

- WATERMAIN**
- W1 MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS. ALL BACKFILL SHALL BE 95% OF STANDARD PROCTOR AT RECOMMENDED MOISTURE CONTENT. WATERLINES SHALL BE CHLORINATED, PRESSURE TESTED AND FLUSHED. TESTING IS CONSIDERED INCIDENTAL.
 - W2 CONNECT TO 12" EXISTING WATERMAIN WITH 12"x6" TAPPING SADDLE (INV. 58.22±). INSTALL 39.73 LF 6" WATERMAIN AND TEMPORARY CAP, INV. 61.95. APPROXIMATELY FIVE FEET FROM BUILDING INSTALL 1-1/2" TAPPING SADDLE AND VALVE AND 5.00 LF 1-1/2" WATER SERVICE, INV. 61.95. BOTH FIRE LINE AND WATER SERVICE CAN BE IN THE SAME TRENCH.
 - W3 CONNECT TO 12" EXISTING WATERMAIN WITH 12"x6" TAPPING SADDLE (INV. 57.60±). INSTALL 37.97 LF 6" WATERMAIN AND TEMPORARY CAP, INV. 61.95. APPROXIMATELY FIVE FEET FROM BUILDING INSTALL 1-1/2" TAPPING SADDLE AND VALVE AND 5.00 LF 1-1/2" WATER SERVICE, INV. 61.95. BOTH FIRE LINE AND WATER SERVICE CAN BE IN THE SAME TRENCH.

- SANITARY SEWER**
- S1 MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS. ALL BACKFILL SHALL BE 95% OF STANDARD PROCTOR AT RECOMMENDED MOISTURE CONTENT. TESTING IS CONSIDERED INCIDENTAL.
 - S2 CONNECT TO EXISTING 8" SANITARY SEWER WITH 8"x6" INSERTA TEE, INV. 54.86±
 - S3 CONNECT TO INSERTA TEE, INSTALL 62.11 LF 6" SANITARY SEWER AT 5.02±% AND MANHOLE #1, INV. 58.05, RIM 67.02.
 - S4 CONNECT TO WYE (STA. 0+48.1), INV. 57.40, INSTALL 36.02 LF 6" SAN SEWER AT 8.1899% AND 6" CLEANOUT, INV. 60.35. INSTALL 8.00 LF 6" SAN SEWER AT 8.1250% AND 240 GALLON WORKING CAPACITY SAND/OIL INTERCEPTOR, INV. 61.00. INSTALL 11.50 LF 6" SAN SEWER AT 10.9300% AND TEMPORARY CAP, INV. 61.95.
 - S5 CONNECT TO WYE (STA 0+52.1), INV. 57.55, INSTALL 21.65 LF 6" SAN SEWER AT 10.9300% AND 6" CLEANOUT, INV. 59.93. INSTALL 8.00 LF 6" SAN SEWER AT 11.0000% AND 240 GALLON WORKING CAPACITY SAND/OIL INTERCEPTOR, INV. 60.81. INSTALL 10.43 LF 6" SAN SEWER AT 10.9300% AND TEMPORARY CAP, INV. 61.95.
 - S6 CONNECT TO WYE (STA 0+38.3), INV. 60.54, INSTALL 8.50 LF 4" SANITARY SEWER AT 9.5294% AND 45° BEND, INV. 61.35. INSTALL 6.30 LF 4" SANITARY SEWER AT 9.5238% AND TEMPORARY CAP, INV. 61.95.
 - S7 CONNECT TO WYE (STA 0+24.1), INV. 60.20, INSTALL 6.00 LF 4" SANITARY SEWER AT 7.6667% AND 45° BEND, INV. 60.66. INSTALL 16.87 LF 4" SANITARY SEWER AT 7.6467% AND TEMPORARY CAP, INV. 61.95.

- GENERAL LANDSCAPING NOTES FOR ALL SHEETS**
- G1 ALL CONTRACTORS WISHING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
 - G2 PROTECT THE IMPROVEMENTS ON SITE AND ON THE ADJOINING PROPERTIES. PROVIDE BARRICADES, COVERINGS OR OTHER TYPE OF PROTECTION AS NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY TO EXISTING UTILITIES.
 - G3 DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
 - G4 ALL PLANTING BEDS SHALL BE INSTALLED WITH 3" OF 2" CRUSHED ROCK MULCH, LANDSCAPE FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ. YD. AND WHERE NECESSARY, 6" COMMERCIAL GRADE BLACK PLASTIC EDGING TO CONTAIN THE PLANTING BED.
 - G5 ALL LANDSCAPE PLANTINGS ARE TO BE WATERED BY THE LANDSCAPE CONTRACTOR THE SAME DAY THAT THE PLANTING OCCURS. IF WATER IS NOT AVAILABLE AT THE BUILDING, THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALTERNATIVE METHODS FOR WATERING.
 - G6 SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MUTTLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
 - G7 CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING:
 - G7.1 FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
 - G7.2 LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND CARING FOR ALL PLANT MATERIAL, AND OTHER LANDSCAPING IMPROVEMENTS UNTIL THE DATE OF FINAL INSPECTION AND APPROVAL.

