



ENGINEERING • INSPECTIONS
CERTIFICATIONS • TESTING

November 3, 2022

Steel Homes
4300 NW 128 Street
Opa Locka, FL 33013

RE: Manufacturer: Steel Homes, Inc.
S/N Size & Occ.: Soccer Camp Bldg 1; 8' X 20'; A-5
HWC Plan#: 2557-0112F

To Whom It May Concern:

This is to certify that the plans for the referenced manufactured building have been reviewed and approved as being in compliance with the 2020 Florida Codes with Supplements as noted on the approved drawings, subject to the following limitations:

1. Approval covers factory-built structure only. (Note: Any alterations to factory built structure on site voids state approval)
2. Items installed at the site are subject to review, approval, and inspection by the local authority having jurisdiction.
3. The Chapter 633 Plan Review and Inspection shall be conducted by the local fire safety inspector.
4. Signed and sealed plans shall be on file with HWC Engineering.
5. IS Approved for High Velocity Hurricane Zone (i.e. Broward and Dade Counties)

Sincerely,
HILBORN, WERNER, CARTER & ASSOCIATES, INC.

Plan Reviewer

HILBORN, WERNER, CARTER AND ASSOCIATES, INC.
1627 SOUTH MYRTLE AVENUE CLEARWATER, FLORIDA 33756
(727) 584-8151
FAX: (727) 586-3343 / (727) 585-2392 / (727) 587-0447
Modular / Design / Inspection

PROJECT

SW CORNER INTERSECTION
SW 8TH ST. & SW 20TH AVE
MIAMI, FL 33135

OWNER

GALENM. ENTERPRISE, LLC

ARCHITECT

NANDEZ Design+Development
2223 SW 13TH AVE
MIAMI, FL 33145
tel: 786.703.7704
info@nandezdd.com
AA 26002732
IB 26001520

Digitally signed
by Ralph Puig
DN: c=US,
st=Florida,
o=Coral Gables,
ou=Nandez D&D
LLC, cn=Ralph
Puig
Date:
2022.10.19
10:43:29 -04'00'
ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REVISIONS

REVISION#1	
REVISION#2	

Scale: AS SHOWN

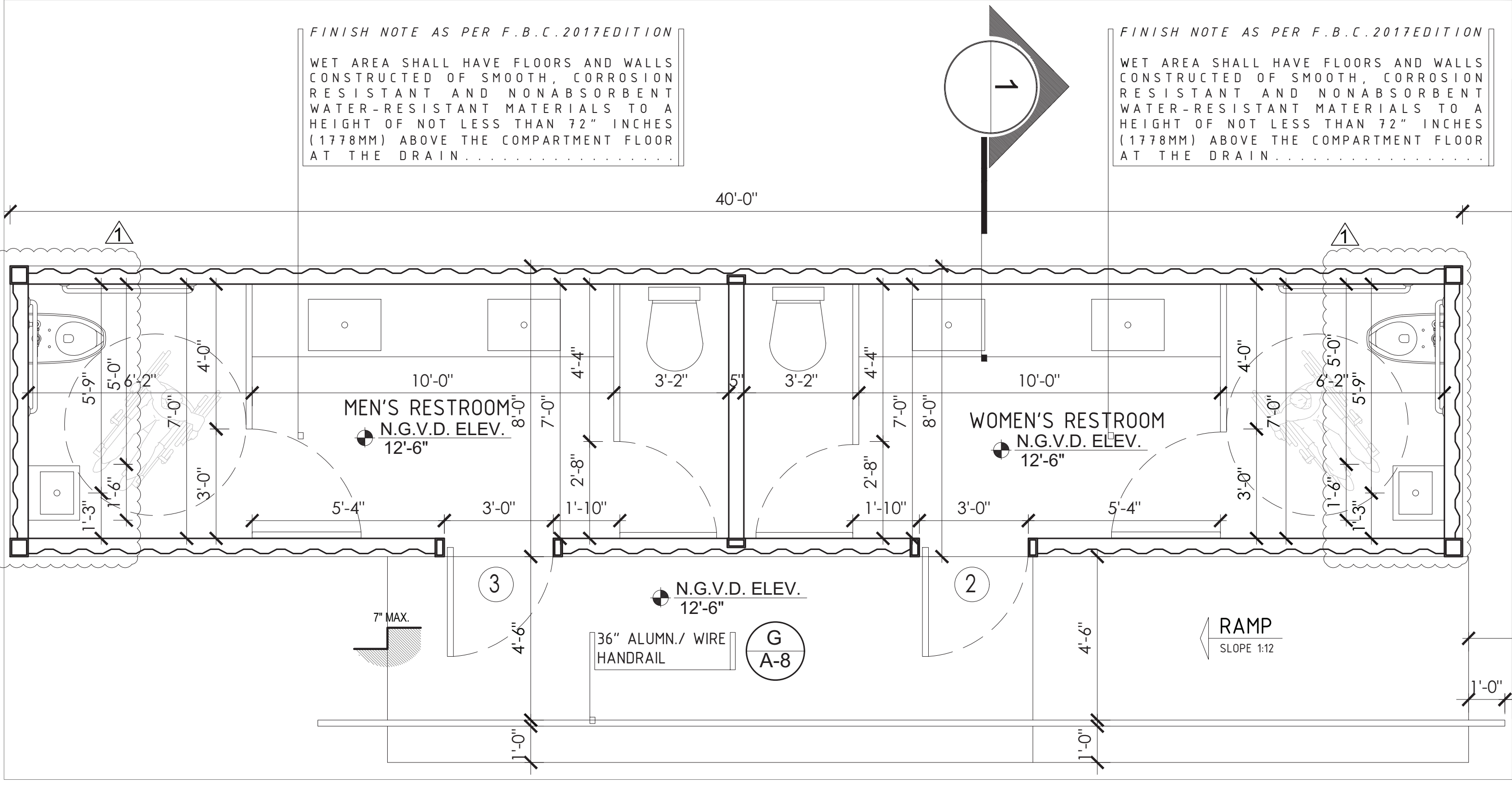
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BUILDING.01

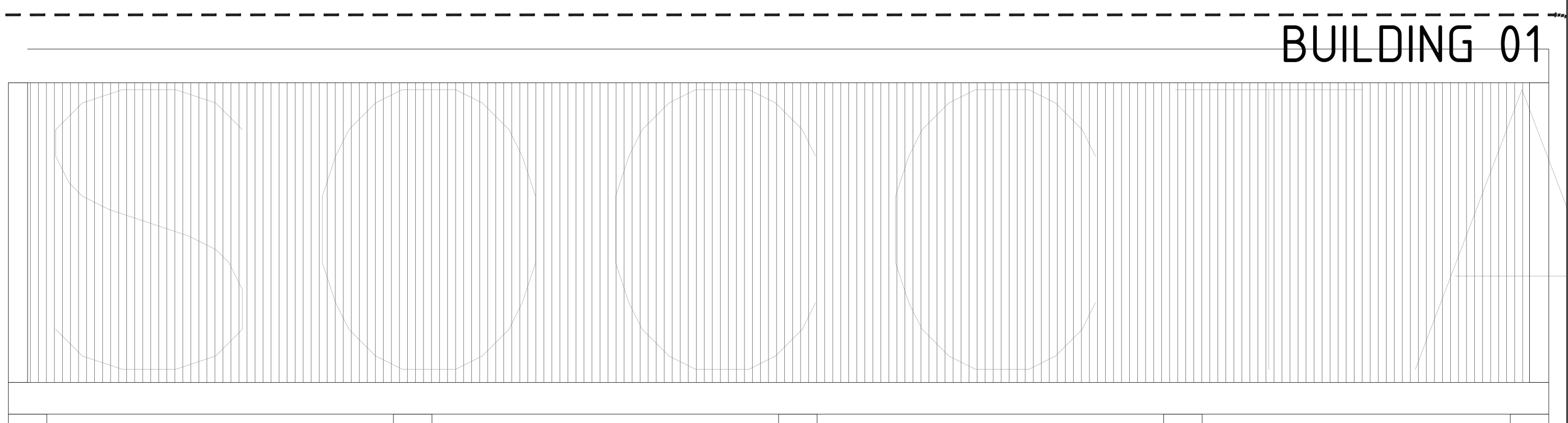
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A-1

+ BUILDING 01 - FLOOR PLAN



NOT ACCESS TO THE ROOF



NORTH ELEVATION
SCALE: 3/8" = 1'-0"

+ APPLICABLE CODE: 7th EDITION 2020

+ SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK: THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE. SINCE THE WORK INVOLVES NEW AND/OR EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS, NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS, SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES, THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT.

+ TERMITE PROTECTION

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.

+ NOTE

ALL WALK SURFACE OF THE MEAN OF EGRESS SHALL HAVE A SLIP-RESISTANCE SURFACE AND SECURELY ATTACHED, AS PER FBC-2014 SECTION 1003.4

+ FINISHES NOTE

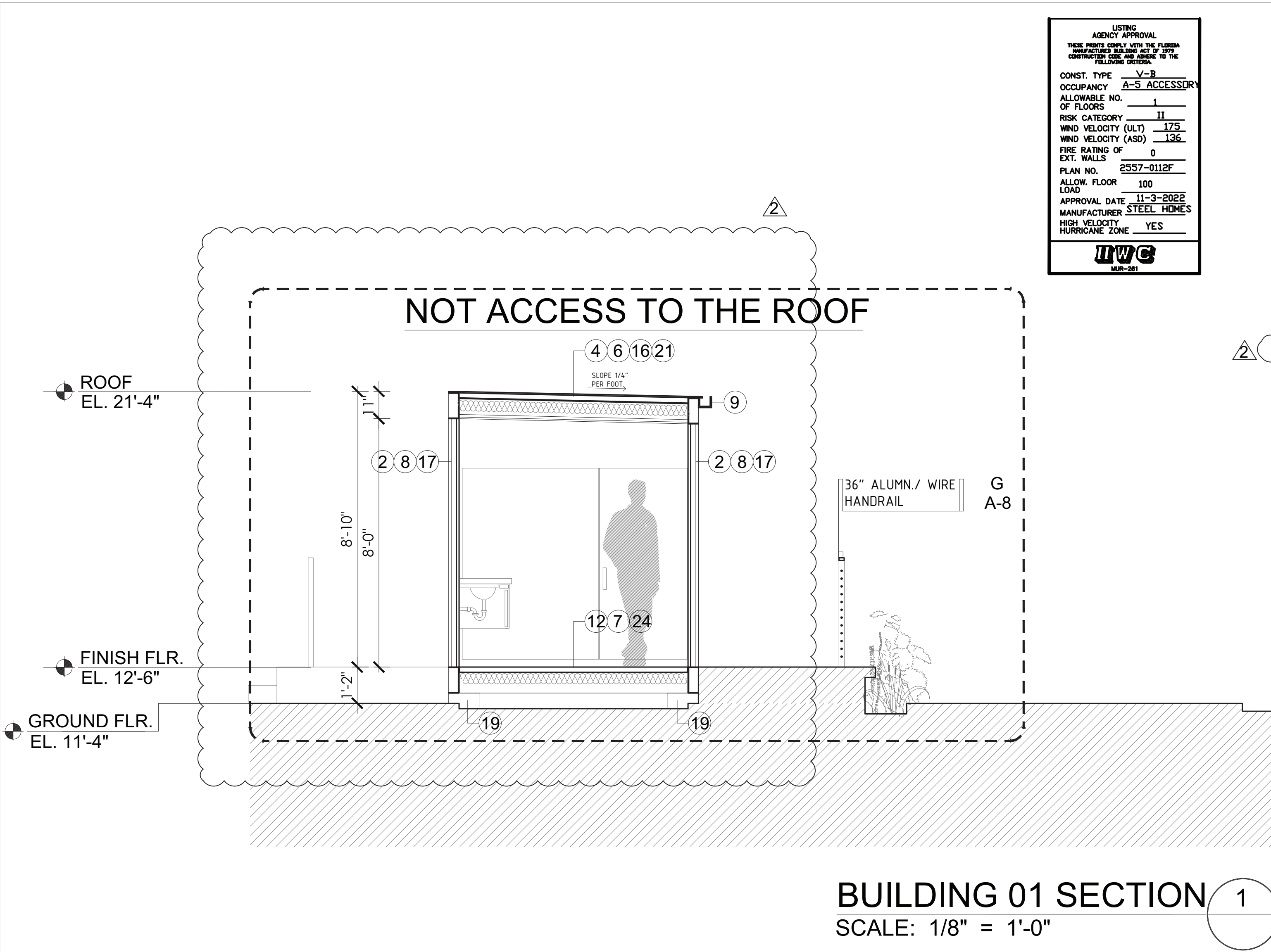
ALL NEW FINISHES (WALL / CEILING / FLOOR) OTHER THAN PAINT, TO COMPLY WITH FBC 803 AND FBC 804:
CLASS A: FLAME SPREAD 0-25; SMOKE DEVELOPED 0-450
CLASS B: FLAME SPREAD 26-75; SMOKE DEVELOPED 0-450
CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPED 0-450

+ GLASS NOTE

ALL GLAZING LARGER THAN 9 SQ. FT. MUST BE CATEGORY II SAFETY GLASS. MANUFACTURER SHALL STORE GLASS ON SITE READILY ACCESSIBLE FOR INSPECTION FBC B 2406.1.

+ EQUIPMENT SCHEDULE

EQUIPMENT	QTY.	LOCATION	SPEC./BROCHURE
1 MOLINO MYTHOS 19x40 cm	2	COFFEE BAR 1	01 MOLINO MYTHOS 1. PDF
2 COFFEE MACHINE	1	COFFEE BAR 1	02 VA358 BROCHURE MAY 2016 PDF.
3 COFFEE MACHINE HARIO V60: 12 cm	1	COFFEE BAR 2	12 2015 HARIO COFFEE CATALOG SP
4 HAND SINK	2	COFFEE BAR 1	06 COMPACT DROP-IN HAND SINK W/DECK FOR FAUCET-MOLI INT. PDF
5 ICE MACHINE ITV SPIKA NG140 CUBITO 6.5 O 13 C.	2	PREPARATION	16 ICE MACHINE ITV SPIKA NG140 CUBITO 6.5 O 13 g BY AIR.
6 COFFEE BAR FREEZER	2	COFFEE BAR 1	18 NEVERA BARRA 890 t.u27.PDF
7 CASHIER MACHINE	3	CASHIER COUNTER	
8 PAPER TOWEL DISPENSER	2	ENTRY DOORS	
9 3 COMPARTMENT SINK	1	PREPARATION	T.B.D.
10 REFRIGERATOR	3	PREPARATION	17 REFRIGERATOR GN 2 1 1200 LT. NIC663
11 MICROWAVE - CONVECTION OVEN	1	PREPARATION	15 OVEN / MICROWAVE MANUAL PROFESSIONAL CLOM1519A SAMSUNG
12 SERVICE SINK	2	SERVICE SINK	
13 2 COMPARTMENT SINK	1	PREPARATION	T.B.D.
14 BLENDER WARING MX1500TX XTREME	3	COFFEE BAR 1	05 BLENDER MX1500TX XPREP SERIES SPEC SHEET



LISTING
AGENCY APPROVAL
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURED BUILDING ACT OF 1974 CONSTRUCTION CODE, AND REFER TO THE FOLLOWING LISTING:

CONST. TYPE **V-3**
OCCUPANCY **A-5 ACCESSORY**
ALLOWABLE NO. OF FLOORS **11**
RISK CATEGORY **II**
WIND VELOCITY (ULT) **175**
WIND VELOCITY (ASD) **136**
FIRE RATING OF EXT. WALLS **0**
PLAN NO. **2557-0112F**
ALLOW. FLOOR LOAD **100**
APPROVAL DATE **11-3-2022**
MANUFACTURER **STEEL HOMES**
HIGH VELOCITY HURRICANE ZONE **YES**

IWC
14-0-201

Num.	GENERAL NOTES
1	STEELHOMES INTERIOR WALLS-LIGHT GAUGE STEEL 3525162-33 @ 24" O.C.
2	STEELHOMES EXTERIOR WALL-LIGHT GAUGE STEEL 5505200-43 @ 16" O.C.
3	IMPACT DOORS FOR HIGH WIND ZONE BROWARD AND DADE COUNTY. NOT IMPACT DOORS FOR NOT HIGH WIND ZONE AREAS, IF CLIENT CHOOSES TO BUY NOT IMPACT DOORS, WILL BE REQUIRED TO INSTALL DOORS BARRIER PROTECTION SYSTEM.
4	ROOFING: GAF ROOF SYSTEM RUBEROID MODIFIED BITUMEN ROOF SYSTEM FOR WOOD DECKS NOA: 11-0919.12 OR OPT. GAF EVERGUARD FREEDOM TPO HW OVER WOOD DECKS NOA: 19-0617.04 IN LIGHT COLORS, WHEN REQUIRED
5	
6	R-20 BATT INSULATION IN ROOF (TYP)
7	R-11 BATT INSULATION IN FLOOR (TYP)
8	36" ALUMN./ WIRE HANDRAIL G A-8
9	PROVIDE CONTINUOUS GUTTER ALONG THE SIDE (TYP)
10	
11	
12	STEEL FLOOR DECK 10005200-54 AND COMPOSE LGS BEAM 10005162-69
13	ANY ADDITIONAL STRUCTURE ATTACH TO THE BUILDING, AS A STAIRS DECKS, SHALL BE COMPLETELY SELF SUPPORTING AND SHALL NO TRANSFER ANY ADDITIONAL LOADS TO THE STRUCTURE
14	A/C & HEATING UNITS ARE INSTALLED ON SITE BY OTHERS.
15	
16	5/8" CDX PLYWOOD WITH ITEM #4 OF THIS LIST
17	LGS STRUCTURAL WALL PANEL SYSTEM BY STEELHOMES
18	IMPACT WINDOWS FOR HIGH WIND ZONE BROWARD AND DADE COUNTY. NOT IMPACT WINDOWS FOR NOT HIGH WIND ZONE AREAS, IF CLIENT CHOOSES TO BUY NOT IMPACT WINDOWS, WILL BE REQUIRED TO INSTALL WINDOWS BARRIER PROTECTION SYSTEM.
19	FOUNDATION AND TIE-DOWN ARE BY OTHERS.
20	
21	THE SLOPE MAY VARY FROM THE ORIGINAL DRAWING.
22	
23	
24	1" CEMENT BOARD ANSI / UL 263, DESIGN NO. M513
25	
26	
27	
28	
29	
30	
31	

BUILDING 01 SECTION 1
SCALE: 1/8" = 1'-0"

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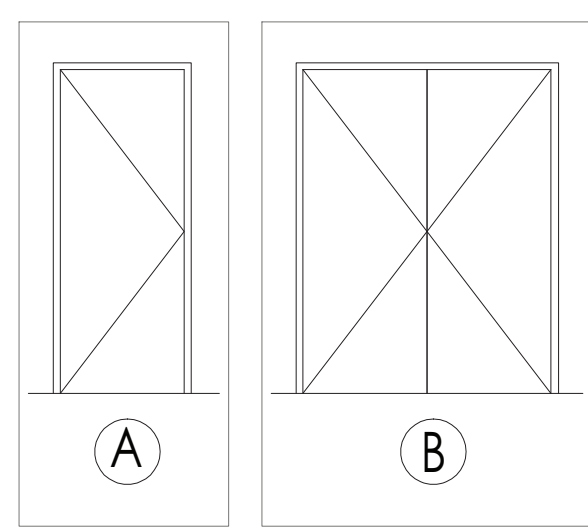
Digitally signed
by Ralph Puig
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st=Florida,
o=Coral Gables,
ou=Nandez D&D
LLC, cn=Ralph
Puig
Date:
2022.11.01
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ARCHITECT OF RECORD:
RALPH PUIG JR.
FL ARCHITECT REG. #
AR 0012528

REVISIONS

DATE: 09/16/2022
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Job No.: 2022
Drawn by: RP
Checked by: RP Jr.

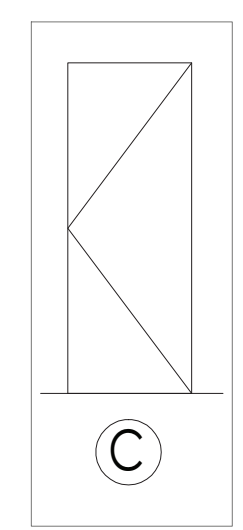
SCHEDULES

BUILDING 01 DOOR SCHEDULE															
FLOOR	MARK	LOCATION	DOOR ELEV.	DOOR OPENING SIZE			MATERIAL		FINISH		DETAILS	LEVEL/ FIRE RATING	UNDER CUT	HDW.	REMARKS
				W.	H.	T.	DOOR	FRAME	DOOR	FRAME					
	②	WOMEN'S RESTROOM	(A)	3'-0"	7'-0"	—	HOLLOW METAL	METAL	PAINTED	PAINTED					
	③	MEN'S RESTROOM	(A)	3'-0"	7'-0"	—	HOLLOW METAL	METAL	PAINTED	PAINTED					



EXTERIOR DOOR ELEVATIONS

- DIMENSION NOTES:**
- ① CONTRACTOR TO COORDINATE DIMENSIONS WITH DOOR SIZE AND MASONRY OPENINGS AS PER NOA'S AND MANUFACTURER INFORMATION BEFORE COMMENCING WORK.
 - ② CONTRACTOR TO COORDINATE DIMENSION W/ STRUCTURE DRAWINGS FOR BEAM LOCATION.



