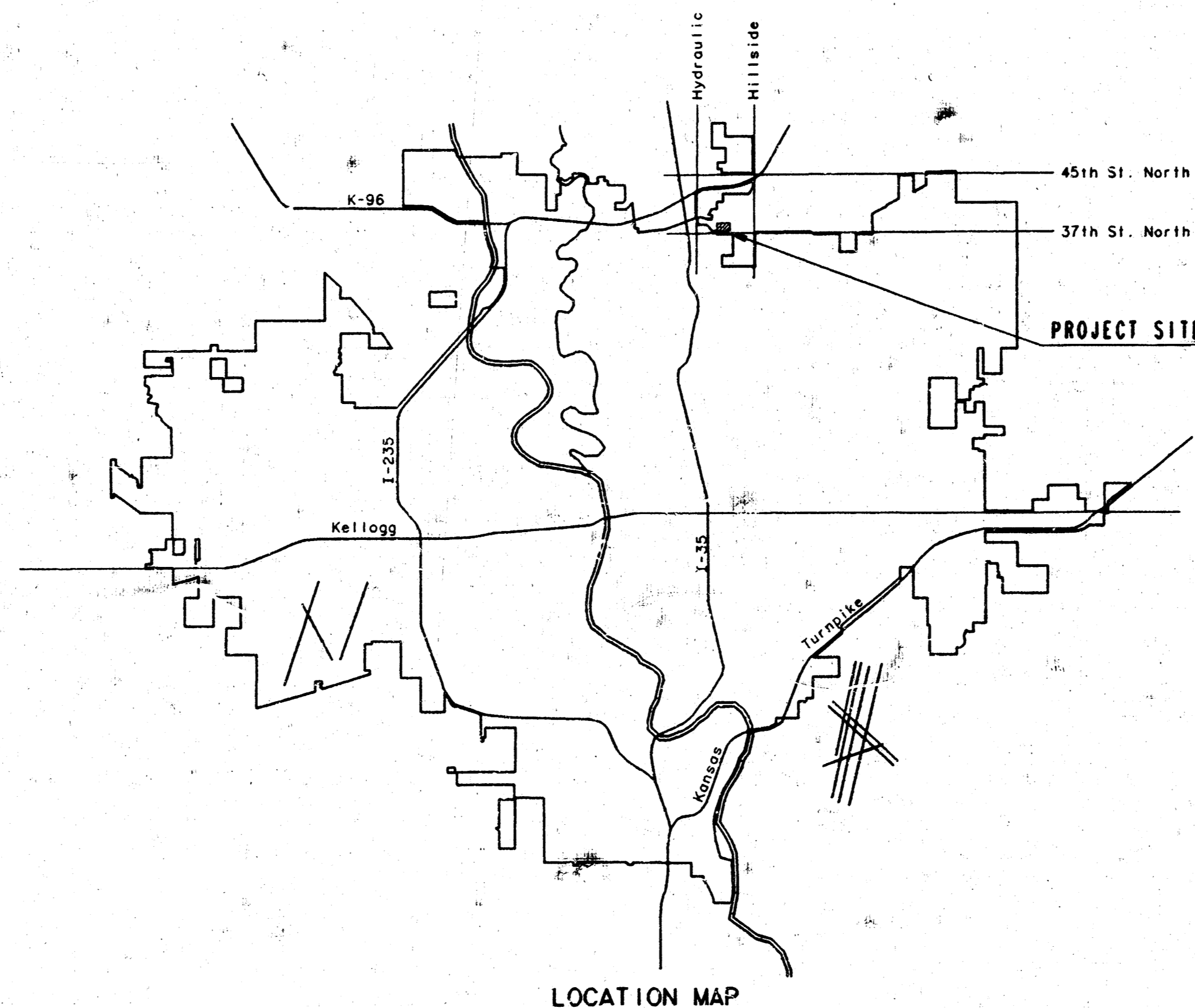


CONSTRUCTION PLANS FOR GROUNDWATER REMEDIATION FORCE MAIN

TO SERVE
UNOCAL CORPORATION

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



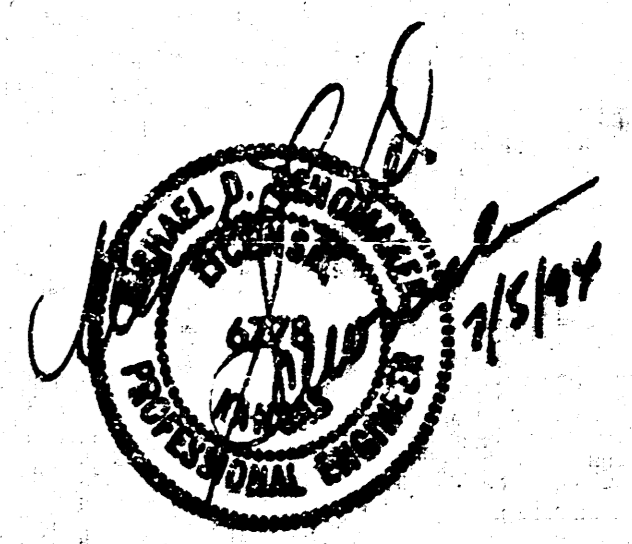
INDEX OF SHEETS	
SHEET NO. 1	TITLE SHEET
SHEET NO. 2	KEY MAP AND GENERAL NOTES
SHEET NO. 3&4	PLAN/PROFILE

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

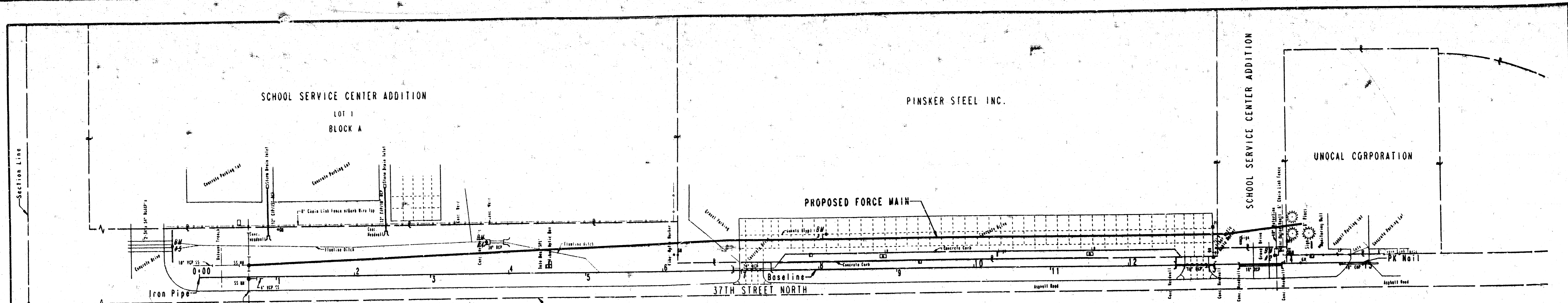
JUNE, 1994

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

DEC 2 1994



DRAWING NAME: 34-94361-FR-1111A
LOCATION: E. 6155
DATE: 6/1/94
DATE LAST CHECKED ON: June 28, 1994
SPECIAL INSTRUCTIONS:
M.E.L.



SW COR SECTION 27
T26S, R1E

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.B.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/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. 4878 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 ABOVES AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THE SURFACE OR PAVEMENT IS REQUIRED. IN INSTANCES WHERE SAVED 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.

