

**PUBLIC WORKS BUILDING
WALKER, IOWA**

CONTRACTOR'S BID DATE: Thursday, August 10, 2023 @ 2:00 P.M.

PLACE FOR CONTRACTORS
TO SUBMIT BIDS:

City of Walker
City Hall
204 Greene St.
Walker, Iowa 52352

ADDENDUM NO.2

August 4, 2023

TO ALL PLANHOLDERS:

The following changes, clarifications, additions, and/or deletions are hereby made a part of the contract documents for the above-referenced project, as fully and completely as if the same were fully set forth therein. All Bidders submitting a Bid on the above Contract shall carefully read this Addendum and give it consideration in the preparation of their Bid.

This Addendum No. 2 consists of the following:

- Addendum No. 2 (pages ADN2-1 through ADN2-2)
- Plan Sheets: S001 and S101


SPECIFICATIONS:

1. **REFER TO SECTION 01 2000 - PRICE AND PAYMENT PROCEDURES:**
 - a. **ADD** to 1.07.B "and precast concrete splash blocks for downspouts".
 - b. **ADD** to 1.07.C "and precast concrete splash blocks for downspouts".
2. **REFER TO SECTION 13 1250 - PRE-ENGINEERED METAL BUILDING SYSTEMS:**
 - a. **REPLACE** 2.02.E. "coiling door openings" with "sectional door openings".
3. **REFER TO SECTION 26 3213 ENGINE GENERATORS:**
 - a. **ADD** to 2.01.B: "4. Generac Power Systems:www.generac.com/industrial#sle".

PLANS:

1. **REFER TO SHEET S001 - NOTES:**
 - a. **REPLACE** with revised sheet issued with this addendum.
2. **REFER TO SHEET S101 - BUILDING FOUNDATION:**
 - a. **REPLACE** with revised sheet issued with this addendum.

All bidders shall acknowledge receipt and acceptance of Addendum No. 2 by signing in the space provided on the Bid Form. Bids submitted without Addendum No. 2 being acknowledged will be considered non-responsive.

	<p>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.</p>
	<p><i>Haley Jindrlich</i> Date: 8/4/23</p> <hr/> <p>HALEY ANNE JINDRICH, P.E.</p> <p>License No. 26406</p> <p>My renewal date is December 31, 2023</p> <p>Pages or sheets covered by this seal: Addendum #2.</p> <hr/>

HALEY JINDRICH, PE
HR GREEN, INC.
8710 EARHART LANE
CEDAR RAPIDS, IOWA 52404
PHONE: (319) 841-4000

END OF ADDENDUM #2

PROJECT LOCATION
LINN COUNTY, IOWA

BAR DEVELOPMENT, SPLICE, AND HOOK TABLE FOR 4500 PSI CONCRETE

BAR SIZE	DEVELOPMENT	LAP SPLICE	STANDARD 90 DEGREE HOOK LEG	DEVELOPMENT EMBED WITH HOOK
#3	1'-2"	1'-6"	0'-6"	0'-7"
#4	1'-6"	2'-0"	0'-8"	0'-9"
#5	1'-11"	2'-6"	0'-10"	1'-0"
#6	2'-3"	2'-11"	1'-0"	1'-2"
#7	3'-4"	4'-3"	1'-2"	1'-4"
#8	3'-9"	4'-11"	1'-3"	1'-6"
#9	4'-3"	5'-6"	1'-7"	1'-9"
#10	4'-9"	6'-2"	1'-9"	1'-11"
#11	5'-4"	6'-10"	1'-11"	2'-2"

- ALL BARS SHALL BE CONSIDERED TOP BARS.
- BAR LENGTHS FOR DEVELOPMENT AND SPLICES ARE BASED ON CONCRETE STRENGTHS. USE THE CORRECT TABLE BASED ON NOMINAL STRENGTH OF CONCRETE WHERE THE REINFORCEMENT IS USED.
- NONCONTACT LAP SPLICE LENGTH IS THE LAP SPLICE PLUS THE SEPARATION OF BARS BEING LAPPED. BARS BEING LAPPED CAN NOT BE FURTHER APART THAN 1/5TH OF THE LAP SPLICE LENGTH OR 6 INCHES, WHICHEVER IS SMALLER.
- FOR EPOXY-COATED BARS, MULTIPLY LAP SPLICE LENGTH BY 1.5.

