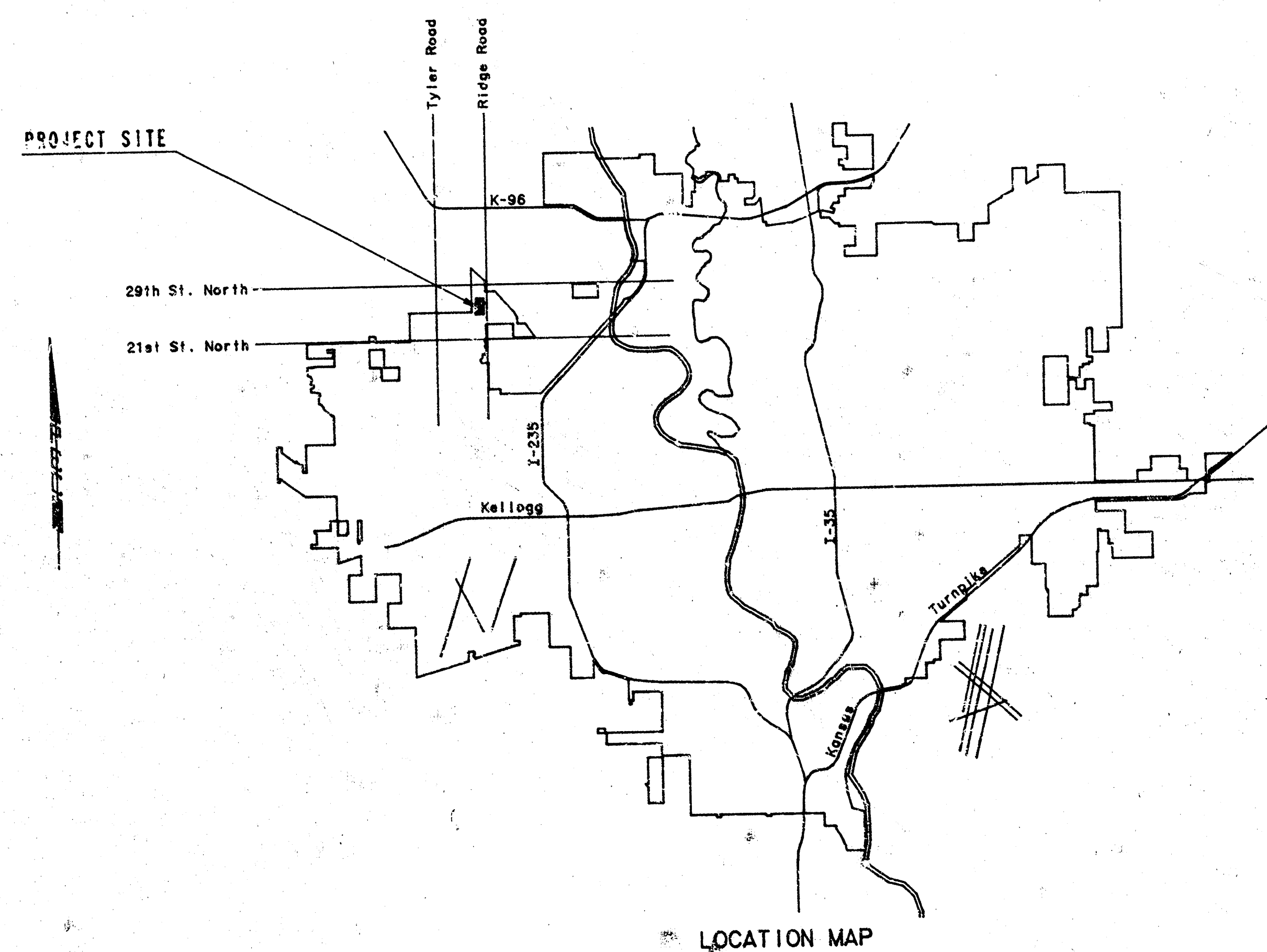


CONSTRUCTION PLANS FOR LIFT STATION AND FORCE MAIN

TO SERVE
LATERAL 21 AND 22, MAIN 15 OF THE
SOUTHWEST INTERCEPTOR SEWER

THE CITY OF WICHITA,
SEDGWICK COUNTY, KANSAS
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER



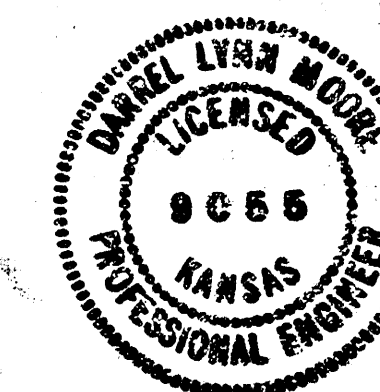
INDEX OF SHEETS

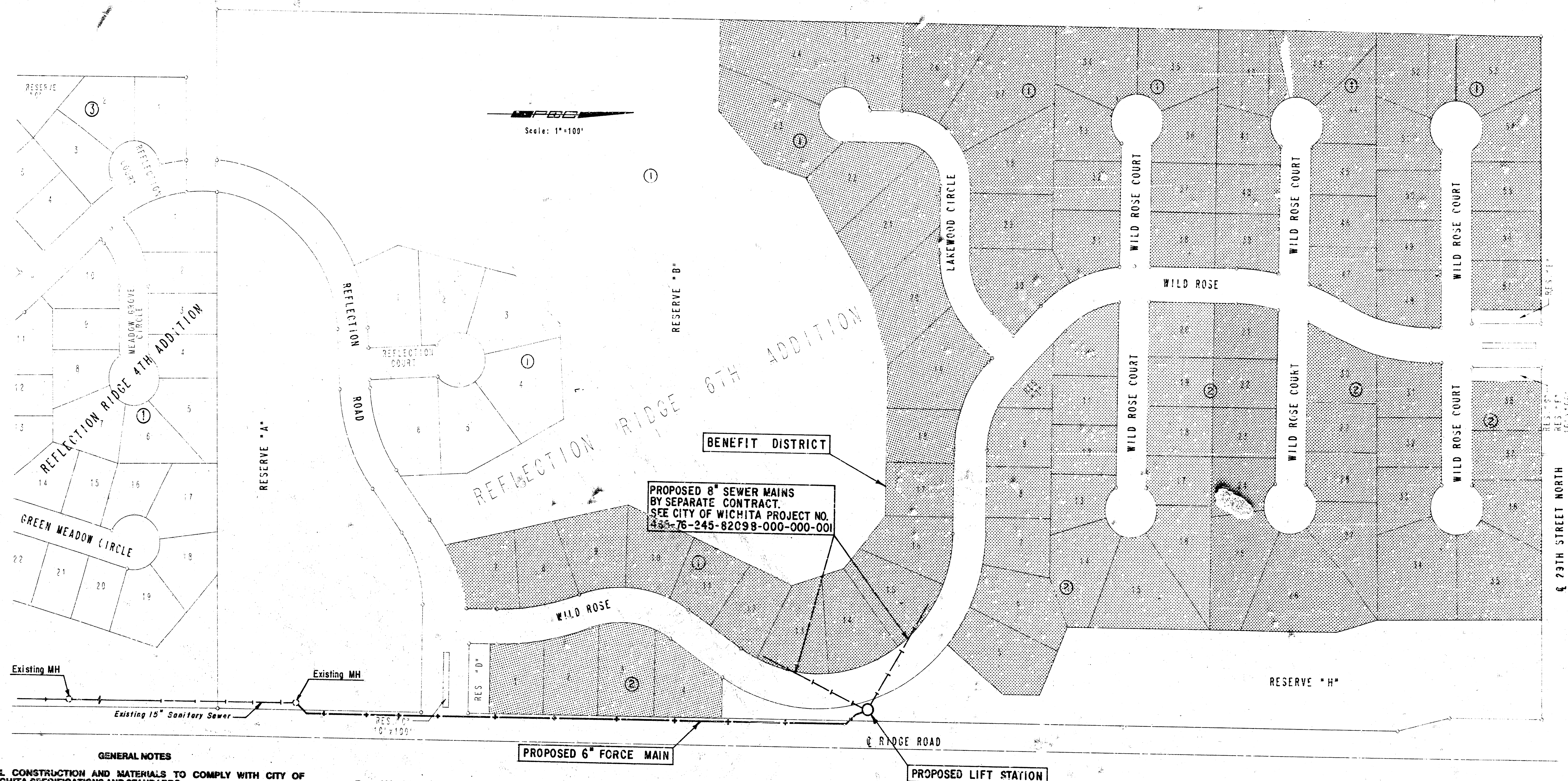
SHEET NO. 1	TITLE SHEET
SHEET NO. 2	KEY MAP AND GENERAL NOTES
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INDEX CODE 740712
CITY OF WICHITA PROJECT NO. 468-76-245-82097-000

MAY, 1991

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





- GENERAL NOTES**
1. ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.
 2. ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM (USGS - 1187.18 = CITY DATUM).
 3. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
 4. AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT (816) 887-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: ARKLA, K.G. & E., THE WICHITA WATER DEPARTMENT, MULTIMEDIA TELEVISION, AND SOUTHWESTERN BELL TELEPHONE.
 5. 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 OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR THE DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE OTHER ITEMS OF WORK.

7. ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SOD AS EXISTING. RESTORATION OF DISTURBED AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP SOIL PREPARATION, SEEDING, MULCH, AND/OR RESEEDING. ALL SEEDING/SODDING WORK SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS AND THE CITY OF WICHITA ADMINISTRATIVE REGULATION NO. 4072 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.
8. EXCESS EXCAVATED MATERIAL SHALL BE STOCKPILED WITHIN THE LIMITS OF REFLECTION RIDGE 6TH ADDITION AS APPROVED BY THE ENGINEER. STOCKPILE LOCATIONS SHALL BE AS DIRECTED BY MR. MARVIN SCHELLSBERG, VICE PRESIDENT, REFLECTION RIDGE, INC. AT 721-2153. COSTS FOR STOCKPILING SHALL BE SUBSIDIARY TO THE PROJECT.
9. WHERE TREE TRIMMING OR TREE REMOVAL IS REQUIRED OUTSIDE THE LIMITS OF THE GOLF COURSE, THE CONTRACTOR SHALL PERFORM SUCH WORK AS APPROVED BY THE ENGINEER. PRIOR TO BID PREPARATION FOR THIS PROJECT THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO DETERMINE THE EXTENT OF TREE TRIMMING/TREE REMOVAL TO BE PERFORMED. THE PROPERTY OWNER IS CURRENTLY HAVING SOME SITE CLEARING PERFORMED BY PRIVATE CONTRACT. ALL COSTS FOR TREE TRIMMING/TREE REMOVAL SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE CLEARING".
10. WHERE TREE TRIMMING OR TREE REMOVAL IS REQUIRED WITHIN OR ADJACENT TO THE GOLF COURSE, THE CONTRACTOR SHALL COORDINATE SUCH WORK WITH THE GOLF COURSE SUPERINTENDENT, MR. JOHN WRIGHT AT 721-2463. SUCH TREE TRIMMING OR TREE REMOVAL SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE BID FOR "SITE CLEARING".

