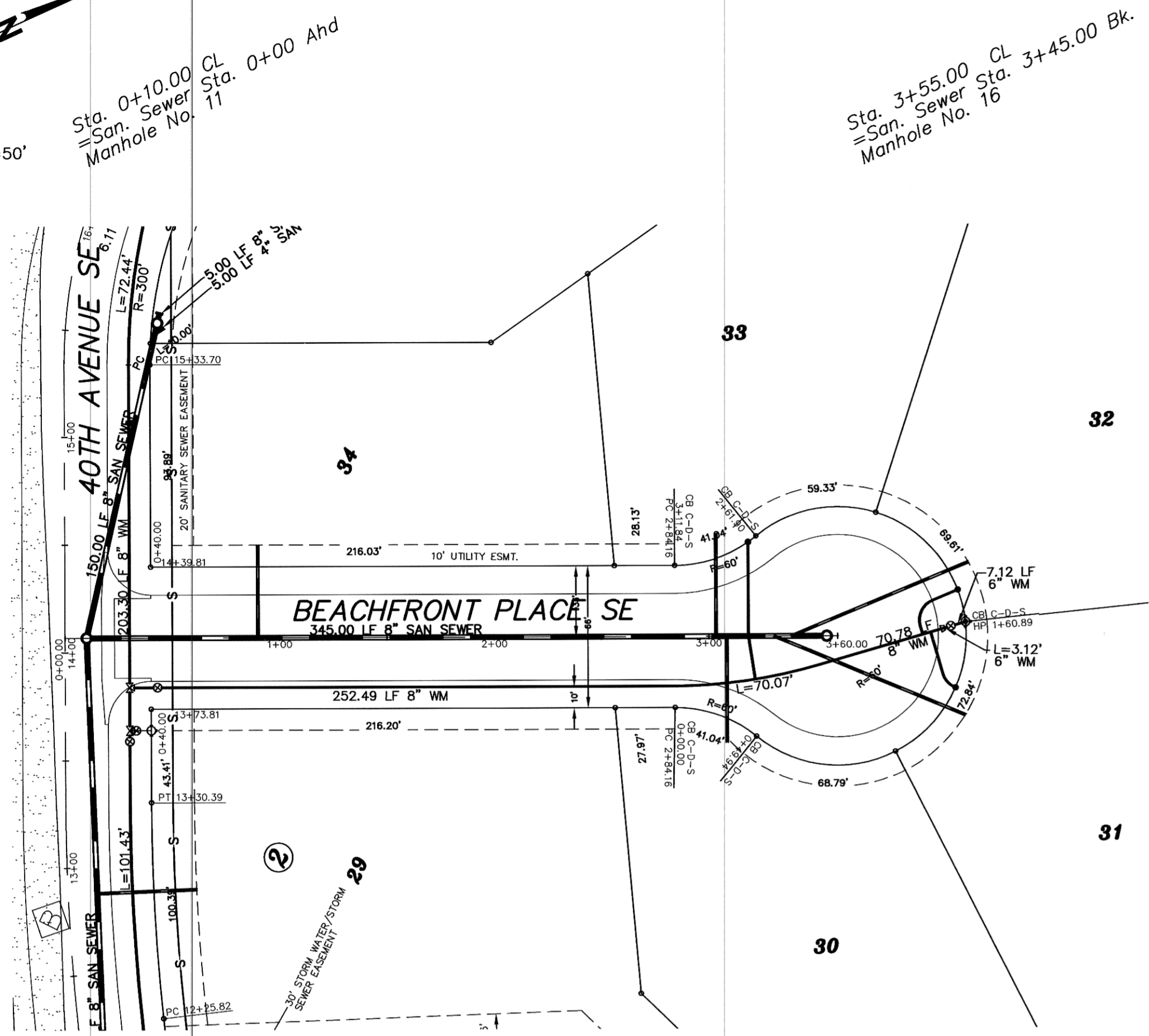


CONSTRUCTION NOTES (THIS SHEET)

- BACKFILL SHALL BE CLASS 'A'.
- THE PROFILE SHOWS THE EXISTING GROUND CENTERLINE OF THE STREETS. THE PLAN VIEW SHOWS THE EXISTING GROUND CONTOURS. THIS WILL BE THE CONDITION AT THE TIME OF CONSTRUCTION. UPON COMPLETION OF THE CONSTRUCTION OF THE WATER/SEWER THE EARTHWORK CONTRACTOR WILL BUILD THE STREETS UP TO THE PROPOSED CURB GRADES.
- 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 TO STABILIZE THE TRENCH FOR THE CONSTRUCTION OF THE DEEPER PORTIONS OF THE SEWERMAINS.
- THE STORM SEWER IS NOT PART OF THIS CONTRACT.
- PROTECT ALL SURVEY MONUMENTS. MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- ALL HYDRANTS SHALL HAVE 8.5' BURY DEPTH AND THE HYDRANT NOZZLE SHALL BE 18" ABOVE THE FINAL PLAN GROUND ELEVATION.
- THERE ARE A NUMBER OF CROSSINGS OF THE EXISTING 6" SANITARY SEWER FORCEMAIN. PROVIDE ADDITIONAL CAUTION NOT TO DAMAGE THIS LINE.

