


# IDYLLWOOD EQUESTRIAN CENTER

**CONTACT:**  
 Jamie Benner/Jur Strobos  
 11490 Julianne Avenue North  
 Grant, Minnesota 55082  
 Phone: 763-285-9280  
 Email: jurstrobos@icloud.com

**COUNTY/CITY:**  
**WASHINGTON COUNTY**  
**CITY OF GRANT**

**REVISIONS:**

DATE	REVISION
06-24-2022	INITIAL ISSUE
03-15-2023	PROP. BUILDING

**CERTIFICATION:**  
 I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly licensed Land Surveyor under the laws of the state of Minnesota.  
  
 Daniel L. Thurmes Registration Number: 25718  
 Date: 06-24-2022

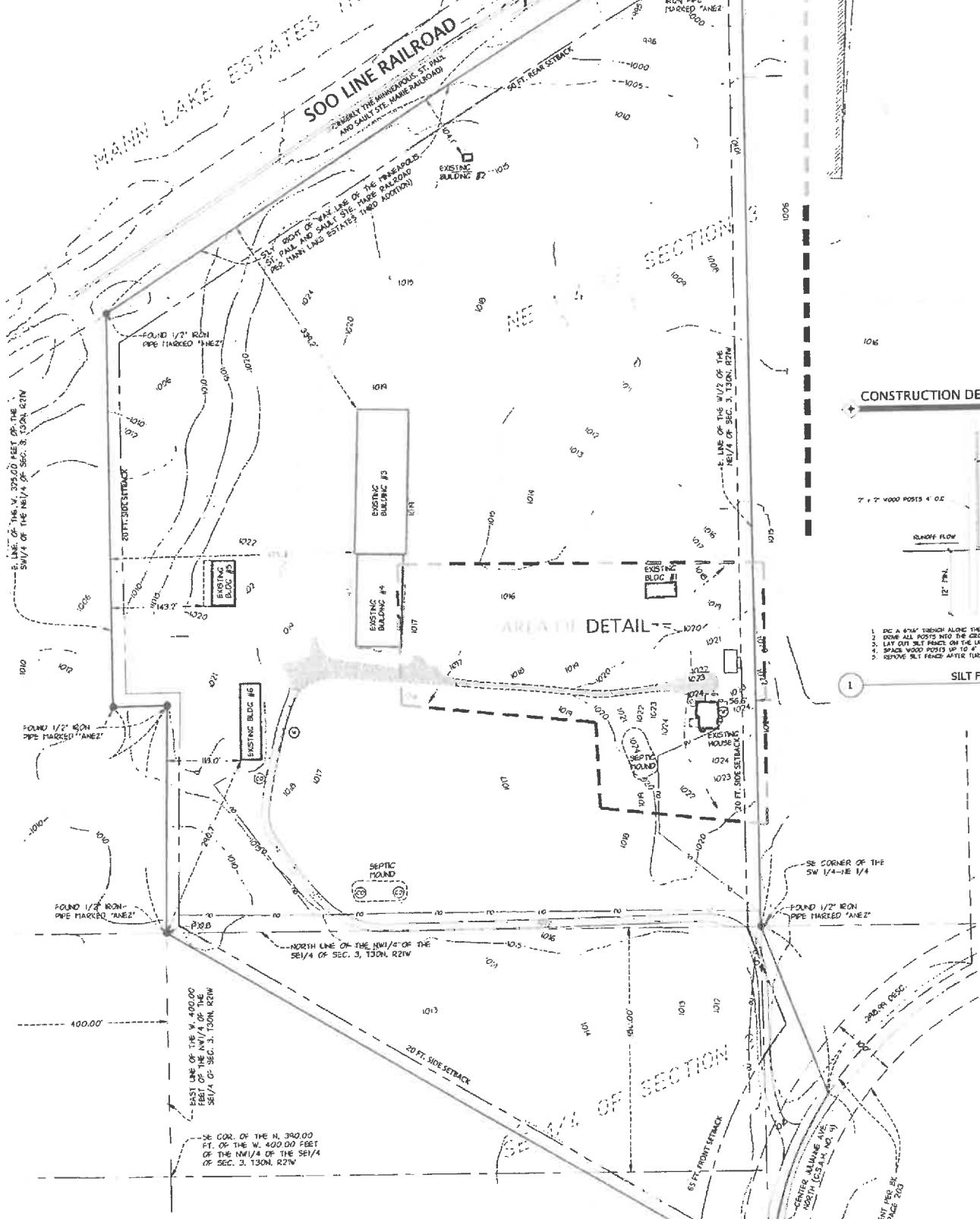
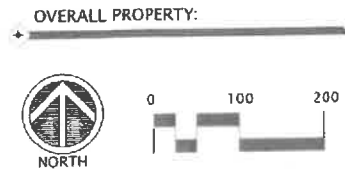
**PROJECT LOCATION:**  
**11490 JULIANNE AVE. N.**  
 PID#0303021130003

Suite #200  
 1970 Northwestern Ave.  
 Stillwater, MN 55082  
 Phone 651.275.8969  
 dan@cornerstone-land.com  
 cssurvey.net

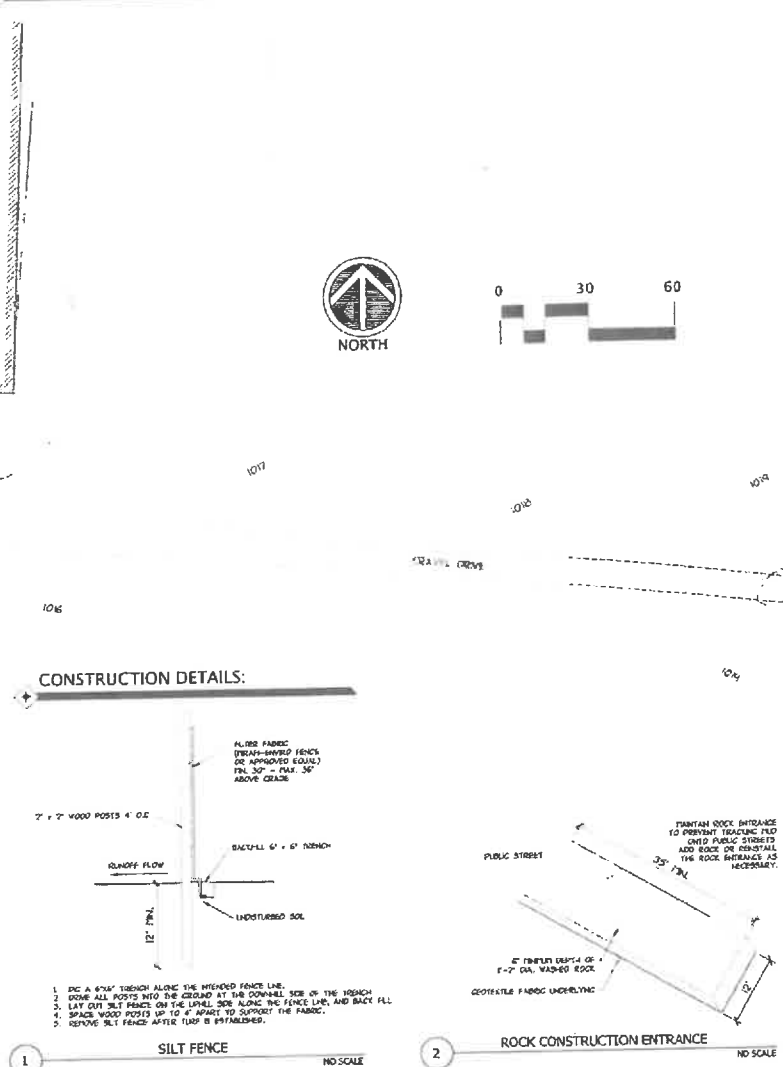
**CORNERSTONE  
LAND SURVEYING, INC.**

FILE NAME: SURV22468A  
 PROJECT NO: Z217468A

**BOUNDARY/TOPOGRAPHIC SURVEY**



**AREA OF DETAIL:**



**EXISTING LEGAL DESCRIPTION:**

(LEGAL DESCRIPTION PER LIMITED WARRANTY DEED DOC. NO. 3859080)  
 All that part of the Northeast Quarter and the Southeast Quarter of Section 3, Township 30 North, Range 21 West, Grant Township, Washington County, Minnesota, described as follows:  
 Commencing at the Southeast corner of the North 380.00 feet of the West 400.00 feet of the Northwest Quarter of said Southeast Quarter; thence North 01 degrees 30 minutes 59 seconds West, assumed bearing, along the East line of said West 400.00 feet, a distance of 380.05 feet to its intersection with the North line of said Northwest Quarter of the Southeast Quarter; thence North 01 degrees 35 minutes 35 seconds East, a distance of 1074.20 feet to its intersection with the centerline of Julianne Avenue North (also known as Washington County Road No. 9); thence Northeasterly, along said centerline of Julianne Avenue North, a distance of 300.00 feet to its intersection with a line that bears South 21 degrees 49 minutes 41 seconds East from the Southeast corner of the Southwest Quarter of said Northeast Quarter, thence North 29 minutes 33 seconds West, along the East line of the West Half of said Northeast Quarter, a distance of 1609.34 feet to its intersection with the Southerly right of way line of the Minneapolis, St. Paul and Sault Ste. Marie Railroad Company; thence South 55 degrees 58 minutes 10 seconds West, along said Southerly right of way line, a distance of 1171.49 feet to its intersection with the East line of the West 325.00 feet of said Southwest Quarter of the Northeast Quarter; thence South 01 degrees 20 minutes 59 seconds East, along said East line of the West 325.00 feet, a distance of 611.10 feet; thence North 88 degrees 34 minutes 07 seconds East, a distance of 83.46 feet; thence South 00 degrees 09 minutes 42 seconds East, a distance of 353.49 feet to the point of beginning.

**TITLE NOTES:**

NO TITELWORK WAS PROVIDED FOR OUR REVIEW. EASEMENTS OF WHICH WE ARE UNAWARE (AND HENCE HAVE NOT BEEN LOCATED/SHOWN) MAY EXIST.

**SURVEY NOTES:**

- BEARINGS ARE BASED ON COORDINATES SUPPLIED BY THE WASHINGTON COUNTY SURVEYORS OFFICE (NAD 83).
- UNDERGROUND UTILITIES NOT SHOWN.
- FIELD TOPOGRAPHY HAS BEEN CONDUCTED IN AREAS SHOWING SPOT ELEVATIONS AND THE LOCATION OF THE IMPROVED ROADS LOCATED WITH SURVEY FIELD METHODS. ADDITIONAL CONTOURS ON THE SITE IS SHOWN PER LIDAR DATA FROM THE MINNESOTA DNR MNTPO DATASET.
- THE PURPOSE OF THIS SURVEY IS TO DETAIL THE AREA AROUND THE HOME SITE FOR PLANNING PURPOSES. THE BOUNDARY AND SUPPLEMENTAL INFORMATION HAS BEEN PROVIDED FOR FUTURE PLAN REVIEW. ALL EXISTING BUILDINGS ON THE SITE HAVE BEEN LOCATED AND THE MORE FORMAL ROADS (BITUMINOUS OR CLEARLY GRAVEL COVERED) HAVE ALSO BEEN INCLUDED WITH IMPERVIOUS SURFACE CALCULATIONS FOR FUTURE SITE REVIEW INFORMATION.

**ZONING/SETBACKS:**

(ZONING AND SETBACK INFORMATION FROM THE CITY OF GRANT WEBSITE 06/23/2022).  
 ZONING: A-1 (AGRICULTURAL LARGE SCALE)  
 SETBACKS:  
 FRONT: 65 FEET  
 SIDE: 20 FEET  
 REAR: 50 FEET  
 MAXIMUM HEIGHT: 35 FEET  
 \*VERIFY ALL SETBACKS WITH CITY ZONING ADMINISTRATOR.

**EXISTING IMPROVEMENTS:**

HOUSE	= 1405	AREAS SHOWN IN SQUARE FEET
DECKS/STEPS	= 423	
CELLAR DOOR	= 38	
EXPANDED FNDT	= 11	
GRAVEL DRIVE (AS SHOWN)	= 14373	
BITUMINOUS DRIVE	= 18618	
BUILDING #1	= 1135	
BUILDING #2	= 185	
BUILDING #3	= 18076	
BUILDING #4	= 10455	
BUILDING #5/LEANTO	= 3478	
TOTAL IMPROVED AREA	= 68197	
% IMPROVED	= 4.6%	

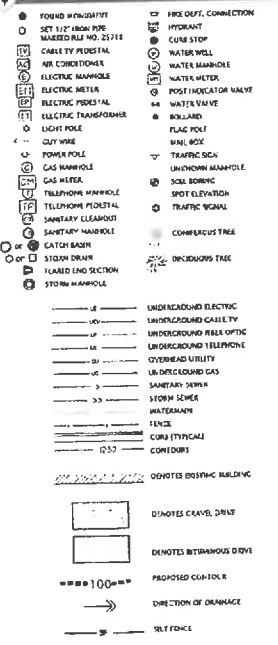
**PROPOSED IMPROVEMENTS:**

HOUSE	= 1405	AREAS SHOWN IN SQUARE FEET
NEW BUILDING	= 720	
DECKS/STEPS	= 423	
CELLAR DOOR	= 38	
EXPANDED FNDT	= 11	
GRAVEL DRIVE (AS SHOWN)	= 14373	
BITUMINOUS DRIVE	= 18618	
BUILDING #1	= 1135	
BUILDING #2	= 185	
BUILDING #3	= 18076	
BUILDING #4	= 10455	
BUILDING #5/LEANTO	= 3478	
TOTAL IMPROVED AREA	= 68917	
% IMPROVED	= 4.6%	

**PROPOSED ELEVATIONS:**

MAIN FLOOR	1024.50	"ELEVATIONS PER GARY HITTLE, HITTLE SURVEYING 3/14/2023"
BASEMENT FLOOR	1015.73	
TOP FOUNDATION	1023.40	

**LEGEND:**



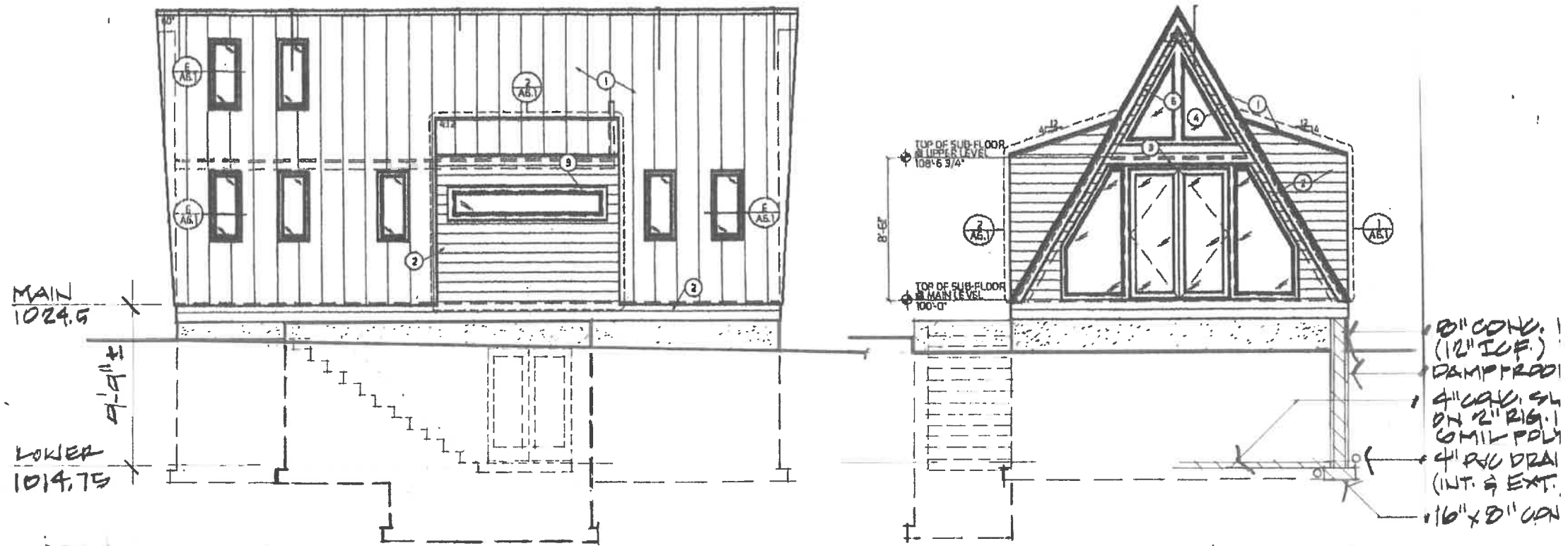
**AREAS:**

TOTAL PARCEL AREA	= 1,510,003 SF / 34.66 ACRES
ROW OF JULIANNE AREA	= 16,121 SF / 0.37 ACRES
PARCEL AREA MINUS ROW	= 1,493,882 SF / 34.29 ACRES

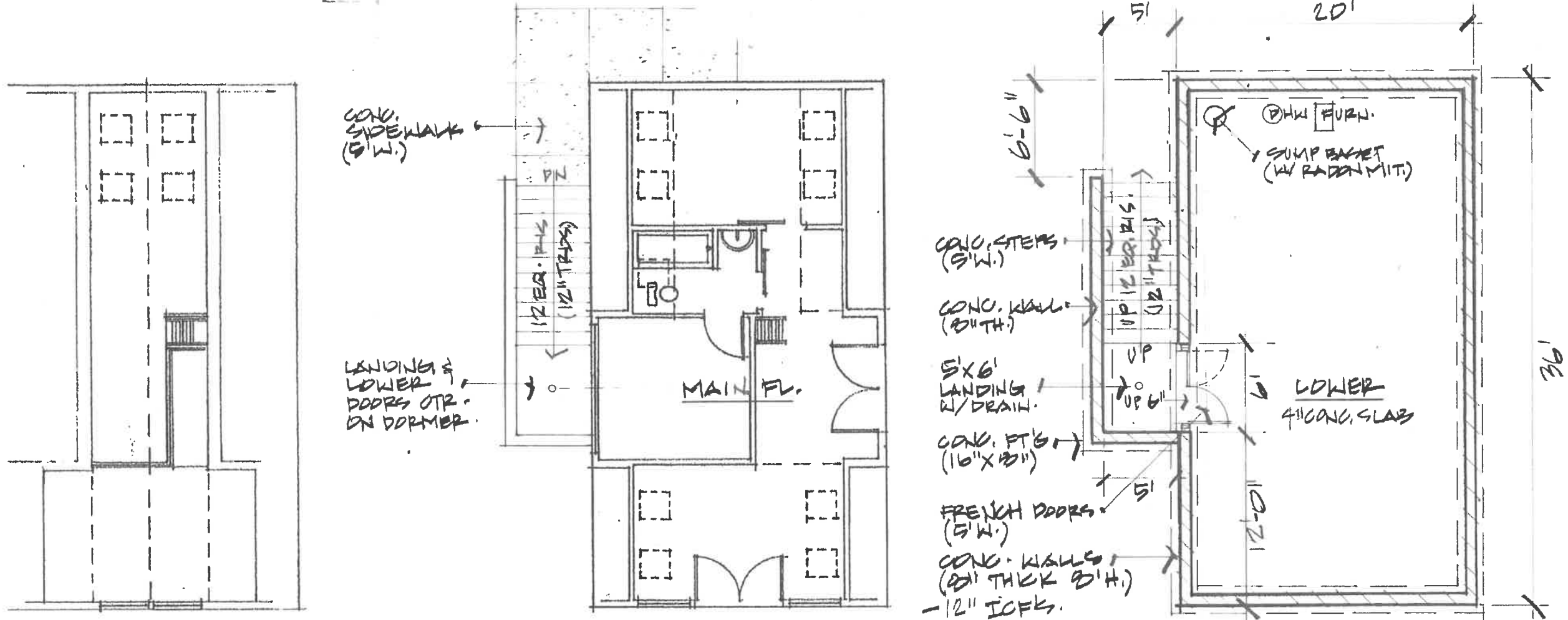
**UNDERGROUND UTILITIES NOTES:**

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH FACILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST.

