

New Utility Building
for



Rockford, Illinois

APPLICABLE CODES:

- BUILDING:**
~2015 ICC [IBC] International Building Code (with local amendments)
- FIRE PREVENTION:**
~2015 ICC [IFC] International Fire Code (with local amendments)
- MECHANICAL / PLUMBING:**
~2015 ICC [IMC] International Mechanical Code (with local amendments)
~2015 ICC [IFGC] International Fuel Gas Code (with local amendments)
~2014 IDPH [IPC] Illinois Plumbing Code (with local amendments)
- ELECTRICAL:**
~2014 NFPA 70 [NEC] National Electrical Code (with local amendments)
- ENERGY CODE:**
~2018 International Energy Conservation Code (with local amendments)
- ACCESSIBILITY CODE:**
~2018 State of Illinois Accessibility Code
~2010 ADA Standards for Accessible Design
- LIFE SAFETY CODE:**
~2015 NFPA 101 Life Safety Code (with local amendments)
~2010 NFPA 101 Life Safety Code (with local amendments)
- OTHERS:**
~All those codes & standards [i.e. NFPA 13, NFPA 72, etc.] included by reference by the codes listed above.
- NOTES:**
1. Guide of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE).
 2. The standards, regulations, and requirements of OSHA, EPA, National Consumer Protection Agency, and any other public utility servicing the community.
 3. Exceptions and amendments to above codes and standards adopted by the City of Rockford
 4. Provide fire extinguishers, smoke detectors and all other life safety devices as required by code. All locations to be approved by Blakemore Architects.
 5. City of Rockford Zoning Ordinance.
- GENERAL NOTES:**
1. Contractor as agent for the owner, shall apply for and pay for all permits issued in accordance with section 105 of IBC 2015, the application shall be submitted on a written form acceptable to the building official.
 2. All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by the IBC Code (2015).
 3. This building is equipped with alarm systems for smoke, fire and security.

SHEET INDEX:

ARCHITECTURAL:

		Current Drawing Date
A101	Floor Plans	08-03-2020
A102	Elevations	08-03-2020
A103	Wall Sections	08-03-2020

STRUCTURAL:

S001	General Notes	08-03-2020
S100	Foundation Plan	08-03-2020
S101	Roof Framing Plan	08-03-2020
S300	Sections & Details	08-03-2020

CIVIL:

C-001	Legend, General Notes & Location Map-For Reference Use Only	08-07-2020
C-002	Site Plan-For Reference Use Only	08-07-2020

CODE SYNOPSIS:

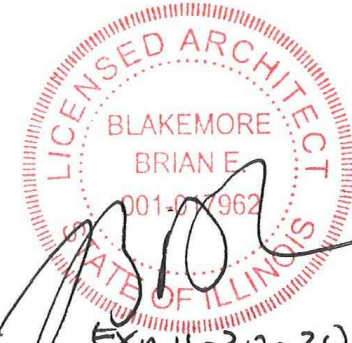
Construction Type:	5B
Use Group	S-1 (Unconditioned Storage)
Fully Sprinkled	None (less than 12,000 s.f.)
Allowable Size	15,750 s.f. (9,000 s.f. plus 6,750 s.f. perimeter increase)
Building Size	10,404

BA

BLAKEMORE
ARCHITECTS

Date: 08-03-2020 Project: 20-18
Issued for Construction

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342



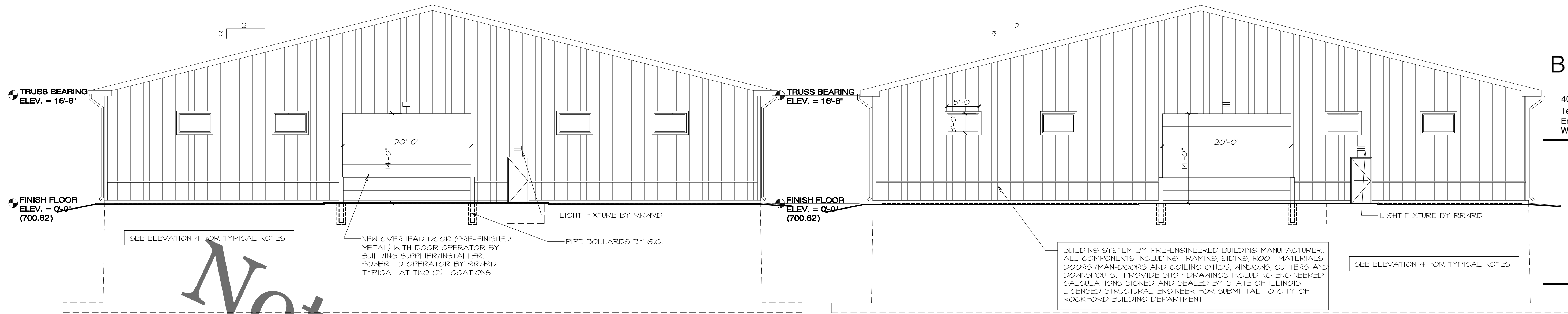
7-16-2020

date

license expires 11-30-20

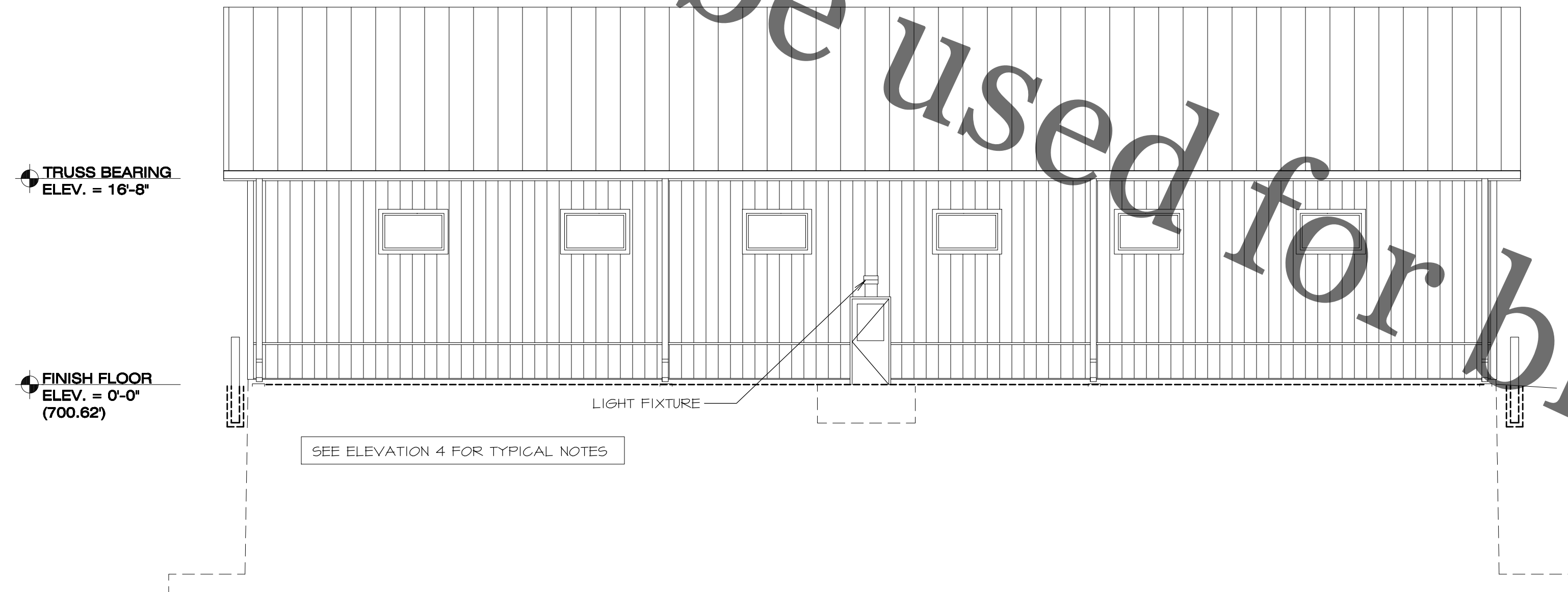
PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342