3 REBAR LAP AND SPLICE TABLE

SCALE: NONE

GENERAL NOTES

GENERAL REQUIREMENTS

- SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- LOCATE, VERIFY AND MARK THE LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS.
- THE CONTRACTOR SHALL VERIFY ALL ANCHOR BOLTS AND RELATED FORMING INFORMATION WITH THE APPLICABLE EQUIPMENT SUPPLIERS AND SUB-CONTRACTORS PRIOR TO CONCRETE PLACEMENT.
- ALL LOCATIONS AND SIZES OF OPENINGS IN CONCRETE WALLS, FLOORS AND ROOFS SHALL BE VERIFIED WITH THE APPLICABLE EQUIPMENT SUPPLIERS AND SUB-CONTRACTORS PRIOR TO CONCRETE PLACEMENT.
- DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ENGINEER.

EARTHWORK & BACKFILL FOR STRUCTURES

1. UNLESS NOTED OTHERWISE:

EXCAVATIONS ARE TO BE FREE OF FROST, WATER AND LOOSE SOIL PRIOR TO PLACING CONCRETE.

FOOTINGS ARE TO BEAR ON FIRM UNDISTURBED SOIL OR COMPACTED FILL MATERIAL.

ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH PROPERLY COMPACTED MATERIAL APPROVED BY THE ENGINEER.

2. ANY FILL MATERIAL THAT MAY BE REQUIRED BENEATH STRUCTURES TO BRING THE SUBGRADE TO BEARING ELEVATION IS TO BE AN APPROVED FILL MATERIAL PLACED IN LIFTS NOT TO EXCEED 9 INCHES.

ALL FILL PLACED BELOW STRUCTURAL FOUNDATION, SHALL BE A LOW PLASTICITY COHESIVE SOIL WITH A PLASTIC INDEX ≤ 15 AND A LIQUID LIMIT ≤ 45 OR A GRANULAR SOIL.

3. FILL MATERIAL COMPACTION IS TO BE AS FOLLOWS:

UNDER SLABS AND FOOTINGS: MATERIAL SHALL BE COMPACTED TO AT LEAST 98% OF ITS MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D-698) WITH MOISTURE CONTENT ±3% FOR SANDS AND -2% TO +3% FOR LOW PLASTICITY COHESIVE SOILS OF OPTIMUM.

WALL BACKFILL MATERIAL: (NOT UNDER STRUCTURE) MATERIAL SHALL BE SAND OR GRAVEL COMPACTED TO AT LEAST 95% OF ITS MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D-698) WITH MOISTURE CONTENT ±3% FOR SANDS AND -2% TO +3% FOR LOW PLASTICITY COHESIVE SOILS OF OPTIMUM.

4. CH AND CL/CH SOILS SHALL NOT BE USED FOR BACKFILL AGAINST FOUNDATIONS OR WITHIN 2 FEET OF FINISHED SUBGRADE ELEVATION

5. QUALITY CONTROL:

THE GENERAL CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THE STATED SOIL BEARING CAPACITY AND PERFORM SOIL DENSITY TESTS ON FILL PLACEMENT.

THE SOIL BEARING CAPACITY SHALL BE VERIFIED PRIOR TO PLACING CONCRETE FOR FOOTINGS.

SOIL DENSITY TESTS ARE TO BE TAKEN UNIFORMLY THROUGHOUT FILL PLACEMENT TO VERIFY THE SPECIFIED COMPACTION REQUIREMENTS.