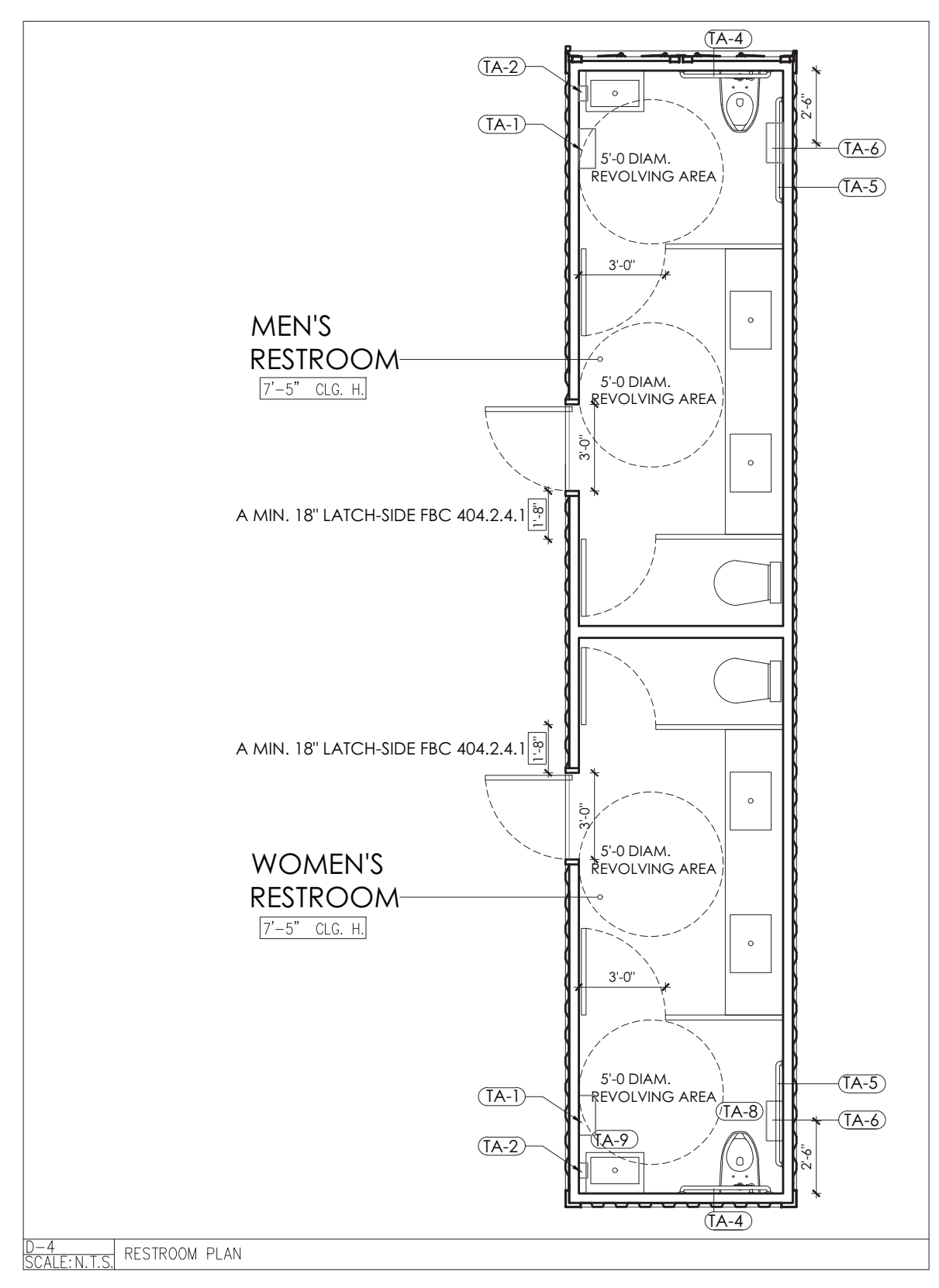
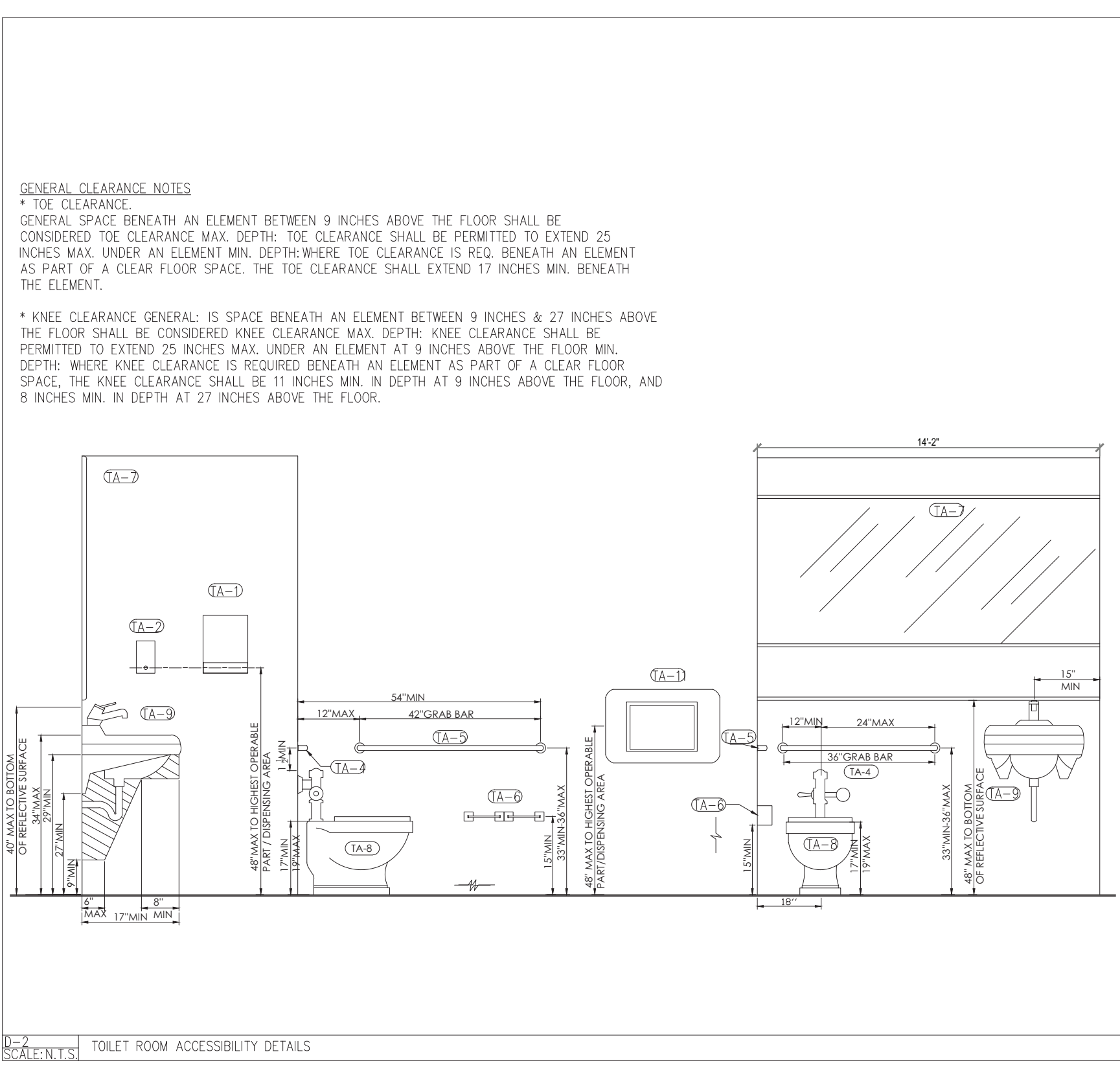
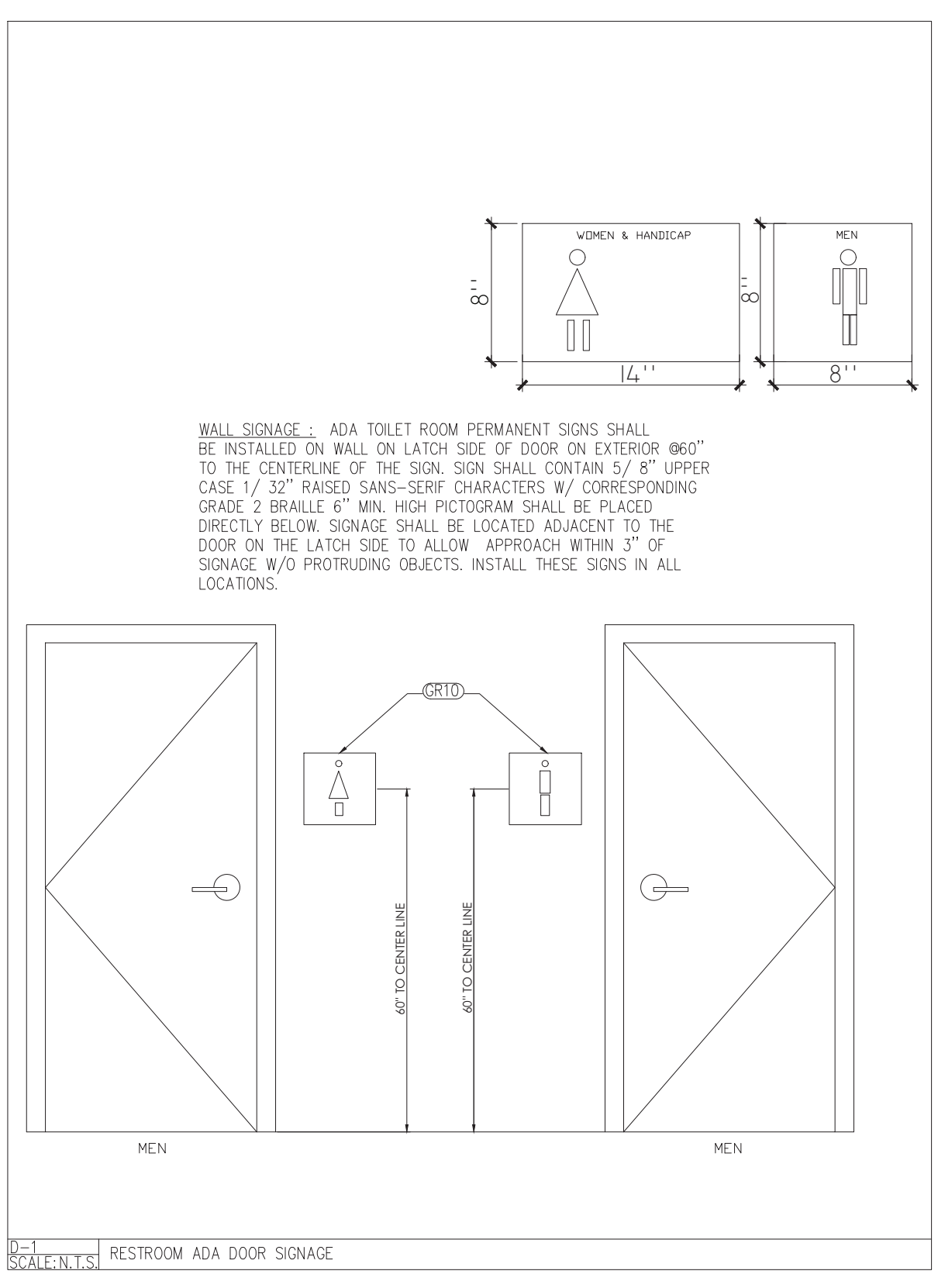
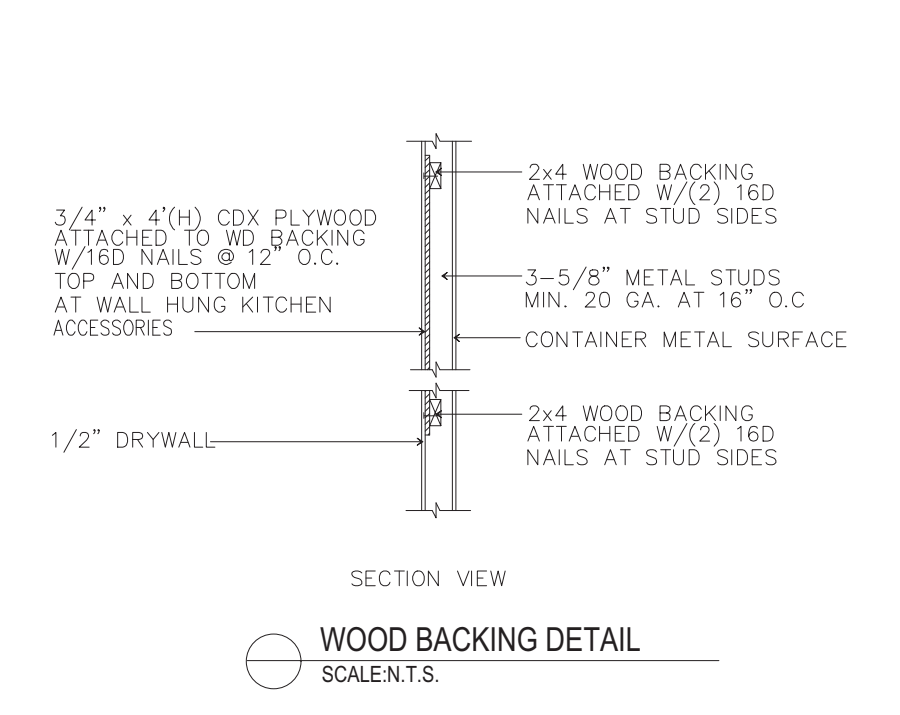
INTERIOR DOOR ELEVATIONS

LISTING AGENCY APPROVAL
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURING REGULATORY ACT OF 1999
CONTRACTOR SHALL VERIFY AND ADHERE TO THE FOLLOWING DETAILS:

CONST. TYPE: V-B
OCCUPANCY: A-5 ACCESSORY
ALLOWABLE NO. OF FLOORS: 1
RISK CATEGORY: II
WIND VELOCITY (ULI): 175
WIND VELOCITY (ASD): 136
FIRE RATING OF EXT. WALLS: 0
PLAN NO.: 2557-0112F
ALLOW. FLOOR LOAD: 100
APPROVAL DATE: 11-3-2022
MANUFACTURER: STEEL HOMES
HIGH VELOCITY HURRICANE ZONE: YES

IWC
IWB-281

MARK	QTY	DESCRIPTION	SUPPLIED BY	INSTALLED BY	NOTE
TA-1	1	EANEW PAPER TOWEL DISPENSER	G.C.	G.C.	C
TA-2	1	EANEW LIQUID SOAP DISPENSER	G.C.	G.C.	C
TA-3	1	1/8" H.C. VERTICAL GRAB BAR; BOBRICK #B 6806	G.C.	G.C.	A.C.
TA-4	1	EANEW 36" H.C. GRAB BAR	G.C.	G.C.	A.C.
TA-5	1	EANEW 42" H.C. GRAB BAR	G.C.	G.C.	A.C.
TA-6	1	EANEW TOILET TISSUE DISPENSER	G.C.	G.C.	C
TA-7	1	MIRROR BOTTOM OF REFLECTIVE SURFACE @ 48" MAX EXTEND TO CEILING AND FULL WIDTH OF RESTROOM	G.C.	G.C.	C.D.
TA-8	1	NEW WATER CLOSET-REFER TO PLUMBING PLANS		G.C.	C
TA-9	1	EANEW WALL MOUNTED LAVATORY REFER TO PLUMBING PLANS	G.C.	B.C.	
TA-11	EA	WALL MOUNTED BABY CHANGING STATION; MFG: KOALA; MODEL # KB200	G.C.	G.C.	C
T-15		WALL TILE TO BE SELECTED BY OWNER COLOR AND SIZE UP TO 42" HEIGHT (OPTIONAL)	G.C.	G.C.	
P-15		WALL FINISH: STUCCO+PAINT COLOR BY OWNER	G.C.	G.C.	



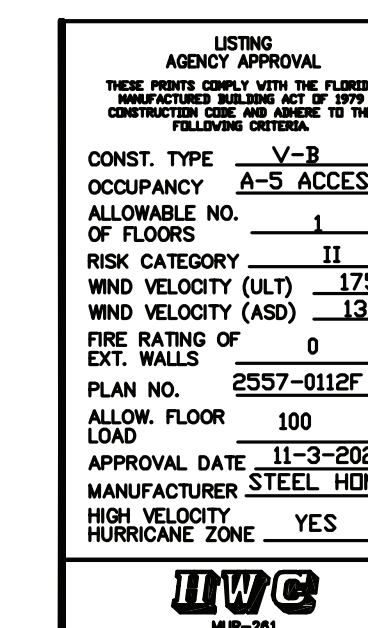
ULTIMATE DESIGN WIND SPEED: 175 MPH WIND EXPOSURE CATEGORY:
C & D MEAN ROOF HEIGHT: 40 FT.

FLORIDA PRODUCT APPROVAL SPECIFICATION SHEET:

C & D LOADS BASED ON ALLOWABLE STRESS DESIGN AS CONVERTED FROM THE ULTIMATE OR STRENGTH DESIGN.

AS REQUIRED BY FLORIDA 553.842 AND THE FLORIDA ADMINISTRATIVE CODE 61-G20-3-006, THE INFORMATION AND APPROVAL NUMBERS ON THE BUILDING COMPONENTS ARE LISTED BELOW:

CATEGORY / SUBCATEGORY	MANUFACTURER	PRODUCT DESCRIPTION	MIAMI DADE PRODUCT APPROVAL NUMBER(S)
1 EXTERIOR DOORS 1 EXTERIOR DOORS	LAWSON INDUSTRIES, INC LAWSON INDUSTRIES, INC	SERIES SDG-9200 ALUMINUM SLIDING GLASS DOOR - L.M.I OR SIMILAR SERIES "LA PORTE" ALUMINUM OUTSWING FRENCH DOOR - L.M.I OR SIMILAR	NOA No: 20 - 0901.06 NOA No: 20 - 0901.11
1 EXTERIOR DOORS	ES WINDOWS, LLC	SERIES "EL300" ALUMINUM OUTSWING DOOR L.M.I LARGE AND SMALL MISSILE IMPACT RESISTANT OR SIMILAR	NOA No: 19 - 0918.03
2 WINDOWS	ES WINDOWS, LLC	SERIES "9500" ALUMINUM WINDOW WALL SYSTEM L.M.I LARGE AND SMALL MISSILE IMPACT RESISTANT OR SIMILAR	NOA No: 20 - 1208.10
3 WALL PANELS EXTERIOR WALL SIDING SIDING	JAMES HARDIE JAMES HARDIE	PLAKS AND PANELS - FIBER CEMENT SIDING AND SOFFIT OPT ARTISAN LAP SIDING OPT	NOA No: 22 - 0315.07 NOA No: 20 - 0730.07
DENS DECK / MASTERWALL.	MASTERWALL SYSTEM -PACIFIC GYPSUM LLC	AGGRE-FLEX AND ROLLERSHIELD DRAINAGE H75F5LM EIFS SYSTEM OVER 1/2" DENS GLASS GOLD OR SIMILAR	NOA No: 21 - 0414.02
4 ROOFING PRODUCTS GAF RUBEROID OPT. GAF EVERGUARD TPO STEEL CONNECTORS	GAF RUBEROID GAF EVERGUARD NU- VUE INDUSTRIES	GAF RUBEROID MODIFIED BITUMEN ROOF SYSTEM GAF EVERGUARD FREEDOM TPO HW METAL STRAP	NOA No: 18 - 0919.12 NOA No: 19 - 0617.04 NOA No: 20 - 0519.03
5 CONSTRUCTIVE COMPONENTS 25 FIRE RESISTANCE RATING / FIRE RATED SYSTEM		UL- DESING NO. H504 BXUV.H504 FIRE - RESISTANCE RATINGS - NSI/UL 263	UL- DESING NO. H504 BXUV.H504 FIRE RESISTANCE RATINGS - NSI/UL 263



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SEAL
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Gables, o=Nandez D&D LLC,
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ARCHITECT OF RECORD:
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REVISIONS

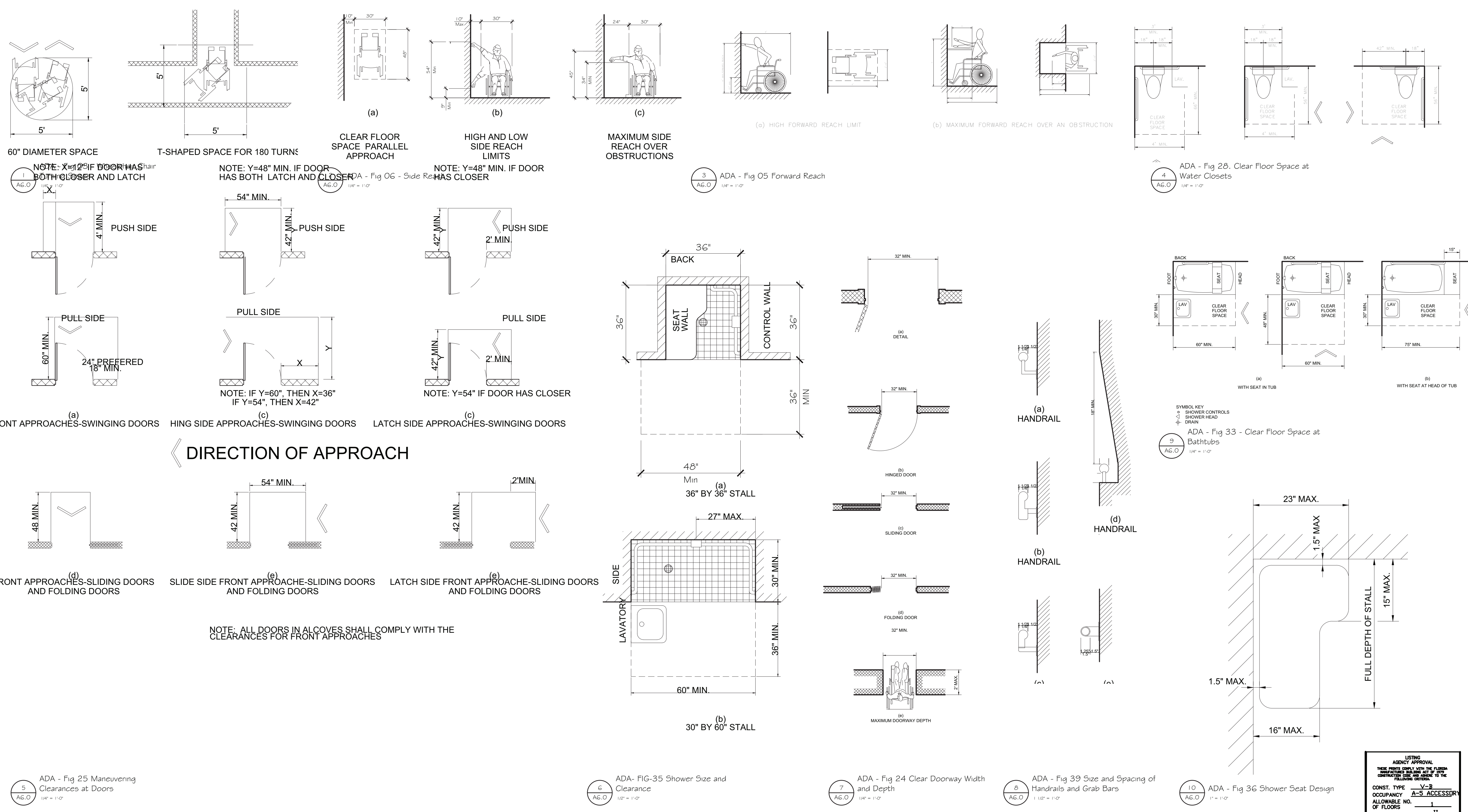
SOCCER CAMP BUILDING 1

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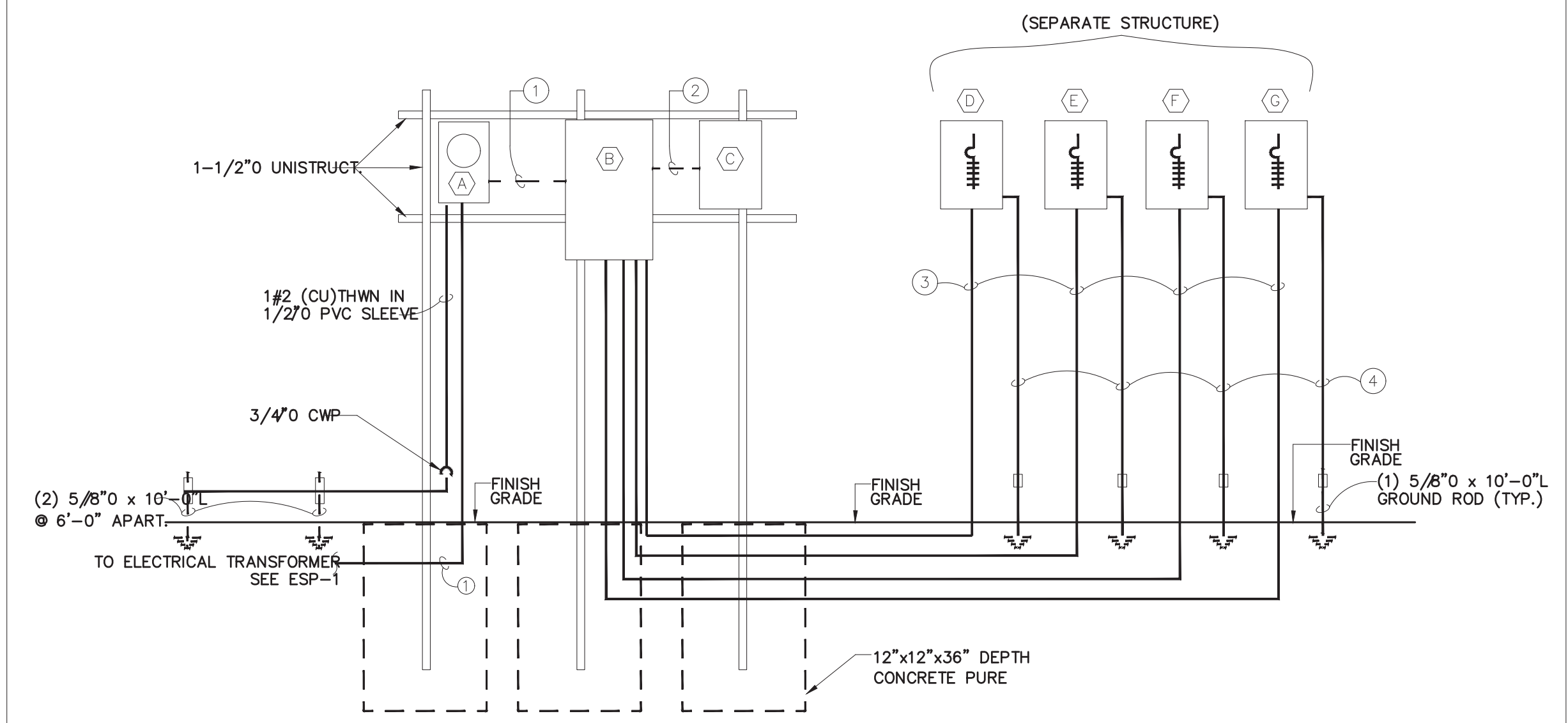
Drawn by: RP
Checked by: RP Jr.

SPECIFICATIONS

Sheet
A-3
20F13



5 ADA - Fig 25 Maneuvering Clearances at Doors
6 ADA- FIG-35 Shower Size and Clearance
7 ADA - Fig 24 Clear Doorway Width and Depth
8 ADA - Fig 39 Size and Spacing of Handrails and Grab Bars
9 ADA - Fig 33 - Clear Floor Space at Bathtubs
10 ADA - Fig 36 Shower Seat Design



ELECTRICAL RISER DIAGRAM
N.T.S.

ELECTRICAL RISER LEGEND / SYMBOL

- (A) ELECTRICAL METER (3 #) NEMA 3R ENCLOSURE
- (B) MDP NEMA 3R ENCLOSURE 400 AMPS, RATED MLO (SEE PNL. SCHEDULE)
- (C) ELECTRICAL PANEL "CF" W/2125 AMPS. (SIDE) IN NEMA 3R ENCLOSURE (SEE PNL. SCHEDULE) (MAIN 100%)
- (D) ELECTRICAL PNL. "A" NEMA 3R W/2125 A. MCB (SIDE) (SEE PNL. SCHEDULE)
- (E) ELECTRICAL PNL. "B" NEMA 3R W/2125 A. MCB (SIDE) (SEE PNL. SCHEDULE)
- (F) ELECTRICAL PNL. "C" NEMA 3R W/2125 A. MCB (SIDE) (SEE PNL. SCHEDULE)
- (G) ELECTRICAL PNL. "D" NEMA 3R W/2125 A. MCB (SIDE) (SEE PNL. SCHEDULE)
- (1) 4 # 250 KCMIL (CU) THWN IN 3" # CONDUIT
- (2) 4 # 1 (CU) THWN IN 1-1/2" # CONDUIT
- (3) 3 # 1 (CU) THWN IN 1-1/4" # CONDUIT
- (4) 1 # 8 (CU) THWN IN 1/2" # PVC SLEEVE (GROUND)

ELECTRICAL SERVICE LOAD SUMMARY

PANEL "SF" (208/3/60)	69 AMPS	14313 VA
PANEL "A" (208/1/60)	26 AMPS	5348 VA
PANEL "B" (208/1/60)	102 AMPS	21168 VA
PANEL "C" (208/1/60)	110 AMPS	22951 VA
PANEL "D" (208/1/60)	86 AMPS	17829 VA
TOTAL SERVICE		53384 VA
AT: (208/3/60) ⇒	81609 VA	= 227 AMPS.
	360 V	
PROVIDE 250 AMPS. SERVICE IN 208 / 3/ 60		

NOTE: ALL ELECTRICAL INSTALLATION SHALL COMPLY W/ F.B.C. 2020 AND NEC 2017

TYPE: LOADCENTER, NEMA 3R
SERVICE: 1 Ø, 3W, S/N
VOLTAGE: 120 / 208 VOLTS
MOUNTING/LOCATION: SURFACE / BATH

PANEL "D"

MAIN BUS: 125 A
NEUTRAL: 125 A
MAIN: 2/125 A MCB (SIDE)
AICS: 22 KAICS

AMPS	POLES	TOTAL V.A.	COND. SIZE	WIRE SIZE	REMARKS	CKT. NO.	CKT. NO.	REMARKS	WIRE SIZE	COND. SIZE	TOTAL V.A.	POLES	AMPS
20	1	240	1/2	12	FCU A-1	1	2	[CU # "A"	12	1/2"	2280	2	20
20	1	240	1/2	12	FCU A-2	3	4	[DUAL / MINI					
20	1	245	1/2	12	LIGHTING (EXT.)	5	6	LIGHTING	12	1/2"	372	1	20
20	1	210	1/2	12	LIGHTING (EXT.)	7	8	LIGHTING	12	1/2"	372	1	20
20	1	1500	1/2	12	GFI RECEPT	9	10	[MAIN (SIDE)					
60	2	11800	1	6	EWB	11	12						
					TANK LESS	13	14	SPACE					
20	1	180	1/2	12	ROOF RECEPTACLE	15	16						
					SPACE	17	18						
						19	20						
						21	22						
						23	24						
						25	26						
						27	28						
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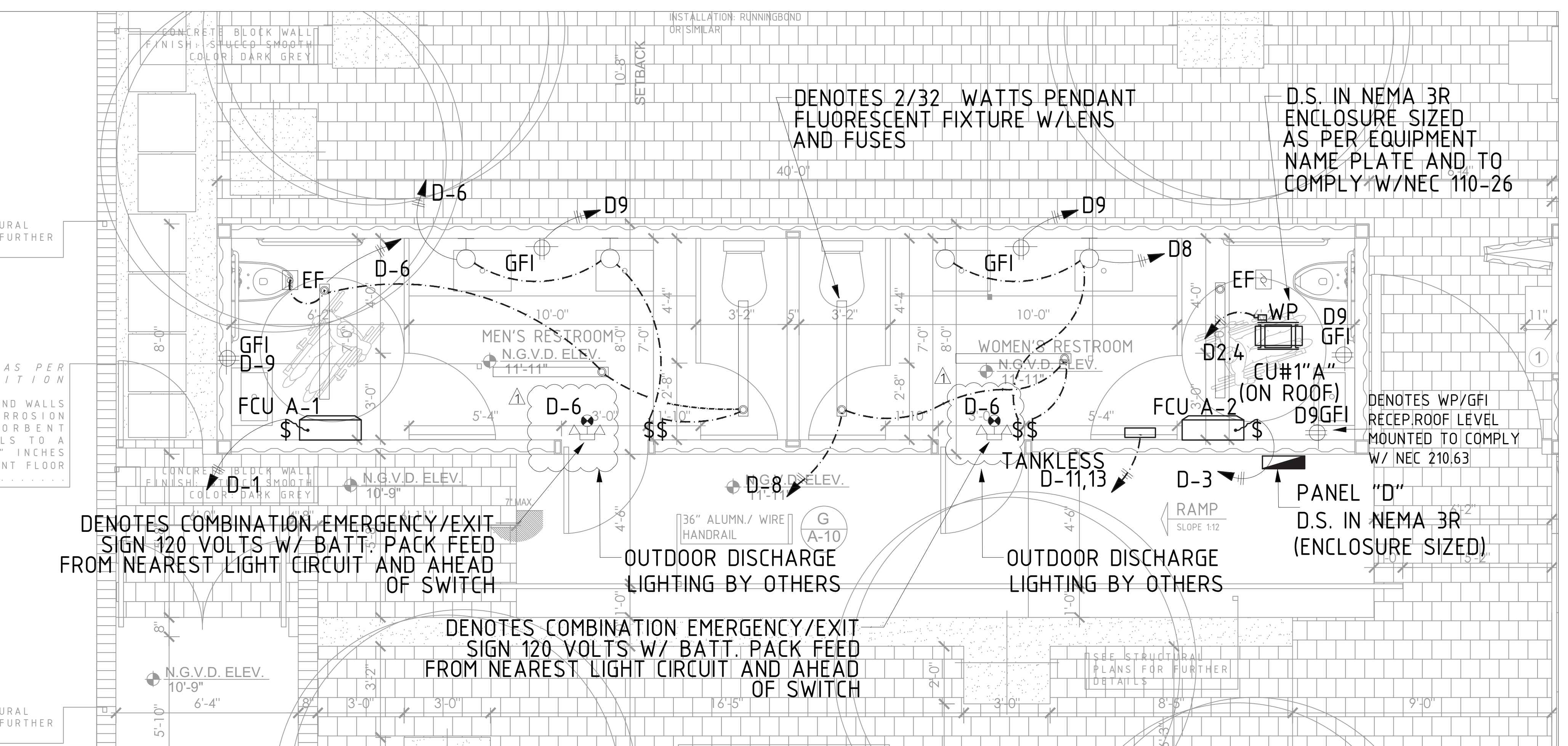
CONNECTED LOAD: $I_d = \frac{17829 \text{ VA}}{208 \text{ V}} = 86 \text{ AMPS.}$

NOTE: LARGEST MOTOR @ 125 %

FEEDER: (SEE RISER)

FED FROM: (SEE RISER)

BUILDING.01



LISTING AGENCY APPROVAL
THESE PLANS COMPLY WITH THE FLORIDA BUILDING CODE AND ALL APPLICABLE LOCAL ORDINANCES AND ARE SUBJECT TO THE FOLLOWING CONDITIONS:

CONST. TYPE V-3
OCCUPANCY A-3 ACCESSORY
ALLOWABLE NO. 1
OF FLOORS 11
RISK CATEGORY II
WIND VELOCITY (ULT) 175
WIND VELOCITY (ASD) 136
FIRE RATING OF EXT. WALLS 0
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ALLOW. FLOOR LOAD 100
APPROVAL DATE 11-3-2022
MANUFACTURER STEEL HOUSES
HIGH VELOCITY HURRICANE ZONE YES

IWE
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Date: 2022.10.13 16:19:47 -04'00'

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Drawn by: RP
Checked by: RP Jr.