2 Floor Plan
3/32" = 1'-0"

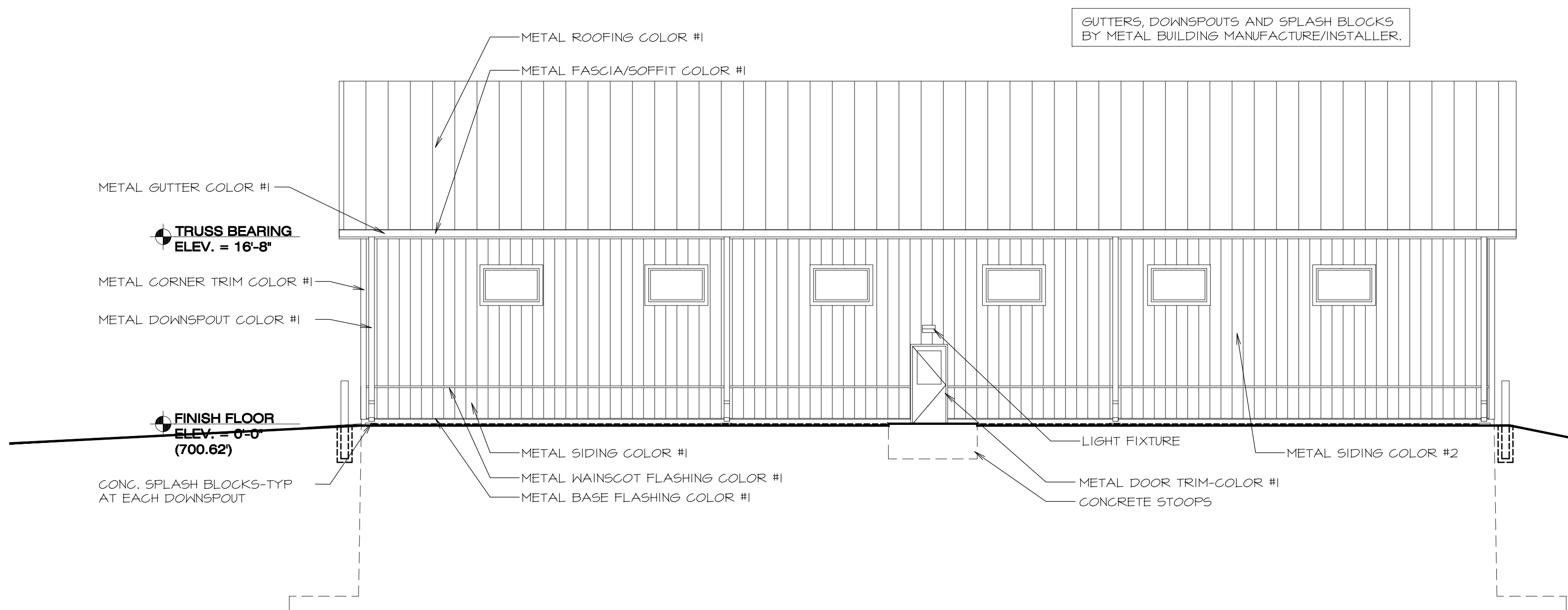


1 North Building Elevation
1/8" = 1'-0"

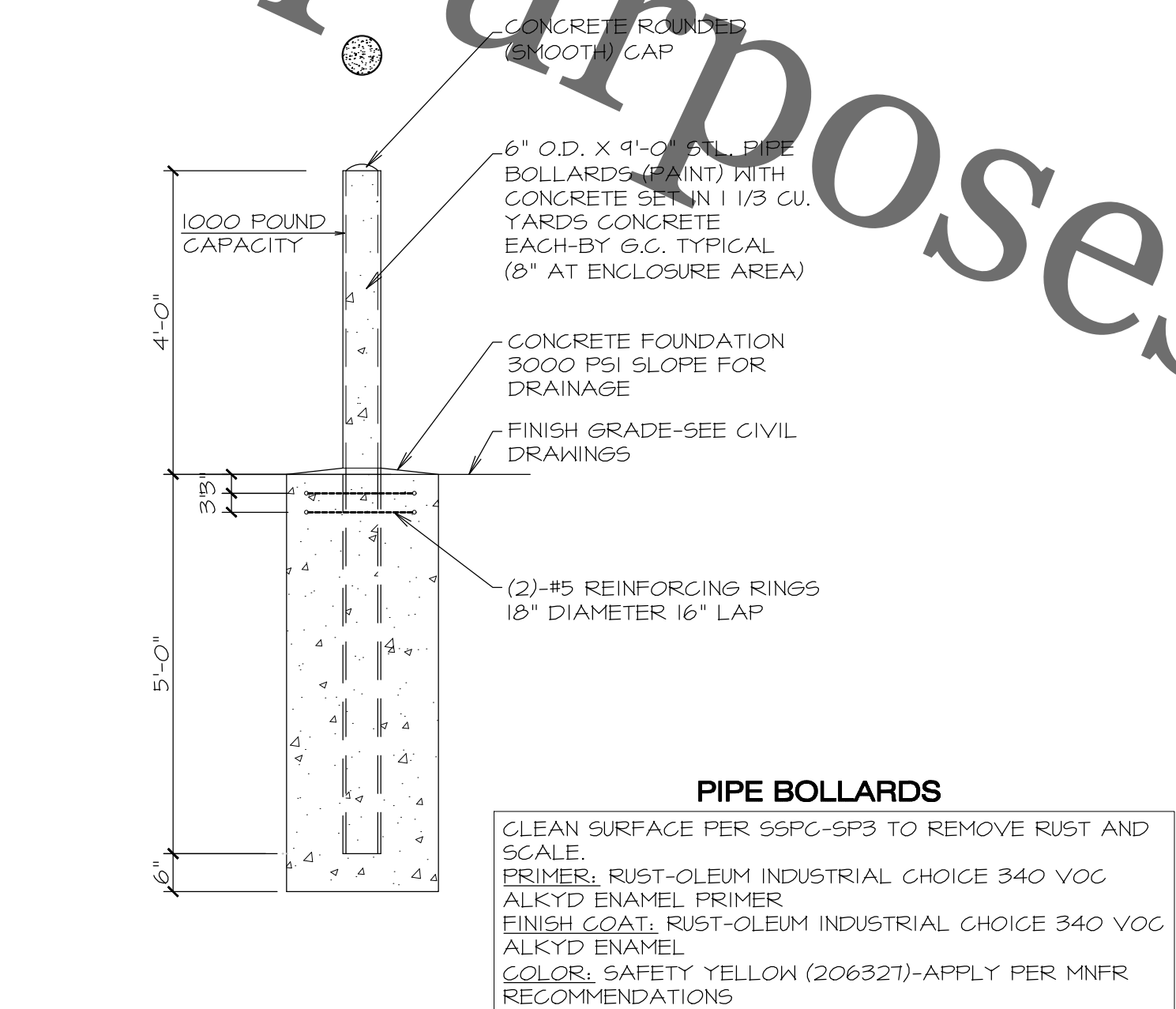
2 South Building Elevation
1/8" = 1'-0"



3 East Building Elevation
1/8" = 1'-0"



4 West Building Elevation
1/8" = 1'-0"



5 Typical 6" Pipe Bollard Detail
Scale: 1/2" = 1'-0"

New Utility Building

for



3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-03-2020	Issued for Construction

© COPYRIGHT Blakemore Architects 2020

BA Project No. 20-18

Scale

1/8" = 1'-0"

Sheet Title

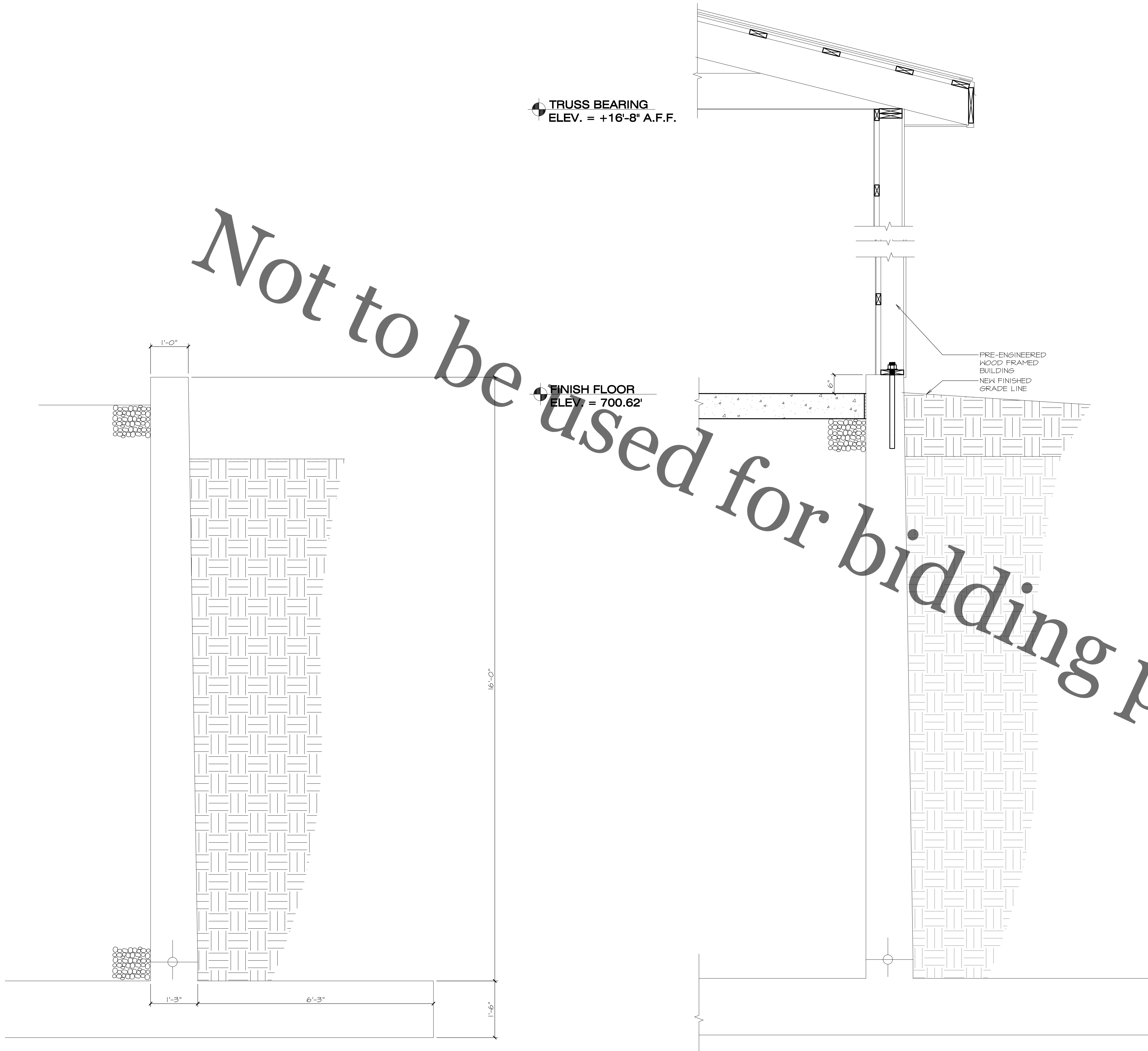
ELEVATIONS

Ref. North Sheet No.

