

FOUR RIVERS SANITATION AUTHORITY

COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS

CAPITAL PROJECT #2206

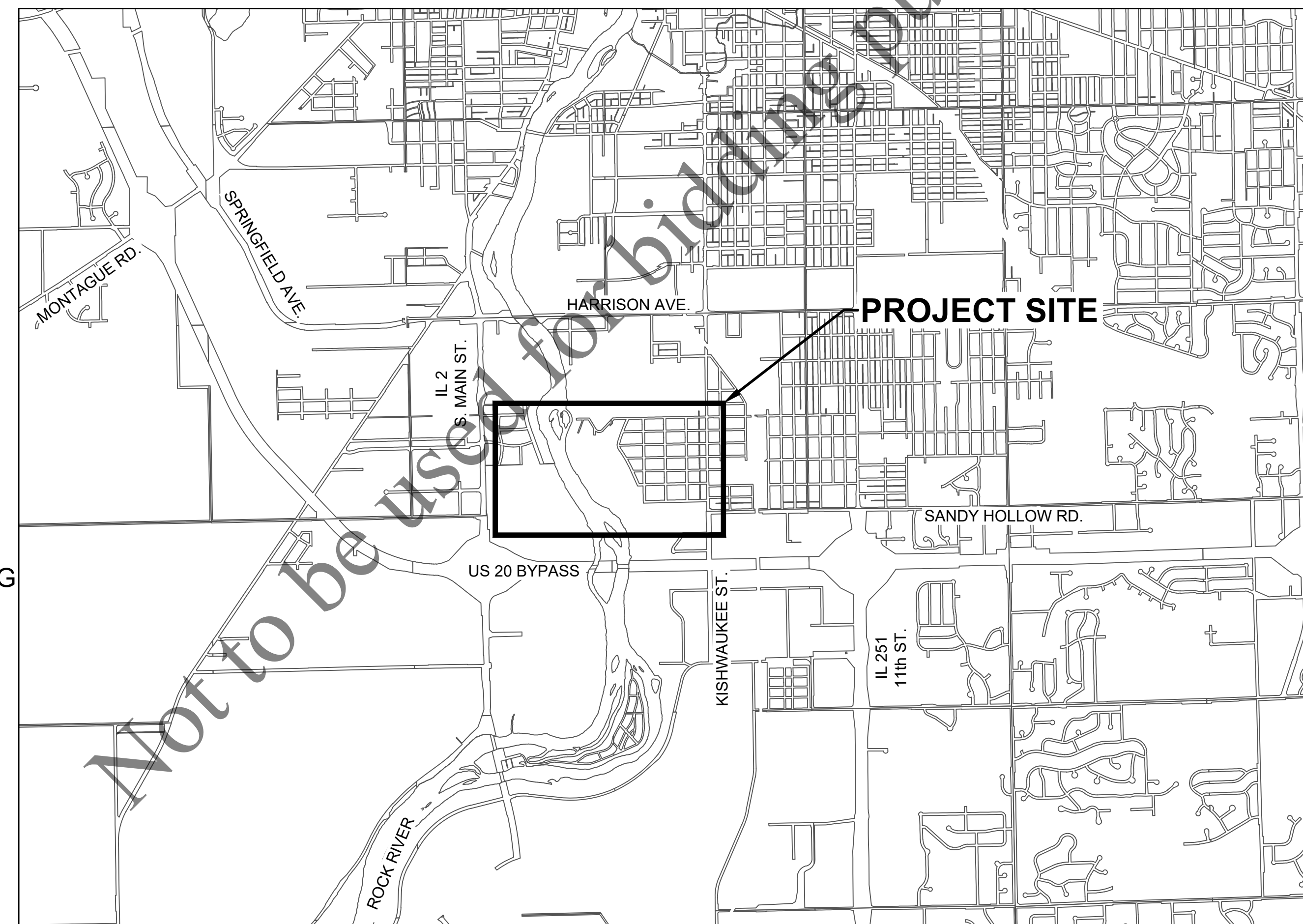
2022

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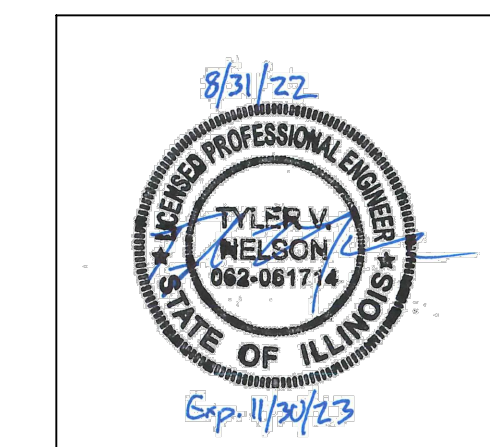
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WINNEBAGO COUNTY, ILLINOIS

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file: I:\District Projects\Collection Systems Administration Building Site Improvements 2206\01 Design\Drawings (Working Folder)\Re-Bid CS Admin Bldg Site Imp-Standard Sheets.dwg

LEGEND		
EXISTING	PROPOSED	
		RIGHT OF WAY LINE
		PROPERTY LINE
		BUILDING
		WATER EDGE
		EASEMENT - PERMANENT SANITARY
		EASEMENT - TEMPORARY CONSTRUCTION
		VEGETATION / TREE LINE
		TREE DRIPLINE
		CONTOUR - MAJOR
		CONTOUR - MINOR
		FENCE
		FENCE - TEMPORARY CONSTRUCTION
		FENCE - SILT (PERIMETER EROSION BARRIER)
		ROADWAY CENTERLINE
		EDGE OF PAVEMENT
		CURB & GUTTER
		GUARD RAIL
		RAILROAD TRACKS
		CABLE - OVERHEAD
		CABLE - UNDERGROUND
		ELECTRIC - OVERHEAD
		ELECTRIC - UNDERGROUND
		FIBER OPTIC
		GAS LINE
		TELEPHONE - OVERHEAD
		TELEPHONE - UNDERGROUND
		PEDESTALS (CATV, ELEC, TELE), GAS METER, ELEC METER
		ELECTRIC MANHOLE, HANDHOLE
		SOIL BORING
		BENCHMARK & CONTROL POINT
		MAILBOX
		UTILITY POLE W/ GUY WIRE & MAST ARM LIGHT POLE
		TREE (DECIDUOUS & CONIFEROUS)
		BUSH & SHRUB
		GROUND / LANDSCAPE LIGHT
		SPOT ELEVATION

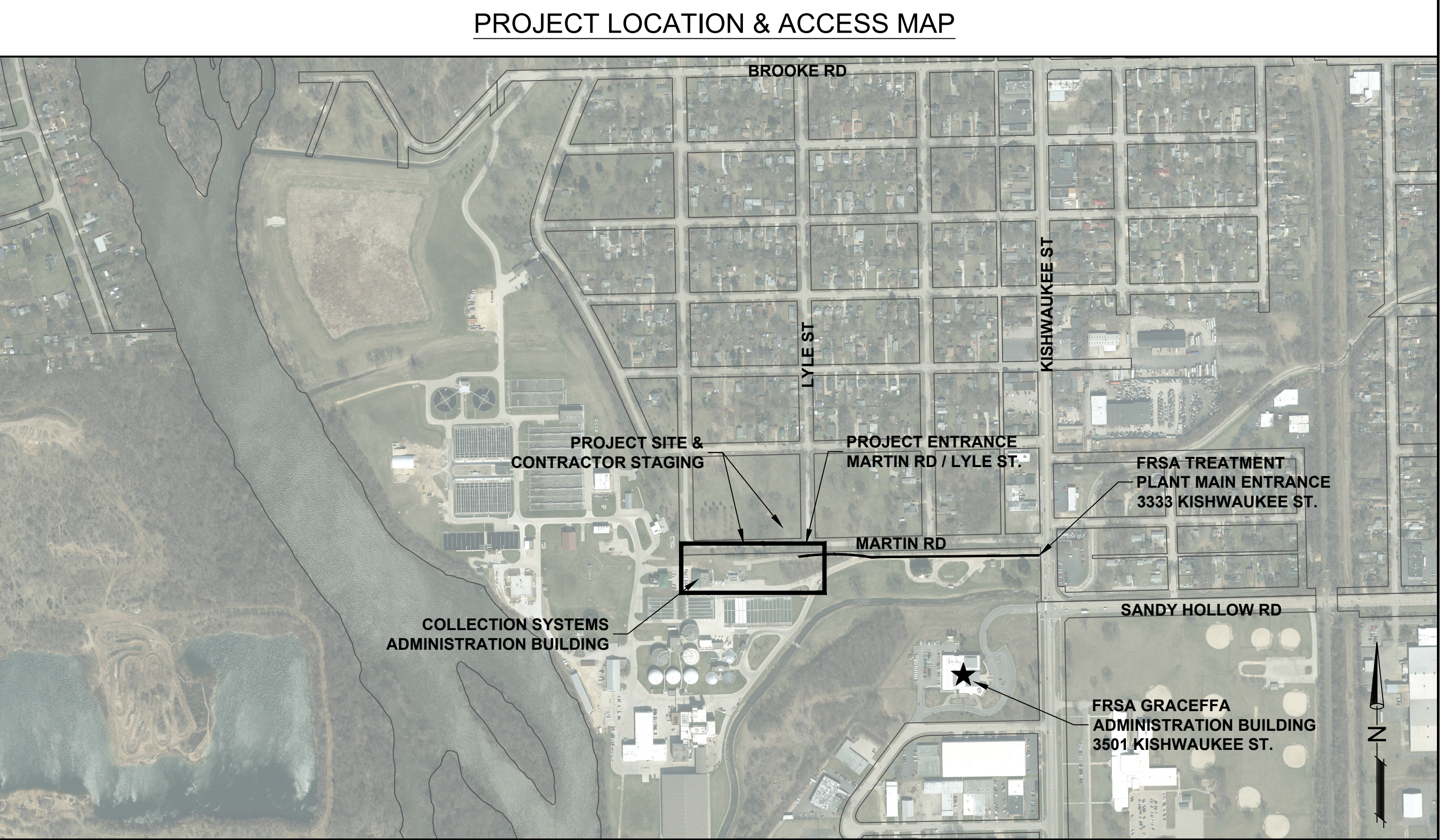
LEGEND		
EXISTING	PROPOSED	
		SANITARY MANHOLE & SANITARY SEWER
		SANITARY SEWER SERVICE & CLEANOUT
		SANITARY FORCEMAIN
		TREATMENT PLANT PROCESS PIPING
		STORM SEWER
		STORM MANHOLE, CATCH BASIN, CURB & GUTTER INLET, CURB INLET SPECIAL
		DRAINAGE CULVERT, WITH END SECTION
		WATER MAIN
		WATER SERVICE & WATER SERVICE VALVE
		WATER MAIN VALVE
		WATER MAIN VALVE WITH BOX
		WATER MAIN VALVE WITH VAULT
		WATER MAIN REDUCER
		FIRE HYDRANT
		YARD HYDRANT
		WATER WELL
		SPRINKLER HEAD & SPRINKLER VALVE
		EXISTING SURFACE TYPE (HOT-MIX ASPHALT, AGGREGATE CONCRETE, TURF)
		DITCH CHECK
		INLET OR PIPE PROTECTION

ABBREVIATIONS	
ABD = ABANDON(ED)	LS = LUMP SUM
CMP = CORRUGATED METAL PIPE	MH = MANHOLE
CO = CLEAN OUT	PVMNT = PAVEMENT
CTRL = CONTROL	PRC = PRECAST REINFORCED CONCRETE
CY = CUBIC YARD(S)	PR = PROPOSED
DI = DUCTILE IRON	RCP = REINFORCED CONCRETE PIPE
EA = EACH	REM = REMOVE(D)
EL = ELEVATION	REPL = REPLACE(D)
EROS = EROSION	R/R = REMOVE & REPLACE
EX = EXISTING	SAN = SANITARY
FES = FLARED END SECTION	SVC = SERVICE
FM = FORCE MAIN	SY = SQUARE YARD(S)
FRSA = FOUR RIVERS SANITATION AUTHORITY	TY = TYPE
FT = FEET	UNK = UNKNOWN
INV = INVERT	VCP = VITRIFIED CLAY PIPE
LF = LINEAR FEET	WM = WATER MAIN
LINCIPP = LINED WITH CURED IN PLACE PIPE	

