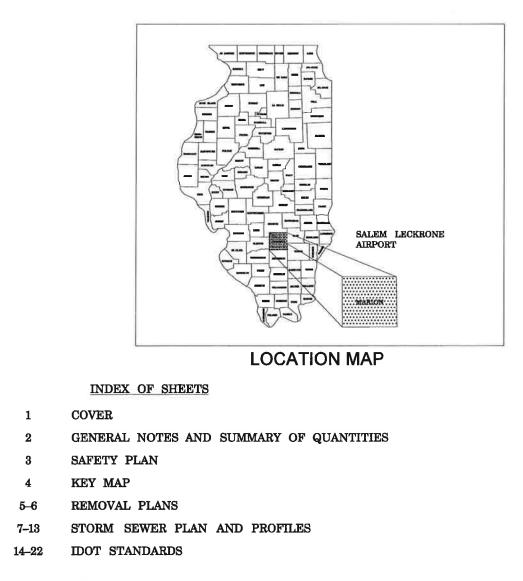
# **CONSTRUCTION PLANS** FOR SALEM LECKRONE AIRPORT SALEM, MARION COUNTY, ILLINOIS

## DRAINAGE IMPROVEMENTS

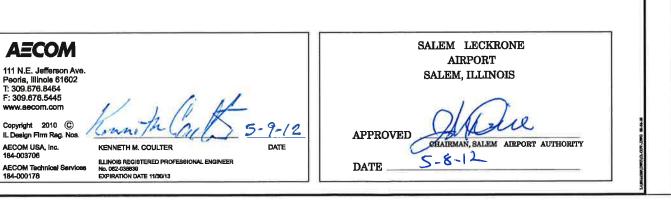
THIS PROJECT SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF STORM SEWER PIPES AND INLETS AND ALL OTHER INCIDENTAL WORK FOR SPECIFIED LOCATIONS



ILLINOIS PROJECT - SLO-4151 AIP PROJECT NO - 3-17-0089-B20 DATE: MAY 11, 2012

> LATITUDE: 38\*38'34" LONGITUDE: 88\*57'51" ELEVATION: 573 M.S.L.





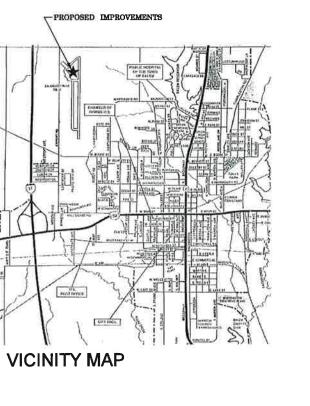
ARCOM JOB NO 60297721

13A

SA030 TOTAL SHEETS: 22



CITY OF SALEN



### UTILITIES - LOCATIONS/INFORMATION ON PLANS

The locations of existing utilities, as shown on the plans are based on the best information available, however they are not guaranteed. All utility locations shown on the plans are based on the approximate depth from previous construction plans. It shall be the Contractor's responsibility to ascertain their exact location. Neither the owner nor the engineer assumes any responsibility whatsoever in respect to the accuracy or sufficiency of the information and there is no guarantee either expressed or implied, that the conditions are representative of those to be encountered.

### EXCESS WASTE

Excess waste products removed from the construction site shall be disposed of offsite as required by local and state laws. Excess earthen materials may be disposed of on airport property at a location determined by the Resident Engineer.

### ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

The Contractor shall verify exact lengths, types and size of the pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

### EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

The connecting of existing drain tiles, pipe culverts, or storm sewers to the proposed drainage system will not be paid for separately and shall be considered as included in the pay items provided.

### STORM SEWER BACKFILL AND BACKFILL AT PIPE REMOVAL

Suitable material excavated during the project may be used as backfill for trenches in seeded areas, in accordance with Section 152. Additional material needed to backfill storm sewer or pipe/structure removal areas shall be provided by the contractor at no additional cost.

### <u>EARTHWORK</u>

Minor earthwork and grading will be needed at the outlet of Pipe 1 and at various other locations, particularly at new inlets or manholes. All earthwork and grading will not be paid for separately but will be considered included in the cost of the project. All areas of construction shall be graded smooth, creating positive drainage, prior to seeding.

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DATE - 3-12-12

REVISED -

PLOT DATE = \$DATE\$

#### HIGHWAY STANDARDS

280001-06	TEMPORARY EROSION CONTROL SYSTEMS
542546-01	FLUSH INLET BOX FOR MEDIAN
602401-03	MANHOLE TYPE A
602406-05	MANHOLE TYPE A 6' DIA.
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE 8

### DR'S RESPONSIBILITIES

CONTRACTOR'S EMPLOYEES WILL PARK IN THE EQUIPMENT PARKING AREA.

CONTRACTOR WILL FURNISH ALL EMPLOYEES WITH SOME TYPE OF TAG OR INT TO IDENTIFY THEM AS BEING PART OF THE CONSTRUCTION CREW.

THE CONTRACTOR'S VEHICLES ARE ON THE AIRPORT SITE THEY WILL BE TRLY MARKED WITH THE INTERNATIONAL ORANGE AND WHITE FLAG DISPLAYED L VIEW ABOVE THE VEHICLES.

RACTOR MUST HAVE AERONAUTIC RADIO FOR EMERGENCY USE (122.8 MHZ)

CONTRACTOR WILL NOT BE ALLOWED ACCESS TO THE AIRPORT TERMINAL NG & WILL NEED TO SUPPLY PORTABLE REST ROOMS ON SITE FOR RUCTION CREWS.

ACTOR PERSONNEL SHALL BE LIMITED TO AREA REQUIRED TO CONSTRUCT VEMENTS. ACCESS NOT ALLOWED ACROSS AIRPORT PROPERTY.

CADES SHALL BE PLACED IN SUCH A WAY AS TO PREVENT AIRCRAFT IS TO THE CONTRACTOR'S WORK AREA.(MAXIMUM 10' SPACING)

CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED AND IDENTIFIED FOR DEPTH E ANY EXCAVATION BEGINS. J.U.L.I.E. WILL ONLY MARK THE UTILITIES TO THE LOCATION.

L BE THE CONTRACTORS RESPONSIBILITY TO LOCATE ON SITE UNDERGROUND ES, AND THE COST WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND ADDITIONAL COMPENSATION WILL BE ALLOWED.

CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THE AYS, TAXILANES, OR APRONS.

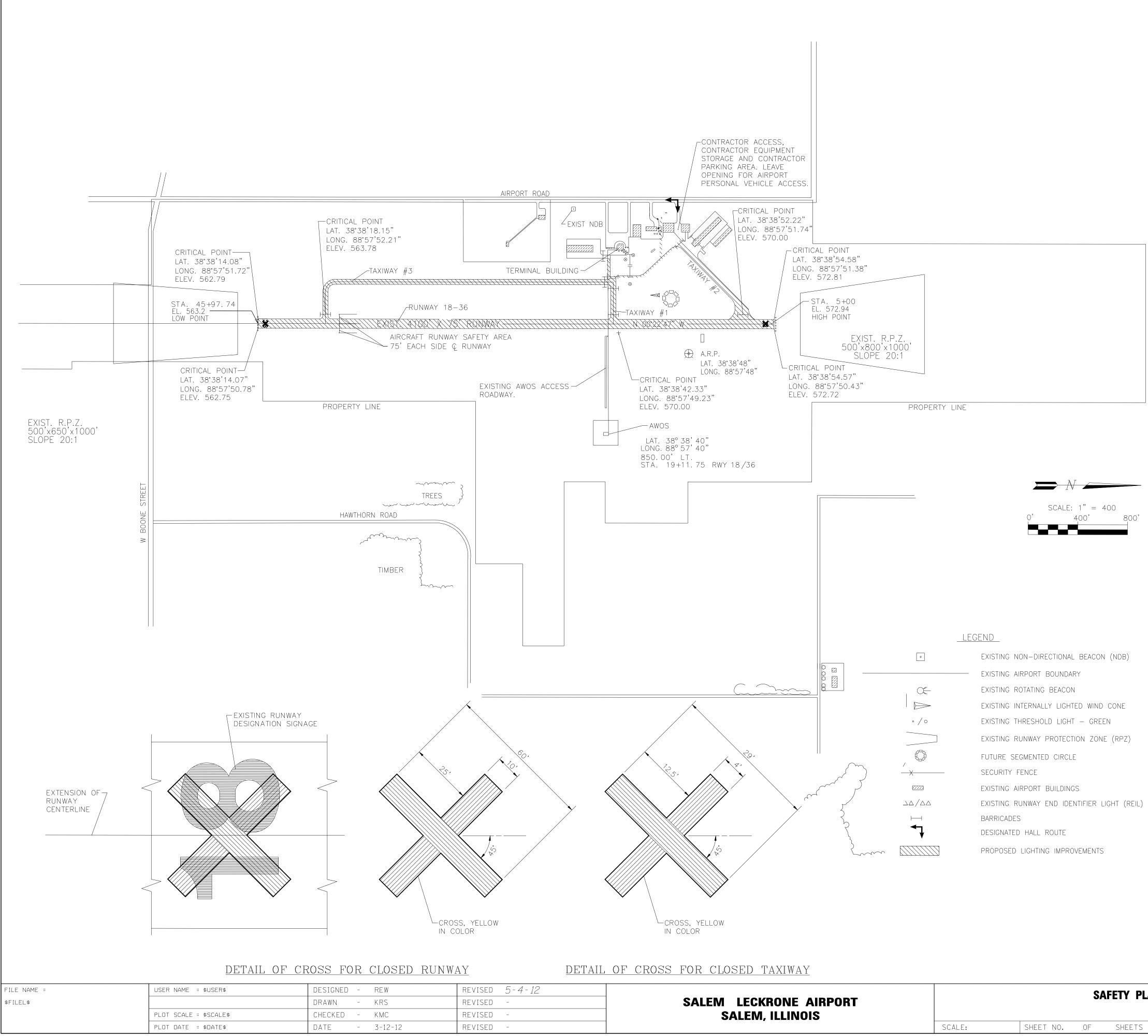
LD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORALLY RELOCATE MENT TO ALLOW AIRCRAFT TO PASS, THE CONTRACTOR SHALL DO SO AT NO IONAL COST TO THE PROJECT.

CONSTRUCTION WORK IS WITHIN AN OPERATING AIRPORT. THE CONTRACTOR EXERCISE CAUTION AND YIELD TO AIRCRAFT AT ALL TIMES.

	SUMMARY OF QUANTITIES		
PAY ITEM NO.	PAY ITEM	UNIT	TOTAL QUANTIT
AR150510	ENGINEER'S FIELD OFFICE	L SUM	1
AR150530	TRAFFIC MAINTENANCE	L SUM	1
AR156500	TEMPORARY EROSION CONTROL	L SUM	1
AR401910	REMOVE & REPLACE BIT. PAVEMENT	SQ YD	250
AR701415	15" RCP, CLASS III	LF	196
AR701418	18" RCP, CLASS III	LF	290
AR701424	24" RCP, CLASS III	LF	1880
AR701427	27" RCP, CLASS III	LF	410
AR701430	30" RCP, CLASS III	LF	59
AR701436	36" RCP, CLASS III	LF	268
AR701512	12' RCP, CLASS IV	LF	42
AR701518	18' RCP, CLASS IV	LF	524
AR701900	REMOVE PIPE	LF	2,379
AR751410	INLET	EACH	12
AR751540	MANHOLE 4'	EACH	2
AR751550	MANHOLE 5'	EACH	7
AR751560	MANHOLE 6'	EACH	1
AR751900	REMOVE INLET	EACH	5
AR751903	REMOVE MANHOLE	EACH	6
AR752430	PRECAST REINFORCED CONC. FES 30"	EACH	1
AR752903	REMOVE HEADWALL	EACH	1
AR801403	FILL EXISTING STORM SEWER	CU YD	144
AR801418	BORE AND JACK 18" PIPE CULVERT	LF	130
AR801427	BORE AND JACK 27" PIPE CULVERT	LF	130
AR801430	BORE AND JACK 30" PIPE CULVERT	LF	130
AR801436	BORE AND JACK 36" PIPE CULVERT	LF	130
AR901510	SEEDING	ACRES	4
AR908510	MULCHING	ACRES	4

2			GENERAL NOTES AND	F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
	SALEM LECKRONE AIRPORT SALEM, ILLINOIS		SUMMARY OF QUANTITES		. PROJ. NO. SLO-4151	MARION	22 2	
	JALEIVI, ILLINUIJ		SCALE: SHEET NO. OF SHEETS STA. TO STA.				AIP PROJ.	3-17-0089-B20
		SCALE:	SHEET NO. OF SHEETS STA.		ILLINOIS FED. A	AID PROJECT		

## SA030



2			SAFETY PLAN		F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	SALEM LECKRONE AIRPORT						MARION	22 3
	SALEM, ILLINOIS				IL. PRO	OJ. NO. SLO-4151	AIP PROJ.	3-17-0089-B20
		SCALE:	SHEET NO. OF SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	

#### SCOPE OF WORK

THIS PROJECT CONSISTS OF THE REMOVAL AND REPLACEMENT OF STORM SEWERS. MANHOLES, AND INLETS AND OTHER INCIDENTAL WORK. SOME STORM SEWERS ARE TO BE ABANDONED AND FILLED WITH CLSM.