A102

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342

F:\Projects\2020 Projects\20-18 RRWRD Tank Building\Final\20-18- A101 6-26-2020.dwg Aug 03, 2020 - 11:59am Brian



1 Existing Tank Wall
3/4" = 1'-0"

2 Proposed New Wall Section
3/4" = 1'-0"



BLAKEMORE

ARCHITECTS

400 N. First Street Rockford, IL 61107

Telephone: 815-227-0023

Email: Brian@blakemore-architects.com

Web: blakemore-architects.com

New Utility Building

for



3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-03-2020	Issued for Construction

© COPYRIGHT Blakemore Architects 2020

BA Project No. 20-18

Scale

3/4" = 1'-0"

Sheet Title

WALL SECTIONS

Ref. North

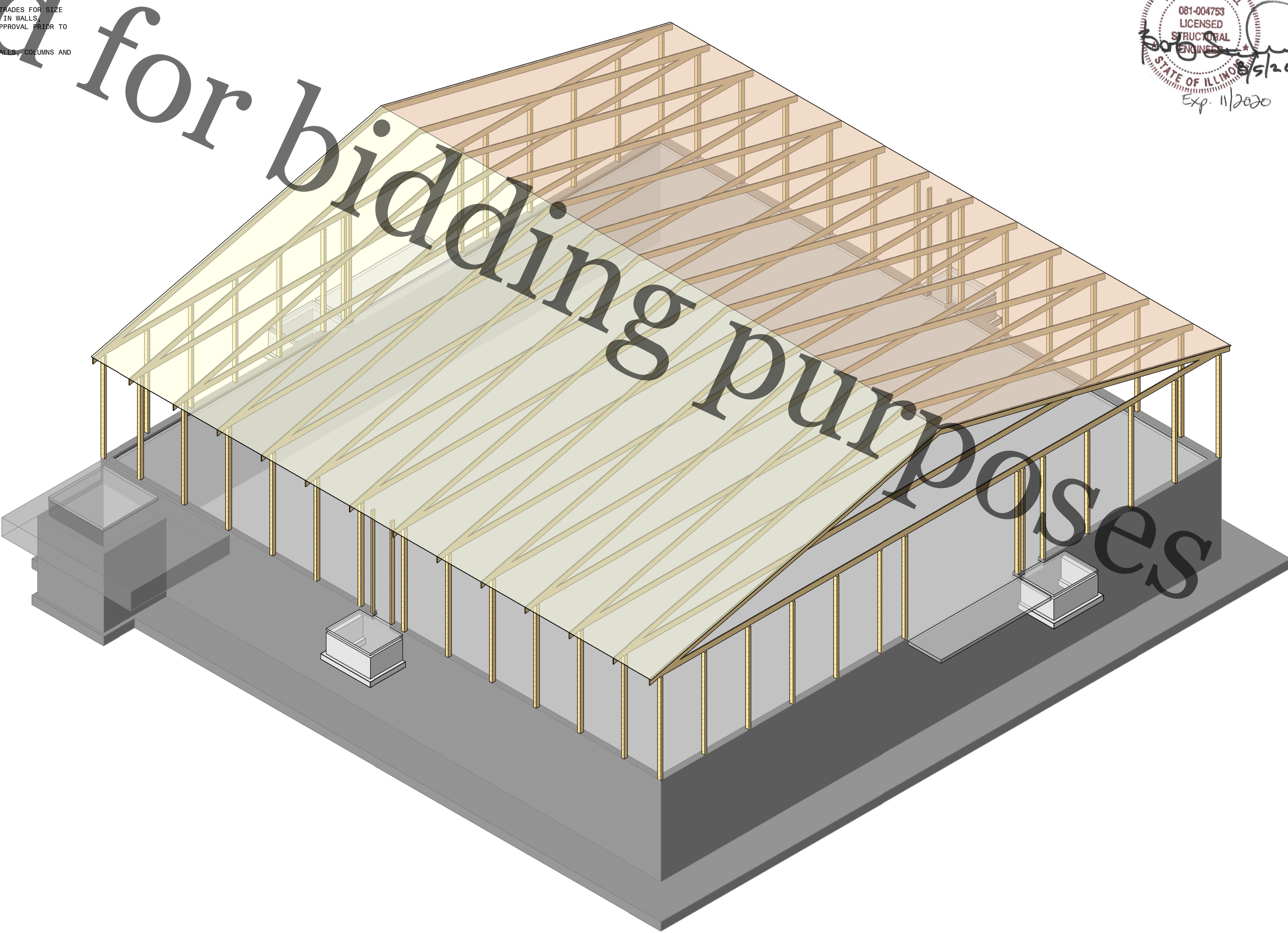
Sheet No.