- ### GENERAL NOTES
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE EXECUTION OF WORK TO THE LINES AND GRADES SHOWN ON THE PLANS. CONSTRUCTION SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR APPROVAL FROM THE FOUR RIVERS SANITATION AUTHORITY (FRSA).
 - THE PROJECT MANAGER ASSIGNED TO THIS PROJECT IS TYLER NELSON, (815-387-7651).
 - FOR UTILITY LOCATES WITHIN PLANT BOUNDARIES, THE CONTRACTOR SHALL CONTACT THE ASSISTANT DIRECTOR OF PLANT OPERATIONS, MICHAEL CHRISTENSEN AT 815-262-5858, 48 HOURS, MINIMUM, PRIOR TO START OF CONSTRUCTION, TO ARRANGE FOR THE LOCATION OF PLANT INFRASTRUCTURE.
 - FOR UTILITY LOCATES OUTSIDE OF PLANT BOUNDARIES, THE CONTRACTOR SHALL IDENTIFY ALL UTILITY LOCATIONS IN THE FIELD BY CONTACTING J.U.L.I.E. AT 811 OR 1-800-892-0123 AND ALL UTILITIES NOT ON THE J.U.L.I.E. NETWORK 48 HOURS, MINIMUM, PRIOR TO START OF CONSTRUCTION.
 - ALL UTILITY OUTAGES SHALL BE COORDINATED WITH THE PROJECT MANAGER AND THE PLANT OPERATIONS MAINTENANCE DIVISION MANAGER. PROVIDE A MINIMUM OF 72 HOURS ADVANCED NOTICE PRIOR TO ANY SERVICE INTERRUPTION. DURING THE ENTIRE PERIOD OF THE CONTRACT, PROVIDE RESTORATION OF ANY UNSCHEDULED SERVICE INTERRUPTION WITHIN 30 MINUTES DURING NORMAL WORKING HOURS, OR WITHIN 2 HOURS OUTSIDE OF NORMAL WORKING HOURS. THE FRSA RESERVES THE RIGHT TO REQUEST ADDITIONAL ADVANCED NOTICE AND/OR COORDINATION MEETINGS FOR MAJOR OUTAGES.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND SHALL IMMEDIATELY NOTIFY THE PROJECT MANAGER OF ANY DISCREPANCIES WITH THE PROJECT PLANS OR SPECIFICATIONS.
 - ALL WORK ON FRSA PLANT GROUNDS MUST BE PERFORMED DURING NORMAL CONTRACTOR WORKING HOURS, FROM 6:00 AM TO 5:00 PM, M-F, EXCLUDING WEEKENDS AND FRSA-OBSERVED HOLIDAYS. THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER 24 HOURS, MINIMUM, PRIOR TO PERFORMING WORK OUTSIDE OF THESE HOURS AND SHALL PROVIDE A LIST OF ALL EMPLOYEES, INCLUDING PRIMARY CONTACT(S), WHO WILL BE PRESENT FOR THE OFF-HOUR WORK.
 - THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE IEPA NPDES PERMIT AND THE ILLINOIS URBAN MANUAL FOR SOIL EROSION AND SEDIMENT CONTROL.

- ### SPECIAL CONSIDERATIONS
- THE CONTRACTOR SHALL PROVIDE TEMPORARY RESTROOM FACILITIES FOR HIS WORKFORCE FOR THE DURATION OF THIS PROJECT.
 - CONSTRUCTION STAGING SHALL BE EXCLUDED FROM THE AREA SOUTH AND WEST OF THE COLLECTIONS SYSTEMS ADMINISTRATION BUILDING DUE TO ON-GOING CONSTRUCTION ACTIVITIES IN AND AROUND THIS BUILDING. THE CONTRACTOR SHALL COORDINATE WITH THE FRSA AND OTHER CONTRACTORS ACCORDINGLY. THE FRSA OWNED PROPERTY NORTHWEST OF MARTIN RD / LYLE ST CAN BE USED FOR STAGING. THE CONTRACTOR SHALL REPAIR ALL TURF & OTHER DAMAGES AT NO ADDITIONAL COST TO THE THE FRSA.
 - ALL NEW UNDERGROUND PIPING AND DUCTBANK SHALL BE BURIED WITH LOCATING TRACER WIRE APPROXIMATELY 12 INCHES ABOVE THE TOP OF PIPE. TRACER WIRES SHALL BE TERMINATED AS SHOWN ON THE PLANS OR AS DIRECTED. TRACER WIRE AND ACCESS POINTS SHALL BE IN ACCORDANCE WITH FRSA TRACER WIRE AND ACCESS POINTS DETAIL.
 - TRACER WIRE SHALL BE COPPER-CLAD STEEL HIGH STRENGTH 12 AWG AS MFG BY COPPERHEAD INDUSTRIES AND SHALL BE COLOR CODED PER APWA UNIFORM COLOR CODE
 - ACCESS POINTS SHALL BE PROVIDED AT EACH END OF NEW PIPING, OR IN BETWEEN ENDS OF PIPING IF REQUIRED. THE MAXIMUM LINEAR DISTANCE BETWEEN ACCESS POINTS SHALL BE 800 FEET. ACCESS POINTS IN NON-PAVED AREAS SHALL BE SNAKEPIT LITE DUTY ADJUSTABLE SINGLE TERMINAL ACCESS POINTS AS MFG BY COPPERHEAD INDUSTRIES, AND SHALL BE INSTALLED FLUSH WITH FINISHED GROUND ELEVATION. ACCESS POINTS IN PAVED AREAS SHALL BE SNAKEPIT ROADWAY SINGLE TERMINAL CAST IRON LID ACCESS POINTS AS MFG BY COPPERHEAD INDUSTRIES, AND SHALL BE INSTALLED 1/4" TO 3/8" BELOW FINAL PAVEMENT ELEVATION.

- ### STANDARDS
- IDOT 606001-08 CONCRETE CURB TYPE B
 - FRSA TREATMENT PLANT SEGMENTAL CONCRETE BLOCK WALL DETAIL
 - FRSA TREATMENT PLANT CONCRETE DUCTBANK DETAIL
 - FRSA TREATMENT PLANT TRACER WIRE & ACCESS POINTS DETAIL



No.	DATE	REVISION	INT.

COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
CAPITAL PROJECT #2206

LEGEND & GENERAL NOTES

FOR-BID

Date: 8/31/2022

Sheet No. 2 of 11

CONTROL POINT TABLE				
CP#	ELEVATION	NORTHING	EASTING	DESCRIPTION
11	704.22	2025806.30	2587839.41	CP CUT X
26	711.82	2025978.06	2587261.66	CP CUT X
101	719.70	2026074.09	2587886.74	MON 1/2
107	724.77	2026063.37	2587387.00	MON 3/4

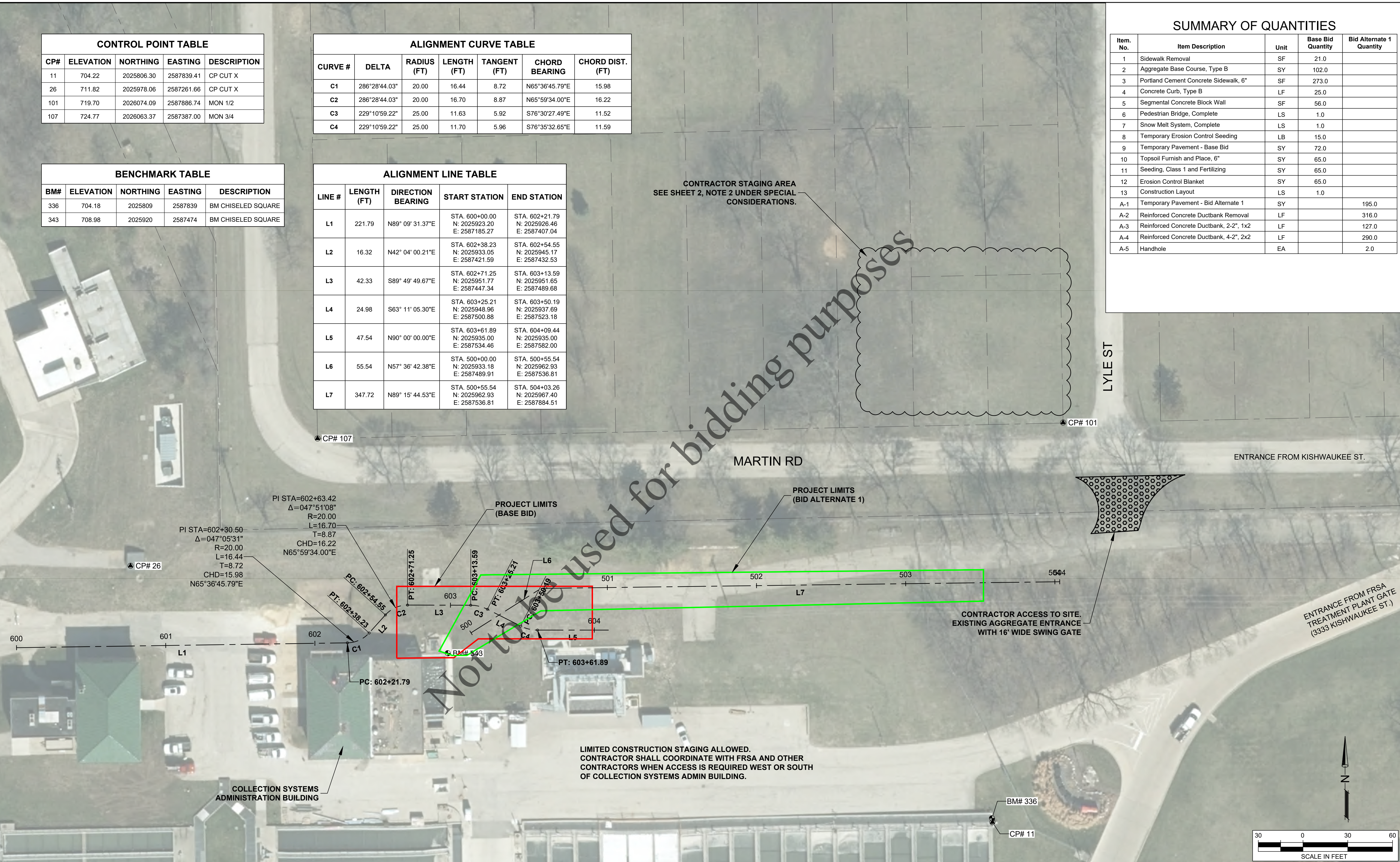
BENCHMARK TABLE				
BM#	ELEVATION	NORTHING	EASTING	DESCRIPTION
336	704.18	2025809	2587839	BM CHISELED SQUARE
343	708.98	2025920	2587474	BM CHISELED SQUARE

ALIGNMENT CURVE TABLE						
CURVE #	DELTA	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	CHORD BEARING	CHORD DIST. (FT)
C1	286°28'44.03"	20.00	16.44	8.72	N65°36'45.79"E	15.98
C2	286°28'44.03"	20.00	16.70	8.87	N65°59'34.00"E	16.22
C3	229°10'59.22"	25.00	11.63	5.92	S76°30'27.49"E	11.52
C4	229°10'59.22"	25.00	11.70	5.96	S76°35'32.65"E	11.59