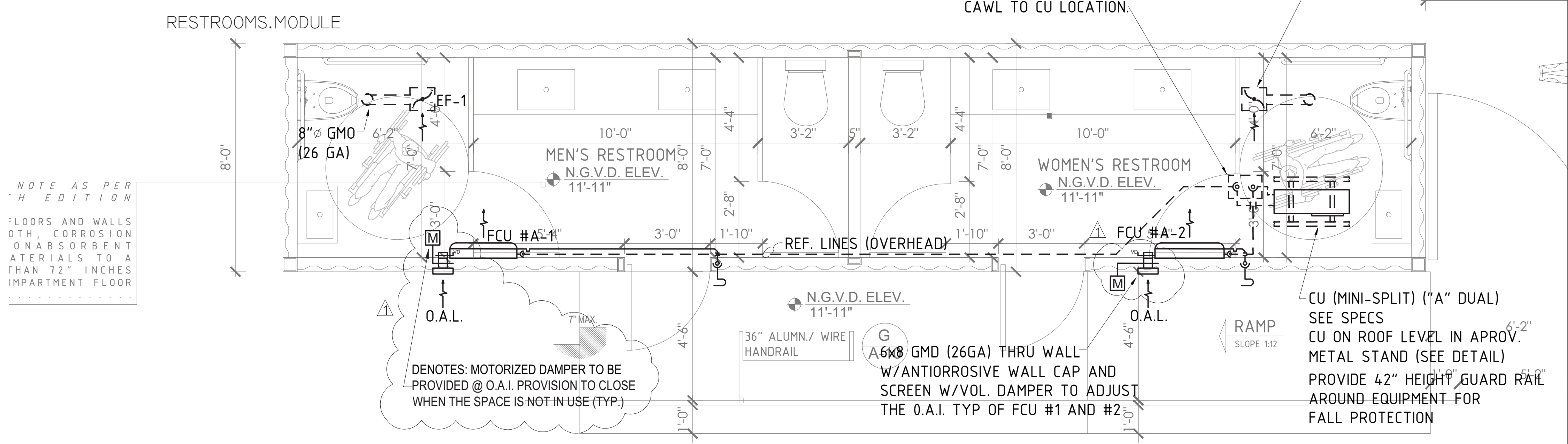
ELECTRICAL FLOOR PLAN

Sheet
E-1.0

GENERAL HEATING, VENTILATION AND AIR CONDITIONING NOTES

- ALL WORK SHALL CONFORM WITH ALL LOCAL STATE, FEDERAL ORDINANCES AND BUILDING CODES GOVERNING THE INSTALLATION OF THE AIR CONDITIONING SYSTEM AND IN COMPLIANCE WITH LATEST ASHRAE AND SMACNA STANDARD.
- THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL OF THE MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK. CHECK WITH OTHER TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED AND MAINTAIN MAXIMUM HEADROOM, AND SPACE CONDITIONS AT WHERE HEADROOM, OR SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY THE ARCHITECT/ENGINEER.
- AFTER EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF CONDITIONS, THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE, SINCE THE WORK INVOLVES NEW BUILDINGS, SYSTEMS, SPECIAL CONSIDERATION SHALL BE GIVEN TO THE WORKING CONDITIONS. SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THE CONTRACT. THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER, BEFORE SUBMITTING A BID, IF ANY DISCREPANCIES ARE ENCOUNTERED, THEN WE WILL ISSUE INSTRUCTIONS HOW TO PROCEED.
- INSTALL MATERIALS AND EQUIPMENT IN A NEAT AND WORKMANLIKE MANNER, THE OWNER RESERVES THE RIGHT TO REQUIRE OR REMOVAL THE PLACEMENT OF ITEMS WHICH WERE NOT RIGHT.
- THIS CONTRACTOR SHALL OBTAIN AND PAY ALL INSURANCE, FEES, PERMITS, ROYALTIES, AND TAXES OF WHATEVER NATURE SHALL APPLY TO THIS WORK. HE SHALL ALSO PAY ALL INSPECTIONS FEES AND SHALL KEEP THE OWNER HARMLESS FROM ANY DAMAGE AND EXPENSE ASSURING FROM ANY VIOLATION OF THE LAWS, RULES, OR ORDINANCES.
- PROVIDE MEANS "FURNISH AND INSTALL".
- SHOP DRAWINGS: THIS CONTRACTOR SHALL FURNISH THE ENGINEER WITH SHOP DRAWINGS OF EQUIPMENT AND DEVICES PRIOR TO PURCHASE FOR APPROVAL AND ACCEPTANCE.
- AT COMPLETION OF JOB THE HVAC CONTRACTOR SHALL GIVE THE OWNER AN AS-BUILT SET OF REPRODUCIBLE SERIALS SHOWING THE EXACT INSTALLATION. IF ANY DEVIATIONS OCCUR FROM THIS, SET OF CONTRACT DOCUMENTS.
- BETWEEN THE UNITS OR SPACES THE HVAC CONTRACTOR SHALL TEST AND BALANCE THE AIR QUANTITIES SHOWN ON THE PLANS, PROVIDE T & B REPORTS IN ACCORDANCE WITH AIR BALANCE COUNCIL STANDARDS, SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER.
- ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
- THE HVAC CONTRACTOR SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM THE DATE OF FINAL WORK ACCEPTANCE BY OWNER. ANY BREAKDOWN OCCURRING IN FIRST YEAR SHALL BE REPAIRED AT NO EXPENSE TO THE OWNER. THE COMPRESSOR (S) SHALL HAVE A FIVE YEARS WARRANTY MINIMUM.
- MOUNT ALL EQUIPMENT FOR WIND LOADS AND MOUNTING HEIGHTS AS REQUIRED BY LOCAL CODES.
- MATERIALS:
 - AIR CONDITIONING DUCTWORK SHALL BE CONSTRUCTED OF CODE GAUGE GALVANIZED METAL DUCT WITH 1-1/2" THICK R=4.2 WRAP AROUND STANDARD DUTY FIBERGLASS BOARD FLAMEPROOF REINFORCED ALUMINUM FACED COVER IN ACCORDANCE WITH THE S.M.A.C.N.A. AS MANUFACTURED BY OWNERS-COMING. DUCTWORK SHALL BE FABRICATED AND INSTALLED ACCORDING WITH MANUFACTURER'S INSTRUCTIONS INSTALL AIR VOLUME EXTRACTORS AT EACH DUCT TAP.
 - IF AIR CONDITIONING DUCTWORK IS EXPOSED, SHALL BE CONSTRUCTED OF GALVANIZED METAL DUCT (26 GAUGE)(SNAP LOCK TYPE). DUCTWORK SHALL BE FABRICATED AND INSTALLED ACCORDING WITH MANUFACTURER'S INSTRUCTIONS.
- FLEXIBLE DUCTWORK SHALL BE CLASS I AIR DUCT, U.L. 181 LISTED AS FOR CONDITIONED SPACE R 4.0 AND BUILT IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
 - BENDS SHALL MAINTAIN A CENTERLINE RADIUS OF NOT LESS THAN ONE DUCT DIAMETER.
 - TERMINAL DEVICES SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCT.
 - DUCTS SHALL BE INSTALLED FULLY EXTENDED, THE TOTAL EXTENDED LENGTH OF DUCT MATERIAL SHALL NOT EXCEED 5 PERCENT OF THE MINIMUM REQUIRED LENGTH FOR THAT RUN.
- TOILET EXHAUST DUCTWORK SHALL BE GALVANIZED SHEET 26 GAUGE METAL DUCT INSTALLED IN ACCORDANCE WITH THE LATEST ASHRAE STANDARDS AND MANUFACTURERS RECOMMENDATIONS. METALWARE OR AS APPROVED BY ENGINEER.
- ALL AIR DEVICES SHALL BE OF ALUMINUM CONSTRUCTION, TITUS, ARMAFLEX, WHEN EXPOSED IN CONDITIONED SPACE. IF THE PIPE-RUN THRU A RETURN PLENUM, THEN AN COMBUSTIBLE MATERIAL IS TO BE PROVIDED IN PLENUM SIDE.
- MEP DESIGN SHALL MAINTAIN BUILDING STANDARDS IN BASE BUILDING.

BUILDING.01



1.5TON - 1.5TON MINI SPLIT SYSTEM

MINISPLIT SYSTEM "UNIT A & D"

MR SLIM DUCTLESS MITSUBISHI OR EQUAL

INDOOR UNIT "A1,D1" MSZ-A15NA
INDOOR UNIT "A2,D2" MSZ-A15NA
OUTDOOR UNIT "A,D" MXZ-3A30NA

INDOOR UNIT

TOTAL COOLING	13,500/13,500 BTUH
SENSIBLE COOLING	9,900/9,900 BTUH
HEATING CAPACITY	13,000/13,000 BTUH
SEER	16.0/16.0
HSPF	8.2/8.2
POWER	230/1/60
MCA	1 AMP/1 AMP
FUSE	15/15 AMP
AIR LOW	380CFM/380 CFM

OUTDOOR UNIT

POWER	230/1/60
MCA	9.5 AMP
FUSE	20 AMP
REF LINES (LIQ., GAS)	1/4", 1/2"

DIMENSIONS

INDOOR UNIT

W : 30-11/16"
D : 8-1/4" WEIGHT : 23 lbs
H : 11-3/4"

OUTDOOR UNIT

W : 35-7/16"
D : 13-3/16" WEIGHT : 158 lbs
H : 35-7/16"

OUTSIDE AIR INTAKE CALCULATIONS AS PER F.B.C 2017.TABLE 403.3.1.1

AREA (S.F.)	Rp(CFM/PERS) PEOPLE OUTDOOR AIR RATE	Rz(PERSON) ZONE POPULATION	Ra(CFM/FT²) AREA OUTDOOR AIR	Az(FT²) ZONE FLOOR AREA	EQUATION 4-1 (RpPz)+(RaAz)	TOTAL AIRFLOW RATE Vbc REQUIRED (CFM)
FOR FC - A1 and A2 / CU-A						
BATHROOMS	312 SF X 50 CFM/70 SF				(312x50)/70	222
PROVIDE 230 CFM OF OUTSIDE AIR INTAKE (*)						
FOR FC - D1 and D2 / CU-D						
RETAIL	7.5	7	0.12	428	(7.5X7)+(0.12X428)	104
PROVIDE 120 CFM OF OUTSIDE AIR INTAKE (*)						

* PROVIDE MANUAL VOLUME DAMPER TO BE ADJUSTED TO OAI CFM.

EXHAUST FAN'S SPECS.

EF-1. TO BE "BROAN" CEILING EXHAUST FAN MODEL #505 MG 180 CFM DELIVERY @ 1/8 SP- 120/11/60 W/8" DUCT FLANGE AND BACKDRAFT DAMPER BUILT-IN - UL LISTED.

LISTING AGENCY APPROVAL

THESE PRINTS CONFORM WITH THE FLORIDA MECHANICAL BOARD ACT OF 2017, CHAPTER 403, PART 1.1.

CONST. TYPE	V-B
OCCUPANCY	A-S ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-012F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HIGH VELOCITY HURRICANE ZONE	YES

IWC
11-3-2022



PROJECT

SW.CORNER INTERSECTION SW.8TH ST. & SW.20TH AVE MIAMI, FL. 33135

OWNER

GALENM. ENTERPRISE, LLC

ARCHITECT

NANDEZ Design+Development
2223 SW 13TH AVE MIAMI, FL 33145
tel: 786.703.7704
info@nandezdd.com
AA 26002732
IB 26001520

Digitally signed by Ralph Puig
DN: c=US, st=Florida, l=Coral Gables, o=Nandez D&D LLC, cn=Ralph Puig
Date: 2022.10.13.16:20:17 -04'00'

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REVISIONS

DATE: 09/16/2022
Scale: AS SHOWN
Job No.: 2022
Drawn by: RP
Checked by: RP Jr.

GROUND.FLOOR

Sheet
M-1.0
20F13

PROJECT

SW CORNER INTERSECTION
SW 8TH ST. & SW 20TH AVE
MIAMI, FL 33135

OWNER

ARCHITECT

NANDEZ Design+Development

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DN: c=US, st=Florida, l=Coral
Gables, o=Nandez D&D LLC,
cn=Ralph Puig
Date: 2022.10.13 16:20:51 -04'00'

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REVISIONS

NO.	DESCRIPTION

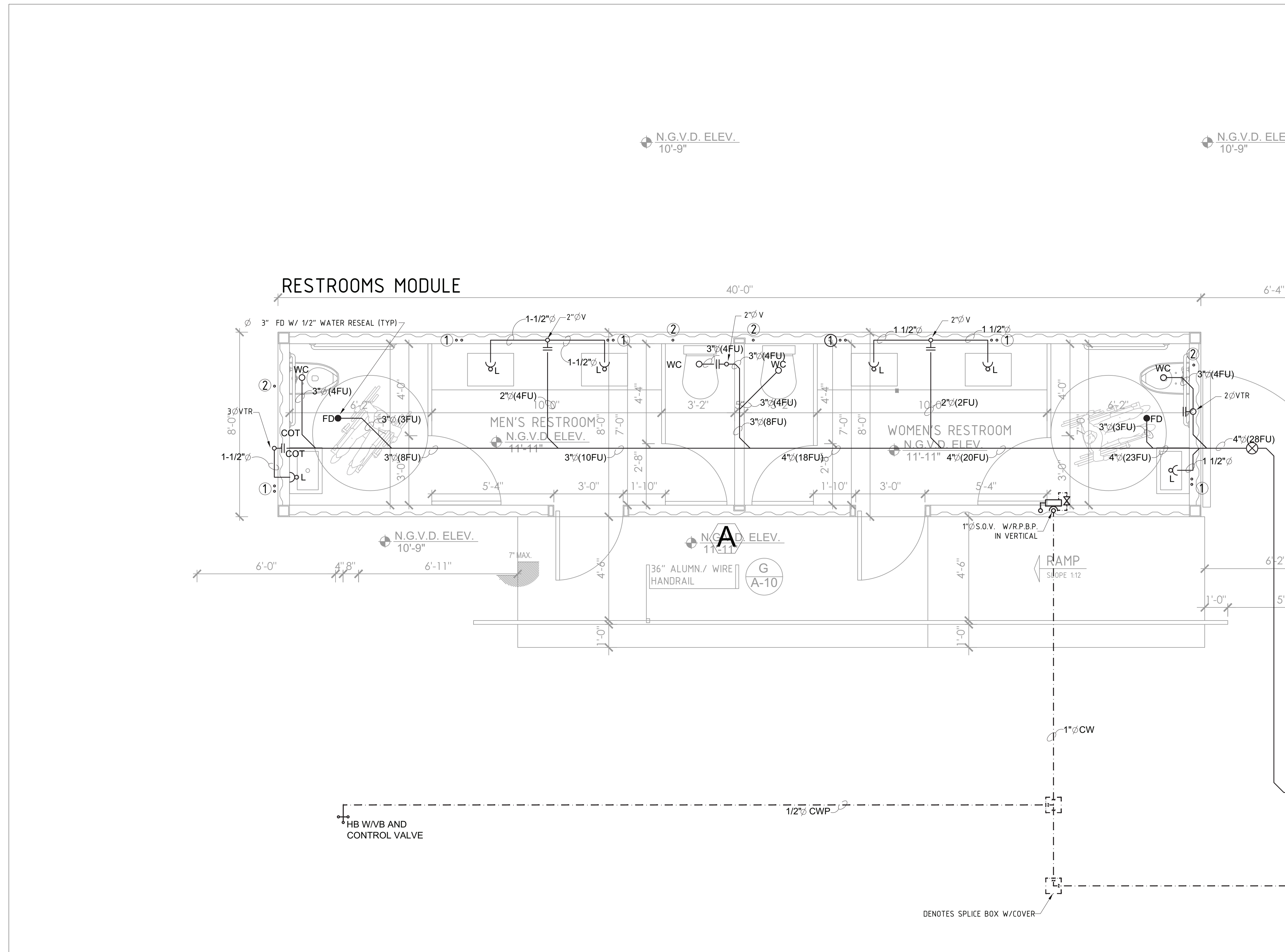
DATE: 09/16/2022
Scale: AS SHOWN
Job No.: 2022
Drawn by: RP
Checked by: RP Jr.

GROUND FLOOR

Sheet

P-1.0

BUILDING.01



NOTE: ALL PLUMBING INSTALLATION SHALL COMPLY W/ F.B.C. 2020

LISTING AGENCY APPROVAL	
CONST. TYPE	V-3
OCCUPANCY	A-5 ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2022-0112F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOME'S
HIGH VELOCITY WIND HURRICANE ZONE	YES

IWE
MB-21

GENERAL PLUMBING NOTES

- ALL WORK SHALL CONFORM WITH ALL LOCAL, STATE, FEDERAL 2010 FBC ORDINANCES AND BUILDING CODES GOVERNING THE INSTALLATION OF THE PLUMBING SYSTEM. IF WORK AS LAID OUT, INDICATED OR SPECIFIED IS CONTRARY TO OR CONFLICTS WITH LOCAL ORDINANCES, BUILDING CODES AND REGULATIONS, THE CONTRACTOR SHALL REPORT IN WRITING TO THE ARCHITECT/ENGINEER BEFORE SUBMITTING A BID. THE ARCHITECT/ENGINEER WILL THEN ISSUE INSTRUCTIONS AS HOW TO PROCEED.
- THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, NOT NECESSARILY SHOWING IN DETAIL OR TO SCALE ALL OF THE MINOR ITEMS. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, THE STRUCTURAL, ARCHITECTURAL AND SITE CONDITIONS SHALL GOVERN THE EXACT LOCATIONS. CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK, CHECK DRAWINGS OF ALL TRADES TO VERIFY SPACES IN WHICH WORK WILL BE INSTALLED AND MAINTAIN MAXIMUM HEAD ROOM, AND SPACE CONDITIONS AT ALL POINTS. WHERE HEAD ROOM, OR SPACE CONDITIONS APPEAR INADEQUATE, ARCHITECT/ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH INSTALLATION. THIS CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE FIELD MODIFICATION IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF VARIOUS TRADES OR FOR PROPER EXECUTION OF THE WORK.
- EXAMINE ALL DRAWINGS CAREFULLY PRIOR TO SUBMITTING A BID. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND/OR CONNECT WITH APPROPRIATE SERVICES ALL PLUMBING ITEMS SHOWN ON ANY OF THE ARCHITECTURAL, AIR CONDITIONING, ELECTRICAL AND SPRINKLER DRAWINGS WITHOUT ADDITIONAL EXPENSE TO THE OWNER. IF DISCREPANCIES, CONFLICTS, INTERFERENCE OR OMISSIONS OCCUR BETWEEN DRAWINGS, NOTIFY IN WRITING THE ARCHITECT/ENGINEER IN AMPLE TIME TO PERMIT REVISIONS BEFORE THE BIDS ARE SUBMITTED.
- INSTALL MATERIALS AND EQUIPMENT IN A NEAT AND FIRST CLASS WORKMANLIKE MANNER. THE OWNER RESERVES THE RIGHT TO DIRECT REMOVAL AND REPLACEMENT OF ITEMS WHICH, IN HIS OPINION, DO NOT PRESENT A NEAT AND WORKMANLIKE APPEARANCE. REMOVAL AND REPLACEMENT IS TO BE DONE IMMEDIATELY WHEN DIRECTED BY THE OWNER IN WRITING, AT THE SOLE EXPENSE OF CONTRACTOR.
- START OF WORK BY CONTRACTOR SHALL BE CONSIDERED AS ACCEPTANCE BY HIM OF ALL CLAIMS OR QUESTIONS AS TO SUITABILITY OF THE WORK OF OTHER TRADES OR OTHER CONTRACTORS TO RECEIVE HIS WORK. THIS CONTRACTOR SHALL REMOVE AND REPLACE, AT HIS EXPENSE, ALL PLUMBING WORK WHICH MAY HAVE TO BE REMOVED BECAUSE OF INTERFERENCE WITH OTHER TRADES.
- THIS CONTRACTOR SHALL OBTAIN AND PAY ALL INSURANCE, FEES, PERMITS, ASSOCIATION DUES, ROYALTIES AND TAXES OF WHATEVER NATURE SHALL APPLY TO THIS WORK. HE SHALL ALSO PAID ALL THE INSPECTION FEES AS MAY BE REQUIRED BY LAW OR ORDINANCE AND SHALL KEEP THE OWNER HARMLESS FROM ANY DAMAGE AND EXPENSE ARISING FROM ANY VIOLATION OF LAWS, RULES OR ORDINANCES.
- PROVIDE MEANS "FURNISH AND INSTALL".
- DO A COMPLETE JOB, EVERYTHING CONNECTED, READY FOR USE.
- SHOP DRAWINGS: CONTRACTOR SHALL FURNISH THE ENGINEER WITH SHOP DRAWINGS OF EQUIPMENT PRIOR TO PURCHASE FOR APPROVAL.
- AT COMPLETION OF JOB THE PLUMBING CONTRACTOR SHALL GIVE THE OWNER AN AS-BUILT SET OF REPRODUCIBLE SEPIAS SHOWING THE EXACT LOCATION OF ALL INSTALLATIONS.
- PLUMBING CONTRACTOR SHALL PRESSURE TEST ALL PIPING AS REQUIRED BY CODE. TEST SHALL BE WITNESSED AND APPROVED BY PROPER AUTHORITIES.
- THE PLUMBING CONTRACTOR SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE YEAR FROM THE DATE OF FINAL WORK ACCEPTANCE BY OWNER. ANY BREAKDOWN OCCURRING IN FIRST YEAR SHALL BE REPAIRED AT NO EXPENSE TO THE OWNER.
- PROVIDE BATHROOM FIXTURES AS SPECIFIED.
- PROVIDE SHUT-OFF VALVE FOR EACH FIXTURE.
- WHEREVER NOT SIMILAR METALS ARE TO BE JOINED, A DI-ELECTRIC FITTING SHALL BE PROVIDED TO CONNECT BOTH TYPES OF PIPES.
- PLUMBING CONTRACTOR SHALL PROVIDE AIR CONDITIONING CONDENSATE DRAIN AND TRAP. SEE AIR CONDITIONING PLANS FOR LOCATION OF UNITS AND DRAINS.
- MATERIALS
 - A. COLD WATER PIPING DOWNSTREAM OF WATER METER SHALL BE TYPE "L" COPPER BELOW GROUND AND TYPE "M" COPPER ABOVE GROUND.
 - B. COLD WATER PIPES INSIDE OF SLAB SHALL BE TYPE "K" SOFT COPPER INSTALL INSIDE POLYETHYLENE CONDUIT. NO JOINTS PERMITTED INSIDE SLAB.
 - C. SANITARY WASTE AND VENT 4"Ø AND SMALLER SHALL BE P.V.C., SCHEDULE 40.
 - D. STORM LINES INSIDE BUILDING SHALL BE P.V.C. SCHEDULE 40
 - E. IN COASTAL AREAS ALL SANITARY AND STORM PIPING OUTSIDE OF BUILDING SHALL BE SCHEDULE 40, PVC.
 - F. CONDENSATE DRAIN PIPE SHALL BE SCHEDULE 40, PVC PIPE AND FITTINGS.
 - G. WATER HEATER RELIEF AND DRAIN LINE SHALL BE TYPE "L" COPPER, MIN 3/4" DIA.