A103

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342

GENERAL NOTES

1.1	GENERAL:	1.1.5	EXECUTION: CONTRACTOR TO CROSS CHECK DIMENSIONS, ELEVATIONS, SECTIONS AND DETAILS BETWEEN ARCHITECTURAL, MECHANICAL AND STRUCTURAL PLANS. AMBROSE ENGINEERING IS TO BE NOTIFIED OF ANY VARIANCE THAT WILL AFFECT THE STRUCTURAL FRAMING BEFORE CONTRACTOR BEGINS WORK. ALL EQUIPMENT SUPPORTS AND ANCHORAGES TO BE CROSS CHECKED WITH MANUFACTURER'S DRAWINGS. CONTRACTORS SHALL VERIFY ALL PROFILES, HEIGHTS AND DIMENSIONS AT PROJECT SITE PRIOR TO FABRICATION OF ANY MATERIAL AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR FRAMING INTERFERENCES.	3.1	CONCRETE:
1.1.1	SCOPE: THE FOLLOWING GENERAL AND SPECIFIC NOTES SHALL APPLY EQUALLY TO ALL CONTRACTORS SUPPLYING/ENGAGED IN EXECUTION OF THE WORK SHOWN ON CONTRACT DOCUMENTS. THESE NOTES SUPPLEMENT AND ARE MADE A PART OF THE PLANS AND SPECIFICATIONS.	1.1.6	PROJECT CONDITIONS: ALL EXISTING BUILDING DIMENSIONS AND CONDITIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION. AMBROSE ENGINEERING SHALL NOT BE RESPONSIBLE FOR ANY EXISTING INFORMATION SUPPLIED BY THE OWNER/ARCHITECT NOR BE LIABLE FOR THOSE EXISTING CONDITIONS THAT VARY FROM THE PREVIOUSLY GIVEN INFORMATION.	3.1.1	REFERENCES: CONCRETE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING STANDARDS AND AS MODIFIED HEREIN: ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS" ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" ACI SP-46 "ACI DETAILING MANUAL" ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI 318 "GUIDE TO FORMWORK FOR CONCRETE" ACI 360 "GUIDE TO DESIGN OF SLABS-ON-GROUND" CRSI "MANUAL OF STANDARD PRACTICE" CRSI "PLACING REINFORCING BARS"
1.1.2	REFERENCES: ALL CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE FOLLOWING: PLANS AND SPECIFICATIONS GOVERNING LOCAL AND MUNICIPAL CODES 2015 INTERNATIONAL BUILDING CODE (IBC) ASCE 7-10 ASTM INTERNATIONAL (ASTM) OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) CONCRETE CONSTRUCTION: - AMERICAN CONCRETE INSTITUTE (ACI) - CONCRETE REINFORCING STEEL INSTITUTE (CRSI) - PRECAST/PRESTRESSED CONCRETE INSTITUTE (PCI) WOOD CONSTRUCTION & TRUSSES: - NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION - AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) - APA - THE ENGINEERED WOOD ASSOCIATION (APA) - TRUSS PLATE INSTITUTE (TPI) CONTRACTOR SHALL ENSURE FAMILIARITY OF THE ABOVE ITEMS. INSPECTIONS AND OBSERVATIONS WILL BE IN CONFORMANCE WITH THE ABOVE.	1.1.7	SHOP DRAWINGS/SUBMITTALS: SHALL BE SUBMITTED BY THE GENERAL CONTRACTOR TO THE ARCHITECT/ENGINEER FOR APPROVAL BEFORE FABRICATION MAY PROCEED. SUBMIT (2) COPIES TO ARCHITECT/ENGINEER FOR REVIEW. (1) REVIEWED COPY WILL BE RETURNED. ANY ADDITIONAL SHOP DRAWING COPIES WILL NOT BE RETURNED. ALL SHOP DRAWINGS SHALL CONTAIN THE ISSUE DATE INDICATED ON THE CONSTRUCTION DOCUMENTS, ALONG WITH ANY ADDENDUMS OR REVISION DATES. COPIES OF THE STRUCTURAL DRAWINGS SUBMITTED AS SHOP DRAWINGS WILL BE REJECTED: - ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE NOTED (CLOUD, NOTE, ETC.) ON THE SHOP DRAWINGS SUBMITTED FOR APPROVAL. - ANY CHANGES ON RESUBMITTED SHOP DRAWINGS SHALL BE CLOUDED.	3.1.2	MATERIALS: PROPORTION CONCRETE MATERIALS TO ATTAIN 28 DAY CONCRETE MIX DESIGN STRENGTHS INDICATED IN THE DESIGN CRITERIA. SEE SPECIFICATIONS FOR ADDITIONAL MATERIAL REQUIREMENTS.
1.1.3	DESIGN DATA: RISK CATEGORY: CATEGORY II ROOF DEAD LOADS (D): WOOD FRAMED ROOF 15 PSF FLOOR LIVE LOADS (L1): STORAGE WAREHOUSE 125 PSF LIGHTS ROOF LIVE LOADS (L2): ORDINARY FLAT, PITCHED, OR CURVED ROOF 20 PSF SNOW LOADS (S): GROUND SNOW LOAD, P_g 30 PSF EXPOSURE FACTOR, E 1.2 THERMAL FACTOR, C_e 1.0 WIND EXPOSURE CATEGORY, C_e 1.0 FLAT ROOF SNOW LOAD, P_f 25.2 PSF DRIFT ROOF SNOW LOAD, P_d 25.2 PSF DESIGN ROOF SNOW LOAD, P_s 25.2 PSF WIND LOADS (W) (ASCE 7-10 WINDS DIRECTIONAL PROCEDURE, PART 1, ALL H): BASIC WIND SPEED, V_{30} 115 MPH EXPOSURE CATEGORY C ENCLOSURE CATEGORY 1 INTERNAL PRESSURE COEFFICIENT, C_{pi} +/- 0.18 COMPONENTS AND CLADDING DESIGN PRESSURES: (ASCE 7-10 CHAPTER 30) EFFECTIVE WIND AREAS* (ULTIMATE LOADS) ROOF ZONES* NEG. ZONE 1 (FIELD) 10 SF NEG. ZONE 2 (PERIMETER) 10 SF NEG. ZONE 3 (CORNER) 10 SF POS. ZONE ALL ZONES 10 SF OVERHANG ZONE 1 & 2 34.3 PSF OVERHANG ZONE 3 34.3 PSF WALL ZONES* NEG. ZONE 4 (INTERIOR ZONE) 10 SF NEG. ZONE 5 (CORNER ZONE) 10 SF POS. ZONE 4 & 5 10 SF	1.1.8	DEFERRED COMPONENT SUBMITTALS: SHALL BE SUBMITTED BY THE GENERAL CONTRACTOR TO THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION. DEFERRED SUBMITTALS SHALL BE PROVIDED FOR THE FOLLOWING COMPONENTS: PRECAST CONCRETE, TILT-UP WALL PANELS, METAL BUILDING, STRUCTURAL STEEL, STEEL JOISTS AND GIRDERS, STEEL DECKING, METAL FABRICATION, COLD-FORMED STEEL FRAMING, PRE-ENGINEERED COLD-FORMED STEEL TRUSSES, PRE-ENGINEERED WOOD TRUSSES, AND GLUE LAMINATED LUMBER. NOTES: - GENERAL CONTRACTOR SHALL REVIEW AND STAMP SHOP DRAWINGS BEFORE SUBMITTAL TO ARCHITECT/ENGINEER. - SUBMIT (4) COPIES OF DRAWINGS AND CALCULATIONS TO ENGINEER. (3) COPIES WILL BE RETURNED WITH ENGINEER'S APPROVAL STAMP. - ALL COMPONENT SUBMITTALS SHALL BEAR AN ORIGINAL SEAL AND SIGNATURE OF THE COMPONENT DESIGNER. - ALL SUBMITTED COPIES MUST BE THE FINAL "FIELD USE" SETS WHICH INCLUDES ALL CORRECTIONS MADE DUE TO SHOP DRAWING REVIEW COMMENTS.	3.1.3	TEST HISTORY, CEMENT, FLY ASH, AGGREGATE TEST REPORTS, ADMIXTURES, FIBER REINFORCING, REBAR PLACEMENT AND FABRICATION PLANS, LAP LENGTHS, REBAR BENDING DIAGRAMS, AND ALL DETAILS AS REQUIRED TO COMPLETE INSTALLATION.
		1.1.9	SPECIAL INSPECTIONS: AN INSPECTION & TESTING COMPANY SHALL BE RETAINED IN ACCORDANCE WITH THE IBC FOR THE FOLLOWING: - SOILS AND EARTHWORK SUPPORTING FOUNDATIONS AND SLABS. - CONCRETE TEST CYCLES AND STRENGTH TESTING. - MASONRY TEST CYCLES AND STRENGTH TESTING. - METAL DECK FASTENING. - POST INSTALLED EXPANSION AND EPOXY ANCHORS.	3.1.4	ACCESSORIES: ALL CONCRETE ACCESSORIES SUCH AS CHAIRS, TIES, ETC., THAT COME IN CONTACT WITH FORMWORK OR EXPOSED CONCRETE SHALL BE GALVANIZED OR PLASTIC COATED. CONCRETE BLOCK OR CLAY MASONRY SHALL NOT BE USED AS CHAIRS FOR SUPPORT OF SLAB-ON-GRADE REINFORCEMENT.
		1.1.10	CONSTRUCTION LOADS: PLACEMENT OF CONSTRUCTION EQUIPMENT, MATERIALS, AND PERSONNEL SHALL NOT EXCEED THE DESIGN LIVE LOAD OF THE STRUCTURE. THE CONTRACTOR SHALL CURE A MINIMUM OF 7 DAYS BEFORE THE APPLICATION OF CONSTRUCTION LOADS. IN ADDITION, EQUIPMENT PLACED ON FLOORS SHALL ALSO COMPLY WITH THE FOLLOWING: FORKLIFT SPACING BETWEEN WHEELS ON AXLE IS NOT LESS THAN 36" c/c OR SCISSOR LIFT SPACING BETWEEN WHEELS ON AXLE IS NOT LESS THAN 25" c/c.	3.1.5	WELDED WIRE REINFORCEMENT: PROVIDE WELDED WIRE REINFORCEMENT IN ACCORDANCE WITH THE DESIGN CRITERIA. WELDED WIRE REINFORCEMENT SHALL BE FLAT SHEETS ONLY, LAPPED 6" MINIMUM AND POSITIONED AT MID-HEIGHT OF THE SLAB THICKNESS, UNO.
		1.1.11	FIELD MODIFICATIONS: MODIFICATIONS OF STRUCTURAL MEMBERS DUE TO MISLOCATION, MISFIT, MECHANICAL INTERFERENCE, OR ANY OTHER CONSTRUCTION ISSUE SHALL NOT BE MADE WITHOUT THE PRIOR APPROVAL OF ENGINEER. NO OPENINGS SHALL BE PLACED IN ANY STRUCTURAL MEMBER UNLESS SHOWN ON THE CONTRACT STRUCTURAL DRAWINGS OR THE APPROVED SHOP DRAWINGS.	3.1.6	SYNTHETIC FIBER REINFORCEMENT: PROVIDE SYNTHETIC FIBER REINFORCEMENT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AT THE DOSAGE RATE INDICATED ON THE PLANS.
