

PLANS FOR SANITARY SEWER MAIN IN BEL AIRE 37TH. STREET NORTH TO 45TH. STREET NORTH

CITY OF BEL AIRE
SEDGWICK COUNTY, KANSAS

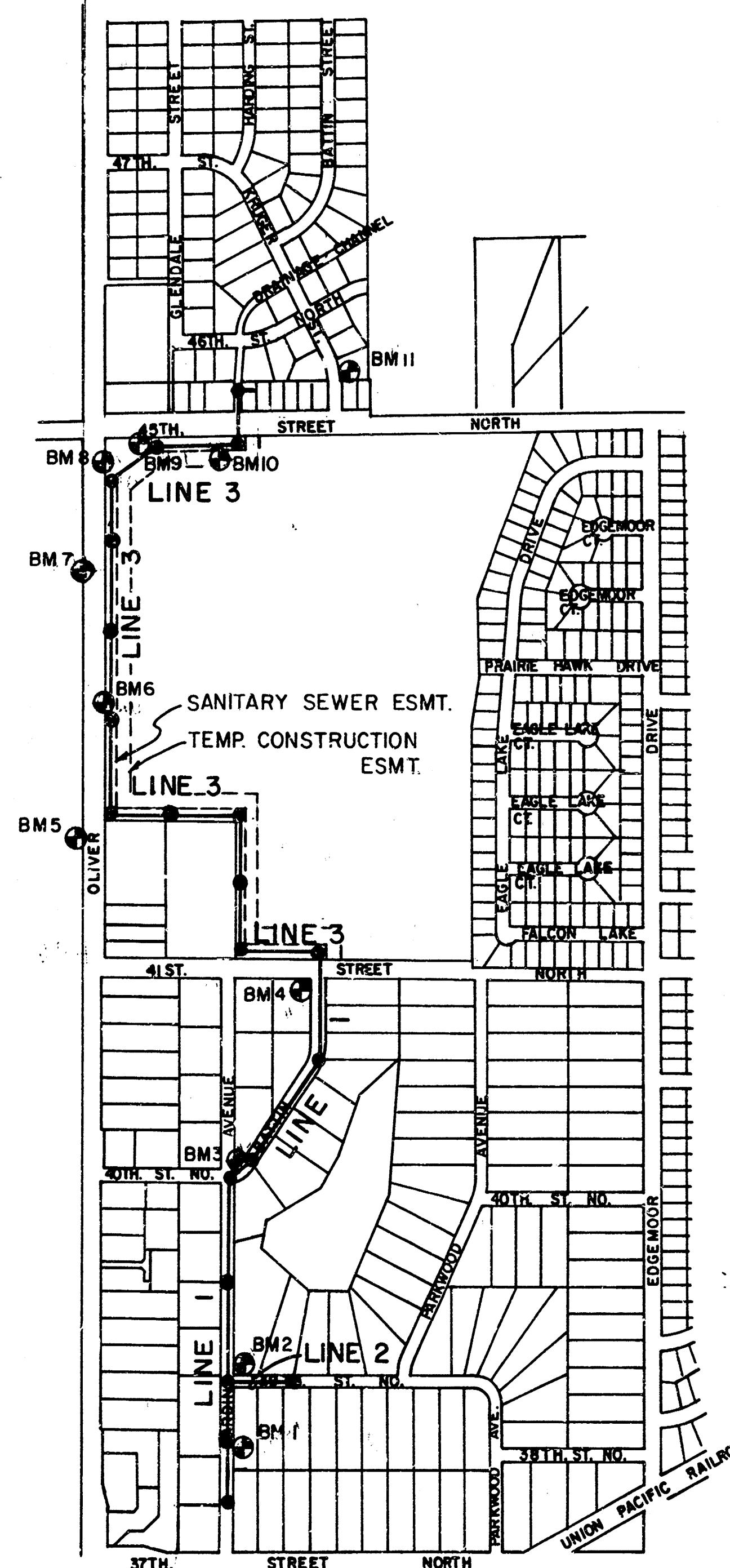
GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH THE SPECIFICATIONS.
- INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA AND LOCAL TRAFFIC GENERATED WITHIN THE PROJECT AREA ARE TO BE CARRIED THROUGH CONSTRUCTION ON EXISTING ROADWAYS AT ALL TIMES. VEHICULAR ACCESS TO ALL DWELLINGS IN THE PROJECT AREA SHALL BE PROVIDED AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHTS AND WEEKENDS TO LESS THAN 50 FEET.
- THE TRAC. 1 WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY (8) HOURS TO UTILITY AND PIPELINE COMPANIES PRIOR TO STARTING ANY E. TATION AS FOLLOWS:

KANSAS ONE-CALL 1-800-344-7233
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:
CITY OF BEL AIRE 744-2000 or 744-2451
CARLEVISION 262-4270 or 263-2061
KPL GAS SERVICE COMPANY 263-7511
KANSAS GAS & ELECTRIC 264-1141
SOUTHWESTERN BELL TELEPHONE COMPANY 1-571-2611
CITY OF WICHITA WATER OR SEWER DEPT. 268-4908
WILLIAMS NATURAL GAS COMPANY 524-0491 or 524-4290

- EXISTING UTILITIES AND THEIR LOCATIONS, 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. UNDERGROUND UTILITY LINES ARE TO BE ADJUSTED DURING CONSTRUCTION AS NOTED ON THE PLANS BY EITHER ITS OWNER OR THE CONTRACTOR. THE CONTRACTOR WILL BE REQUIRED TO PROTECT AND WORK AROUND EXISTING UTILITIES WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, CHANNELS, BANK STABILIZATION, SHOULDER, ROAD SHOULDERS, RIP-RAP, PAVEMENT ENTRANCES, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SPRINKLER SYSTEMS, SIDEWALKS, DRIVES, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN THEY SHALL BE REMOVED AND REPLACED OR RESET IN LIKE KIND.
- TREES AND SHRUBS IN THE PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES, DEBRIS AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNGTLY APPEARANCE WILL NOT BE APPROVED.
- POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.
- WHERE REMOVAL OF EXISTING FENCES NEXT TO THE CONSTRUCTION IS DEEMED NECESSARY BY THE CONTRACTOR, THE CONTRACTOR SHALL COORDINATE REMOVAL WITH ADJACENT PROPERTY OWNERS. ALL REMOVAL AND RESETTLEMENT OF FENCES SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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 REGISTERED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW FOR SEWAGE THROUGH CONSTRUCTION. CONTRACTOR'S PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE APPROVED BY THE ENGINEER. COST OF MAINTAINING SEWAGE FLOW THROUGH CONSTRUCTION SHALL BE CONSIDERED SUBSIDIARY TO THE OTHER ITEMS OF WORK.
- ALL ELEVATIONS SHOWN ARE USGS MSL.
- FOR CONSTRUCTION IN AREAS WITH GRAVELED SURFACING, THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING SURFACING MATERIAL OVER THE AREA TO BE DISTURBED, AND CONSERVE THE MATERIAL FREE FROM ADMIXTURE WITH OTHER MATERIALS. AFTER TRENCHING AND BACKFILLING IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS, THE GRAVEL SURFACING MATERIAL SHALL BE REPLACED TO A DEPTH AT LEAST EQUAL TO THE UNDISTURBED GRAVEL SURFACING. IF THE GRAVEL TAKEN FROM THE DISTURBED AREA HAS BEEN ALLOWED TO BECOME MIXED WITH OTHER MATERIAL, IT SHALL NOT BE RE-USED BUT SHALL BE REPLACED WITH APPROVED CLEAN GRAVEL. COSTS FOR GRAVEL REPLACEMENT SHALL BE CONSIDERED AS SUBSIDIARY TO OTHER ITEMS OF WORK.
- MAILBOXES WITHIN THE LIMITS OF THE PROJECT SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AS APPROVED BY THE ENGINEER. CONTRACTOR WILL BE REQUIRED TO MAKE SATISFACTORY PROVISIONS FOR MAIL DELIVERY TO PROPERTIES AFFECTED BY THIS PROJECT DURING ITS CONSTRUCTION. COST SUBSIDIARY TO OTHER ITEMS.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF PROPERTY DIRECTLY AFFECTED BY THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF 5 DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
- ALL EXISTING GRASSED AREAS WHICH ARE DISTURBED OR DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ORIGINAL CONDITIONS AND RESEEDED IN LIKE KIND, UNLESS OTHERWISE NOTED ON THE PLANS. COSTS SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK. APPLICATION RATE FOR THE VARIOUS SEED MIXTURES SHALL BE AS APPROVED BY THE ENGINEER. SEEDING SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE SPECIFICATIONS.
- SLOPES STEEPER THAN 10 TO 1 SHALL BE MULCHED AS REQUIRED BY STANDARD SPECIFICATIONS. COST OF MULCHING SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK.
- THE COST OF MANHOLE STUB OUTS, WHERE SHOWN ON THE PLANS, SHALL BE SUBSIDIARY TO THE PRICE BID FOR MANHOLE.
- AT SANITARY SEWER LINE (INCLUDING SERVICE LINES) AND WATER LINE CROSSINGS, THE SEWER LINE SHALL BE CONCRETE ENCASED FOR 10 FT. EACH WAY FROM THE WATER LINE, UNLESS THE SEWER LINE HAS 2 FT. OR MORE CLEARANCE BELOW THE WATER LINE.
- A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUND AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.
- WHERE SHOWN ON DRAWINGS, GASKETED MANHOLE LIDS SHALL BE INSTALLED WITH REPLACEMENT RUBBER O-RING SELF-SEALING GASKETS. PROVIDE ONE SPARE GASKET FOR EACH MANHOLE FRAME AND COVER INSTALLED. DO NOT INSTALL GASKETS UNTIL AFTER FINAL INSPECTION.
- AFTER LINE 3 HAS BEEN ACCEPTED BY THE CITY AND AFTER THE PUMP STATION HAS BEEN TURNED OFF, THE EXISTING MANHOLE AT STA. 67+53 (ADJACENT TO PUMP STATION) SHALL BE ABANDONED IN PLACE OR REMOVED IN ACCORDANCE WITH SPECIFICATIONS.
- CONTRACTOR TO PURCHASE CONNECTION PERMITS FOR HOUSE SERVICE FROM CITY OF WICHITA.



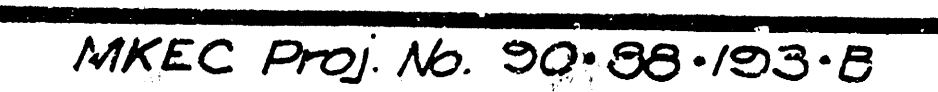
N

Scale: 1" = 40' Horiz.
 1" = 5' Vert.



