

# CITY OF MASSILLON

## CITY ENGINEER DEPARTMENT

### STARK COUNTY, OHIO

### KEUPER STORM SEWER RELOCATION

#### PROJECT DESCRIPTION

RELOCATION OF A STORM SEWER ALONG KEUPER BLVD.  
LOCATED IN THE CITY OF MASSILLON, OHIO 44646

#### CONVENTIONAL SIGNS

- RIGHT OF WAY . . . EXISTING: \_\_\_\_\_, PROPOSED: \_\_\_\_\_
- COUNTY LINE . . . \_\_\_\_\_
- TOWNSHIP LINE . . . \_\_\_\_\_
- CORPORATION LINE . . . \_\_\_\_\_
- FENCE LINE . . . EXISTING: , PROPOSED:
- GUARDRAIL . . . EXISTING: , PROPOSED:
- MANHOLES . . . EXISTING: , PROPOSED: , REHABILITATED:
- CATCH BASINS . . . EXISTING: , PROPOSED: , REHABILITATED:
- SIGNS . . . . . 1-POST: , 2-POST: , 3-POST:
- EXISTING POLES . . . POWER: , TELEPHONE , LIGHT , SPAN
- PROPOSED POLES . . . POWER: , TELEPHONE , LIGHT , SPAN
- EXIST. UTILITIES . . . VALVE: , HYDRANT: , METERS: , GUY:

#### UNDERGROUND UTILITIES

**TWO WORKING DAYS  
BEFORE YOU DIG**

CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY

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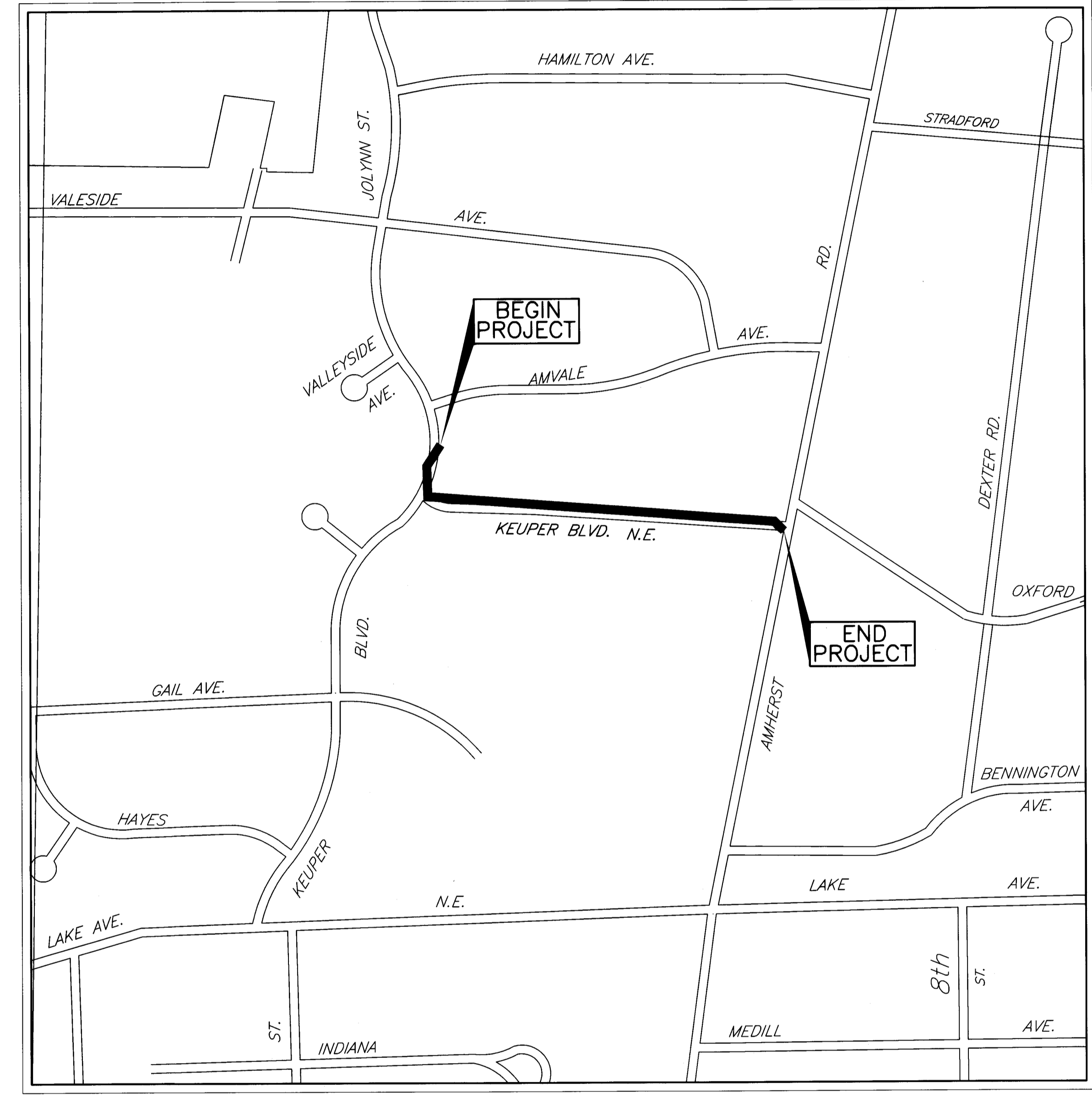
**TWO WORKING DAYS  
BEFORE YOU DIG**

CALL 1-800-925-0988 (TOLL FREE)

OIL & GAS PRODUCERS UNDERGROUND  
PROTECTION SERVICE

PLAN PREPARED BY:  
CITY OF MASSILLON  
Engineering Department

OWNER:  
CITY OF MASSILLON  
151 Lincoln Way East  
Massillon, Ohio 44646



LOCATION MAP

PORTION TO BE IMPROVED \_\_\_\_\_  
STREETS \_\_\_\_\_

Francis H. Cicchinelli, Jr.  
Mayor



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#### APPROVALS

DIRECTOR OF PUBLIC SAFETY AND SERVICE    MICHAEL J. LOUDIANA

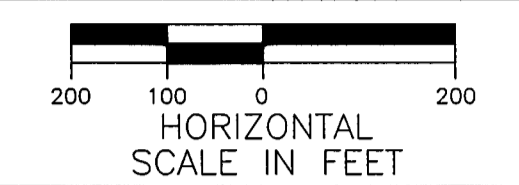
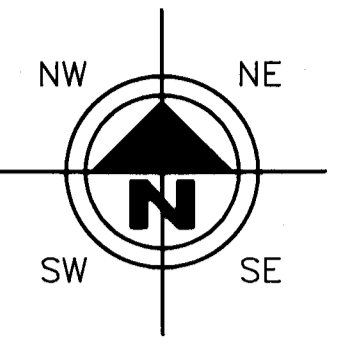
9/13/07  
 DATE

CITY ENGINEER  
  
 KEITH A. DYLEWSKI, P.E.

9/13/07  
 DATE

#### CITY OF MASSILLON ELECTED OFFICIALS

FRANCIS H. CICCINELLI, Jr. . . . .	MAYOR
PERICLES G. STERGIOS . . . . .	LAW DIRECTOR/PROSECUTOR
BILL HAMIT . . . . .	AUDITOR
PAUL LAMBERT . . . . .	TREASURER
<b>COUNCIL</b>	
GLEN E. GAMBER . . . . .	PRESIDENT
RONALD E. MANG . . . . .	1st WARD
CHUCK MAIER . . . . .	2nd WARD
KATHERINE CATAZARO-PERRY . . . . .	3rd WARD
TONY M. TOWNSEND . . . . .	4th WARD
DONNIE PETERS JR. . . . .	5th WARD
DAVID K. McCUNE . . . . .	6th WARD
TIM BYRAN . . . . .	AT LARGE
PAUL MANSON . . . . .	AT LARGE
JAYNE FERRERO . . . . .	AT LARGE



DRAWN BY: FPW	CHECKED BY: KAD
DATE: MAY, 2007	DATE: MAY, 2007

Keuper Storm Sewer Relocation

Title Sheet  
City of Massillon  
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:  
07SM0101.DWG

ACCOUNT NUMBER  
07SM01

UTILITIES

LISTED BELOW ARE ALL KNOWN UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERITECH 50 W.BOWERY, 6TH FLOOR AKRON, OH 44308 800-384-8057 RICK DELAGRANGE	CONSUMERS OHIO WATER P.O. BOX 584 MASSILLON, OH 44648 (330) 833-4156	OHIO EDISON STARK DIVISION 2600 S. ERIE ST. MASSILLON, OH 44545 (330) 833-3141	MASSILLON CABLE TV P.O. BOX 814 MASSILLON, OH 44648 (330) 833-4134	GREAT LAKES 104 6TH ST. S.W. CANTON, OH 44702 (330) 456-2454
CITY OF MASSILLON SANITARY SEWER 151 LINCOLN WAY EAST MASSILLON, OH 44646 (330) 830-1722	AT&T COMMUNICATIONS 2535 E. 40TH AVE. DENVER, CO 80205-3601 (800) 852-3786	DOMINION EAST OHIO GAS COMPANY 4725 SOUTHWAY ST. S.W. CANTON, OH 44706 (330) 478-3142 NANCY KOVACH	NORTHEAST OHIO NATURAL GAS CORP. 9081 S.R. 250 STRASBURG, OH 44680-9766 (330) 878-5589	

THE CONTRACTOR SHALL NOTIFY ALL UTILITIES 48 HOURS PRIOR TO WORK.

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE SHOWN AT APPROXIMATE LOCATIONS AND WHERE OBTAINED AS REQUIRED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

UPS - 1-800-362-2764  
OGUPUPS - 1-800-925-0988

DATUM ELEVATION

ALL BENCHMARKS ARE BASED ON REFERENCE BENCHMARKS PROVIDED BY THE CITY OF MASSILLON

STATIONING

ALL STATIONING SHOWN IS REFERENCED TO THE BASELINE AS SHOWN.

NOTIFICATION OF SAFETY FORCES AND BUS GARAGES

THE CONTRACTOR SHALL NOTIFY ALL AGENCY LISTED BELOW AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSING OR TRAFFIC CHANGE.

MASSILLON SAFETY SERVICE 330-830-1702	MASSILLON FIRE DEPARTMENT 330-833-1053	PERRY TOWNSHIP HALL 330-833-2141	NORTH LAWRENCE FIRE DEPT. 330-832-6347
TUSCARAWAS TOWNSHIP HALL 330-832-4337	JACKSON FIRE DEPARTMENT 330-832-1553	MASSILLON POLICE DEPARTMENT 330-830-1735	MASSILLON SCHOOL BUS GARAGE 330-830-1849
JACKSON TOWNSHIP HALL 330-832-7416	PERRY FIRE DEPARTMENT 330-478-5121	JACKSON POLICE DEPARTMENT 330-497-7440	JACKSON SCHOOL BUS GARAGE 330-830-8042
PERRY POLICE DEPARTMENT 330-833-3865	PERRY SCHOOL BUS GARAGE 330-477-1300	STARK COUNTY SHERIFF 330-430-3887	TUSCARAWAS SCHOOL BUS GARAGE 330-837-7805

SARTA  
330-454-5333

SUBSURFACE CONDITIONS

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKES HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING BID. PROSPECTIVE BIDDERS ARE TO COORDINATE WITH THE OWNER FOR ACCESS TO THE SITE FOR INSPECTIONS AND EXPLORATORY EXCAVATION. THE BIDDER SHALL CONTACT THE OWNER AT LEAST 72 HOURS IN ADVANCE OF THE DESIRED INSPECT OR EXCAVATION. THE BIDDER SHALL CONTACT O.U.P.S. AND OBTAIN LOCATIONS OF OTHER UTILITIES.

QUANTITIES

QUANTITIES ARE INDICATED FOR COMPARISON OF BIDS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY QUANTITIES BEFORE ORDERING MATERIALS. VARIATIONS FROM THE PLAN QUANTITIES SHALL BE APPROVED BY THE ENGINEER OR OWNER BEFORE MATERIALS ORDERS ARE PLACED. MATERIALS REJECTED DUE TO INCOMPATIBILITY BETWEEN ORDERED QUANTITIES AND FIELD CONDITIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION SPECIFICATIONS & STANDARDS

ALL CONSTRUCTION IS TO BE PER CITY OF MASSILLON SPECIFICATIONS AND STANDARDS, THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND FOLLOW ALL OSHA AND ADA REGULATIONS AND REQUIREMENTS.

PRESERVATION OF EXISTING UTILITY SERVICES

ANY EXISTING WATER LINE, SANITARY SEWER, STORM SEWER, GAS LINE OR OTHE UTILITY IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THE CONTRACTORS EXPENSE.

MAINTENANCE OF TRAFFIC

THE CONTRACTOR SHALL SUPPLY A MAINTENANCE OF TRAFFIC PLAN TO THE CITY ENGINEER.

MAINTENANCE OF TRAFFIC PLAN MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION COMMENCING.

SAID APPROVED DETOUR SHALL BE FORWARDED TO THE LOCAL NEWSPAPER.

CONTRACTOR AVAILABILITY

THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A 24 HOUR PHONE NUMBER WHERE THE CONTRACTOR SHALL BE AVAILABLE FOR EMERGENCIES.

PRESERVATION OF PRIVATE PROPERTY

THE CONTRACTOR SHALL PERFORM WORK AS TO NOT DISTURB, DAMAGE OR DESTROY ANY TELEPHONE OR POWER POLES, SIGNS, LANDSCAPING ITEMS, ETC.. ANY ITEM DAMAGED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE. PRIOR ENGINEER APPROVAL IS REQUIRED BEFORE ANY OF THE ABOVE ITEMS ARE PERFORMED.

PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS ANY TYPE OF LAND MONUMENT. HE SHALL HAVE ALL LAND MONUMENTS IN THE PROXIMITY OF THE WORK REFERENCED. HE SHALL REPLACE DESTROYED OR DAMAGED MONUMENTS AND SHALL FURNISH A CERTIFICATION BY AN OHIO REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED.

CONDITIONS OF WORK

ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT, STATE, COUNTY, AND CITY OF MASSILLON LAWS AND REGULATIONS. ALL WORK, AT ALL TIMES SHALL BE SUBJECT TO OBSERVATION BY THE OWNER AND/OR ENGINEER. ALL WORK SHALL COMPLY WITH THE CONDITIONS OF THE CONTRACT DOCUMENTS AND OHIO EPA, AND STANDARDS OF THE CITY OF MASSILLON ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, AND APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES TO THE PROJECT SITE. ADJACENT ROADS SHALL BE MAINTAINED AND KEPT CLEAN OF MUD AND OTHER DEBRIS THAT MAY BE CAUSED BY TRAFFIC EXITING THE WORK SITE. THE CONTRACTOR SHALL COORDINATE AND PROVIDE FOR ALL NECESSARY TRAFFIC CONTROL. TRAFFIC CONTROL SHALL FOLLOW THE MORE STRINGENT GUIDELINES OF THE CITY OF MISSION OR ODOT.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN FACILITIES FOR A CONSTRUCTION OFFICE, EMPLOYEE PARKING, AND EMPLOYEE SANITARY FACILITIES. ON STREET PARKING WILL NOT BE PERMITTED. THE CONTRACTOR SHALL PROVIDE FOR THE LAWFUL OFF-SITE DISPOSAL OF DEMOLITION DEBRIS AND CONSTRUCTION WASTE.

EXISTING DATA

EACH CONTRACTOR SHALL VISIT THE SITE PERSONALLY TO ASCERTAIN THE NATURE OF THE WORK AND BECOME THOROUGHLY FAMILARIZED WITH THE SITE PRIOR TO BID SUBMISSION.

EXISTING STRUCTURES, GRADES, PIPING, ETC. ARE INDICATED IN APPROXIMATE LOCATION ON THE PLAN. INFORMATION SHOWN IS NOT GUARANTED TO BE CORRECT AND COMPLETE. THE DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE EXISTENCE OF FACILITIES ABOVE OR BELOW GROUND, WHICH MAY NOT BE SHOWN, WILL NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.

EXISTING UNDERGROUND UTILITIES SHOWN ARE RECORDS PROVIDED BY UTILITY COMPANIES AND ARE APPROXIMATE ONLY. SERVICE LATERALS ARE NOT SHOWN.

IT IS THE RESPONSIBILITY OF CONTRACTOR TO NOTIFY THE CITY, PRIOR TO BID OPENING NON-CONNFORMING OR CONFLICTING INFORMATION.

ACCESSIBILITY TO PRIVATE PROPERTY

ACCESS TO ALL DRIVEWAYS AND PARKING AREAS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHILE LAYING THE SANITARY SEWER ACROSS THE DRIVE. THE TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORK DAY TO PROVIDE ACCESS. THE CONTRACTOR MUST NOTIFY EACH PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF CUTTING THIER DRIVEWAY.

PRESERVATION OF EXISTING UTILITY SERVICES

ANY EXISTING WATER LINE, SANITARY SEWER, STORM SEWER, GAS LINE OR OTHER UTILITY IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THAT CONTRACTORS EXPENSE.

EXCAVATED MATERIAL

ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE PILED AND STORED IN A MANNER THAT WILL NOT ENDANGER THE WORK AND THAT WILL LEAVE DRIVEWAYS OR OTHER CONTROLS UNOBSTRUCTED AND ACCESSIBLE WHILE THE WORK IS TO BE COMPLETED. SATISFACTORY PROVISIONS SHALL BE MADE FOR STREET DRAINAGE, AND NATURAL WATERCOURSES SHALL NOT BE OBSUCTED. DURING THE PROGRESS OF THE WORK, ALL MATERIAL PILES SHALL BE KEPT TRIMMED UP AND MAINTAINED IN A NEAT MANNER. ALL EXCAVATED WASTE MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, AS DIRECTED BY THE ENGINEER. THE WASTE SITE IS TO BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE CITY, UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS. ALONG WITH A LETTER FROM THE PROPOSED WASTE SITE OWNER PERMITTING SUCH AND HOLDING THE CITY HARMLESS.

RESTORATION

FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED UP TO MAY 15TH OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY JUNE 30th OF THAT YEAR. FOR INSTALLATION OF SANITARY SEWER TESTED AND ACCEPTED FROM MAY 15th TO SEPTEMBER 30th OF ANY CALENDER YEAR, RESTORATION SHALL BE COMPLETE BY NOVEMBER 15th OF THAT CALENDER YEAR. FOR SANITARY SEWER INSTALLED, TESTED, AND ACCEPTED AFTER NOVEMBER 15TH OF ANY CALENDER YEAR. RESTORATION SHALL BE COMPLETE BY MAY 15th OF THE NEXT CALENDER YEAR.

