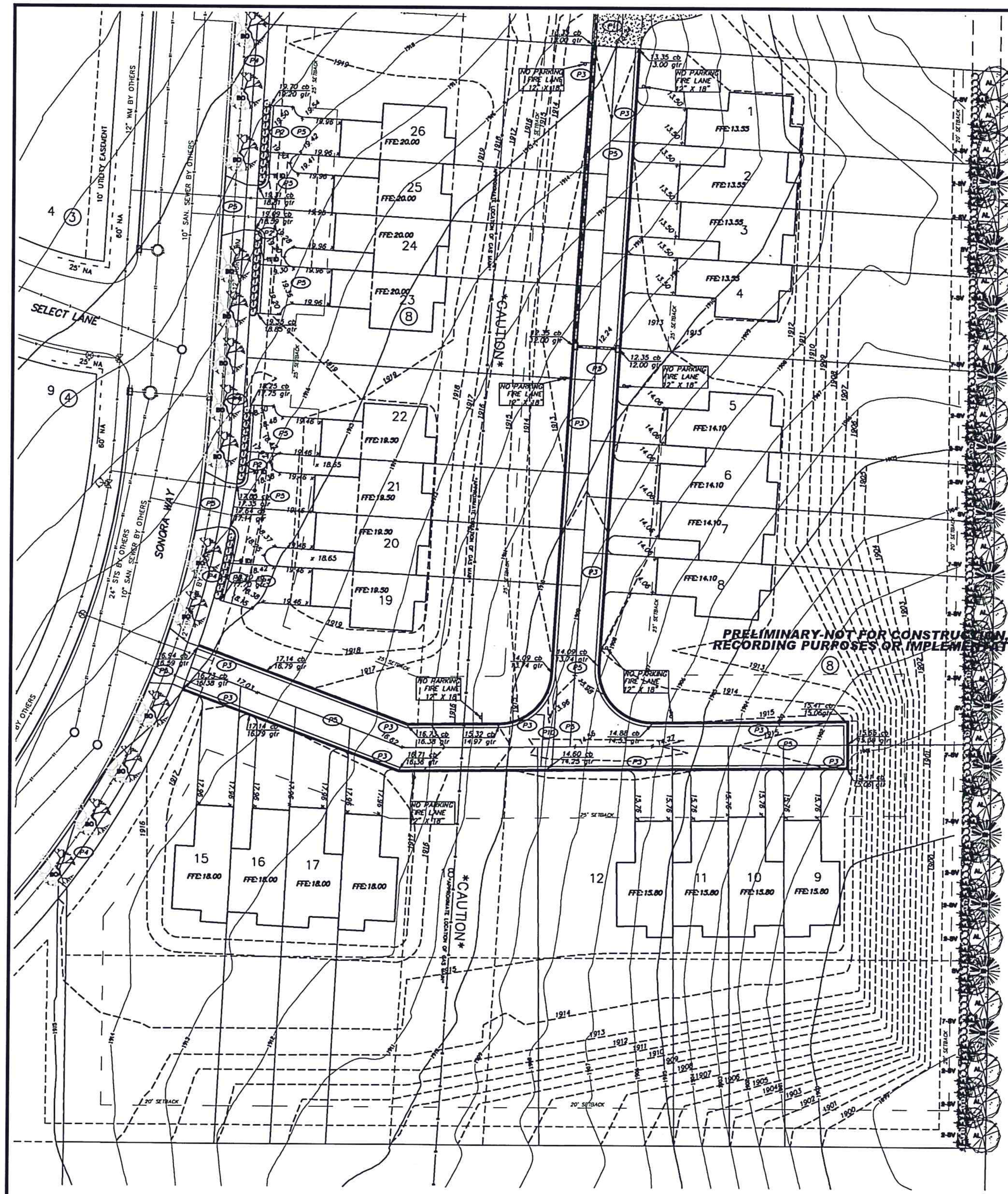
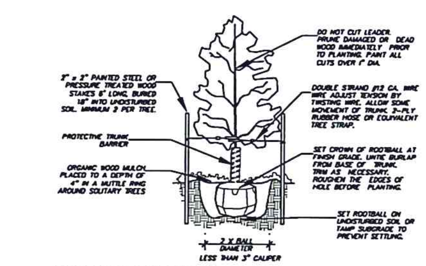
APPROVED BY PLANNING
TITLE DATE 6/16/16