FIRE RATED PENETARATION NOTE
WHEN FIRE PENETRATION OF PIPING OCCUR, SHALL BE PROTECTED BY ASSEMBLY No. W-L-2088, UL APPROVED

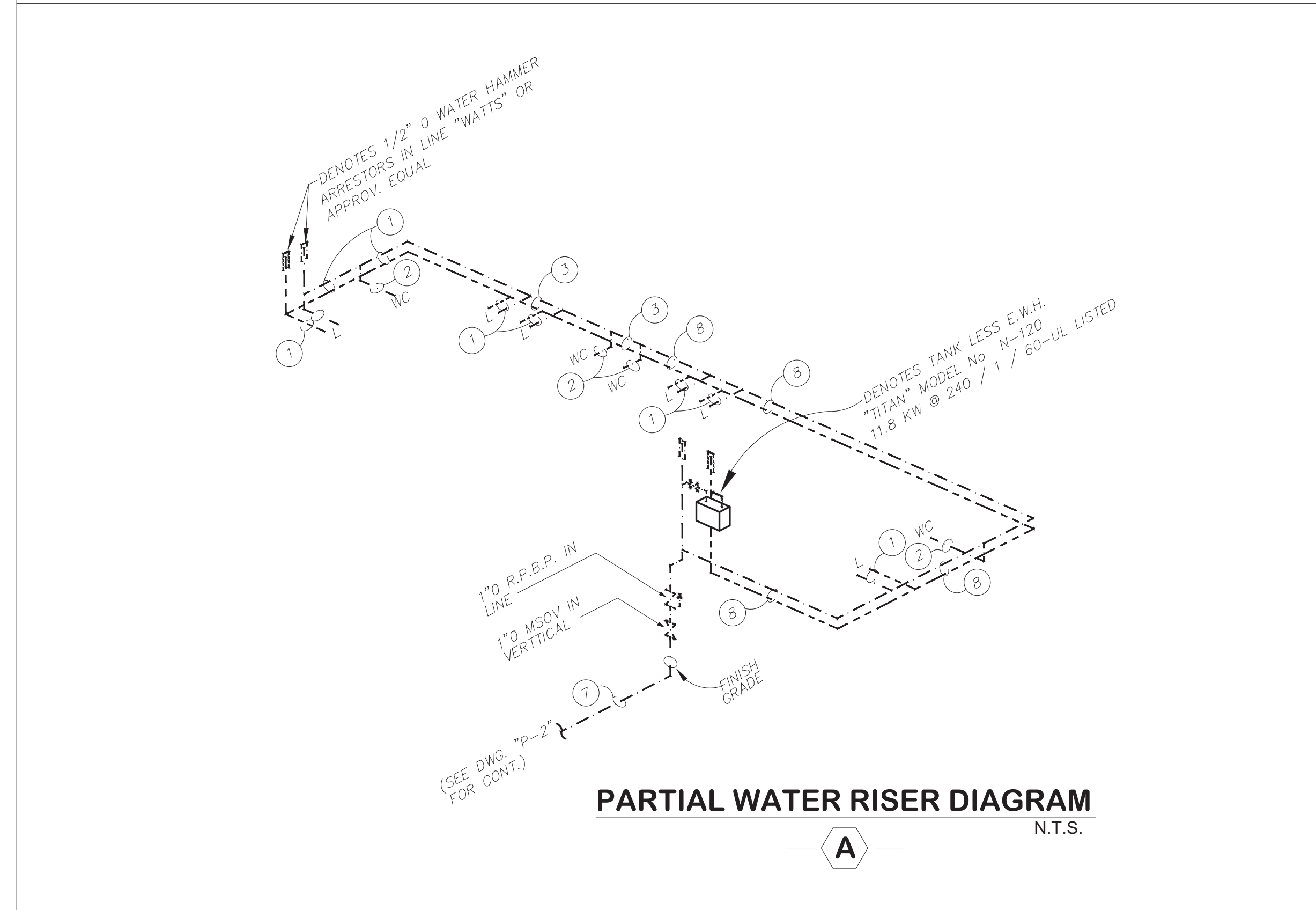
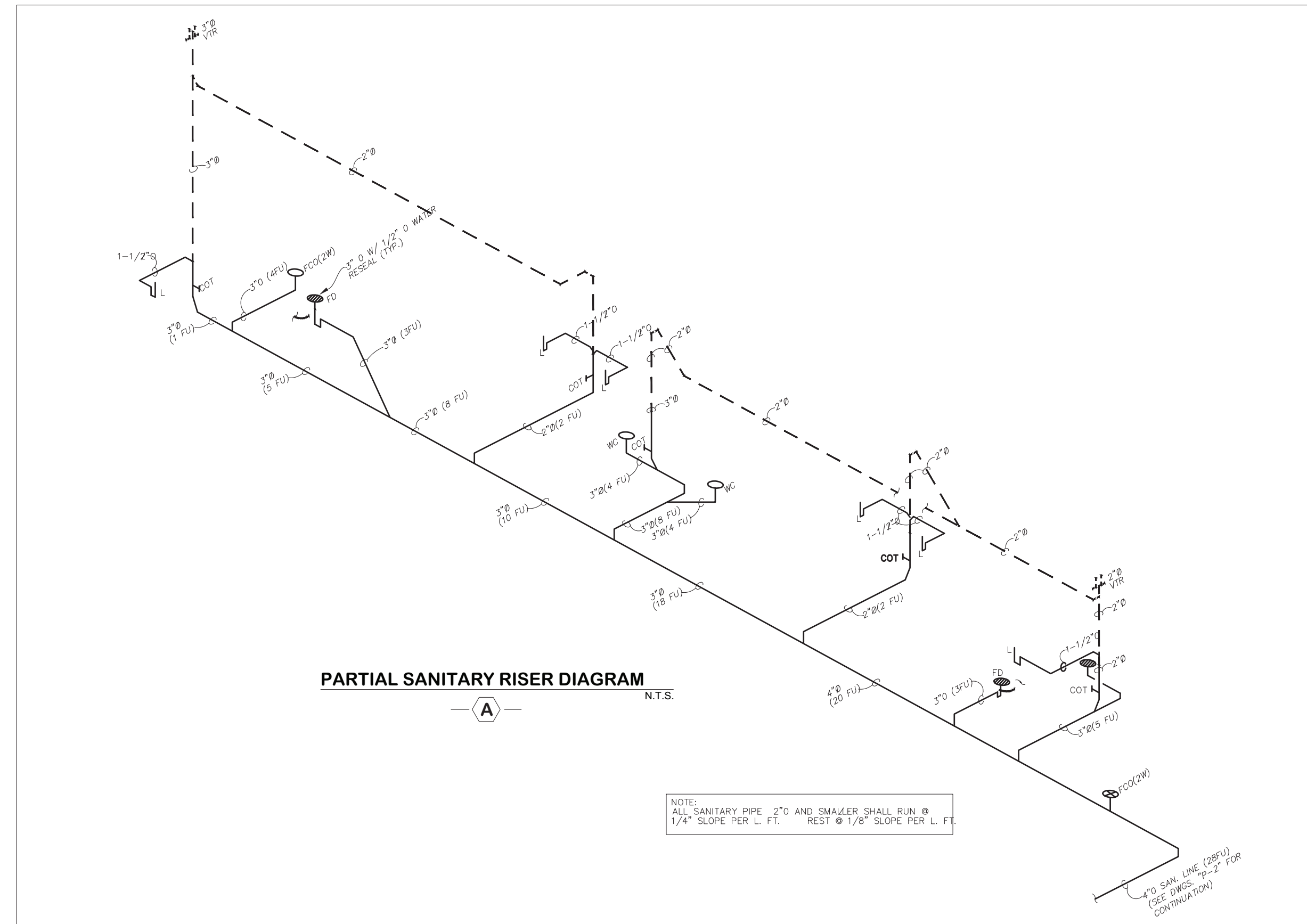
SITE INVESTIGATION NOTE

EXAMINATION OF CONTRACT DOCUMENTS AND SITE OF WORK: THE BIDDER IS REQUIRED, BEFORE SUBMITTING HIS PROPOSAL, TO VISIT THE SITE OF THE PROPOSED WORK AND FAMILIARIZE HIM OR HERSELF WITH THE NATURE AND EXTENT OF THE WORK AND ANY LOCAL CONDITIONS THAT MAY IN ANY MANNER AFFECT THE WORK TO BE DONE AND EQUIPMENT, MATERIALS AND LABOR REQUIRED THEREFORE. SINCE THE WORK INVOLVES NEW AND/OR EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS, NEW FACILITIES AND ALL BUILDING STRUCTURES FAMILIARIZE TO HIMSELF WITH ALL EXISTING CONDITIONS. SLIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE VARIATIONS ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITY ASSUMED UNDER THIS CONTRACT.

NOTE

ALL SANITARY PIPE 2" Ø OR SMALLER SHALL RUN @ 1/4" SLOPE PER L. FT. REST @ 1/8" SLOPE PER L. FT.

MAXIMUM FLOW RATE AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS	
PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY
LAVATORY, PUBLIC	0.5 GPM @ 60 PSI
LAVATORY, PUBLIC, METERING OR SELF-CLOSING	0.25 GALLONS PER METERING CYCLE
SINK FAUCET	1.5 GPM @ 60 PSI
WATER CLOSET	1.28 GALLON PER FLUSHING CYCLE



NOTE: ALL PLUMBING INSTALLATION SHALL COMPLY W/ F.B.C. 2020

LISTING
AGENCY APPROVAL
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURERS AND TRADERS ACT OF 1975
REGISTERED PROFESSIONAL ENGINEER

CONST. TYPE V-B
OCCUPANCY A-S ACCESSORY
ALLOWABLE NO. OF FLOORS 1
RISK CATEGORY II
WIND VELOCITY (ULT) 175
WIND VELOCITY (ASD) 136
FIRE RATING OF EXT. WALLS 0
PLAN NO. 2557-0112F
ALLOW. FLOOR LOAD 100
APPROVAL DATE 11-3-2022
MANUFACTURER STEEL HOMES
HIGH VELOCITY HURRICANE ZONE YES

IWE
11-3-21



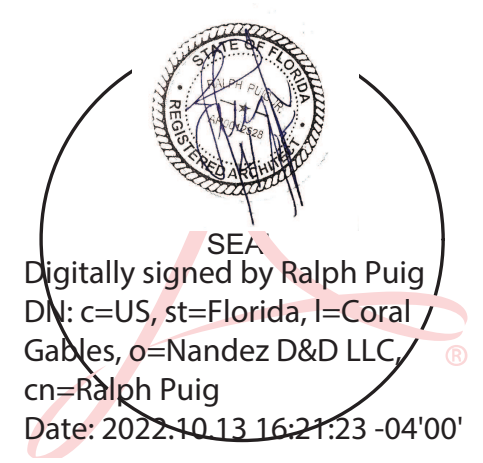
PROJECT

SW.CORNER INTERSECTION
SW.8TH ST. & SW.20TH AVE
MIAMI, FL. 33135

OWNER

ARCHITECT

NANDEZ Design+Development
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DN: c=US, st=Florida, l=Coral Gables, o=Nandez D&D LLC, cn=Ralph Puig
Date: 2022.10.13 16:21:23 -04'00'

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

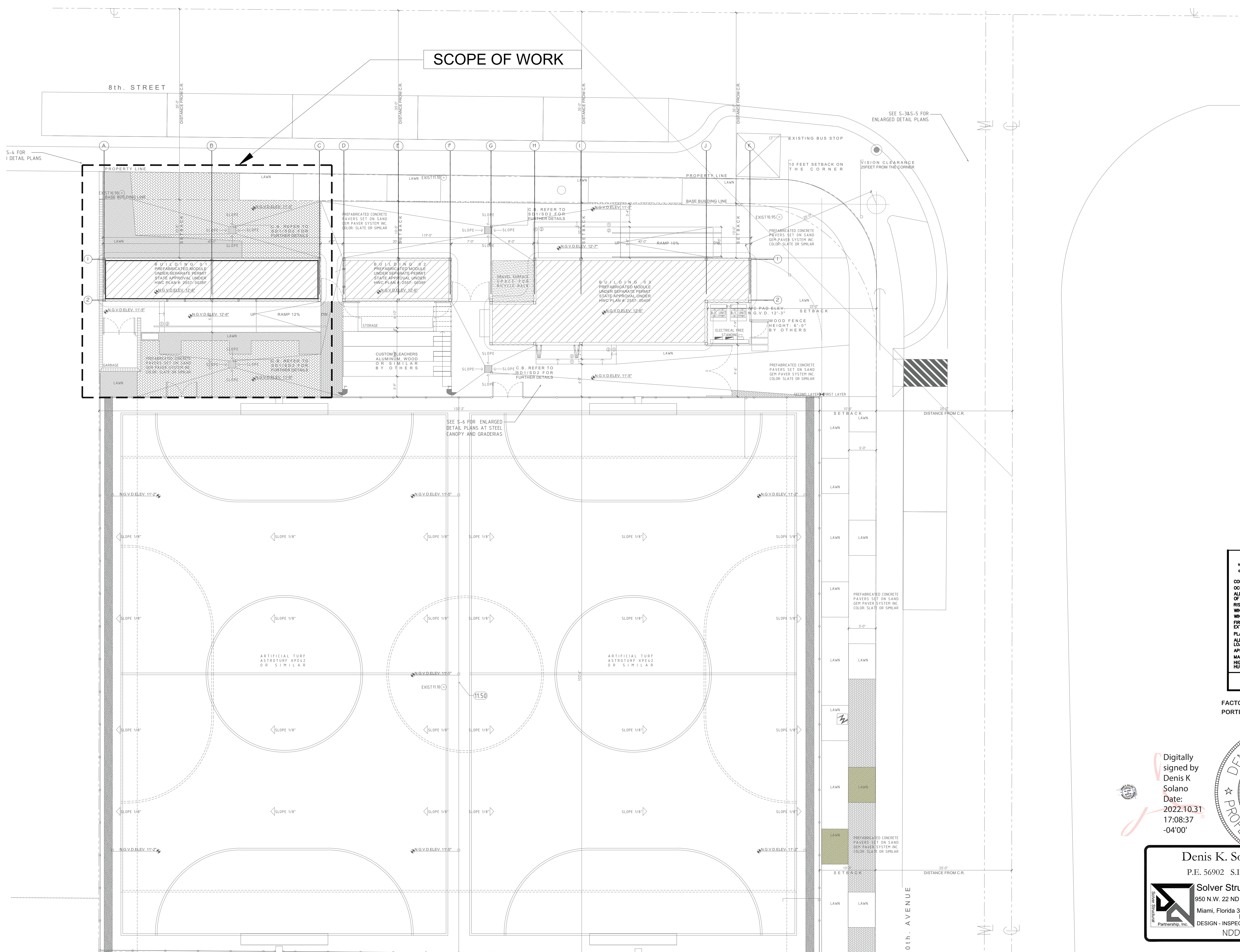
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Checked by: RP Jr.

GROUND FLOOR

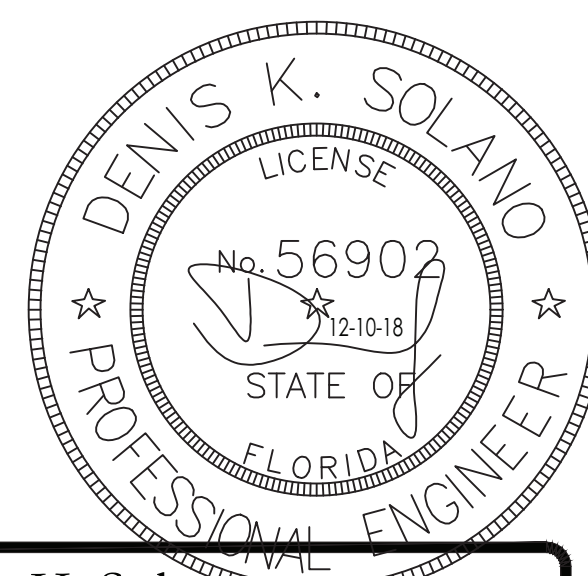
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SCOPE OF WORK



LISTING AGENCY APPROVAL	12-3
CONST. TYPE	A-S ACCESSORY
OCCUPANCY	1
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	175
WIND VELOCITY (ULT)	136
WIND VELOCITY (ASD)	0
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-0112F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HIGH VELOCITY HURRICANE ZONE	YES

FACTORY BUILT MODULAR BUILDING PORTIONS ONLY.

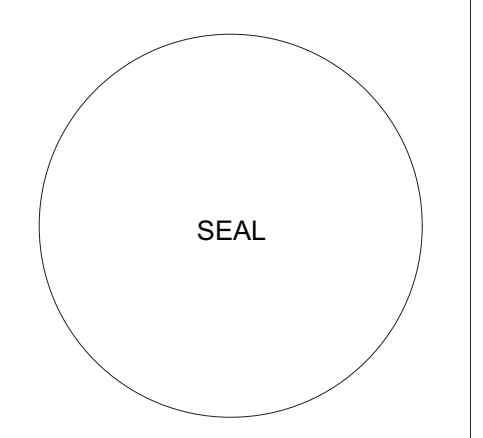


Digitally signed by Denis K Solano
Date: 2022.10.31 17:08:37 -04'00'

Denis K. Solano
P.E. 56902 S.I. 2046 C.O.A. 00009095

Solver Structural Partnership, Inc.
950 N.W. 22 ND AVE. Phone: (305) 643-8699
Miami, Florida 33125 Fax: (305) 643-8692
E-Mail: info@solverstructural.com
DESIGN - INSPECTION - INVESTIGATION - REPORTS
NDD-17-2816

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AA 26002732
IB 26001520



ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REVISIONS

DATE: 12-10-2018
Scale: AS SHOWN
Job No.: NDD-17-2816
Drawn by: A.S.G
Checked by: D.K.S

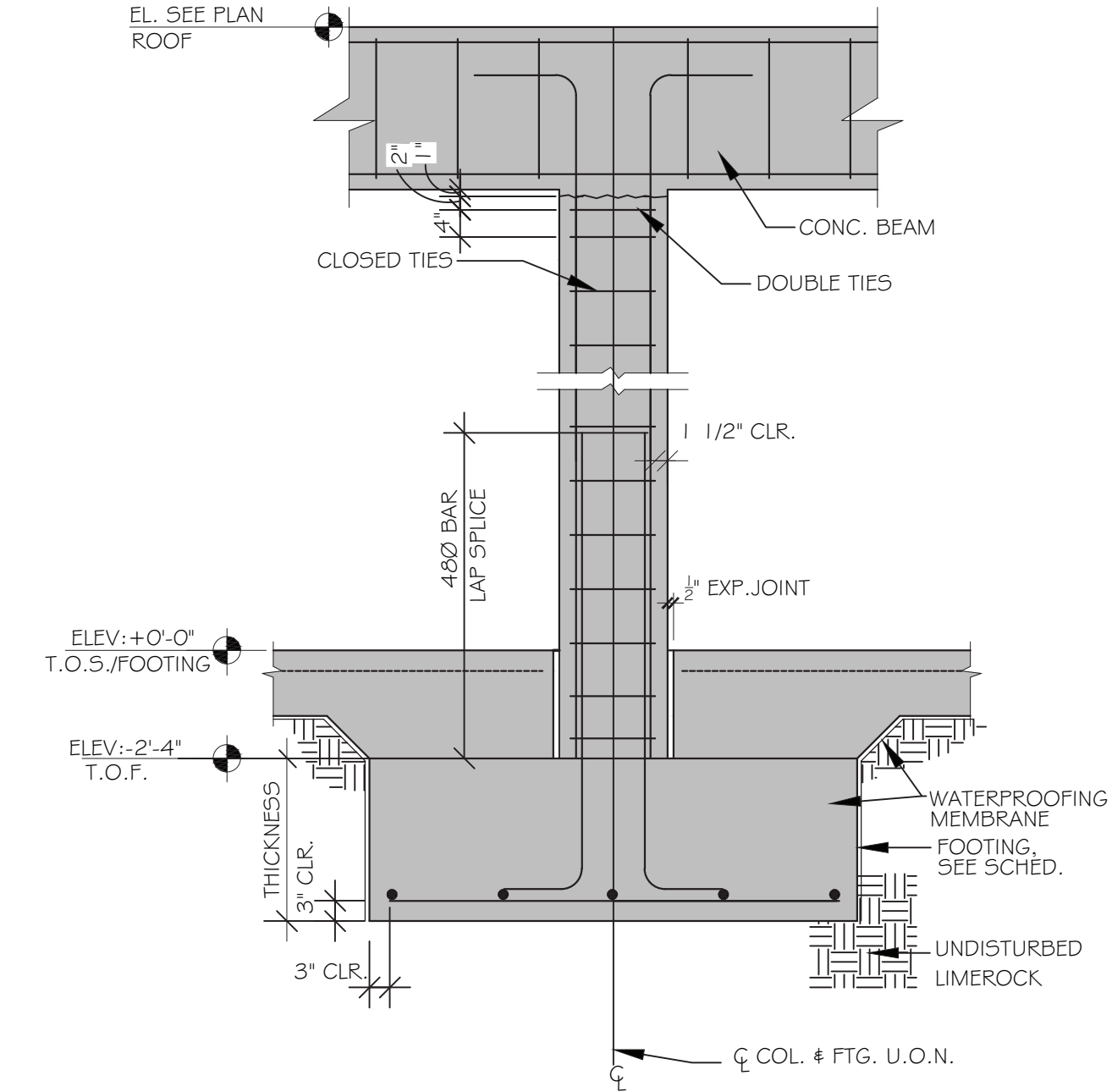
BUILDING 01
 PREFABRICATED MODULE
 UNDER SEPARATE PERMIT
 STATE APPROVAL UNDER
 HWC PLAN #: 2557- 0038F

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

LEGEND:

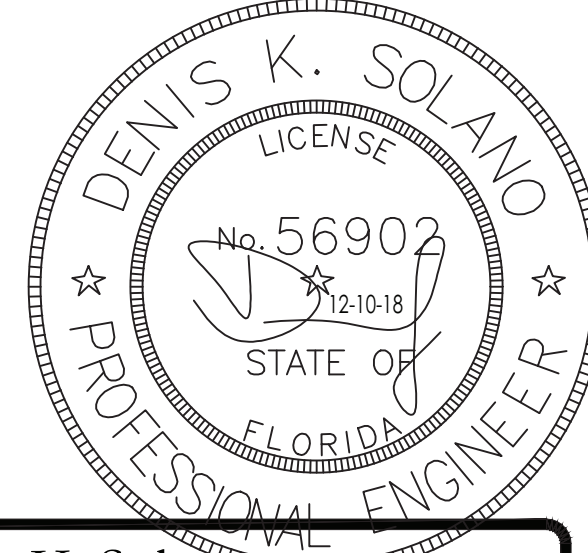
- WF-# CONC. WALL FOOTING . SEE FOOTING SCHEDULE ON S-1.2
- TSE NEW THICKENED SLAB EDGE (TSE). SEE TYP. DETAIL ON S-1.2
- SC 8" BEARING CMU WALL REINF. W/1 #6 REBAR @ 32" IN C.I. OF FILLED CELL.
- BC TS STEEL COL. SEE STEEL COL. SCHEDULE FOR DIM. & TYP. STEEL COL. DETAIL ON S-3.1.
- BC BUILT-UP METAL STUD COL. SEE PLAN & TYP. DETAILS ON SHEET S-3.1
- TC CONC. TIE COL. SEE COL. SCHEDULE FOR REINF. & DIM. ON S-3.1
- SW-# 600 S 200-43 METAL STUDS @ 16" O.C.
- BI METAL SHEAR WALL. SEE TYP. DETAIL ON S-2.2 & TYP. DETAIL A OR B ON S-2.2
- BI BUILT-UP BEAM. SEE TYP. DETAILS ON S-3.1 (WEB STIFFENERS REQUIRED @ E.A. END SEE DETAIL 1/S-3.1)
- F-# CONC. ISOLATED FOOTING . SEE FOOTING SCHEDULE ON S-1.2
- PD 12"x12" CONC. PEDESTAL REINF. W/4#6 VERT. & #3 @ 9" O.C. CLOSED STIRRUPS & FOURED W/ 3000 PSI GROUT. (MIN. 2 STIRRUPS PER PIER)

NOTES:
 1. TOP OF FOOTING : -2'-4" UNLESS OTHERWISE NOTED



TYPICAL COLUMN-FOOTING DETAIL
 SCALE: 3/4" = 1'-0"

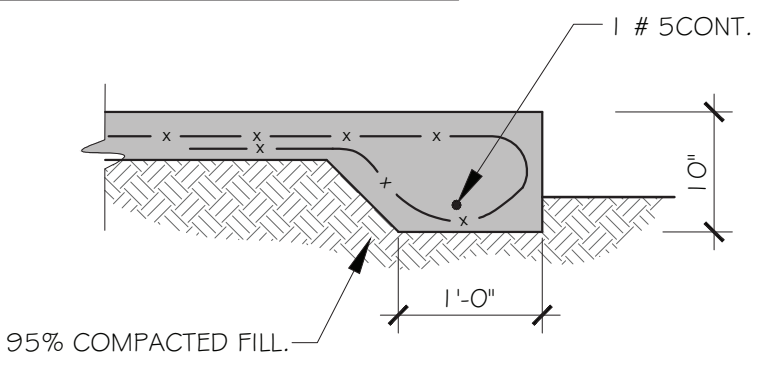
LISTING	
AGENCY APPROVAL	
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURED BUILDING ACT OF 1972. CONTRACTOR HAS AND AGREES TO THE FOLLOWING NOTES:	
CONST. TYPE	V-2
OCCUPANCY	A-S ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULI)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-0112F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HITES
HIGH VELOCITY HURRICANE ZONE	YES



Digitally signed by Denis K Solano
 Date: 2022.10.31 17:08:58 -04'00'

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 DESIGN - INSPECTION - INVESTIGATION - REPORTS
 NDD-17-2816



TYPICAL THICKENED SLAB EDGE (TSE) DETAIL
 SCALE: 3/4" = 1'-0"
 NOTE: OTHERWISE NOTED ON SECTION.

FOOTING	DIMENSION	BOTTOM REINFORCEMENT	TOP REINFORCEMENT	REMARKS
WF-16	16"x 16" x CONT.	2#5 CONT.		# 4 @ 24" O.C. TRANSV. BOTT.
WF-36	36"x 16" x CONT.	4#5 CONT.	4#5 CONT.	# 5 @ 10" O.C. TRANSV. TOP & BOTT.
F-3.5	3'-6" x 3'-6" x 12"	5#5 E.W.	5#5 E.W.	
TSE	12"x 10" x CONT.	1#5 CONT.		SEE TYP. DETAIL ON THIS SHEET

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 AA 26002732
 IB 26001520

ARCHITECT OF RECORD:
 RALPH PUIG JR.
 FL. ARCHITECT REG. #
 AR 0012528

REVISIONS

1 06/14/18 B.D.C.

DATE: 12-10-2018
 Scale: AS SHOWN
 Job No.:NDD-17-2816
 Drawn by:A.S.G
 Checked by:D.K.S

Sheet
S-1.2

BUILDING 01
PREFABRICATED MODULE
UNDER SEPARATE PERMIT
STATE APPROVAL UNDER
HWC PLAN #: 2557-0038F

4x8-³/₄ COMPOSED CEMENT AND MINERALIZED
WOOD FIBERS BOARD ATTACHED TO THE STEEL
STUDS W/ #12 TEK SCREWS @ 6" O.C AT EDGES
AND 12" O.C. IN THE FIELD.

