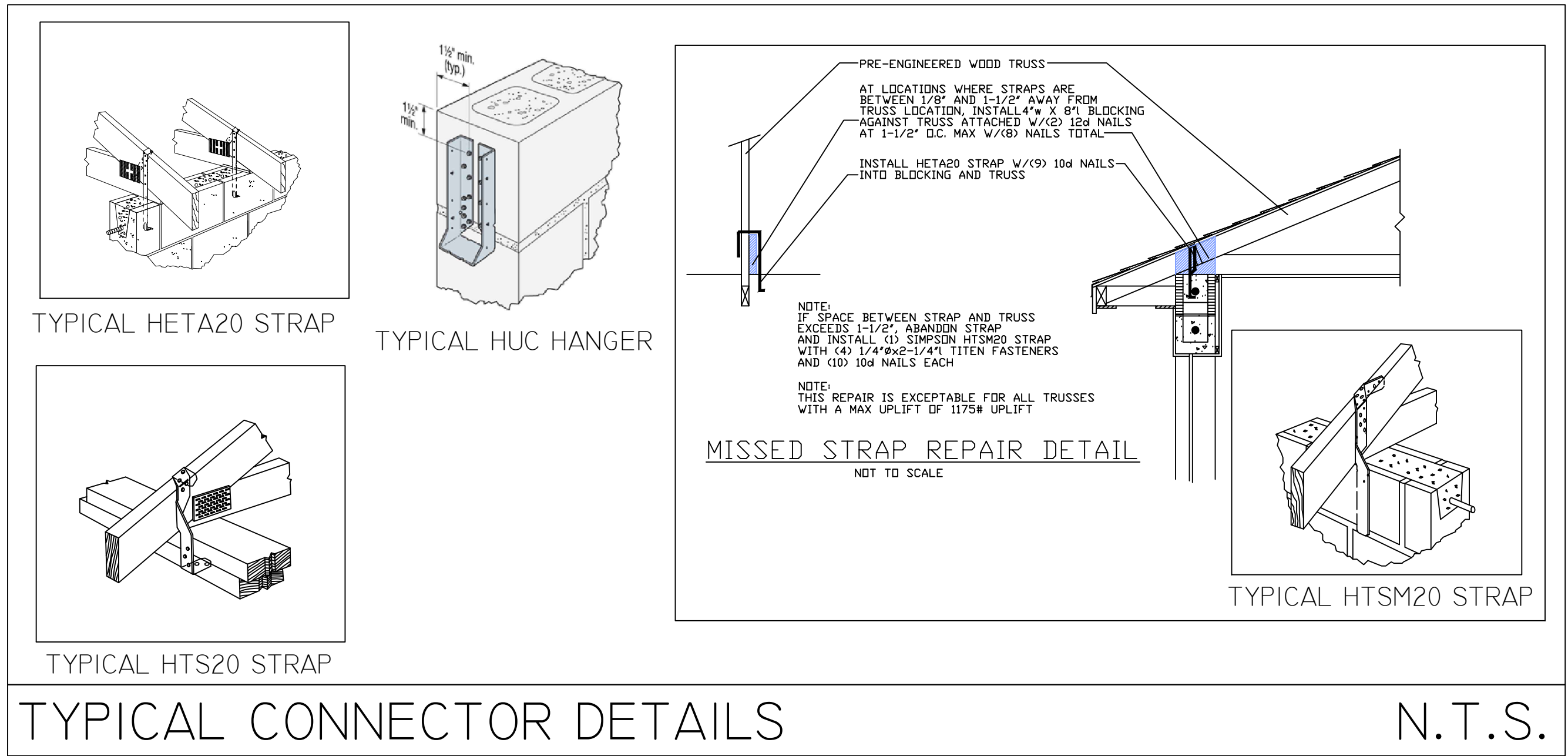
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 4. DO NOT SCALE DRAWINGS.

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SHEET 4 OF 7
DRAWN BY:
DANIEL FRECHETTE



Builders FirstSource
1600 INDUSTRIAL PARK DR
PLANT CITY, FL
Phone: (813) 752-5522
Fax: (813) 752-1532
http://www.bfsr.com

General Notes:
- Per ANSI/TPI 1-2007 all "Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Dimensions are Feet-Inches-Sixteenths.
- Trusses are to be 24" o.c. unless noted otherwise (U.N.O.).
- Trusses are not designed to support brick U.N.O.
- Do not cut or modify trusses without first contacting Builders FirstSource.
- Immediately contact Builders FirstSource if trusses are damaged.
Connection Notes:
- All hangers are to be Simpson or equivalent U.N.O.
- Use Manufacturer's specifications for all hanger connections U.N.O.
- Use 10d x 1 1/2" Nails in hanger connections to single ply roof girders.
Floor Truss Notes:
- Shift truss as required to avoid plumbing traps.
- Installation Contractor and/or Field Supervisor are to verify all dimensions, trap locations, and options prior to installation.
Dimension Notes:
- All dimensions are to scale. Do not scale dimensions.

TNT BUILDERS OF SOUTH FLORIDA
MARCELLINO DUPLEX

Comments: **

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

SHEET 1 of 1

ROOF DESIGN PRESSURES

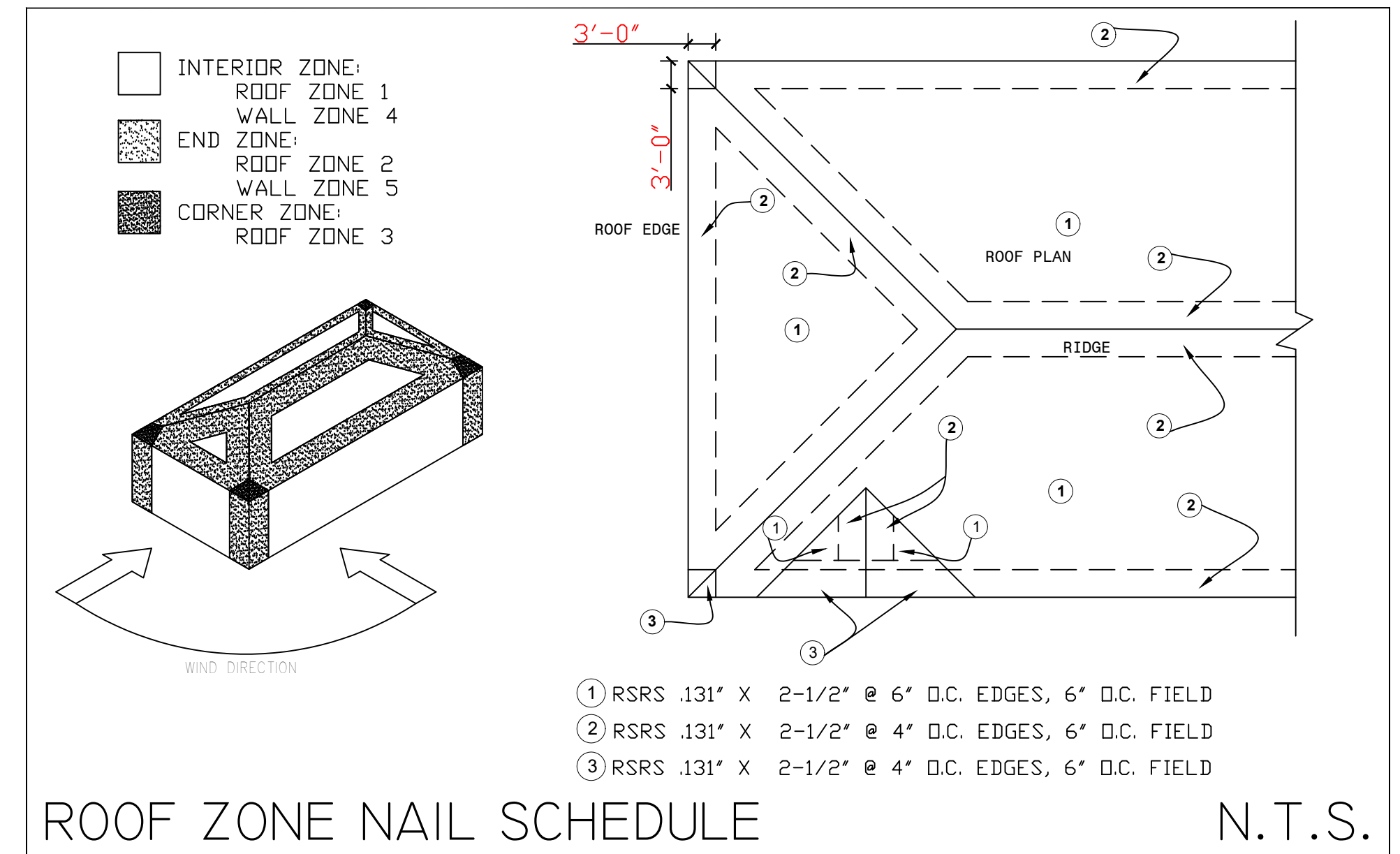
BUILDING INFORMATION	
Design Wind Speed	Nominal
Ultimate Wind Velocity (mph)	170
Nominal Wind Velocity (mph)	131.7
Exposure	B
Internal Pressure	Excluded
Roof to Above Ground (ft) - (ft)	0.0
Standard Wall Height (ft)	8.8
Mean Roof Height (ft) - (ft)	58.8
Building Width (ft)	26.7
Building Length (ft)	76.3
Roof Slope (degrees)	4.8
Roof Angle (degrees)	18.43
(at Edge Start) (ft)	3.00
End Zone (ft)	6.00
Parapet Along Roof Perimeter (ft)	

Windloadcalc.com
Your Window to Success

ASCE 7-16

Building Permit Edition
Wind Load Program

WIND LOAD DESIGN INFORMATION								
INFL.	APPLYING WIND LOAD FOR	ZONE	OPENING ELEVATION (feet)	WIDTH (feet)	LENGTH (feet)	EFFECTIVE WIND AREA (sq ft)	Nominal Wind Load Pressures	
							MAXIMUM POSITIVE PRESSURE (psf)	MAXIMUM NEGATIVE PRESSURE (psf)
ROOF INFORMATION	Hip to Overhang	1-Hip	N/A	4.0	41.0	500	15.3	-31.3
	Hip to Overhang	2-Hip	N/A	41.0	8.0	500	15.3	-76.0
	Hip to Overhang	3-Hip	N/A	3.0	3.0	9	21.7	-76.0
			N/A					
			N/A					
			N/A					



CONNECTOR SCHEDULE

TRUSS ID/DESCRIPTION:	CONNECTOR
A, AI, AH1, AH3, AH7, AH9, BH2, C, J1, C, J3, C, J5, E, J2, E, J7, H, J2, H, J7	* AT CMU WALL ONE (1) SIMPSON HETA20 STRAP W/(9) 10dx1-1/2"L NAILS EACH
	* AT WOOD BEAM ONE (1) SIMPSON HTS20 STRAP W/(24) 10dx1-1/2"L NAILS EACH
	* AT TRUSS TO TRUSS BY TRUSS COMPANY
VT1, VT2	BY TRUSS COMPANY
WOOD BEAMS	* AT CMU COLUMN TWO (2) SIMPSON HETA20 STRAP WITH (9) 10dx1-1/2"L NAILS EACH
	* AT 2-PLY WOOD BEAM ONE (1) SIMPSON HUC410 HANGER WITH (18) 1/4"x2-3/4" L TITEN FASTENERS AND (10) 10d NAILS EACH

ALL ANCHORS ARE SIMPSON ANCHORS OR USP EQUIVALENT

NOTE: TRUSS LAYOUT DESIGN AND CERTIFICATION BY STATE OF FLORIDA LICENSED SPECIALTY TRUSS ENGINEER. ENGINEER OF RECORD DOES NOT CERTIFY TRUSS DESIGN/LAYOUT AS DEPICTED ON THESE DRAWINGS. ALL TRUSS TO TRUSS CONNECTIONS, INCLUDING TRUSSES TO GIRDERS (HANGERS) SHALL BE PROVIDED BY TRUSS COMPANY.

Builder: TNT Builders of South Florida
Subdivision: MARCELLINO DUPLEX
Jurisdiction: State: FL
Lot: N/A
Model: MARCELLINO DUPLEX
Shipment: All
Elevation:
Option:

OnLine Job No: Pick Ticket:
Sales No:
Acct No:
Ship Date:
Designer:
AppWrt JobNo: 2328861

Truss ID	Truss Description	Gravty (lb)	Uplift (lb)	Gravty (lb)	Uplift (lb)
A	JR2 E 0	1258 lb	742 lb	JR2 E 0	1258 lb
A1	JR2 E 0	1258 lb	742 lb	JR2 E 0	1258 lb
AH11	JR2 E 0	1173 lb	742 lb	JR2 E 0	1173 lb
AH13	JR2 E 0	1173 lb	742 lb	JR2 E 0	1173 lb
AH7	JR2 E 0	2597 lb	1562 lb	JR2 E 0	2597 lb
AH9	JR2 E 0	1173 lb	742 lb	JR2 E 0	1173 lb
BH2	JR2 E 0	425 lb	247 lb	JR2 E 0	425 lb
C, J1	JR2 E 0	183 lb	223 lb	JR2 E 0	183 lb
C, J3	JR2 E 0	200 lb	198 lb	JR2 E 0	200 lb
C, J5	JR2 E 0	267 lb	247 lb	JR2 E 0	267 lb
E, J2	JR2 E 0	173 lb	223 lb	JR2 E 0	173 lb
E, J7	JR2 E 0	338 lb	252 lb	JR2 E 0	338 lb
H, J2	JR2 E 0	241 lb	223 lb	JR2 E 0	241 lb
H, J7	JR2 E 0	229 lb	371 lb	JR2 E 0	229 lb
VT1	JR2 E 0	150 lb	165 lb	JR2 E 0	150 lb
VT2	JR2 E 0	150 lb	165 lb	JR2 E 0	150 lb

Note: The reactions shown on this page are summarized from the Truss Design Drawings. Refer to the Project Truss Design Drawings for further details or verification.

GENERAL NOTES

- THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THAT THE CONTRACTOR/OWNER BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
- THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
- THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER-BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

DO NOT SCALE DRAWINGS

Edward F Shinski Jr. Digitally signed by Edward F Shinski Jr.
Date: 2021.03.02 15:00:50 -05'00'