APPROVED BY FORESTRY
LANDSCAPE ARBORIST
TITLE DATE 6-15-16

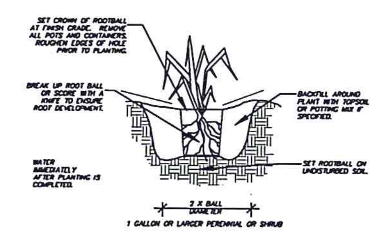


PAVEMENT

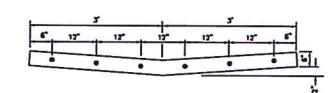
- (P1) ON SITE EXTERIOR CONCRETE MATERIALS AND CONSTRUCTION MATERIALS SHALL CONFORM TO CITY OF BISMARCK SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. AIR CONTENT SHALL BE 5% TO 7%. STRENGTH AT 28 DAYS SHALL BE 4000 PSI.
- (P2) STANDARD VERTICAL FACE CURB AND GUTTER. SEE NOTE THIS SHEET. TIP GUTTER AS APPROPRIATE.
- (P3) MOUNTABLE CURB AND GUTTER. SEE NOTE THIS SHEET. TIP GUTTER AS APPROPRIATE.
- (P4) CITY SIDEWALK PER CITY OF BISMARCK SPECIFICATIONS - THICKEN SIDEWALK AT DRIVEWAYS TO 8" AND PROVIDE KEYWAY PER CITY SPECIFICATIONS.
- (P5) 5" CONCRETE WITH FIBERMESH AND 6" CLASS V BASE. SEE DETAIL THIS PAGE.
- (P6) ISOLATION JOINTS WILL BE REQUIRED ALONG THE BUILDING, STOOPS AND ALL FIXED ITEMS. LEAVE JOINT ½" LOW AND SEAL. ISOLATION JOINTS SHALL BE SEALED USING A ONE PART POLYURETHANE TYPE SEALANT.
- (P7) CONSTRUCTION JOINTS WILL BE PLACED TO COINCIDE WITH CONTRACTION JOINT SPACING. CONSTRUCTION JOINT FOR UNREINFORCED CONCRETE SHALL HAVE A MINIMUM 1½" DIAMETER HALF ROUND KEYWAY OR APPROVED EQUAL. CONSTRUCTION JOINTS FOR REINFORCED CONCRETE SHALL BE 1/2" X 12" DOWELS AT 12 O/C.
- (P8) 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.
- (P9) 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.
- (P10) 6" REINFORCED CONCRETE VALLEY GUTTER. SEE DETAIL THIS SHEET.
- (P11) 6" GRAVEL FIRE APPARATUS TURNAROUND.



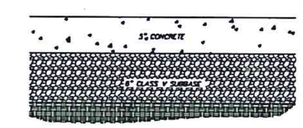
TREE PLANTING DETAIL
TYPICAL FOR ALL DECIDUOUS, SINGLE-TRUNK, TREES — NTS



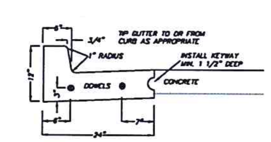
SHRUB/PERENNIAL PLANTING DETAIL
TYPICAL FOR ALL SHRUBS AND PERENNIALS — NTS



6" CONCRETE VALLEY GUTTER



5" CONCRETE WITH FIBERMESH



VERTICAL FACE CURB & GUTTER
DOWEL CURB AT EXPANSION AND CONSTRUCTION JOINTS ONLY

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./SY, AND WHEREVER 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:

  FURNISHED TREES GUARANTEED TO LIVE AND REMAIN STRONG, VIGOROUS, AND HEALTHY CONDITION FOR 365 DAYS MINIMUM FROM DATE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETED.
- (G8) 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 4" OF TOPSOIL AND SEEDED ACCORDING TO SPECIFICATIONS.
- (T2) 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.