ALL SOIL AREAS DISTURBED BY THE CONTRACTOR SHALL BE TOPSOILED, SEEDED AND MULCHED. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM OF AFFECTED WORK. TOPSOIL, SEEDING AND MULCHING SHALL NOT BE A SEPERATE PAY ITEM. THIS INCLUDES BACKFILLING, SEEDING AND MULCHING ALONG THE EDGE OF ALL PAVEMENT RESTORATION.

PAVEMENT CROSSINGS WILL RECEIVE TYPE C PAVEMENT REPLACEMENT WITH FULL WIDTH PAVEMANT OVERLAY.

CONTRACTOR TO REPLACE ALL PAVEMENT MARKINGS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT

CONTRACTOR TO USE HOT APPLIED JOINT CRACK SEALER ON ASPHALT PAVEMENT AT ALL ENDS AND INTERSECTIONS.

ALL TRENCHES IN ROAD RIGHT OF WAY WILL RECEIVE FULL DEPTH PREMIUM GRANULAR BACKFILL.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING THIS SHALL INCLUDE ON TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNLESS OTHERWISE STATED BY CITY REPRESENTATIVE.

REMOVAL AND RELOCATION OF EXISTING UTILITIES

THE CONTRACTOR IS REQUIRED TO COOPERATE WITH EACH RESPECTIVE UTILITY OWNER FOR THE REMOVAL AND RELOCATION OF ANY AND ALL UTILITIES THAT CREATE A CONFLICT WITH CONSTRUCTION OF THE PROJECT.

CONCRETE REMOVAL

ALL EXISTING CONCRETE INCLUDING CURBS, DRIVES, AND BASE ETC. WITHIN WORK LIMITS SHALL BE REMOVED AND PAID FOR UNDER:

ALL WORK SHALL BE PAID FOR UNDER ITEM 203 ROADWAY EXCAVATION

ITEM 623. CONSTRUCTION STAKING

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT. THIS WORK IS TO BE UNDER ITEM 623 CONSTRUCTION STAKING.

DRAWN BY: FPW	CHECKED BY: KAD
DATE: SEPT, 2007	DATE: SEPT, 2007

Kueper Storm Sewer Relocation

General Notes  
City of Massillon  
Stark County, Ohio



REVISIONS:	
DATE	DESCRIPTION
ELECTRONIC FILE NAME: 07SM0102.DWG	
ACCOUNT NUMBER 07SM01	

MANHOLES, CATCH BASINS, INLETS AND PIPES REMOVED OR ABANDONED

ALL CASTING, PRE-CAST STRUCTURES AND PIPES SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY THE CITY. CONTACT THE CITY OF MASSILLON STREET SUPERINTENDENT – GREG BABCOCK AT 330-833-5746. ANY UNWANTED MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

ITEM 407, TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GALLONS PER SQUARE YARD OF TACK COAT FOR EXTISMATING PURPOSES ONLY.

ITEM 408, BITUMINOUS PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.40 GALLONS PER SQUARE YARD OF PRIME COAT FOR ESTIMATING PURPOSES ONLY.

CROSSING OR CONNECTING TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRDE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

ITEM 604, MASS CI-1

CATCH BASINS SHALL BE CONSTRUCTED IN CONFORMANCE WITH ITEM 604 EXCEPT THAT THE GRATES SHALL BE NEENAH NO. R-4859-C WITH NO DUMP NO WASTE OR EAST JORDON NO. 7350 WITH FISH BACK OR APPROVED EQUALS.

ITEM 609, CAST IN PLACE 6”X18” CONCRETE CURB

GRANULAR BEDDING, BACKFILLING AND CONCRETE CURB PLACEMENT ALONG WITH ALL APPURTENANCES IS TO BE INCLUDED IN ITEM 609. THIS SHALL ALSO INCLUDE THE REPLACEMENT AND REMOVAL OF ALL WALK EXTENSION DISTURB DO TO CURB PLACEMENT

ITEM 659, TOPSOIL, SEEDING AND MULCHING

ITEM 659 SHALL BE APPLIED TO ALL EXPOSED SOIL AREAS DISTURBED DURING CONSTRUCTION. SUCH AS SPECIFIED IN ITEM 659 AND IS NOT LIMITED TO JUST TOPSOIL, SEEDING AND MULCHING. THE CITY SHALL APPROVE SEED MIX PRIOR TO CONSTRUCTION TO BE USED THROUGH OUT CONSTRUCTION LIMITS. PROPOSED MIX SHALL BE SUBMITTED IN WRITING PRIOR TO ANY CONSTRUCTION. ALL ABOVE SAID WORK SHALL BE PAID FOR UNDER

ITEM 659, SEEDING AND MULCHING LUMP SUM BID

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EACH LOT SHALL BE SUPPLIED WITH A SINGLE 10” STORM LATERAL THAT WILL BE INSTALLED FROM THE MAIN TO THE PROPERTY LINE, SAID STORM LATERAL SHALL BE CONNECTED TO FOUNDATION DRAINS, SUMP DRAIN AND WHEN POSSIBLE AS PER ENGINEER’S DIRECTION THE DOWN SPOUT WILL BE CONNECTED.

THE FOLLOWING WORK SHALL BE PAID FOR UNDER ITEM 603 10” STORM LATERAL.

ITEM SPECIAL – PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING CONDUITS SPECIFIED IN THE FIELD. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 203.05. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATE QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

SPECIAL, 500 FEET PIPE CLEANOUT 500 L.F.

ITEM 651, TOPSOIL STOCKPILED

THE MATERIAL FOR THIS ITEM SHALL BE OBTAINED FROM AREAS WITHIN THE PROPOSED RIGHT-OF-WAY.

PROVISION OF THIS 651 ITEM SHALL NOT BE CONSTRUCTED AS A WAIVER OF THE PROVISIONS OF 201.4 SOD AND INCIDENTAL TOPSOIL REMOVED ELSEWHERE ON THIS PROJECT FOR SALVAGE, FOR USE AS DESCRIBED IN 203.04(e). SHALL BE INCLUDED IN THE CONTRACT PRICE FOR VARIOUS 203 ITEMS.

REVIEW OF SANITARY AND DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY OF MASSILLON AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY OF MASSILLON.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY OF MASSILLON.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR’S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

DOWN SPOUTS

ALL DOWN SPOUTS UNABLE TO BE CONNECTED TO THE STORM LATERAL SHALL BE PUT THROUGH THE CURB AS PER ENGINEER’S DIRECTION.

CURB OPENING SHALL NOT GREATER THAN A 3 1/2” DIAMETER.

THE WORK ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609.

ITEM SPECIAL – FILL AND PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH LEANOR CLEAN GROUT, ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER. SO THAT, AFTER SETTLEMENT,

AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF LINEAR FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF 203, OR IT MAY BE REMOVED.

THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER LINEAR FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

TELEVISION TESTING

ALL SANITARY SEWERS, 8-INCH DIAMETER AND LARGER, MUST PASS AN INTERNAL TELEVISION INSPECTION. THE CONTRACTOR SHALL PROVIDE COMPLETE INTERNAL INSPECTION VIDEOTAPE TO THE CITY OF MASSILLON ENGINEERING DEPARTMENT. THE VIDEOTAPING PROCEDURE SHALL BE IN ACCORDANCE WITH CITY OF MASSILLON ENGINEERING DEPARTMENT.

WORKING AREA

NO EXCAVATION WITH SIDE SLOPES STEEPER THAN 2:1 AND/OR DEEPER THAN 2’, OPEN CASTINGS AND PIPES SHALL BE LEFT EXPOSED WHEN THE SITE IS UNATTENDED BY THE CONTRACTOR. THE CONTRACTOR SHALL SECURE ALL SUCH EXCAVATIONS, OPEN CASTINGS AND PIPES AGAINST UNAUTHORIZED ENTRY COVERING WITH STEEL PLATES, TEMPORARY BACKFILLING, FENCING AND SECURITY SERVICES SHALL BE INCLUDED IN THE PRICE BID FOR THE WORK.

EROSION CONTROL

THE CONTRACTOR SHALL PREPARE AND SUBMIT A STORM WATER POLLUTION CONTROL PLAN TO THE CITY OF MASSILLON ENGINEER TO BE FORWARDED TO OBTAIN A PERMIT. THE STORM WATER POLLUTION CONTROL PLAN SHALL AN EFFECTIVE PLAN. SAID PLAN MUST COMPLY W/ THE OHIO DEPARTMENT OF NATURAL RESOURCES. THE OHIO ENVIRONMENTAL SOIL AND WATER CONSERVATION DISTRICT AND THE CITY OF MASSILLON BEST MANAGEMENT PRACTICES.

BECAUSE OF THE LINEAR NATURE OF THIS PROJECT. THE PLAN WILL VARY DAILY BASED UPON THE CONTRACTORS MEANS AND METHODS OF CONSTRUCTION. THE CITY AND ALL LOCAL, STATE AND FEDERAL AGENCIES WILL MONITOR THE CONSTRUCTION SITE AND THE CHOSEN METHOD OF SOIL EROSION CONTROL. THE CONTRACTOR WILL BE HELD TO FOLLOWING THE IMPLEMENTATION AS NECESSARY TO PROTECT THE INTEGRITY OF THE STORM SEWERS AND THE WATER’S OF THE STATE OF OHIO.

BELOW IS A NUMBER OF MISC. ITEMS WHICH MAYBE USED BUT NOT LIMITED TO.

ITEM 870 – COMMERCIAL FERTILIZER  
ITEM 870 – REPAIR SEEDING AND MULCHING  
ITEM 870 – WATER

ITEM 877 – TEMPORARY SEEDING AND MULCHING  
ITEM 877 – TEMPORARY FILTER FABRIC FENCE  
ITEM 877 – TEMPORARY INLET PROTECTION

ALL OF THE ABOVE SAID WORK SHALL BE INCLUDED IN ITEM 207SPEC EROSION CONTROL.

CONCRETE REMOVAL

REMOVAL OF EXISTING CONCRETE SHALL BE INCLUDED IN ITEM 603 \_\_\_ CONDUIT.

REMOVAL OF TRAFFIC CONTROL DEVICES AND PRECAST STRUCTURES

ALL TRAFFIC CONTROL DEVICES AND PRE-CAST STRUCTURES WITH CASTINGS SHALL BE REMOVED IN A WAY NOT TO DAMAGE. SAID ITEMS SHALL BE STORED UNTIL THEY CAN BE TRANSPORTED TO THE CITY GARAGE BY THE CONTRACTOR. THE CONTRACTOR MUST COORDINATE SAID DELIVERS WITH GREG BABCOCK AT (330)833-5746.

ALL OF THE ABOVE SAID WORK SHALL BE INCLUDED IN ITEM 603 \_\_\_ CONDUIT.

FINAL APPROVAL


A VIDEO TAPE WILL BE MADE BY THE CONTRACTOR AND SUBMITTED TO THE CITY PRIOR TO THE PROJECT COMMENCING. AFTER THE FINAL INVOICE IS RECEIVED THE SITE WILL BE VIDEO TAPED AGAIN BY THE CONTRACTOR. ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO FINAL PAYMENT. AS BUILT DRAWING SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE CITY IN A CLEAR AND LEGEND ABLE MANNER PRIOR TO FINAL INVOICE.

COST OF THIS WORK SHALL BE INCLUDED IN ITEM 623 CONSTRUCTION STAKING

Keuper Storm Sewer Relocation

General Notes  
City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
Mayor



REVISIONS:	
DATE	DESCRIPTION

FILE NAME:

07SM0103.DWG

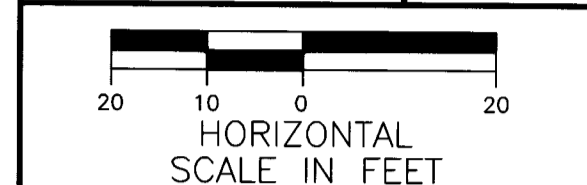
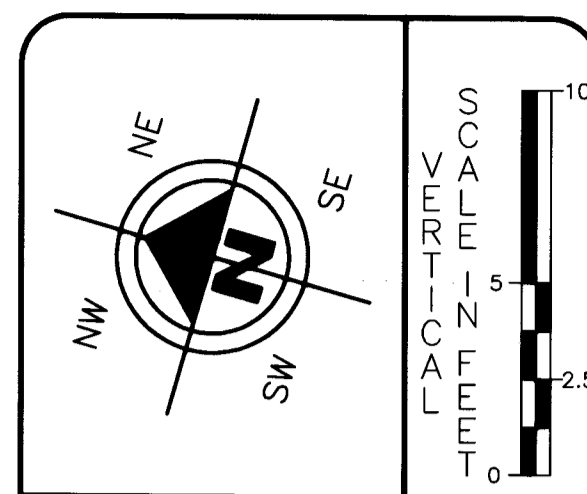
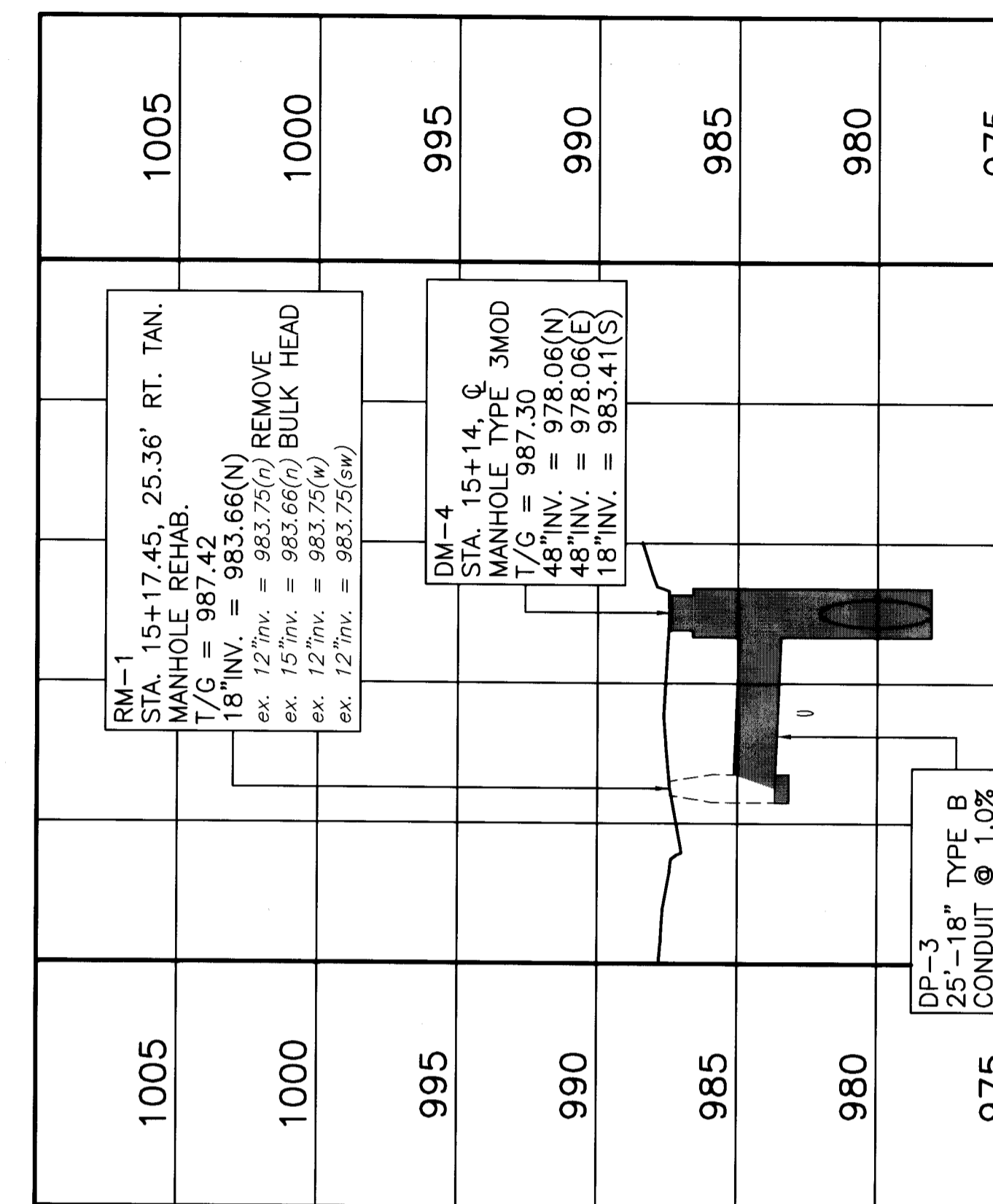
ACCOUNT NUMBER

07SM01

3

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10



<i>DRAWN BY:</i> FPW	<i>CHECKED BY:</i> KAD
<i>DATE:</i> SEPT, 2007	<i>DATE:</i> SEPT, 2007

***Keuper Storm Sewer Relocation***  
Sewer Plan and Profile Sta. 11+00 to Sta. 16+00

Storm Sewer Plan and Profile Sta. 11+00 to Sta. 16+00  
City of Massillon  
Stark County, Ohio

City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.