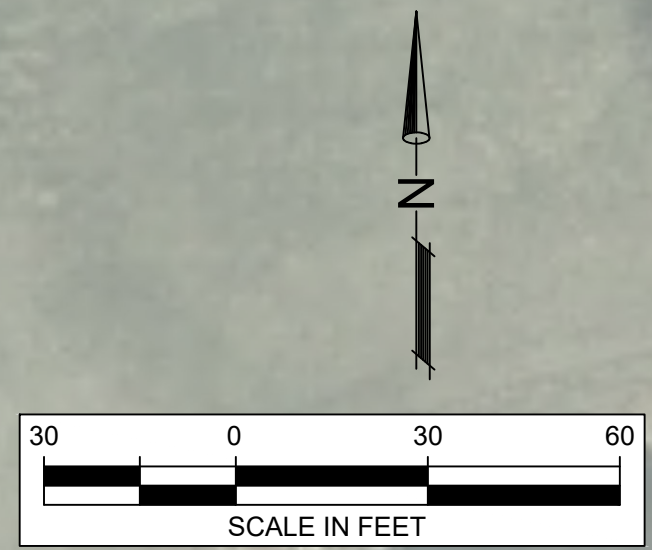
ALIGNMENT LINE TABLE				
LINE #	LENGTH (FT)	DIRECTION BEARING	START STATION	END STATION
L1	221.79	N89° 09' 31.37"E	STA. 600+00.00 N: 2025923.20 E: 2587185.27	STA. 602+21.79 N: 2025926.46 E: 2587407.04
L2	16.32	N42° 04' 00.21"E	STA. 602+38.23 N: 2025933.05 E: 2587421.59	STA. 602+54.55 N: 2025945.17 E: 2587432.53
L3	42.33	S89° 49' 49.67"E	STA. 602+71.25 N: 2025951.77 E: 2587447.34	STA. 603+13.59 N: 2025951.65 E: 2587489.68
L4	24.98	S63° 11' 05.30"E	STA. 603+25.21 N: 2025948.96 E: 2587500.88	STA. 603+50.19 N: 2025937.69 E: 2587523.18
L5	47.54	N90° 00' 00.00"E	STA. 603+61.89 N: 2025935.00 E: 2587534.46	STA. 604+09.44 N: 2025935.00 E: 2587582.00
L6	55.54	N57° 36' 42.38"E	STA. 500+00.00 N: 2025933.18 E: 2587489.91	STA. 500+55.54 N: 2025962.93 E: 2587536.81
L7	347.72	N89° 15' 44.53"E	STA. 500+55.54 N: 2025962.93 E: 2587536.81	STA. 504+03.26 N: 2025967.40 E: 2587884.51

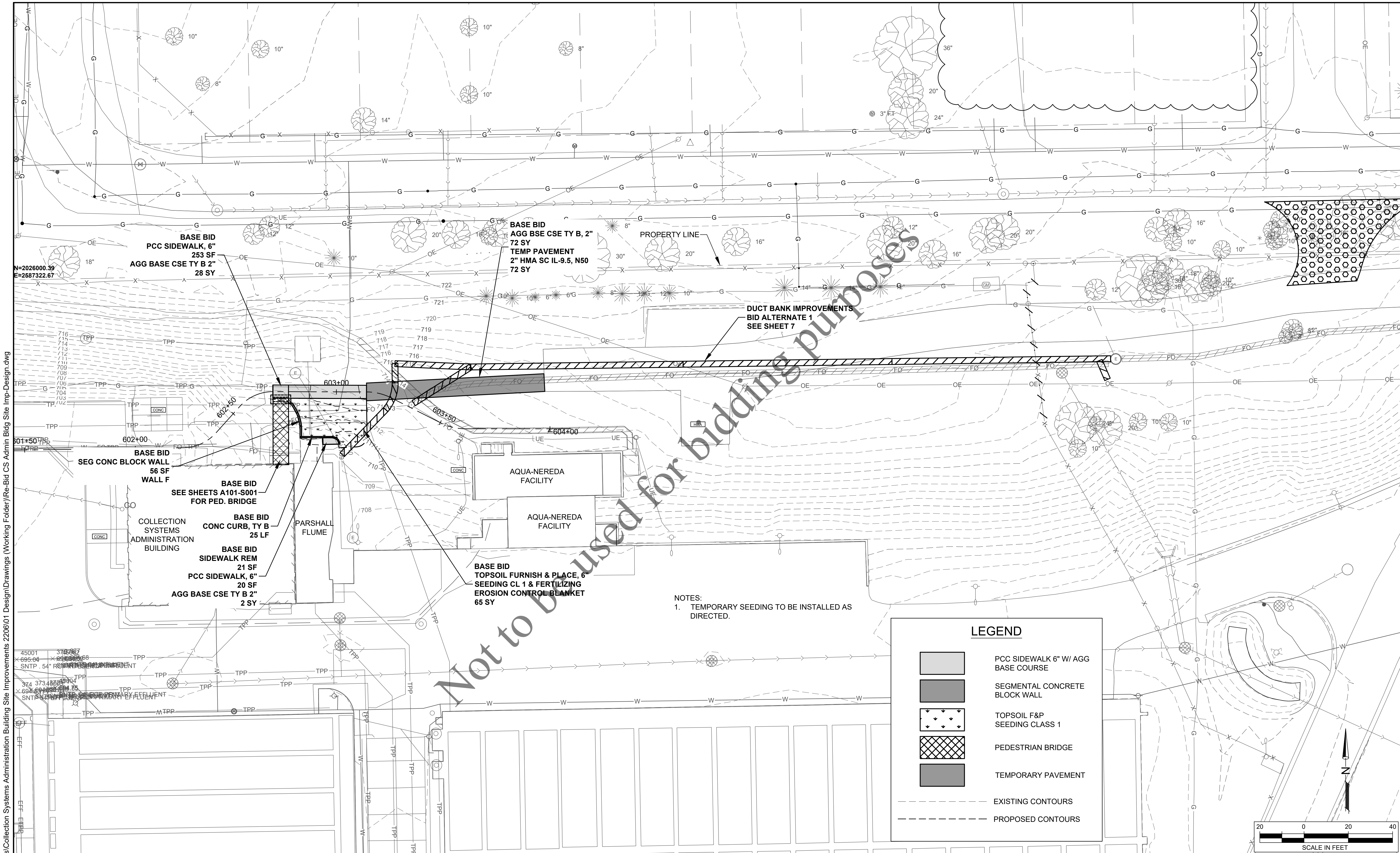
SUMMARY OF QUANTITIES				
Item No.	Item Description	Unit	Base Bid Quantity	Bid Alternate 1 Quantity
1	Sidewalk Removal	SF	21.0	
2	Aggregate Base Course, Type B	SY	102.0	
3	Portland Cement Concrete Sidewalk, 6"	SF	273.0	
4	Concrete Curb, Type B	LF	25.0	
5	Segmental Concrete Block Wall	SF	56.0	
6	Pedestrian Bridge, Complete	LS	1.0	
7	Snow Melt System, Complete	LS	1.0	
8	Temporary Erosion Control Seeding	LB	15.0	
9	Temporary Pavement - Base Bid	SY	72.0	
10	Topsoil Furnish and Place, 6"	SY	65.0	
11	Seeding, Class 1 and Fertilizing	SY	65.0	
12	Erosion Control Blanket	SY	65.0	
13	Construction Layout	LS	1.0	
A-1	Temporary Pavement - Bid Alternate 1	SY		195.0
A-2	Reinforced Concrete Ductbank Removal	LF		316.0
A-3	Reinforced Concrete Ductbank, 2-2", 1x2	LF		127.0
A-4	Reinforced Concrete Ductbank, 4-2", 2x2	LF		290.0
A-5	Handhole	EA		2.0

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LIMITED CONSTRUCTION STAGING ALLOWED. CONTRACTOR SHALL COORDINATE WITH FRSA AND OTHER CONTRACTORS WHEN ACCESS IS REQUIRED WEST OR SOUTH OF COLLECTION SYSTEMS ADMIN BUILDING.



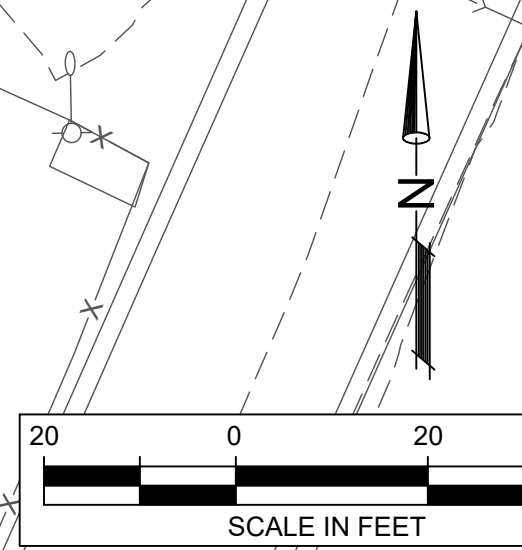


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NOTES:
1. TEMPORARY SEEDING TO BE INSTALLED AS DIRECTED.

LEGEND

- PCC SIDEWALK 6" W/ AGG BASE COURSE
- SEGMENTAL CONCRETE BLOCK WALL
- TOPSOIL F&P SEEDING CLASS 1
- PEDESTRIAN BRIDGE
- TEMPORARY PAVEMENT
- EXISTING CONTOURS
- PROPOSED CONTOURS



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COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
CAPITAL PROJECT #2206

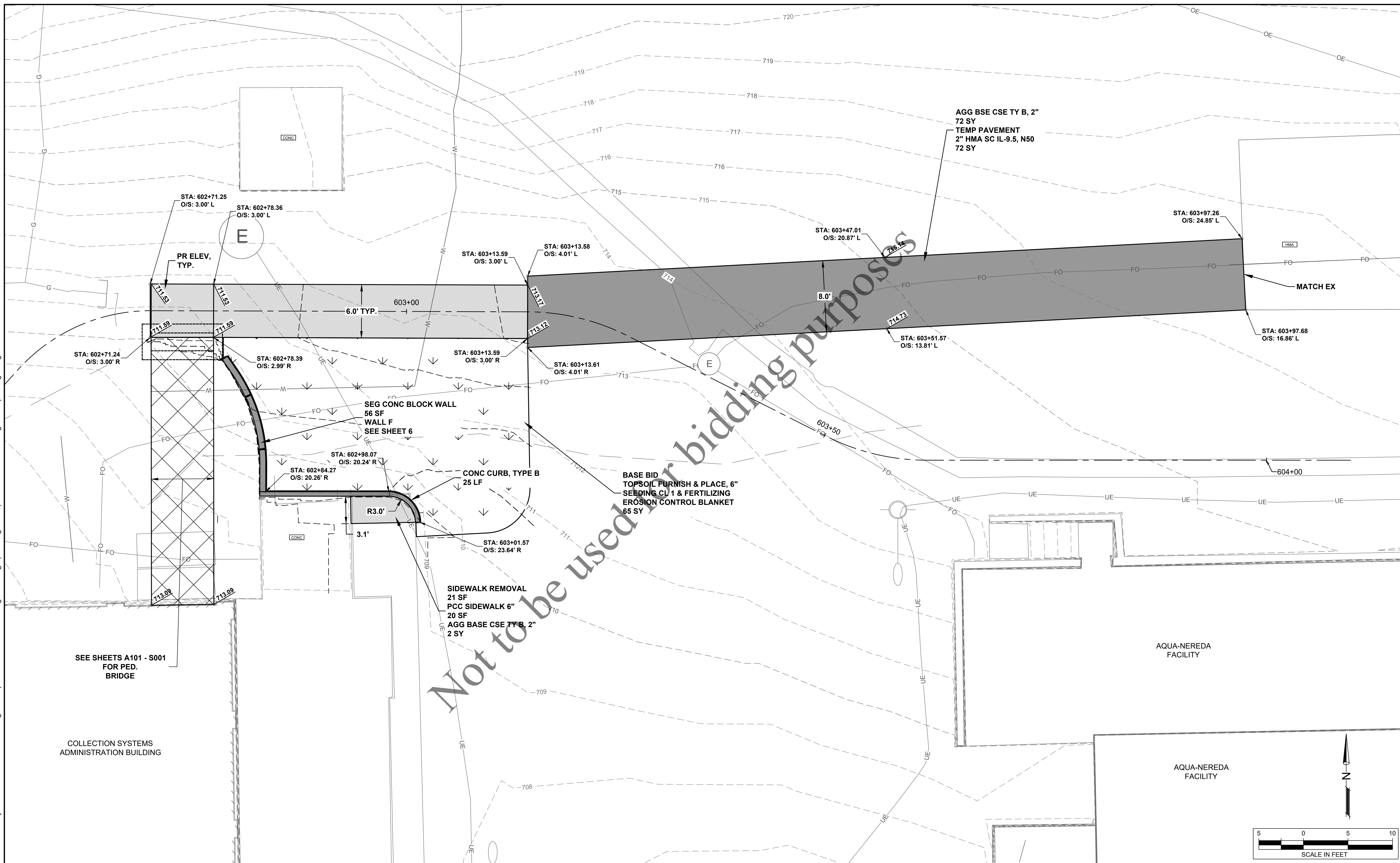
OVERALL SITE PLAN

Sheet No.
4 of 11

Date:
8/31/2022

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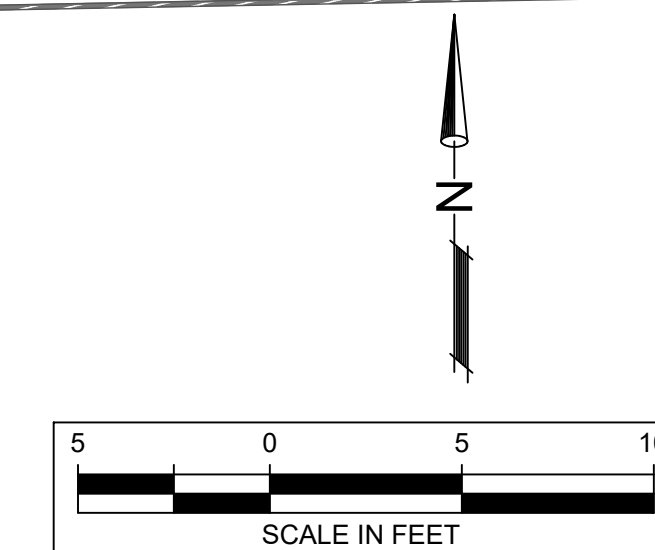
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SEE SHEETS A101 - S001
FOR PED.
BRIDGE

