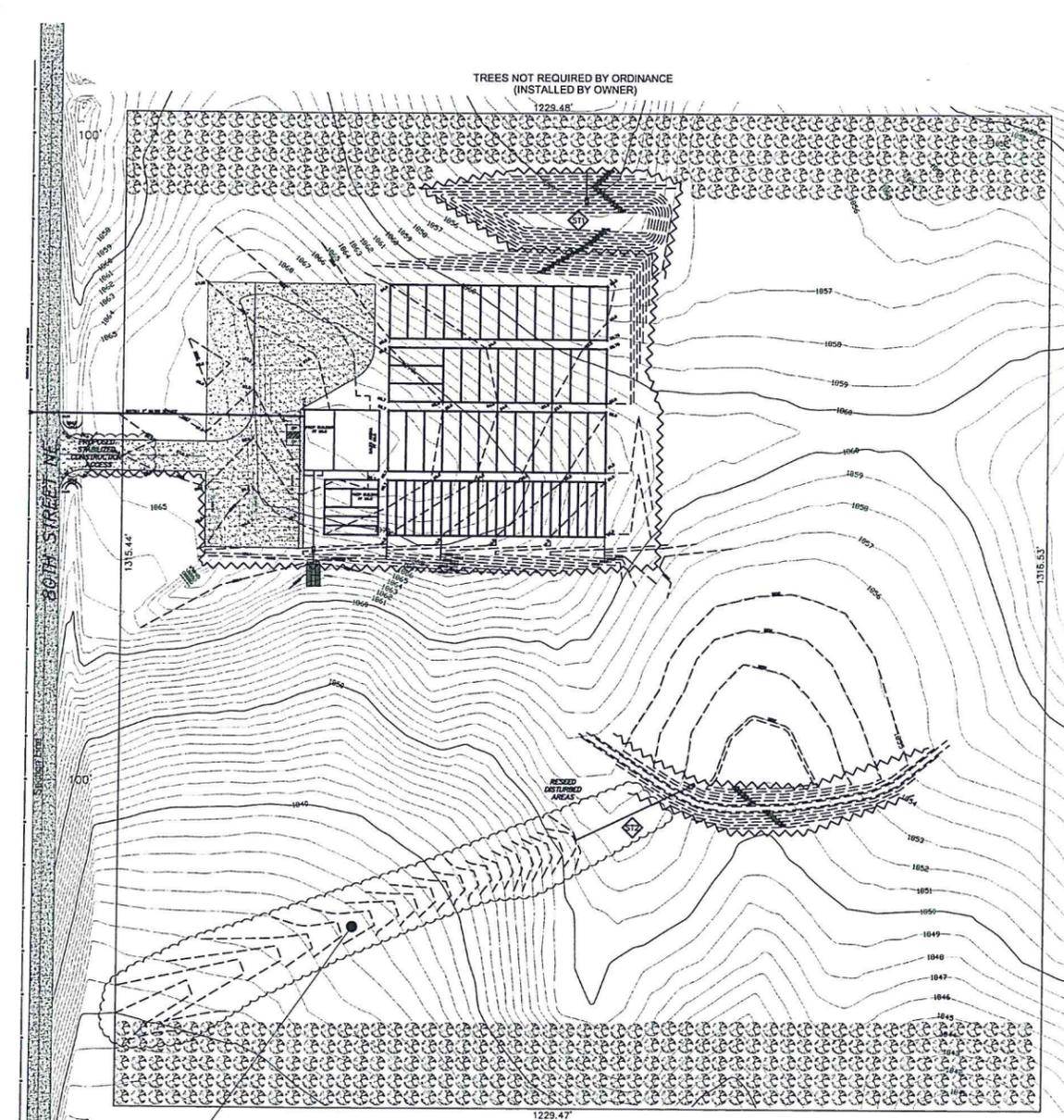
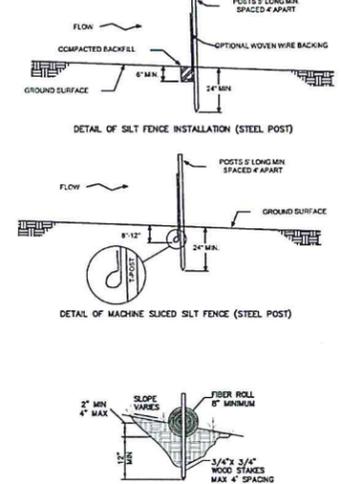


APPROVED BY FORESTRY
L. W. N. K.
LANDSCAPE
8-9-18
DATE

APPROVED BY PLANNING
Deanna
8-9-18
DATE



APPROVED TYPES OF SILT FENCE INSTALLATION



DETAIL OF STRAW WATTLE INSTALLATION

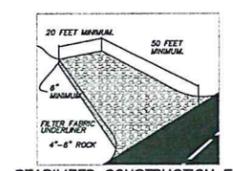
STAKE WATTLES INTO A 2 TO 4 INCH DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE WATTLE.
 DRIVE STAKES AT THE END OF EACH WATTLE AND SPACED 4 FEET MAXIMUM ON CENTER.
 USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 BY 0.75 INCH AND MINIMUM LENGTH OF 24 INCHES.
 IF MORE THAN ONE STRAW WATTLE IS PLACED IN A ROW, THE WATTLES SHOULD OVERLAP, NOT ADJUT.