CALL BEFORE YOU DIG!  
**Gopher State One Call**  
 THIN CITY AREA 651-654-0002  
 TOLL FREE: 1-800-252-1166



- 8" CONG. (12" IOF.)
- DAMP PROOF
- 4" CONG. SLAB
- OR 2" RIG. 1 CMIL POLY
- 4" PVC DRAIN (INT. & EXT.)
- 16" x 8" CONG.



CONG. SIDEWALK (5' W.)

LANDING & LOWER DOORS OTR. ON DORMER.

CONG. STEPS (5' W.)

CONG. WALL (8" TH.)

5' x 6' LANDING W/ DRAIN.

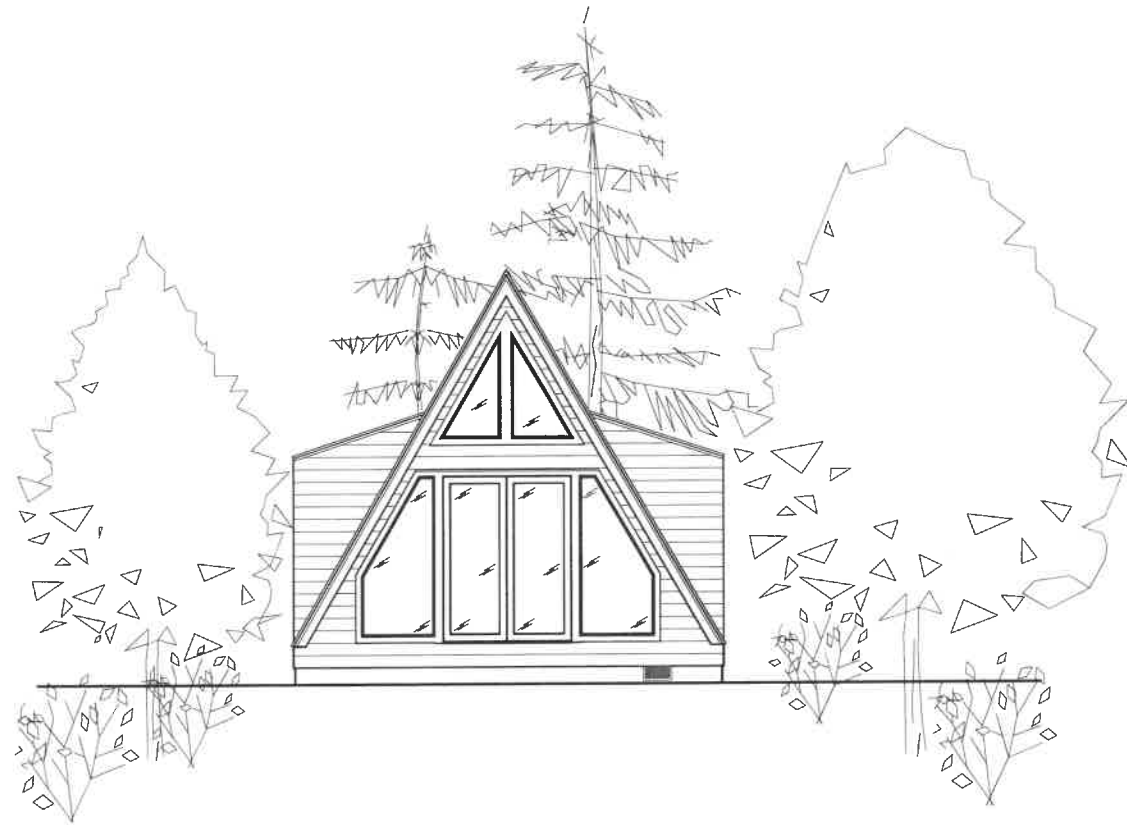
CONG. FTG (16" x 8")

FRENCH DOORS (5' W.)

CONG. WALLS (8" THICK 8" H.) - 12" IOFK.

LOWER 4" CONG. SLAB

STROBIC. A-FRAME FOUNDATION PLAN  
MARCH 2023



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**IDYLLWOOD OFFICE**  
 11490 JULIANNE AVENUE NORTH  
 GRANT, MN 55082

**DUO 100 PROJECT (020)**

DRAWN FOR ONE-TIME USE FOR  
**AVRAME U.S.A.**

ISSUE DATE 10/14/2021

**REVISIONS**  
 REVISION DELTA

**A0.1**  
 COVER SHEET

**GENERAL NOTES**

- A. EXCAVATION, BACKFILL, AND GRADING**
  1. All excavations for footings shall be placed on natural, undisturbed soil.
  2. All excavations for footings shall be placed on undisturbed soil and below frost depth (30 Min). Tops of foundation shall be placed a minimum of 6" above finished grade.
  3. Finish grading shall be done so as to provide positive drainage away from all building foundations. grade shall slope away 6" minimum for the first 10' of building, no negative slope driveways.
- B. WEATHER PROTECTION**
  1. Install roof underlayment per IRC R905.1.1
  2. Install water and resistive barrier at all exterior walls per IRC R703.1 and R703.2
- C. CONCRETE**
  1. Install foundation and footing reinforcement as per Foundation Wall and Footing Schedule
- D. WINDOWS**
  1. All window tops shall be at door header height, i.e. 6'-8" (unless otherwise noted on plans).
  2. Windows located 24" or closer to any exterior door must be tempered.
  3. All windows in sleeping rooms shall be measured to the opening of the window and not be more than 44" above the finished floor with an operable opening no less than 5.7 sq.ft. the window height shall not be less than 24", with a net clear width of no less than 20".
- E. VENTILATION**
  1. Ventilation shall be provided in all crawl spaces by means of screened vents placed to provide cross ventilation.
  2. Enclosed attics and spaces between rafters shall have clear ventilation to outside.
  3. There shall be no gas connections allowed in any rooms used for sleeping or any corridors leading to or through any sleeping rooms.
- F. FIRE PROTECTION AND WARNINGS**
  1. Fireplace chimneys shall extend 24" min. above any roof within a 10' radius.
  2. Smoke/ Carbon Monoxide detectors are required to meet local codes. Wire all smoke/C.M. detectors in series with battery backup.
  3. Walls/ wall coverings are subject to local codes and regulations under the county where the Avrame home lot is located and must be met.
- G. STAIRWAYS**
  1. Max rise = 7-1/2" and min. tread depth= 11" shall apply with current national and local building codes.
  2. Min. headroom= 6'-8" and min. width= 36"
  3. Every landing should be 36" min. in width and length.
  4. Any door opening at the top of any interior flight of stairs must swing away from stairs.
  5. Landings shall have a 36" min. depth and width, and clear min. head height of 80"
- H. RAILING**
  1. Handrails are required at all stairways that have more than 3 risers.
  2. Handrails should be placed between 34" and 38" above stair nosing.
  3. Handrails deeper than 2-1/2" shall have finger grooves 1/4" x 1/4" deep, the full length of one side of the rail. Return handrails to end.
  4. Balusters for handrails and guardrails shall be spaced so that a 4" sphere cannot pass through.
- I. PLUMBING**
  1. Toilets shall be 1.6 gallon flush type.
  2. All work performed by a licensed plumber.
  3. Provide pressure regulator and shut off valve.
  4. Interior waste and vent lines shall be A.B.S.
  5. Back water valves should only be used on the drains for plumbing fixtures that are below the level of the nearest upstream manhole. The fixtures that are above the nearest upstream manhole should not discharge through the back water valve.
  6. It shall be the sole responsibility of the Contractor/Builder to follow all codes & regulations pertaining the type of water heater to be used in the specific State and County where the building site is located.
  7. All showers, & kitchen faucets shall be 1.75 GPM or less. Lavatory faucets shall be 1.0 GPM or less.

**FRAMING NOTES**

1. All dimensions on floor plans are to rough framing, walls calculated to be 3-1/2" wide for dimensioning.
  2. All structural sheathing shall be APA rated and shall not exceed maximum span rating. Floor sheathing shall be 1-1/2" tongue and groove. Gap all waferboard sheathing
  3. Spike together all 2 x laminated built up beams using at least 16d nails at no less than 7" O.C. staggered.
  4. Trusses are to be engineered, designed and constructed by manufacturer to meet all local loads and codes.
  5. Truss anchors shall be provided at each end of all the trusses. (Install to meet local requirements)
  6. Bi-pass doors shall be framed one inch smaller in width than door. Example: A 5'-0" slider shall have a 59" rough opening. Also, bi-fold doors shall be framed one inch wider than door and 02" in height. Bi-pass doors shall be 83" in height.
  7. Interior framing that is non-bearing shall be provided where required.
  8. Framing will include all furr downs, ceiling joists, and plantselves as per architectural drawings.
  9. All hangers (joist, rafter, and beam) shall be installed as per manufacturers specs.
  10. Multiple plates and ledgers shall be nailed with 16d nails at 8" O.C.
  11. Block all horizontal edges of plywood wall sheathing with 2" nominal blocking.
  12. All ledger bolts shall have plate washers with a minimum diameter equal to three times the bolt diameter unless shown otherwise in plans.
  13. Minimum nailing shall be 6" O.C. at panel edges & 12" O.C. in the field.
  14. Walk-in closet shelves 16" in depth. All other closets shall be 7" deep. Space saver closets shall have an upper shelf at 84" A.F.F. and a lower shelf at 42" A.F.F. Located shelves in single shelf closets at 72" A.F.F.
  15. Wood beams made of two or more pieces shall have the pieces securely bolted or nailed together to prevent separation and to insure mutual load sharing. Each interconnected piece shall be continuous between supports shall have the same width as the composite beam. U.N.O.
  16. All framing studs shall be 16" O.C. Max. All floor sheathing with face grain at right angles to framing and glue. Glue must comply with APA specs. Floor joists shall be blocked at all bearing points. Block all horizontal edges of wall sheathing with 2x4 blocking.
  17. All roof sheathing shall be 5/8" (typ) rated CDX sheathing nailed with 8d nail at 6" O.C. at panel edges, supported edges, and all blocking with 8d nails.
  18. All wood that is connected to concrete, steel, and wood to wood (except stud to plate) shall be connected with Simpson (or equivalent) connectors. Sheathing shall be placed no less than 1/2" from edge of panel and driven flush but shall not fracture the surface of the sheathing.
  19. These shall be the member grades used on this structure. Glue-Lam beams (simple span) 24F-V4 DF/DF (cantilevered) 24F-V8 DF/DF
- |                                    |                                 |
|------------------------------------|---------------------------------|
| Joists                             | DF 2# (or better)               |
| Headers                            | DF 2# (or better)               |
| Posts                              | DF 2# (or better)               |
| Studs                              | DF stud grade (or better) U.N.O |
| Sill plates in contact w/ concrete | DF #2 (pressure treated)        |
| Pre-Fab trusses or joists          | As per manufacturers spec's     |

**PROJECT INFORMATION**

**SCOPE OF WORK**  
 SINGLE FAMILY RESIDENCE

**STRUCTURAL ENGINEER**  
 McNEIL ENGINEERING  
 8610 SOUTH SANDY PARKWAY  
 SANDY, UT 84070  
 801-255-7700  
 mcneileng@meer.com

**JURISDICTION**  
 GRANT, MN 55082

**CODES**  
 2018 IRC (CHAPTERS 2 - 35)  
 2018 IRC (EXCLUDING CHAPTERS 11 - 43)  
 2018 INTERNATIONAL MECHANICAL CODE  
 2018 INTERNATIONAL FUEL GAS CODE  
 ANSIAASHRAH STANDARD 62.2-2016 NS  
 ANSIAASHRAH STANDARD 154-2016  
 2015 MINNESOTA PLUMBING CODE IAPMO  
 2020 MINNESOTA FIRE CODE "BASED ON 2018 INTER. FIRE CODE"  
 MINNESOTA ELECTRICAL CODE REFERENCES 2020 NEC AND NFPA 70

**CONSTRUCTION**

TYPE OF CONSTRUCTION	VB
OCCUPANCY CLASSIFICATION	R3
NUMBER OF STORIES	1 W/O BASEMENT
BUILDING HEIGHT	19'-8"

**BUILDING AREAS**

MAIN LEVEL	526 SQ. FT.
STORAGE AREA	0 SQ. FT.
FINISHED AREA	526 SQ. FT.
UNFINISHED AREA	0 SQ. FT.
TOTAL AREA	526 SQ. FT.

AVRAME U.S.A HAS DESIGNED THIS STRUCTURE IN CONJUNCTION WITH A LICENSED ENGINEER TO MEET OR EXCEED LOCAL BUILDING CODES. AVRAME ASSUMES NO LIABILITY FOR THE ACCUPACY AND CRAFTSMANSHIP OF THE OWNER/BUILDER IN FOLLOWING THE PLANS

IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO PERFORM BUILDING REVIEWS BEFORE BEGINNING CONSTRUCTION.

THESE INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

1. VERIFY ALL DIMENSIONS
2. REVIEW ALL STAIR REQUIREMENTS
3. VERIFY COMPLIANCE WITH LOCAL CODES
4. VERIFY ALL FOUNDATION HOLDOWN LOCATIONS
5. VERIFY ACTUAL SITE CONDITIONS

ANY DISCREPANCIES ON THE PLANS MUST BE RESOLVED BY THE BUILDER PRIOR TO CONSTRUCTION

TRUSS DESIGN AND LAYOUT IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER

CONSTRUCTION USING THESE PLANS SHOULD NOT BE UNDERTAKEN WITHOUT THE ASSISTANCE OF A BUILDING PROFESSIONAL.

**INDEX OF DRAWINGS**

<b>GENERAL</b>	
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A0.2	SITE PLAN
<b>ARCHITECTURAL</b>	
A1.1	FLOOR PLANS
A2.1	EXTERIOR ELEVATIONS
A3.1	BUILDING SECTIONS & DETAILS
<b>ELECTRICAL</b>	
M1.1	ELECTRICAL PLANS
<b>STRUCTURAL</b>	
S0C1	GENERAL STRUCTURAL NOTES
S1O1	FOOTING & FOUNDATION PLAN

### WINDOW SCHEDULE

QTY.	WIDTH	HEIGHT	HEAD	U-FACTOR	SHGC	TYPE	REMARKS
1	3'-7"	7'-8"	7'-11"	-	-	PICTURE	TRAPEZOID PICTURE - SEE ELEVATIONS
2	3'-7"	7'-8"	7'-11"	-	-	PICTURE	TRAPEZOID PICTURE - SEE ELEVATIONS
3	9'-0"	1'-6"	6'-8"	-	-	PICTURE	
4	3'-0 1/2"	5'-3"	6'-3"	-	-	PICTURE	TRIANGLE PICTURE - SEE ELEVATIONS
5	3'-0 1/2"	5'-3"	6'-3"	-	-	PICTURE	TRIANGLE PICTURE - SEE ELEVATIONS
6	13	1'-9"	4'-6 7/16"	-	-	SKYLIGHT	VELUX VSE - MANUAL OPENING SKYLIGHT - COB - OWNER TO DETERMINE HEAD HEIGHT

### DOOR SCHEDULE

QTY.	WIDTH	HEIGHT	THICK	U-FACTOR	SHGC	TYPE	REMARKS
A	6'-0"	6'-8"	1 3/4"	-	-	EXT. FRENCH	EXTERIOR FRENCH, FULL LITE, INSULATED, LOW E, WEATHER STRIP, THRESHOLD, LOCKSET
B	6'-0"	7'-10"	1 3/4"	-	-	EXT. FRENCH	EXTERIOR FRENCH, FULL LITE, INSULATED, LOW E, WEATHER STRIP, THRESHOLD, LOCKSET
B	2'-8"	6'-8"	1 3/4"	-	-	INT. SWING	
B	2'-8"	6'-8"	1 3/4"	-	-	INT. BARN	
C	2'-6"	6'-8"	1 3/4"	-	-	INT. BARN	

### KEYED NOTES

- STANDING SEAM METAL ROOF WITH SEAMS @ 16" O.C. INSTALLED PER MANUFACTURERS SPECIFICATIONS OVER ICE AND WATER MEMBRANE OVER ENTIRE ROOF SURFACE UP TO 24" DOWN FROM RIDGE TYP. DOUBLE UNDERLAYMENT REQUIRED AT ROOFS WITH SLOPE 4:12 OR LESS.
- SIDING AND TRIM PER OWNER ON TYVEK HOMEWRAP ON 1/2" EXT. SHEATHING ON 2x6 STUDS @ 16" O.C.
- 2" CONT. METAL FLASHING ABOVE ALL NEW DOORS, WINDOWS, AND HORIZ. TRIM
- FASCIA PER OWNER
- SOFFIT PER OWNER
- CONCRETE FOUNDATION - SEE STRUCTURAL FOR SIZE AND REINFORCING.
- VERTICAL DRAIN BOARD OR SPRAY APPLIED FOUNDATION DAMP PROOFING TO DRAIN TO 4" CONTINUOUS FOUNDATION DRAIN, SET IN GRAVEL DRAIN TO SUMP. ALL SIDES OF FOUNDATION. BACKFILL FOUNDATION WITH GRANULAR FILL @ 95% COMPACTION.
- NON-VENTED ROOF PER REScheck REPORT AND IRC R806.5
- INSULATION PER REScheck REPORT. INSTALL MIN. 4-MIL POLYETHYLENE VAPOR RETARDER OVER THE INSULATION ON THE INSIDE (WARM SIDE). IRC R702.7
- TUBS AND SHOWERS WITH TILED WALLS REQUIRE A PORTLAND CEMENT OR GLASS MAT GYPSUM BACKER. GREEN BOARD IS NO LONGER ALLOWED IN THIS APPLICATION.
- GUARDRAIL AT STAIRWAY TO BE 36" TALL W/ NO OPENINGS ALLOWING THE PASSAGE OF A SPHERE 4" IN DIAMETER.
- CRAWL SPACE ACCESS. SEE FLOOR FRAMING PLANS FOR DETAILS.
- VENTILATION TO BE COMPLIANT AT ALL CRAWLSPACE AREAS. SEE ELEVATIONS FOR SIZE AND LOCATIONS OF VENTS. INSULATION TO BE HELD BACK TO MAINTAIN CLEARANCE AROUND VENTS.  
720 SQ. FT. CRAWL SPACE AREA / 1500 = 0.48 SQ. FT. MIN. REQ. VENT AREA.
- PELLET STOVE - INSTALL PER MANUFACTURER INSTRUCTIONS. TRIPLE WALL MANUFACTURED CHIMNEY SYSTEM. SIZED PER MECHANICAL SPEC.