BM#1 - "□" Cut S.E. Cor. Drive at 3815 N.
Harding.
Elev. = 1373.00

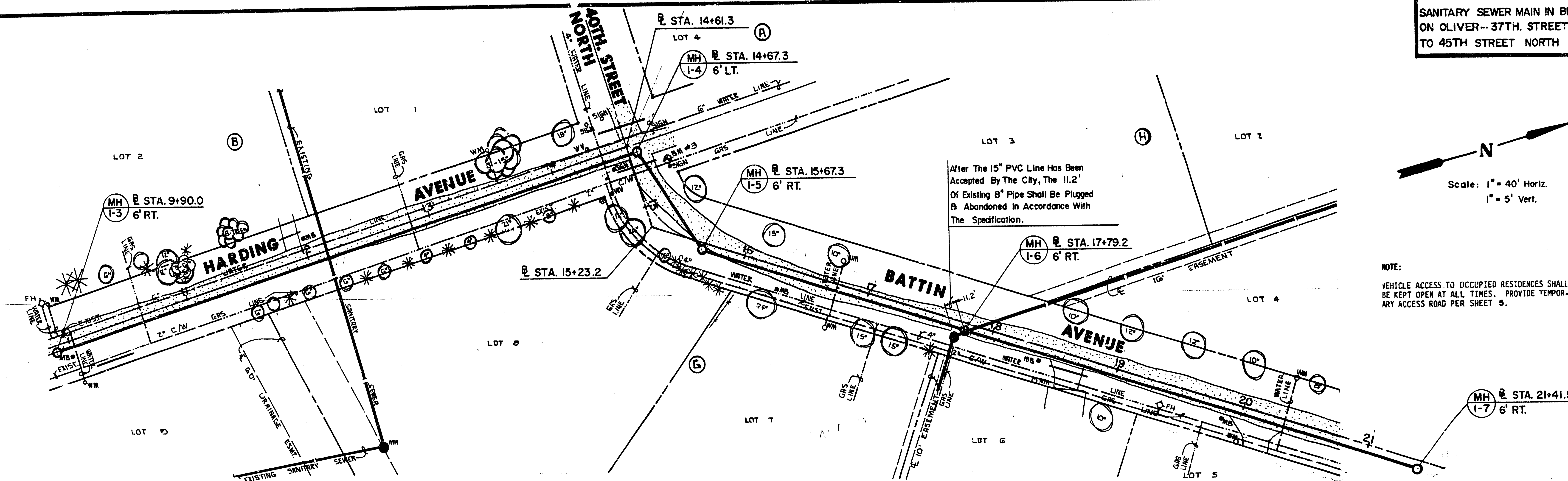
BM#2 - RR Spike E. Face L.P. N.E. Corner
39th & Harding.
Elev. = 1374.495



SANITARY SEWER MAIN IN BEL AIRE
ON OLIVER--37TH STREET NORTH
TO 45TH STREET NORTH

Scale: 1" = 40' Horiz.
1" = 5' Vert.

NOTE:
VEHICLE ACCESS TO OCCUPIED RESIDENCES SHALL
BE KEPT OPEN AT ALL TIMES. PROVIDE TEMPOR-
ARY ACCESS ROAD PER SHEET 5.

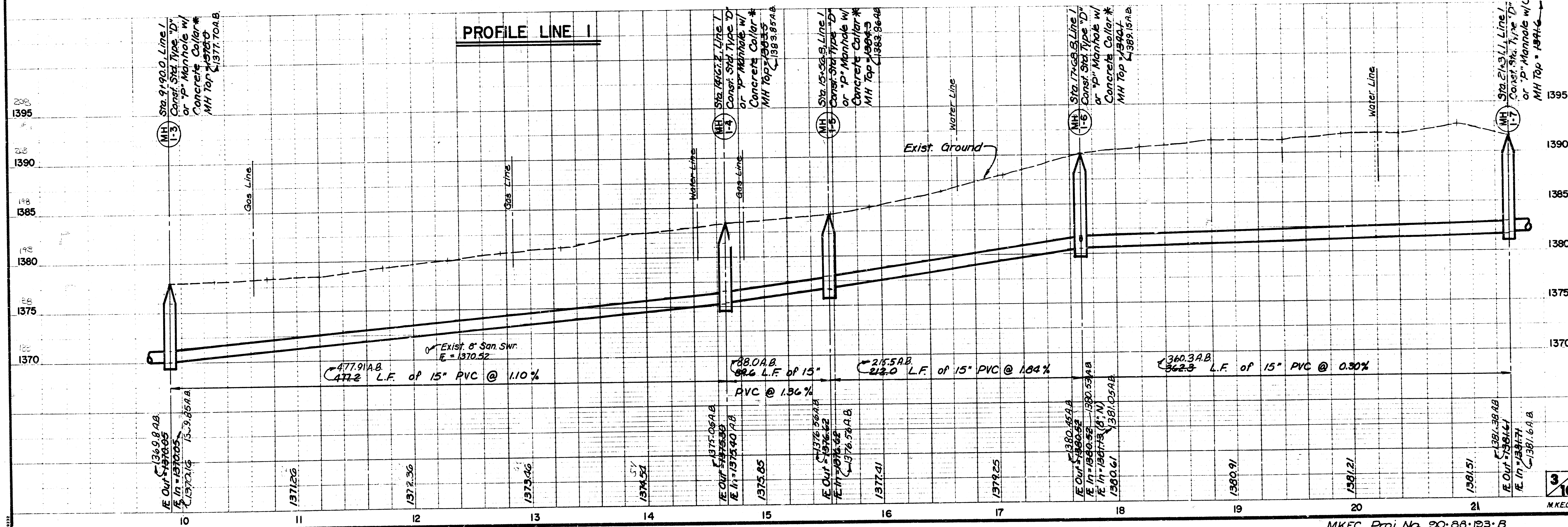


PLAN LINE I

*SEE CONCRETE COLLAR
DETAIL ON SHEET 10

BM#3 - RR Spike S. Face L.P. N.E. Corner
40th & Harding.
Elev. = 1383.30

PROFILE LINE I



SANITARY SEWER MAIN IN BEL AIRE
ON OLIVER--37TH STREET NORTH TO
45TH STREET NORTH

Scale: 1" = 40' Horiz.
1" = 5' Vert.

NOTE:
VEHICLE ACCESS TO OCCUPIED RESIDENCES SHALL
BE KEPT OPEN AT ALL TIMES. PROVIDE TEMPOR-
ARY ACCESS ROAD PER SHEET 2.

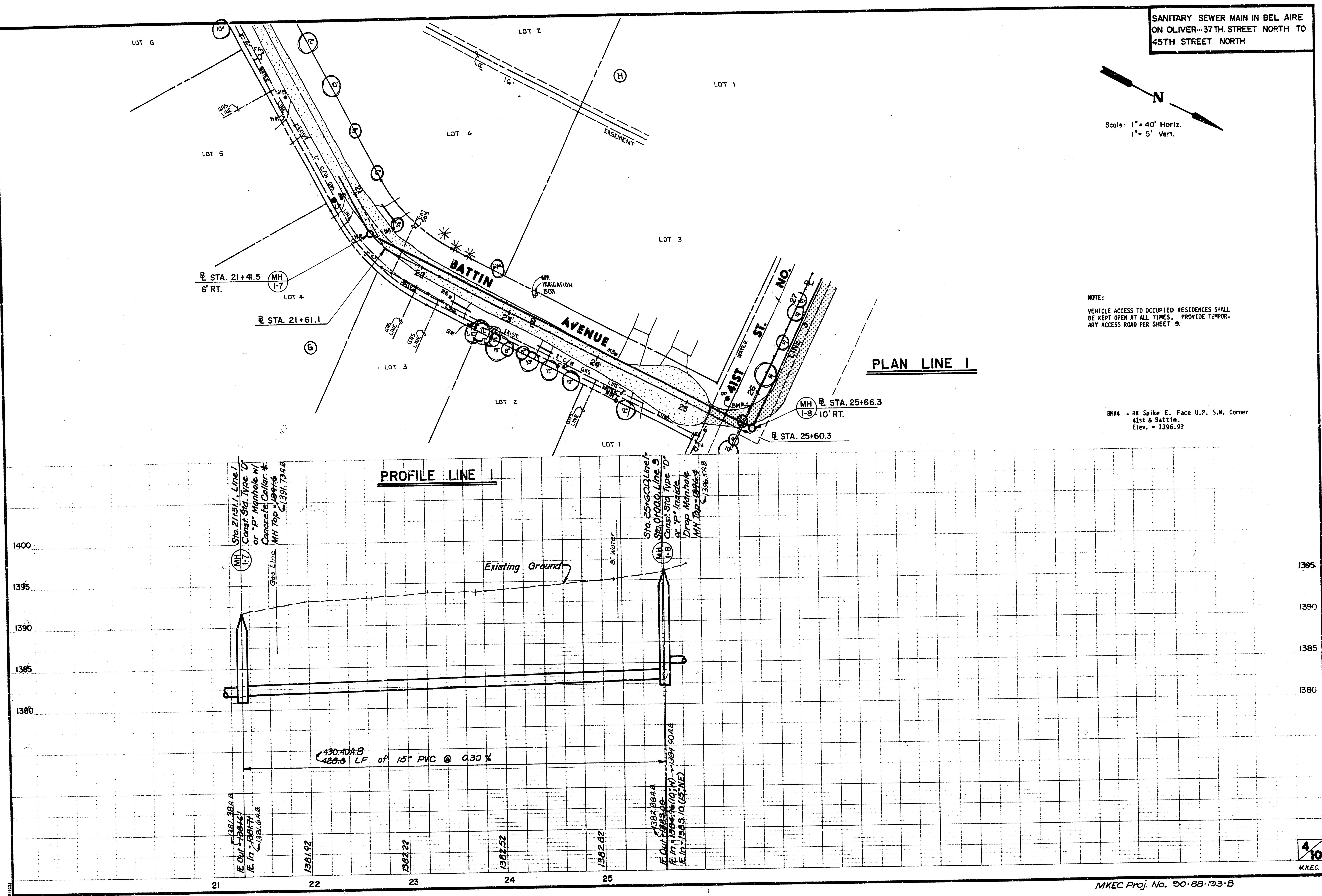
BH#4 - RR Spike E. Face U.P. S.W. Corner
41st & Battin.
Elev. = 1396.93

