

CONSTRUCTION NOTES (THIS SHEET)

- BACKFILL SHALL BE CLASS 'A'.
- THE CONTRACTOR SHALL CLOSE 40TH AVENUE SE AS REQUIRED TO CONSTRUCT THE IMPROVEMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SIGNAGE, TRAFFIC CONTROL AND NOTIFICATION TO THE APPROPRIATE AGENCIES. TYPE III "ROAD CLOSED" BARRICADES AT THE NORTH AND SOUTH ENDS OF THE PROJECT SHALL BE MAINTAINED UNTIL THE PAVING CONTRACTOR TAKES OVER CONTROL OF THE SITE. SAID WORK SHALL BE CONSIDERED INCIDENTAL TO THE "15" SANITARY SEWER" BID ITEM.
- THE EXISTING GROUND PROFILE FOR THE CENTER OF THE ROAD IS SHOWN TO REPRESENT THE EXISTING GROUND ELEVATION AT THE TIME OF CONSTRUCTION. THE STREETS WILL BE BUILT UP TO FINISHED GRADE BY THE PAVING CONTRACTOR AFTER THE COMPLETION OF THIS PROJECT.
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE GROUND WATER AT THE TIME OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DEWATERING OR SOIL STABILIZATION (OTHER THAN USING SUBCUT GRAVEL) OF THE CONSTRUCTION SITE AS REQUIRED TO INSTALL THE PROPOSED UTILITIES. IT IS EXPECTED THAT DEWATERING WILL BE REQUIRED.
- PROTECT EXISTING UTILITIES AND MINIMIZE AREAS DISTURBED.
- REMOVE AND DISPOSE OF OFFSITE THE CASTING, ADJUSTING RINGS, COVER AND TOP SECTION OF THE CHECK VALVE MANHOLES AT APPROXIMATELY STA. 22+24, 27+25, 32+24, 37+24, 42+24 AND 46+98. CUT A HOLE IN THE BASE OR THE BOTTOM OF ONE SIDE OF THE REMAINING MANHOLES SO THAT THEY DO NOT HOLD WATER. FILL THE REMAINING MANHOLES WITH ON-SITE MATERIAL AND COMPACT IN 18" MAXIMUM LIFTS. SAID WORK SHALL BE CONSIDERED INCIDENTAL TO THE "ABANDON CHECK VALVE MANHOLE" BID ITEM.
- THE CONTRACTOR SHALL COORDINATE WORK AROUND THE EXISTING POWER POLES ON THE WEST SIDE OF 40TH AVENUE SE WITH THE APPROPRIATE UTILITY COMPANY. ALL EXPENSES INCURRED FROM PROTECTING AND TEMPORARILY SUPPORTING THE POWER POLES SHALL BE BORNE BY THE CONTRACTOR.
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- THE CONTRACTOR SHALL REMOVE AND STOCKPILE ANY TOPSOIL ALONG 40TH AVENUE SE AND 19TH STREET SE IN AREAS TO BE DISTURBED. TWO STOCKPILE LOCATIONS WILL BE ALLOWED ON THE WEST SIDE OF 40TH AVENUE SE AND WILL BE DETERMINED AT THE TIME OF CONSTRUCTION. THE TOPSOIL WILL BE REPLACED BY THE PAVING CONTRACTOR.
- ALL MANHOLES SHALL HAVE THE 15" SEWER PIPE RUN THROUGH THE MANHOLES CUT OFF THE TOP HALF OF THE PIPE WITHIN THE MANHOLE AND GROUT THE PIPE IN PLACE.

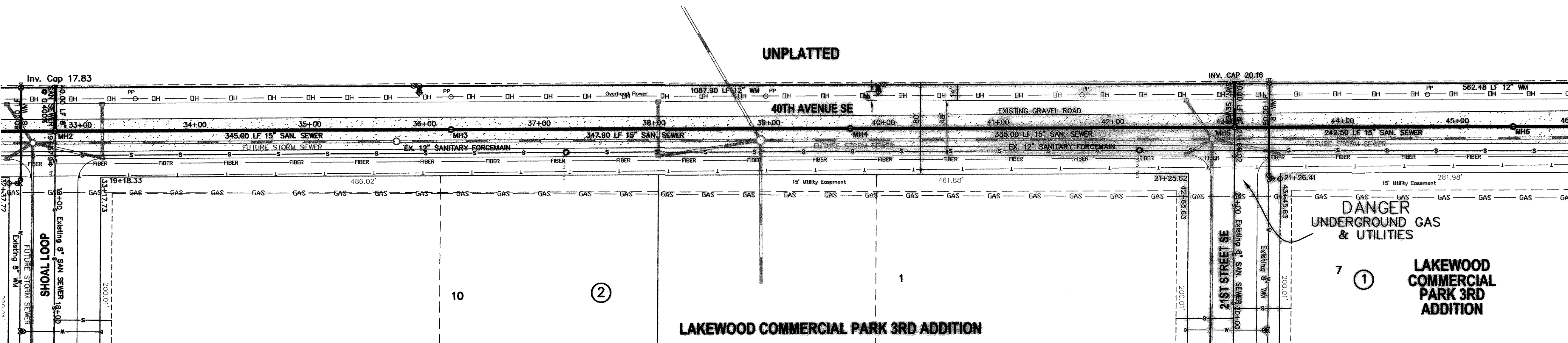
SCALE - 1"=50'

