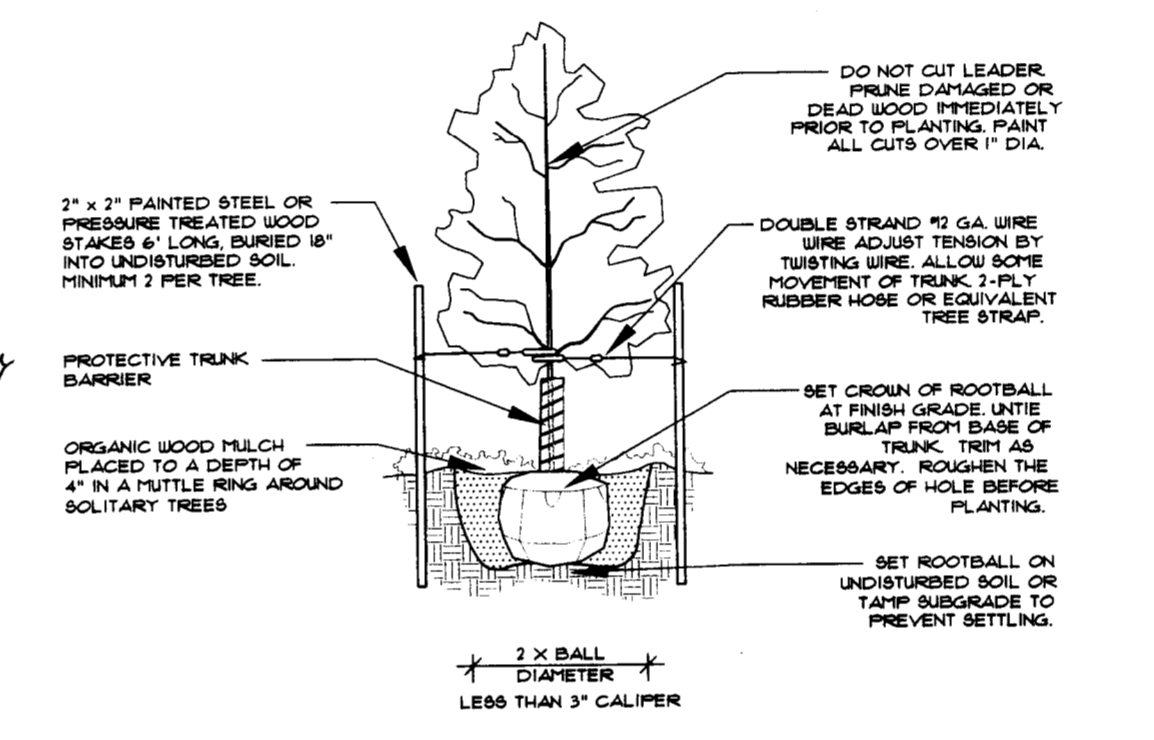


TYPICAL SECTION—REINFORCED RETAINING WALL NTS

- RETAINING WALL NOTES**
- W1 RETAINING WALL SHALL BE CONSTRUCTED OF VERSA-LOK RETAINING WALL SYSTEM OR AN ENGINEER APPROVED EQUAL.
 - W2 RETAINING WALL SHALL HAVE COMPACTED SAND OR GRAVEL BACKFILL WITH IMPERVIOUS FILL MATERIAL AT TOP PORTION OF WALL.
 - W3 WALL BASE MATERIAL SHALL BE COMPRISED OF LEVELING PAD THAT CONSISTS OF COMPACTED FREE DRAINING GRANULAR MATERIAL A MINIMUM OF 6" THICK.
 - W4 4" DRAIN PIPE BEHIND WALL AT BASE SHALL BE INSTALLED TO ALLOW DRAINAGE AWAY FROM THE WALL BASE.
 - W5 RETAINING WALL SYSTEM SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.

APPROVED BY PLANNING
Jana Wm.
PALINIE 09.25.14
DATE

APPROVED BY FORESTRY
Jana Wm.
PALINIE 09.25.14
DATE



TREE PLANTING DETAIL NTS

- LEGEND**
- EXISTING SANITARY SEWER
 - EXISTING WATERMAIN
 - EXISTING UNDERGROUND ELECTRIC
 - EXISTING UNDERGROUND TELEPHONE
 - EXISTING UNDERGROUND GAS
 - EXISTING UNDERGROUND CABLE TV
 - EXISTING OVERHEAD POWER
 - EXISTING HYDRANT
 - EXISTING SANITARY MANHOLE
 - EXISTING ASPHALT
 - EXISTING CONCRETE
 - EXISTING CONTOUR
 - PROPOSED SANITARY SEWER
 - PROPOSED WATERMAIN
 - PROPOSED CLEANOUT
 - PROPOSED GATE VALVE
 - PROPOSED CURB STOP
 - PROPOSED CONCRETE
 - PROPOSED RETAINING WALL
 - PROPOSED CONTOUR
 - PROPOSED GRADE

