BUILDING CODE SUMMARY

APPLICABLE CODES

2020 "Florida Building Code" and the most recently adopted "Florida Fire Prevention Code".

FLORIDA BUILDING CODE, BUILDING

Chapter 3 Use and Occupancy Classification
This building is designed to accommodate Occupancy Groups B, & S-1.

Chapter 4 Special Detailed Requirements Based on Occupancy

Chapter 5 General Building Heights and Areas
Building Area = 2,080 SF

Using Type VB Construction, Non-Sprinkled Allowable Areas for each Occupancy follows.
Business (Group B) Allowable Area = 9,000 SF
Storage (Group S-1) Allowable Area = 9,000 SF
NOTE: Above areas do not include Frontage Increase per Section 506.3
NOTE: This building is a Mixed Use Building with Nonseparated Occupancies per Section 508.3. Therefore, fire-rated walls are not required to separate Occupancies.

Chapter 6 Types of Construction
Type VB, Non-Sprinkled
Table 602. Rear Masonry Wall meets the requirement for 1 hour fire rating for walls 5' from the Property Line.

Chapter 7 Fire-Resistance-Rated Construction

Chapter 8 Interior Finishes
When interior finish is provided, unless noted otherwise, all walls to be painted drywall.
Table 803.11 Interior Wall and Ceiling Finish Requirements
Rooms and Enclosed Spaces Class C per ASTM E 84

Chapter 9 Fire Protection Systems
Building is Non-Sprinkled.

Chapter 10 Means of Egress

Chapter 11 Accessibility
Handicapped Accessibility is provided.

ABBREVIATIONS

A.F.F.	Above Finished Floor	MIN	Minimum
BM	Beam	M.O.	Masonry Opening
BRG	Bearing	MTL.	Metal
C.J.	Control Joint	NGVD	National Geodetic Vertical Datum
CLG	Ceiling		
CONC.	Concrete	O.C.	On Center
CONT.	Continuous	o/	Out of
CMU	Concrete Masonry Unit	o/o	Out to Out
DBL.	Double	OSB	Oriented Strand Board
DEG.	Degree	PSF	Pounds per square foot
DIA	Diameter	PSI	Pounds per square inch
DL	Dead Load	PSL	Parallel Strand Lumber
EOR	Engineer of Record	PT	Pressure Treated
EQ	Equal	REBAR	Reinforcing Steel Bar
EXT.	Exterior	REIN.	Reinforced
F.D.	Floor Drain	SF	Square Feet
F.F.	Finished Floor	SPF	Spruce Pine Fur
FT.	Foot	STL	Steel
FTG.	Footing	SYP	Southern Yellow Pine
GA	Gage	T & G	Tongue and Groove
GALV.	Galvanized	T.O.B.	Top of Beam
GCB	Gypsum Ceiling Board	T.O.W.	Top of Wall
GEW	Gable Endwall	TYP	Typical
GWB	Gypsum Wall Board	UNO	Unless Noted Otherwise
HDR	Header	WD.	Wood
LBS	Pounds	w/o	without
LL	Live Load	W.W.M.	Welded Wire Mesh
LSL	Laminated Strand Lumber	W.W.F.	Welded Wire Fabric
LVL	Laminated Veneer Lumber		
MAX	Maximum		
MFG	Manufacturer		

FLORIDA BUILDING CODE COMPLIANCE TABLE

This structure is designed in compliance with the 2020 Florida Building Code using ASCE 7 to calculate the wind pressures.

Basic Wind Speed = 130 MPH
Wind Exposure Category = C
(Mean Roof Height=25')

Risk Category = II
Enclosure Classification = Enclosed

EXTERIOR GLAZING PROTECTION
Impact protection is not required.
Structure is outside of the wind-borne debris region.

EXTERIOR WINDOW & DOOR DESIGN WIND PRESSURES

WINDOW/DOOR LOCATION and AREA (See NOTES below)	POSITIVE DESIGN WIND PRESSURE	NEGATIVE DESIGN WIND PRESSURE
ZONE 4 (INTERIOR ZONE)		
AREA — 0 to 20 SF	+24.6 PSF	-26.7 PSF
AREA — over 20 to 50 SF	+23.5 PSF	-25.6 PSF
AREA — over 50 to 100 SF	+22.0 PSF	-24.1 PSF
AREA — over 100 SF	+20.9 PSF	-23.0 PSF
ZONE 5 (END ZONE)		
AREA — 0 to 20 SF	+24.6 PSF	-33.0 PSF
AREA — over 20 to 50 SF	+23.5 PSF	-30.7 PSF
AREA — over 50 to 100 SF	+22.0 PSF	-27.8 PSF
AREA — over 100 SF	+20.9 PSF	-25.6 PSF

NOTES:
1. All Windows and Doors within 4' of a building corner are in the END ZONE. Otherwise, Windows and Doors are in the INTERIOR ZONE. See Floor Plan.
2. Choose pressures above based on AREA of Window or Door.
3. Wind pressures above are already factored by 0.6 for use with Allowable Stress Design. These pressures will not work with Strength Design unless adjusted accordingly.