Sta. 32+78.12 CL
=San. Sewer Sta. 3+89.88 Bk.
=San. Sewer Sta. 0+00.00 Ahd.
MH 2

Sta. 36+23.12 CL
=San. Sewer Sta. 3+45.00 Bk.
=San. Sewer Sta. 0+00.00 Ahd.
MH 3

Sta. 39+71.02 CL
=San. Sewer Sta. 3+47.90 Bk.
=San. Sewer Sta. 0+00.00 Ahd.
MH 4

Sta. 43+06.02 CL
=San. Sewer Sta. 3+35.00 Bk.
=San. Sewer Sta. 0+00.00 Ahd.
MH 5



Sta. 32+48.12 (West)
12" x 8" Cross
2.00 LF 8" WM
8" Plug

Sta. 32+48.12 (East)
12" x 8" Cross
80.00 LF 8" WM
8" Gate Valve & Box
Connect

Sta. 32+78.12
Begin Sewermain Quantities

Sta. 32+48.12
Begin Watermain Quantities

Sta. 35+95.62
12" x 8" Tee
4.50 LF 8" WM
8" Gate Valve & Box
1.50 LF 8" WM
8" Hydrant

Sta. 35+90.62
12" Gate Valve & Box

Sta. 39+95.62
8" x 8" Tee
4.50 LF 8" WM
8" Gate Valve & Box
1.50 LF 8" WM
8" Hydrant

Sta. 40+00.62
12" Gate Valve & Box

Sta. 43+36.32 (West)
12" x 8" Cross
2.00 LF 8" WM
8" Plug

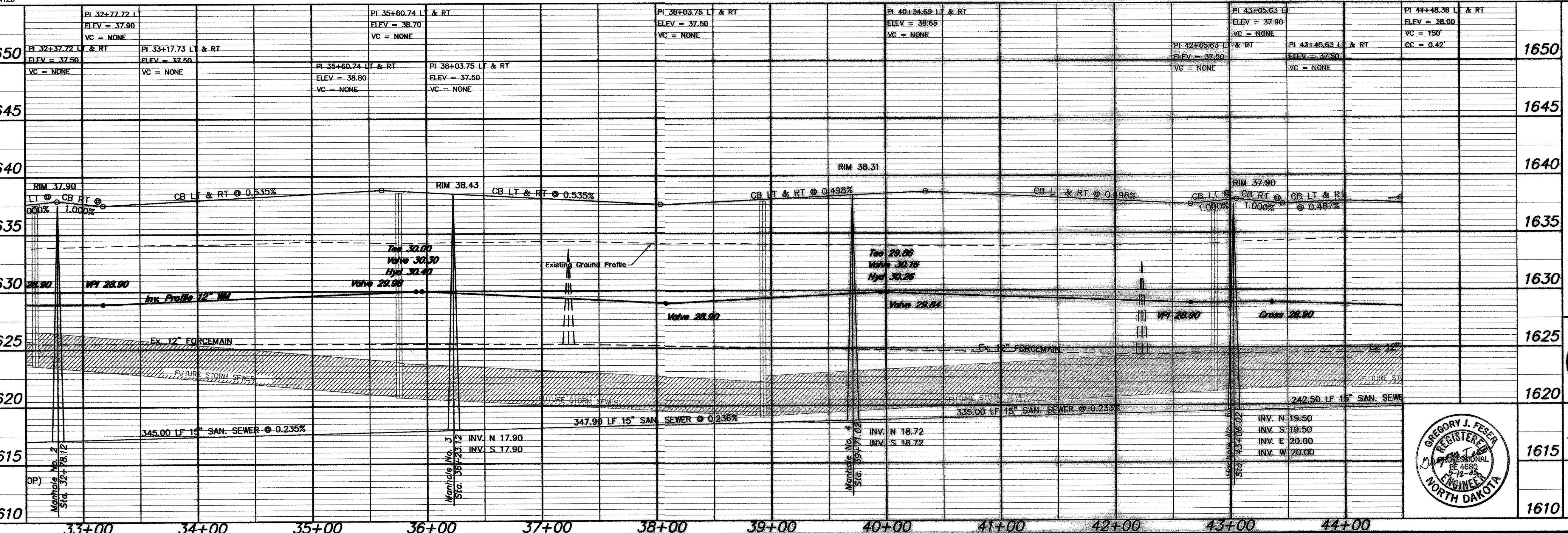
Sta. 43+36.32 (East)
12" x 8" Cross
80.00 LF 8" WM
8" Gate Valve & Box
Connect

Sta. 43+03.02
End Sewermain Quantities

Sta. 43+36.32
End Watermain Quantities

Manhole Number	3	4	5
Casting Elev.	38.43	38.31	37.50
Top P.C. Section	37.39	37.27	36.46
Invert Elev. (a)	17.90	18.72	19.50
Invert Elev. (b)	17.90	18.72	19.50
Invert Elev. (c)	---	---	20.00
Invert Elev. (d)	---	---	20.00
Length P.C. Section	19.49	18.55	16.96

NOTE:
ALL WATER MAINS
SHALL BE 30' LEFT
OF CENTERLINE
UNLESS OTHERWISE
NOTED



APPROXIMATE QUANTITIES	
San. Sewer Items	Quantity
8" Sanitary Sewer	40 LF
15" Sanitary Sewer	1028 LF
Subcut Gravel	610 TON
Concrete Manhole	3 EA
Abandon Check Valve Manhole	2 EA
Watermain Items	Quantity
8" PVC Watermain	94 LF
12" PVC Watermain	1088 LF
8" Hydrant	2 EA
8" Gate Valve & Box	3 EA
12" Gate Valve & Box	2 EA
Ductile Iron Fittings	Incidental
Remove & Stockpile Topsoil	1 LS

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 Fax (701) 223-2606



40TH AVENUE
 FROM SHOAL LOOP NORTH TO 21ST STREET SE
 WATER AND SEWER IMPROVEMENT DISTRICT 47
 SHEET NO. 3 OF 6 PROJECT 2005-14
 MANDAN, ND MAY 11, 2005