#### <u>RUNWAY SAFETY AREA</u>

THE CONTRACTOR OR HIS EMPLOYEES WILL NOT PROCEED INTO THE RUNWAY SAFETY AREA (RSA) WITHOUT FIRST CLOSING THE AFFECTED RUNWAY. THE CONTRACTOR WILL NOTIFY THE AIRPORT MANAGER TWO DAYS IN ADVANCE OF A RUNWAY CLOSING. ANY RUNWAY CLOSURE MUST BE APPROVED BY THE RESIDENT ENGINEER PRIOR TO ANY CONSTRUCTION. WHEN CONSTRUCTION ACTIVITIES ARE WITHIN 75' OF THE RUNWAY CENTERLINE, THE RUNWAY WILL BE CLOSED BY PLACING YELLOW CROSSES OVER THE NUMBERS AT THE END OF THE RUNWAY. COST OF CONSTRUCTING, MAINTAINING AND REMOVING CROSSES WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE RUNWAY WILL BE CLOSED ONLY DURING THE CONSTRUCTION DAY. AT THE END OF EACH CONSTRUCTION DAY, THE CONTRACTOR WILL SMOOTH GRADE ALL AREAS WITHIN THE SAFETY AREA TO THE SATISFACTION OF THE RESIDENT ENGINEER AND REOPEN THE RUNWAY. ALL WORK INCLUDED IN OPENING AND CLOSING THE RUNWAY WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

<u>OBJECT\_FREE\_AREA (OFA) – TAXIWAYS / TAXILANES / APRONS</u>

THE CONTRACTOR WILL NOT PROCEED INTO THE OBJECT FREE AREA WITHOUT FIRST CLOSING THE TAXIWAY. BARRICADES, SAFETY CONES AND CROSSES SHALL BE POSITIONED TO PROPERLY CLOSE THE AREA AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

WHEN RUNWAY 18–36 IS OPEN AND EXIT TAXIWAYS ARE CLOSED FOR MORE THAN 3 CALENDAR DAYS, YELLOW PAINTED "X"'S BETWEEN THE RUNWAY EDGE AND BARRICADES WILL BE REQUIRED. THE TEMPORARY PAINT SHALL BE 'SEYMOUR TEMPORARY MARKER' PART NO. 20-636 OR OTHER EQUILIVANT PAINT EASILY REMOVED WITH WATER WITHOUT DEFACING THE PAVEMENT.

#### <u>ELECTRIC CABLE / UNDERDRAIN</u>

LOCATION OF EXISTING AIRPORT UNDERGROUND CABLES AND UNDERDRAINS MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT AND SUPPORT EXPOSED CABLES AND UNDERDRAIN, BOTH TO PROTECT THE UTILITY AND WORKERS IN THE AREA.

THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT MANAGER TO SHUT-OFF ELECTRICITY AND DISCONNECT CIRCUITS NEAR THE WORK AREA.

REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATION, OR AS DIRECTED BY THE OWNER OF THE CABLE, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM POINT TO POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS, IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.

#### RUNWAY LIGHTING

PROPER CARE SHALL BE TAKEN WHEN WORKING AROUND THE RUNWAY/TAXIWAY LIGHTING TO AVOID ANY DAMAGE. DAMAGE TO THE LIGHTS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS' EXPENSE.

#### EROSION CONTROL

THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL WORK AND ANY REQUIRED PERMITS.

#### HAUL ROAD AND EQUIPMENT PARKING AREA

CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND EQUIPMENT PARKING AREA AS SHOWN ON THIS SHEET, OR AS DIRECTED BY THE ENGINEER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AIRPORT SECURITY AT THE HAUL ROUTE ENTRANCE, AND RESTORE THESE AREAS TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETED. ANY DAMAGE WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

#### TAXIWAY CROSSING

A DESIGNATED CROSSING IS SHOWN ON THE PLANS, THE LOCATION MAY BE ALTERED AS APPROVED BY THE RESIDENT ENGINEER. DAMAGE TO ANY PAVED AREAS CAUSED BY THE CONTRACTORS' EQUIPMENT OR TRUCKS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS' EXPENSE.

#### CONSTRUCTION EQUIPMENT HEIGHT

MAXIMUM HEIGHT OF CONSTRUCTION EQUIPMENT SHALL NOT EXCEED 25'.

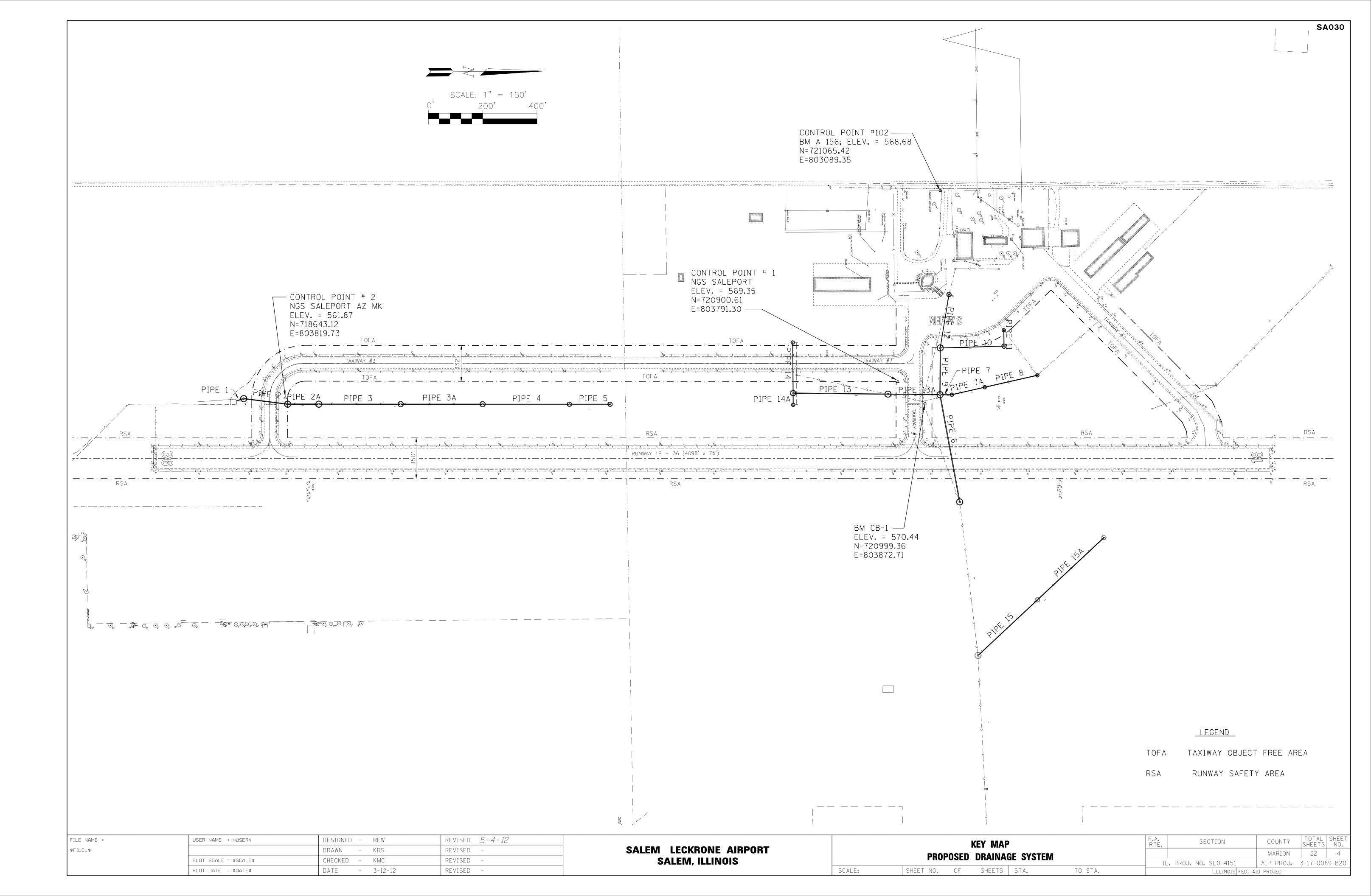
#### CONSTRUCTION STAGING

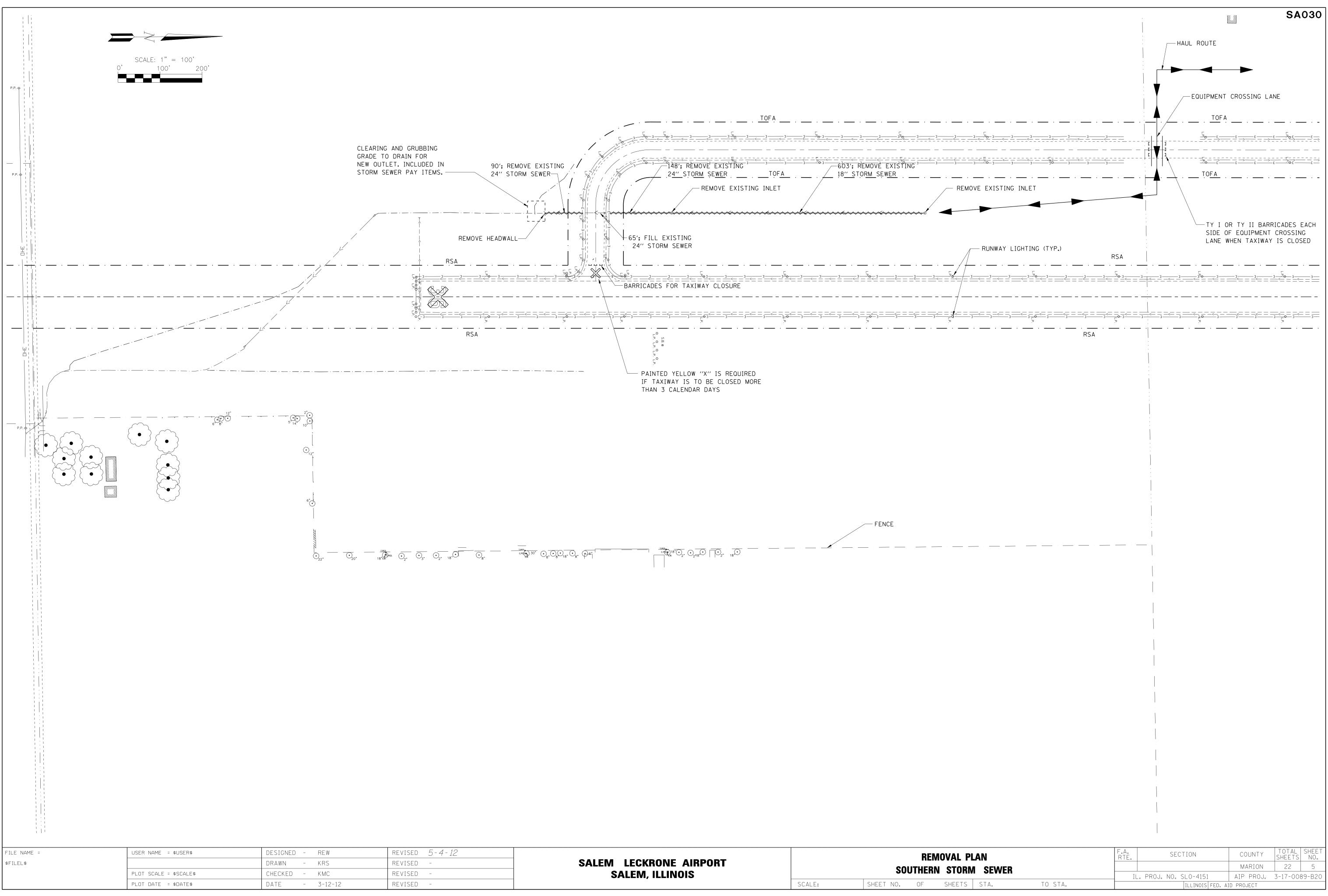
THE CONTRACTOR SHALL PLACE BARRICADES TO CLOSE INDIVIDUAL WORK AREAS AND TO ALLOW ACCESS FROM THE APRON AND/OR T-HANGARS TO THE RUNWAY AS DIRECTED BY THE RESIDENT ENGINEER. NO CONTRACTOR PERSONNEL, EQUIPMENT OR BARRICADES WILL BE ALLOWED WITHIN 66' OF AN ACTIVE TAXIWAY OR TAXILANE CENTERLINE, UNLESS OTHERWISE APPROVED.

