

DELAWARE COUNTY, OHIO

WOODS ON SELDOM SEEN

6" SANITARY FORCE MAIN

1989

GENERAL NOTES

THE COUNTY OF DELAWARE REQUIREMENTS, IN CONJUNCTION WITH THE SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN.

THESE PLANS SHALL INCORPORATE ALL NECESSARY CONSTRUCTION DETAILS FOUND IN "STANDARD PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO".

6" SANITARY FORCE MAIN SHALL BE PVC PIPE (SDR-21).

SEWER TRENCHES SHALL BE DE-WATERED TO 2' BELOW BELL OF PIPE PRIOR TO INSTALLATION OF PIPE.

ANY FIELD TILE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AS DIRECTED BY THE COUNTY WITH ABS PIPE SPANNING THE TRENCH, THE TRENCH SHALL BE FILLED WITH COMPACTED GRANULAR BACKFILL.

ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED ON THIS PROJECT.

SANITARY SEWER LINES AND MANHOLES SHALL BE TESTED BY EXFILTRATION TEST IN ACCORDANCE WITH "PRELIMINARY STANDARD PLANS & SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO", SECTION 5.1 "GRAVITY SEWER TESTING". SANITARY SEWER PIPE SHALL BE TESTED FOR DEFLECTION PER SECTION 5.5 "DEFLECTION TESTING".

THE CONTRACTOR SHALL COOPERATE WITH THE DELAWARE COUNTY SANITARY ENGINEER IN PROVIDING ALL NECESSARY EQUIPMENT AND PERFORMING ALL TESTING OF SANITARY SEWERS TO THE SATISFACTION OF THE SANITARY ENGINEER.

THE CONTRACTOR AND SUB-CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

COST FOR ALL COMPACTED BACKFILL OR CONTROLLED DENSITY BACKFILL SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SANITARY SEWER ITEMS.

COMPACTED GRANULAR BACKFILL SHALL BE PLACED FOR ALL STREETS, DRIVEWAYS, STORM SEWERS, AND WATERLINE CROSSINGS.

EXISTING UTILITIES

THE IDENTITY AND LOCATION OF THE EXISTING UNDERGROUND UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS ACCURATELY AS PROVIDED BY THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF DELAWARE AND/OR ENGINEER ASSUME NO RESPONSIBILITY AS TO THE ACCURACY OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS.

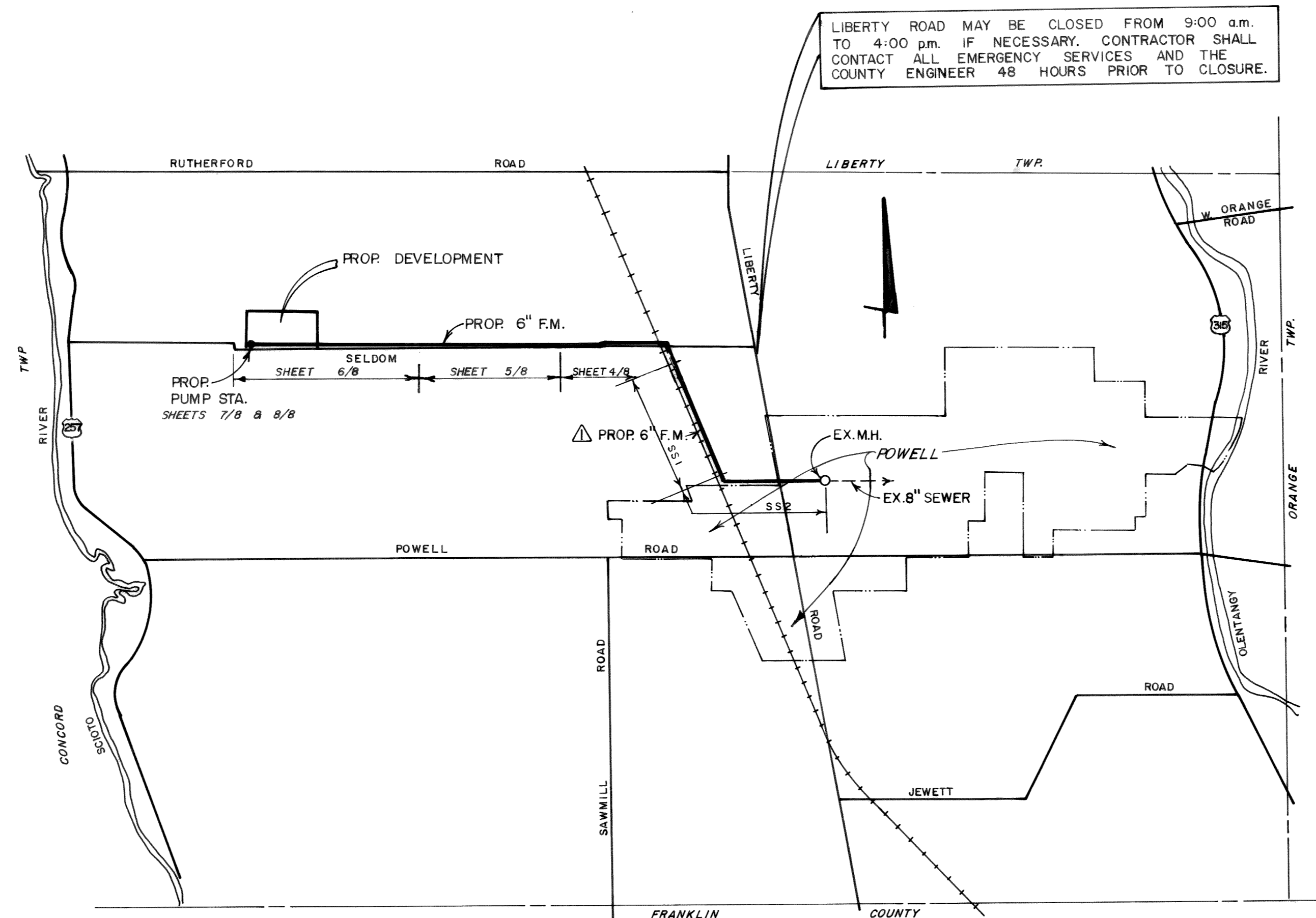
THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO THE REGISTERED UNDERGROUND UTILITY PROTECTION SERVICES (TELEPHONE 800-362-2764 - TOLL FREE) AND THE OWNER'S OF UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE REVISED CODE. THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.

SPECIAL NOTES

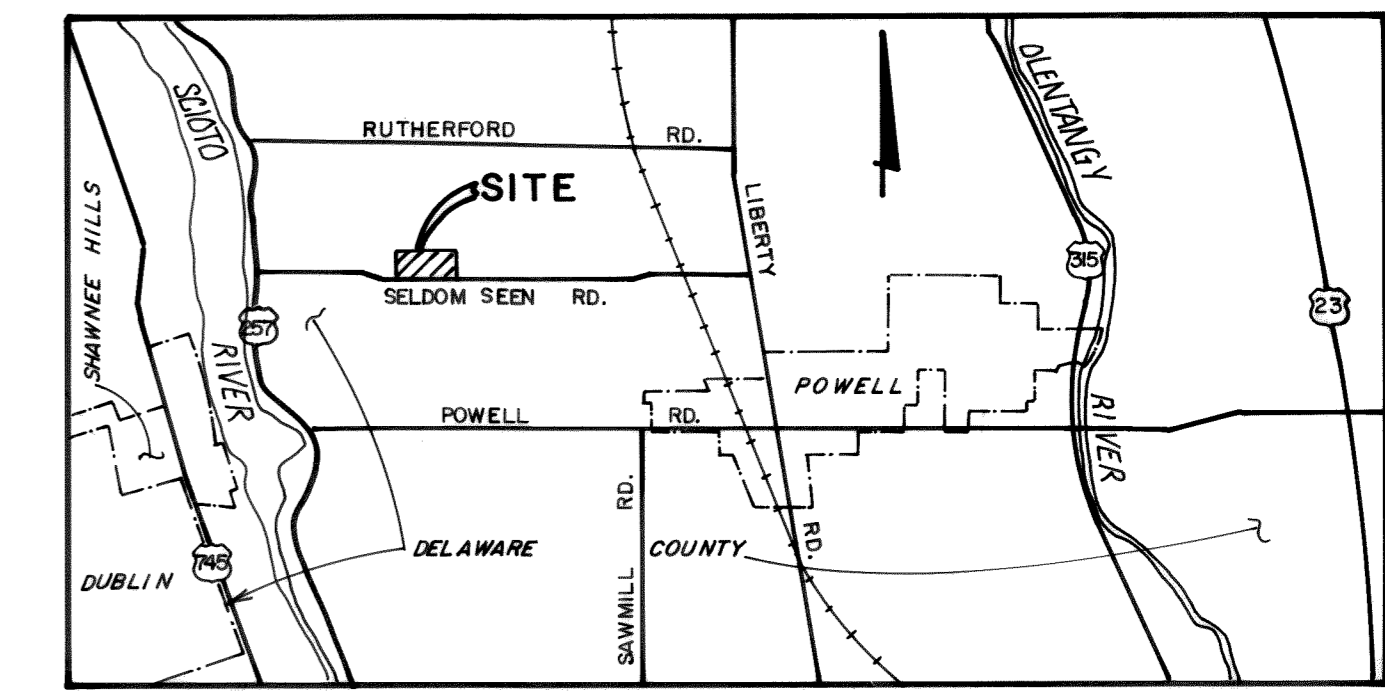
ALL EXCESS MATERIAL FROM 6" FORCE MAIN TRENCH EXCAVATION SHALL BE HAULED AWAY.

CONTRACTOR SHALL NOTIFY DELAWARE COUNTY ENGINEERS OFFICE AT 50 CHANNING STREET DELAWARE, OHIO 43015, TEL. NO. (614) 948-7313 EXT. 231, ONE WEEK PRIOR TO FORCE MAIN CONSTRUCTION @ LIBERTY ROAD CROSSING.

IN THE EVENT THAT THE CONTRACTOR CHOOSES TO MAINTAIN TRAFFIC DURING LIBERTY ROAD FORCE MAIN CONSTRUCTION. THE TRENCH SHALL BE STEEL PLATED FOR K-CRETE CURING PERIOD

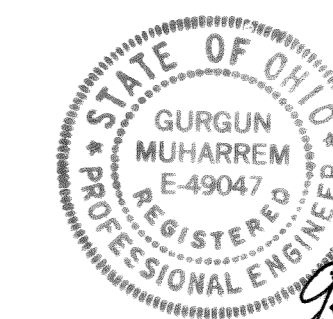


INDEX MAP
NO SCALE



LOCATION MAP

THIS IS TO CERTIFY THAT GOOD ENGINEERING PRACTICES HAVE BEEN UTILIZED IN THE DESIGN OF THIS PROJECT & THAT ALL MINIMUM STANDARDS AS DELINEATED IN THE DELAWARE COUNTY ENGINEERING AND SURVEYING STANDARDS FOR SUBDIVISION DEVELOPMENT HAVE BEEN MET, INCLUDING THOSE STANDARDS GREATER THAN MINIMUM WHERE, IN MY OPINION, THEY ARE NEEDED TO PROTECT THE SAFETY OF THE PUBLIC.



PREPARED BY:
HOCKADEN AND ASSOCIATES, INC.
CONSULTING ENGINEERS
COLUMBUS, OHIO

Gurgun Muharrem
Registered Engineer No. 49047 Date 4/25/89

APPROVAL: DELAWARE COUNTY

Fred L. Parrott
County Commissioner Date 7-10-89

Marlin Shurt
County Commissioner Date 7-10-89

County Commissioner Date

Jack Smelker
Delaware County Sanitary Engineer Date 7/6/89

Edward S. Siskoff
Village Engineer, Village of Powell Date 19 July 89

ESTIMATE OF QUANTITIES			
ITEM	QUAN.	UNIT	DESCRIPTION
1	12,997	L.F.	6" SDR-21 PVC FORCE MAIN
2	2	L.S.	LIFT STATION W/ APPURTENANCES (INCL. TELEMETERING EQUIP)
3	5	E.A.	AUTOMATIC AIR RELEASE VALVE (STD. DWG. 25)
4	66	L.F.	TUNNEL @ RAILROAD
604	34	L.F.	12" CORRUGATED METAL PIPE
601	.6	C.F.	ROCK CHANNEL PROTECTION (TYPE B)

STANDARD DRAWINGS

STANDARD DRAWINGS LISTED BELOW, AS SHOWN IN THE "PRELIMINARY STANDARD PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF SANITARY FACILITIES IN DELAWARE COUNTY, OHIO" SHALL BE CONSIDERED A PART THEREOF.