**Avrame USA**  
 622 WEST DOUBLE EAGLE CIRCLE  
 DEER CREEK, MN 55005  
 PHONE: 952.287.2837  
 EMAIL: SALES@AVRAMEUSA.COM

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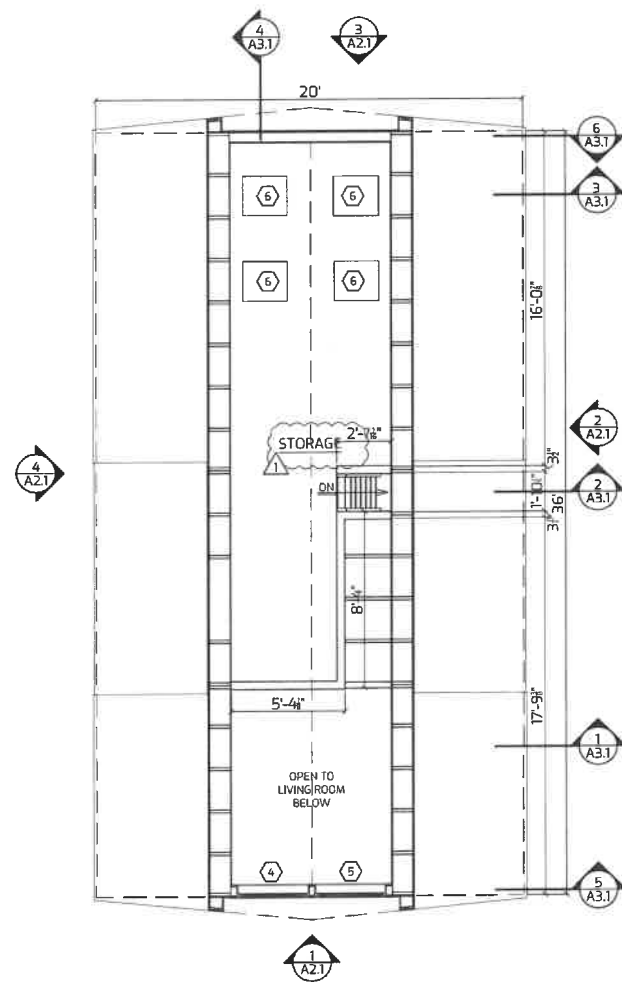
**DUO 100 PROJECT (020)**

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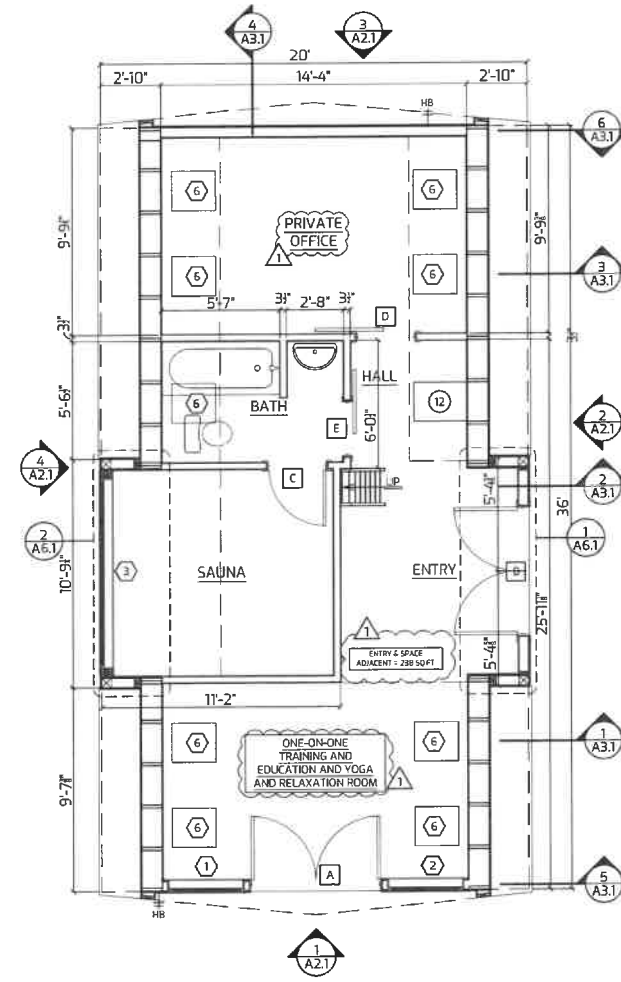
ISSUE DATE 10/14/2021

REVISIONS  
 REVISION DELTA

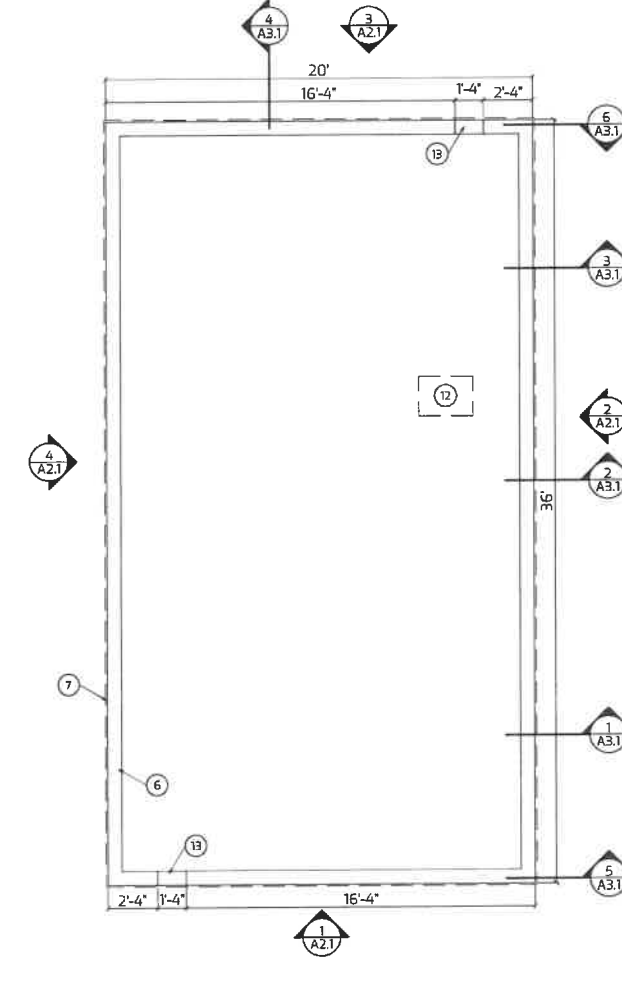
**A1.1**  
 FLOOR PLANS



**3 LOFT LEVEL FLOOR PLAN**  
 1/4" = 1'-0"



**2 MAIN LEVEL FLOOR PLAN**  
 1/4" = 1'-0"



**1 LOWER LEVEL FLOOR PLAN**  
 1/4" = 1'-0"

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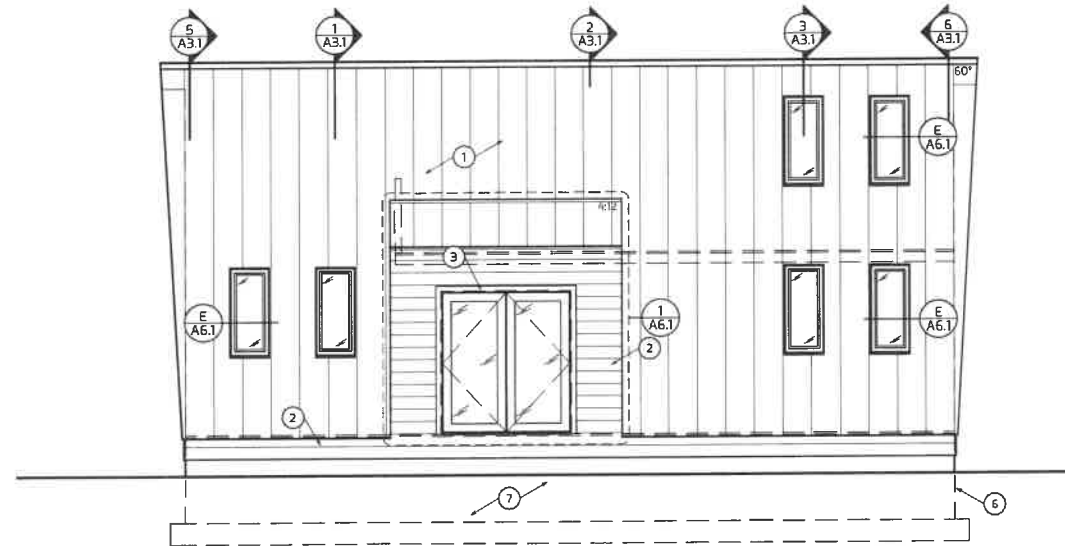
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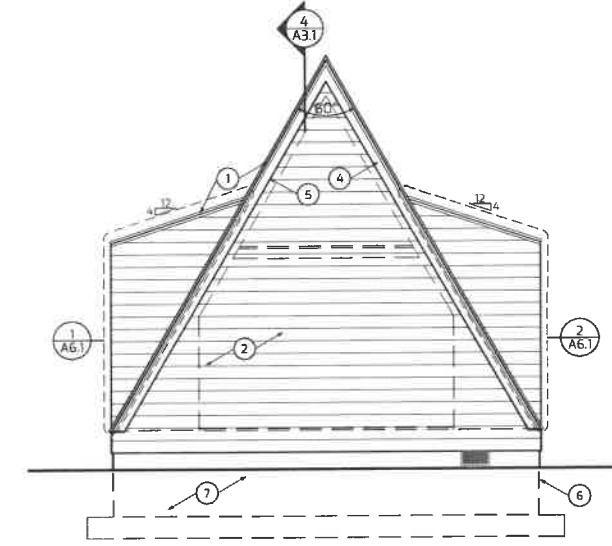
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REVISIONS  
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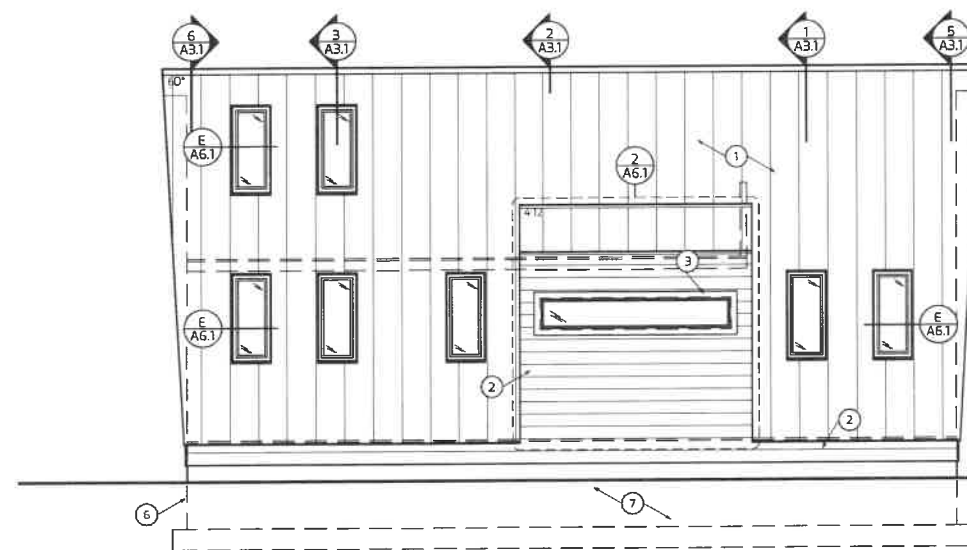
**A2.1**  
 EXTERIOR ELEVATIONS



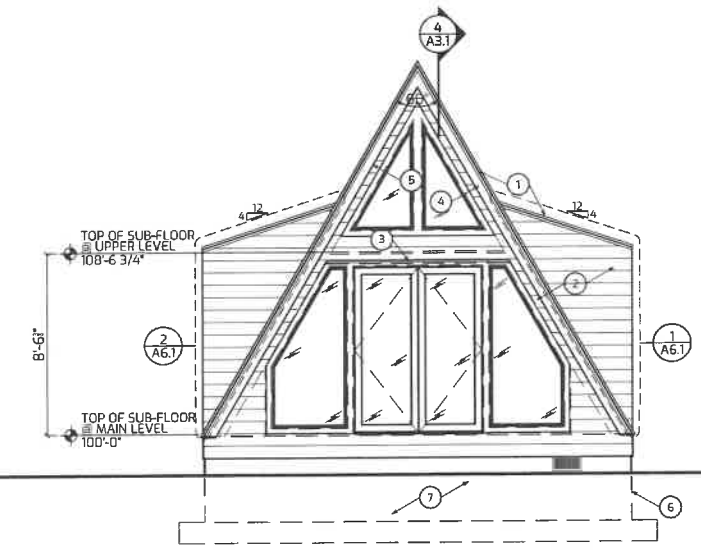
**4 RIGHT ELEVATION**  
 1/4" = 1'-0"



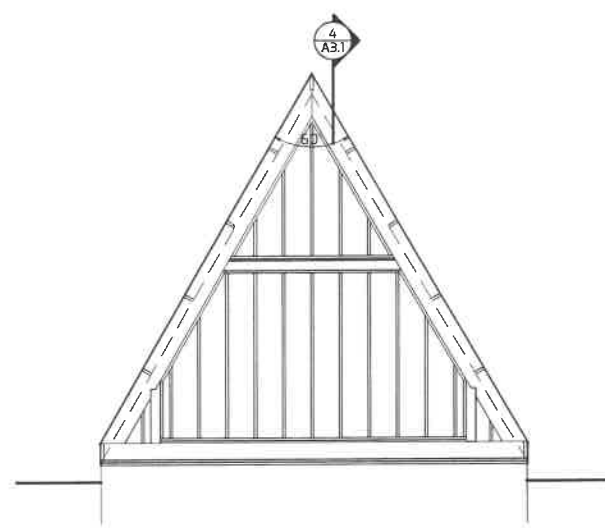
**3 REAR ELEVATION**  
 1/4" = 1'-0"



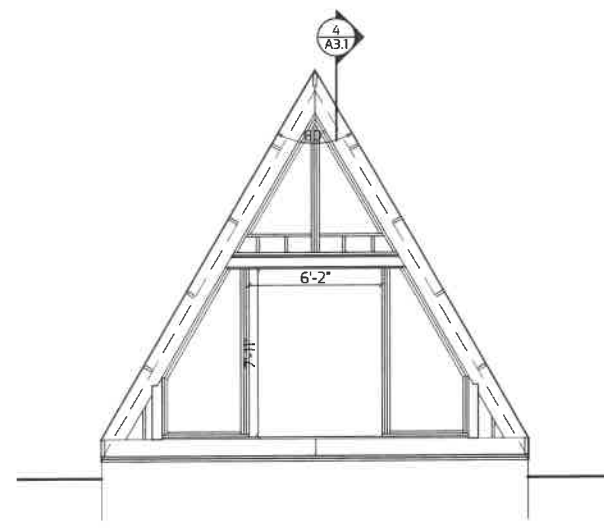
**2 LEFT ELEVATION**  
 1/4" = 1'-0"



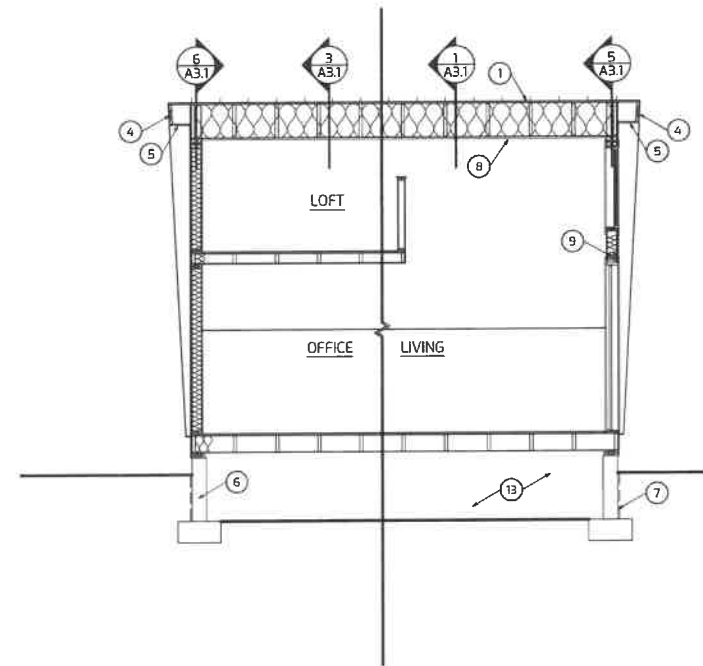
**1 FRONT ELEVATION**  
 1/4" = 1'-0"



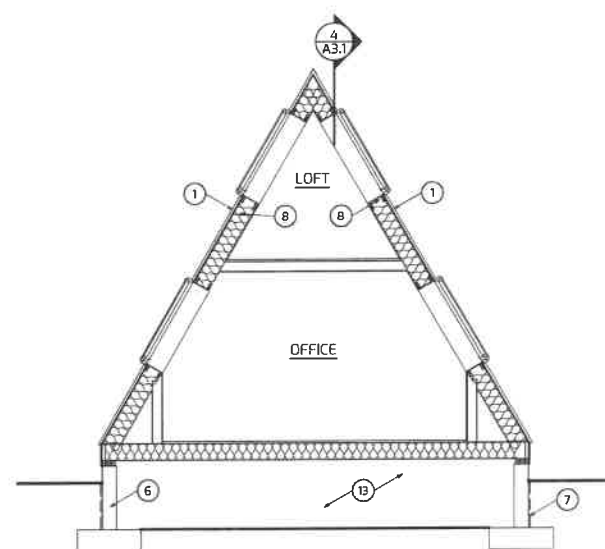
6 REAR GABLE FRAMING SECTION  
1/4" = 1'-0"



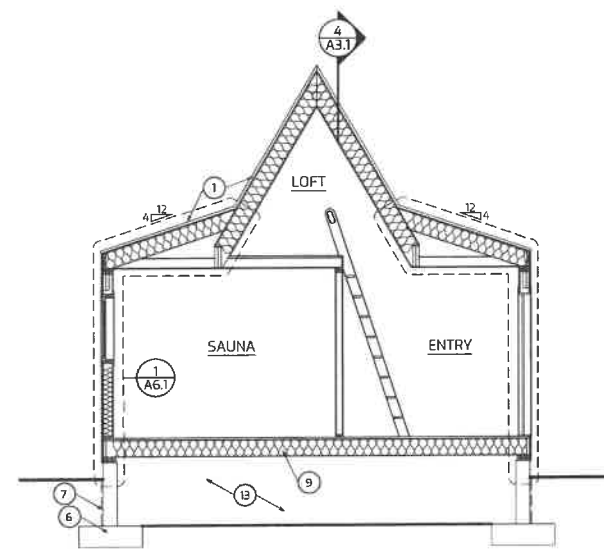
5 FRONT GABLE FRAMING SECTION  
1/4" = 1'-0"



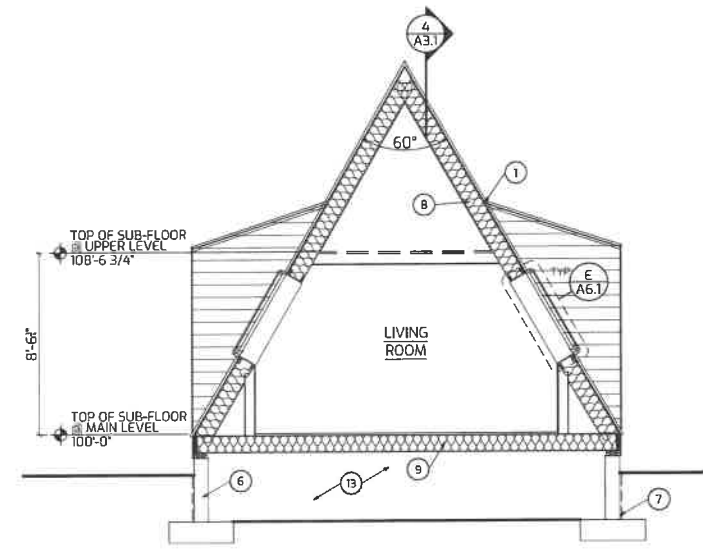
4 BUILDING LONGITUDINAL SECTION  
1/4" = 1'-0"



3 BUILDING CROSS SECTION  
1/4" = 1'-0"



2 BUILDING CROSS SECTION  
1/4" = 1'-0"



1 BUILDING CROSS SECTION  
1/4" = 1'-0"

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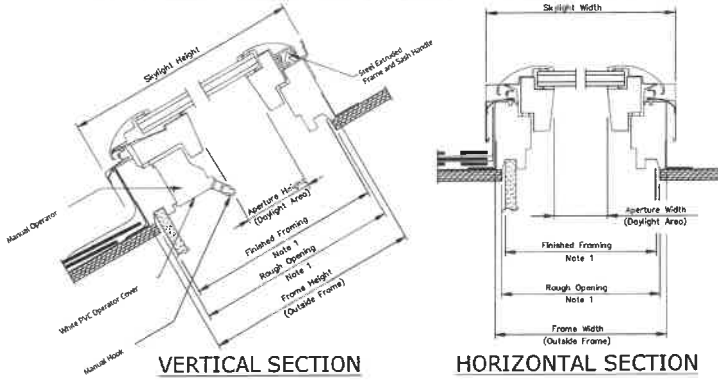
DUO 100  
PROJECT (020)  
DRAWN FOR ONE-TIME USE FOR  
AVRAME U.S.A.