BARRICADES REQUIRED FOR CLOSURES SHALL BE IDOT TY. 1 OR TY. 2 BARRICADES WITH ONE FLASHING OR STEADY BURNING RED LIGHT MOUNTED TO EACH BARRICADE.

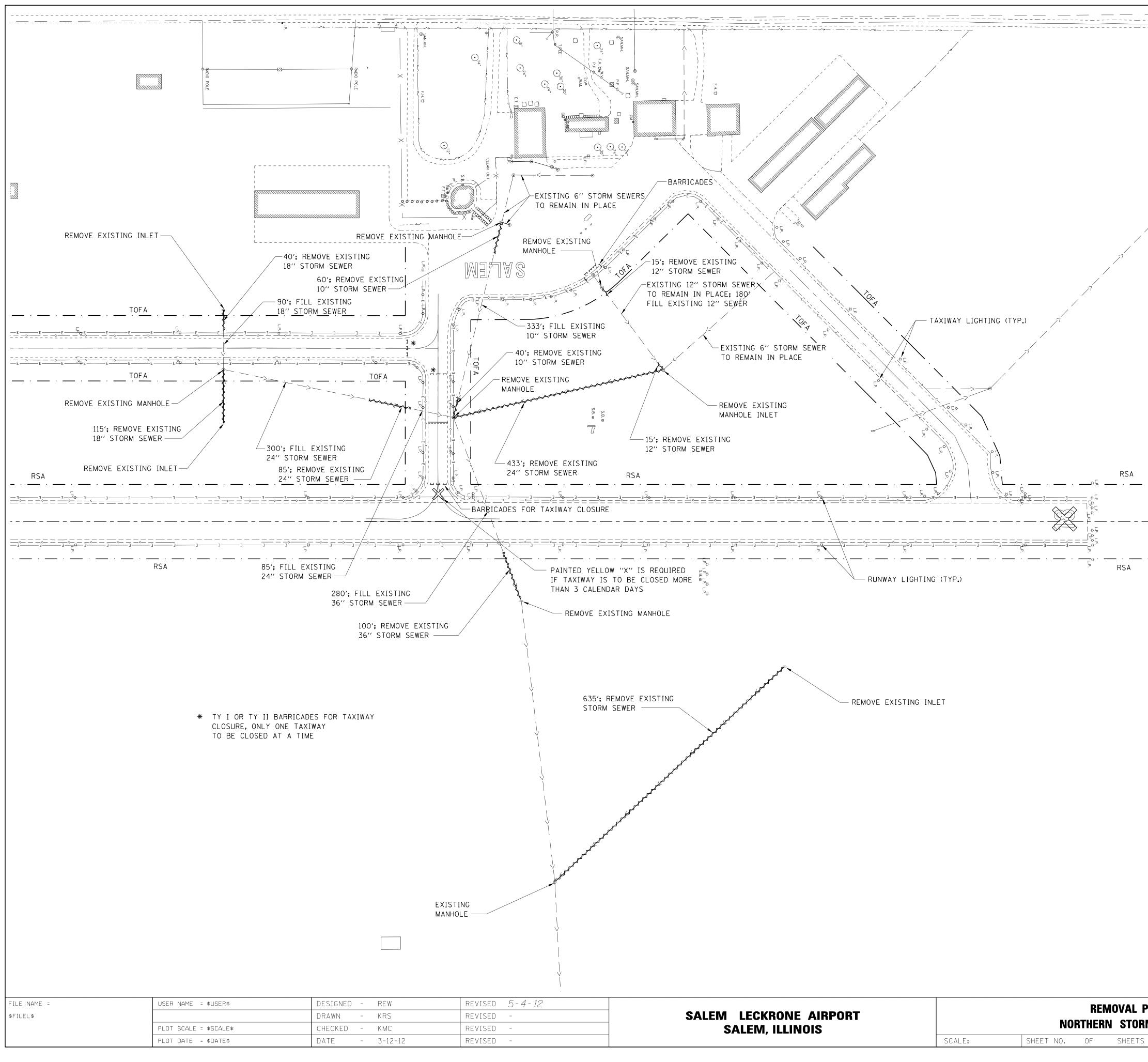
#### <u>open trenches</u>

BEFORE REOPENING RUNWAYS OR TAXIWAYS, ALL OPEN TRENCHES AND EXCAVATED MATERIAL WITHIN THE RUNWAY RSA OR TAXIWAY OFA SHALL BE BACKFILLED AND SMOOTH GRADED AS APPROVED BY THE RESIDENT ENGINEER.

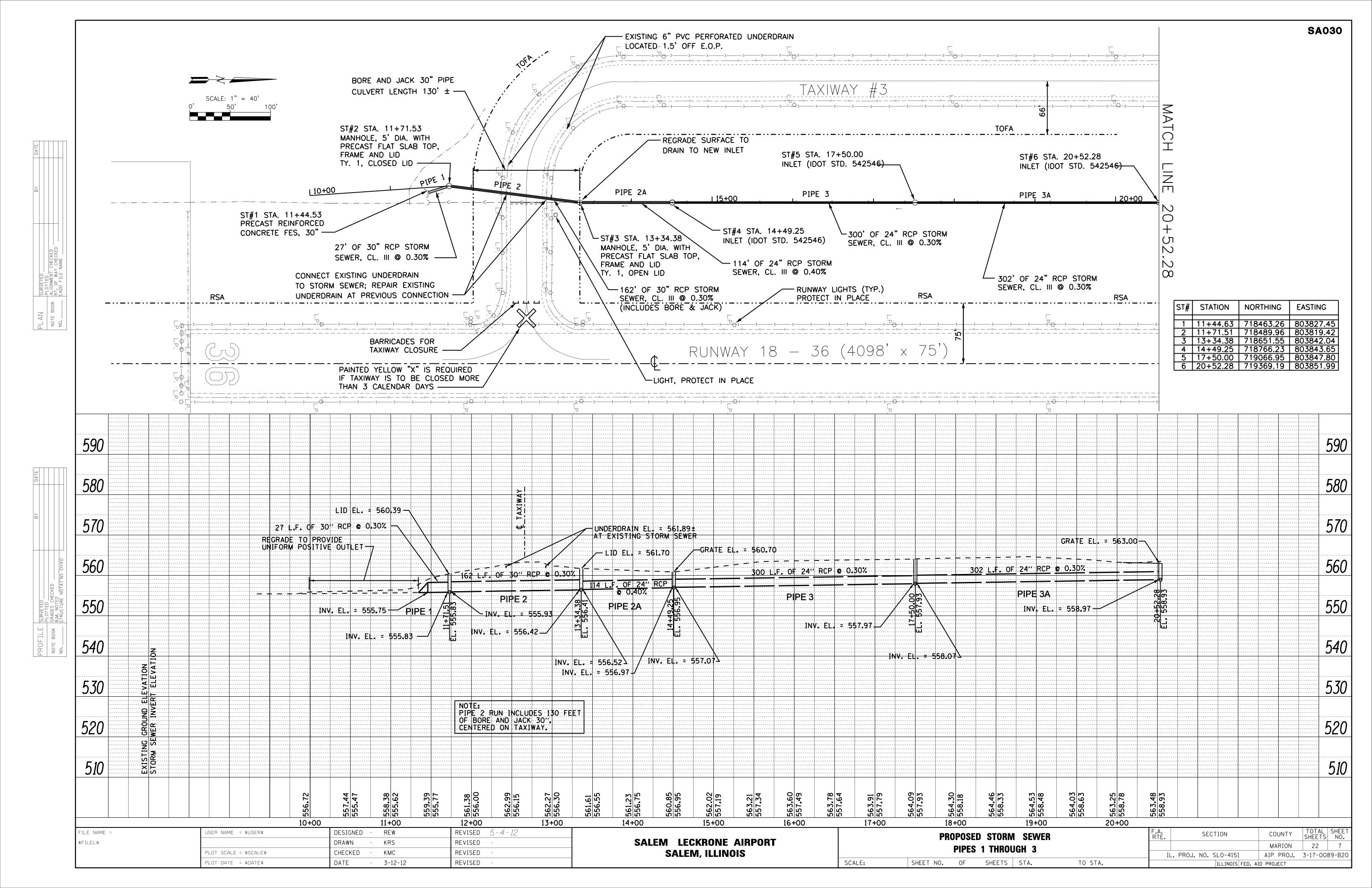




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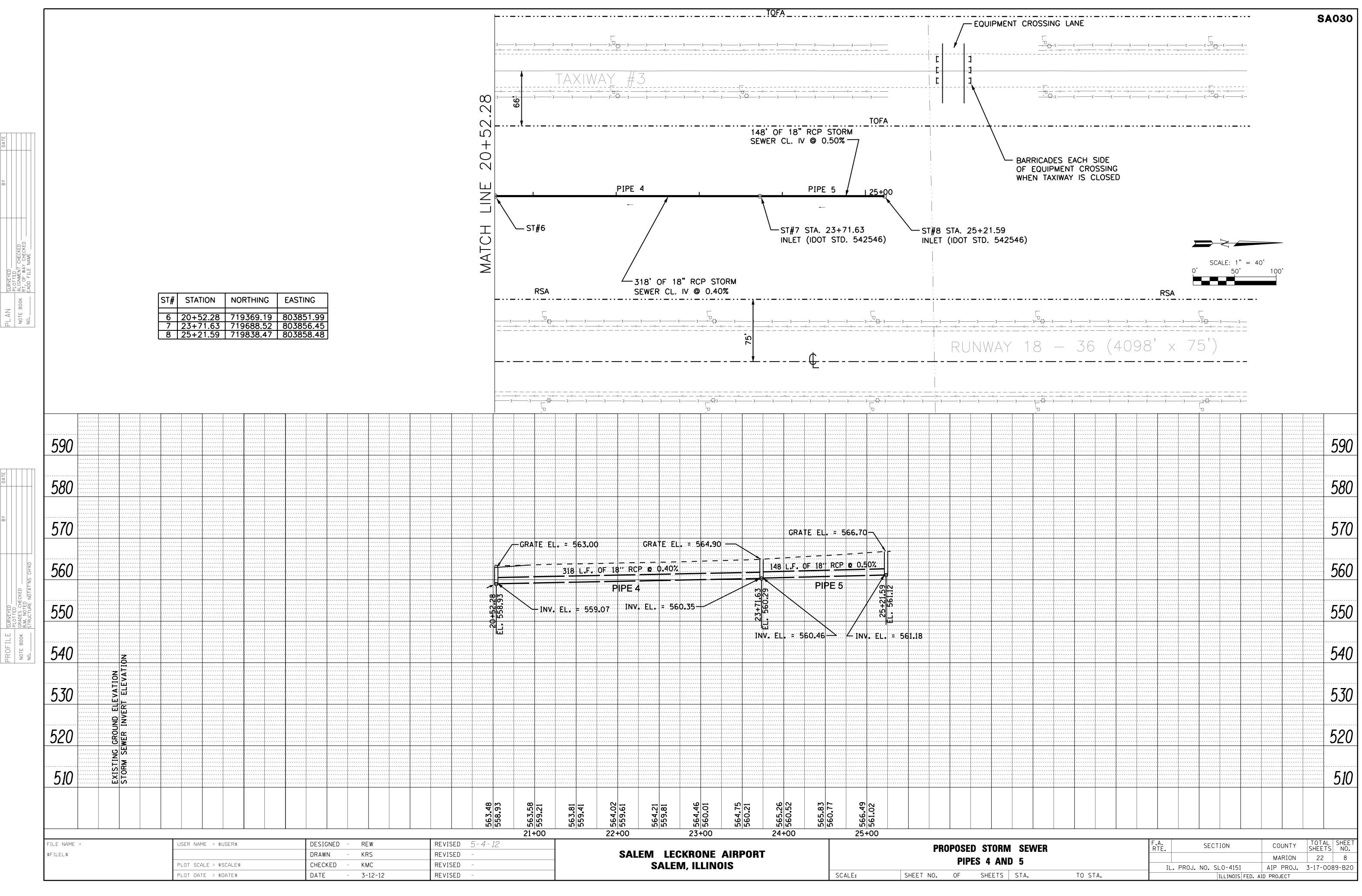
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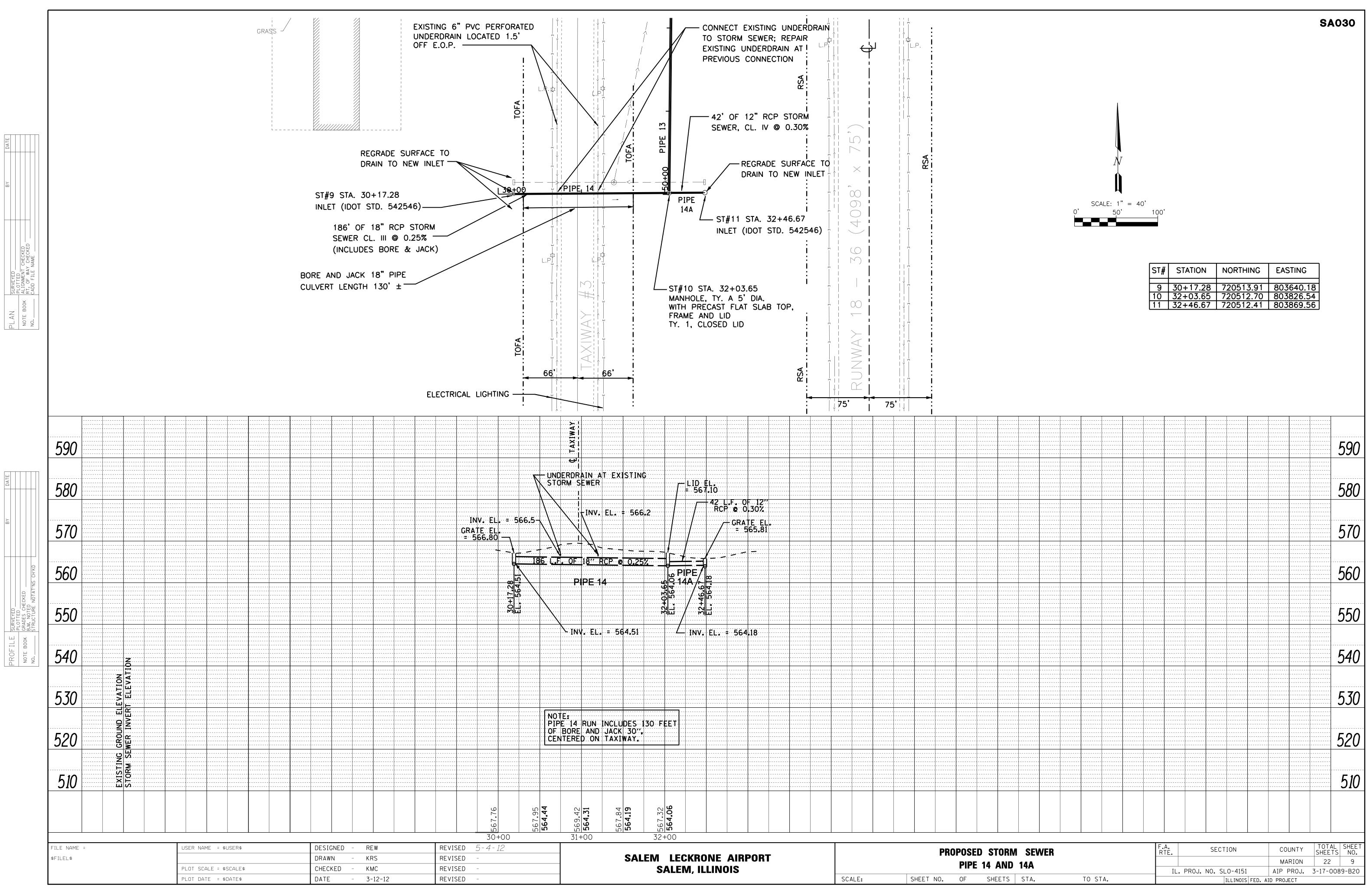