1, 14, 20, 21, 22, 23, 24, 25, 31
O.D.O.T. 601, 604

BENCH MARKS

SOURCE BENCH MARK: B.P. SELDOM SEEN RD. & LIBERTY RD.
ELEV. 930.98

SITE BENCH MARKS: R.R. SPIKE IN U-POLE, 50' S.E. OF @ SELDOM SEEN & @ FILIZ LN. INTERSECTION.
ELEV. 927.01

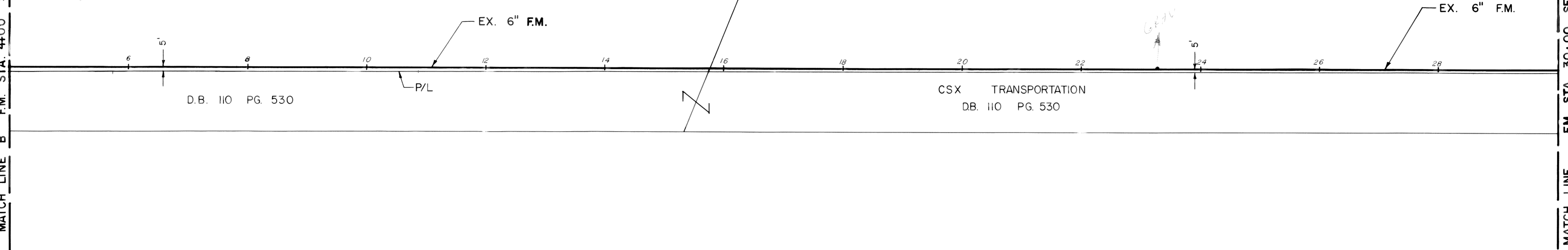
12,997



MATCH LINE "B" F.M. STA. 4+00 SEE SHEET 4/8

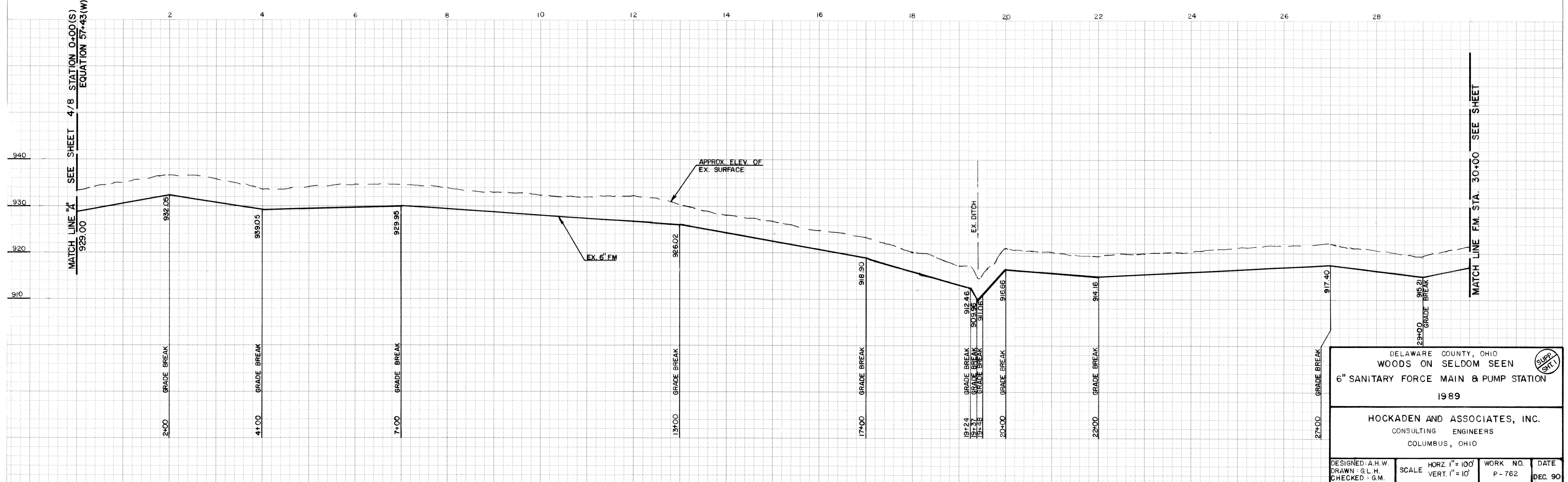
LOUIS V. & DORIS E. HUFFMAN
D.B. 342 PG. 57

JOHN W. & CAROLYN HILL
D.B. 463 PG. 192



MATCH LINE F.M. STA. 30+00 SEE SUPPLEMENTAL SHEET 2

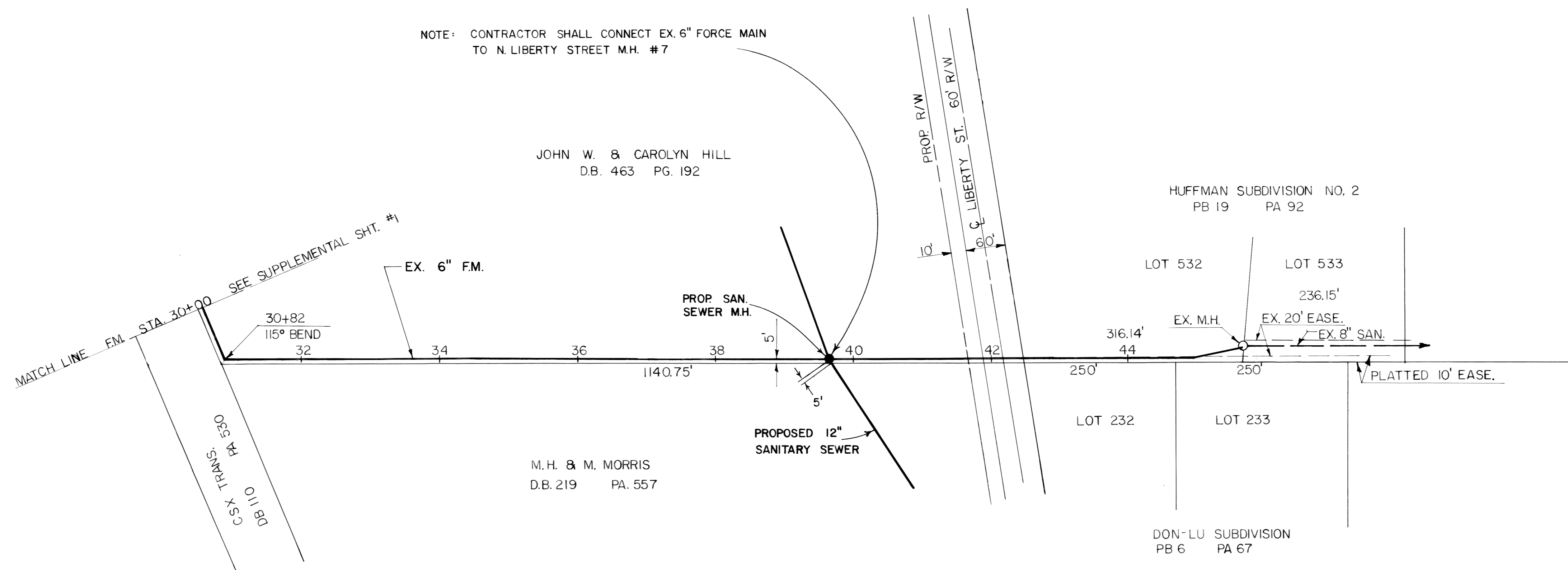
MATCH LINE "A" SEE SHEET 4/8 STATION 0+00(S)
EQUATION 57+43(W)



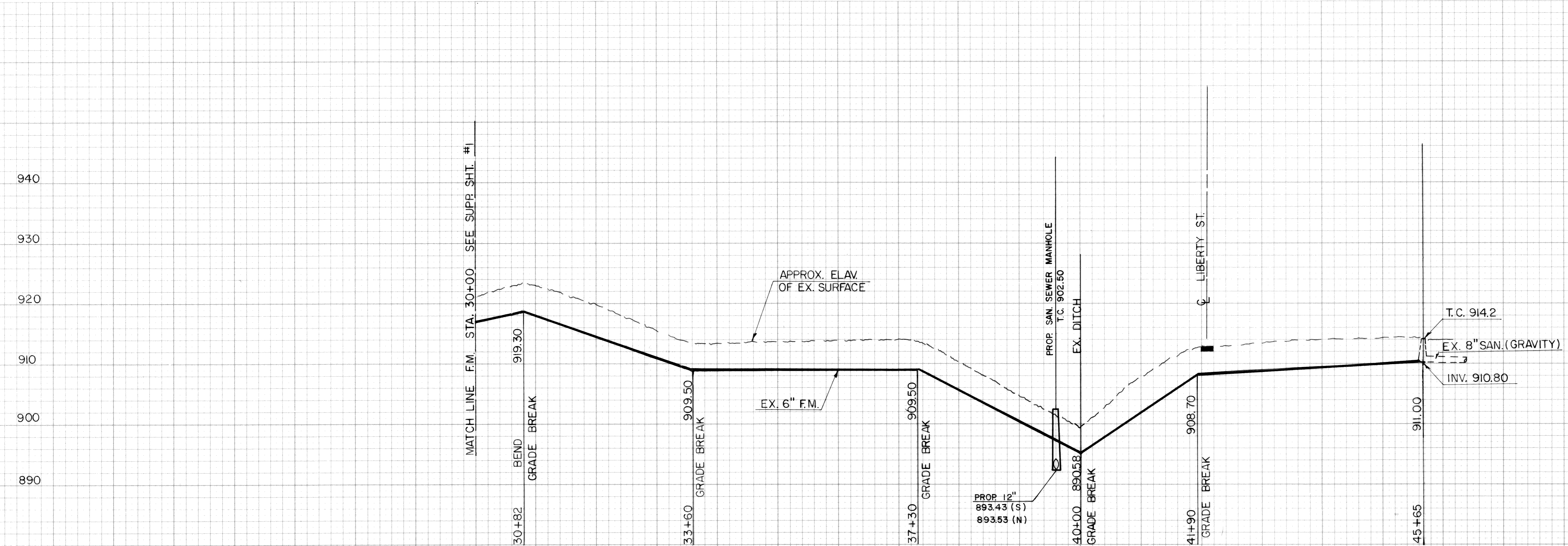
MATCH LINE F.M. STA. 30+00 SEE SHEET

DELAWARE COUNTY, OHIO WOODS ON SELDOM SEEN 6" SANITARY FORCE MAIN & PUMP STATION 1989			
HOCKADEN AND ASSOCIATES, INC. CONSULTING ENGINEERS COLUMBUS, OHIO			
DESIGNED: A.H.W.	SCALE: HORZ. 1" = 100'	WORK NO. P-762	DATE DEC. 90
DRAWN: G.L.H.	CHECKED: G.M.		

