

APPROVED BY PLANNING
 [Signature]
 TITLE: PLANNING
 DATE: 07-05-13

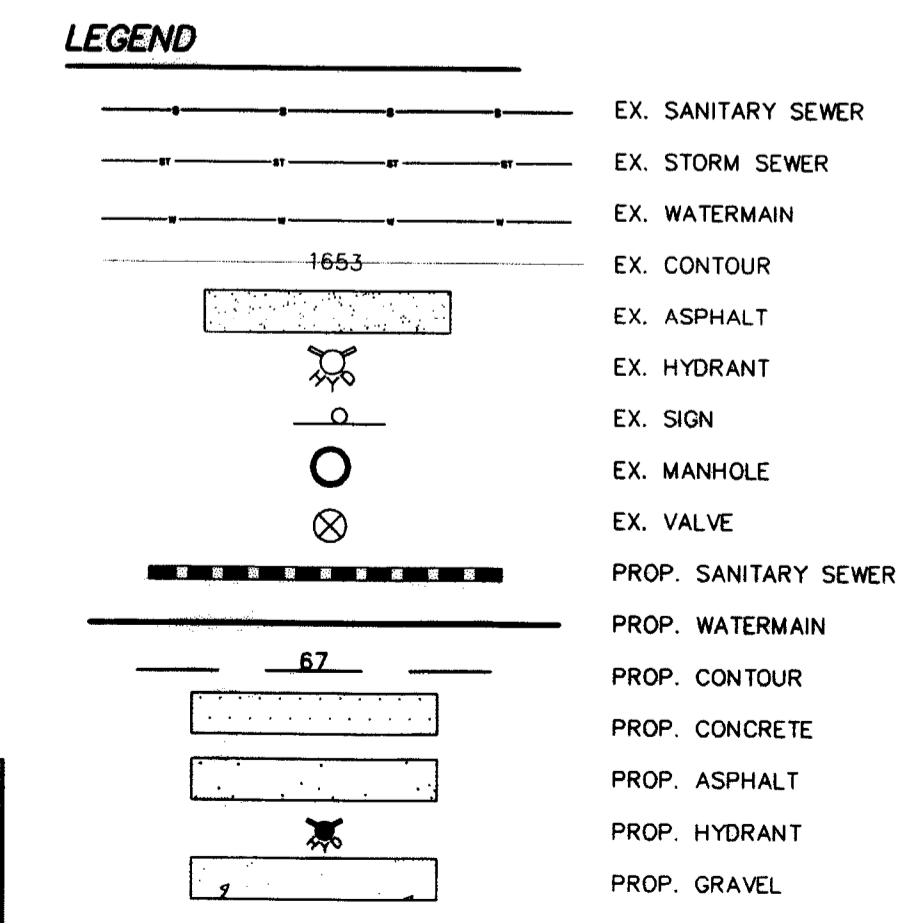
APPROVED BY FORESTRY
 [Signature]
 TITLE: FORESTRY
 DATE: 7-5-13

- 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. ALL CURB SHALL BE STANDARD VERTICAL FACE CURB AND GUTTER. SEE DETAIL THIS SHEET.
 - 3. 4" UNREINFORCED CONCRETE SIDEWALK PER CITY OF BISMARCK SPECIFICATIONS.
 - 4. 5" FULL DEPTH ASPHALT OR 5" CONCRETE WITH FIBERMESH ALTERNATE. SEE DETAIL THIS SHEET.
 - 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 COINCIDE WITH CONTRACTION JOINT SPACING. CONSTRUCTION JOINT FOR UNREINFORCED CONCRETE SHALL HAVE A MINIMUM 1/2" DIAMETER HALF ROUND KEYWAY OR APPROVED EQUAL. CONSTRUCTION JOINTS FOR REINFORCED CONCRETE SHALL BE 1/2" X 12" DOWELS 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" SWK 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.

- GENERAL LANDSCAPING (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 THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
 - 4. 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.
 - 5. SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MULTIPLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
 - 6. CONTRACTOR SHALL PROVIDE WRITTEN WARRANTIES CONFIRMING THE FOLLOWING:
 - 16. FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
 - 17. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND NECESSARY TO PREVENT DAMAGE AND TO SAFEGUARD AGAINST INJURY TO EXISTING UTILITIES.