STRUCTURAL NOTES

1. See FLORIDA BUILDING CODE COMPLIANCE TABLE. Design Loadings as follows:
ROOF
Live Load = 20 PSF

2. The Roof Framing may be a pre-engineered system prepared by the manufacturer. If so, the Framing Plan shown on these blueprints is diagrammatic and to be used as a guide for the manufacturer. Therefore, actual layout and details of these pre-engineered systems to follow manufacturer's drawings. However, discrepancies from Framing Plan shown on these blueprints are to be approved by LaFlam Design Group before construction.

3. Provide lateral support for pre-engineered Roof Framing in accordance with manufacturer's specifications. Provide lateral support for conventionally framed Roof Framing in accordance with current National Forest Products Association and Florida Building Code specifications (at a minimum provide lateral support at all ends and at all bearing points).

4. Provide lateral support for conventionally framed Ceiling Framing in accordance with current National Forest Products Association and Florida Building Code specifications (at a minimum provide lateral support at all ends and at all bearing points).

5. Use #2 Southern Yellow Pine for all wood framing unless noted otherwise. (EXCEPTION: 2x4 & 2x6 studs to be #2 Spruce unless noted otherwise). Wood posts (4" x 4" and 6" x 4" for example) to be #2 Southern Yellow Pine.

6. All Laminated Veneer Lumber (LVL) to be 1.9E Microllam LVL by Weyerhaeuser unless otherwise noted.

7. CONTRACTOR ALERT: There can be significant corrosion of metal products in contact with treated wood. This can be especially true when using treatments other than Chromated Copper Arsenate (CCA-C). CONTRACTOR to use more stringent of manufacturer's recommendations or recommendations shown on this plan. Uncoated and painted products should not be used with treated woods. When using Stainless Steel or hot-dip galvanized products, the connectors and fasteners should be of the same material.

8. Concrete to be 3000 PSI minimum strength at 28 days. All reinforcing steel shall be grade 40 deformed bar unless noted otherwise.

9. Concrete Masonry Units to be Grade N-1 laid with type M or S mortar. Poured cells, lintels, etc. to use 3000 PSI concrete.

10. Provide control joints in concrete & masonry according to good construction practices.

11. Structural steel to be ASTM A36 with all welds to be installed by certified welders using E70XX electrodes.

12. Soil under slab and footing areas to be clean sandy fill compacted to 95 % density. Minimum bearing value of 2000 PSF. It is the CONTRACTOR'S responsibility to verify the soil conditions. If conditions are found inadequate, notify the designer so that provisions can be made.

13. Plumbing, Electrical and Mechanical information on these plans is diagrammatic and the error or omission of an item does not relieve the contractor from supplying same. Design to be checked by Plumbing, Electrical and Mechanical contractors and adjustments made accordingly.

14. All work to be done in accordance with all applicable codes and specifications. While every effort has been made to avoid errors, it is the Contractor's responsibility to verify dimensions and existing conditions before starting work. Discrepancies to be noted to ENGINEER before construction.

FASTENING SCHEDULE

1. Unless noted otherwise, Roof Sheathing to be nailed to framing members with 8d ring-shank nails at 6 inches on center at edges and 6 inches on center at intermediate framing. Ring-shank nails shall have the following minimum dimensions:
1. 0.113 inch nominal shank diameter.
2. Ring diameter of 0.012 over shank diameter
3. 16 to 20 rings per inch.
4. 0.280 inch full round head diameter
5. 2 inch nail length

2. Unless noted otherwise, fasten members in accordance with the FLORIDA BUILDING CODE, Building.

DRAWING INDEX

PROJECT NARRATIVE

This job is a new building.

FIRE SERVICE NOTES:

1. This is a mixed occupancy building per NFPA 101 6.1.14.2.2. This building has non-rated walls separating tenants. Therefore, the occupancies are intermingled in this building since they are not separated by fire barriers. This building meets the requirements of a mixed occupancy building and has been reviewed to meet code accordingly.
2. Occupancy Classifications per NFPA 101:
Business
Storage (Ordinary Hazard Contents)
3. Products to be stored in an open floor arrangement with no storage over 12' high in areas greater than 2500 SF.

Keith LaFlam, State of Florida, Professional Engineer, License No. 33690.
This item has been digitally signed and sealed by Keith LaFlam on the date indicated here.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Keith LaFlam
Digitally signed by Keith LaFlam
DN: o=LaFlam Design Group, ou, cn=Keith LaFlam
Date: 2022.11.14 17:16:26 -05'00'

