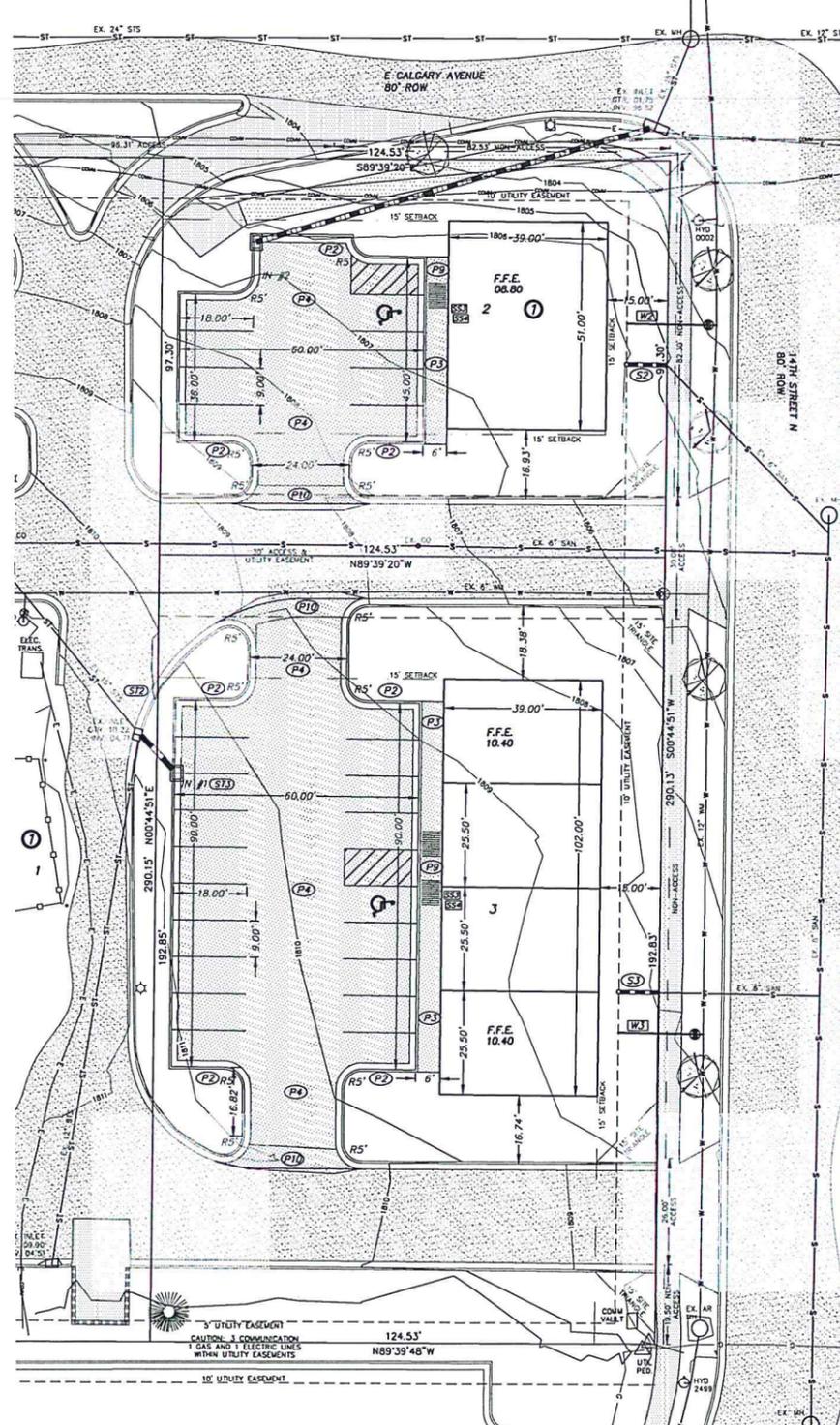
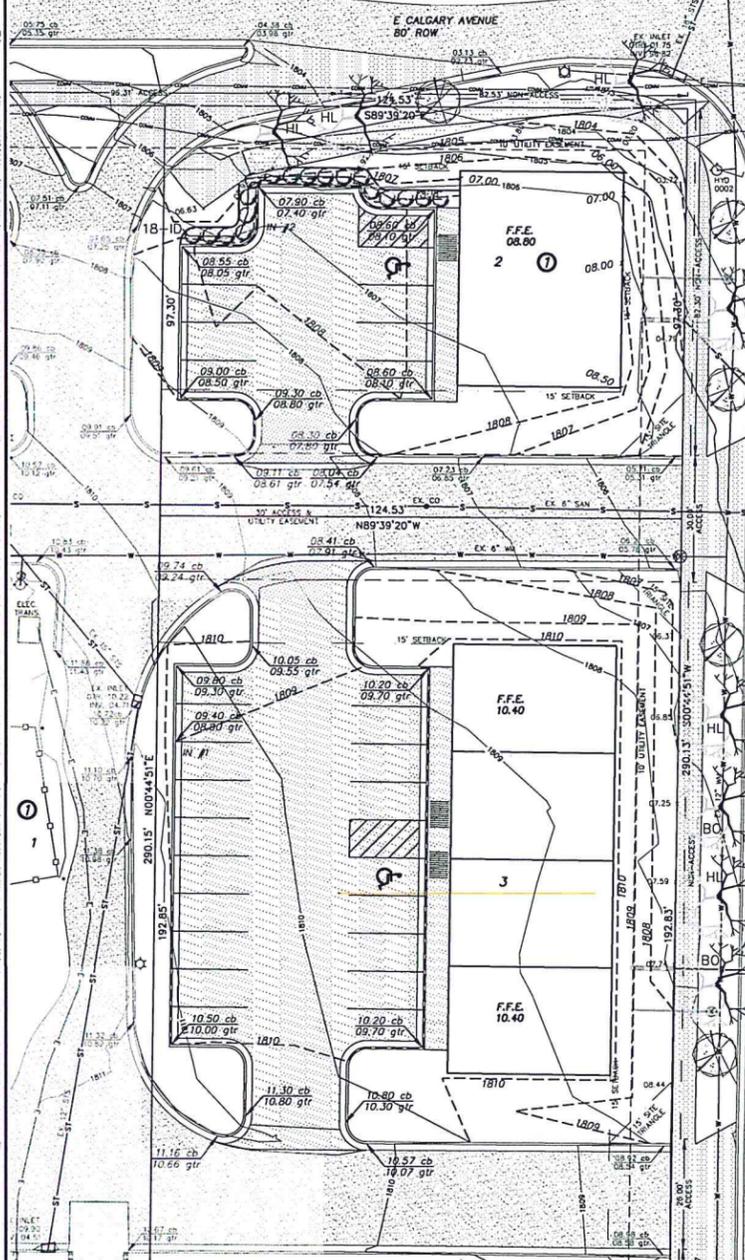