ISSUE DATE 10/14/2021

REVISIONS  
REVISION DELTA

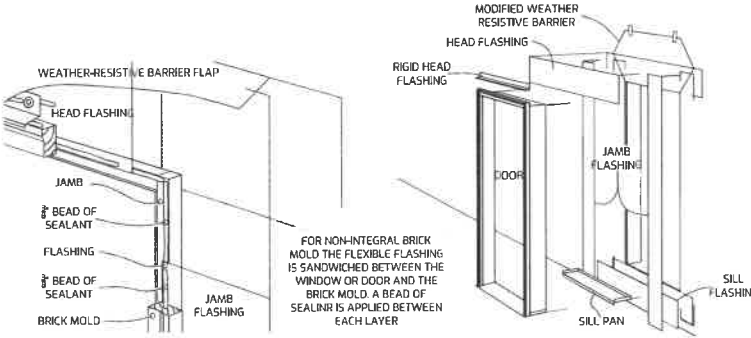
**A3.1**  
BUILDING SECTIONS  
DETAILS



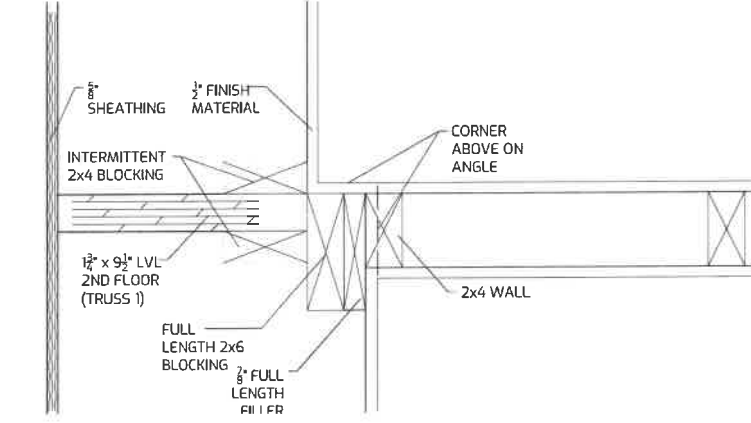


Model	Style	Size	Rough Opening Width	Frame Aperture Width	Skylight Width	Rough Opening Height	Frame Aperture Height	Skylight Height	Daylight Area (Sq. Feet)
FS	Side Frame Air	CD1	21 1/2"	18"	22 5/8"	26 7/8"	27 3/8"	28 3/8"	2.27
VSS	Electric Frame Air	CD4	21 1/2"	18"	22 5/8"	27 7/8"	28 3/8"	29 3/8"	3.50
VSE	Manual Frame Air	CD6	21 1/2"	18"	22 5/8"	45 3/4"	46 1/4"	47 1/4"	4.36
VSS	Fixed	CD8	21 1/2"	18"	22 5/8"	54 7/8"	54 15/16"	55 11/16"	5.34

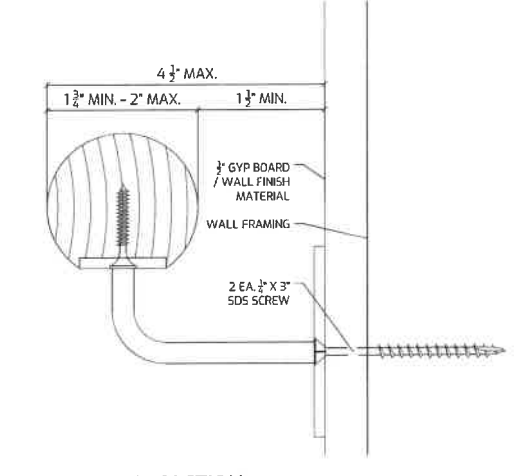
**E VELUX SKYLIGHT DETAILS**  
NO SCALE



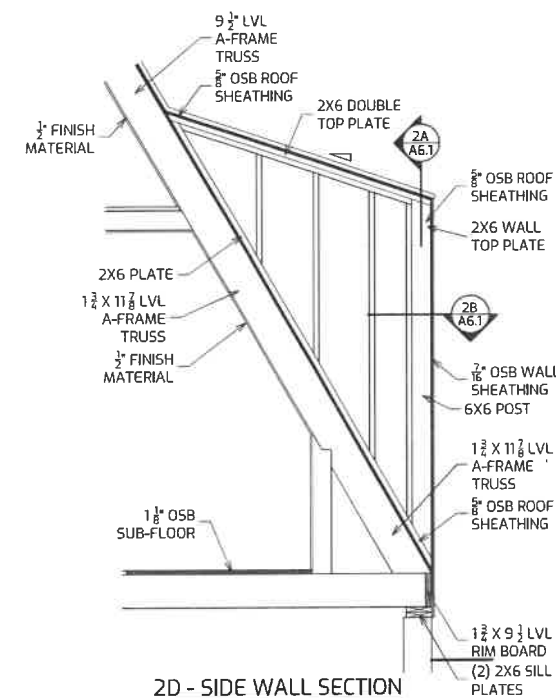
**D DOOR FLASHING DETAILS**  
NO SCALE



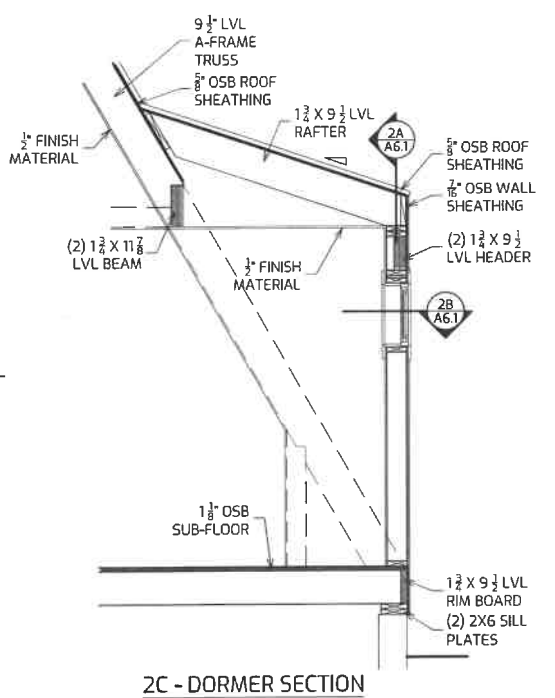
**C LOFT PONY WALL SECTION**  
3/8" = 1'-0"



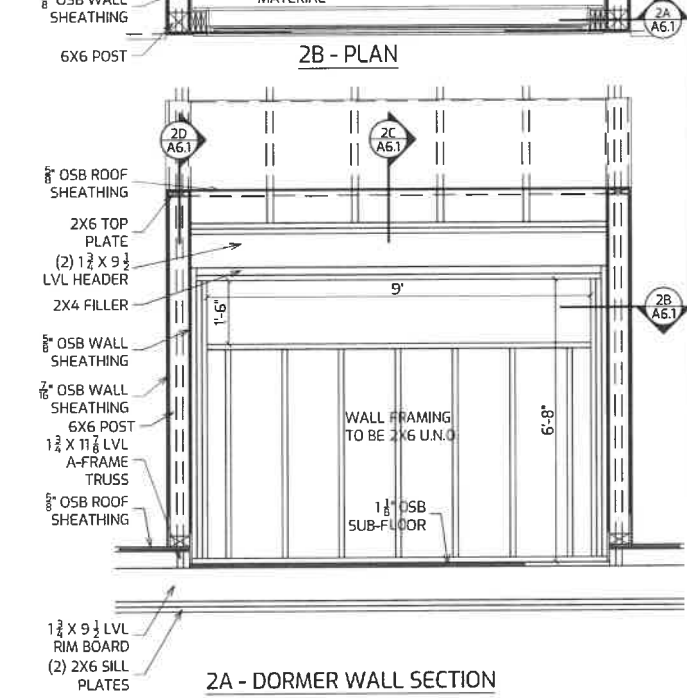
**B HANDRAIL SECTION**  
FULL SCALE



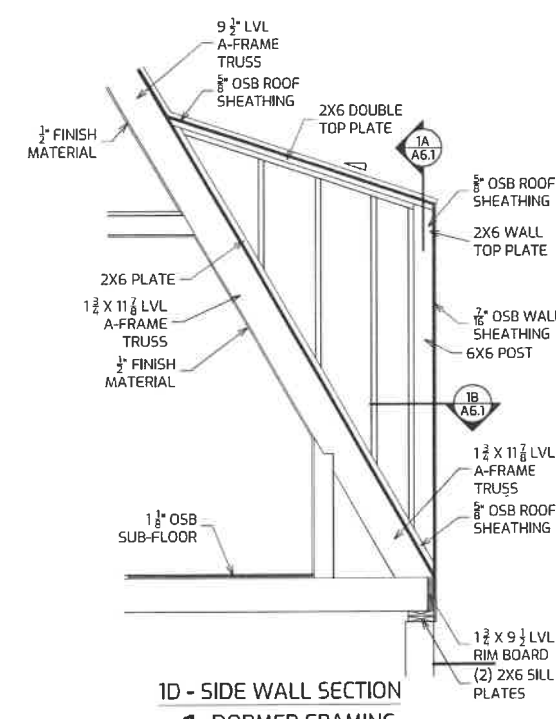
**2D - SIDE WALL SECTION**  
**2 DORMER FRAMING**  
1/2" = 1'-0"



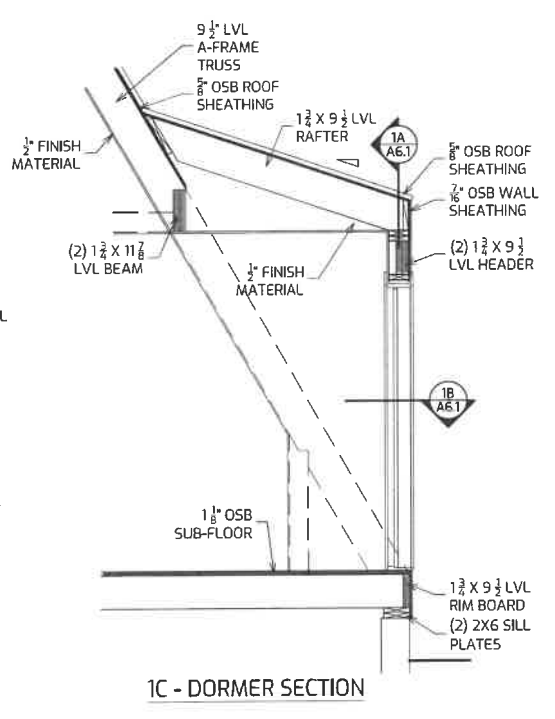
**2C - DORMER SECTION**



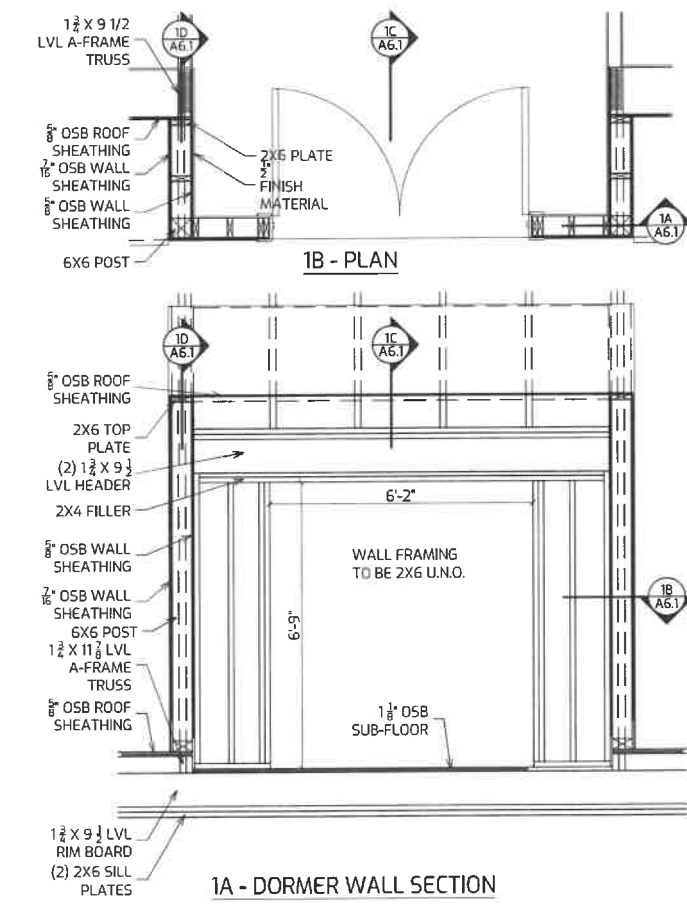
**2A - DORMER WALL SECTION**



**1D - SIDE WALL SECTION**  
**1 DORMER FRAMING**  
1/2" = 1'-0"



**1C - DORMER SECTION**



**1A - DORMER WALL SECTION**



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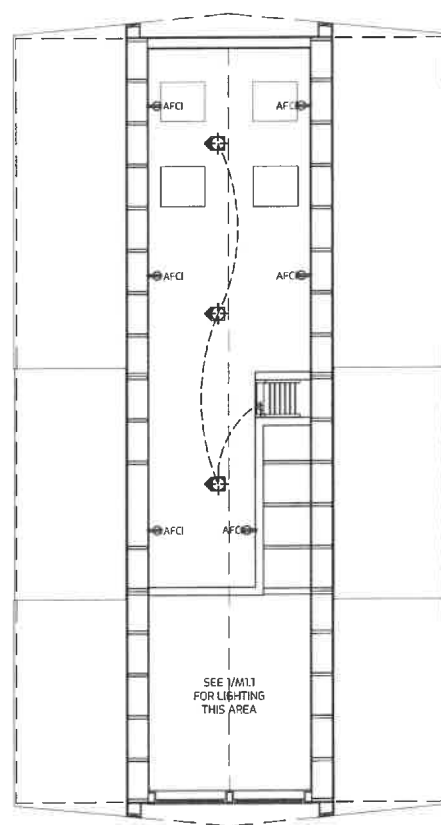
**A6.1**  
ARCHITECTURAL DETAILS

**MECHANICAL, ELECTRICAL, AND PLUMBING NOTES**

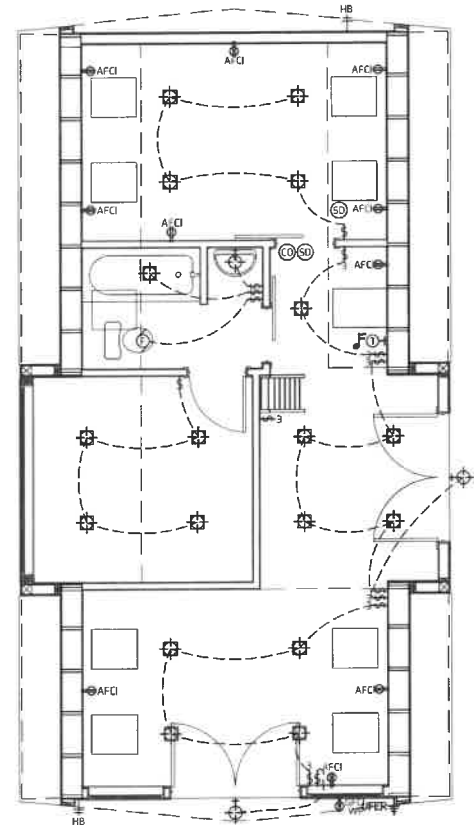
- ALL ELECTRICAL INSTALLATIONS SHALL COMPLY W/ 2016 CRC & 2014 NEC
- INSTALL OUTLETS SO NO POINT ALONG ANY WALL IS MORE THAN 6' FROM OUTLET.
- INSTALL RECEPTACLES ALONG KITCHEN COUNTERTOPS SO NO POINT ALONG ANY WALL IS MORE THAN 2' FROM AN OUTLET.
- ALL RECEPTACLES SERVING KITCHEN COUNTERTOPS, IN GARAGES, UNFINISHED BASEMENTS AND OUTSIDE OUTLETS TO BE GFCI PROTECTED.
- FUEL FIRED WATER HEATERS SHALL NOT BE INSTALLED IN A ROOM USED AS A STORAGE CLOSET. NON-DIRECT-VENT WATER HEATERS LOCATED IN A SEALED ENCLOSURE SO THAT COMBUSTION AIR WILL NOT BE TAKEN FROM THE LIVING SPACE.
- PROVIDE A MIN. OF 30" OF CLEARANCE SPACE IN FRONT OF THE FURNACE AND A MIN. OF 3" ALONG SIDE AND BACK.
- ELECTRICAL PANEL MUST HAVE 30" WIDTH, 36" DEPTH AND 6'-6" HEADROOM CLEARANCE.
- UFER GROUND REQUIRED
- ALL 15- AND 20- AMPERE RECEPTACLES IN EVERY KITCHEN, FAMILY, LIVING, DINING, PARLOR, LIBRARY, DEN, SUNROOM, BEDROOM, RECREATION, OR SIMILAR ROOM OR AREA OF DWELLING UNITS SHALL BE LISTED AS TAMPER-RESISTANT RECEPTACLES -E4002.14 AND -E3901.1
- WHEN MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT.
- PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM.
- A MIN. OF TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS SHALL SERVE ALL WALL AND FLOOR RECEPTACLES OUTLETS IN THE KITCHEN
- PROVIDE APPROVED BOXES OF SUPPORT FOR FAN/LIGHT COMBOS
- PROVIDE ALL BEDROOM OUTLETS, LIGHTS, SWITCHES, AND SMOKE DETECTORS W/ ARC-FAULT PROTECTION.
- ALL EXTERIOR OUTLETS TO BE GFCI WETHER PROOF.
- ALL EXTERIOR OUTLETS SHALL HAVE BUBBLE COVERS & 110V OUTLET WITH 25' OF AC UNIT.
- SMOKE DETECTORS AND CARBON MONOX. DETECTORS ARE REQUIRED TO BE INTERCONNECTED SO IF ONE SOUND, ALL SOUND.
- ALSO ALL DETECTORS ARE TO BE WIRED WITH PRIMARY POWER, AND BATTERY BACKUP.
- CARBON MONOXIDE DETECTORS REQUIRED ON ALL HABITABLE LEVELS INCLUDING ANY "BONUS ROOMS"
- ALL ELECTRICAL RECEPTACLES AND SWITCHES ARE UP A MIN. 18" ABOVE THE FLOOR, IN THE GARAGE OR ANY ROOM WITH ACCESS FROM GARAGE.
- A 125-VOLT, SINGLE PHASE, 15- OR 20-AMP RATED GFCI RECEPTACLE OUTLET SHALL BE INSTALLED WITHIN 25' OF MECHANICAL EQUIPMENT AND NOT BE CONNECTED TO THE LOAD SIDE OF THE DISCONNECTING MEANS.
- ALL ELECTRICAL BOXES IN GARAGE TO BE 2-HOUR RATED.

