GENERAL CONSTRUCTION NOTES:

1. THE INTENT OF THESE PLANS AND NOTES IS TO PRESENT THE PROJECT REQUIREMENTS FOR THE _____PROJECT IN _____.
2. THESE STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS. SOME DIMENSIONS, SECTIONS, AND FRAMING DETAILS MAY BE SHOWN ON THE ARCHITECTURAL DRAWINGS.
3. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS THAT ARE UNKNOWN OR THAT DIFFER THAN AS DEPICTED IN THESE DRAWINGS. SUCH EXISTING CONDITIONS MAY INTERFERE WITH THE NEW CONSTRUCTION OR REQUIRE PROTECTION DURING CONSTRUCTION.
4. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ALL ENCOUNTERED EXISTING CONDITIONS THAT INTERFERE WITH THE PROPER EXECUTION OF NEW WORK OR COMPROMISE THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE.
5. ALL WORK SHALL COMPLY WITH THE _____ INTERNATIONAL BUILDING CODE, AS APPROVED BY THE STATE OF _____/ CITY OF_____.
6. REFERENCE STANDARDS: UNLESS OTHERWISE NOTED, ALL STANDARDS SHALL BE CURRENT EDITION, WITH LATEST ADDENDA, IF APPLICABLE.
7. THE CONTRACTOR SHALL VERIFY ALL CONTRACT DOCUMENTS, SITE ELEVATIONS, DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.
8. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES.
9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE MEANS, METHODS, TIMING, OR PROCEDURES USED TO COMPLETE THE CONSTRUCTION. TEMPORARY BRACING, SHORING, OR PROTECTION OF THE STRUCTURE AGAINST WIND, ERECTION AND OTHER SITE CONDITIONS DURING CONSTRUCTION OF THE BUILDING SHALL BE THE RESPONSIBILITY OF CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF THE STRUCTURE DURING ALL PHASES OF DEMOLITION, CONSTRUCTION, AND INSTALLATION.
10. NO AREA OF THE STRUCTURE SHALL BE LOADED WITH CONSTRUCTION MATERIALS OR EQUIPMENT THAT EXCEEDS FINAL DESIGN CRITERIA.
11. SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR ALL OPENINGS AND INSERTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
12. VERIFY LOCATION OF BOX OUTS AND OPENINGS WITH MECHANICAL AND ELECTRICAL CONTRACTORS. OPENING SIZES AND LOCATIONS SHOWN FOR PIPES, DUCTS, ETC ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED WITH THE MECHANICAL CONTRACTOR BEFORE COMMENCING THE WORK.
13. VERIFY SIZE, NUMBER, AND LOCATION OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT. IF EQUIPMENT SIZES, WEIGHTS, OR LOCATIONS DO NOT COINCIDE WITH EQUIPMENT SHOWN ON PLANS, COORDINATE ADJUSTMENTS WITH THE STRUCTURAL ENGINEER.
14. HOLES, PIPES, SLEEVES, ETC NOT SHOWN ON THE DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE PLACEMENT THROUGH STRUCTURAL MEMBERS.
15. CONTRACTOR SHALL PROVIDE A CAST-IN SLEEVE FOR ALL HORIZONTAL ELEMENTS THAT EXTEND THROUGH FOOTING. IE: DRAIN TILE, ELECTRICAL CONDUIT, MECHANICAL PIPING, ETC. ALL SLEEVES SHALL BE COORDINATED WITH ARCHITECT/ENGINEER.
16. SHOP DRAWINGS PREPARED BY SUPPLIERS, SUB CONTRACTORS, ETC, SHALL BE DIMENSIONED, REVIEWED, COORDINATED, AND SIGNED/STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE STRUCTURAL ENGINEER. MANUFACTURED COMPONENTS SUCH AS TRUSSES OR PRECAST CONCRETE SHALL BE ENGINEERED AND STAMPED PRIOR TO SUBMISSION.
17. FABRICATOR SHALL CLEARLY NOTE CHANGES MADE IN THE SHOP DRAWINGS WHICH DO NOT COMPLY WITH THE CONTRACT DOCUMENTS. REVIEWED APPROVAL SHOP DRAWINGS SHOWING ENGINEERS COMMENTS ACCOMPANIED WITH RECORD SET SHOP DRAWINGS, SHALL BE AVAILABLE FOR REFERENCE AT THE CONSTRUCTION SITE.
18. EXPANSION ANCHORS SHALL BE HILTI "KWIK BOLT TZ" OR EQUIVALENT (UON). INSTALL ANCHORS IN STRUCTURAL CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
19. ADHESIVE ANCHORS (AA) SHALL BE HILTI "HIT HY-200 USING 'HAS' STANDARD RODS" OR EQUIVALENT (UON). USE HILTI "HIT-ICE" FOR COLD WEATHER APPLICATIONS. SEE SPECIFICATIONS FOR USAGE. INSTALL ANCHORS IN STRUCTURAL CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
20. CONCRETE SCREW ANCHORS (CSA) SHALL BE SIMPSON STRONG-TIE "TITEN HD" OR EQUIVALENT (UON). INSTALL ANCHORS IN STRUCTURAL CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
21. DESIGN LOADS:

FLOOR LIVE LOADS:

CATWALKS	40 psf
CLASSROOMS	40 psf
HOTEL ROOMS & CORRIDORS SERVING THEM	40 psf
OFFICE	50 psf
PARTITIONS	15 psf
ASSEMBLY (FIXED SEATING)	60 psf
EXTERIOR BALCONIES	60 psf
CORRIDORS & STAIRS	100 psf
CORRIDORS (ABOVE 1ST FLOOR)	80 psf
STORAGE ROOMS	125 psf
MECHANICAL & ELECTRICAL ROOMS	150 psf
APARTMENTS & CORRIDORS SERVING THEM	40 psf
RETAIL (FIRST FLOOR)	100 psf
RETAIL (ABOVE 1ST FLOOR)	80 psf
PARKING GARAGES	40 psf

ROOF LIVE LOADS:

FLAT ROOF SNOW	P_f	= 100 psf
EXPOSURE FACTOR	C_e	= 1.0
IMPORTANCE FACTOR	I_s	= 1.0
THERMAL FACTOR	C_t	= 1.0
GROUND SNOW LOAD	P_g	= 100 psf
DRIFT SURCHARGE LOAD	P	= 100 psf
DRIFT WIDTH	W	= 100 ft
CONSTRUCTION LOADING		= 100 psf
GREEN ROOF / PATIO		= 100 psf

DEAD LOADS:

TYPICAL FLOOR	= ___ psf
TYPICAL ROOF	= ___ psf

LATERAL LOADS (WIND-MWFRS):

ULTIMATE DESIGN WIND SPEED (3 SEC. GUST)	V_{ult}	= 115 mph
NOMINAL DESIGN WIND SPEED	V_{asd}	= 89 mph
WIND EXPOSURE		= "___"
INTERNAL PRESSURE COEFFICIENT		= +/- 0.18
RISK CATEGORY		= III
COMPONENTS & CLADDING	q_h	= ___ psf (VELOCITY PRESSURE)

LATERAL LOADS (SEISMIC-MSFRS):

RISK CATEGORY		= III
IMPORTANCE FACTOR	I_E	= 1.0
MAPPED SPECTRAL RESPONSE	S_s	= ____
	S_1	= ____
SITE CLASS		= "____"
DESIGN SPECTRAL RESPONSE	S_{DS}	= ____
	S_{D1}	= "____"
SEISMIC DESIGN CATEGORY		= "____"
BASIC SEISMIC FORCE-RESISTING SYSTEM		_____
DESIGN BASE SHEAR	V_S	= ____K
SEISMIC RESPONSE COEFFICIENT	C	= ____
RESPONSE MODIFICATION FACTOR	R	= ____
ANALYSIS PROCEDURE		_____

22. THE FOLLOWING STANDARD DETAILS SHALL APPLY:
    - STEPPED FOOTING
    - FOOTING CORNER REINFORCEMENT
    - CORNER BAR
    - WALL INTERSECTION
    - WALL CONSTRUCTION JOINT-WCJ
    - FLOOR CONSTRUCTION JOINT (CCJ)
    - FLOOR CONTROL JOINT (CJ)
    - STOOP DETAIL
    - ADDITIONAL REINFORCING AT OPENING
    - THICKENED SLAB
    - ISOLATION JOINT

    - CMU CONTROL JOINT
    - CMU CORNER BAR
    - CMU WALL REINFORCING
    - CMU WALL CORNER

    - JOIST BRIDGING ANCHORAGE
    - JOIST REINFORCING
    - ROOF DECK OPENING
    - MECH SUPPORT
    - ROOF DECK FASTENING
    - FLOOR DECK FASTENING
    - STEEL BEAM CONNECTION

    - COLD-FORMED HEADER
    - COLD-FORMED WALL BRIDGING
    - COLD-FORMED JOIST BRIDGING
    - COLD-FORMED TRACK CONNECTION
    - COLD-FORMED TRACK SPLICE
    - COLD-FORMED WALL SLIP CONNECTION

    - WOOD HEADER
    - WOOD BEAM FASTENING
    - WOOD TOP PLATE SPLICE

FOUNDATION NOTES:

1. FOOTING ELEVATIONS ARE TO TOP OF FOOTING (T.O.F.), (UON).
2. FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF ___ psf FOR CONTINUOUS AND ___ psf FOR PAD FOOTINGS. FOUNDATION DESIGN COMPLIES WITH GEOTECHNICAL REPORT #_____ DATED: ___ BY ___

   OR

   FOOTINGS ARE DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF ___ psf. THIS VALUE SHALL BE VERIFIED BY A GEOTECHNICAL ENGINEER. SUBMIT REPORT OF OBSERVATION TO ARCHITECT/ENGINEER PRIOR TO POURING FOOTINGS.
3. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL OR ENGINEERED FILL. SOILS SHALL BE OBSERVED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOOTING CONCRETE. IF NATURAL UNDISTURBED SOILS ARE NOT ENCOUNTERED AND/OR INADEQUATE SOILS ARE NOTED AT FOOTING BEARING LEVEL. ARCHITECT/ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH FURTHER WORK AT THOSE FOOTING LOCATIONS.
4. PROTECT FOOTINGS FROM THE ACTION OF WATER OR FREEZING.
5. FOOTINGS ARE CENTERED UNDER WALLS ABOVE (UON).
6. PRIOR TO PLACEMENT OF FOOTING CONCRETE, CLEAN FOOTING EXCAVATIONS OF SNOW, WATER, MUD, DIRT, AND DEBRIS.
7. FOOTINGS SHALL NOT BE EARTH FORMED.