1000 S 200-33
METAL GAGE BLOCKING

ELEV: +21'-2" N.G.V.D.
ELEV: 8'-8" (DATUM)
T.O. ROOF

TS 4"x4"x¹/₂"

1000 S 200-43 STEEL JOISTS @ 16" O.C.

TS 4"x4"x¹/₂"

1000 S 200-43 STEEL JOISTS @ 16" O.C.

TS 4"x4"x¹/₂"

1000 S 200-43 STEEL JOISTS @ 16" O.C.

TS 4"x4"x¹/₂"

1000 S 200-43 STEEL JOISTS @ 16" O.C.

11'-10"
1000 S 200-33
METAL GAGE BLOCKING

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

LEGEND:

- BC BUILT-UP METAL STUD COL. ENDING BELOW
SEE PLAN & TYP. DETAIL ON 5-3.1
- SC STEEL COLUMN ENDING BELOW
SEE PLAN & TYP. DETAIL ON 5-3.1
- 1000 S 200-33
METAL GAGE BLOCKING
- 4x8-³/₄ COMPOSED CEMENT AND MINERALIZED
WOOD FIBERS BOARD ATTACHED TO THE STEEL
STUDS W/ #12 TEK SCREWS @ 6" O.C AT EDGES
AND 12" O.C. IN THE FIELD.
- CONC. TIE BEAM
SEE BEAM SCHEDULE FOR DIM & REINF. ON THIS SHEET
- TC CONC. TIE COL. ENDING BELOW

LISTING	
AGENCY APPROVAL	
CONST. TYPE	V-C-B
OCCUPANCY	A-5 ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-0112F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOME'S
HIGH VELOCITY HURRICANE ZONE	YES
IWE	MR-281

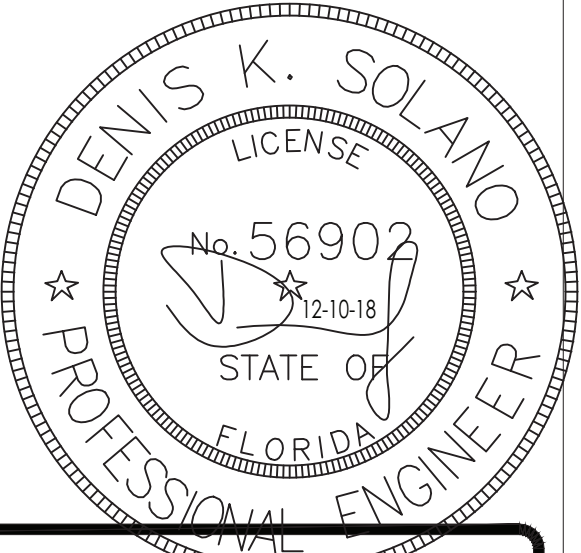
NANDEZ Design+Development
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Job No.: NDD-17-2816
Drawn by: A.S.G
Checked by: D.K.S

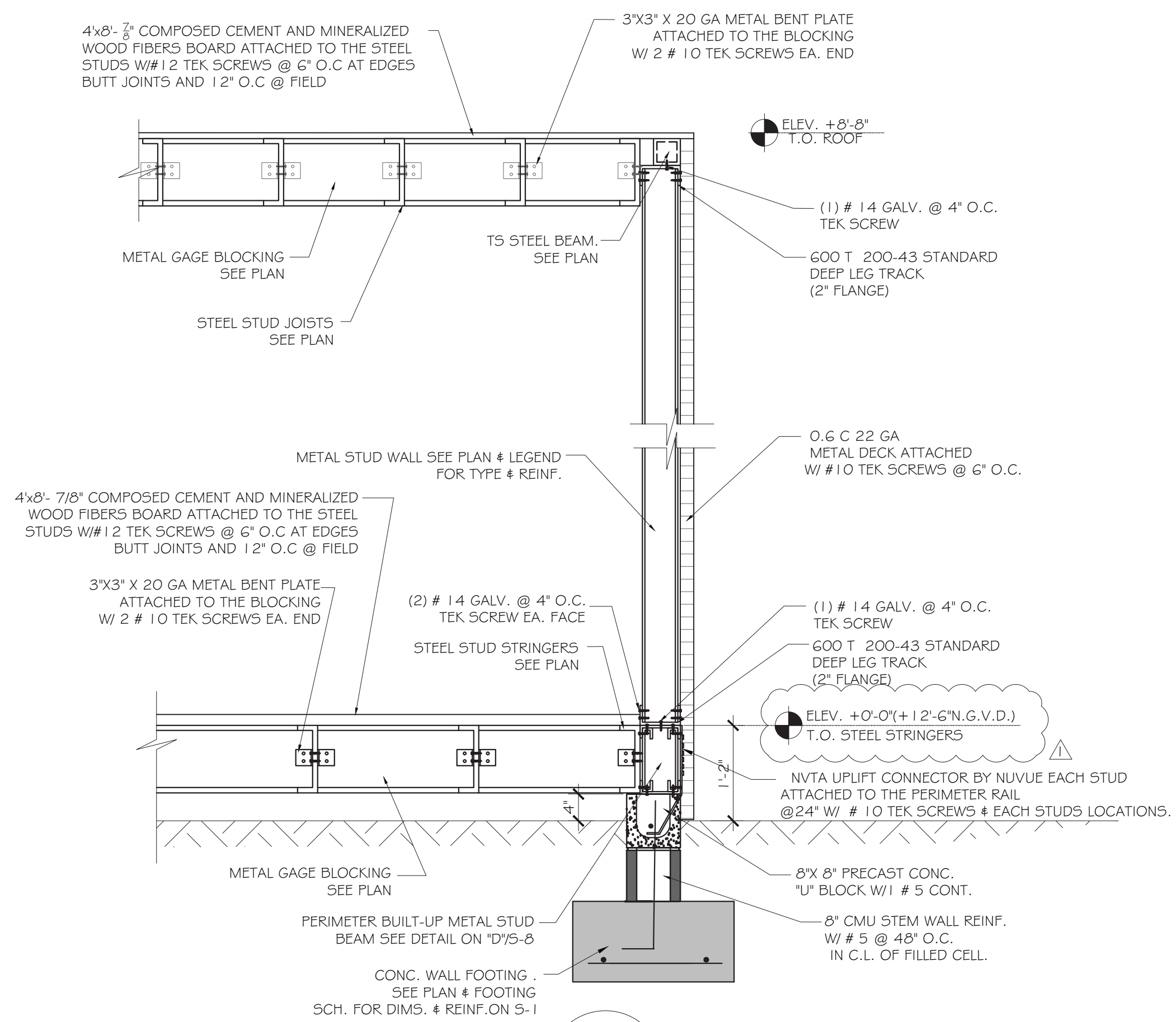
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Denis K Solano
Date: 2022.10.31 17:09:15 -04'00'



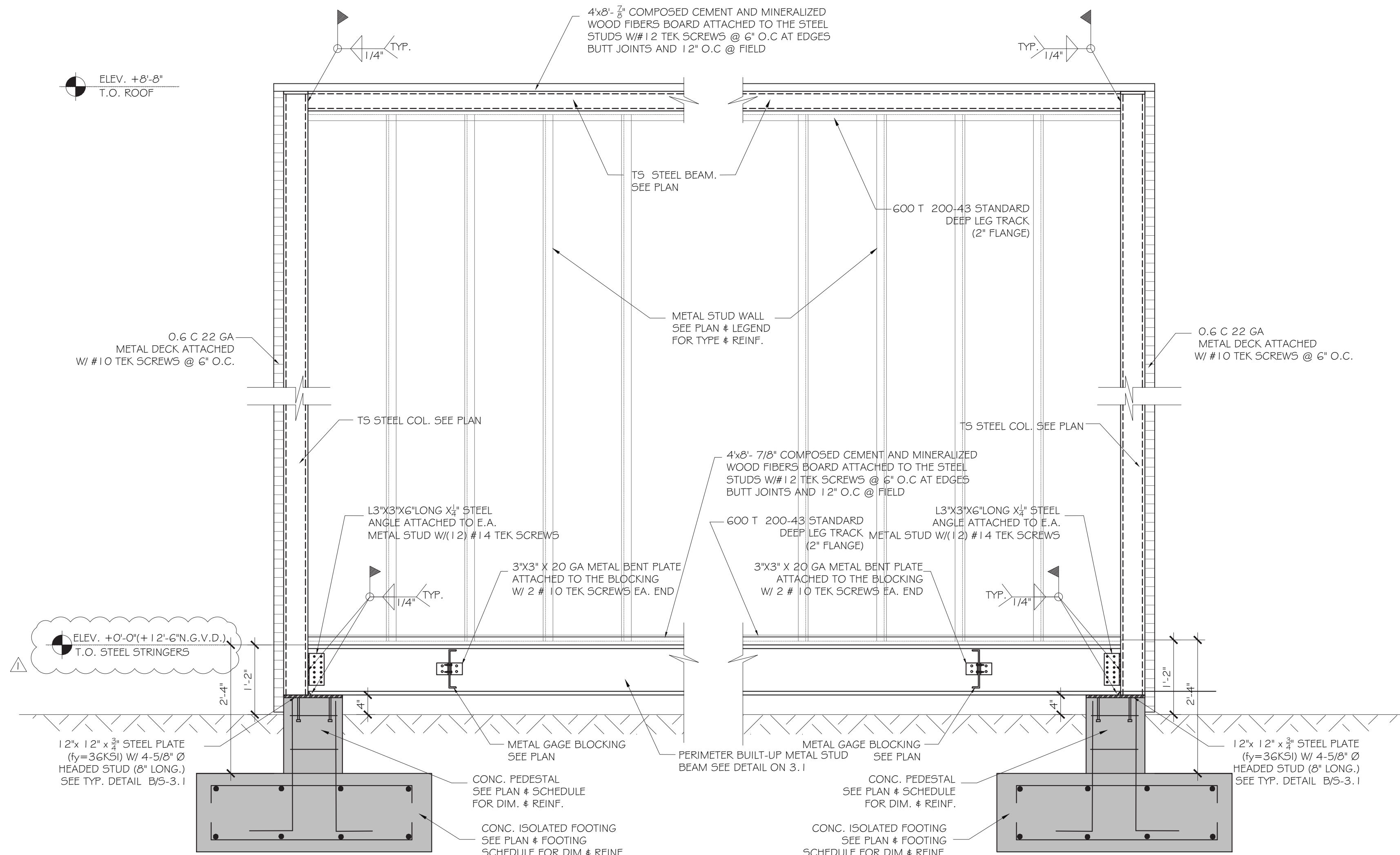
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BEAM SCHEDULE (ROOF)

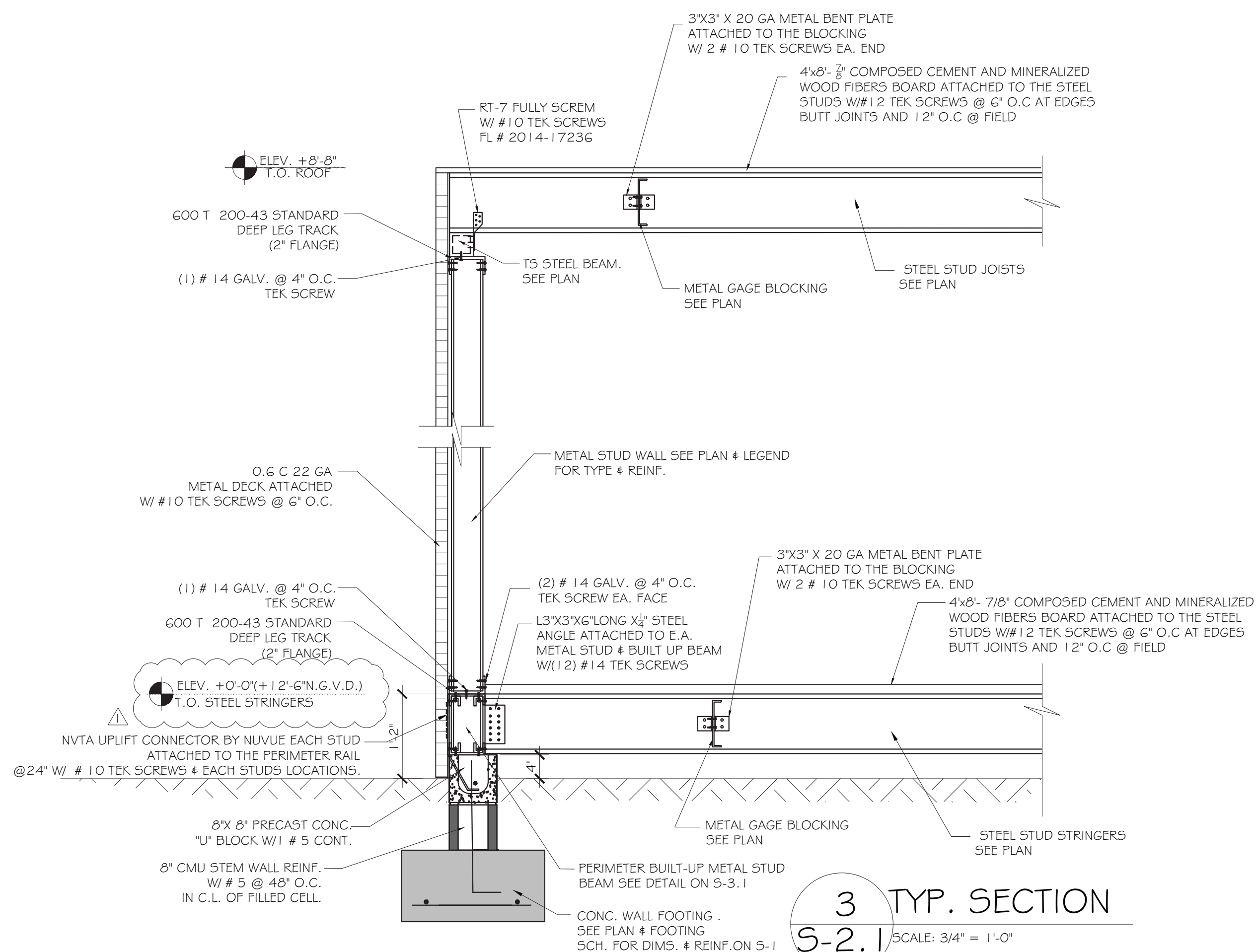
MARK	ELEV. (TO.B)	SIZE		BOTT. CONT.		TOP CONT.		C' BARS		E' BARS		STIRRUPS	REMARKS
		B	D	No.	SIZE	No.	SIZE	No.	SIZE	No.	SIZE		
TB	SEE PLAN	8"	12"	2	5	2	5	-	-	-	-	4 # 3 @ 12" @ CORNERS; BAL 40" O.C	PROVIDE #3@5" O.C AT OPENINGS SEE TYP. TB CORNER DETAIL ON 5-10



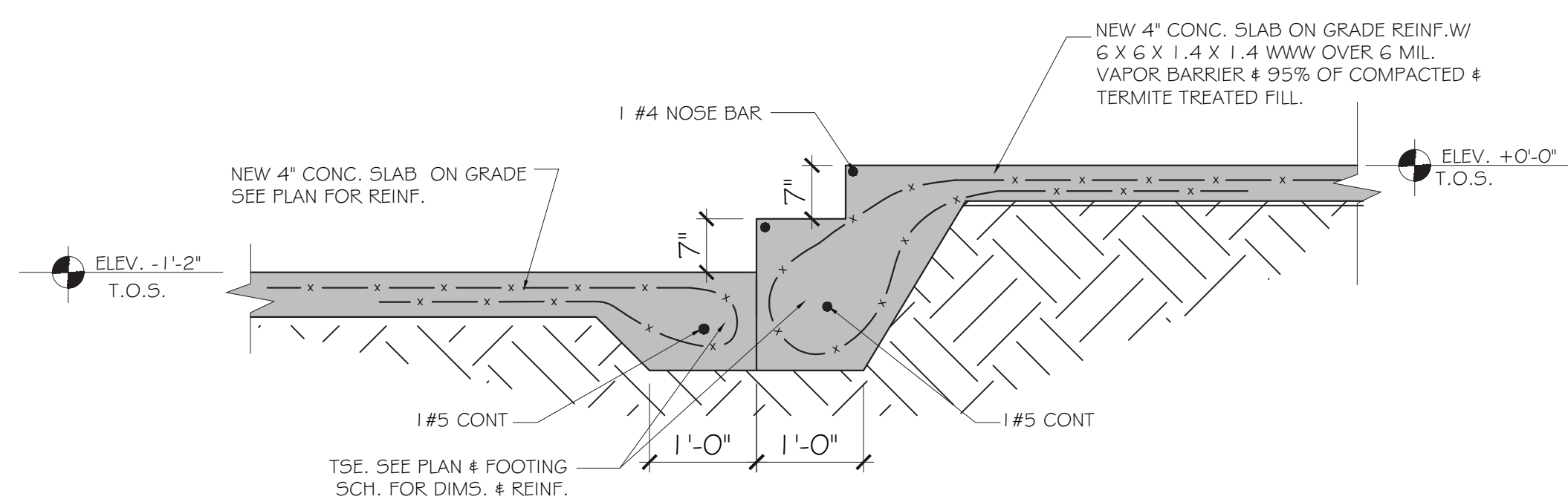
1 TYP. SECTION
S-2.1 SCALE: 3/4" = 1'-0"



2 TYP. SECTION MF-1
S-2.1 SCALE: 3/4" = 1'-0"



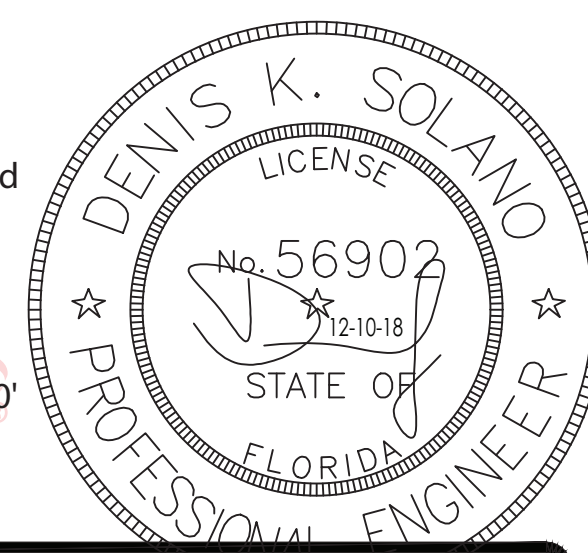
3 TYP. SECTION
S-2.1 SCALE: 3/4" = 1'-0"



5 TYP. SECTION
S-2.1 SCALE: 3/4" = 1'-0"

LISTING	
AGENCY APPROVAL	
CONST. TYPE	V-B
OCCUPANCY	A-S ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-0127
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HIGH VELOCITY HURRICANE ZONE	YES

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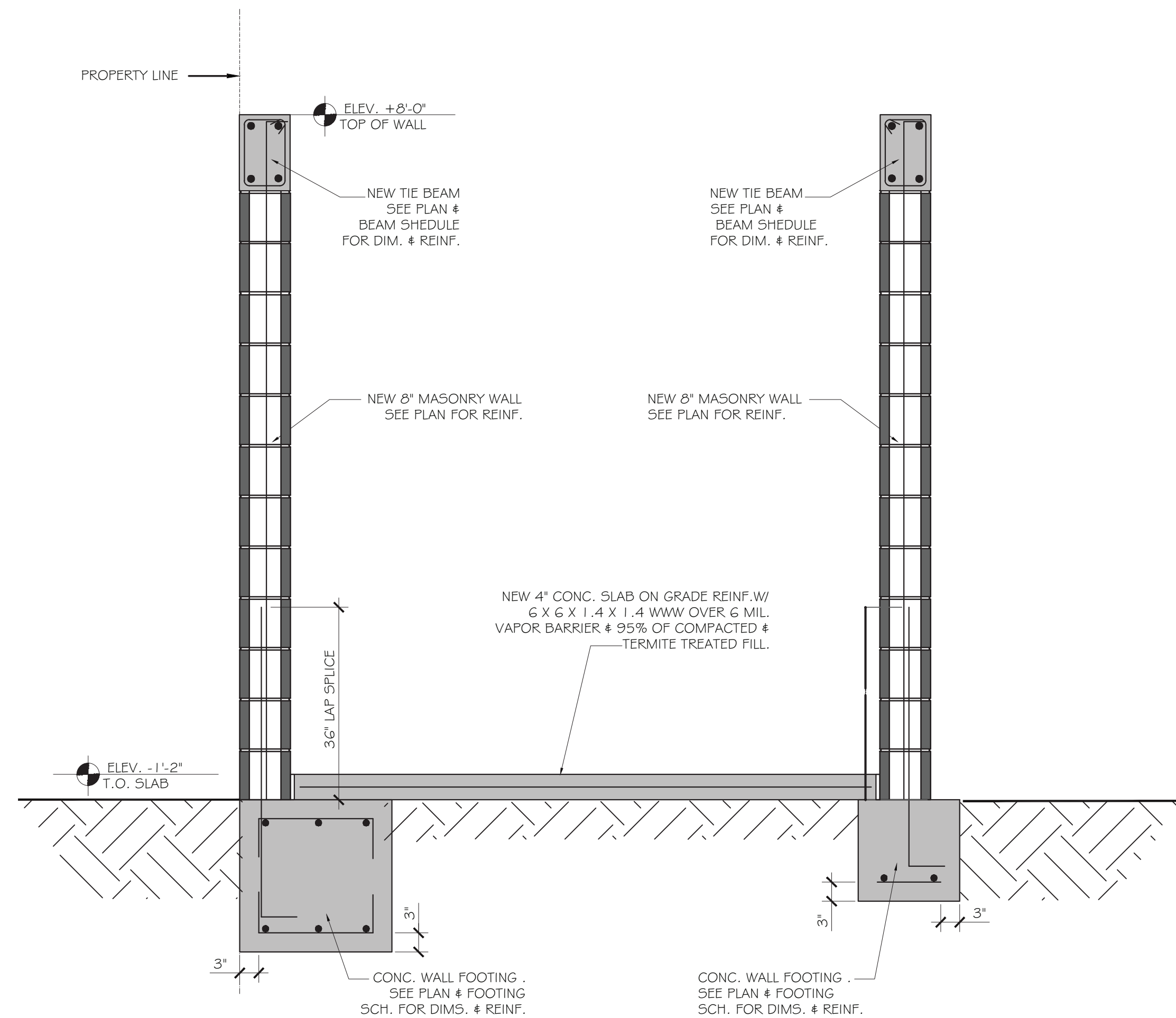
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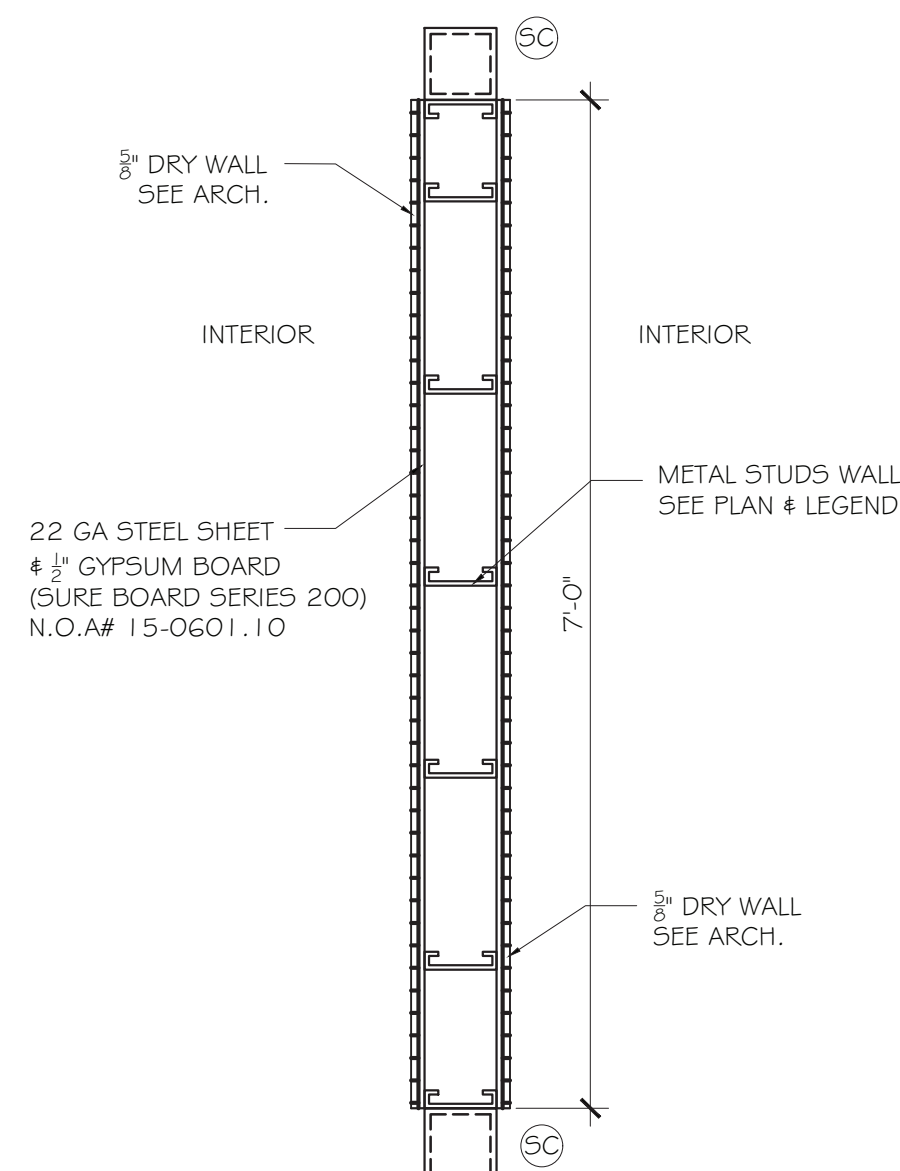
REVISIONS	
1	06/14/18 B.D.C.