1.1.4	DESIGN CRITERIA:	1.1.12	PERMANENT EQUIPMENT: SHALL BE LOCATED ONLY ON THE STRUCTURAL MEMBERS INTENDED TO SUPPORT THIS EQUIPMENT AS SHOWN ON THE CONTRACT DRAWINGS OR THE APPROVED SHOP DRAWINGS. IF STRUCTURAL SUPPORT IS NOT CLEAR, OR A QUESTION ARISES, CONTACT ENGINEER PRIOR TO EQUIPMENT INSTALLATION.	3.1.7	BAR REINFORCEMENT: PROVIDE BAR REINFORCEMENT IN ACCORDANCE WITH THE DESIGN CRITERIA. WHEN BAR REINFORCEMENT IS CALLED FOR IN A CERTAIN PORTION OF THE BUILDING, IT SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING, UNO.
	SOIL BEARING CAPACITY 4000 PSF	2.1	EARTHWORK: 2.1.1 GEOTECHNICAL REPORT: REFER TO GEOTECHNICAL REPORT INDICATED IN DESIGN CRITERIA FOR SITE CONDITIONS, SUITABLE BEARING MATERIALS, STRUCTURAL FILL, BACKFILL MATERIALS, COMPACTION REQUIREMENTS AND PROJECT SPECIFICATIONS FOR EARTHWORK NOT SPECIFIED HEREIN. 2.1.2 EXCAVATIONS: ALL UNSUITABLE EXISTING FILL AND TOPSOIL SHALL BE EXCAVATED BELOW FOOTING BEARING AND REPLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS. IF EXCAVATIONS SHOULD INDICATE A SAFE SOIL BEARING CAPACITY LESS THAN THE DESIGN CRITERIA SOIL BEARING CAPACITY THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND FOUNDATION REVISED TO MEET THIS CONDITION.	3.1.8	MINIMUM COVER: INSTALL BAR REINFORCEMENT WITH THE FOLLOWING MINIMUM COVER UNLESS A GREATER COVER IS REQUIRED DUE TO FIRE PROTECTION: CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" CONCRETE EXPOSED TO EARTH AND WEATHER: 1 1/2" #5 BAR AND SMALLER 1 1/2" #11 BAR AND LARGER 2" CONCRETE NOT EXPOSED TO EARTH AND WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, AND JOISTS: 3/4" #11 BAR AND SMALLER 1 1/2" BEAMS AND COLUMNS: 1 1/2"
	GEOTECHNICAL REPORT: REFER TO GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS, PREPARED BY ILLINOIS DRILLING & TESTING, REPORT # 1303, DATED JANUARY 19, 1968.	2.1.3	SITE PREPARATION: ALL UNSUITABLE EXISTING FILL AND TOPSOIL SHALL BE EXCAVATED WITHIN THE BUILDING FOOTPRINT AND REPLACED TO FINISHED PAD ELEVATION IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS. PROVIDE COMPACTED AGGREGATE SUB-BASE AND VAPOR RETARDER ABOVE PAD AND BELOW SLAB PER SPECIFICATIONS AND GEOTECHNICAL REPORT RECOMMENDATIONS.	3.1.9	DEVELOPMENT: THE MINIMUM DEVELOPMENT LENGTH OF NON-CONTINUOUS BAR REINFORCEMENT IS SHOWN BELOW. TERMINATE WITH A STANDARD HOOK IN ACCORDANCE WITH ACI IF REQUIRED DEVELOPMENT LENGTH CANNOT BE OBTAINED. THE LAP SPICE LENGTH OF CONTINUOUS BAR REINFORCEMENT IS SHOWN BELOW. IN GROUPS OF PARALLEL BARS, LAP SPLICES SHALL BE STAGGERED. f'_c = 3000 PSI, GRADE 60, UNCOATED: ALL BARS (EXCEPT TOP HORIZ. BARS): #5 BAR AND SMALLER 44 BAR DIAMETERS #7 BAR AND LARGER 55 BAR DIAMETERS TOP HORIZONTAL BARS: #5 BAR AND SMALLER 57 BAR DIAMETERS #7 BAR AND LARGER 71 BAR DIAMETERS #11 BAR AND LARGER 93 BAR DIAMETERS f'_c = 4000 PSI, GRADE 60, UNCOATED: ALL BARS (EXCEPT TOP HORIZ. BARS): #5 BAR AND SMALLER 38 BAR DIAMETERS #7 BAR AND LARGER 47 BAR DIAMETERS TOP HORIZONTAL BARS: #5 BAR AND SMALLER 50 BAR DIAMETERS #7 BAR AND LARGER 62 BAR DIAMETERS
	CONCRETE (NOMINAL WEIGHT UNO): FOOTINGS AND SUB-SLABS f'_c = 3000 PSI CIP WALLS AND PIERS f'_c = 4000 PSI INTERIOR SLAB ON GRADE f'_c = 4000 PSI EXTERIOR SLABS f'_c = 3500 PSI TOPPING SLABS f'_c = 4000 PSI GROUT: UNDER BASE PLATES, ASTM C1107 GRADE A, B, OR C f'_c = 7000 PSI REINFORCEMENT STEEL: #3 BARS & LARGER, ASTM A615 GRADE 60 f_y = 60000 PSI #3 BARS & LARGER RELIEFABLE, ASTM A706 GRADE 60 f_y = 60000 PSI WELDED WIRE REINFORCEMENT, ASTM A1064 f_y = 65000 PSI STRUCTURAL STEEL: ANGLE SHAPES & PLATES, ASTM A36 F_y = 36000 PSI WIDE FLANGE SHAPES, ASTM A992 F_y = 50000 PSI HSS TUBE SHAPES, ASTM A500 GRADE B F_y = 46000 PSI HSS ROUND SHAPE, ASTM A500 GRADE B F_y = 42000 PSI STEEL PIPE, ASTM A53 GRADE B F_y = 35000 PSI CHANNEL SHAPES, ASTM A36 F_y = 36000 PSI S, V AND HP SHAPES, ASTM A572 GRADE 50 F_y = 50000 PSI WOOD CONSTRUCTION: ULTIMATE STRESSES: RAFTERS - SPRUCE-PINE-FIR F_b = 1250 PSI E = 1,500,000 PSI JOISTS - DOUGLAS FIR-LARCH F_b = 1200 PSI E = 1,800,000 PSI STUDS, PLATES - SPRUCE-PINE-FIR F_b = 1250 PSI E = 1,800,000 PSI POSTS (5x5 AND LARGER) - DOUGLAS FIR-LARCH NO.1 F_b = 1200 PSI E = 1,800,000 PSI WOOD TRUSSES - MACHINE STRESS RATED (6 = 42 MIN) F_b = 1650 PSI E = 1,600,000 PSI LVL (MICROLAM OR EQUAL) F_b = 2600 PSI E = 1,500,000 PSI PSL (PARALLAM OR EQUAL) - BEAMS F_b = 2900 PSI E = 2,000,000 PSI PSL (PARALLAM OR EQUAL) - COLUMNS/POSTS F_b = 2400 PSI E = 1,750 PSI GLUE-LAM - WESTERN SPECIES: 24F-1.8E F_b = 2400 PSI E = 1,800,000 PSI FASTENERS: BELDS >=5/8" HIGH-STRENGTH BOLTS, ASTM A325A #1/2" DIA NON-HIGH STRENGTH BOLTS, ASTM A307 ANCHOR BOLTS, ASTM F1554 GRADE 36 F_u = 36000 PSI THREADED ROD, ASTM A193 F_u = 36000 PSI NUTS AT STRUCTURAL BOLTS, ASTM A563 GRADE C WASHERS AT STRUCTURAL BOLTS, ASTM F438 TYPE 1 WASHERS AT ANCHOR BOLTS, A563 F_u = 36000 PSI HEADED SHEAR CONNECTOR STUDS, ASTM A108 EXPANSION ANCHORS KWIK-BOLT III BY HILTI, INC. CONCRETE EPOXY ANCHORS HIT HY-200 BY HILTI, INC. MASONRY EPOXY ANCHORS HIT HY-70 BY HILTI, INC. SCREW ANCHORS (3/16" - 1/4") KWIK-CON II BY HILTI, INC. SCREW ANCHORS (5/8" - 3/4") KR-EZ BY HILTI, INC. POWER ACTIVATED FASTENERS X-100 DS BY HILTI, INC. STEEL DECKING FASTENERS X-HSK24 BY HILTI, INC. SELF-DRILLING SCREWS TEK 9 BY ITW BUILDUP WOOD SCREWS SDS BY SIMPSON, INC.	2.1.4	BACKFILLING: BACKFILL EACH SIDE OF FOUNDATION WALLS IN EQUAL LIFTS. WHERE FINAL GRADES CREATE AN UNBALANCED CONDITION BACKFILL AS FOLLOWS: AT FOUNDATIONS WALLS STRUCTURALLY CONNECTED TO SLABS (SUCH AS DOCK WALLS), BRACE TOP OF WALL UNTIL SLAB IS IN PLACE AND CURED 7 DAYS MINIMUM. AT BASEMENT WALLS DO NOT BACKFILL UNTIL FIRST FLOOR CONSTRUCTION IS COMPLETE OR TOP OF WALLS ARE BRACED. WHERE WALLS ARE NOT STRUCTURALLY CONNECTED AT THE TOP (SUCH AS RETAINING WALLS) BRACING IS NOT REQUIRED.	3.1.10	NOT WEATHER CONCRETING: FOLLOW ACI 308 "HOT WEATHER CONCRETING" WHEN MAXIMUM DAILY TEMPERATURE EXCEEDS 85°F, OR RAPID DRYING CONDITIONS EXIST; EVAPORATION RATE > 15 LB/5F/HR PER FIGURE 2.1.5.
	DEFLECTION LIMITS MEMBERS			3.1.11	COLD WEATHER CONCRETING: FOLLOW ACI 306 "COLD WEATHER CONCRETING" WHEN FREEZING CONDITIONS OR MEAN DAILY TEMPERATURE FALLS BELOW 40°F.
	ROOF MEMBERS SUPPORTING GYPSUM BOARD CEILING SUPPORTING FLEXIBLE CEILING NOT SUPPORTING CEILING SUPPORTING RIGID MATERIAL (BRICK, MASONRY, ETC.)			3.1.12	SLABS: MAY BE POURING AS A CONTINUOUS CONCRETE POUR WITH SAW CUT CONTROL JOINTS IN BOTH DIRECTIONS. SAW CUTS TO BE MADE WITHIN 8 HOURS OF POUR AND SPACED AS INDICATED IN THE DRAWINGS.
	FLOOR MEMBERS LINTELS/HEADER/BEAM MEMBERS SUPPORTING FLEXIBLE MATERIALS SUPPORTING RIGID MATERIAL (BRICK, MASONRY, ETC.) SUPPORTING CURTAIN WALLS			3.1.13	WALLS: MAXIMUM POUR LENGTH 100 FT BETWEEN FORMED CONSTRUCTION JOINTS. FOR WALLS EXPOSED TO VIEW PROVIDE IMMEDIATELY CONTROL JOINTS NO GREATER THAN 30 FT ON CENTER. JOINTS SHOULD ALIGN WITH BUILDING CORNERS AND JOINTS WHEN PRESENT AND COORDINATED WITH ARCHITECTURAL DRAWINGS.
	EXTERIOR MEMBERS SUPPORTING FLEXIBLE MATERIALS SUPPORTING RIGID MATERIAL (BRICK, MASONRY, ETC.) SUPPORTING METAL WALL PANEL CURTAIN WALL SPANS 13'-0" OR LESS CURTAIN WALL SPANS GREATER THAN 13'-0"			3.1.14	OPENINGS: CONTRACTOR TO PROVIDE AND COORDINATE WITH ALL OTHER TRADES FOR SIZE AND LOCATIONS OF ANY AND ALL OPENINGS, SLEEVES, ETC. OCCURRING IN WALLS, FOOTINGS, AND FLOORS. SLEEVE LAYOUTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO CONSTRUCTION.
				3.1.15	BOND BREAKER: PROVIDE BOND BREAKER MATERIAL WHERE SLABS ADJUT WALLS, COLUMNS AND OTHER VERTICAL SURFACES.