EXCAVATION AND BACKFILL NOTES:

1. EXCAVATION AND BACKFILL SHALL BE EXECUTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. BACKFILL AND COMPACTION SHALL BE INSPECTED AND CERTIFIED BY A LICENSED GEOTECHNICAL ENGINEER. REPORTS ARE TO BE SUBMITTED TO THE ARCHITECT/ENGINEER.
3. FOOTING EXCAVATIONS SHALL BE EXCAVATED TO PROPER LINE AND LEVEL TO ENSURE MINIMUM CONCRETE COVER OF FOOTING REINFORCEMENT FOR FOOTING DEPTH.
4. ALL BACKFILL BELOW STRUCTURAL FOUNDATIONS AND SLABS ON GRADE BOTH INTERIOR AND EXTERIOR, IF NOT SPECIFIED IN CONTRACT DOCUMENTS OR SPECIFICATIONS, SHALL BE SOIL TYPE SP OR SP-SM ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM. GRADATION MUST BE 100% PASSING 2" SIEVE WITH <20% PASSING #200 SIEVE. BACKFILL MUST BE FREE OF ORGANICS.
5. BACKFILL SHALL BE COMPACTED BY MECHANICAL MEANS. FLOODING OR WATER INUNDATION SHALL NOT BE PERMITTED.
6. BACKFILL SHALL BE PLACED IN 8" (ALTERNATING) LIFTS ON EACH SIDE OF THE FOUNDATION WALLS TO MAINTAIN STABILITY OF FOUNDATION WALLS. COMPACT EACH LIFT TO THE FOLLOWING DENSITY (ASTM D698):

   - 98% DRY DENSITY - BELOW FOOTINGS
   - 98% DRY DENSITY - BELOW SLABS ON GRADE
   - 95% DRY DENSITY - EXTERIOR FOUNDATION WALL BACKFILL
7. BACKFILL SHALL NOT BE PLACED AGAINST BASEMENT FOUNDATION WALLS UNLESS WALLS ARE ADEQUATELY BRACED, TOP AND BOTTOM. FINAL WALL BRACING IS BASEMENT SLAB AND 1ST FLOOR STRUCTURE. IF THESE ELEMENTS ARE NOT IN PLACE AT TIME OF BACKFILL, CONTRACTOR SHALL PROVIDE AN ENGINEERED, TEMPORARY BRACING SYSTEM. THE TEMPORARY BRACING SYSTEM PROPOSED SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO BACKFILLING.
8. THE CONTRACT STRUCTURAL DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE MEANS AND METHODS USED TO PERFORM THE EXCAVATION IS AT THE SOLE DISCRETION OF THE CONTRACTOR, INCLUDING THE DESIGN AND INSTALLATION OF TEMPORARY BRACING OR SHORING. CONTRACTOR IS RESPONSIBLE FOR ALL CODE AND REGULATORY SAFETY REQUIREMENTS.

CONCRETE NOTES:

1. CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) CODES AND SPECIFICATIONS, LATEST EDITION.

   ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
   ACI 315 "DETAILS & DETAILING OF CONCRETE REINFORCEMENT"
   ACI 318-14 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
2. CAST-IN-PLACE CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH IS AS FOLLOWS:

   0000 psi - FOOTINGS & FOOTING PADS
   0000 psi - CAISSONS & DRILLED PIERS
   0000 psi - FILL FOR STEEL PIPE PILES
   0000 psi - EXTERIOR FOUNDATION WALLS
   0000 psi - INTERIOR FOUNDATION WALLS
   0000 psi - PIERS
   0000 psi - COLUMNS
   0000 psi - WALLS
   0000 psi - BEAMS
   0000 psi - INTERIOR SLABS ON GRADE
   0000 psi - EXTERIOR SLABS ON GRADE - AIR ENTRAINED
   0000 psi - RAISED SLABS
   0000 psi - TOPPING (REINFORCED W/ FIBERMESH)
   0000 psi - EXTERIOR SLABS ON DECK - AIR ENTRAINED
   0000 psi - CONCRETE FOR PILE CAPS
   0000 psi - MASONRY GROUT
   0000 PSI - STAIR PAN FILL
3. CONCRETE MIX DESIGNS SHALL BE BY AN INDEPENDENT TESTING LABORATORY, AND SUBMITTED FOR REVIEW & APPROVAL.
4. CAST-IN-PLACE CONCRETE SHALL BE SUBJECT TO TESTING BY AN INDEPENDENT TESTING LABORATORY. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS.
5. NON-WELDED REINFORCING STEEL SHALL BE GRADE 60 DEFORMED, BILLET-STEEL, ASTM A615, UON ALL WELDED WIRE FABRIC (WWF) SHALL BE PLAIN ASTM A185.
6. WELDED REINFORCING STEEL SHALL BE GRADE 60, LOW CARBON, ASTM A706.
7. CLEAR CONCRETE COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE DRAWING:

CONCRETE ON SOIL	3"
SLAB ON GRADE	MID-HEIGHT
WALLS, STRUCTURAL SLABS-	
FORMED & EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18	2"
#5 & SMALLER	1 1/2"
NOT EXPOSED TO EARTH & WEATHER:	
#11 & SMALLER	3/4"
BEAMS & COLUMNS (COVER TO STIRRUPS OR TIES)	1 1/2"

8. PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 1'-0" SQUARE OR 1'-0" IN DIAMETER, INCLUDING DOOR OPENINGS, IN CONCRETE WALLS & SLABS. PROVIDE 2- #5 BARS @ 3" OC, ON EACH SIDE OF THE OPENING EXTENDING 2'-0" BEYOND THE CORNER OF THE OPENING & 2- #5 BARS AT 3" OC BY 2'-0" LONG DIAGONAL BARS AT EACH CORNER. PLACE DIAGONAL BARS CENTERED ON CORNER @ 2" CLEAR OF CORNER. ADDITIONAL REINFORCEMENT SHALL BE PROVIDED AT EACH LAYER OF REINFORCING.
9. REINFORCING STEEL SHALL BE BENT, SPLICED, AND PLACED IN ACCORDANCE WITH ACI 301 (LATEST EDITION).
10. PROVIDE LAP SPLICE FOR REINFORCING STEEL AS FOLLOWS:
    TYPE #1 SPLICE - ONLY WHERE SPECIFICALLY SHOWN ON PLAN
    TYPE #2 SPLICE - TYPICAL FOR HORIZONTAL REINFORCING BARS IN SLABS, GRADE BEAMS, FOOTINGS AND FOUNDATION WALLS (UON)
    TYPE #3 SPLICE - WHERE CONCRETE COVER IS LESS THAN Bd AND THE SPACING IS LESS THAN 2 Bd
    TYPE #4 SPLICE - TYPICAL FOR VERTICAL BARS IN COLUMNS AND PIERS (UON.)

REINFORCING STEEL SPLICE LENGTHS STANDARD NON-COATED BARS

CONCRETE STRENGTH f'c	TYPE #1 SPLICE CLASS A SPLICE		TYPE #2 SPLICE CLASS B SPLICE		TYPE #3 SPLICE CLASS B SPLICE		TYPE #4 SPLICE COMPRESSION SPLICE #4 & LARGER
	#6 & SMALLER	#7 & LARGER	#6 & SMALLER	#7 & LARGER	#6 & SMALLER	#7 & LARGER	
3000 psi	44 Bd	55 Bd	57 Bd	71 Bd	85 Bd	107 Bd	30 Bd
3500 psi	41 Bd	51 Bd	53 Bd	66 Bd	79 Bd	99 Bd	30 Bd
4000 psi	38 Bd	47 Bd	49 Bd	62 Bd	74 Bd	92 Bd	30 Bd
5000 psi	34 Bd	42 Bd	44 Bd	55 Bd	66 Bd	83 Bd	30 Bd
6000 psi	31 Bd	38 Bd	40 Bd	50 Bd	60 Bd	76 Bd	30 Bd

NOTES: Bd = BAR DIAMETER

A. MIN. LAP: 1' - 6" FOR TYPE #1 THROUGH TYPE #3 & 1' - 0" FOR TYPE #4 SPLICES.
B. MULTIPLY THE SPLICE LENGTH ABOVE BY THE FOLLOWING ADJUSTMENT FACTORS:
   a. 1.0 - FOR STANDARD REBAR
   b. 1.3 - WHEN HORIZONTAL REINFORCING HAS MORE THAN 1' - 0" OF FRESH CONCRETE, PLACE BELOW BAR
   c. 1.3 - FOR LIGHTWEIGHT CONCRETE
   d. 1.2 - FOR TYPICAL EPOXY COATED REBAR
   e. 1.5 - FOR EPOXY COATED REBAR WITH COVER LESS THAN 3 Bd OR CLEAR SPACING LESS THAN 6 Bd
   f. Fy USED/60 - FOR REBAR STRENGTHS OTHER THAN 60 ksi
C. ALL ADJUSTMENT FACTORS THAT APPLY SHALL BE USED TO CALCULATE REQUIRED SPLICE LENGTH.

11. PROVIDE ADEQUATE SUPPORT BARS AND ACCESSORIES TO HOLD REINFORCING BARS FIRMLY IN PLACE TO SPECIFIED COVERAGE.
12. UNLESS SHOWN SPECIFICALLY ON PLAN, CONTROL JOINTS SHALL BE PLACED IN A SQUARE PATTERN WITH A MAXIMUM SPACING OF 36 TIMES THE SLAB THICKNESS. WHERE A SQUARE PATTERN IS NOT POSSIBLE, THE MAXIMUM LONG SIDE TO SHORT SIDE OF THE JOINT PATTERN SHALL NOT EXCEED A RATIO OF 1.25:1. CONSTRUCTION JOINTS SHALL BE LOCATED BY THE CONTRACTORS AS REQUIRED FOR CONSTRUCTION WITH A MAXIMUM OF 3,000 SQUARE FEET. CONTRACTOR SHALL SUBMIT A JOINT PLACEMENT PLAN TO OWNER/ARCHITECT/ENGINEER FOR REVIEW PRIOR TO POURING CONCRETE.
13. CAST DOWELS, WITH STD 90° HOOK, IN FOOTINGS FOR CONCRETE PIERS AND WALLS ABOVE. DOWELS SHALL BE THE SAME SIZE AND NUMBER AS THE VERTICAL REINFORCING, (UON).
14. SUPPLY ___ FEET EXTRA OF #5 REBAR FOR MISC PLACEMENT AS DIRECTED BY THE ARCHITECT/ENGINEER. CONTRACTOR SHALL INCLUDE ALLOWANCE FOR PROJECTED LABOR COSTS INVOLVED WITH INSTALLATION OF REINFORCEMENT.