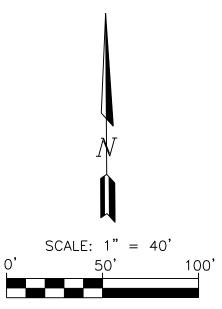
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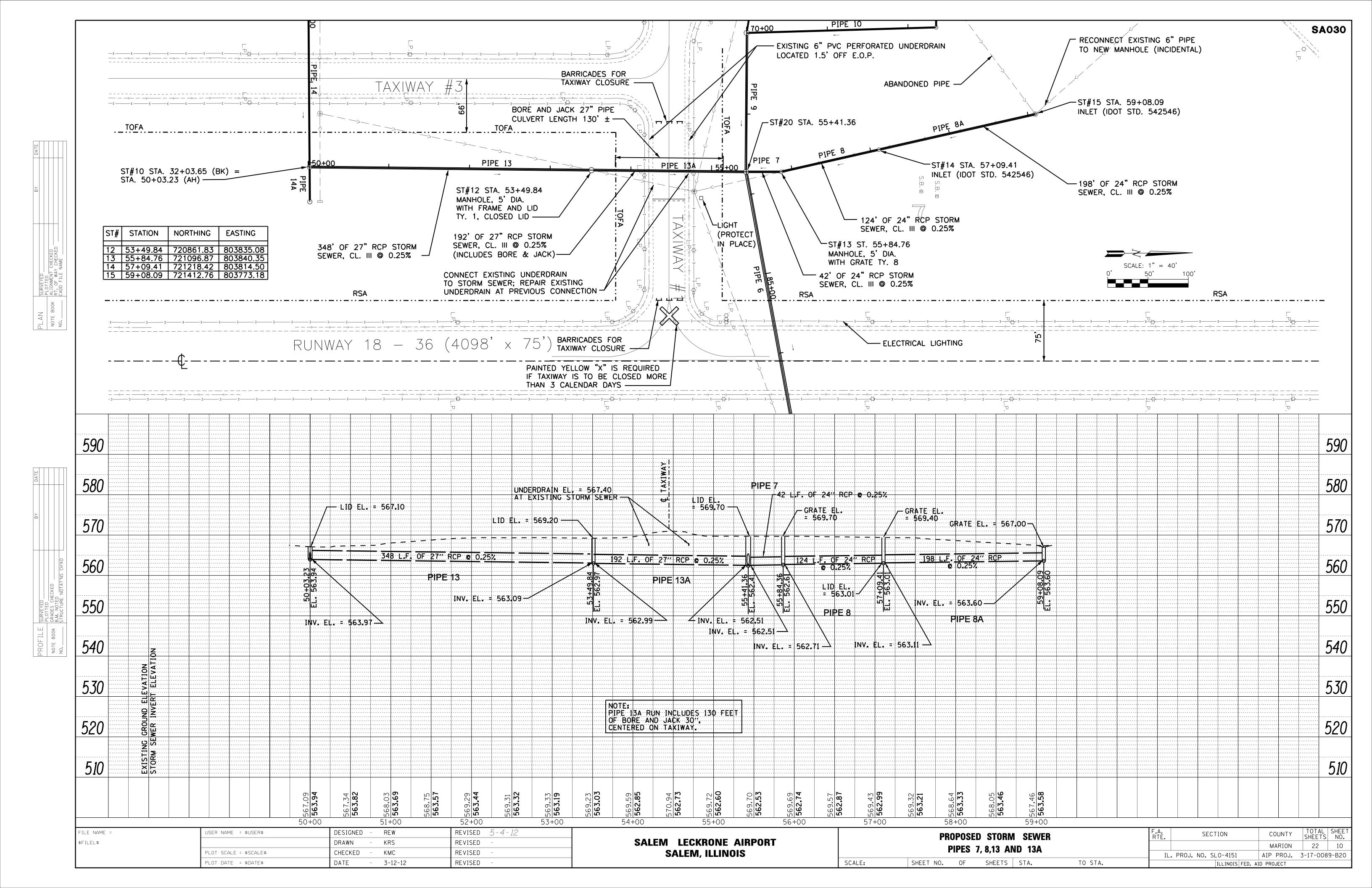
ST#	STATION	NORTHING	EASTING
6	20+52.28	719369.19	803851.99
7	23+71.63	719688.52	803856.45
8	25+21.59	719838.47	803858.48