- 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. ALL PORTIONS OF THE SITE NOT RECEIVING OTHER IMPROVEMENTS SHALL BE SEEDED. SEED SHALL CONFORM TO THE CITY OF BISMARCK SPECIFICATIONS FOLLOWS:
 - 51. FERTILIZER 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.
 - 52. 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.
 - 53. THE SEEDING CONTRACTOR SHALL WATER THE NEWLY SEEDED AREAS ON THE SAME DAY THAT SEEDING OCCURS. IF AN IRRIGATION SYSTEM IS PRESENT AND FUNCTIONING, THE SEEDING CONTRACTOR SHALL ENERGIZE THIS SYSTEM AND ENSURE THAT A WATERING SCHEDULE HAS BEEN ESTABLISHED BEFORE LEAVING THE SITE.
 - 54. 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 THEREFOR, 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.
 - 55. 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.

- TOPSOIL NOTES**
- 1. 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.
 - 2. TOPSOIL SHALL BE PLACED AND SEEDED 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.



PLANT PALETTE

SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QNTY.
PK	PRINCESS KAY PLUM	Prunus nigra 'Princess Kay'	1 1/2" Cal.	5
CB	CORALBURST CRABAPPLE	Malus 'Coralcote'	1 1/2" Cal.	5
SM	SILVER MAPLE	Acer saccharinum	1 1/2" Cal.	18
AK	ALPINE CURRANT	Ribes alpinum	2 Gallon	129
FS	FRITSCH SPIREA	Spiraea fritschiana	2 Gallon	64

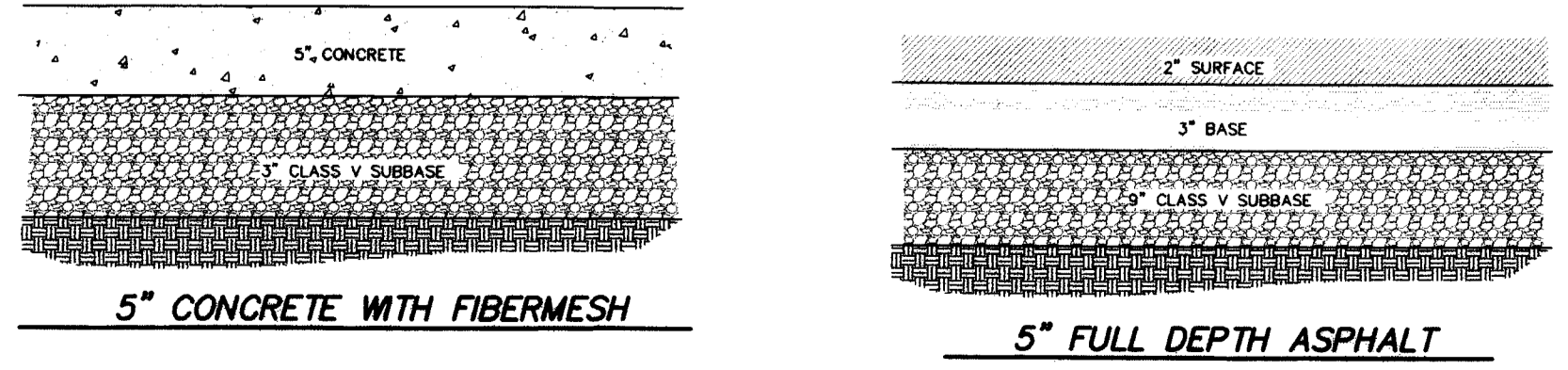
Copyright © 2013 by Swenson, Hagen & Co.
 All rights reserved. No part of this drawing may be used or reproduced in any form or by any means without the express written permission of Swenson, Hagen & Co.

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. 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 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.

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.

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



GRADING, PAVING & LANDSCAPING PLAN
 NORTHERN PLAINS COMMERCE CENTRE ADDITON
 LOT B OF LOT 1, BLOCK 2
 BISMARCK, NORTH DAKOTA

SWENSON, HAGEN & COMPANY P.C.
 900 Basin Avenue P.O. Box 1135
 Bismarck, North Dakota 58504
 Phone (701) 223-2600
 Fax (701) 223-2606
 sheng@swensonhagen.com

SH & CO
 Surveying
 Hydrology
 Land Planning
 Civil Engineering
 Landscape & Site Design
 Construction Management

PROFESSIONAL ENGINEER
 NORTH DAKOTA

DRAWN BY: CK/LN
 CHECK BY: JP
 DATE: 7-2-13
 FILE DESC:
 COMPUTER FILE:
 PROJ: BISMARCK / NORTHERN PLAINS COMMERCE CENTRE / LOT B OF LOT 1 SITE PLAN
 SURVEY FILE:

SHEET C3.0