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REVISIONS

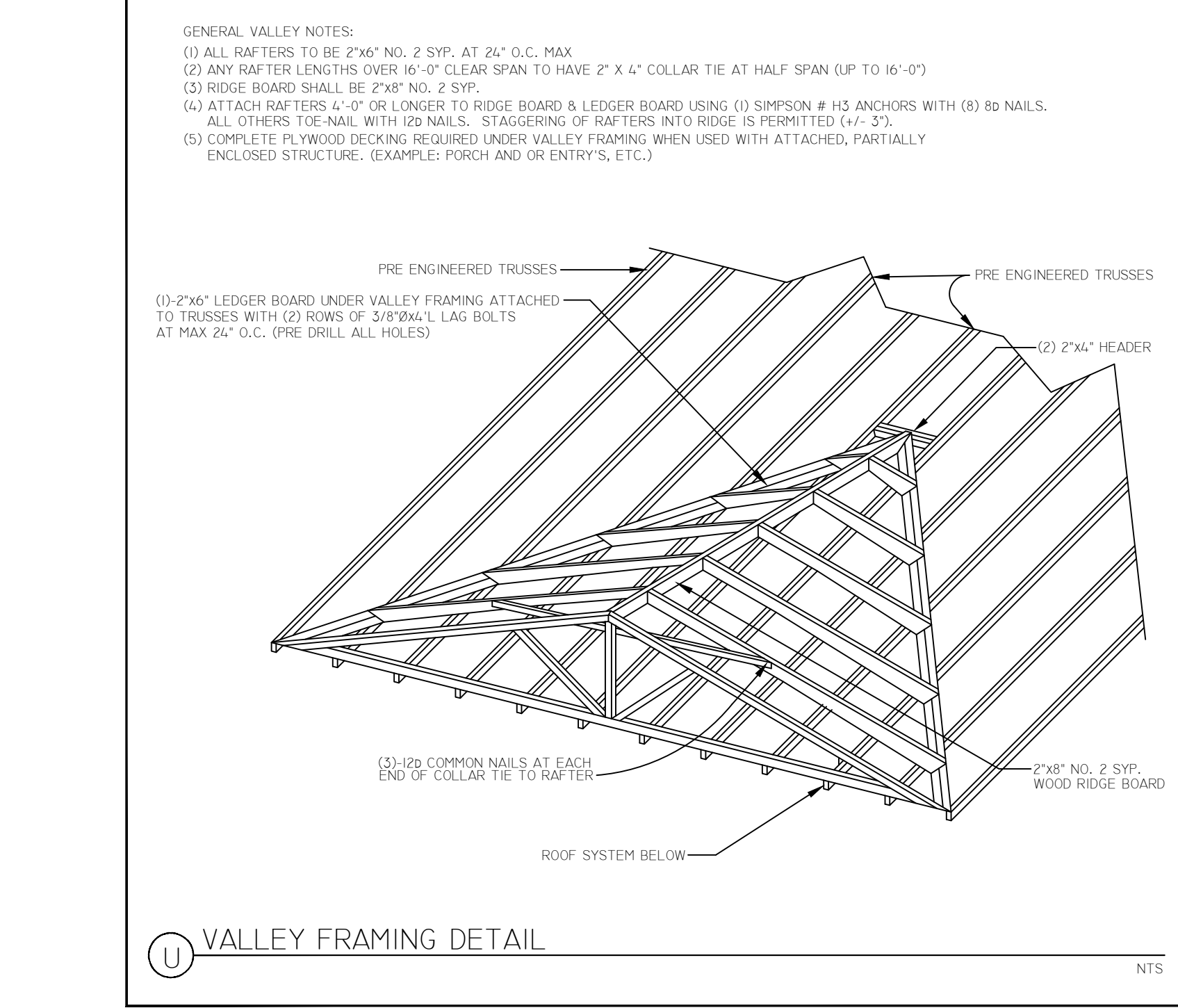
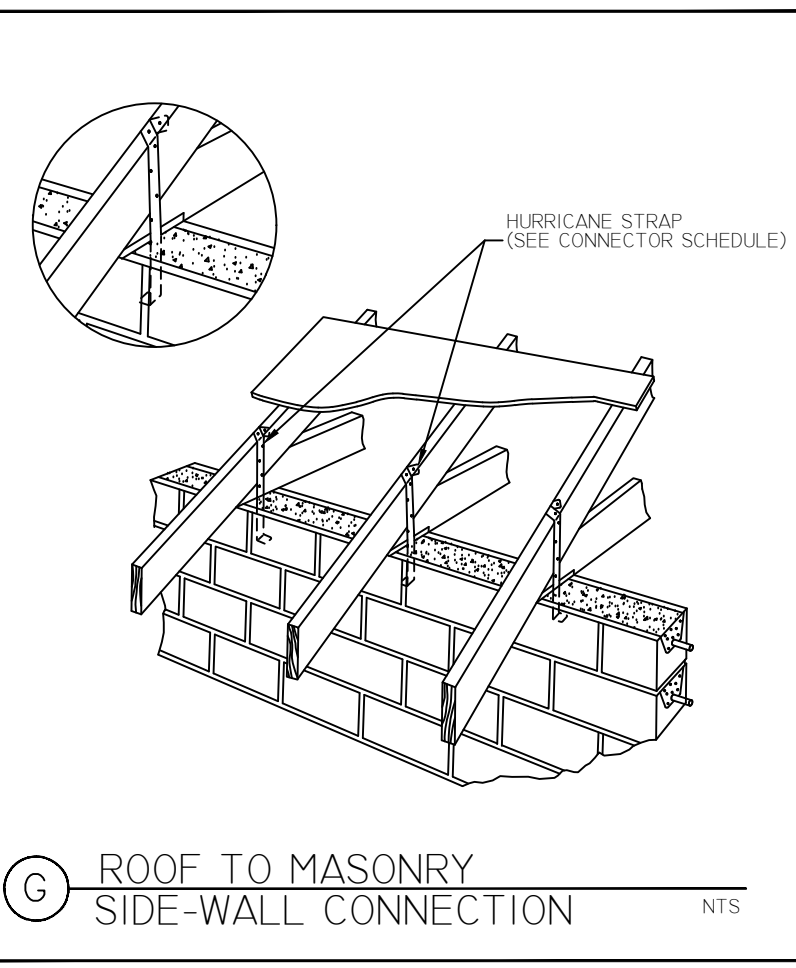
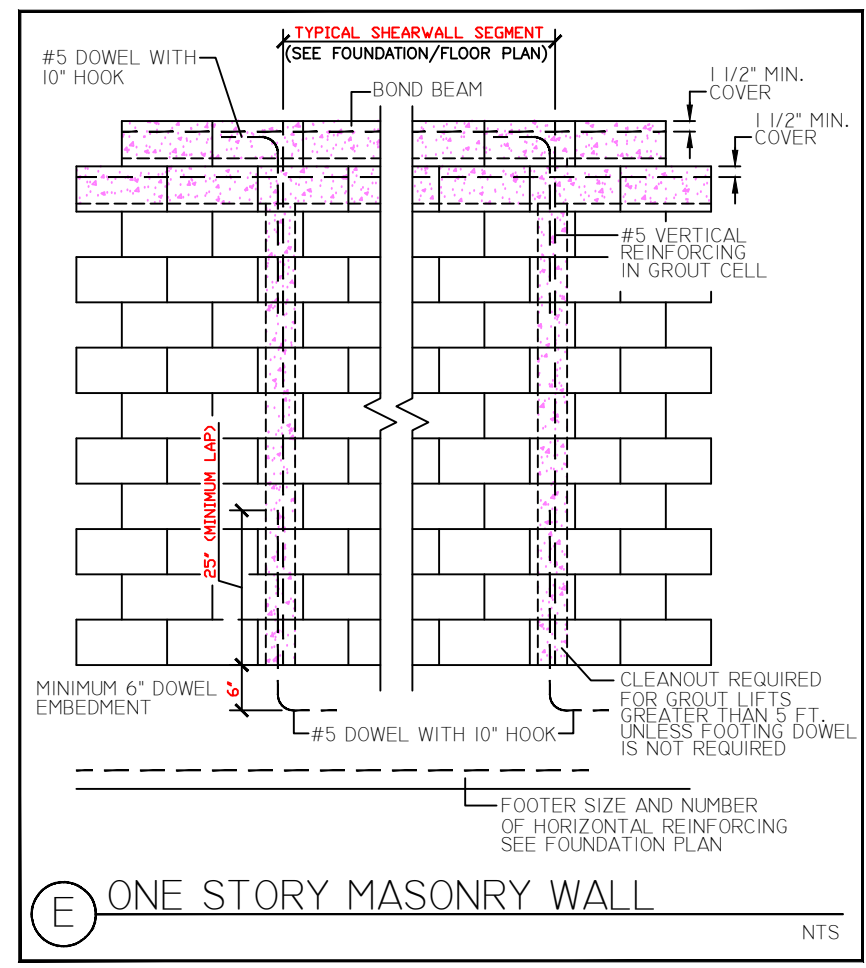
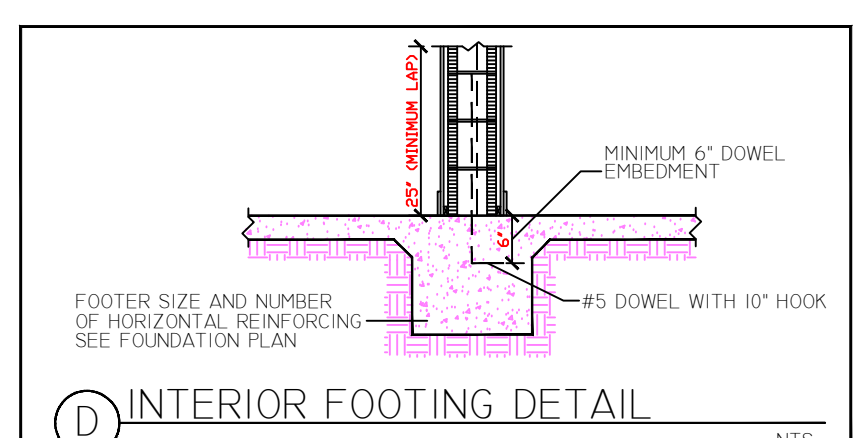
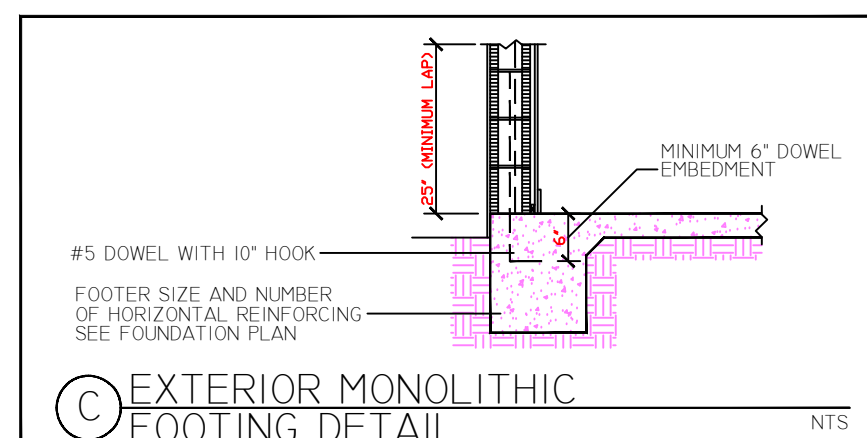
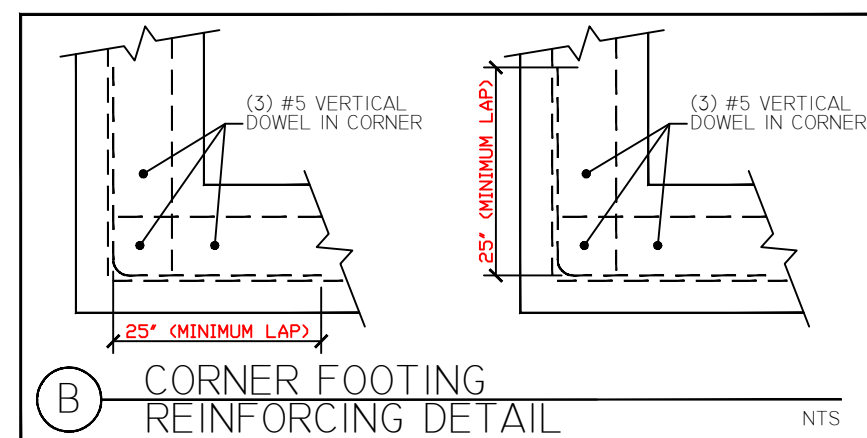
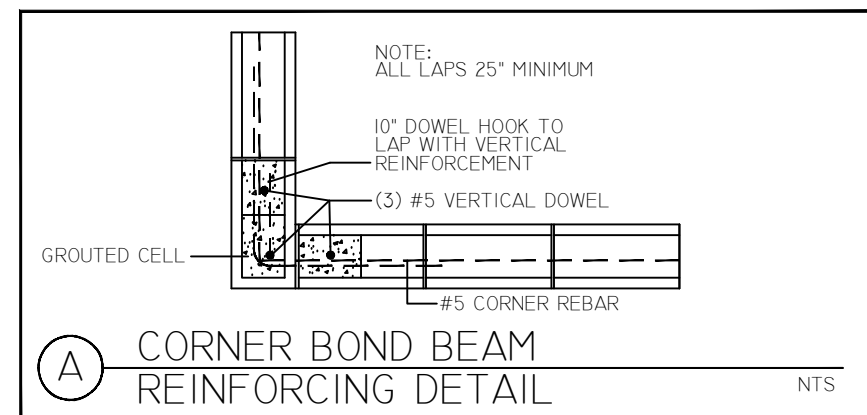
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TEL: (321) 724-0740
FAX: (321) 916-4206
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@EFCOR.COM

EEDC
ENGINEERING AND DESIGN CONCEPTS, INC.

- DUPLEX FOR -
MARCELLINO
BUILDING 2
951 N. 12TH ST. FORT PIERCE, FL 34950

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH: 321-863-3223

A5
SHEET 5 OF 7
DRAWN BY: DANIEL FRECHETTE



GENERAL NOTES: MASONRY

1. ALL CONSTRUCTION WORKMANSHIP AND MATERIALS SHALL CONFORM TO "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530-92/ASCE 7-16/TMS 402-92, (LATEST EDITIONS)
2. COURSE GROUT (SIZE 10) SHALL BE USED IN CONFORMANCE TO THE REQUIREMENTS OF ASTM C476-83 "STANDARD SPECIFICATIONS FOR GROUT OF REINFORCED AND NON-REINFORCED MASONRY".
3. CONCRETE MASONRY SHALL BE NORMAL WEIGHT, GRADE N, TYPE I OR II, CONFORMING WITH ASTM C90-85 "STANDARD SPECIFICATIONS FOR HOLLOW LOAD BEARING CONCRETE MASONRY UNITS".
4. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS (f_m) SHALL BE 1900 PSI USING TYPE M OR S MORTAR.
5. THICKNESS OF MORTAR BED SHALL NOT EXCEED 5/8".
6. HORIZONTAL REINFORCING SHALL CONFORM WITH ASTM A82-85.
7. MASONRY REINFORCING STEEL BARS SHALL BE CONTINUOUS WITH LAP SPICES OF 30 BAR DIAMETERS MINIMUM.
8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL MASONRY STRUCTURAL ELEMENTS ARE ADEQUATELY BRACED TO RESIST WIND, BACKFILLING, SOIL COMPACTION, AND OTHER CONSTRUCTION AS WELL AS NATURAL OCCURRING FORCES ORDINARILY ENCOUNTERED DURING THE CONSTRUCTION PROCESS. BRACING SHALL REMAIN IN PLACE UNTIL THE STRUCTURE HAS BEEN COMPLETED.
9. MASONRY GROUT SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP BETWEEN 8 AND 11 INCHES.
10. WHEN GROUT POURS EXCEED 5 FEET IN HEIGHT, PROVIDE A CLEAN-OUT HOLE AT THE BOTTOM CELL. CLEAN THE CELL BY REMOVING ALL MORTAR DEBRIS, LOOSE AGGREGATES AND ANY MATERIAL DELETED TO MASONRY GROUT. INSTALL AND SECURELY TIE THE VERTICAL STEEL REINFORCEMENT TOGETHER. CLOSE THE OPENING AFTER INSPECTION.

GENERAL NOTES: WOOD

1. ALL FRAMING CONSTRUCTION, WORKMANSHIP AND MATERIALS (INCLUDING TRUSSES) SHALL CONFORM WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE REFERENCES LISTED BELOW: "AMERICAN INSTITUTE OF WOOD CONSTRUCTION" THIRD EDITION 1985 "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" 1991 AND SUPPLEMENT "U.S. PRODUCT STANDARD PS 1" OR APA PRP-108 PERFORMANCE STANDARDS "MANUAL FOR HOUSE FRAMING, WOOD CONSTRUCTION DATA NO. 1 "NATIONAL FOREST PRODUCTS ASSOCIATION."
2. ALL TRUSS BEAM AND COLUMN MEMBERS SHALL BE SPECIES AND GRADES OF LUMBER WHICH WILL PRODUCE DESIGN VALUES EQUAL TO OR GREATER THAN VALUES FOR SOUTHERN YELLOW PINE NO. 2, 19% MAX. M.C. GALVANIZED METAL HANGERS AND FRAMING ANCHORS SHOWN ON THE PLANS SHALL BE USED AND SHALL BE FASTENED IN ACCORDANCE WITH THE MANUFACTURERS' SPECIFICATIONS, SUBSTITUTIONS REQUIRE ENGINEER'S APPROVAL.
3. ANCHORING AND NAILING NOT IDENTIFIED SHALL COMPLY WITH THE NAILING SCHEDULE GIVEN WITHIN "MANUAL FOR HOUSE FRAMING", AND 2020 FLORIDA BUILDING CODE 7th EDITION.
4. A MINIMUM OF TWO STUDS SHALL BE INSTALLED ADJACENT TO ALL OPENINGS IN EXTERIOR AND LOAD BEARING WALLS AND BENEATH ALL BEAM & GIRDER BEARING POINTS.
5. TRUSSES SHALL BE SIZED AND DETAILED IN ACCORDANCE WITH THE DIMENSIONS AND LOADS INDICATED.
6. TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED BY A FLORIDA LICENSED ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE SPECIALLY ENGINEER SHALL SPECIFY BLOCKING AND BRACING NECESSARY TO WITHSTAND WIND LOADS DETERMINED USING ASCE 7-16.
7. AS A MINIMUM, ROOF SHEATHING SHALL CONSIST OF 19/32" (NOMINAL) APA 40/20 SPAN RATED, EXPOSURE 1 SHEATHING.
8. EXTERIOR WOOD FRAME WALLS SHALL BE SHEATHED WITH 15/32" APA SPAN RATED, EXPOSURE 1 SHEATHING.
9. EXTERIOR AND INTERIOR LOAD BEARING WALLS SHALL BE FRAMED WITH 2x4 MEMBERS AT 16" O.C. MAX. SPACING FOR MAX. 8' HIGH PARTITIONS. FOR HEIGHTS ABOVE 8' REFER TO WALL SECTIONS. STUDS SHALL BE SPRUCE-PINE-FIR #2 OR SPECIES WITH EQUAL OR GREATER DESIGN VALUES.
10. ALL PRESSURE TREATED LUMBER SHALL BE SOUTHERN YELLOW PINE #2 19% MAX. M.C. IN ACCORDANCE WITH AWPA STANDARDS C1,C2 AND C3 LATEST EDITIONS, WITH A WATERBORNE PRESERVATIVE IN ACCORDANCE WITH STANDARD PS. ALL NAILS AND SCREWS SHALL BE STAINLESS STEEL OR GALVANIZED.
11. WHERE DRAWING INDICATES APPLIED EXTERIOR FINISH OVER APPROVED WATER BARRIER OVER WOOD FRAMING MEMBERS, OWNER IS RESPONSIBLE TO INSTALL ALL REQUIRED SEALANT, FLASHING, ETC. TO MAINTAIN WATER-PROOF INTEGRITY TO PREVENT MOISTURE INFILTRATION INTO STRUCTURE. OWNER IS RESPONSIBLE FOR PERIODIC MAINTENANCE AND UPKEEP OF EXTERIOR APPLIED FINISH TO MAINTAIN WATERPROOF INTEGRITY TO PREVENT DAMAGE TO INTERIOR COMPONENTS.
12. WATER-RESISTIVE BARRIER: EXTERIOR WALLS OF FRAME CONSTRUCTION RECEIVING A VENEER SHALL BE PROVIDED WITH A WATER-RESISTIVE BARRIER. THE WATER RESISTIVE BARRIER SHALL BE A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT, COMPLYING WITH ASTM D 226 FOR TYPE 1 FELT, SHALL BE ATTACHED TO THE SHEATHING, WITH FLASHING IN SUCH A MANNER AS TO PROVIDE A CONTINUOUS WATER-RESISTIVE BARRIER BEHIND THE EXTERIOR WALL VENEER.

WHERE CEMENT PLASTER (STUCCO) IS TO BE APPLIED TO LATH OVER FRAME CONSTRUCTION, MEASURES SHALL BE TAKEN TO PREVENT BONDING BETWEEN THE CEMENT PLASTER AND THE WATER-RESISTIVE BARRIER. A BOND BREAKER, A BOND BREAKER BETWEEN THE WATER-RESISTIVE BARRIER AND THE CEMENT PLASTER (STUCCO) CONSISTING OF ONE OF THE FOLLOWING:

1. TWO LAYERS OF AN APPROVED WATER-RESISTANT BARRIER; OR
2. ONE LAYER OF AN APPROVED WATER-RESISTANT BARRIER OVER AN APPROVED PLASTIC HOUSE WRAP; OR
3. OTHER APPROVED METHODS OR MATERIALS APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

A CORROSION RESISTANT WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON ALL EXTERIOR STUD WALLS. THE SCREED MUST BE PLACED AT A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING.

GENERAL NOTES: CONCRETE

1. ALL CONCRETE CONSTRUCTION WORKMANSHIP AND MATERIAL SHALL COMPLY WITH THE REQUIREMENTS OF ACI 301-89 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
 2. ALL CONCRETE SHALL BE TYPE I OR II PORTLAND CEMENT COMPLYING WITH ASTM C150 AND SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH SHOWN BELOW:
- | | |
|---------------------|----------|
| FOUNDATIONS & SLABS | 3000 PSI |
| BEAMS | 3000 PSI |
| MASONRY | 3000 PSI |
3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A 615-87 GRADE 60. BARS SHALL BE FREE OF RUST, MILL SCALE, PAINT OR OTHER COATINGS THAT WILL REDUCE CONCRETE BOND.
 4. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN WITH ACT 315-80 (REVISED 1986) "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
 5. ALL BAR SPICES, DOWELS AND CONCRETE COVERAGE SHALL MEET THE REQUIREMENTS OF ACI 318-89 / 318R-89 "BUILDING CODE AND COMMENTARY FOR REINFORCED CONCRETE."
 6. BEAMS OVER MASONRY OPENINGS SHALL HAVE CONTINUOUS TOP AND BOTTOM REINFORCEMENT. LAP SPICES IN BOTTOM BARS SHALL OCCUR OVER SUPPORTS. TOP BARS SHALL LAP AT MID-SPAN.
 7. CONCRETE BEAMS AND SLABS SHALL BE FINISHED LEVEL AND TO THE ELEVATIONS SHOWN ON THE DRAWINGS.
 8. CALCIUM CHLORIDE SHALL NOT BE USED IN ANY FORM, UNLESS OTHERWISE PERMITTED OR SPECIFIED, CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 4 INCHES +/- 1 INCH.