For Permit

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LICENSE NUMBER: 33690

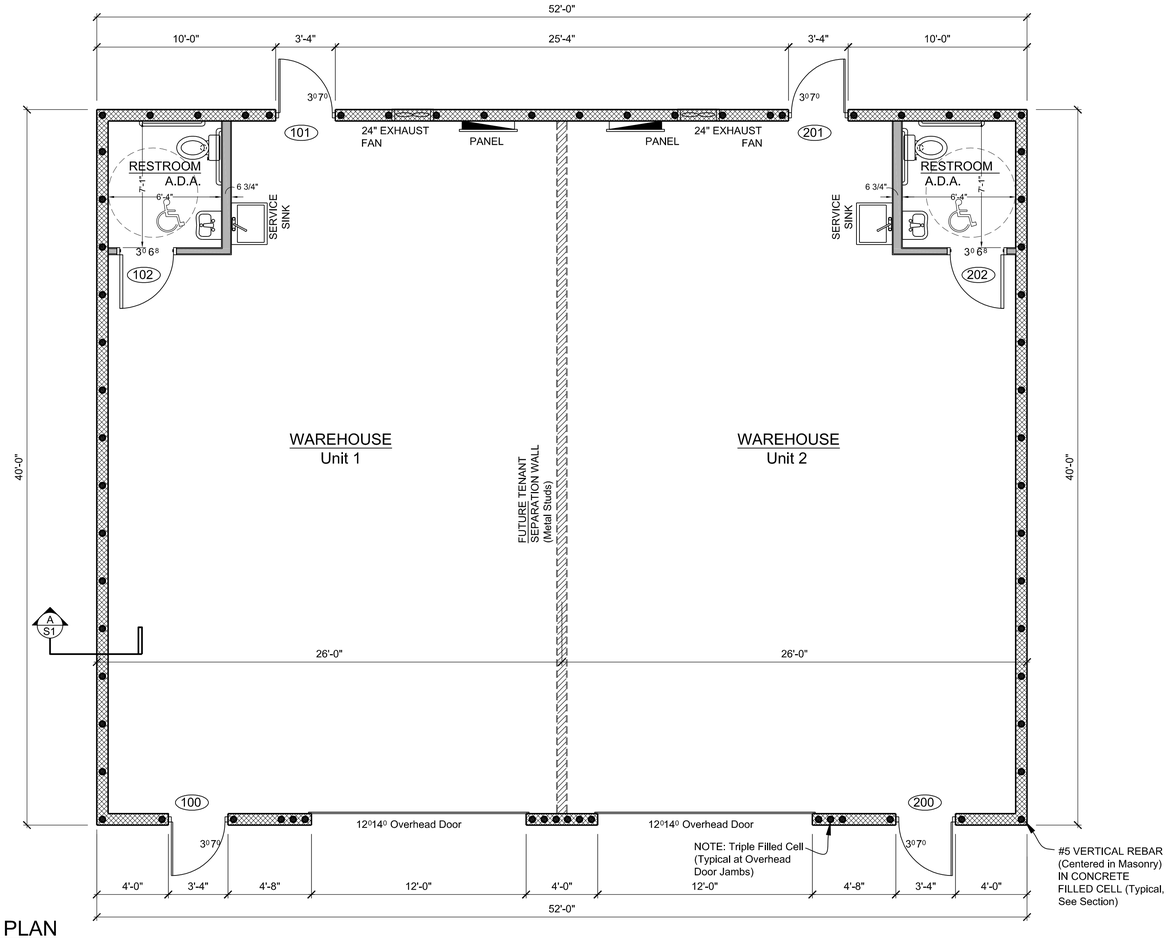
CONTRACTOR:
DiMare CONSTRUCTION CO.
3545 US 1 South
St. Augustine, Florida 32086
(904) 797-3328

JOB NAME:
New Building for:
Atlantic Plumbing
96 Fred Waters Way
City of St. Augustine, FL

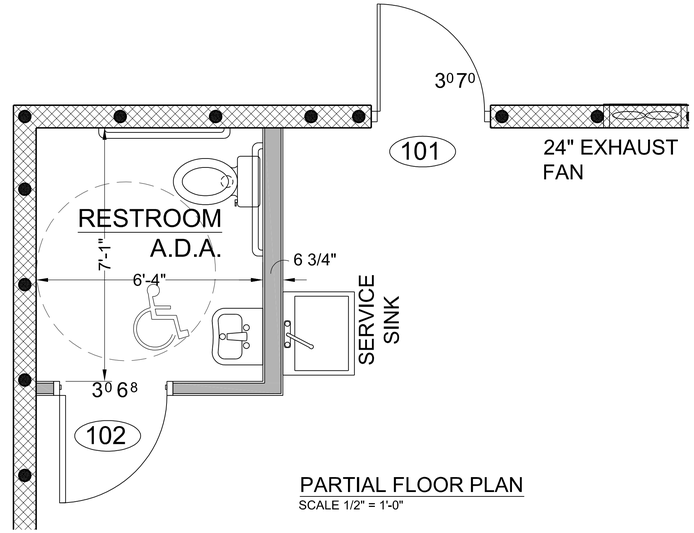
REVISIONS	BY

DRAWN	RKL
CHECKED	RKL
DATE	November 14, 2022
SCALE	NOTED
JOB NAME	
SHEET	CS

1 OF 6 SHEETS



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



PARTIAL FLOOR PLAN
SCALE 1/2" = 1'-0"

NOTE:
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DOOR HARDWARE SCHEDULE

MARK	SIZE	TYPE	HARDWARE
100, 200	3⁰-7⁰	Hollow Metal Door and Frame with 1/2 Glass	Standard Entry Lever Lockset with Push Button inside (always free Egress), & Surface Mount Crash Stop.
101, 201	3⁰-7⁰	Hollow Metal Door and Frame	Standard Entry Lever Lockset with Push Button inside (always free Egress), & Surface Mount Crash Stop.
102, 202	3⁰ 6⁸	Pre-Hung Wood or Masonite	Standard Privacy Set

WALL LEGEND
- MASONRY WALL
- FULL HEIGHT METAL STUD WALL (See Sections)
- WOOD-FRAMED STUD WALL

DIMENSION LEGEND
ROOM SIZES TO DRYWALL — 4'-0"

BUILDING DIMENSIONS TO STUDS, MASONRY, OR OUT OF GIRT — 4'-0"

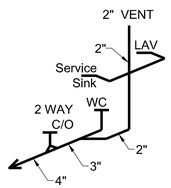
RESTROOM FRAMING NOTES:

1. WALL FRAMING: Provide 2"x4" or 2"x6" Wood Framed Stud Walls as shown on Floor Plan. Provide (2)-2"x (#2 SYP) Top Plate, 2"x (#2 Spruce) Studs at 16" on center, and 2"x Pressure Treated Bottom Plate. Finish with 5/8" Gypsum Wallboard. Walls to be ±8' tall.

