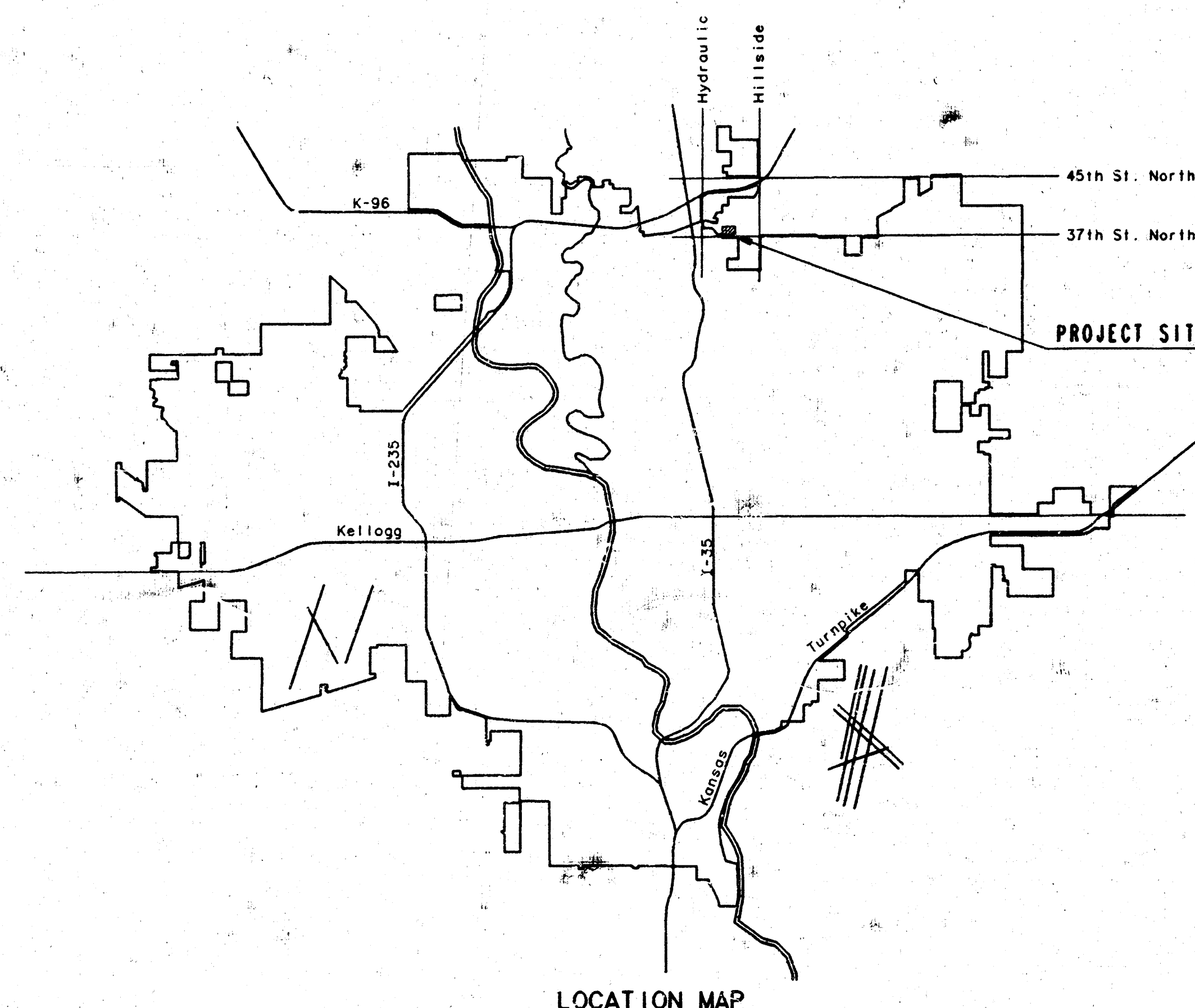


CONSTRUCTION PLANS FOR
GROUNDWATER REMEDIATION FORCE MAIN
TO SERVE
UNOCAL CORPORATION

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



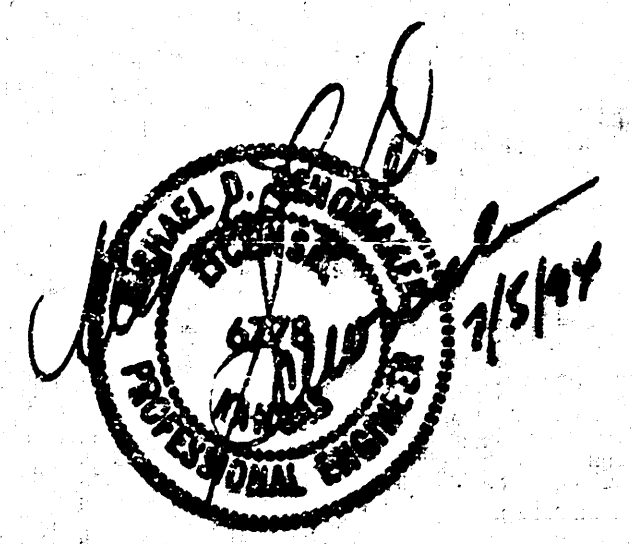
INDEX OF SHEETS	
SHEET NO. 1	TITLE SHEET
SHEET NO. 2	KEY MAP AND GENERAL NOTES