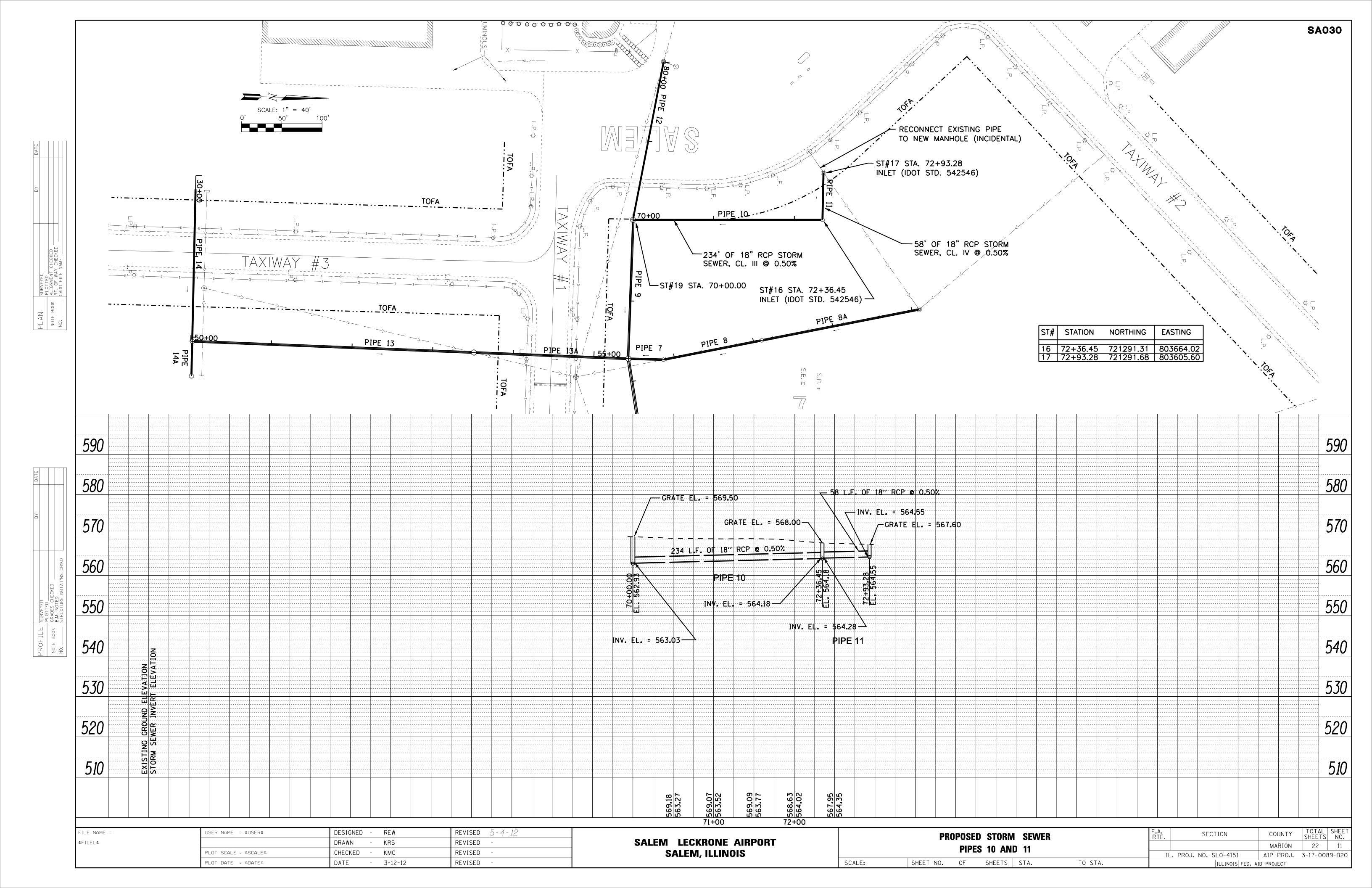


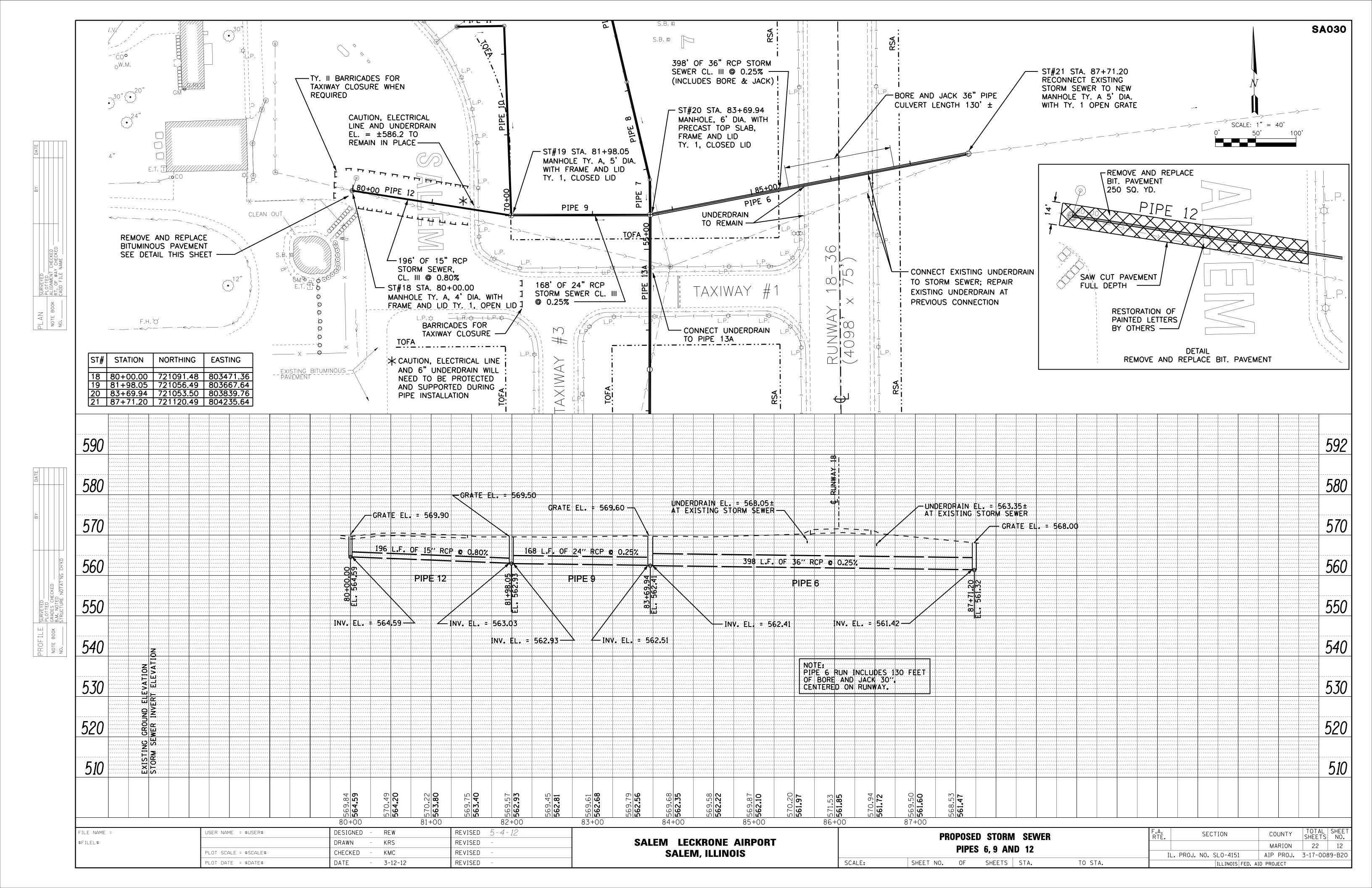




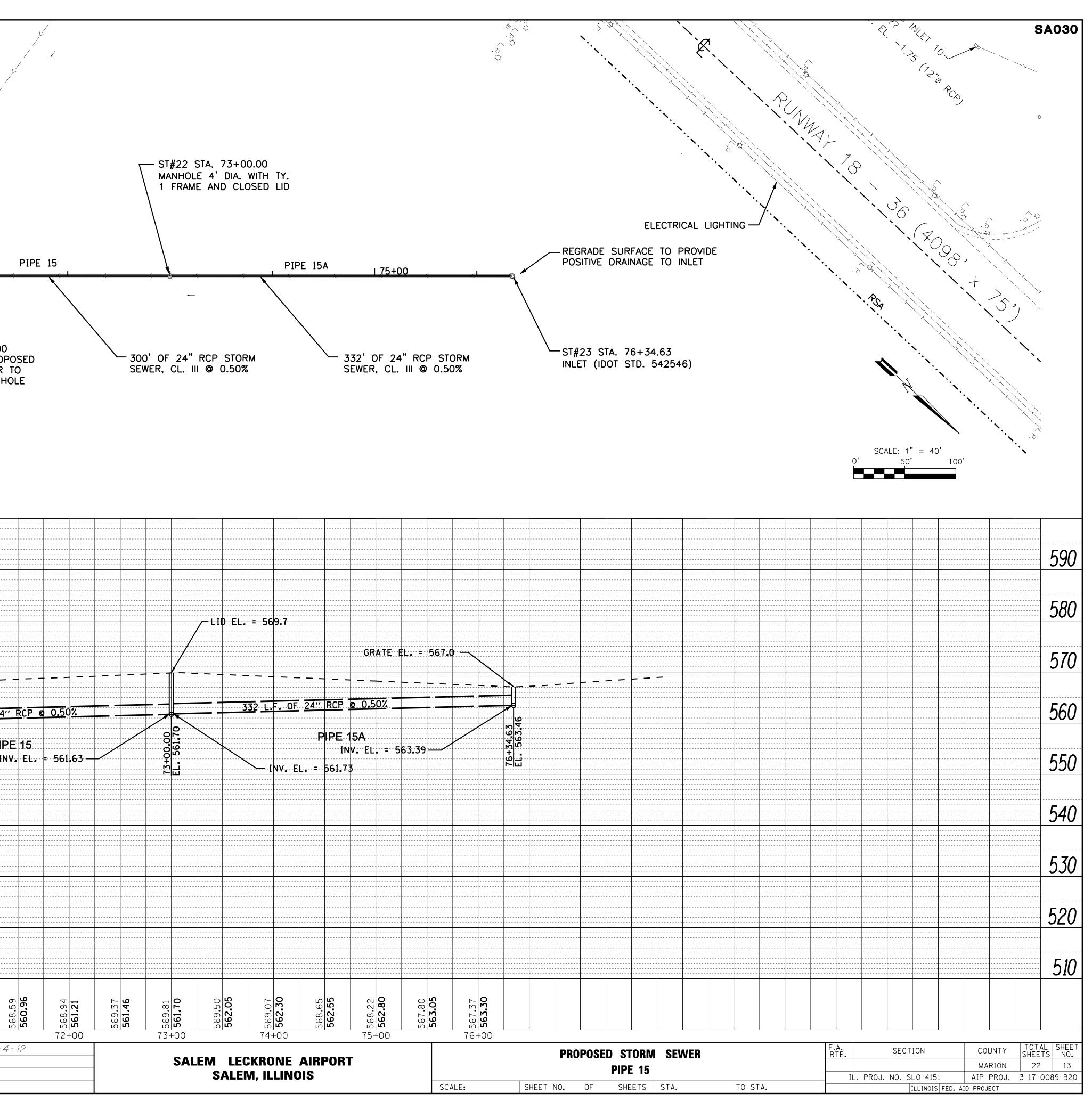
ST#	STATION	NORTHING	EASTING
9	30+17.28	720513.91	803640.18
10	32+03.65	720512.70	803826.54
11	32+46.67	720512.41	803869.56