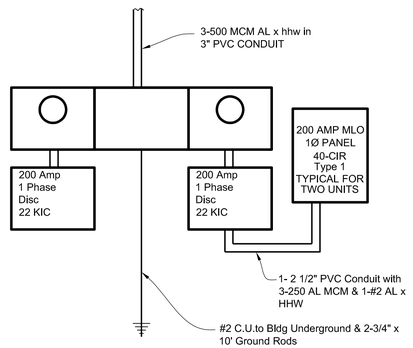
2. CEILING FRAMING: Provide 2"x8" Ceiling Framing at 24" on center to span ±7' maximum. Finish with 5/8" Gysum Ceilingboard (Contractor verify) inside the Restroom. Provide 3/4" T & G Plywood Floor Sheathing on top.

3. HEADERS: Provide (2)-2"x8" Header over 3' wide doors with single jack and single king stud.

MECHANICAL NOTE:
For the Warehouse areas, provide mechanical ventilation thru Exhaust Fans to meet the requirements of the 2020 Florida Building Code, Mechanical. Provide Exhaust Fans in Bathrooms also.



PLUMBING ISOMETRIC
(REAR RESTROOM)
SCALE = N.T.S.



ELECTRICAL DISTRIBUTION CENTER

ATLANTIC PLUMBING
ELECTRICAL LOAD CALCULATIONS

WAREHOUSE LIGHTING 0.25 va x 1040 SQ FT x 1.25 x 2 UNITS = 650 va
SIGN x2 =2,400 va
GP OUTLETS 6 x 180 va x 2 UNITS = 2,160 va
5,210 va

WATER HEATER 4500 va x 2 UNITS = 9,000 va
EXHAUST FAN #1 = 1,296 va
EXHAUST FAN #2 = 1,296 va
EXTERIOR WALL PACKS 6 x 150 va x 1.25 % = 1,250 va
12,842 va

LIGHTING LOAD VA TOTAL 5,210 va
EQUIPMENT LOAD VA TOTAL 12,842 va
18,052 va

DIVIDED BY 240v SINGLE PHASE
TOTAL AMPS @ 240 SINGLE PHASE 65 AMPS

TOTAL BUILDING SERVICE SIZE REQUIRED 100 AMP SINGLE PHASE

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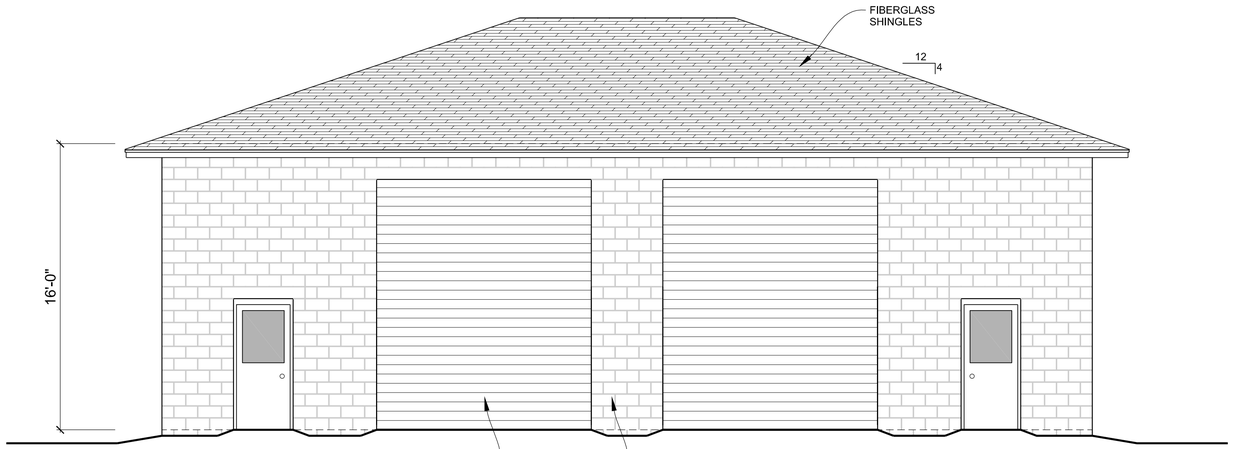
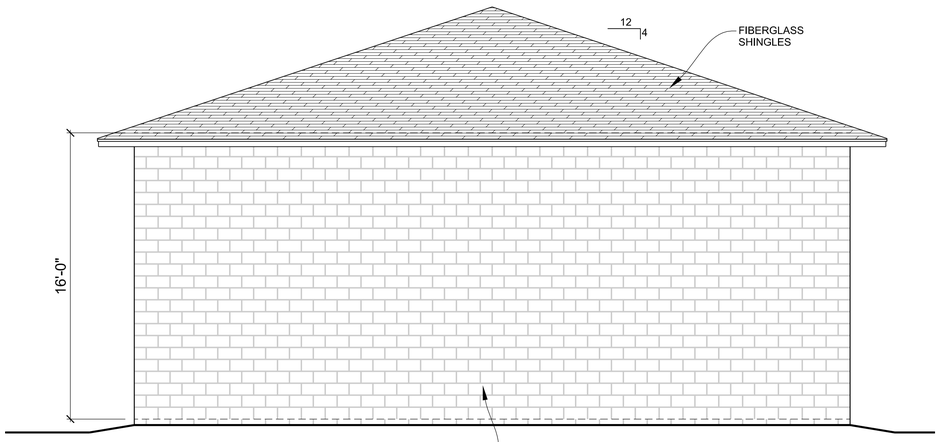
JOB NAME	