PLAN LINE 1

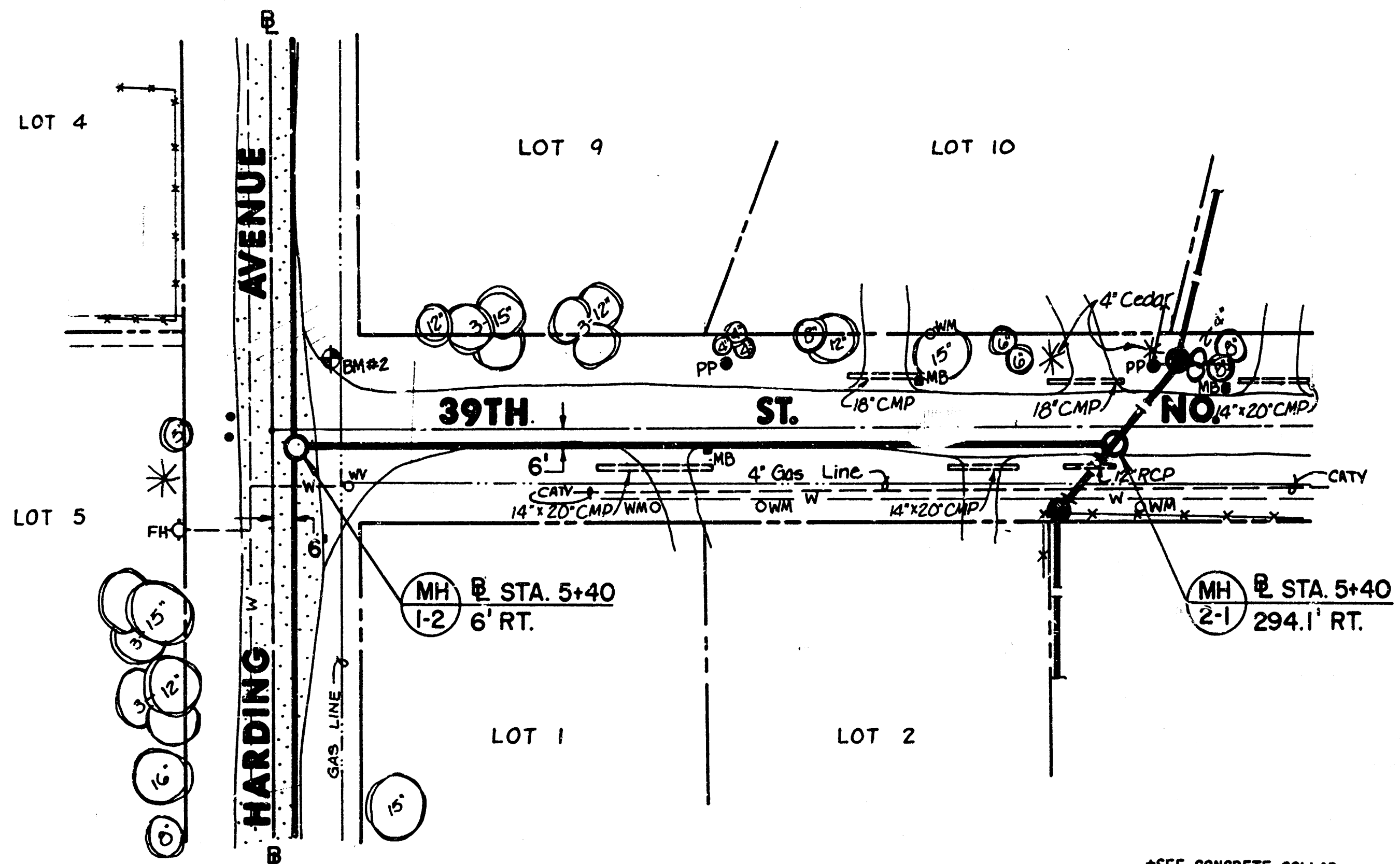
PROFILE LINE 1

4/10
MKEC

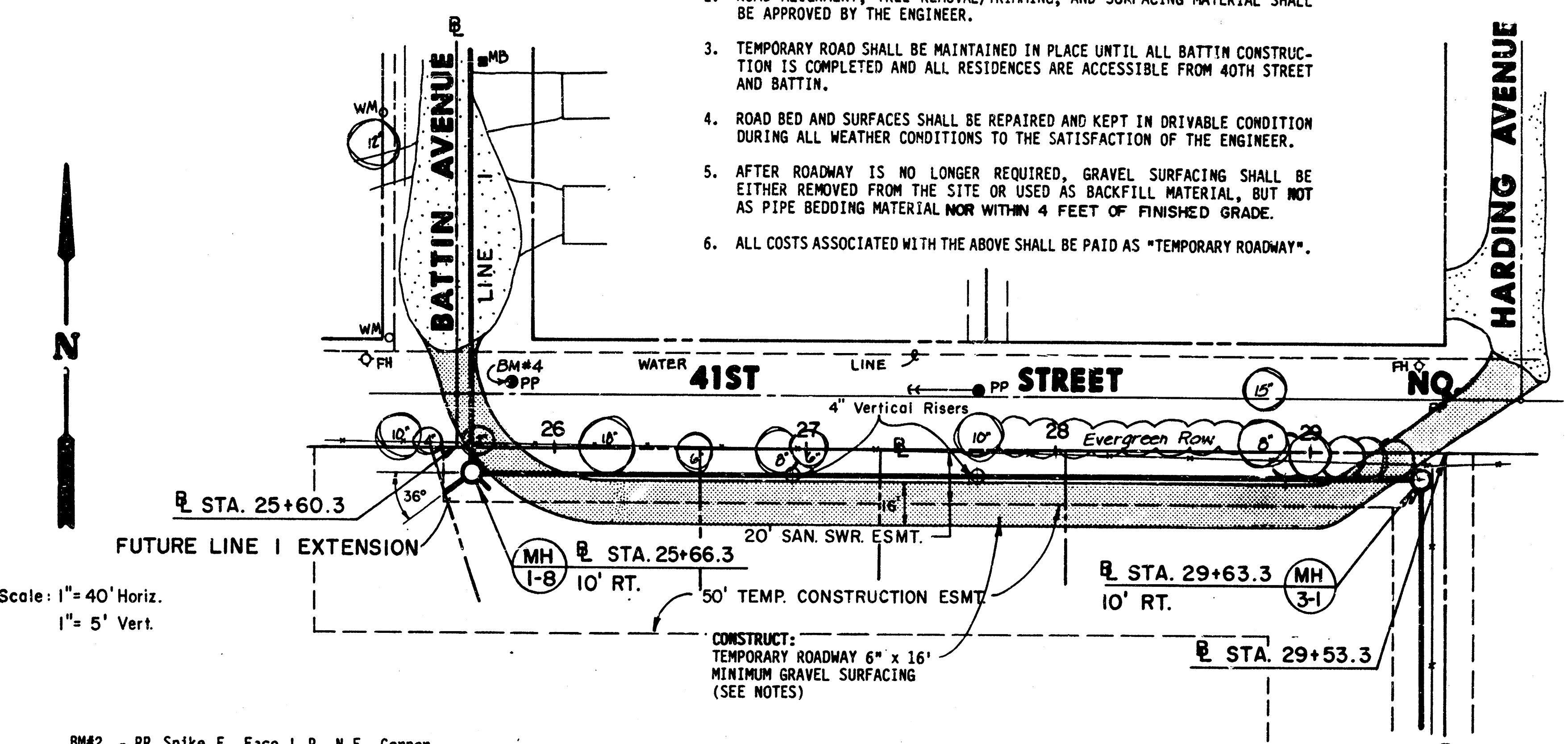
MKEC Proj. No. 20-88-133-B



**SANITARY SEWER MAIN IN BEL AIRE
ON OLIVER-37TH STREET NORTH TO
45TH STREET NORTH**



PLAN LINE 2



PLAN LINE 3

- NOTES:**
1. EMERGENCY AND PRIVATE VEHICLE ACCESS TO OCCUPIED RESIDENCES ALONG BATTIN SHALL BE KEPT OPEN AT ALL TIMES.
 2. ROAD ALIGNMENT, TREE RE-HOVAL/TRIMMING, AND SURFACING MATERIAL SHALL BE APPROVED BY THE ENGINEER.
 3. TEMPORARY ROAD SHALL BE MAINTAINED IN PLACE UNTIL ALL BATTIN CONSTRUCTION IS COMPLETED AND ALL RESIDENCES ARE ACCESSIBLE FROM 40TH STREET AND BATTIN.
 4. ROAD BED AND SURFACES SHALL BE REPAIRED AND KEPT IN DRIVABLE CONDITION DURING ALL WEATHER CONDITIONS TO THE SATISFACTION OF THE ENGINEER.
 5. AFTER ROADWAY IS NO LONGER REQUIRED, GRAVEL SURFACING SHALL BE EITHER REMOVED FROM THE SITE OR USED AS BACKFILL MATERIAL, BUT NOT AS PIPE BEDDING MATERIAL NOR WITHIN 4 FEET OF FINISHED GRADE.
 6. ALL COSTS ASSOCIATED WITH THE ABOVE SHALL BE PAID AS "TEMPORARY ROADWAY".

Scale: 1" = 40' Horiz.
1" = 5' Vert.

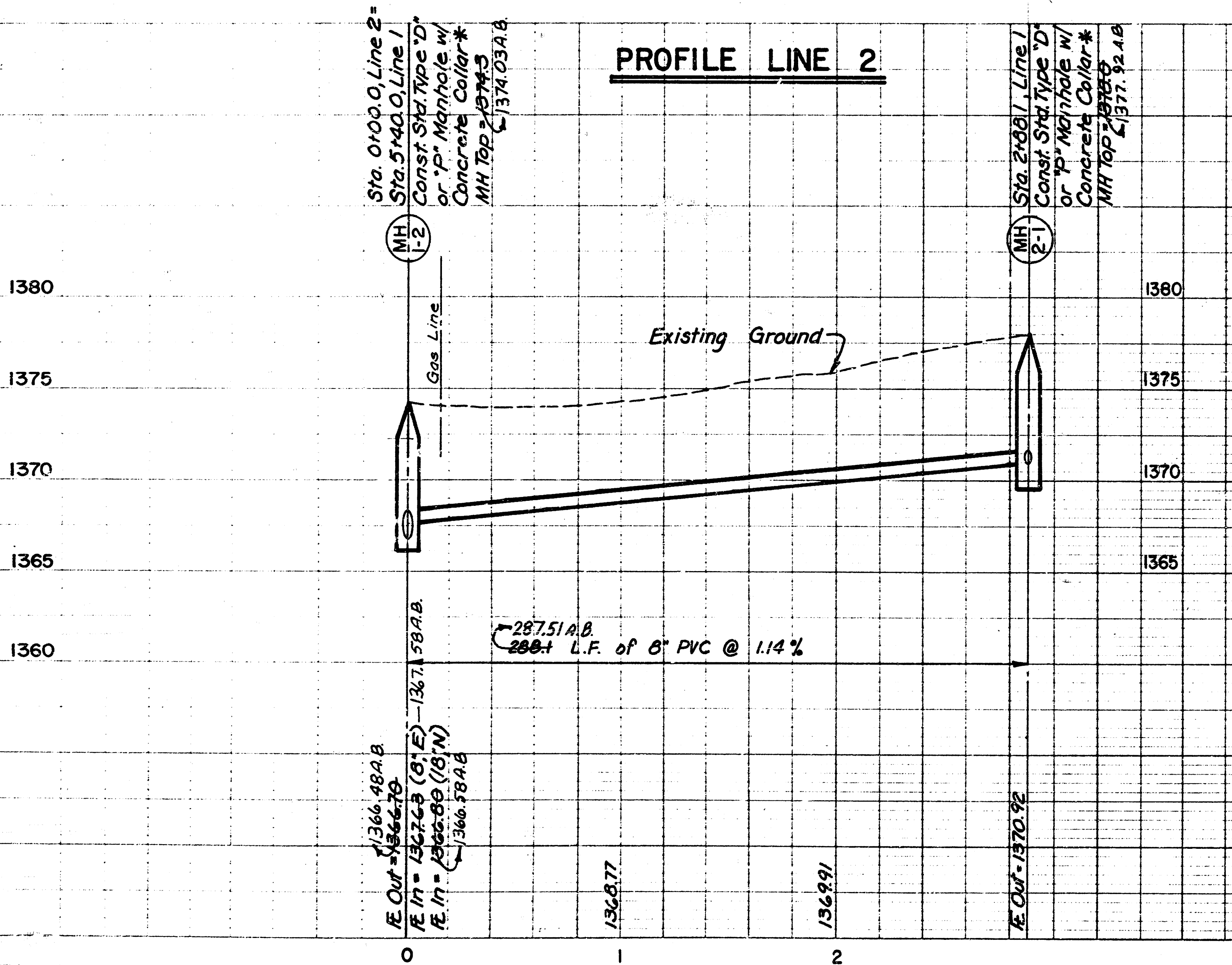
Scale: 1" = 40' Horiz.
1" = 5' Vert.