NOTE: CONTRACTOR SHALL CONNECT EX. 6" FORCE MAIN TO N. LIBERTY STREET M.H. #7

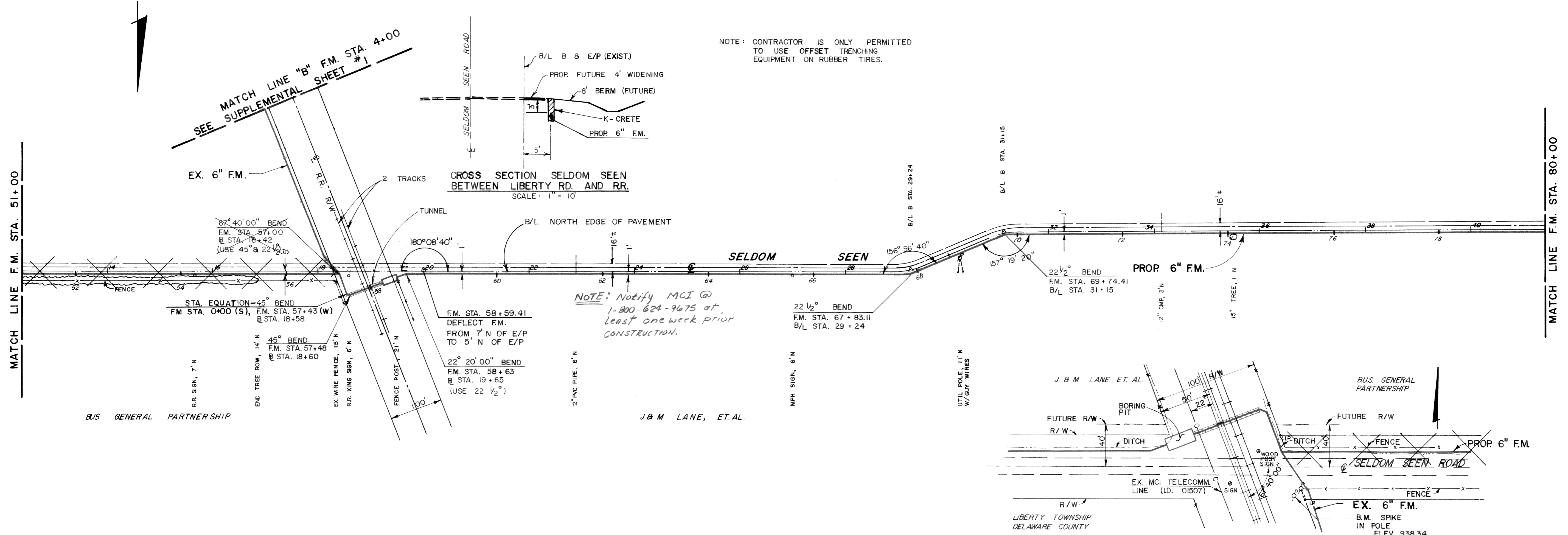


30 32 34 36 38 40 42 44 46



DELAWARE COUNTY, OHIO			
WOODS ON SELDOM SEEN			
6" SANITARY FORCE MAIN & PUMP STATION			
1989			
HOCKADEN AND ASSOCIATES, INC.			
CONSULTING ENGINEERS			
COLUMBUS, OHIO			
DESIGNED: A.H.W.	SCALE: HORZ. 1" = 100'	WORK NO. P-762	DATE DEC. 90
DRAWN: G.L.H.	CHECKED: G.M.		

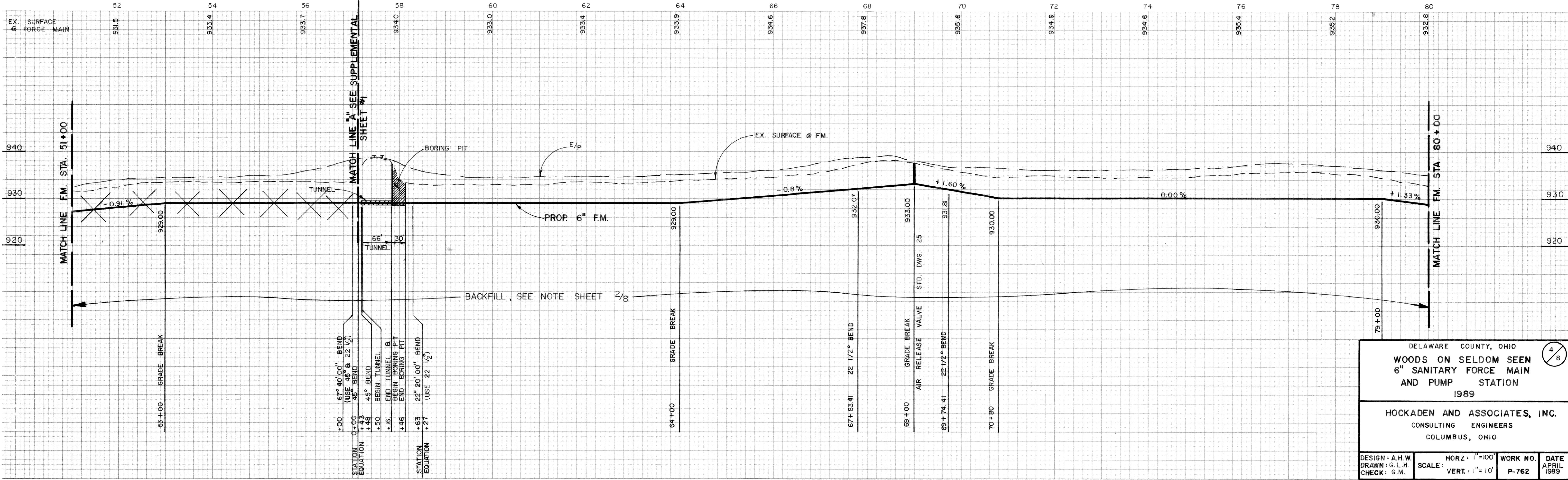
REVISD ALINEMENT FROM RR TO OUTLET MH AS BUILT DEC. 90



NOTE: CONTRACTOR IS ONLY PERMITTED TO USE OFFSET TRENCHING EQUIPMENT ON RUBBER TIRES.

CROSS SECTION SELDOM SEEN BETWEEN LIBERTY RD. AND RR.
SCALE: 1" = 10'

NOTE: Notify MCI @ 1-800-624-9675 at least one week prior construction.



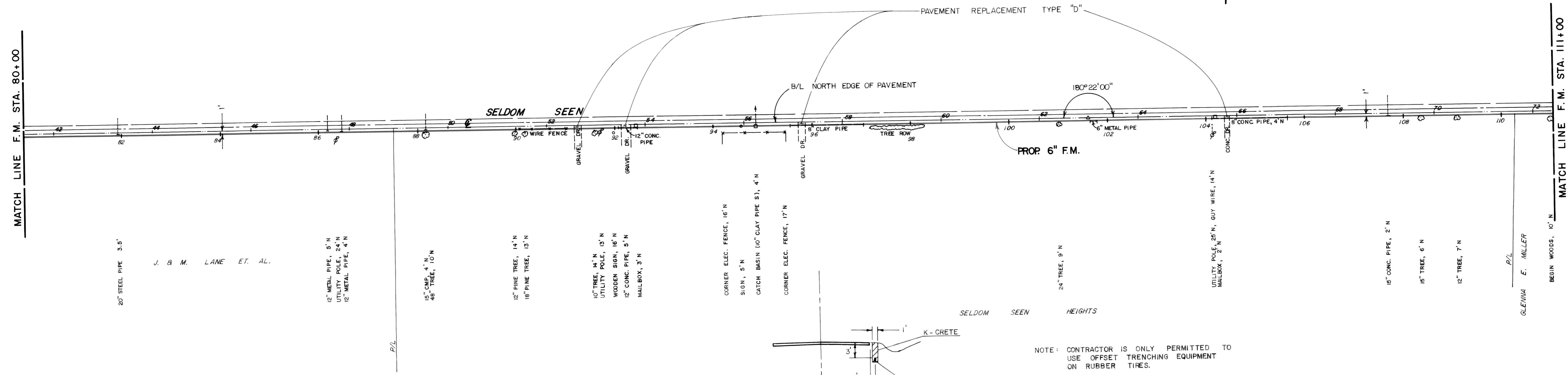
DELAWARE COUNTY, OHIO
WOODS ON SELDOM SEEN
6" SANITARY FORCE MAIN
AND PUMP STATION
1989

HOCKADEN AND ASSOCIATES, INC.
CONSULTING ENGINEERS
COLUMBUS, OHIO

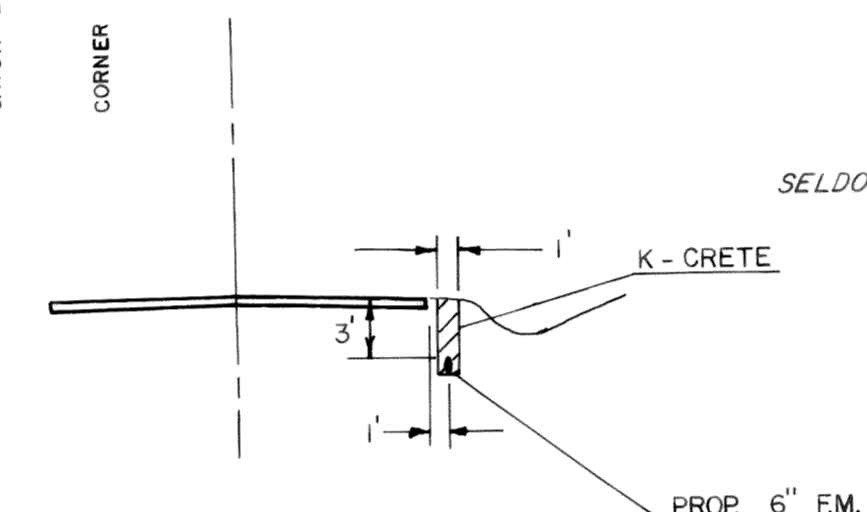
DESIGN: A.H.W. DRAWN: G.L.H. CHECK: G.M. SCALE: HORZ: 1"=100' VERT: 1"=10' WORK NO. P-762 DATE APRIL 1989

MATCH LINE F.M. STA. 80+00

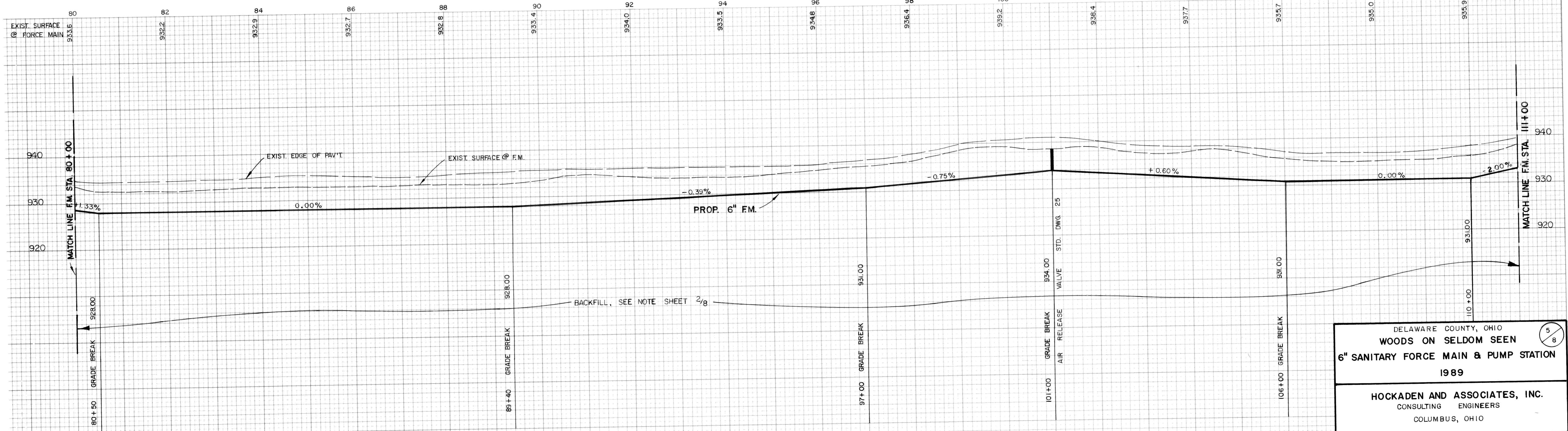
MATCH LINE F.M. STA. 111+00



CROSS SECTION OF SELDOM SEEN RD.
BETWEEN R.R. AND PROJECT SITE
SCALE: 1" = 10'



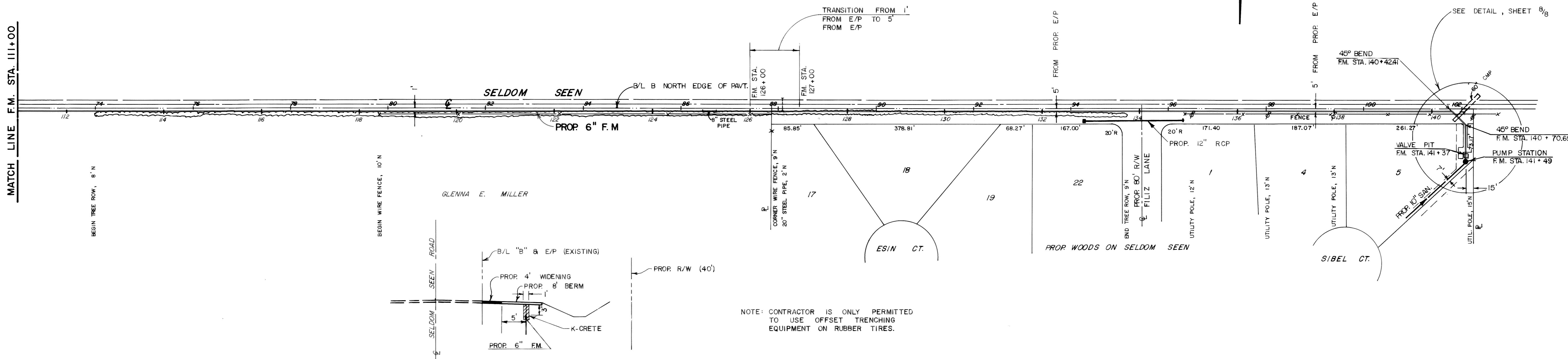
NOTE: CONTRACTOR IS ONLY PERMITTED TO
USE OFFSET TRENCHING EQUIPMENT
ON RUBBER TIRES.