SHEET
A1
2 OF 6 SHEETS

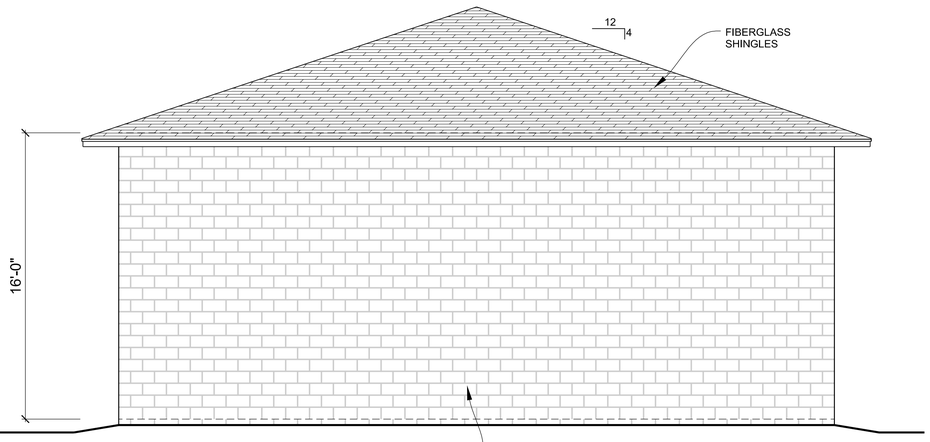
DISCLAIMER:
Architectural Elevations shown on this plan are an approximate view of the finished project. Actual Elevations may look different in field.



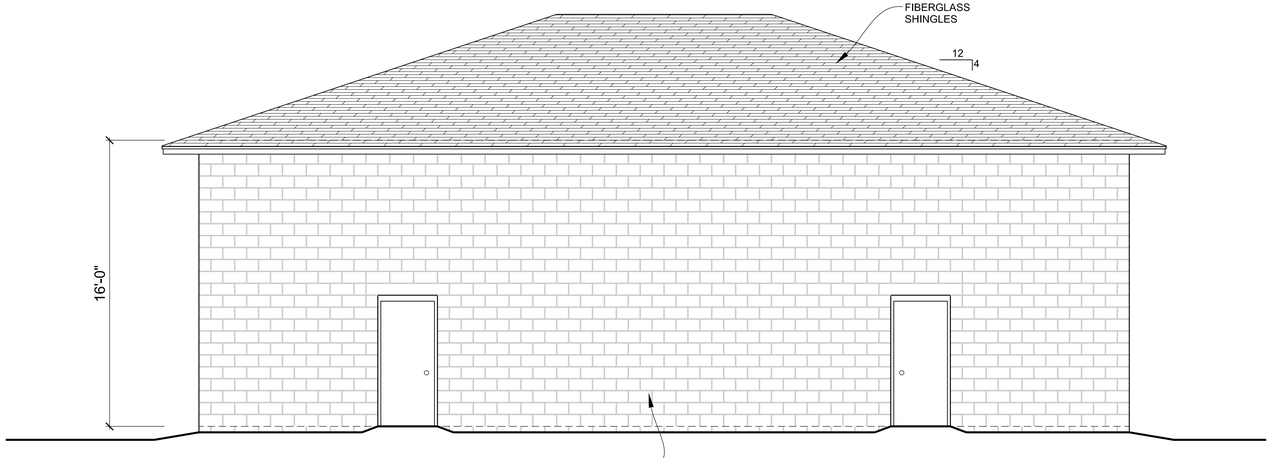
FRONT ELEVATION
SCALE 1/4" = 1'-0"