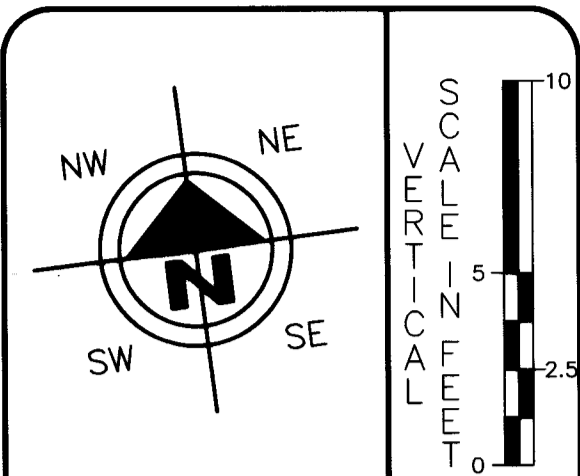
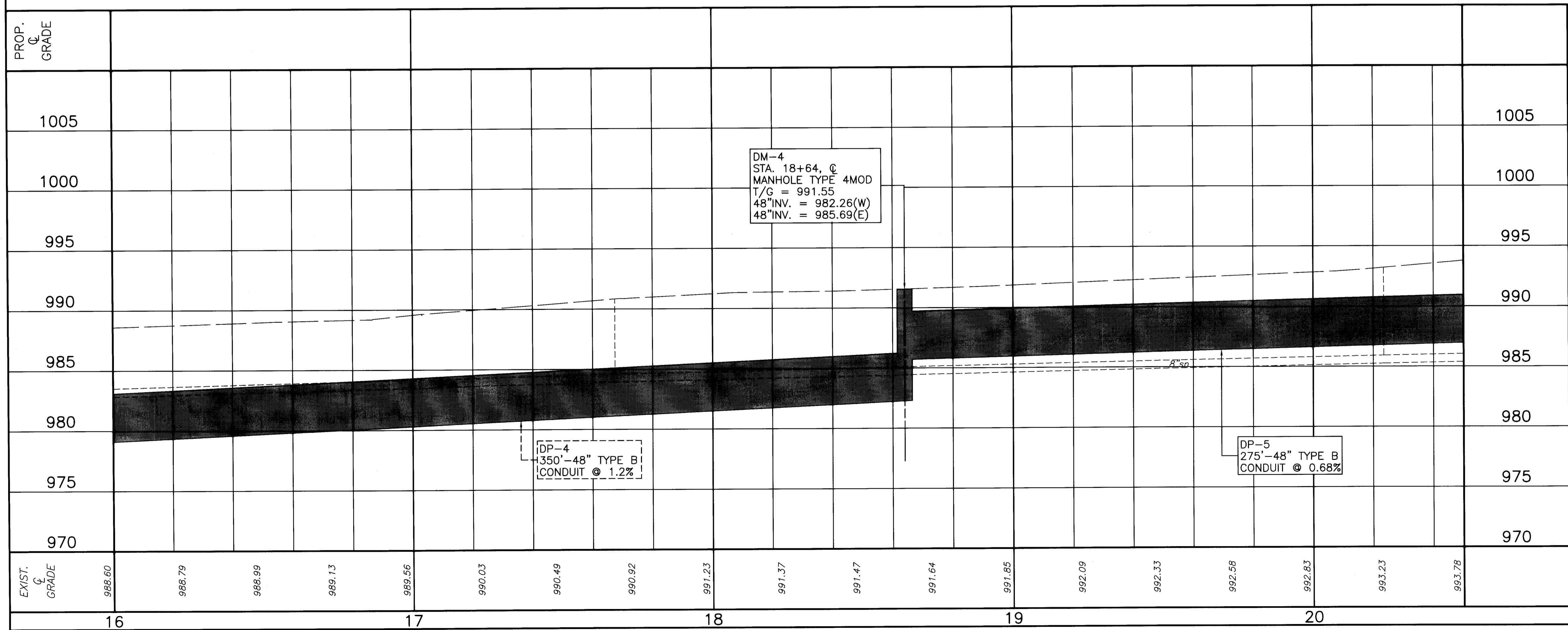
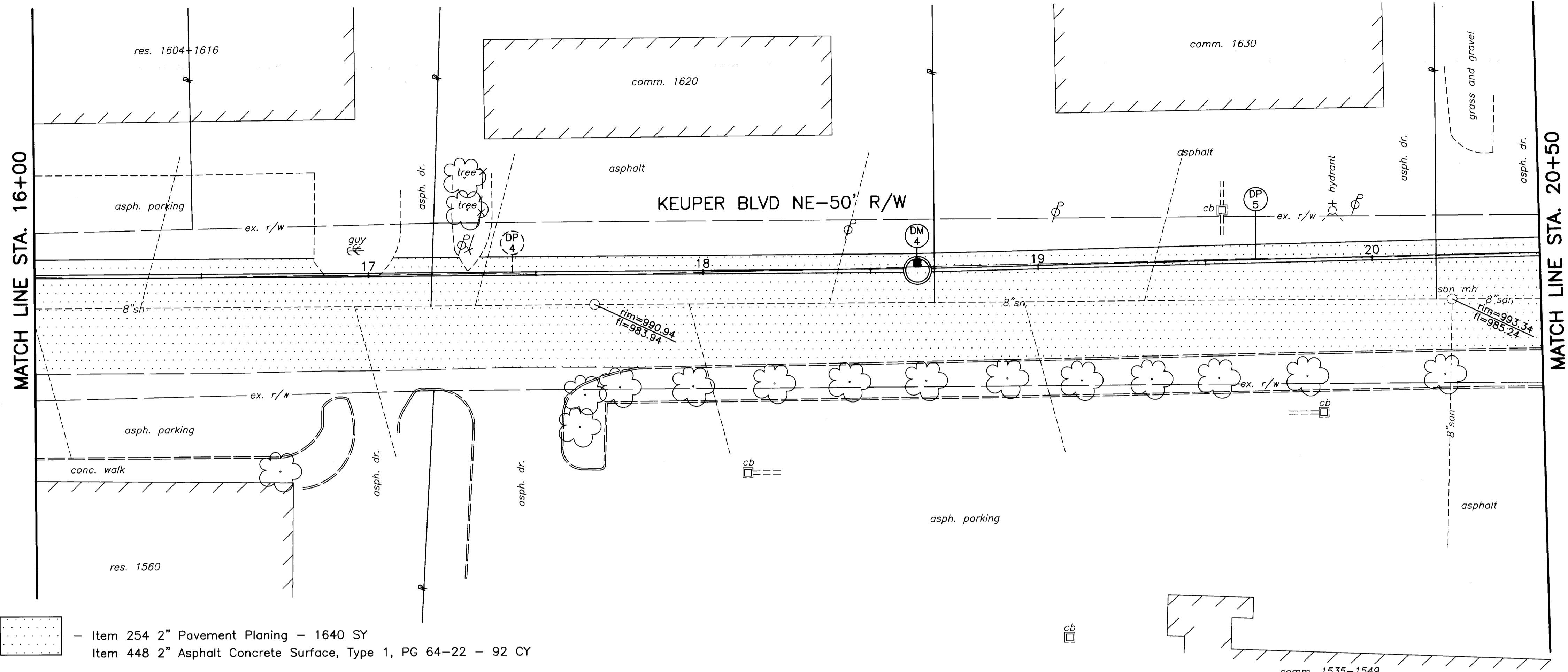


REVISIONS:

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FILE NAME:  
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ACCOUNT NUMBER
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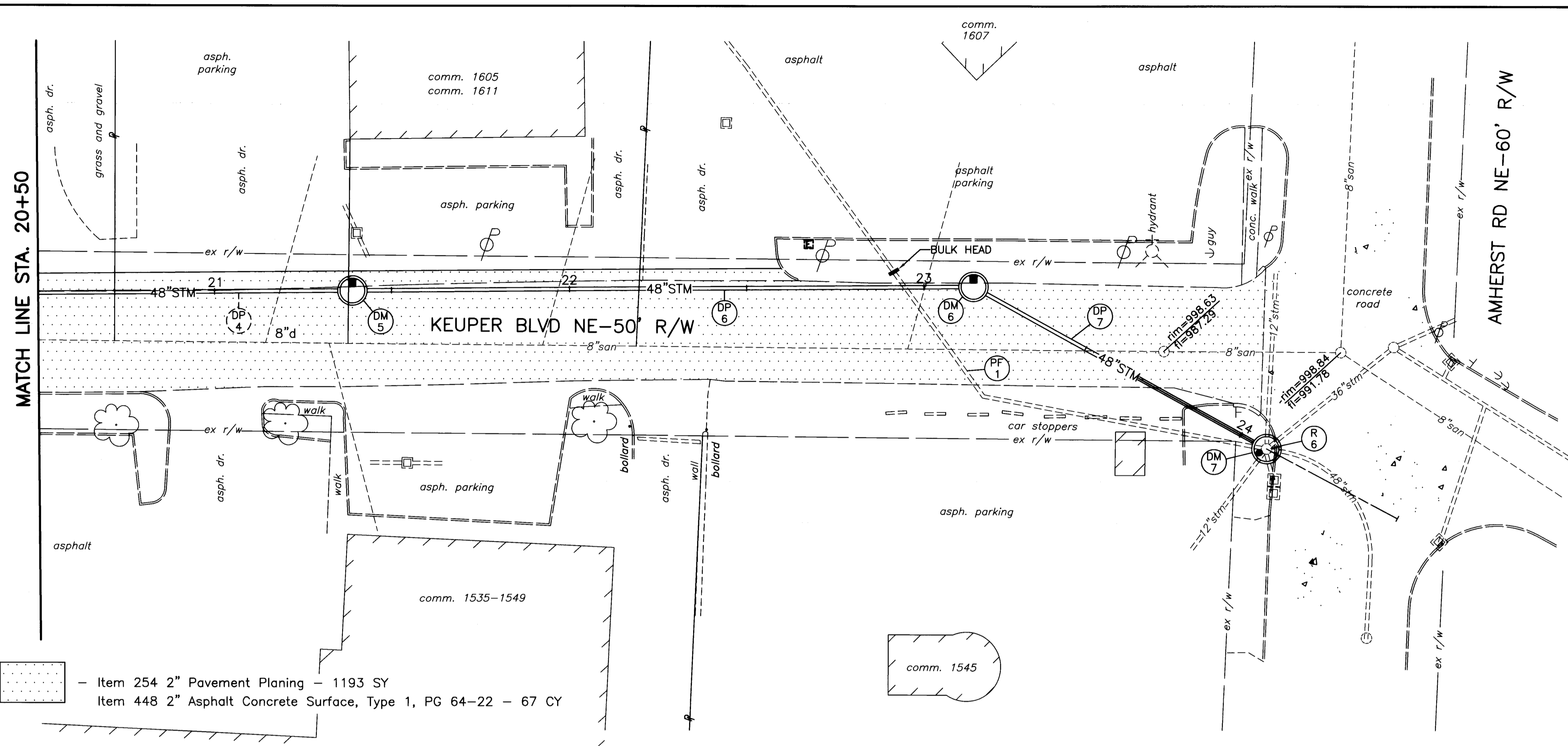
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FPW	KAD
DATE:	DATE:
SEPT, 2007	SEPT, 2007

# **Keuper Storm Sewer Relocation** Storm Sewer Plan and Profile Sta. 16+00 to Sta. 20+50 City of Massillon Stark County, Ohio

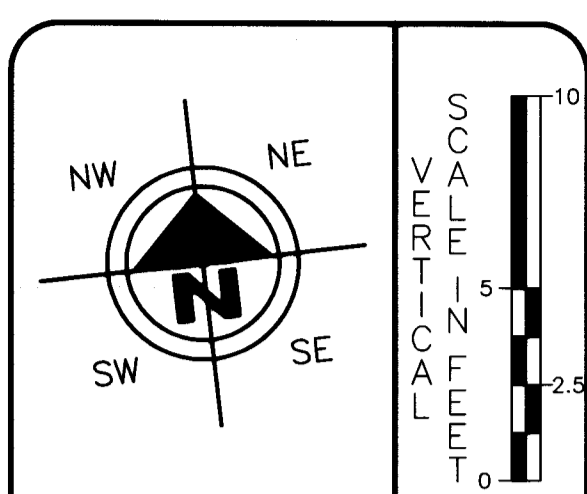
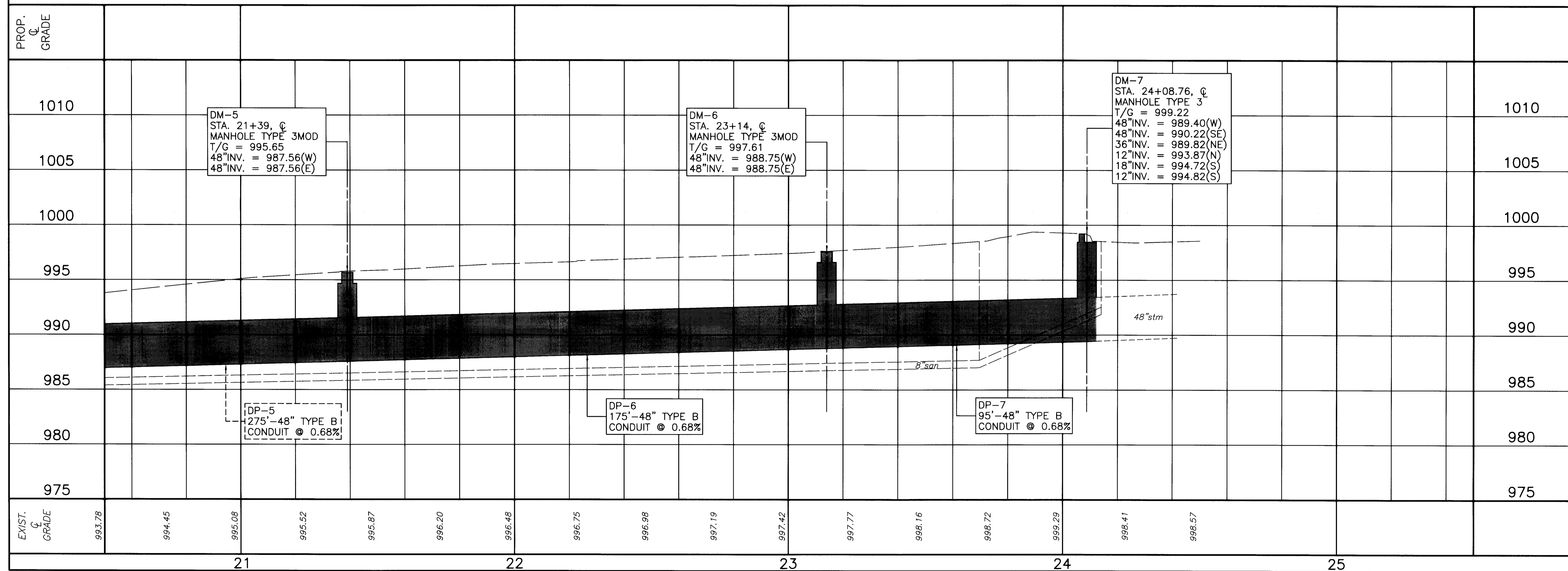


REVISIONS:	
DATE	DESCRIPTION

FILE NAME:
07SM0105.DWG
ACCOUNT NUMBER
07SM01



- Item 254 2" Pavement Planing - 1193 SY  
 Item 448 2" Asphalt Concrete Surface, Type 1, PG 64-22 - 67 CY



HORIZONTAL SCALE IN FEET

DRAWN BY: FPW  
 CHECKED BY: KAD  
 DATE: SEPT, 2007  
 DATE: SEPT, 2007

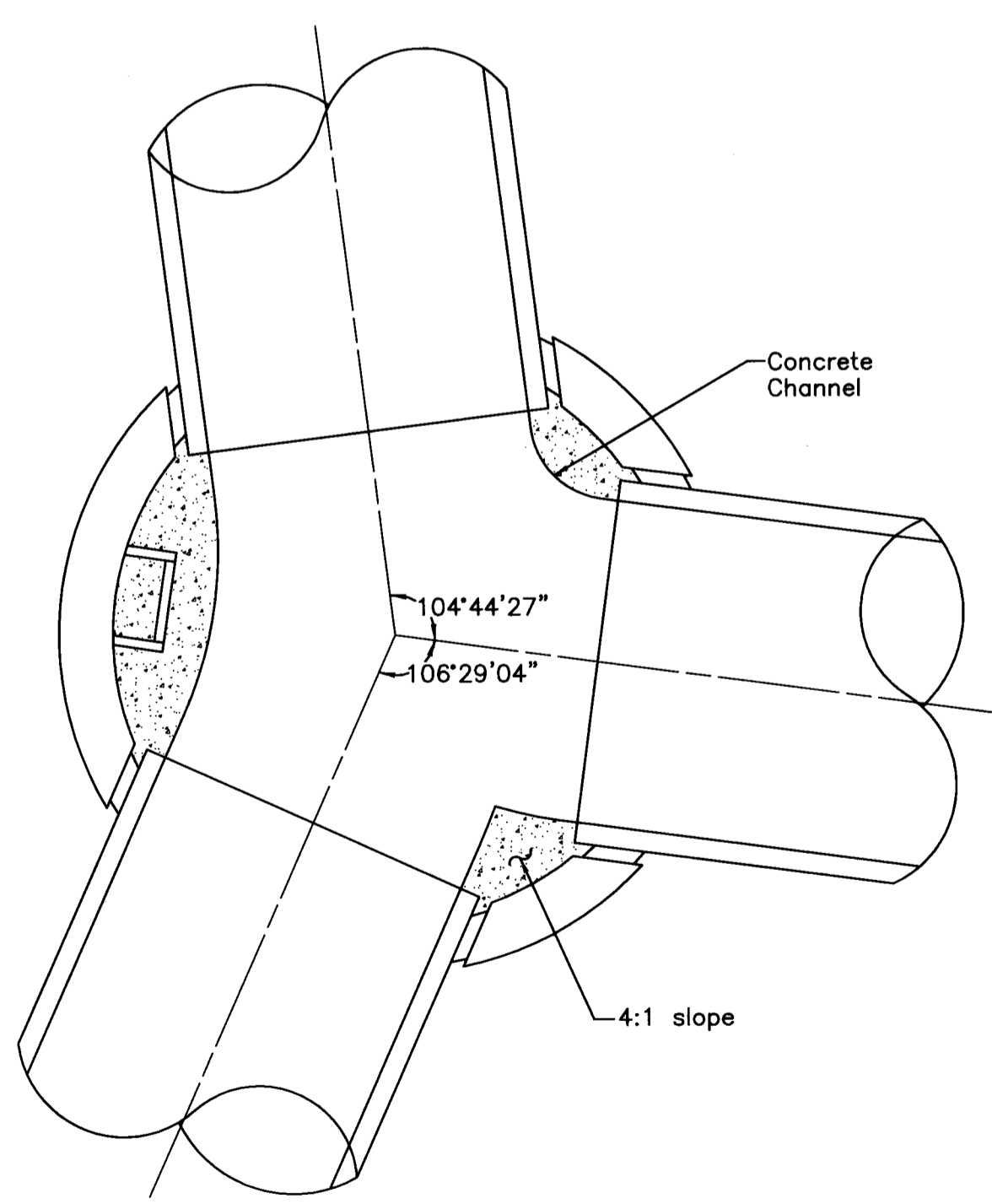
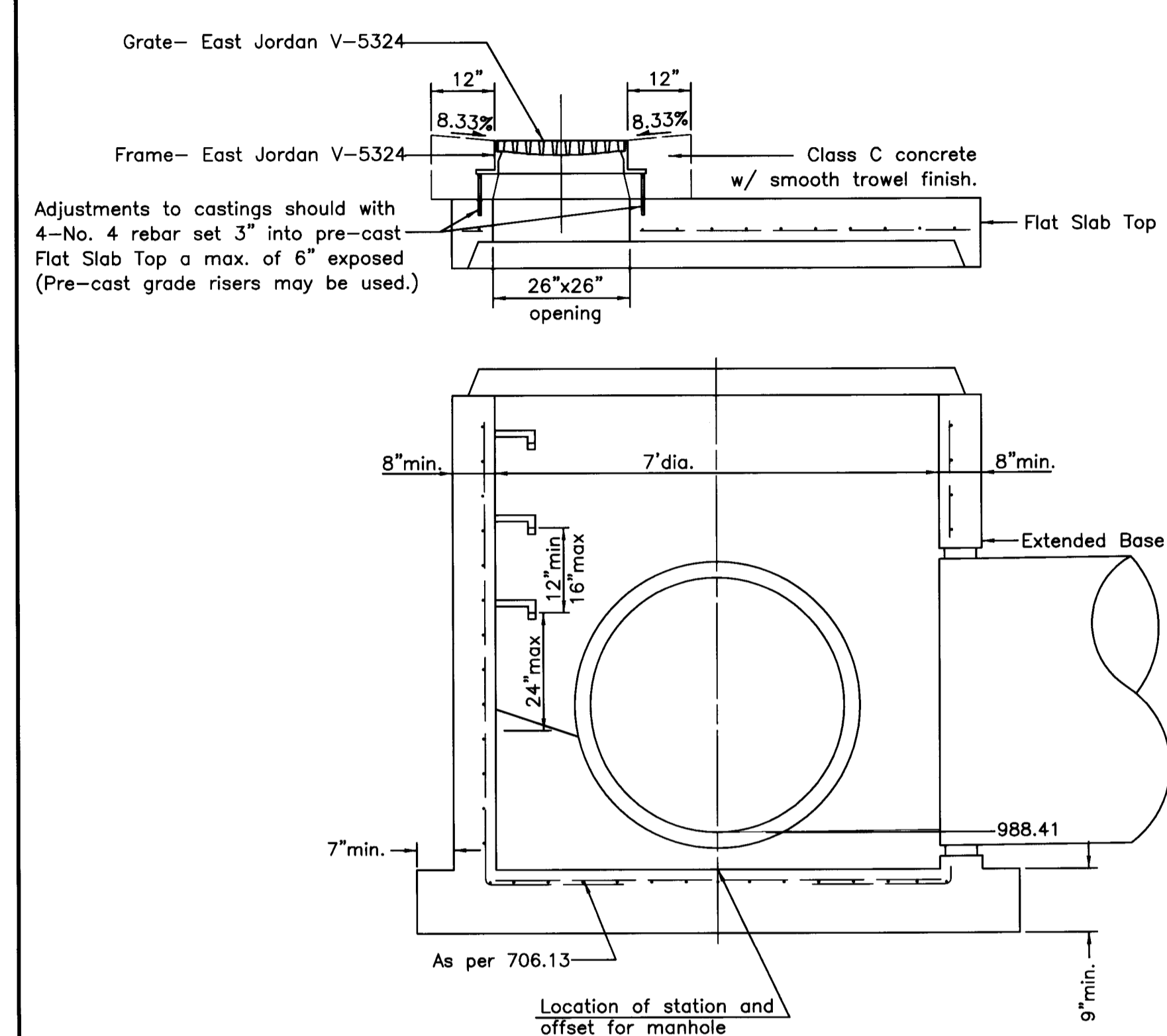
# Keuper Storm Sewer Relocation