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044.2025-NC/AF

RHET ARCHITECTURE
RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

	questions	
CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	DESCRIPTION	DATE

REVISION SCHEDULE

PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
NOTES SHEET

S001

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfQFHGz.rvt
Plot Date: 11/20/2025 5:58:14 PM

ENGINEERED WOOD NOTES:

1. POSTS AND BEAMS CONSTRUCTED OF MULTIPLE LAMINATED VENEER LUMBER MEMBERS SHALL BE FASTENED TOGETHER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SD ___/S___ FOR MINIMUM REQUIREMENTS.
2. LAMINATED WOOD FABRICATOR SHALL BE AN AITC MEMBER AND SHALL FABRICATE ACCORDING TO AITC SPECIFICATIONS.
3. LAMINATED WOOD SUPPLIER SHALL FURNISH ALL HANGERS, HARDWARE, AND ACCESSORIES FOR ALL CONNECTIONS ASSOCIATED WITH LAMINATE WOOD MEMBERS (UON).
4. SEE ARCHITECTURAL DETAILS AND SPECIFICATIONS FOR MATERIAL TYPE AND FINISHES.
5. LAMINATED WOOD DECKING SHALL BE SOLID, 2" NOMINAL (1 1/2" ACTUAL) DOUGLAS FIR/LARCH, W/ THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,500 psi - BENDING
   - Fv = 165 psi - SHEAR
   - E = 1,800 ksi - MODULUS OF ELASTICITY
6. ALL WOOD DECKING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS W/ RANDOM LENGTH LAYOUT.
7. PLACE DECK WITH TONGUE UP, BEGINNING AT THE LOW POINTS OF THE ROOF.
8. ALL WOOD DECKING SHALL BE NAILED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS WITH THE FOLLOWING MINIMUM REQUIREMENTS:
   - NAIL EACH COURSE OF DECKING TO SUPPORT WITH 2- 12d COMMON OR RING SHANK NAILS.
   - SECURE ADJACENT COURSES BY SLANT NAILING WITH 8d NAILS AT A MAXIMUM 2'-6" OC, STAGGER LOCATIONS IN ALTERNATE COURSES BY 1'-3".
   - DRIVE NAILS AT AN ANGLE OF 40° TO 50° STARTING WITHIN 1'-0" OF EACH END JOINT.
9. ALL LAMINATED FRAMING MEMBERS ARE SPECIFIED AS DOUG-FIR COMBINATION 24FV4. SOUTHERN-PINE COMBINATION 24FV3 MAY BE USED WITH EQUIVALENT DESIGN VALUES & SECTION PROPERTIES.
10. LAMINATED WOOD SUPPLIER SHALL PROVIDE ALL WOOD TO WOOD CONNECTIONS. STRUCTURAL STEEL SUPPLIER SHALL FURNISH ALL WOOD TO STEEL CONNECTIONS, HANGERS AND HARDWARE WHICH ARE REQUIRED TO COMPLETE THE ERECTION OF THE LAMINATED WOOD.
11. LAMINATED WOOD MANUFACTURER AND STRUCTURAL STEEL SUPPLIER SHALL COORDINATE ALL CONNECTION DETAILS PRIOR TO FABRICATION.
12. PROVIDE STANDARD CAMBER AT ALL ROOF BEAMS AND PURLINS.
13. LVL MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,600 psi - BENDING
   - Fv = 285 psi - SHEAR
   - Fc = 2,510 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 750 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 2,000 ksi - MODULUS OF ELASTICITY
14. GLU-LAM MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,400 psi - BENDING
   - Fv = 265 psi - SHEAR
   - Fc = 1650 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 650 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 1,800 ksi - MODULUS OF ELASTICITY
15. LSL MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,325 psi - BENDING
   - Fv = 310 psi - SHEAR
   - Fc = 2,170 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 900 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 1,550 ksi - MODULUS OF ELASTICITY
16. PSL COLUMN MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,400 psi - BENDING
   - Fv = 190 psi - SHEAR
   - Fc = 2,500 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 545 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 1,800 ksi - MODULUS OF ELASTICITY
17. PSL BEAM MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
   - Fb = 2,900 psi - BENDING
   - Fv = 290 psi - SHEAR
   - Fc = 2,900 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 625 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 2,000 ksi - MODULUS OF ELASTICITY

WOOD FRAMING NOTES:

1. WOOD AND TIMBER CONSTRUCTION SHALL CONFORM TO PROJECT SPECIFICATIONS AND AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) STANDARDS.
2. WOOD CONSTRUCTION SHALL CONFORM TO CHAPTER 23, OF THE INTERNATIONAL BUILDING CODE (UON).
3. ALL NAILING SHALL BE COMMON WIRE NAILS (UON) & SHALL CONFORM TO TABLE 2304.10.1 "FASTENING SCHEDULE" OF THE INTERNATIONAL BUILDING CODE UNLESS OTHER REQUIREMENTS NOTED ON THE PLAN ARE MORE STRICT.
4. FRAMING LUMBER SHALL CONFORM WITH THE PROVISIONS OF THE AMERICAN SOFTWOOD LUMBER STANDARD PS20-10 AND EACH PIECE SHALL BEAR THE GRADE STAMP OF A GRADING AGENCY APPROVED BY THE AMERICAN LUMBER STANDARDS COMMITTEE. ALL FRAMING LUMBER 2" AND LESS IN THICKNESS SHALL BE SEASONED TO A MOISTURE CONTENT OF 19% OR LESS PRIOR TO SURFACING WITH THE INDICATION "S-DRY" ON THE GRADE STAMP.
5. DIMENSION LUMBER SHALL BE SPRUCE-PINE-FIR (SPF), NO. 2 GRADE OR BETTER WITH THE FOLLOWING MINIMUM DESIGN VALUES (UON):
   - Fb = 875 psi - BENDING
   - Fv = 135 psi - SHEAR
   - Fc = 1,150 psi - COMPRESSION PARALLEL TO GRAIN
   - Fc⊥ = 425 psi - COMPRESSION PERPENDICULAR TO GRAIN
   - E = 1,400 psi - MODULUS OF ELASTICITY
   - EMIN = 510 psi - MINIMUM MODULUS OF ELASTICITY
6. SILL PLATES FOR LOAD BEARING WALLS ON CONCRETE OR MASONRY SHALL BE AWPA COPPER AZOLE (CA-B) TREATED SOUTHERN PINE (SP), NO. 2 GRADE MINIMUM. SILL PLATES FOR NON-LOAD BEARING WALLS ON CONCRETE OR MASONRY SHALL BE AWPA CA-B TREATED PONDEROSA PINE (PP) STUD GRADE MINIMUM.
7. ALL BEARING STUD WALLS SHALL BE CONSTRUCTED WITH CONTINUOUS TREATED SILL PLATE AND DOUBLE TOP PLATE. JOINTS IN LOAD BEARING WALL TOP PLATES SHALL BE OFFSET AT LEAST 4'-0". SEE PLANS AND DETAILS.
8. SILL PLATES FOR BEARING WALLS SHALL BE ANCHORED TO CONCRETE OR MASONRY WITH 1/2" DIAMETER ZINC GALVANIZED (1.7 MILS MINIMUM) EPOXY BOLTS SPACED 4'-0" OC (UON), PROVIDE 6" EMBEDMENT DEPTH (UON). THERE SHALL BE A MINIMUM OF 3- BOLTS PER PIECE WITH ONE BOLT LOCATED WITHIN 8" OF EACH END OF EACH PIECE. THERE SHALL BE NO SILL PLATE SPLICE UNDER ANY POST, JACK STUD, OR KING STUD.
9. BUILT-UP MEMBERS SUCH AS COLUMNS, BEAMS, JOISTS, AND JAMB STUDS SHALL BE FASTENED TOGETHER WITH 2 - ROWS OF 16d COMMON WIRE NAILS SPACED AT 1'-0" OC (UON).
10. 2X LUMBER USED FOR HEADERS, BEAMS, AND JOISTS SHALL BE FREE OF CHECKS AND SPLITS.
11. ALL HEADERS, BEAMS, JOISTS, AND TRUSSES SHALL BEAR FULLY ON STUD WALLS, POSTS, AND JACK STUDS. DO NOT OVERCUT.
12. ALL 2X HEADERS AND BEAMS SHALL HAVE 3 - SUPPORT STUDS (1- KING STUD, 2- JACK STUDS) UNLESS REQUIREMENTS NOTED ON PLAN ARE MORE STRICT.
13. NO NOTCHING OF STUDS, JOISTS, BEAMS, OR TRUSSES IS PERMITTED WITHOUT THE ENGINEERS APPROVAL. DO NOT OVERCUT NOTCHES. HOLES BORED IN STUDS OR JOISTS SHALL BE IN THE MIDDLE ONE-THIRD OF THE DEPTH AND MIDDLE ONE-THIRD OF THE SPAN. THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-FOURTH THE DEPTH.
14. ALL FABRICATED WOOD TRUSSES ARE TO BE ENGINEERED BY FABRICATOR AND ERECTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. PLAN LOCATIONS FOR TRUSSES ARE FOR REFERENCE ONLY. FINAL LOCATIONS SHALL BE DETERMINED BY SUPPLIER USING MAXIMUM SPACING AND DETAILS INDICATED ON PLANS. WOOD TRUSS CONSTRUCTION AND FABRICATION SHALL FOLLOW GUIDELINES SET FORTH BY THE WOOD TRUSS COUNCIL OF AMERICA. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL TRUSS INFORMATION.
15. ALL FABRICATED WOOD TRUSSES SHALL BE FURNISHED IN ACCORDANCE WITH DESIGNS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE THE PROJECT IS LOCATED, USING THE DESIGN LOADS AND SPAN CONDITIONS INDICATED ON THE CONTRACT DOCUMENTS. WOOD TRUSS DESIGN ENGINEER SHALL DESIGN TRUSSES USING THE CURRENT ADOPTED IBC IN THAT STATE. ADDITIONAL LOADS SUCH AS SNOW DRIFT LOADING AND LOADS FROM ALL OTHER DISCIPLINES ARE THE RESPONSIBILITY OF THE WOOD TRUSS ENGINEER. NO DEVIATION OF OVERALL TRUSS SHAPE, MEMBER SIZE, OR SUPERIMPOSED LOADS, FROM THE CONTRACT DOCUMENTS SHALL BE PERMITTED WITHOUT THE APPROVAL OF THE ARCHITECT AND/OR THE ENGINEER. SHOP DRAWINGS, INCLUDING AN OVERALL ERECTION PLAN INDICATING EACH TYPE OF TRUSS, TRUSS BEARING POINT LOCATIONS, REQUIRED LATERAL BRACING, EACH TRUSS MEMBERS SIZE, STRESS AND CONNECTION DETAILS, SHALL BE SUBMITTED FOR PRIOR APPROVAL TO THE GENERAL CONTRACTOR. TRUSS DETAIL SHEETS INDICATING LOADS, TRUSS MAKE-UP, MEMBER SIZES, REACTIONS, ETC TO BE SIGNED BY A PROFESSIONAL ENGINEER AND SUBMITTED PRIOR TO INSTALL.
16. FASTEN ALL WOOD TRUSSES TO TOP PLATES WITH 2 - 16d COMMON WIRE NAILS (MINIMUM). SEE PLANS FOR ADDITIONAL FASTENING REQUIREMENTS.
17. THE WOOD TRUSS SUPPLIER SHALL PROVIDE AN HIB-91 "SUMMARY SHEET" WITH THE TRUSS ERECTION DRAWINGS FOR REFERENCE BY THE TRUSS INSTALLER.
18. THE GUIDELINES SET FORTH BY THE TRUSS PLATE INSTITUTE PUBLICATION BCSI: "GUIDE TO HANDLING, RESTRAINING AND BRACING WOOD TRUSSES" SHALL BE FOLLOWED BY THE TRUSS INSTALLER.
19. PERMANENT BRACING OF WOOD TRUSSES SHALL BE INSTALLED BY THE TRUSS INSTALLER, WHERE INDICATED BY THE TRUSS ERECTION DRAWINGS. MINIMUM BRACING REQUIREMENTS FOR TOP CHORD, BOTTOM CHORD, AND WEB MEMBER PLANES SHALL BE IN ACCORDANCE WITH BCSI, UNLESS REQUIREMENTS NOTED ON THE PLAN ARE MORE STRICT.
20. ERECTION BRACING OF WOOD TRUSSES IS THE RESPONSIBILITY OF THE TRUSS INSTALLER. THE TRUSS INSTALLER SHALL PROVIDE TEMPORARY DIAGONAL, LATERAL, AND CROSS BRACING (PER BCSI) UNTIL ROOF SHEATHING, CEILING AND PERMANENT BRACING CAN BE APPLIED AND SHEARWALLS COMPLETED.
21. ROOF TRUSSES SHALL BE FASTENED TO THE SUPPORT WALLS WITH SIMPSON "H2.5T" TIES OR EQUAL (UON) AND SHALL BE NAILED PER MANUFACTURES RECOMMENDATION.
22. CONTRACTOR TO PROVIDE DIAGONAL BRACING AT STUD WALLS TO PREVENT RACKING DURING CONSTRUCTION.