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



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



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

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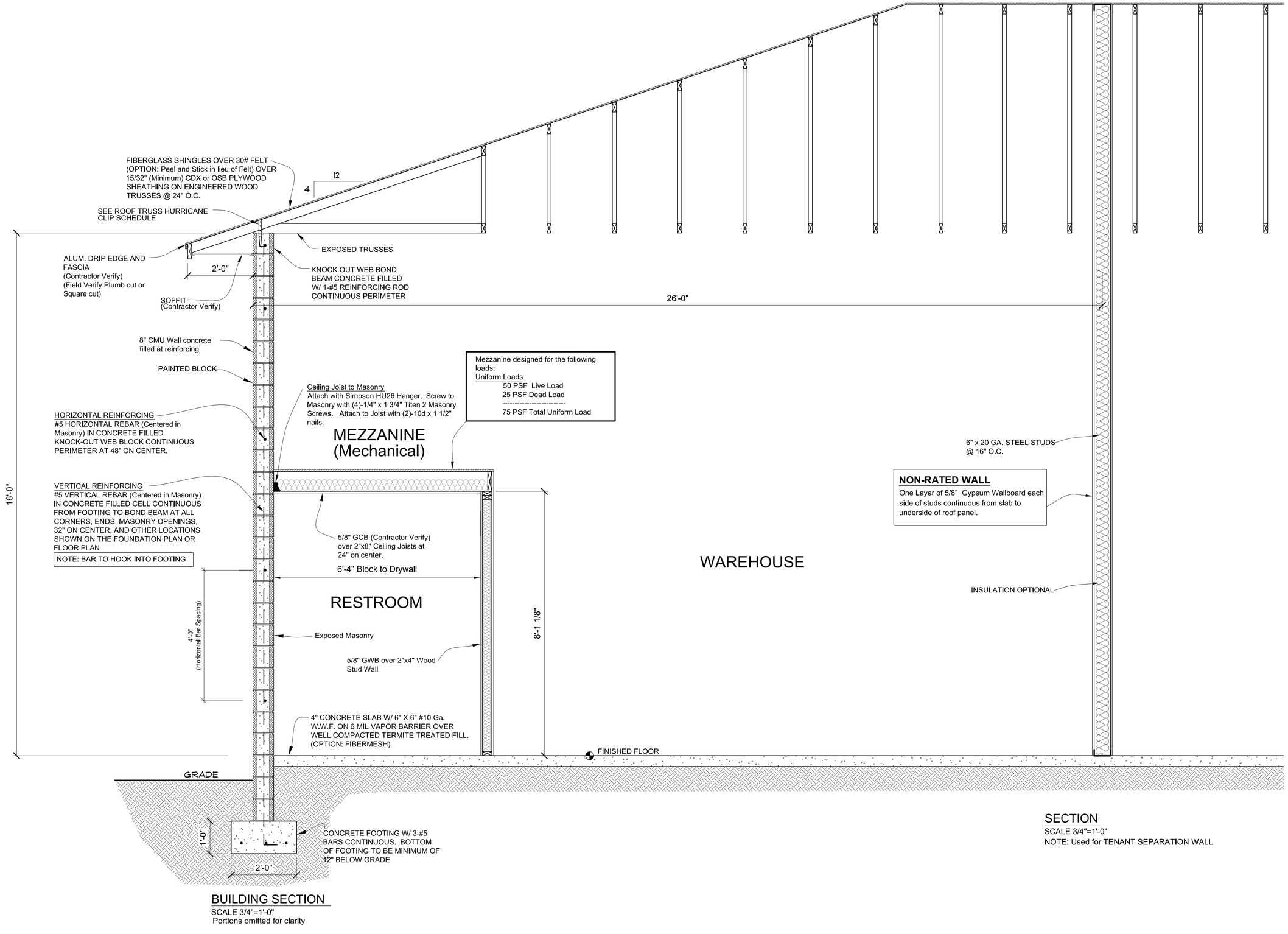
SHEET
A2
3 OF 6 SHEETS