BA

BLAKEMORE

ARCHITECTS

400 N. First Street Rockford, IL 61107

Telephone: 815-227-0023

Email: Brian@blakemore-architects.com

Web: www.blakemore-architects.com

BA

AMBROSE

ENGINEERING

PHONE: 262-377-7602

AE PROJECT# 020-224

FIRM REGISTRATION # 184.005219-0003

New Utility Building

for

Rock River

Water

Reclamation

District

3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF MCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-3-2020	Issued for Construction

Scale

Sheet Title

Ref. North

GENERAL NOTES

Ref. North

PROFESSIONAL DESIGN FIRM REGISTRATION #

184-003342

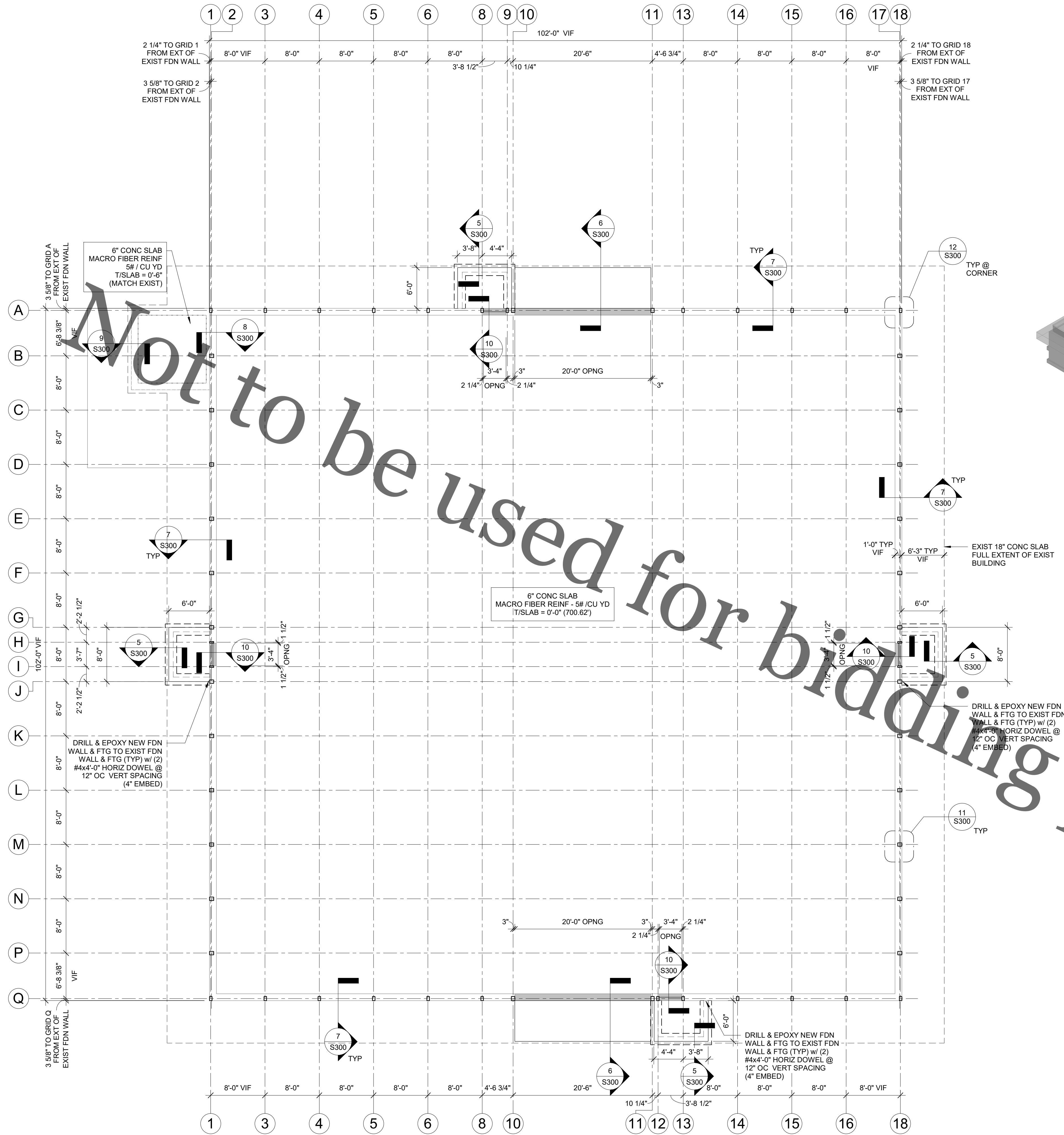
S001

12" = 1'-0"

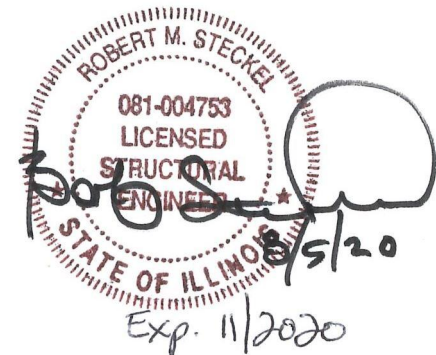
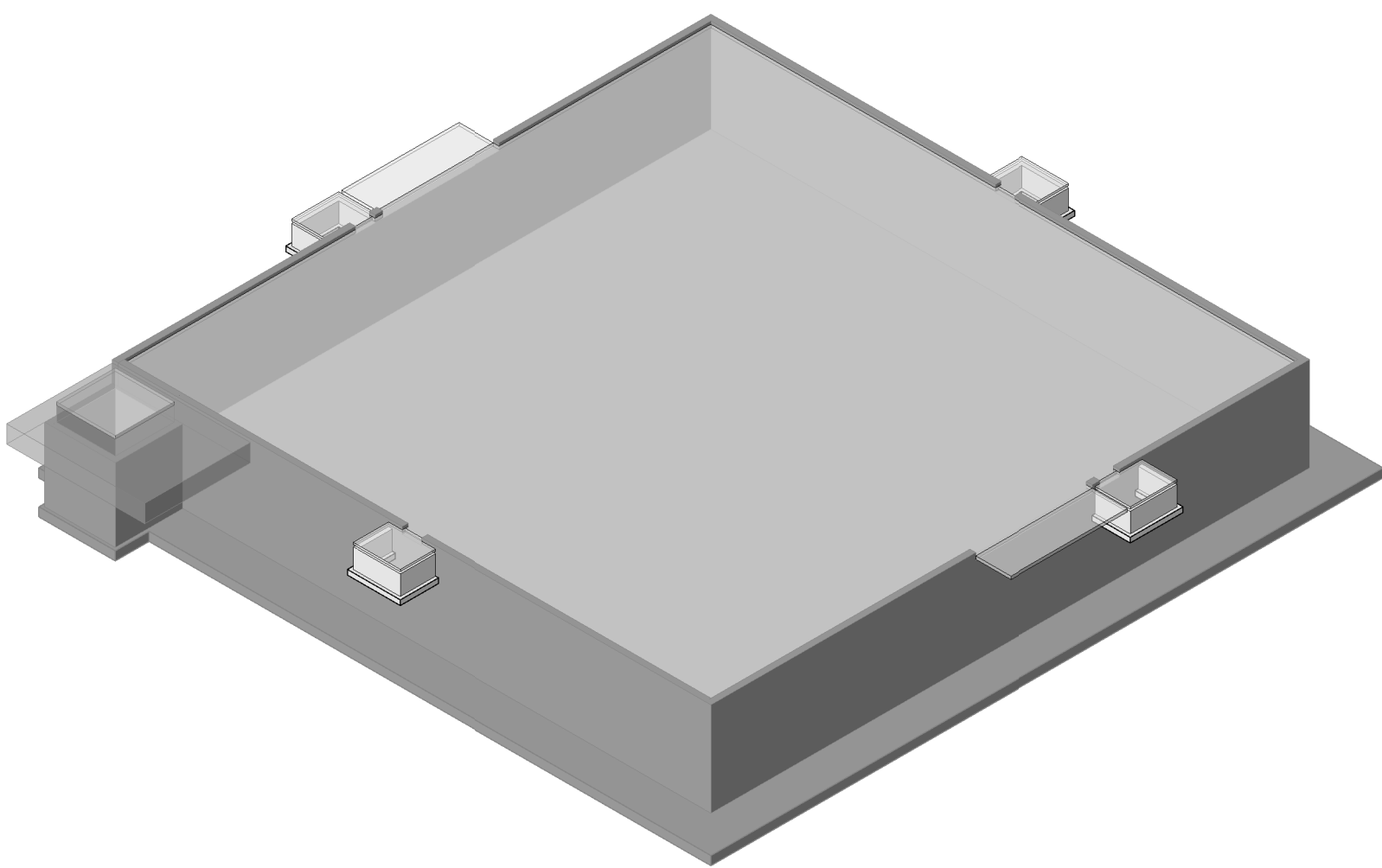
20-18

BA Project No.

C COPYRIGHT Blakemore Architects 2020



- FOUNDATION PLAN NOTES:**
1. SEE SHEET S001 FOR GENERAL NOTES.
 2. FOR FOUNDATION WALL CONSTRUCTION JOINTS AND TYPICAL REINFORCING DETAILS, SEE SHEET S300.
 3. TOP OF EXIST FOUNDATION SLAB = -15'-4" VIF.
 4. TOP OF NEW EXTERIOR FOOTING ELEVATION = -4'-0" UNO.
 5. TOP OF EXIST FOUNDATION WALL ELEVATION = 0'-6" UNO.
 6. VERIFY ALL DOOR OPENING SIZES AND LOCATIONS IN WALLS W/ ARCHITECTURAL DRAWINGS.