COLLECTION SYSTEMS
ADMINISTRATION BUILDING

AQUA-NEREDA
FACILITY

AQUA-NEREDA
FACILITY



No.	DATE	REVISION	INT.

**COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
CAPITAL PROJECT #2206**

SIDEWALK LAYOUT & ELEVATIONS (BASE BID)

Sheet No.
5 of 11

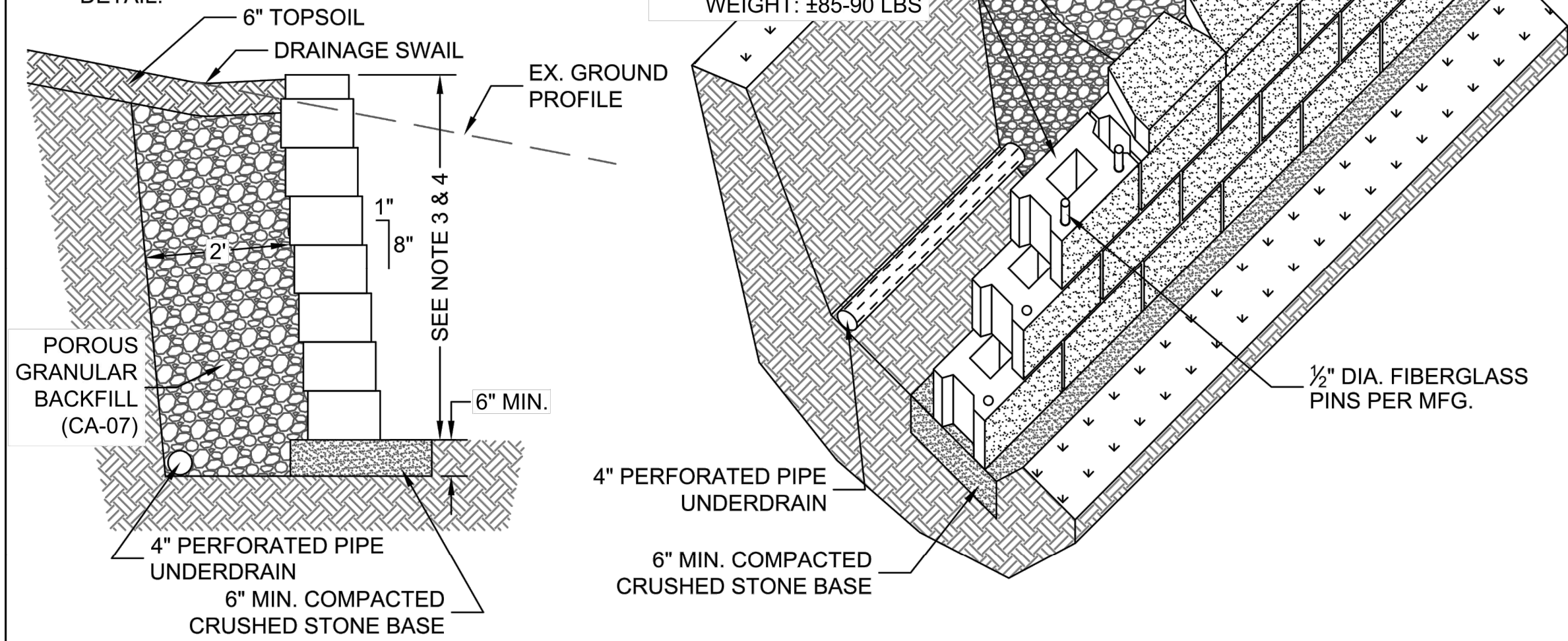
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Date:
8/31/2022



NOTES:

1. SEGMENTAL BLOCK RETAINING WALL SYSTEM SHALL BE **KEYSTONE COMPAC SERIES III STRAIGHT SPLIT (KEYSTONE GRAY)** OR APPROVED EQUAL.
2. DRAIN PIPE, GEOGRID, AND OTHER MATERIALS MAY BE REQUIRED.
3. REFER TO THE APPROVED SUBMITTAL FOR THIS PROJECT (**CONTAINING THE RETAINING WALL SYSTEM DESIGN, DRAWINGS, CALCULATIONS, AND SPECIFICATIONS**), AND THE PROJECT DETAILED SPECIFICATIONS FOR ADDITIONAL DIMENSIONS AND REQUIREMENTS.
4. THE **APPROVED DESIGN** SPECIFIC TO THIS PROJECT SHALL TAKE PRECEDENCE OVER THIS DETAIL.



CAP UNIT
WIDTH: 18"
DEPTH: 10 1/2"
HEIGHT: 4"
WEIGHT: 50 LBS
ADHERE TO TOP UNIT WITH
CONCRETE ADHESIVE.

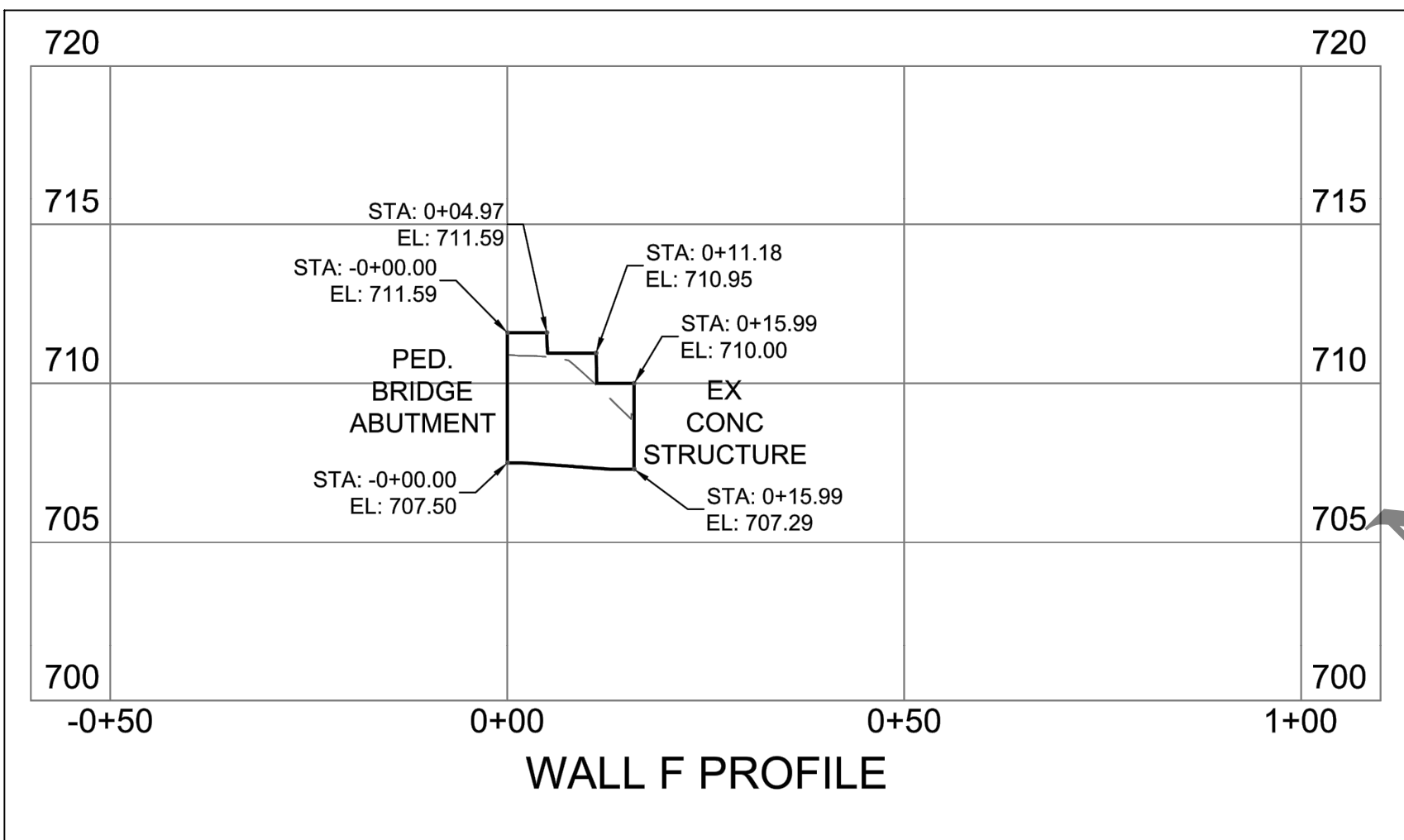
COMPAC SERIES III UNIT
WIDTH: 18"
DEPTH: 12"
HEIGHT: 8"
WEIGHT: ±85-90 LBS



**FRSA TREATMENT PLANT
SEGMENTAL CONCRETE BLOCK WALL DETAIL**

(NOT TO SCALE)