DIMENSION AND UTILITIES



GRADING AND LANDSCAPING



GENERAL LANDSCAPING NOTES FOR ALL SHEETS

- 1. ALL CONTRACTORS WISHING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
- 2. 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.
- 3. DAMAGE TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 4. ALL PLANTING BEDS SHALL BE INSTALLED WITH 3" OF 2" CRUSHED ROCK MULCH, LANDSCAPE FABRIC WITH A MINIMUM HEIGHT OF 4 OZ./SQ. YD. AND WHERE NECESSARY, 6" COMMERCIAL GRADE BLACK PLASTIC EDGING TO CONTAIN THE PLANTING BED.
- 5. 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.
- 6. SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MUTILLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
- 7. CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING:
 - FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
- 8. 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

- 1. TOPSOIL WILL BE STOCKPILED ON SITE 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.
- 2. TOPSOIL SHALL BE PLACED AND SEED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CURB AND GUTTERS AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

SEEDING NOTES

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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 THEREOF, 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.
- 5. 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.

FENCING NOTES

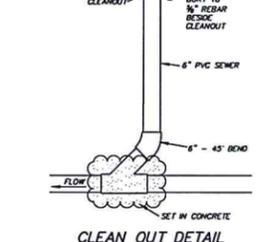
- 1. A 6' HIGH OPAQUE WHYL FENCE WITH SWING GATE OPENING TO THE SOUTHEAST SHALL BE INSTALLED WHERE DEPICTED ON THE PLANS.

PLANT PALETTE

SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QTY.
HL	HONEYLOCUST	Gleditsia triacanthos	2" Cal.	5
BO	BUR OAK	Quercus maroccarpa	1-1/2" Cal.	3
ID	ISANTI DOGWOOD	Cornus sericea 'Isanti'	2 Gallon	18

LANDSCAPING REQUIREMENTS

- REQUIRED INTERIOR LANDSCAPING: N/A
- REQUIRED STREET TREES: 3 PER 100 FEET CALGARY AVENUE = 4 TREES 14TH STREET = 9 TREES
- REQUIRED PERIMETER PARKING: CONTINUOUS HEDGE
- REQUIRED LANDSCAPE BUFFER YARD: N/A
- PROVIDED INTERIOR LANDSCAPING: N/A
- PROVIDED STREET TREES: 4 TREES ON CALGARY AVENUE 9 TREES ON 14TH STREET
- PROVIDED PERIMETER PARKING: CONTINUOUS HEDGE
- PROVIDED LANDSCAPE BUFFER YARD: N/A



