

SHEET NO.	TOTAL SHEETS
01	5

CITY OF WICHITA, KANSAS
 MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

STORM WATER SEWER IMPROVEMENTS

IN
 WICHITA MUNICIPAL AIRPORT ADDITION
 CITY OF WICHITA PRIVATE PROJECT NO. 1101PPS (607861)

INDEX OF SHEETS

- C1 TITLE
- C2 GRADING PLAN
- C3 REINFORCED CONCRETE INLETS AND MANHOLES



SCALE: 1"=200'

GENERAL NOTES

UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION. CONTRACTOR SHALL SATISFY HIMSELF OF SUBSURFACE CONDITIONS PRIOR TO BIDDING.

RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR AND APPROVED AS NOTED.

ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, FERTILIZED, AND MULCHED ACCORDING TO CITY OF WICHITA STANDARDS AND SPECIFICATIONS.

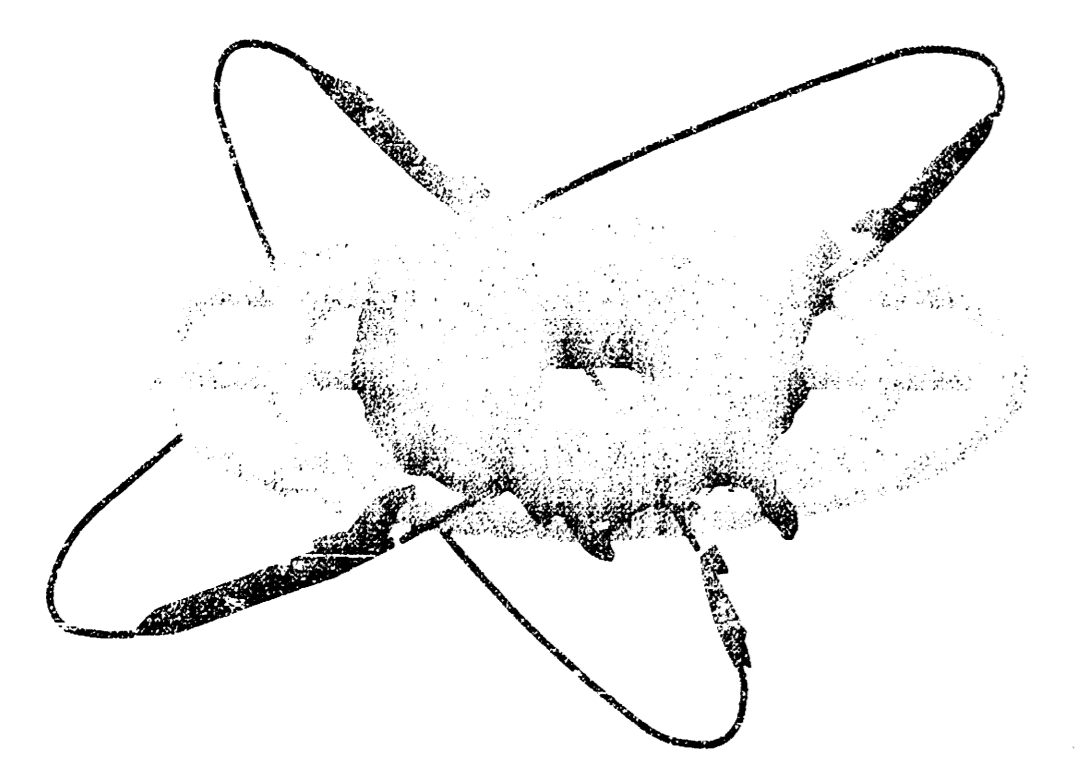
RECORD DRAWING
 [Signature]
 APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA

- SANITARY SEWERS _____
- STORM SEWERS URH 4/4/01
- DRIVEWAY APPROACHES _____
- WATER MAINS _____
- PAVING _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM CONTRACTED BY THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR UNTIL SUCH INSPECTION IS ARRANGED FOR AND REQUIRED BONDS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY. NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER. IMPROVEMENTS PERFORMED UNDER THIS PROJECT SHALL NOT BE ACCEPTED BY THE CITY UNTIL ALL APPLICABLE DOCUMENTATION HAS BEEN SUBMITTED TO THE CITY ENGINEER. THIS MAY INCLUDE: AS-BUILT DRAWINGS, INSPECTION LOGS, TEST DOCUMENTATION, TV TAPES, AND A CERTIFICATE OF COMPLETION. THE ABOVE SHALL BE PERFORMED BY THE CONSULTING FIRM CONTRACTED TO INSPECT THIS PROJECT.

AIRPORT REFERENCE CODE (ARCI) D - IX



MARCH 2001

PLANS PREPARED BY
 PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 ENGINEERS
 WICHITA, KANSAS

OWNER: OPER. S-40 SCALE: 1"=200.00
 DRAWN BY: [Name] DATE: 03-29-2001 10:22:44 am
 PLOT: 0388 Private SMS TITLE

13-11-01-14

C.P.#1: Chiseled "x"
8507.98 N, 10299.96 E

C.P.#100: Pk Nail
8446.17 N, 10277.96 E

C.P.#101: Pk Nail
8086.58 N, 10194.61 E

SCALE: 1"=20'

