



**SWPPP NOTES:**

1. SWPPP = STORMWATER POLLUTION PREVENTION PLAN
2. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION. SITEWORK CONTRACTOR SHALL COMPLETE AND SUBMIT TO THE CITY OF ELK RIVER, INCLUDING ITEMS IN THE 'INTRODUCTION' SECTION.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATIONS, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

MATTHEW D. HIEB  
DATE \_\_\_\_\_ REG. NO. 26140

- CONSTRUCTION NOTES:**
1. ALL CONSTRUCTED DITCHES SHALL BE GRADED AT A 1.0% MINIMUM SLOPE, UNLESS OTHERWISE NOTED.
  2. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED IN ANY PARTICULAR AREA. SEEDING AND MULCHING SHALL NOT WAIT UNTIL ALL GRADING IS COMPLETED ON THE ENTIRE SITE.
  3. ALL DISTURBED SLOPES IN EXCESS ON 4:1 SHALL BE SEEDED AND PROTECTED WITH EROSION MAT (INCLUDING CONSTRUCTED POND), OR SHALL BE HYDROSEEDED WITH MECHANICALLY BONDED FIBER MATRIX.
  4. INSTALL SEED AND EROSION MAT ON ALL CONSTRUCTED DITCH BOTTOMS AS PER DETAIL.
  5. ALL DITCH CHECKS ARE TO BE SILT FENCE, STRAW BALES, FIBER LOGS, OR TRIANGULAR SILT DIKE, AS MANUFACTURED BY TRIANGULAR SILT DIKE, INC. DITCH CHECKS SHALL BE INSTALLED IN ALL CONSTRUCTED SWALES WITH THE FOLLOWING LIMITATIONS:  
FLOW LENGTH, UPSLOPE FROM DITCH CHECKS, SHALL BE LIMITED AS FOLLOWS:  
- 600' MAX FOR SLOPES LESS THAN 3%  
- 300' MAX FOR SLOPES 3% TO 6%  
- 150' MAX FOR SLOPES GREATER THAN 6%
  6. ALL SOIL STOCKPILES THAT WILL BE IN PLACE LONGER THAN 14 CALENDAR DAYS SHALL HAVE ITS PERIMETER SURROUNDED BY SILT FENCE AND THE STOCKPILE TEMPORARILY SEEDED.
  7. STORM SEWER STRUCTURES, WITH OPEN LIDS, SHALL BE PROTECTED WITH FABRIC AS SHOWN ON THE DETAIL SHEETS.
  8. ALL APPLICABLE EROSION CONTROL MEASURES AND STORM PONDS SHALL BE INSTALLED BEFORE CONSTRUCTION COMMENCES. ALL AREAS SEEDED AFTER OCTOBER 15TH SHOULD BE SEEDED WITH THE SPECIFIED MIX AT A RATE OF 150% OF WHAT IS SPECIFIED (DORMANT SEEDING). ALL EROSION CONTROL MEASURES SHALL BE SEEDED AND APPLICABLE EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED. ANY EROSION THAT OCCURS WITHIN THE SITE SHALL BE CONTAINED WITHIN THE PROJECT AREA.
  9. WITHIN TWO (2) WEEKS OF COMPLETION OF SITE GRADING, TOPSOIL SHALL BE SPREAD ON ALL DISTURBED AREAS OF SITE EXCLUDING ROADWAYS. SEED ALL AREAS WITH PERENNIAL RYE GRASS AT THE RATE ON 100 LBS/ACRE. MULCH ALL DISTURBED AREAS AT THE RATE OF 1.5-2.0 TONS PER ACRE. MULCH SHALL BE DISC ANCHORED.
  10. ALL FILL MATERIAL TO BE COMPACTED TO 95% STANDARD PROCTOR. TOPSOIL TO BE REMOVED BEFORE FILL MATERIAL IS PLACED. NO ORGANIC OR FROZEN MATERIALS TO BE PLACED IN FILL AREAS.
  11. EROSION CONTROL TO BE IN PLACE BEFORE BEGINNING CONSTRUCTION AND CONTINUOUSLY MAINTAINED BY SITEWORK CONTRACTOR.
  12. EROSION CONTROL MAT SHALL BE PLACED ON ALL 3:1 SIDE SLOPES OF ALL PONDS TO NORMAL WATER LEVEL AS WELL AS ALL POND BERMING BACKSLOPES AND ALL OTHER 3:1 OR STEEPER SLOPES ON THE REMAINING SITE.