SPECIAL INSPECTIONS:

1. THE CONTRACTOR SHALL COORDINATE THE TESTING AND INSPECTION SERVICES IN ACCORDANCE WITH THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO THE TESTING OR INSPECTION AGENCY OF THE REQUIRED WORK TO ALLOW ALLOCATION OF PERSONNEL. THE COST OF ANY RETESTING OR ADDITIONAL INSPECTIONS AS A RESULT OF UNINSPECTED WORK, FAILED TESTS, OR REJECTED WORK, SHALL BE BORNE BY THE CONTRACTOR.
2. THE FOLLOWING TABLE INCLUDES ITEMS REQUIRING SPECIAL INSPECTION PROVIDED BY THE OWNER. SPECIAL INSPECTIONS LISTED IN THIS TABLE MAY NOT INCLUDE ALL INSPECTIONS AND/OR TESTING THAT IS REQUIRED FOR THE PROJECT PER IBC CHAPTER 17. ADDITIONAL TESTING MAY BE REQUIRED BY THE CONTRACTOR, AS PART OF THEIR CONTRACT. THESE "SPECIAL INSPECTIONS" ARE IN ADDITION TO THE INSPECTIONS BY THE BUILDING OFFICIAL THAT ARE IDENTIFIED IN SECTION 110 IBC.

REQUIRED SPECIAL INSPECTION

DESCRIPTION OF WORK	TESTING REQUIRED	INSPECTION FREQUENCY	REMARKS
DRIVEN PILINGS	NO	CONTINUOUS DURING INSTALLATION	SEE IBC TABLE 1705.7 ITEM NO 1, 2, 3, & 4
HELICAL PILING	NO	CONTINUOUS DURING INSTALLATION	SEE IBC SECTION 1705.9
CAST-IN-PLACE PILING	YES	CONTINUOUS	SEE SECTION 1705.8 ITEM NO 1 & 2
GRADING, EXCAVATION, & FILLING	YES	PERIODIC (CONT DURING FILL)	SEE IBC TABLE 1705.6
CONCRETE FORMWORK	NO	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 12
CONCRETE REINFORCEMENT	NO	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 1
CONCRETE REINFORCEMENT	NO	PERIODIC (CONT FOR MULTIPASS WELDS)	SEE IBC TABLE 1705.3 ITEM NO 2
CAST-IN-PLACE CONCRETE	YES	PERIODIC (CONT DURING PLACEMENT)	SEE IBC TABLE 1705.3 ITEM NO 5, 6, 7, 8, & 11
CAST-IN-PLACE CONCRETE CURING & PROTECTION	NO	PERIODIC	CURING TECHNIQUES
POST-TENSIONED CONCRETE MEMBERS	YES	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 11
POST-TENSIONED CONCRETE TENDON FORCE	NO	CONTINUOUS	SEE IBC TABLE 1705.3 TEM NO 9
POST-TENSIONED CONCRETE GROUTING	YES	CONTINUOUS	SEE IBC TABLE 1705.3 ITEM NO 9
ANCHOR RODS INSTALLED IN CONCRETE	NO	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 3
POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE	NO	CONTINUOUS	SEE IBC TABLE 1705.3 ITEM NO 4a
POST-INSTALLED MECHANICAL	NO	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 4b
ERECTION OF PRECAST CONCRETE MEMBERS	NO	PERIODIC	SEE IBC TABLE 1705.3 ITEM NO 10
STRUCTURAL MASONRY	YES	PERIODIC	SEE TMS 402-2016 (LEVEL B QA)
STRUCTURAL STEEL WELDING	YES	PERIODIC (10% OF ALL WELDS)	SEE AISC360 TABLE N5.4.1 THRU 3
STRUCTURAL STEEL BOLTING	NO	PERIODIC	SEE AISC360 TABLE N5.6.1 THRU 3
COLD-FORMED STEEL DECKING	NO	PERIODIC	IN ACCORDANCE WITH SDI QA/QC-2017
OPEN-WEB STEEL JOIST	NO	PERIODIC	SEE IBC TABLE 1705.2.3 ITEM NO 1a, 1b.1, 1b.2
COLD-FORMED STEEL MECHANICAL CONNECTIONS	NO	PERIODIC	FIELD CONNECTIONS
COLD-FORMED STEEL WELDING	NO	PERIODIC	FIELD CONNECTIONS
COLD-FORMED STEEL TRUSSES	NO	PERIODIC	FOR SPANS 60' & GREATER
COLD-FORMED STEEL FRAMING	NO	PERIODIC	FRAMING AND DETAILS
METAL PLATE CONNECTED WOOD TRUSSES	NO	PERIODIC	FOR SPANS 60' & GREATER
STRUCTURAL WOOD GLUING OPERATIONS	NO	CONTINUOUS	
STRUCTURAL WOOD MECHANICAL FASTENING	NO	PERIODIC	NAILING, STAPLING, BOLTING, & ANCHORING
SPRAYED-ON FIREPROOFING FREPARATION	NO	PERIODIC	INSPECT SUBSTRATE PRIOR TO APPLICATION
SPRAYED-ON FIREPROOFING APPLICATION	YES	PERIODIC	TEST THICKNESS, DENSITY, & BOND STRENGTH
MASTIC & INTUMESCENT COATINGS	NO	PERIODIC	INSPECT SUBSTRATE AND APPLICATION

STRUCTURAL PANEL SHEATHING NOTES:

1. FASTENERS SHALL NOT BE LOCATED LESS THAN 3/8" IN FROM THE EDGE OF THE PANEL.
2. FASTENERS SHALL BE DRIVEN WITH THE HEAD OF THE FASTENER FLUSH WITH THE SURFACE OF THE SHEATHING.
3. FASTENERS SHALL BE OF SUFFICIENT LENGTH TO ENSURE PENETRATION INTO FRAMING MEMBERS BY AT LEAST 1 1/2" (UON).
4. FRAMING MEMBERS SHALL BE A MINIMUM 2" NOMINAL (3" NOMINAL FOR PANEL FLOOR SHEATHING) IN THE DIMENSION TO WHICH THE STRUCTURAL PANEL IS ATTACHED.
5. NO UNBLOCKED PANELS LESS THAN 1'-4" WIDE SHALL BE USED.
6. PANEL EDGES SHALL BUTT ALONG THE CENTERLINE OF FRAMING MEMBERS.
7. EACH WOOD SHEATHING PANEL SHALL BE IDENTIFIED WITH THE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION AND SHALL MEET THE REQUIREMENTS OF PRODUCT STANDARD (psi). APPLICATION AND NAILING OF PLYWOOD SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION AND TABLE 2304.10.1 "FASTENING SCHEDULE" OF THE INTERNATIONAL BUILDING CODE UNLESS OTHER REQUIREMENTS NOTED ON THE PLAN ARE STRICTER.
8. PANEL WALL SHEATHING SHALL BE 7/16" APA EXPOSURE 1, RATED WOOD SHEATHING WITH 24/16 SPAN RATING (UON). PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY.
9. GYPSUM WALL SHEATHING SHALL BE 5/8" TYPE 'X' GYPSUM WALL BOARD (EXTERIOR GRADE) (UON). 4'-0" WIDE PANELS MAY BE APPLIED PARALLEL OR PERPENDICULAR TO STUDS. 2'-0" WIDE PANELS MUST BE APPLIED PERPENDICULAR TO STUDS. END JOINTS OF ADJACENT COURSES OF GYPSUM BOARD SHALL NOT OCCUR OVER THE SAME STUD.
10. BACK ALL VERTICAL SHEATHING PANEL EDGES WITH NOMINAL 2 x BLOCKING (MINIMUM).
11. FRAMING MEMBERS SHALL BE SPACED NO FURTHER THAN 1'-4" OC.
12. OFFSET PANEL JOINTS ON EACH SIDE OF WALL MINIMUM ONE STUD BAY.
13. FASTENERS FOR PANEL WOOD SHEATHING SHALL BE A MINIMUM 8d COMMON WIRE OR GALVANIZED BOX NAILS. SPACE NAILS AT 1'-0" OC ALONG INTERMEDIATE FRAMING MEMBERS (FIELD OF PANEL) AND AT 6" OC AT ALL PANEL EDGES (UON).
14. FASTENERS FOR GYPSUM SHEATHING SHALL BE A MINIMUM 6d GALVANIZED COOLER (0.092" DIAMETER X 1 7/8", 1/4" HEAD) OR WALLBOARD (0.0915" DIAMETER X 1 7/8", 19/64" HEAD) NAILS. SPACE NAILS AT 7" OC ALONG INTERMEDIATE FRAMING MEMBERS (FIELD OF PANEL) AND AT 8" OC AT ALL PANEL EDGES (UON).
15. PANEL ROOF SHEATHING SHALL BE 1/2" APA EXPOSURE 1, RATED SHEATHING WITH 32/16 PANEL SPAN RATING (UON).
16. PANEL FLOOR SHEATHING SHALL BE 3/4" APA EXPOSURE 1, RATED PLYWOOD WITH 48/24 PANEL SPAN RATING (UON).
17. ALL UNSUPPORTED PANEL ROOF/FLOOR EDGES SHALL BE TONGUE AND GROOVE EDGES, OR HAVE PANEL EDGE CLIPS (MIDWAY BETWEEN EACH SUPPORT), OR HAVE 2X LUMBER BLOCKING.
18. PANEL ROOF/FLOOR SHEATHING SHALL BE ORIENTED WITH THE STRENGTH AXIS PERPENDICULAR TO THE SUPPORTS AND SHALL BE CONTINUOUS OVER 2 OR MORE SUPPORTS.
19. FASTENERS FOR PANEL ROOF SHEATHING SHALL BE MINIMUM 8d COMMON WIRE NAILS (UON). SPACE NAILS AT 1'-0" OC ALONG INTERMEDIATE FRAMING MEMBERS (FIELD OF PANEL) AND AT 6" OC AT ALL PANEL EDGES (UON).
20. FASTENERS FOR PANEL FLOOR SHEATHING SHALL BE MINIMUM 10d COMMON WIRE NAILS (UON). SPACE NAILS AT 1'-0" OC ALONG INTERMEDIATE FRAMING MEMBERS (FIELD OF PANEL) AND AT 6" OC AT ALL PANEL EDGES (UON).