11. ALL TREE TRIMMINGS OR TREES REMOVED SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. OFF SITE DISPOSAL AREA SHALL BE AS APPROVED BY THE ENGINEER.
12. WHERE RELOCATION, REMOVAL OR ADJUSTMENTS TO THE GOLF COURSE IRRIGATION SYSTEM ARE REQUIRED DUE TO THE CONSTRUCTION OF THE SANITARY SEWER, THE GOLF COURSE SUPERINTENDENT SHALL PERFORM SUCH WORK. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION OPERATIONS WITH THE GOLF COURSE SUPERINTENDENT, MR. JOHN WRIGHT AT 721-2463 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION IN THESE AREAS. RESTORATION OF THE IRRIGATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE GOLF COURSE SUPERINTENDENT.
13. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION OF THE 6" FORCE MAIN UNTIL AFTER THE 1991 BEN HOGAN WICHITA CHARITY CLASSIC GOLF TOURNAMENT WHICH HAS BEEN SCHEDULED FOR JULY AT THE REFLECTION RIDGE GOLF COURSE. THE CONTRACTOR SHALL CONTACT MR. MARVIN SCHELLSBERG, VICE PRESIDENT-REFLECTION RIDGE, INC. TO DETERMINE THE EXACT GOLF TOURNAMENT DATES. CONSTRUCTION OF THE WET WELL AND LIFT STATION MAY BE PERFORMED DURING THE GOLF TOURNAMENT. HOWEVER, IMMEDIATELY FOLLOWING THE CONCLUSION OF THE GOLF TOURNAMENT, THE CONTRACTOR SHALL CONSTRUCT THE 6" FORCE MAIN IN ITS ENTIRETY INCLUDING MEETING ALL CITY OF WICHITA TESTING AND INSPECTION REQUIREMENTS.

DRAWING NAME: 34-01081-4 SS KEY
 LOCATION: SW 10, D4 DUG: 6 307
 CENTER COORDINATES:
 DATE ISSUED: 02/26/91
 SPECIAL INSTRUCTIONS:

LICENSED
 9055
 PROFESSIONAL ENGINEER

Revision _____ By _____ Date _____

KEY MAP AND GENERAL NOTES

LATERAL 21 AND LATERAL 22, MAIN 15
 OF THE SOUTHWEST INTERCEPTOR SEWER

MICHAEL C. LINDBERGH, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 468-76-245-82097-000-000-001

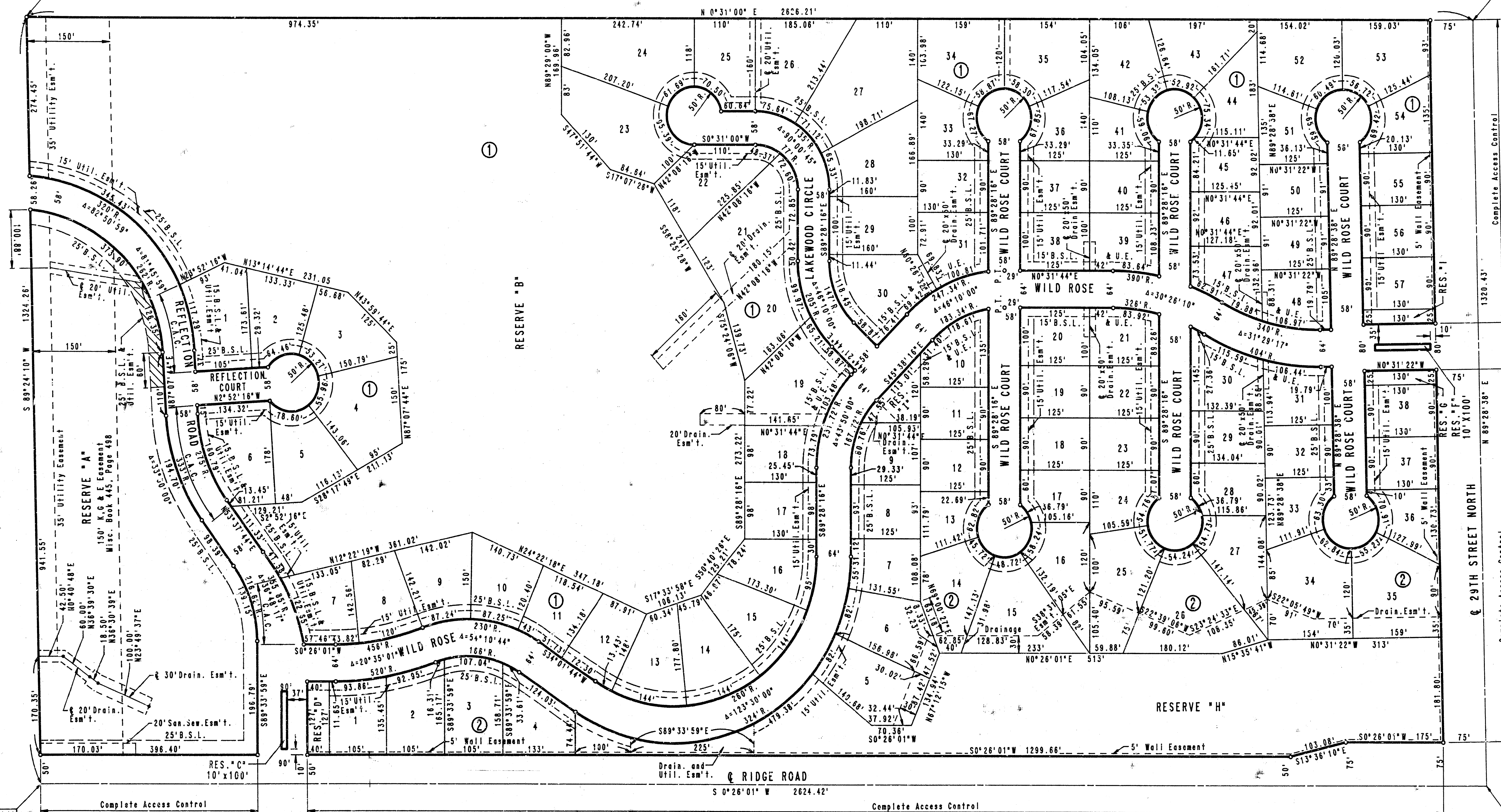
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 ENGINEERS
 WICHITA, KANSAS

Designed by *DLM, RFV* Job No. *34-01081-3* Sht. *2* of *6*
 Drawn by *TDS, TJS* Date *March, 1991*

REFLECTION RIDGE 6TH ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

S.W. COR. E. 1/2, N.E. 1/4
SEC. 4, T27S, R1W
OF THE 6TH P.M.

N.W. COR. E. 1/2, N.E. 1/4
SEC. 4, T27S, R1W
OF THE 6TH P.M.