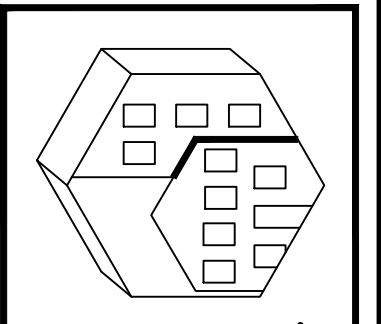
GENERAL NOTES

1. THESE DRAWINGS WERE PREPARED WITH THE ASSUMPTION THE CONTRACTOR/OWNER-BUILDER IS KNOWLEDGEABLE OF COMMON CONSTRUCTION PRACTICES.
2. THE CONTRACTOR/OWNER-BUILDER SHALL REVIEW DRAWINGS FOR ACCURACY AND INTERPRETATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNERS PRIOR TO CONSTRUCTION.
3. THE FOUNDATION PLAN SHALL BE VERIFIED BY THE CONTRACTOR/OWNER-BUILDER TO CORRESPOND WITH THE FINAL ENGINEERED TRUSS LAYOUT.
4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE - DO NOT SCALE DRAWINGS.
5. FLASHING SHALL BE PROVIDED PER FIELD CONDITIONS.
6. MOISTURE PROTECTION SHALL BE PROVIDED BETWEEN ALL MASONRY AND NON PRESSURE TREATED WOOD SURFACES.
7. A 1/2" DIAMETER X 10" LONG MINIMUM WEDGE ANCHOR MAY BE USED IN LIEU OF 1/2" DIAMETER J-BOLTS AT FOUNDATION.
8. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS LISTED.
9. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SHOWN ON THE DRAWINGS. ANY QUESTIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE STARTING CONSTRUCTION.
10. THE STRUCTURE HAS BEEN DESIGNED TO MEET THE REQUIREMENTS OF 2020 FLORIDA BUILDING CODE 7th EDITION.
11. FOUNDATION AND SLAB ARE TO BE FORMED UPON SOIL WITH A MINIMUM SAFE BEARING CAPACITY OF 2000 PSF.
12. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO UNIFORMLY PROVIDE THE BEARING CAPACITY UNDER ALL FOUNDATIONS.
13. THE CONTRACTORS SHALL HIRE A GEOTECHNICAL ENGINEER TO RECOMMEND SOIL IMPROVEMENTS REQUIRED TO OBTAIN THE MINIMUM SAFE BEARING CAPACITY STATED ABOVE.

REVISIONS

1	
2	
3	

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F.E.D.C.
ENGINEERING AND DESIGN CONCEPTS, INC.

-DUPLICATE FOR-
MARCELLINO
BUILDING 2
951 N. 12TH ST. FORT PIERCE, FL 34950

ENGINEER OF RECORD
EDWARD F. SHINSKIE, PE
4707 WILD TURKEY ROAD
MIMS, FLORIDA 32754
FLORIDA PE# 47515
PH. 321-863-3223

Digitally signed
Edward F. Shinskie Jr.
Date: 2021.03.02
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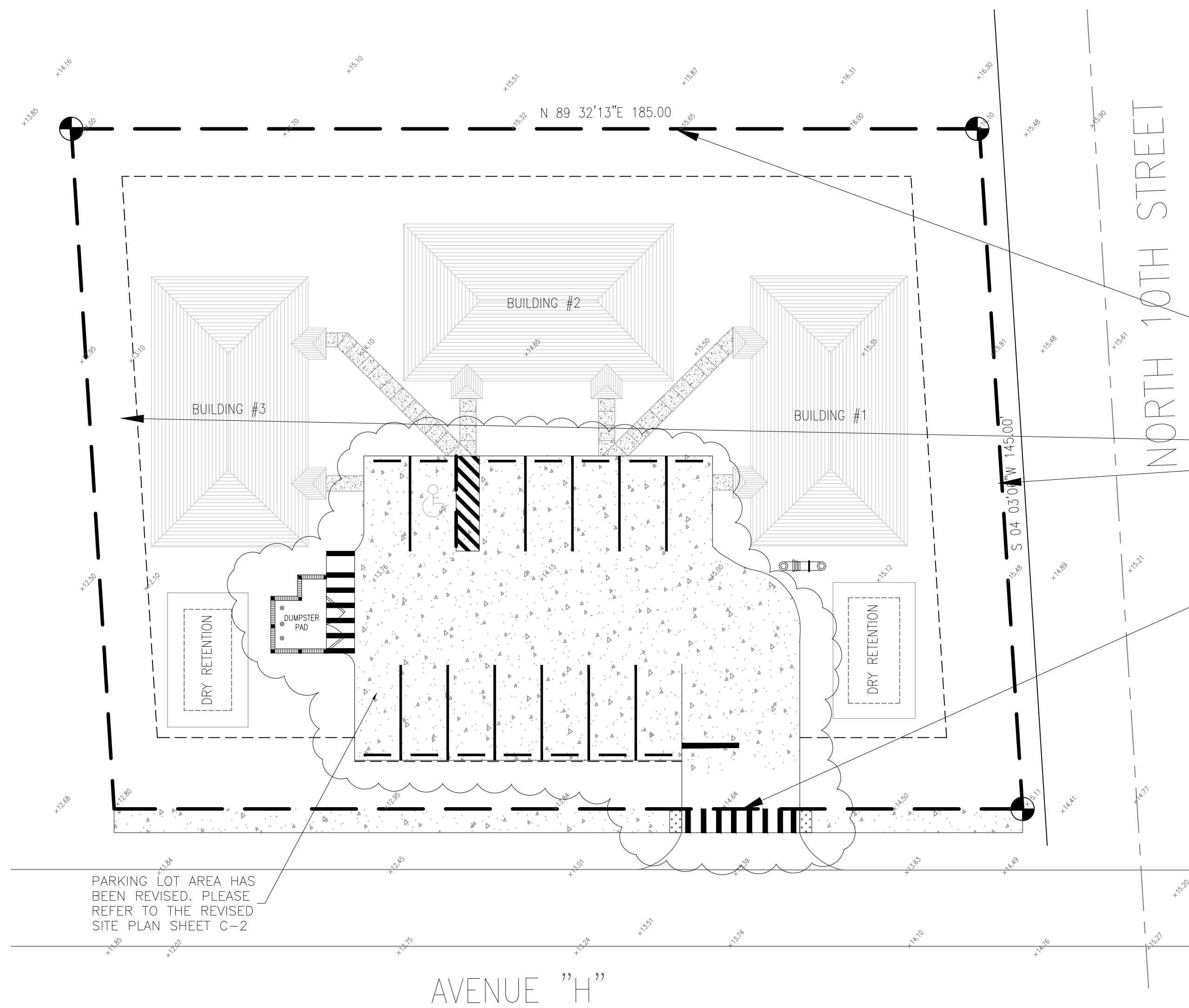
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S-1
SHEET 6 OF 7
DRAWN BY:
DANIEL FRECHETTE

SITE DEMOLITION & EROSION CONTROL NOTES

- (1) CONTRACTOR SHALL FIELD VERIFY THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF DEMOLITION AND CONSTRUCTION ACTIVITIES.
- (2) EROSION AND SEDIMENT CONTROL DEVICES AND OTHER NECESSARY MEASURES ARE TO BE IMPLEMENTED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION. SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SATISFACTORY COMPLETION OF ALL WORK SPECIFIED.
- (3) ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO THE STANDARDS OF CITY, COUNTY, SIRWMD AND FDOT.
- (4) SOIL MATERIAL FROM THIS PROJECT SHALL BE CONTAINED AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS AND PONDS.
- (5) DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF THESE EFFORTS AND TO MAKE ADJUSTMENTS AS NECESSARY.
- (6) ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING STATE, COUNTY, CITY OR PRIVATE ROADS AND FACILITIES FROM THIS SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- (7) EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE FDOT ROADWAY & TRAFFIC DESIGN STANDARDS MANUAL, INDEX 102.
- (8) SILT FENCE LOCATION SHOWN ON PLAN IS THE MINIMUM EROSION AND SEDIMENTARY CONTROL MEASURE TO BE CONSTRUCTED. ADDITIONAL EROSION CONTROL MEASURES MUST BE LOCATED AS NEEDED DEPENDING ON THE ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATION.
- (9) CONTRACTOR SHALL OBTAIN PHOTOGRAPHIC RECORDS OF THE EXISTING SITE AND PERIMETER FACILITIES CONDITION PRIOR TO BEGINNING ANY SITE WORK.



1

SCALE: 1" = 20'

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE OF ORDINANCES SECTIONS 119 AND 125

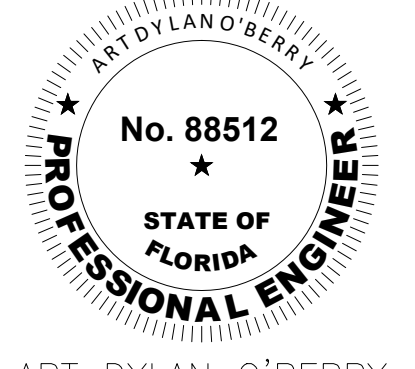
PLEASE REFER TO SHEET 9 (CD-1) FOR EROSION CONTROL NOTES AND DETAILS

PARKING LOT AREA HAS BEEN REVISED. PLEASE REFER TO THE REVISED SITE PLAN SHEET C-2

EROSION CONTROL/DEMOLITION/REMOVAL NOTES:
CITY OF FORT PIERCE CODE ORDINANCE, SECTION 107-7.

- 1- INSTALL SILT FENCE PER 1-ETAIL SHOWN ON THIS SHEET;
- 2- REMOVE ALL WITHIN THE LIMITS OF THE BUILDING;
- 3- REMOVE SHRUBBERY AND TREES;
- 4- REMOVE CURB WITHIN THE LIMITS OF THE SITE IMPROVEMENTS SHOWN ON THIS SHEET
- 5- PROTECT ALL WATER, SEWER MAIN PIPING;

Dylan O'Berry, P.E.
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Port St. Lucie, Florida
(772) 203-0664
dylan@artofengineering.net
https://artofengineering.net



ART DYLAN O'BERRY
2674 SE RUFFIN TERRACE
FORT ST LUCIE, FL 34952
P.E. NO. 88512

LUXOR
CONSULTING GROUP

PERMITS REQUIRED

- _____
- _____
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- _____

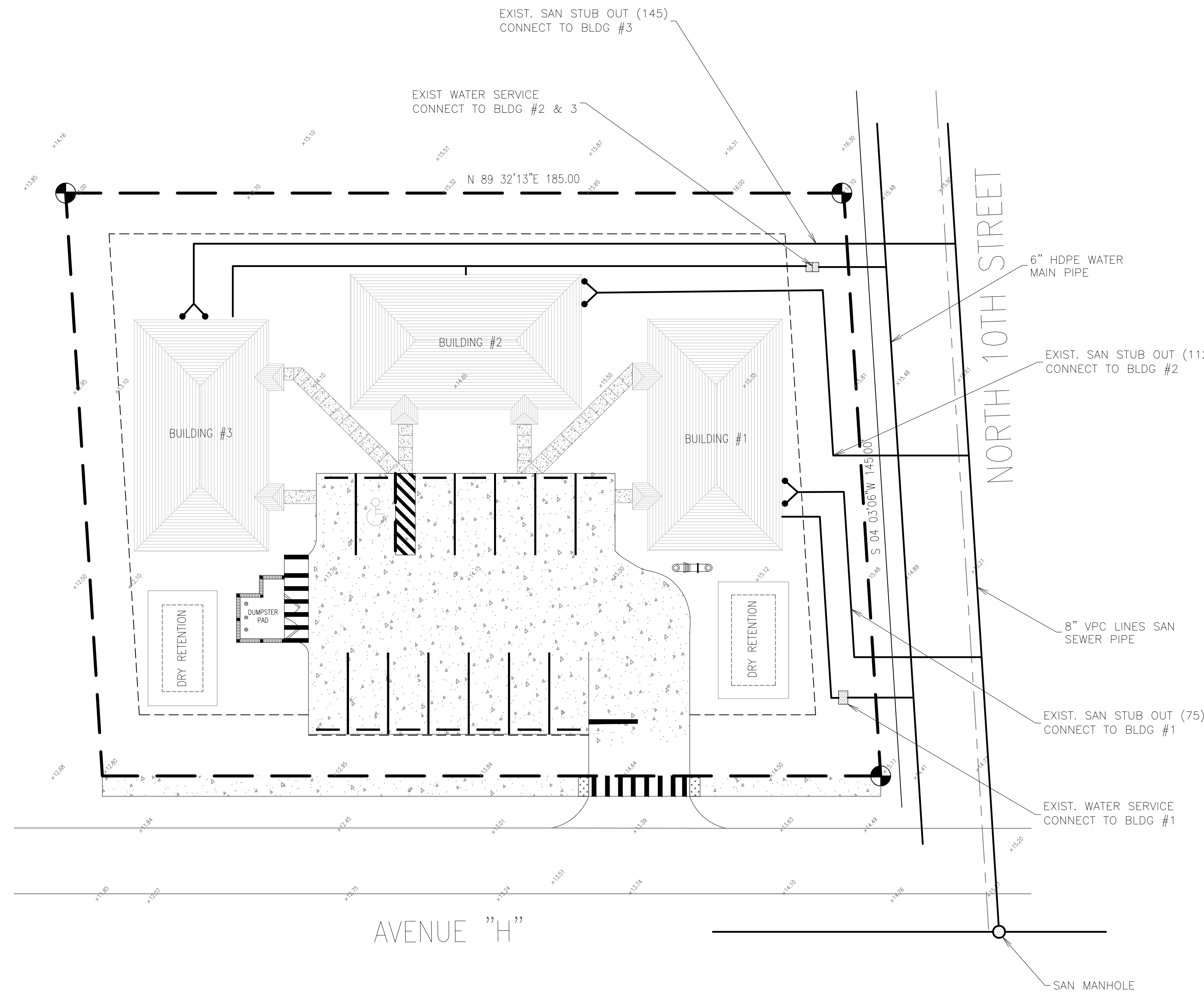
PERMIT #

NO.	REVISIONS	DATE

Dylan O'Berry
ENGINEERS SIGNATURE
SIGNED: 2/13/2025

DUPLIX PROJECT
1006 AVENUE H
FORT PIERCE, FL 34950
ST LUCIE COUNTY

SHEET TITLE	
DEMO & EROSION CONTROL PLAN	
DATE	SHEET
01/22/2025	C-1
SCALE	
N/A	
DRAWN BY	
DC	



NORTH

WEST EAST
SOUTH

GRAPHIC SCALE
0' 15' 30' 60'

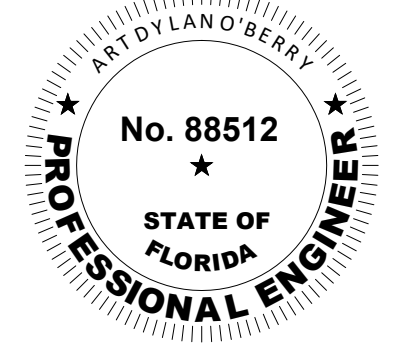
SCALE: 1" = 20'

ALL CONSTRUCTION SHALL COMPLY WITH
THE CITY OF FORT PIERCE CODE OF
ORDINANCES SECTIONS 119 AND 125

PLEASE REFER TO FPUA STANDARD DETAILS FOR WATER
AND SEWER SERVICE CONNECTIONS PROVIDED ON THE
FOLLOWING DETAIL SHEETS C-4 AND D-6

FPUA ELECTRIC, WATER AND SEWER SERVICE

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P.E. NO. 88512

LUXOR
CONSULTING GROUP

PERMITS REQUIRED

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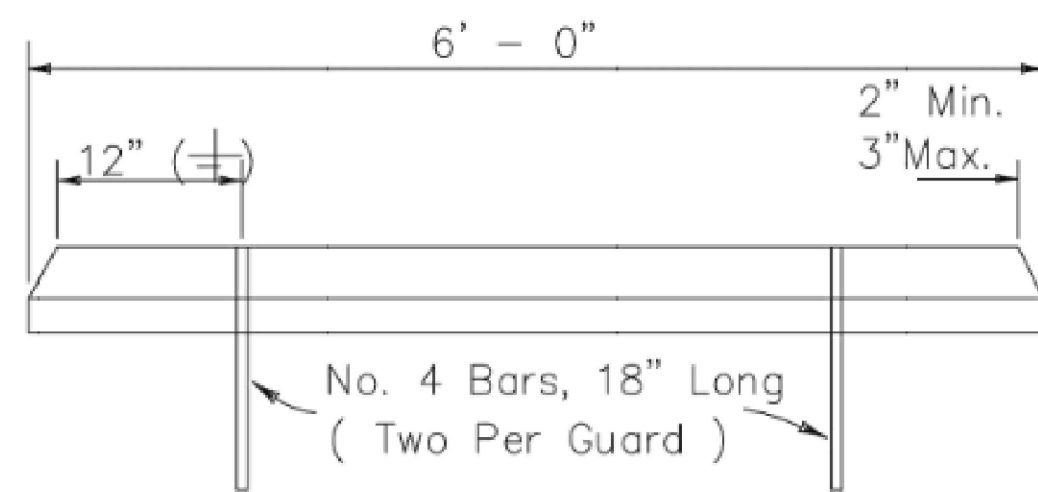
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NO.	REVISIONS	DATE

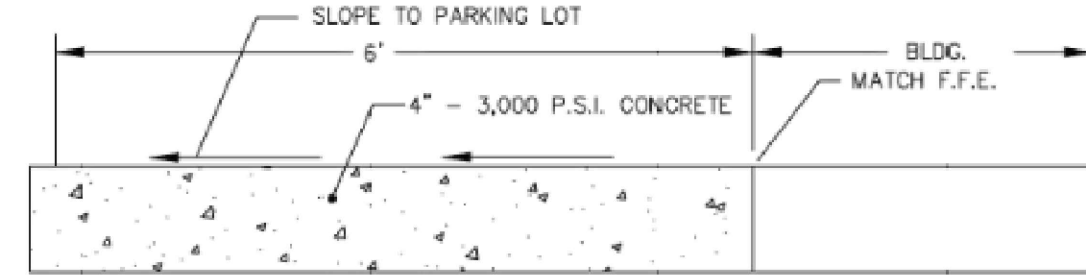
Dylan O'Berry
ENGINEERS SIGNATURE
SIGNED: 2/13/2025