DEFERRED STRUCTURAL SUBMITTALS:

1. THE DESIGN AND DOCUMENTATION OF THE CERTAIN STRUCTURAL COMPONENTS MAY BE DEFERRED UNTIL AFTER THE BUILDING PERMIT HAS BEEN ISSUED.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS THAT ARE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED FOR THE FOLLOWING DEFERRED SUBMITTALS:
   - STRUCTURAL PRECAST CONCRETE
   - ARCHITECTURAL PRECAST CONCRETE
   - STRUCTURAL STEEL CONNECTIONS
   - STEEL STAIRS, HAND RAILS AND GUARD RAILS
   - EXTERIOR LIGHT-GAUGE FRAMING
   - LIGHT GAUGE TRUSS SYSTEMS
   - WOOD FLOOR TRUSSES
   - WOOD ROOF TRUSSES
   - HOLDOWN SYSTEMS
   - GLUED-LAMINATED TRUSS SYSTEMS
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION FOR THE FOLLOWING DEFERRED SUBMITTALS:
   - STRUCTURAL STEEL FRAMING
   - STEEL JOIST AND DECKING
   - CURTAIN WALL SYSTEMS
   - HOISTS AND CRANES
   - OPERABLE PARTITIONS

ABBREVIATIONS AND SYMBOLS:

AA	ADHESIVE ANCHOR ROD
AR	ANCHOR ROD
APA	ASSOCIATION
ARCH	ARCHITECT/ARCHITECTURAL
BB	BOND BEAM
BLDG	BUILDING
BLK	BLOCK
BM	BEAM
B.O.	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
CL	CENTER LINE
CJ	CONTROL JOINT
CCJ	CONSTRUCTION CONTROL JOINT
CLR	CLEAR/CLEARANCE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CSA	CONCRETE SCREW ANCHOR
DBL	DOUBLE
DET	DETAIL
DEG	DEGREES
DIA	DIAMETER
DIM	DIMENSION
DL	DEAD LOAD
DT	DRAIN TILE
DWL	DOWEL
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEV	ELEVATOR
EQ	EQUAL
EW	EACH WAY
(E)	EXISTING
EXC	EXCAVATION
EXP	EXPANSION
FD	FLOOR DRAIN
FDN	FOUNDATION
FG	FINISH GRADE
FTG	FOOTING
FT	FOOT/FEET
GALV	GALVANIZE
GA	GAUGE
GC	GENERAL CONTRACTOR
GT	GIRDER TRUSS
HC	HOLLOW CORE
HORIZ/HOR	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
IF	INSIDE FACE
INT	INTERIOR
JST	JOIST
K	KIPS
KLF	KIPS PER LINEAR FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE
LL	LIVE LOAD
LB	LEDGER BEAM
LBS	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
MO	MASONRY OPENING
N	NORTH
NTS	NOT TO SCALE
NS	NON-SHRINK
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OVERHEAD
OPNG	OPENING
ORIG	ORIGINAL
PAF	POWDER ACTUATED FASTENER
PART	PARTITION
PC	PRECAST CONCRETE
PLF	POUND PER LINEAR FOOT
PL	PLATE
PWD	PLYWOOD
PNL	PANEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
RAD	RADIUS
RD	ROOF DRAIN
REINF	REINFORCING
REM	REMOVE
REQD	REQUIRED
RFG	ROOFING
RO	ROOF OPENING
SA	SCREW ANCHOR
SB	SOIL BORING
SCHED	SCHEDULE
SD	SEE DETAIL
SDL	SUPERIMPOSED DEAD LOAD
SLL	SUPERIMPOSED LIVE LOAD
SER/SEOR	STRUCTURAL ENGINEER OF RECORD
SHT	SHEET
SIM	SIMILAR
SQ	SQUARE
SJ	STEEL JOIST
SL	SNOW LOAD
SPA	SPACE/SPACING
SPC	SPECIAL
SPECS	SPECIFICATIONS
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
TEMP	TEMPORARY
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
THK	THICK/THICKENED
T.O.	TOP OF
TRANS	TRANSVERSE
TS	TUBE STEEL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VER/(V)	VERIFY
VERT	VERTICAL
WF	WIDE FLANGE
WD	WOOD
WL	WIND LOAD
W/	WITH
W/O	WITH OUT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
@	AT
+/-	PLUS OR MINUS

RHET ARCHITECTURE

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

MARK	DESCRIPTION	DATE
CD	CONSTRUCTION DOCUMENTS	__/__/20__

REVISION SCHEDULE

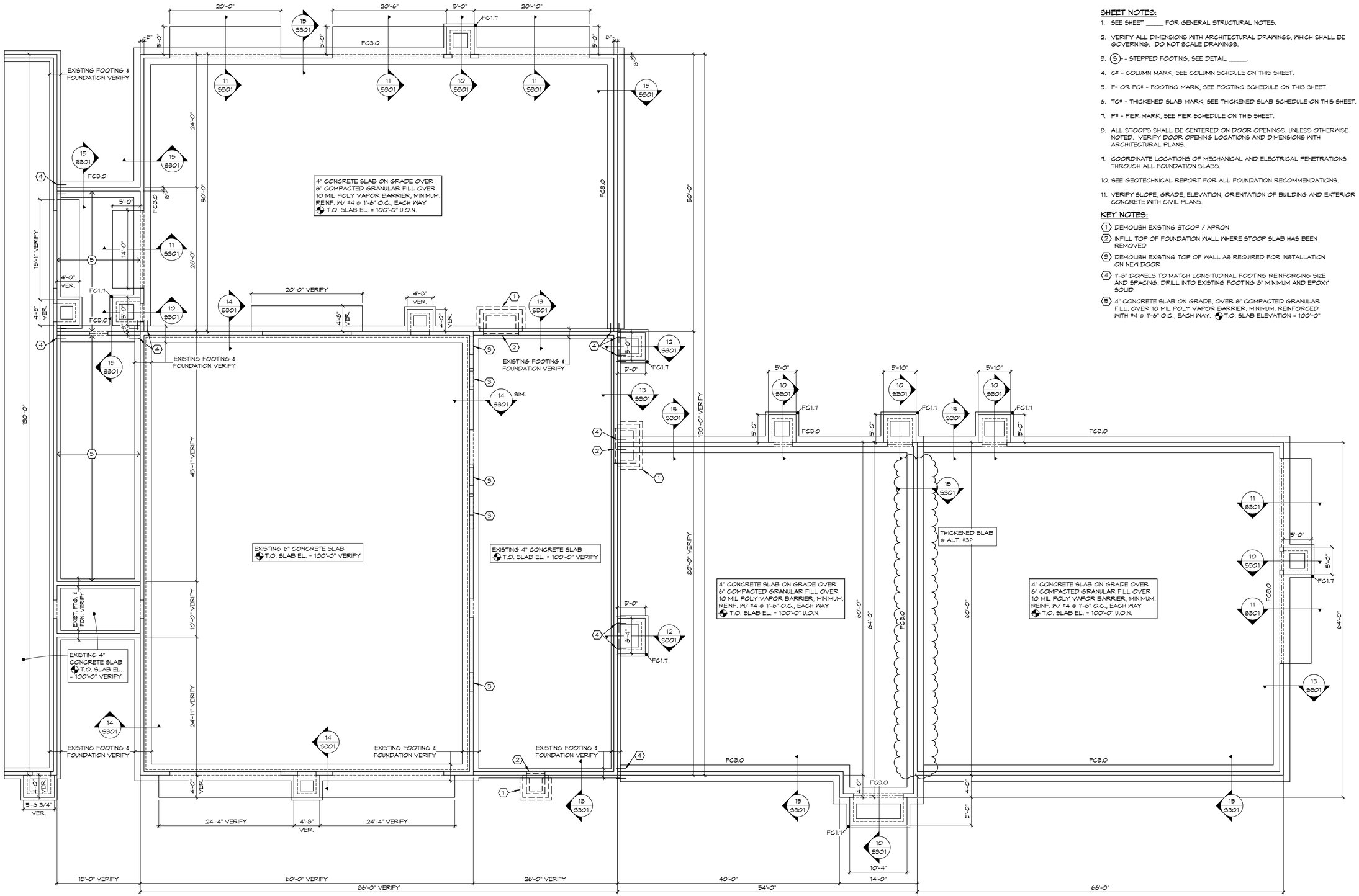
PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
NOTES SHEET

S002

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044.2025-NC/AF

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfQFHGzl.rvt
Plot Date: 11/20/2025 5:58:15 PM



FOOTING & FOUNDATION PLAN

1/8" = 1'-0"

SHEET NOTES:

1. SEE SHEET _____ FOR GENERAL STRUCTURAL NOTES.
2. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, WHICH SHALL BE GOVERNING. DO NOT SCALE DRAWINGS.
3. (S) = STEPPED FOOTING, SEE DETAIL _____.
4. C# - COLUMN MARK, SEE COLUMN SCHDULE ON THIS SHEET.
5. F# OR FC# - FOOTING MARK, SEE FOOTING SCHEDULE ON THIS SHEET.
6. TC# - THICKENED SLAB MARK, SEE THICKENED SLAB SCHEDULE ON THIS SHEET.
7. P# - PIER MARK, SEE PIER SCHEDULE ON THIS SHEET.
8. ALL STOOPS SHALL BE CENTERED ON DOOR OPENINGS, UNLESS OTHERWISE NOTED. VERIFY DOOR OPENING LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL PLANS.
9. COORDINATE LOCATIONS OF MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH ALL FOUNDATION SLABS.
10. SEE GEOTECHNICAL REPORT FOR ALL FOUNDATION RECOMMENDATIONS.
11. VERIFY SLOPE, GRADE, ELEVATION, ORIENTATION OF BUILDING AND EXTERIOR CONCRETE WITH CIVIL PLANS.