CAST-IN-PLACE CONCRETE

- SHIFT REINFORCING TO CLEAR ANCHOR BOLTS AND EMBEDDED ITEMS. CUTTING OR WELDING OF REINFORCING BARS IS NOT PERMITTED.
- PROVIDE 1/2" EXPANSION JOINT MATERIAL WHERE SLABS ON GRADE ABUT A VERTICAL SURFACE.
- LIMIT SLAB-ON-GRADE AREAS BY CONTROL OR CONSTRUCTION JOINTS TO APPROXIMATELY 250 SQUARE FEET WITH AN ASPECT RATIO NOT EXCEEDING 1.5:1.
- WATERSTOPS ARE TO BE 6" PVC UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER.

DESIGN CRITERIA

INTERNATIONAL BUILDING CODE (IBC) 2015
AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)
AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL 14TH EDITION
AMERICAN SOCIETY OF CIVIL ENGINEERS MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10)
AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE-STEEL (AWS D1.1)

STORAGE BUILDING RISK

CATEGORY: II

GRAVITY DESIGN LOADING

ROOF DESIGN LOADS:

DEAD LOAD: SELF WEIGHT + 10 PSF ROOF COLLATERAL LOAD

ROOF LIVE LOAD: 20 PSF

15 MINUTE PRECIPITATION INTENSITY, I: 6.9IN/HR

60 MINUTE PRECIPITATION INTENSITY, I: 3.24IN/HR

SNOW LOAD:

GROUND SNOW LOAD: 30 PSF

FLAT ROOF SNOW LOAD: 23 PSF

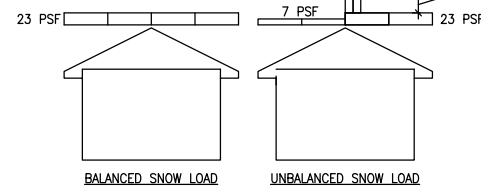
SNOW EXPOSURE FACTOR, Ce: 1.0

THERMAL FACTOR, Ct: 1.10

SLOPE FACTOR, Cs: 1.0

SNOW IMPORTANCE FACTOR: 1.0

SLOPED ROOF SNOW LOAD: 23 PSF



GROUND FLOOR LIVE LOAD 250 PSF
GRATING DESIGN LIVE LOAD: 100 PSF

LATERAL DESIGN LOADING

WIND:

BASIC WIND SPEED (ULTIMATE) = 115 MPH

NOMINAL WIND SPEED (ASD) = 89 MPH

EXPOSURE C

COMPONENT AND CLADDING DESIGN WIND PRESSURES:

SEE DIAGRAM 5/S001 AND TABLE 6/S001

INTERNAL PRESSURE COEFFICIENT: ±0.18

SEISMIC:

SEISMIC IMPORTANCE FACTOR: 1.0

MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS

Ss = 0.069

S1 = 0.047

SITE CLASS: D

DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS

Sds = 0.073

Sd1 = 0.075

SEISMIC DESIGN CATEGORY: B

BASIC SEISMIC FORCE-RESISTING SYSTEM:

STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE

SEISMIC RESPONSE COEFFICIENT CS: 0.024

RESPONSE MODIFICATION COEFFICIENT R: 3

ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE

DESIGN BASE SHEAR: CSxW

GEOTECHNICAL

- FOUNDATION DESIGN IS BASED ON A NET ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTRACTOR TO VERIFY BEARING CAPACITY AT THE BEARING ELEVATION WITH IOWA REGISTERED GEOTECHNICAL ENGINEER.
- FOUNDATION DESIGN, EXISTING SOIL, EARTHWORK, AND BACKFILL MATERIALS ARE BASED ON GEOTECHNICAL REPORT PREPARED BY:

TERRACON CONSULTANTS, INC
2640 12TH ST SW
CEDAR RAPIDS, IA
319-366-8321
TERRACON PROJ. NO. 06225181.01

- BOTTOM OF FOOTING MINIMUM OF 3'-6" BELOW GRADE IN HEATED STRUCTURES; 4'-6" BELOW GRADE IN UNHEATED STRUCTURES.