- TOPSOIL NOTES**
- T1 TOPSOIL IS STOCKPILED ON SITE AND WILL BE PLACE FOR THE LANDSCAPE CONTRACTOR TO SPREAD AND FINISH GRADE. ALL PORTIONS OF THE SITE NOT RECEIVING CONCRETE, CURB & GUTTER OR OTHER IMPROVEMENTS SHALL BE COVERED WITH A MINIMUM OF 6" OF TOPSOIL AND SEEDED ACCORDING TO SPECIFICATIONS.
 - T2 TOPSOIL SHALL BE PLACED AND SEED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CURB AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

- SEEDING NOTES**
- S1 CLEAR AND GRUB SITE BEFORE SEEDING ENSURING THAT THE SITE IS IN A SMOOTH CONDITION WITH NO DEBRIS OR ROCKS LARGER THAN 2" IN DIAMETER.
 - S2 FERTILIZE SOIL DURING THE SEEDING PROCESS USING AN APPROPRIATE APPLICATION PROCESS. FERTILIZER SHALL BE 10-10-10 AND APPLIED AT A RATE OF 4 LBS. PER 1000 SQUARE FEET.
 - S3 SEED SHALL BE DRILL SEED TO A DEPTH OF 1/4" TO 1/2" AND SHALL BE EVENLY SPREAD. AFTER SEED HAS BEEN SOWN, THE SOIL SHALL BE REPAKED IMMEDIATELY AFTER THE SEED IS APPLIED TO FIRM THE SOIL AROUND THE SEED. NO SEED SHALL BE PLACED ON DAYS WHERE THE WIND IS STRONG ENOUGH TO PREVENT IT FROM BEING PROPERLY IMBEDDED INTO THE SOIL.
 - S4 SEED MUST SHOW A DENSITY OF 20 TO 30 SEEDLINGS PER SQUARE FOOT BEFORE ACCEPTANCE WILL OCCUR. THE CONTRACTOR SHALL FURNISH AND REPLACE WITHOUT ADDITIONAL COMPENSATION THEREFORE, ANY SEED FOR AREAS THAT HAVE NOT GERMINATED, HAVE DIED, OR ARE DAMAGED TO THE EXTENT THAT REPLACEMENT IS REQUIRED TO CONFORM TO THE REQUIREMENTS OUTLINED ABOVE. THE CONTRACT WARRANTY PERIOD SHALL ALSO APPLY TO THIS ITEM.
 - S5 CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY EROSION SCARS OR WASHOUTS UNTIL THE DATE THAT FINAL SEED STAND IS ACCEPTED. SEE EROSION CONTROL PLAN FOR EROSION CONTROL METHODS.

PLANT PALETTE

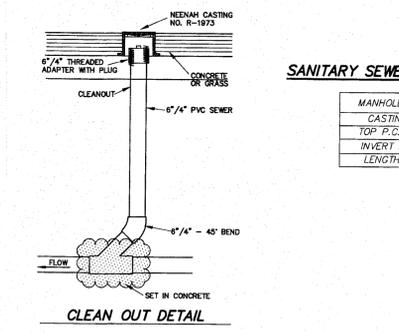
SYM	COMMON NAME	SCIENTIFIC NAME	SIZE	QNTY.
HL	HONEYLOCUST	Gleditsia triacanthos	2" Cal	6
ID	ISANTI DOGWOOD	Cornus sericea 'santi'	2 Gallon	15

APPROXIMATE WYE LOCATIONS (MAINLINE)