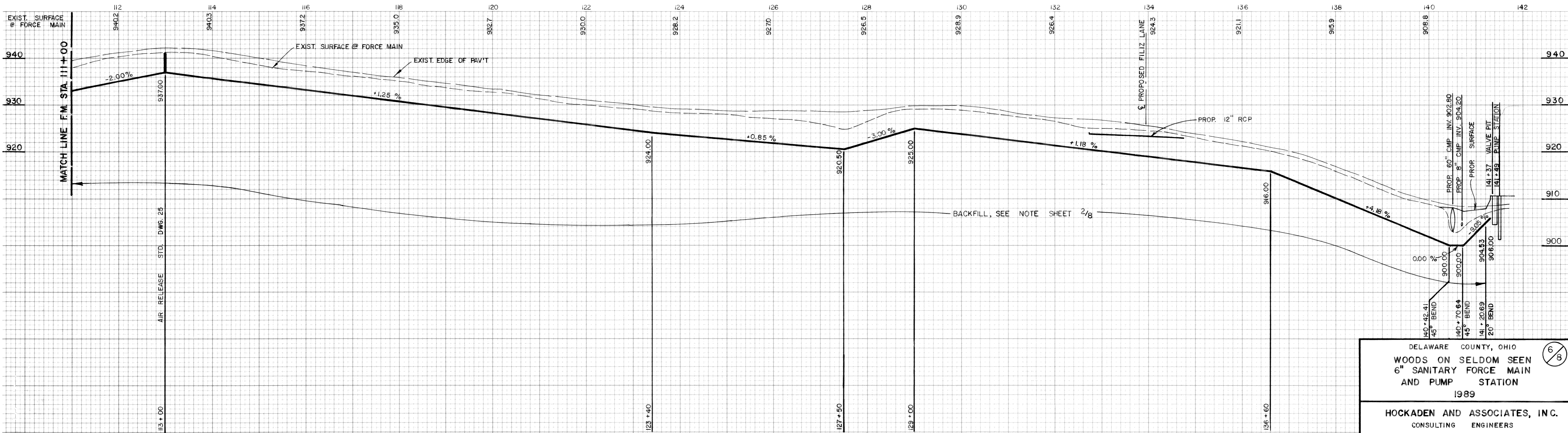
DELAWARE COUNTY, OHIO WOODS ON SELDOM SEEN 6" SANITARY FORCE MAIN & PUMP STATION 1989			
HOCKADEN AND ASSOCIATES, INC. CONSULTING ENGINEERS COLUMBUS, OHIO			
DESIGNED: A.H.W.	HORZ. 1" = 100'	WORK NO. P-762	DATE APRIL 1989
DRAWN: D.D.H.	SCALE: VERT. 1" = 10'		
CHECKED: G.M.			

REVISD ALINEMENT FROM RR TO OUTLET MH AS BUILT DEC. 90

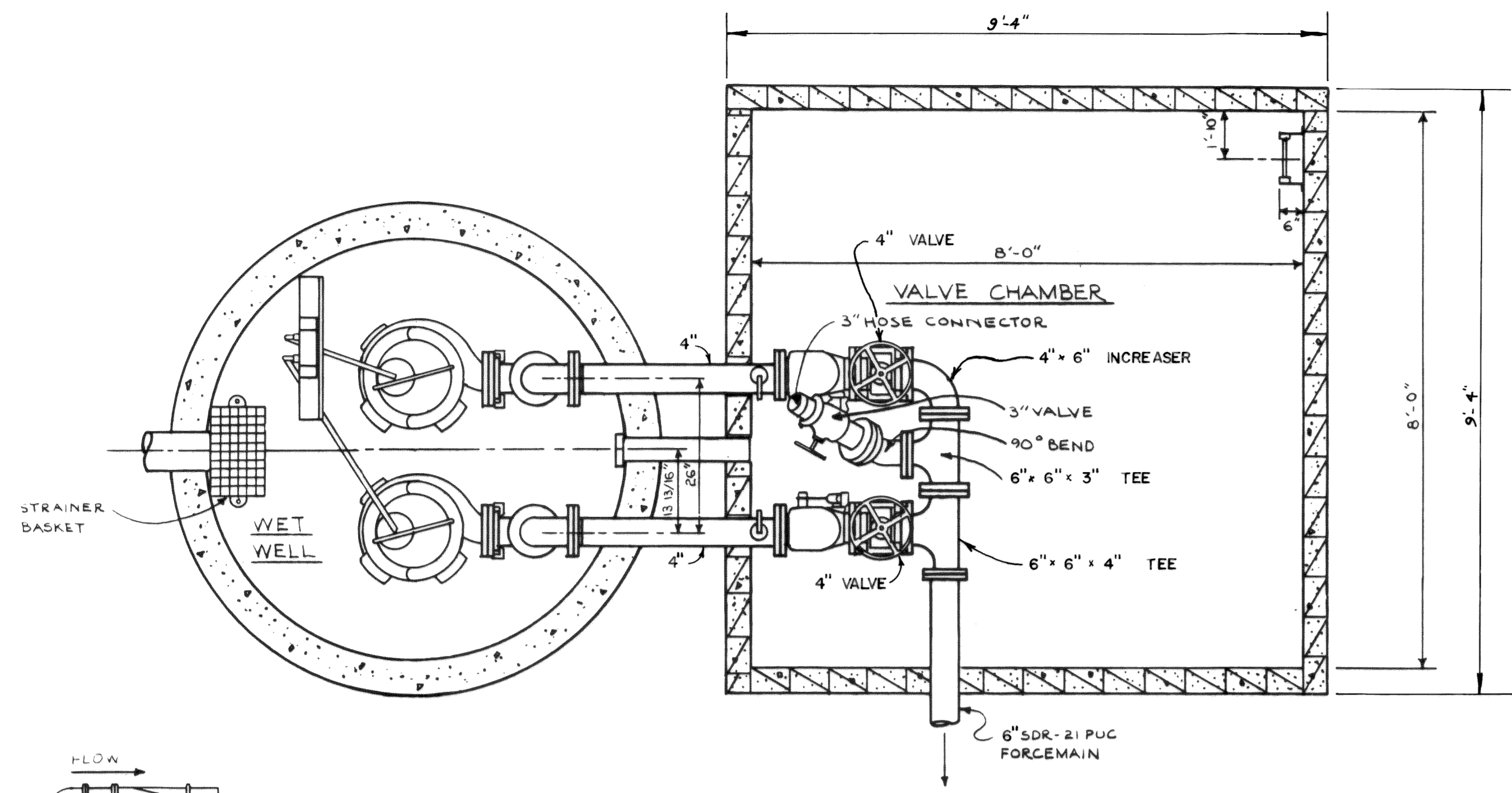
MATCH LINE F.M. STA. 111+00



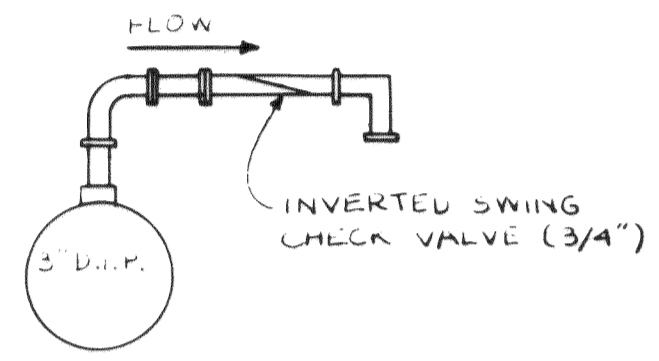
CROSS SECTION ON SELDOM SEEN
IN FRONT OF PROJECT
SCALE: 1" = 10'



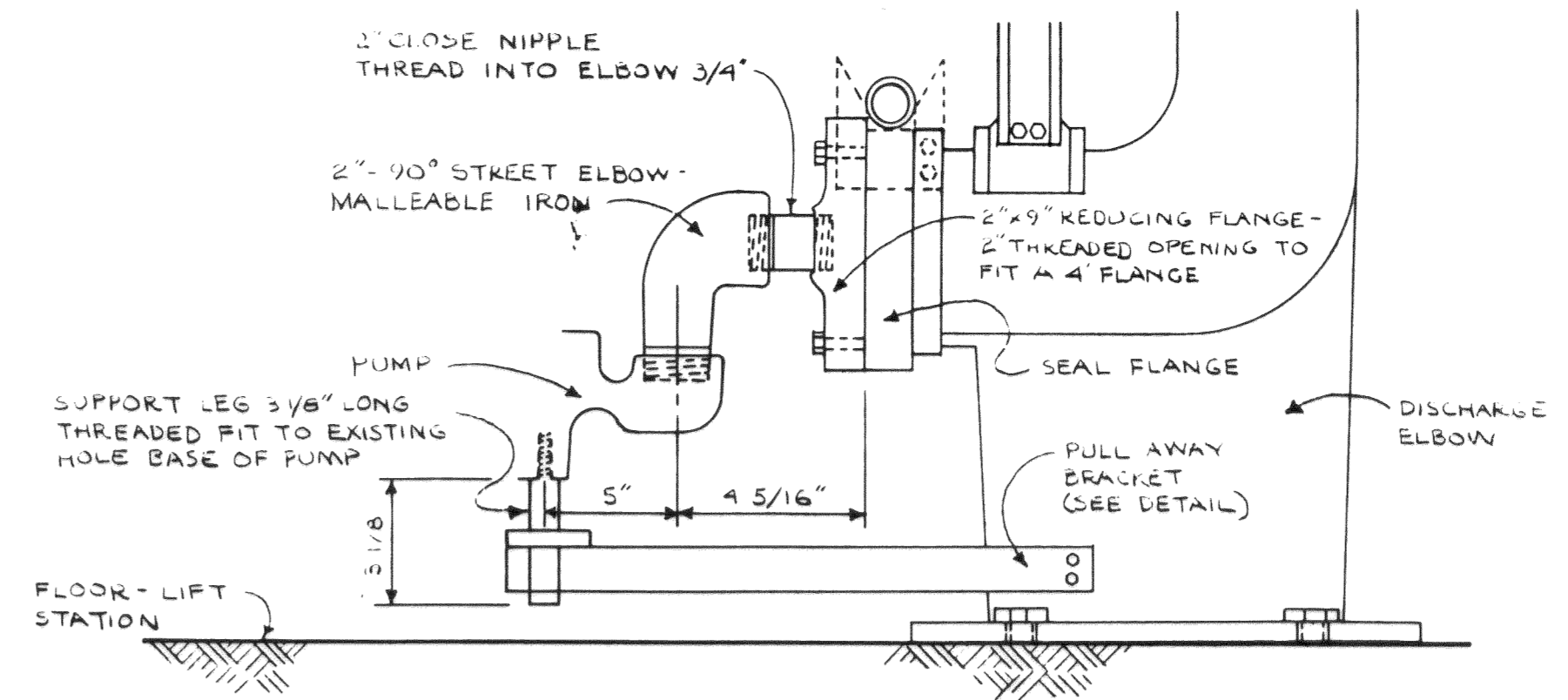
DELAWARE COUNTY, OHIO			
WOODS ON SELDOM SEEN			
6" SANITARY FORCE MAIN			
AND PUMP STATION			
1989			
HOCKADEN AND ASSOCIATES, INC.			
CONSULTING ENGINEERS			
COLUMBUS, OHIO			
DESIGN: A.H.W.	HORIZ: 1"=100'	WORK NO.	DATE
DRAWN: D.D.H.	SCALE: VERT: 1"=10'	P-762	APRIL 1989
CHECK: G.M.			