SEEDING NOTES

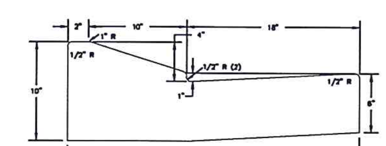
- (S1) CLEAR AND GRUB SITE BEFORE SEEDING ENSURING THAT THE SITE IS IN A SMOOTH CONDITION WITH NO DEBRIS OR ROCKS LARGER THAN 2" IN DIAMETER.
- (S2) FERTILIZE SOIL DURING THE SEEDING PROCESS USING AN APPROPRIATE APPLICATION PROCESS. FERTILIZER SHALL BE 10-10-10 AND APPLIED AT A RATE OF 4 LBS. PER 1000 SQUARE FEET.
- (S3) SEED SHALL BE DRILL SEEDED TO A DEPTH OF 1/4" TO 1/2" AND SHALL BE EVENLY SPREAD. AFTER SEED HAS BEEN SOWN, THE SOIL SHALL BE REPACKED 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.
TREES	BO	BUR OAK	Quercus macrocarpa	1 1/2" Cal.	14
	AL	AMERICAN LINDEN	Tilia americana	2" Cal.	19
	AM	AMUR MAPLE	Acer ginnala	1 1/2" Cal.	25
	BH	BLACK HILLS SPRUCE	Picea glauca var. densata	4' +	14
	MJ	MEDORA JUNIPER	Juniperus scopulorum 'Medora'	4' +	58
SHRUBS	ID	ISANTI DOGWOOD	Cornus sericea 'Isanti'	2 Gallon	41
	SV	SAVIN JUNIPER	Juniperus sabina	2 Gallon	83

LANDSCAPING REQUIREMENTS

REQUIRED	PROVIDED
REQUIRED STREET TREES: 3 PER 100 FEET = 14 TREES	PROVIDED STREET TREES: 14 TREES
REQUIRED PERIMETER PARKING: CONTINUOUS HEDGE	PROVIDED PERIMETER PARKING: CONTINUOUS HEDGE
REQUIRED BUFFER YARD 3 SHADE TREES/100 FEET 4 ORNAMENTAL TREES/100 FEET 2 LARGE UPRIGHT CONIFERS/100 FEET 10 SMALL UPRIGHT CONIFERS/100 FEET 14 SHRUBS/100 FEET	PROVIDED BUFFER YARD 18 SHADE TREES 25 ORNAMENTAL TREES 14 UPRIGHT CONIFERS 58 SMALL CONIFERS 83 SHRUBS



MOUNTABLE CURB & GUTTER CROSS SECTION

LEGEND

- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING STORM SEWER
- EXISTING CONTOUR
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED STORM SEWER
- PROPOSED GATE VALVE
- PROPOSED HYDRANT
- PROPOSED CONCRETE
- PROPOSED CONTOUR
- PROPOSED GRADE (XX.XX cb / XX.XX gtr)

SCALE - 1" = 30'
NGVD 29 DATUM
MAY 3, 2016
REVISED: JUNE 13, 2016

WARRANTY / DISCLAIMER
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REVISIONS	DATE
REVISED PER CITY COMMENTS	6/13/2016

GRADING, PAVING & LANDSCAPE PLAN

LOTS 1-12 & 15-26, BLOCK 8, HERITAGE PARK ADDITION
BISMARCK, NORTH DAKOTA

SWENSON, HAGEN & COMPANY P.C.
909 Basin Avenue
Bismarck, North Dakota 58504
shcng@swensonhagen.com
Phone (701) 223-2600
Fax (701) 223-2606
Surveying
Hydrology
Land Planning
Civil Engineering
Landscape & Site Design
Construction Management

DRAWN BY: CK
CHECK BY: JP
DATE: 5-3-16
FILE DESC.:

COMPUTER FILE:
P:\BISMARCK\HERITAGE RIDGE\HERITAGE PARK SITE PLAN.dwg

SHEET
C3.0