DUPLEX PROJECT
1006 AVENUE H
FORT PIERCE, FL 34950
ST LUCIE COUNTY

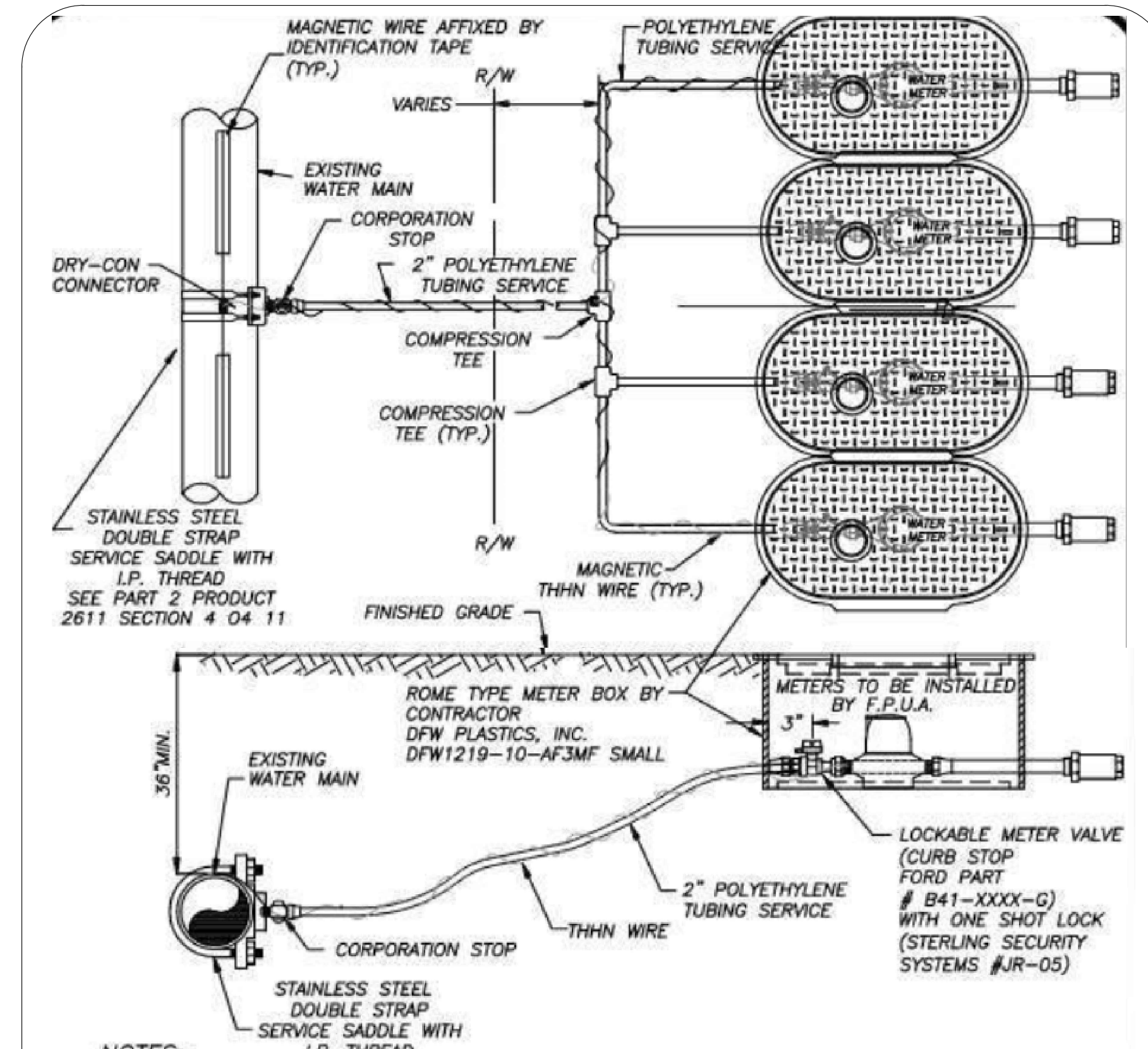
SHEET TITLE UTILITY PLAN	
DATE 01/22/2025	SHEET
SCALE N/A	C-3A
DRAWN BY DC	



A WHEEL STOP
SCALE: NONE



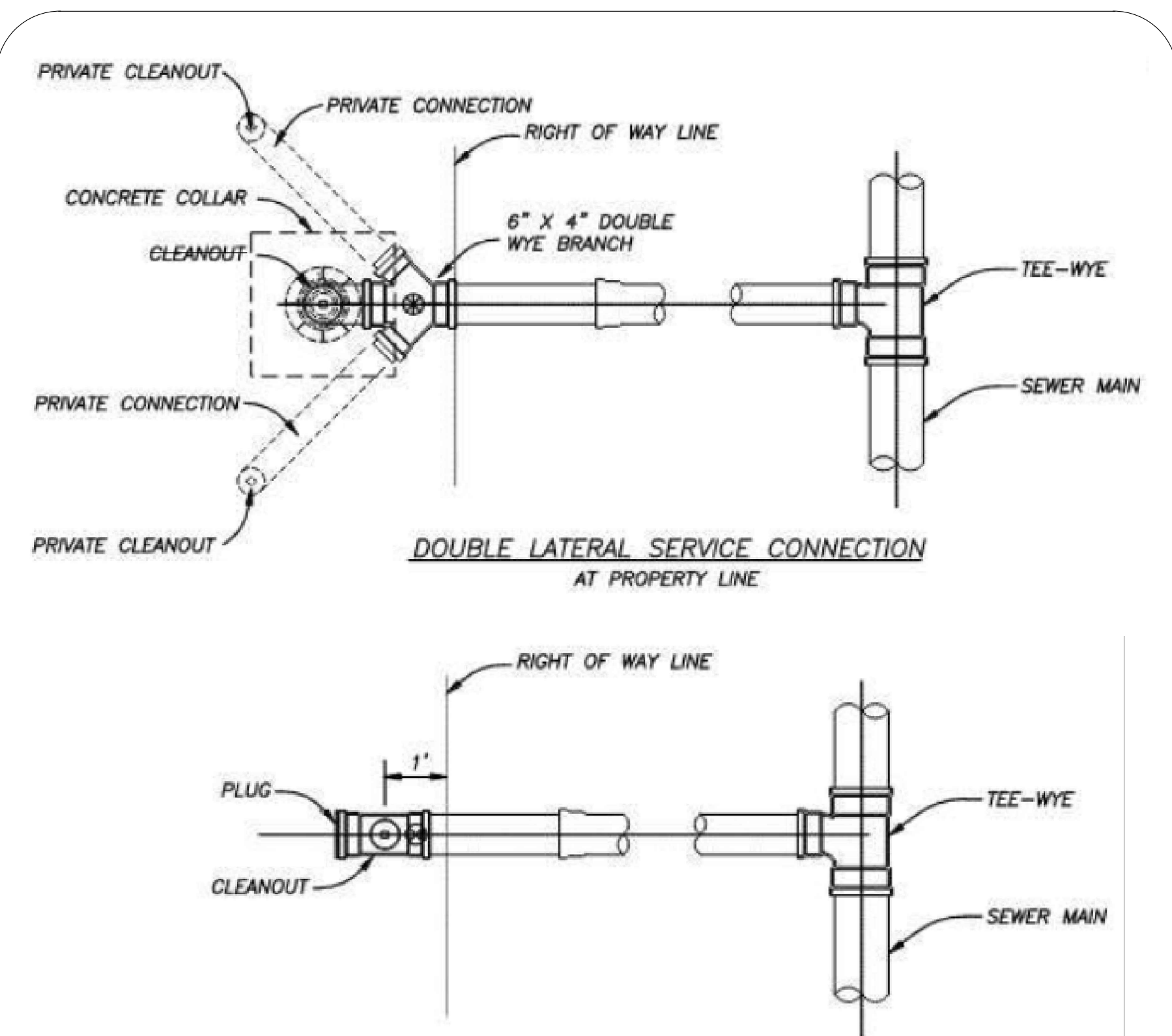
B CONC. SIDEWALK
SCALE: NONE



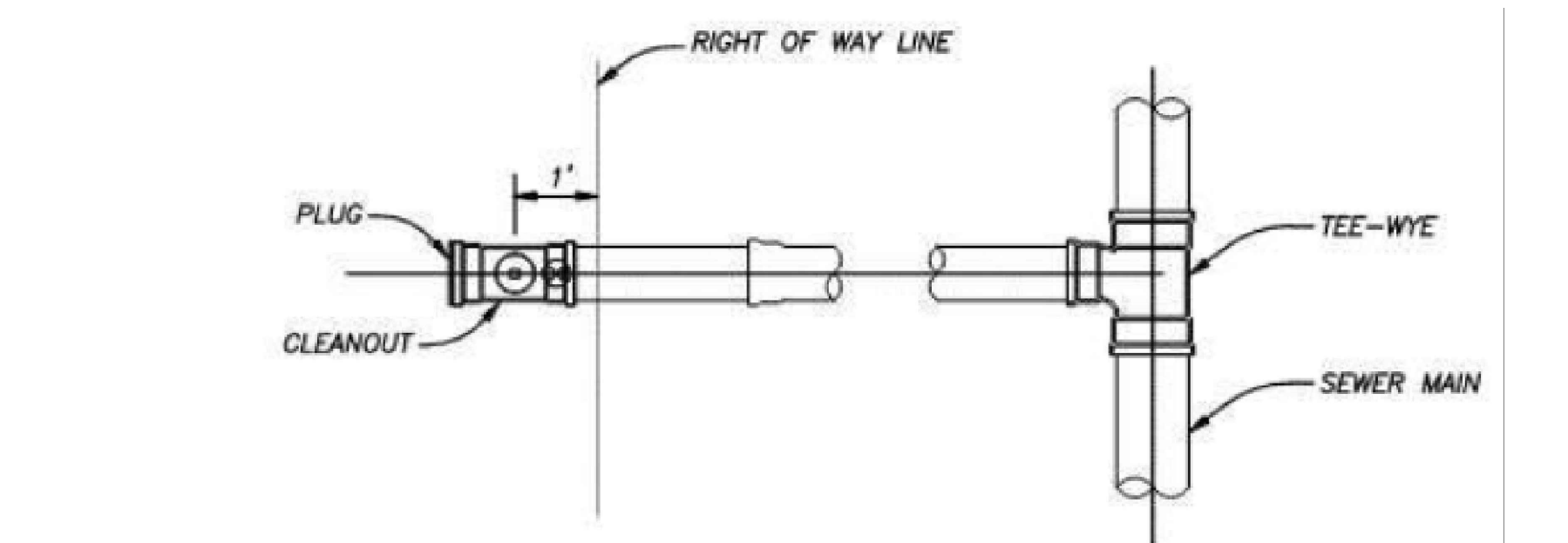
- NOTES:**
1. BLUE 10 GAUGE THIN WIRE SHALL BE ATTACHED TO THE SERVICE LINE AND RUN TO OUTER METERS ONLY.
 2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
 3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)
 4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

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

	TYPICAL MULTIPLE WATER SERVICE CONNECTION		W-4	
	DATE: 02-09	DESIGN: JLC	SCALE: N.T.S.	DATE: 2020
DESIGNED BY: JLC	REVISION: NONE	COMPUTER FILE #	BY: JLC	APPROVED BY: JLC
DRAWN BY: JLC	SCALE: N.T.S.	WATER DETAILS 200602.DWG	SHEET 1 OF 1	
DATE: 2020	DATE: 2020	DATE: 2020	PROJECT: WATER/WASTEWATER ENGINEERING	
FT. PIERCE UTILITIES AUTHORITY			PROJECT NO. 200602.DWG	



DOUBLE LATERAL SERVICE CONNECTION AT PROPERTY LINE

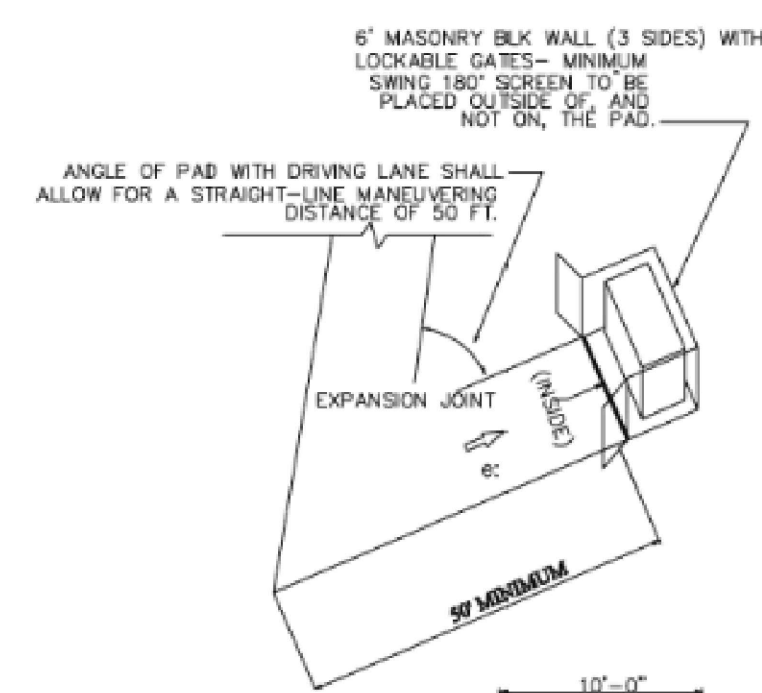


SINGLE SERVICE LATERAL CONNECTION

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

SERVICE CONNECTION
(N.T.S.)

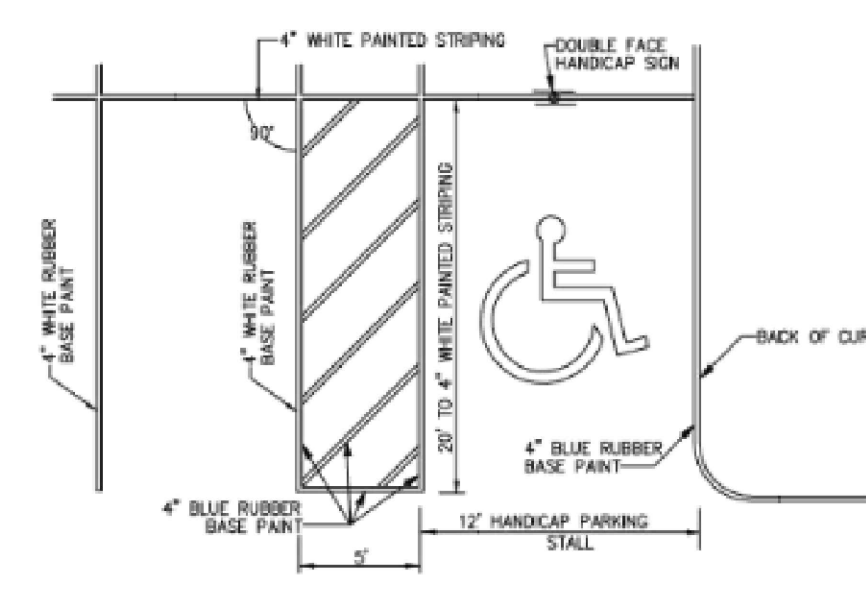
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DESIGNED BY: JLC	REVISION: NONE	COMPUTER FILE #	BY: JLC	APPROVED BY: JLC
DRAWN BY: JLC	SCALE: N.T.S.	SEWER DETAIL 200602.DWG	SHEET 1 OF 1	
DATE: 2020	DATE: 2020	DATE: 2020	PROJECT: WATER/WASTEWATER ENGINEERING	
FT. PIERCE UTILITIES AUTHORITY			PROJECT NO. 200602.DWG	



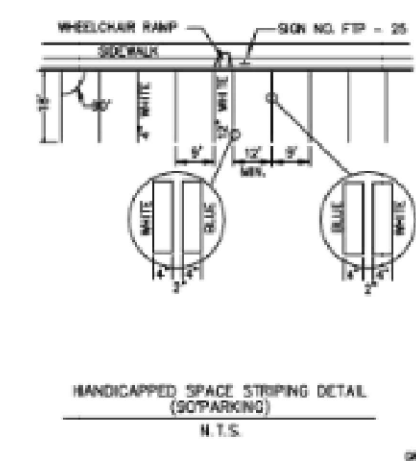
D DUMPSTER PAD STALL DETAIL
SCALE: NONE



DUMPSTER PAD
NOT TO SCALE



G HANDICAP PARKING STALL DETAIL
SCALE: NONE

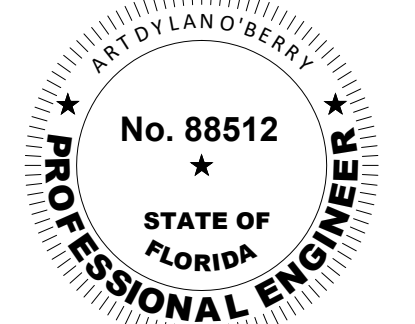


PAVEMENT MARKING FOR WHEELCHAIR RAMPS
N.T.S.