LEGEND

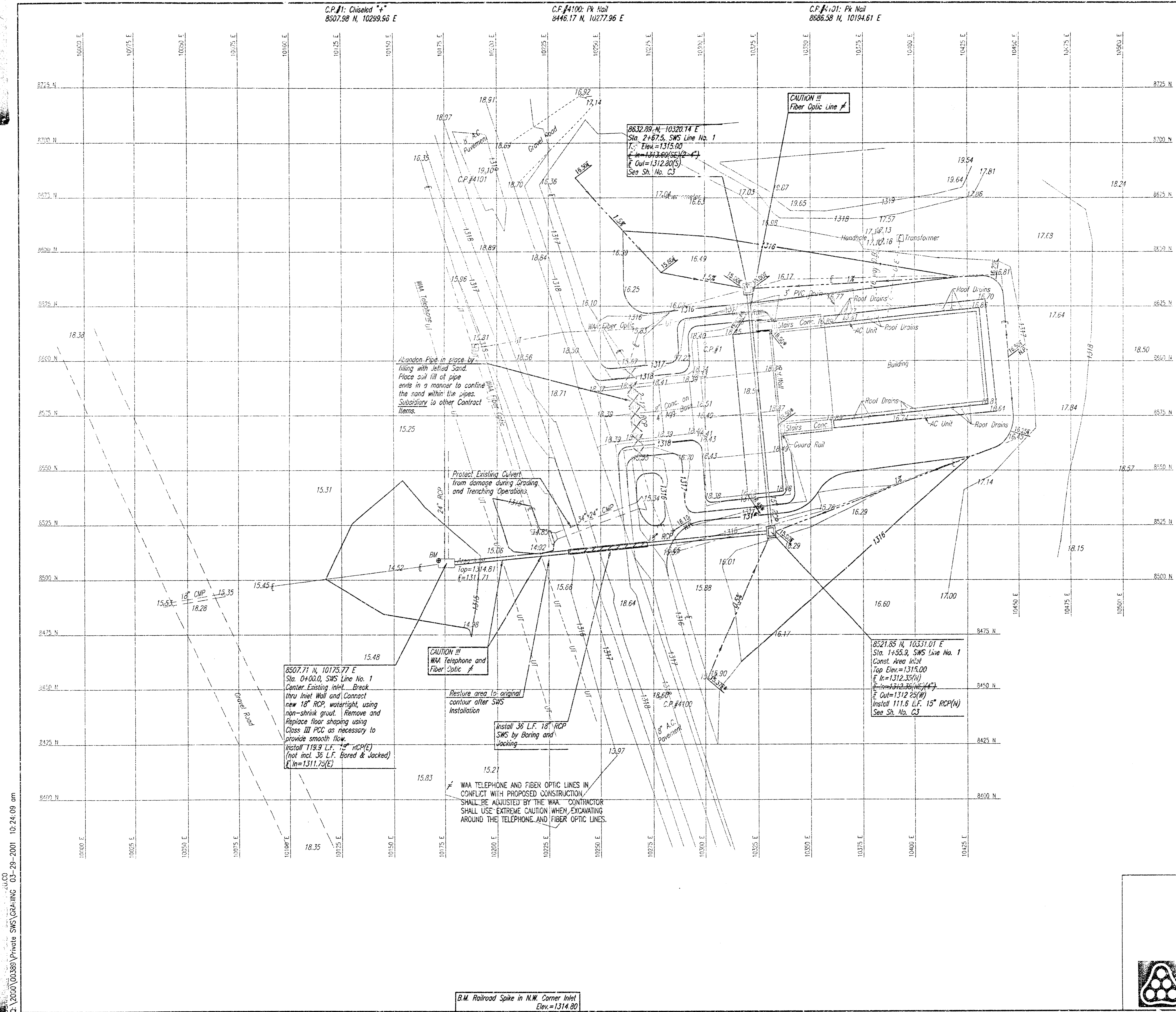
* MATCH EXISTING ELEVATION

GENERAL NOTES

1. GRADE THE SITE TO THE CONTOURS SHOWN. HORIZONTAL CONTROL MAY BE SCALED FROM THE DRAWING USING THE COORDINATE GRID.
2. REMOVE AND DISPOSE ON AIRPORT PROPERTY ALL EXISTING VEGETATION WHERE GRADING WILL OCCUR. STRIP AND STOCKPILE TOPSOIL FOR REUSE ON THE PROJECT. DISPOSE OF EXCESS TOPSOIL ON AIRPORT PROPERTY.
3. THE TOP 4" OF ALL ARFAS TO BE SEEDDED SHALL BE DRESSED WITH SALVAGED TOPSOIL.
4. FILL MATERIAL IN TURF AREAS SHALL BE COMPACTED TO 90% STD. PROCTOR DENSITY. FILL AND/OR BACKFILL BENEATH PAVEMENT OR SIDEWALK SHALL BE PLACED IN 6" MAX. LOOSE LIFTS AND COMPACTED TO 98% STD. PROCTOR DENSITY.
5. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE LOCAL FAA AIRWAYS FACILITIES TO VERIFY THE LOCATION OF FAA CABLES.

RECORD DRAWING

Barry E. ...



8632.89 N, 10320.74 E
Sta. 2+67.5, SWS Line No. 1
T. Elev.=1315.00
In=1312.60(4")
Out=1312.80(5")
See Sh. No. C3

CAUTION !!!
Fiber Optic Line

Abandon Pipe in place by filling with Jetted Sand. Place soil fill of pipe ends in a manner to confine the sand within the pipes. Subsidiary to other Contract Items.

Protect Existing Culvert from damage during grading and trenching operations.

CAUTION !!!
WAA Telephone and Fiber Optic

Restore area to original contour after SWS installation

Install 36 L.F. 18" RCP SWS by Boring and Jacking

WAA TELEPHONE AND FIBER OPTIC LINES IN CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE ADJUSTED BY THE WAA CONTRACTOR. SHALL USE EXTREME CAUTION WHEN EXCAVATING AROUND THE TELEPHONE AND FIBER OPTIC LINES.

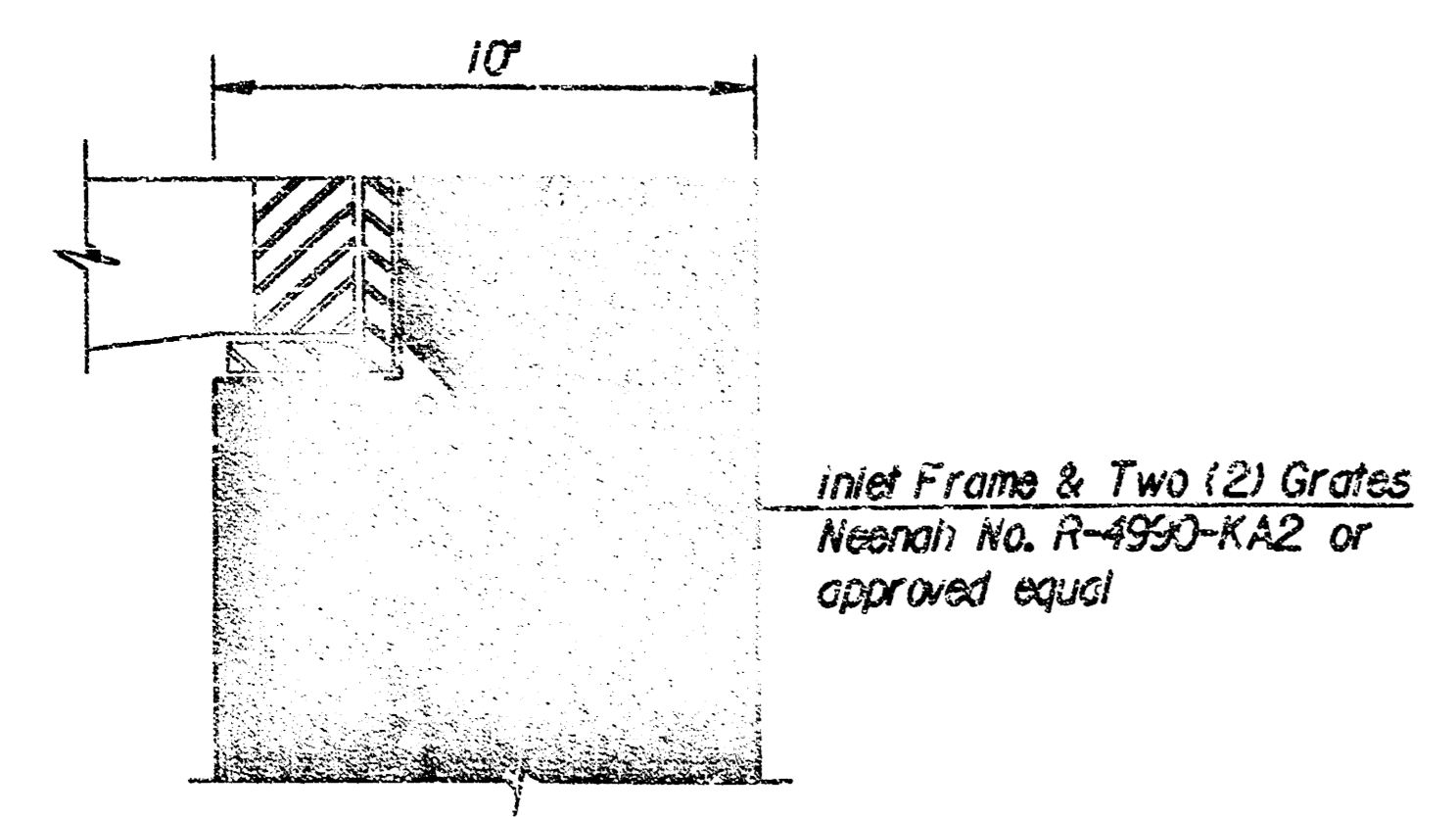
8521.85 N, 10331.01 E
Sta. 1+85.3, SWS Line No. 1
Const. Area Inlet
Top Elev.=1315.00
In=1312.35(4")
Out=1312.25(4")
Install 111.6 L.F. 15" RCP(N)
See Sh. No. C3