BM#2 - RR Spike E. Face L.P. N.E. Corner
39th & Harding.
Elev. = 1374.495

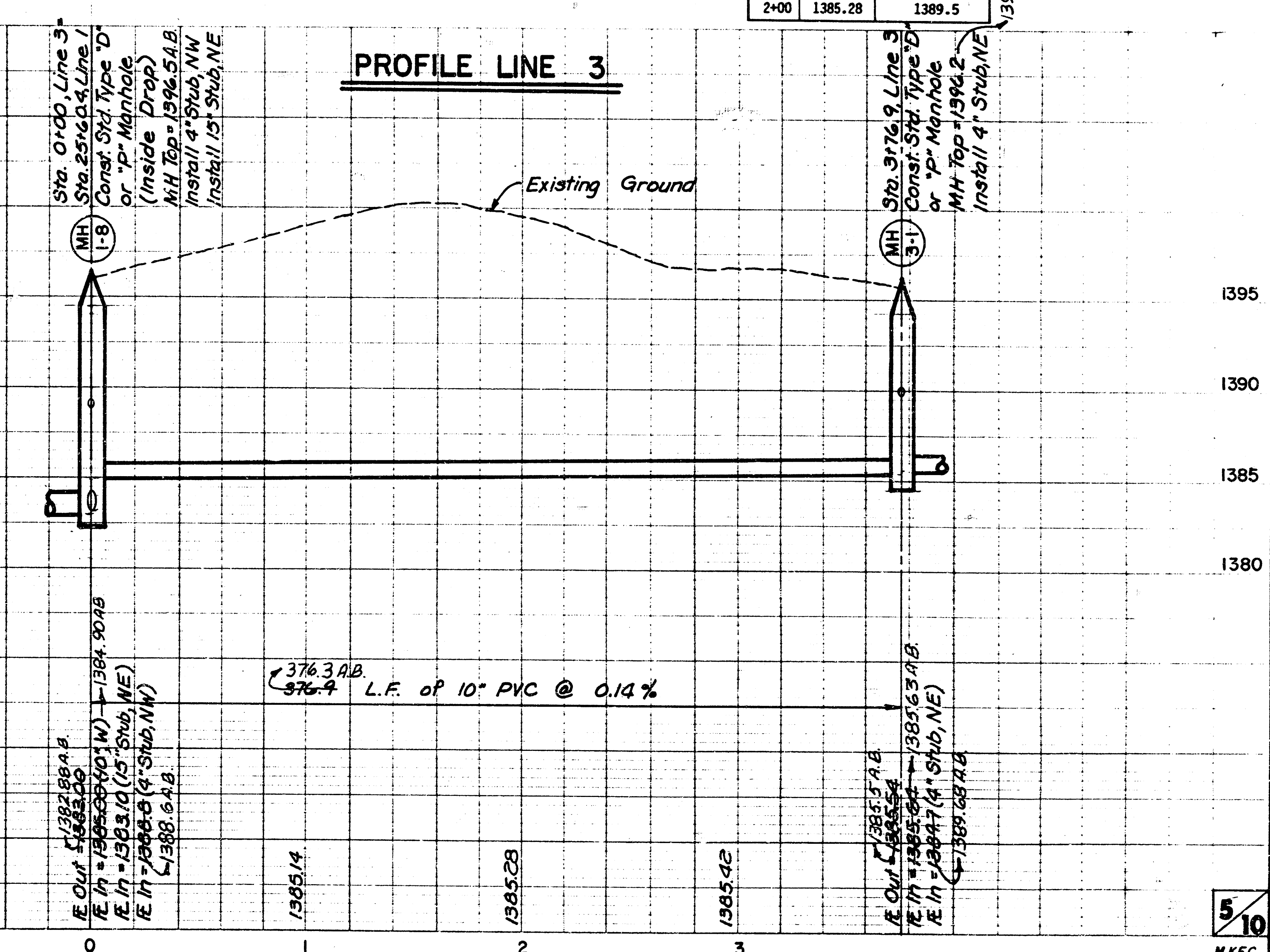
BM#4 - RR Spike E. Face U.P. S.W. Corner
41st & Batten.
Elev. = 1396.93

4" VERTICAL RISERS -- LINE 3

Sta.	FL Elev.	Top of Riser
1+27	1385.18	1389.2
2+00	1385.28	1389.5



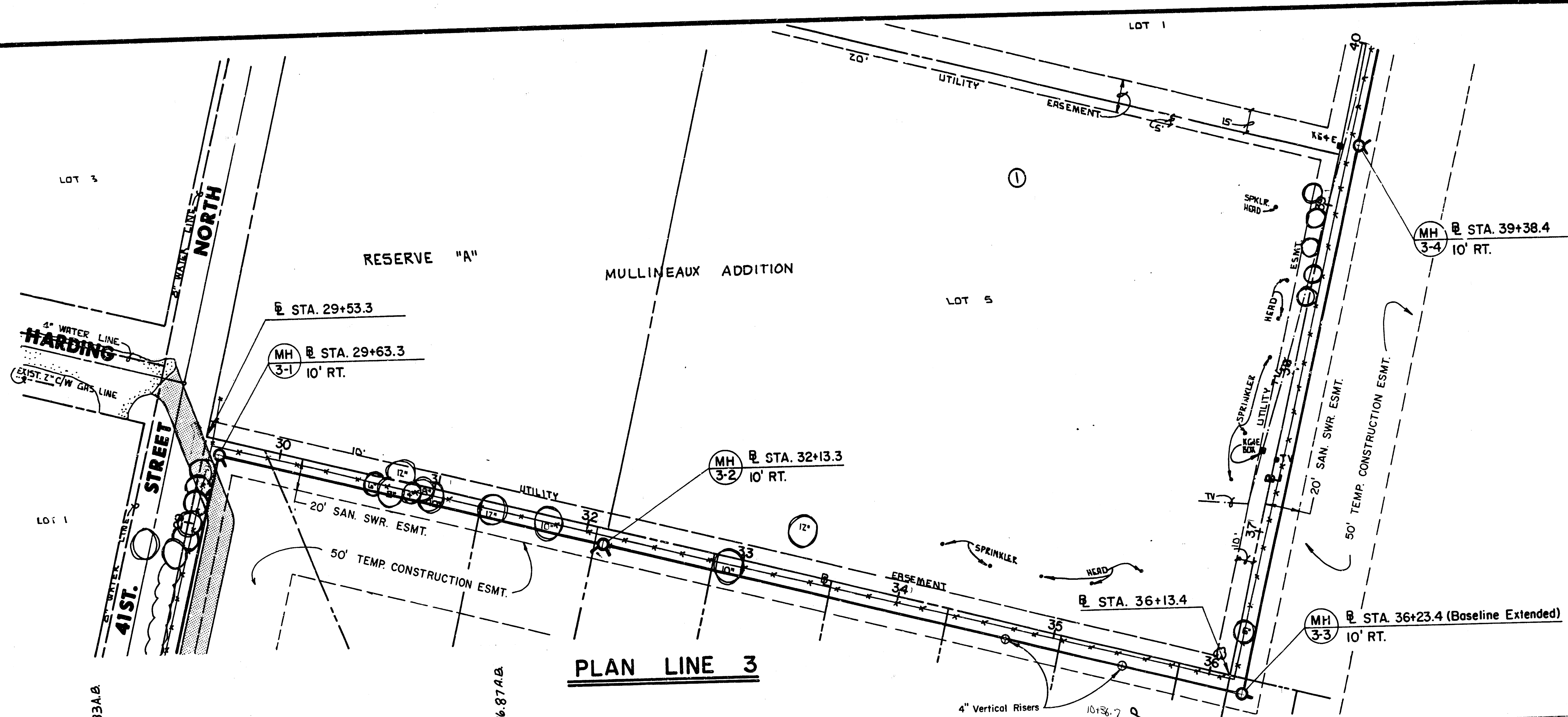
PROFILE LINE 2



PROFILE LINE 3

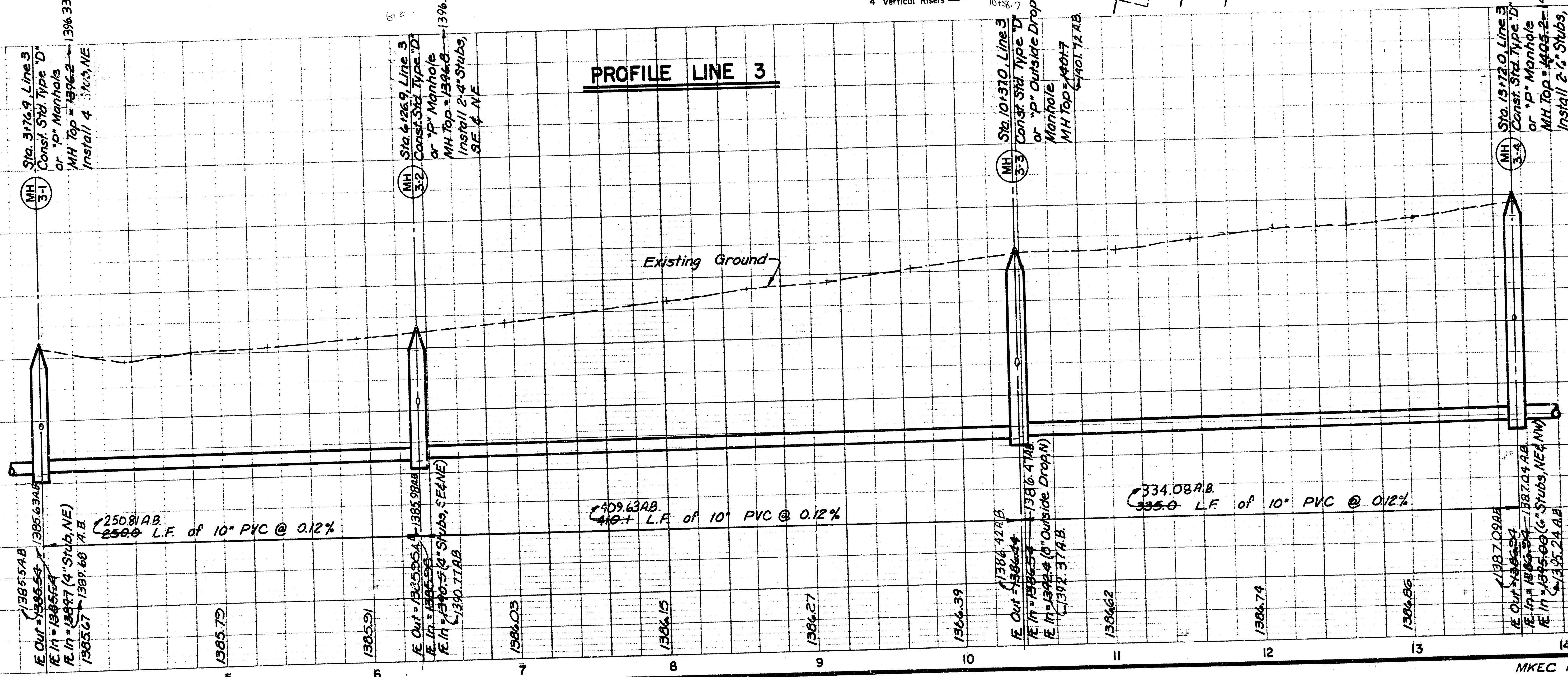
SANITARY SEWER MAIN IN BEL AIRE
ON OLIVER--37TH STREET NORTH TO
45TH STREET NORTH

Scale: 1" = 40' Horiz.
1" = 5' Vert.