H HANDICAP PARKING SIGN DETAIL
SCALE: NONE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FORT PIERCE CODE ORDINANCES SECTION 119 AND 125

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LUXOR
CONSULTING GROUP

PERMITS REQUIRED

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PERMIT #

NO.	REVISIONS	DATE
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Dylan O'Berry
ENGINEERS SIGNATURE
SIGNED: 2/13/2025

DUPLX PROJECT
1006 AVENUE H
FORT PIERCE, FL 34950
ST. LUCIE COUNTY

SHEET TITLE DETAILS	
DATE 01/22/2025	SHEET
SCALE N/A	C-4
DRAWN BY DC	

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3406, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.
- WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE, SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).
- POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THIN WIRE.
- FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED.
- GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNEDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.
- WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT, IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.
- THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.
- MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.
- DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
- EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
- WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
 - THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
 - THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.
 - WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFICATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITIES AUTHORITY SPECIFICATIONS.
 - SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE, CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.
 - MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.
 - ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. - 2 HR MINIMUM TEST
- $$L = \frac{SD(P)}{148,000} \times \frac{1}{2}$$
- L = LEAKAGE IN GPH
S = LENGTH OF PIPE IN FEET
D = PIPE DIAMETER IN INCHES
P = TESTING PRESSURE IN PSI
- PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45° AND EXTENDED SO THAT SWABBING AND A FULL BORE FLOSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.
 - A MINIMUM SIX FEET AND PREFERABLE TEN FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
 - WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.
 - CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

- ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
- GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
- THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
- WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
- A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
- THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
- MAINTAIN SIX FEET AND PREFERABLE 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
- WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
- A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY/COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF FPUA/CITY/COUNTY/FDOT ENGINEER.
- TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
- CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
- WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
- FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
- WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THIN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
- MINIMUM COVER SHALL BE 36 INCHES. PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITIES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
- EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY JM CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
- ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
- THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

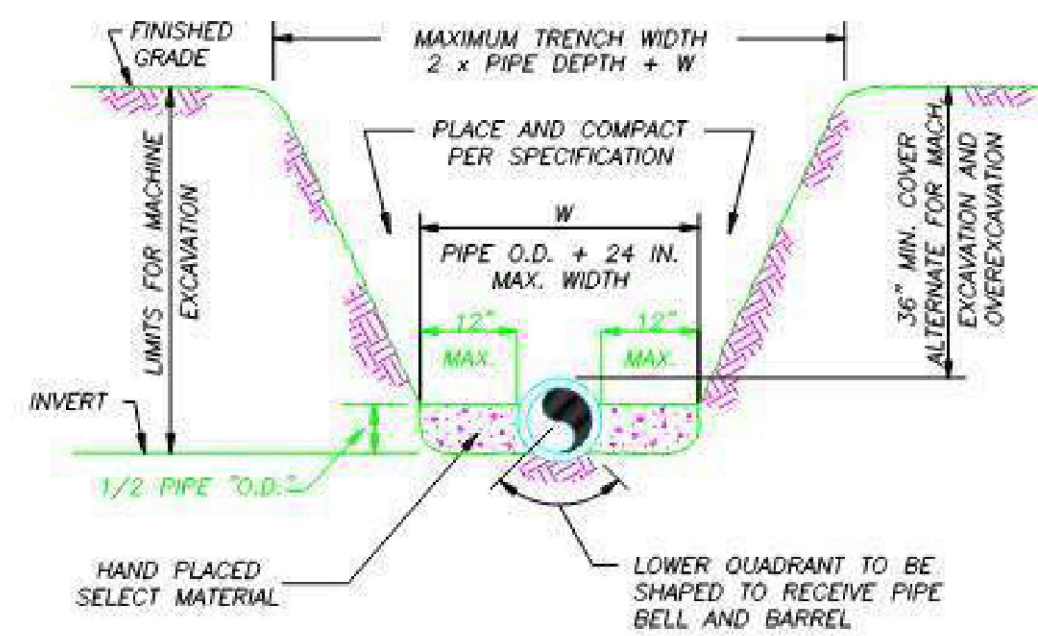
- SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.
WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.
ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-810, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-810, F.A.C.
WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ON SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELVE LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.
WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- ALL DIP SHALL BE PRESSURE CLASS 250 MIN., ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

WATER DISTRIBUTION		G-1 NOTES	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
DESIGNED BY: JLC	SCALE: N/A	COMPUTER FILE #	DETAIL NOTES 200802.DWG
DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	1 OF 2

WATER DISTRIBUTION		G-1 NOTES	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
DESIGNED BY: JLC	SCALE: N/A	COMPUTER FILE #	DETAIL NOTES 200802.DWG
DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	2 OF 2

WASTEWATER CONSTRUCTION NOTES		G-2 CONSTRUCTION NOTES	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
DESIGNED BY: JLC	SCALE: N/A	COMPUTER FILE #	DETAIL NOTES 200802.DWG
DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	1 OF 1

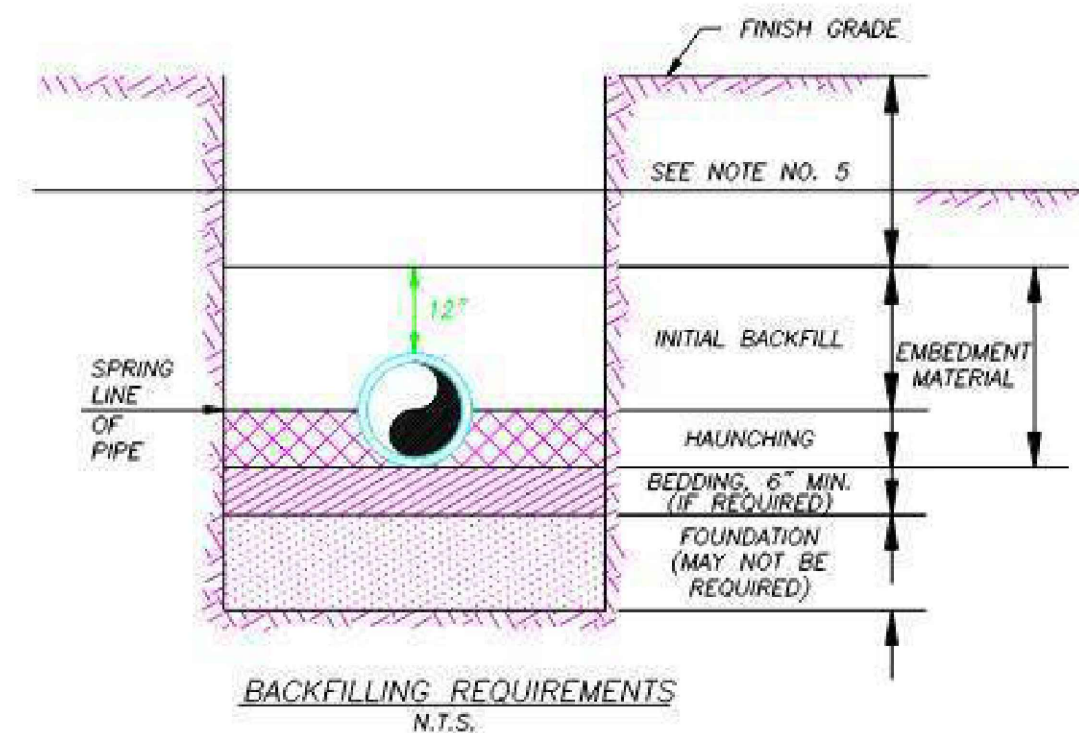
STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT		G-3 WATER/SEWER CONFLICT	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
DESIGNED BY: JLC	SCALE: N/A	COMPUTER FILE #	DETAIL NOTES 200802.DWG
DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	1 OF 1



- NOTES:
- THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
 - INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

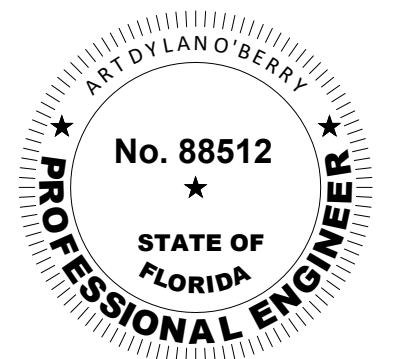
TYPICAL TRENCH DETAIL		M-1	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
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DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	1 OF 1



- NOTES:
- IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
 - BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
 - HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
 - INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY (AASHTO T-99).
 - BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-160.
 - DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

BACKFILLING REQUIREMENTS		M-2	
DATE: 01/22/2025	REVISION: 1	BY: JLC	APPROVED: JLC
DESIGNED BY: JLC	SCALE: N/A	COMPUTER FILE #	DETAIL NOTES 200802.DWG
DRAWN BY: JLC	SCALE: N/A	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2015	SHEET	1 OF 1

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2674 SE RUFFIN TERRACE
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P.E. NO. 88512

LUXOR
CONSULTING GROUP

PERMITS REQUIRED

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PERMIT #

NO.	REVISIONS	DATE

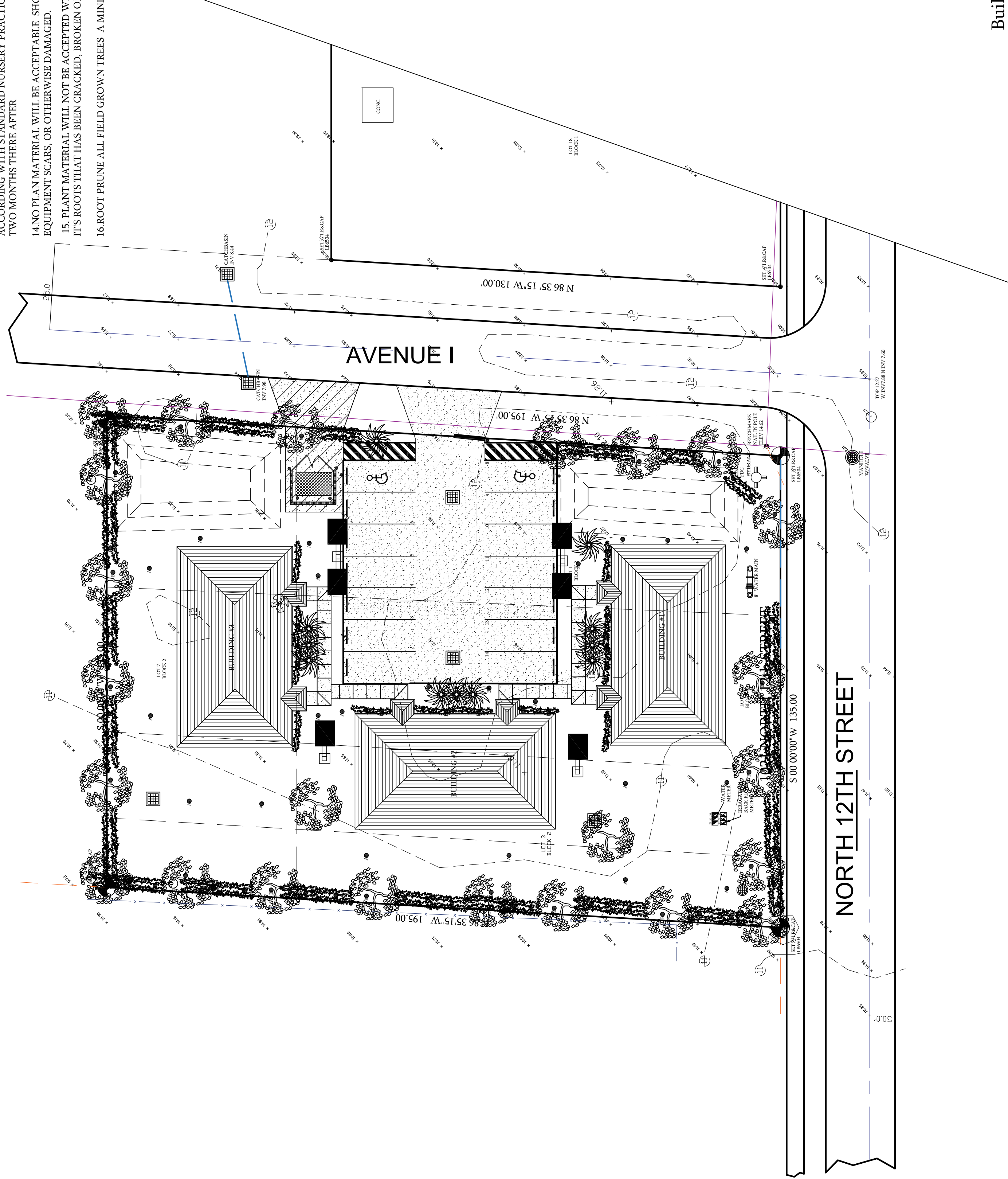
Art of Engineering
ENGINEERS SIGNATURE
SIGNED: 2/13/2025

DUPLIX PROJECT
1006 AVENUE H
FORT PIERCE, FL 34950
ST LUCIE COUNTY

SHEET TITLE UTILITIES DETAILS	
DATE 01/22/2025	SHEET C-6
SCALE N/A	
DRAWN BY DC	

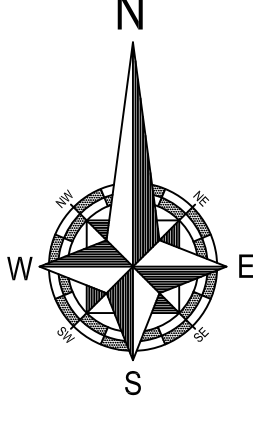
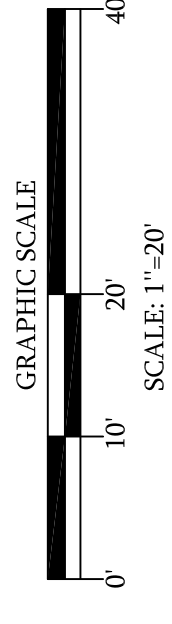
PLANTING SPECIFICATIONS

1. ALL PLANT MATERIALS SHALL BE FLORIDA NUMBER 1 AS PROVIDED IN THE MOST CURRENT OPTIONS OF THE GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I & II PREPARED BY THE STATE DEPARTMENT OF AGRICULTURAL AND CONSUMER SERVICES.
2. ALL TREES, SHRUBS AND GROUND COVERS SHALL BE OF THE SIZE AS SPECIFIED IN THE PLANT LIST.
3. QUANTITIES LISTED ON THE PLANT LIST ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND REPORT DISCREPANCIES TO THE ARCHITECT IMMEDIATELY. MULCH AND SOIL FERTILIZER SHALL BE INCLUDED IN THE UNIT COST.
4. WHERE THERE IS A DISCREPANCY EITHER IN QUANTITIES OR IN SPECIFICATIONS BETWEEN THE PLANT LIST AND THE PLANT LIST, THE PLANT LIST TAKES PRECEDENCE.
5. ALL PLANTING BEDS AND WATER BASINS FOR TREES SHALL BE COVERED WITH A 3" MINIMUM DEPTH OF SHRECCED BARK OF EUCALYPTUS OR FLORAMULCH GRADE B OR BETTER REFER TO THE PLANT LIST FOR THE SPECIFIED MULCH TYPE. ALTERNATIVE MULCH MATERIAL IS REQUIRED TO BE APPROVED LANDSCAPE DESIGNER.
6. THE PLANTING PLAN SHALL BE REINSTALLED IN COMPLIANCE WITH ALL EXISTING CODES AND APPLICABLE DEED RESTRICTIONS.
7. **PLANTING SOIL:** ALL TREES AND SHRUBS SHALL BE PLANTED WITH A MINIMUM OF 12" TOPSOIL AROUND AND BENEATH ROOTBALL. MINIMUM TOPSOIL SHALL BE 6" FOR GROUND COVER AREA.
8. PLANTING SOIL SHALL BE WEED-FREE MIXTURE OF 50% SAND AND 50% MICHIGAN TOPSOIL. SOIL SHALL BE HAND DUG EXCEPT WHERE MACHINE DUG HOLES WILL NOT ADVERSELY AFFECT OR DRAINAGE UTILITIES OR IMPROVEMENTS SEE NOTE 7.
10. NO PLUGGING OF ANY TREES OR PALMS WILL BE PROMITTED NOR ACCEPTED. ALL PLANTS SHALL BE PLANTED AT THEIR NURSERY GRADE OR SLIGHTLY HIGHTER.
11. AFTER FINAL GRADE, AREA TO BE RAKED TO 6" DEPTH AND ALL ROCKS FOREIGN INORGANIC MATERIAL REMOVED AND DISPOSED OF PROPERLY OFF SITE.
12. FERTILIZER IS REQUIRED FOR PLANTING AND SHALL BE NPK 16-4-8 AT 12.5lb/1000 SF OR 445 lb/4 ACRES NITROGEN 50% SHOWON RELEASE FORM AND FERTILIZER TO INCLUDE SECONDARY MINOR MICRONUTRIENTS.
13. **WATERING:** ALL PLANTS MATERIALS SHALL BE WATERED AT TIME OF PLANTING ACCORDING WITH STANDARD NURSERY PRACTICE AND SHALL CONTINUE WATERING FOR TWO MONTHS THERE AFTER.
14. NO PLANT MATERIAL WILL BE ACCEPTABLE SHOWING EVIDENCE OF CABLE CHAIN MARKING EQUIPMENT SCARS, OR OTHERWISE DAMAGED.
15. PLANT MATERIAL WILL NOT BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS THAT HAS BEEN CRACKED, BROKEN OR OTHERWISE DAMAGED.
16. ROOT PRUNE ALL FIELD GROWN TREES A MINIMUM OF 6 WEEKS PRIOR PLANTING



LANDSCAPE PLANTING PLAN

LOTS 2, 17 AND 18 BLOCK 1 OF THE PLAT OF NOBLES AND NOTTINGHAM SUBDIVISION AS RECORDED IN PLAT BOOK 4 PAGE 41 OF THE PUBLIC RECORDS OF ST LUCIE COUNTY, FLORIDA



PLANTING NOTES:

MULCH REQUIREMENTS: MULCH SHALL BE ORGANIC AND SHALL NOT BE PLACED ON TOP OF THE ROOT BALL OR PLACED AGAINST THE TRUNK. MULCH SHALL BE APPLIED A MINIMUM OF 12" TO 18" FROM THE TRUNK OF ANY SIZED TREE. MATERIALS SUCH AS ROCK AND SHELLS THAT DO NOT BIODEGRADE, ARE NOT DEEMED ACCEPTABLE. FAILURE TO INSTALL MULCH (AND TYPE OF MULCH) AS PROVIDED IN THE SPECIFICATION ABOVE IF NOT THIS MAY RESULT IN A FAILED INSPECTION. DUMPSTER/SERVICE AREA LANDSCAPING: SERVICE AREAS SHALL BE PLANTED WITH SERVICE OR SOLID WASTE STORAGE AREA THAT IS APPROVED BY THE ARCHITECT. MULCH SHALL BE SCREENED ON 3 SIDES BY A 5X5 FT. HIGH MASONRY WALL. A 5 FT. WIDE LANDSCAPE BUFFER, A 36" HIGH HEDGE SPACED 36" O.C. SHALL BE INSTALLED WITHIN THE BUFFER.

LANDSCAPE PLAN REQUIREMENTS: IN THEIR ENTIRETY. CERTIFICATION BY ENGINEER QUALIFIED PROFESSIONAL THAT THE LANDSCAPE PLAN IS DESIGNED IN ACCORDANCE WITH ALL CODE. THIS CERTIFICATION SHALL INCLUDE THAT THE IRRIGATION SYSTEM HAS BEEN DESIGNED AND WILL BE INSTALLED IN CONFORMANCE WITH CH. 37, SECTIONS 604-613 OF THIS CODE. THIS CERTIFICATION SHALL BE STATED DIRECTLY ON THE LANDSCAPE PLAN.