SEEDING NOTES

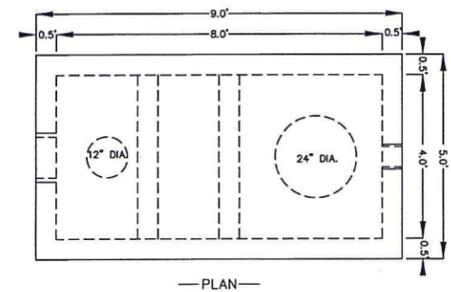
- 1. CLEAR AND GRUB SITE BEFORE SEEDING ENSURING THAT THE SITE IS IN A SMOOTH CONDITION WITH NO DEBRIS OR ROCKS LARGER THAN 2" IN DIAMETER.
- 2. ALL PORTIONS OF THE SITE NOT RECEIVING OTHER IMPROVEMENTS SHALL BE SEED.
- 3. FERTILIZE SOIL DURING THE SEEDING PROCESS USING AN APPROPRIATE APPLICATION PROCESS. FERTILIZER SHALL BE 10-10-10 AND APPLIED AT A RATE OF 4 LBS. PER 1000 SQUARE FEET.
- 4. 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.
- 5. THE SEEDING CONTRACTOR SHALL WATER THE NEWLY SEEDS 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.
- 6. 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.
- 7. 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

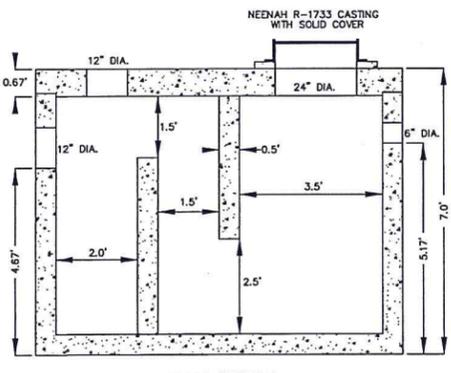
- 1. TOPSOIL IS STOCKPILED ON SITE AND WILL BE PLACED FOR THE LANDSCAPE CONTRACTOR TO SPREAD AND FINISH GRADE. ALL PORTIONS OF THE SITE NOT RECEIVING GRAVEL OR OTHER IMPROVEMENTS SHALL BE COVERED WITH A MINIMUM OF 4" OF TOPSOIL, AND SEED ACCORDING TO SPECIFICATIONS.
- 2. TOPSOIL SHALL BE PLACED AND SEED 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.



STABILIZED CONSTRUCTION EXIT



PLAN



CROSS SECTION

SHEET INDEX

C1.0 SITE SURVEY, EROSION CONTROL, & GRADING PLAN
 C2.0 SITE PLAN

DESCRIPTION

THE NW 1/4 OF THE SW 1/4 OF 139-79-16

OWNER

DEAN ULMER
 12687 HIGHWAY 1804
 MOBRIDGE, SD 57601
 (605)848-2524

BUILDINGS

CONSTRUCTION TYPE WOOD FRAMED
 FIRE RESISTANCE OF EXTERIOR WALL - 1 HR
 ONE STORY BUILDING: 8,000 SF
 FIRST FLOOR:

PARKING

REQUIRED: 1 STALL/200 SF OF GROSS FLOOR AREA = 40 STALLS
 PROVIDED: 45 STALLS

ZONING

AG (AGRICULTURE)

BENCHMARKS (NAVD 88)