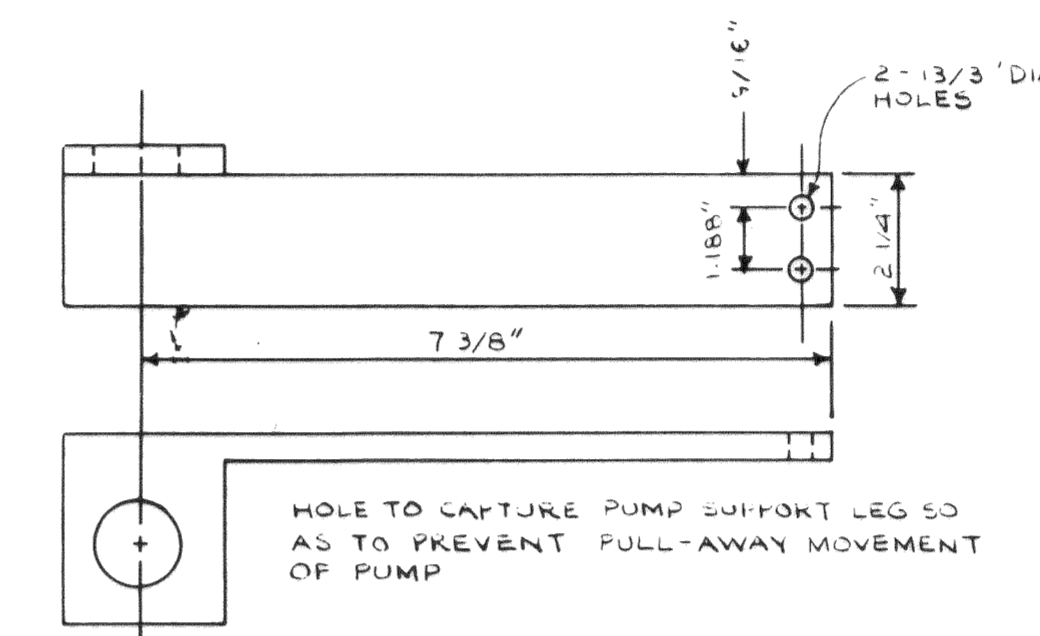
PLAN VIEW
N.T.S.



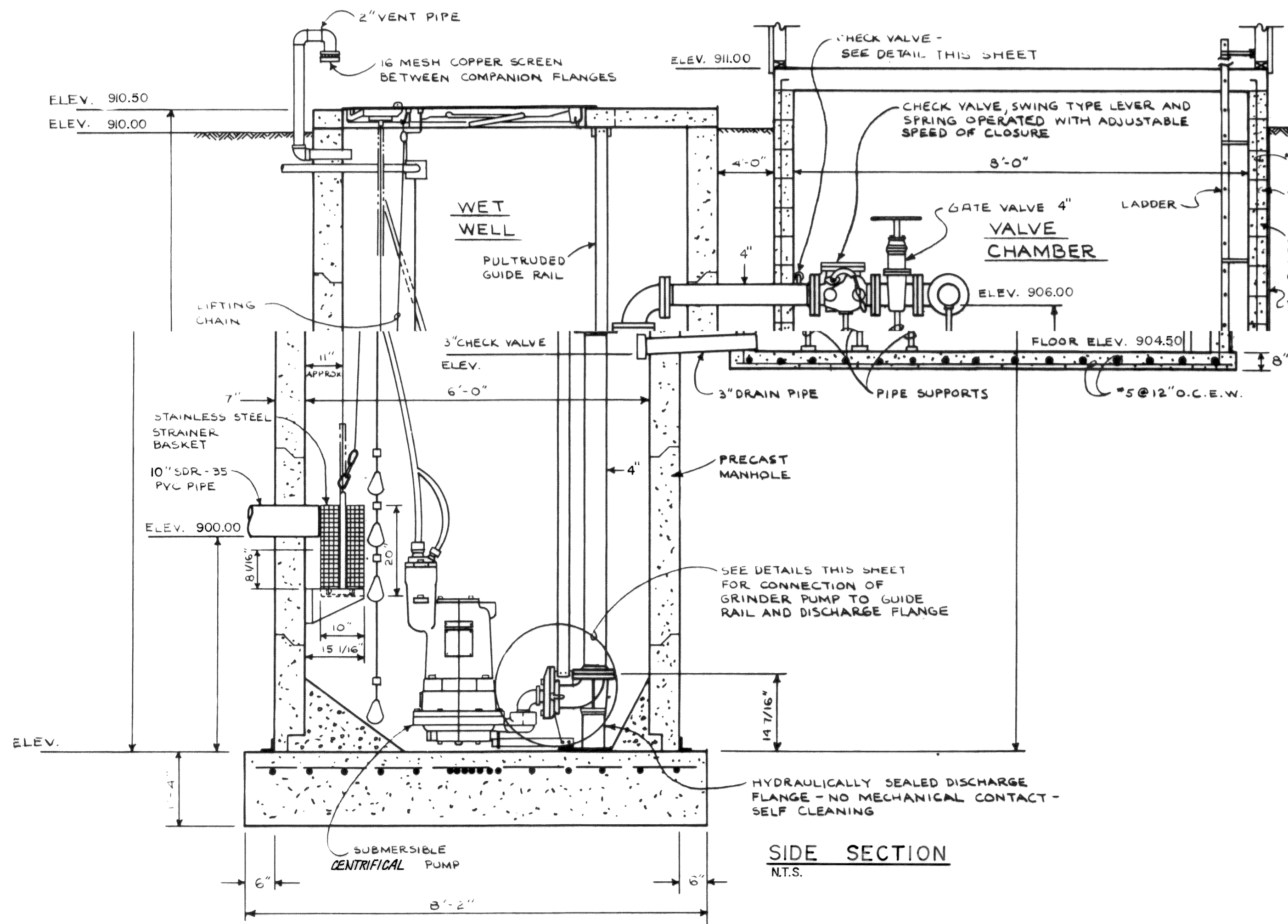
CHECK VALVE DETAIL
N.T.S.



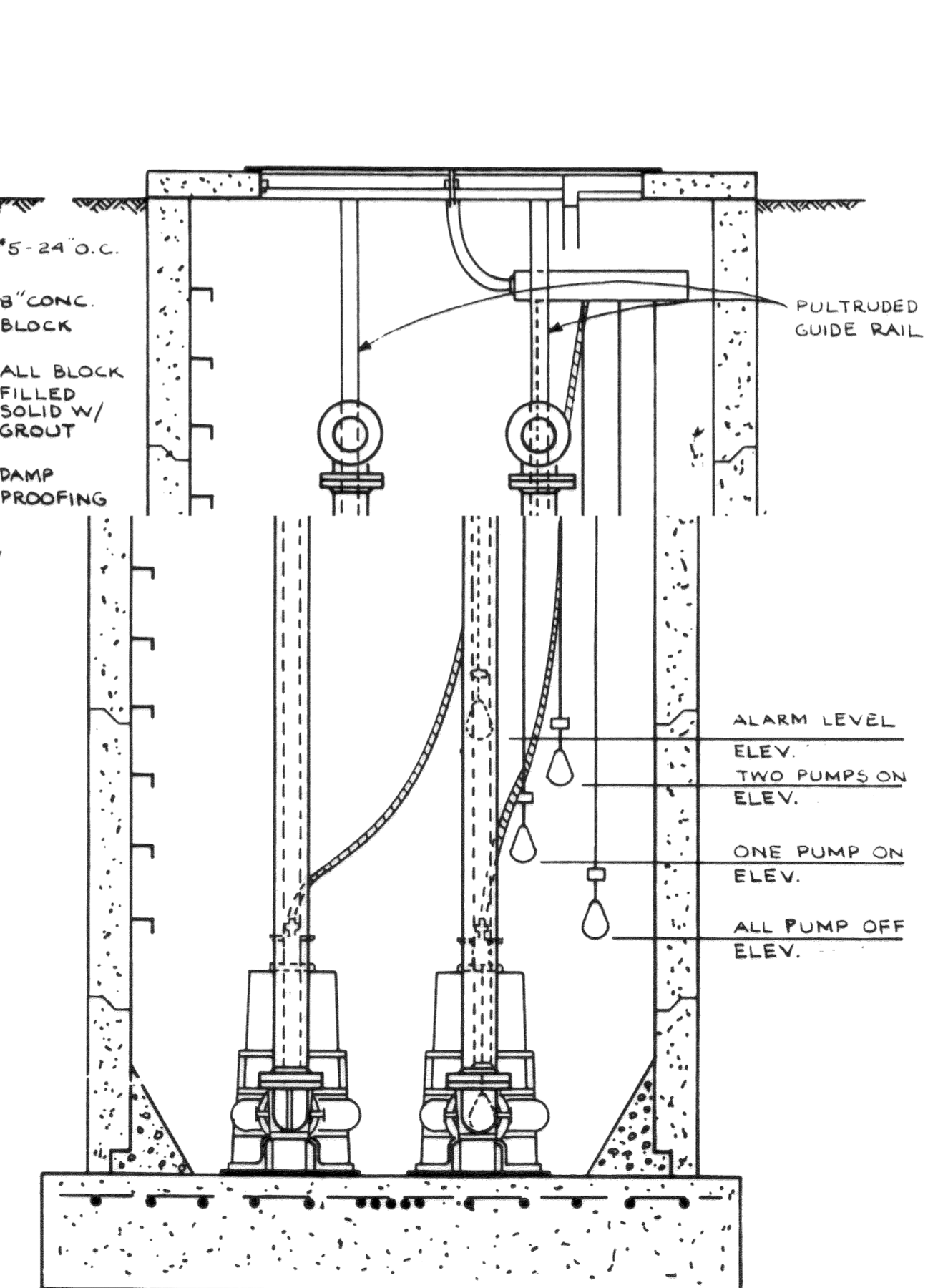
GRINDER PUMP CONNECTION DETAIL
N.T.S.