**SYMBOLS LEGEND**

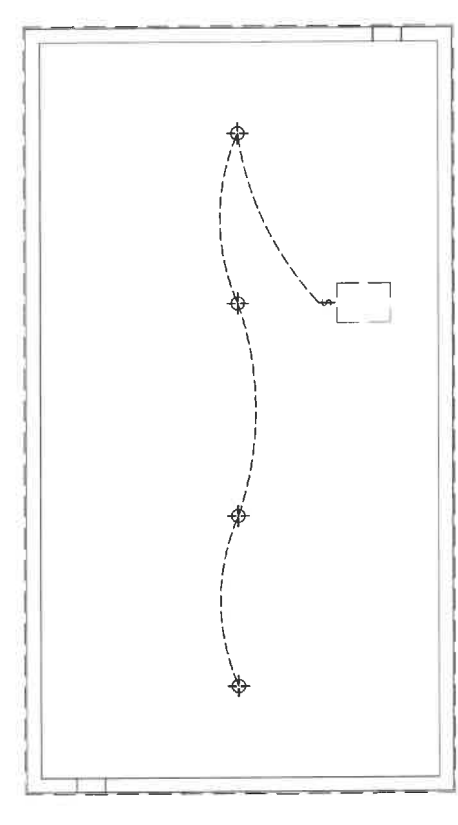
UFER CONCRETE ENCASED GROUNDING ELECTRODE	UFER	220V DISCONNECT BOX FOR AC COMPRESSOR PER NEC 422.26	4AC	110V DUPLEX CONV. OUTLET	•	THERMOSTAT CONTROL	⊕
SURFACE MOUNT LIGHT FIXTURE	⊕	PUSH BUTTON AT 48" A.F.F.	D	110V FOURPLEX CONV. OUTLET	•	RETURN AIR GRILLE	⊕
WALL HUNG FIXTURE	⊕	CHIMES	♩	1/2 HOT OUTLET	•	SUPPLY AIR GRILLE	⊕
RECESSED LIGHT FIXTURE	⊕	SMOKE DETECTOR (WIRED IN SERIES)	⊕	220V OUTLET	•	220V	•
RECESSED SLOPED LIGHT	⊕	CARBON MONOXIDE DETECTOR	⊕	AFCI DUPLEX OUTLET	•	AFCI	•
VAPOR PROOF RECESSED	⊕	GARBAGE DISPOSAL	⊕	GFCI DUPLEX OUTLET	•	GFCI	•
SINGLE POLE SWITCH	⊕	EXHAUST FAN (MIN. 5 AIR CHANGES PER HOUR)	⊕	WEATHERPROOF DUPLEX OUTLET	•	W/P GFCI	•
3-WAY SWITCH	⊕	TELEPHONE JACK AT 14" A.F.F. TYP IN CONDUIT U.N.O.	⊕	GARAGE DOOR OPENER RECEPTACLE	•	⊕	•
						CEILING FAN WITH LIGHT KIT	⊕
						GAS LINE	⊕
						*FROST FREE* HOSE BIB	⊕



**3 LOFT LEVEL MECHANICAL, ELECTRICAL, AND PLUMBING PLAN**  
1/4" = 1'-0"



**2 MAIN LEVEL MECHANICAL, ELECTRICAL, AND PLUMBING PLAN**  
1/4" = 1'-0"



**1 LOWER LEVEL MECHANICAL, ELECTRICAL, AND PLUMBING PLAN**  
1/4" = 1'-0"



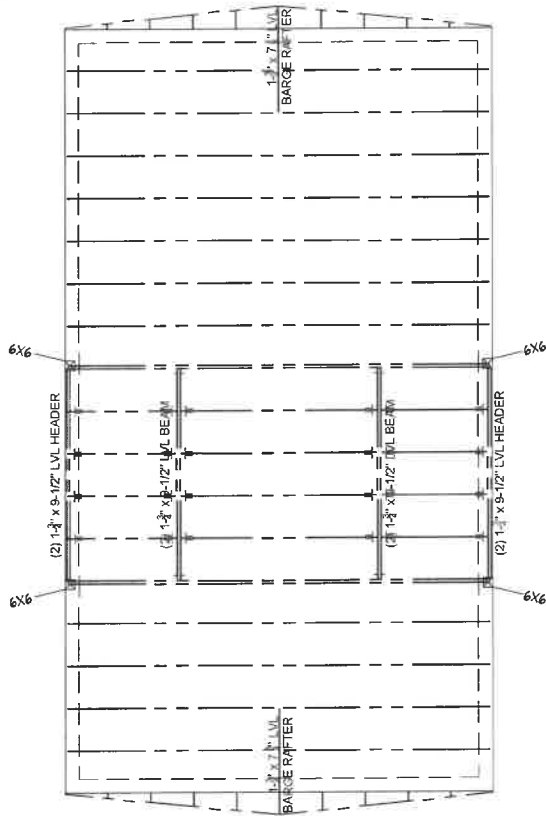
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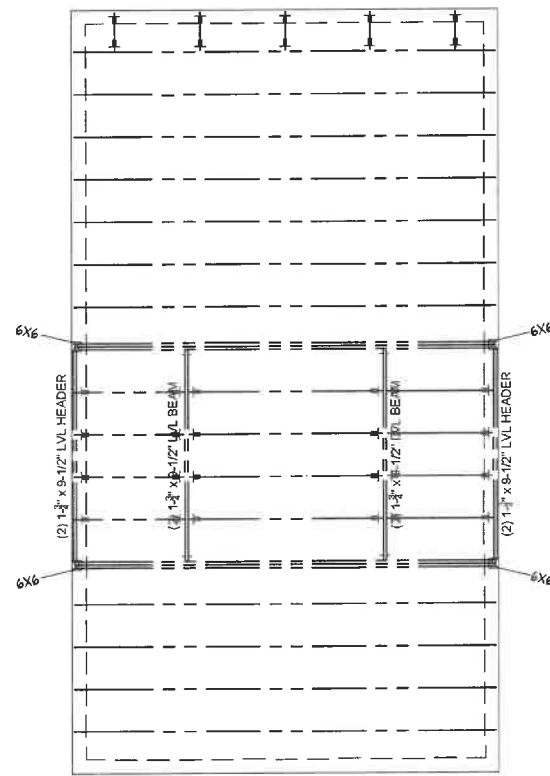
**DUO 100 PROJECT (020)**  
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ISSUE DATE 10/14/2021  
**REVISIONS**  
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**M1.1**  
M.E.P. PLANS

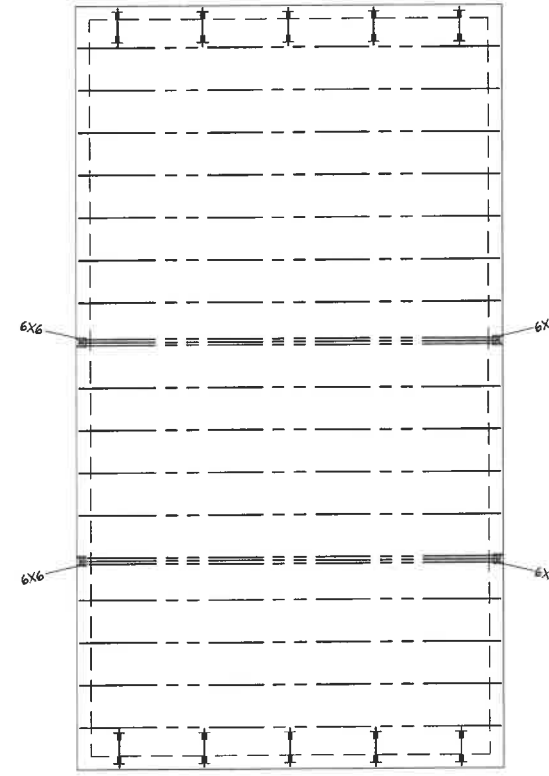




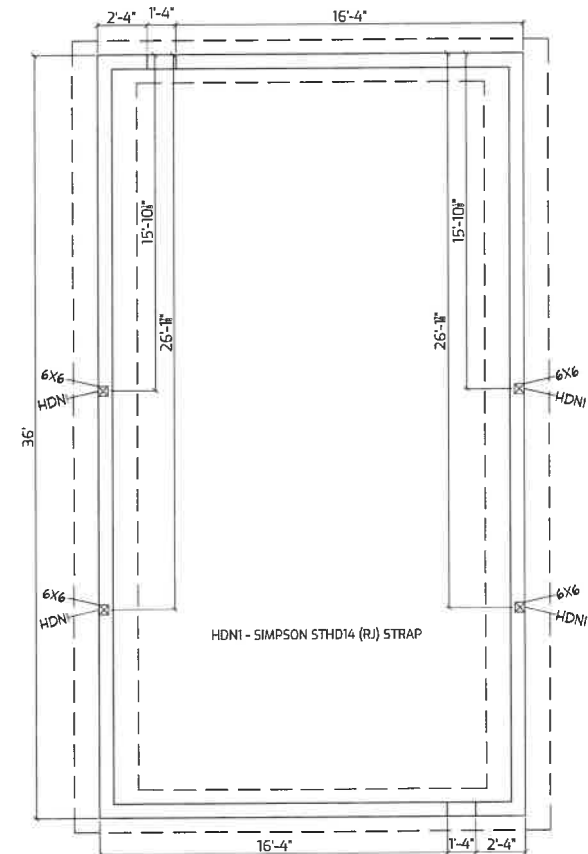
**4 TRUSS PLAN**  
1/4" = 1'-0"



**3 LOFT LEVEL FRAMING PLAN**  
1/4" = 1'-0"



**2 MAIN LEVEL FRAMING PLAN**  
1/4" = 1'-0"



**1 FOOTING AND FOUNDATION PLAN**  
1/4" = 1'-0"



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**S1.1**  
STRUCTURAL PLANS

277 WEST DUNDAS STREET, CIRCLE,  
SALT LAKE CITY, UT 84119  
PH: 866.287.2632  
WWW.AVRAMEUSA.COM  
EMAIL: SALES@AVRAMEUSA.COM

**GENERAL:**  
UNLESS NOTED OTHERWISE, ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST BUILDING CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING CONDITIONS AT THE JOB SITE, AND TO FULLY CORRELATE ALL DIMENSIONS AND CONDITIONS OF DETAILS WITH OTHER DISCIPLINES. ANY FIELD CONDITIONS REQUIRING CONSTRUCTION THAT IS DIFFERENT FROM THAT SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. ANY CONFLICTING DETAILS SHOWN IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE CONSTRUCTION OF SAID DETAIL. DO NOT SCALE DRAWINGS. ANY QUESTIONS REGARDING THE CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT IN THE FORM OF A WRITTEN REQUEST FOR INFORMATION (RFI).

ALL SUPPORT OF CONSTRUCTION LOADS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SHORING AND BRACING REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION PROCESS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE DONE IN ACCORDANCE WITH OSHA REQUIREMENTS. POTENTIAL CONFLICTS BETWEEN THESE DOCUMENTS AND OSHA REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL PROCEDURES FOR SOIL EXCAVATION, BACK FILL, AND SUPPORT OF ADJACENT PROPERTY DURING EARTHWORK SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ALL DIMENSIONS INDICATED ON PLANS SHALL BE TO FACE OF STUDS, FACE OF CONCRETE BLOCK, FACE OF ROUGH CONCRETE, CENTERLINE OF STRUCTURAL BOTTOM OF METAL DECK, AND TOP OF SLAB, UNLESS NOTED OTHERWISE REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT INDICATED ON STRUCTURAL DRAWINGS. THE FOLLOWING DESIGN CRITERIA SHALL BE ENFORCED:

GOVERNING BUILDING CODE: 2020 MINNESOTA BUILDING CODE  
RISK: CATEGORY II (IBC TABLE 1604.5)

**LOADING:**

**ROOF LOAD:**

1. ROOF DEAD LOAD: 16 PSF
2. ROOF LIVE LOAD: 20 PSF (NON-CONCURRENT WITH ROOF SNOW LOAD)
3. ROOF SNOW LOAD:
  - A. GROUND SNOW LOAD  $P_g = 100$  PSF USED IN CALCUS
  - B. FLAT ROOF SNOW LOAD  $P_f = 84$  PSF (SNOW DRIFT PER ASCE 7)
  - C. SLOPED ROOF SNOW LOAD  $P_s = 31$  PSF
  - D. SNOW EXPOSURE FACTOR  $C_e = 1.2$
  - E. SNOW LOAD IMPORTANCE FACTOR  $I_s = 1.0$
  - F. THERMAL FACTOR  $C_t = 1.0$

**FLOOR LOAD:**

1. DEAD: 15 PSF
2. LIVE: 50 PSF (OFFICE)

**WIND LOAD:**

1. BASIC WIND SPEED: 130 MPH USED IN CALCUS
2. WIND EXPOSURE TYPE: C
3. WIND IMPORTANCE FACTOR:  $I_w = 1.0$
4. INTERNAL PRESSURE COEFFICIENT:  $+0.18$

**SEISMIC LOAD:**

1. SEISMIC IMPORTANCE FACTOR  $I_p = 1.0$
2. SITE COEFFICIENTS:
  - A. SDS = 1.0g (USED IN CALCUS)
  - B. SDI = 0.5g
  - C.  $C_i = 0.62$
  - D. SOIL SITE CLASS: D
  - E. SEISMIC DESIGN CATEGORY: D

4. BASIC LFPS - LIGHT FRAMED WALL WITH SHEAR WALLS (LONGITUDINAL DIR)
  - A. RESPONSE MODIFICATION COEFFICIENT  $R = 5$
  - B. W WEIGHT OF STRUCTURE
  - C. DESIGN BASE SHEAR = 0.154W (ULTIMATE) 0.110W (SERVICE)
  - D. DESIGN PROCEDURE: EQUIVALENT LATERAL FORCE

5. BASIC LFPS - LIGHT FRAMED WALL WITH SHEAR WALLS (TRANSVERSE DIR)
  - A. RESPONSE MODIFICATION COEFFICIENT  $R = 7$
  - B. W WEIGHT OF STRUCTURE
  - C. DESIGN BASE SHEAR = 0.35W (ULTIMATE) 0.357W (SERVICE)
  - D. DESIGN PROCEDURE: EQUIVALENT LATERAL FORCE

**ALTERNATES:**

ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION TO THE ARCHITECT/ENGINEER FOR REVIEW. ALTERNATE MATERIALS THAT ARE SUBMITTED WITHOUT ADEQUATE TECHNICAL DOCUMENTATION OR THAT SIGNIFICANTLY DEVIATE FROM THE DESIGN INTENT OF MATERIALS SPECIFIED MAY BE RETURNED WITHOUT REVIEW. ALTERNATES THAT REQUIRE SUBSTANTIAL EFFORT TO REVIEW WILL NOT BE REVIEWED UNLESS AUTHORIZED BY THE OWNER.

**DISCREPANCIES:**

IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLAN DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEBARRED FROM THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN THE CONTRACT PRICE.

**SITE VERIFICATION:**

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

**MEANS, METHODS AND SAFETY REQUIREMENTS:**

THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA AND DOSH (DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH). CONTRACTOR IS RESPONSIBLE TO ADHERE TO OSHA REGULATIONS REGARDING STEEL ERECTION ITEMS SPECIFICALLY ADDRESSED ON THE LATEST OSHA REGULATIONS. BOLTING AND FIELD WELDING AT ALL MEMBER CONNECTIONS IS TO BE COMPLETED PRIOR TO THE RELEASE OF THE MEMBER FROM THE LIFTING MECHANISMS UNLESS REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR'S TEMPORARY BRACING AND SHORING DESIGN ENGINEER.

**BRACING/SHORING DESIGN ENGINEER:**

THE CONTRACTOR SHALL, AT HIS DISCRETION EMPLOY AN SEE, A REGISTERED PROFESSIONAL ENGINEER FOR THE DESIGN OF ANY TEMPORARY BRACING AND SHORING.

**TEMPORARY SHORING BRACING:**

THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY.

**CONSTRUCTION LOADS:**

LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN DESIGN CRITERIA & LOADS BELOW OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTION AS DETERMINED BY THE CONTRACTOR'S SEE FOR BRACING/SHORING.

**CHANGES IN LOADING:**

THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY THE SEE OF ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING LOAD IMPOSED ONTO THE STRUCTURE THAT DIFFERS FROM OR THAT IS NOT DOCUMENTED ON THE ORIGINAL CONTRACT DOCUMENTS (ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL OR PLUMBING DRAWINGS). PROVIDE DIRECTION OF LOCATION, LOAD, SIZE AND ANCHORAGE OF ALL UNDOCUMENTED LOADS IN EXCESS OF 400 POUNDS. PROVIDE MARKED UP STRUCTURAL PLAN INDICATING LOCATIONS OF ANY NEW EQUIPMENT OR LOADS. SUBMIT PLANS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

**NOTE PRIORITIES:**

PLAN AND DETAIL NOTES AND SPECIFIC LOADING DATA PROVIDED ON THE INDIVIDUAL PLANS AND DETAIL DRAWINGS SUPPLEMENT INFORMATION IN THE STRUCTURAL GENERAL NOTES.

**PLAN INFORMATION:**

DIMENSIONS ARE FOR REFERENCE. CONTRACTOR TO VERIFY ALL DIMENSIONS. DIMENSIONS ARE PROVIDED BY THE ARCHITECTS ELECTRONIC FILE. ALWAYS VERIFY THESE PLANS AND DIMENSIONS WITH THE ARCHITECT'S PLANS UNDER NO CIRCUMSTANCES WILL MGNEL ENGINEERING, ITS EMPLOYEES OR AGENTS BE LIABLE FOR ANY DIRECT INDIRECT PUNITIVE OR CONSEQUENTIAL DAMAGES THAT MAY RESULT IN ANY WAY FROM YOUR USE. MAKE REFERENCE TO OR RELIANCE ON ANY OF THE INFORMATION PROVIDED OR THAT RESULT FROM MISTAKES, ERRORS, OMISSIONS, INTERPRETATIONS OR DEFECTS. MGNEL ENGINEERING EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION HEREIN.