SHEET NO. 304	PLAN/PROFILE

P.E.C. PROJECT NO. 34-94361-3263

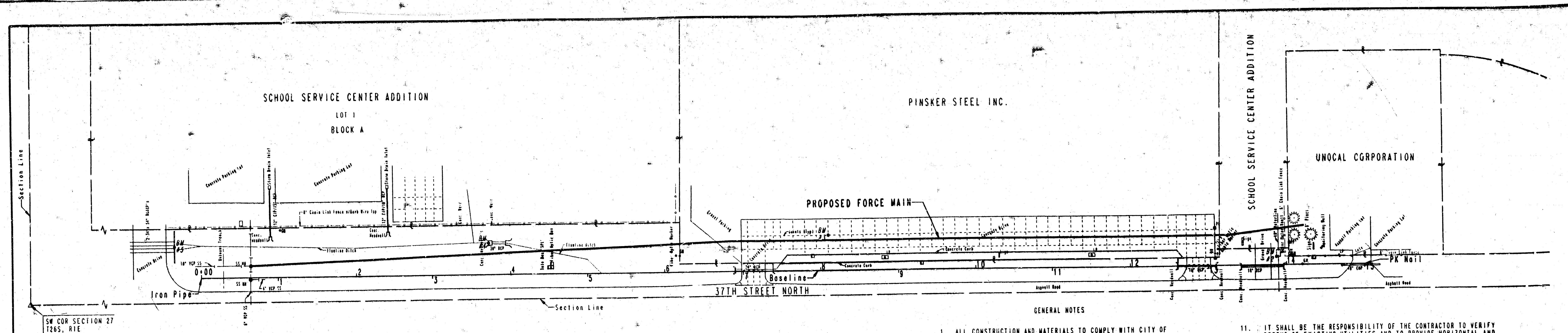
JUNE, 1994

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

DEC 2 1994



DRAWING NAME: 34-94361-FR-T1110
LOCATION: E. 6155
DATE: JAN 28, 1994
SPECIAL INSTRUCTIONS:



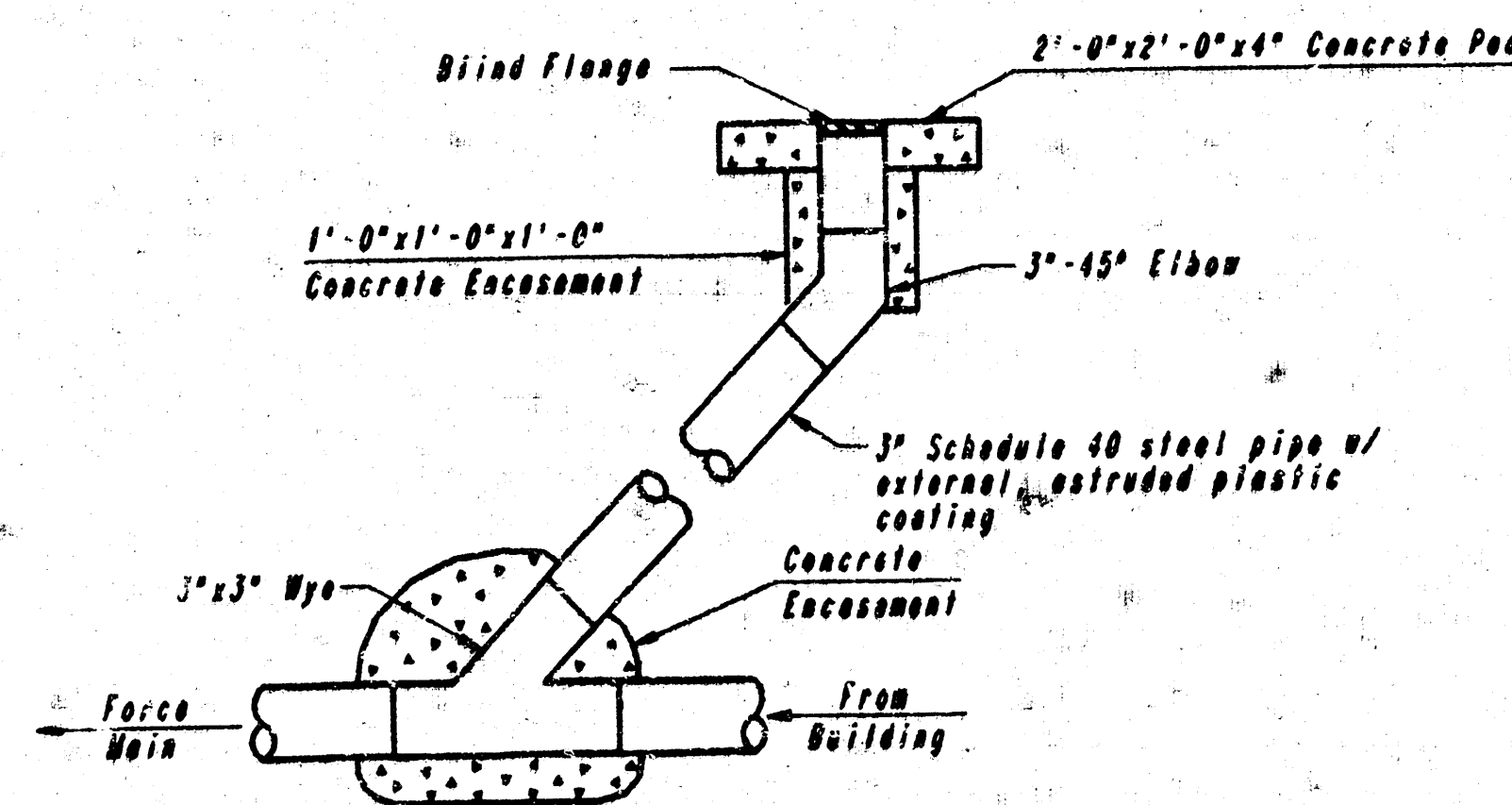
BENCH MARK LIST

BW 2	BASLINE STATION 13+87, 10' LT. CHISELED "D" SW CORNER WATER METER VAULT.	ELEV. 160.13
BW 3	BASLINE STATION 8+10, 43' LT. CHISELED "D" AT CONCRETE JOINT IN PINSKER STEEL PARKING LOT.	ELEV. 153.60
BW 4	BASLINE STATION 3+71, 30' LT. CHISELED "D" CENTER WEST END HEADWALL FOR 30" RCP.	ELEV. 140.64
BW 5	BASLINE STATION 0+34, 38.5' LT. CHISELED "D" CENTER EAST END HEADWALL FOR 2-54" X 34" RCACP.	ELEV. 139.22

BASLINE TIES

BASLINE STATION 0+00
 39.5' NW TO SOUTH END HEADWALL 2-54" X 34" RCACP
 27.3' SW TO PC CONC. APPROACH USD 250 SUPPLY DIV. DR.
 30.0' SW TO CENTER 37TH STREET NORTH