BENCH MARK LIST

B.M. NO.	DESCRIPTION	ELEVATION
B.M. 2	BASELINE STATION 13+87, 10' LT. CHISELED "D" SW CORNER WATER METER VAULT.	ELEV. 160.13
B.M. 3	BASELINE STATION 8+10, 43' LT. CHISELED "D" AT CONCRETE JOINT IN PINSKER STEEL PARKING	ELEV. 153.60
B.M. 4	BASELINE STATION 3+71, 38' LT. CHISELED "D" CENTER WEST END HEADWALL FOR 30" RCP.	ELEV. 140.64
B.M. 5	BASELINE STATION 0+34, 38.5' LT. CHISELED "D" CENTER EAST END HEADWALL FOR 2-54" X 34" RCACP	ELEV. 139.22

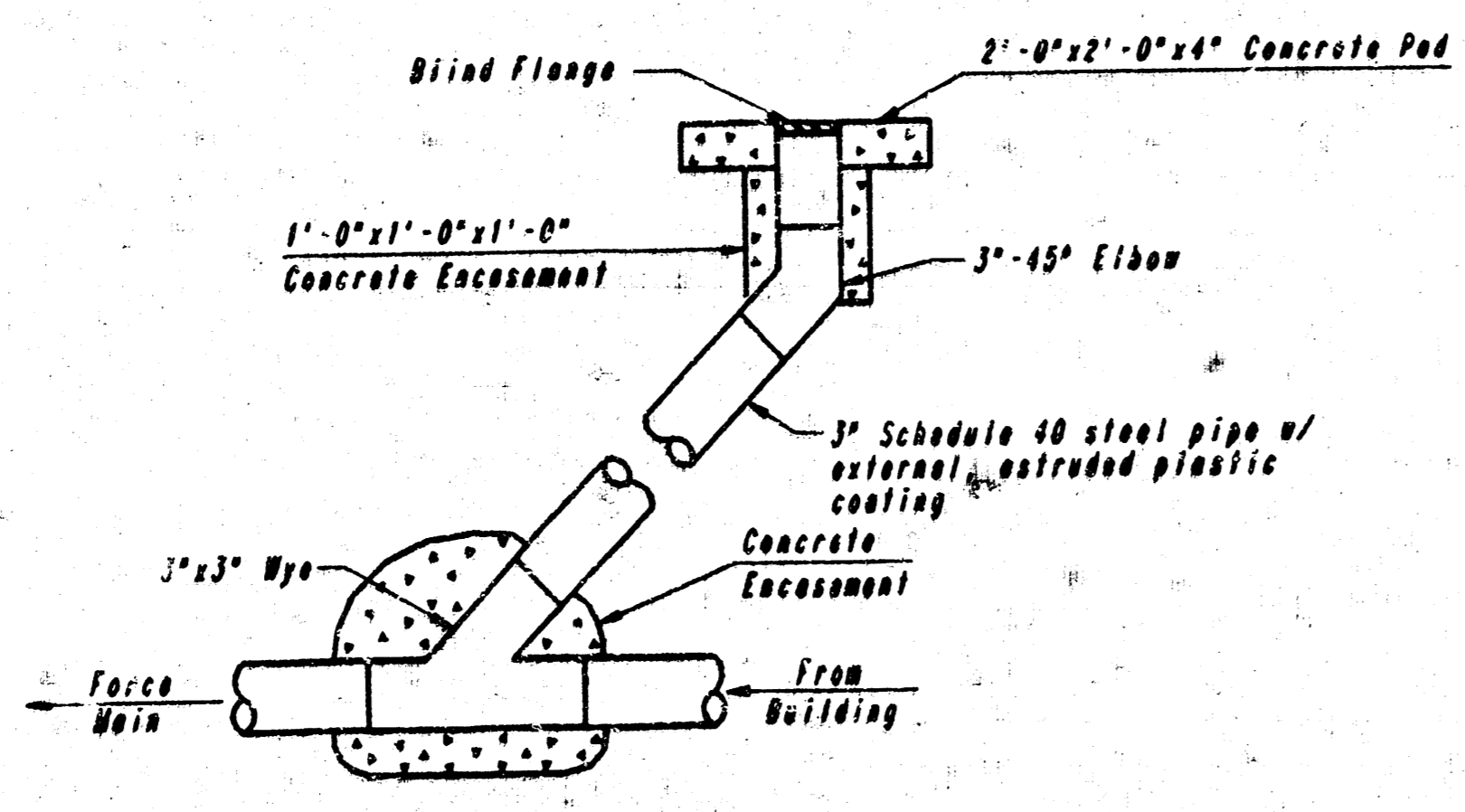
KEY MAP

SCALE: 1"=60'