WHILE MGNEL ENGINEERING MAKES EVERY EFFORT TO PRESENT ACCURATE AND RELIABLE INFORMATION, MGNEL ENGINEERING DOES NOT ENDORSE, APPROVE OR CERTIFY THE INFORMATION PROVIDED BY OTHERS. MGNEL ENGINEERING DOES NOT GUARANTEE ITS ACCURACY, COMPLETENESS OR TIMELINESS. USE OF THIS INFORMATION IS VOLUNTARY AND RELIANCE ON IT SHOULD NOT BE UNDERTAKEN AFTER YOU HAVE INDEPENDENTLY VERIFIED ITS ACCURACY, COMPLETENESS AND TIMELINESS.

CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY DIMENSIONS AGAINST THE CORRESPONDING OFFICIAL CONSTRUCTION DRAWINGS. DIMENSIONS SHOWN ON THE CONSTRUCTION DOCUMENTS MUST BE VERIFIED WITH ARCHITECTURAL PLANS. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. MGNEL ENGINEERING DOES NOT GUARANTEE THAT THIS ELECTRONIC MEDIA HAS NOT BEEN DAMAGED, ALTERED OR MODIFIED DURING TRANSMISSION AND/OR STORAGE. MGNEL ENGINEERING DOES NOT GUARANTEE CHANGES ON THE ARCHITECTURAL PLANS HAVE BEEN FULLY CONVEYED AND THE CONSTRUCTION DOCUMENTS UPDATED. ANY ONE RECEIVING ELECTRONIC MEDIA MUST VERIFY ALL INFORMATION WITH THE CORRESPONDING OFFICIAL CONSTRUCTION DRAWINGS. ANY USE OR RELIANCE OF THIS INFORMATION SHALL BE THE FULL RESPONSIBILITY OF THE USER.

**FOUNDATIONS:**

SOIL TO BE OBSERVED PRIOR TO PLACEMENT OF FOOTINGS. ALL FOOTING DEPTHS INDICATED ON PLANS ARE MINIMUM DEPTHS. FOOTINGS MUST BE PLACED ON NEAT EXCAVATED TRENCHES. TRENCH SHALL BE APPROVED BY INSPECTOR PRIOR TO PLACEMENT OF CONCRETE. AT LOCATIONS WHERE STRUCTURAL FILL IS REQUIRED, FILL SHALL BE PLACED IN 6" LIFTS & COMPACTED AT OPTIMUM MOISTURE CONTENT.

1. MAXIMUM NET BEARING PRESSURE = 150 PSF (NET ALLOWABLE) - ASSUMED PER IBC
2. FOOTING DEPTH - VERIFY BY LOCAL JURISDICTION - FOOTINGS TO BE PLACED 4" MIN DEPTH FROM GRADE TO BOTTOM OF FOOTING
3. INTERIOR FOOTINGS = 12" (BOTTOM OF FOOTING TO TOP OF SOIL OR SLAB)
4. LATERAL SOIL PRESSURE - ACTIVE = 40 PCF; AT REST = 55 PCF; PASSIVE = 250 PCF (ASSUMED)
5. FRICTION COEFFICIENT: 0.45

**CONCRETE:**

ALL CONCRETE MATERIALS SHALL COMPLY WITH THE STANDARDS SPECIFIED IN THE LATEST EDITION OF THE ACI 318 BUILDING CODE. EACH MIX DESIGN SHALL BE REVIEWED BY AN APPROVED INDEPENDENT LABORATORY.

LOCATION	EXPOSURE CLASS	SLUMP (MAX)	AGGREGATE (MAX SIZE)	AIR CONTENT	COMPRESSIVE STRENGTH (PSI)
FOOTINGS (INTERIOR)	F0, S0, P0, C0	5"	1" DIA	1.5%	3,500 PSI
FOOTINGS (EXTERIOR)	F0, S0, P0, C0	5"	1" DIA	1.5%	3,500 PSI
CONCRETE WALLS	F1, S0, P0, C1	4"	3/4" DIA	5%	4,500 PSI
INTERIOR SLAB ON GRADE	F0, S0, P0, C0	5"	3/4" DIA	1.5%	4,000 PSI
SLAB CONCRETE (UNREIN)	F0, S0, P0, C0	4"	3/4" DIA	0%	4,500 PSI

**2500 PSI USED IN DESH:**

SITE CONCRETE UNLESS SPECIFIED OTHER BY CIVIL ENGINEER  
CONCRETE TYPE: TYPE I, MAX FLASH: 2%

AIR CONTENT = 1.5% MEASURED AT POINT OF FINAL PLACEMENT. AIR-ENTRAINING ADMIXTURES SHALL COMPLY WITH ASTM C260 (WHEN USED). CALCIUM CHLORIDE SHALL NOT BE ADDED TO THE CONCRETE MIX. UNREINFORCED CONCRETE SLABS ON GRADE MAY HAVE CALCIUM CHLORIDE NOT EXCEEDING ONE PERCENT. AIR ENTRAINMENT SHALL BE ADJUSTED FOR THE USE OF ADMIXTURES AND FLY ASH.

ANY CONCRETE THAT FAILS TO MEET SPECIFICATIONS SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION DESIGN, PLACEMENT AND REMOVAL OF ALL FORMWORK. ALL SHORING DURING PLACEMENT OF CONCRETE IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SEE CIVIL DRAWINGS FOR SITE CONCRETE REQUIREMENTS. IN ABSENCE OF INFORMATION, USE VALUES LISTED.

**CAST-IN-PLACE CONCRETE COVER:**

CONFORM TO THE FOLLOWING COVER AND CORROSION PROTECTION REQUIREMENTS UNLESS NOTED OTHERWISE IN THE DRAWINGS:

REINFORCEMENT LOCATION	MIN. COVER
FOOTING BOTTOM REINFORCEMENT	3"
FOOTING TOP REINFORCEMENT	2"
SLAB ON GRADE REINFORCEMENT	2" FROM TOP
WALLS IN CONTACT WITH EARTH	2"
WALLS NOT IN CONTACT WITH EARTH	3/4"

**POST-INSTALLED ANCHORS (CONCRETE):**

ANCHOR LOCATION, TYPE, DIAMETER AND EMBEDMENT SHALL BE AS INDICATED ON DRAWINGS. REFERENCE THE "POST INSTALLED ANCHORS" SECTION FOR APPLICABLE POST-INSTALLED ANCHOR ADHESIVES. ANCHORS SHALL BE INSTALLED AND INSPECTED IN STRICT ACCORDANCE WITH THE APPLICABLE ICC.

**CONCRETE REINFORCING:**

ALL REINFORCING BARS SHALL CONFORM TO ASTM A-641 GRADE 60, F<sub>y</sub> = 60,000 PSI MIN. UNLESS NOTED OTHERWISE. BARS SHALL BE TIED SECURE PRIOR TO PLACEMENT OF CONCRETE TO MAINTAIN PROPER PLACEMENT AFTER CONCRETE IS IN PLACE. L<sub>1</sub> & L<sub>2</sub> BARS 40 DIAMETERS UNLESS NOTED OTHERWISE. SPICE BARS ONLY WHERE SHOWN ON PLANS.

NORMAL WEIGHT CONCRETE SHALL HAVE A UNIT WEIGHT OF POUNDS PER CUBIC FOOT USE OF CALCIUM CHLORIDE IS NOT PERMITTED IN ANY CONCRETE MIXES. ALL OTHER ADDITIVES AND ADMIXTURES MUST HAVE THE WRITTEN APPROVAL OF THE ENGINEER. THE ENGINEER SHALL HAVE 10 BUSINESS DAYS TO REVIEW SHOP DRAWINGS.

**STRUCTURAL STEEL:**

ALL STRUCTURAL STEEL COMPONENTS SHALL BE FABRICATED AND ERRECTED ACCORDING TO THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH "COMMENTARY" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AS WELL AS THE FOLLOWING STANDARDS:

AISC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A-325 OR A-490 BOLTS" APPROVED BY THE RESEARCH COUNCIL ON ORNATE AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING FOUNDATION  
AWS D1.1 "STRUCTURAL WELDING CODE"  
ASTM A-6 GENERAL REQUIREMENTS FOR DELIVERY OF ROLLED STEEL PLATES, SHAPES, SHEET PILING AND BARS FOR STRUCTURAL USE\*

ALL STEEL SECTIONS SHALL CONFORM TO THE FOLLOWING:  
WIDE FLANGE SHAPES: ASTM A572 GRADE 50 OR ASTM A992 GRADE 50  
HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B  
ANGLE: ASTM A36  
PIPING: ASTM A53  
ANGLES, CHANNELS, PLATES & BARS: ASTM A36

**MASONRY:**

CONCRETE MASONRY UNITS: ALL CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT CONCRETE UNITS GRADE "N" PER ASTM C90 AND C-391, FM = 1500 PSI. MINIMUM UNIT STRENGTH OF CONCRETE UNITS TO BE 1900 PSI. MORTAR SHALL BE TYPE "S" 1800 PSI AT 28 DAYS. GROUT SHALL BE OF FLUID CONSISTENCY WITH A SLUMP OF 4" MIN., AND SHALL DEVELOP A COMPRESSIVE STRESS AT 28 DAYS OF 2000 PSI MIN. MINIMUM WALL REINFORCING UNLESS NOTED OTHERWISE SHALL BE #5 @ 32" O.C. VERTICAL AND #5 @ 48" O.C. HORIZONTAL. PROVIDE ONE #5 VERTICAL BAR @ CORNERS. PROVIDE (2) #5 VERTICAL BARS @ JAMBS. L<sub>1</sub> & L<sub>2</sub> ALL MASONRY WALL REINFORCING 40 DIAMETERS MIN. UNLESS NOTED OTHERWISE. REINFORCING SHALL BE PLACED IN FULLY GROUTED CELLS.

JOINT REINFORCEMENT SHALL HAVE NOT LESS THAN 50% MORTAR COVERAGE FROM THE EXPOSED FACE. OTHER REINFORCEMENT SHALL HAVE A MINIMUM COVERAGE OF ONE BAR DIAMETER OVER THE BARS, BUT NOT LESS THAN 3/4". WHEN MASONRY IS EXPOSED TO SOIL, MINIMUM COVERAGE SHALL BE 1 1/2".

WHERE WALLS ARE NOT GROUTED SOLID, EACH GROUT POOR SHALL TERMINATE FLUSH WITH THE TOP OF THE UPPERMOST UNIT EXCEPT AT CELLS WITH VERTICAL REINFORCEMENT WHERE GROUT SHALL BE 1 1/2" BELOW TOP OF UNIT TO PROVIDE CONSTRUCTION KEY. GROUT POORS SHALL BE LIMITED TO 4'-0" UNLESS HIGH LIFT GROUTING PROCEDURES ARE FOLLOWED. ALL MASONRY OVER 200 PSI GRADE SHALL BE SOLID GROUTED. VERTICAL CELLS TO BE FILLED WITH GROUT SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, AND VERTICAL CELL MEASURING NOT LESS THAN 7" BY 3". ALL STEEL REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES. AT ENDS OF WALLS WITH VERTICAL REINFORCEMENT, THE MAXIMUM CUR AT BAR SPACE LOCATIONS VERTICAL REINFORCEMENT SHALL BE LOCATED AT THE CENTER OF THE WALL, UNLESS NOTED OTHERWISE. REINFORCEMENT SHALL NOT BE WELDED UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS IN SUCH CASES. USE ONLY AWS STANDARDS. DO NOT SUBSTITUTE REINFORCEMENT BARS FOR DRA OR HAS.

CONTROL JOINT SPACING SHALL NOT EXCEED 20'-0". SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS. GROUT ALL BEAMS AND JOIST POCKETS SOLID AFTER INSTALLATION OF BEAMS AND JOISTS. EMBED CHANNELS AND PLATES SHALL BE PLACED SO AS TO CREATE A FLUSH SURFACE WITH THE FACE OF THE WALL.

ANCHOR BOLTS AND HEADED STUD ANCHORS SHALL BE SET IN A GROUTED CELL. ANCHOR BOLTS AND HEADED STUD ANCHORS SHALL HAVE 1/2" GROUT SURROUNDING THE SHANK AT ITS PENETRATION. GROUT SHALL BE FLUSH WITH THE FACE OR TOP OF THE MASONRY.

ALL VERTICAL REINFORCEMENT SHALL BE DOWELED IN TO THE FOUNDATION, FOOTING AND THE STRUCTURE BELOW WITH THE SAME SIZE DOWEL, SPACING AND IN THE SAME CORE AS THE VERTICAL WALL REINFORCING ABOVE.

WALL OPENINGS 24" WIDE AND WIDER FOR UNSCHEDULED OPENINGS, PROVIDE REINFORCING ON ALL SIDES PER DETAILS. ALSO, FOR ALL OPENINGS, PROVIDE HORIZONTAL BAR AT BOTTOM OF OPENING PER DETAILS. VERTICAL BARS SHALL EXTEND FROM FLOOR LEVEL, BELOW TO THE FLOOR, OR ROOF LEVEL ABOVE HORIZONTAL BARS. FOR ALL OPENINGS SHALL EXTEND A MINIMUM OF 48 BAR DIAMETERS BEYOND THE CORNERS OF THE OPENING WHERE A #4 BAR DIAMETER TERMINATE (THE BARS) WITH A 90 DEG STANDARD CHOOK.

HORIZONTAL WALL REINFORCING SHALL BE CONTINUED THROUGH CONCRETE WALLS, MASONRY WALLS, COLUMNS, AND PLASTERERS. PROVIDE A KEY JOINING THE WALL AND THE COLUMN OR PLASTER. HORIZONTAL WALL REINFORCING SHALL BE PLACED INSIDE THE COLUMN. VERTICAL REINFORCING HORIZONTAL REINFORCING SHALL TERMINATE WITH A STANDARD HOOK AT EDGE OF OPENING AND TOPS OF WALLS WITHOUT CORNER BARS AS SHOWN IN DETAILS. ALL MASONRY COLUMNS SHALL TERMINATE WITH 135 DEG HOOKS PLUS A 6 BAR EXTENSION (4" MIN).

MASONRY SHALL BE SPECIALLY INSPECTED PER THE LATEST EDITION OF IBC, LEVEL 1, THIS 402/ACT 530/ASCE 5 AND THIS 602/ACT 530/HASCE.

**LAMINATED VENEER LUMBER:**

ALL LAMINATED VENEER LUMBER SHALL CONFORM TO THE SPECIFICATIONS OF BOISE CASCADE CORPORATION FOR VENEER LUMBER, OR ENGINEER APPROVED EQUIVALENT. DESIGN VALUES SHALL MEET OR EXCEED THOSE PUBLISHED VALUES IN THE BOISE CASCADE PRODUCT GUIDE, LATEST EDITION.

**SHEATHING:**

SHEATHING SHALL BE A P.A. RATED. SEE PLAN FOR SPAN RATING AND THICKNESS. SHEATHING INSTALLATION.

ROOF AND FLOOR SHEATHING SHALL BE LAID WITH THE GRAIN PERPENDICULAR TO THE FRAMING MEMBERS UNO AND END JOINTS SHALL BE STAGGERED. WALL SHEATHING MAY BE APPLIED HORIZONTALLY OR VERTICALLY.

ALL NAILS SHALL BE COMMON WIRE NAILS UNO EQUIVALENT PNEUMATIC DRIVEN NAILS MAY BE USED IF FASTENER MANUFACTURER HAS CURRENT I.C.C. APPROVAL. FASTENERS TO BE USED SHALL BE EQUIVALENT IN LATERAL AND WITHDRAWAL STRENGTH TO THE SIZE COMMON NAIL SPECIFIED.

USE EXTERIOR GRADE SHEATHING AT DECKS AND CORRIDORS.

**ROOF SHEATHING:**

EDGE BLOCKING OF UNSUPPORTED EDGES OF SHEATHING AS NOTED ON PLANS. PLY CLIPS OR APPROVED EQUAL CONNECTOR SHALL BE INSTALLED AT MID SPAN BETWEEN EACH SUPPORT WHEN RAFTER SPACING EXCEEDS 16" AND EDGE BLOCKING IS NOT SPECIFIED.

TYPICAL NAILING SHALL BE #4 @ 6" O.C. AT SUPPORTED EDGES AND OVER SHEAR WALLS AND #4 AT 12" O.C. AT INTERMEDIATE SUPPORTS, UNO.

**FLOOR SHEATHING:**

EDGE BLOCKING OF UNSUPPORTED EDGES OF SHEATHING AS NOTED ON PLANS. UNLESS NOTED OTHERWISE, BARS SHALL BE TIED SECURE PRIOR TO PLACEMENT OF CONCRETE TO MAINTAIN PROPER PLACEMENT AFTER CONCRETE IS IN PLACE. L<sub>1</sub> & L<sub>2</sub> BARS 40 DIAMETERS UNLESS NOTED OTHERWISE. SPICE BARS ONLY WHERE SHOWN ON PLANS.

ALL FLOOR SHEATHING SHALL BE GLEUED TO JOISTS. THE FIELD-GLEUED FLOOR SYSTEM SHALL BE INSTALLED ACCORDING TO THE RECOMMENDATION OF THE AMERICAN PLYWOOD ASSOCIATION. GLUE SHALL BE APPLIED TO THE JOISTS AND TO THE GROOVE IN THE EDGE OF THE T & G PANELS. GLUE SHALL MEET THE REQUIREMENTS OF THE AMERICAN PLYWOOD ASSOCIATION ADHESIVE SPEC. APG-D1 AND SHALL BE APPLIED AS DIRECTED BY THE GLEUE MANUFACTURER. GLUE MAY BE APPLIED MANUALLY OR WITH PNEUMATIC OR ELECTRIC EQUIPMENT.

**ROUGH CARPENTRY:**

FRAMING LUMBER SHALL BE KILN DRIED AND SHALL MEET THE FOLLOWING MINIMUM STANDARD UNO.

USE	SPECIES	GRADE
SILL PLATES 2 x 4	DF	STANDARD OR BETTER
2 x 6, 2 x 8	DF	No 2 OR BETTER
ALL SILL PLATES IN CONTACT WITH CONCRETE OR MASONRY, SHALL BE PRESSURE TREATED OR CALIFORNIA REDWOOD		
HORIZONTAL FRAMING LUMBER (1" NO) 4x4 AND SMALLER	DF	No 2
2x ROOF JOISTS & RAFTERS	DF	No 2
2x FLOOR JOISTS	DF	No 1
3x LEDGERS	DF	No 1
4x HEADERS & BEAMS	DF	No 1
6x6 & LARGER BEAMS	DF	No 1

VERTICAL FRAMING LUMBER (1" NO) ALL STUDS: DF, STUD GRADE OR #2 (SEE PLAN)  
ALL POSTS: DF, No 1  
ALL OTHER LUMBER UNO: DF, STANDARD OR BETTER.

FINGER-JOINTED LUMBER MAY BE USED EXCEPT AT SHEARWALL HOLD-DOWNS LOCATIONS. AT EXTERIOR LOCATIONS, DECKS EXPOSED CORRIDORS, USE APA RATED SHEATHING EXTERIOR. WHERE CONSTRUCTION DETAILS ARE EXPECTED PRIOR TO PROVIDING PROTECTION USE APA RATED SHEATHING EXPOSURE 1 COMBINATION KNOWN AS "CDS". PROVIDE A MINIMUM OF (2) STUDS UNDER ALL BEAM BEARING LOCATIONS UNO. PROVIDE A MINIMUM OF (3) STUDS UNDER ALL GIRDER TRUSS BEARING LOCATIONS UNO. WHERE POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE IDENTIFIED ON DRAWINGS, THREE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION BLOCK. JOISTS AT ALL SUPPORTS DOUBLE JOISTS UNDER PARALLEL PARTITIONS. BLOCK UNDER PERPENDICULAR PARTITIONS AT 32" O.C.