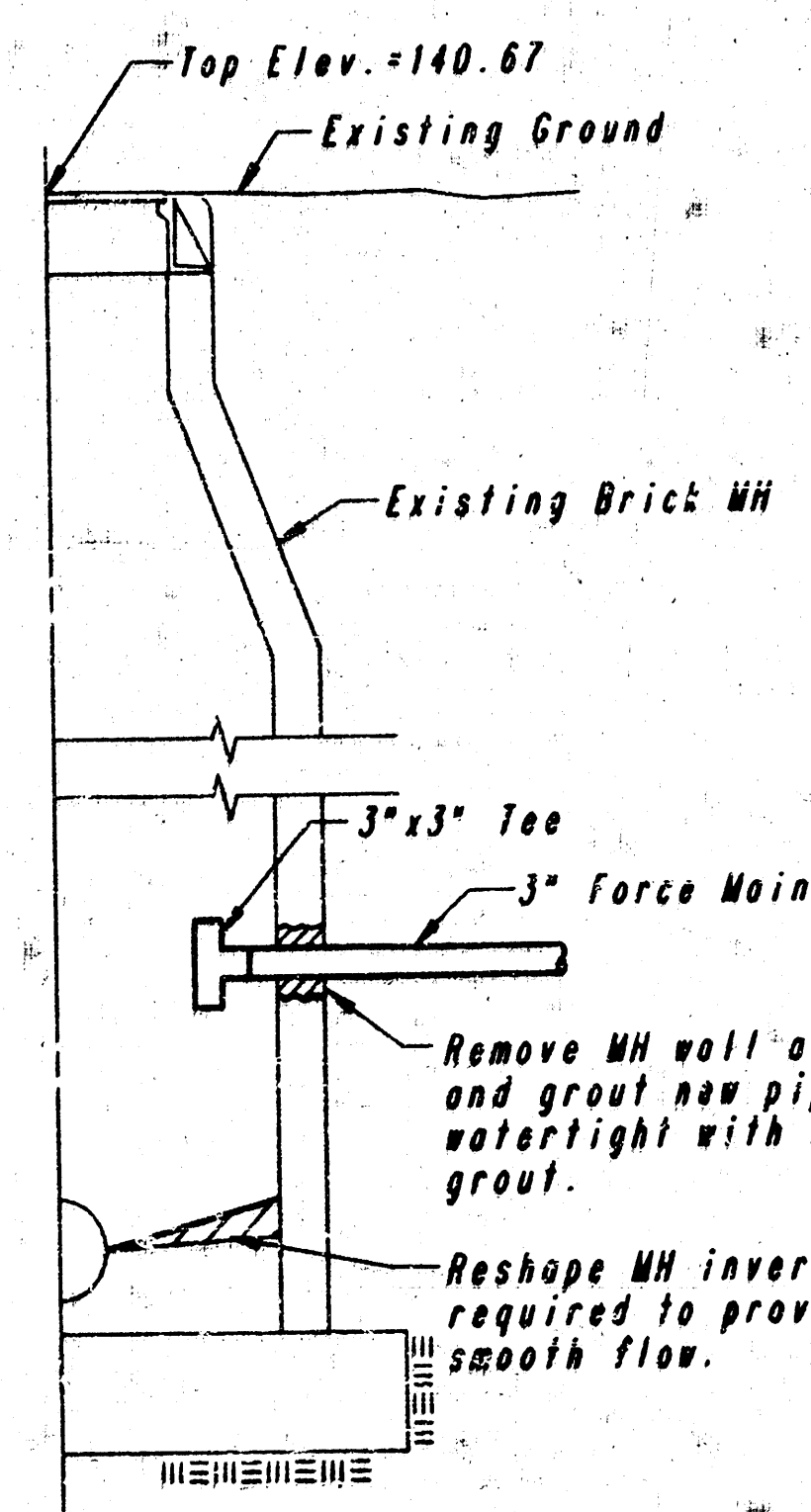
BASLINE STATION 15+00
 PK MAIL IN ASPHALT DRIVE
 13.0' NE TO 6" STEEL GATE POST OF ASPHALT DRIVE
 18.6' NW TO 6" STEEL GATE POST OF ASPHALT DRIVE
 17.0' SOUTH TO NORTH EDGE PAVEMENT 37TH STREET NORTH
 4.0' EAST TO CENTERLINE ASPHALT DRIVE TO 2100 E. 37TH ST. N.



CLEANOUT DETAIL

KEY MAP

SCALE: 1"=60'



FORCE MAIN RECEIVING MANHOLE
 BASELINE STA. 0+64.3, 14.3' LT.