SPECIAL REQUIREMENTS PLACED ON THE APPLICANT: PROJECT OR PROPERTY BY THE BZA, P&Z, DRC OR THE BCC. IT SHALL ALSO INCLUDE A LIMIT OF WORK LINE TO INCLUDE ANY ADJACENT ALL TREES LOCATED ON OR OFF THE PROPERTY UP TO (10) FT. BEYOND THE PROPERTY LINE. ALL EXISTING INVASIVE EXOTIC PLANTS, ARE LISTED, AS REQUIRED ON FLORIDA EXOTIC PEST PLANT COUNCIL'S INVASIVE SPECIES LIST, SHALL BE REMOVED (NO WET LANDS ON THIS PROJECT). PROPOSED LANDSCAPE PLAN MEETS ALL DESCRIBED IN SEC. 24-6 OF THIS CODE HAS BEEN ACHIEVED.

LANDSCAPE PLAN REQUIREMENTS PER SEC. 24-4(1)(1), THE LANDSCAPE PLAN SHALL DEMONSTRATE THE FOLLOWING RATIO AMOUNTS OF PLANTS IN ACCORDANCE WITH THE APPROPRIATE WATER USE AND IRRIGATION NEEDS, BASED ON THE DROUGHT TOLERANCE AND SOIL MOISTURE CATEGORIES LISTED IN THE FLORIDA FRIENDLY PLANT LIST. NO MORE THAN 20% OF THE PROPOSED PLANT MATERIAL SHALL BE IN A HIGH WATER USE ZONE AS DESCRIBED IN SEC. 24-6 OF THIS CODE, NO LESS THAN 40% OF THE PROPOSED PLANT MATERIAL SHALL BE IN A LOW WATER USE ZONE, AND THE REMAINING PROPOSED PLANT MATERIAL MAY BE IN A MODERATE OR LOW WATER USE ZONE. ON THE LANDSCAPE PLAN, PROVIDE A CALCULATION OF (NO QUALIFIED RETENTION PONDS REQUIRED), AS DESCRIBED ABOVE, PER SEC. 24-4(2). FLORIDA FRIENDLY TURF DOES NOT EXCEED 60% OF THE TOTAL SQ. FOOTAGE OF THE AREAS(S) TO BE LANDSCAPED EXCLUDING QUALIFIED RETENTION PONDS. PRESERVED TREES, PRESERVED TREES ARE IDENTIFIED BY A TREE PROTECTION DIAGRAM (FENCING AROUND DRIP LINE) FOR ANY PRESERVED TREES. PLEASE NOTE THAT ANY TREES PROPOSED TO BE PRESERVED ON THIS APPROVED PLAN THAT ARE SUBSEQUENTLY REMOVED, SHALL BE CONSIDERED A VIOLATION AND AS SUCH SHALL BE REPLACED (IN INCHES) ON SITE AT A 2:1 RATIO FOR NON-SPECIMEN TREES AND AT 4:1 FOR SPECIMEN TREES. AS AN ALTERNATIVE, THE VIOLATION MAY BE SATISFIED VIA PAYMENT INTO THE COUNTY TREE FUND.

TREE SURVEY IS PROVIDED TREE DIAMETER AND SPECIES IS SHOWN AS PER LEGGER. TURF, TURFGRASS, SOD REQUIREMENTS HAS BEEN UPDATED EFFECTIVE TURF/TURFGRASS OR SOD AS DEFINED IN SEC. 24-2 SHALL NOT BE PERMITTED FOR USE IN LANDSCAPE AREAS WITHIN ANY INTERIOR VEHICULAR USE AREAS SUCH AS WITHIN LANDSCAPE ISLANDS. SHALL NOT BE PERMITTED FOR USE WITHIN LANDSCAPE STRIPS SUCH AS ALONG THE RIGHT-OF-WAY(S) PER GROUND COVER SHALL BE USED IN LIEU OF THE TURF/TURFGRASS OR SOD IN THE INSTANCES NOTED ABOVE. IN ADDITION, TURF, TURFGRASS OR SOD INSTALLATION DOES NOT EXCEED 60% OF THE TOTAL SQ. FOOTAGE OF THE AREAS(S) TO BE LANDSCAPED (NO QUALIFIED RETENTION PONDS REQUIRED).

SPRINKLER HEAD LIST

TYPE				
(DH) B	1	DAHOON HOLLY	LAX CRESSING	12' 2 1/2" CAL
(LO) B	1	LAUREL OAK	QUERUS LAURIFOLIA	12' 2 1/2" CAL
(QV) B	1	LIVE OAK		12' 2 1/2" CAL
(MO) B	1	MOHOGANY	LAX CRESSING	12' 2 1/2" CAL
(TP) B	1	PINK TABERUJA	LAX CRESSING	12' 2 1/2" CAL
(PT) B	1	PARADISA TREE	LAX CRESSING	12' 2 1/2" CAL
PALMS	B			
		SABAL PALM	SABAL PALMETTA	10' CT CLEAN TRUNKS
SHRUBS-LA WN				
(CO) A	4	OCOCPLURN	CHRYSOBALANUS ROD TIP	3 GAL. 24"
(FB) A	4	FIREBUSH DWART	HAMELLA PALONSVAN GLACRA	3 GAL. 24"
(NG) A	4	SABAL PALM	LXORA COCCINES NORA GRANIL	3 GAL. 24"
(IM) A	4	SABAL PALM	LXORA COCCINES NORA MAUI YELLOW	3 GAL. 24"
(CL) A	4	SABAL PALM	CLUSIA GUTILFERA	3 GAL. 24"
(SS) A	4	SABAL PALM	MYRACANTHES IRAGRANS	3 GAL. 24"
(SA) A	4 PER 80SF	ST AUGUSTINO	STENOTAFTRUM SECURDALIUM FLORILAM	SOLID SOD

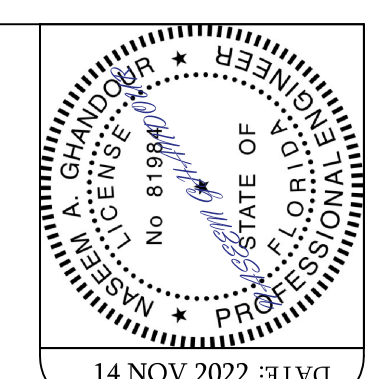
DESIGNWEST ENGINEERS AND ASSOCIATE INC. 951 N 12TH STREET

VINCENT MARCELLINO
PROJECT DUPLEX
FORT PIERCE, FL

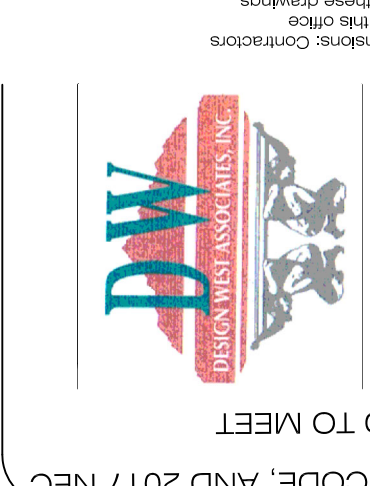
CONSULTING ENGINEERS
NABEER G. GHANOUH, P.E.
1313 S. 11TH ST.
DESIGNWEST ASSOCIATE

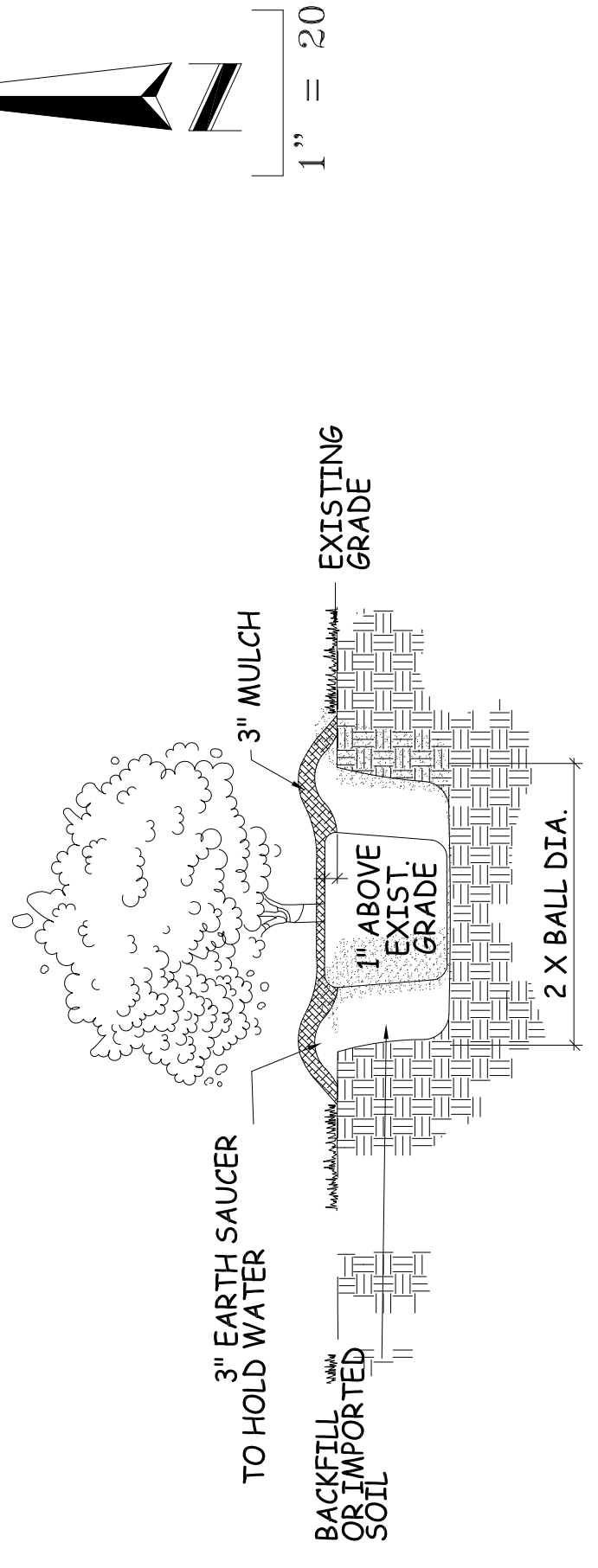
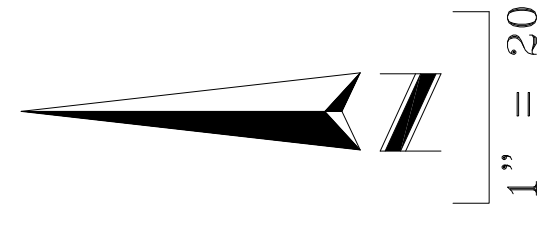
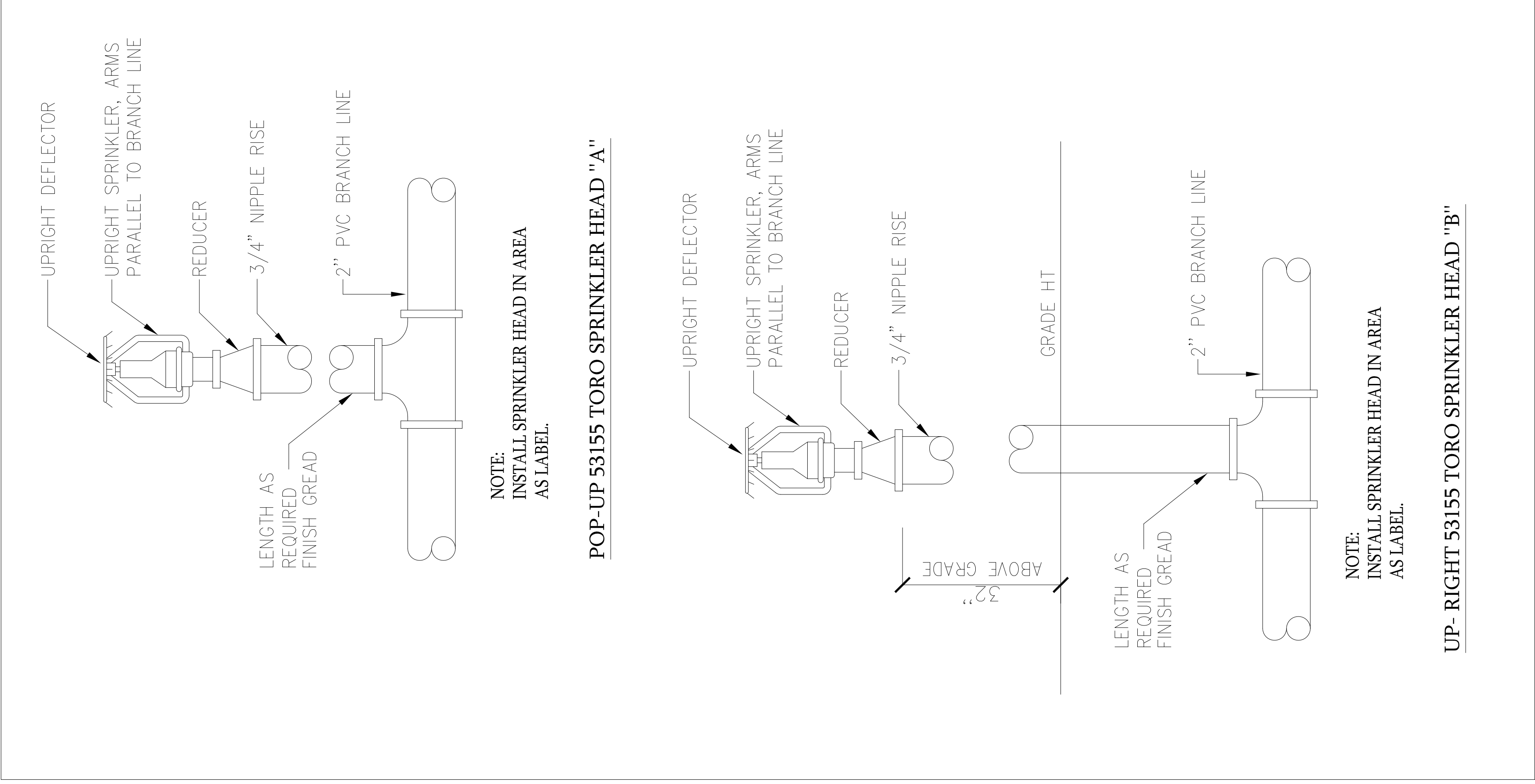
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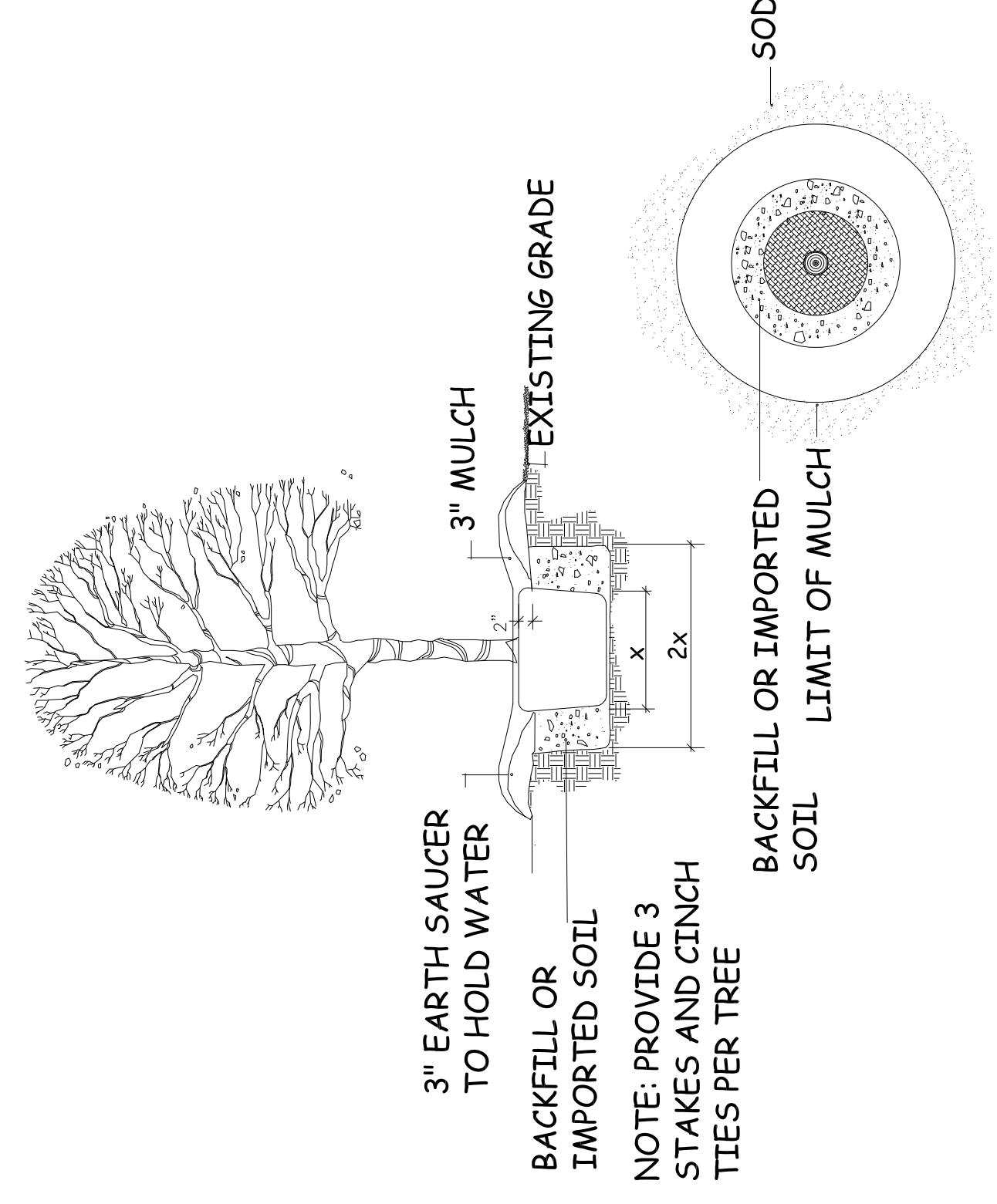
DESIGNWEST ENGINEERS AND ASSOCIATE INC. HAS BEEN DESIGNATED AS THE LEAD ENGINEER FOR THIS PROJECT. THE ARCHITECT HAS REVIEWED THE DESIGN AND DRAWINGS AND HAS NOTED THAT THE DESIGN AND DRAWINGS ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE AND 2017 NEC. THE ARCHITECT HAS REVIEWED THE DESIGN AND DRAWINGS AND HAS NOTED THAT THE DESIGN AND DRAWINGS ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE AND 2017 NEC. THE ARCHITECT HAS REVIEWED THE DESIGN AND DRAWINGS AND HAS NOTED THAT THE DESIGN AND DRAWINGS ARE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE AND 2017 NEC.





PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA NO. 1 OR BETTER, AS PER THE "GRADES AND STANDARDS FOR NURSERY PLANTS, PART 1, 2963, AND PART 1, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE.

SHRUB AND GROUNDCOVER (PLANTING DETAIL)
N.T.S.



TREE PLANTING DETAIL
N.T.S.

LANDSCAPING NOTES & SPECIFICATIONS:

1. ALL LANDSCAPE MATERIAL AND INSTALLATION SHALL COMPLY WITH ORANGE COUNTY REQUIREMENTS.
2. ALL SHADE TREES PLANTED MUST MEET OR EXCEED FLA. NO. 1, AS ESTABLISHED IN THE LATEST PUBLICATION BY THE STATE OF FLA. DEPT. OF AGRICULTURE, GRADES AND STANDARDS FOR NURSERY PLANT MATERIALS, FLORIDA.
3. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO ACCEPTED COMMERCIAL PLANTING PROCEDURES. THE PLANTING HOLE SHALL BE 10% MORE SHALLOW THAN THE ROOT BALL DEPTH SO THAT THE TRUNK FLARE IS VISIBLE ABOVE GRADE. MULCH MUST NOT BE PLACED AT TAPER AND MUST BE SET BACK APPROX. 12 TO 18 INCHES FROM THE TRUNK.
4. SHADE TREES SHALL BE A MINIMUM OF 10" HIGH AND 3" CALIPER. DWARF CULTIVARS OF APPROVED SPECIES NOT MEETING MINIMUM 40" IN HEIGHT STANDARDS AT MATURITY.

5. ALL TREES MUST BE PLANTED WITHIN 10' OF AN ABOVE GROUND POWER OR OTHER UTILITY LINE. UNDERSTORY TREES MAY BE PLANTED IN THE AFFECTED BUFFER TO THE UTILITY LINE. HOWEVER, IN SUCH INSTANCES, THE UNDERSTORY TREES SHALL BE A MINIMUM OF 7' IN HEIGHT AND 2" IN CALIPER, AND SHALL BE PLANTED AT A DISTANCE OF 1 TREE FOR EVERY 25'.
6. ALL LANDSCAPING SHALL BE 100% IRRIGATED BY MEANS OF AN AUTOMATIC IRRIGATION SYSTEM.
7. NEWLY PLANTED TREES SHALL BE FIELD-ADJUSTED TO ACCOMMODATE EXISTING TREES ON THE NEIGHBORING PROPERTIES.
8. ALL LANDSCAPING SHALL BE PROTECTED BY WHEELSTOPS, RAIL ROAD TIES OR CURBING, TO PREVENT ENCROACHMENT OF VEHICULAR TRAFFIC BY CURBING OR WHEELSTOPS.
9. ALL TREES AND LANDSCAPING AREAS ADJACENT TO PARKING AREAS AND THROUGHOUT THE SITE SHALL BE PROTECTED FROM VEHICLE ENCROACHMENT BY CURBING OR WHEELSTOPS.
10. FINAL APPROVAL SHALL INCLUDE EITHER A LANDSCAPE INSPECTION CONDUCTED BY THE ORANGE COUNTY OR AN AS - BUILT CERTIFICATION LETTER FROM A QUALIFIED PROFESSIONAL THAT THE LANDSCAPING IS INSTALLED AND FUNCTIONING AS INTENDED.

11. ALL OPEN SPACES SHALL BE SODED, UNLESS OTHERWISE NOTED.
12. THE QUANTITIES SHOWN ON THE PLAN ARE BASED ON THE ANTICIPATED FIELD AND CONDITIONS. QUANTITIES SHALL BE ADJUSTED TO SITE CONDITIONS. ALL BUYING ADJUSTMENTS AND ADJUSTMENTS IN COMPENSATION SHALL BE APPROVED PRIOR TO THE START OF ANY WORK.
13. ALL TREES SHALL BE TOP DRESSED WITH 3" SPREADDED MULCH.
14. ALL TREES SHALL BE TOP DRESSED WITH 3" SPREADDED MULCH TO MAINTAIN FULLY FAMILIAR WITH ALL EXISTING SITE CONDITIONS AND TO STUDY ALL SUBSURFACE UTILITY PLANS AND ARCHITECTURAL PLANS SO TO PREVENT DAMAGE DURING THE INSTALLATION OF THE LANDSCAPE MATERIAL.
15. STAKING OF TREES AND PALMS IS REQUIRED BY THE LANDSCAPE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO MAINTAIN ALL TREES AND SHRUBS IN AN UPRIGHT PLUM CONDITION.
16. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ARCHITECTURAL OR PAVED SURFACES.
17. THE LANDSCAPE CONTRACTOR SHALL WARRANT ALL SHRUBS FOR A PERIOD NO SHORTER THAN 90 DAYS FROM THE DATE OF THE "FINAL ACCEPTANCE" BY THE CLIENT AND LANDSCAPE DESIGNER. ALL TREES SHALL CARRY A MINIMUM ONE YEAR WARRANTY. ALL WARRANTY RESTRICTIONS SHALL BE SPECIFICALLY DESCRIBED IN WRITING AND SHALL BE PART OF THE BIDDING DOCUMENTS PROVIDED TO THE CLIENT BY THE LANDSCAPE CONTRACTOR.
18. CONTRACTOR IS RESPONSIBLE FOR PLANT AND SOD QUANTITY TAKE-OFF. IN CASE OF DISCREPANCIES, THE PLAN QUANTITIES RULE OVER LIST QUANTITIES.

19. GROUND COVERS TO BE PLANTED IN STRAIGHT ROWS WITH ALTERNATING SPACES BETWEEN ROWS.
20. GRADES AT THE EDGE OF PAVEMENT SHALL BE AT OR ONLY SLIGHTLY BELOW THE HEIGHT OF THE PAVED SURFACE SO THAT EXCESS WATER WILL NOT BE TRAPPED IN SUCH A MANNER AS TO CAUSE DAMAGE TO THE PAVING AND PAVING SUBBASE.

NOTE: ALL LANDSCAPE AND IRRIGATION PLAN SHALL MEET CHAPTER 24 AND UPDATE:

- MULCH REQUIREMENTS: MULCH PER SEC. 24-6(8)(4) SHALL BE ORGANIC AND SHALL NOT BE PLACED ON TOP OF THE ROOT BALL OR PLACED AGAINST THE TRUNK. MULCH SHALL BE APPLIED A MINIMUM OF 12" TO 18" FROM THE TRUNK OF ANY SIZED TREE MATERIALS SUCH AS ROCK AND SHELLS THAT DO NOT BIODEGRADE. ARE NOT DEEMED ACCEPTABLE FAILURE TO INSTALL MULCH (AND TYPE OF MULCH) AS PROVIDED IN THE SPECIFICATION ABOVE. IF NOT THIS WAY RESULT IN A FAILED INSPECTION.

DUMPSTER/SERVICE AREA LANDSCAPING: SERVICE AREAS, AS DEFINED IN SEC. 24-2 SHALL ABIDE BY SECTIONS 24-4(E) AND (F) WHEREIN ANY SERVICE OR SOLID WASTE STORAGE AREA THAT IS VISIBLE TO THE RIGHT-OF-WAY, BUTTING PROPERTY, OR TO CUSTOMERS, SHALL BE SCREENED ON (3) SIDES BY A SIX-FT. HIGH WASONRY WALL AND A 3 FT. WIDE LANDSCAPE BUFFER. A 36" HIGH HEDGE SPACED 36" O.C. SHALL BE INSTALLED WITHIN THE BUFFER.

LANDSCAPE PLAN REQUIREMENTS: CHAPTER 24 AND UPDATED EFFECTIVE 10/1/10 IT SHALL ABIDE BY SECTIONS 24-3(8) AND 24-4(1)(I) OR SECTIONS 24-3(8) AND 24-4(1)(I) IN THEIR ENTIRETY. IT HAS CERTIFICATION BY ENGINEER QUALIFIED PROFESSIONAL THAT THE LANDSCAPE PLAN IS DESIGNED IN ACCORDANCE WITH THIS CODE. THIS CERTIFICATION SHALL INCLUDE THAT THE IRRIGATION SYSTEM HAS BEEN DESIGNED AND WILL BE INSTALLED IN CONFORMANCE WITH CH. 37, SECTIONS 601-613 OF THIS CODE. THIS CERTIFICATION SHALL BE STATED DIRECTLY ON THE LANDSCAPE PLAN.

SPECIAL REQUIREMENTS PLACED ON THE APPLICANT, PROJECT OR PROPERTY BY THE BZA, PAZ, DRC OR THE BCC. IT SHALL ALSO INCLUDE A LIMIT OF WORK LINE TO INCLUDE ANY ADJACENT ALL TREES LOCATED ON OR OFF THE PROPERTY UP TO (10) FT. BEYOND THE PROPERTY LINE. ALL EXISTING INVASIVE EXOTIC PLANTS ARE LISTED. AS REQUIRED ON FLORIDA EXOTIC PEST PLANT COUNCIL'S INVASIVE SPECIES LIST. SHALL BE REMOVED (AND LANDS ON THIS PROJECT) FROM THE PROJECT. PROPOSED LANDSCAPE PLAN MEETS ALL DESCRIBED IN SEC. 24-6 OF THIS CODE HAS BEEN ACHIEVED.

LANDSCAPE PLAN REQUIREMENTS: PER SEC. 24-4(1)(I), THE LANDSCAPE PLAN SHALL DEMONSTRATE THE FOLLOWING RATIO AMOUNTS OF PLANTS IN ACCORDANCE WITH THE APPROPRIATE WATER USE AND IRRIGATION NEEDS, BASED ON THE DROUGHT TOLERANCE AND SOIL MOISTURE CATEGORIES LISTED IN THE FLORIDA FRIENDLY PLANT LIST. NO MORE THAN 20% OF THE PROPOSED PLANT MATERIAL SHALL BE IN A HIGH WATER USE ZONE AS DESCRIBED IN SEC. 24-6 OF THIS CODE. NO LESS THAN 40% OF THE PROPOSED PLANT MATERIAL SHALL BE IN A LOW WATER USE ZONE, AND THE REMAINING PROPOSED PLANT MATERIAL MAY BE IN A MODERATE OR LOW WATER USE ZONE.

ON THE LANDSCAPE PLAN, PROVIDE A CALCULATION OF (NO QUALIFIED RETENTION PONDS REQUIRED) AS DESCRIBED ABOVE, PER SEC. 24-4(1)(2), FLORIDA FRIENDLY. ENTIRE LANDSCAPE PLAN AND TURF DOSE NOT EXCEED 60% OF THE TOTAL SQ. FOOTAGE OF THE AREAS(S) TO BE LANDSCAPED EXCLUDING QUALIFIED RETENTION PONDS. PRESERVED TREES IDENTIFIED. ALL TREES BEING PRESERVED SHALL MEET PER SECTION 15-3 01E(2)(B) AND PROVIDE A TREE PROTECTION DIAGRAM (FENCING AROUND DRIP LINE) FOR ALL PRESERVED TREES. PLEASE NOTE THAT ANY TREES PROPOSED TO BE REMOVED OR REPLACED MUST BE REMOVED PRIOR TO THE START OF CONSTRUCTION AND AS SUCH SHALL BE REPLACED (IN INCHES) ON SITE AT A 2:1 RATIO FOR NON-SPECIMEN TREES AND AT 4:1 FOR SPECIMEN TREES. AS AN ALTERNATIVE, THE VIOLATION MAY BE SATISFIED VIA PAYMENT INTO THE COUNTY TREE FUND.

TREE SURVEY IS PROVIDED. TREE DIAMETER AND SPECIES IS SHOWN AS PER SECTION 15-301E(1)(C).

IRRIGATION REQUIREMENTS: CHAPTER 24 HAS BEEN UPDATED EFFECTIVE 10/1/10. IRRIGATION PLAN SHALL BE IN ACCORDANCE WITH SEC. 24-6 AND SEC. 24-7 AND THE SYSTEM SHALL BE PERMANENT UNDERGROUND, SHALL BE DESIGNED AND INSTALLED SO AS TO CONFORM WITH CH. 37, SECTIONS 601-613 OF THIS CODE. CERTIFICATION THIS COMPLIANCE. THE IRRIGATION IS PERMANENT FOR THE PURPOSE OF ESTABLISHING PLANT MATERIAL.

TURF TURFGRASS, SOD REQUIREMENTS: CHAPTER 24 HAS BEEN UPDATED EFFECTIVE 10/1/10. TURF/TURFGRASS OR SOD, AS DEFINED IN SEC. 24-2 SHALL NOT BE PERMITTED FOR USE IN LANDSCAPE AREAS WITHIN ANY INTERIOR VEHICULAR USE AREAS SUCH AS WITHIN LANDSCAPE ISLANDS PER SEC. 24-4(A)(3)(F) AND SHALL NOT BE PERMITTED FOR USE WITHIN LANDSCAPE STRIPS SUCH AS ALONG THE RIGHT-OF-WAY(S) PER SEC. 24-4(A)(1)(A). GROUND COVER SHALL BE USED IN LIEU OF THE TURF/TURFGRASS OR SOD. IN THE INSTANCES NOTED ABOVE, IN ADDITION, TURF, TURFGRASS OR SOD INSTALLATION DOSE NOT EXCEED 60% OF THE TOTAL SQ. FOOTAGE OF THE AREA(S) TO BE LANDSCAPED (NO QUALIFIED RETENTION PONDS REQUIRED) PER SEC. 24-4(1)(I).

INSPECTION SCHEDULING: TO SCHEDULE A LANDSCAPE INSPECTION FOR ALL COMPLETED PERMITS, CALL THE AUTOMATED INSPECTION SYSTEM AT AND REQUEST A CODE 270 ZONING/LANDSCAPE INSPECTION. ALL PERMITS ASSOCIATED WITH THIS PROJECT THAT ARE COMPLETE SHALL BE PHONED IN, IN ORDER FOR ALL ZONING HOLDS TO BE RELEASED UPON SATISFACTORY INSPECTION. ZONING/LANDSCAPE INSPECTIONS ARE CONDUCTED ON TUESDAYS AND WEDNESDAYS ONLY AND SHALL BE CALLED IN NO LATER THAN 10:00 AM OF THE NIGHT BEFORE THE INSPECTION. INSPECTIONS WILL BE CONDUCTED AT THE PROJECT SITE. TREES PROPOSED TO BE PRESERVED ON THIS PLAN THAT ARE SUBSEQUENTLY REMOVED, SHALL BE CONSIDERED A VIOLATION AND AS SUCH SHALL BE REPLACED (IN INCHES) ON SITE AT A 2:1 RATIO FOR NON-SPECIMEN TREES AND AT 4:1 FOR SPECIMEN TREES. AS AN ALTERNATIVE, THE VIOLATION MAY BE SATISFIED VIA PAYMENT INTO THE COUNTY TREE FUND OR BY SOME COMBINATION OF PAYMENT AND ONSITE PLANTING. THE CURRENT FEE, AS MAY BE AMENDED BY THE BCC, IS \$106.00 PER INCH IN ALL CIRCUMSTANCES. THE MITIGATION SHALL BE SATISFIED PRIOR TO THE RELEASE OF ZONING HOLD(S). ***** ADD THIS NOTE IN ITS ENTIRETY TO THE LANDSCAPE PLAN. THIS COMMENT SHALL BE REPEATED THROUGHOUT THE REVIEW PROCESS FOR INTERNAL RECORD KEEPING PURPOSES.

LANDSCAPE NOTES AND DETAILS

Building designed with 2020 Florida Building Code 7th Edition Residential and include the applicable wind criteria (Ultimate design wind speed (Vult) and 3-second gust/nominal wind speed (Vasd) both in miles per hour, wind exposure and risk category. All documents are properly signed, dated and sealed as required for the method of submittal. (FBC 107)

DESIGNWEST ENGINEERS AND ASSOCIATE INC.
 951 N 12TH STREET
 VINCENT MARCELLINO
 PROJECT DUPEX
 FORT PIERCE, FL

CONSULTING ENGINEERS
 NASEEM GHANOUR, P.E.
 FE 81984
 DESIGNWEST ASSOCIATE

DATE: PH. 203-514-5221 designwestassoc@aol.com
 DRAWN BY: JT
 CHECK BY: AS SHOWN
 SCALE: AS SHOWN
 SUBVISION: BUILDERS: 111 Monument Avenue, Suite 300
 Kissimmee, FL 34741

DATE: 14 NOV. 2022
 SHEET NO L-3

DATE: 14 NOV. 2022
 No. 81984
 LICENSED PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 NASEEM GHANOUR

DESIGNWEST ENGINEERS AND ASSOCIATE INC. ENGINEERING NOTES: 1. ENGINEERING DESIGN CRITERIA MEETS OR EXCEEDS 2020 7TH EDITION FLORIDA BUILDING CODE, AND 2017 NEC CONSTRUCTION 160 MPH WIND SPEED. 2. BUILDING WIND EXPOSURE CATEGORY C AND WIND IMPORTANCE FACTOR = 1.0 INTERNAL PRESSURE COEFFICIENT = +.55. 3. WINDOWS, DOORS, AND CLADDING ARE TO BE DESIGNED TO MEET



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SHEET NO
LT-1

SUBDIVISION:		SCALE:	AS SHOWN
BUILDER:		DATE:	DT
PH 203-514-5221 designwestassoc@aol.com		CHK BY:	JT-NG
Kissimmee, FL 34741		REVISIONS:	
111 Monument Avenue, Suite 300		DRAWN BY:	
Fine Architectural Design		JT	