JOISTS HANGERS AND OTHER METAL FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON COMPANY, SAN LEANDRO CALIFORNIA. ACCESSORIES OF OTHER MANUFACTURER WITH EQUIVALENT LOAD CARRYING CHARACTERISTICS MAY BE USED, WHEN APPROVED BY ENGINEER.

BOLTS: HOLES IN WOOD 1/16" OVERSIZE MAX. USE WASHERS AGAINST WOOD. RE-TIGHTEN ALL BOLTS BEFORE CLOSING IN. PRE-DRILL HOLES FOR LAG BOLTS AND TURN BOLTS INTO HOLES. DO NOT TIGHTEN FIRE STOPPING BACKING FOR INTERIOR FINISHES, NON-BEARING WALLS AND OTHER NON-STRUCTURAL FRAMING UNO. NECESSARILY SHOWN ON THE STRUCTURAL DRAWINGS. SEE FASTENING SCHEDULE (UNO) PER IBC CHAPTER 23.

FASTENERS IN PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD FASTENERS SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM A 153 PER IBC CHAPTER 23.

**POST-INSTALLED ANCHORS:**

FOLLOW ALL ICC REPORT AND MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS FOR POST-INSTALLED ANCHORS INSTALLATION. WHERE CONFLICT MAY EXIST, THE MOST STRINGENT REQUIREMENTS APPLIES.

FOLLOW MANUFACTURER AND ICC EVALUATION REPORT REQUIREMENTS FOR INSTALLATION TEMPERATURE OF ADHESIVE ANCHORS. ADHESIVE ANCHORS SHALL NOT BE INSTALLED OR CURED OUTSIDE OF APPROVED TEMPERATURE RANGES.

ADHESIVE ANCHORS IN CONCRETE SHALL BE HELIX HIT-500 SD (ESR-2322), SIMPSON SET-XP (ESR-2508), OR DEWALT FURE 110+ (ESR-3298).

ADHESIVE ANCHORS IN GROUTED MASONRY SHALL BE HELIX HIT-150 (ESR-1967), SIMPSON SET (ESR-1772) OR DEWALT AC108+ GOLD (ESR-3206).

SPECIAL INSPECTION AND TESTING SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THE ICC EVALUATION REPORT, PER SECTION 1704.13 OF THE IBC. PERIODIC INSPECTION IS ALLOWED FOR MECHANICAL ANCHORS PER SECTION 6.6 OF ICC-ES AC108.

ADDITIONAL SUGGESTED NOTES RELATED TO ADHESIVE INSTALLATION: PER ACI 318-2011 (SECTION D.2.2) ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. FOR INSTALLATIONS SOONER THAN 21 DAYS CONSULT ADHESIVE MANUFACTURER.

IF TEMPERATURE OF BASE MATERIAL AT TIME OF ADHESIVE INSTALLATION IS AT 45 DEGREES (FAHRENHEIT) OR LESS, AN "ACTIVLY" ADHESIVE IS REQUIRED.



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**KEYNOTES:**

1. SEE PLAN FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE.
2. VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.
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Cody R. Palmer  
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**KEYNOTES**

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**REVISIONS**

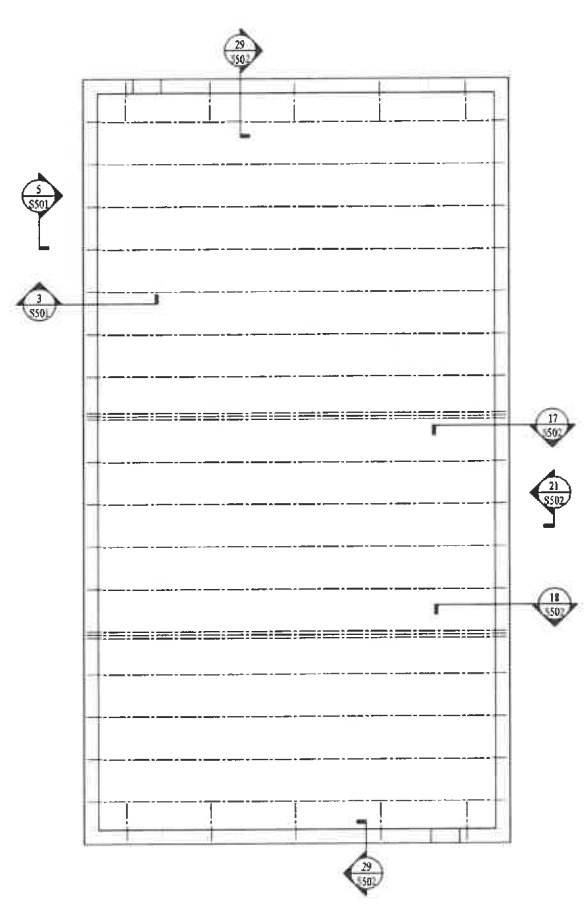
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**CITY REVIEW**

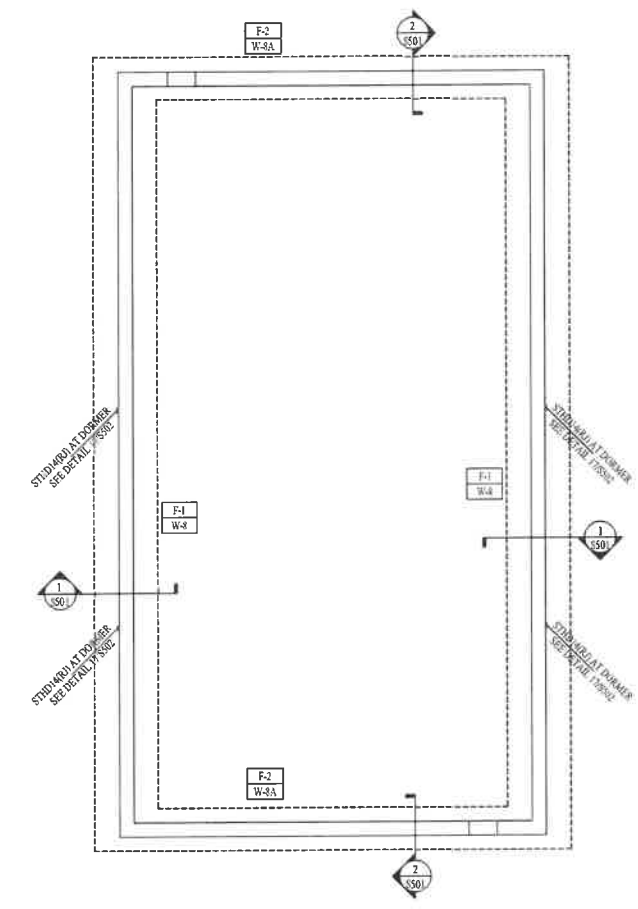
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AVRAME U.S.A.  
 DRAWN FOR ONE  
 TIME USE FOR

PLAN: 21003.05 DATE: 08/28/23  
 SHEET: BASEMENT LEVEL  
**S101**  
 OR  
 MAIN LEVEL  
 UPPER LEVEL  
 TOTAL FINISHED



**FLOOR FRAMING PLAN**  
 SCALE: 1/4"=1'-0"  
 NOTE: DO NOT SCALE PLAN. USE AS REFERENCE ONLY. VERIFY ALL DIMENSIONS ON ARCHITECTURAL PLANS.



**FOOTING AND FOUNDATION PLAN**  
 SCALE: 1/4"=1'-0"  
 NOTE: DO NOT SCALE PLAN. USE AS REFERENCE ONLY. VERIFY ALL DIMENSIONS ON ARCHITECTURAL PLANS.

**FOOTING/FND NOTES**

- ALL FOOTINGS ADJACENT TO AREAS EXPOSED TO FREEZING TEMPERATURE SHALL BE AT OR BELOW FROST DEPTH - VERIFY WITH LOCAL BUILDING DEPARTMENT
- DIMENSIONS (IF ANY) ARE FOR REFERENCE ONLY. DO NOT SCALE PLANS. VERIFY ALL DIMENSIONS WITH ARCH PLANS.
- ALL BOLT HOLES SHALL BE DRILLED 1/8" TO 3/16" OVERSIZED

**FOUNDATION WALL SCHEDULE**

MARK	THICKNESS	VERT. REINFORCEMENT	HORIZ. REINFORCEMENT	REMARKS
		SIZE	SIZE	
W-8	8"	#4	#4	TYP FOUNDATION WALL
W-24	8"	#4	#4	TYP FOUNDATION WALL - ENDWALL

**FOOTING SCHEDULE**

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				REMARKS
				NO	SIZE	LENGTH	SPACING	NO	SIZE	LENGTH	SPACING	
F-1	30"	CONT	12"	-	-	-	-	3	#5	CONT	EQ	CONTINUOUS FOOTING
F-2	20"	CONT	12"	-	-	-	-	2	#5	CONT	EQ	CONTINUOUS FOOTING

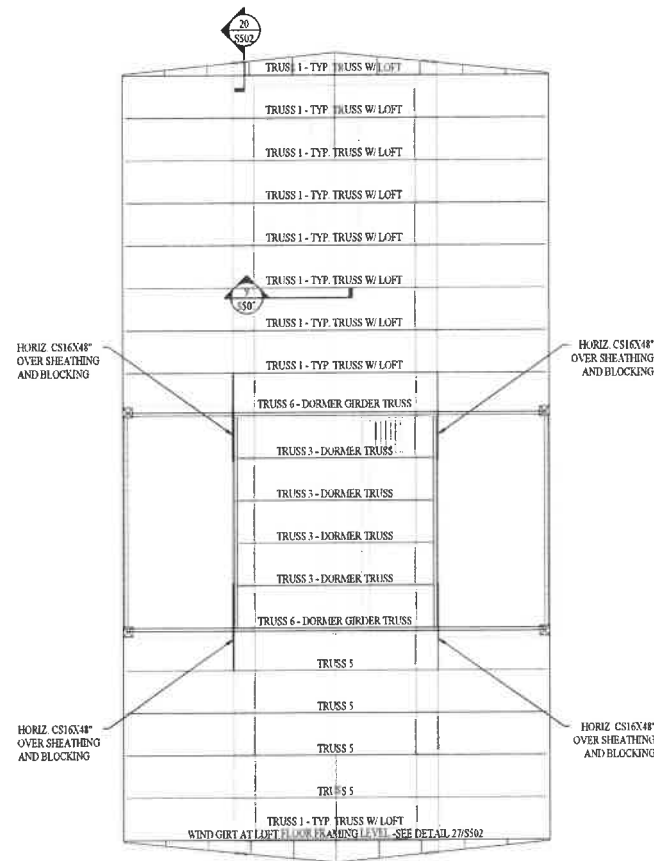
**INTERMEDIATE BEARING WALL BEAM SCHEDULE**

BEAM LENGTH	BEAM SIZE	TRIM/REINFORCING
3-FT	(2) 2X6	1 TRIM @ 60°/1 KING
4-FT	(2) 2X6	1 TRIM @ 60°/1 KING
5-FT	(2) 2X10	1 TRIM @ 60°/1 KING
7-FT	(2) 1-3/4" X 7-1/4" VL (2 @)	2 TRIM @ 60°/1 KING
9-FT	(2) 1-3/4" X 9-1/2" VL (2 @)	2 TRIM @ 60°/2 KINGS
> 9-FT	ADDL ENGINEERING REQUIRED	

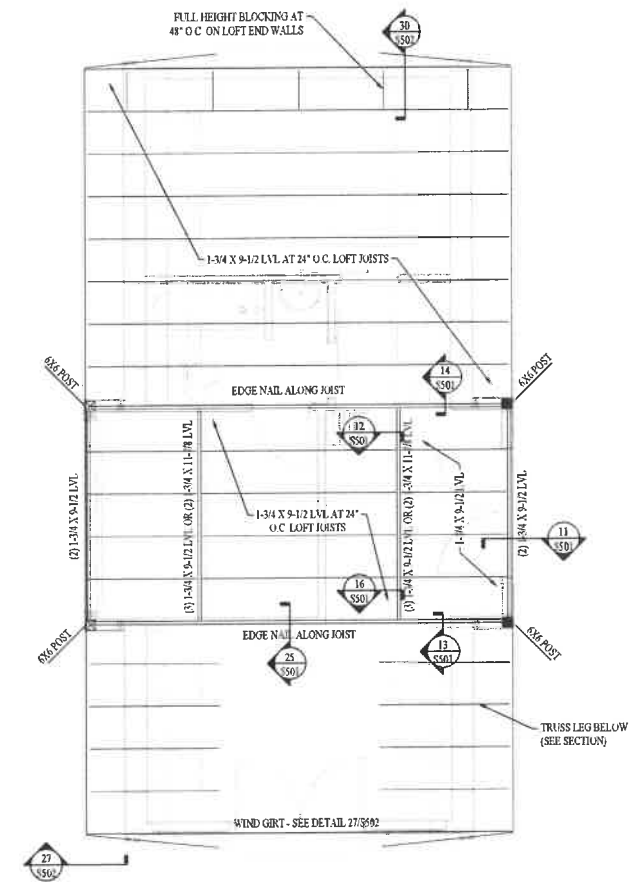
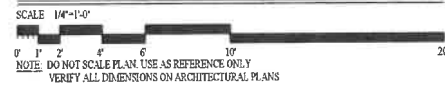
TABLE VALID FOR HEADERS IN CENTER CRAWLSPACE/BASEMENT BEARING WALL ONLY  
 BASED ON RESIDENTIAL 40 PSF LIVE LOAD AND 15 PSF DEAD LOAD

**ROOF/FLOOR SHEATHING SCHEDULE**

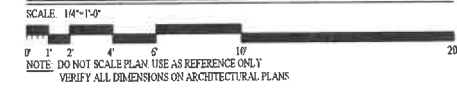
MARK	TYPE	THICKNESS	SPAN RATING	NAILING				REMARKS	
				SIZE	BLOCKED	EDGE	BOUNDARY		FIELD
FLOOR	T&O	3/4"	4804	10d	NO	6"	6"	12"	GLUE AND NAIL
ROOF	CDX/OSB	5/8"	4020	M	NO	6"	6"	12"	-



ROOF/OVERALL TRUSS LAYOUT PLAN



LOFT FRAMING PLAN



**ATTENTION**  
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KEYNOTES

1. *[Signature]*  
 06/29/2023 59454

REVISIONS		
#	DESCRIPTION	DATE

CITY REVIEW

**IDYLVWOOD OFFICE**  
 11490 JULIANNE AVENUE NORTH  
 GRANT, MN 55082  
 DRAWN FOR ONE  
 TIME USE FOR  
**AVRAME U.S.A.**

PLAN: 21003.05	DATE: 08/28/23
SHEET: <b>S102</b>	BASEMENT LEVEL: .
OF: .	MAIN LEVEL: .
	UPPER LEVEL: .
	TOTAL FINISHED: .





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**KEYNOTES**

1. *[Signature]*  
 08/28/2023 09454

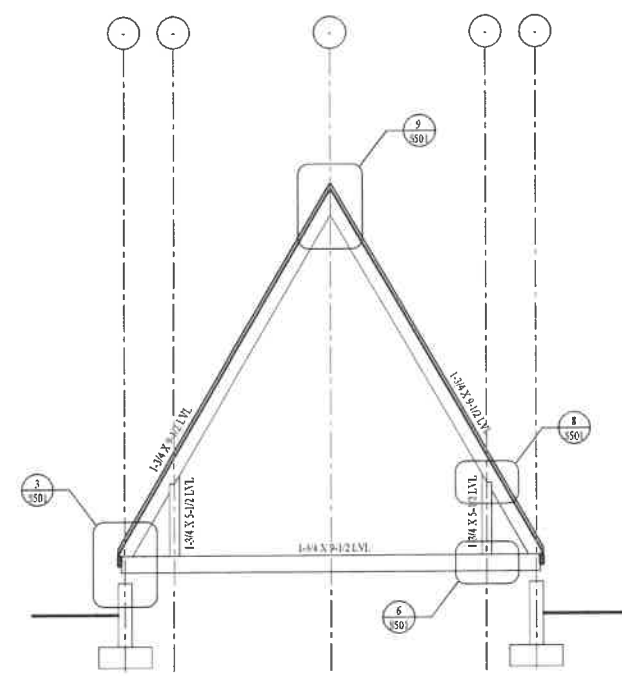
REVISIONS		
#	DESCRIPTION	DATE

**CITY REVIEW**

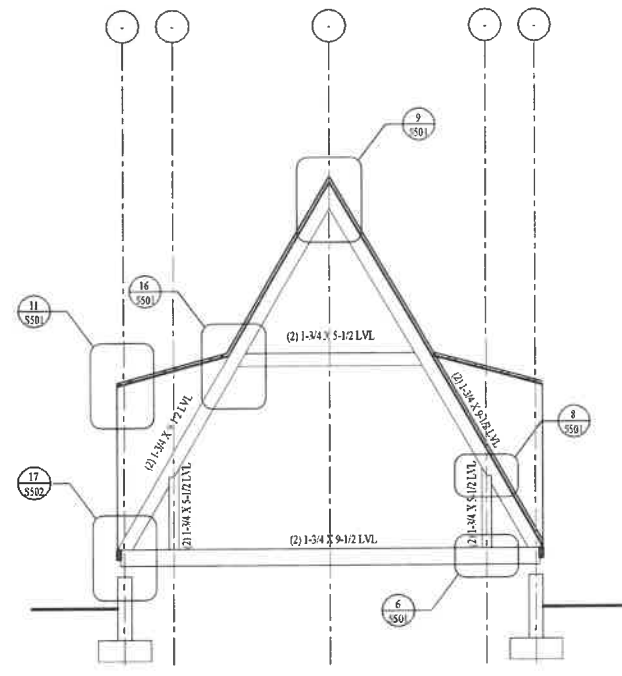
**IDYLLWOOD OFFICE**  
 11490 JULIANNE AVENUE NORTH  
 GRANT, MN 55082

AVRAVE U.S.A.  
DRAWN FOR ONE TIME USE FOR

PLAN: 21003.05	DATE: 08/28/23
SHEET: <b>S302</b>	BASEMENT LEVEL
OF:	MAIN LEVEL
	UPPER LEVEL
	TOTAL FINISHED



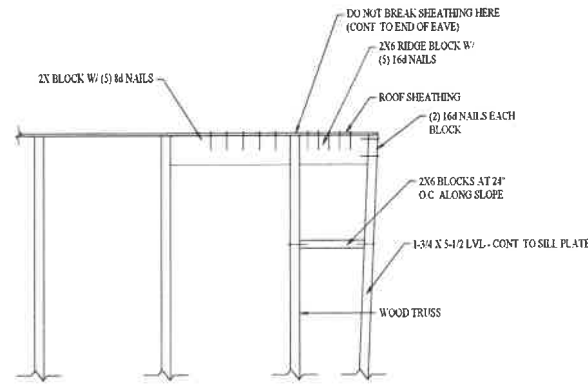
**TRUSS 5 ELEVATION**  
 SCALE 1/4"=1'-0"  
 NOTE: DO NOT SCALE PLAN. USE AS REFERENCE ONLY.  
 VERIFY ALL DIMENSIONS ON ARCHITECTURAL PLANS.