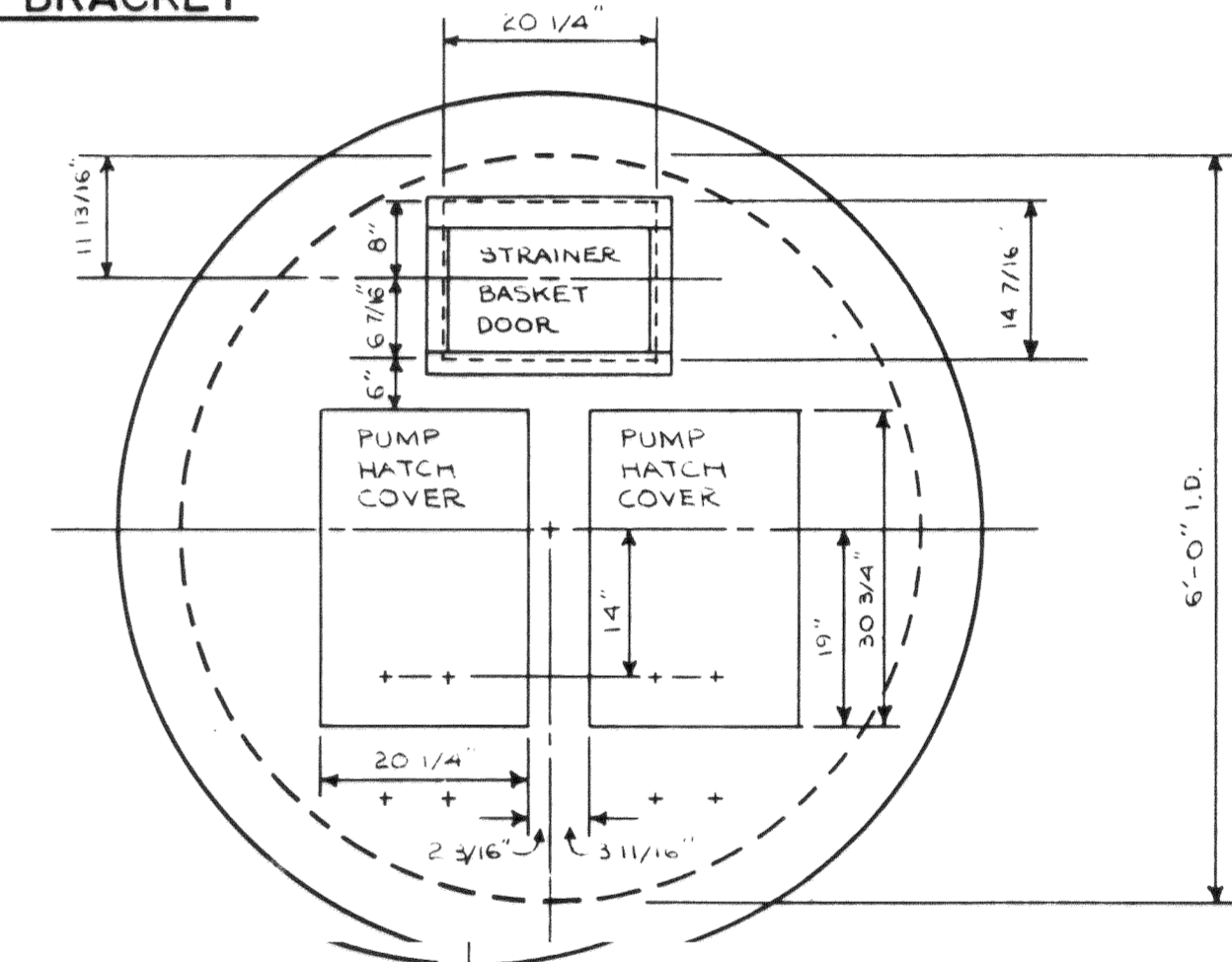
PUMP PULL AWAY BRACKET
N.T.S.



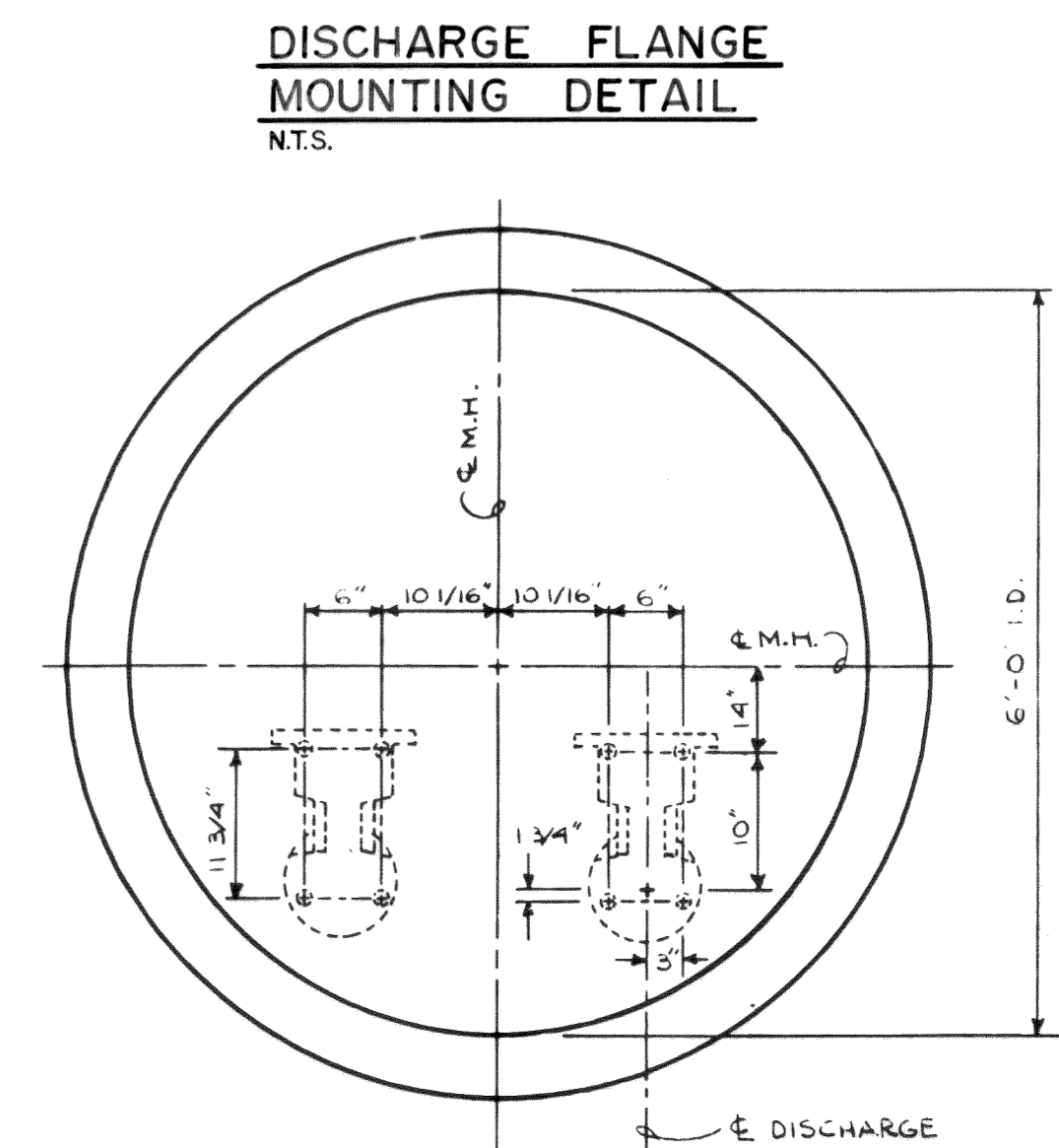
SIDE SECTION
N.T.S.



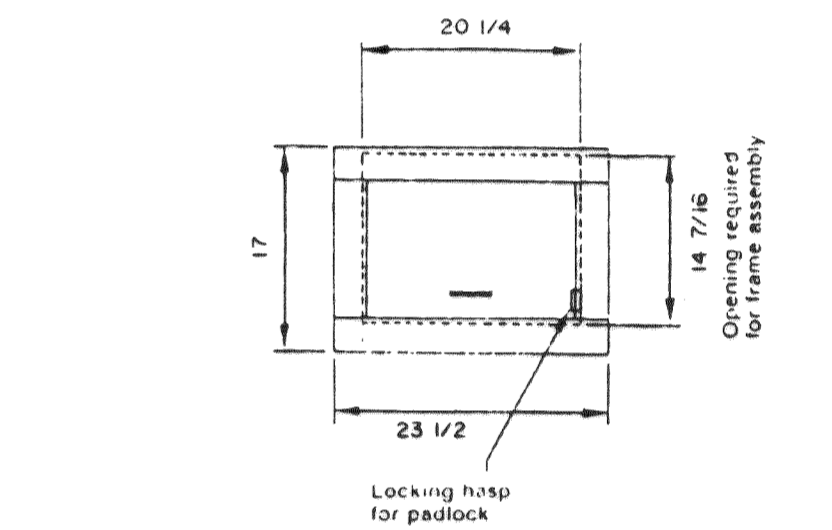
END SECTION
N.T.S.



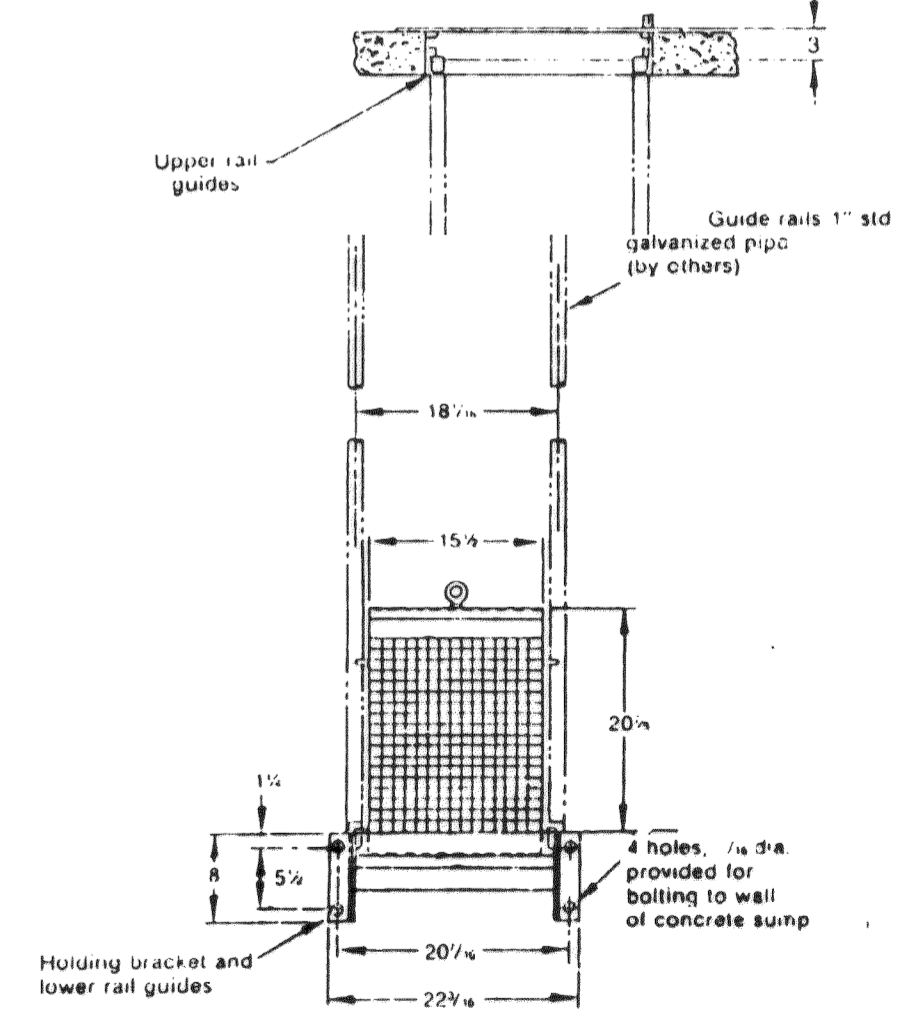
SUMP COVER DETAIL
N.T.S.



DISCHARGE FLANGE MOUNTING DETAIL
N.T.S.