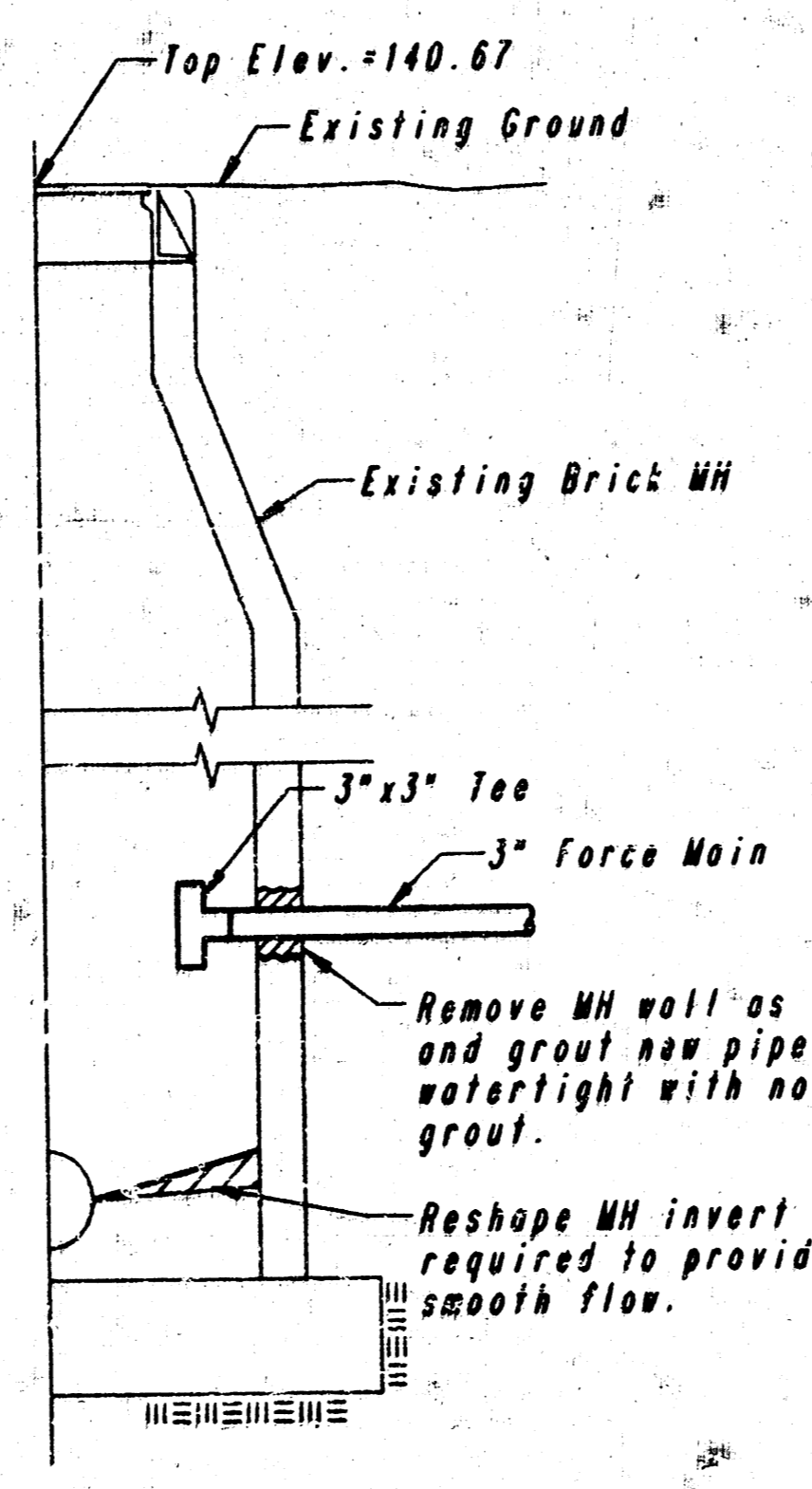
BASELINE TIES

BASELINE STATION 0+00
IRON PIPE
39.5' NW TO SOUTH END HEADWALL 2-54" X 34" RCACP
27.3' SW TO PC CONC. APPROACH USD 259 SUPPLY DIV. DR.
30.0' SOUTH TO CENTER 37TH STREET NORTH

BASELINE 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.



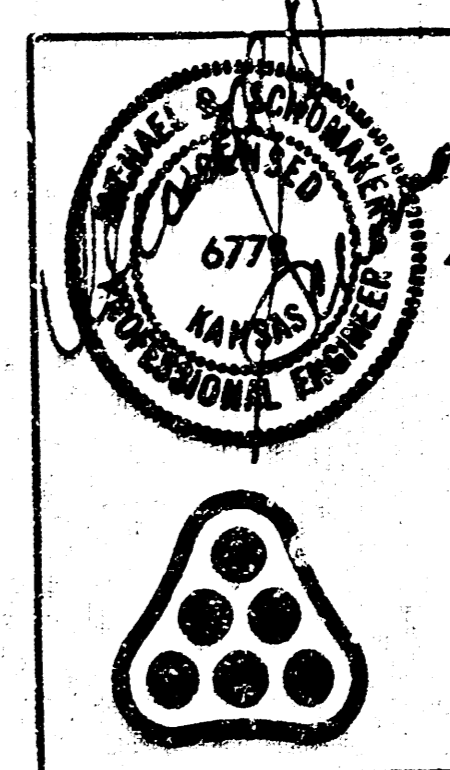
CLEANOUT DETAIL



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

DATE	BY	REVISION
		PLAN CHECKED
		CHECKED

DESIGNED BY: J. SCHMIDT
DRAWN BY: J. SCHMIDT
CHECKED BY: J. SCHMIDT
DATE: JUN 30, 1994



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: J. Schmidt
Job No. 34-94361
Date: June, 1994