CONCRETE MATERIAL SCHEDULE

PROJECT USE	MIX CLASS 1 BLDG CONCRETE
PROPERTIES/MATERIALS	
COMPRESSIVE STRENGTH - MINIMUM	4,500 psi
PORTLAND CEMENT - ASTM C150	Type I/II
FLYASH - ASTM C618	15% max
AGGREGATE - COARSE - ASTM C33	1" max
AIR ENTRAINMENT - ASTM C260	6% ± 1% *
SUPER PLASTICIZER - ASTM C494	OPTIONAL
WATER TO CEMENT RATIO - MAXIMUM	0.45
SYNTHETIC FIBERS	ALL FLATWORK
SLUMP	3" ± 1"

NOTE: ALL CONCRETE IS MIX 2 UNLESS NOTED OTHERWISE.
* LIMIT AIR CONTENT OF STEEL-TROWELED FLOORS TO 3% MAX.

1 CONCRETE MATERIAL SCHEDULE

SCALE: NONE

ADHESIVE AND EXPANSION ANCHORS

UNLESS NOTED OTHERWISE

DIAMETER	3/8"	1/2"	5/8"	3/4"	7/8"	1"
EXP ANCH EMBED.	3"	4"	5"	6"	7"	8"
ADHESIVE ANCH EMBED.	2 1/4"	3"	3 3/4"	4 1/2"	5 1/4"	6"
ALLOWABLE TENSION (LB)	1220	2040	3120	3700	4080	6040
ALLOWABLE SHEAR (LB)	840	1330	2660	3350	5530	6250
CLOSEST ANCHOR (IN) (SEE NOTES 3 & 9)	6 3/4"	9"	11 1/4"	13 1/2"	15 3/4"	18"
CLOSEST EDGE (IN) (SEE NOTE 9)	9"	12"	15"	18"	21"	24"

ANCHORAGE TO CONCRETE - POST-INSTALLED ANCHORS

NOTES:

- UNLESS NOTED OTHERWISE, ANCHORS MAY BE EITHER EXPANSION OR ADHESIVE.
- UNLESS NOTED OTHERWISE, MINIMUM EMBEDMENT SHALL BE PER TABLE ABOVE. IN NO CASE MAY THE EMBEDMENT BE LESS THAN THE MANUFACTURER'S "MINIMUM EMBEDMENT" FROM PUBLISHED CATALOG LITERATURE.
- UNLESS NOTED OTHERWISE, MINIMUM CENTER-TO-CENTER SPACING BETWEEN ANCHORS SHALL BE PER TABLE ABOVE ("CLOSEST ANCHOR").
- EXPANSION ANCHORS - WEDGE-TYPE, GRADE 316 STAINLESS STEEL. MANUFACTURERS: HILTI "KWIK BOLT TZ"; DEWALT "POWER-STUD+SD6"; SIMPSON "STRONG-BOLT 2".
- ADHESIVE ANCHORS - EPOXY OR ACRYLIC ADHESIVE WITH GRADE 316 STAINLESS STEEL THREADED ROD. MANUFACTURERS: HILTI "HY200"; HILTI "RESO0V3"; DEWALT "AC208+"; ITW REDHEAD "C6+"; SIMPSON "SET-3G"
- INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND ADDITIONAL RECOMMENDATIONS OF ICC EVALUATION SERVICE REPORT.
- ALL POST-INSTALLED ANCHORS MUST BE INSPECTED TWICE:
a. AFTER HOLE IS DRILLED AND CLEANED, AND
b. DURING INSTALLATION OF ADHESIVE AND ROD OR EXPANSION ANCHOR.
- ON DRAWINGS, ADHESIVE ANCHORS MAY ALSO BE REFERRED TO AS EPOXY OR EPOXY SET ANCHORS.
- FOR STATED ALLOWABLE LOAD VALUES TO APPLY, THERE MAY BE NO OTHER ANCHORS WITHIN (18 TIMES THE ANCHOR DIAMETER), AND THERE MAY BE NO FREE CONCRETE EDGE WITHIN (24 TIMES THE ANCHOR DIAMETER).
- FOR ANCHORS RESISTING TENSION AND SHEAR, USE FOLLOWING EQUATION:
(ACTUAL TENSION/ALLOWABLE TENSION) + (ACTUAL SHEAR/ALLOWABLE SHEAR) < 1.00
- UNLESS NOTED OTHERWISE, ADHESIVE ANCHORS MAY NOT BE USED IN OVERHEAD APPLICATIONS.
- FOR STATED ALLOWABLE LOAD VALUES TO APPLY, DESIGN STRENGTH OF CONCRETE (F'c) MUST BE AT LEAST 4,000 PSI.
- ANY ADHESIVE ANCHOR INSTALLED IN ANY ORIENTATION BETWEEN HORIZONTAL AND OVERHEAD VERTICAL MUST BE INSTALLED AND INSPECTED BY CERTIFIED INSTALLER/INSPECTOR. SEE DIVISION 5 SPECIFICATIONS.
- CONCRETE ANCHORS MAY ALSO BE USED AT CMU, PROVIDED THAT CELLS AT AND ADJACENT TO ANCHOR ARE FULLY GROUTED (TOP, BOTTOM, AND BOTH SIDES OF ANCHOR CELL). USE 1/2 OF ALLOWABLE LOADS STATED IN TABLE.