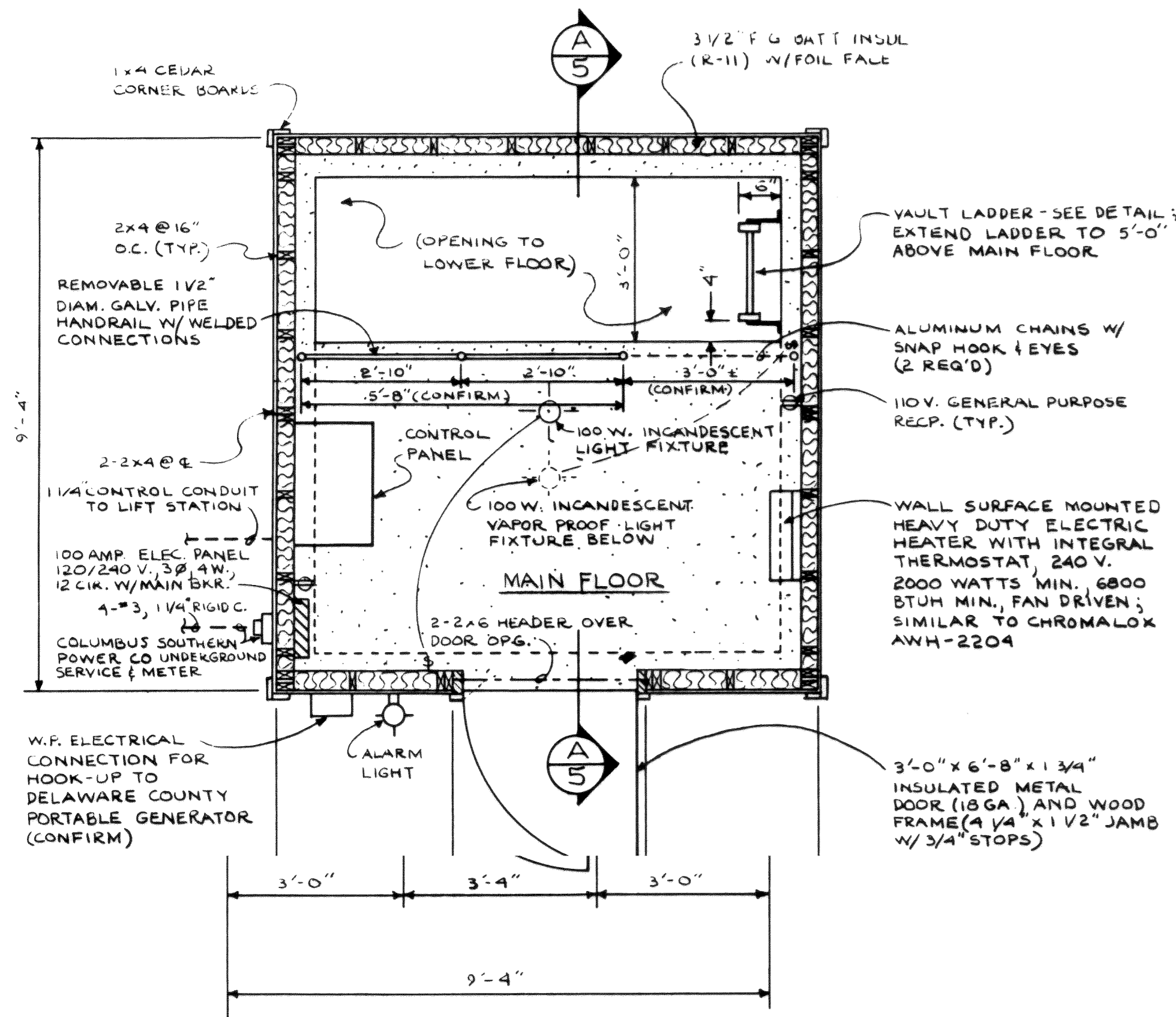


STRAINER BASKET DOOR DETAIL
N.T.S.

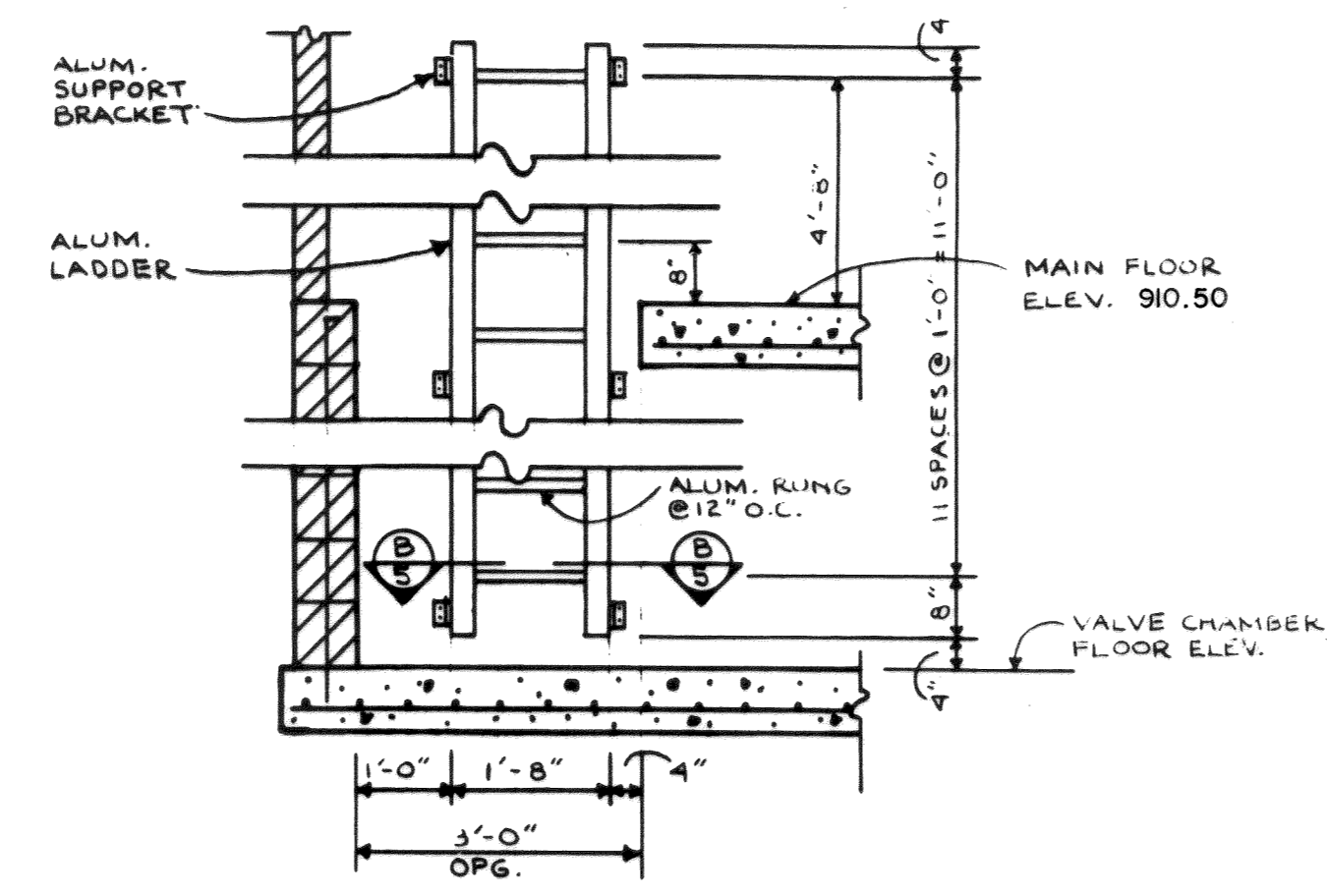


STRAINER BASKET GUIDERAIL DETAIL
N.T.S.

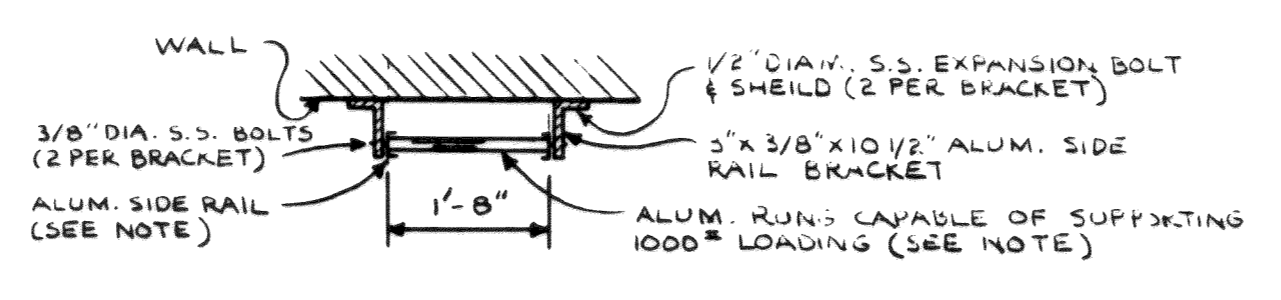
PUMP STATION DETAILS
HOCKADEN AND ASSOCIATES, INC.
 CONSULTING ENGINEERS
 883 N. CASSADY AVENUE
 COLUMBUS, OHIO 43219



FLOOR PLAN
SCALE: 1/2" = 1'-0"

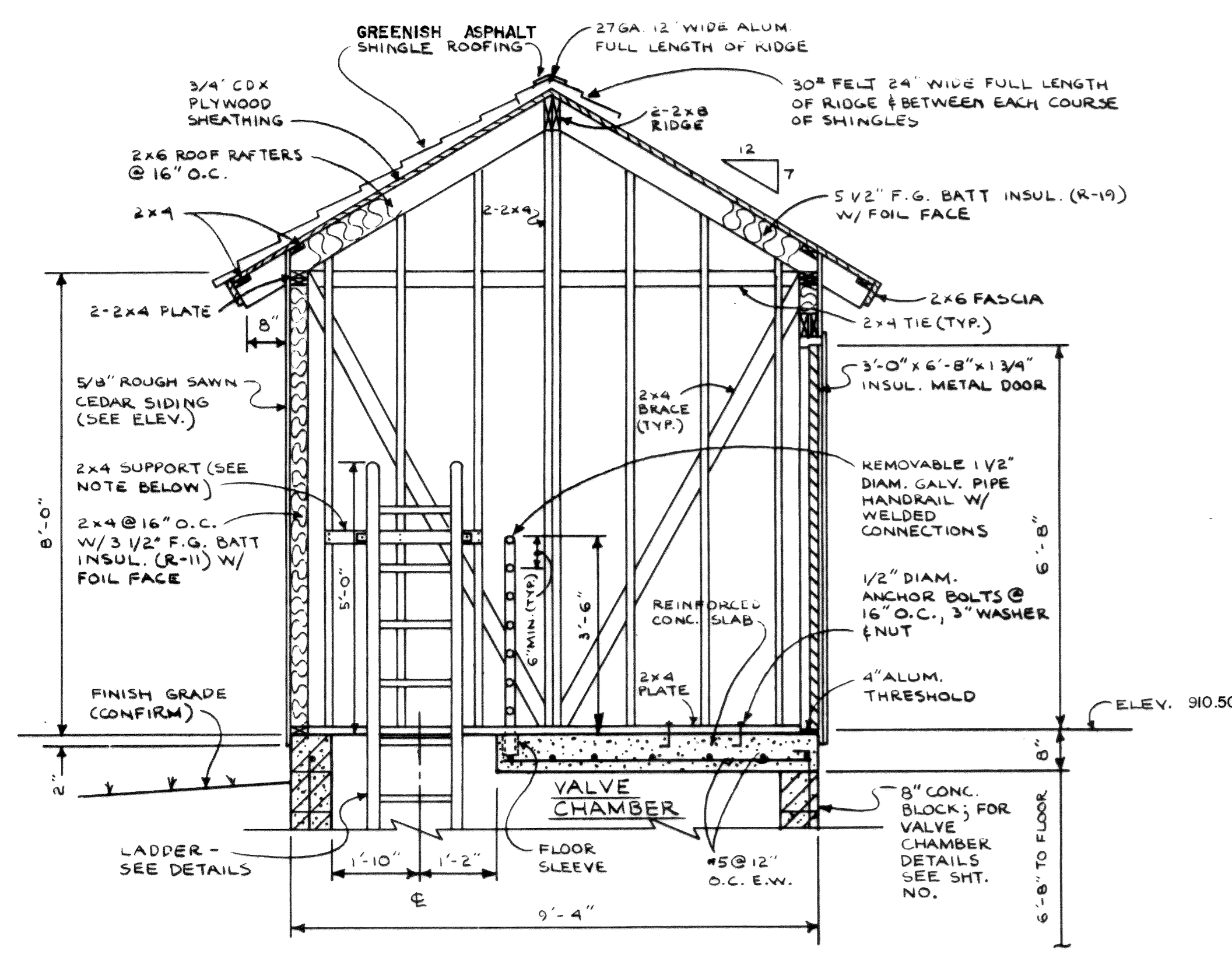


LADDER DETAIL
SCALE: 1/2" = 1'-0"