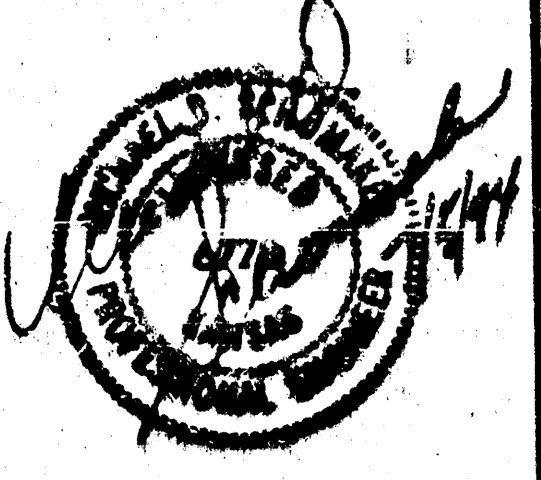
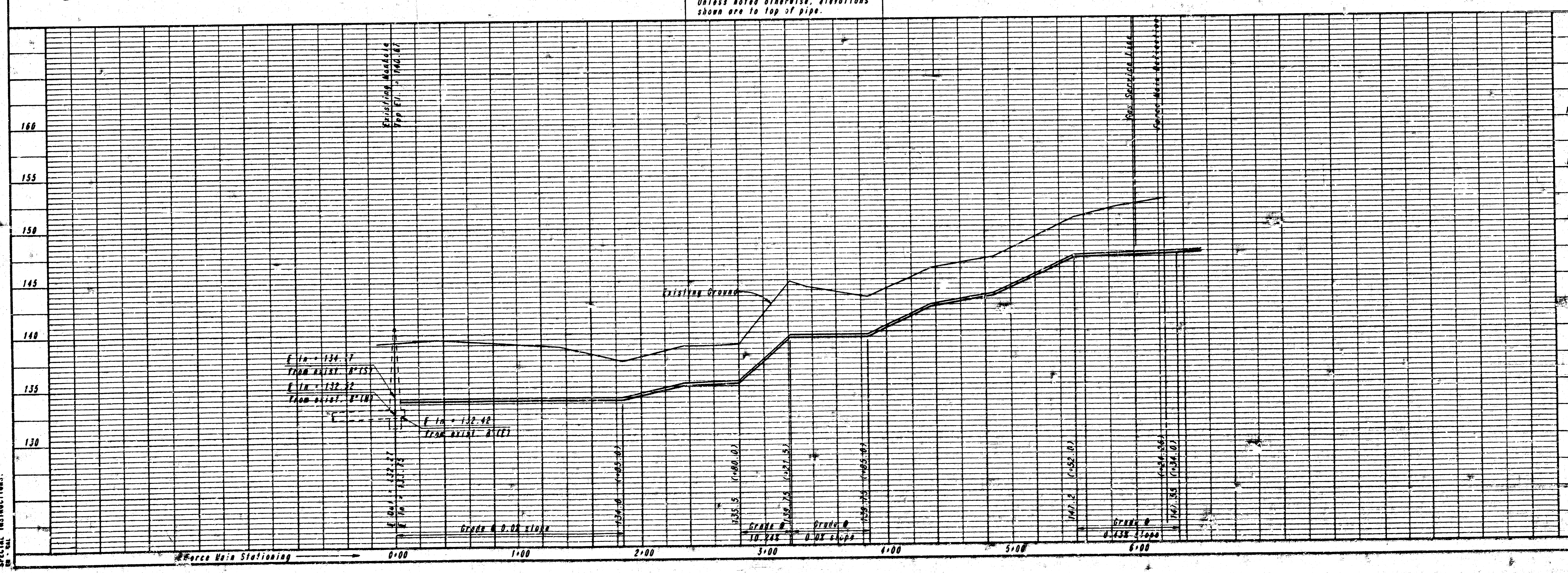