STATION	DIRECTION	INVERT
0+49.1	SW	57.40
0+52.1	NW	57.55

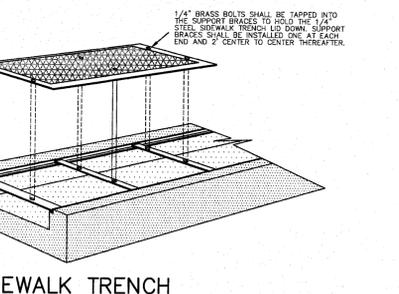
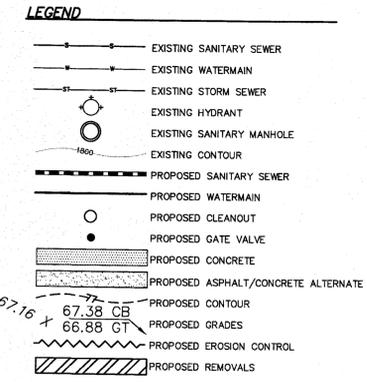
APPROXIMATE WYE LOCATIONS (SERVICE LINES)

STATION	DIRECTION	INVERT
0+38.3	S	60.54
0+24.1	W	60.20



SANITARY SEWER MANHOLE SCHEDULE

MANHOLE NUMBER	#1
CASTING ELEV.	67.02
TOP P.C. SECTION	65.98
INVERT ELEV. (a)	58.05
LENGTH OF P.C.	7.93



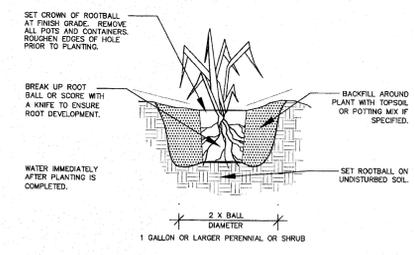
SIDEWALK TRENCH

CALL BEFORE YOU DIG
NORTH DAKOTA
UTILITIES UNDERGROUND LOCATION SERVICE
1-800-795-0555

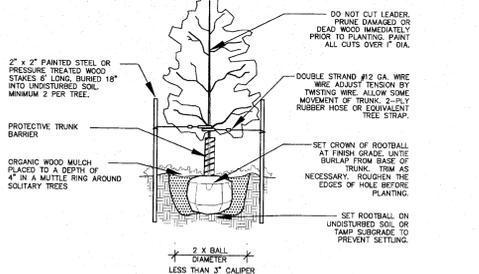
WARRANTY / DISCLAIMER
The designs represented in these plans are in accordance with established practices of civil engineering. However, neither Swenson, Hagen & Co. nor its personnel can or do warrant these plans as constructed except in the specific cases where Swenson, Hagen & Co. personally inspect and control the physical construction on a full time basis.

SAFETY NOTICE TO CONTRACTOR
In accordance with generally accepted construction practices the Contractor will 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.

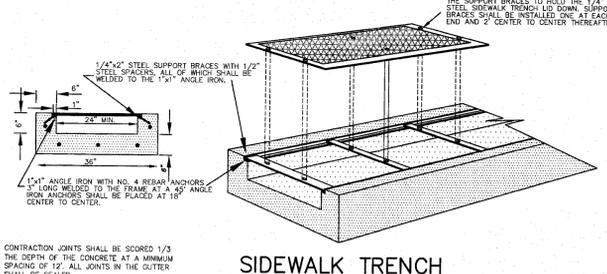
UTILITY NOTICE TO CONTRACTOR
The location of existing underground utilities are shown in an approximate way only and have not been independently verified by the Owner or its representatives. The Contractor shall determine the exact location of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be occasioned by the Contractor's failure to properly locate and preserve any and all underground utilities. Underground location can be made by using the "One Call" number 1-800-795-0555.



SHRUB/PERENNIAL PLANTING DETAIL
TYPICAL FOR ALL SHRUBS AND PERENNIALS



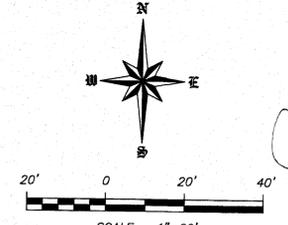
TREE PLANTING DETAIL
TYPICAL FOR ALL DECIDUOUS, SINGLE-TRUNK, TREES



SIDEWALK TRENCH

APPROVED BY PLANNING
[Signature]
PLANNER
DATE 06-04-15

APPROVED BY FORESTRY
[Signature]
LANDSCAPE ARCHITECT
DATE 6-4-15



DRAWN BY: LN
CHECK BY: JP
DATE: 3-23-15
FILE DESC:
COMPUTER FILE:
SURVEY FILE:

SHEET
C2.0

DATE

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REVISION

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DIMENSION, UTILITY & LANDSCAPING PLAN
LOT 2C BLOCK 4
TRILLIUM 4TH ADDITION
BISMARCK, NORTH DAKOTA

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Landscape & Site Design
Construction Management



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