4" VERTICAL RISERS -- LINE 3

Sta.	FL Elev.	Top of Riser
8+85	1386.25	1391.6
9+60	1386.34	1392.0

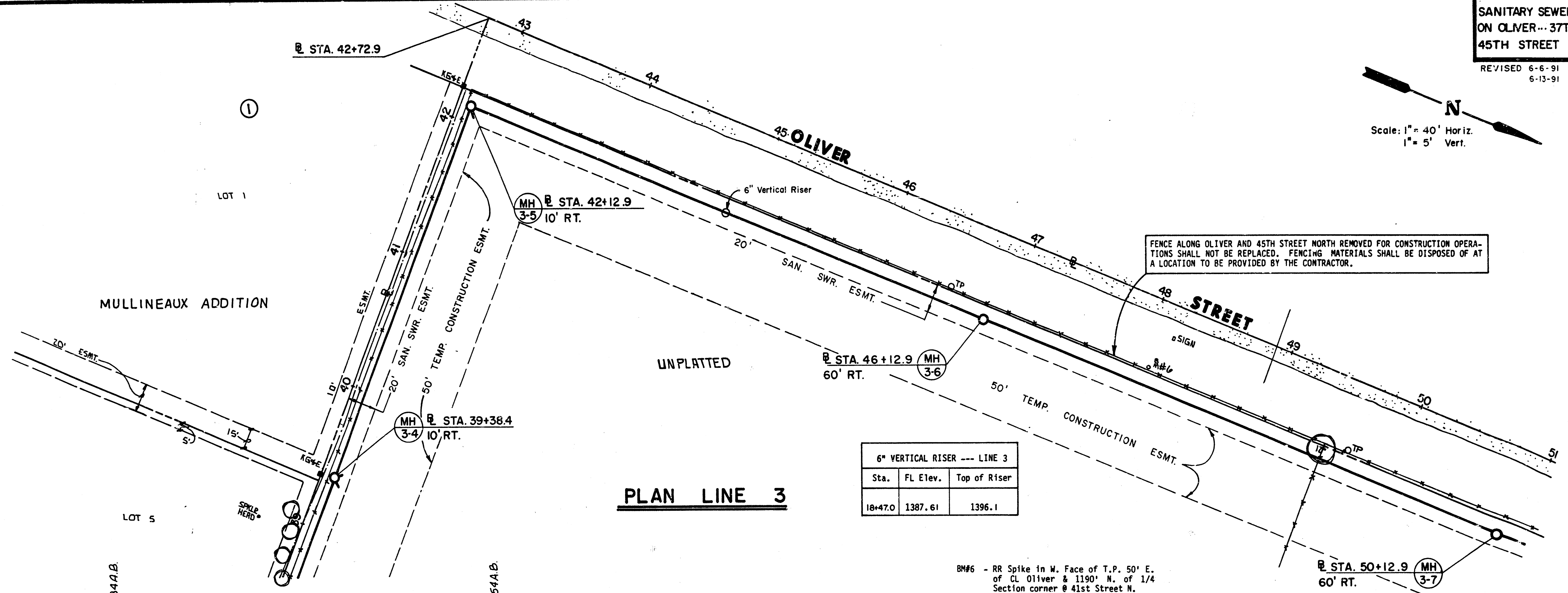
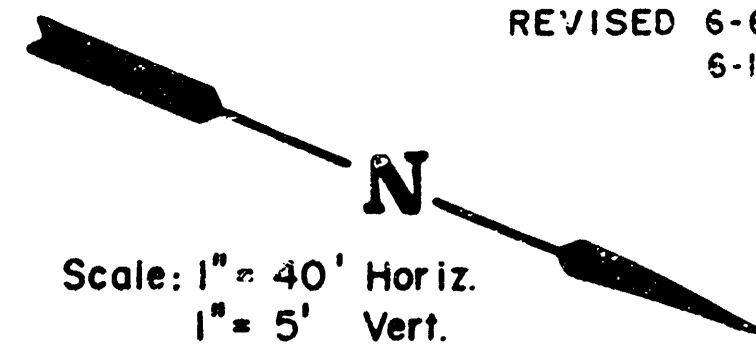


6/10
MKEC

MKEC Proj. No. 90-88-193-B

SANITARY SEWER MAIN IN BEL AIR
ON OLIVER--37TH STREET NORTH TO
45TH STREET NORTH

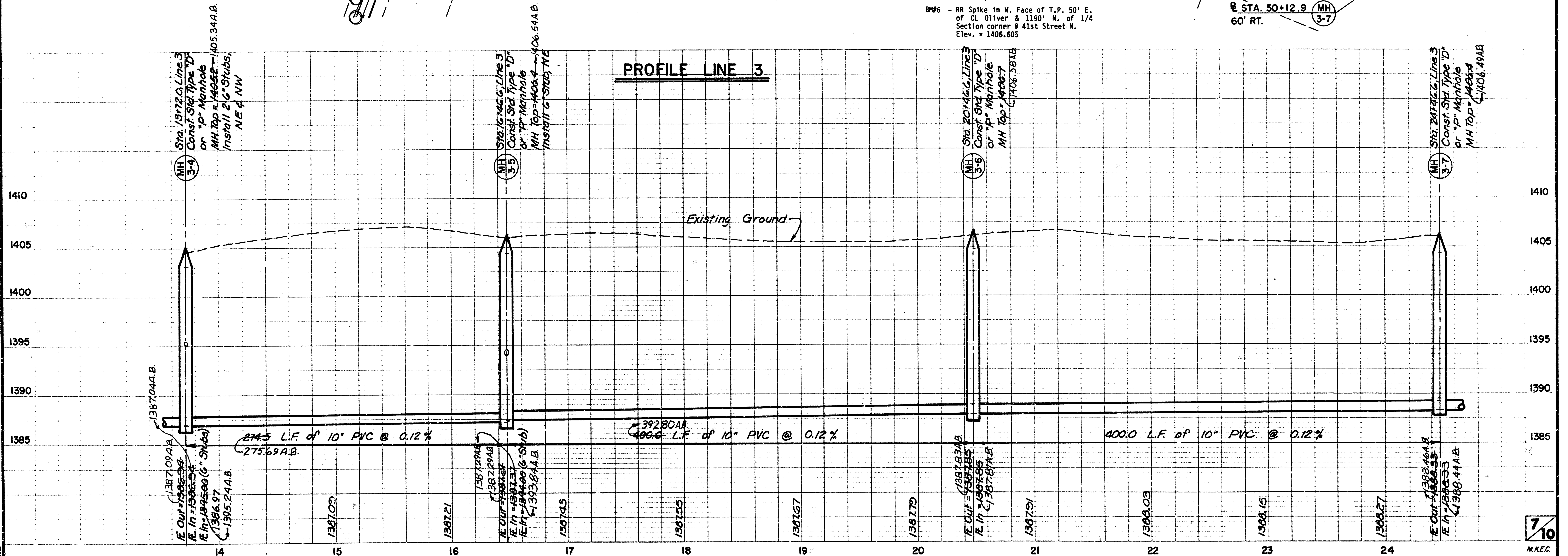
REVISED 6-6-91
6-13-91



PLAN LINE 3

6" VERTICAL RISER --- LINE 3		
Sta.	FL Elev.	Top of Riser
18+47.0	1387.61	1396.1

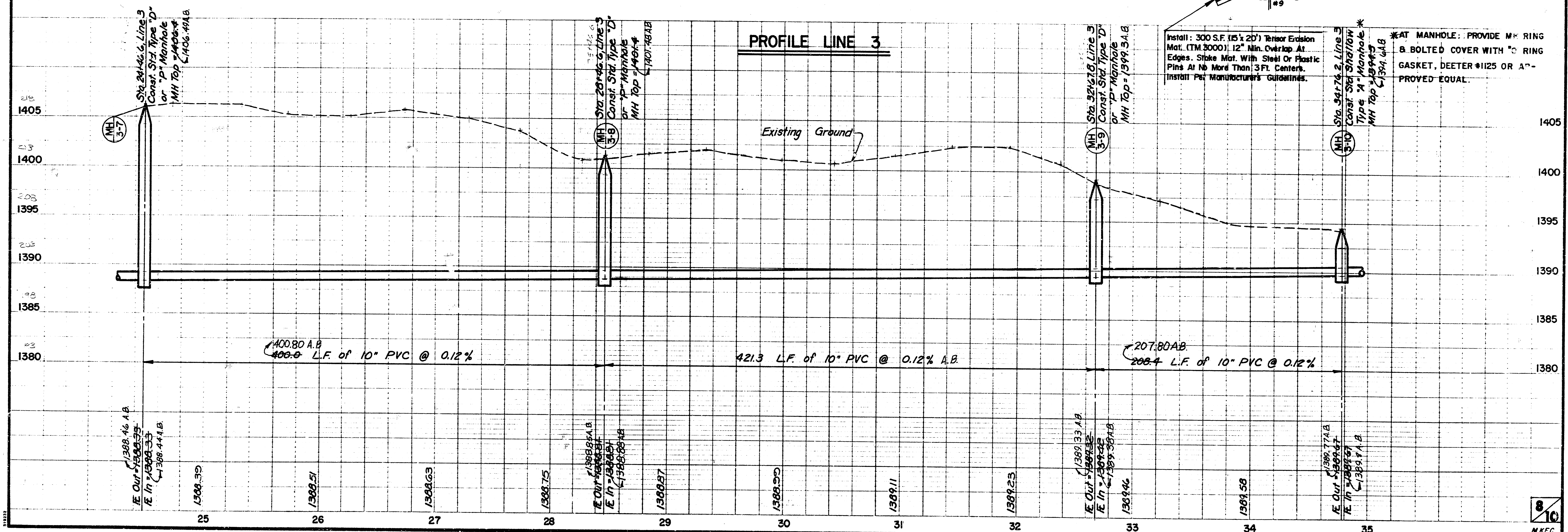
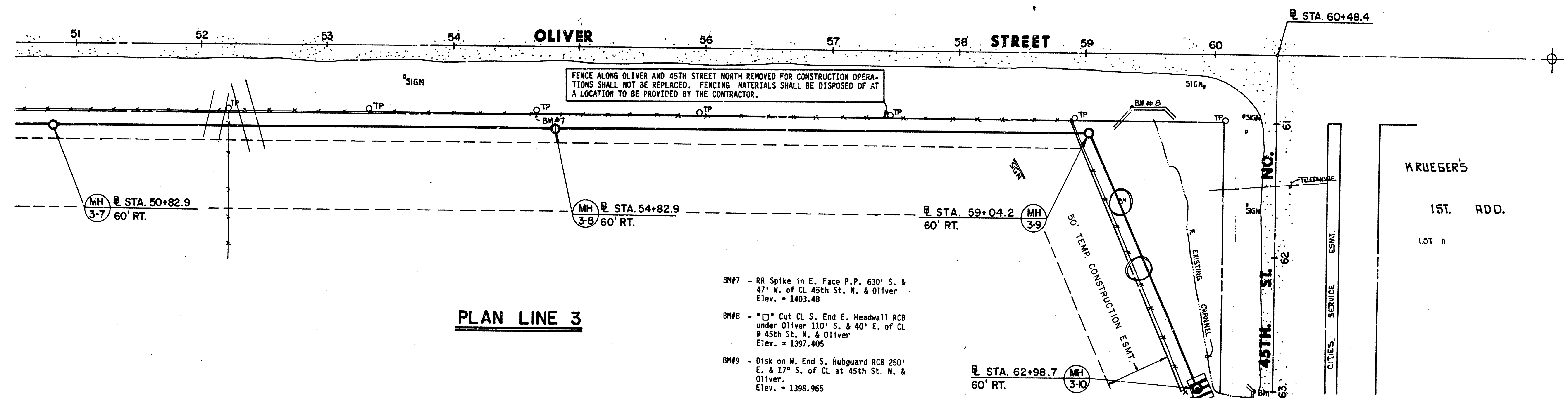
BM#6 - RR Spike in W. Face of T.P. 50' E. of CL Oliver & 1190' N. of 1/4 Section corner @ 41st Street N. Elev. = 1406.605