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Checked by: D.K.S

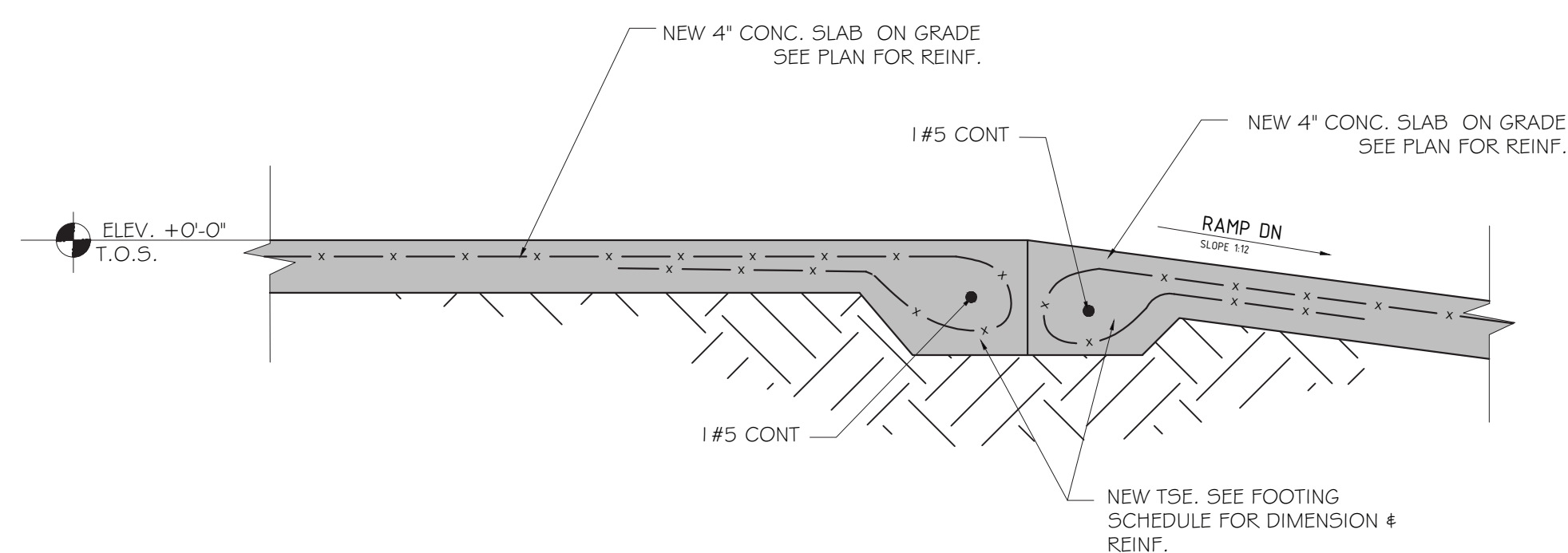
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S-2.1



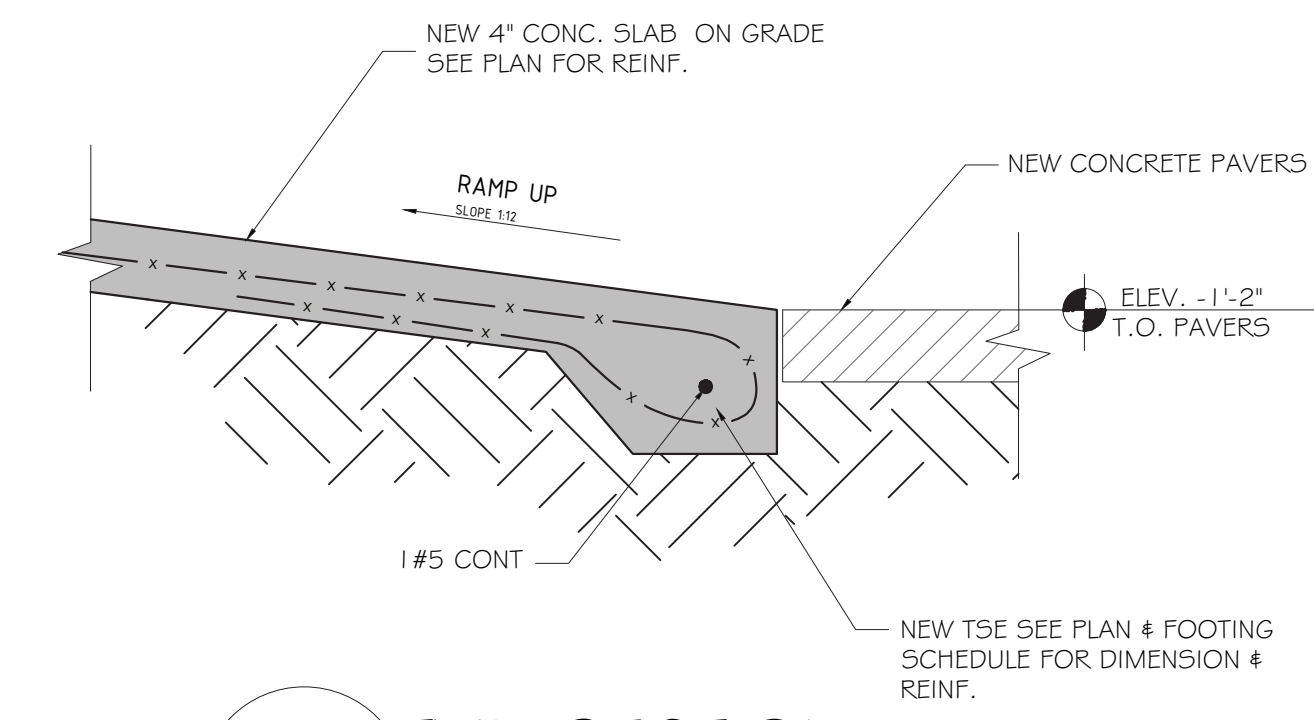
1 TYP. SECTION
S-2.2 SCALE: 3/4" = 1'-0"



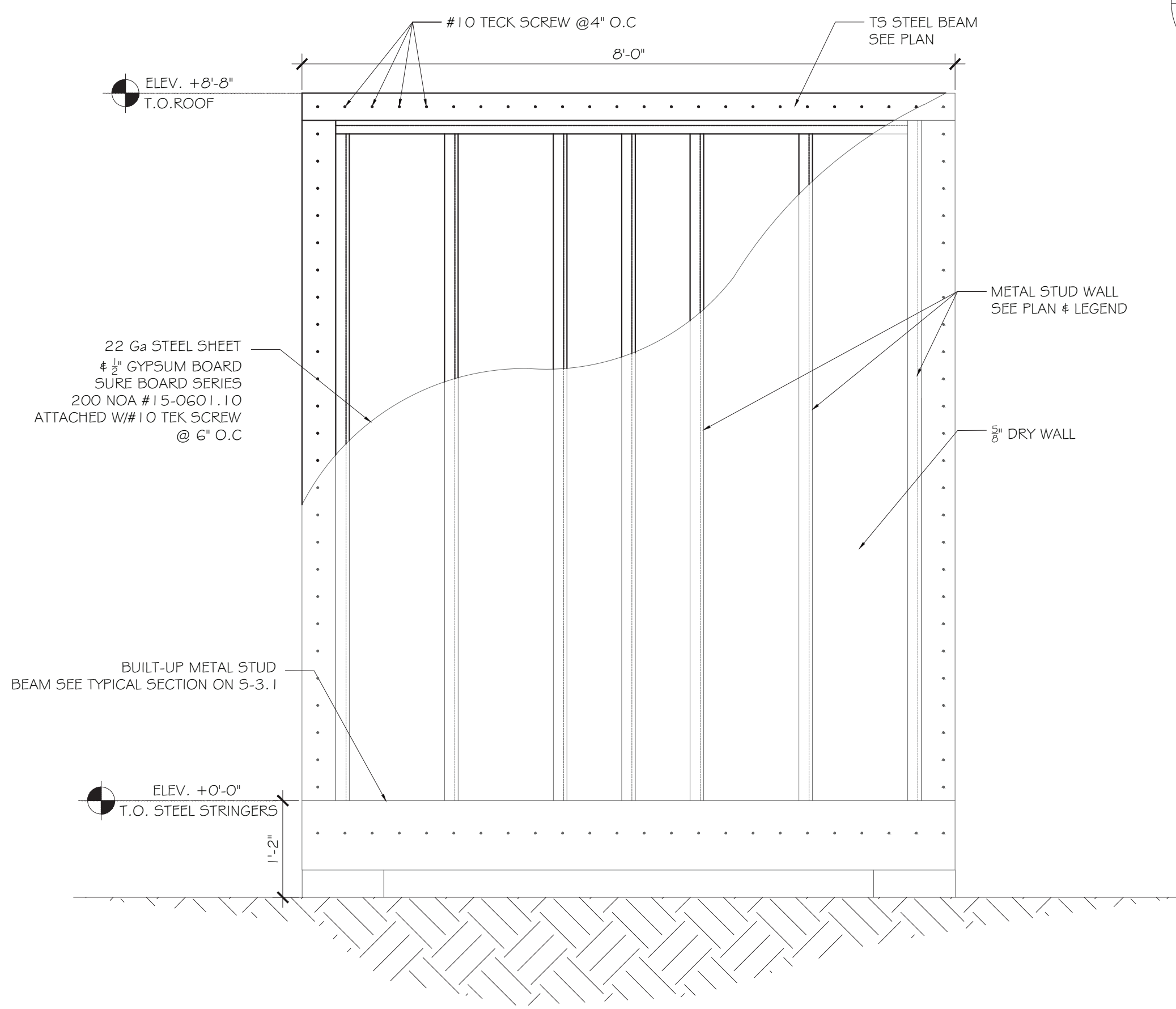
TYPICAL SHEAR WALL(SW-1) PLAN DETAIL
SCALE: 3/4" = 1'-0"



2 TYP. SECTION
S-2.2 SCALE: 3/4" = 1'-0"



3 TYP. SECTION
S-2.2 SCALE: 3/4" = 1'-0"

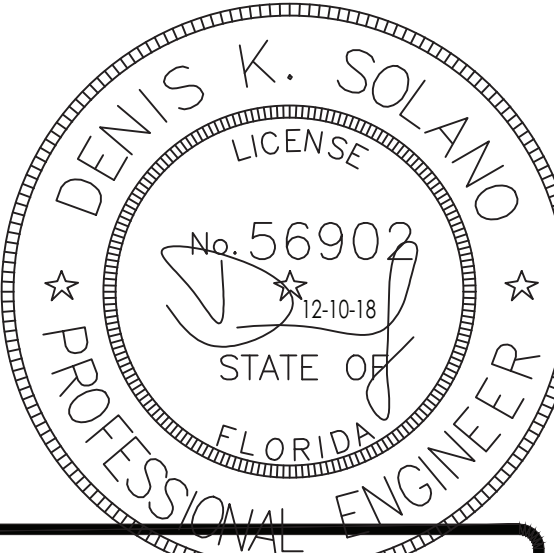


A TYP. SHEAR WALL(SW-1) ELEVATION DETAIL
S-2.2 SCALE: 3/4" = 1'-0"

LISTING	
AGENCY APPROVAL	
THESE PRINTS COVER WITH THE FURNISHED CONTRACT DOCUMENTS AND ARE NOT TO BE REPRODUCED OR COPIED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.	
CONST. TYPE	V-B
OCCUPANCY	A-S ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-012F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HURRICANE ZONE	YES

APPROVAL COVERS FACTORY BUILT MODULAR BUILDING ONLY. SITE BUILT ITEMS INCLUSIVE OF FOUNDATION SYSTEM IS SUBJECT TO LOCAL AUTHORITY APPROVAL

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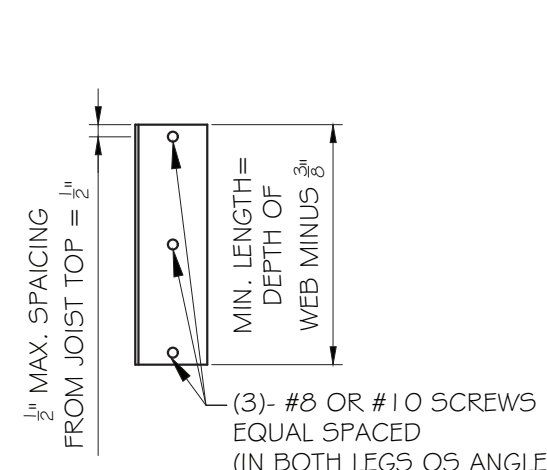
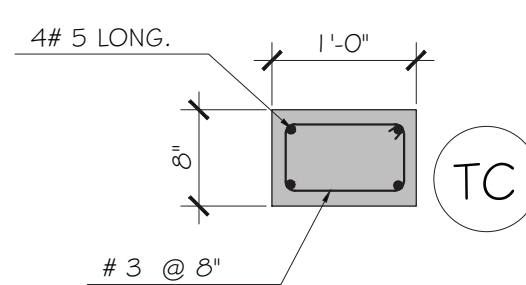
Sheet
S-2.2

STEEL COLUMN SCHEDULE				
MARK	SIZE	BASE PLATE	CAP PLATE	REMARKS
SC	5" x 5" x 3/8"	12" x 12" x 3/4"	6" x 6" x 1/4"	SEE DETAIL ON THIS SHEET

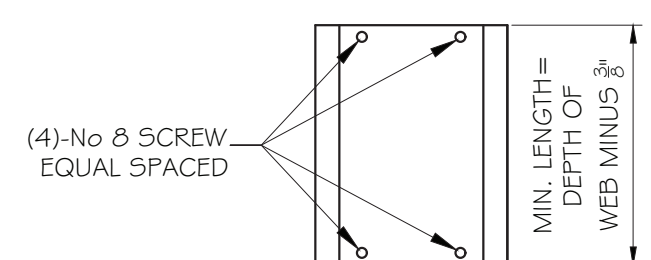
CONCRETE COLUMN SCHEDULE				
MARK	DIMS	LONG REINF.	TRANSV REINF.	REMARKS
TC	8" x 12"	4 # 5	# 3 @ 8" O.C.	CONCRETE COLUMN

COLUMN DIAGRAM

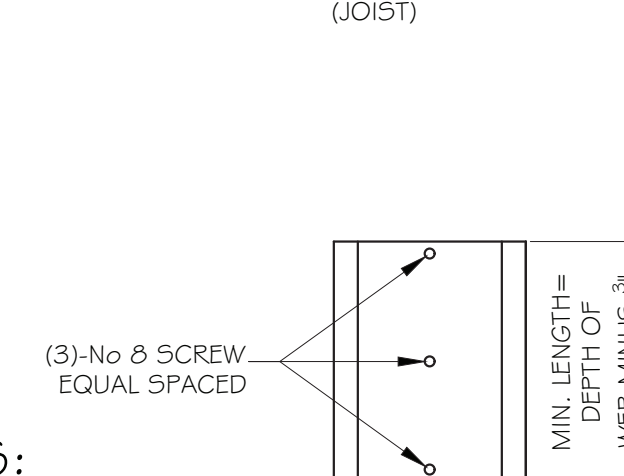
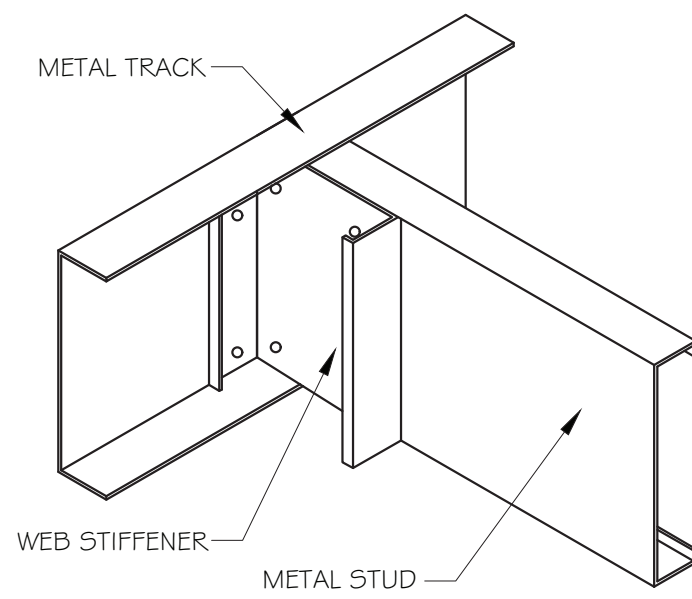
SCALE: 3/4" = 1'-0"



CLIP ANGLE



TRACK SECTION



C-SECTION

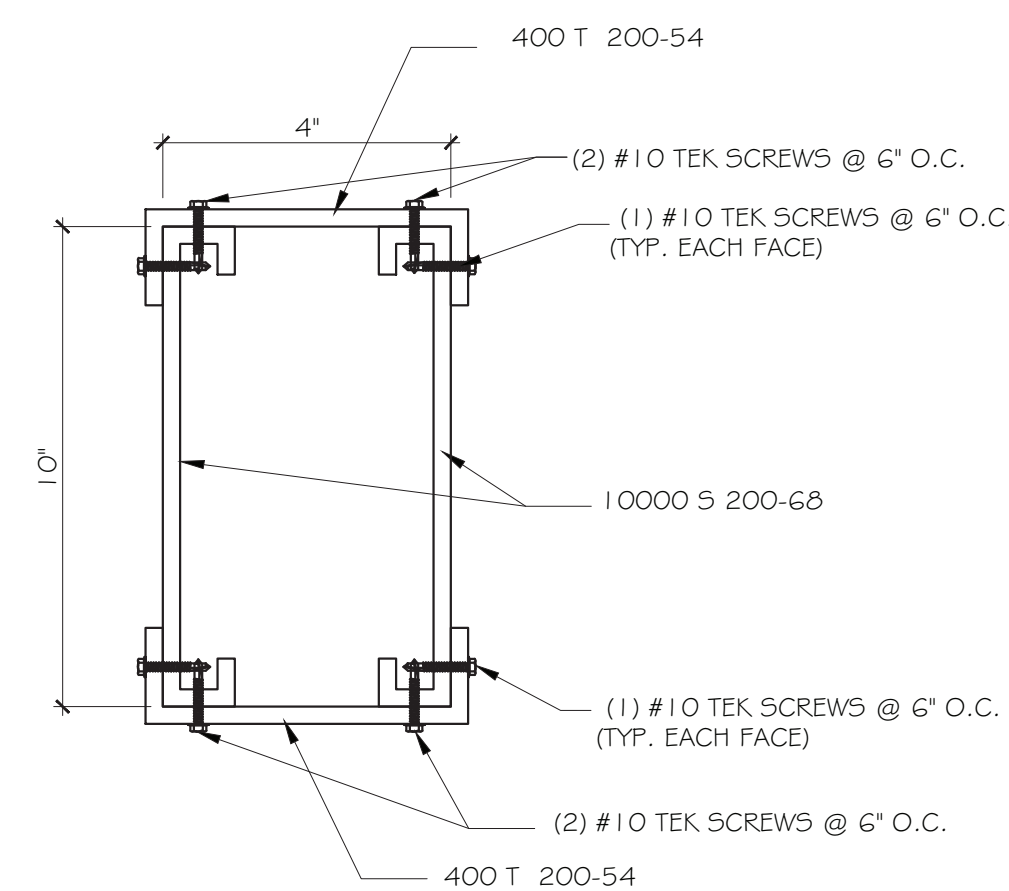
WEB STIFFENER NOTES:

BEARING STIFFENERS SHALL BE FABRICATED FROM AC-CHAPED, TRACK OR CLIP ANGLE MEMBER WITH A MINIMUM SIZE THAT IS IN CONCORDANCE WITH THE ONE OF FOLLOWING:

- C-CHAPED BEARING STIFFENERS:
 - WHERE THE JOIST IS NOT CARRYING A STRUCTURAL WALL ABOVE, THE BEARING STIFFENER SHALL BE A MINIMUM 33 MIL (0.84 mm) THICKNESS.
 - WHERE THE JOIST IS CARRYING A STRUCTURAL WALL ABOVE, THE BEARING STIFFENER SHALL BE AT LEAST THE SAME DESIGNATION THICKNESS AS THE WALL STUD ABOVE.
- TRACK BEARING STIFFENERS:
 - WHERE THE JOIST IS NOT CARRYING A STRUCTURAL WALL ABOVE, THE BEARING STIFFENER SHALL BE A MINIMUM 43 MIL (1.09 mm) THICKNESS.
 - WHERE THE JOIST IS CARRYING A STRUCTURAL WALL ABOVE, THE BEARING STIFFENER SHALL BE AT LEAST ONE DESIGNATION THICKNESS GREATER THAN THE WALL STUD ABOVE.
- CLIP ANGLE BEARING STIFFENERS:
 - WHERE THE CLIP ANGLE BEARING STIFFENER IS FASTENED TO BOTH THE WEB OF THE MEMBER IT IS STIFFENING AND AN ADJACENT RIM TRACK USING THE FASTENER PATTERN SHOWN IN CLIP ANGLE DETAIL, THE BEARING STIFFENER SHALL BE A MINIMUM 2" x 2" (51mm x 51mm) ANGLE SIZED IN ACCORDANCE WITH TABLES B2-1 THROUGH B2-4 AISI STANDARD.

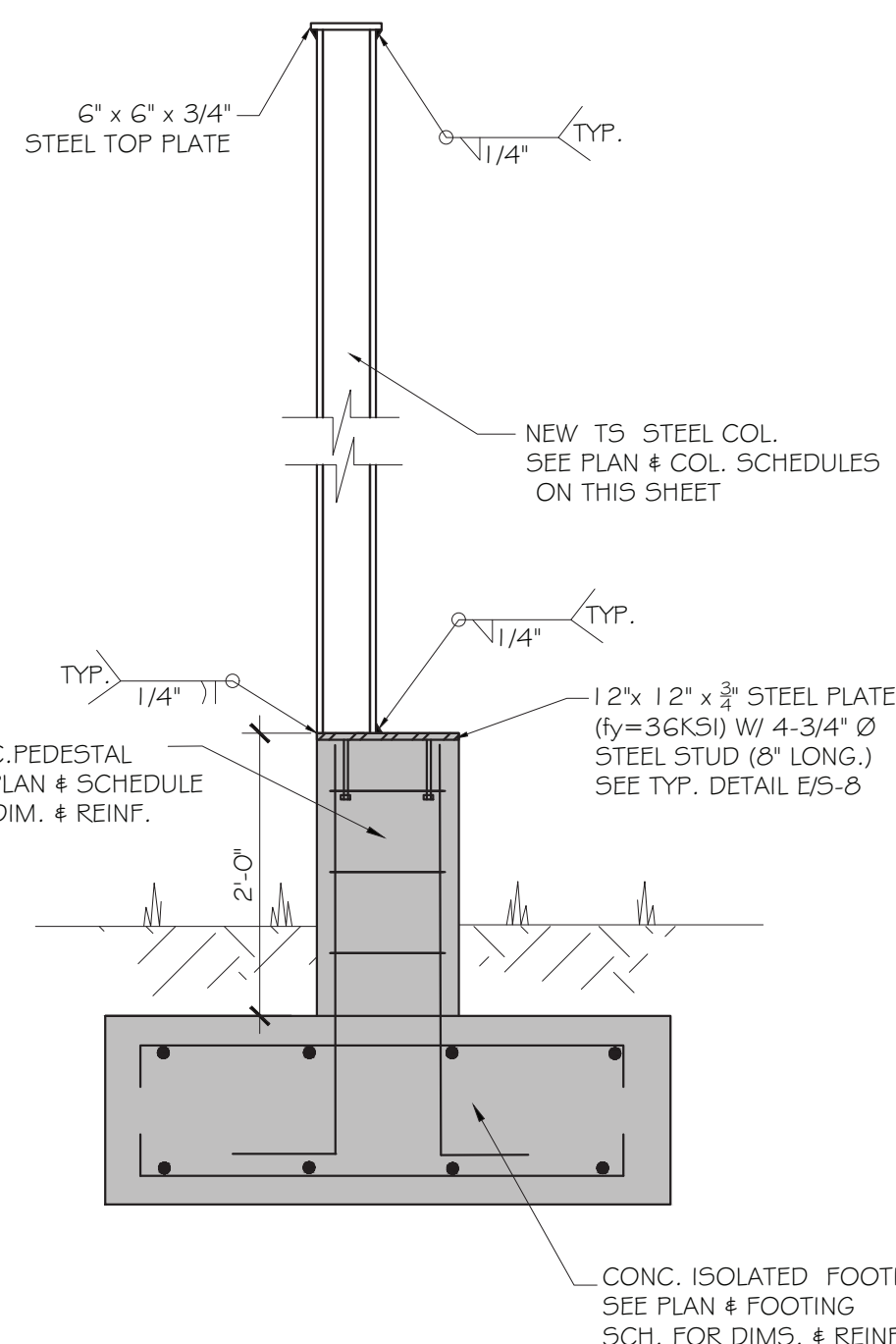


1 TYP. WEB STIFFENER
SCALE: 1/2" = 1'-0"

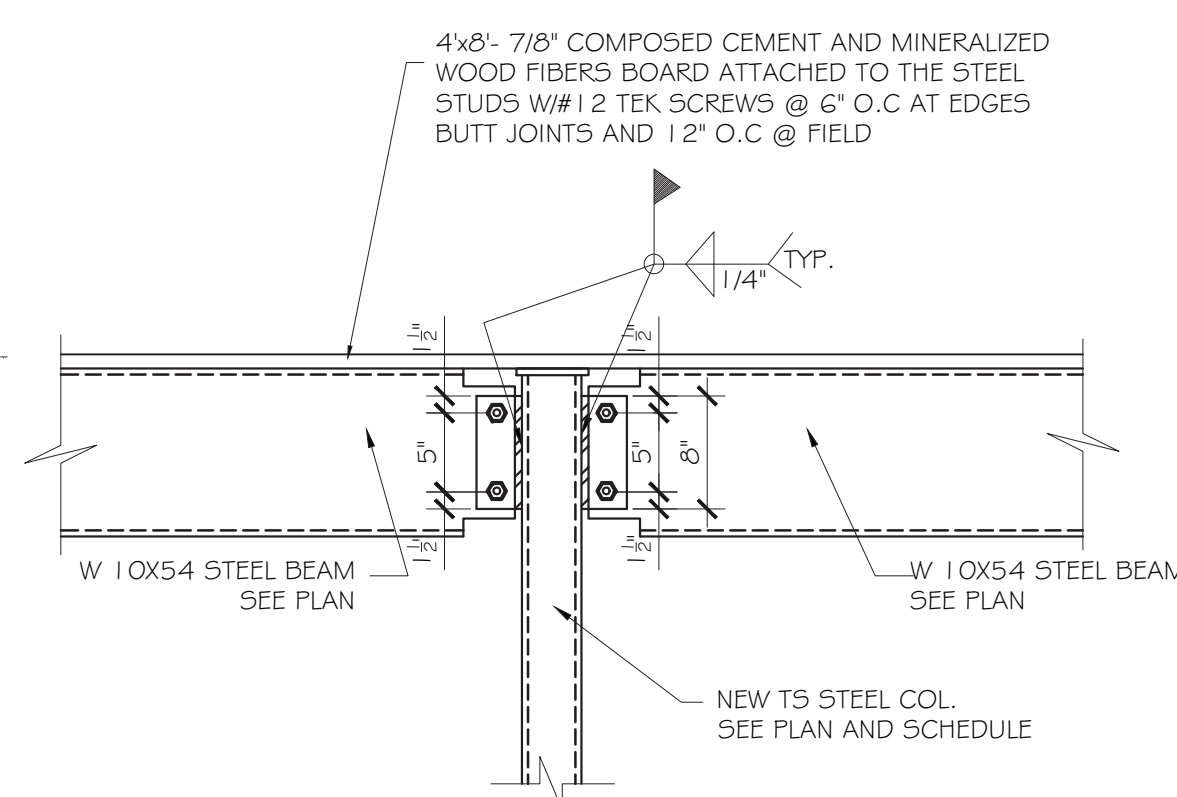


BUILT-UP BEAM (B-1)

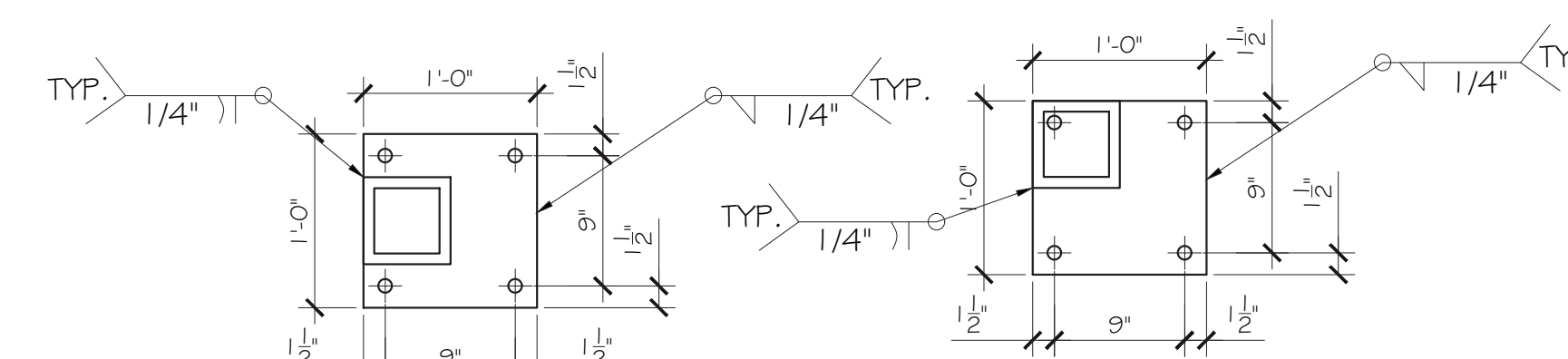
SCALE: 3/4" = 1'-0"
NOTE: WEB STIFFENERS REQUIRED @ E.A. END
SEE DETAIL 1/5-3.1.