4 CONCRETE ANCHORS

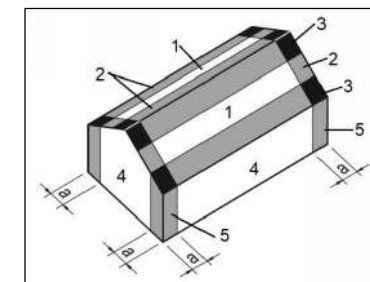
SCALE: NONE

CONCRETE PROTECTION FOR REINFORCEMENT

CLEAR CONCRETE COVER DISTANCES	
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE IN CONTACT WITH OR IMMEDIATELY ABOVE OR ADJACENT TO WATER/WASTEWATER	2"
CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 THROUGH #11 BARS	2"
#5 AND SMALLER, W31 OR D31 WIRE	1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS AND JOISTS: #11 AND LARGER BARS	1 1/2"
#10 AND SMALLER BARS	LARGER OF 1" OR BAR DIA.
BEAMS AND COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS	1 1/2"

2 CONCRETE REINFORCEMENT PROTECTION

SCALE: NONE



5 STORAGE BLDG COMPONENT & CLADDING PRESSURE DIAGRAM

SCALE: NONE

AREA	ZONE (SEE ISOMETRIC)	EFFECTIVE WIND AREA (SF)	COMPONENT & CLADDING WIND PRESSURE (PSF)	
			POSITIVE (TOWARDS BUILDING)	NEGATIVE (SUCTION ON BUILDING)
ROOF	1	10	18	-28
ROOF	1	20	16	-27
ROOF	1	50	16	-26
ROOF	1	100	16	-26
ROOF	2	10	18	-49
ROOF	2	20	16	-45
ROOF	2	50	16	-40
ROOF	2	100	16	-36
ROOF	3	10	18	-72
ROOF	3	20	16	-68
ROOF	3	50	16	-61
ROOF	3	100	16	-57
WALL	4	10	31	-33
WALL	4	20	29	-32
WALL	4	50	27	-30
WALL	4	100	26	-29
WALL	4	500	23	-26
WALL	5	10	31	-41
WALL	5	20	29	-38
WALL	5	50	27	-35
WALL	5	100	26	-32
WALL	5	500	23	-26
ROOF OVERHANGS	2	10		-57
ROOF OVERHANGS	2	20		-57
ROOF OVERHANGS	2	50		-57
ROOF OVERHANGS	2	100		-57
ROOF OVERHANGS	3	10		-96
ROOF OVERHANGS	3	20		-87
ROOF OVERHANGS	3	50		-74
ROOF OVERHANGS	3	100		-65

"a" DIMENSION FOR USE ON ISOMETRIC = 4.2 FT.
LOADS SHOWN ARE ULTIMATE MULTIPLY BY 0.6 FOR ASD

6 COMPONENT & CLADDING DESIGN WIND PRESSURES TABLE

SCALE: NONE

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APPROVED: MJW JOB NUMBER: 2202713
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1	8/4/23	JDM	ADDENDUM #2