**TRUSS 6 ELEVATION**  
 SCALE 1/4"=1'-0"  
 NOTE: DO NOT SCALE PLAN. USE AS REFERENCE ONLY.  
 VERIFY ALL DIMENSIONS ON ARCHITECTURAL PLANS.

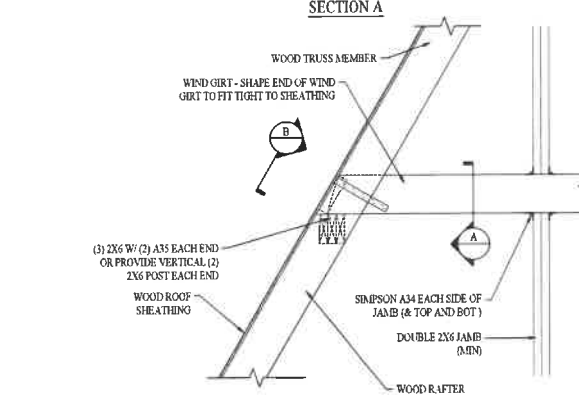
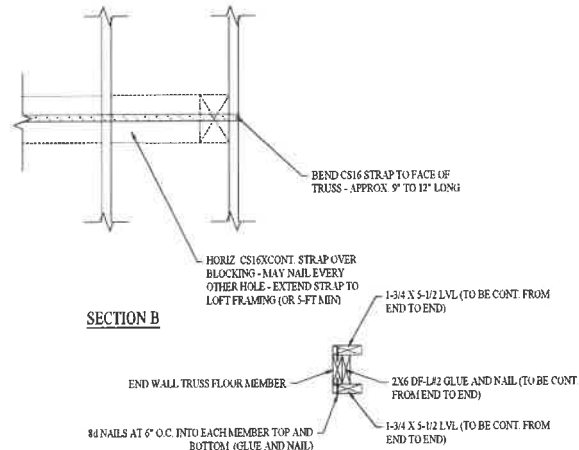






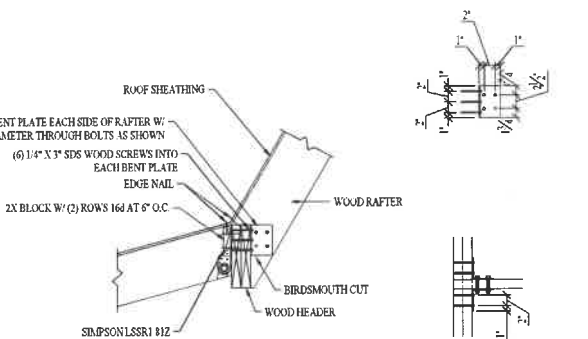
20 OUTRIGGERS AT EAVES  
S502 3/4"-1'-0"

24 NOT USED  
S502 3/4"-1'-0"



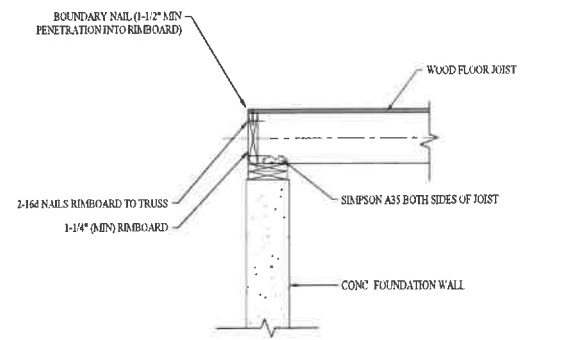
27 WIND GIRTS AT END WALL  
S502 3/4"-1'-0"

31 NOT USED  
S502 3/4"-1'-0"



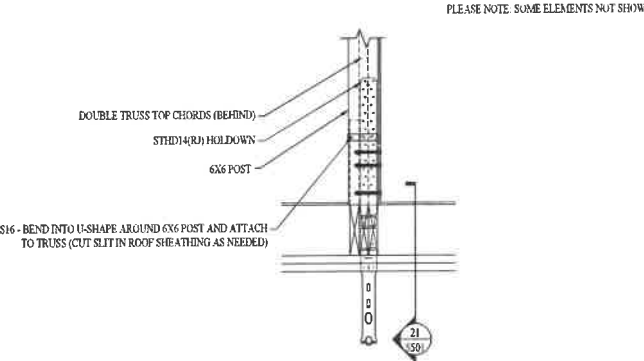
19 SECTION AT DORMER AND STAIRWAY  
S502 3/4"-1'-0"

23 NOT USED  
S502 3/4"-1'-0"

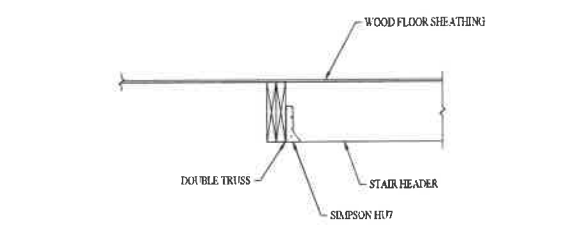


18 FLOOR JOIST AT DORMER  
S502 3/4"-1'-0"

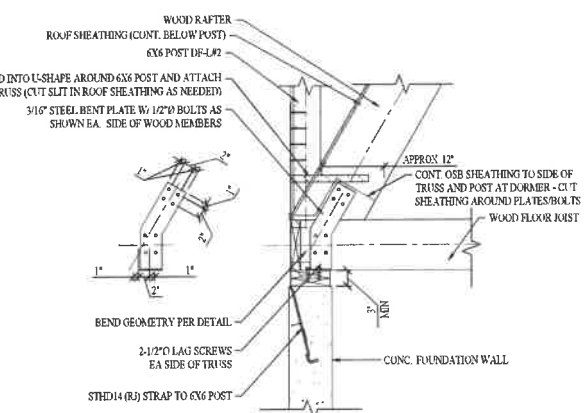
22 DOUBLE TRUSS HOLDOWN AT DORMER  
S502 3/4"-1'-0"



26 STAIR HEADER AT TRUSS  
S502 3/4"-1'-0"

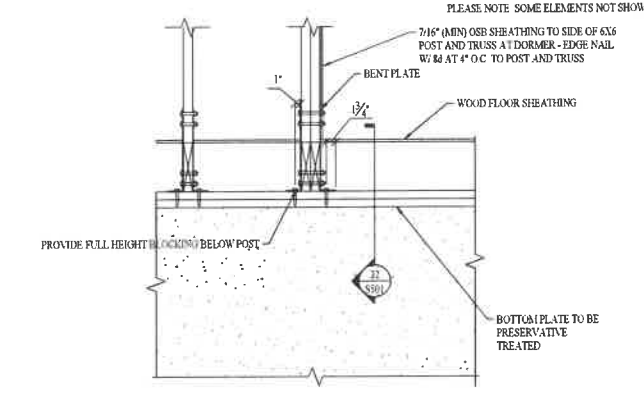


30 LOFT BLOCKING  
S502 3/4"-1'-0"

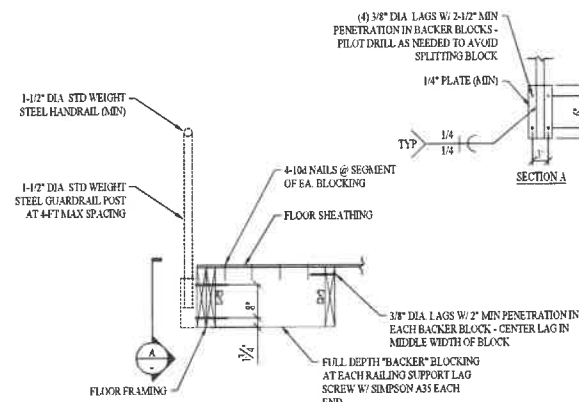


17 FLOOR JOIST AT EDGE AT DOUBLE TRUSS  
S502 3/4"-1'-0"

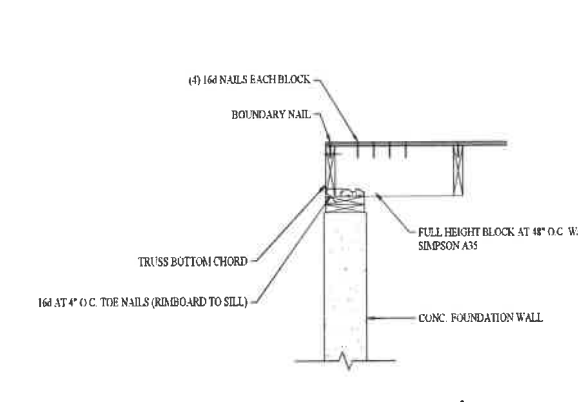
21 DOUBLE TRUSS AT SILL  
S502 3/4"-1'-0"



25 GUARDRAIL ATTACHMENT AT BALCONY  
S502 3/4"-1'-0"



29 ENDWALL CONNECTION  
S502 3/4"-1'-0"



**Avrame**  
USA

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KEYNOTES  
Cody R Palmer  
08/26/2023 59454

REVISIONS		
#	DESCRIPTION	DATE

CITY REVIEW

IDYLLWOOD OFFICE  
11490 JULIANNE AVENUE NORTH  
GRANT, MN 55082  
DRAWN FOR ONE  
TIME USE FOR  
AVRAME U.S.A.

PLAN	21003.06P	DATE	08/28/23
SHEET	S502	BASEMENT LEVEL	
OF		MAIN LEVEL	
		UPPER LEVEL	
		TOTAL FINISHED	

**McNEIL ENGINEERING**  
Civil Engineering • Consulting & Landscape Architecture  
Structural Engineering • Land Surveying & HDS

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**KEYNOTES**

1. ALL DIMENSIONS ARE IN UNITS OF FEET AND INCHES UNLESS OTHERWISE NOTED.  
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 3. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 4. ALL DIMENSIONS ARE TO SURFACE UNLESS OTHERWISE NOTED.  
 5. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 6. ALL DIMENSIONS ARE TO SURFACE UNLESS OTHERWISE NOTED.  
 7. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 8. ALL DIMENSIONS ARE TO SURFACE UNLESS OTHERWISE NOTED.  
 9. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED.  
 10. ALL DIMENSIONS ARE TO SURFACE UNLESS OTHERWISE NOTED.

**REVISIONS**

#	DESCRIPTION	DATE

**CITY REVIEW**

**IDYLLWOOD OFFICE**  
 11480 JULIANNE AVENUE NORTH  
 GRANT, MN 55002

**AVRAM U.S.A.**

DRAWN FOR ONE TIME USE FOR:

PLAN: 21003.050 DATE: 08/28/23  
 SHEET: S601 BASEMENT LEVEL  
 OF: MAIN LEVEL  
 UPPER LEVEL  
 TOTAL FINISHED:

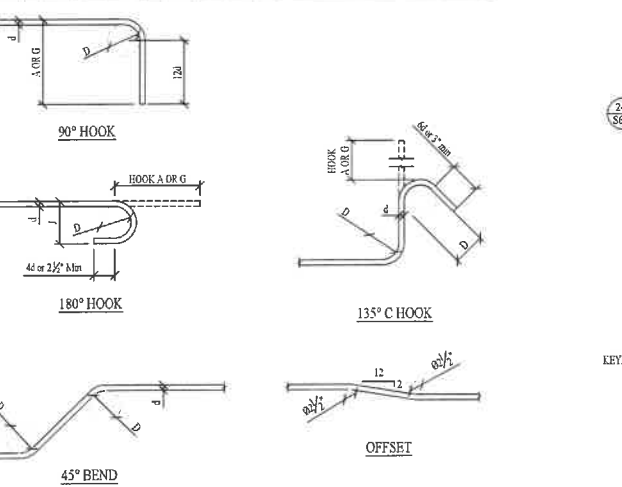
CONSTRUCTION	NAILING
1. CONCRETE TO FORMWORK	16d @ 12" O.C.
2. BRICKWORK TO CONCRETE	16d @ 12" O.C.
3. CONCRETE TO CONCRETE	16d @ 12" O.C.
4. CONCRETE TO BRICKWORK	16d @ 12" O.C.
5. CONCRETE TO CONCRETE	16d @ 12" O.C.
6. CONCRETE TO CONCRETE	16d @ 12" O.C.
7. CONCRETE TO CONCRETE	16d @ 12" O.C.
8. CONCRETE TO CONCRETE	16d @ 12" O.C.
9. CONCRETE TO CONCRETE	16d @ 12" O.C.
10. CONCRETE TO CONCRETE	16d @ 12" O.C.
11. CONCRETE TO CONCRETE	16d @ 12" O.C.
12. CONCRETE TO CONCRETE	16d @ 12" O.C.
13. CONCRETE TO CONCRETE	16d @ 12" O.C.
14. CONCRETE TO CONCRETE	16d @ 12" O.C.
15. CONCRETE TO CONCRETE	16d @ 12" O.C.
16. CONCRETE TO CONCRETE	16d @ 12" O.C.
17. CONCRETE TO CONCRETE	16d @ 12" O.C.
18. CONCRETE TO CONCRETE	16d @ 12" O.C.
19. CONCRETE TO CONCRETE	16d @ 12" O.C.
20. CONCRETE TO CONCRETE	16d @ 12" O.C.
21. CONCRETE TO CONCRETE	16d @ 12" O.C.
22. BUILT-UP ORDER AND BEAM:	20d @ 32" O.C. AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE.

BAR SIZE	f <sub>c</sub> = 2500 PSI			
	L <sub>d</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
#3	18"	23"	23"	30"
#4	24"	31"	31"	41"
#5	30"	39"	39"	51"
#6	36"	47"	47"	61"

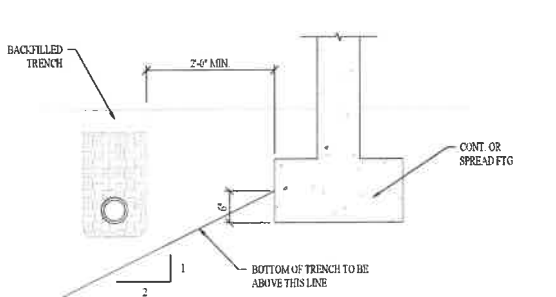
**NOTES:**

- DEFINITIONS:
  - L<sub>d</sub> TENSION DEVELOPMENT LENGTH FOR REINFORCEMENT SATISFYING THE FOLLOWING CONDITIONS: SLABS AND WALLS CLEAR SPACING - 3db AND CONCRETE CLEAR COVER - db; BEAMS AND COLUMNS CLEAR COVER SPACING - db AND CONCRETE CLEAR COVER - db
  - L<sub>1</sub> DEVELOPMENT LENGTH FOR TOP BARS IN TENSION
  - L<sub>2</sub> TENSION LAP SPICE LENGTH FOR OTHER THAN TOP BARS (CLASS B)
  - L<sub>3</sub> TENSION LAP SPICE LENGTH OF TOP BARS
  - L<sub>4</sub> DEVELOPMENT LENGTH FOR BARS IN COMPRESSION
  - L<sub>5</sub> TIED COLUMN LAP SPICE IN COMPRESSION
  - db: NOMINAL BAR DIAMETER (INCHES)
  - TOP BARS: HORIZONTAL BEAM REINFORCEMENT WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW
- MULTIPLY VALUES IN SCHEDULE BY 1.5 IF CLEAR SPACING OR CONCRETE COVER DO NOT MEET REQUIREMENTS FOR L<sub>d</sub> IN NOTE 1
- MULTIPLY VALUES IN SCHEDULE BY 1.3 FOR USE IN LIGHTWEIGHT AGGREGATE CONCRETE
- FOR ENJOY COATED BAR: MULTIPLY VALUES IN SCHEDULE BY 1.5 FOR BARS WITH CLEAR COVER - 3db (OR CLEAR SPACING) - 6db OTHERWISE MULTIPLY VALUES BY 1.2
- a. FOR BUNDLED BARS OF THREE OR LESS MULTIPLY LENGTHS BY 1.3
  - b. FOR BUNDLED BARS OF FOUR OR MORE MULTIPLY LENGTHS BY 1.33
  - c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
- SCHEDULE LENGTHS ARE FOR #6-#60 REINFORCING; MULTIPLY LENGTHS BY 1.25 FOR #6-#75 REINFORCING
- LAP SPLICES ARE NOT PERMITTED FOR #14 & #18 BARS. USE BAR COUPLERS PER G.S.N.

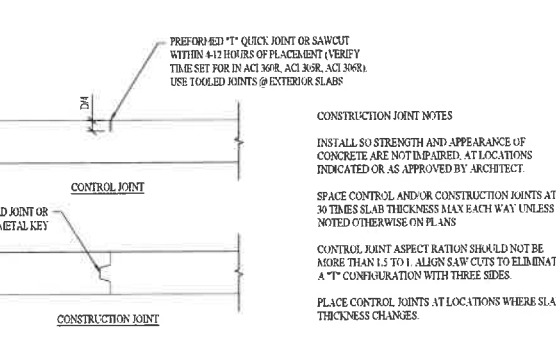
BAR SIZE	D	180°				90°				90°				135°			
		A OR G	J	A OR G	H	A OR G	A OR G	H	A OR G	A OR G	H	A OR G	A OR G	H			
#3	11.5	5	11.5	5	11.5	5	11.5	5	11.5	5	11.5	5	11.5	5	11.5	5	
#4	14	6	14	6	14	6	14	6	14	6	14	6	14	6	14	6	
#5	17	7	17	7	17	7	17	7	17	7	17	7	17	7	17	7	
#6	20	8	20	8	20	8	20	8	20	8	20	8	20	8	20	8	
#7	23	9	23	9	23	9	23	9	23	9	23	9	23	9	23	9	
#8	26	10	26	10	26	10	26	10	26	10	26	10	26	10	26	10	
#9	29	11	29	11	29	11	29	11	29	11	29	11	29	11	29	11	
#10	32	12	32	12	32	12	32	12	32	12	32	12	32	12	32	12	
#11	35	13	35	13	35	13	35	13	35	13	35	13	35	13	35	13	
#12	38	14	38	14	38	14	38	14	38	14	38	14	38	14	38	14	
#13	41	15	41	15	41	15	41	15	41	15	41	15	41	15	41	15	
#14	44	16	44	16	44	16	44	16	44	16	44	16	44	16	44	16	
#15	47	17	47	17	47	17	47	17	47	17	47	17	47	17	47	17	
#16	50	18	50	18	50	18	50	18	50	18	50	18	50	18	50	18	
#17	53	19	53	19	53	19	53	19	53	19	53	19	53	19	53	19	
#18	56	20	56	20	56	20	56	20	56	20	56	20	56	20	56	20	
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#27	83	29	83	29	83	29	83	29	83	29	83	29	83	29	83	29	
#28	86	30	86	30	86	30	86	30	86	30	86	30	86	30	86	30	
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#45	137	47	137	47	137	47	137	47	137	47	137	47	137	47	137	47	
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#59	179	61	179	61	179	61	179	61	179	61	179	61	179	61	179	61	
#60	182	62	182	62	182	62	182	62	182	62	182	62	182	62	182	62	



**1-A REINF. BENDS, HOOKS, AND OFFSET**  
 S601 3/4"-1'-0"



**2-B PIPE PARALLEL TO FTG**  
 S601 3/4"-1'-0"



**2-A SLAB ON GRADE JOINT**  
 S601 3/4"-1'-0"