rev. 9/3/21

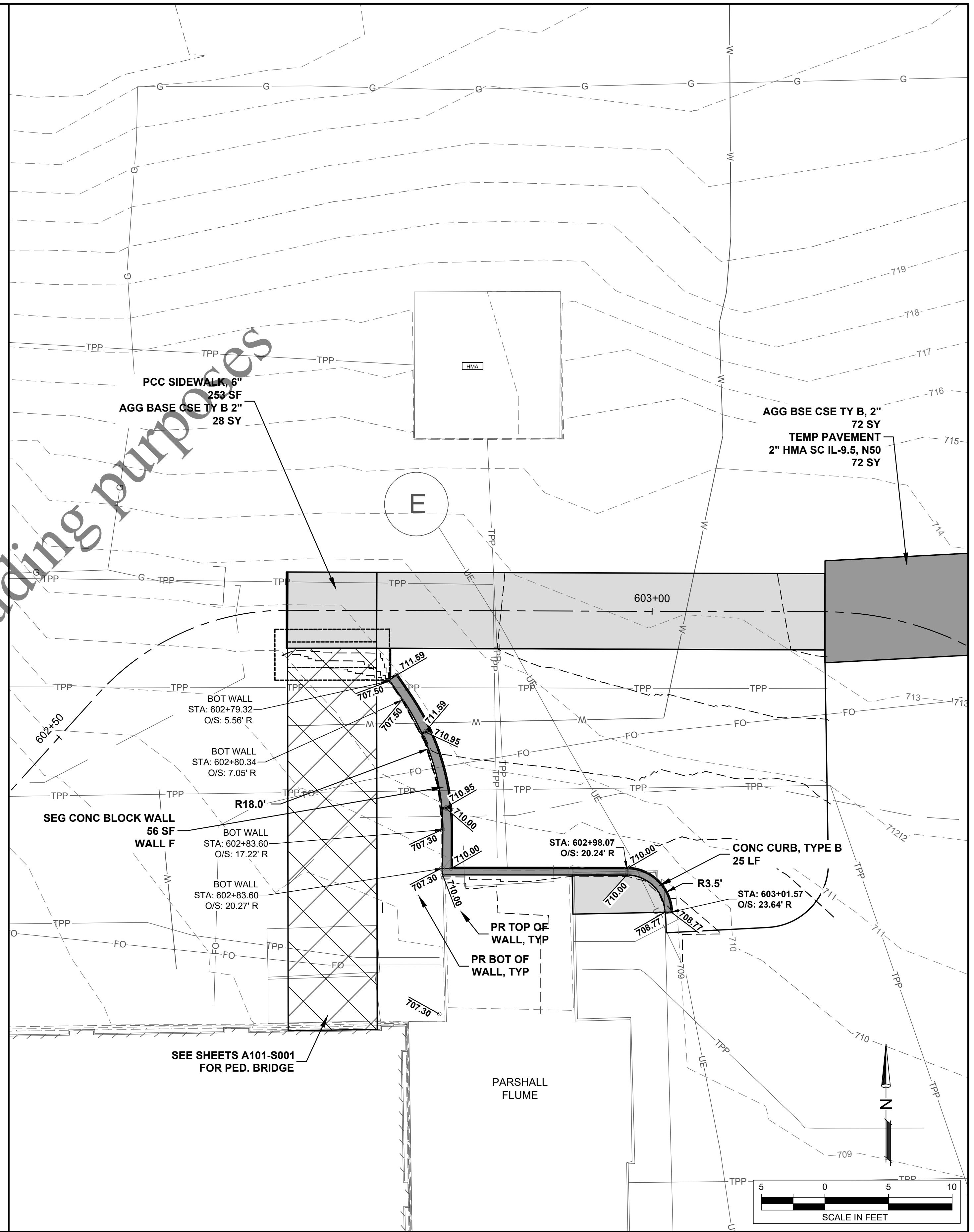


WALL F PROFILE

QUANTITIES

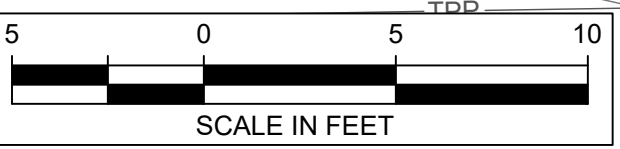
WALL	SQUARE FEET (FACE OF WALL)
F	56

- NOTES:**
1. WALL ALIGNMENTS & PROFILES ARE UNFOLDED ALONG FRONT FACE OF WALL.
 2. NOT ALL TOP OF WALL ELEVATION STEPS ARE SHOWN.
 3. BLOCK WALL ELEVATIONS ARE APPROXIMATE AND MAY VARY DEPENDING ON MANUFACTURER'S RECOMMENDATIONS.
 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS & DESIGN COMPUTATIONS PREPARED & SEALED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER TO FRSA FOR REVIEW.



SEE SHEETS A101-S001
FOR PED. BRIDGE

PARSHALL
FLUME



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**COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
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RETAINING WALL LAYOUT (BASE BID)

FOR-BID

Sheet No.
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Date:
8/31/2022



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Collections Systems
Administration
Building Site
Improvements Project

Capital Project No. 2306

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.	06-16-2021	Initial Layout
2.	07-16-2021	Progress Review
3.	08-10-2021	Issued for Bid
4.	06-15-2022	Revision

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BA Project No. 2021-17

Scale

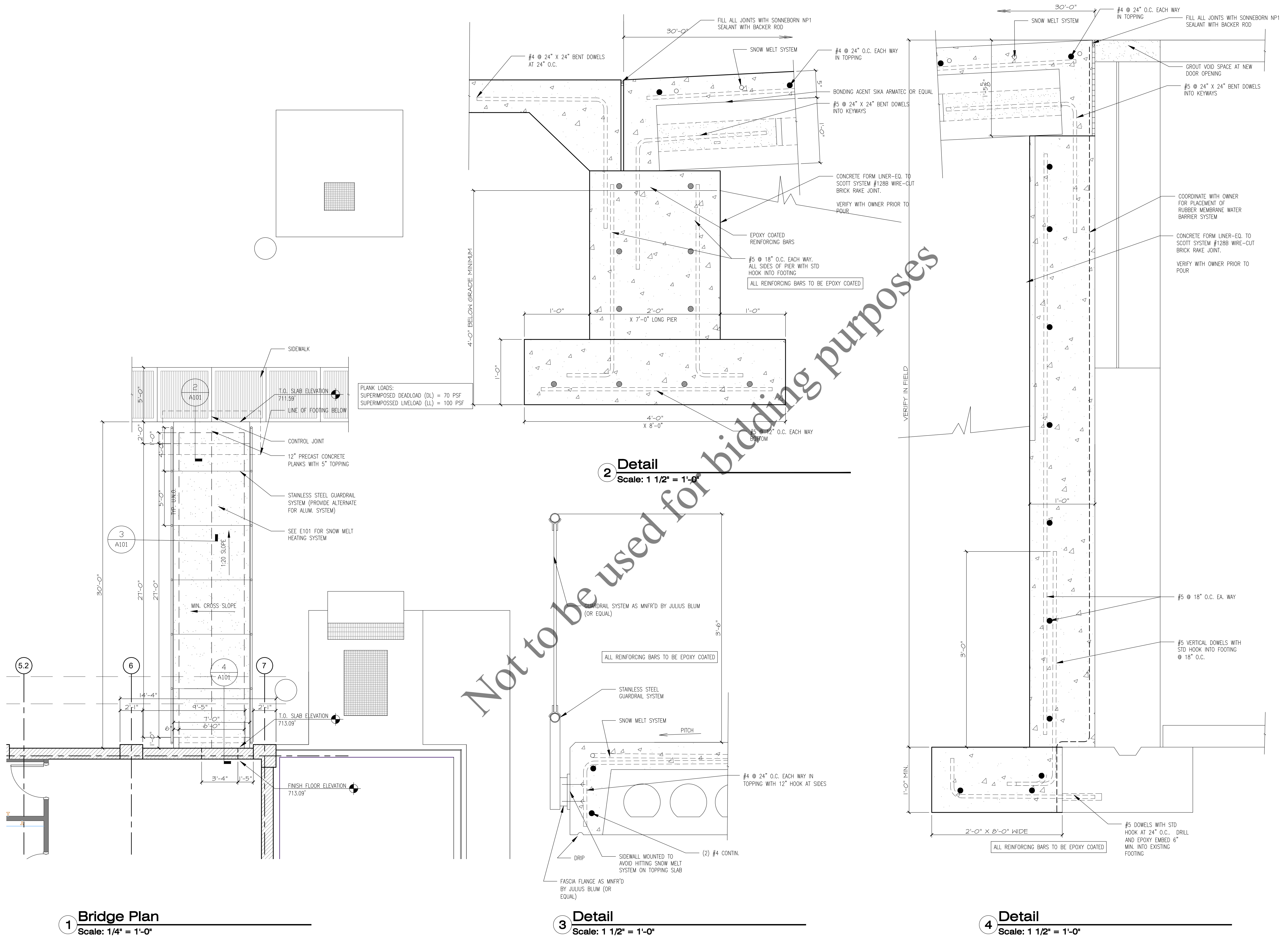
AS NOTED

Sheet Title
**BRIDGE PLAN AND
DETAILS**

Ref. North Sheet No.



PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342



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1 Bridge Plan
Scale: 1/4" = 1'-0"

2 Detail
Scale: 1 1/2" = 1'-0"

3 Detail
Scale: 1 1/2" = 1'-0"

4 Detail
Scale: 1 1/2" = 1'-0"



BLAKEMORE

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Collections Systems
Administration
Building Site
Improvements Project

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Scale

AS NOTED

Sheet Title

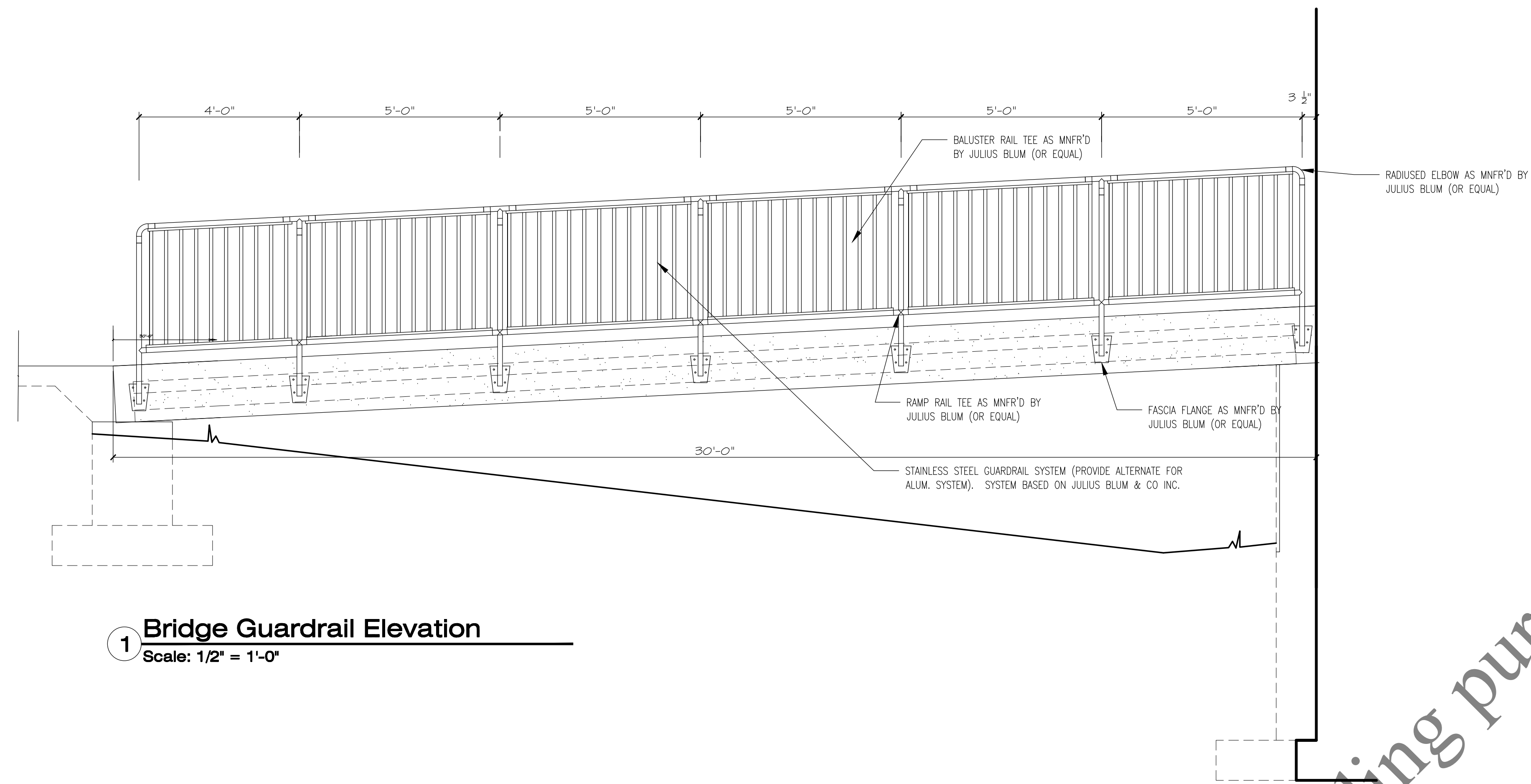
GUARDRAIL ELEVATION

Ref. North

Sheet No.

A102

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342



1 Bridge Guardrail Elevation
Scale: 1/2" = 1'-0"

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BLAKEMORE

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Collections Systems
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Improvements Project

Capital Project No. 2306

for



3501 Kishwaukee Street
Rockford, Illinois

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Table with 3 columns: NO., DATE, DESCRIPTION. Includes entries for Initial Layout, Progress Review, Issued for Bid, and Revision.