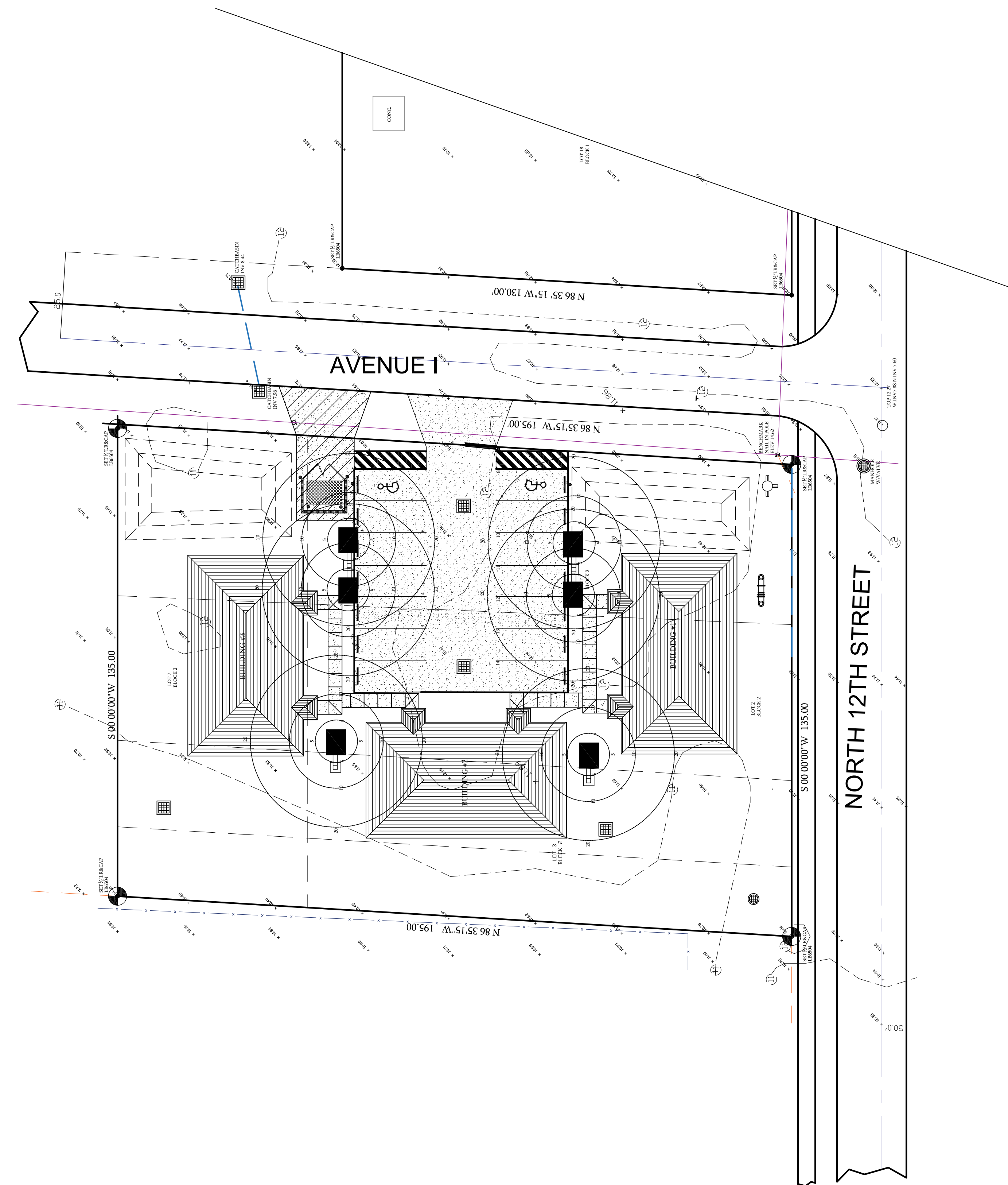
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VINCENT MARCELLINO
PROJECT DUPLEX
FORT PIERCE, FL



ENGINEERING NOTES: 1. ENGINEERING DESIGN CRITERIA MEETS OR EXCEEDS 2020 7TH EDITION FLORIDA BUILDING CODE, AND 2017 NEC CONSTRUCTION. 2. BUILDING WIND EXPOSURE CATEGORY C AND WIND IMPORTANCE FACTOR = 1.0. INTERNAL PRESSURE COEFFICIENT = +.56. 3. WINDOWS, DOORS, AND CLADDING ARE TO BE DESIGNED TO MEET

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PARKING LOT NOTES:
ALL PARKING LOT LIGHTING HAS 20' AVERAGES FOOT-CANDEL FBC 2020 SEC 802

PARKING LOT LIGHTING

Building designed with 2020 Florida Building Code 7th Edition Residential and include the applicable wind criteria (Ultimate design wind speed (Vult) and 3-second gust/nominal wind speed (Vasd) both in miles per hour, wind exposure and risk category. All documents are properly signed, dated and sealed as required for the method of submittal. (FBC 107)





To : Kev Freeman, AICP, Planning Director

FROM: Tracy Telle, Engineering Manager *TS*

Thru : Mark Zrallack, P.E., City Engineer *MZ*

**RE : 1021 N. 12th Street Site Plan
PZSITE2025-00021**

DATE : May 20, 2025

We have completed the review of the following documents as received by this office on April 28, 2025:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Minor Site Plan | <input type="checkbox"/> Construction Drawings |
| <input type="checkbox"/> Test Reports & Related Documents | <input type="checkbox"/> Executed Construction Contract |
| <input type="checkbox"/> Record Drawings
Clearances from all applicable Local,
State and Federal Agencies | <input type="checkbox"/> Permits from applicable Local, |

Based on our reviews and appropriate site final inspection, we

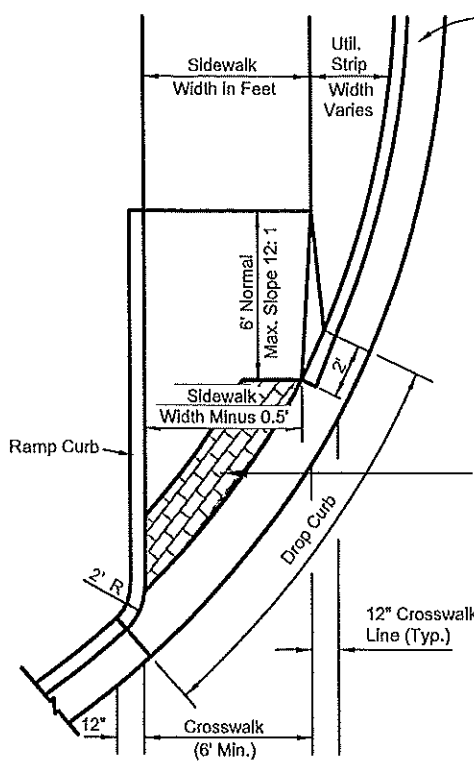
- | | | |
|--|--|------------------------------|
| <input type="checkbox"/> Recommend | <input checked="" type="checkbox"/> Do Not Recommend | |
| <input type="checkbox"/> Variance Approval | <input checked="" type="checkbox"/> Minor Site Plan Approval | <input type="checkbox"/> C/O |

Developer, Owner, Engineer, Contractor, and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

See attached for comments

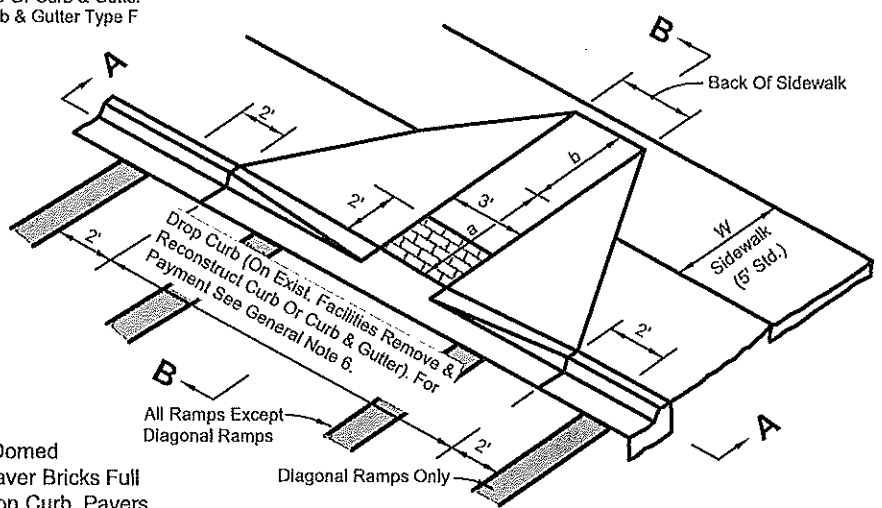
Please address the previously provided site plan review comments identified below:

1. Provide an electronic copy of the certified survey as the electronic copy uploaded into the portal is identified with a title heading of "Color Board" and is noted as *Not needed for this resubmittal at this time*. This department has requested numerous times for a certified electronic copy of the survey.
2. The plans denote a scale of 1" = 20'. However, the plans do not scale properly, please provide plans plotted at the appropriate scale.
3. Plan Sheets C-2 & C-3:
 - a. Provide the required 10' landscape strip between the parking lot and the western property line.
 - b. The detectable warnings proposed at the driveway crossing shall adhere to the attached City of Fort Pierce detail.
 - c. Update the site plan to indicate the proposed building sizes and overall dimensioning between buildings.
4. Plan Sheets LS-1:
 - a. Update the Landscape Plan to include the required 36" hedge around the retention areas as stipulated in Section 119-9.
5. Advisory Comments:
 - a. Prior to any site clearing activities, the applicant shall provide a copy of the tree mitigation plan addressing impacts to the existing native trees located on site.
 - b. The drainage plan was reviewed conceptually and will be reviewed in depth at time of DPCR application.
 - c. The proposed utility work within the Avenue I and N. 12th Street R/W will require issuance of separate R/W Permits.
 - d. At the time of the Building Permit submittal, please revise the plans to comply with the attached Dumpster Enclosure Detail.

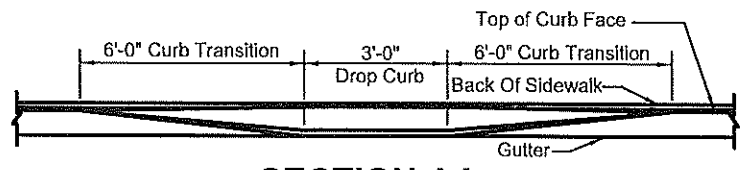


PLAN VIEW

Curb Type D Or Curb & Gutter Type F (Curb & Gutter Type F Shown).



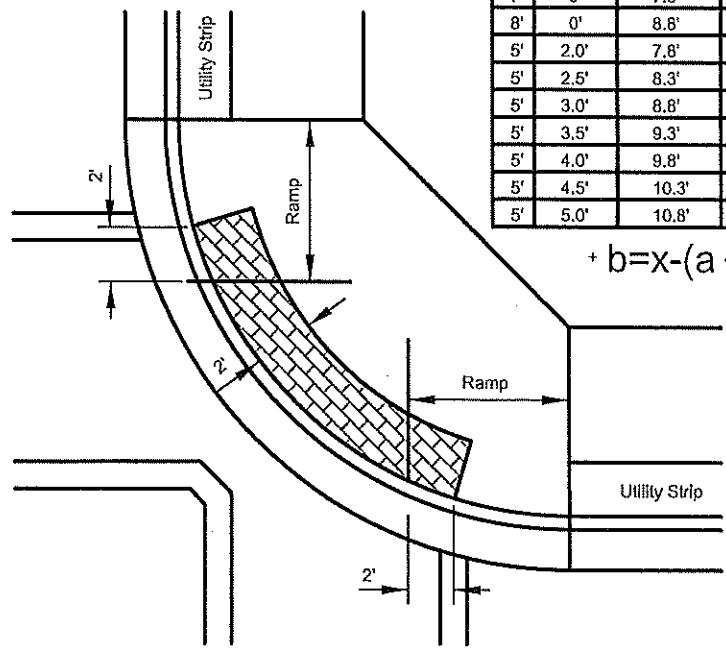
PICTORIAL VIEW



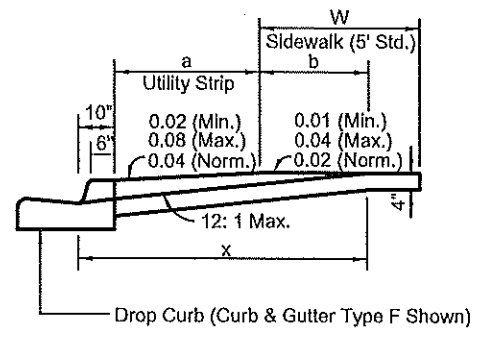
SECTION AA

W	a	W + a + 10"	X	b
5'	0'	5.8'	5.8'	5.0"
6'	0'	6.8'	6.8'	6.0"
7'	0'	7.8'	7.3'	6.5"
8'	0'	8.8'	7.3'	6.5"
5'	2.0'	7.8'	7.8'	5.0'
5'	2.5'	8.3'	8.1'	4.8'
5'	3.0'	8.8'	8.3'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4.0'	9.8'	8.6'	3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	5.0'	10.8'	8.9'	3.1'

$b = x - (a + 10")$



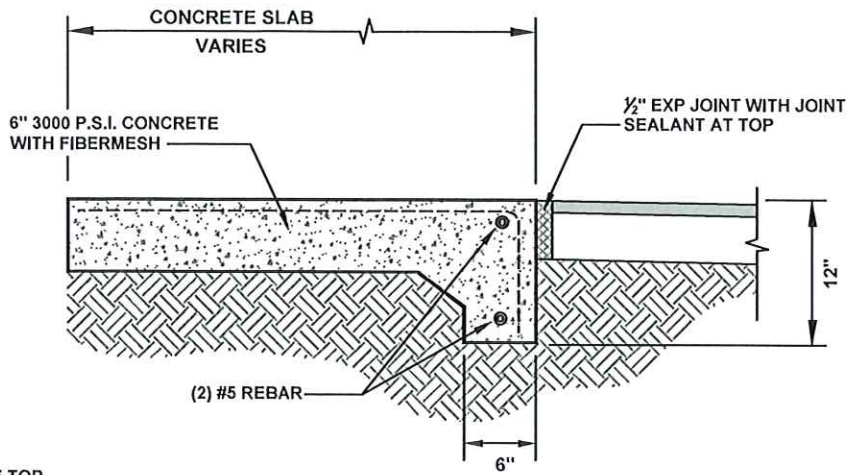
DIAGONAL RAMPS



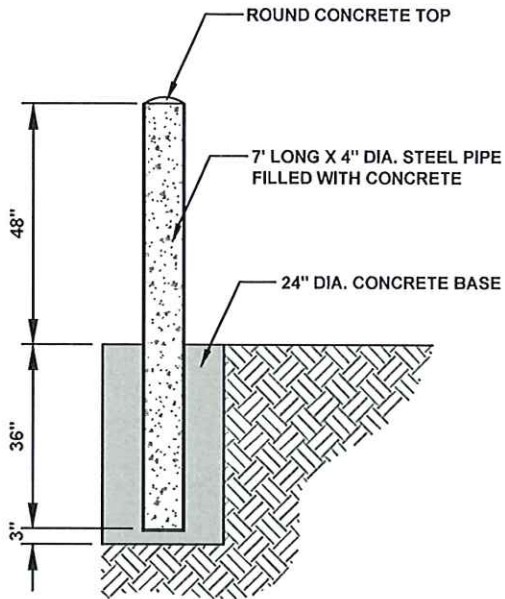
SECTION BB

CROSSWALK WIDTHS AND CONFIGURATION VARY.

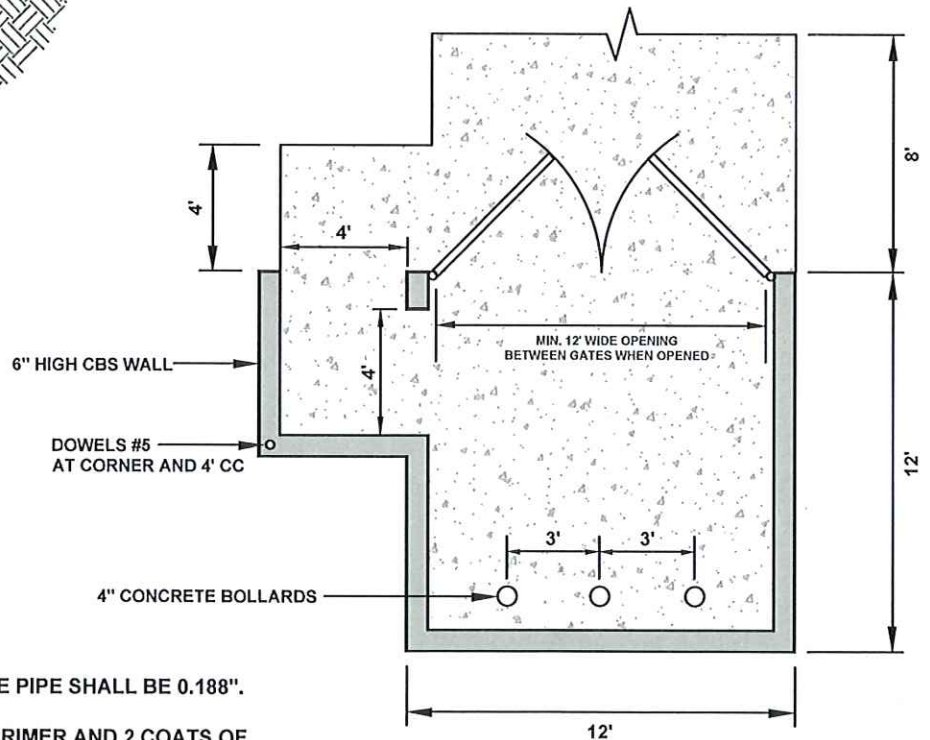
b = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 SLOPE.



FOOTER FOUNDATION



BOLLARD



GENERAL CONSTRUCTION NOTES

- THE MINIMUM WALL THICKNESS OF THE PIPE SHALL BE 0.188".
- ALL POSTS SHALL HAVE 2 COATS OF PRIMER AND 2 COATS OF YELLOW TOP COAT, UNLESS OTHERWISE NOTED.
- THE PRIMER COAT SHALL MEET THE REQUIREMENTS OF FDOT 971-5.
- ALL CONCRETE SHALL BE FDOT CLASS 1.

Q:\Engineering CADD Files\Drawings\Reference\City Details\City Details 2016\000 Dumpster Enclosure Detail.dwg



DUMPSTER ENCLOSURE DETAIL

DATE:	MAY 2022
SCALE:	N.T.S.
DRAWN:	D.SUMNER

SHEET



Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 Ext 3473

Technical Review Committee Meeting

TECHNICAL REVIEW PROJECT: PZSITE2025-00022

951 N 12 St - Duplexes

W/WW Engineering: The TRC application for 951 N 12th Street has been reviewed by the FPUA Water/Wastewater Engineering Department, which has provided the following comments:

Water and Wastewater Service is available to the subject property.

- Each unit will be required to have an individual water meter.
- A sewer transition manhole will be necessary to connect all units to the FPUA sewer system.
- Any sewer laterals to the property that will not be used must be capped at the right-of-way line.

Please contact Lugey Dawson with any questions, (772) 466-1600 ext 3428.

Electric Engineering: FPUA Electric & Gas Engineering has reviewed the application. **Rejected/ please revise electric riser diagram to show service will be fed from underground.**

Sal Scimeca
Engineering Technician III
Electric & Gas Engineering
Fort Pierce Utilities Authority
sscimeca@fpu.com
772.466.1600 ext. 6957

Gas: Approved.

NOTE: Natural gas is available and rebates are applicable for building with natural gas at this site.

FPUAnet Fiber: Approved.



Our mission is to provide our customers with economical, reliable, and friendly service in a continuous effort to enhance the quality of life in our community.