KEY NOTES:

1. DEMOLISH EXISTING STOOP / APRON
2. INFILL TOP OF FOUNDATION WALL WHERE STOOP SLAB HAS BEEN REMOVED
3. DEMOLISH EXISTING TOP OF WALL AS REQUIRED FOR INSTALLATION ON NEW DOOR
4. 1'-8" DOWELS TO MATCH LONGITUDINAL FOOTING REINFORCING SIZE AND SPACING. DRILL INTO EXISTING FOOTING 8" MINIMUM AND EPOXY SOLID
5. 4" CONCRETE SLAB ON GRADE, OVER 6" COMPACTED GRANULAR FILL, OVER 10 MIL POLY VAPOR BARRIER, MINIMUM. REINFORCED WITH #4 @ 1'-6" O.C., EACH WAY. T.O. SLAB ELEVATION = 100'-0"

RHET ARCHITECTURE

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

	questions	
CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	DESCRIPTION	DATE

REVISION SCHEDULE

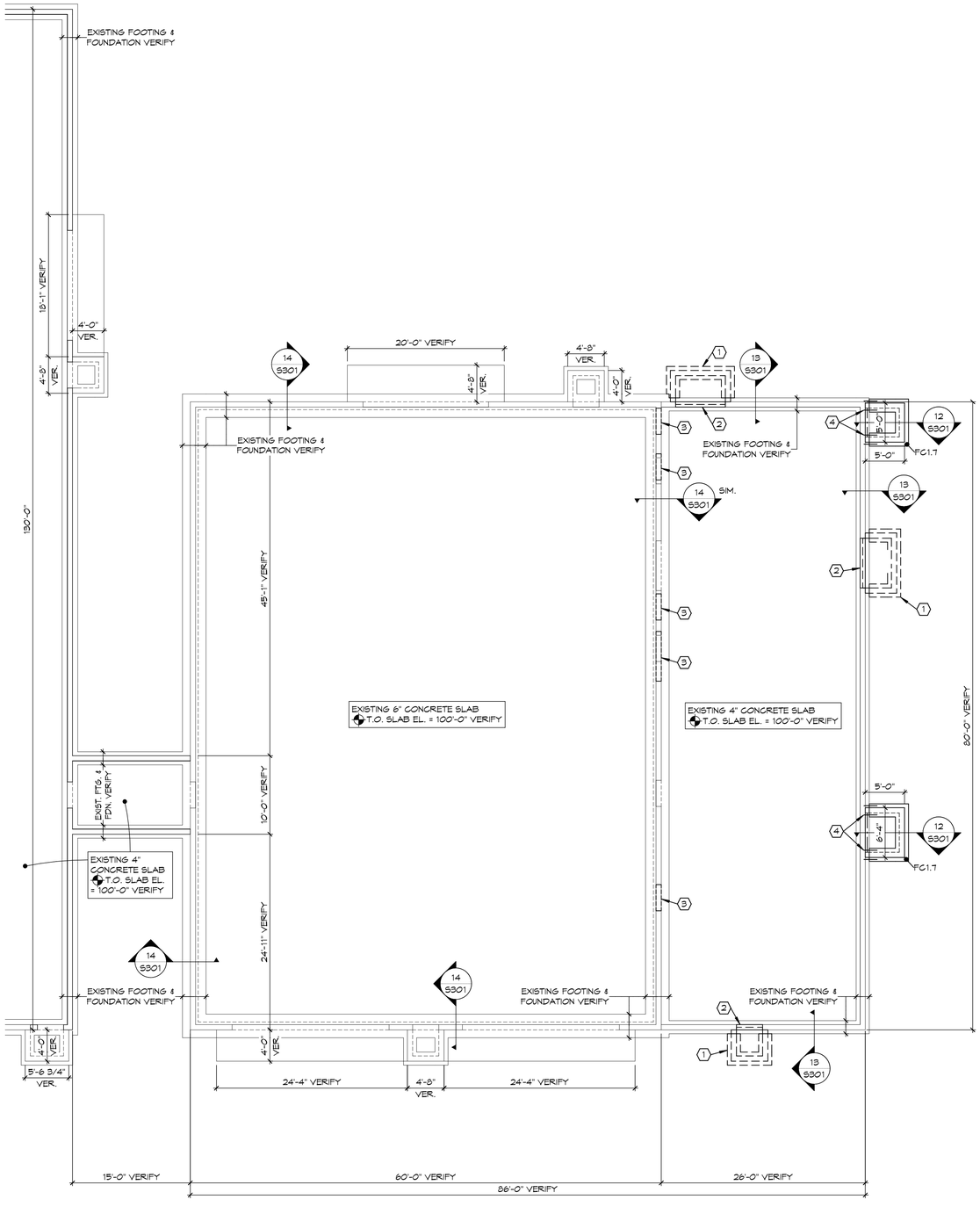
PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
FOOTING & FOUNDATION PLAN - OVERALL

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099.0044.2025-NC/AF

S101

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfDFHG2.rvt
Plot Date: 11/20/2025 5:58:15 PM



N

FOOTING & FOUNDATION PLAN

1/8" = 1'-0"

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

MARK	DESCRIPTION	DATE
CD	CONSTRUCTION DOCUMENTS	/ /20

REVISION SCHEDULE

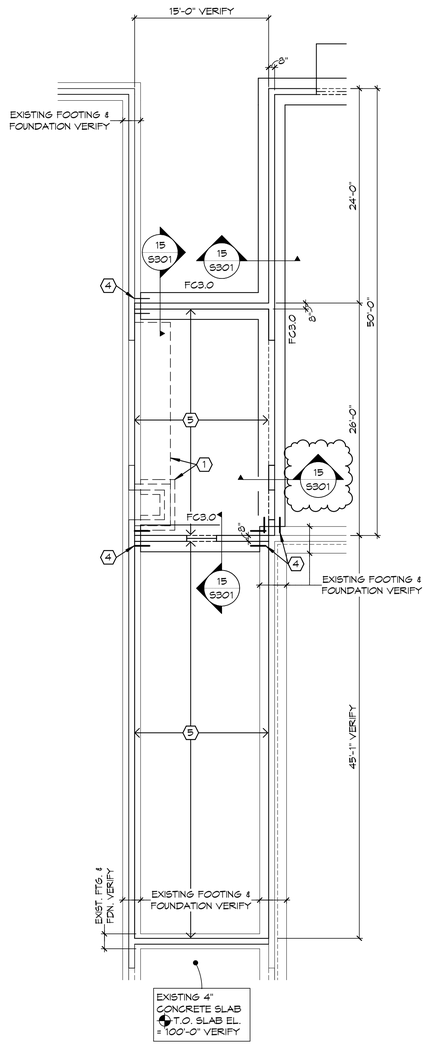
PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
FOOTING & FOUNDATION PLAN - BASE BID

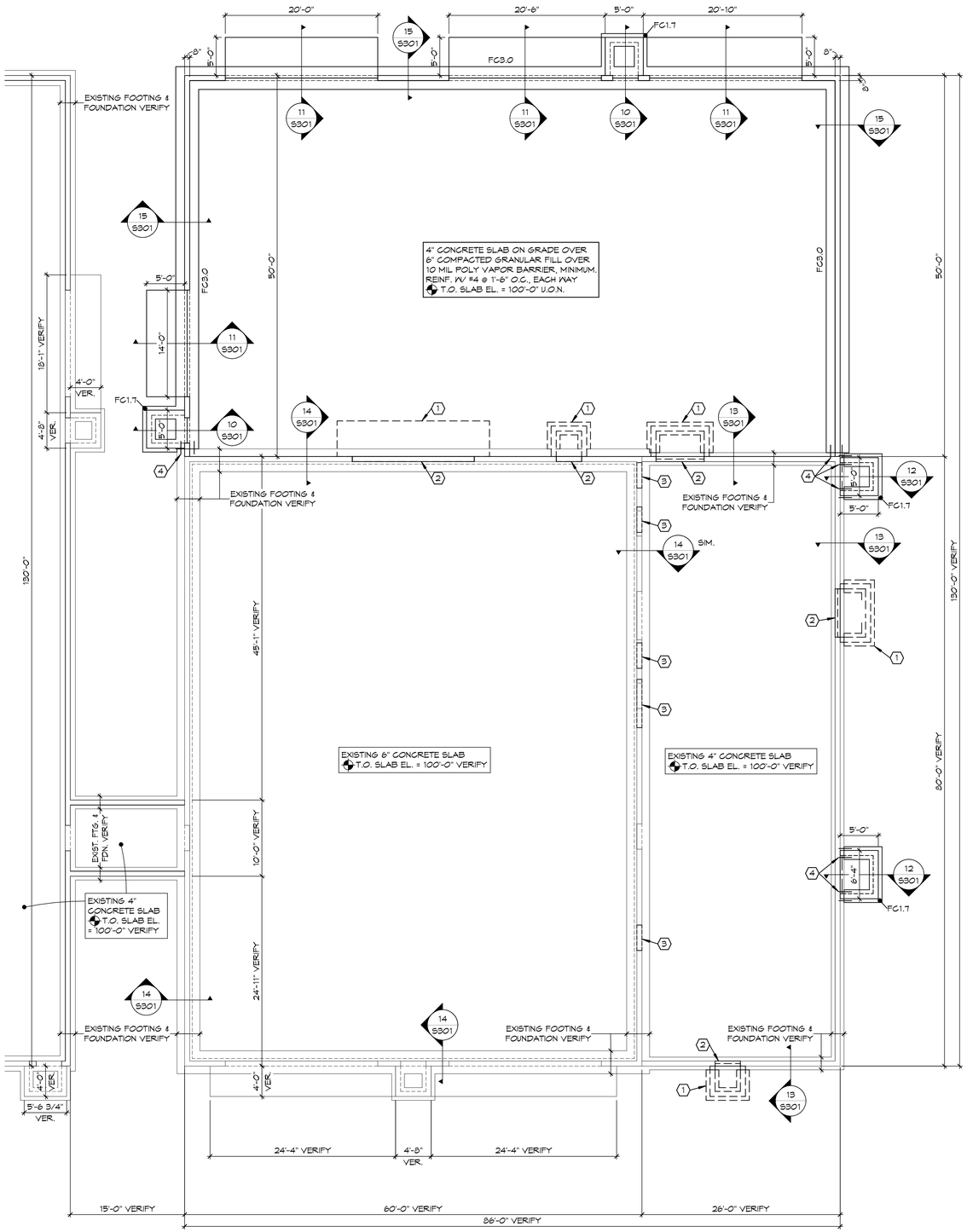
HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S Fargo, ND 58103 | 701.280.0949
www.heyerengineering.com
099-0044.2025-NC,AF

S102

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andy\QFHG2.rvt
Plot Date: 11/20/2025 5:58:15 PM



N FOOTING & FOUNDATION PLAN - ALTERNATE #4
1/8" = 1'-0"



N FOOTING & FOUNDATION PLAN - ALTERNATE #1
1/8" = 1'-0"

RHET ARCHITECTURE
RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

	questions	
CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	DESCRIPTION	DATE