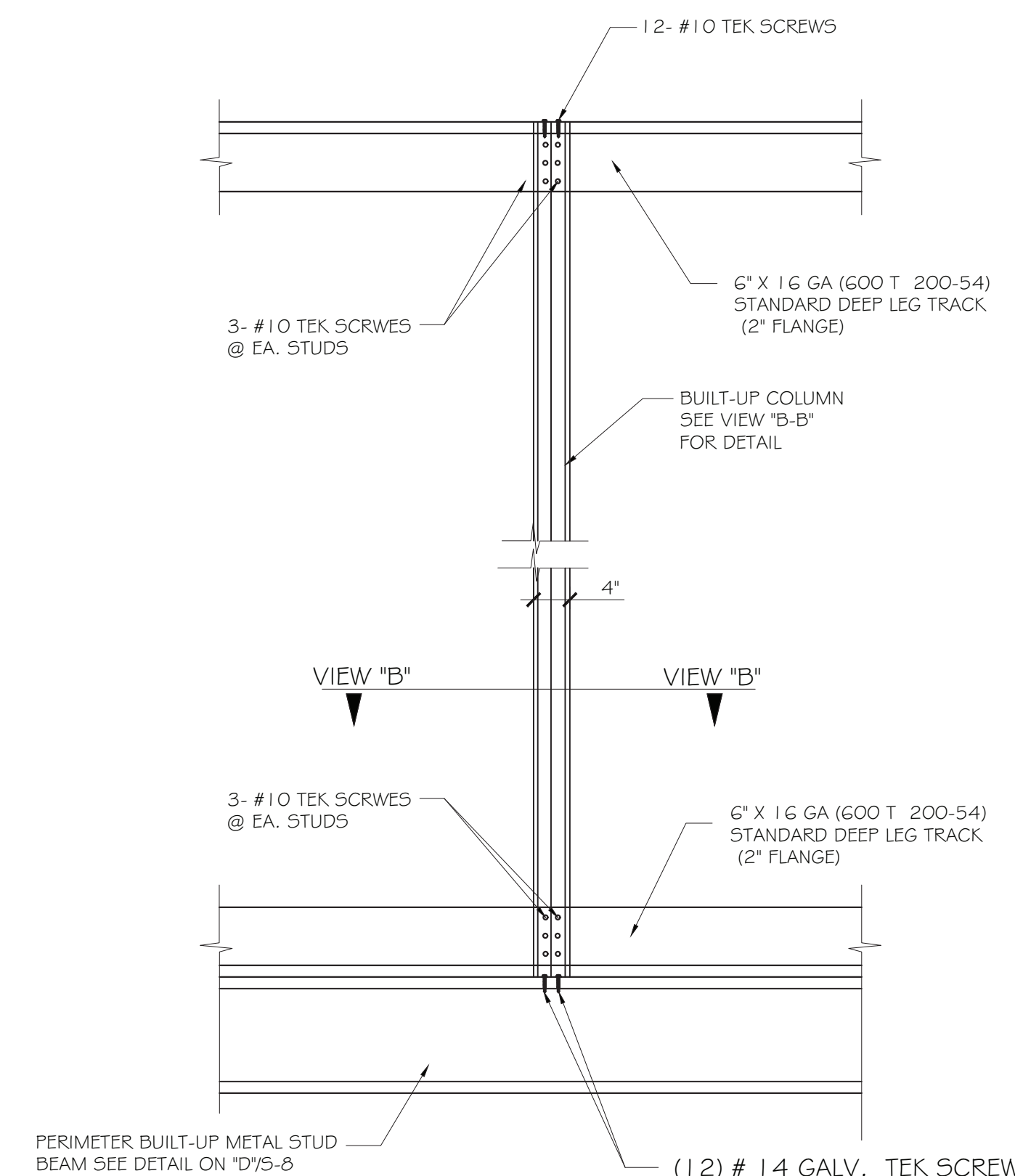
A TYP. DETAIL OF STEEL COLUMN.
5-3.1 NOTE: EXTERIOR STEEL COLUMN AND PLATES MUST BE HOT DIPPED GALVANIZED.
SCALE: 3/4" = 1'-0"



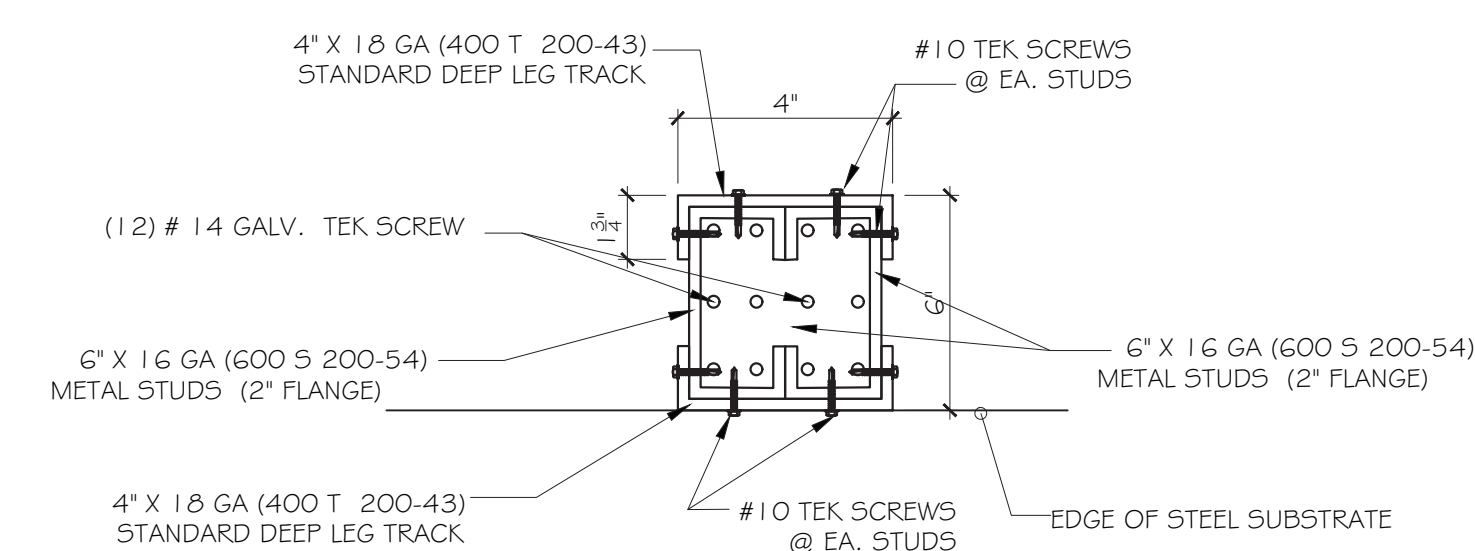
B TYP. BEAM TO COL. CONN. DETAIL
5-3.1 SCALE: 3/4" = 1'-0"



B TYP. BOTT. PLATE DETAIL
5-3.1 SCALE: 1" = 1'-0"



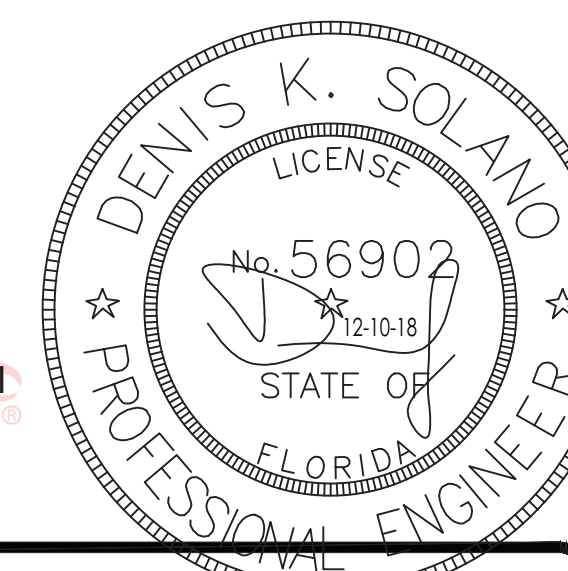
TYP. BUILT-UP COLUMN-BC(2 STUDS)
SCALE: 1" = 1'-0"



VIEW "B-B"
SCALE: 3" = 1'-0"

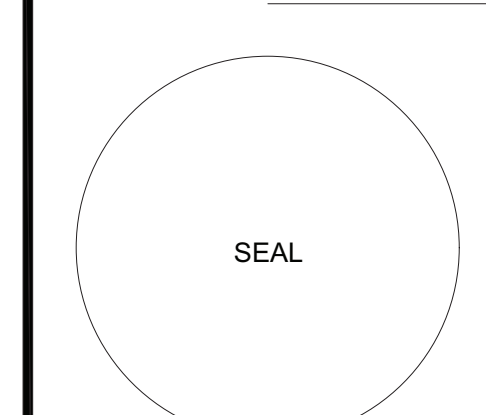
LISTING APPROVAL	
AGENCY APPROVAL	DATE
CONSTRUCTION	12-10-18
CONST. TYPE	V-B
OCCUPANCY	A-5 ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-012F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HIGH VELOCITY HURRICANE ZONE	YES

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NO.	DATE	DESCRIPTION

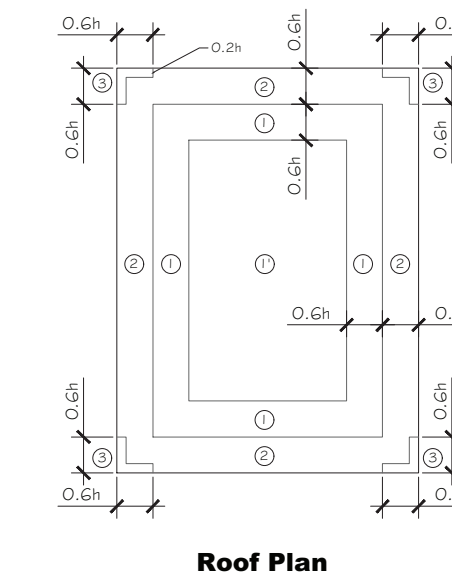
DATE: 12-10-2018
Scale: AS SHOWN
Job No.: NDD-17-2816
Drawn by: A.S.G
Checked by: D.K.S

STRUCTURAL NOTES

1. FOUNDATION:
 - A. FOUNDATION SYSTEM CONSISTS OF SPREAD FOOTINGS DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
 - B. SOIL STATEMENT: SOIL AT THIS SITE IS SAND & ROCK ADEQUATE TO SUPPORT THE DESIGN LOAD OF 2000 PSF. AFTER EXCAVATION SIGNED AND SEALED LETTER WILL BE SUBMITTED BY THE ARCHITECT OR THE ENGINEER ATTESTING THAT THE SITE HAS BEEN OBSERVED AND THE FOUNDATION CONDITIONS ARE SIMILAR TO THOSE WHICH THE DESIGN IS BASED ON.
 - C. ALL EDGE DISTANCES SHALL BE MAINTAINED IN ACCORDANCE WITH THE STRUCTURAL PLANS REGARDLESS OF THE MINIMUM TOLERANCES.
2. GENERAL:
 - A. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE FLORIDA BUILDING CODE, 2020 EDITION, ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS, THE ACI 318-19 BUILDING CODE, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL ORDINANCES.
 - B. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS OF EXISTING STRUCTURES AFFECTING NEW CONSTRUCTION BEFORE COMMENCING ANY WORK. ANY VARIATIONS IN ACTUAL FIELD CONDITIONS/DIMENSIONS FROM THOSE SHOWN IN THE CONTRACT DRAWINGS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR DETERMINING THE NEED OF REDESIGN PRIOR TO CONTRACTOR'S SUBMITTAL OF SHOP WORKING DRAWINGS FOR REVIEW.
 - C. THESE DRAWINGS SHALL BE WORKED TOGETHER WITH ARCHITECTURAL, AIR CONDITIONING, MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, ETC. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
 - D. WHEN PERFORMING WORK BELOW GRADE, CARE SHALL BE TAKEN TO AVOID DAMAGING ANY EXISTING UTILITIES. ALL UNKNOWN UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. ANY DAMAGE TO THE EXISTING UTILITIES SHALL BE REPORTED TO ALL AFFECTED PARTIES, INCLUDING THE ARCHITECT/ENGINEER.
 - E. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS CONSTRUCTION DOCUMENTS WITH THE REVISED DRAWINGS AND SPECIFICATIONS, FIELD ORDERS, CHANGE ORDERS AND CLARIFICATION SKETCHES ISSUED DURING THE COURSE OF CONSTRUCTION.
 - F. TYPICAL DETAILS AND NOTES ON THESE DRAWINGS SHALL APPLY UNLESS SPECIFICALLY NOTED OTHERWISE. CONSTRUCTION DETAILS AND SECTIONS NOT COMPLETELY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS AND SECTIONS SHOWN OR NOTED FOR SIMILAR CONDITIONS.
 - G. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.
 - H. BACKFILL AROUND THE EXTERIOR PERIMETER OF WALLS SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. DO NOT PROCEED WITH BACKFILL UNTIL (7) DAYS AS A MINIMUM AFTER THE COMPLETION OF INTERIOR FLOOR SYSTEM UNLESS WALLS ARE ADEQUATELY BRACED. BACKFILL SHALL NOT BE PLACED UNTIL AFTER COMPLETION AND INSPECTION OF WATERPROOFING WHERE WATERPROOFING OCCURS.
 - I. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER FROM EXCAVATIONS AND DEWATERING OPERATIONS IN SUCH A WAY AS TO NOT CAUSE INCONVENIENCE TO THE WORK AND DAMAGE TO THE STRUCTURAL ELEMENTS.
 - J. REINFORCING STEEL SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
 - K. THE CONTRACTOR SHALL SUPPLY THE ENGINEER THREE COPIES OF SHOP DRAWINGS A MINIMUM OF ONE WEEK PRIOR TO PLACEMENT. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THE REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT NOR DOES IT INFER THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.
 - L. SUBMITTALS TO STRUCTURAL ENGINEER:
 - I. CONCRETE TEST REPORT FOR CAST-IN-PLACE CONCRETE AS PER 318-19.
 - II. REINFORCING STEEL SHOP DRAWINGS.
 - III. RAILING SHOP DRAWINGS AND DESIGN DATA.
 - IV. WOOD TRUSSES LAYOUT, SHOP DRAWINGS AND ALL DESIGN DATA.
 - V. STRUCTURAL STEEL SHOP DRAWINGS, ERECTION DRAWINGS.
3. CONCRETE:
 - A. ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-2020 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
 - B. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 5000 PSI FOR GRADE BEAMS, COLUMNS, SLABS AND ROOF BEAMS.
 - C. FORMWORK SHALL COMPLY WITH ACI 347-14, "RECOMMENDED PRACTICE FOR CONCRETE WORK."
 - D. NO WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.
 - E. THE OWNER SHALL CONTRACT AN INDEPENDENT TESTING LABORATORY TO PERFORM CONCRETE CYLINDER TESTS AS FOLLOWS: FOUR CYLINDER TESTS FOR ANY 50 CUBIC YARDS OF CONCRETE POURED, OR THREE CYLINDER TESTS PER ANY DAYS POUR LESS THAN 50 CUBIC YARDS. ONE CYLINDER SHALL BE TESTED AT 7 DAYS AND TWO AT 28 DAYS.
 - F. TRANSPORTING, PLACING, CURING AND DEPOSITING OF CONCRETE SHALL COMPLY WITH ACI 301-20.
 - G. CONCRETE MIX FOR BALCONIES SHALL HAVE ALL CORROSION INHIBITING ADDITIVES & A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 3000 PSI

4. CONCRETE MASONRY WORKS:
 - A. ALL CONCRETE MASONRY WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 530-13.
 - B. ALL CONCRETE MASONRY WALLS ARE DESIGNED AS LOAD BEARING WALLS, UNLESS OTHERWISE NOTED, AND SHALL BE IN PLACE BEFORE THE SLABS AND BEAMS SUPPORTED BY THEM ARE POURED AS WELL AS THE CONCRETE TIE COLUMNS FRAMING THEM.
 - C. ALL CONCRETE MASONRY UNITS (C.M.U.) SHALL CONFORM TO ASTM C 90 "STANDARD SPECIFICATIONS FOR HOLLOW LOA BEARING CONCRETE MASONRY UNITS".
 - D. MORTAR SHALL CONFORM TO ASTM C 270, TYPE "M", WITH A MINIMUM AVERAGE STRENGTH OF 2500 PSI.
 - E. CONCRETE MASONRY STRENGTH, fm, SHALL BE A MINIMUM OF 1500 PSI (fc=1900 PSI).
 - F. VERTICAL REINFORCING IN C.M.U. CELLS SHALL BE SPICED WITH 48 BAR DIAMETER LAP SPICE, PROVIDE CLEAN OUT HOLES AT BASE OF FILLED CELLS FOR LAP INSPECTION AND VERIFYING THAT THE CELLS HAVE BEEN FILLED SOLID WITH GROUT.
 - G. FILLED CELLS SHALL BE FILLED WITH 3000 PSI GROUT AS PER ACI 530-13 AND ACI 530.1-13. FILLING OF CELLS SHALL BE DONE IN FOUR FOOT LIFTS WITH A MAXIMUM POUR OF 12 FEET. USE MECHANICAL VIBRATION TO ACHIEVE GROUT-FILLED SOLID CELLS. GROUT SHALL CONFORM TO ASTM C 476. SLUMP SHALL BE BETWEEN 8" AND 11".
 - H. ALL C.M.U. WALLS SHALL BE HORIZONTALLY REINFORCED WITH STANDARD NO. 9 LADDER-TYPE GALVANIZED STEEL REINFORCING EVERY SECOND COURSE. EXTEND REINFORCING A MINIMUM OF 4 INCHES INTO TIE COLUMNS.
5. REINFORCING STEEL:
 - A. REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH FBC 2020 EDITION.
 - B. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A 615-2010 (S1) GRADE 60.
 - C. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185-94.
 - D. REINFORCING SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES DURING PLACING OF CONCRETE.
 - E. ALL TOP REINFORCING SHALL TERMINATE WITH STANDARD HOOKS AT DISCONTINUOUS EDGES OR ENDS.
 - F. ALL BOTTOM BARS SHALL BEAR 6" MINIMUM OVER SUPPORTS, U.O.N.
 - G. ALL REINFORCING BARS MARKED CONTINUOUS SHALL BE LAPPED 30 DIA. AT SPLICES AND CORNERS UNLESS OTHERWISE NOTED. LAP CONTINUOUS TOP BARS AT CENTER SUPPORTS AS REQUIRED. TERMINATE CONTINUOUS BARS AT NON-CONTINUOUS ENDS WITH STANDARD HOOKS, U.O.N.
 - H. MINIMUM CONCRETE COVER FOR REINFORCEMENT:
 - I. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:.....3"
 - II. CONCRETE EXPOSED TO EARTH OR WEATHER #6 BARS AND LARGER.....2"
 - III. #5 BARS AND SMALLER.....1 1/2"
 - IV. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH: SLABS AND WALLS.....3/4"
 - BEAMS AND COLUMNS.....1 1/2"
 - V. EXTERIOR CONCRETE BALCONY SLABS.....2"

7. STRUCTURAL STEEL:
 - A. STRUCTURAL STEEL SHALL COMPLY WITH AISC 360 "SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION FOR STRUCTURAL STEEL BUILDINGS, LAST EDITION 2020 (7TH EDITION).
 - B. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A 36, Fy=36 KSI.
 - C. STRUCTURAL STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE B, Fy=50 KSI.
 - D. STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53, TYPE S, GRADE B, Fy=35 KSI.
 - E. ANCHOR BOLTS SHALL CONFORM TO EITHER ASTM A 307 OR ASTM A 36.
 - F. FRAMING BOLTS SHALL CONFORM TO ASTM 325, WITH HARDENED WASHERS AND HEX NUTS.
 8. WELDING:
 - A. WELDING SHALL BE DONE WITH E-70 ELECTRODES.
 - B. WELDERS SHALL BE AWS-CERTIFIED.
 9. WOOD FRAMING:
 - A. WOOD FRAMING MEMBERS OTHER THAN TRUSSES SHALL BE #2 SOUTHERN PINE WITH A FIBER BENDING STRESS AS PER NDS.
 - B. SIZES SHOWN ARE NOMINAL.
 - C. MEMBERS SHALL BE FREE OF CRACKS AND KNOTS.
 - D. MOISTURE CONTENT SHALL BE 19% OR LESS.
 - E. PRESSURE-TREATED WOOD SHALL BE USED ONLY WHERE SPECIALLY NOTED IN THE DRAWINGS. NO FRAMING MEMBER SHALL BE OF PRESSURE-TREATED WOOD, UNLESS OTHERWISE NOTED.
 10. BALCONY AND TERRACE RAILINGS AND STAIR RAILINGS SHALL BE DESIGNED BY MANUFACTURER'S REGISTERED ENGINEER IN THE STATE OF FLORIDA TO RESIST A LOAD OF 50LBS/FT. APPLIED IN ANY DIRECTION AT TOP OF SUCH BARRIER. POSTS SHALL BE DESIGNED TO RESIST THE REACTION FROM THE RAILINGS OR A MINIMUM LOAD OF 200 LBS. HANDRAILS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST A LOAD OF NOT LESS THAN 200 LBS. APPLIED IN ANY DIRECTION AND AT ANY POINT ON THE RAIL.
 11. ROOF SHEATHING:
 - A. PLYWOOD ROOF SHEATHING SHALL HAVE A NET THICKNESS OF NOT LESS THAN 5/8" WHEN THE SPAN IS NOT MORE THAN 24" AND SHALL HAVE STAGGERED JOINTS CONTINUOUS OVER TWO OR MORE SPANS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS.
 - B. PLYWOOD ROOF SHEATHING SHALL BE NAILED WITH 10d RING SHANK NAILS @ 2 1/2" O.C. WITH SPACING NOT EXCEED 2 1/2" O.C. AT PANEL EDGES AND AT INTERMEDIATE SUPPORTS/BLOCKING AND 4". ELSE WHERE IF APPLICABLE. PROVIDE 2X4 IN. BLOCKING AT RIDGE AND HIP LINES W/ 2 - 16d TOE NAILS FROM EACH SIDE, NAIL PLYWOOD TO BLOCKING AT 4 IN. OC.
- NOTES:
- I. All exterior ceilings must be constructed with 5/8" plywood. See sheathing notes for nailing.
 - II. DESIGN LOAD:
 - ROOF TRUSSES:
 - DL: 25 PSF (1.5PSF AT TOP CHORD & 1.0PSF AT BOTTOM CHORD.)
 - LL: 35 PSF.
 - FLOOR LOAD:
 - SDL: 25 PSF.
 - LL: 100 PSF.
 - WIND LOAD:
 - ASCE 7-16
 - WIND VELOCITY: 175 MPH
 - EXPOSURE "D"
 - CATEGORY "II"



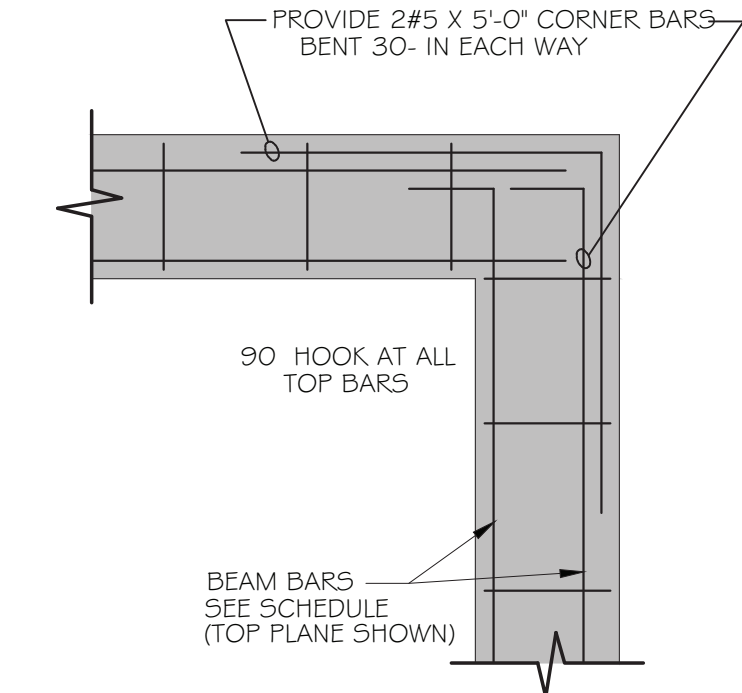
ZONE	WIND PRESSURE	WIND SUCTION
ZONE 1	+16.29 PSF	-63.81 PSF
ZONE 1'	+16.29 PSF	-36.66 PSF
ZONE 2	+16.29 PSF	-84.18 PSF
ZONE 3	+16.29 PSF	-114.72 PSF

END ZONE LENGTH h = 3.0'

COMPONENT AREA	ZONE 4		ZONE 5	
	PRESSURE	SUCTION	PRESSURE	SUCTION
ALL OPENINGS	36.66	-39.71	36.66	-48.88

NOTE:
I. WIND PRESSURES FOR A PANEL AREA IN BETWEEN TWO LIMITING ZONE AREAS SHALL BE ROUNDED OFF TO THE GREATEST VALUE OF THE WIND PRESSURE SHOWN.

IN MY PROFESSIONAL JUDGEMENT AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, THESE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE; 7TH EDITION (2020).



TYPICAL CORNER TIE. BEAM DETAIL
SCALE: 1/2" = 1'-0"

LISTING AGENCY APPROVAL
THIS PROJECT COMES WITH THE FLORIDA PROFESSIONAL SEAL AND ACTS AS EVIDENCE OF THE CONTRACTOR'S USE OF AGENCY IN THE FOLLOWING DETAIL:

CONST. TYPE	V-2
OCCUPANCY	A-5 ACCESSORY
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	175
WIND VELOCITY (ASD)	136
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2557-0112F
ALLOW. FLOOR LOAD	100
APPROVAL DATE	11-3-2022
MANUFACTURER	STEEL HOMES
HIGH VELOCITY HURRICANE ZONE	YES

IWE
10-201

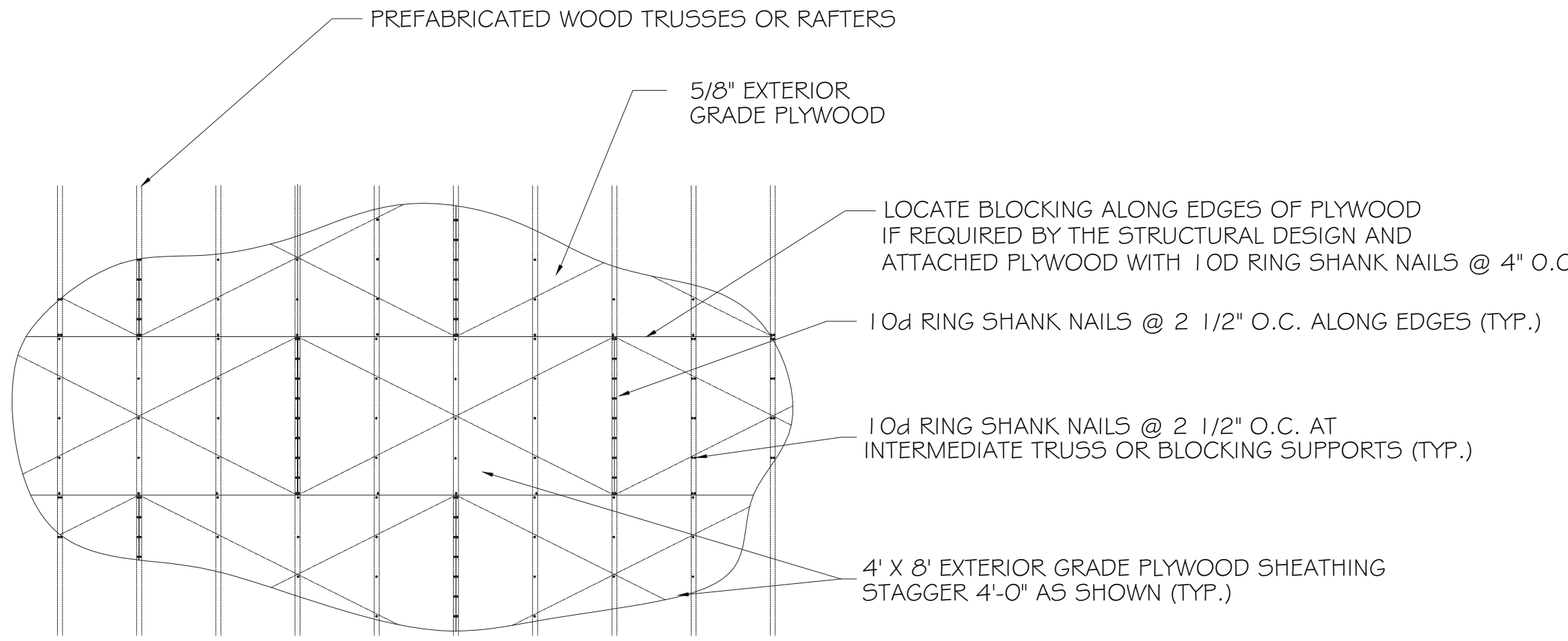
NANDEZ Design+Development
2223 SW 13th AVE
MIAMI, FL 33145
tel:786.703.7704
info@nandezdd.com
AA 26002732
IB 26001520

ARCHITECT OF RECORD:
RALPH PUIG JR.
FL. ARCHITECT REG. #
AR 0012528

REVISIONS

NO.	DESCRIPTION

DATE: 12-10-2018
Scale: AS SHOWN
Job No.:NDD-17-2816
Drawn by:A.S.G
Checked by:D.K.S



TYP. PLYWOOD LAYOUT & NAILING
SCALE: N.T.S

Digitally signed by Denis K Solano
Date: 2022.10.18 10:31:04 -04'00'

Denise K. Solano
P.E. 56902 S.I. 2046 C.O.A. 00009095

Solver Structural Partnership, Inc.
950 N.W. 22 ND AVE. Phone:(305) 643-8699
Miami, Florida 33125 Fax: (305) 643-8692
E-Mail: info@solverstructural.com
DESIGN - INSPECTION - INVESTIGATION - REPORTS
NDD-17-2816

Professional Engineer Seal: DENIS K. SOLANO LICENSE No. 56902 STATE OF FLORIDA PROFESSIONAL ENGINEER

Florida Building Code, Seventh Edition (2020) - Energy Conservation

EnergyGauge Summit® Fla/Com-2020, Effective Date: Dec 31, 2020

C402.1.3: FBC Total Building Performance Compliance Option

Check List

Applications for compliance with the Florida Building Code, Energy Conservation shall include:

- This Checklist
- The full compliance report generated by the software that contains the project summary, compliance summary, certifications and detailed component compliance reports.
- The compliance report must include the full input report generated by the software as contiguous part of the compliance report.
- Boxes appropriately checked in the Mandatory Section of the compliance report.