LEGEND

- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND COMMUNICATION
- EXISTING UNDERGROUND GAS
- EXISTING UTILITY RISER-VAULT
- EXISTING LIGHT-POWER POLE
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- EXISTING FENCE
- EXISTING ASPHALT
- EXISTING CONCRETE
- EXISTING RETAINING WALL
- EXISTING CONTOUR
- EXISTING GRADE
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED FENCE
- PROPOSED VALVE
- PROPOSED CONCRETE
- PROPOSED CONTOUR
- PROPOSED GRADE

WATERMAIN

- 1. 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.
- 2. CONNECT TO EXISTING 12" WATERMAIN (INV. ±95.2) WITH 1" TAPPING SADDLE AND VALVE. INSTALL 22.1 LF OF 1" WATER SERVICE AND TEMPORARY CAP. COORDINATE WITH MECHANICAL FOR ELEVATION AND LOCATION OF CONNECTION INTO BUILDING.
- 3. CONNECT TO EXISTING 12" WATERMAIN (INV. ±99.3) WITH 1" TAPPING SADDLE AND VALVE. INSTALL 21.0 LF OF 1" WATER SERVICE AND TEMPORARY CAP. COORDINATE WITH MECHANICAL FOR ELEVATION AND LOCATION OF CONNECTION INTO BUILDING.

SANITARY SEWER

- 1. 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. ONE FOOT OF SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SEWER SERVICES. VERIFY ELEVATION AND LOCATION OF EXISTING SEWER SERVICES PRIOR TO CONSTRUCTION.
- 2. CONNECT TO EXISTING 6" SANITARY SEWER STUB (INV. ±97.2) WITH 45' BEND AND INSTALL 10.0 LF OF 6" SANITARY SERVICE AT A MINIMUM OF 1.00% AND 6" CLEANOUT. VERIFY WITH MECHANICAL FOR ELEVATION AND LOCATION OF CONNECTION INTO BUILDING.
- 3. CONNECT TO EXISTING 6" SANITARY SEWER STUB (INV. ±96.5) AND INSTALL 10.0 LF OF 6" SANITARY SERVICE AT A MINIMUM OF 1.00% AND 6" CLEANOUT. VERIFY WITH MECHANICAL FOR ELEVATION AND LOCATION OF CONNECTION INTO BUILDING.

PAVEMENT

- 1. ON SITE EXTERIOR CONCRETE MATERIALS AND CONSTRUCTION MATERIALS SHALL CONFORM TO CITY OF BISMARCK SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. AIR CONTENT SHALL BE 5% TO 7% STRENGTH AT 28 DAYS SHALL BE 4000 PSI.
- 2. STANDARD VERTICAL FACE CURB AND GUTTER. SEE NOTE THIS SHEET, TP GUTTER AS APPROPRIATE.
- 3. CITY SIDEWALK PER CITY OF BISMARCK SPECIFICATIONS - THICKEN SIDEWALK AT DRIVEWAYS TO 8" AND PROVIDE KEYWAY PER CITY SPECIFICATIONS.
- 4. 5" CONCRETE WITH FIBERMESH AND 6" CLASS V BASE. SEE DETAIL THIS PAGE.
- 5. ISOLATION JOINTS WILL BE REQUIRED ALONG THE BUILDING, STOODS AND ALL FIXED ITEMS. LEAVE JOINT 1/2" LOW AND SEAL. ISOLATION JOINTS SHALL BE SEALED USING A ONE PART POLYURETHANE TYPE SEALANT.
- 6. CONSTRUCTION JOINTS WILL BE PLACED TO CONFORM WITH CONSTRUCTION JOINT SPACING. CONSTRUCTION JOINT FOR UNREINFORCED CONCRETE SHALL HAVE A MINIMUM 18" DIAMETER HALF ROUND KEYWAY OR APPROVED EQUAL. CONSTRUCTION JOINTS FOR REINFORCED CONCRETE SHALL BE 1/2" X 12" DOVELS AT 12 O/C.
- 7. JOINT SPACING SHALL TYPICALLY BE SPACED AT 1-1/2 TIMES THE THICKNESS OF THE PAVEMENT (MEASURED IN INCHES) IN FEET (4" S/W EQUALS 6 FOOT SPACING). IN NO CASE SHALL THE JOINT SPACING EXCEED TWO TIMES THE THICKNESS.
- 8. SUBGRADE PREPARATION UNDER AREAS TO BE PAVED SHALL BE 6" THICK AND SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS EXCEPT DENSITY SHALL BE 95% OF ASTM D 698.
- 9. INSTALL ADA RAMP PER DETAIL THIS SHEET.
- 10. INSTALL 6" VALLEY GUTTER PER CITY OF BISMARCK SPECIFICATIONS AND DETAIL.