Storm Sewer Plan and Profile Sta. 20+50 and Sta. 25+50  
City of Massillon  
Stark County, Ohio

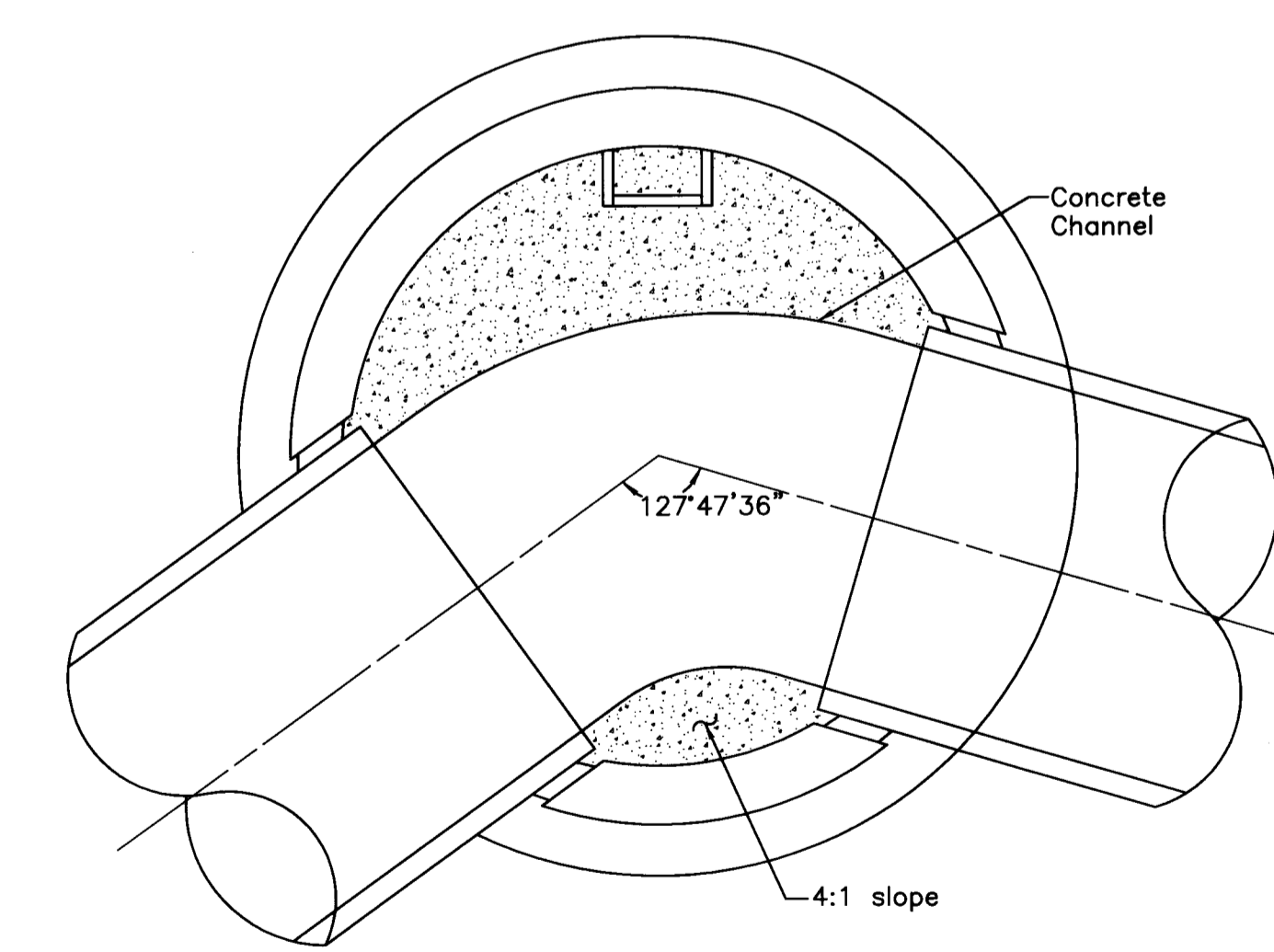
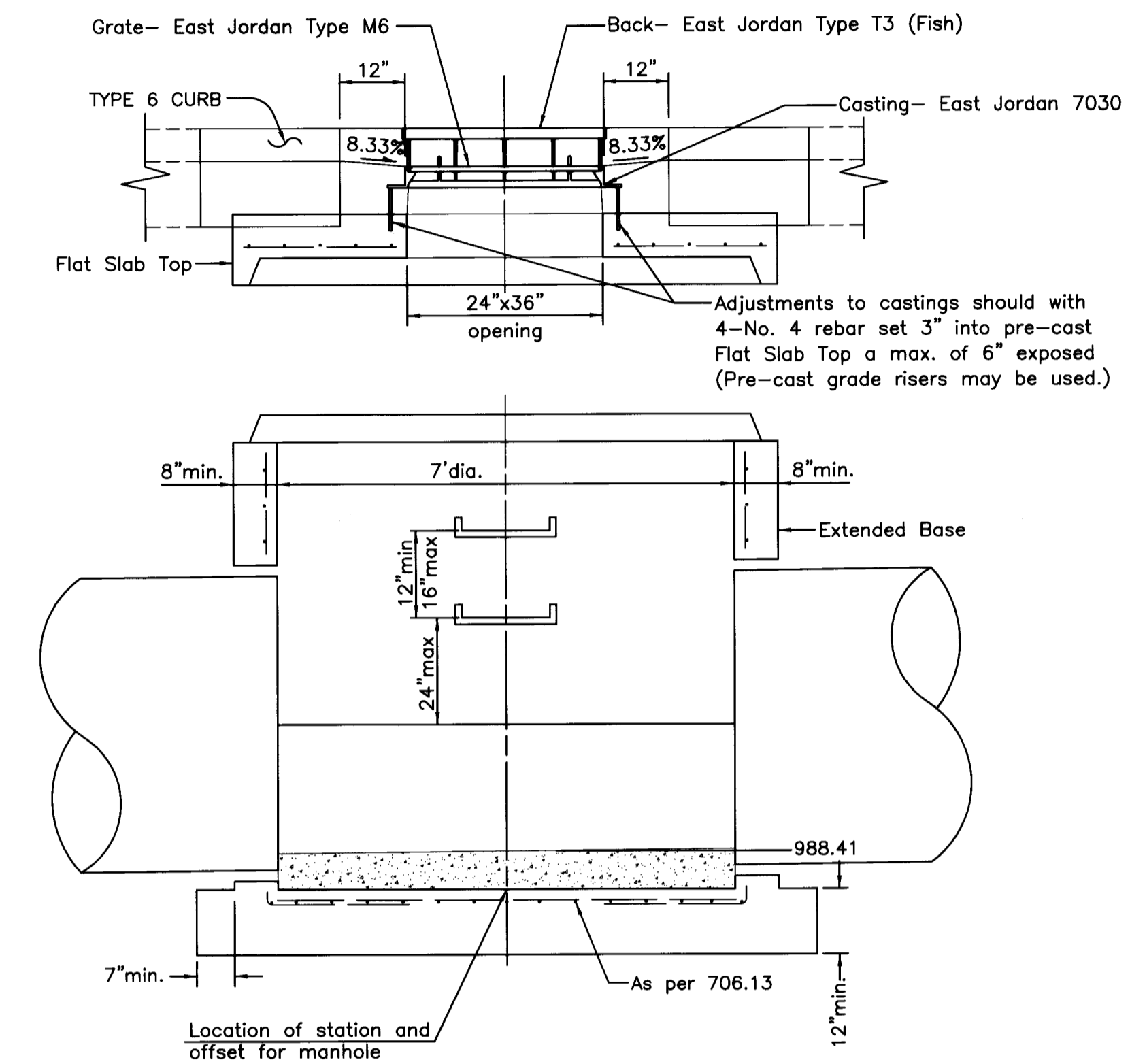


REVISIONS:	
DATE	DESCRIPTION

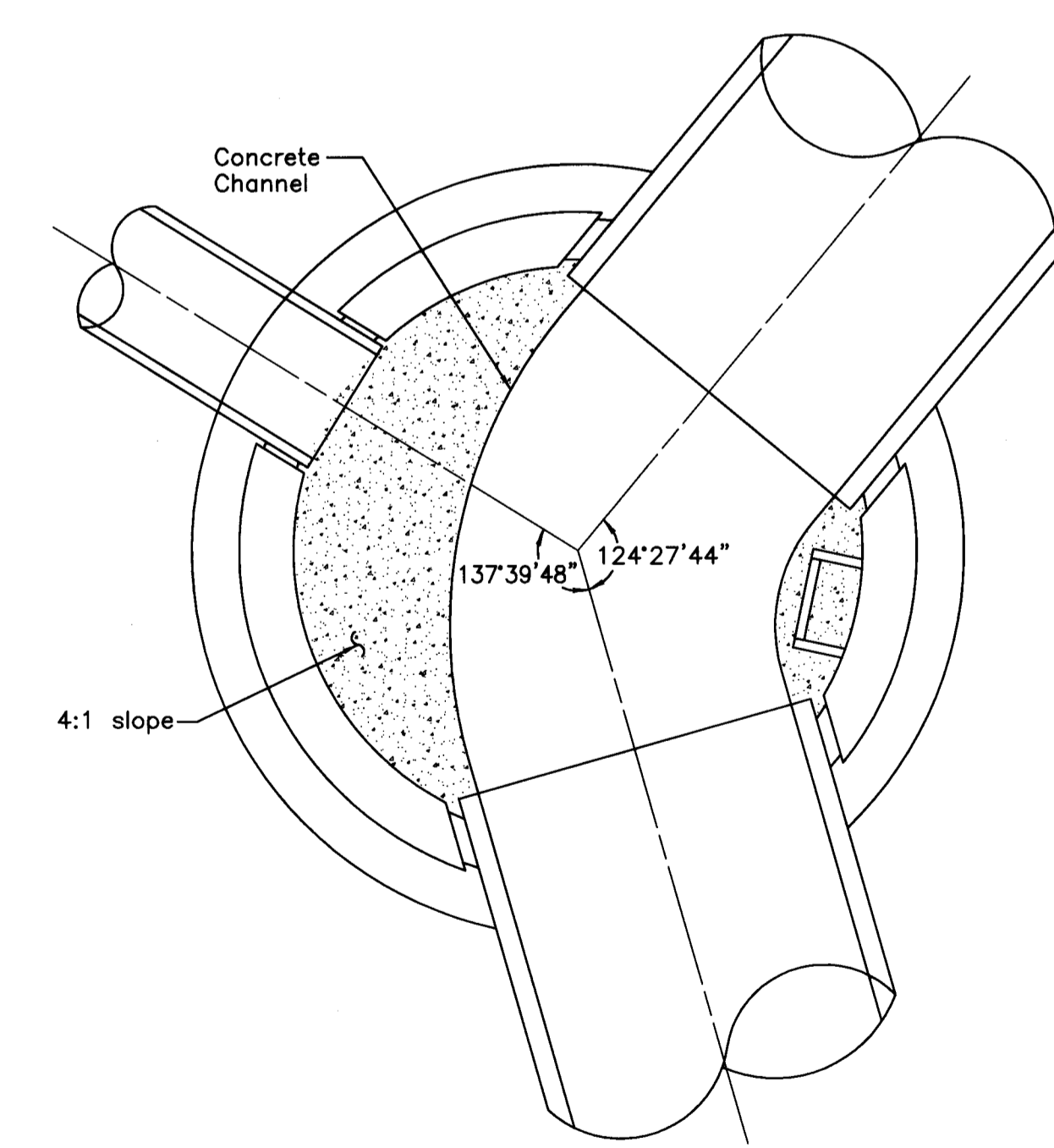
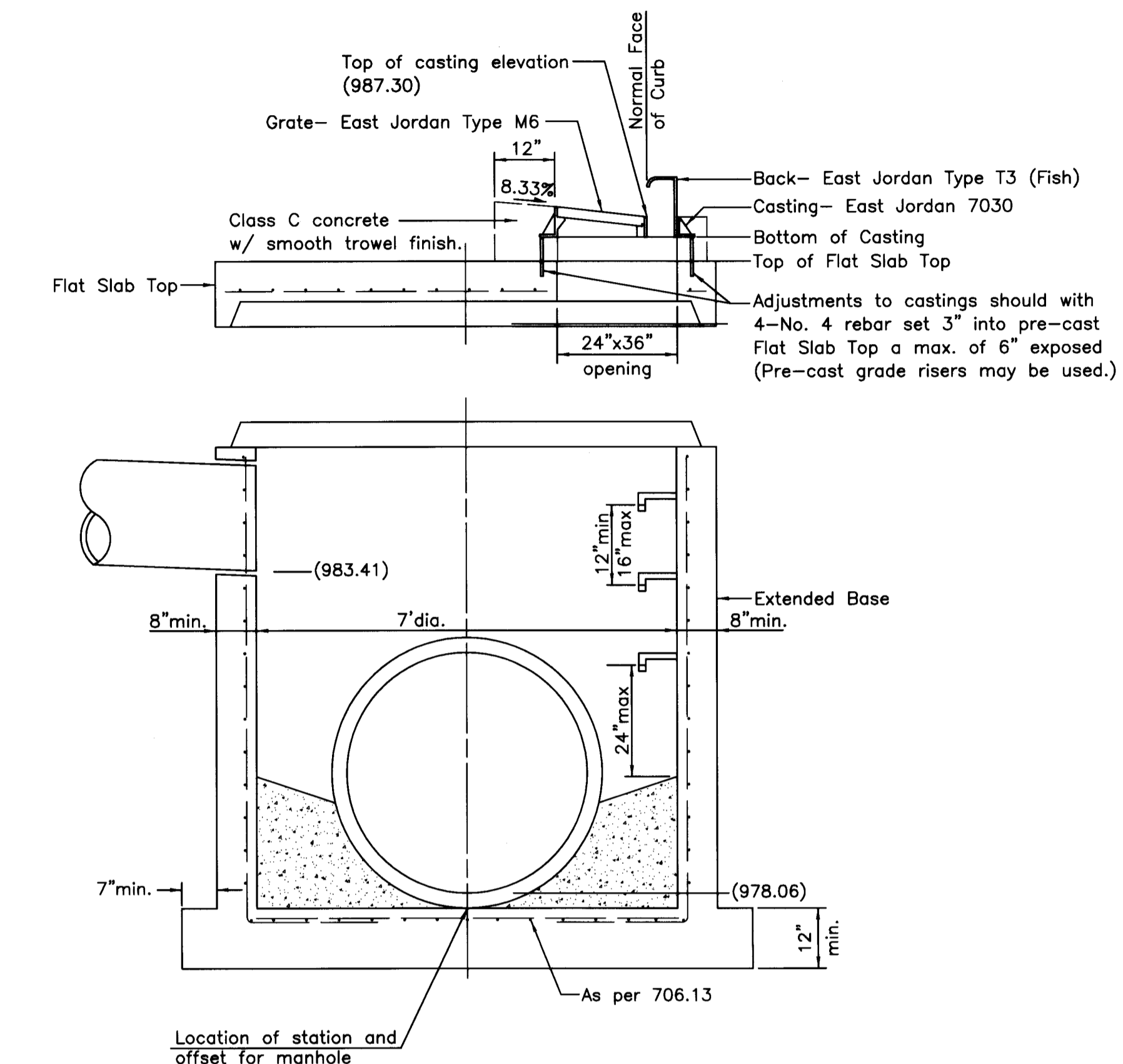
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 ACCOUNT NUMBER: 07SM01