BUILDING SECTION

SCALE 3/4"=1'-0"
Portions omitted for clarity

SECTION

SCALE 3/4"=1'-0"
NOTE: Used for TENANT SEPARATION WALL

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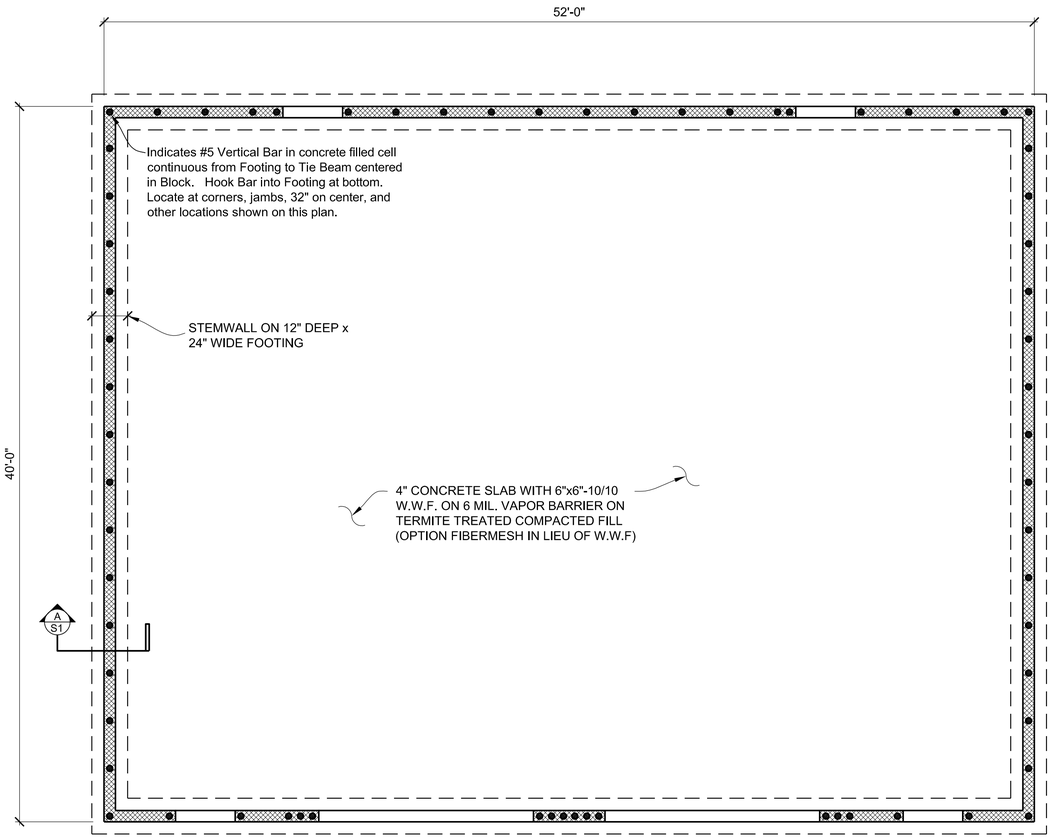
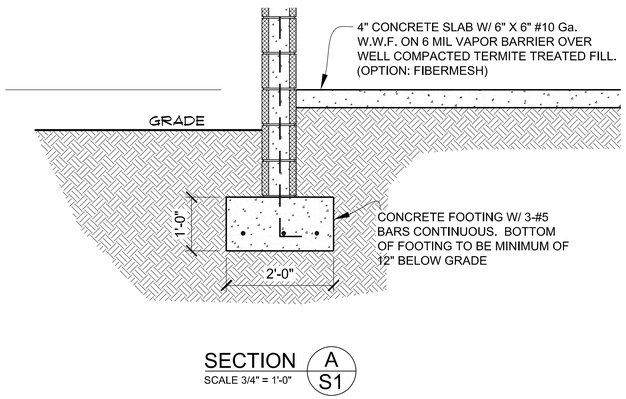
SHEET
A3
4 OF 6 SHEETS



FOUNDATION PLAN
SCALE 1/4" = 1'-0"



SECTION A/S1
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S1
5 OF 6 SHEETS

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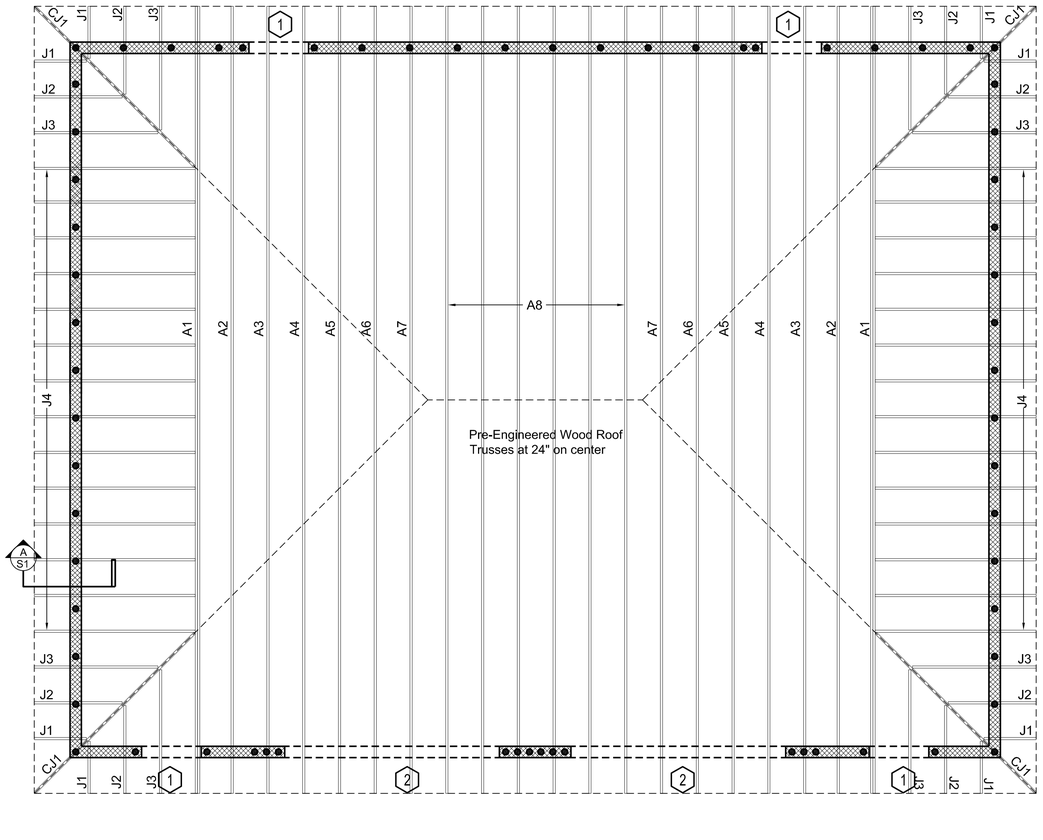
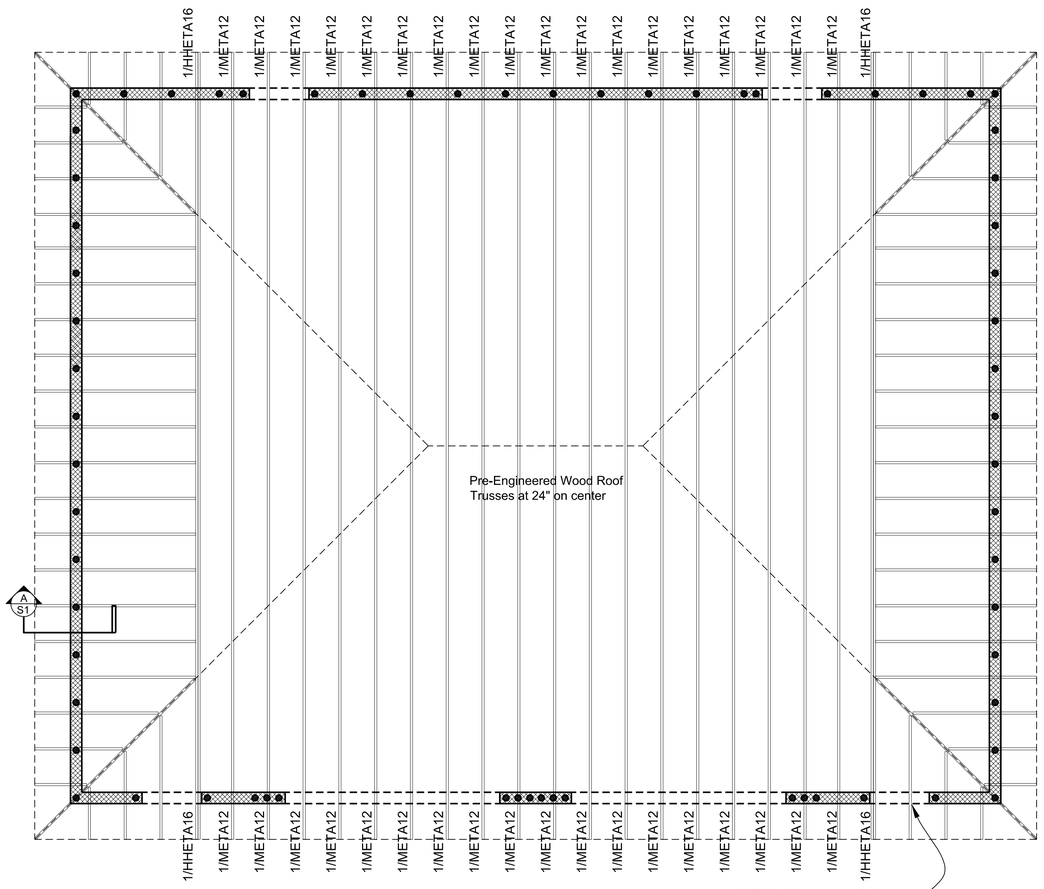