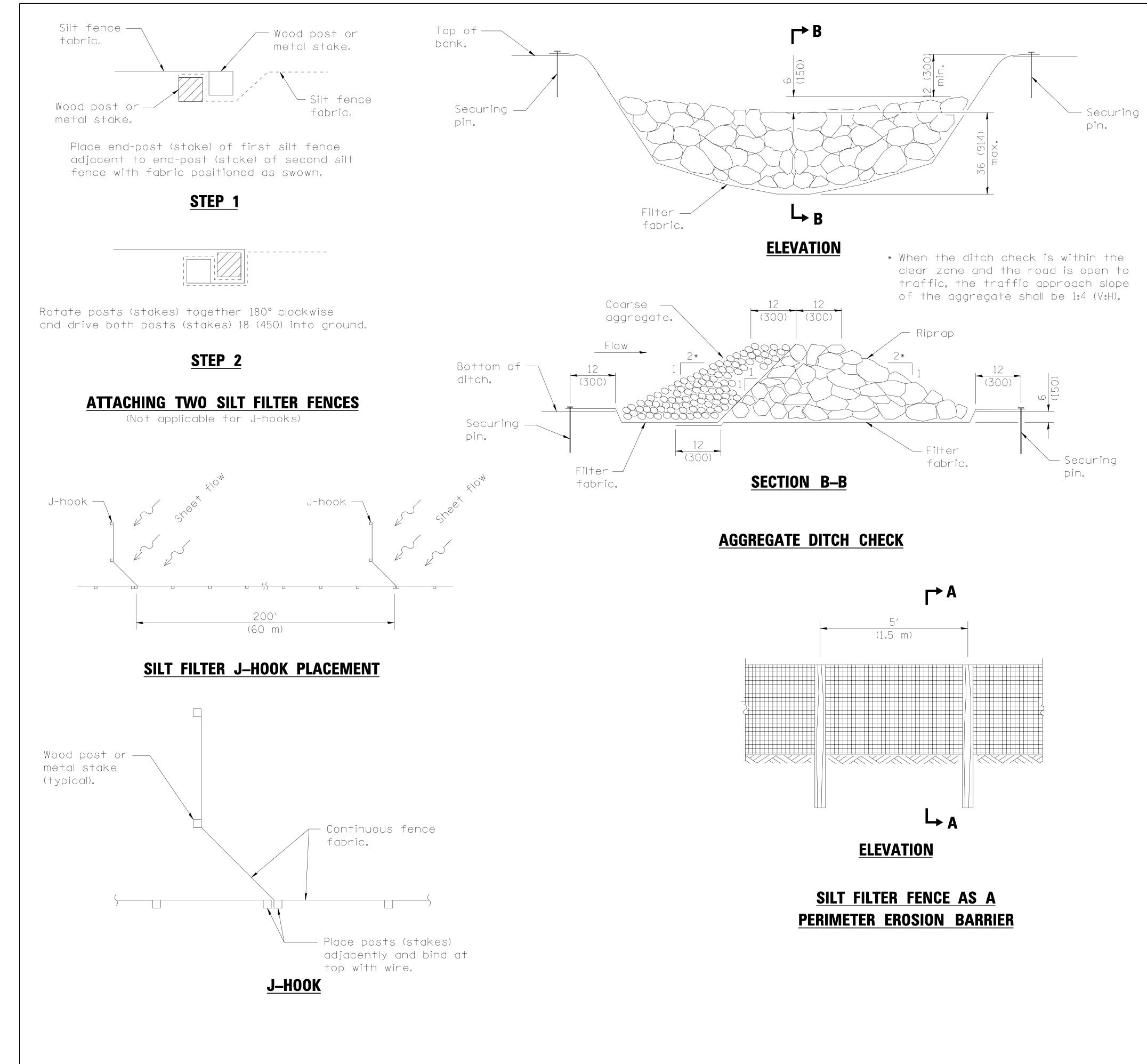


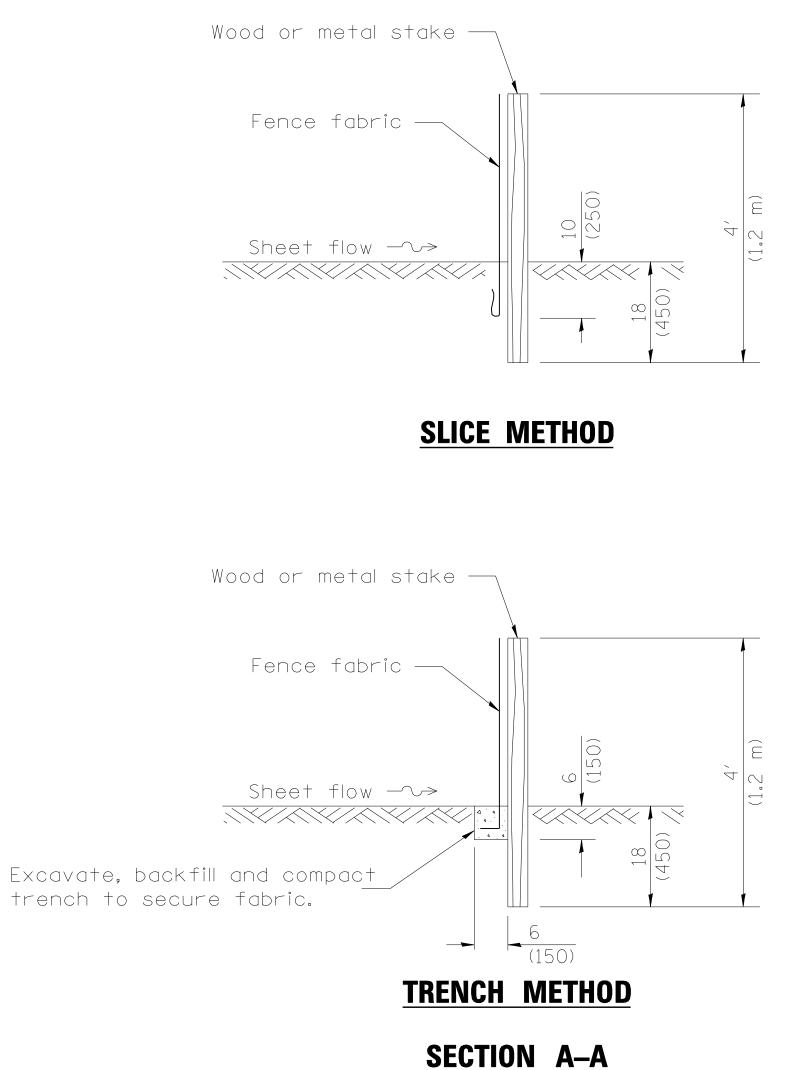




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## **GENERAL NOTES**

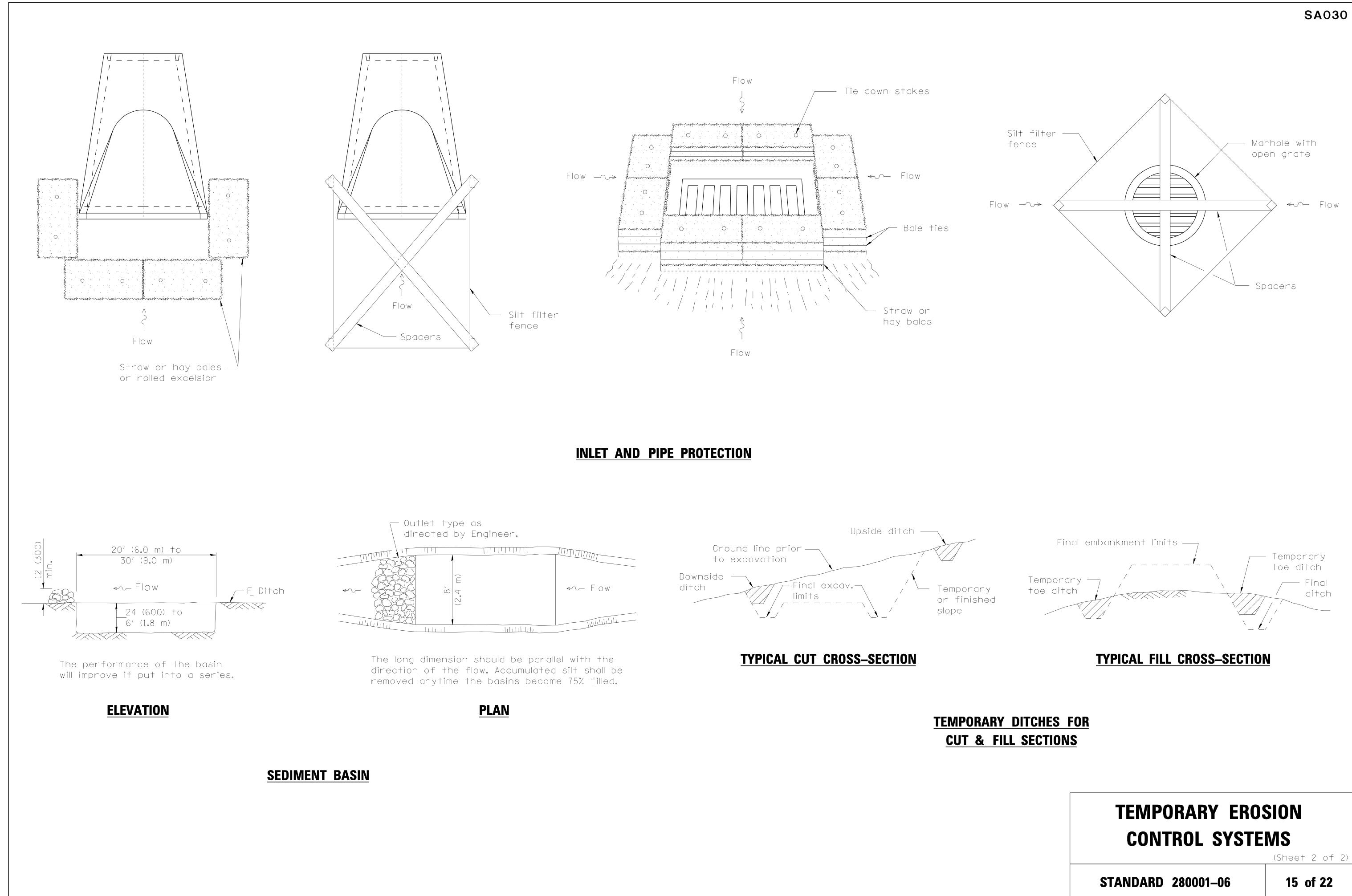
The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

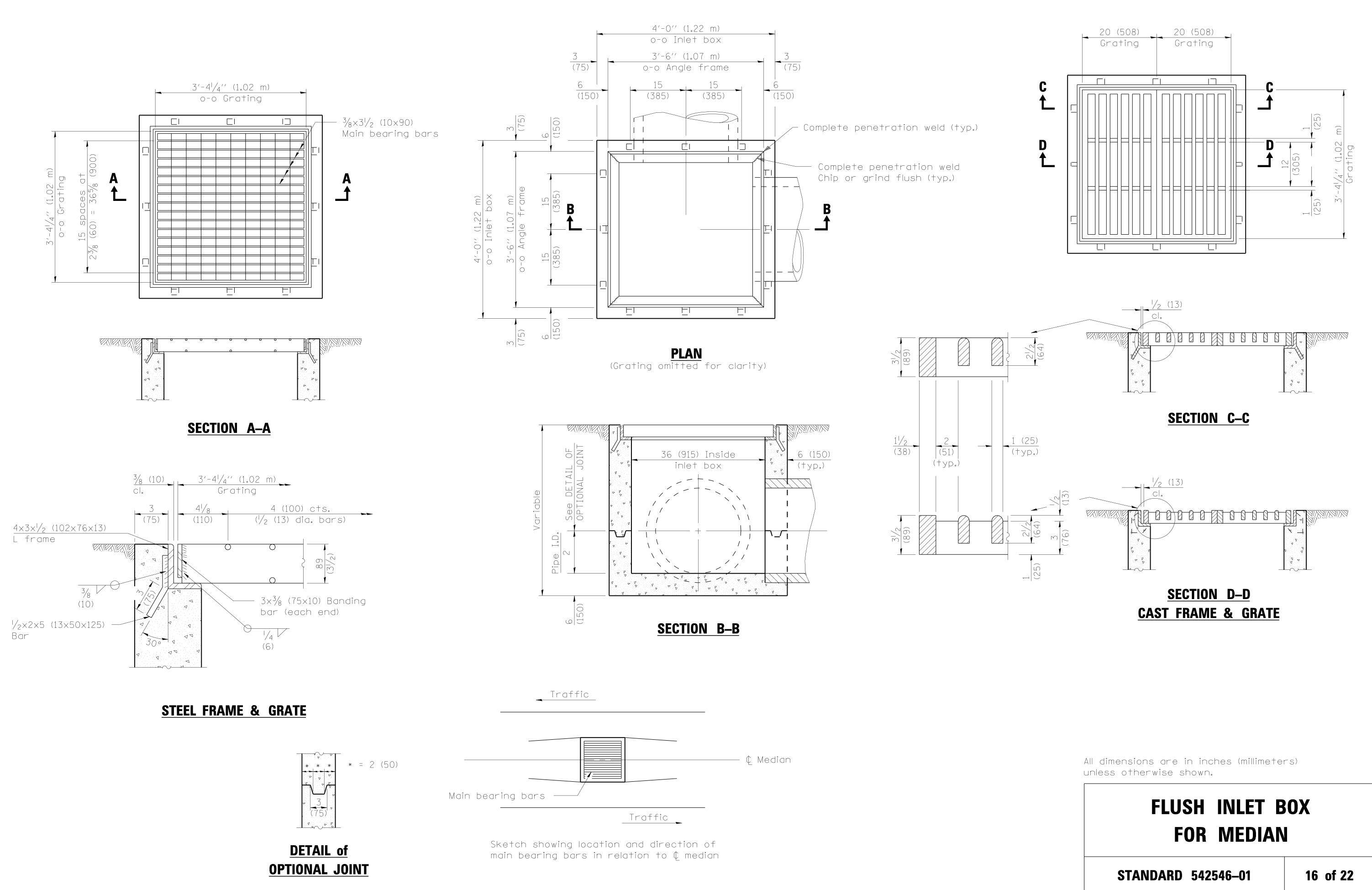
All dimensions are in inches (millimeters) unless otherwise shown.

# **TEMPORARY EROSION CONTROL SYSTEMS**

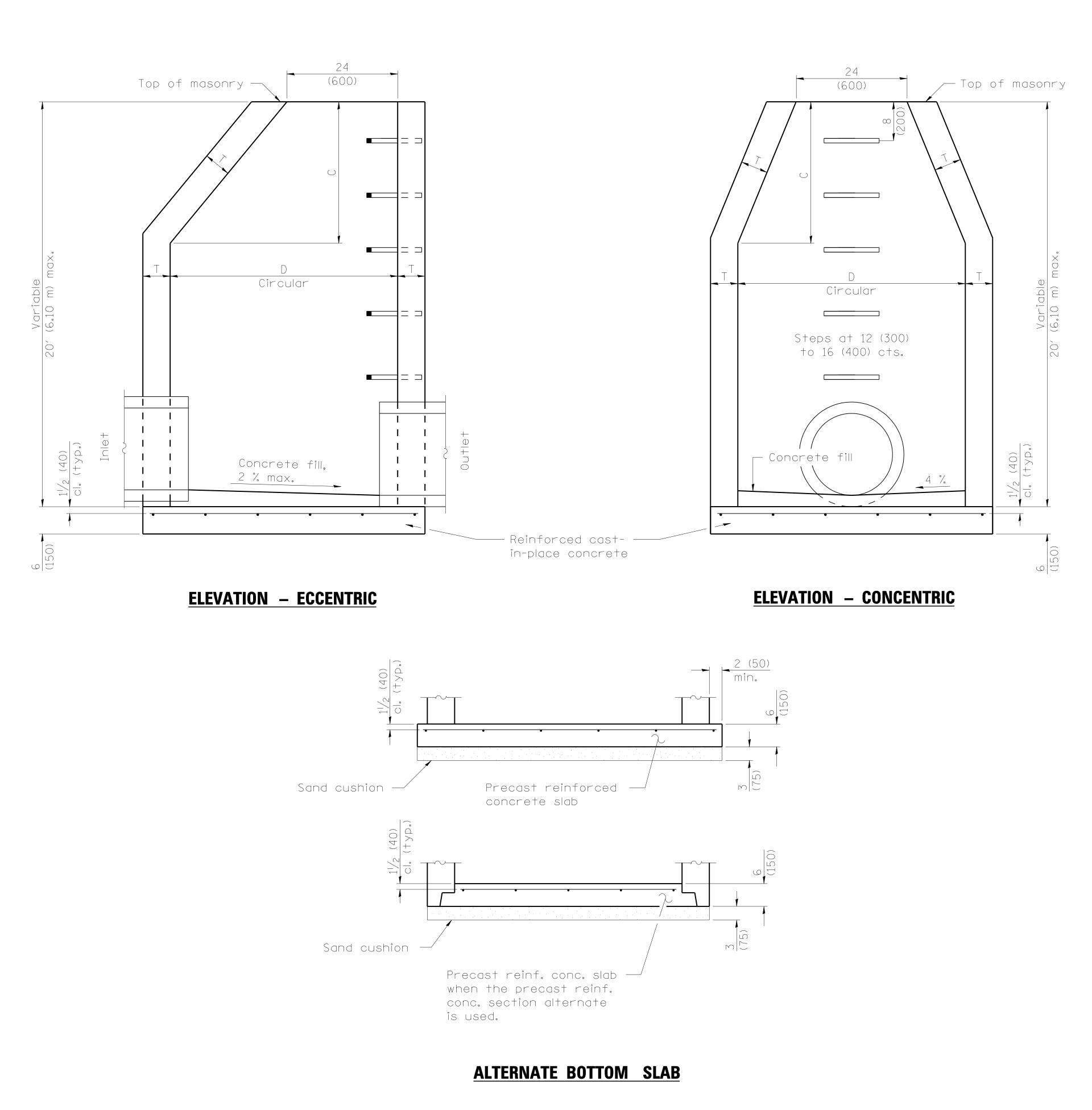
(Sheet 1 of 2)

**STANDARD 280001–06** 











LTERNATE Als for Walls	D	() *	T (min.)
Masonry Unit	4'-0'' (1.2 m)	30 (750)	5 (125)
	5'-0'' (1.5 m)	3'-9'' (1.15 m)	5 (125)
nry	4'-0'' (1.2 m)	30 (750)	8 (200)
	5'-0'' (1.5 m)	3'-9'' (1.15 m)	8 (200)
einforced	4'-0'' (1.2 m)	30 (750)	4 (100)
Section	5'-0'' (1.5 m)	3'-9'' (1.15 m)	5 (125)
ce Concrete	4'-0'' (1.2 m)	30 (750)	6 (150)
	5'-0'' (1.5 m)	3'-9'' (1.15 m)	6 (150)

\* For precast reinforced concrete sections, dimension "C" may vary from the dimension given to plus 6 (150).

