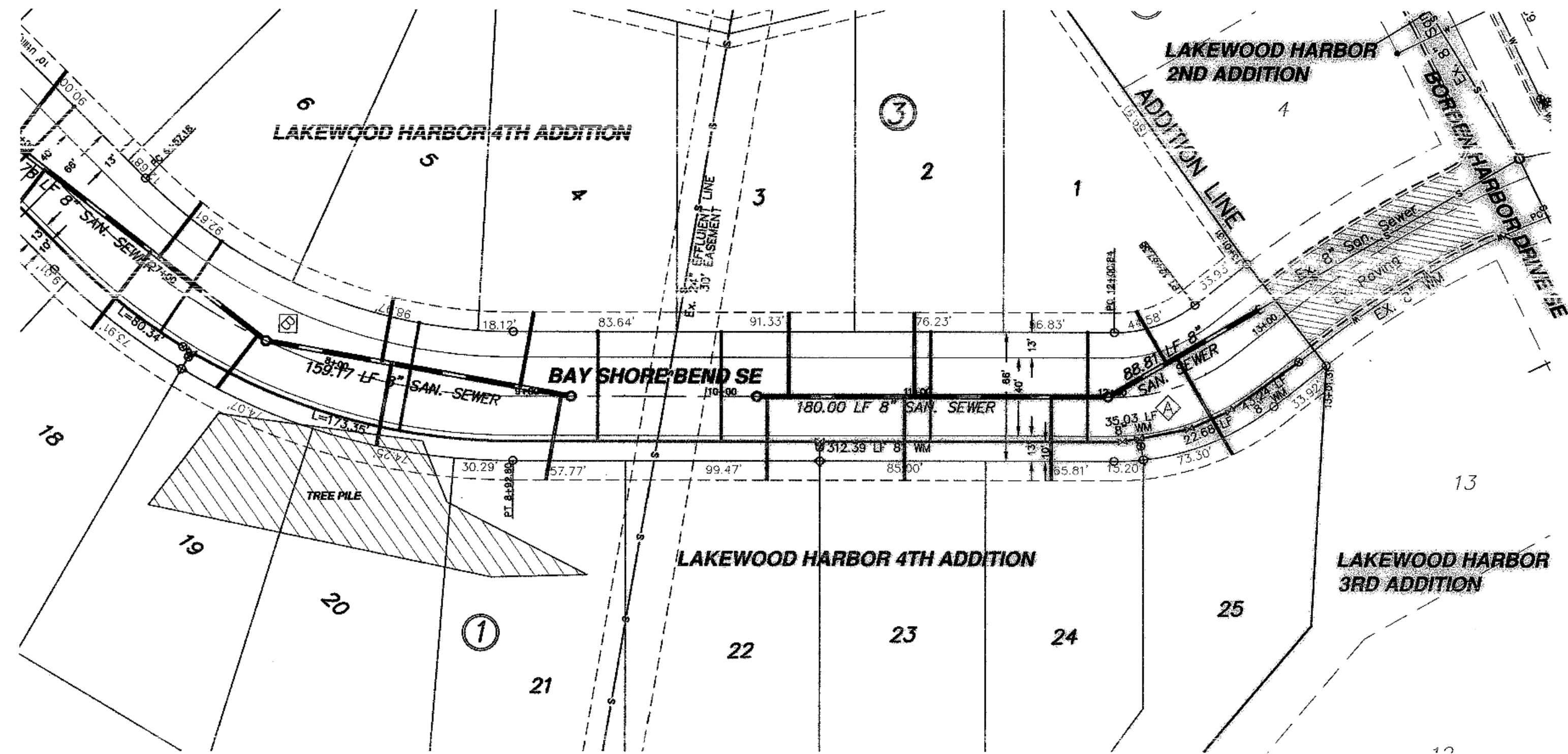


SCALE - 1"=50'