SIGNAGE & PAVEMENT STRIPING

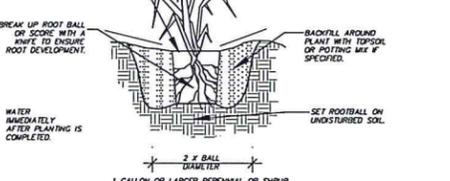
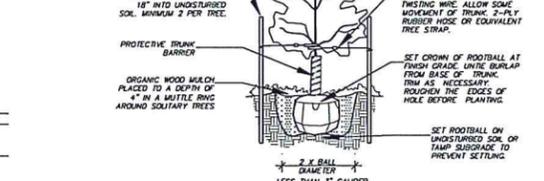
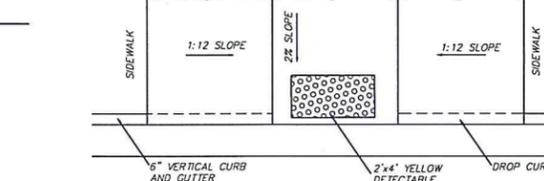
- 1. ALL NON-ADA STRIPING SHALL BE 4" WIDE NON REFLECTORIZED PAINT MEETING THE REQUIREMENTS OF AASHTO M28 APPLIED AT A RATE OF 110 SQUARE FEET PER GALLON. COLOR SHALL BE YELLOW. TYPICAL FOR ALL STRIPING UNLESS OTHERWISE NOTED.
- 2. ADA STRIPING FOR LANES AND SYMBOLS SHALL BE BLUE PAINT MEETING THE REQUIREMENT OF AASHTO M28 APPLIED AT A RATE OF 110 SQUARE FEET PER GALLON. PAINT FACE AND TOP OF CURB (6" WIDE) IN FRONT OF ALL HANDICAP STALLS.
- 3. PROVIDE AND INSTALL ADA SIGNS SECURED TO BUILDING.
- 4. PROVIDE AND INSTALL SIGN SECURED TO BUILDING THAT INDICATES "VAN ACCESSIBLE". SIGNS MUST INDICATE "100 FINE".

STORM SEWER

- 1. MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH CITY OF BISMARCK SPECIFICATIONS. ALL BACKFILL SHALL BE 95% OF STANDARD PROCTOR AT RECOMMENDED MOISTURE CONTENT.
- 2. BREAK INTO BACK OF EXISTING 2x3" INLET WITH 12" STORM SEWER; INV. 05.10.
- 3. INSTALL 13.66 LF 12" STORM SEWER AT 0.732% AND INSTALL INLET #1; GUTTER: 08.90; NW INV. 05.20.
- 4. BREAK INTO BACK OF EXISTING 2x6" INLET WITH 12" STORM SEWER; INV. 97.22.
- 5. INSTALL 102.35 LF 12" STORM SEWER AT 5.061% AND INSTALL INLET #2; GUTTER: 07.40; NE INV. 02.40.

STORM SEWER INLET SCHEDULE

Inlet/Manhole Number	Inlet #1	Inlet #2
Manhole/Inlet Size	2'x3' BOX	2'x3' BOX
Casting Type	CONCRETE	CONCRETE
Rim/Gutter Elev.	08.90	07.40
Top P.C. Section	08.11	06.61
Invert Elev. (a)	05.20	02.40
Length of P.C.	2.91	4.21



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Will Stelzer
Planning
TITLE
DATE 8-2-18

APPROVED BY FORESTRY
Michael
LANDSCAPING 8-2-18
TITLE
DATE

SCALE - 1" = 20'
NGVD 29 DATUM
FOR REGULATORY REVIEW ONLY - NOT FOR CONSTRUCTION

SITE PLAN
LOTS 2 & 3 BLOCK 1, SCHWEITZER SECOND ADDITION
BISMARCK, NORTH DAKOTA

SWENSON, HAGEN & COMPANY P.C.
909 Bison Avenue
Bismarck, North Dakota 58501
Phone (701) 223-2600
Fax (701) 223-2606

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SHEET C3.0

SP 2018-050