REVISION SCHEDULE

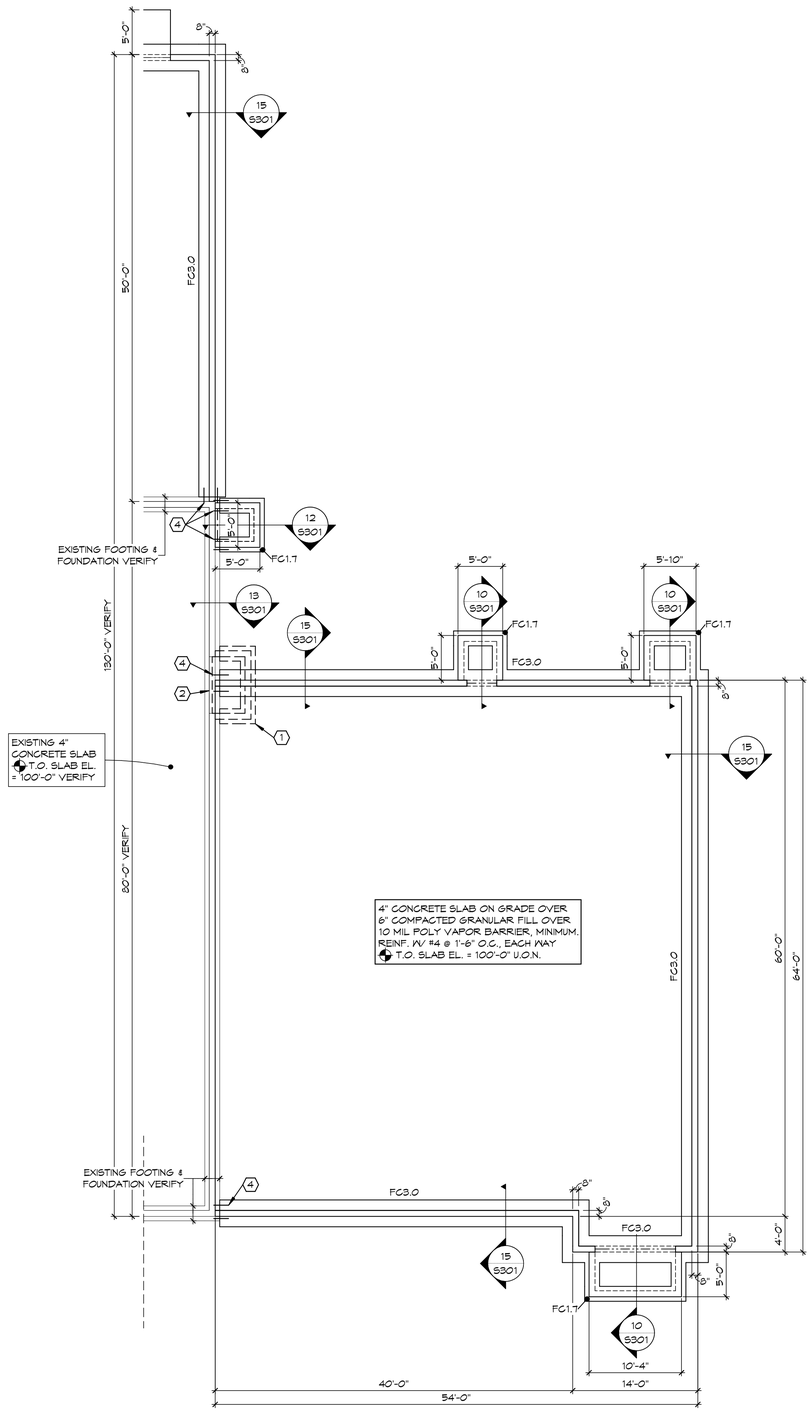
PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
FOOTING & FOUNDATION PLAN - ALTERNATE #1 & #4

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099.0044.2025-NC/AF

S103

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfQFHG2.rvt
Plot Date: 11/20/2025 5:58:15 PM



N

FOOTING & FOUNDATION PLAN - ALTERNATE #2

1/8" = 1'-0"

RHET
ARCHITECTURE

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

MARK	DESCRIPTION	DATE
CD	CONSTRUCTION DOCUMENTS	__/__/20__

REVISION SCHEDULE

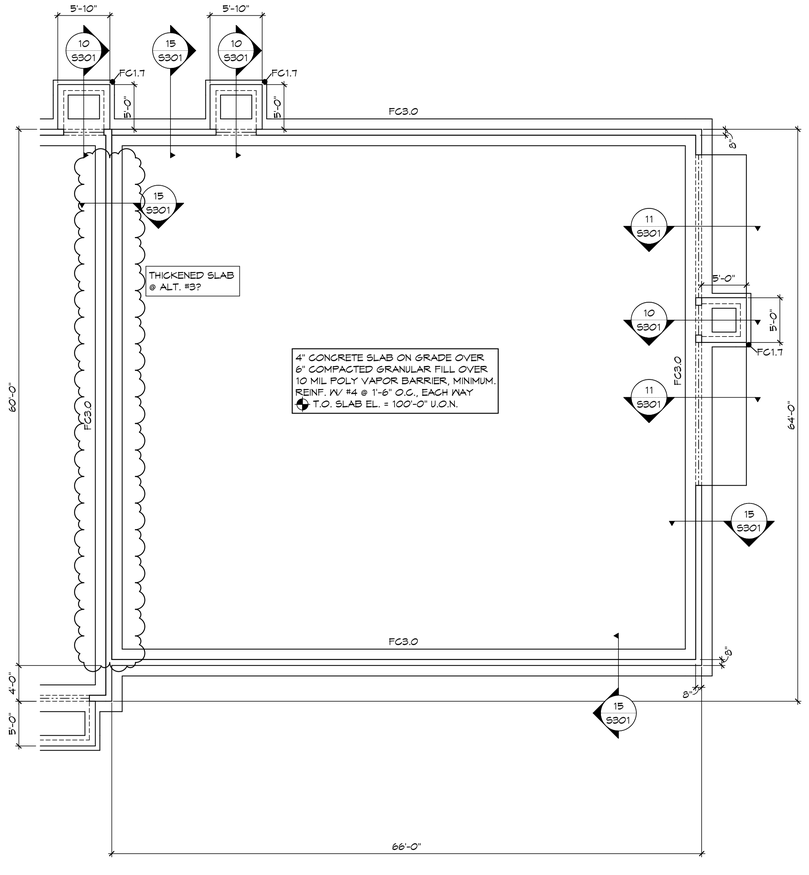
PROJECT NO:	25-126101
DRAWN BY:	Author
CHECKED BY:	Checker

DRAWING TITLE:
FOOTING & FOUNDATION PLAN - ALTERNATE #2

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044.2025-NC/AP

S104

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfQFHG2.rvt
Plot Date: 11/20/2025 5:58:16 PM



N

FOOTING & FOUNDATION PLAN - ALTERNATE #3

1/8" = 1'-0"

RHET ARCHITECTURE

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

	questions	
CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	**DESCRIPTION**	**DATE**

REVISION SCHEDULE

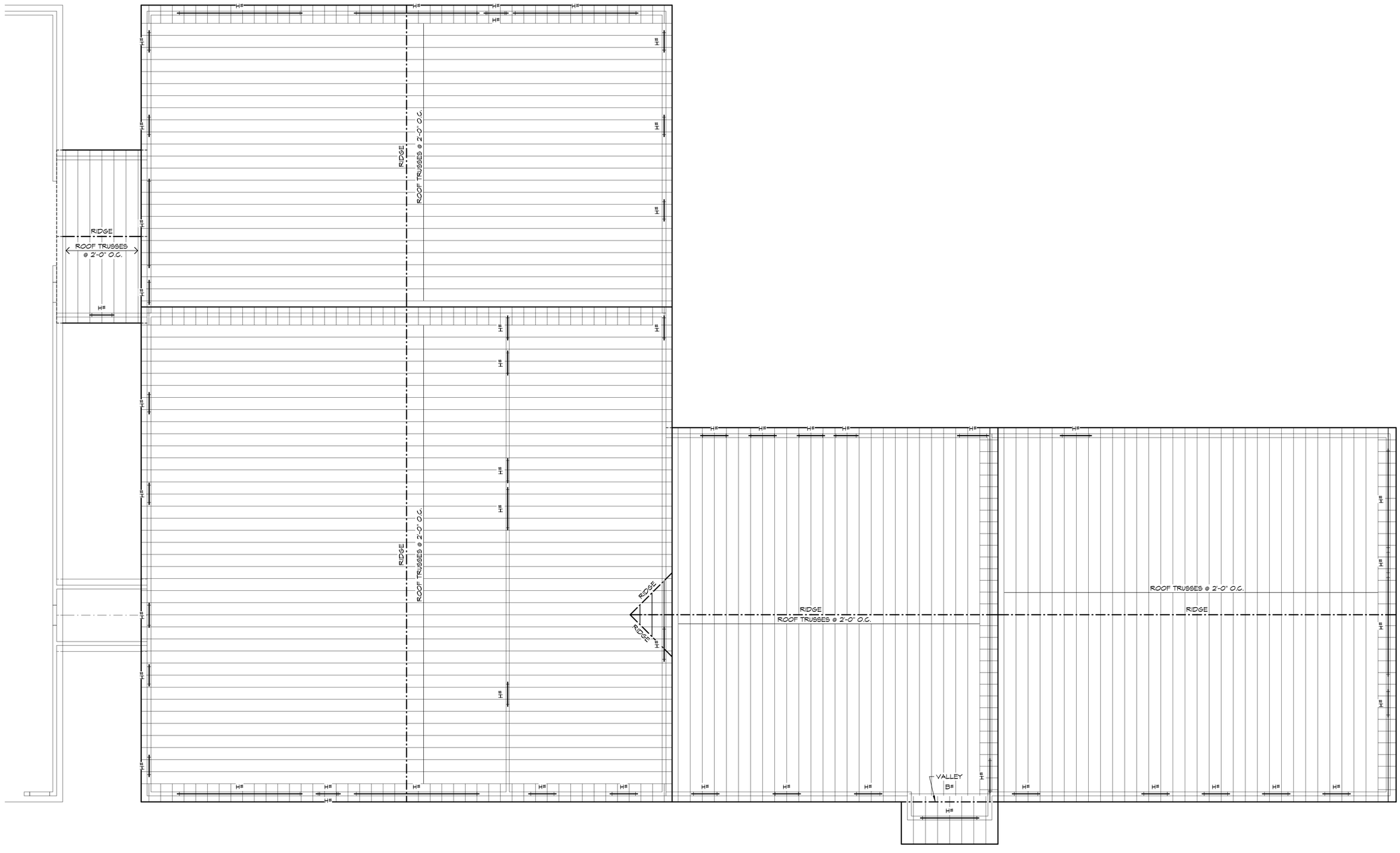
PROJECT NO:	25-126101
DRAWN BY:	Author
CHECKED BY:	Checker

DRAWING TITLE:
FOOTING & FOUNDATION PLAN - ALTERNATE #3

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044.2025-NC/AP

S105

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andy\QFHG2.rvt
Plot Date: 11/20/2025 5:58:16 PM



ROOF FRAMING PLAN - OVERALL

1/8" = 1'-0"

RHET
ARCHITECTURE

RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	DESCRIPTION	DATE

REVISION SCHEDULE

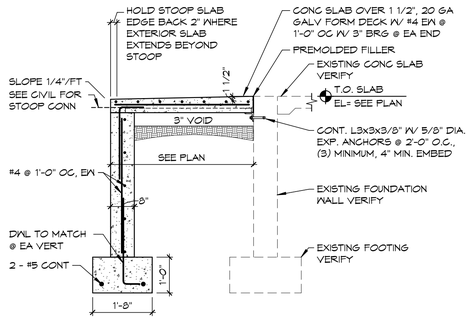
PROJECT NO:	25-126101
DRAWN BY:	Author
CHECKED BY:	Checker