BLAKEMORE
ARCHITECTS
400 N. First Street Rockford, IL 61107
Telephone: 815-227-0023
Email: Brian@blakemore-architects.com
Web: www.blakemore-architects.com

AMBROSE
ENGINEERING
PHONE: 262-377-7602
AE PROJECT# 020-224
FIRM REGISTRATION # 184.005219-0003

New Utility Building

for



3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF McCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-3-2020	Issued for Construction

C COPYRIGHT Blakemore Architects 2020

BA Project No. 20-18

Scale

As indicated

Sheet Title

FOUNDATION PLAN

Ref. North Sheet No.



S100

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342

FOUNDATION PLAN

SCALE: 1/8" = 1'-0"



- ROOF PLAN NOTES:**
1. SEE SHEET S100 FOR GENERAL NOTES.
 2. SEE ARCHITECTURAL DRAWINGS FOR TRUSS PROFILES, HEEL HEIGHTS, TRUSS BEARING ELEVATIONS AND ROOF SLOPES.
 3. DESIGN TRUSSES FOR A NET UPLIFT OF 10 PSF.
 4. MAX TRUSS BEARING ELEVATION = 16'-8"
 5. MAX BUILDING RIDGE ELEVATION = 31'-0"



BLAKEMORE

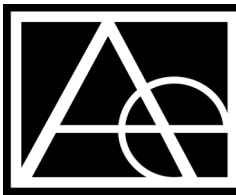
ARCHITECTS

400 N. First Street Rockford, IL 61107

Telephone: 815-227-0023

Email: Brian@blakemore-architects.com

Web: www.blakemore-architects.com



AMBROSE
ENGINEERING

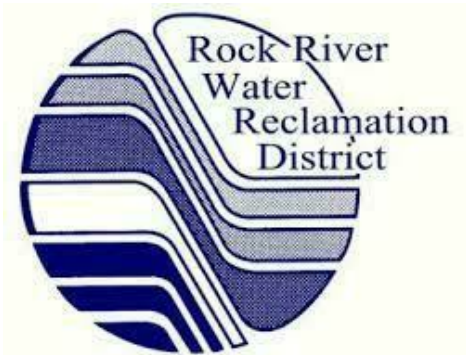
PHONE: 262-377-7602

AE PROJECT# 020-224

FIRM REGISTRATION # 184.005219-0003

New Utility Building

for



3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF MCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-3-2020	Issued for Construction

COPYRIGHT Blakemore Architects 2020

BA Project No. 20-18

Scale

As indicated

Sheet Title

ROOF FRAMING PLAN

Ref. North

Sheet No.



S101

PROFESSIONAL DESIGN FIRM REGISTRATION #

184-003342

1
S101

ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"



BLAKEMORE

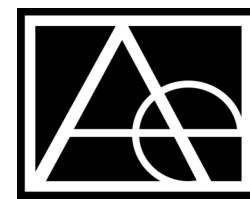
ARCHITECTS

400 N. First Street Rockford, IL 61107

Telephone: 815-227-0023

Email: Brian@blakemore-architects.com

Web: www.blakemore-architects.com



AMBROSE
ENGINEERING

PHONE: 262-377-7602

AE PROJECT# 020-224

FIRM REGISTRATION # 184.005219-0003

New Utility Building

for



3501 Kishwaukee Street
Rockford, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF McCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1.	06-26-2020	Initial Layout
2.	07-7-2020	Review Set
3.	07-16-2020	Review Set
4.	08-3-2020	Issued for Construction

BA Project No. 20-18

Scale As indicated

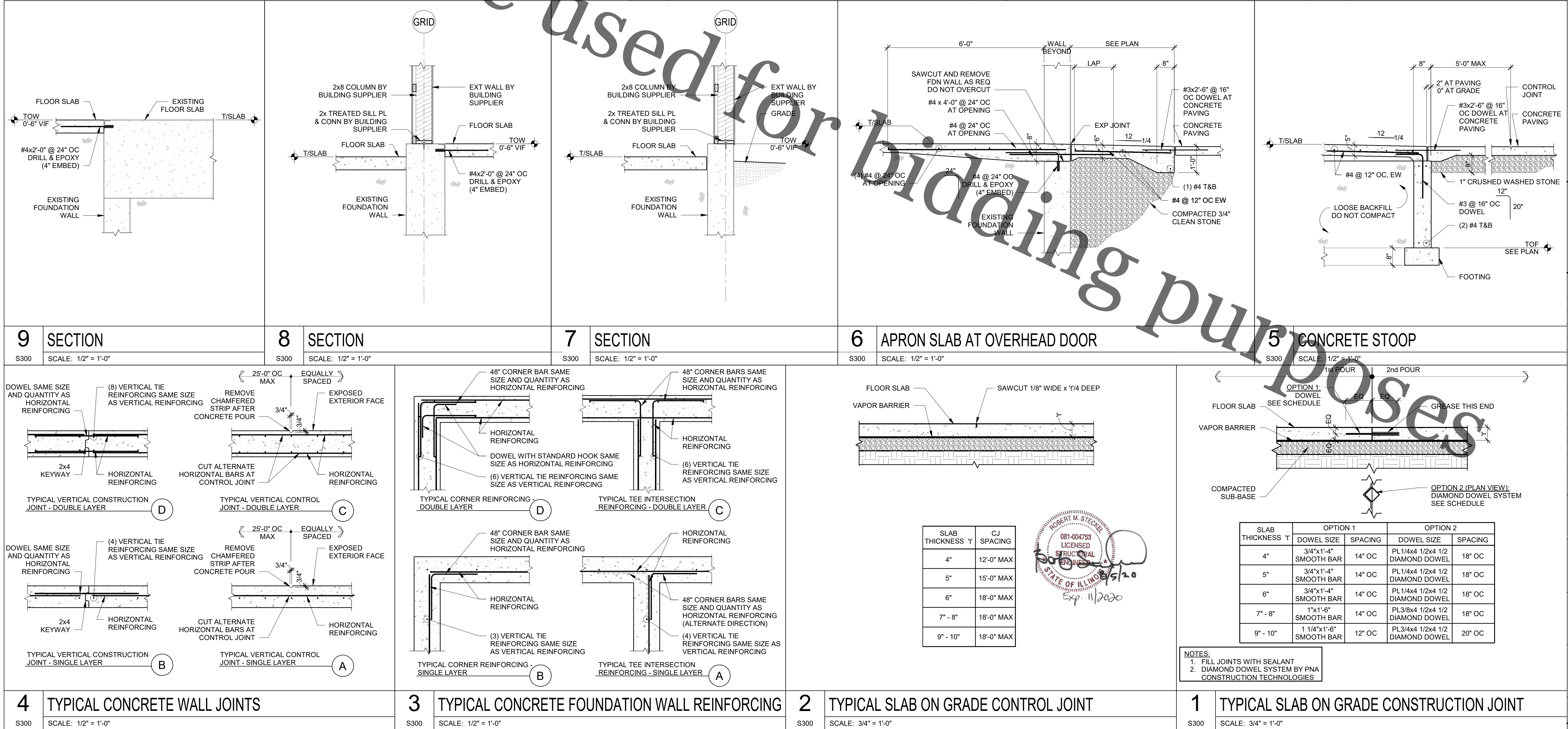
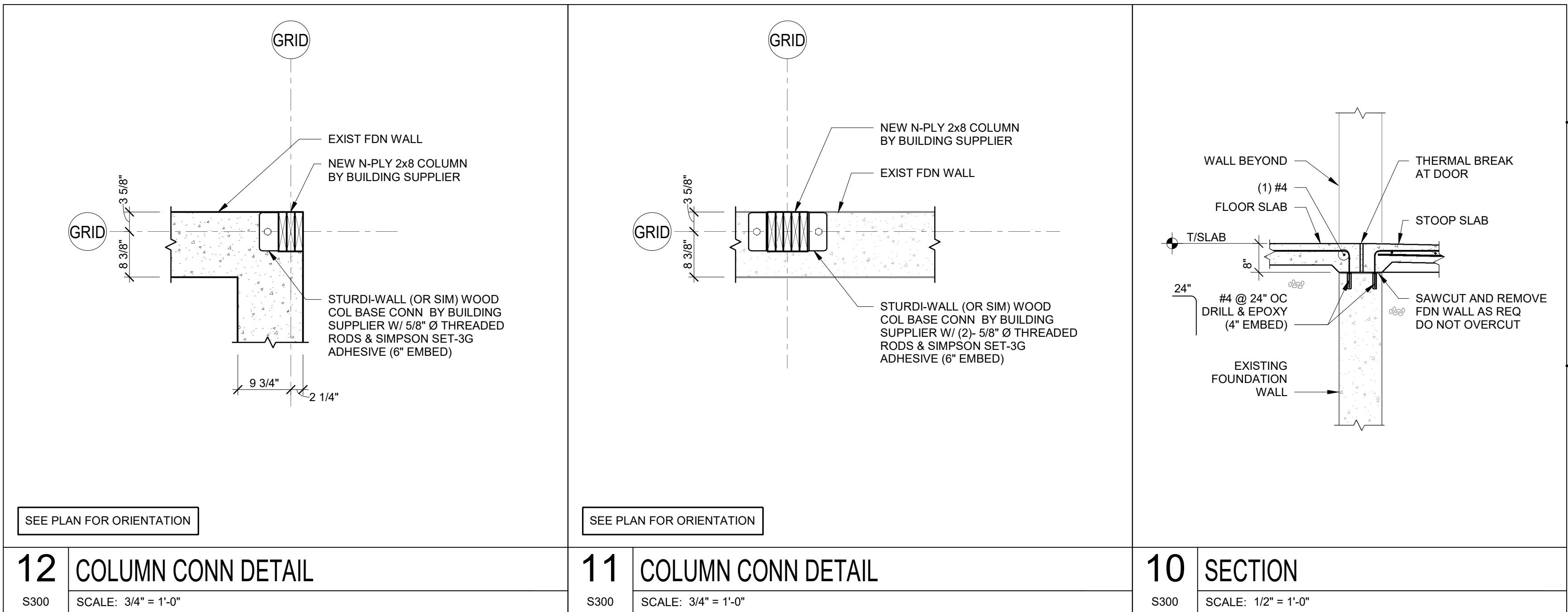
Sheet Title

SECTIONS & DETAILS

Ref. North Sheet No.