8507.71 N, 10175.77 E
Sta. 0+00.0, SWS Line No. 1
Center Existing Inlet. Break thru Inlet Wall and Connect thru Inlet Wall and Connect new 18" RCP, watertight, using non-shrink grout. Remove and Replace floor slabs using Class III PCC as necessary to provide smooth flow.
Install 119.9 L.F. 15" RCP(E) (not incl. 36 L.F. Bored & Jacked)
In=1311.73(E)

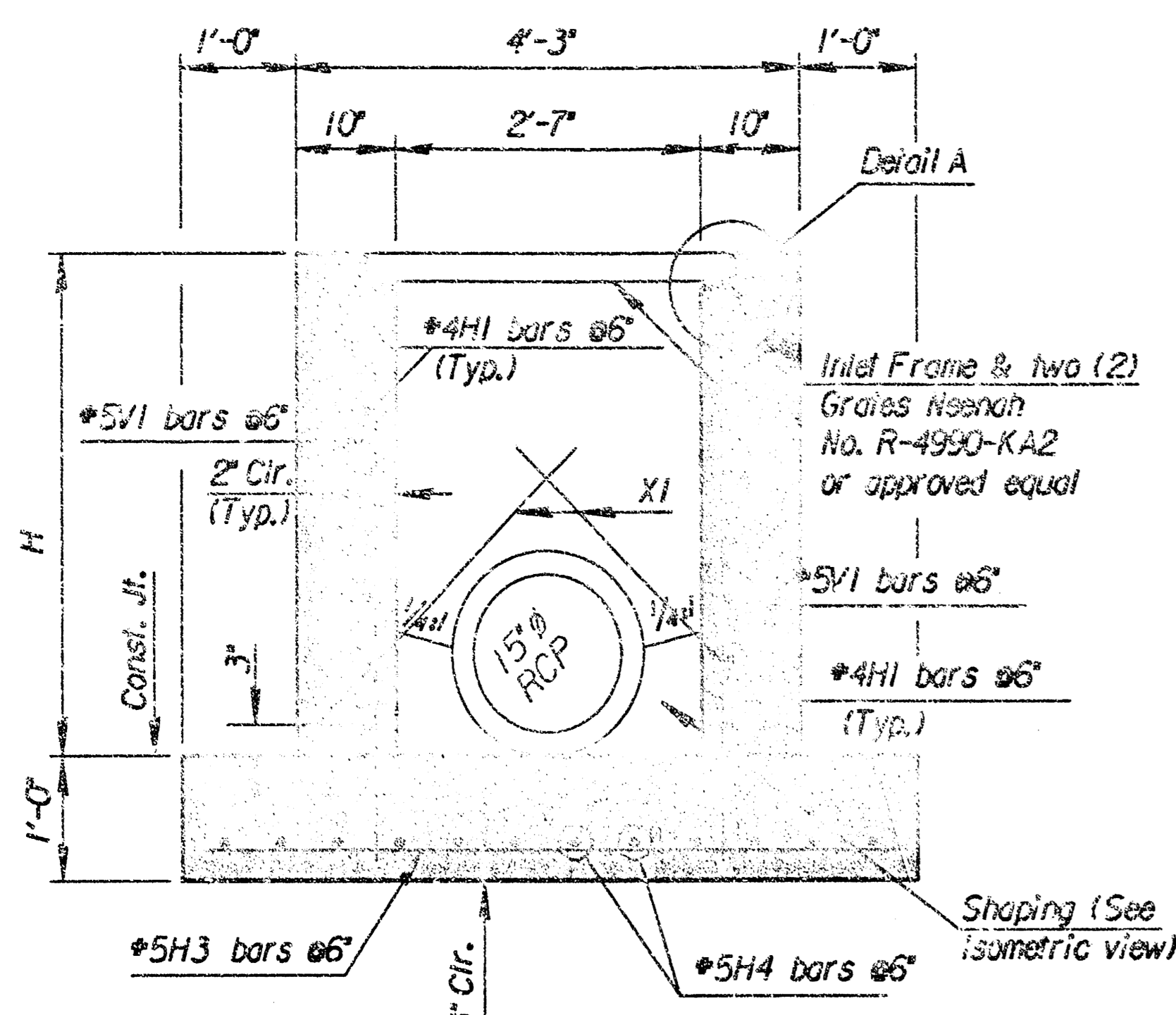
B.M. Railroad Spike in N.W. Corner Inlet
Elev.=1314.80

G:\2000\00388\Private SWS GRADING 03-29-2001 10:24:09 am

No.	Revision	By	Date
WICHITA MID-CONTINENT AIRPORT ELECTRICAL VAULT IMPROVEMENTS			
GRADING PLAN			
Professional Engineering Consultants, P.A.			
303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DBC	Job No.	00388
Drawn by	DEP	Date	10/25/00
			Sht. C2 of 3