## **GENERAL NOTES**

Bottom slabs shall be reinforced with a minimum of 0.31 sq. in./ft. (660 sq. mm/m) in both directions with a maximum spacing of 12 (300).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

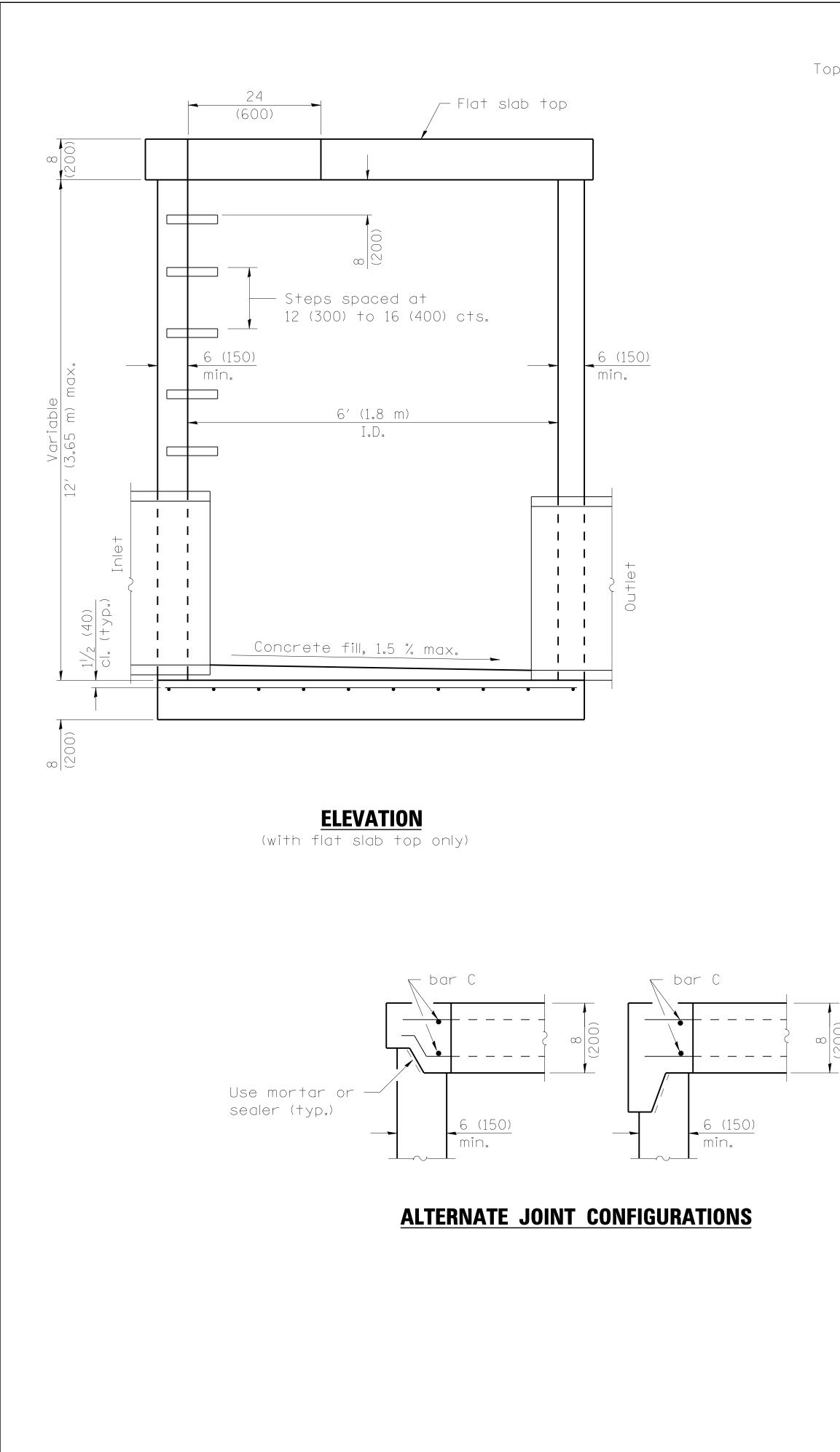
See Standard 602701 for details of steps.

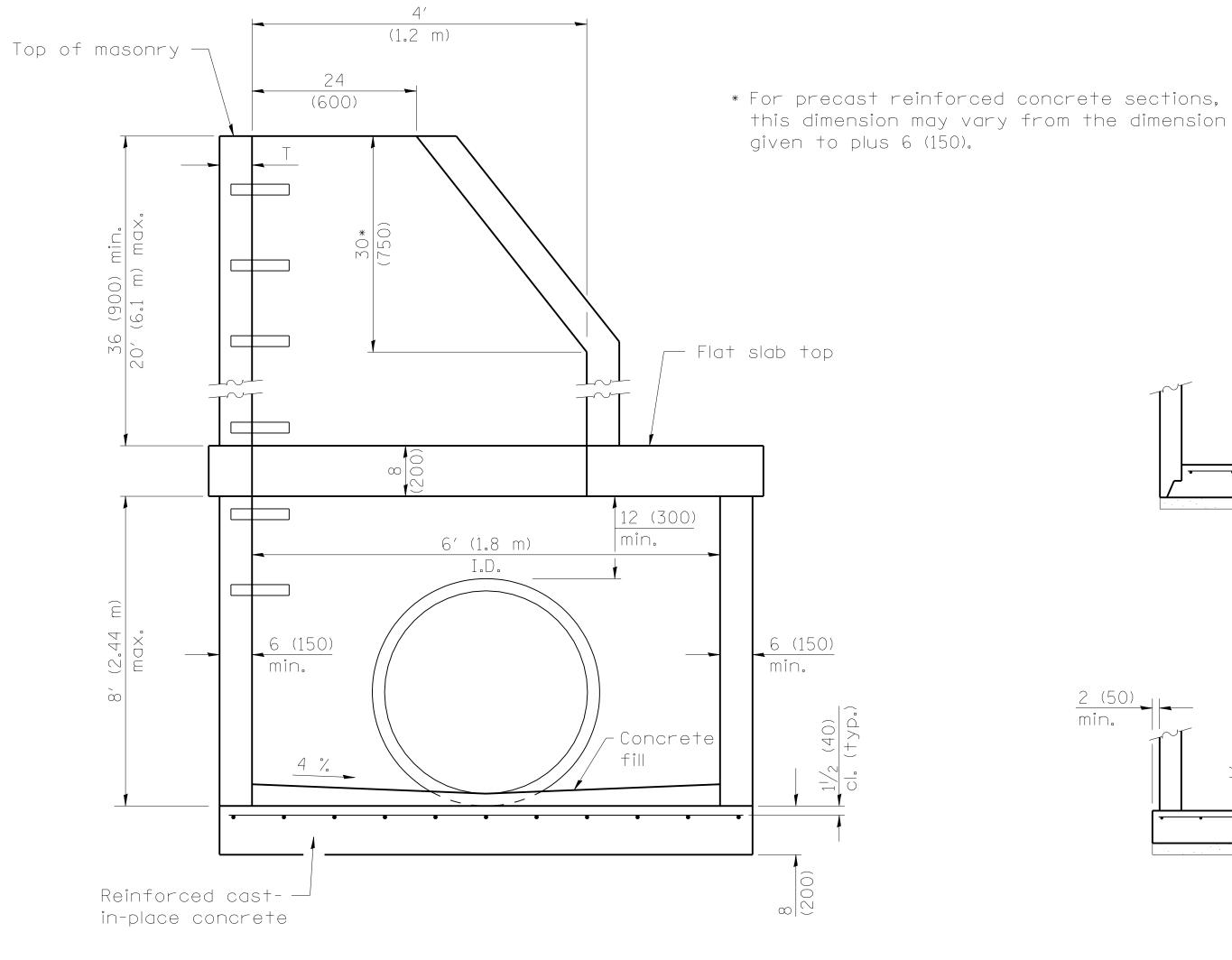
See Standard 602601 for optional Precast Reinforced Concrete Flat Slab Top.

All dimensions are in inches (millimeters) unless otherwise shown.

# MANHOLE TYPE A

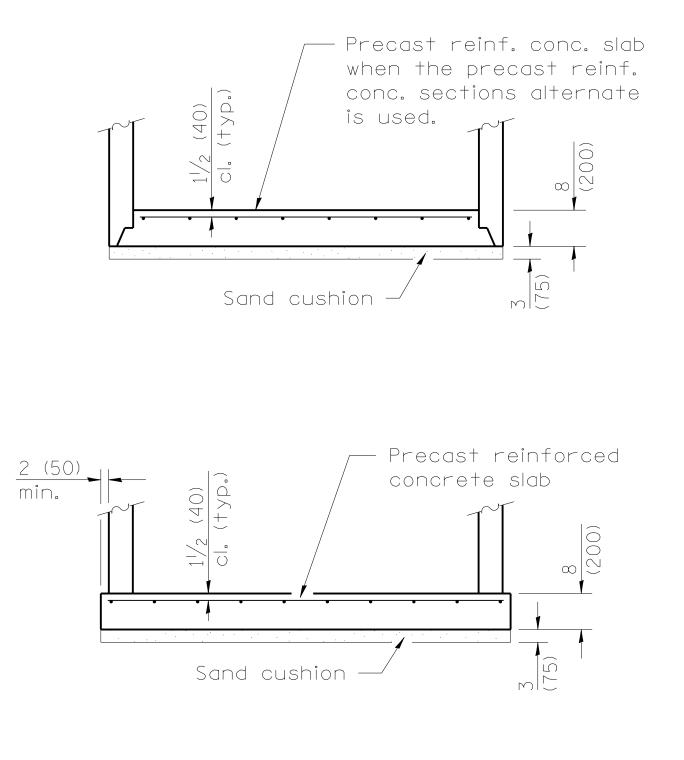
**STANDARD 602401–03** 





**ELEVATION** (with flat slab top and riser)

ALTERNATE	T
Materials for Walls	(min)
Concrete Masonry Units	5 (125)
Precast Reinforced	4
Concrete Sections	(100)
Cast-in-Place Concrete	6 (150)



## **ALTERNATE BOTTOM SLABS**

## **GENERAL NOTES**

Joint configuration and dimensions of flat slab top shall match and fit the riser joint detail.

Lifting devices shall be approved by the Engineer.

Bottom slabs shall be reinforced with a minimum of 0.37 sq. in./ft. (780 sq. mm /m) in both directions with a maximum spacing of 10 (250)

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

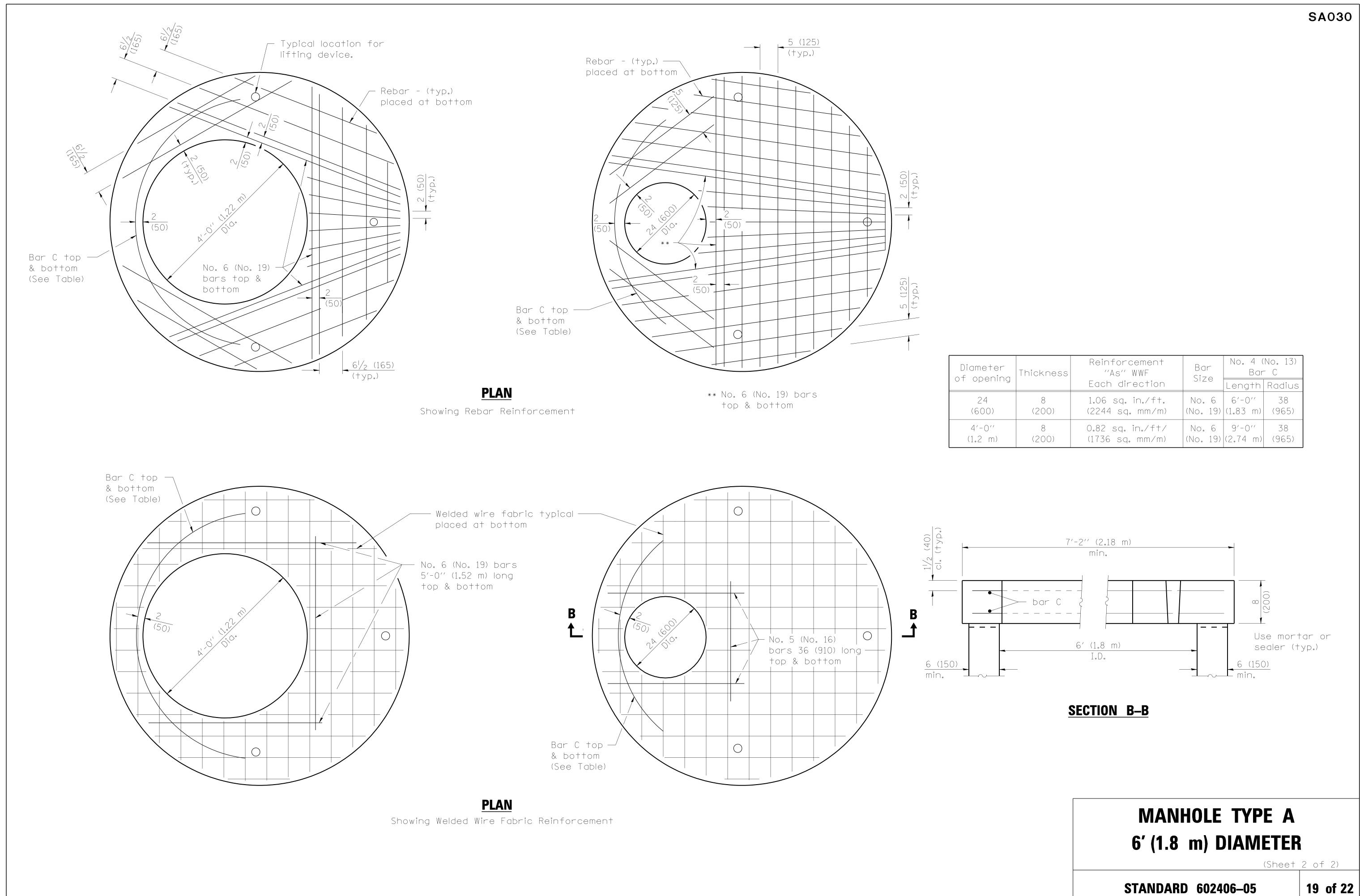
See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise shown.