**DM-1**  
MASS MOD. 3



**DM-2**  
MASS MOD. 4



**DM-3**  
MASS MOD. 4

SCALE IN FEET  
 0 1 2 3 4

HORIZONTAL SCALE IN FEET  
 2 1 0 1 2

DRAWN BY:  
FPW  
DATE:  
SEPT, 2007

CHECKED BY:  
KAD  
DATE:  
SEPT, 2007

**Keuper Storm Sewer Relocation**

Manhole Details DM-1 thru DM-3

City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
Mayor

**MASSILLON**  
Means More!

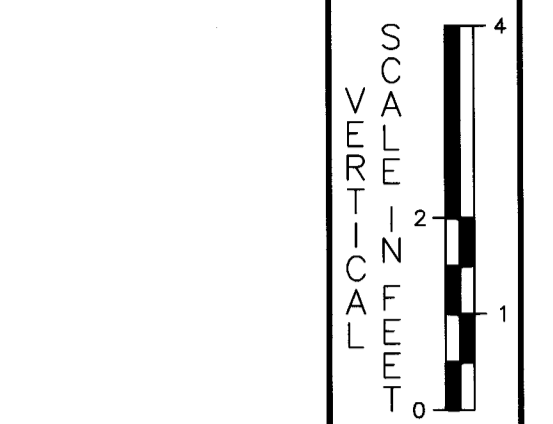
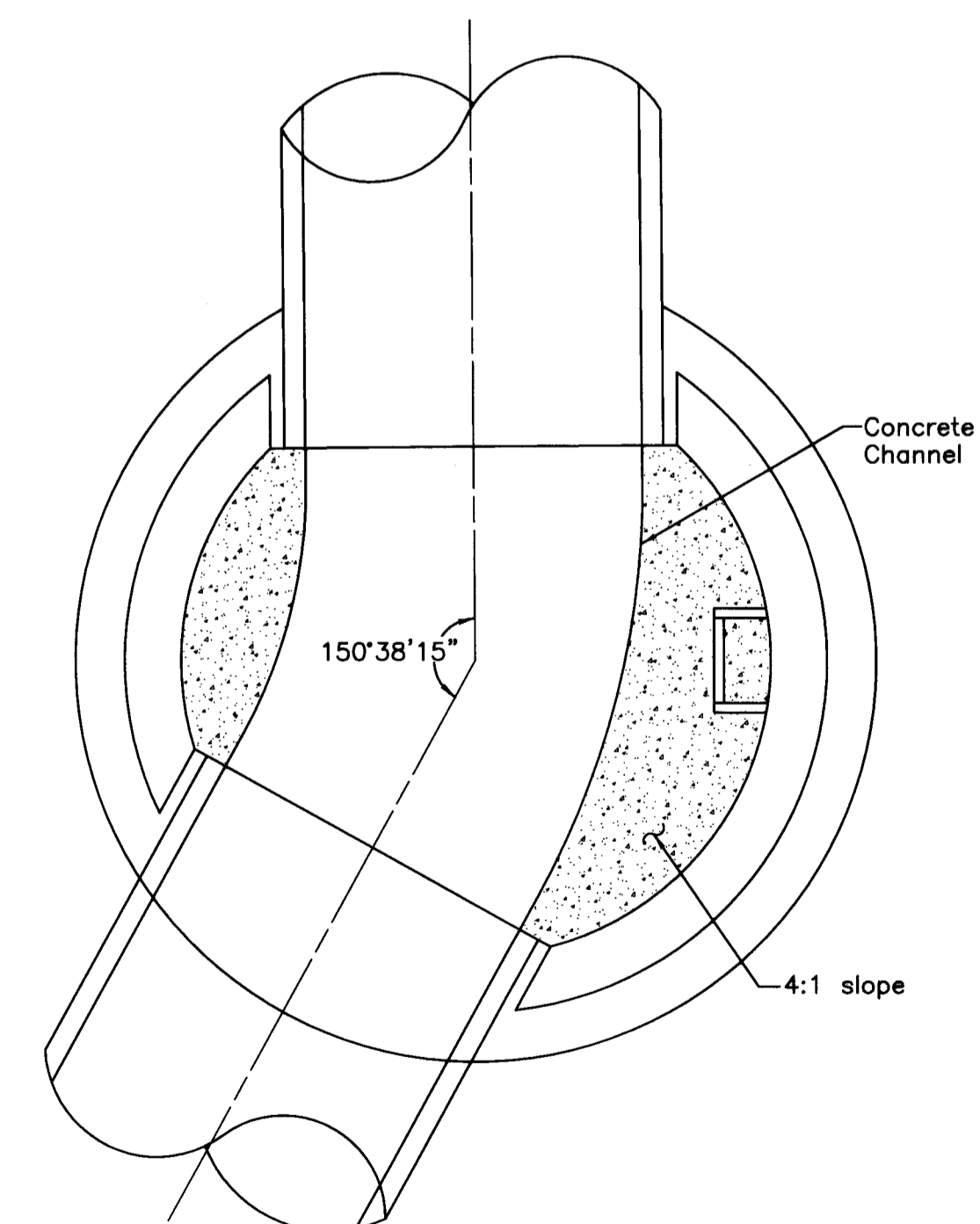
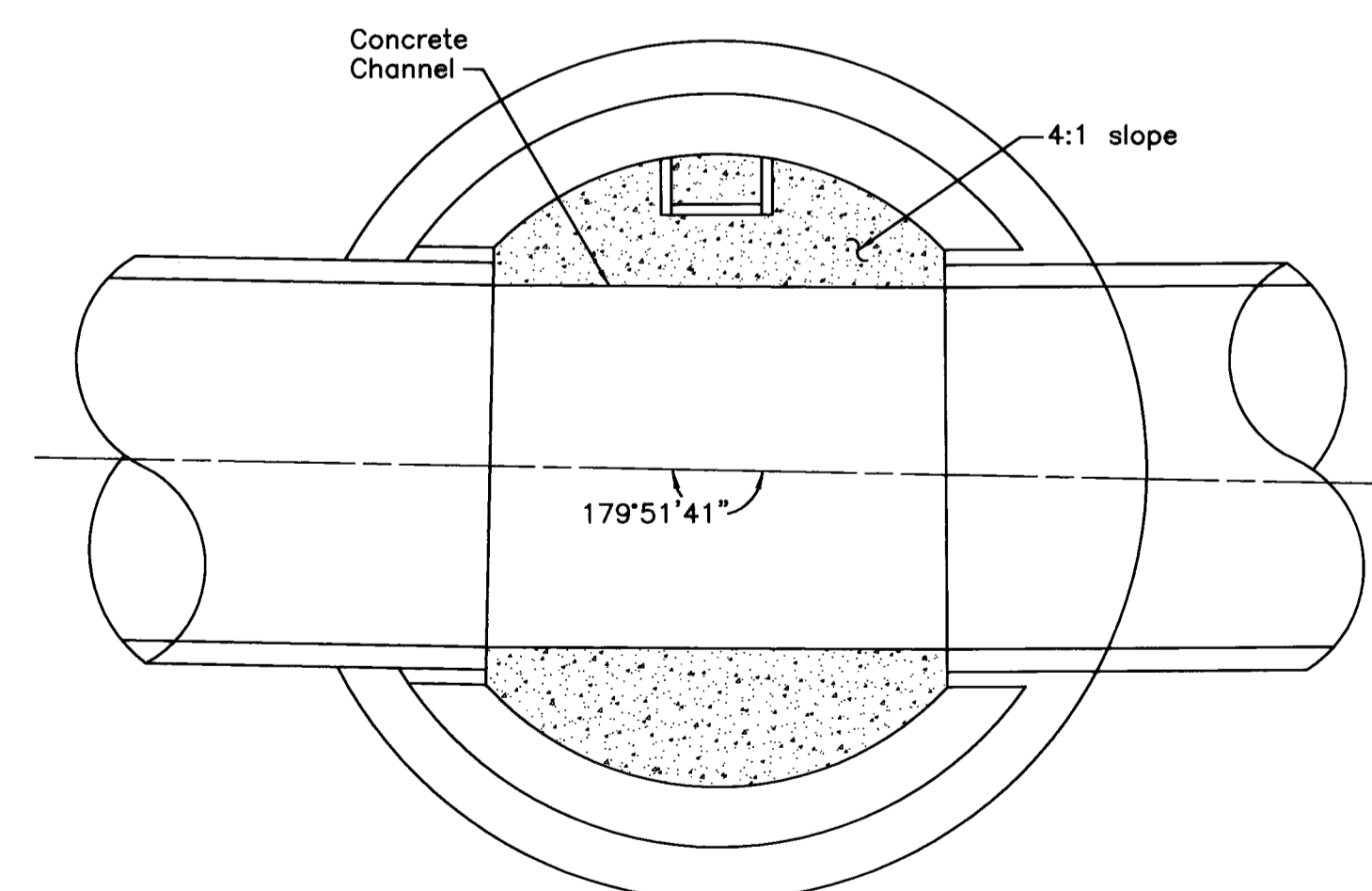
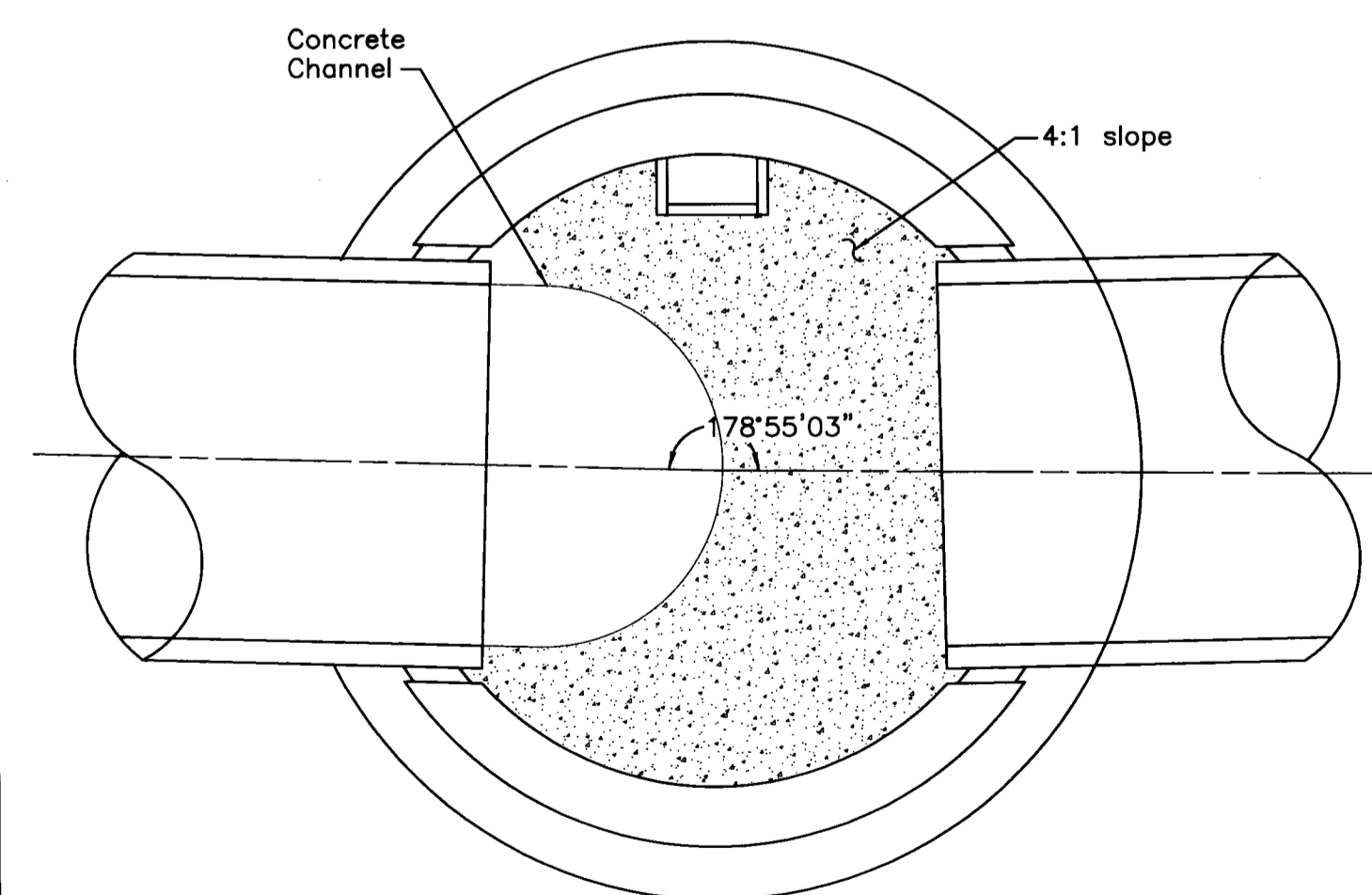
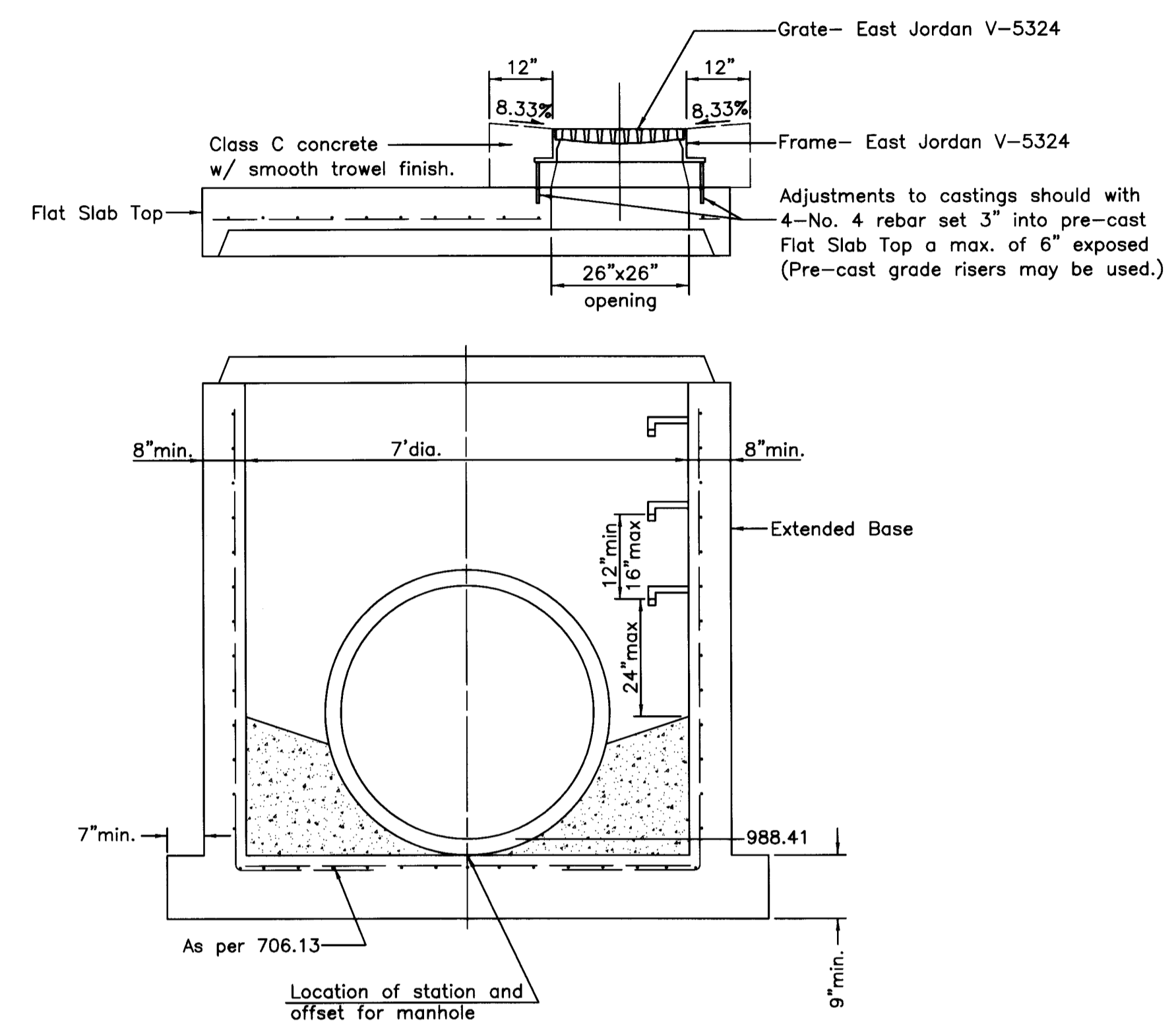
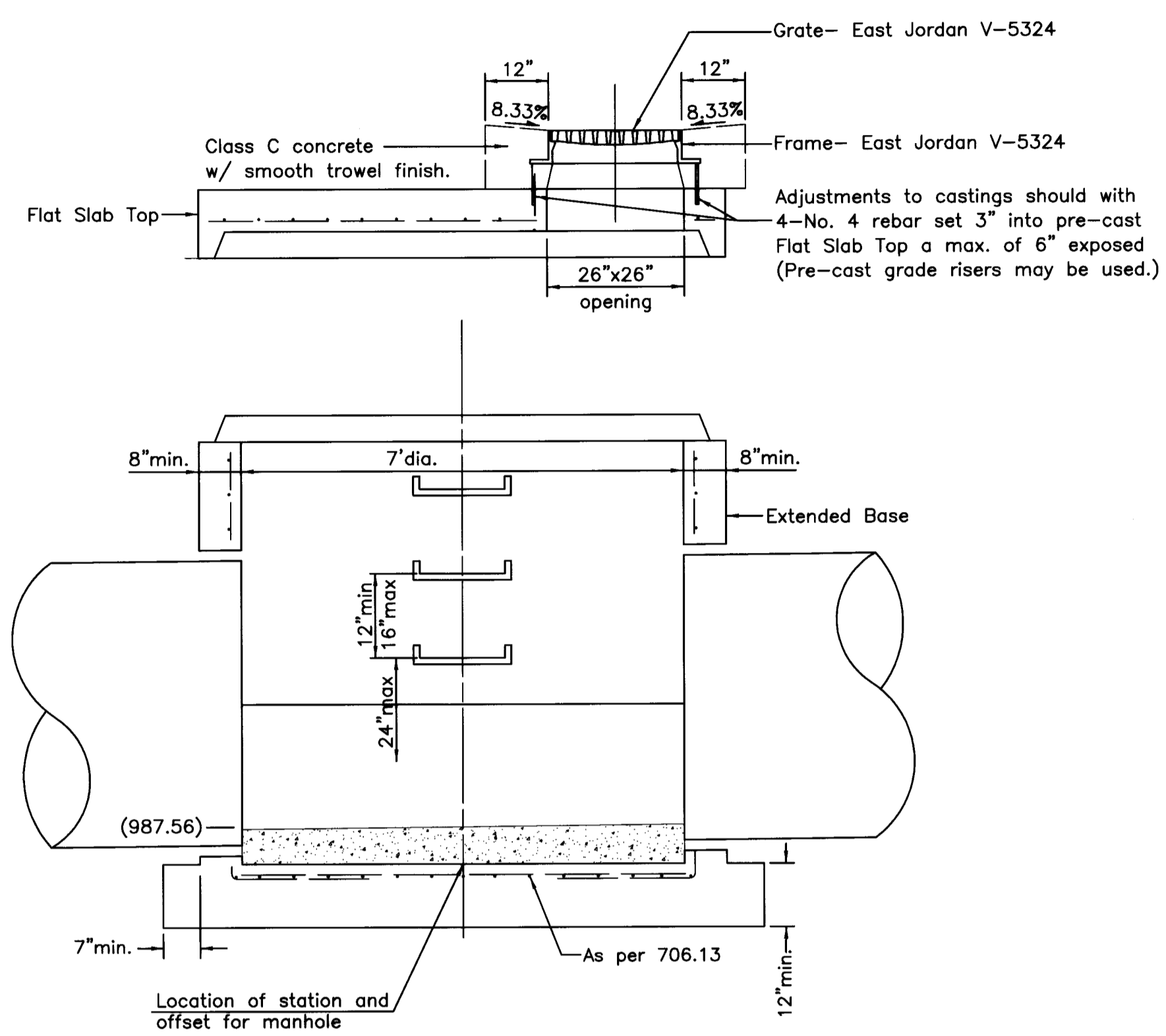
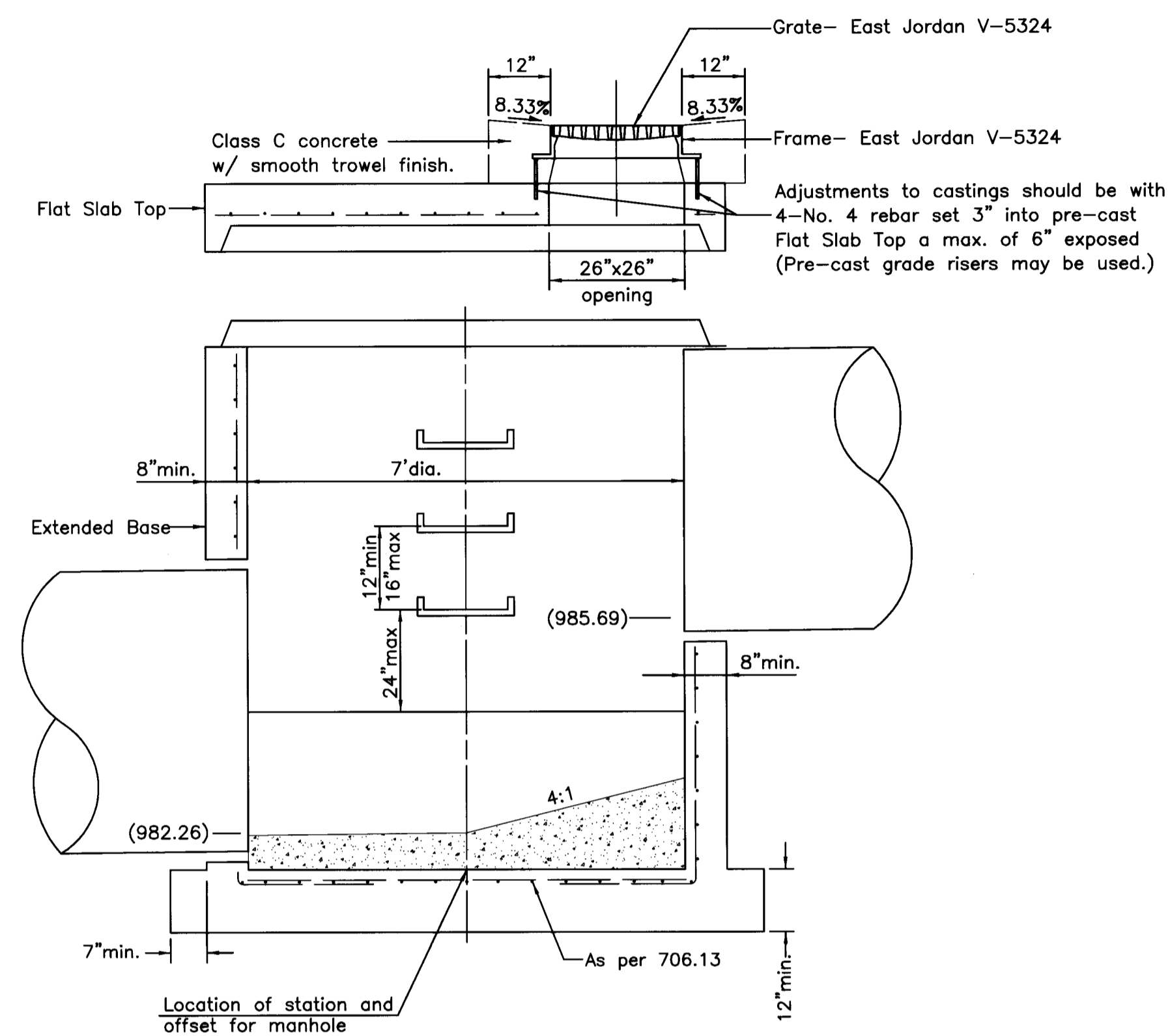
REVISIONS:	
DATE	DESCRIPTION