GENERAL LANDSCAPING NOTES FOR ALL SHEETS

- ALL CONTRACTORS WISHING TO SUBMIT BIDS FOR THIS LANDSCAPING PROJECT SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL CONDITIONS.
- 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.
- DAMAGE THAT OCCURS TO PLANTS DURING TRANSPORTATION AND INSTALLATION WILL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- 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.
- SOLITARY TREES DO NOT NEED TO BE EDGED AROUND, HOWEVER ORGANIC WOOD MULCH SHALL BE PLACED AROUND THE TREE IN A MATTLE RING THAT CONFORMS TO THE DETAIL PROVIDED FOR TREE PLANTINGS.
- 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.
 - 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

- 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.
- TOPSOIL SHALL BE PLACED AND SEEDED AS SOON AS PRACTICAL TO MINIMIZE WIND AND WATER EROSION. BACKFILL BEHIND CONCRETE AND SIDEWALK AS SOON AS REASONABLE TO PREVENT STANDING WATER AND PROTECT THE IMPROVEMENTS.

SEEDING NOTES

- 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.
- 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.
- SEED SHALL BE DRILL SEEDING 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.
- 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.
- 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

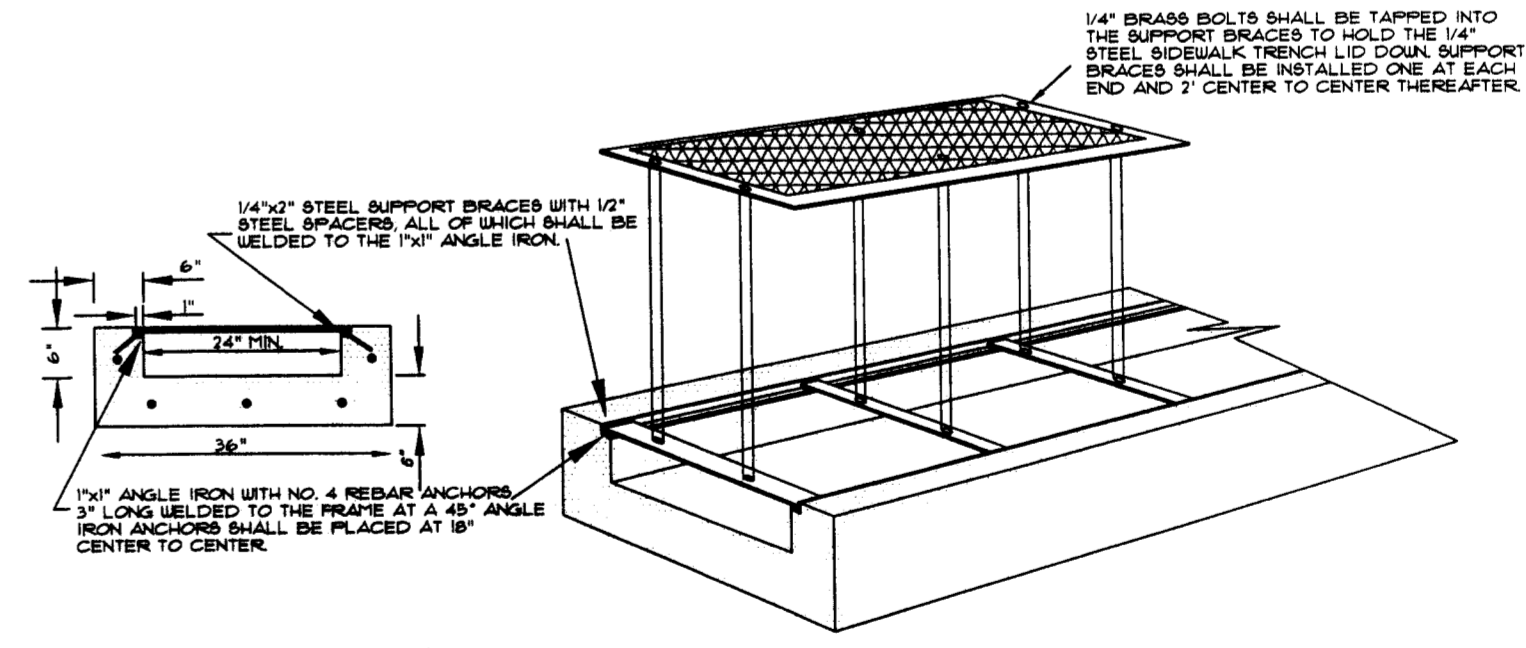
TREES	SYM.	COMMON NAME	SCIENTIFIC NAME	SIZE	QNTY.
	HL	HONEYLOCUST	Gleditsia triacanthos	2" Cal.	13