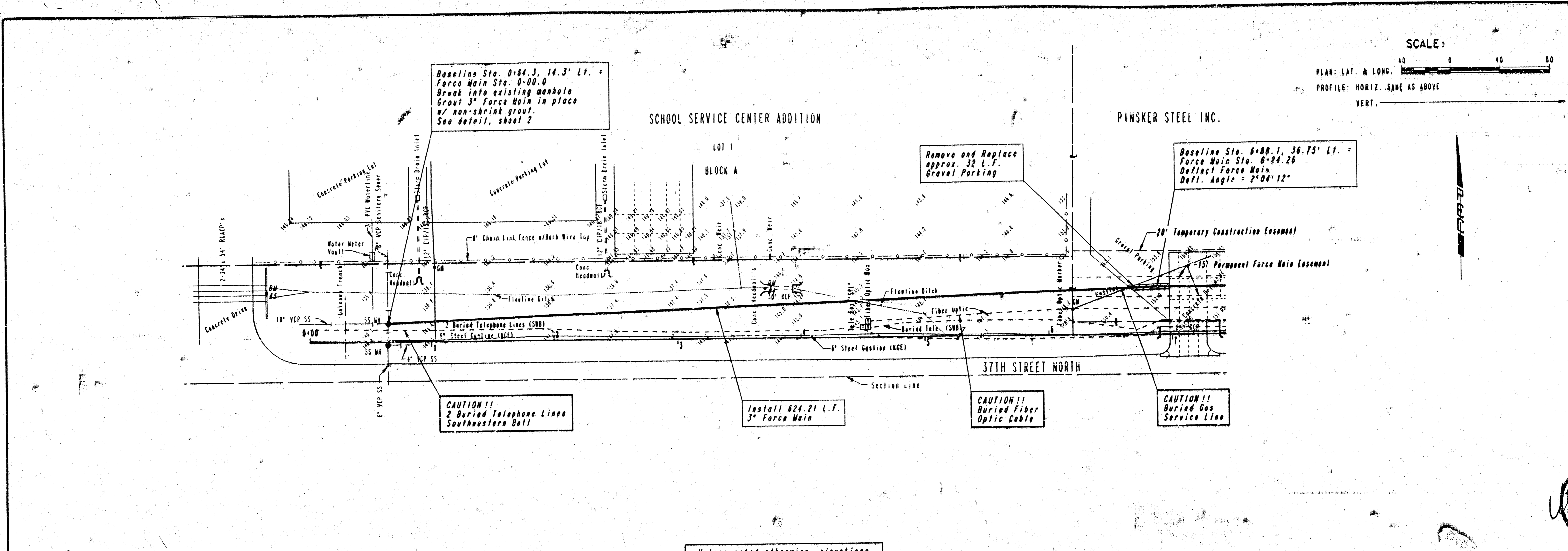
Drawn by: J. Schmidt
Date: June, 1994