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.
- ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM.
- THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- 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 (316) 687-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: ARKLA, KPI/GAS SERVICE, THE WICHITA WATER DEPARTMENT, MULTIMEDIA CABLEVISION, K.G.M.E. (ELECTRIC), AND SOUTHWESTERN BELL TELEPHONE.
- 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.
- 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 PRICE BID.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 42 INCH DEPTH OF COVER OVER THE PROPOSED FORCE MAIN.
- ALL LAWN/TURF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE RESTORED WITH THE SAME GRASS/SEED 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. 40 WHICH GOVERNS CLEANUP AND RESTORATION OR REPLACEMENT FOLLOWING CONSTRUCTION. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE PRICE BID.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITE AS DIRECTED BY THE ENGINEER.
 ALL OTHER 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 MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- THE CONTRACTOR SHALL AVOID REMOVAL OR TRIMMING OF ANY TREES OR SHRUBS WHERE POSSIBLE. WHERE THE CONTRACTOR BELIEVES THE REMOVAL OR TRIMMING IS UNAVOIDABLE, HE SHALL OBTAIN THE CONCURRENCE OF THE ENGINEER BEFORE PROCEEDING WITH SUCH WORK. COSTS FOR TREE/SHRUB REMOVAL AND TRIMMING, REGARDLESS OF SIZE, SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY DEPTHS OF EXISTING UTILITIES AND TO PROVIDE HORIZONTAL AND VERTICAL DEFLECTIONS ALONG THE FORCE MAIN AS REQUIRED TO AVOID CONFLICTS WITH THE EXISTING UTILITIES.
- A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THE SURFACE OR PAVEMENT IS REQUIRED. IN INSTANCES WHERE SAWED JOINTS, TO FACILITATE PAVEMENT REMOVAL FALLS WITHIN 3 FEET (3') OF EXISTING JOINTS, THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL MAINTAIN CONSTRUCTION RECORDS OF THE HORIZONTAL AND VERTICAL LOCATIONS OF THE FORCE MAIN SUCH THAT RECORD DRAWINGS CAN BE PREPARED UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THRU CONSTRUCTION.
- THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT ACCESS THRU AND ACROSS THE CONSTRUCTION AREA AT ALL TIMES.
- ALL FORCE MAIN PIPE SHALL BE 3" DIAMETER, SCHEDULE 40 STEEL WITH AN EXTERIOR, EXTRUDED PLASTIC COATING AS STATED IN THE SPECIFICATIONS.
- TRAFFIC SHALL NOT BE DISRUPTED IN 37TH STREET NORTH OR IN THE ENTRANCES TO THE PINSKER STEEL PARKING LOT.