DETAIL A



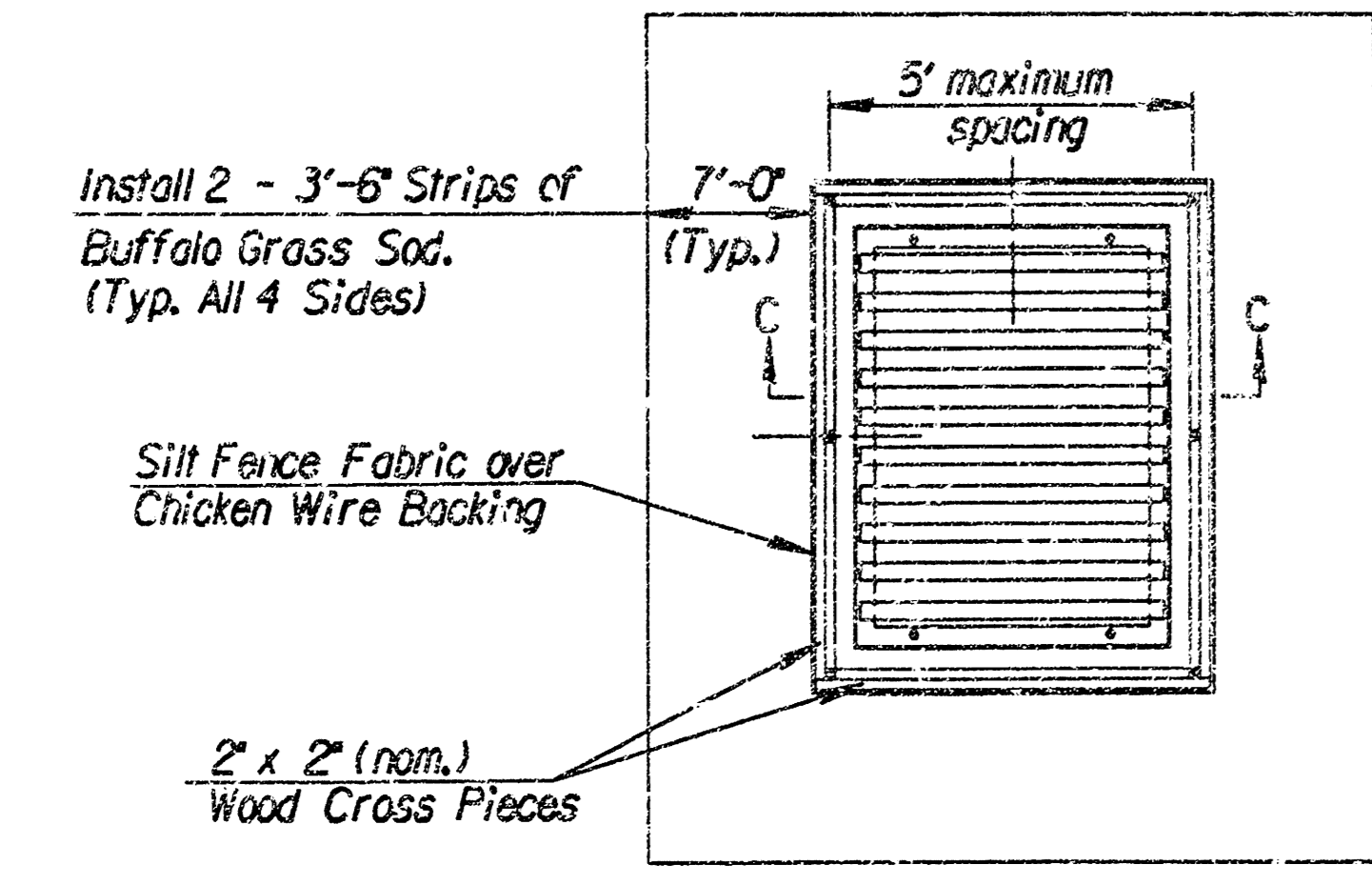
SECTION A-A

Field align inlets parallel to new RCP

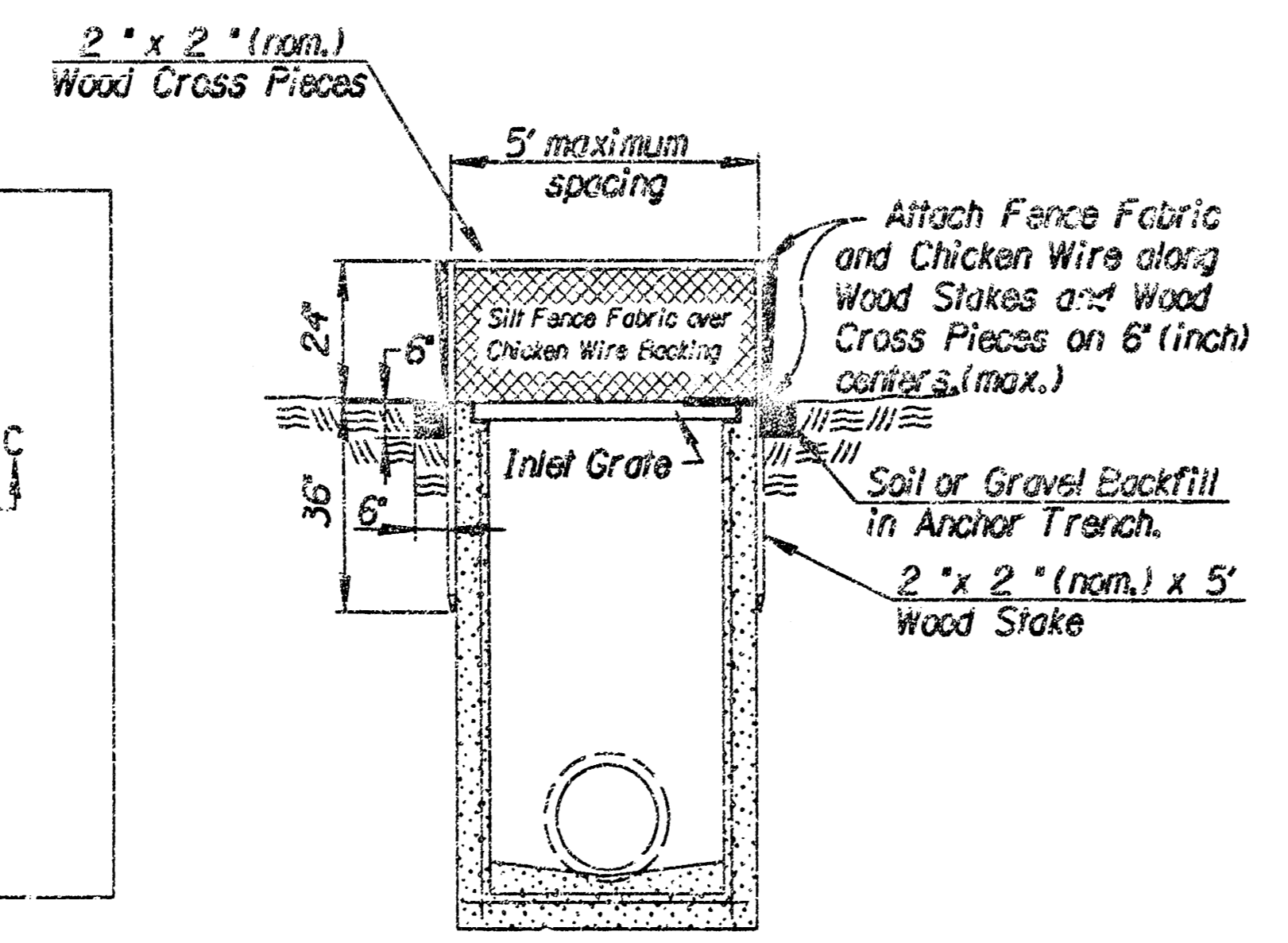
AREA INLET

LOCATION	SWS STA.	H
8521.85N, 10331.01E	1+55.9	3'
8632.89N, 10320.14E	2+67.5	3'

SCHEDULE FOR AREA INLETS



PLAN



SECTION C-C

TEMPORARY INLET SEDIMENT BARRIER AND PERMANENT SEEDING
NO SCALE

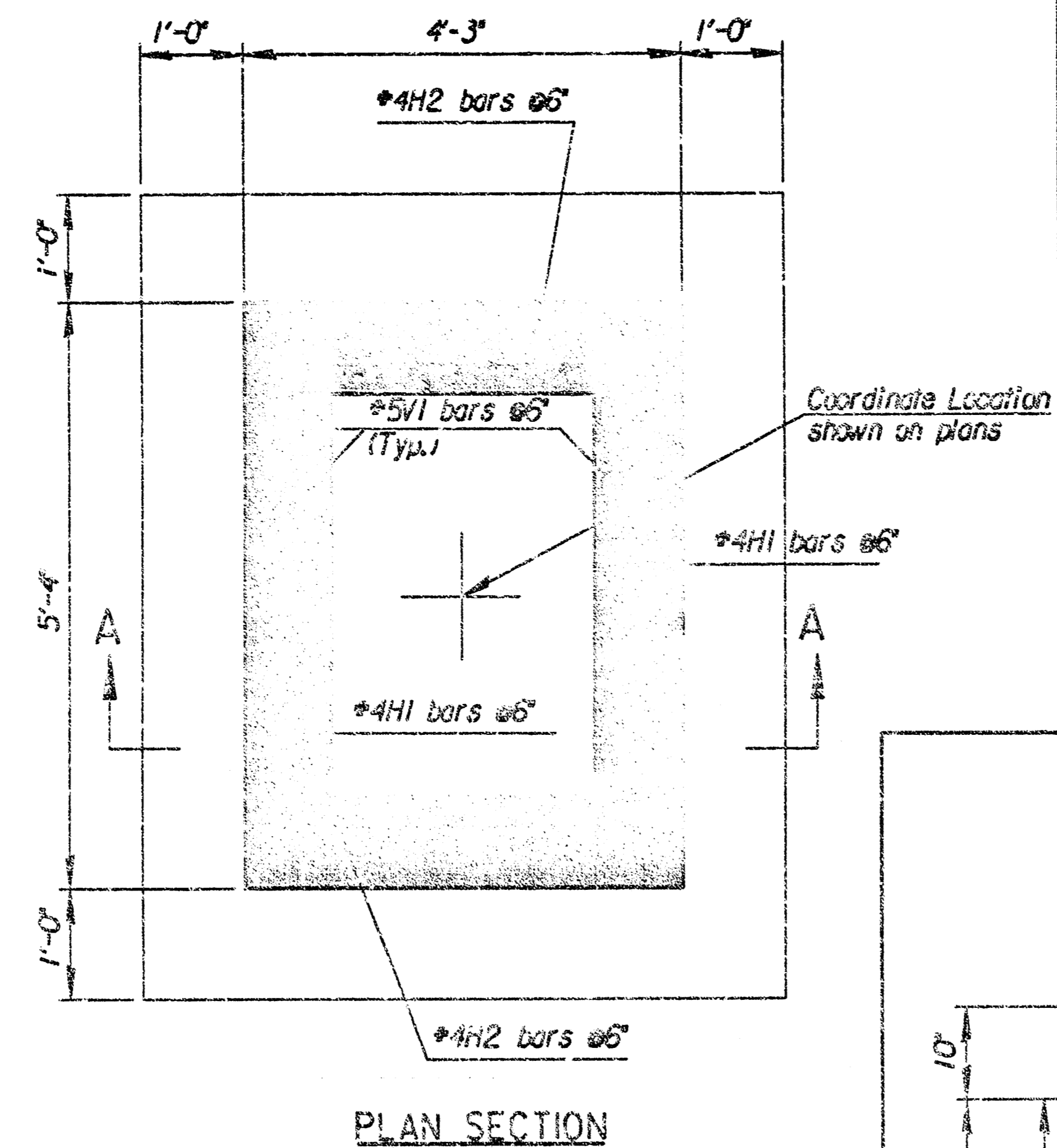
Inlet Sediment Barrier and Buffalo Grass Sod to be Subsidiary to Permanent Seeding.