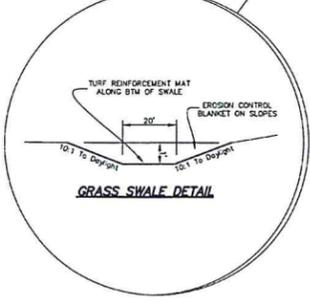
TO BE SET AT TIME OF CONSTRUCTION

GENERAL EROSION CONTROL NOTES

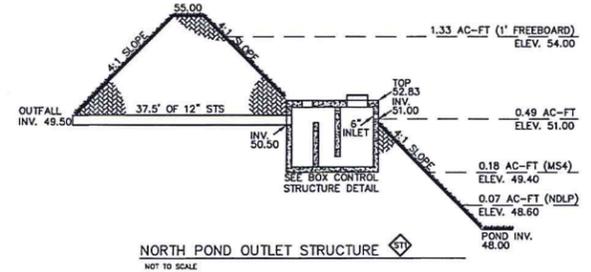
- 1. AN M.O.I. AND SWPPP WILL NEED TO BE PREPARED FOR THIS PROJECT BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL SUBMIT THE DOCUMENTATION AND SUBMIT TO NORTH DAKOTA HEALTH DEPARTMENT AND THE CITY OF BISMARCK. CONTRACTOR SHALL NOT START THE PROJECT UNTIL RECEIVING AN APPROVAL LETTER FROM THE NORTH DAKOTA HEALTH DEPARTMENT AND THE CITY OF BISMARCK.
- 2. CONTRACTOR SHALL IMPLEMENT APPROPRIATE EROSION CONTROL BEFORE BEGINNING ANY LAND DISTURBING ACTIVITIES AS DESIGNED. NOTE: EROSION CONTROL ITEMS SHOWN NEED TO BE IMPLEMENTED AT APPROPRIATE STAGES OF CONSTRUCTION.
- 3. CONTRACTOR SHALL CONTROL DUST BLOWING THROUGHOUT PROJECT.
- 4. CONTRACTOR SHALL SEED AND MULCH DISTURBED AREAS.
- 5. CONTRACTOR SHALL HAVE A COPY OF THE SWPPP AND EROSION CONTROL PLAN ON-SITE AT ALL TIMES.
- 6. WEEKLY (PLUS WITHIN 24 HOURS OF A STORM WATER EVENT) INSPECTIONS OF THE CONSTRUCTION SITE WILL BE PERFORMED BY PERSONNEL FAMILIAR WITH ALL ASPECTS OF THE SWPPP AND THE IMPLEMENTED CONTROL PRACTICES. INSPECTIONS WILL INCLUDE THE REVIEW OF ALL DISTURBED AREAS, STRUCTURAL AND NON-STRUCTURAL CONTROL MEASURES, MATERIAL STORAGE AREAS AND VEHICULAR ACCESS POINTS.
- 7. INSPECTIONS WILL BE PERFORMED AT LEAST ONCE EVERY 7 DAYS OR WITHIN 24 HOURS OF A STORM EVENT GREATER THAN 0.5 INCHES OF RAIN WITHIN A 24 HOUR PERIOD.
- 8. EROSION CONTROL FOR PROJECT DESIGNATES A MINIMUM EFFORT TO CONTROL AND CONTAIN EROSION. CONTRACTOR SHALL USE DUE DILIGENCE TO CONTROL EROSION.
- 9. SEDIMENT TRACKING ONTO ADJACENT STREETS WILL BE PROHIBITED. STREETS SHALL BE CLEANED WITHIN 48 HOURS IF SEDIMENT TRACKING OCCURS.
- 10. IN GENERAL, STRAW WATTLES OR SILT FENCE SHALL BE PLACED ON LEVEL GROUND 5' TO 10' AWAY FROM DISTURBED AREAS. WHEN FEASIBLE, SILT FENCE SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.
- 11. ONCE ALL DISTURBED AREAS HAVE BEEN SEEDS AND MULCHED AND THE SITE DEMONSTRATES A MINIMUM OF 70% VEGETATIVE GROWTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SILT FENCE AND FIBER ROLL REMOVAL.
- 12. CONCRETE WASHOUT AREAS WILL BE INDICATED BY A SIGN. WASHOUT AREAS WILL CONSIST OF A HOLE IN THE GROUND A MINIMUM OF 1.5 FEET DEEP. CONCRETE WILL BE ROUTINELY REMOVED AND DISPOSED OFF-SITE. WASHOUT AREAS SHALL NOT BE LOCATED IN A CONVEYANCE WATERWAY. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF CONCRETE WASHOUT AREAS AT THE END OF THE PROJECT.

LEGEND

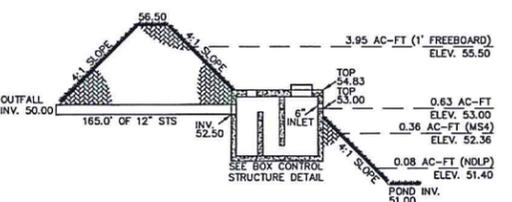
- EXISTING ASPHALT
- EXISTING CONTOUR
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN
- PROPOSED STORM SEWER
- PROPOSED CLEANOUT
- PROPOSED GRAVEL
- PROPOSED CONCRETE
- PROPOSED GRAVEL
- PROPOSED CONTOUR
- PROPOSED GRADE
- PROPOSED EROSION CONTROL



GRASS SWALE DETAIL



NORTH POND OUTLET STRUCTURE



SOUTH POND OUTLET STRUCTURE

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 contractors 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.

UTILITY NOTICE TO CONTRACTOR
 The location of existing underground utilities are shown in an approximate way 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. Underground locations can be made by using the "One Call" number 1-800-795-0555.

DATE	REVISION
4/26/2018	PROPOSED PARKING LOT AND POND OUTLET STRUCTURE
8/15/2018	REGRADE PARKING LOT TO SOUTH DIRECTION POND
8/29/2018	GRADE GRASS SWALE FROM POND TO ROAD R/W

BISMARCK LIVESTOCK MARKET
 BURLEIGH COUNTY, NORTH DAKOTA

SWENSON, HAGEN & COMPANY P.C.
 800 Main Avenue
 Bismarck, North Dakota 58104
 shceng@swensohagen.com
 Phone (701) 233-7600
 Fax (701) 233-7206



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 SURVEY FILE: _____
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 C1.0