PLAN	CHECKED	DATE

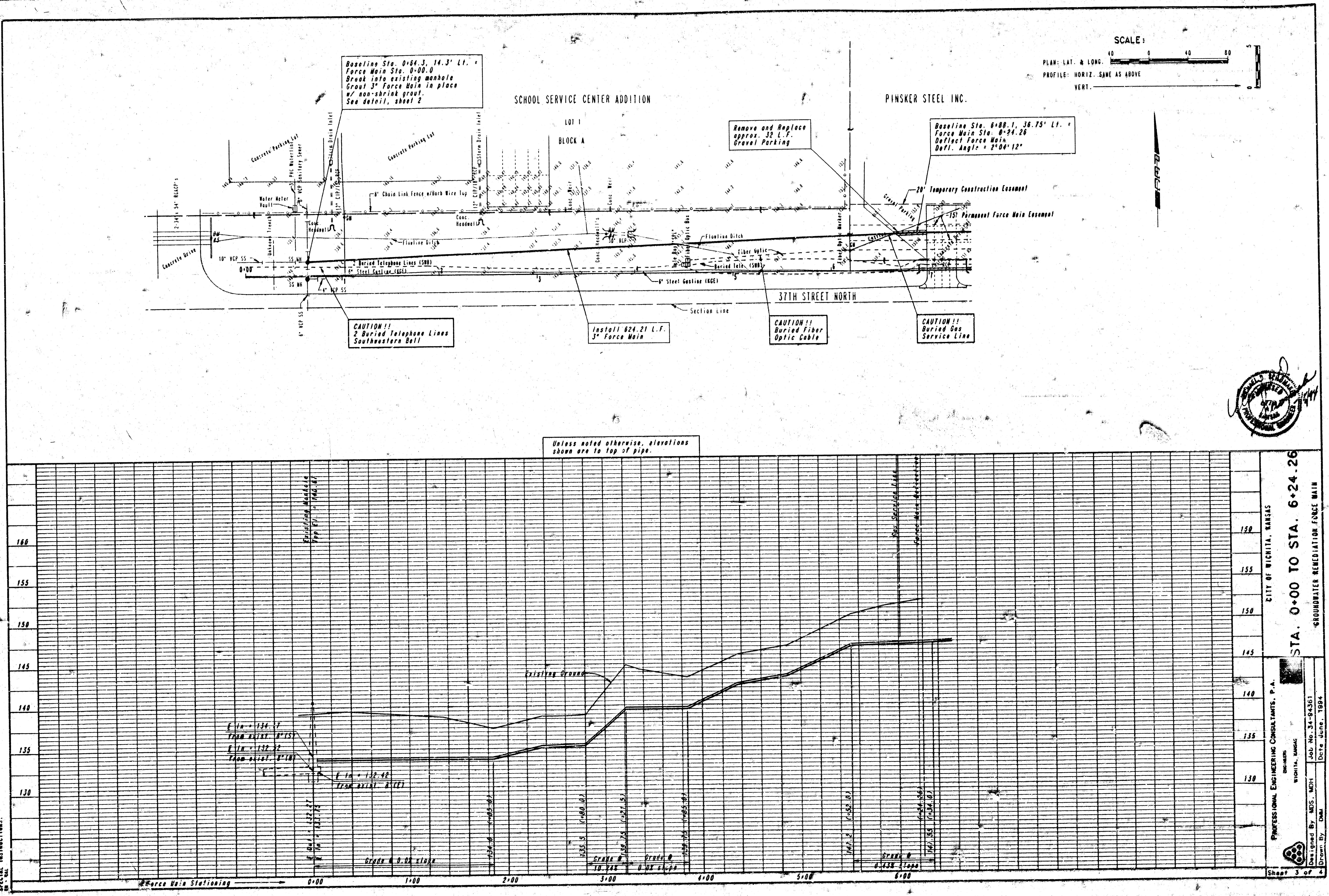
DESIGNED BY: J. H. HARRIS
 DRAWN BY: J. H. HARRIS
 CHECKED BY: J. H. HARRIS
 DATE: MAY 30, 1994
 SPECIAL INSTRUCTIONS:

	Revision	By	Date
	CITY OF WICHITA, KANSAS		
	KEY MAP & GENERAL NOTES		
	GROUNDWATER REMEDIATION FORCE MAIN		
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.			
ENGINEERS WICHITA, KANSAS			
Designed by	Job No. 34-94361	Sheet 2 of 4	
Drawn by DMM	Date June, 1994		