Sta. 7+61.73 Cl. 0+00 Ahd. =San. Sewer Sta. 2+20.78 Bk. Manhole No. 5
 Sta. 9+22.52 Cl. 0+00 Ahd. =San. Sewer Sta. 1+59.17 Bk. Manhole No. 6
 Sta. 10+17.65 Cl. 0+00 Ahd. =San. Sewer Sta. 1+80.00 Bk. Manhole No. 8
 Sta. 11+97.65 Cl. 0+00 Ahd. =San. Sewer Sta. 0+88.81 Bk. Manhole No. 7
 Sta. 12+91.09 Cl. 0+00.00 Ahd. =San. Sewer Sta. 0+00.00 Bk. Cap/Connect



- CONSTRUCTION NOTES (THIS SHEET)**
- BACKFILL SHALL BE CLASS 'A'.
 - THE PROFILE SHOWS THE EXISTING GROUND CENTERLINE OF THE STREETS. THIS WILL BE THE CONDITION AT THE TIME OF CONSTRUCTION.
 - 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.
 - PROTECT ALL SURVEY MONUMENTS. MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL VERIFY ALL SIGNAGE AND TRAFFIC CONTROL AS NECESSARY TO CONSTRUCT THE SANITARY SEWER. REMOVE AND DISPOSE OF OFFSITE PAVEMENT AS REQUIRED TO MAKE THE CONNECTION TO THE EXISTING SANITARY SEWER. MINIMIZE THE AMOUNT OF PAVEMENT REMOVED. PATCH THE AREA BACK IN WITH CLASS V GRAVEL. SAID WORK SHALL BE CONSIDERED INCIDENTAL TO THE "B" SANITARY SEWER BID ITEM.
 - THE WATER SERVICE QUANTITY FOR LOT 4 BLOCK 3 IS SHOWN ON SHEET 2.
 - ALL HYDRANTS SHALL HAVE 8.5' BURY DEPTH AND THE HYDRANT NOZZLE SHALL BE 18" ABOVE THE FINAL PLAN GROUND ELEVATION.

Lot	Block	4" Sewer Service	4" x 22 1/2" Bend	4" x 45' Bend	8" x 4" Wye Branch	Sewer Service Invert At The Cap	1" Copper Water Service Pipe	Water Service Connection	7" Ball Valve Curb Stop	1 1/2" Box
25	2	57.4	1	1	30.05					
1	3	30.9	1	1	28.81	56.0	1	1		
24	2	43.0	1	1	30.29					
2	3	43.0	1	1	30.57	56.0	1	1		
23	2	43.0	1	1	30.59					
3	3	43.0	1	1	30.83	56.0	1	1		
22	2	43.0	1	1	30.87					
TOTAL		303.3	7	7	168.0	3	3			

APPROXIMATE WYE LOCATIONS

STATION	DIRECTION	LOT	BLOCK
FROM EXISTING 8" CAP TO MANHOLE NO. 7			
0+48	SW	25	2
0+54	NE	1	3
FROM MANHOLE NO. 7 TO MANHOLE NO. 8			
0+29	SW	24	2
0+99	NE	2	3
1+04	SW	23	2
1+64	NE	3	3
1+75	SW	22	2

Manhole Number	7	8
Cast Elev.	40.59	39.72
Top P.C. Section	39.55	38.68
Invert Elev. (a)	28.34	30.16
Invert Elev. (b)	28.44	
Length P.C. Section	10.21	R 60

CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	DELTA
A	100.00'	66.54'	34.55'	38°07'28"

NOTE:
ALL WATER MAIN IS 24.00' RIGHT OF CENTERLINE UNLESS OTHERWISE STATED

Begin Watermain Quantities
Sta. 8+22.50
Begin San. Sewer Quantities
Sta. 9+22.52

Sta. 10+50.04
8" x 6" Tee
3.00 LF 6" WM
6" Gate Valve & Box
7.00 LF 6" WM
6" Hydrant

Sta. 12+11.54 21.97' Rt.
8" x 6" Tee
4.00 LF 6" WM
6" Gate Valve & Box
7.00 LF 6" WM
6" Hydrant From Salvage