BILL OF MATERIALS FOR AREA INLETS			
3'-0" Wall Height			
Bar	No.	Size	Length
V1	28	#5	3'-5"
H1	12	#4	5'-0"
H2	12	#4	3'-11"
H3	14	#5	5'-11"
H4	12	#5	7'-0"
X1	2	#5	3'-6"
Class II Conc.(AE) 3.16 Cu.Yd.			
Reinf. steel 355 Lbs.			
Excavation 17.2 Cu.Yd.			
Cast Iron 722 Lbs.			

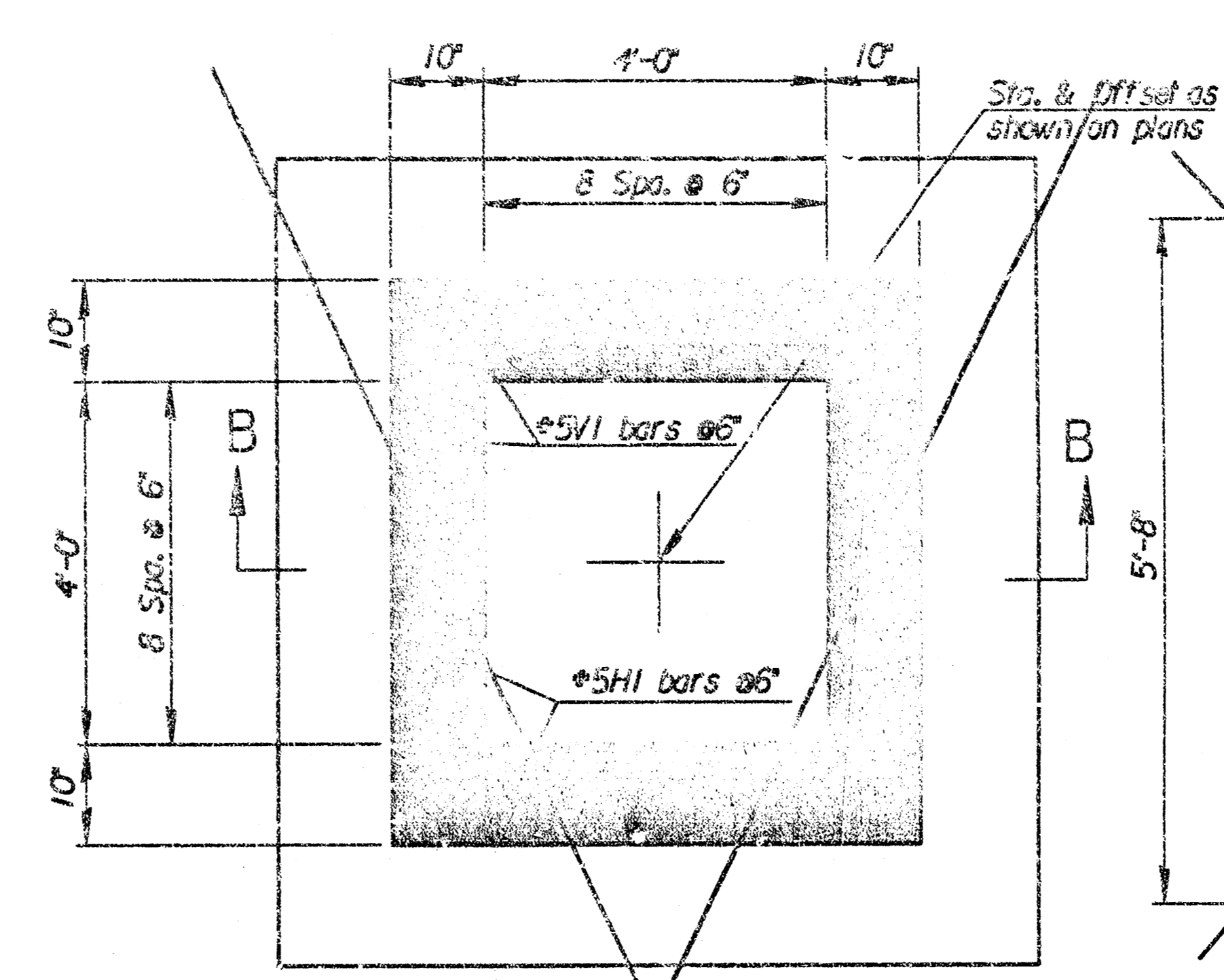
BILL OF MATERIALS FOR AREA INLETS			
4'-0" Wall Height			
Bar	No.	Size	Length
V1	23	#5	4'-6"
H1	12	#4	5'-0"
H2	12	#4	3'-11"
H3	14	#5	5'-11"
H4	12	#5	7'-0"
X1	4	#5	3'-5"
Class II Conc.(AE) 3.77 Cu.Yd.			
Reinf. steel 392 Lbs.			
Excavation 21.5 Cu.Yd.			
Cast Iron 722 Lbs.			

BILL OF MATERIALS FOR MANHOLE			
5'-0" Wall Height			
Located at Taxiway E3			
Sta. 6+50.24, 67.50 L.			
Bar	No.	Size	Length
V1	36	#5	5'-7"
H1	32	#5	5'-8"
H2	32	#5	7'-4"
H3	20	#6	5'-4"
H4	4	#6	5'-2"
H5	4	#6	4'-2"
X1	4	#5	4'-0"
Class II Conc.(AE) 5.6 Cu.Yd.			
Reinf. steel 705 Lbs.			
Excavation 33.2 Cu.Yd.			
Cast Iron 440 Lbs.			