SCALE - 1"=50'



APPROXIMATE WYE LOCATIONS

STATION	DIRECTION	LOT	BLOCK
FROM MANHOLE NO. 6 TO MANHOLE NO. 7			
0+80	NE	34	2
2+93	NE	33	2
2+98	SW	30	2
3+20	SE	31	2
3+29	SE	32	2

Manhole Number	16
Casting Elev.	42.00
Top P.C. Section	40.96
Invert Elev. (a)	34.91
Invert Elev. (b)	--
Length P.C. Section	6.05

Lot	Block	4" Sewer Service	4" 22 1/2" Bend	4" 45" Bend	8" x 4" Wye Branch At The Curb	Sewer Service Invert At The Curb	1" Copper Water Service Pipe Connection	1" Ball Valve Curb Stop	Water Service Invert At The Curb Stop
34	2	43.0	1	1	34.58	--	--	--	--
33	2	47.7	1	1	35.48	63.9	1	1	33.90
30	2	49.3	1	1	35.50	--	--	--	--
31	2	96.3	1	1	35.90	29.3	1	1	34.30
32	2	89.3	1	1	36.00	31.3	1	1	34.40
TOTAL		325.6	2	3	5	124.5	3	3	

Sta. 0+30.00
8" x 8" Tee

Sta. 0+43.00
8" Gate Valve & Box

Begin Watermain Quantities
Sta. 0+30.00

Begin San. Sewer Quantities
Sta. 0+10.00

Sta. 4+19.66 6.33' Lt.
6" Hydrant

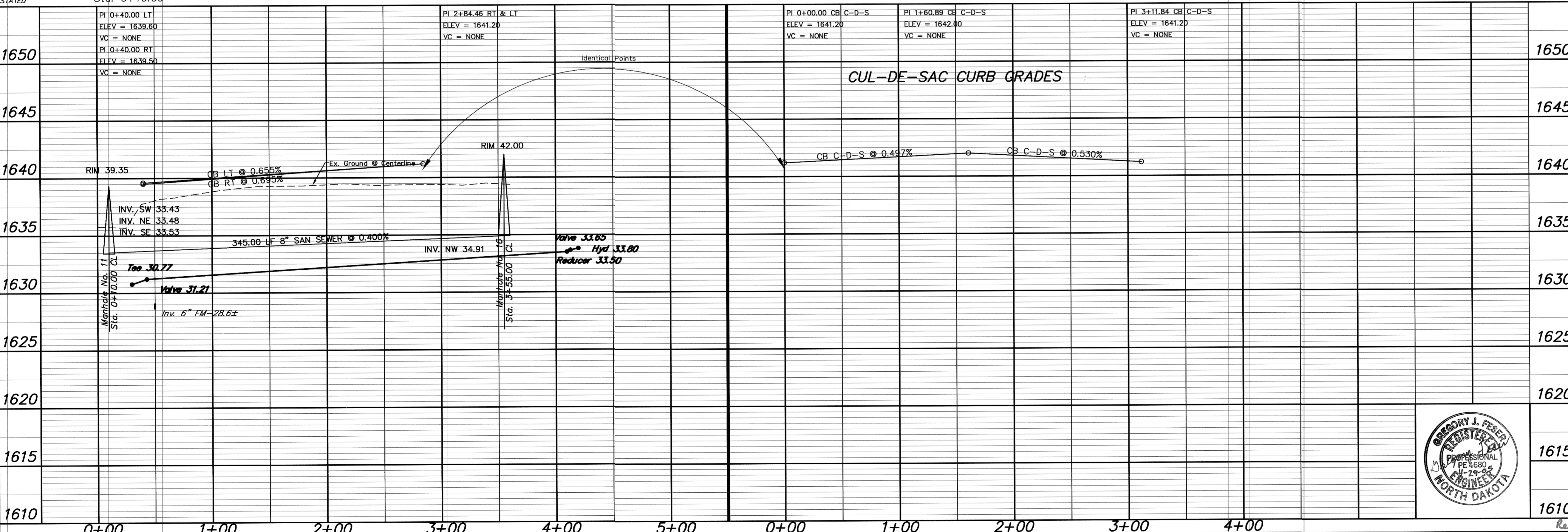
Sta. 4+12.82 4.36' Lt.
6" Gate Valve & Box

Sta. 4+09.82 3.50' Lt.
8" x 6" Reducer

End Watermain Quantities
Sta. 4+19.66 6.33' Lt.

End San. Sewer Quantities
Sta. 3+55.00

NOTE:
ALL WATER MAINS TO BE 33.00' RIGHT OF CENTERLINE UNLESS OTHERWISE STATED



APPROXIMATE QUANTITIES

San. Sewer Items	Quantity
8" Sanitary Sewer	345 LF
8" x 4" Wye Branch	5 EA
Concrete Manhole	1 EA
4" Sewer Service Pipe	326 LF
4" 45" Bend	3 EA
4" 22 1/2" Bend	2 EA

Watermain Items	Quantity
8" PVC Watermain	383 LF
6" PVC Watermain	10 LF
6" Hydrant	1 EA
6" Gate Valve & Box	1 EA
8" Gate Valve & Box	1 EA
Ductile Iron Fittings	(incidental)
1" Water Copper Serv. Pipe	125 LF
1" Water Serv. Connection	3 EA
1" Ball Valve Curb Stop And 1 1/2" Box	3 EA

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BEACHFRONT PLACE SE
FROM THE INTERSECTION OF 40TH AVE SE
EAST TO THE CUL-DE-SAC

1615 WATER AND SEWER IMPROVEMENT PROJECT 2005-17
SHEET NO. 8 OF 8

1610 MANDAN, ND APRIL 22, 2005

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