LANDSCAPING REQUIREMENTS

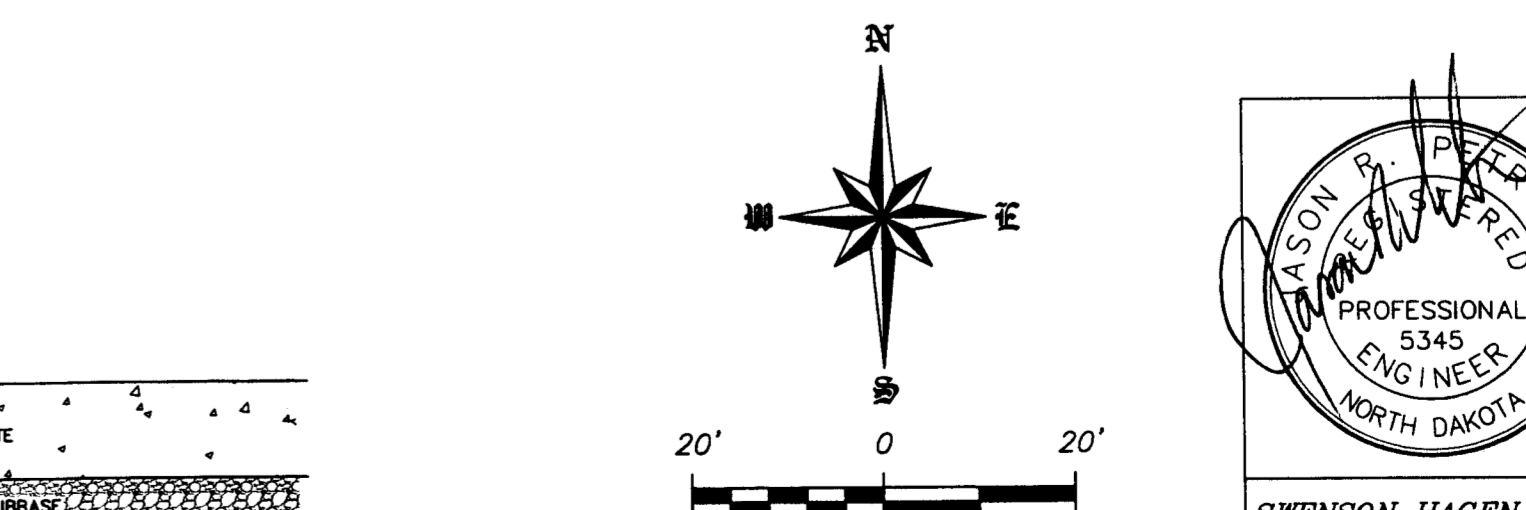
REQUIRED STREET TREES: 3 PER 100 FEET
13 TREES
PROVIDED STREET TREES: 13 TREES

NOTES:

- 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.
- CITY SIDEWALK PER CITY OF BISMARCK SPECIFICATIONS - THICKEN SIDEWALK AT DRIVEWAYS TO 8" PER CITY SPECIFICATIONS.
- 5" CONCRETE WITH FIBERMESH. SEE DETAIL THIS SHEET.
- CONCRETE 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.
- 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.
- VERSA-LOK RETAINING WALL PER MANUFACTURERS SPECIFICATIONS. SEE DETAIL THIS SHEET.
- TRENCH DRAIN PER DETAIL THIS SHEET.
- CONTRACTOR SHALL CONSTRUCT CURB SWALE WITH SIDE SLOPES OF 3:1 AND A MINIMUM DEPTH OF ONE FOOT. ENGINEER SHALL BE NOTIFIED WHEN SWALE IS CONSTRUCTED FOR VERIFICATION.



SIDEWALK TRENCH DRAIN



5" CONCRETE WITH FIBERMESH
NGVD 29 DATUM
JULY 25, 2014
REVISED: SEPTEMBER 22, 2014

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 the safety of all workers and the general public. It is the responsibility of the contractor to 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.

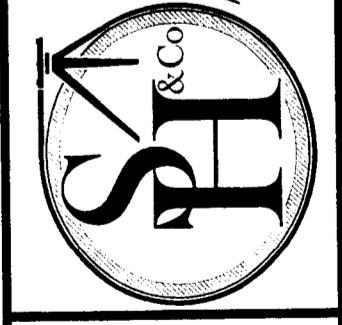
NOTICE TO CONTRACTOR
The location of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representatives. The Contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully 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

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GRADING, PAVING, AND LANDSCAPE PLAN
HAY CREEK MEADOWS FIRST REPLAT
LOTS 1-11
BISMARCK, NORTH DAKOTA

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DRAWN BY: CK/LN
CHECK BY: JP
DATE: 7-25-14
FILE DESC:

COMPUTER FILE:
HAY CREEK MEADOWS
FIRST REPLAT LOTS 1-11
SITE PLANDWG

SHEET
C3.0