PROFILE LINE 3

SANITARY SEWER MAIN IN BEL AIR
ON OLIVER... 37TH STREET NORTH TO
45TH STREET NORTH
REVISED 6-18-91

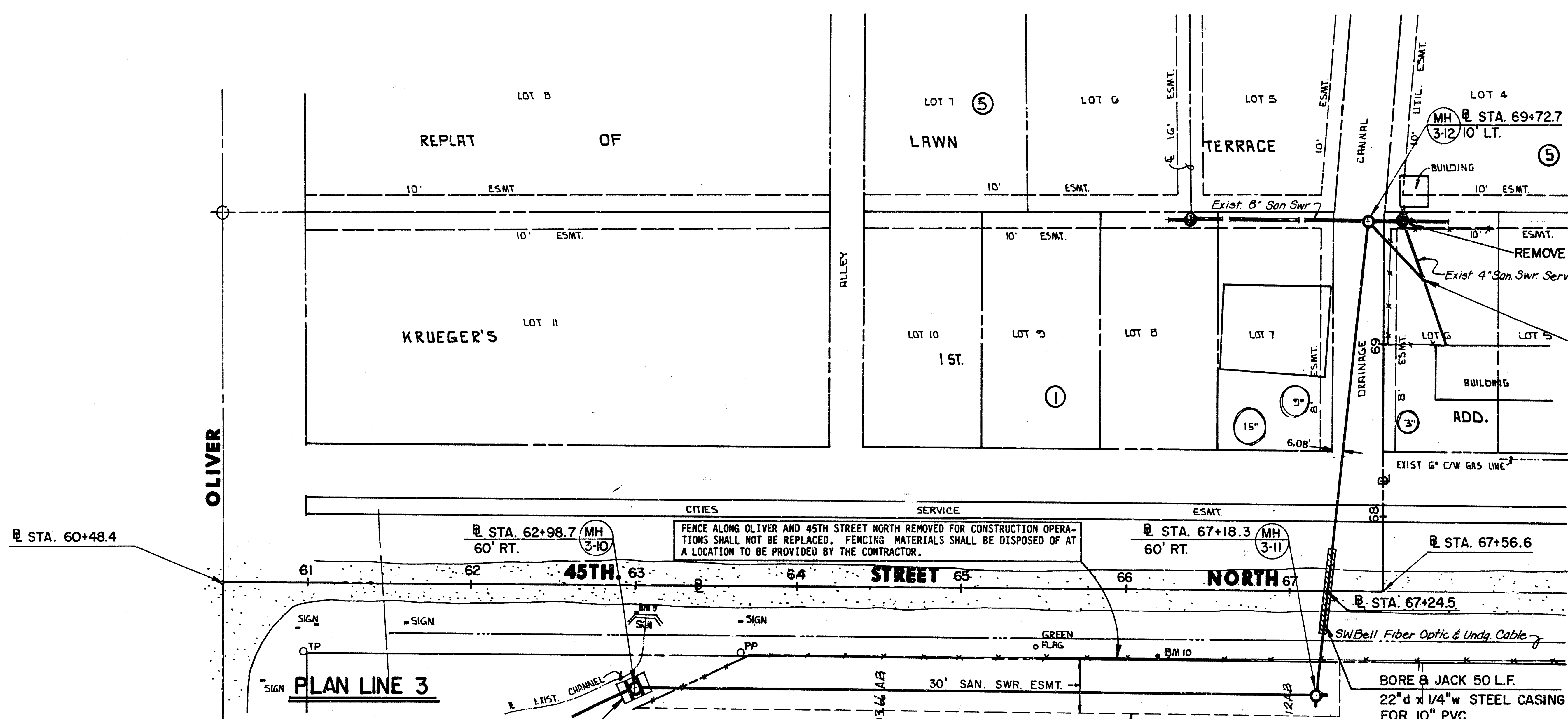
N
Scale: 1" = 40' Horiz.
1" = 5' Vert.



SANITARY SEWER MAIN IN BEL. AIRE
ON OLIVER... 37TH STREET NORTH TO
41ST STREET NORTH

REVISED 6-13-91
6-18-91

Scale: 1" = 40' Horiz.
1" = 5' Vert.



RECONNECT EXIST. 4" SERVICE LINE TO
MH 3-12 WITH 4" SCHEDULE 40 PVC.
SLOPE AT 1/4"/FT. MIN. FITTINGS &
CONNECTIONS PER CITY REQUIREMENTS.
NOTIFY ENGINEER IF FIELD CONDITIONS
ARE NOT AS SHOWN. COORDINATE
CONSTRUCTION WORK AND SCHEDULE WITH
BARBARA GRANT, PROPERTY OWNER,
5018 E. 45TH STREET NORTH.
HOME PHONE: 744-9420
WORK PHONE: 526-5506

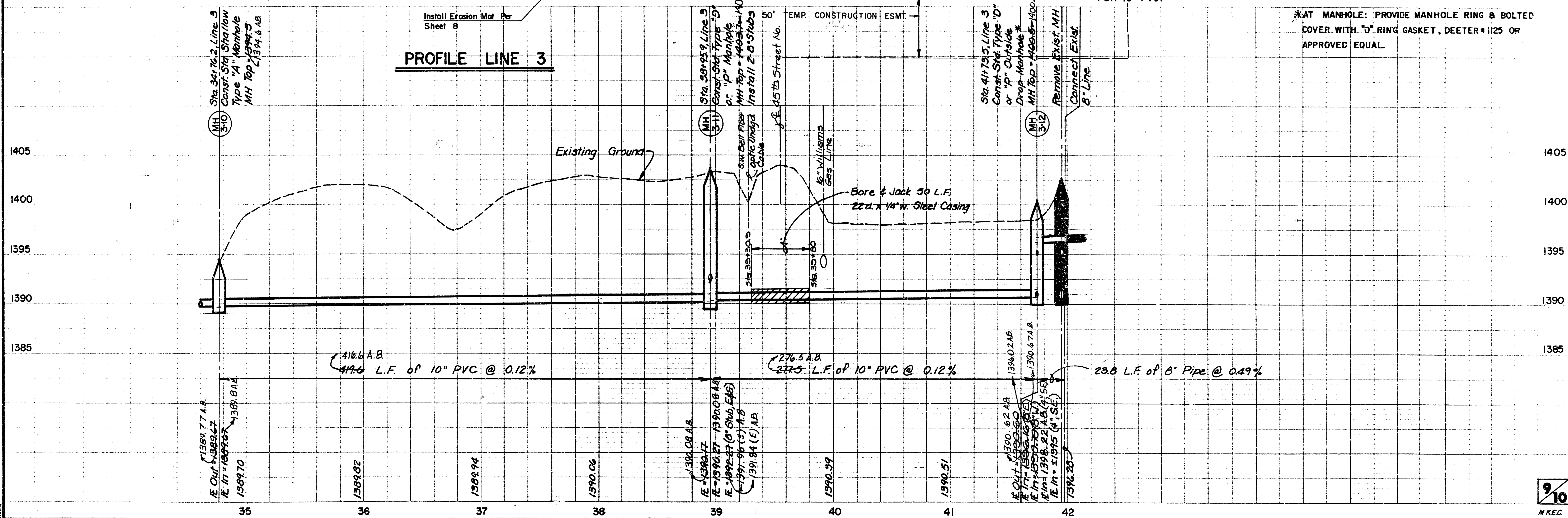
NOTE:
After Completion Of 45th Street North
Crossing, Contact Darrell Preston,
383-7901 For Inspection By Sedgwick
County.

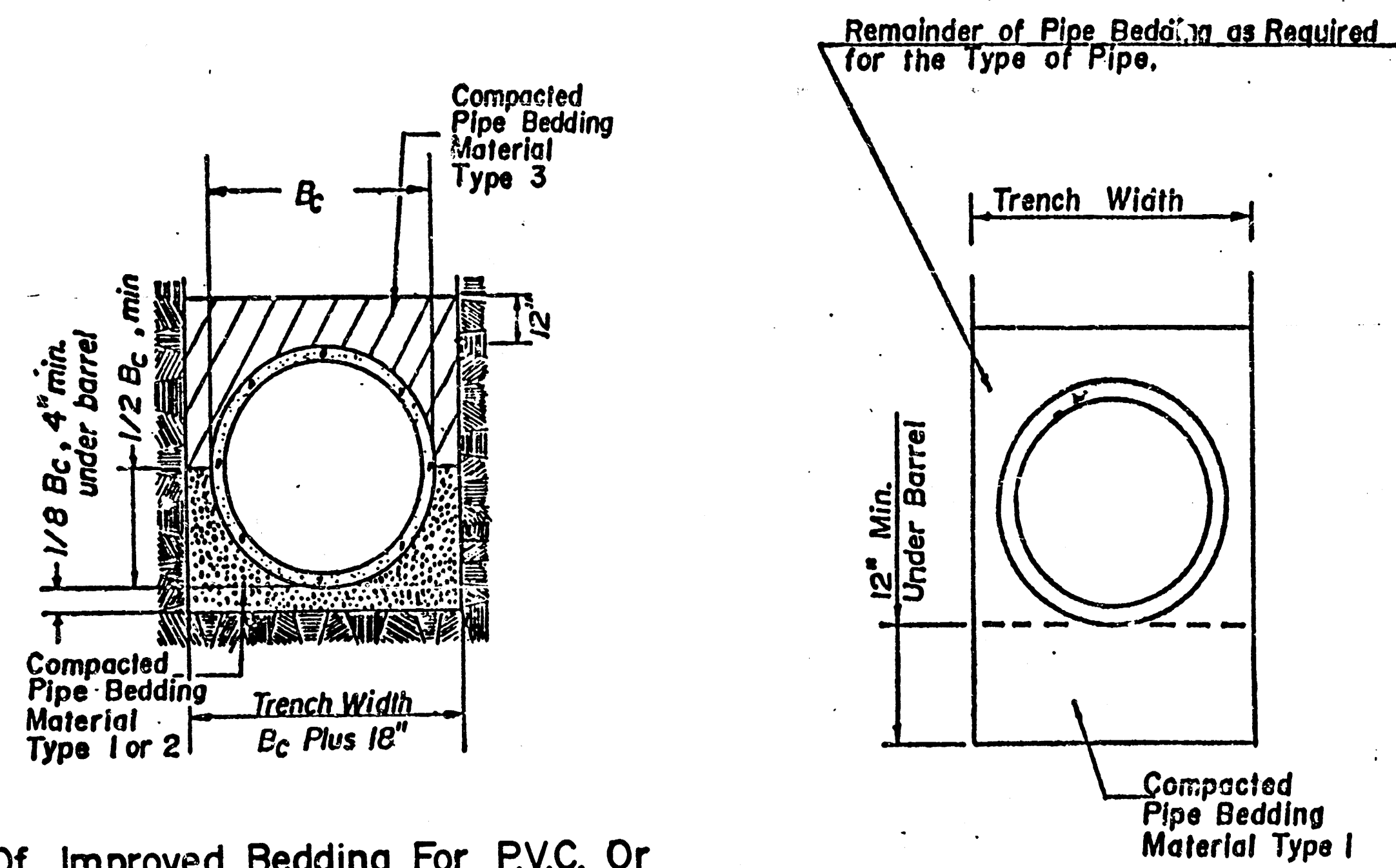
BM#9 - Disk on W. End S. Hubguard RCB 250'
E. & 17" S. of CL at 45th St. N. &
Oliver.
Elev. = 1398.965

BM#10 - RR Spike in N. Face P.P. 570' E. &
388' S. of CL 45th St. N. & Oliver.
Elev. = 1403.805