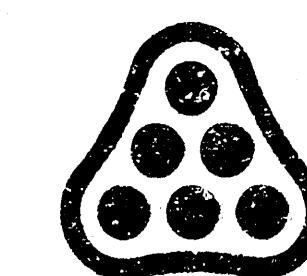
SCALE: 1"=100'
 ○ = IRON SET
 U.E. = UTILITY EASEMENT
 B.S.L. = BUILDING SETBACK LINE
 C.A.C. = COMPLETE ACCESS CONTROL
 B.M. - CHISELED "D" N.E. COR. 3-7'X3' RIB
 BRIDGE ON RIDGE ROAD 175' NORTH OF
 S.E. COR. N.E. 1/4 SEC. 4, T27S, R1W
 ELEV. = 1325.64 M.S.L.
 ELEV. = 1325.52 CITY DATUM

MINIMUM PAD ELEVATIONS (LOWEST OPENING)
 ALL LOTS = 1327.5 M.S.L.

S.E. COR. N.E. 1/4
SEC. 4, T27S, R1W
OF THE 6TH P.M.

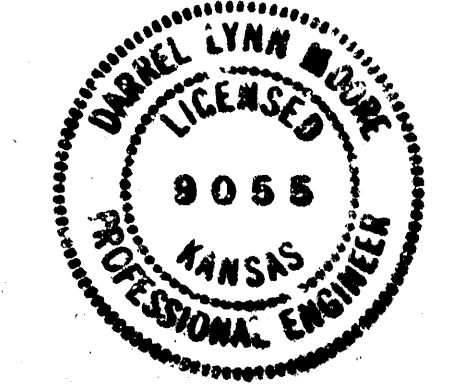
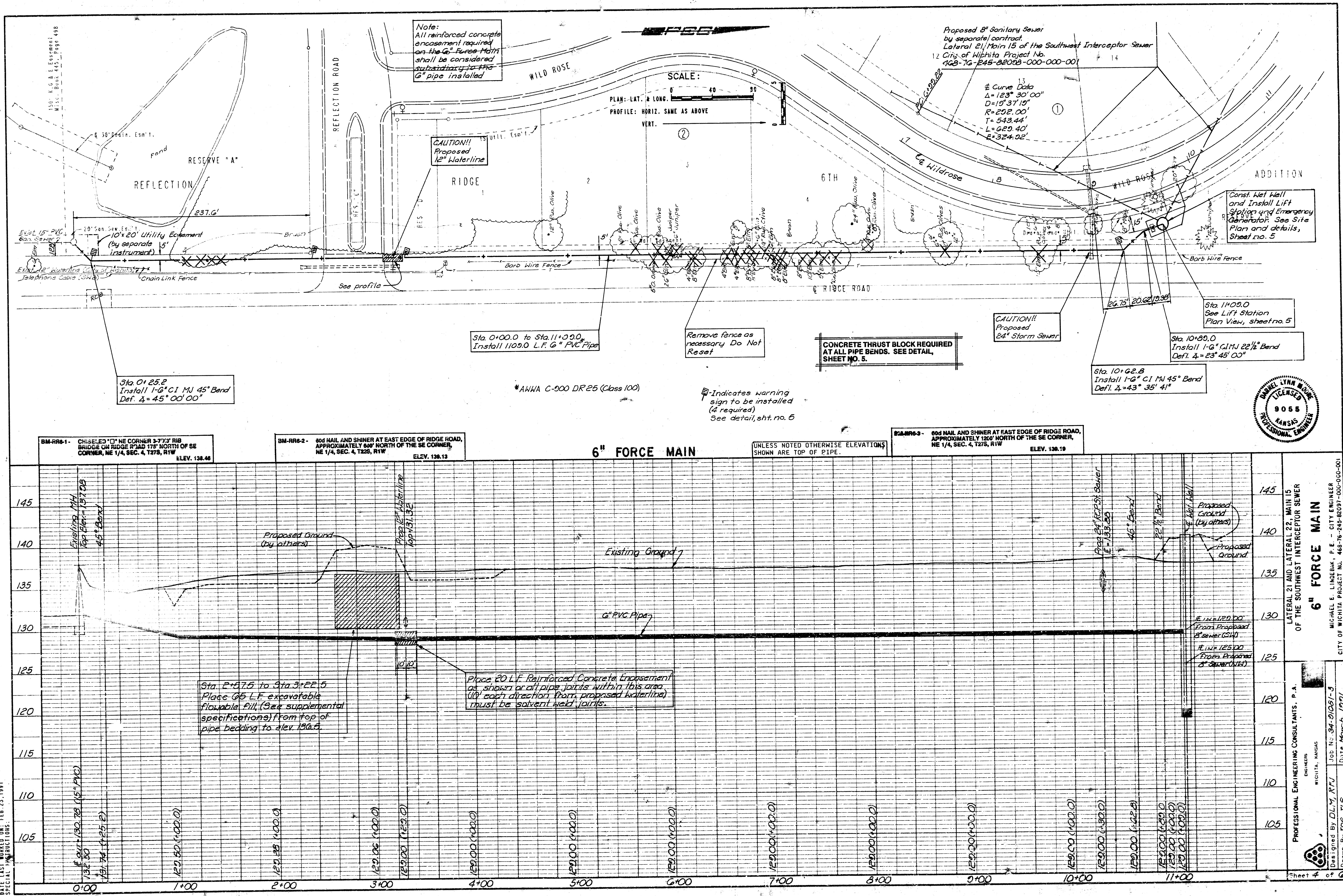
N.E. COR. N.E. 1/4
SEC. 4, T27S, R1W
OF THE 6TH P.M.