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GENERAL STRUCTURAL NOTES

Ref. North Sheet No.

S001

PROFESSIONAL DESIGN FIRM REGISTRATION # 184-003342

DESIGN LOADS - DESIGN DATA

Table of design loads including Roof Live Load, Roof Snow Load, Ground snow load, Flat roof snow load, Snow exposure factor, Snow load importance factor, Snow load temperature factor, Wind Load, Basic wind speed, Wind importance factor, Wind exposure classification, Internal pressure coefficient, MWFRS, and Earthquake Design Data.

Earthquake Design Data - IBC 1603.1.5

Table of seismic data including Seismic use group, Spectral response coefficients, Site class, Design base shear, and Analysis procedure.

GENERAL NOTES

GOVERNING CODE & DESIGN LOADS

Table of governing codes and design loads including Code, Wind, and Roof specifications.

The roof system shown on these Drawings has been designed for code specified uniformly distributed roof snow loads, roof dead loads, and non-uniform effect of snow drift (if applicable) and a uniformly distributed loading of 3 psf to account for lighting, small pipes and ducts.

Unless superseded by provisions of the Code listed above, the structural design for this form has been based on the following code or specification, as appropriate, for each listed material.

Table of material specifications for Cast-in-place and precast concrete, Structural Steel, Joists and Joist Girders, and Metal Roof Deck and Steel Form Deck.

MATERIAL STRENGTH REQUIREMENTS

Table of material strength requirements for Concrete Reinforcement, Cast-in-Place Concrete, and Structural Steel.

GENERAL REQUIREMENTS

- 1. Use of these drawings for the construction of this project carries with such use implicit acceptance of the requirements and obligations stated in the following paragraphs.
2. The Contractor shall be solely responsible for supervising and directing the Work, using the Contractor's best skill and attention.
3. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.
4. In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) or other known hazardous material...
5. In no case shall structural alterations or work affecting a structural member be made, unless approved by BA in writing.
6. Contractor shall field verify all dimensions and existing conditions and notify BA of any discrepancies before proceeding with the Work.
7. Submittals shall be sent to BA based on the following procedure:

Shop Drawings - Submit one set of reproducible's and one set of prints for shop drawings specifically requested to be submitted in subsequent paragraphs of these notes for the various materials to MBA after review and approval by the Contractor. The reproducible will be returned.

- BA will:
a) review submittal information solely for conformance with the design concept
b) approve or take other appropriate action
c) stamp and return submittals to Contractor for appropriate distribution or resubmittal.

The BA review of submittals will be made for the limited purposes and are subject to the limitations and disclaimers set forth in the Contract Documents, these General Notes, and the MBA Proposal to our client. The BA review does not involve or include:

- a) review of submittal dimensions and quantities.
b) acceptance or assumption of any responsibility to review, analyze or evaluate any submittals including shop drawings provided to BA, or acceptance or assumption of any part of Contractor's responsibilities which include the Contractor's responsibilities to review and approve of submittals, whether or not the BA review was made prior to the review and approval of the Contractor.
c) review, evaluation or approval of project safety precautions or safety training.
d) review, evaluation or approval of construction means, methods, techniques, procedures or sequences.

BA approval of a specific item does not include or indicate or constitute approval of a group or an assembly of which the item is a component.

The Contractor must notify BA, in writing, relative to any deviation from the Contract Documents, which appears in the shop drawings. Approval of the submittal containing such deviation does not constitute approval of the deviation. Approval or rejection of the deviation will only be provided by BA in a separate written communication to the Contractor.

In the event that BA reviews submittals (as a courtesy to the Contractor to reduce the time prior to the start of fabrication) such submittals having not first been reviewed and approved by the Contractor, such BA review shall not relieve the Contractor of his responsibility to perform review and approve all such submittals, nor will it create responsibility or liability on the part of BA as to the contents, accuracy or completeness of such shop drawings except as may be specifically described in the Contract Documents, these General Notes, and the Submittal Transmittal. Contractor is solely responsible for review and approval of shop drawings and other submittals, and Contractor is solely responsible for all requirements of the work of the contractor as provided for in the Contract Documents or on the agreement with the Owner.

In the event that the Contractor chooses, at its own discretion, to create shop drawings for use as erection drawings by using BA prepared Drawings or electronic files, Contractor does so at its own risk. No guarantee whatsoever is given by BA that BA Drawings are suitable for such use.

8. The Contractor shall defend and indemnify and hold Blakemore Architects ("BA"), their agents and employees, harmless from all costs, damages, claims, actions and proceedings (including legal fees associated with threatened or actual lawsuits, mediations and arbitrations) of whatever nature arising out of the performance of the Work, and any modifications thereto, under the terms and conditions of the Contract Documents or arising out of, but not limited to, collapse, failure, shifting, leaning, misalignment, twisting, bending, or falling of the Work or any portion of the work whether or not said occurrence is a result of negligence on the part of the Contractor, so that the indemnity against said claims is in the nature of a strict obligation with the one exception of proved negligence (in a court of competent jurisdiction) that BA committed a design error which caused the collapse, failure, shifting, leaning, misalignment, twisting, bending or falling of the Work. Owner and Contractor acknowledge that BA has no responsibility for the manner and means of construction, including bracing, and that BA may rely on this paragraph. The indemnified claims include, without limitation, any damage to tangible property or loss of use thereof and any injury to persons including sickness, disease and death, and any fines, penalties, wages lost or cost of corrective measures sustained as a result of the Contractor's failure to comply with O.S.H.A. or any other applicable rules or regulations.

9. The Contractor shall conform to all applicable local, state and federal regulations.
10. The General Notes and Drawings contain performance standards, tolerances and material specification. It is the responsibility of the Contractor to provide a constructed product in conformance with these criteria. If some portion of the constructed product is not in compliance with these criteria, the Contractor is responsible to repair or remove and replace the faulty construction at no cost to the Owner. The proposed repair is subject to the written approval of the Engineer and the Owner and must restore the constructed product to perform its intended purpose.

11. BA is the Project Structural Engineer of Record. Unless an activity or duty is specifically identified as being performed by the Project Structural Engineer of Record in Subpart R, it will not be performed by BA. It will be performed by others. The only exception to this is the design of bottom chord stability plates for joists adjacent to columns.

12. BA will analyze repairs, replacements or field modifications to anchor rods as required by OSHA subpart R. However, requests for these assessments must be initiated by the "Controlling Contractor" or the "Steel Erector", not BA.

02200 EARTHWORk

A. Conform to the following:

- 1. All local, state and federal codes, ordinances and regulations including OSHA regulations.
B. Use the following:
1. Soil Material (Definitions)
a) Satisfactory materials are those conforming to ASTM D2487 groups.
b) Unsatisfactory materials are:
1. Soil Material (Definitions)
a) Satisfactory materials are those conforming to ASTM D2487 groups.
b) Unsatisfactory materials are:
1. Soil Material (Definitions)
a) Satisfactory materials are those conforming to ASTM D2487 groups.
b) Unsatisfactory materials are:

Table with 5 columns: Type, Material, Size, Use, Compaction. Lists specifications for Slab Base Course, Select, and Stone.

C. Contractor shall:

- 1. Notify Owner if any of the following are encountered: Hazardous materials (Also stop work in area)
2. Excavate all materials encountered except bedrock defined as a natural material that cannot be removed with a power excavator having a breakout force of 80,000 lbs. for bucket and stick combined.
3. Grade perimeter of excavation to drain water away and provide means to remove water that enters excavation.
4. Protect bottom of excavations from freezing.
5. Fill over-excavated areas with select fill or lean mix concrete at direction of Geotechnical Engineer.
6. Proof roll areas to receive fill using rubber tired trucks or earth moving equipment having an axle load equivalent to that of a fully loaded five cubic yard dump truck.
7. Place fill in 8" uncompacted lifts.
8. Do not place fill over frozen soil or on surface with snow, ice or standing water.
9. Filling against walls:
a) No construction equipment may operate closer to a wall than a distance equal to the height of the wall unless the wall is properly braced to accommodate the additional earth pressure forces from the equipment.
b) Do not backfill against concrete walls until the concrete has attained its specified 28 day unless the wall is braced. Backfill building foundation walls in a balanced condition to eliminate tipping.
c) Design, installation and maintenance of any temporary wall bracing system is solely the responsibility of the Contractor for a and c) above.
d) Compact backfill using hand operated equipment.

03200 CONCRETE REINFORCEMENT

A. Conform to the latest edition of the following:

- 1. CRSI "Manual of Standard Practice" and CRSI "Placing Reinforcing Bars".
2. Applicable requirements of ACI 301, ACI 315 and ACI 318 and Section 3 of ANSI A10.9.
B. Use the following materials:
1. Deformed bars: ASTM A615 Grade 60.
2. Wire fabric: Plain ASTM A185, deformed ASTM A497.
3. Smooth dowels: ASTM A615 Grade 60.

C. Contractor shall:

- 1. Submit shop drawings for approval by MBA.
2. Cold form rebars with bends to conform to ACI 315.
3. Accurately place reinforcement per ACI 301 and approved shop drawings.
4. Provide Class "B" lap splices in all rebar splices in walls, piers, columns, beams and slabs.
5. Unless shown otherwise on Drawings, provide the following minimum clear cover on all rebars:
Concrete cast against and permanently exposed to earth 3"
Concrete exposed to earth or weather 2"
Slabs 3/4"
Beams, columns 1-1/2"

03300 CAST-IN-PLACE CONCRETE

A. Conform to the latest edition of the following:

- 1. ACI 117 "Standard Specifications for Tolerances for Concrete Construction and Material".
2. ACI 301 Specification for Structural Concrete for Buildings.
3. ACI 302.1R - Guide for Concrete Floor and Slab Construction.
4. ACI 304R "Guide for Measuring, Mixing, Transporting and Placing Concrete".
5. ACI 305R "Hot Weather Concreteing".
6. ACI 306.1 Standard Specification for Cold Weather Concreteing.
7. ACI 318 Building Code Requirements for Reinforced Concrete.
8. ANSI A10.9 American National Standard for Construction and Demolition Operations.
9. ASTM C31 Standard Method of Making and Curing Concrete Test Specimens in the field.
10. ASTM C94 Standard Specification for Ready Mixed Concrete.

B. Use the following materials.

- 1. Water: Clean, potable.
2. Portland Cement ASTM C150 Type I. Blast furnace slag cement is not permitted.
3. Fine and Coarse Aggregate: ASTM C33 except as noted subsequently max. size aggregate for concrete to be placed in forms to conform to ACI 318, Sect. 3.3.
4. Fly Ash: ASTM C618 - Type F or C. 3% max. loss on ignition.
5. Air Entraining Admixture: ASTM C260. In-place air entrained concrete shall have 5-7% air. Use for all concrete exposed to freeze thaw conditions including during the construction phase as well as in service.
6. Concrete slumps shall be as follows with tolerance plus or minus 1":
All Concrete 3-1/2"
Concrete water to cement ratio shall not exceed the following:
All concrete 0.55

03300 CAST-IN-PLACE CONCRETE

8. Chemical Admixtures: At producer's option for structural concrete only. Not permitted with slabs-on-ground or pavements.

- Limited to the following:
a. Water reducing
b. Retarding
c. Accelerating
d. Water reducing & retarding
e. Water reducing & accelerating
f. Water reducing high range
g. Water reducing highrange & retarding

C. Contractor shall:

- 1. Submit concrete mix design for review.
2. Place concrete per ACI 302 using appropriate placing procedures. Thoroughly consolidate concrete using suitable means. Use experienced finishers.
3. Place and cure concrete in hot weather per ACI 305.
4. Place and cure concrete in cold weather per ACI 306.
5. Use air entrained concrete for all concrete exposed to freezing and thawing and/or required to be watertight.
6. Arrange for cylinders to be made for test per ASTM C31. One test consists of four cylinders. Make one test per each 100 c.y. of concrete placed or fraction thereof.

03600 GROUT - BUILDING STRUCTURES

A. Conform to the following:

- 1. ASTM C1107.