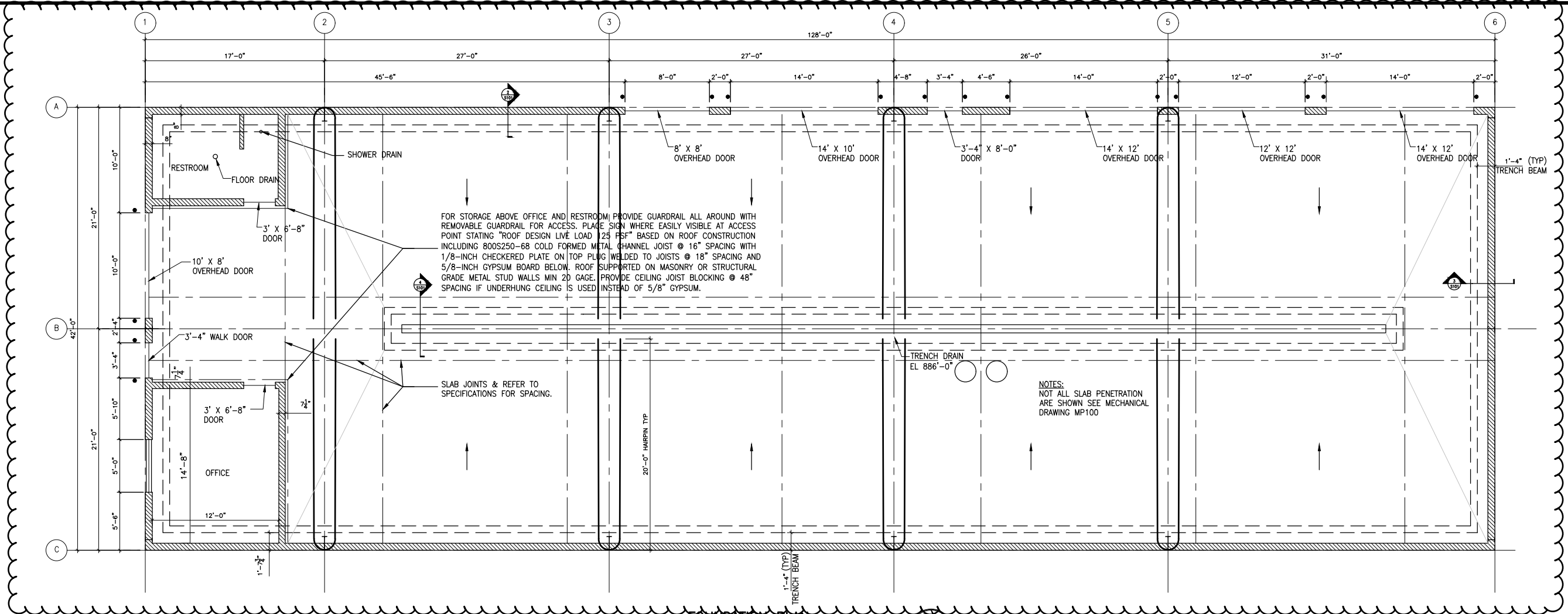


PUBLIC WORKS BUILDING
CITY OF WALKER
WALKER, IOWA

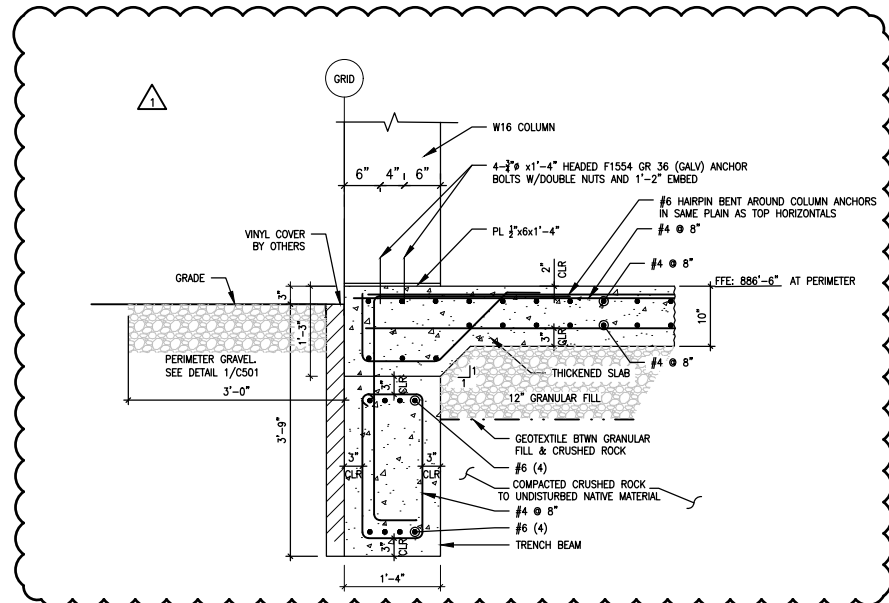
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NOTES

SHEET NO.
S001

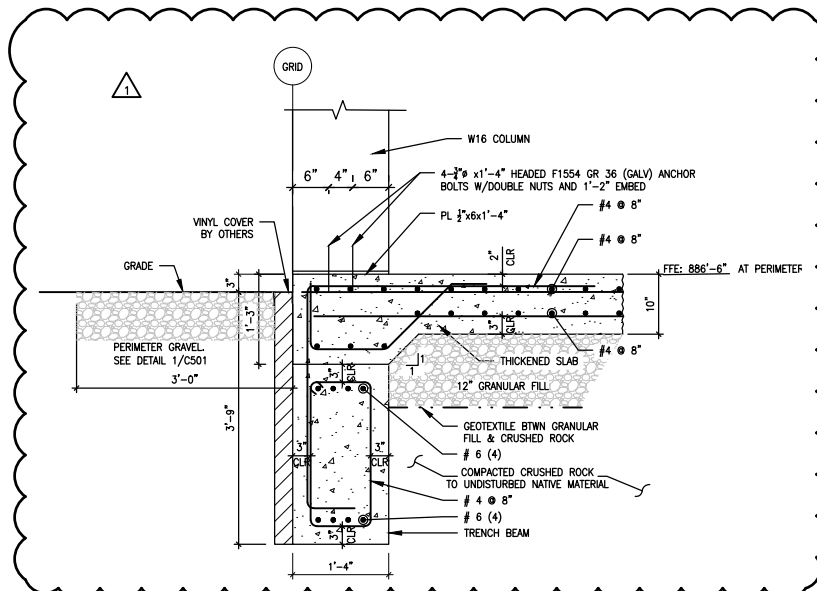
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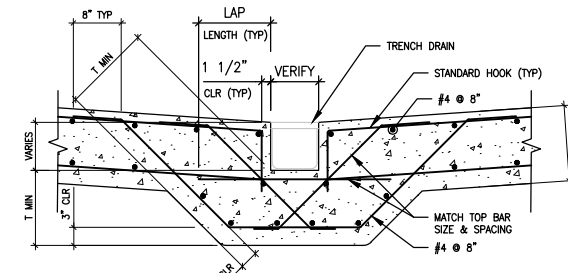
1 FOUNDATION PLAN
SCALE: 3/16" = 1'-0"



2 FOUNDATION WALL SECTION FOR 42'-0" SLAB SPAN
SCALE: 3/4" = 1'-0"



3 FOUNDATION WALL SECTION FOR 128'-0" SLAB SPAN
SCALE: 3/4" = 1'-0"



4 REINFORCING AT TRENCH DRAIN
SCALE: 3/4" = 1'-0"

BID SET 8/4/23

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BAR IS ONE INCH ON OFFICIAL DRAWINGS.
 IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.

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PUBLIC WORKS BUILDING
 CITY OF WALKER
 WALKER, IOWA

STRUCTURAL
 BUILDING FOUNDATION

SHEET NO.
 S101