- PERMANENT SEDIMENT CONTROL SCHEDULE:**
1. ALL WORK SHALL COMPLY WITH THE GUIDELINES SET FORTH IN BEST MANAGEMENT PRACTICES FOR MINNESOTA STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES. BY BEGINNING WORK, THE CONTRACTOR ACKNOWLEDGES THE TERMS OF THIS PERMIT AND AGREES TO ABIDE BY THEM.
  2. THE IMPROVEMENTS INCLUDED ON THE PLAN ARE PART OF THE PERMANENT EROSION CONTROL PLAN.
  3. SITE MAINTENANCE SHALL INCLUDE: REMOVING SITE DEBRIS INCLUDING ROUTINE SWEEPING OF STREETS, CLEANING OUT CULVERTS, CLEANING EROSION CONTROL MEASURES, AND DISPOSING OF SAID MATERIAL OFFSITE.
  4. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE ENTIRE SITE AT LEAST ONCE A WEEK AND FOLLOWING ANY MEASURABLE RAINFALL EVENTS FOR SIGNS OF EROSION AND SILTING. WASHED OUT TURF AND OTHER DAMAGED AREAS SHALL BE REPAIRED IMMEDIATELY.

- CONSTRUCTION SEQUENCE:**
1. INSTALL SILT FENCE PERIMETER AND STABILIZED CONSTRUCTION ENTRANCE.
  2. BEGIN SITE EARTHWORK, INCLUDING ANY REMOVALS.
  3. BEGIN UTILITY CONSTRUCTION.
  4. BEGIN BUILDING CONSTRUCTION.
  5. COMPLETE SITE EARTHWORK, INCLUDING ANY REMOVALS.
  6. BEGIN PAVEMENT CONSTRUCTION.
  7. COMPLETE UTILITY CONSTRUCTION.
  8. COMPLETE BUILDING CONSTRUCTION.
  9. COMPLETE PAVEMENT CONSTRUCTION.
  10. CONVERT TO PERMANENT STORMWATER AND SEDIMENT CONTROL FEATURES.
  11. INSTALL PERMANENT SEEDING AND/OR SODDING AND LANDSCAPING.
  12. REMOVE ALL SILT DEPOSITS FROM SITE AND REMOVE ALL TEMPORARY EROSION CONTROL FEATURES UPON PERMANENT STABILIZATION AND FINAL ACCEPTANCE BY THE ENGINEER.

**LEGEND**

- PROPOSED 1FT CONTOURS
- EXISTING 2FT CONTOURS
- DIRECTIONS OF SURFACE DRAINAGE
- SPOT ELEVATIONS (FLOWLINE/PAVEMENT)
- SILT FENCE - TO BE INSTALLED PRIOR TO ANY CONSTRUCTION
- SILT FENCE - TO BE INSTALLED AFTER DRAINAGE SWALES HAVE BEEN SHAPED, STABILIZED AND SEEDED.
- EROSION MAT, CLASS I, TYPE A OR EQUIVALENT HYDROSEED
- EROSION MAT, CLASS II, TYPE B
- PERMANENT EROSION MAT, CLASS III, TYPE A
- RIP RAP
- DITCH CHECK

**KEY:**

- REJECT SURMOUNTABLE CURB AND GUTTER
- REJECT BARRIER CURB AND GUTTER
- T/W TOP OF SIDEWALK
- T/WALL TOP OF RETAINING WALL
- B/WALL BOTTOM OF RETAINING WALL
- F/F FINISHED FLOOR

SCALE: 0 15 30 60

PROJECT:	NEW FACILITY FOR MEDICAL EXTRUSION TECHNOLOGIES CITY OF ELK RIVER, SHERBURNE COUNTY, MINNESOTA																											
PROJECT NUMBER:	MEEXT.05																											
SHEET NO.:	C2.1																											
DATE:	07/29/05																											
DESIGNED BY:	JRK																											
CHECKED BY:	JRK																											
DWG. FILE:	344-GRAD																											
REF. FILE:	344-001																											
JOB NUMBER:	344-001																											
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**AC/a**  
Auth Consulting/associates  
Professional Engineering  
Building Design  
Construction Management

BRANCH OFFICE: 2020 Enloe Street, Suite 101, Hudson, WI 54016  
Tel: 715-581-5877, Fax: 715-581-5878, Email: info@authconsulting.com

CORPORATE OFFICE: 405 Technology Drive East, Suite A, Menomonie, WI 54751  
Tel: 715-252-4480, Fax: 715-252-4480, Email: info@authconsulting.com

SAVED PRODUCTS • NEW HORIZON, MINNESOTA  
RENDERED BY PART NUMBER 8582

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

DRAWING NUMBER

3

DRAWING NUMBER MEEXT.05