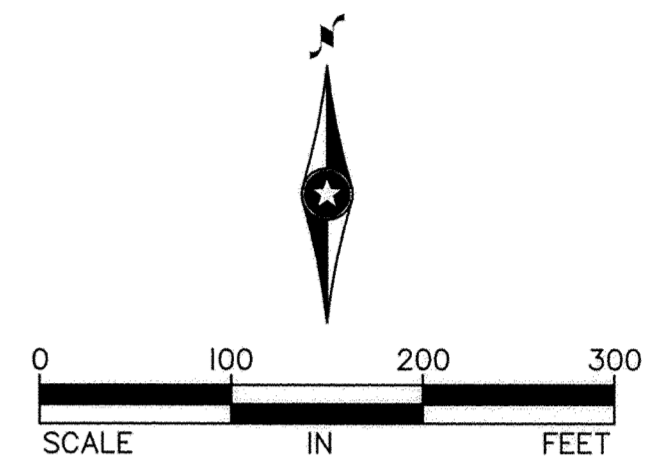


**NOTE:**  
WETLAND DELINEATION BY PETER MILLER OF MILLER ENVIRONMENTAL INC.  
SILT FENCE SHALL BE PLACED AROUND ALL SEDIMENTATION BAINS AFTER CONSTRUCTION IS COMPLETE.

- LEGEND:**
- 962 --- EXISTING CONTOURS
  - EXISTING CULVERT LOCATED BY BPA
  - TREE LINE
  - FOUND IRON PIPE
  - FOUND CAST IRON MONUMENT
  - SET IRON PIPE W/ LS 16095 CAP
  - WETLAND
  - WET --- EDGE OF DELINEATED WETLANDS
  - #B--- DENOTES EXISTING BARBWIRE FENCE
  - SOIL BORINGS
  - EXISTING POLE
  - EXISTING GUY ANCHOR
  - EXISTING ELECTRIC BOX
  - EXISTING TELEPHONE PEDESTAL
  - B --- DENOTES BUILDABILITY LINE
  - --- DENOTES EXISTING DITCH
  - PROPOSED SILT FENCE
  - PROPOSED BAILE CHECK
  - 972--- PROPOSED CONTOURS
  - <--- PROPOSED STORM SEWER
  - PROPOSED CATCH BASIN
  - POSSIBLE PRIMARY AND SECONDARY SEPTIC SYSTEM LOCATION (1200 S.F.)
  - 872 POSSIBLE HOUSE PAD LOCATION
  - FWO PROPOSED LOW OPENING
  - 980 FWO = DENOTES FULL WALKOUT
  - SUGGESTED GARAGE PAD ELEVATIONS



**NOTES:**

1. Contractor shall confine construction operations to the construction limits shown.
2. All work shall conform to the Minnesota Pollution Control Agency's Storm Water Permit requirements. Contractor shall obtain NDPS permit and comply with all Permit requirements.
3. Contractor shall inspect the entire site at least every 7 days and within 24 hours of any measurable rainstorm. Damaged silt fence or other erosion control device or practices shall be repaired immediately. Inspection and maintenance of devices shall continue until the site has undergone final stabilization and a Notice of Termination is submitted to the MPCA.
4. All grading operations shall be conducted in a manner to minimize the potential for site erosion.
5. The site soil erosion and sediment control facilities shall be installed and maintained to conform with the standards specified by the (MPCA).
6. Silt fences shall be installed prior the disturbance of any areas and maintained until all tributary disturbed areas are restored.
7. All soils tracked onto pavement or any other off-site areas shall be removed daily.
8. The site sediment control facilities for the project must be installed prior to any site grading operation. Contact the Soil and Water Conservation District (SWCD) once said facilities are installed and before any grading can take place.
9. The Contractor shall be responsible for the removal of all erosion control measures, including silt fence and bales, upon establishment of permanent vegetation in said areas.
10. All ditches and areas disturbed during construction shall be restored and vegetated as soon as possible. Any finished areas shall be seeded and mulched within 14 days after finished grading is completed accordance to Mn/Dot 2575.
11. All disturbed areas shall be revegetated with seed mix 50B, mulched, fertilized & disk anchored.

**PROPOSED STORM SEWER STRUCTURE SCHEDULE:**

STRUCTURE NUMBER	FLOW LINE ELEV.	INVERT ELEV.	CASTING	SUMP	PIPE DIA.	PIPE	PIPE LENGTH & END SECTION	GRADE
CB 124 (24"x36")	949.69	942.60	R-3067-V		15"	RCP CL 5	32	0.63%
CBMH 123 (48")	949.69	942.40	R-3067-V		15"	HDPE	106	2.26%
APR 122		940.00						
(1) CB 112 (24"x36")	961.69	954.32	R-3067-V		(1) 15"	RCP CL 5	32	0.38%
(1) CBMH 111 (48")	961.69	954.20	R-3067-V		(2) 15"	HDPE	95	0.42%
CBMH 110	956.27	953.80 S 945.00 E	R-3067-V	944.00	15"	HDPE	220	2.27%
(3) APR 110 A		940.00						

- (1) EXISTING CATCH BASIN & STORM SEWER, LEAVE IN PLACE
- (2) SALVAGE & REUSE EXISTING 15" HDPE - 52' IN LENGTH
- (3) SALVAGED APRON

PLACE 35.0 CY CLASS 4 RIP-RAP OVER GEOTEXTILE FABRIC

TEMPORARY ROCK CONSTRUCTION ENTRANCE (SEE DETAIL) SAWCUT & MATCH BITUMINOUS REMOVE & SALVAGE EXISTING STORM SEWER & APRON. CONNECT TO EXISTING CBMH III. PATCH EXISTING OUTLET.

REUSE EXISTING APRON AND HDPE

DET/SED BASIN 100 YEAR ELEV=940.3  
NWL=940.0  
RIP RAP CL 4 (SEE DETAIL)  
25 LF 15" CSP 16 GA  
● 0.50% W/ APRONS  
IE 939.9 SE  
IE 940.0 NW

4' WEIR (SEE DETAIL) OVERFLOW ELEV. 941.5  
RIP RAP CL 4 (SEE DETAIL)  
25 LF 15" CSP 16 GA  
● 0.50% W/ APRONS  
IE 939.9 SE  
IE 940.0 NW

TROTT BROOK FLOOD PLAIN ELEV. 939.0

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.  Signed: <i>Greg Bowles</i> Date: <b>9/8/05</b> Reg. No. 41929	DATE: 08/10/05 DESIGN BY: MG DRAWN BY: MG CHECKED BY: DS DWG. FILE: 2 fin_grad FILE NO.: 05-0356.00	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING
	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING
	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING
	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING	REVISIONS TO EROSION CONTROL MEASURES REVISIONS TO PROFILE STATIONING

**BOGART, PEDERSON & ASSOCIATES, INC.**  
 LAND SURVEYING  
 ENGINEERING  
 MAPPING  
 13075 FIRST STREET, BECKER, MN 55308-9322  
 TEL: 763-882-8822 FAX: 763-882-8844

**KINGDOM ESTATES 2ND ADD.**  
 City of Elk River, Mn.  
 Dennis T. Wurm  
 Final Grading & Erosion Control Plan

SHEET NO. **2**