ELECTRONIC FILE NAME:  
01SM0707.DWG

ACCOUNT NUMBER:  
01SM07

7

10



<b>DRAWN BY:</b> FPW	<b>CHECKED BY:</b> KAD
<b>DATE:</b> SEPT, 2007	<b>DATE:</b> SEPT, 2007

*Keuper Storm Sewer Relocation*  
Storm Sewer Details DM-4 thru DM-6  
City of Massillon  
Stark County, Ohio

Storm Sewer Details DM-4 thru DM-6  
City of Massillon  
Stark County, Ohio

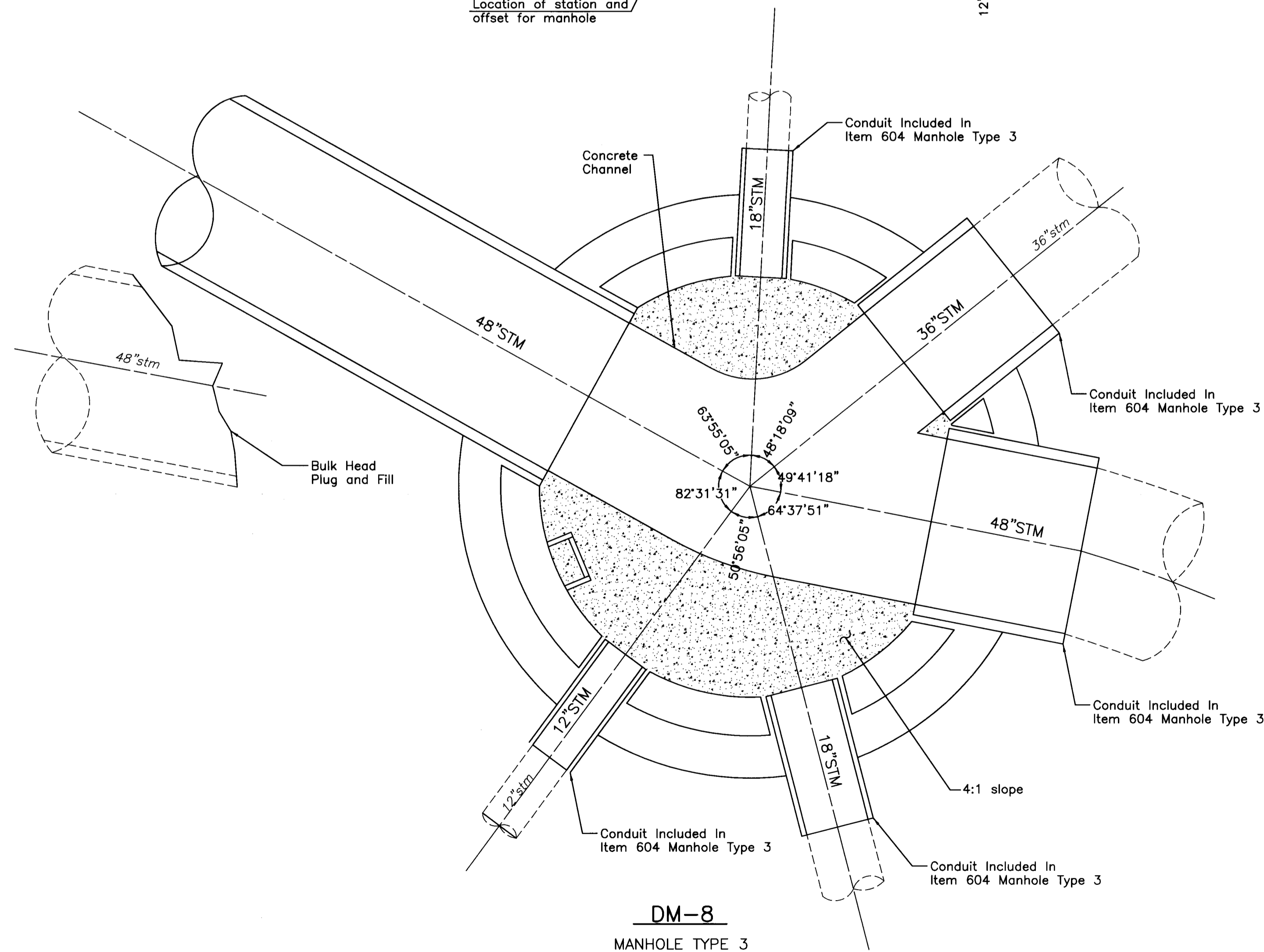
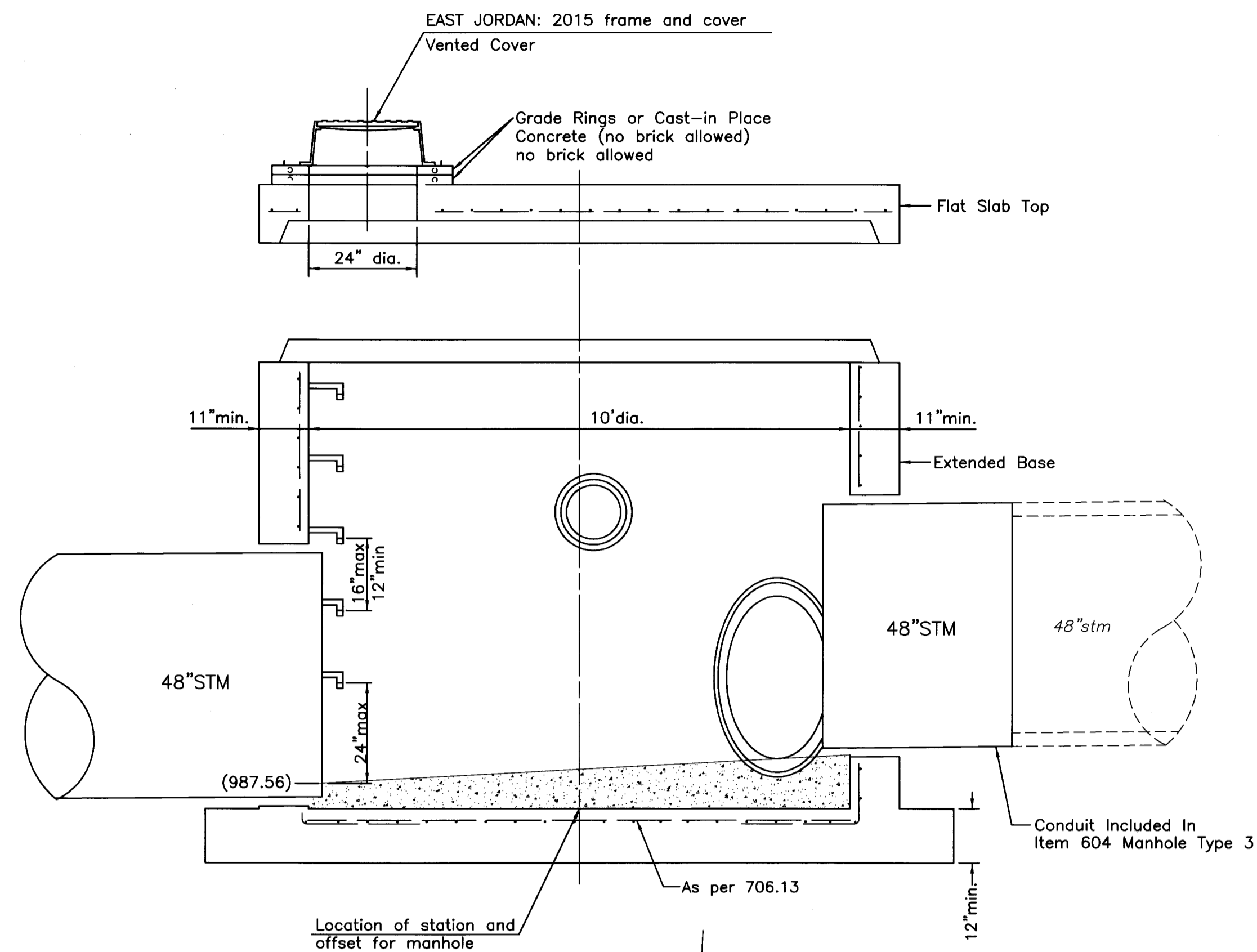
City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
Mayor

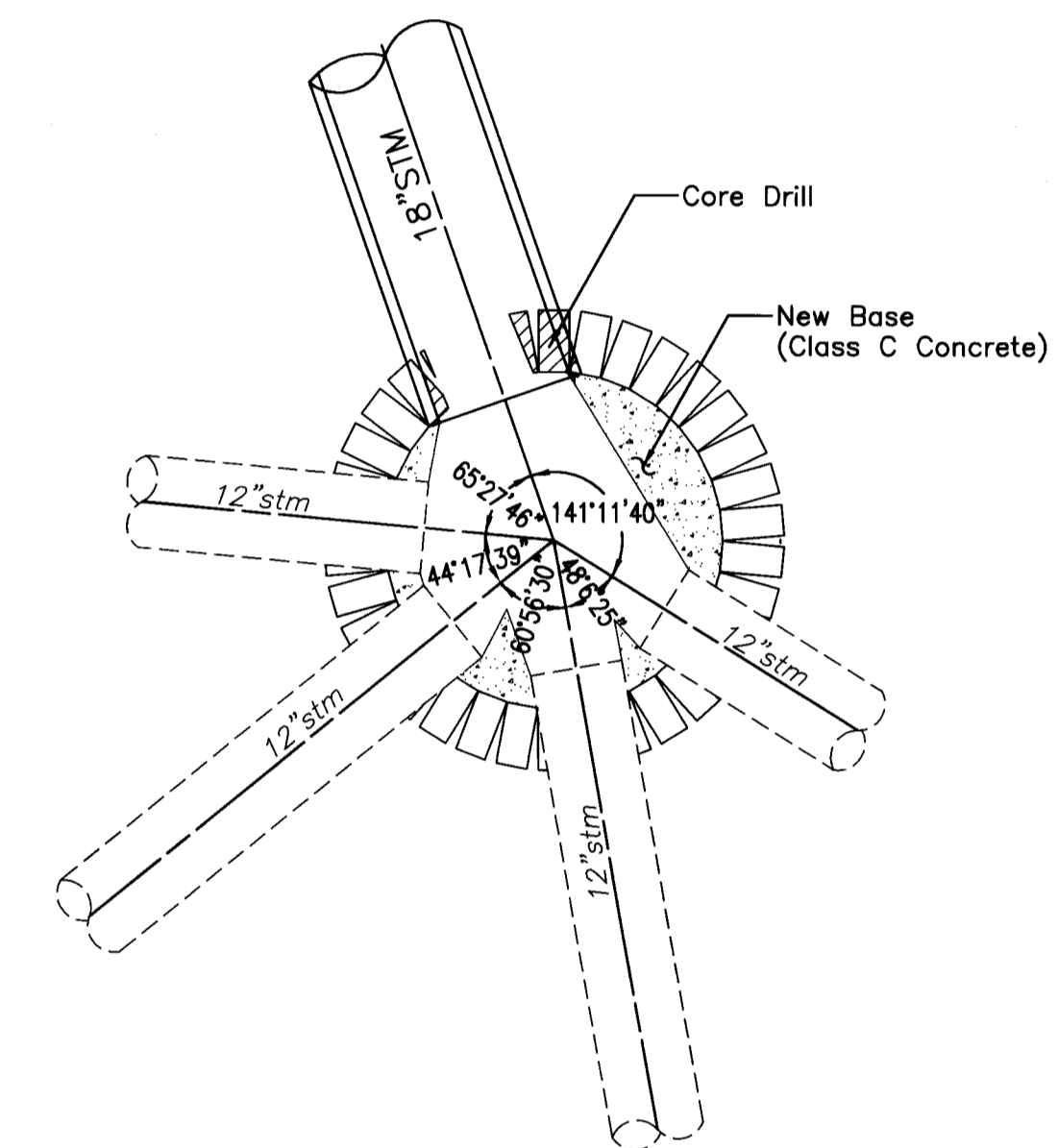
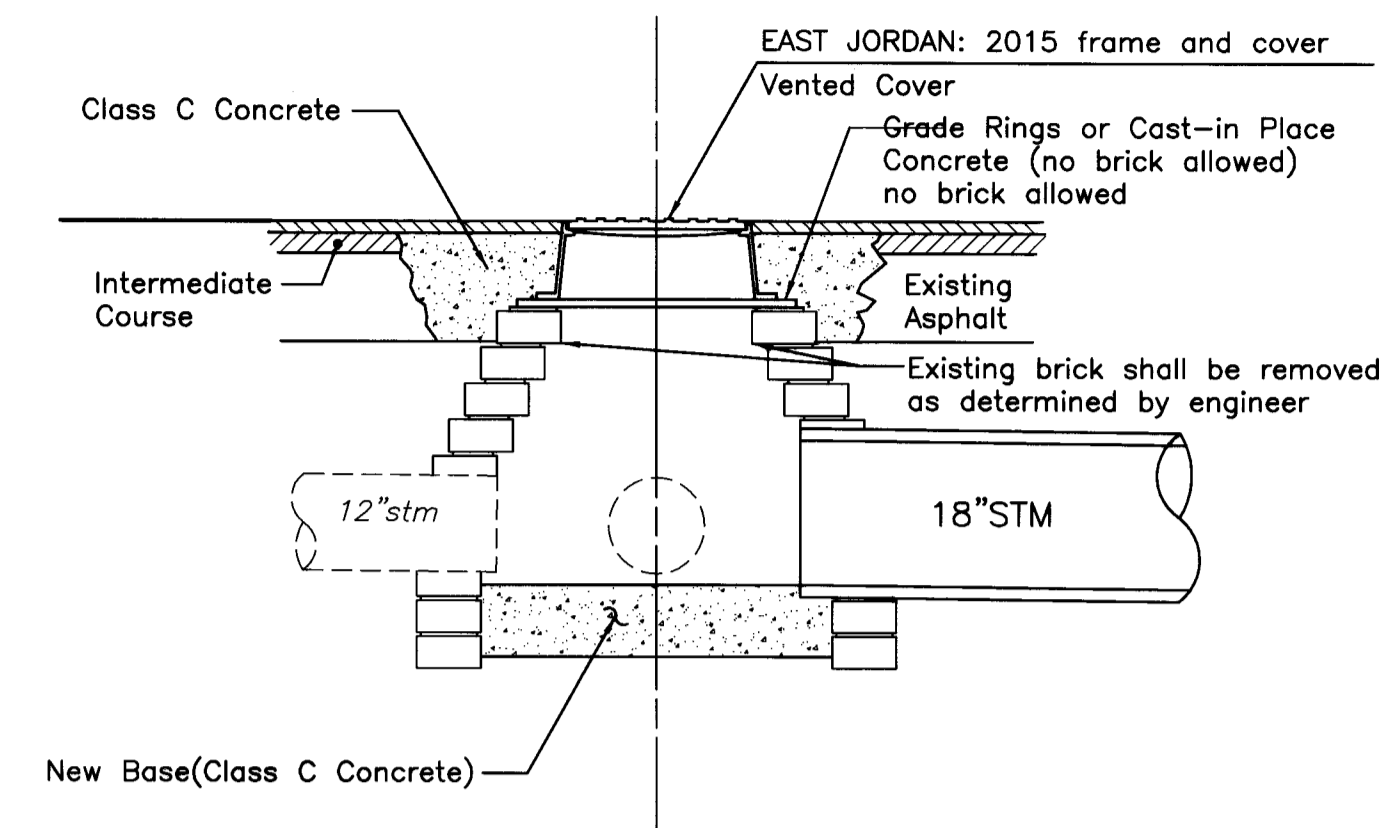
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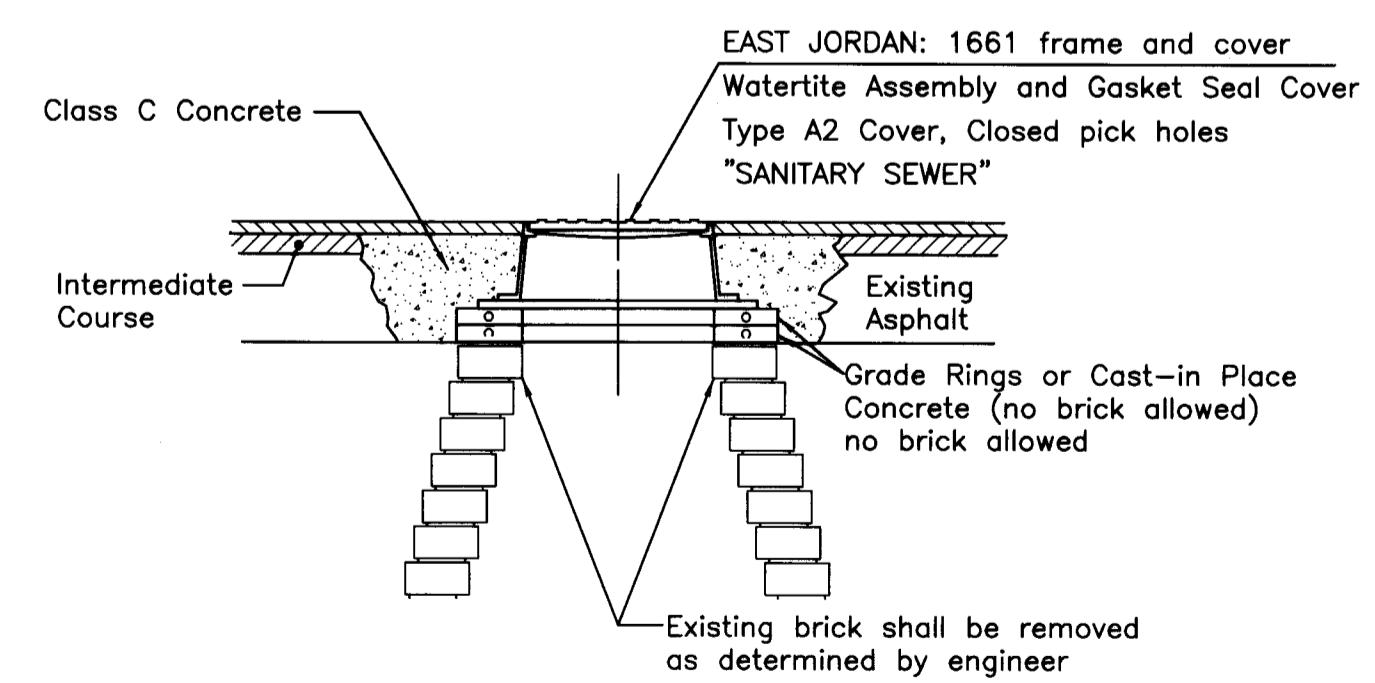
ACCOUNT NUMBER
01SM07