DRAWING NAME: 34-91081-3 SS PLAT
 LOCATION: SW 10 04 DWG # 304
 CENTER COORDINATES
 DATE LAST WORKED ON: FEB 23, 1991
 SPECIAL INSTRUCTIONS:



No.	Revision	By	Date
	LATERAL 21 AND LATERAL 22, MAIN 15 OF THE SOUTHWEST INTERCEPTOR SEWER		
	PLAT		
	MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER CITY OF WICHITA PROJECT NO. 468-78-245-82097-000-000		
	PROFESSIONAL ENGINEERING CONSULTANTS, P.A. ENGINEERS WICHITA, KANSAS		
Designed by	Job No. 34-91081-3	Sht. 3 of 6	
Drawn by	Date March, 1991		

DRAWING NAME: 34-50881-3 BK. FRI
 LOCATION: STATION 0+00 TO 11+00
 CENTER COORDINATES:
 DATE: JAN. 1991
 SPECIAL INSTRUCTIONS:



6" FORCE MAIN
 LATERAL 21 AND LATERAL 22 MAIN 15
 OF THE SOUTHWEST INTERCEPTOR SEWER

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 WICHITA, KANSAS

Designed By: D.L.M. RJU
 Drawn By: TDS/TJS
 Date: March, 1991

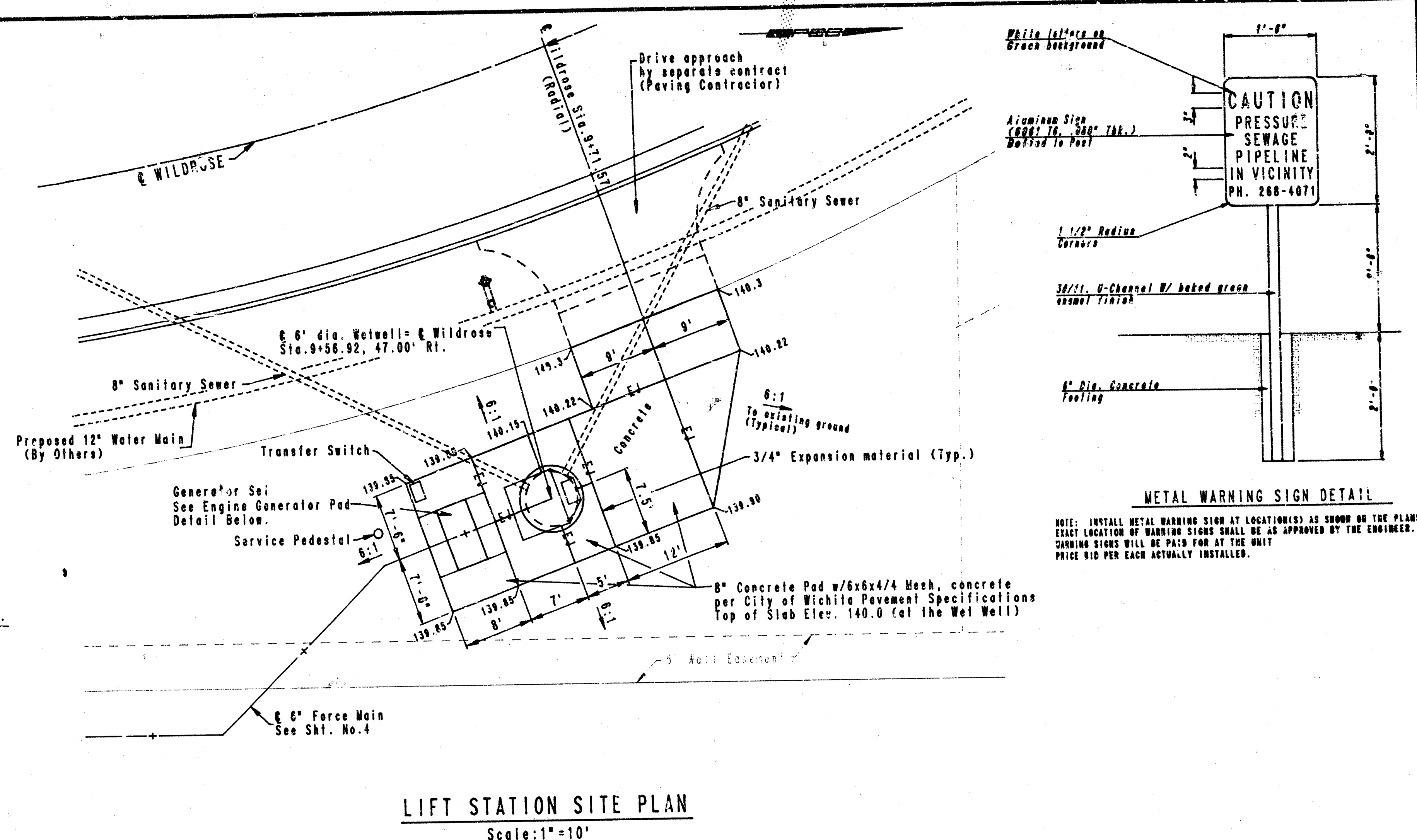
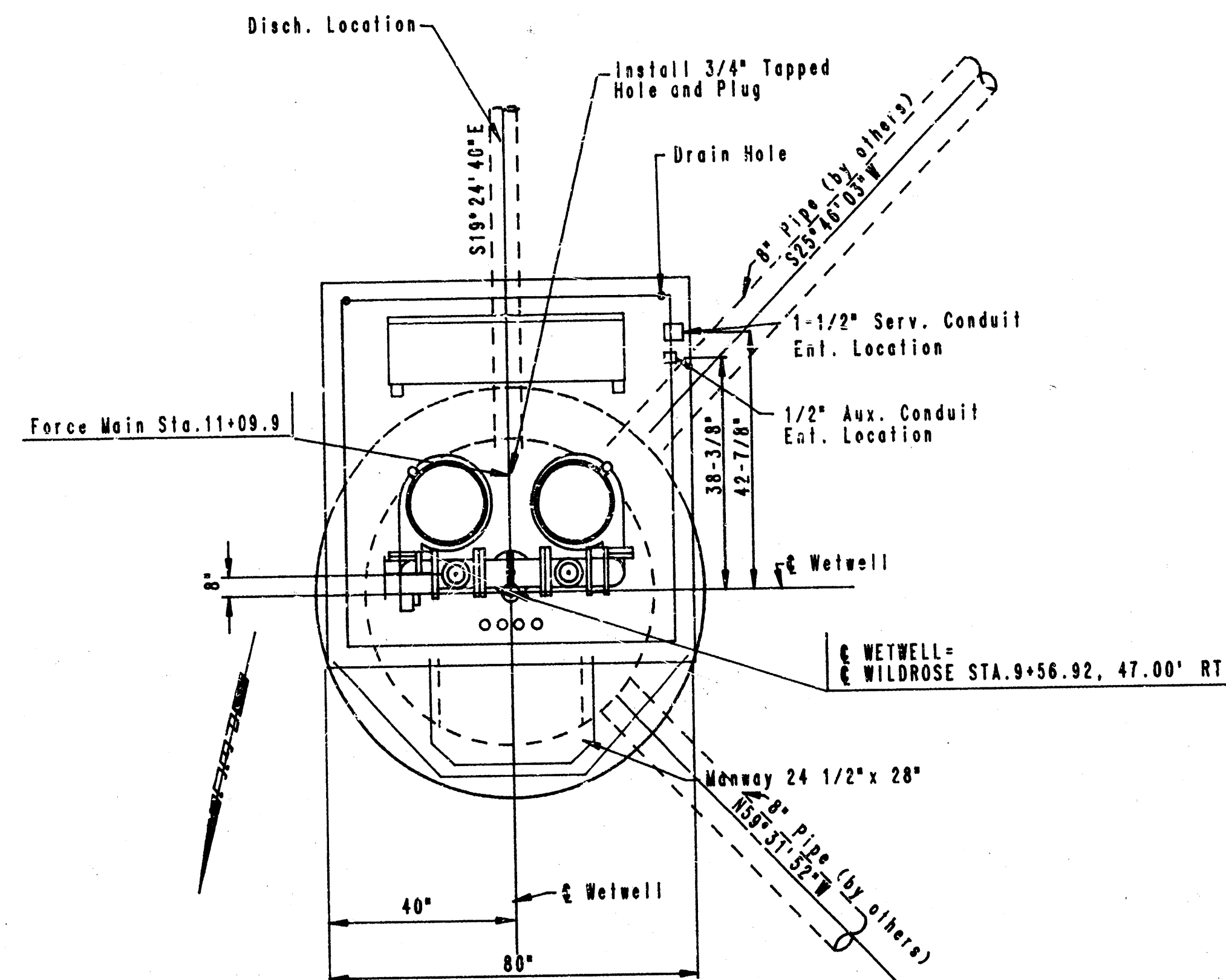
CITY OF WICHITA PROJECT NO. 468-76-245-8091-000-000-001