ROOF FRAMING PLAN

SCALE 1/4" = 1'-0"



ROOF TRUSS HURRICANE CLIP SCHEDULE

SCALE 1/4" = 1'-0"

HEADER & BEAM SCHEDULE FOR MASONRY WALLS

MARK	SIZE	
1	8" Deep Header consisting of single precast high strength U Lintel by Cast-Crete ®. Fill with concrete and provide 1-#5 bar continuous at bottom of precast lintel cavity.	
2	16" Deep Header consisting of single precast high strength U Lintel by Cast-Crete ® at bottom 8" and single knock-out web block lintel at top 8". Fill with concrete and provide #5 bar at bottom of precast lintel cavity and #5 bar in knock-out web block lintel for a total of 2-#5 bars continuous.	

ROOF TRUSS HURRICANE CLIP SCHEDULE

HURRICANE STRAPS ARE REQUIRED TO ATTACH EACH ROOF TRUSS TO THE WALL. LOCATE TYPICALLY AT EACH BEARING POINT OF EACH TRUSS TO HANDLE UPLIFT. CHOOSE CLIP FROM TABLE BELOW BASED ON THE UPLIFT REQUIREMENTS FROM THE TRUSS MANUFACTURER, UNLESS NOTED OTHERWISE ON PLANS.
NOTE: Uplift values are from Simpson Strong-Tie Catalog C-C-2021.

MARK	NOTES / CONNECTIONS	UPLIFT VALUE 1 Ply	UPLIFT VALUE 2 or 3 Ply
1/META12	Indicates 1-Simpson META12 nailed to one ply truss with 7-10d x 1 1/2" nails and to 2 or 3 ply truss with 6-16d common nails.	1420 lbs	1450 lbs
1/HETA12	Indicates 1-Simpson HETA12 nailed to one ply truss with 7-10d x 1 1/2" nails and to 2 or 3 ply truss with 7-16d common nails.	1455 lbs	1730 lbs
1/HETA16	Indicates 1-Simpson HETA16 nailed to one ply truss with 9-10d x 1 1/2" nails and to 2 or 3 ply truss with 8-16d common nails.	1810 lbs	1810 lbs
1/HHETA16	Indicates 1-Simpson HHETA16 nailed to one ply truss with 10-10d x 1 1/2" nails and to 2 or 3 ply truss with 9-16d common nails.	2120 lbs	2120 lbs

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SHEET
S2
6 OF 6 SHEETS