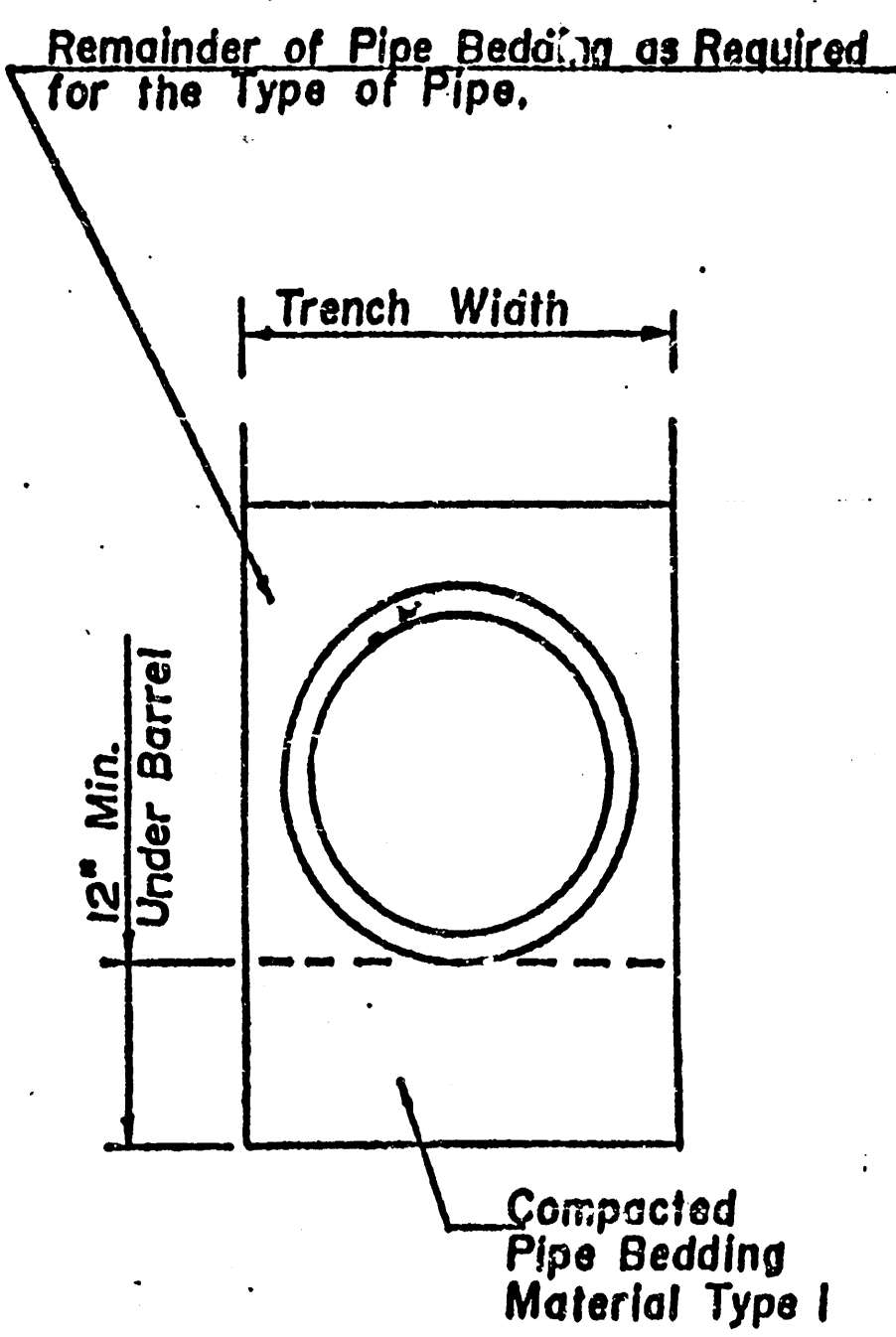
*AT MANHOLE: PROVIDE MANHOLE RING & BOLTED
COVER WITH "O" RING GASKET, DEETER #1125 OR
APPROVED EQUAL.

PROFILE LINE 3

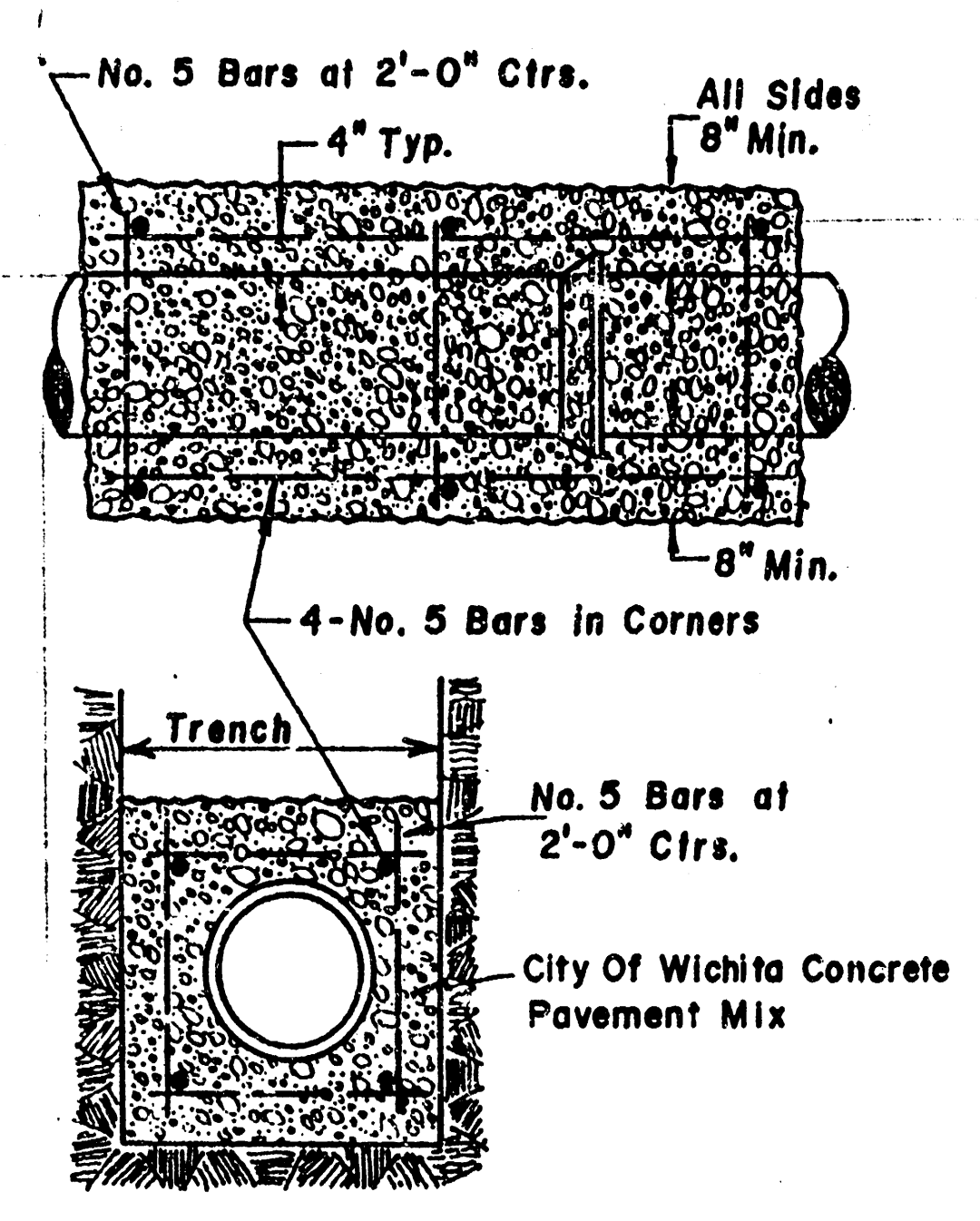




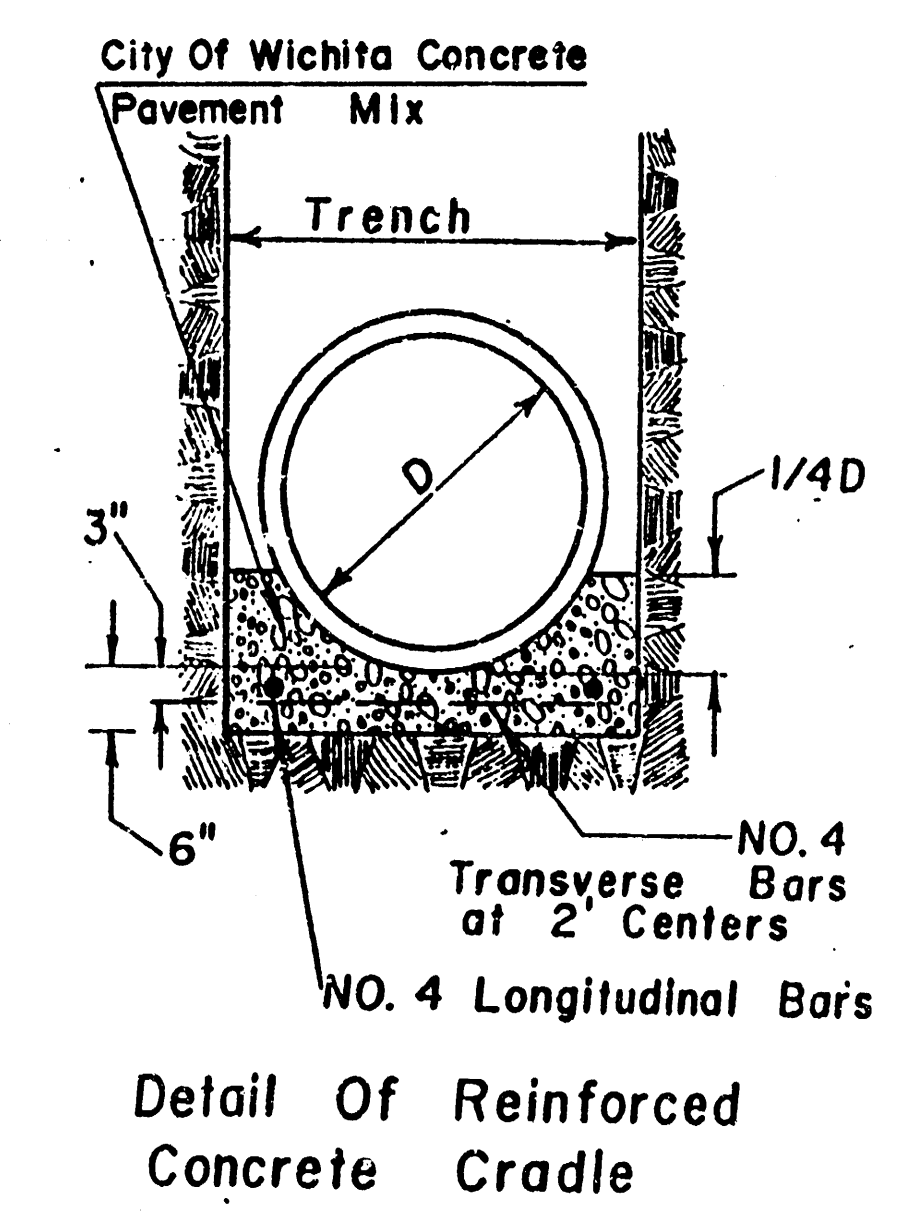
Detail Of Improved Bedding For P.V.C. Or P.V.C. Composite Pipe.