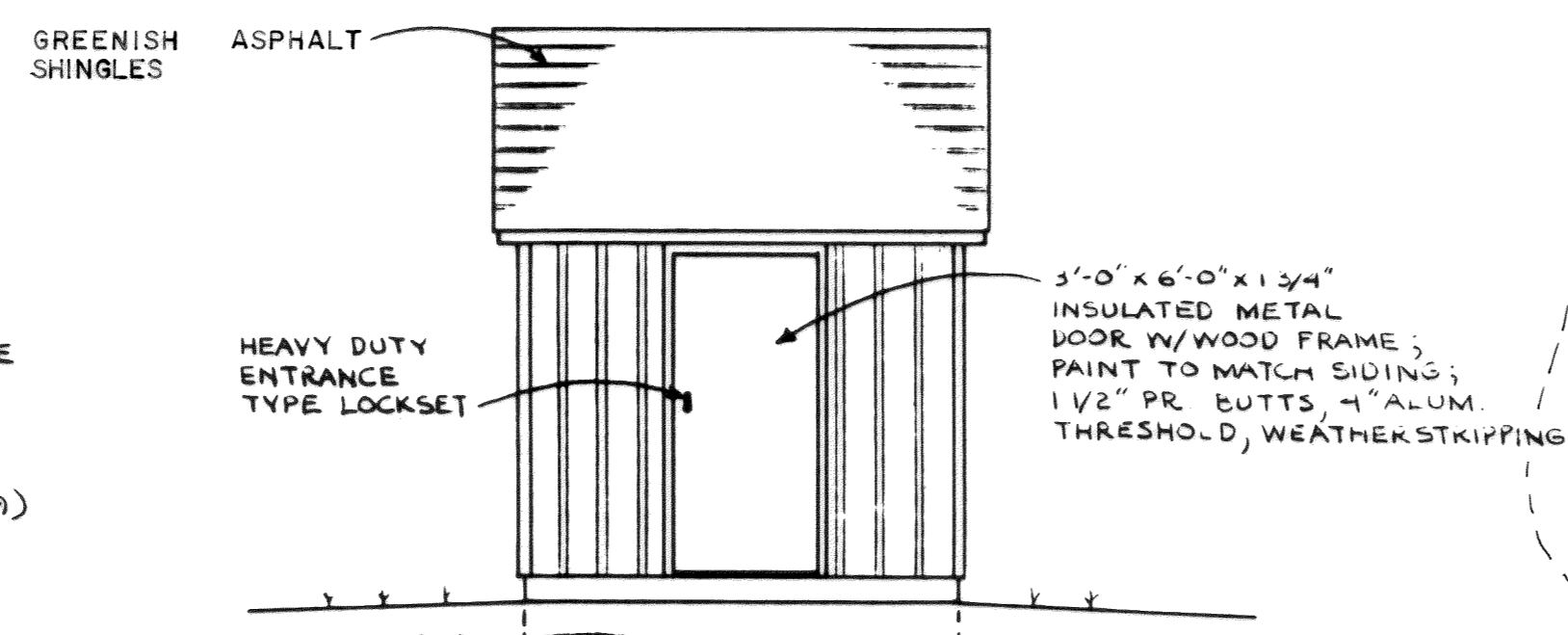
LADDER SECTION (B)
N.T.S.

NOTE: ALUMINUM LADDER TO BE SIMILAR TO FIXED ALUMINUM LADDER MODEL NO. FC-156 BY PRECISION STAIR CORPORATION. RUNGS - 2 3/4" x 1'-8" ALUMINUM EXTRUSION, ALLOY 6063-T5 SERRATED TO PROVIDE GRIP AND FOOT TRACTION. SIDE RAILS - 0.125" WALL THICKNESS x 3" FORMED FROM ALUMINUM EXTRUSION, ALLOY 6063-T5.



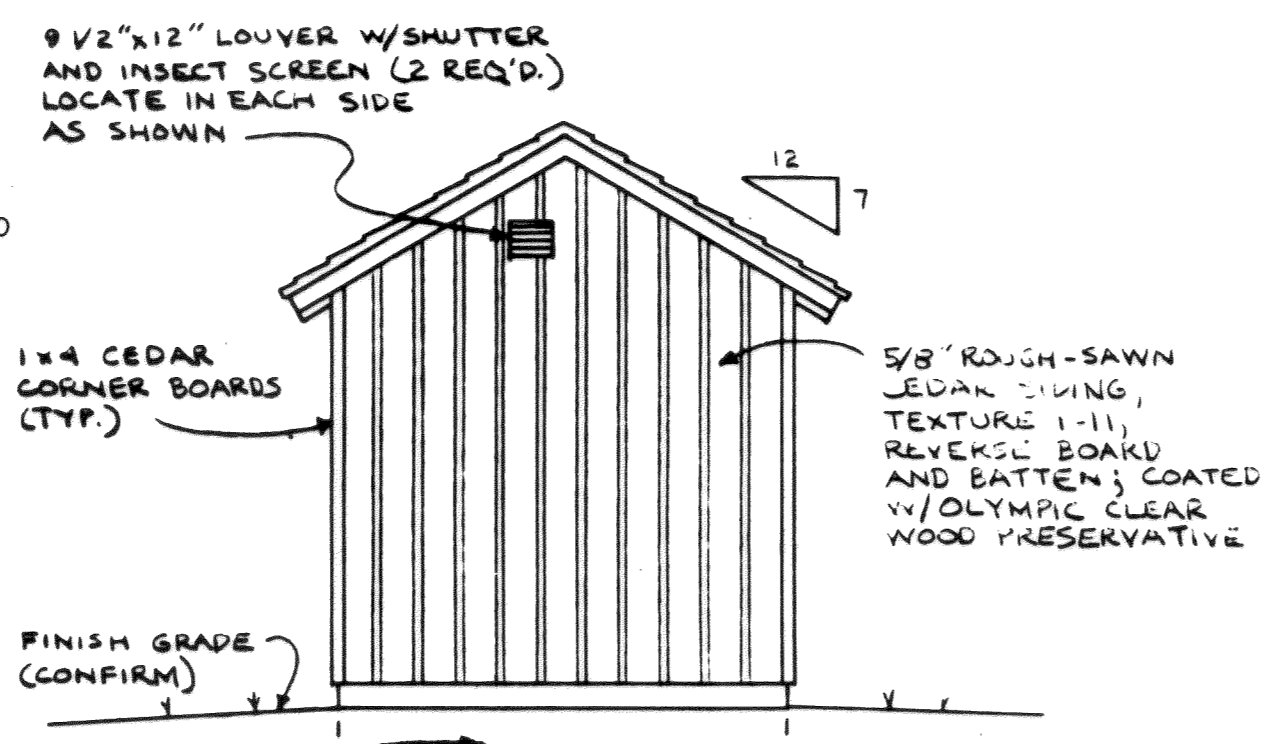
SECTION (A)
SCALE: 1/2" = 1'-0"

LADDER SUPPORT NOTE:
SECURE 2x4 SUPPORT TO WALL FRAMING W/ 5/16" Ø x 5" GALV. LAG BOLTS (6 REQ'D); SECURE LADDER TO SUPPORT W/ 3/8" Ø S.S. BOLTS; SEE LADDER BRACKET DETAILS, ETC.



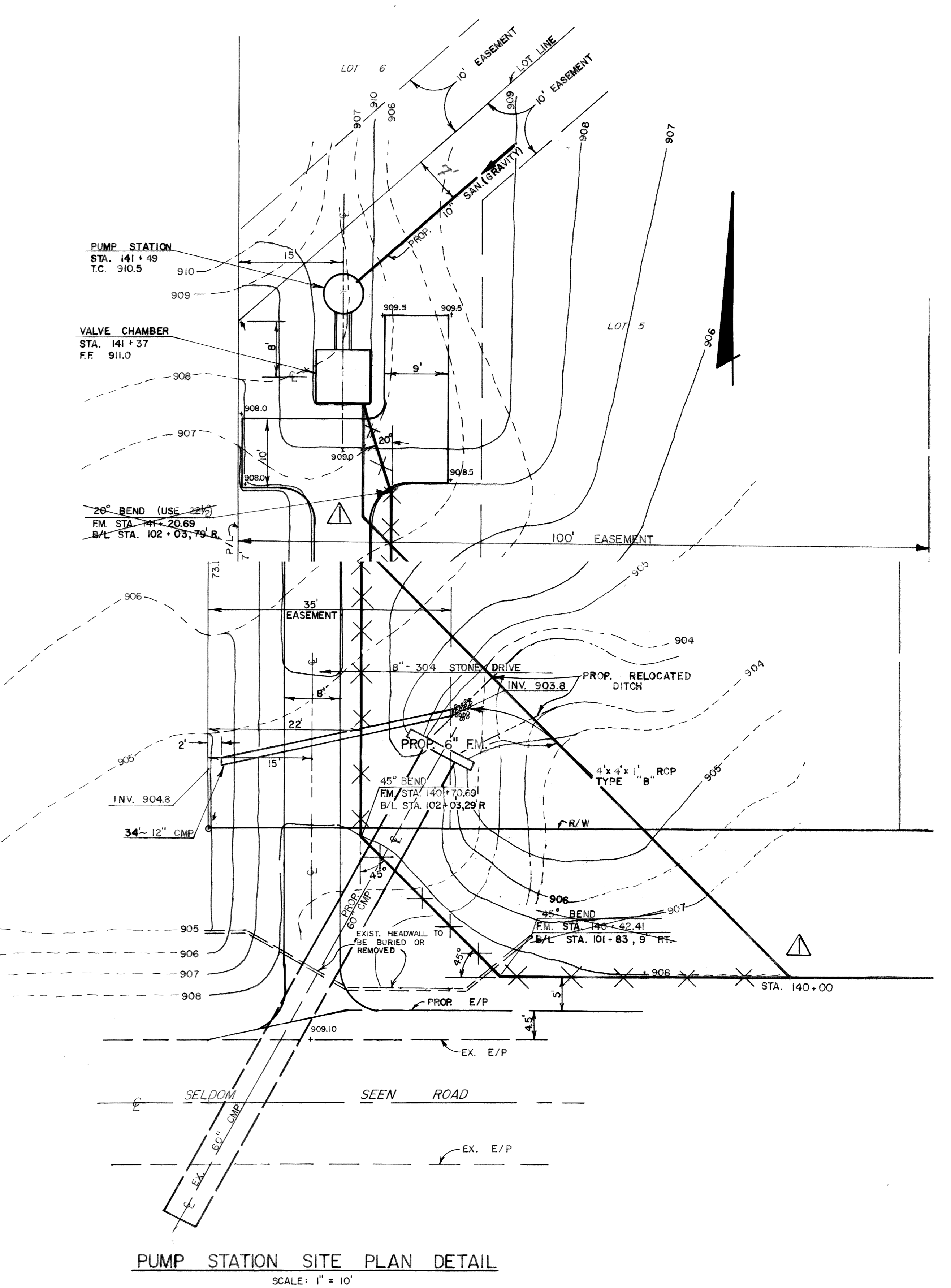
FRONT ELEVATION
SCALE: 1/4" = 1'-0"

(REAR ELEVATION SAME EXCEPT NO DOOR)



SIDE ELEVATION
SCALE: 1/4" = 1'-0"

(TYPICAL OF BOTH SIDES)



PUMP STATION SITE PLAN DETAIL
SCALE: 1" = 10'

DELAWARE COUNTY, OHIO
WOODS ON SELDOM SEEN
6" SANITARY FORCE MAIN
AND PUMP STATION
PUMP STATION DETAILS

HOCKADEN AND ASSOCIATES, INC.
CONSULTING ENGINEERS
COLUMBUS, OHIO

CHECKED BY: G. M. SCALE: NONE
WORK NO. P-762
DATE APRIL 1989