

WARRANTY/DISCLAIMER
 THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING. HOWEVER, NEITHER SWENSON, HAGEN & CO. NOR ITS PERSONNEL CAN OR DO WE WARRANT THESE PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE SWENSON, HAGEN & CO. PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A FULL TIME BASIS.

SAFETY NOTICE TO CONTRACTOR
 IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL BUSINESS HOURS.

UTILITY NOTICE TO CONTRACTOR
 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. UNDERGROUND LOCATES CAN BE MADE BY USING THE "ONE CALL" NUMBER 1-800-795-0555.

APPROXIMATE WYE LOCATIONS

Station	Direction	Lot	Block
MANHOLE # 1 TO MANHOLE # 2			
0+88	E	5	3
1+45	W	9	3
1+65	E	4	3
2+23	E	3	3
2+28	W	8	2
2+52	NE	8	2
2+57	NW	7	2
MANHOLE # 1 TO MANHOLE # 3			
0+08	E	6	3
0+74	E	7	3
1+34	W	3	4
1+39	E	8	3
2+09	E	9	3
2+14	W	4	4

CONSTRUCTION NOTES

- PHASE I IS SCHEDULED TO BE CONSTRUCTED IN THE SUMMER OF 2001. PHASE II IS SCHEDULED TO BE CONSTRUCTED IN THE SPRING/SUMMER OF 2002.
- DANGER - OVERHEAD POWER LINES EXIST IN THE VICINITY.
- GRADING SHALL BE DONE BY OTHERS PRIOR TO CONSTRUCTION.
- ALL REMOVAL OR REPLACEMENT OF SOILS, AND ALL HAULING AND OR GRADING TO RESTORE THE FINISH GROUND TO THE ORIGINAL SECTION SHALL BE CONSIDERED INCIDENTAL.
- BACKFILL SHALL BE CLASS "A".
- INSTALL CURB STOPS AND PERMANENT HYDRANTS ON PROPERTY LINE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS INCIDENTAL TO OTHER BID ITEMS.
- THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL SURVEY MONUMENTS. SURVEY MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET BY A LICENSED PROFESSIONAL SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- SEWER BENDS AND CAPS SHALL BE CONSIDERED INCIDENTAL TO THE 8" x 4" WYE BRANCH BID ITEM.
- VALVES ON HYDRANT LEADS SHALL BE RESTRAINED TO THE HYDRANT TEE.
- SIX INCH WATERMAIN SHALL BE CONSIDERED INCIDENTAL TO THE SIX INCH HYDRANT BID ITEM.