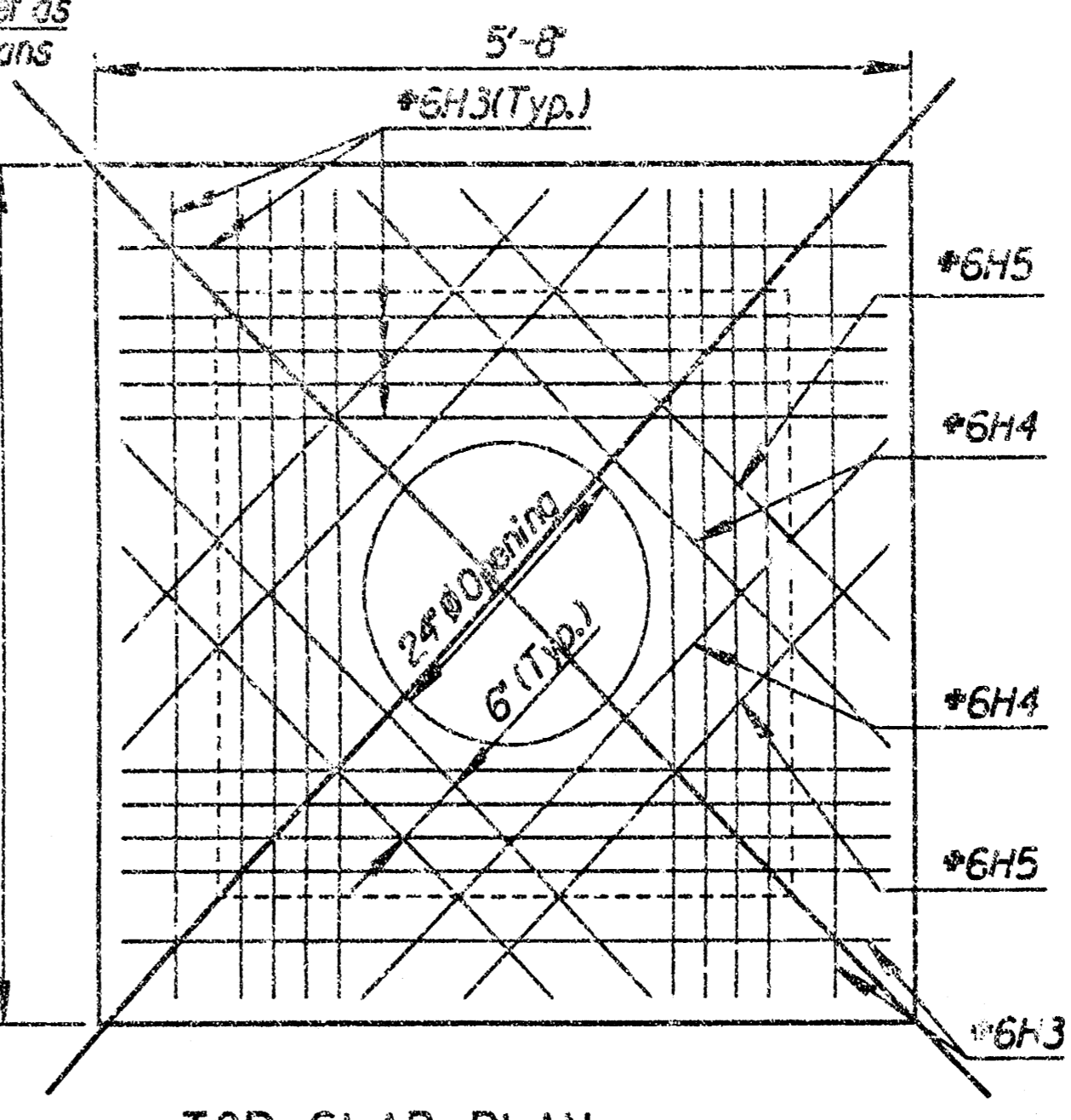
Quantities for inlets and Manhole are for information only.