WARNING: INPUT REPORT NOT GENERATED.

To include input report in final submission, go to the Project Form, Settings Tab and check the box - "Append Input Report to Compliance Output Report"

Then rerun your calculation

PROJECT SUMMARY

Short Desc: Bathroom

Description: Bathroom

Owner:

Address1: 8 ST 20th Ave

City: Miami

Address2:

State: FL

Zip: 33135

Type: Retail

Class: Renovation to existing buildi

Jurisdiction: MIAMI, MIAMI-DADE COUNTY, FL (232400)

Conditioned Area: 312 SF

Conditioned & UnConditioned Area: 312 SF

No of Stories: 1

Area entered from Plans 2622 SF

Permit No: 0

Max Tonnage 2.2

If different, write in: _____

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Cost (in \$)	152.0	222.0	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			No Entry
HVAC SYSTEM			PASSES
PLANT			No Entry
WATER HEATING SYSTEMS			PASSES
PIPING SYSTEMS			No Entry
Met all required compliance from Check List?			Yes/No/NA
 IMPORTANT MESSAGE Info 5009 -- -- -- An input report of this design building must be submitted along with this Compliance Report			

CERTIFICATIONS


I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code

Prepared By: RALPH PUIG

Building Official: _____

Date: 11/02/2022

Date: _____

<small>LISTING AGENCY APPROVAL</small>	
<small>THESE PLANS COMPLY WITH THE FLORIDA MANUFACTURED BUILDING ACT OF 1974 CONTRACTOR CODE AND REFER TO THE FOLLOWING CRITERIA</small>	
<small>CONST. TYPE</small>	<small>V-3</small>
<small>OCCUPANCY</small>	<small>A-S ACCESSORY</small>
<small>ALLOWABLE NO. OF FLOORS</small>	<small>1</small>
<small>RISK CATEGORY</small>	<small>II</small>
<small>WIND VELOCITY (ULT.)</small>	<small>175</small>
<small>WIND VELOCITY (ASD)</small>	<small>136</small>
<small>FIRE RATING OF EXT. WALLS</small>	<small>0</small>
<small>PLAN NO.</small>	<small>2557-0112F</small>
<small>ALLOW. FLOOR LOAD</small>	<small>100</small>
<small>APPROVAL DATE</small>	<small>11-3-2022</small>
<small>MANUFACTURER</small>	<small>STEEL HOMES</small>
<small>HIGH VELOCITY HURRICANE ZONE</small>	<small>YES</small>
 IWE <small>MB-201</small>	

I certify that this building is in compliance with the Florida Energy Efficiency Code

Owner Agent: _____

Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the Florida Energy Efficiency Code

Architect:  Digitally signed by Ralph Puig
DN: c=US, st=Florida, In=Coral Gables, o=Nandez D&D LLC, cn=Ralph Puig
Date: 2022.11.03 09:30:06 -04'00'

Reg No: _____

Electrical Designer: _____

Reg No: _____

Lighting Designer: _____

Reg No: _____

Mechanical Designer: _____

Reg No: _____

Plumbing Designer: _____

Reg No: _____

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: Bathroom
 Title: Bathroom
 Type: Retail
 (WEA File: FL_MIAMI_INTL_AP.tm3)

Building End Uses

	1) Proposed	2) Baseline
Total	9.60	16.40
	\$152	\$261
ELECTRICITY(MBtu/kWh/\$)	9.60	16.40
	2814	4820
	\$152	\$261
AREA LIGHTS	3.00	2.80
	882	812
	\$48	\$44
MISC EQUIPMT	0.60	0.60
	183	183
	\$10	\$10
SPACE COOL	4.90	9.20
	1431	2700
	\$77	\$146
SPACE HEAT	0.10	0.10
	20	28
	\$1	\$2
VENT FANS	1.00	3.70
	298	1097
	\$16	\$59

Credits Applied: None

PASSES

Passing Criteria = 222

Design (including any credits) = 152

Passing requires Proposed Building cost to be at most 85% of Baseline cost. This Proposed Building is at 58.1%

External Lighting Compliance						
Description	Category	Tradable?	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)
None						

Project: Bathroom
Title: Bathroom
Type: Retail
(WEA File: FL_MIAMI_INTL_AP.tm3)

Lighting Controls Compliance						
Acronym	Ashrae ID	Description	Area (sq.ft)	Design CP	Min CP	Compliance
Bathroom	6	Toilet and Washroom	312	2	1	PASSES
PASSES						

Project: Bathroom
Title: Bathroom
Type: Retail
(WEA File: FL_MIAMI_INTL_AP.tm3)

System Report Compliance							
System	System	Room Units (Airconditioners & Heat pumps)				No. of Units 1	
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Compliance
Cooling System	Room AC HP with Louvered Sides	27000	16.00	8.70			PASSES
Heating System	PTHP All Capacities (Heating Mode)	26000	8.20	2.81			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	760	0.30	0.82			PASSES
PASSES							

Plant Compliance								
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Compliance
								None

Project: Bathroom Title: Bathroom Type: Retail (WEA File: FL_MIAMI_INTL_AP.tm3)								
Water Heater Compliance								
Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance	
Water Heater 1	Electric Storage water heater	> 12 [kW]	0.97			27.30	PASSES	
								PASSES

Piping System Compliance								
Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance	
								None

Mandatory Requirements (as applicable)

Requirements compiled by US Department of Energy and Pacific Northwest National Laboratory. Adopted for FBC with permission. Not all may be applicable

Topic	Section	Component	Description	Yes	N/A	Exempt
1. To be checked by Designer or Engineer						
Insulation	C303.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C303.2	Envelope	Slab edge insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C303.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.3	Envelope	High-albedo roofs satisfy one of the following: 3-year-aged solar reflectance ≥ 0.55 and thermal emittance ≥ 0.75 or 3-year-aged solar reflectance index ≥ 64.0 .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	C402.4.4	Envelope	U-factor of opaque doors associated with the building thermal envelope meets requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.7	Mechanical	Exhaust air energy recovery on systems meeting Table C403.2.7(1) and C403.2.7(2).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.8	Mechanical	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.2.4.8.1 and C403.2.4.8.2).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3, C403.3.1, C403.3.2	Mechanical	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3.2	Mechanical	Economizer operation will not increase heating energy use during normal operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3.3.3	Mechanical	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.3.3.3 for applicable device types and climate zones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3.3.4	Mechanical	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3.3.5	Mechanical	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.2.4.3 for details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.3.4, C403.3.4.1, C403.3.4.2, C403.3.1	Mechanical	Water economizers provided where required, meet the requirements for design capacity, maximum pressure drop and integrated economizer control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.3.1	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.3.2	Mechanical	Multiple-cell heat rejection equipment with variable speed fan drives are controlled to operate the maximum number of fans allowed and so that all fans operate at the same fan speed required for the instantaneous cooling duty. The minimum fan speed will be the minimum allowable speed of the fan drive system in accordance with the manufacturer's recommendations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	C403.4.3.4	Mechanical	Open-circuit cooling towers having water cooled chiller systems and multiple or variable speed condenser pumps, are designed so that tower cells can run in parallel with larger of flow criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4	Mechanical	Supply air systems serving multiple zones have VAV systems with controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone. See section for details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.1	Mechanical	Single-duct VAV systems use terminal devices configured to reduce the supply of primary supply air before reheating or recooling takes place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.2	Mechanical	Systems that have 1 warm air duct and 1 cool air duct use terminal devices configured to reduce the flow from one duct to a minimum before mixing of air from the other duct takes place.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.3	Mechanical	Individual dual-duct or mixing heating and cooling systems with a single fan and with total capacities > 90,000 Btu/h not equipped with air economizers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.2	Mechanical	Service water heating equipment meets efficiency requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)a	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=40.2 gpm/hp .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)b	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=20.0 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)c	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=16.1 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)d	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=7.0 gpm/hp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)e	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=134 kBtu/h-hp w/ Ammonia test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)f	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=110 kBtu/h-hp w/ Ammonia test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)g	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=157 kBtu/h-hp w/ R-507A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)h	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=135 kBtu/h-hp w/ R-507A test fluid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	Table_C403.3.2(8)i	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement >=176 kBtu/h-hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.1	Mechanical	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.2	Mechanical	HVAC fan motors not oversized beyond allowable limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.3	Mechanical	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.4	Mechanical	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.5	Mechanical	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. To be checked by Plan Reviewer						
Plan Review	C103.2	Envelope	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plan Review	C103.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	C103.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	C103.2	Interior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	C103.2	Exterior Lighting	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.5	Envelope	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.4	Envelope	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.6	Project	Radiant heating systems panels insulated to >=R-3.5 on face opposite space being heated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C402.2.6	Mechanical	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.6	Envelope	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.7	Envelope	Vestibules are installed on all building entrances. Doors have self-closing devices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.13	Mechanical	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.2	Mechanical	Each zone equipped with setback controls using automatic time clock or programmable control system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.2	Mechanical	Each zone equipped with setback controls using automatic time clock or programmable control system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.2	Mechanical	Each zone equipped with setback controls using automatic time clock or programmable control system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.4	Mechanical	Zone isolation devices and controls installed where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.4	Mechanical	Zone isolation devices and controls installed where applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.7	Mechanical	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.5	Mechanical	Hot water boilers supplying heat via one- or two-pipe systems include outdoor setback control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.6	Mechanical	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HVAC	C403.2.6.1	Mechanical	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.5.1	Mechanical	Hydronic and multizone HVAC system controls are VAV fans driven by mechanical or electrical variable speed drive per Table C403.2.12.5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.5.3	Mechanical	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2	Mechanical	The heating of fluids in hydronic systems that have been previously mechanically cooled, and the cooling of fluids that have been previously mechanically heated are limited in accordance with Sections C403.4.2.1-C403.4.2.3. Single boiler systems >500,000 Btu/h have multistaged or modulating burner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.3.2	Mechanical	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.4	Mechanical	Hydronic systems greater than 500,000 Btu/h designed for variable fluid flow. See section language for full details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.5	Mechanical	System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.6	Mechanical	Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0 MBtu/h and 10 MBtu/h has 4:1 turndown ratio, boiler input > 10.0 MBtu/h has 5:1 turndown ratio. Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.3.1	Mechanical	Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.3.3	Mechanical	Fan systems with total system motor capacity >=5 hp associated with heat rejection equipment configured to automatically modulate the fan speed to control the leaving fluid temperature or condensing temp/pressure of heat rejection device.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.3.3	Mechanical	Centrifugal fan open-circuit cooling towers having combined rated capacity >= 1100 gpm meets minimum efficiency requirement: >=40.2 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.5	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.6	Mechanical	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	C404.2.1	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment $\geq 1,000$ kBtu/h serves the entire building, thermal efficiency ≥ 90 Et. Where multiple pieces of water-heating equipment serve the building with combined rating $\geq 1,000$ kBtu/h, the combined input-capacity-weighted-average thermal efficiency ≥ 90 Et. Exclude input rating of equipment in individual dwelling units and equipment ≤ 100 kBtu/h.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.2.1	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment $\geq 1,000$ kBtu/h serves the entire building, thermal efficiency ≥ 90 Et. Where multiple pieces of water-heating equipment serve the building with combined rating $\geq 1,000$ kBtu/h, the combined input-capacity-weighted-average thermal efficiency ≥ 90 Et. Exclude input rating of equipment in individual dwelling units and equipment ≤ 100 kBtu/h.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.4	Mechanical	All piping insulated in accordance with section details and Table C403.2.10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.5, C404.5.1, C404.5.2	Mechanical	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.6.3	Mechanical	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to ≤ 5 minutes after end of heating cycle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.7	Mechanical	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	C405.4.1	Exterior Lighting	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	C405.5.2	Project	Group R-2 dwelling units have separate electrical meters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plan Review	C406	Project	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C408.2.2.2	Mechanical	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. To be checked by Inspector

Insulation	C303.1	Envelope	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is ≤ 3 in 12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C303.1	Envelope	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.2	Envelope	Insulation installed on a suspended ceiling having ceiling tiles is not being specified for roof/ceiling assemblies. Continuous insulation board installed in 2 or more layers with edge joints offset between layers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.2.2	Envelope	Skylight curbs are insulated to the level of roofs with insulation above deck or R-5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	C303.1.3	Envelope	Fenestration products rated in accordance with NFRC.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C303.2, C402.2.5	Envelope	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Insulation	C303.2.1	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C303.2.1	Envelope	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C402.1.3	Envelope	Non-swinging opaque doors have R-4.75 insulation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C104	Envelope	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C104	Envelope	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulation	C104	Envelope	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5	Envelope	Building envelope contains a continuous air barrier that has been tested and deemed to limit air leakage ≤ 0.40 cfm/ft ² .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and either constructed or tested in an approved manner. Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.1.1	Envelope	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.1.2.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability ≤ 0.004 dfm/ft ² . Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.1.2.2	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and average assembly air leakage ≤ 0.04 cfm/ft ² . Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.2, C402.5.4	Envelope	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.5, C403.2.4.3	Envelope	Stair and elevator shaft vents have motorized dampers that automatically close. Refernce section C403.2.4.3 for operational details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.6	Envelope	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.6	Envelope	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C402.5.8	Envelope	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.1	Mechanical	HVAC systems and equipment design loads calculated in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an approved equivalent computational procedure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.10	Mechanical	HVAC piping insulation insulated in accordance with Table C403.2.10. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.3	Mechanical	HVAC equipment efficiency verified.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.3	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only as per Footnote b to Table C403.2.3(3).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	C403.2.3	Mechanical	Centrifugal fan open-circuit cooling towers having combined rated capacity >= 1100 gpm meets minimum efficiency requirement: >=38.2 gpm/hp.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.1	Mechanical	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.1.1	Mechanical	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.1.2	Mechanical	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.1.2	Mechanical	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.1.3	Mechanical	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.2.1, C403.2.4.2.2	Mechanical	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.4.2.3	Mechanical	Systems include optimum start controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.4.5, C403.2.4.6	Mechanical	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.6.2	Mechanical	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air Leakage	C403.2.4.3	Mechanical	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.9.1, C403.2.9.2	Mechanical	HVAC ducts and plenums insulated in accordance with C403.2.9.1 and constructed in accordance with C403.2.9.2, verification may need to occur during Foundation Inspection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.5.2	Mechanical	VAV fans have static pressure sensors located so controller setpoint <=1.2 w.c..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.2	Mechanical	Two-pipe hydronic systems using a common distribution system have controls to allow a deadband >=15 °F, allow operation in one mode for at least 4 hrs before changeover, and have rest controls to limit heating and cooling supply temperature to <=30 °F.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.2.3.3	Mechanical	Two-position automatic valve interlocked to shut off water flow when hydronic heat pump with pumping system >10 hp is off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.4.7	Mechanical	Parallel-flow fan-powered VAV air terminals have automatic controls configured to 1) turn off the terminal fan except when space heating is required or where required for ventilation, 2) turn on the terminal fan as the first stage of heating before the heating coil is activated, and 3) during heating for warmup or setback temperature control, either operate the terminal fan and heating coil without primary air or, reverse the terminal damper logic and provide heating from the central air handler by primary air.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.2.12.5.3	Mechanical	Systems with DDC of individual zones reporting to the central control panel configured to reset the static pressure setpoint based on zone requiring the most pressure. The DDC is capable of monitoring zone damper positions or have an alternative method of indicating the need for static pressure. See section for details.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEM_SPECIFIC	C403.2.12.5.2	Mechanical	Static pressure sensors used to control VAV fans located such that the controller setpoint is <= 1.2 inches w.c.. Where this results in one or more sensors being located downstream of major duct splits, not less than one sensor located on each major branch.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.5	Mechanical	Condenser heat recovery system that can heat water to 85 °F or provide 60% of peak heat rejection is installed for preheating of service hot water.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C403.4.6	Mechanical	Hot gas bypass limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.3	Mechanical	Heat traps installed on supply and discharge piping of non-circulating systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.6.1	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.6.1, C404.6.2	Mechanical	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.9.1	Mechanical	Pool heaters are equipped with on/off switch and no continuously burning pilot light.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.9.2	Mechanical	Time switches are installed on all pool heaters and pumps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEM_SPECIFIC	C404.9.3	Mechanical	Vapor retardant pool covers are provided for heated pools and permanently installed spas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.1, C405.2.1.1	Interior Lighting	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.1.2	Interior Lighting	Occupancy sensors control function in warehouses: In warehouses, the lighting in aiseways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.1.3	Interior Lighting	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.2, C405.2.2.1, C405.2.2.2	Interior Lighting	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Controls	C405.2.2.2	Interior Lighting	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern \geq 50 percent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.3, C405.2.3.1, C405.2.3.2	Interior Lighting	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.4	Interior Lighting	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	C405.2.4	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controls	C405.2.6	Exterior Lighting	Exterior lighting systems shall be provided with controls that comply with Sections C405.2.6.1 through C405.2.6.4. Decorative lighting systems shall comply with Sections C405.2.6.1, C405.2.6.2, and C405.2.6.4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wattage	C405.3.1	Interior Lighting	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mandatory Additional	C406.4	Project	Enhanced digital lighting controls efficiency package: Interior lighting has following enhanced lighting controls in accordance with Section C405.2.2: Luminaires capable of continuous dimming and being addressed individually, \leq 8 luminaires controlled in combination in a daylight zone, digital control system for fixtures, "Sequence of Operations" documentation, and functional testing per Section C408.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mandatory Additional	C406.6	Project	Dedicate outdoor air system efficiency package: Buildings with hydronic and/or multiple-zone HVAC systems are equipped with an independent ventilation system designed to provide \geq 100-percent outdoor air to each individual occupied space, as specified by the IMC. The ventilation system is capable of total energy recovery and includes HVAC system controls that manage temperature resets \geq 25 percent of delta design supply-air / room-air temp. Reference section C406.6 for qualifying systems/equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mandatory Additional	C406.7, C406.7.1	Project	Enhanced Service Water Heat System efficiency package. One of the following SWH system enhancements must satisfy 60 percent of buildings annual hot water requirements, or 100 percent if the building requirements otherwise complies with heat recovery per Section C403.9.5: Waste heat recovery (from SWH, process equipment, OR on-site renewable water-heating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C408.2.2.1	Mechanical	Air outlets and zone terminal devices have means for air balancing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testing	C408.2.3.2	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	C403.2.14, C403.2.14.1, C403.2.14.2	Mechanical	Commercial refrigerators, freezers, refrigerator-freezers and refrigeration equipment, defined in U.S. 10 CFR part 431.62, shall have an energy use in kWh/day not greater than the values of Table C403.2.14.1(1) when tested and rated in accordance with AHRI Standard 1200. Walk-in cooler and walk-in freezer refrigeration systems, except for walk-in process cooling refrigeration systems as defined in U.S. 10 CFR 431.302, shall meet the requirements of Tables C403.2.14.2(1), C403.2.14.2(2) and C403.2.14.2(3).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. To be checked by Inspector at Project Completion and Prior to Issuance of Certificate of Occupancy

Post Construction	C408.1.1, C408.2.5.2	Interior Lighting	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.1.1, C408.2.5.3	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fenestration	C402.4.2.2	Envelope	Skylights in office, storage, automotive service, manufacturing, non-refrigerated warehouse, retail store, and distribution/sorting area have a measured haze value > 90 percent unless designed to exclude direct sunlight.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.1.1	Project	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.1	Mechanical	Commissioning plan developed by registered design professional or approved agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.3.1	Mechanical	HVAC equipment has been tested to ensure proper operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.3.3	Mechanical	Economizers have been tested to ensure proper operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.4	Mechanical	Preliminary commissioning report completed and certified by registered design professional or approved agency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.5.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.5.3	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.2.5.4	Mechanical	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C408.3	Interior Lighting	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C405.6	Project	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C405.7	Project	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C405.8.2, C405.8.2.1	Project	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Construction	C405.5.3	Project	Total voltage drop across the combination of feeders and branch circuits <= 5%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EnergyGauge Summit® v7.00
INPUT DATA REPORT

Project Information

Project Name: Bathroom
Project Title: Bathroom
Address: 8 ST 20th Ave

Orientation: 0 Deg Clockwise. Walls & Windows will be rotated accordingly
Building Type: Retail

Building Classification: Renovation to existing building

State: FL
Zip: 33135

No.of Stories: 1

GrossArea: 312 SF

Owner:

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]
1	Bathroom	Zone 1	CONDITIONED	312.0	1	312.0

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multi plier	Total Area [sf]	Total Volume [cf]
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In Zone: Bathroom		Toilet and Washroom		8.00	39.00	8.00	1	312.0	2496.0	<input type="checkbox"/>
1	Bathroom	Zo0Sp1								

Lighting											
No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No. of Ctrl pts				
In Zone: Bathroom											
In Space: Bathroom											
1	Compact Fluorescent	General Lighting	6	48	288	Manual On/Off	2				<input type="checkbox"/>

Walls (Walls will be rotated clockwise by building rotation value)											
No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Orientation	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.s.f.F/Btu]
In Zone: Bathroom											
1	North Wall	Metal siding/2x4@24"+R1 1Batt/5/8"Gyp	39.00	8.00	1	312.0	North	0.0920	1.072	19.38	10.9
2	South Wall	Metal siding/2x4@24"+R1 1Batt/5/8"Gyp	39.00	8.00	1	312.0	South	0.0920	1.072	19.38	10.9
3	East Wall	Metal siding/2x4@24"+R1 1Batt/5/8"Gyp	8.00	8.00	1	64.0	East	0.0920	1.072	19.38	10.9
4	West Wall	Metal siding/2x4@24"+R1 1Batt/5/8"Gyp	8.00	8.00	1	64.0	West	0.0920	1.072	19.38	10.9

Windows (Windows will be rotated clockwise by building rotation value)										
No	Description	Orientation	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multi plier	Total Area [sf]

In Zone:
In Wall:

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]
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In Zone: Bathroom	In Wall: South Wall										
1	Door	Aluminum door, 1.25 in. polystyrene	No	3.00	6.66	2	20.0	0.1919	43.67	0.53	5.21

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap Dens. [lb/cf]	R-Value [h.sf.F/Btu]
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In Zone: Bathroom	1	Roof	Mtl Bldg Roof/R-19 Batt	39.00	8.00	1	312.0	0.0492	1.34	9.49	20.3
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Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier [Sf]	Area [Sf]	Total Area [Sf]
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In Zone:
In Roof:

Floors

No	Description	Type	Width [ft]	H (Effic) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.s.f./Btu]
1	Bathroom Floor	Metal siding/2x4@24"+R1 1Batt/5/8"Gyp	39.00	8.00	1	312.0	0.0920	1.07	19.38	10.87

In Zone:

Systems

System	System	Room Units (Airconditioners & Heat pumps)	No. Of Units
1	Cooling System	Capacity: 27000.00 Efficiency: 16.00	<input type="checkbox"/>
2	Heating System	Capacity: 26000.00 Efficiency: 8.20	<input type="checkbox"/>
3	Air Handling System -Supply	Capacity: 760.00 Efficiency: 0.30	<input type="checkbox"/>

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLY
					<input type="checkbox"/>

Water Heaters

W-Heater Description	CapacityCap.Unit	I/P Rt.	Efficiency	Loss
1 Electric Storage water heater	1 [Gal]	10000 [kW]	0.9700 [Ef]	% <input type="checkbox"/>

Ext-Lighting

Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]
264	Mat264	ALUMINUM, 1/16 IN	No	0.0002	0.0050	26.0000	480.00	0.1000
214	Mat214	POLYSTYRENE, EXP., 1-1/4IN,	No	5.2100	0.1042	0.0200	1.80	0.2900
187	Mat187	GYP OR PLAS BOARD, 1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000
23	Mat23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000
4	Mat4	Steel siding	No	0.0002	0.0050	26.0000	480.00	0.1000

271	Mat1271	2x4@24" oc + R11 Batt	No	10.4179	0.2917	0.0280	7.11	0.2000	<input type="checkbox"/>
94	Mat194	BUILT-UP ROOFING, 3/8IN	No	0.3366	0.0313	0.0930	70.00	0.3500	<input type="checkbox"/>

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1002	Aluminum door, 1.25 in. polystyrene	No	No	0.19	0.53	43.67	5.2

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	264	ALUMINUM, 1/16 IN	0.0050	0.000
2	214	POLYSTYRENE, EXP., 1-1/4IN,	0.1042	0.000
3	264	ALUMINUM, 1/16 IN	0.0050	0.000

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1019	Metal siding/2x4@24"+R11Batt/5/8"Gyp	No	No	0.09	1.07	19.38	10.9

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	4	Steel siding	0.0050	0.000
2	271	2x4@24" oc + R11 Batt	0.2917	0.000
3	187	GYP OR PLAS BOARD, 1/2IN	0.0417	0.000

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1047	Mtl Bldg Roof/R-19 Batt	No	No	0.05	1.34	9.49	20.3
							<input type="checkbox"/>
Layer	Material No.	Material	Thickness [ft]	Framing Factor			
1	94	BUILT-UP ROOFING, 3/8IN	0.0313	0.000			<input type="checkbox"/>
2	23	6 in. Insulation	0.5000	0.000			<input type="checkbox"/>