PUMP	FLOW	TOT	MOTOR HP	IMPELLER DIA.	RPM	ELECT. SERV. REQ.	MOTOR CODE	PUMP EFFICIENCY
NO. 1 4928	250 gpm	16 ft	5 hp	7 inch	1170	208V, 60HZ, 3Ø, 4-Wire	H	82%
NO. 2 4928	250 gpm	16 ft	5 hp	7 inch	1170	208V, 60HZ, 3Ø, 4-Wire	H	82%

NOTES:

1. THE PRICE BID FOR FURNISHING AND INSTALLING THE WET WELL MOUNTED LIFT STATION WITH STANDBY EMERGENCY POWER AND MISCELLANEOUS APPURTENANCES COMPLETE IN PLACE SHALL INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE LIFT STATION AND STANDBY EMERGENCY POWER AS INDICATED IN THE PLANS. COMPLETE IN PLACE AND IN OPERATION. THIS PRICE SHALL INCLUDE THE COST OF CONSTRUCTING AND/OR INSTALLING COMPACTED SUBGRADE, CONCRETE PAD, POWER POLE, ELECTRICAL CONDUIT, ELECTRICAL WIRING, DISCONNECT SWITCH, PRIMARY AND SECONDARY ELECTRICAL POWER SUPPLY, NATURAL GAS FUEL SUPPLY, PIPING, FINISHED GRADING AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGEMENTS WITH THE GAS COMPANY FOR EXTENSION OF GAS SERVICE TO THE LIFT STATION SITE, AND FOR PAYMENT OF COSTS OF SUCH EXTENSION AND METER SETTING. LOCATION OF METER TO BE ACCEPTABLE TO GAS SERVICE COMPANY AND TO CITY OF WICHITA SEWER MAINTENANCE DIVISION.