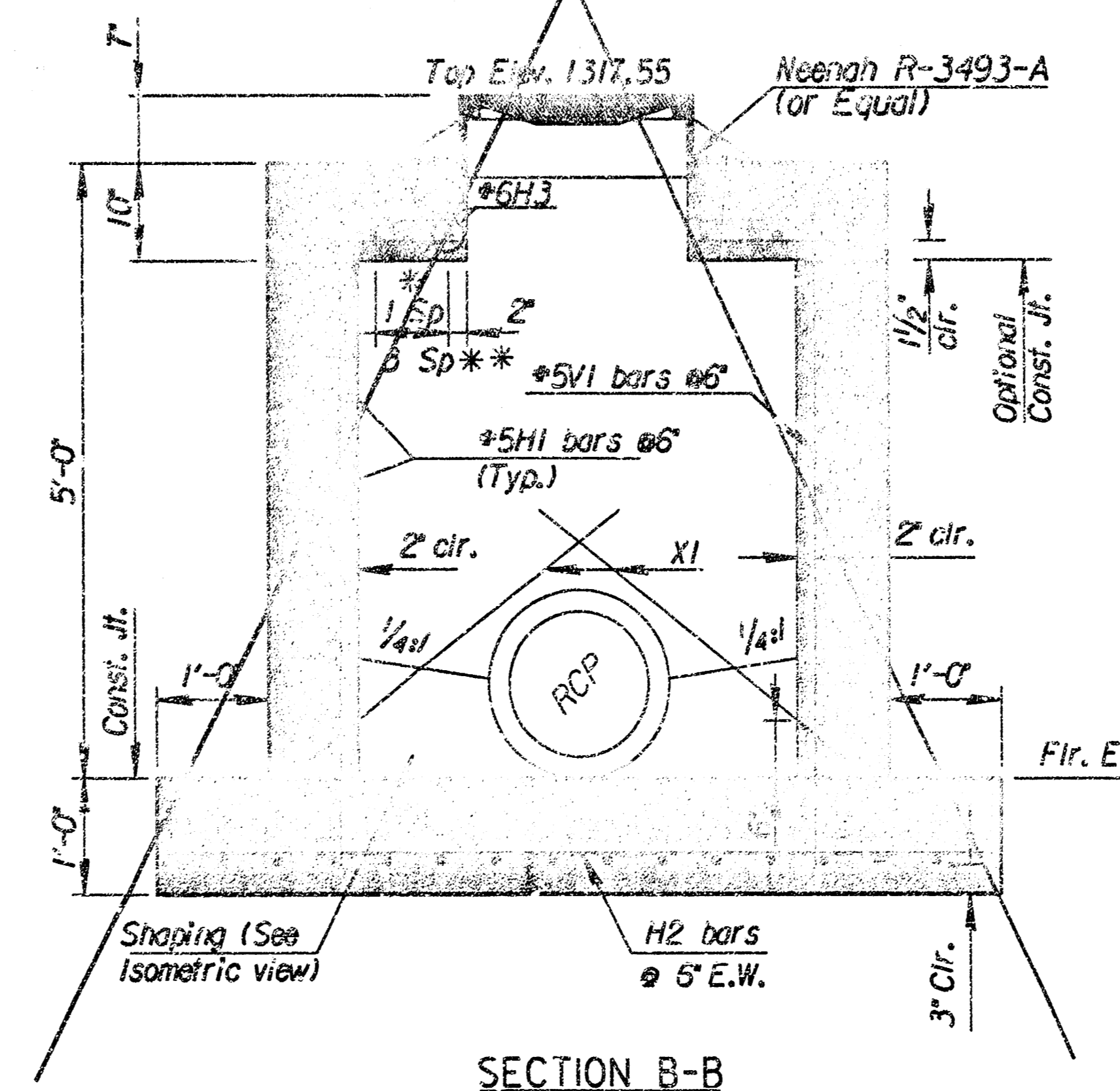
PLAN SECTION



PLAN SECTION

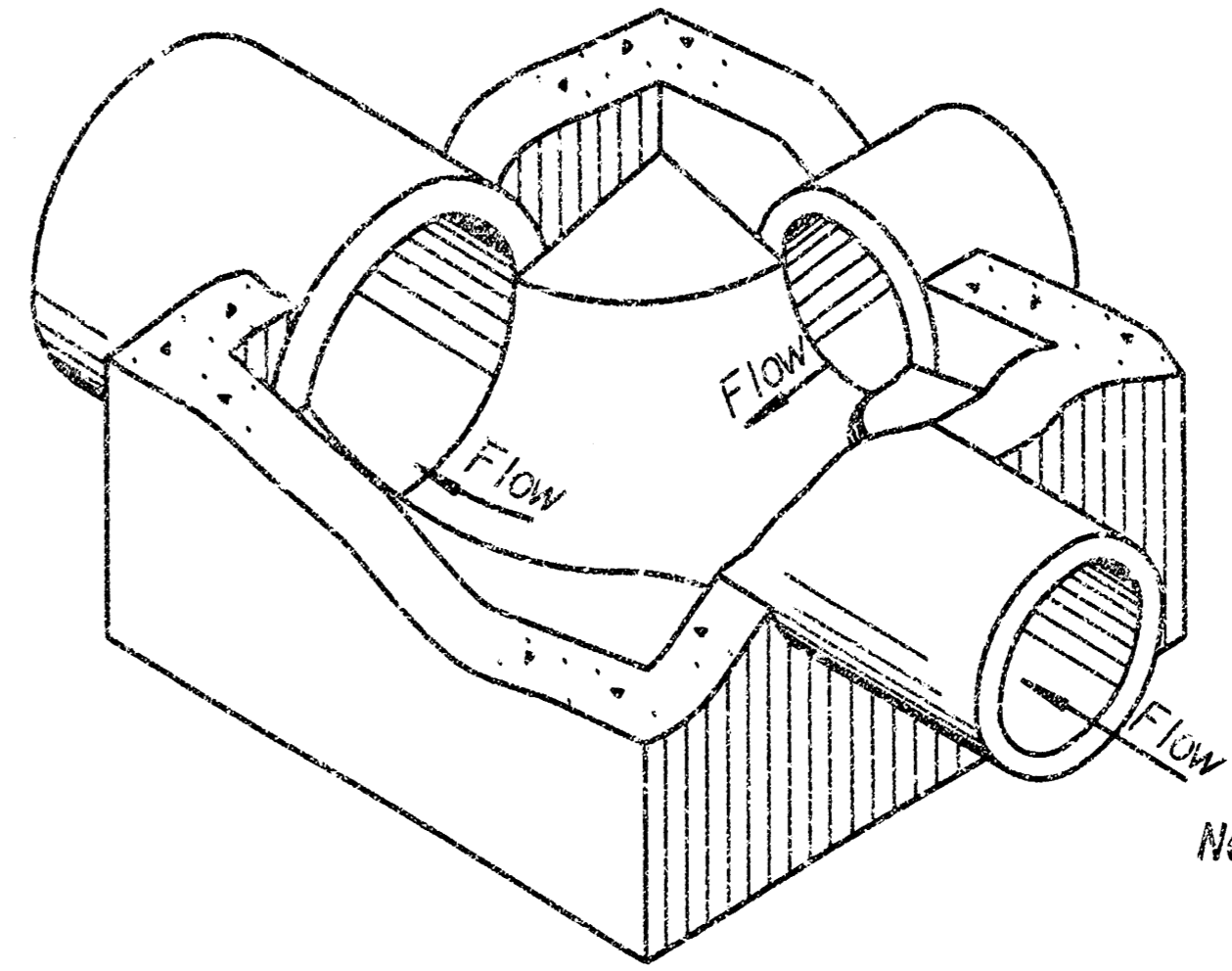


TOP SLAB PLAN



SECTION B-B

MANHOLE
Field align manhole parallel to existing RCP

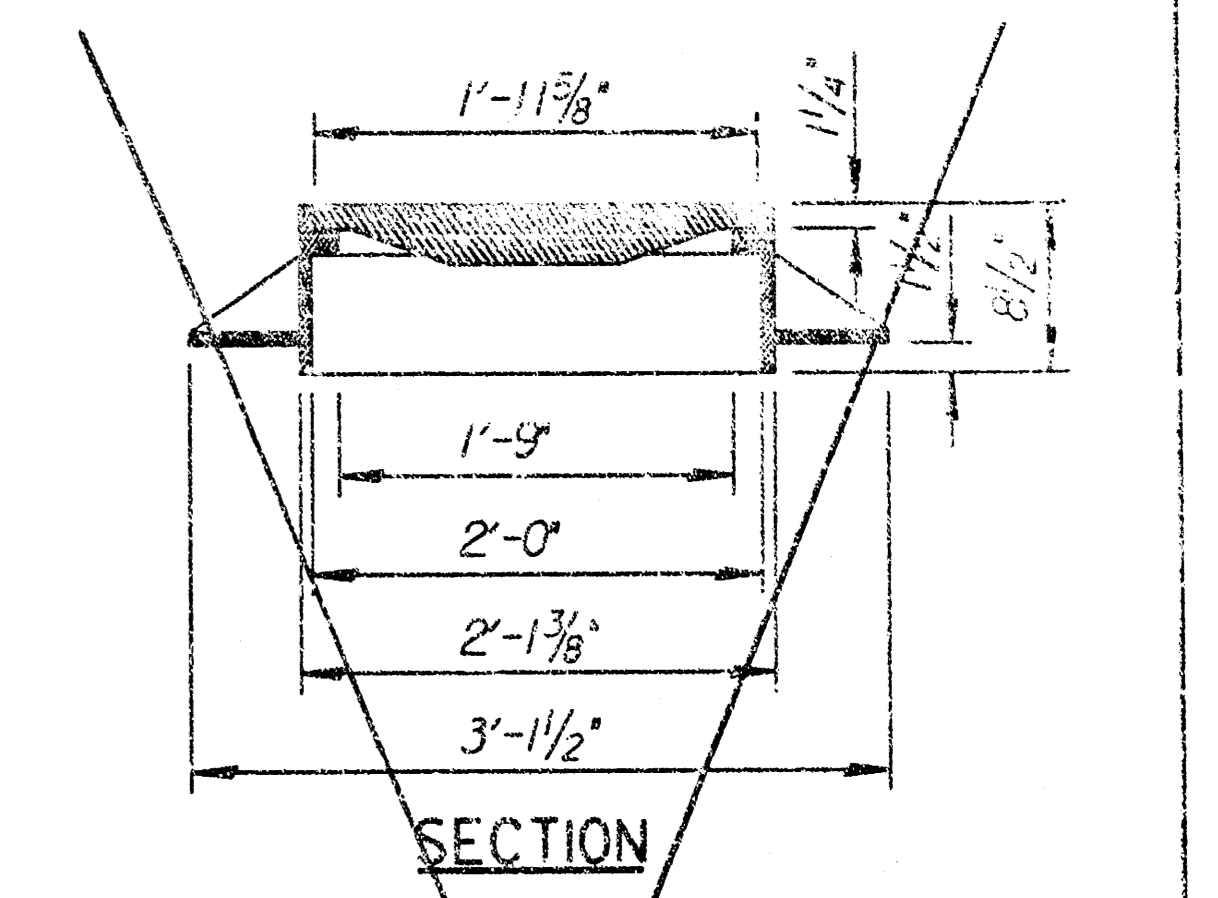


ISOMETRIC VIEW

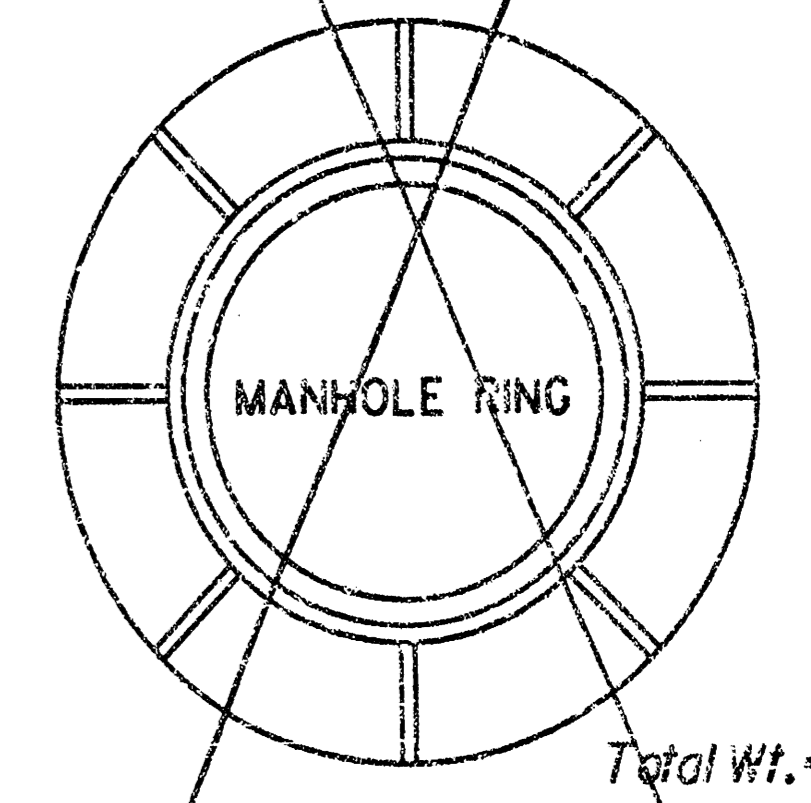
Floor of inlet or manhole shall be shaped as shown to increase hydraulic efficiency.

GENERAL NOTES

- Class II Concrete (AE)(P-610) shall be used throughout. Bevel all exposed edges with a 3/4" triangular molding or with an approved edging tool.
- Reinforcing steel shall be a minimum Grade 60, ASTM A615. All bars shall have a minimum clearance of 2" unless otherwise noted on the plans.
- All dimensions relative to placement of Reinforcing are to the centerline of bars unless otherwise noted.
- Pipes will enter and leave the inlets or manhole at various positions. Field bend or cut reinforcing to clear pipes. See plan sheets for RCP elevations for RCP's.
- Inlet invert shall be shaped with unreinforced Class II Concrete (P-610) to create flow channels and to increase hydraulic efficiency such that the inlet or manhole will be self cleaning between all inlet and/or outlet pipes. (See Isometric View, this sheet.)