Sheet 2 of 4

PLAN	CHECKED	DATE

PROFILE	CHECKED	DATE

DRAWING NAME: 34-04341 EM P&P 1
 LOCATION: EA 413
 COUNTY: WICHITA, KANSAS
 DATE L&S: 05/18/84
 DATE L&S: 05/18/84
 SPECIAL INSTRUCTIONS:



CITY OF WICHITA, KANSAS
 STA. 0+00 TO STA. 6+24.26
 GROUNDWATER REMEDIATION FENCE MAIN

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 DENNIS W. SMITH
 WICHITA, KANSAS

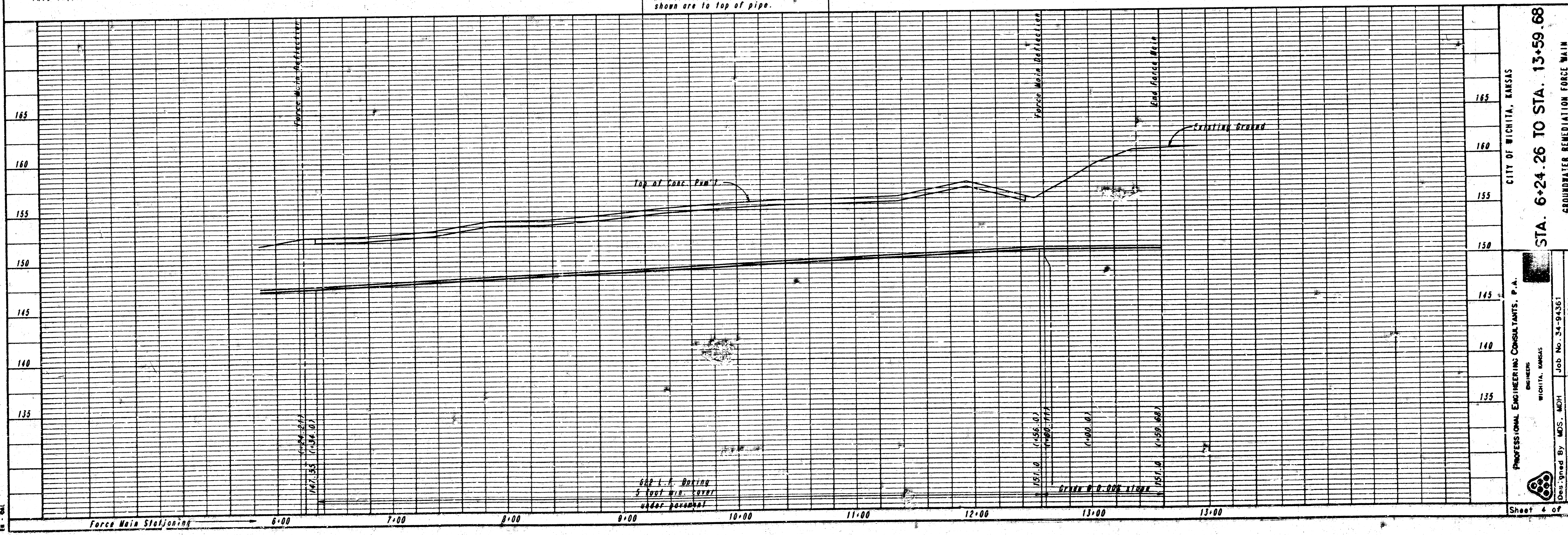
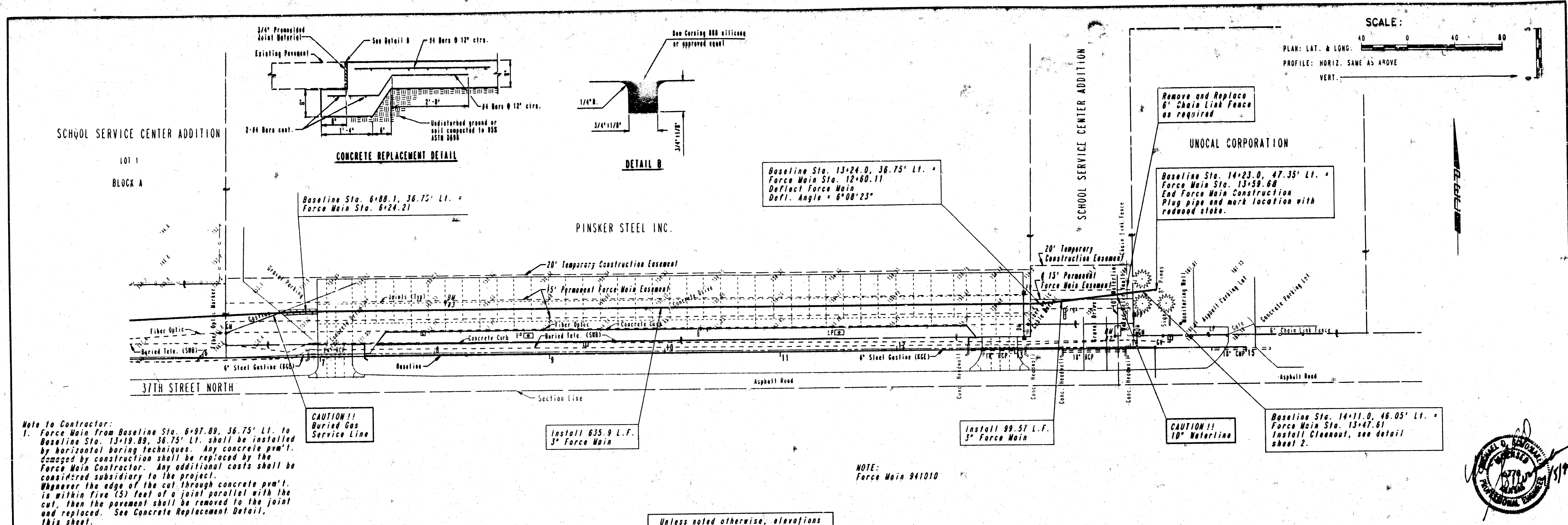
Designed By: MDS, MDH
 Drawn By: DMK
 Job No. 34-94361
 Date June, 1984

Sheet 3 of 4

PLAN	CHECKED	BY	DATE

PROFILE	CHECKED	BY	DATE

DRAWING NAME: 24-04151 PIP P/P 2
 LOCATION: 4132
 CENTER COORDINATES:
 DATE: 30 June 30, 1994
 SPECIAL INSTRUCTIONS:



CITY OF WICHITA, KANSAS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 WICHITA, KANSAS

STA. 6+24.26 TO STA. 13+59.68
GROUNDWATER REMEDIATION FORCE MAIN

Job No. 24-94361
 Drawn By: DMW
 Date: June, 1994

Sheet 4 of 4