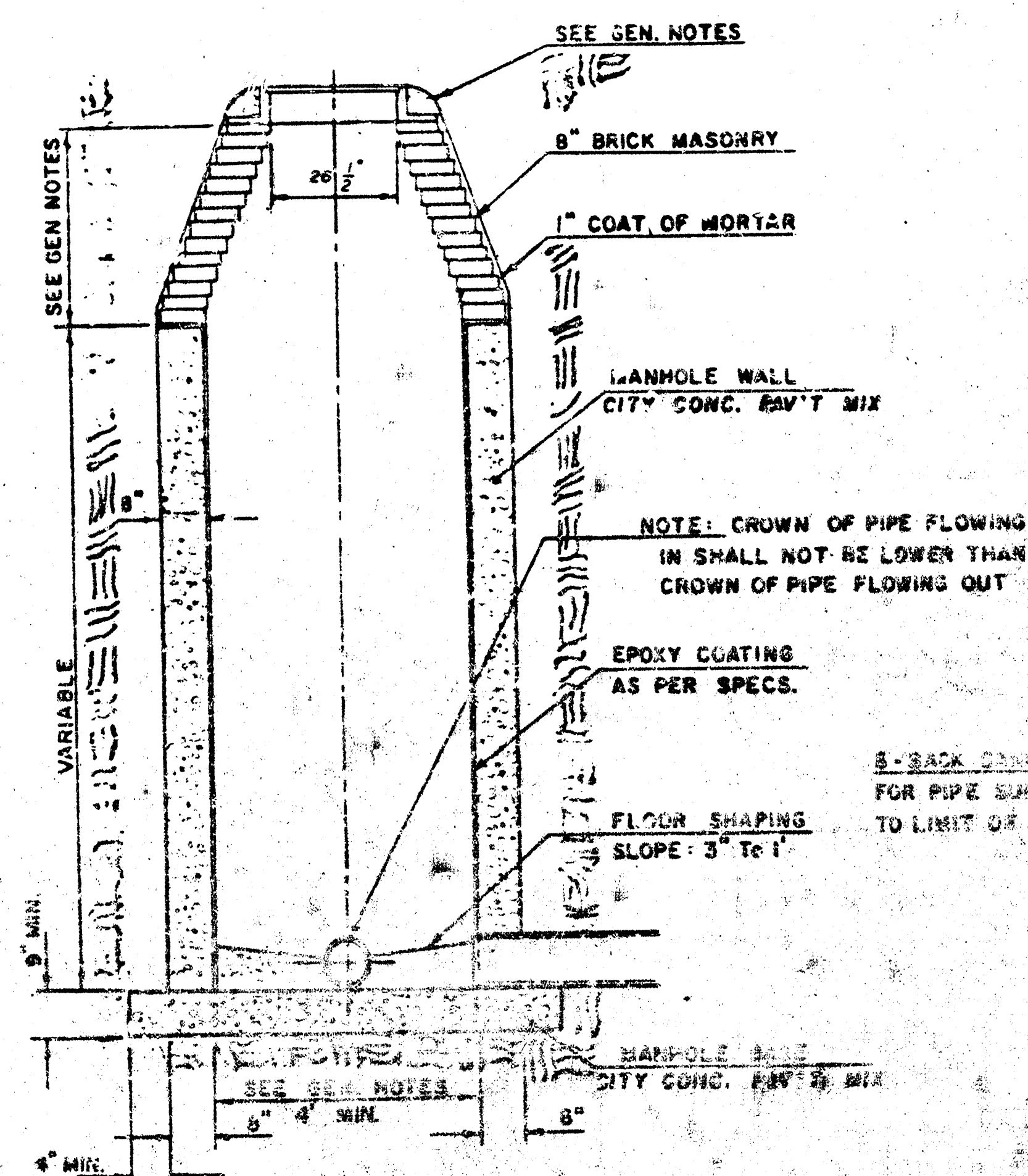


SEWER APPURTENANCES DETAILS

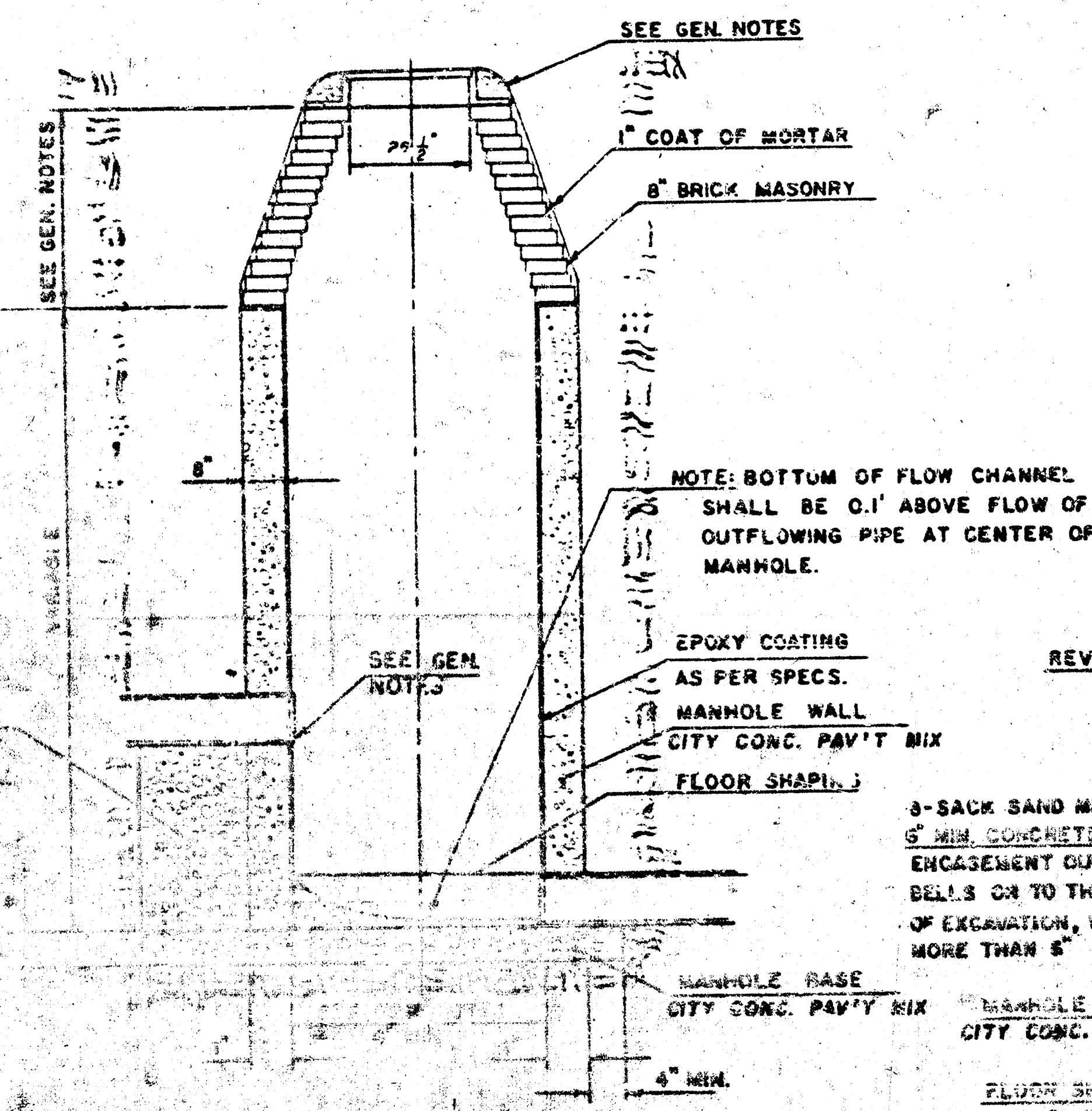
ADOPTED AS STANDARD DESIGN
BY

CITY OF WICHITA, KANSAS

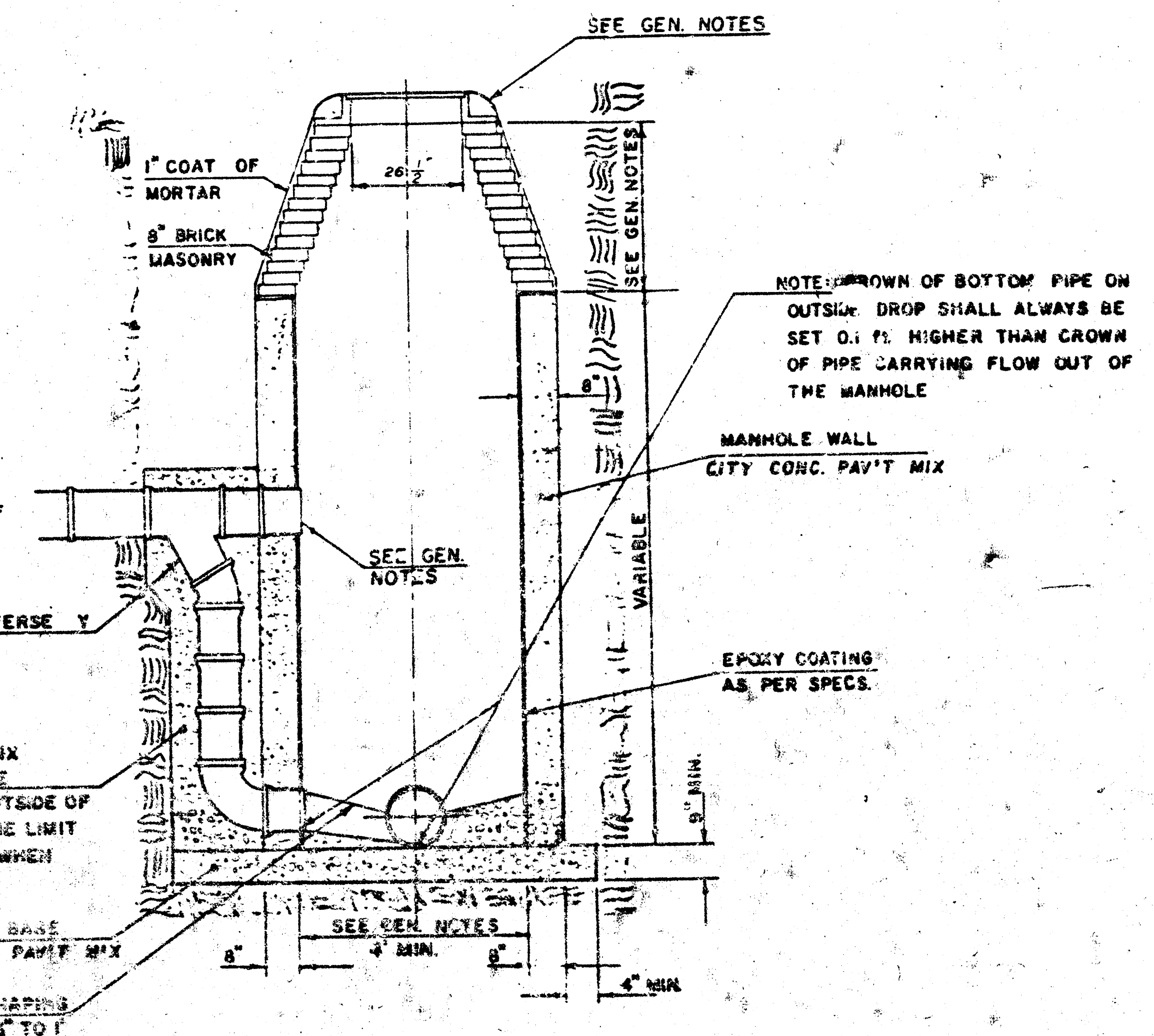
TYPE "D" MANHOLE



TYPE "D" INSIDE DROP MANHOLE



TYPE "D" OUTSIDE DROP MANHOLE



1. MANHOLE USED IN EXISTING SEWER SYSTEMS SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF THE CITY OF WICHITA, KANSAS, STANDARD SPECIFICATIONS FOR SEWER APPURTENANCES, AS ADOPTED BY THE CITY ENGINEER. MANHOLES SHALL BE PLACED AROUND THE MANHOLE PIPE AS SHOWN ON THE STANDARD SPECIFICATIONS AND CONSTRUCTED TO UNPAVED AREAS.
2. ALL INSIDE SURFACES OF THE MANHOLE SHALL BE COATED WITH EPOXY COATING AS PER SPECS. THE REQUIRED COATING HEIGHT SHALL BE THE FULL INSIDE DIAMETER OF THE MANHOLE PIPE IN THE MANHOLE.
3. MANHOLES CONSTRUCTED UNDER EXISTING PAVEMENT SHALL HAVE A MINIMUM COVER OF 4\"/>

4. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF-CLEANING AND AREAS WHERE SOLIDS COULD BE DEPOSITED OR SEWER FLOES COULD FORM SHALL BE ELIMINATED.
5. OUTLET PIPE, FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLUENT PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAY THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO REVEAL LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
6. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN GRAD WITHIN THE EXCAVATION SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE GRADE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF GRADE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
7. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
8. THE VERTICAL FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2'. THE CROWNS OF INFLUENT PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
9. STANDARD MANHOLES TYPE "D" AND STANDARD INSIDE DROP MANHOLE TYPE "D" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES TYPE "D" SHALL BE BID AS 5' AND OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

NOTE: EPOXY COATING ON INTERIOR CONCRETE SURFACES MAY BE DELETED IF MANHOLES ARE CONSTRUCTED ON SEWERS WITH DIAMETERS SMALLER THAN 36\"/>

NOTE NO. 7 REVISED JAN. 1991

APRIL 1987 Sht. 6 of 6

14-02-05-08