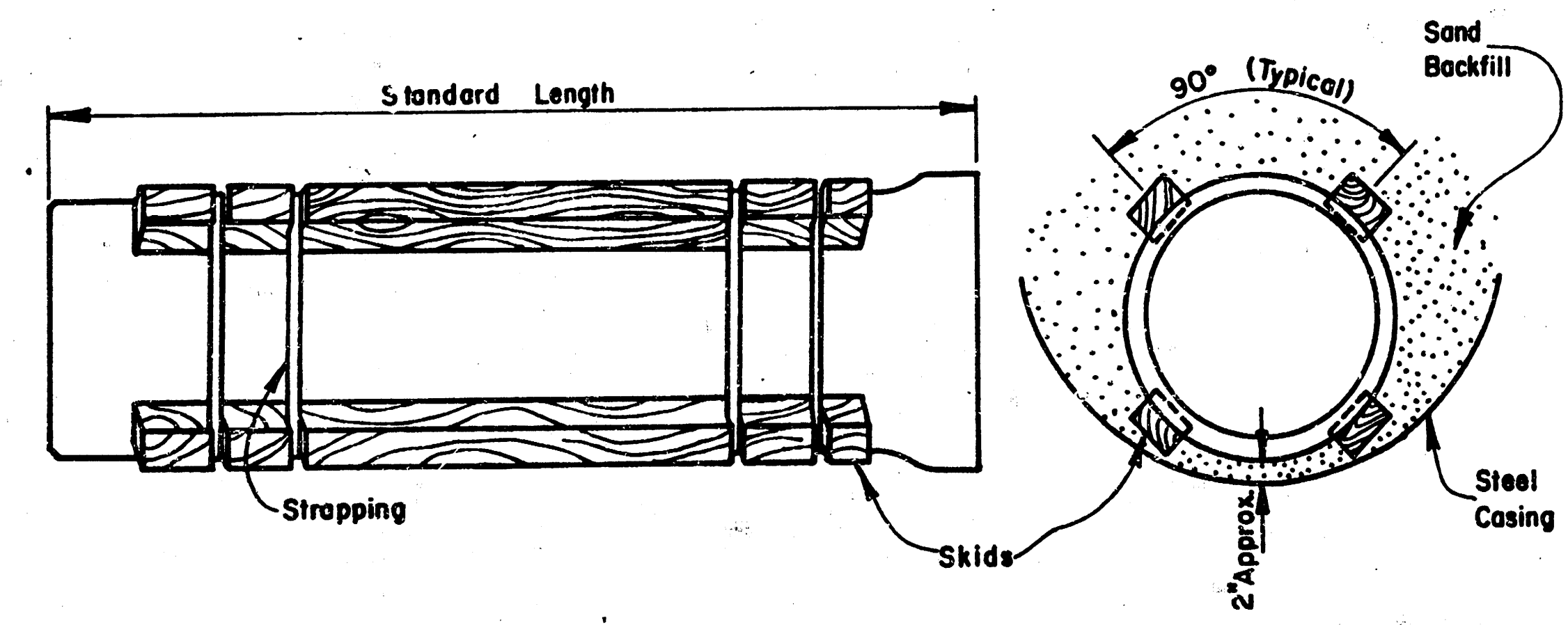
Detail of Trench Stabilization, Required When Trench is Wet or Unstable or When Dewatering is Required.



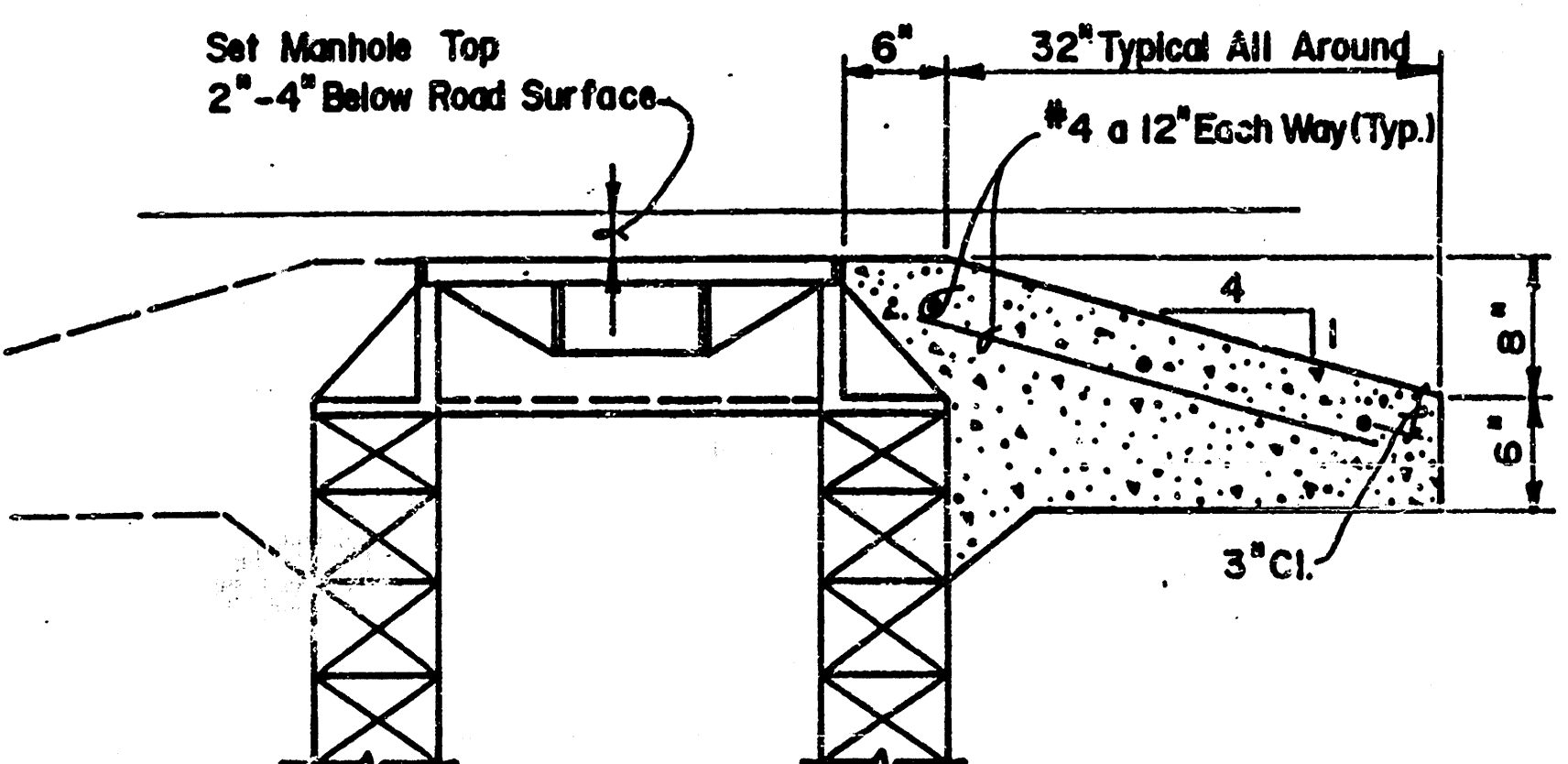
Detail Of Reinforced Concrete Encasement



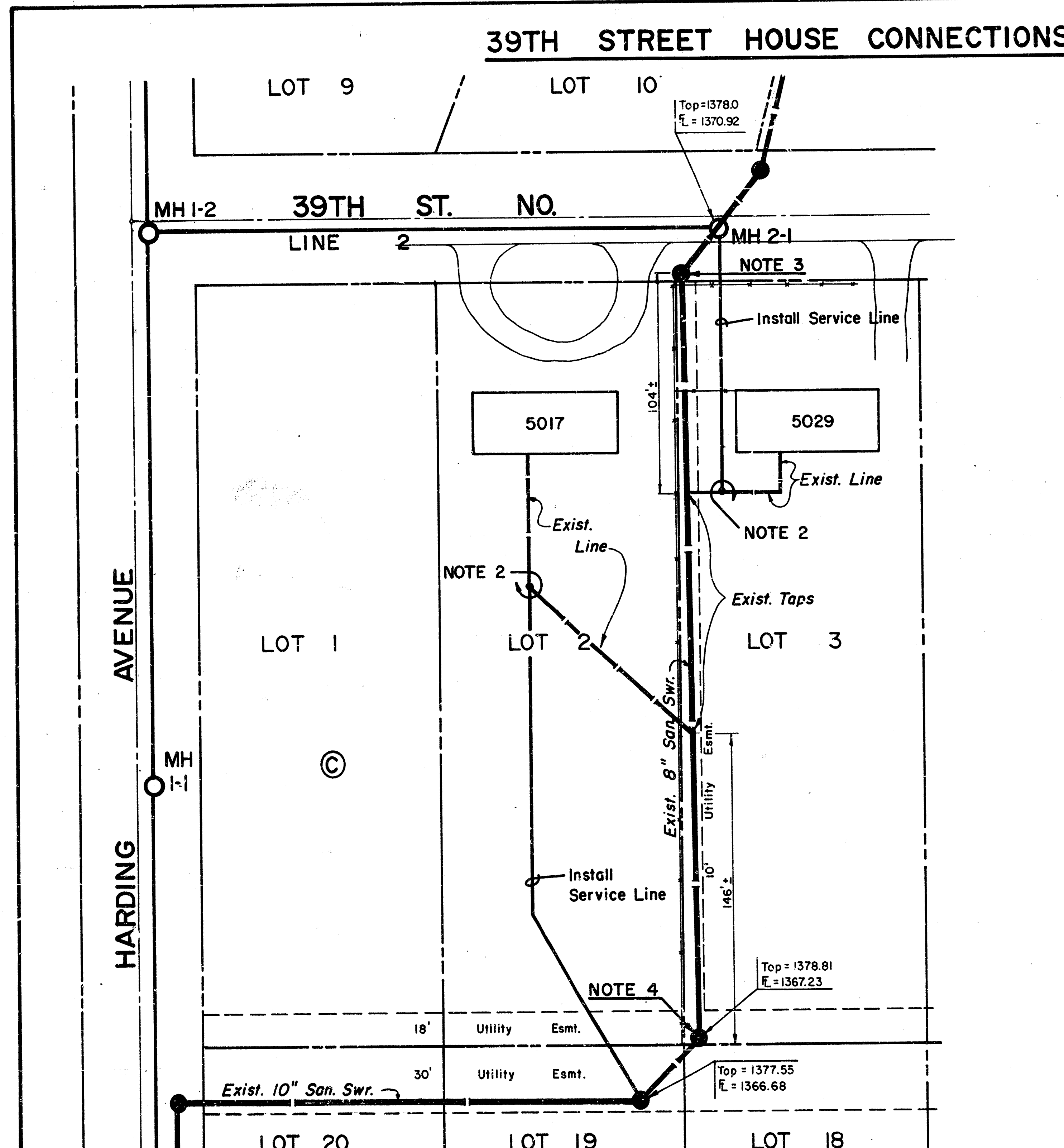
Detail Of Reinforced Concrete Cradle



STEEL ENCASEMENT DETAIL



CONCRETE COLLAR FOR MANHOLE COVER (When Located in Graveled Surfacing)



NOTES:

- COORDINATE CONSTRUCTION WORK, PIPE ALIGNMENT, AND SCHEDULE WITH RESPECTIVE PROPERTY OWNER:
5017 E. 39TH STREET NORTH - RICHARD LOWEN, 744-0050
5029 E. 39TH STREET NORTH - JOSEPH PINCKARD, 744-0091
- RECONNECT EXISTING 4" SERVICE LINES WITH SCHEDULE 40 OR SDR35 PVC PIPE, 4" DIAMETER AT 1/4"/FT. MINIMUM OR 6" DIAMETER AT 1/8"/FT. MINIMUM. FITTINGS, CLEANOUTS, CONNECTIONS SHALL BE IN ACCORDANCE WITH CITY OF WICHITA REQUIREMENTS. PROPERTY IMPROVEMENTS, LANDSCAPING, FENCES, ETC. ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS AND COORDINATE ANY SPECIAL CONSTRUCTION REQUIREMENTS WITH THE PROPERTY OWNERS. LOCATIONS OF SERVICE LINES AS SHOWN ARE APPROXIMATE; THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXACT LOCATION AND DEPTH OF CONNECTION POINTS. NOTIFY ENGINEER IF CONDITIONS ARE NOT AS SHOWN. THE PROPOSED ALIGNMENTS AND CONNECTIONS SHALL BE APPROVED BY THE ENGINEER.
- AFTER LINE 2 HAS BEEN ACCEPTED BY THE CITY OF BEL AIRE, ABANDON MANHOLE AND PLUG PIPE ENDS IN ACCORDANCE WITH SPECIFICATIONS.
- AFTER LINE 2 HAS BEEN ACCEPTED BY THE CITY OF BEL AIRE, PLUG END OF ABANDONED PIPE IN ACCORDANCE WITH SPECIFICATIONS.

	DETAILS		Design
			Drawn by
			Checked by
			Date
		Job no.	
MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226		636-5566	Sheet 10 of 10