- The Area Inlet grate must be certified by the manufacturer as being capable of supporting a design wheel load of at least 200 P.S.I. All castings shall be grey iron.
- The Manhole Ring and Cover must be certified by the manufacturer as being capable of supporting an aircraft wheel load of at least 100,000 lbs.



SECTION



PLAN

HEAVY TYPE
MANHOLE COVER AND RING

Neenah R-3493-A (or Equal)
Note: Inlets modified from KDOT Std. No. 648
Manhole modified from KDOT Std. No. 633.

RECORD DRAWING

No.	Revisions	By	Date
1			

THE WICHITA AIRPORT AUTHORITY
MID-CONTINENT AIRPORT WICHITA, KANSAS

REINFORCED CONCRETE
INLETS AND MANHOLES

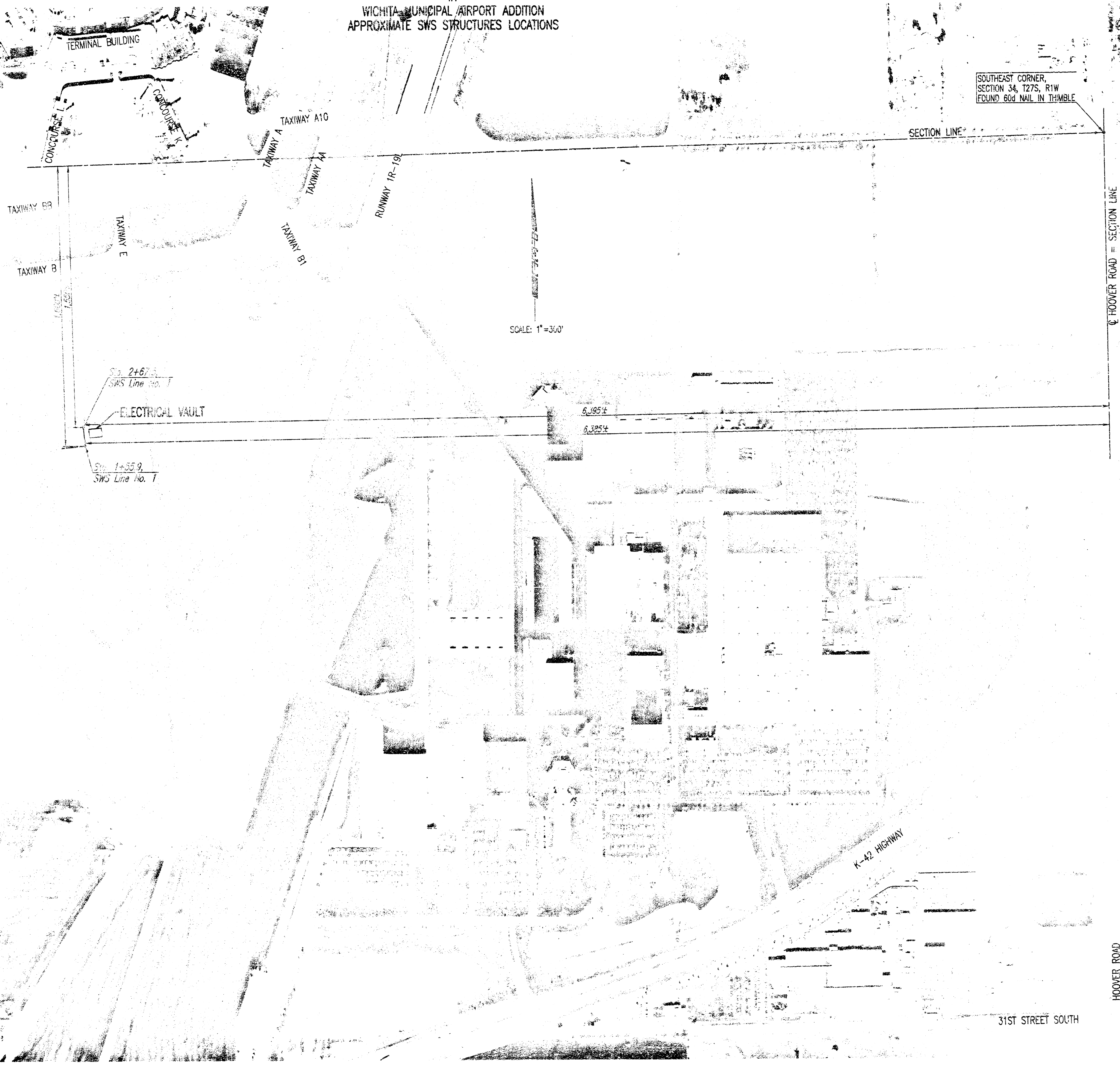
AIP PROJECT NO. 3-20-0088-31

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by	DAR	Checked by	
Drawn by	DJW	Date	10/5/00
		Job No.	00389

STORM WATER SEWER IMPROVEMENTS
 IN
 WICHITA MUNICIPAL AIRPORT ADDITION
 APPROXIMATE SWS STRUCTURES LOCATIONS

SOUTHEAST CORNER,
 SECTION 34, T27S, R1W
 FOUND 60d NAIL IN THIMBLE



Sta. 2+67.1
 SWS Line No. 1

Sta. 1+55.9
 SWG Line No. 1

6+395.4

6+395.4

DSNR: KER, OPER, S&D, SCALE: 1"=300.00
 0:\2000\00089\Private SWS\asm 04-02-2001 09:37:37 am