# MANHOLE TYPE A 6' (1.8 m) DIAMETER

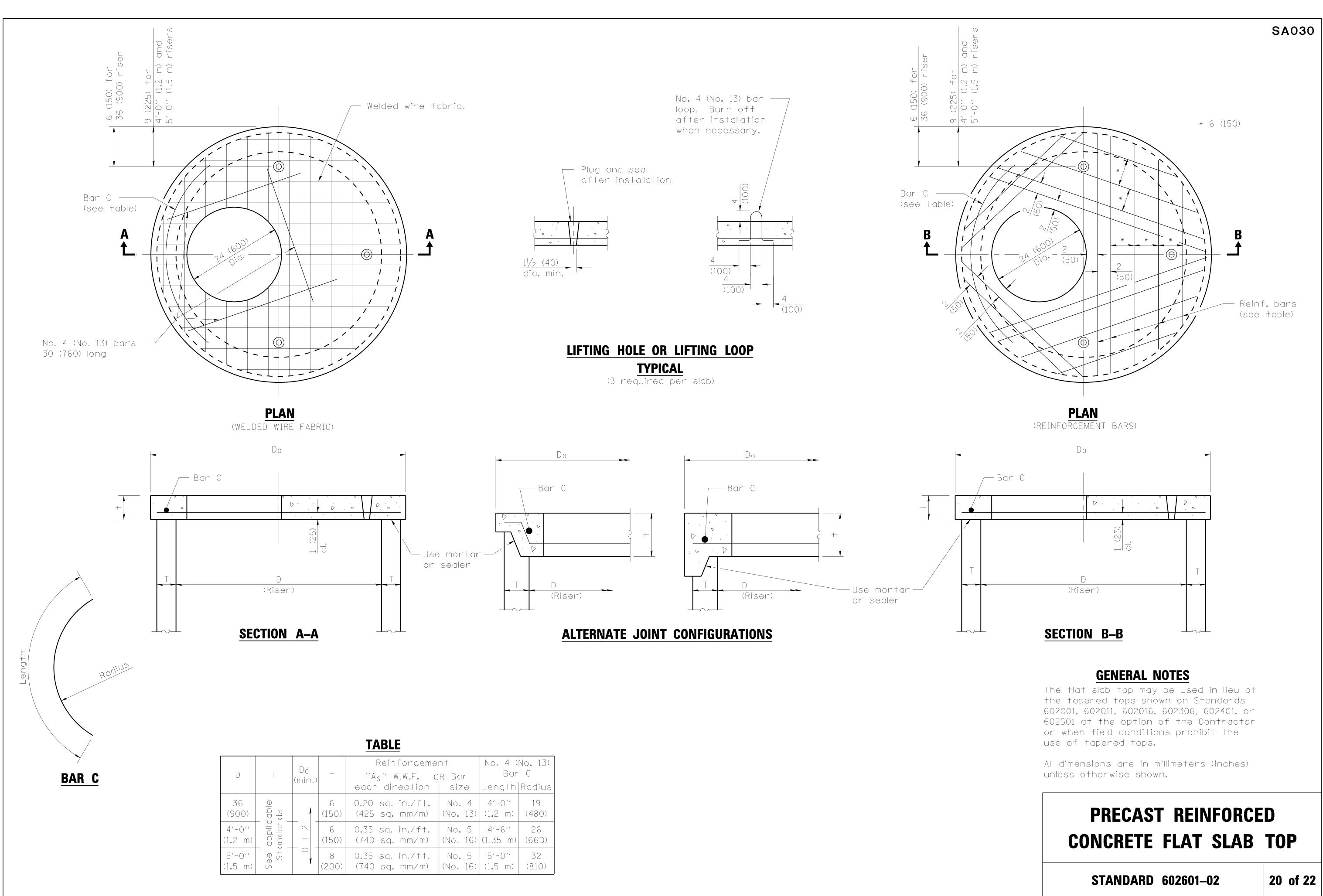
(Sheet 1 of 2)

**STANDARD 602406–05** 

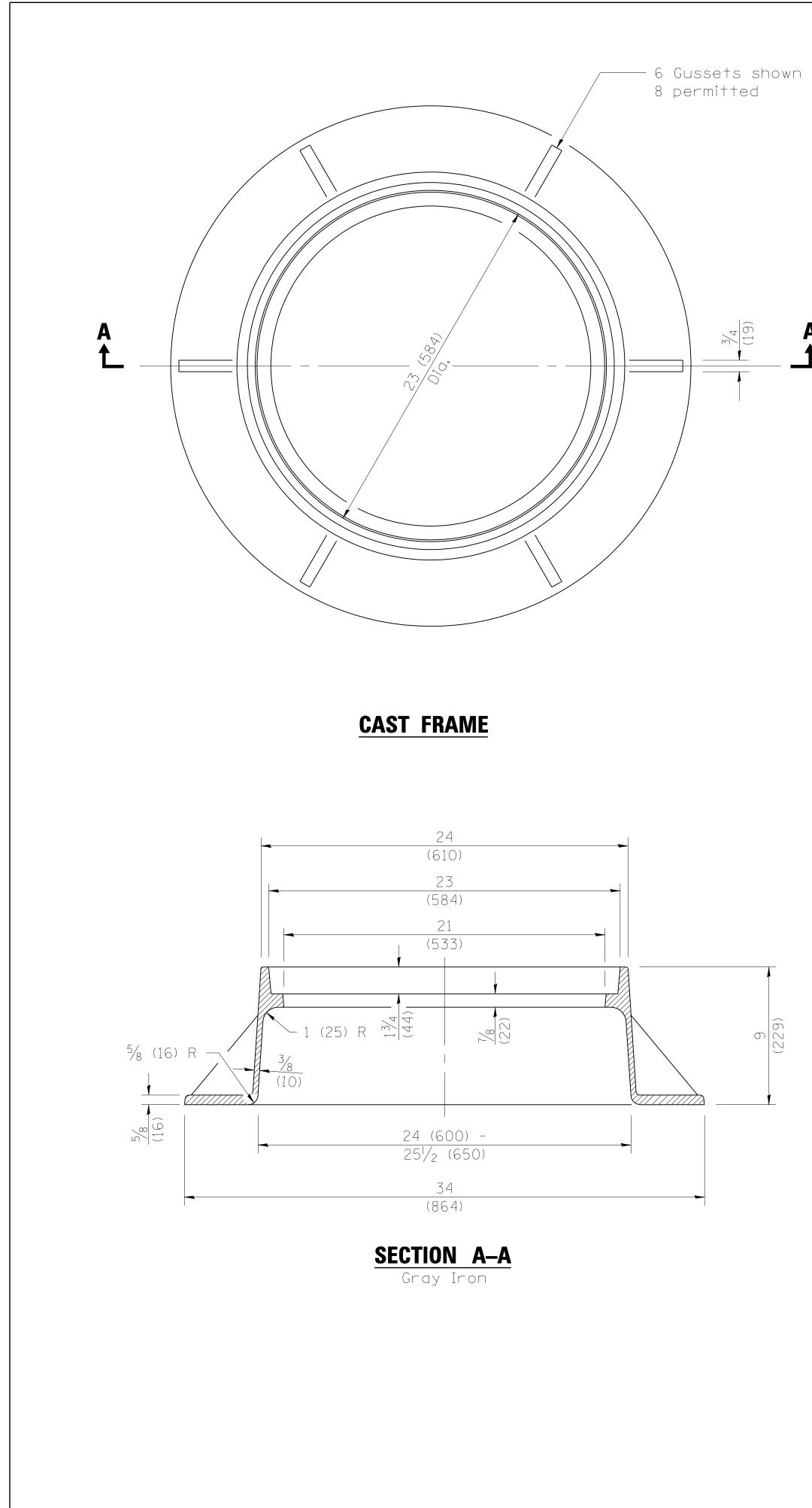


ter ning	Thickness		As" WWF Bar C		- C
		Each direction		Length	Radius
))	8 (200)	1.06 sq. in./ft. (2244 sq. mm/m)		6′-0′′ (1.83 m)	38 (965)
// m)	8 (200)	0.82 sq. in./ft/ (1736 sq. mm/m)	No. 6 (No. 19)	9'-0'' (2.74 m)	38 (965)

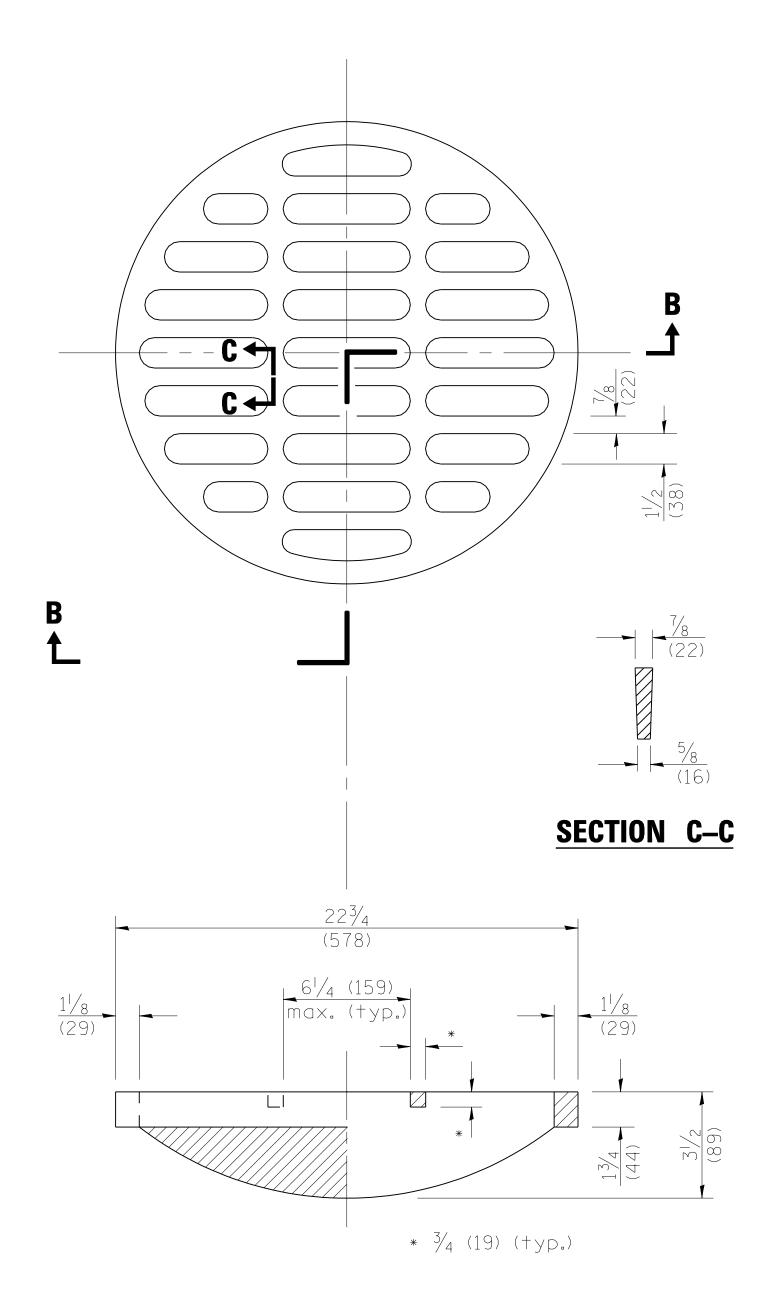
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n+	No. 4 (No. 13)		
<u>R</u> Bar	Bar C		
size	Length	Radius	
No. 4 (No. 13)	4'-0'' (1.2 m)	19 (480)	
No. 5 (No. 16)	4′-6′′ (1.35 m)	26 (660)	
No. 5 (No. 16)	5′-0′′ (1.5 m)	32 (810)	



A ▲



D

11/<sub>8</sub> (29)  $\frac{13/4}{(44)}$ 



CAST OPEN LID