DM-8  
MANHOLE TYPE 3



RM-1  
MASSILLON MANHOLE REHAB.  
WORK SHALL INCLUDED ALL REMOVAL AND DISPOSAL OF EXISTING



SANITARY SEWER MANHOLE REHAB.  
WORK SHALL INCLUDED ALL REMOVAL AND DISPOSAL OF EXISTING

SCALE  
VERTICAL  
SCALE IN FEET  
0 1 2 4

HORIZONTAL  
SCALE IN FEET  
0 1 2

DRAWN BY: FPW  
CHECKED BY: KAD  
DATE: SEPT, 2007  
DATE: SEPT, 2007

**Keuper Storm Sewer Relocation**  
Storm Sewer Details AM-1 and DM-7  
City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
**Massillon**  
*Means More!*

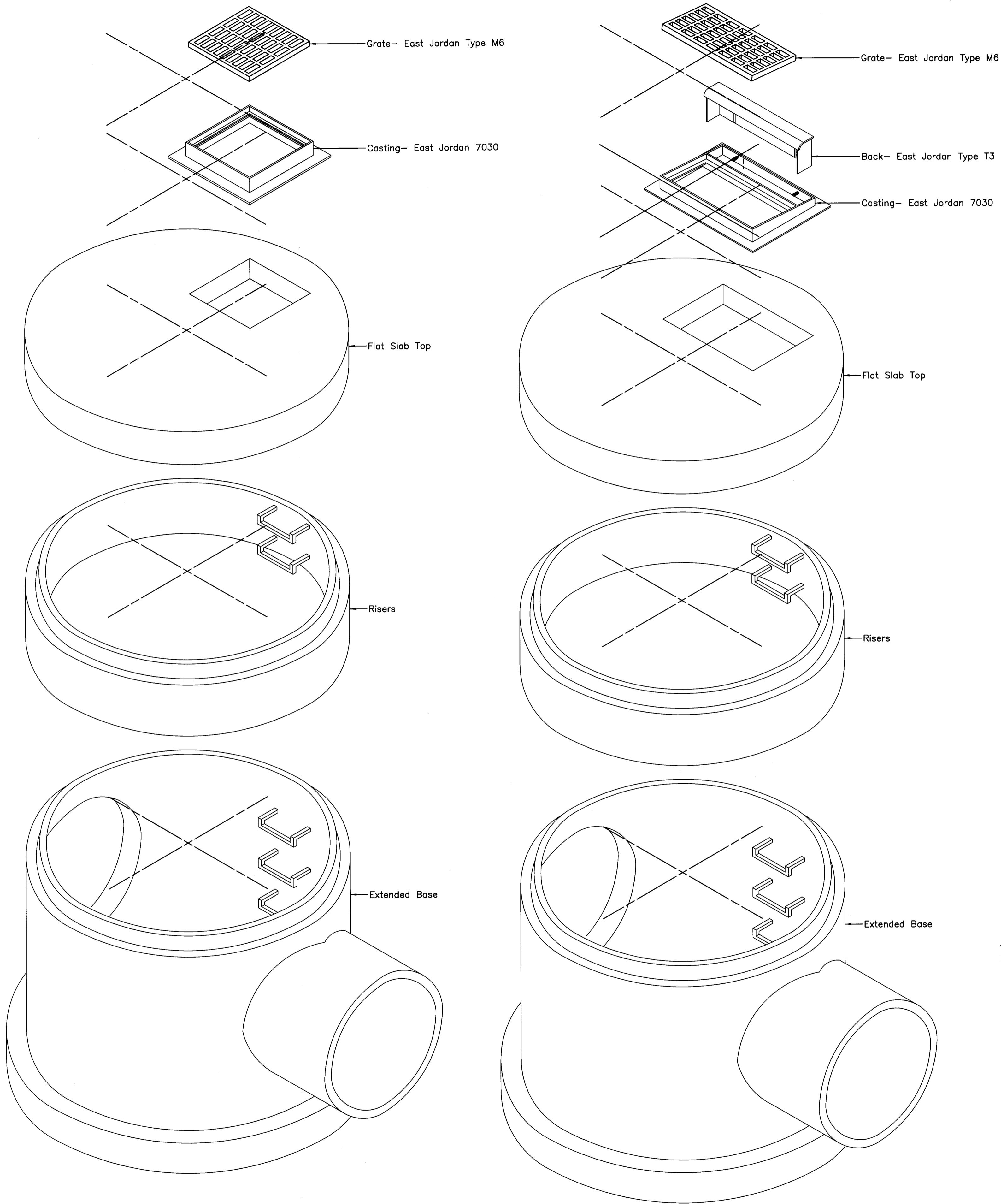
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DATE	DESCRIPTION

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ACCOUNT NUMBER:  
01SM07

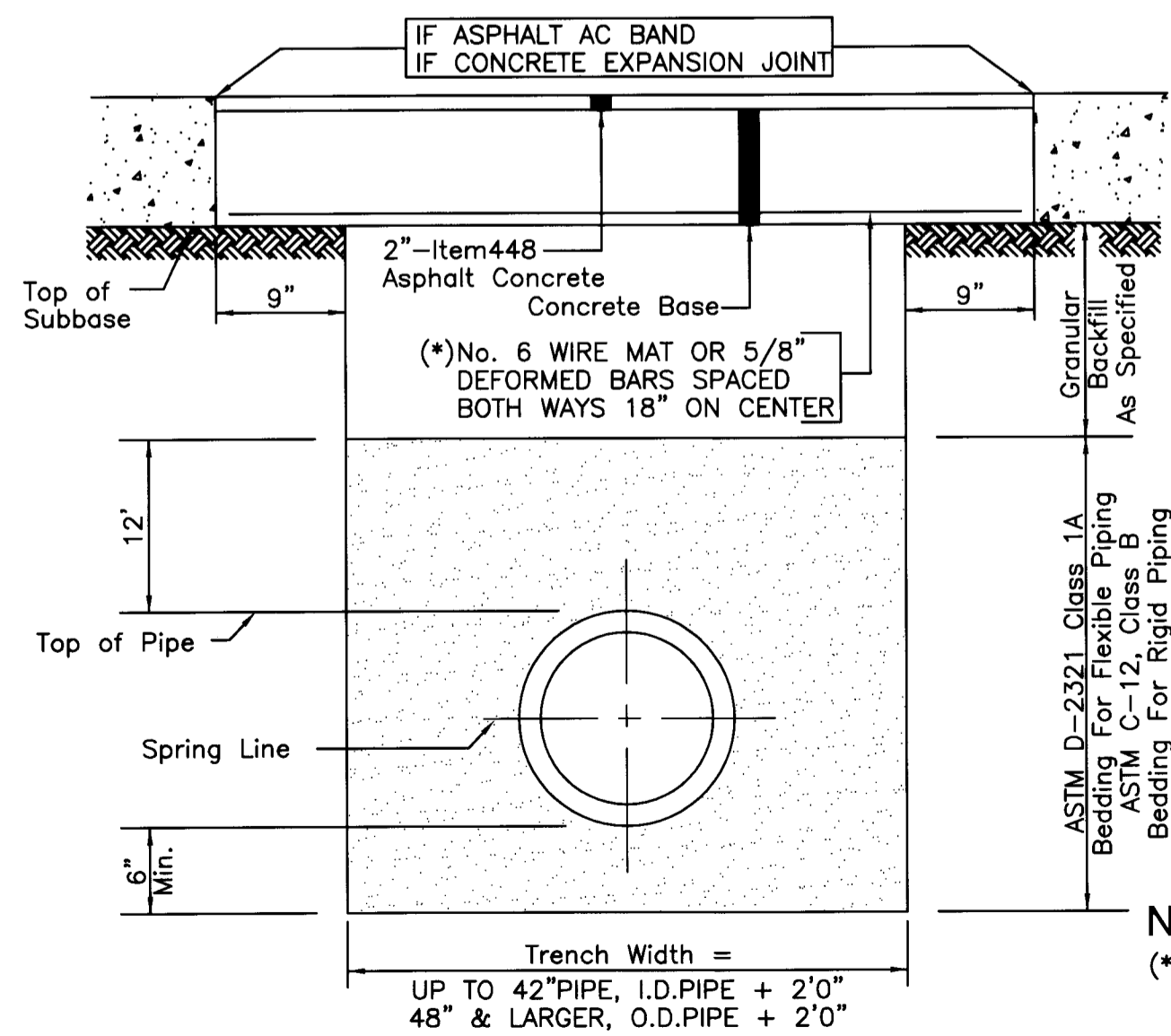
9

10



MASS MOD. 3

MASS MOD. 4



TRENCH DETAIL

SHEET NUMBER		ITEM	GRAND TOTAL	UNIT	DESCRIPTION
2	3				ROADWAY
	4				
	5				
	6				
		202	4	EACH	MANHOLE AND CATCH BASIN REMOVED
		202	110	LF	PIPE REMOVED
		202	220	LF	PLUG AND FILL
		SPEC	500	LF	PIPE CLEANOUT
					EROSION CONTROL
		207SPEC	1	LUMP	EROSION CONTROL
		653	1	LUMP	TOPSOIL FURNISHED AND PLACED
		659SPEC	1	LUMP	SEEDING AND MULCHING
					PAVEMENT
		254	3887	SY	2" PAVEMENT PLANING
		301	1200	CY	TRENCH REPAIR
		407	389	GAL	TACK COAT
		448	216	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
		609	550	LF	CAST IN PLACE CONCRETE CURB - 6"x18"
					DRAINAGE
		603	25	LF	18" TYPE B CONDUIT, 707.33
		603	1059	LF	48" TYPE B CONDUIT, 707.33
		603	4	EACH	MASSILLON MOD 3
		603	2	EACH	MASSILLON MOD 4
		604	2	EACH	MASSILLON TYPE 3
		604	1	EACH	MASSILLON MANHOLE REHABILITATION (STORM)
		604	4	EACH	MASSILLON MANHOLE REHABILITATION (SANITARY)
					MAINTAINING TRAFFIC
614					CONSTRUCTION STAKING
LUMP		614	LUMP	LUMP	
		623	LUMP	LUMP	
		624	LUMP	LUMP	MOBILIZATION

NOTES  
 (\*) Must Be Used When Width Of Trench Is Greater Than 3' At The Subbase Level  
 Concrete Base Shall Be Of 1:2:4, 6 Bag Mix, Portland Cement Concrete Using High Early Strength Cement And It Must Be Cured At Least 48 HRS.

2

1

0

2

HORIZONTAL SCALE IN FEET

0

2.5

5

10

VERTICAL SCALE IN FEET

DRAWN BY: FPW

CHECKED BY: KAD

DATE: SEPT, 2007

DATE: SEPT, 2007

# Keuper Storm Sewer Relocation

Details and General Summary

City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
Mayor

REVISIONS:

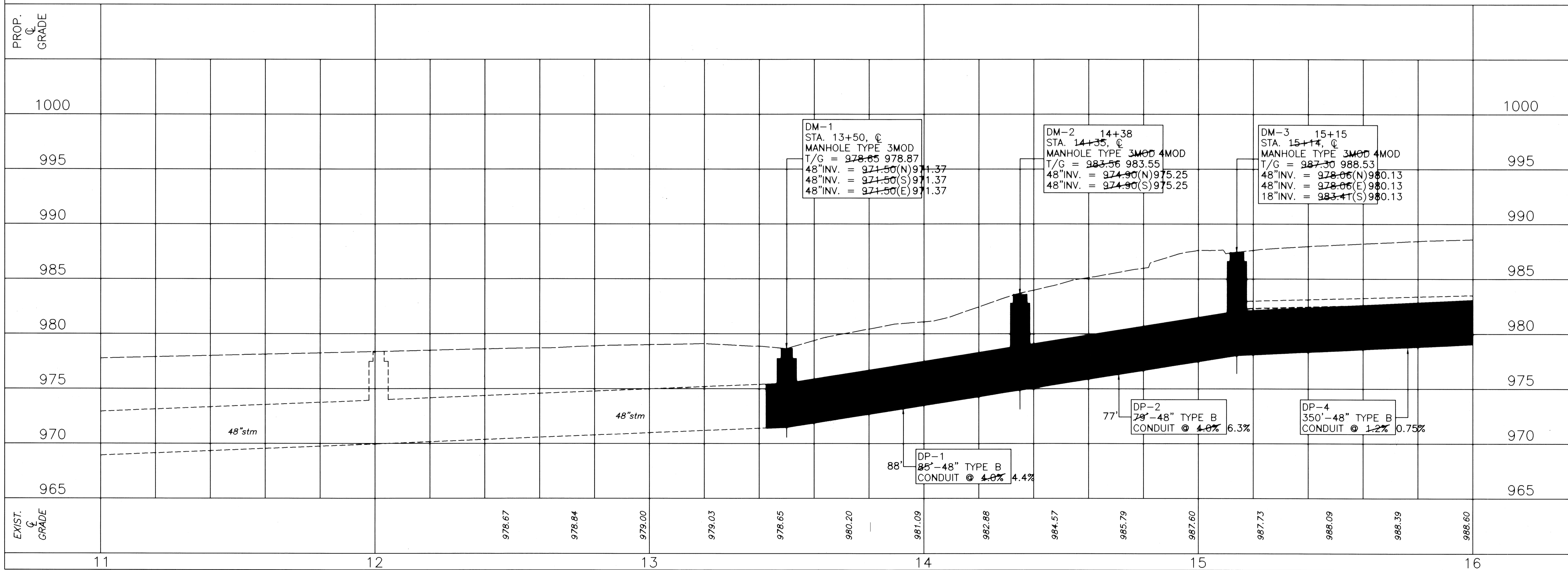
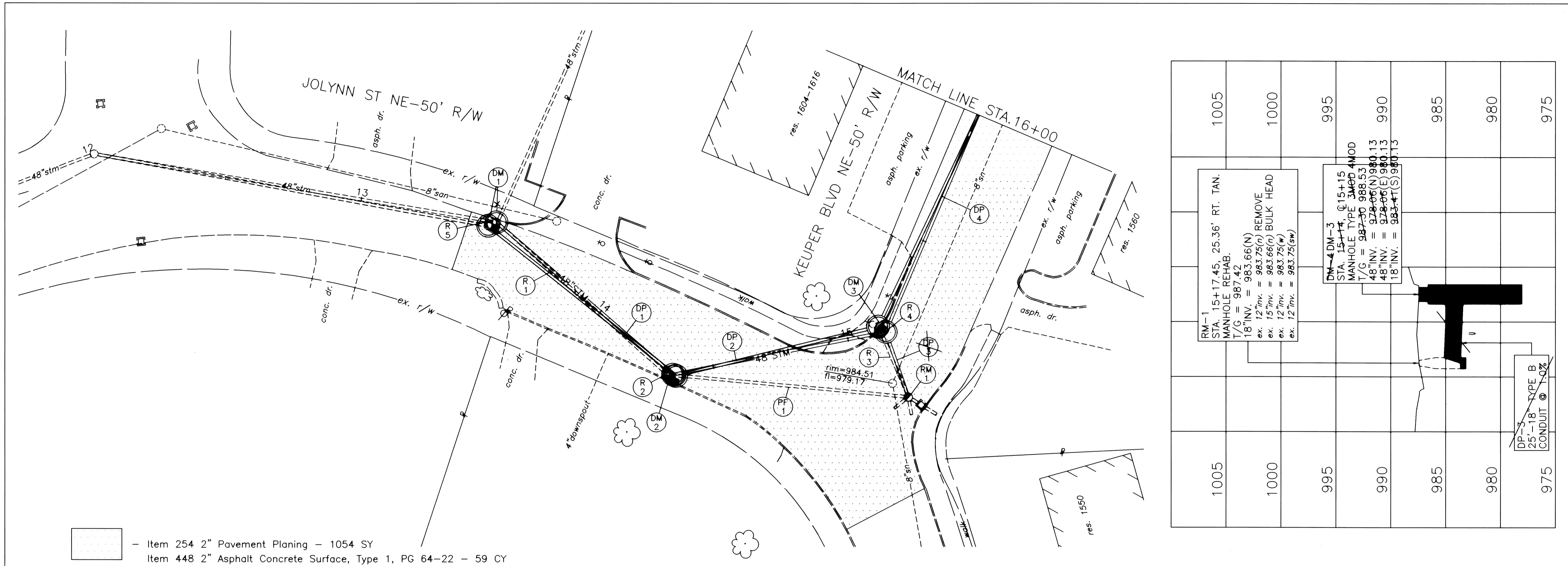
DATE	DESCRIPTION

ELECTRONIC FILE NAME:

07ST0110.DWG

ACCOUNT NUMBER

07ST01



NE  
NW  
SE  
SW

20 10 0 10 20

HORIZONTAL SCALE IN FEET

10  
5  
0  
-2.5

VERTICAL SCALE IN FEET

1005 1000 995 990 985 980 975

1005 1000 995 990 985 980 975

RM-1 15+17.45, 25.36' RT. TAN. MANHOLE REHAB. T/G = 987.42 18" INV. = 983.66(N) ex. 12" INV. = 983.75(n) REMOVE ex. 15" INV. = 983.66(n) BULK HEAD ex. 12" INV. = 983.75(w) ex. 12" INV. = 983.75(sw)

DM-4 DM-3 STA. 15+14, @ 15+15 MANHOLE TYPE 3MOD 4MOD T/G = 987.30 988.53 48" INV. = 928.06(N) 980.13 48" INV. = 928.06(E) 980.13 18" INV. = 983.41(S) 980.13

DP-3 25'-18" TYPE B CONDUIT @ 1.0%

## Keuper Storm Sewer Relocation

Storm Sewer Plan and Profile Sta. 11+00 to Sta. 16+00

City of Massillon  
Stark County, Ohio

Francis H. Cicchinelli, Jr.  
Mayor

MASSILLON  
Means More!

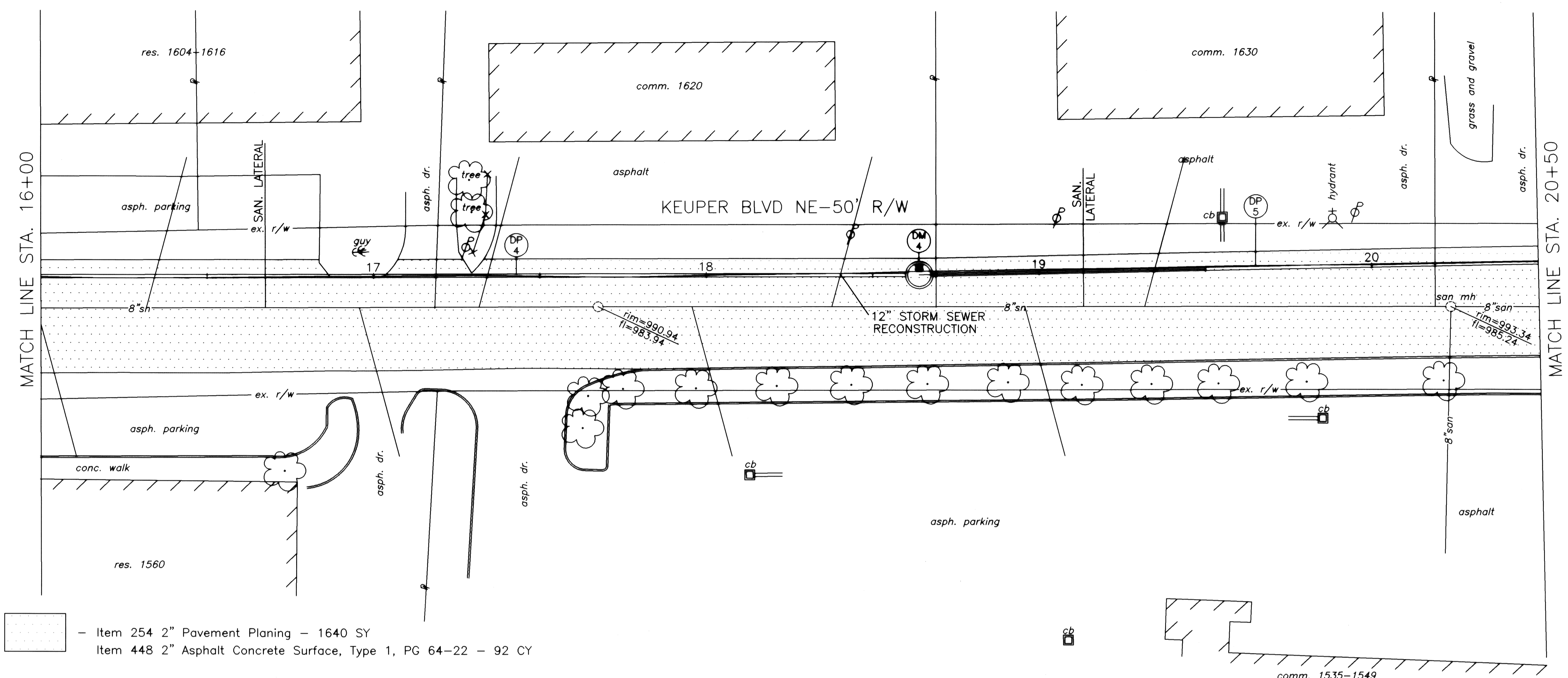
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5/30/2009	AS-BUILT RED LINE

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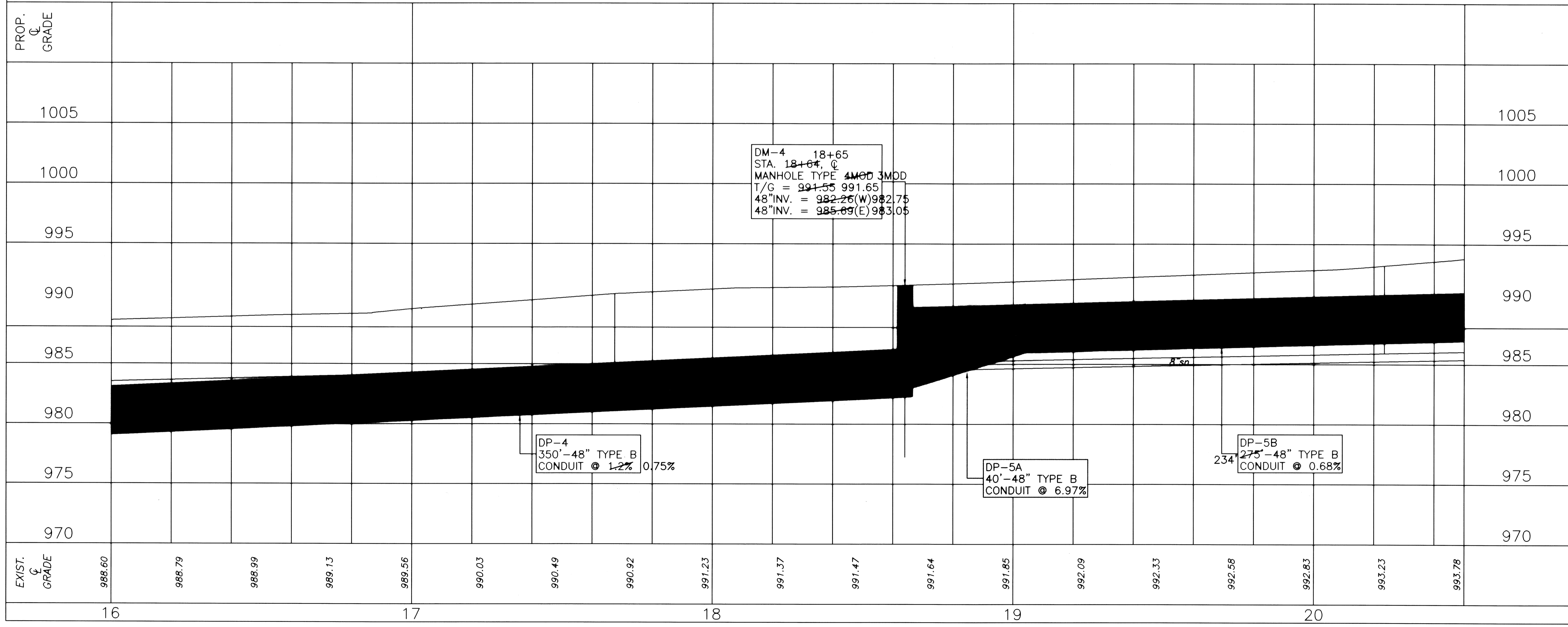
ACCOUNT NUMBER  
07SM01

4

10



- Item 254 2" Pavement Planing - 1640 SY  
 Item 448 2" Asphalt Concrete Surface, Type 1, PG 64-22 - 92 CY



HORIZONTAL SCALE IN FEET

DRAWN BY:  
FPW

DATE:  
SEPT, 2007

CHECKED BY:  
KAD

DATE:  
SEPT, 2007

## Keuper Storm Sewer Relocation

Storm Sewer Plan and Profile Sta. 16+00 to Sta. 20+50

City of Massillon  
Stark County, Ohio

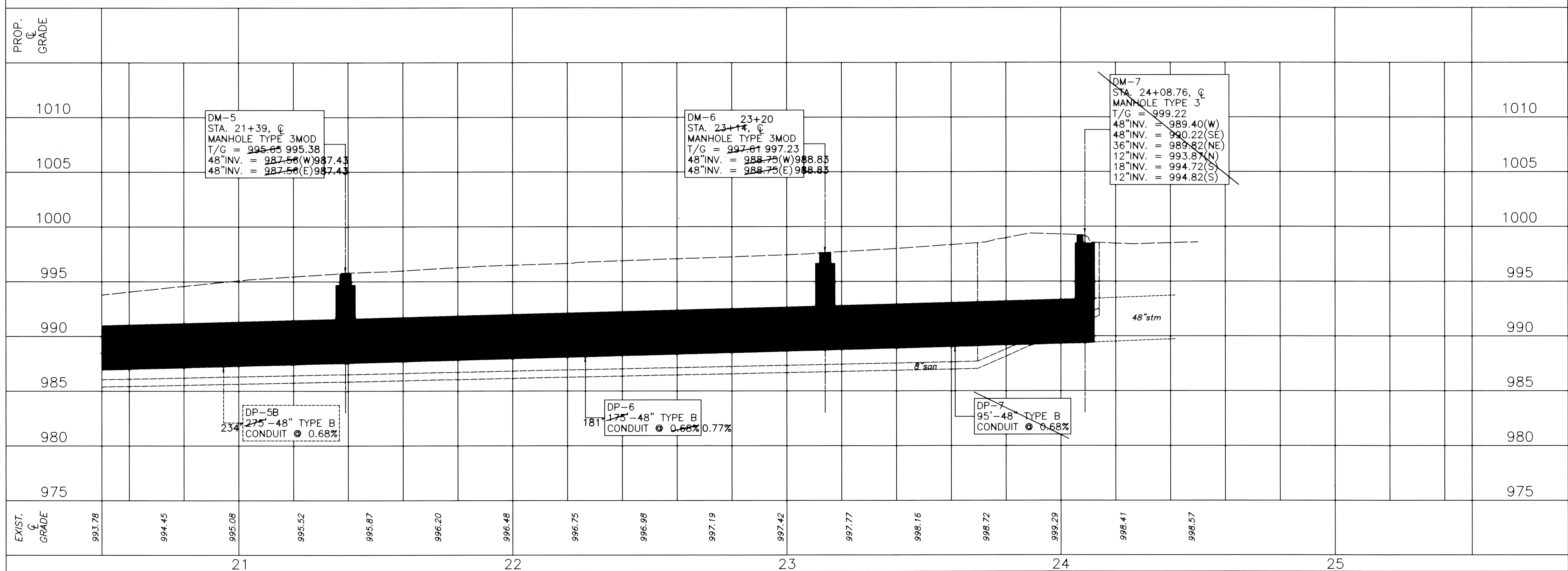
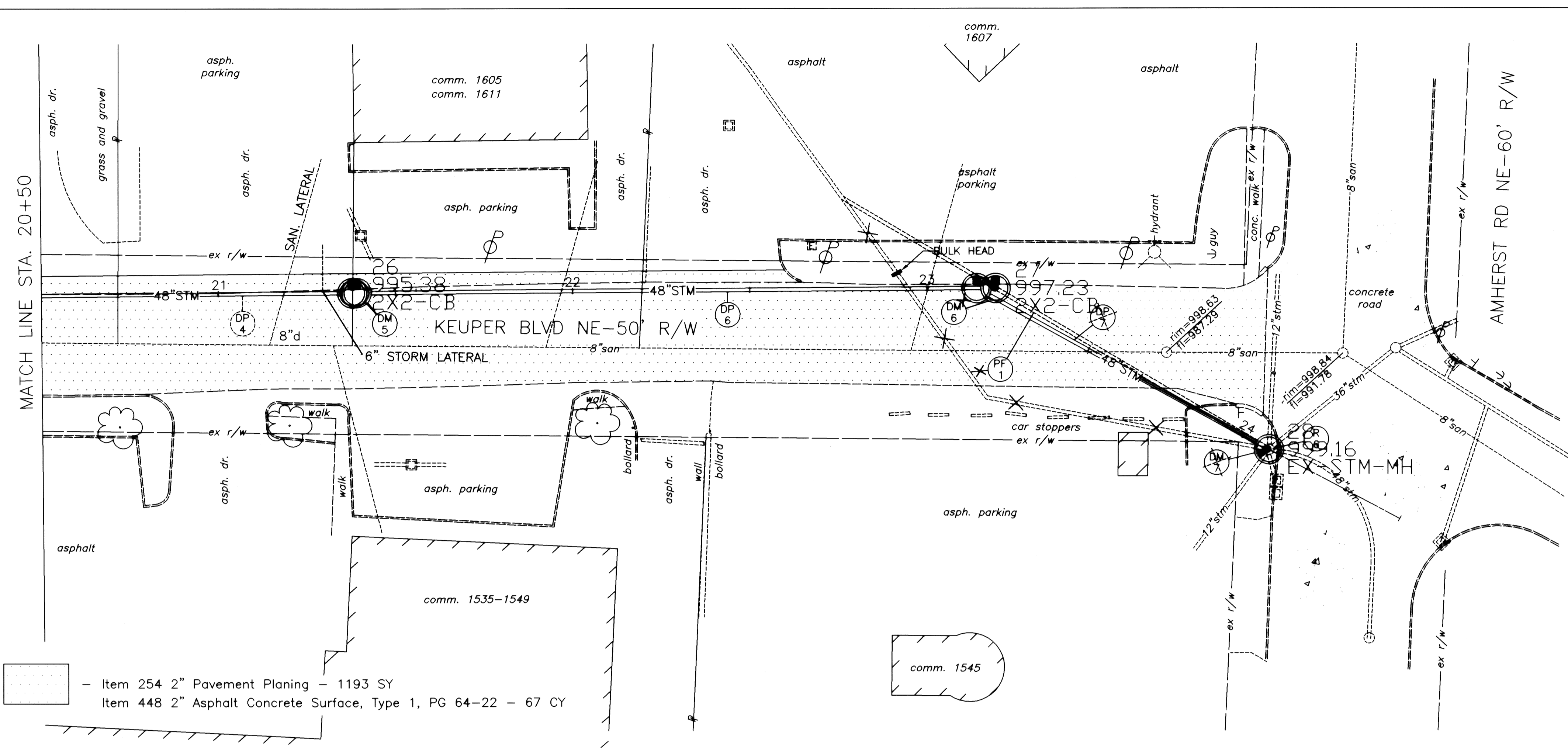
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<small>DATE</small>	<small>DESCRIPTION</small>
5/30/2009	AS-BUILT RED LINE

FILE NAME:  
07SM0105.DWG

ACCOUNT NUMBER  
07SM01

5 / 10



**MASSILLON**  
Means More!

Francis H. Cicchinelli, Jr.

**Keuper Storm Sewer Relocation**  
Storm Sewer Plan and Profile Sta. 20+50 and Sta. 25+50  
City of Massillon  
Stark County, Ohio

**REVISIONS:**

DATE	DESCRIPTION
5/30/2009	AS-BUILT RED LINE

**FILE NAME:**  
07SM0106.DWG

**ACCOUNT NUMBER**  
07SM01

**6**

**10**