PLAN	CHECKED	DATE

PROFILE	CHECKED	DATE

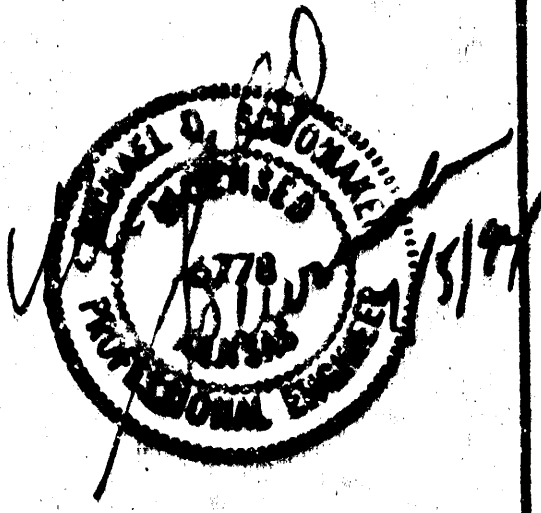
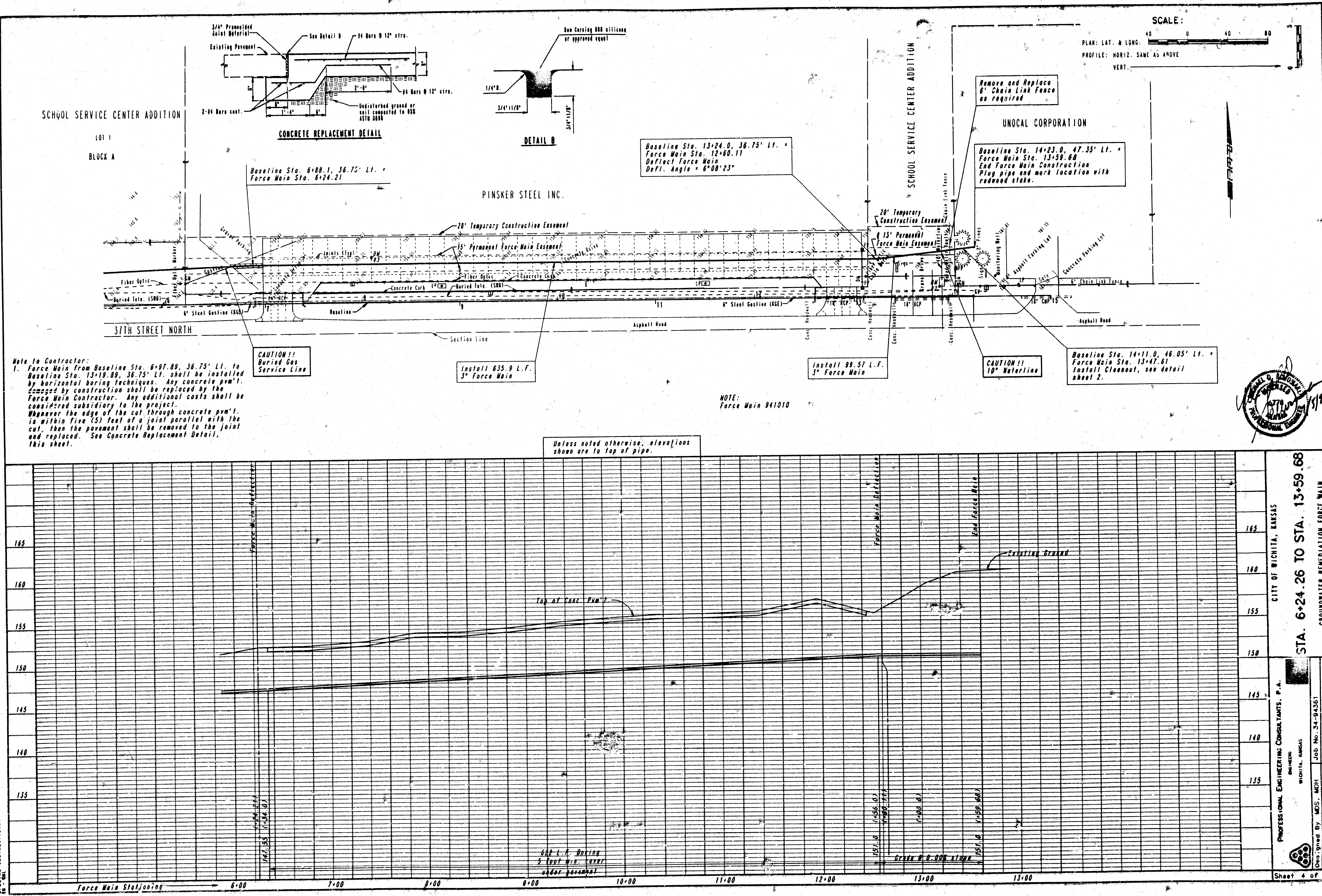
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 LOCATION: EA 4311
 SHEET NO.: 34-04341-1
 DATE: JAN 30, 1994
 SPECIAL INSTRUCTIONS:



PLAN	CHECKED	DATE

PROFILE	CHECKED	DATE

DRAWING NAME: 34-94361 PM P/P 2
 LOCATION: 4132
 CENTER COORDINATES:
 DATUM: 1984
 SPECIAL INSTRUCTIONS:
 1-84



CITY OF WICHITA, KANSAS

STA. 6+24.26 TO STA. 13+59.68

GROUNDWATER REMEDIATION FORCE MAIN

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

WICHITA, KANSAS

Job No. 34-94361

Designed By: MDS: MDH

Drawn By: DAM

Date: June, 1994

Sheet 4 of 4