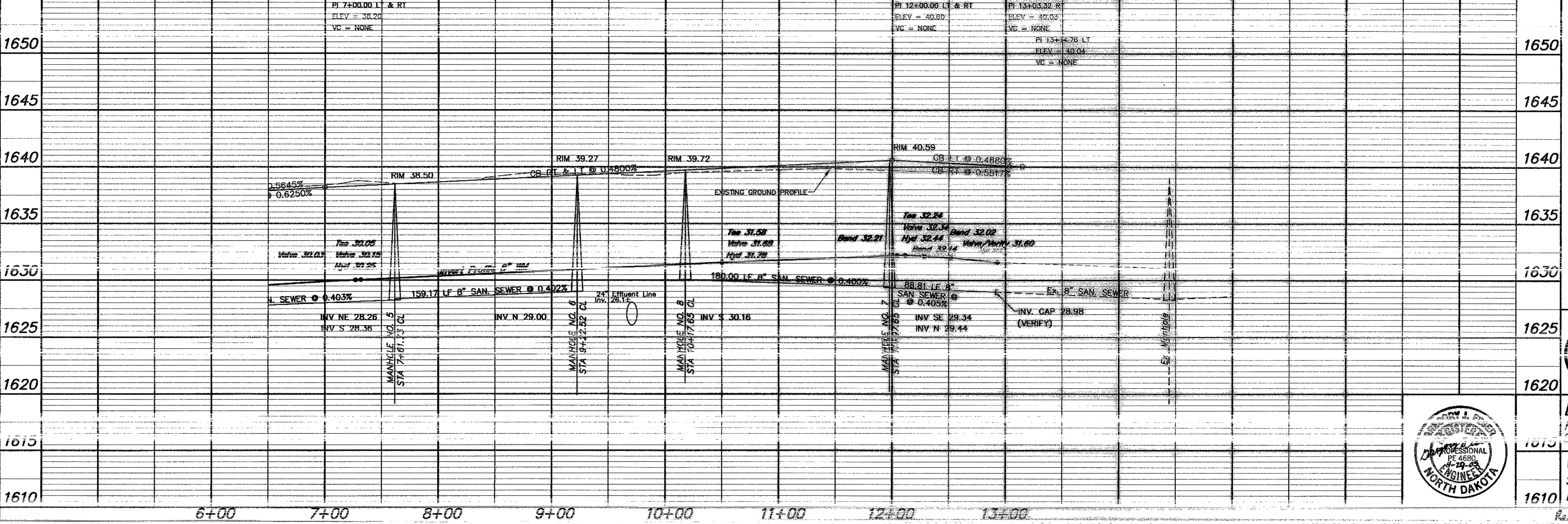
Sta. 12+91.31
Remove & Salvage
8" x 6" Reducer
1 LF 6" WM
6" Hydrant
Sta. 12+91.31
8" Gate Valve & Box

Sta. 12+04.37 23.08' Rt.
8" 11 1/4" Bend

Sta. 12+51.56 22.27' Rt.
8" 11 1/4" Bend

Sta. 12+28.40 22.44' Rt.
8" 11 1/4" Bend

End Watermain Quantities
Sta. 12+91.31
End San. Sewer Quantities
Sta. 12+91.09



APPROXIMATE QUANTITIES

San. Sewer Items	Quantity
8" Sanitary Sewer	269 LF
8" x 4" Wye Branch	7 EA
Concrete Manhole	2 EA
4" Sewer Service Pipe	303 LF
4" 45' Bend	7 EA

Watermain Items	Quantity
6" PVC Watermain	21 LF
8" PVC Watermain	413 LF
6" Hydrant	1 EA
6" Hydrant From Salvage	1 EA
6" Gate Valve & Box	2 EA
8" Gate Valve & Box	1 EA
Ductile Iron Fittings	(incidental)
1" Water Copper Serv. Pipe	168 LF
1" Water Serv. Connection	3 EA
1" Ball Valve Curb Stop	3 EA
And 1 1/2" Box	

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 Construction Management
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 Fax (701) 923-2606



BAY SHORE BEND SE
 FROM 550 NORTH OF BURDEN HARBOR DRIVE SE
 SOUTH TO THE ADDITION LINE

WATER AND SEWER IMPROVEMENT PROJECT 2005-19
 SHEET NO. 3 OF 5
 MANDAN, ND APRIL 28, 2005