DRAWING TITLE:
ROOF FRAMING PLAN - OVERALL

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044-2025-NC/AF

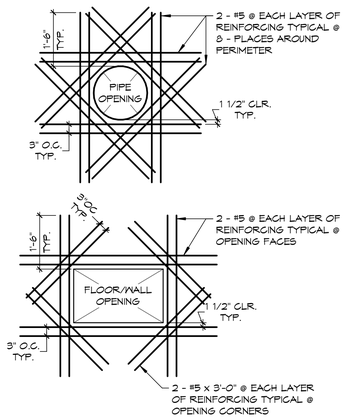
S201

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyKFHG2.rvt
Plot Date: 11/20/2025 5:58:17 PM



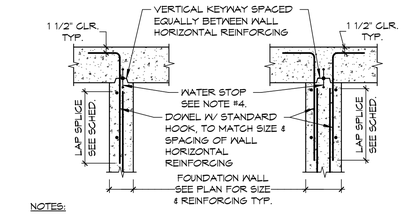
12 / S301 STOOP @ EXISTING FOUNDATION

1/2" = 1'-0"



8 / S301 ADDITIONAL REINFORCING @ OPENING

NO SCALE

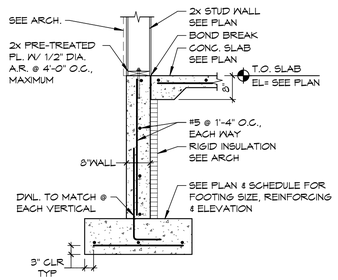


NOTES:

1. CONTRACTOR'S OPTION: CONSTRUCTION JOINT & KEYNAY SHOWN MAY BE OMITTED.
2. USE 2x4 x 6" LONG VERTICAL KEYNAY @ FOUNDATION WALL < 8" WIDTH, USE 2x6 x 6" LONG VERTICAL KEYNAY @ FOUNDATION WALL > 8" WIDTH.
3. SEE SPECIFICATIONS FOR WATERPROOFING REQUIREMENTS.
4. KEYNAY TO BE CONTINUOUS WHERE WATERSTOP IS REQUIRED.

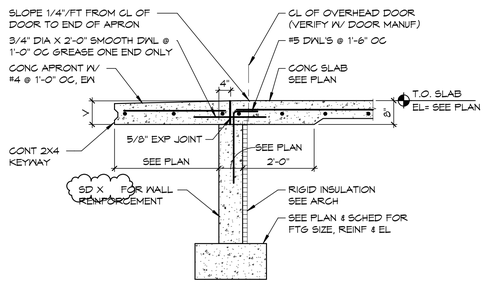
4 / S301 WALL INTERSECTION REINFORCEMENT

NO SCALE



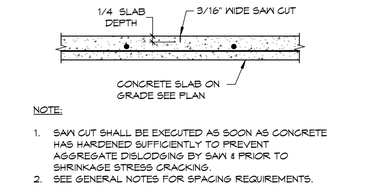
15 / S301 EXTERIOR FOUNDATION WALL

1/2" = 1'-0"



11 / S301 TYPICAL APRON @ OVERHEAD DOOR

1/2" = 1'-0"

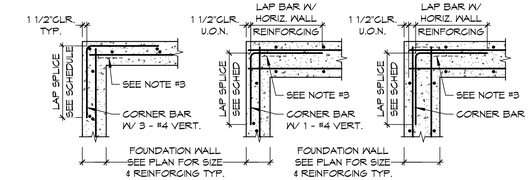


NOTE:

1. SAW CUT SHALL BE EXECUTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE DISLODGING BY SAW & PRIOR TO SHRINKAGE STRESS CRACKING.
2. SEE GENERAL NOTES FOR SPACING REQUIREMENTS.

7 / S301 FLOOR CONTROL JOINT REINFORCEMENT - (CJ)

NO SCALE

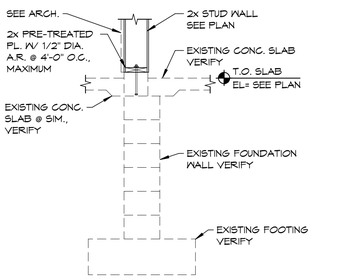


NOTES:

1. CORNER BARS TO MATCH SIZE AND SPACING OF HORIZONTAL WALL REINFORCING.
2. ALL VERTICAL REINFORCING TO HAVE DOWELS TO MATCH SIZE AND REINFORCING INTO FOOTING.
3. WHERE WALL FACE OPPOSITE OF CORNER BAR IS SOIL LOADED PROVIDE STANDARD HOOK AT HORIZONTAL REINFORCING.

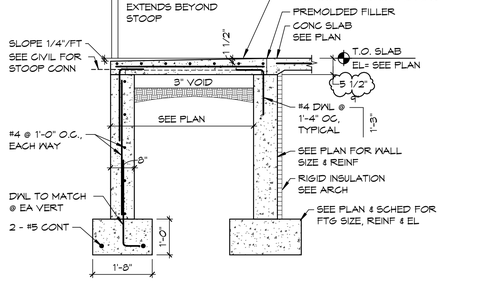
3 / S301 CORNER BAR REINFORCEMENT

NO SCALE



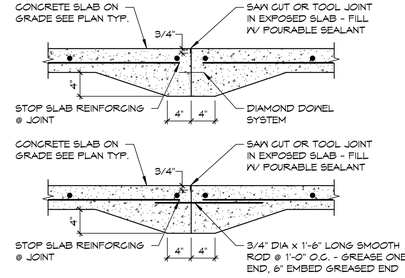
14 / S301 NEW STUD WALL @ EXIST. FD.N WALL

1/2" = 1'-0"



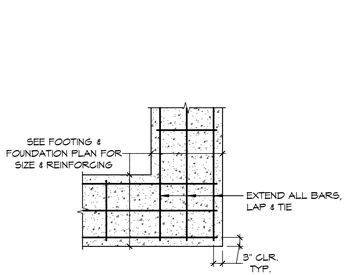
10 / S301 TYPICAL STOOP DETAIL

1/2" = 1'-0"



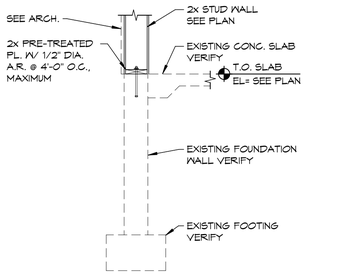
6 / S301 FLOOR CONSTRUCTION JOINT REINF - (CCJ)

NO SCALE



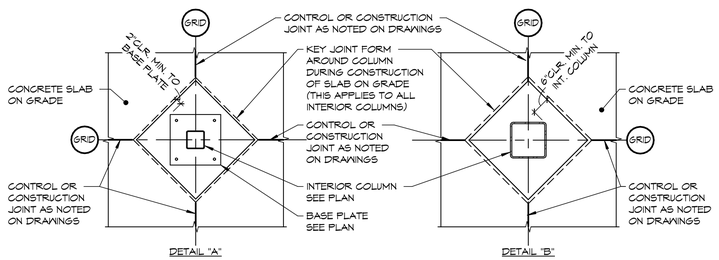
2 / S301 FOOTING CORNER REINFORCEMENT

NO SCALE



13 / S301 NEW STUD WALL @ EXIST. FD.N WALL

1/2" = 1'-0"

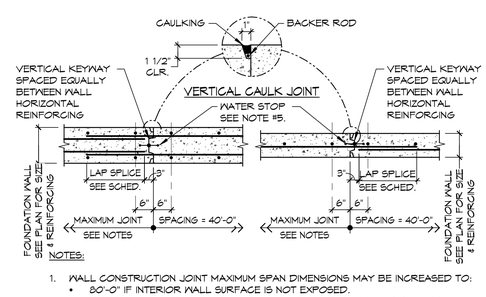


NOTES:

1. USE DETAIL "A" IF SLAB ON GRADE IS POURED PRIOR TO STEEL ERECTION.
2. USE DETAIL "B" IF SLAB ON GRADE IS POURED AFTER STEEL ERECTION.
3. INCREASE FORM'S MINIMUM CLEARANCE AS REQUIRED TO NOT INTERFERE WITH COLUMN BASE PLATE.

9 / S301 INTERIOR COLUMN ISOLATION JOINT

NO SCALE

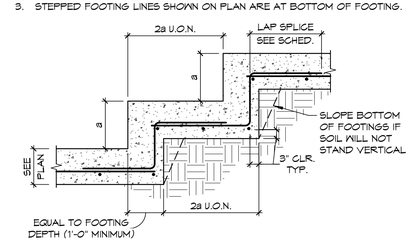


NOTES:

1. WALL CONSTRUCTION JOINT MAXIMUM SPAN DIMENSIONS MAY BE INCREASED TO:
   - 80'-0" IF INTERIOR WALL SURFACE IS NOT EXPOSED.
   - 120'-0" IF INTERIOR AND EXTERIOR WALL SURFACES ARE BACKFILLED FULL HEIGHT.
2. USE 2x4 x 6" LONG VERTICAL KEYWAY @ FOUNDATION WALL < 8" WIDTH, USE 2x6 x 6" LONG VERTICAL KEYWAY @ FOUNDATION WALL > 8" WIDTH.
3. ALL EXPOSED WALL SURFACES TO HAVE A VERTICAL CAULK JOINT.
4. SEE SPECIFICATIONS FOR WATERPROOFING REQUIREMENTS.
5. KEYWAY TO BE CONTINUOUS WHERE WATERSTOP IS REQUIRED.

5 / S301 WALL CONSTRUCTION JOINT - (WCJ)

NO SCALE



1 / S301 STEPPED FOOTING REINFORCEMENT

NO SCALE

NOTES:

1. SEE PLAN FOR FOOTING SIZE AND REINFORCING.
2. SLOPED OR STEPPED FOOTINGS SHALL BE CAST AS A UNIT.
3. STEPPED FOOTING LINES SHOWN ON PLAN ARE AT BOTTOM OF FOOTING.

HEYER ENGINEERING
STRUCTURAL CONSULTANT
4180 24th Avenue S | Fargo, ND 58103 | (P)701.280.0949
www.heyerengineering.com
099-0044.2025-NC/AF

RHET ARCHITECTURE
RHET ARCHITECTURE
27 11th ST. N. FARGO, ND 58102
701.715.8232
WWW.RHET-ARCH.COM

NOT FOR CONSTRUCTION

PROJECT NAME:
ADA PUBLIC WORKS

ADA, MINNESOTA

OWNER:
ADA PUBLIC WORKS

ATTN: BRIAN RASMUSSON

PHONE: 218-784-5537
EMAIL: brasmusson@adamn.gov

	questions	
CD	CONSTRUCTION DOCUMENTS	__/__/20__
MARK	DESCRIPTION	DATE

REVISION SCHEDULE

PROJECT NO:	25-126101
DRAWN BY:	AF
CHECKED BY:	NC

DRAWING TITLE:
FOUNDATION DETAILS

S301

File Location: C:\Users\Andy\Documents\099-0044_Ada Public Works_Struct_andyfQFH62.rvt
Plot Date: 11/20/2025 5:58:17 PM