S300

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342



ALT. ENTRANCE FROM BROOKE RD.

KISHWAUKEE ST

RRWRD TREATMENT PLANT MAIN ENTRANCE
3333 KISHWAUKEE ST.

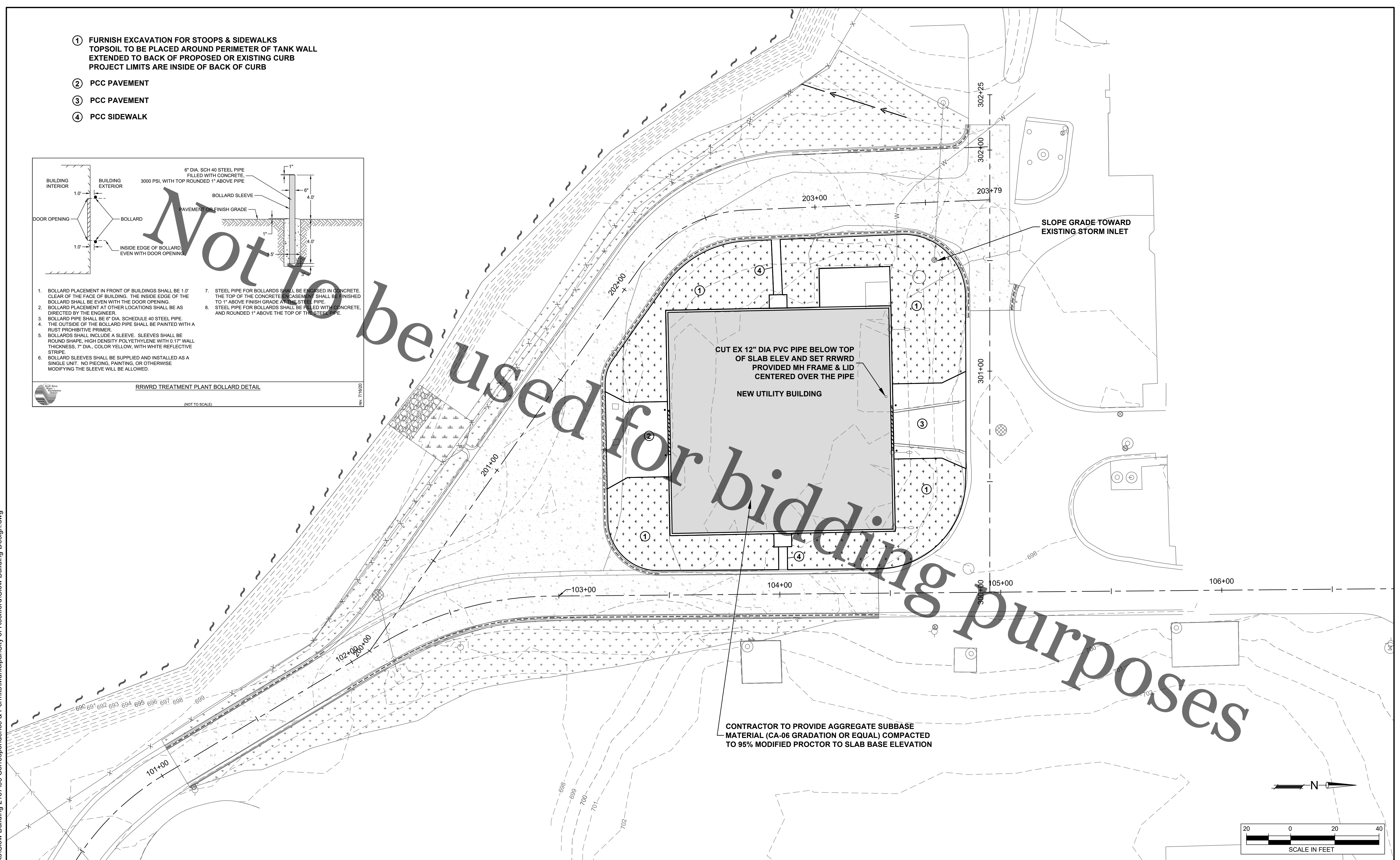
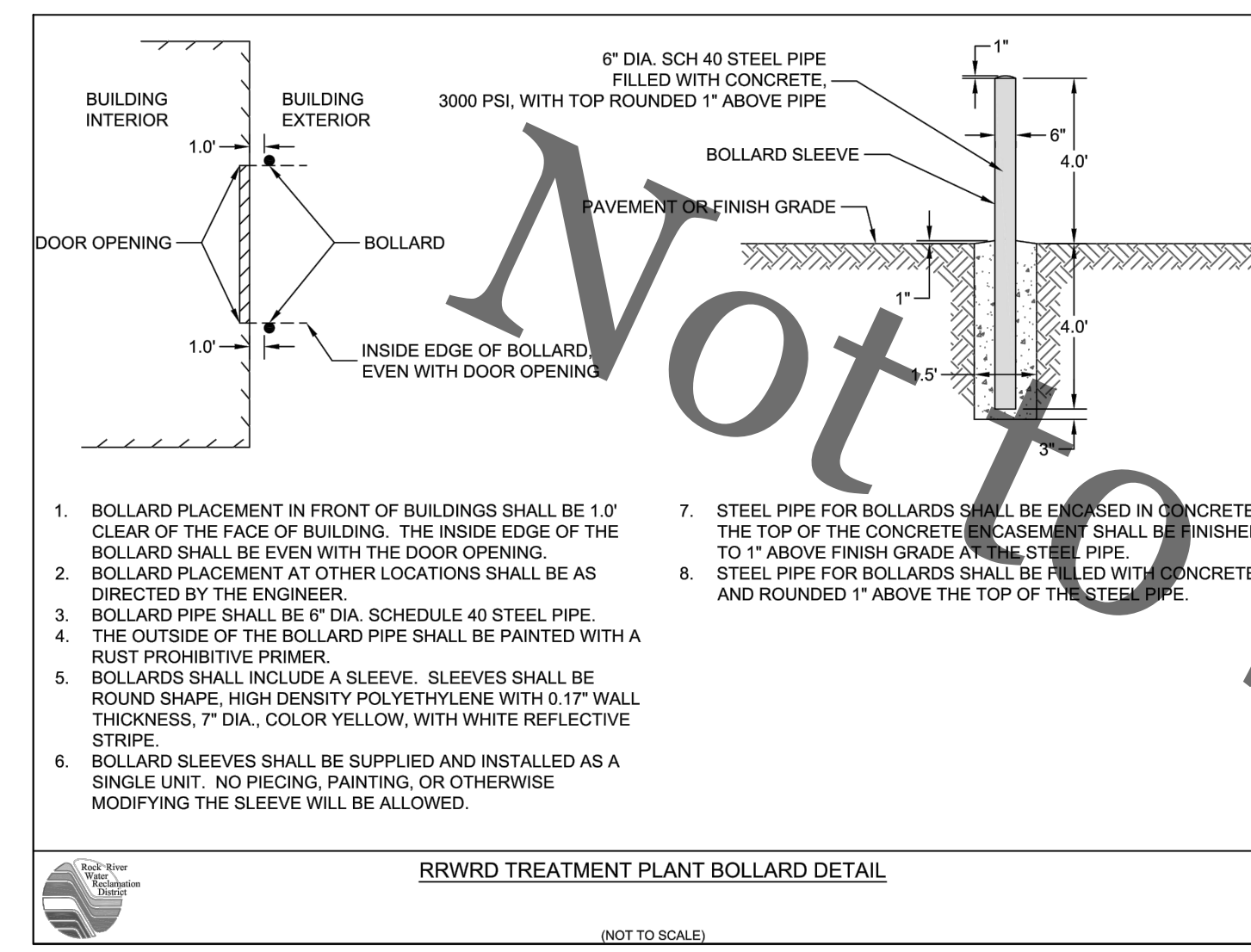
PROJECT SITE


CONTRACTOR STAGING AREA

CONTRACTOR STAGING AREA

SANDY HOLLOW RD

- ① FURNISH EXCAVATION FOR STOOPS & SIDEWALKS
TOPSOIL TO BE PLACED AROUND PERIMETER OF TANK WALL
EXTENDED TO BACK OF PROPOSED OR EXISTING CURB
PROJECT LIMITS ARE INSIDE OF BACK OF CURB
- ② PCC PAVEMENT
- ③ PCC PAVEMENT
- ④ PCC SIDEWALK



 Rock River Water Reclamation District 3501 KISHWAUKEE STREET ROCKFORD, ILLINOIS 61109 (815) 387-7660	No.	DATE	REVISION	INT.	NEW UTILITY BUILDING	SITE PLAN	Sheet No. C-002	