B. Use the following materials:

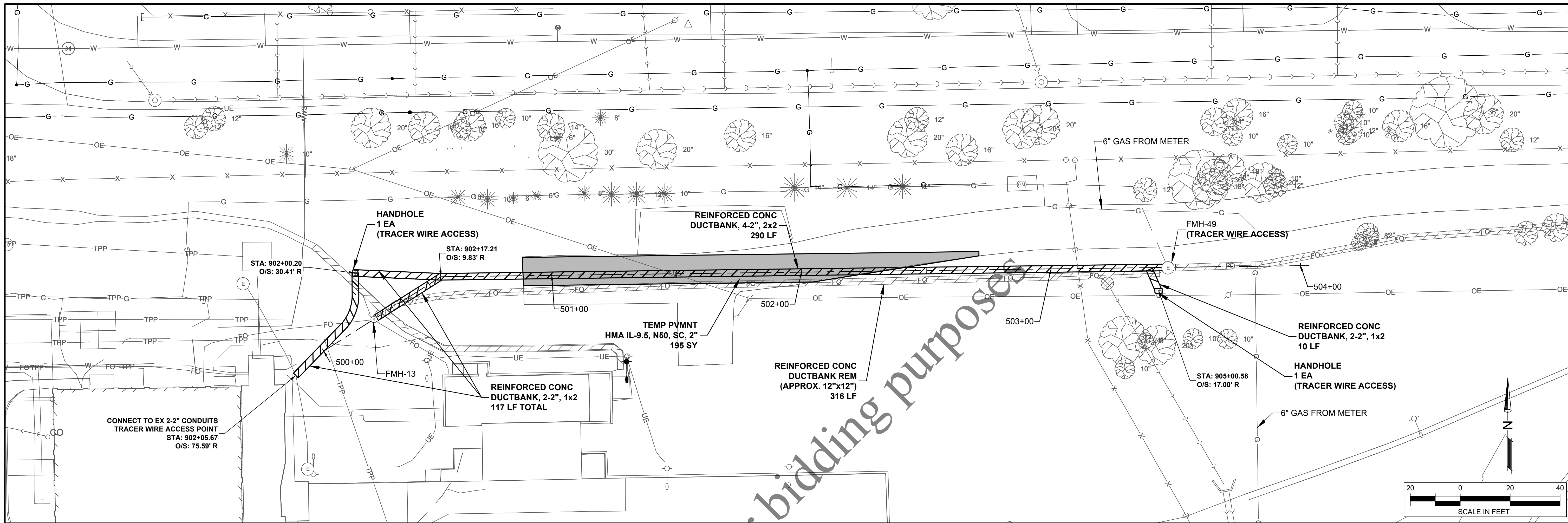
- 1. Dry Non-shrink Hydraulic Cementitious Grout: ASTM C1107 Grade C, premixed, packaged, non-metallic. Minimum 28 day compressive strength is 5000 psi per ASTM C109.
2. Water: potable.

C. Contractor shall:

- 1. Store and maintain packaged materials clean and dry and protected from dampness, freezing and foreign materials.
2. Maintain grout at a minimum 50 degrees F. and maximum 90 degrees F. prior to, during and 48 hours after completion of grout work.
3. Saturate surface with clean water 24 hours prior to grouting operations. Remove any free standing water on surface and in anchor rod holes prior to grouting.
4. Mix packaged materials in accordance with manufacturer's printed instruction.
5. Place grout under base and bearing plates in accordance with manufacturer's printed instructions completely filling all voids. Do not vibrate grout. Bevel edges of non-slab grout.
6. Complete grout installation prior to installation of wall sheeting, roof sheeting or supported floors.

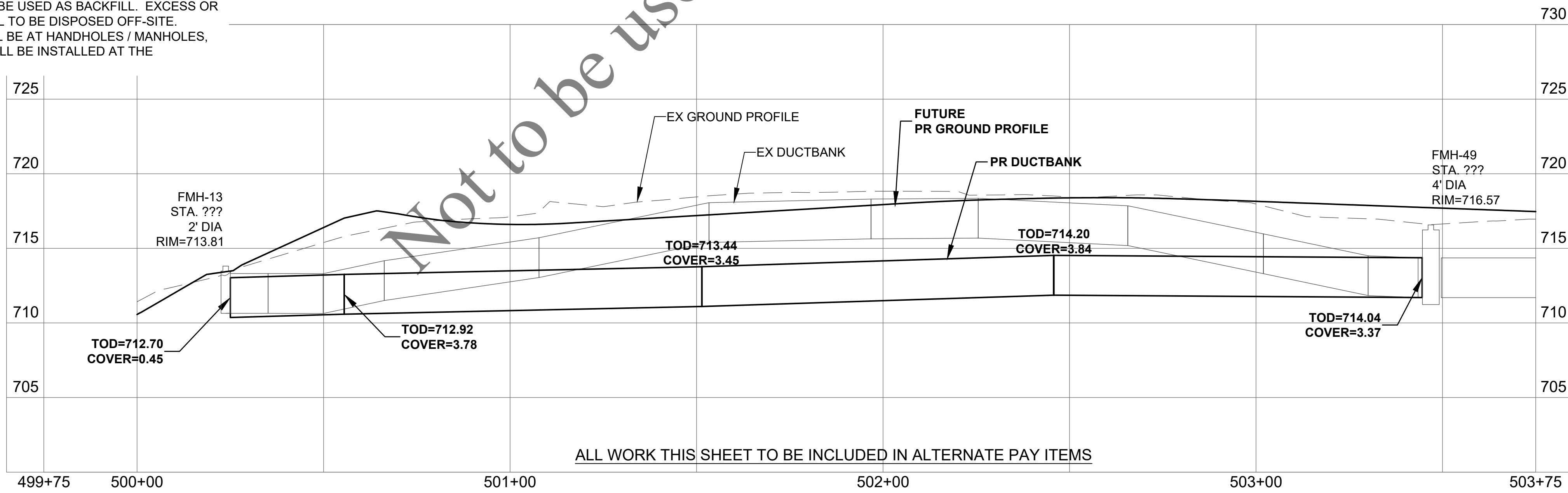
SHOP DRAWING NOTES:

- 1. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. PRIOR TO SUBMITTAL TO ARCHITECT/ ENGINEER, THE GENERAL CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE GENERAL CONTRACTOR SHALL STAMP AND SIGN THE DRAWINGS THAT HE HAS REVIEWED THEM.
3. SHOP DRAWINGS PREPARED BY THE SUBCONTRACTORS, SUPPLIERS, ETC., SHALL BE REVIEWED BY THE ARCHITECT FOR CONFORMANCE WITH THE DESIGN CONCEPT ONLY.
4. SHOP DRAWINGS SHALL BE FURNISHED FOR ALL STRUCTURAL DESIGN COMPONENTS. ALL SHOP SUBMITTALS TO BE SENT VIA EMAIL IN PDF FORMAT. CONTRACTOR SHALL ALLOW IN THE SCHEDULE 2 WEEKS (10 WORKING DAYS) FOR REVIEW OF ALL SHOP DRAWING DOCUMENTS.



NOTES:

1. PROPOSED DUCTBANKS SHALL BE INSTALLED PER DETAIL ON SHEET 11, EXCEPT THAT DUCTBANKS SHALL BE EITHER (2) 2 INCH CONDUITS, 1 HIGH x 2 WIDE, OR (4) 2 INCH CONDUITS, 2 HIGH x 2 WIDE, AS SPECIFIED IN PLAN VIEW.
2. NO CONDUCTORS WILL BE PULLED AS PART OF THIS PROJECT.
3. TOP OF PROPOSED DUCTBANK SHALL BE 3.5' MIN. BELOW FINAL GRADE.
4. SUITABLE EXCAVATED MATERIAL TO BE USED AS BACKFILL. EXCESS OR NON-SUITABLE EXCAVATED MATERIAL TO BE DISPOSED OFF-SITE.
5. TRACER WIRE ACCESS POINTS SHALL BE AT HANDHOLES / MANHOLES, EXCEPT THAT AN ACCESS POINT SHALL BE INSTALLED AT THE CONNECTION AT STA 902+05.



ALL WORK THIS SHEET TO BE INCLUDED IN ALTERNATE PAY ITEMS

PROPOSED DUCTBANK ALIGNMENT PROFILE

NOTE:
TOP OF DUCTBANKS DRAWN TO CORRECT ELEVATION.
BOTTOM OF DUCTBANKS TO BE CALCULATED DUE TO SOFTWARE LIMITATIONS OF 24" SMALLEST HEIGHT AVAILABLE.

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No.	DATE	REVISION	INT.

COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
CAPITAL PROJECT #2206

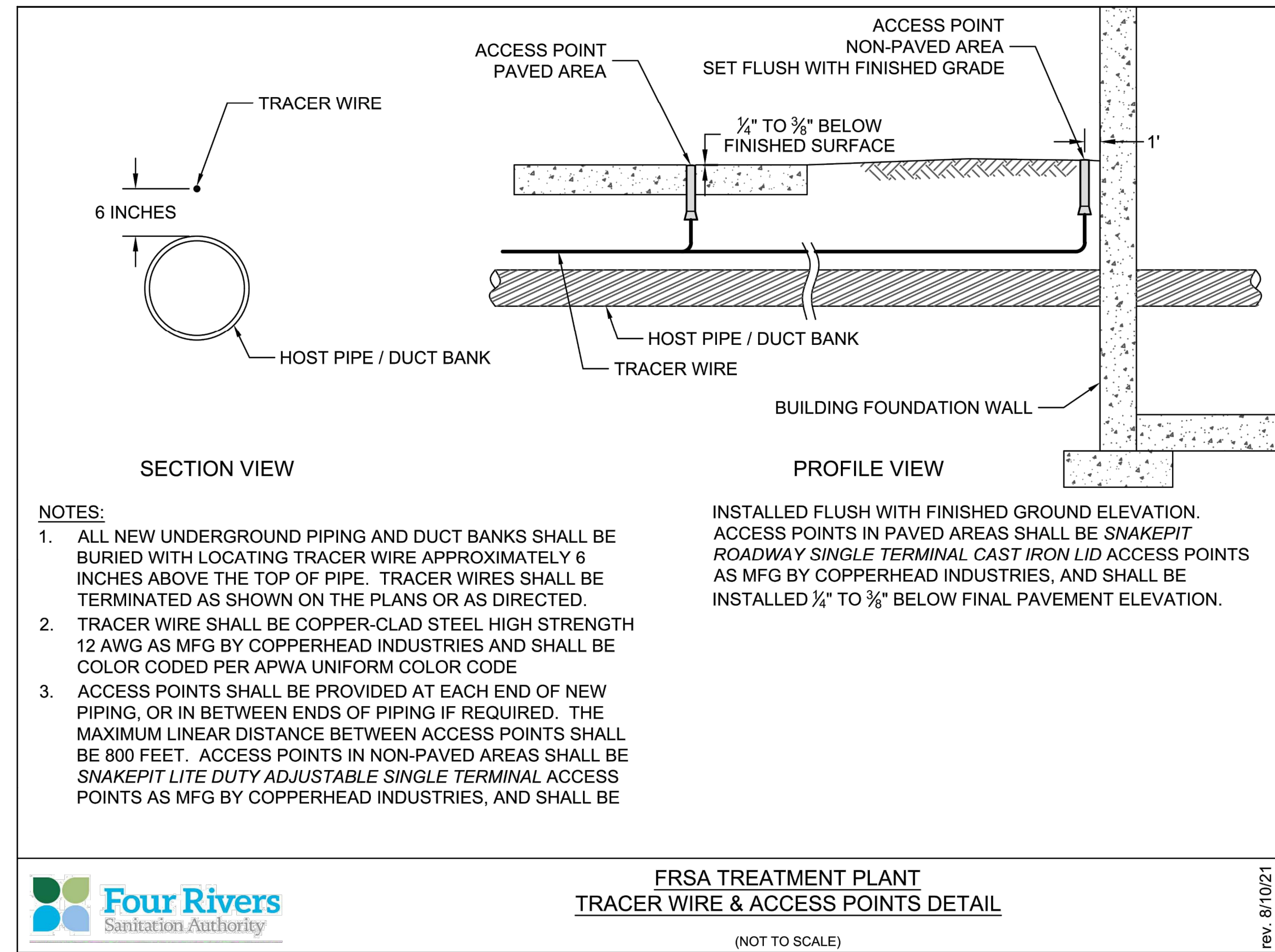
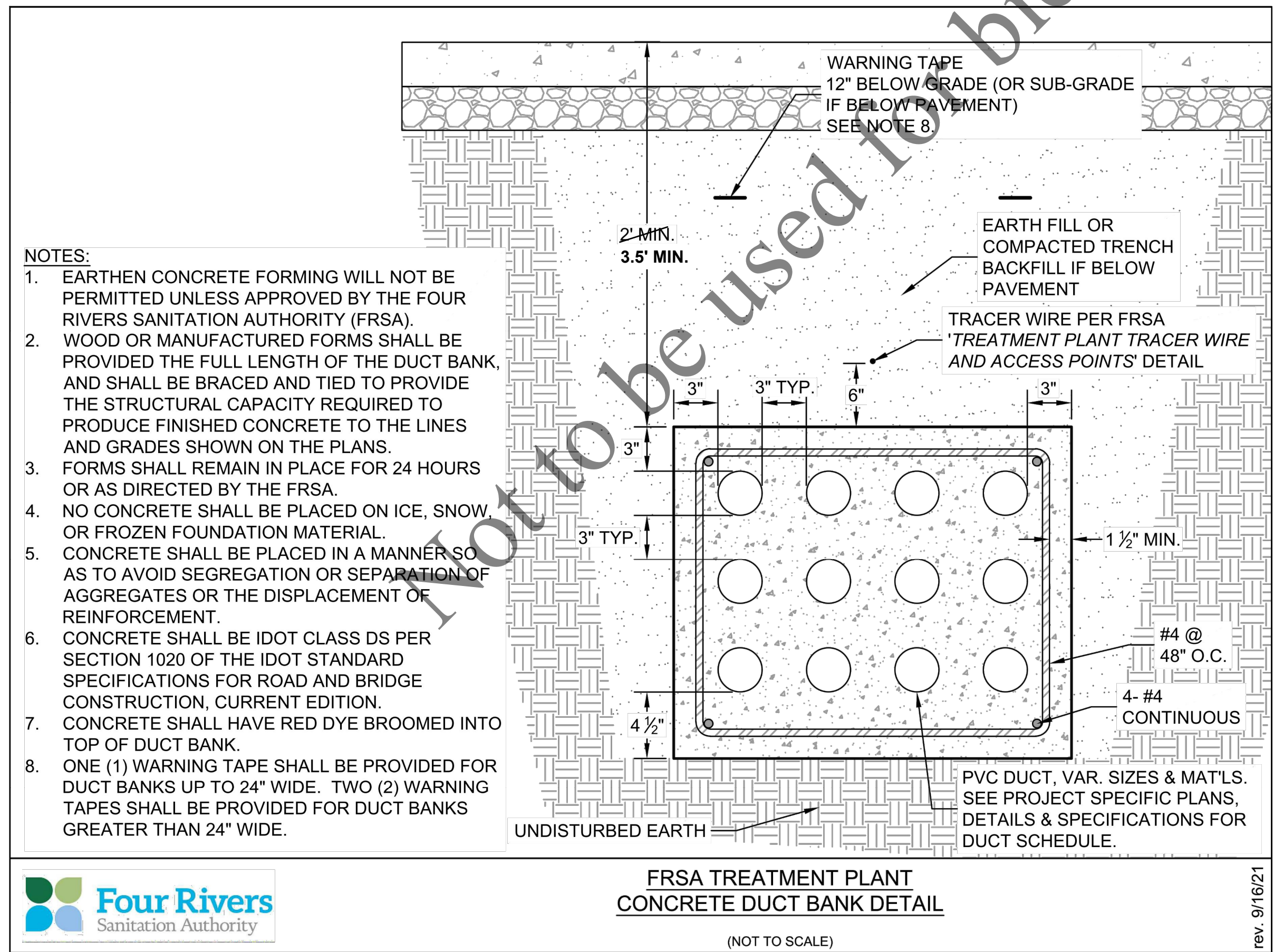
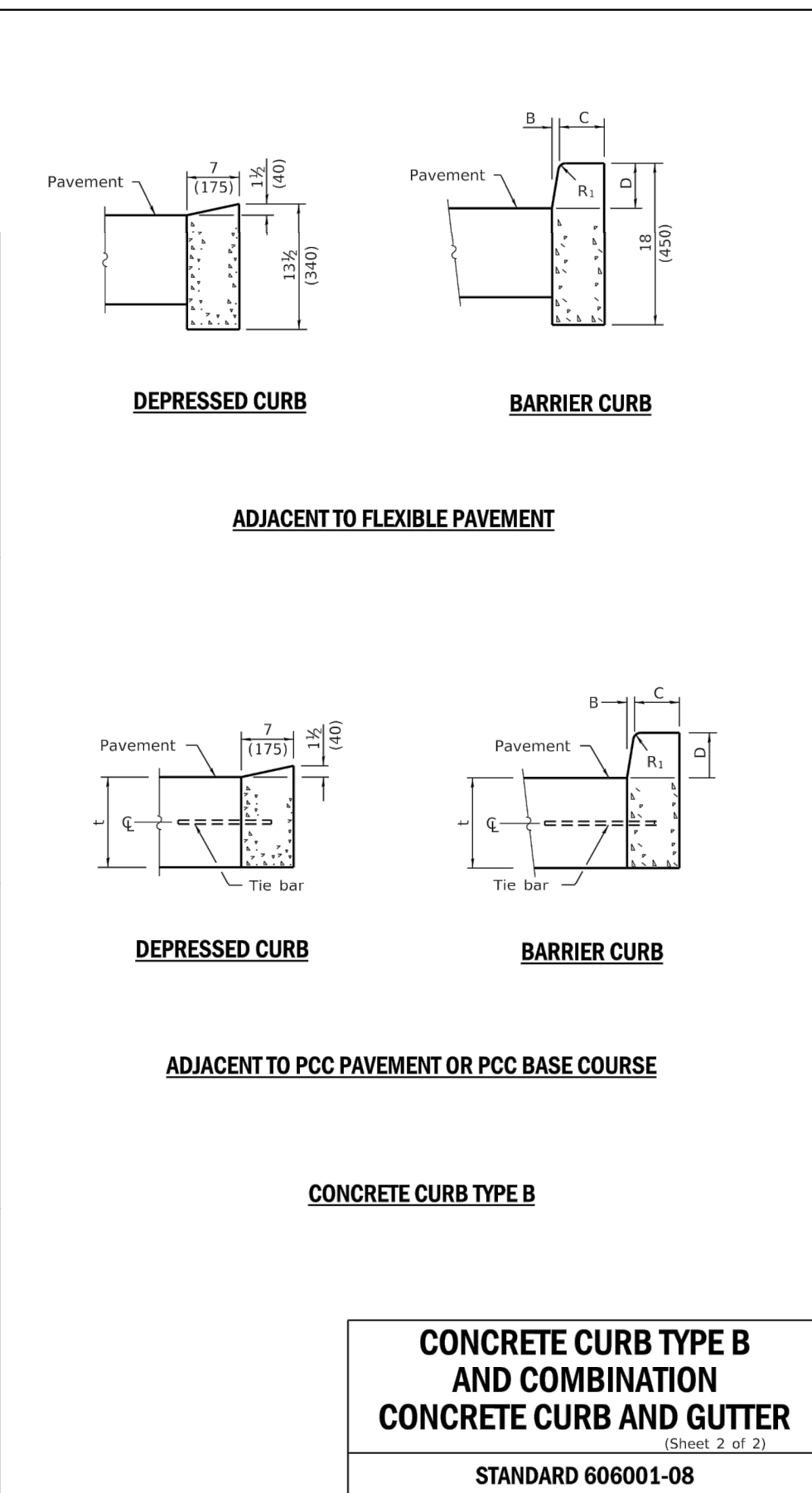
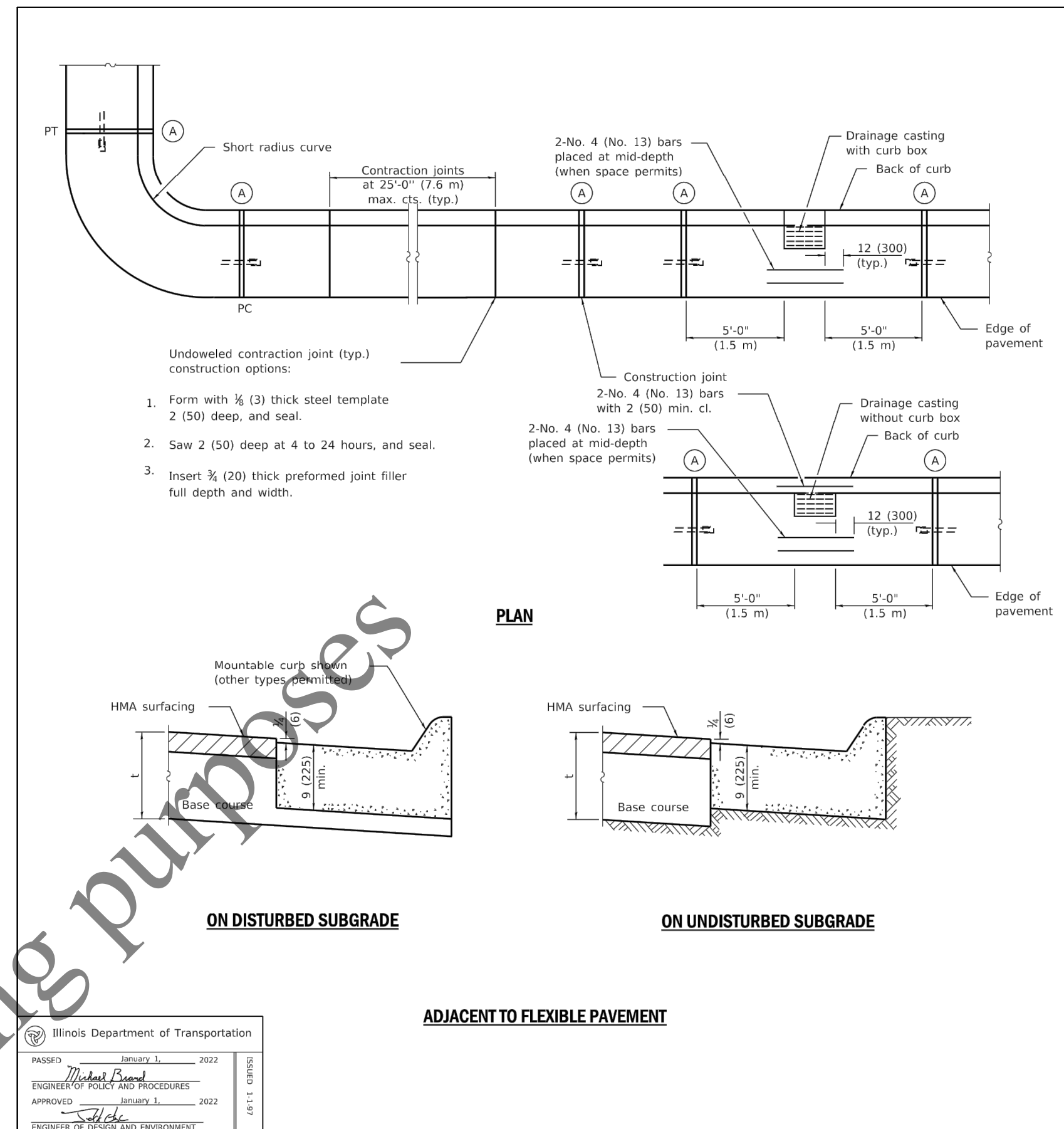
DUCTBANK PLAN & PROFILE (BID ALTERNATE 1)

Sheet No.
10 of 11

FOR-BID

Date:
8/31/2022

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No.	DATE	REVISION	INT.

COLLECTION SYSTEMS ADMINISTRATION BUILDING SITE IMPROVEMENTS
 CAPITAL PROJECT #2206

PROJECT DETAILS

FOR-BID Date: 8/31/2022

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