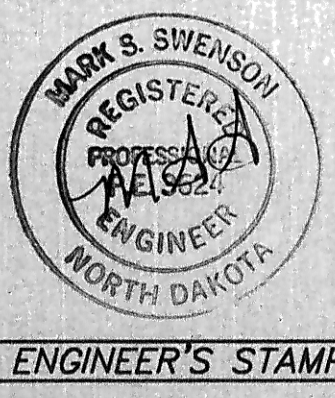
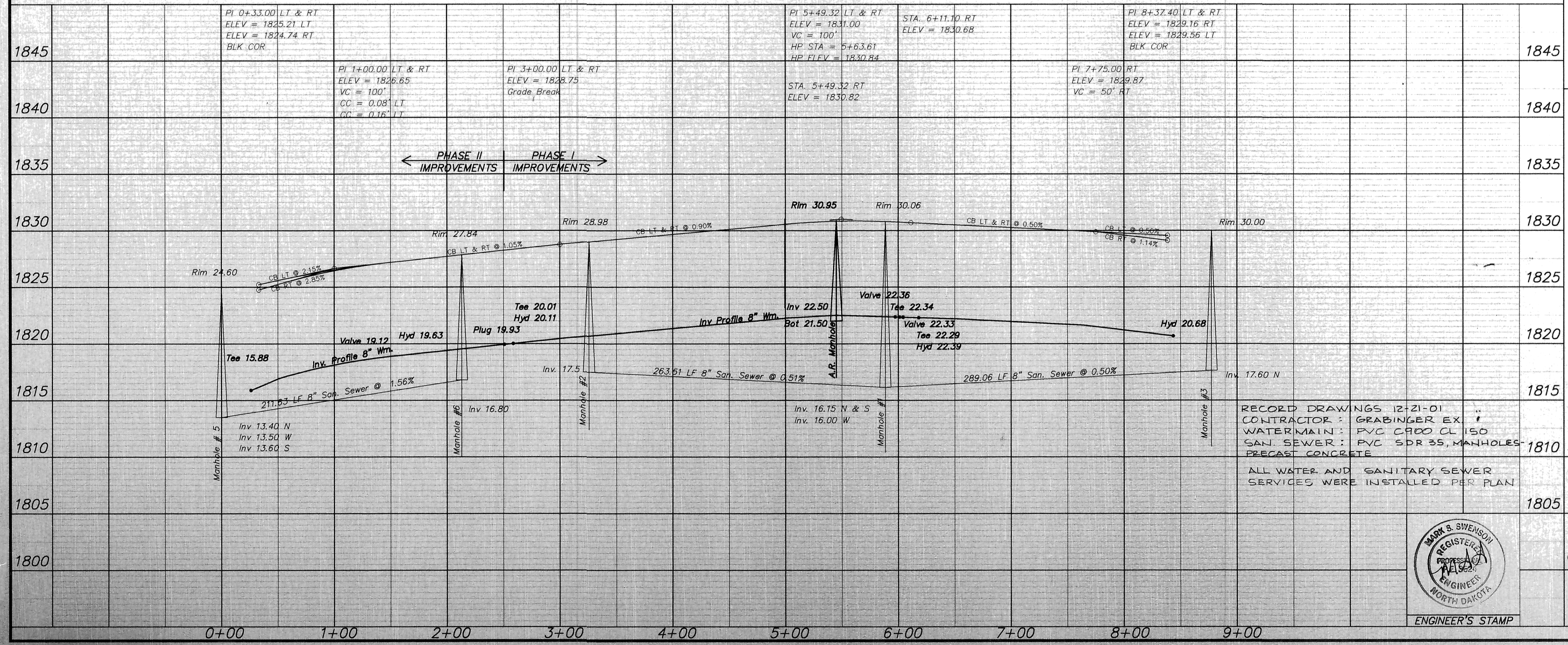
APPROXIMATE QUANTITIES PHASE I ONLY

San. Sewer Items	Quantity
Pitrun Gravel	130 TON
Subcut Gravel	5 TON
Rock Excavation	50 CY
8" San. Sewer	553 LF
Concrete Manhole	2 EA
8" x 4" Wye Branch	13 EA
4" Sewer Service Pipe	466 LF

Water Items	Quantity
Pitrun Gravel	215 TON
Subcut Gravel	5 TON
Rock Excavation	25 CY
8" Watermain	600.8 LF
8" Hydrant	1 EA
8" Gate Valve, Rod & Box	2 EA
6" Hydrant	2 EA
6" Gate Valve, Rod & Box	2 EA
Ductile Iron Fittings	(incidental)
Air Release & Manhole	1 EA
1" Water Copper Service Pipe	447 LF
1" Water Service Connection	8 EA
1" Ball Valve Curb Stop & 1 1/4" Box	8 EA

RECORD DRAWINGS 12-21-01
 CONTRACTOR: GRABINGER EX.
 WATERMAIN: PVC C900 CL 150
 SAN SEWER: PVC SDR 35, MANHOLES
 PRECAST CONCRETE

ALL WATER AND SANITARY SEWER SERVICES WERE INSTALLED PER PLAN



SWENSON, HAGEN & CO., P.C.
 PLANNING CIVIL ENGINEERING SURVEYING
 SITE DESIGN CONSTRUCTION MANAGEMENT
 909 BASIN AVE. P.O. BOX 1185 (701) 228-2600
 BISMARCK, N.D. 58504 FAX (701) 228-2608
 E-mail: msu@swensonhagen.com

PLAINVIEW DRIVE
 FROM 10TH AVE SE TO THE WEST LOT LINE
 OF LOT 4 BLOCK 2

WATER AND SEWER IMPROVEMENT PROJECT 01-08
 SHEET NO. 3 OF 3
 MANDAN, ND AUGUST 2, 2001
 FINAL