



CALL BEFORE YOU DIG!
Gopher State One Call
 TWIN CITY AREA: 651-454-0002
 TOLL FREE: 1-800-252-1166

**RAMSEY COUNTY
 PARKS AND RECREATION**
 2015 N. VAN DYKE STREET
 MAPLEWOOD, MN 55109
 TEL: (651) 748-2500
 FAX: (651) 748-2508

**RAMSEY COUNTY
 Parks & Recreation**
Green Spaces • Fun Places • Active Lives

LOUCK ASSOCIATES

Planning • Civil Engineering
 Land Surveying • Landscape Architecture
 Environmental
 7200 Hemlock Lane, Suite 300
 Minneapolis, Minnesota 55369
 Telephone: (763) 424-5505
 Fax: (763) 424-5822
 www.LouckAssociates.com

CONTACT INFORMATION:
 Gus Blumer, Landscape Architect
 2015 N. Van Dyke Street
 Maplewood, MN 55109
 gus.blumer@co.ramsey.mn.us
 651.748.2500

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.

Registration: Engineer
 Number: 45961
 State: Minnesota
 Signature: Nicholas M. Mann
 Date: 10/21/11
 NO. DATE DESCRIPTION:
 1 07/19/11 TURNING EXHIBIT
 2 10/21/11 DOLI COMMENTS

DESIGN PHASE:
BIDDING PLAN SET

**Boat Launch & Off-Leash Dog Park -
 Restroom Building & Utilities Bid Package**
 RAMSEY COUNTY PARKS AND RECREATION
 Bald Eagle - Otter Lake Regional Park

DATE: JULY, 2011
 DESIGNED BY: NMM
 DRAWN BY: CCL
 CHECKED BY: NMM
 TITLE

UTILITY PLAN
BD4.0
 SHEET 5 OF 9

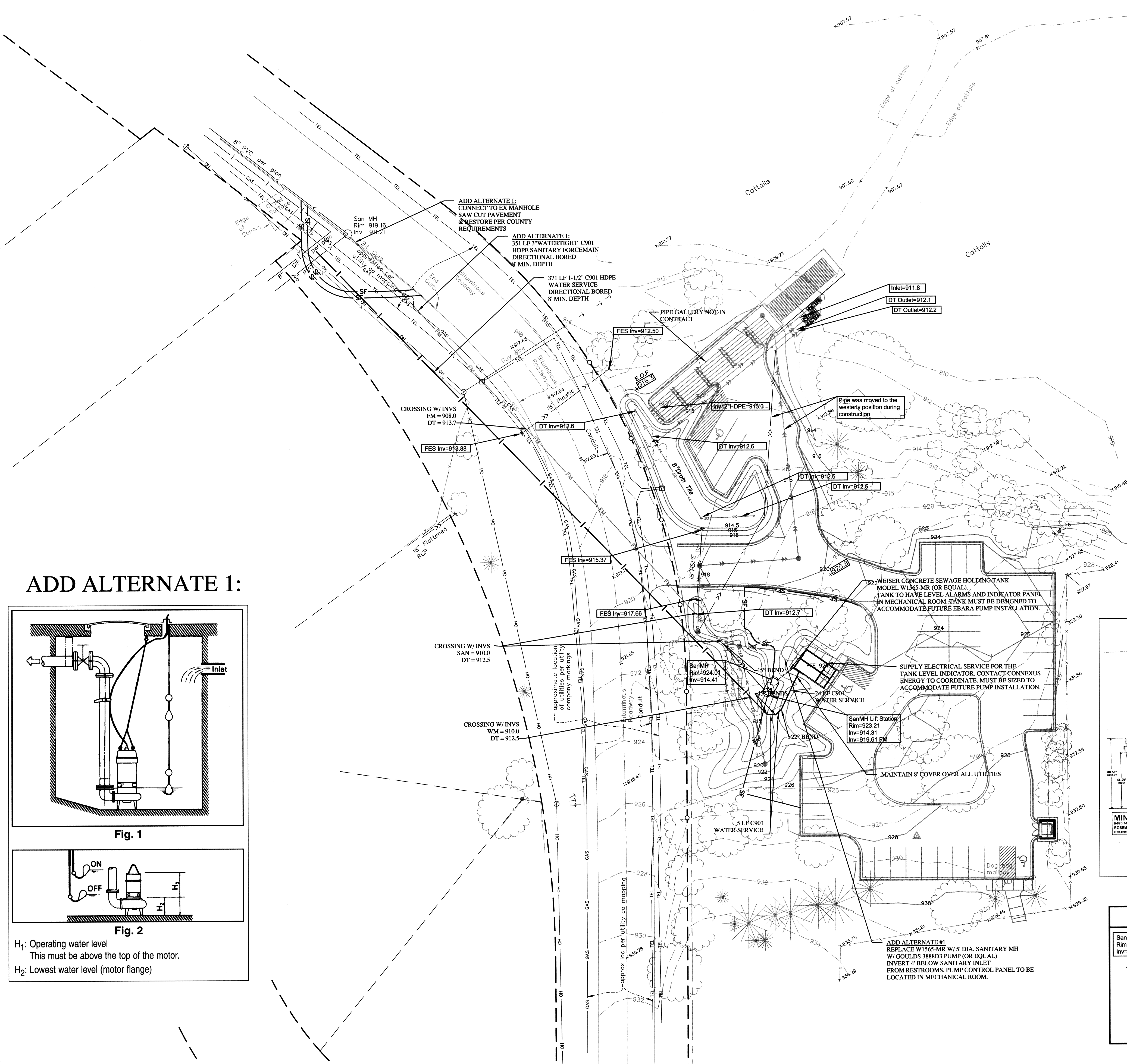
UTILITY PLAN GENERAL NOTES

- All sanitary sewer, storm sewer and watermain utilities shall be furnished and installed per the requirements of the specifications, the Township and the standard utilities specification of the City Engineers Association of Minnesota (CEAM), 1999 edition. All HDPE connections to concrete manholes shall be connected with an internal rubber gasket or by using ADS waterstop gasket.
- All connections to existing utilities shall be performed per the requirements of the Township. The Township Department of Engineering and Building Inspections Department and the County. This shall include all signage, barricades, flashers and flaggers as needed. All public streets shall be open to traffic at all times. No road closures shall be permitted without the expressed authority of the County.
- The contractor shall notify GOPHER STATE ONE CALL at 651-454-0002 at least 48 hours prior to performing any excavation or underground work.
- The contractor shall field adjust watermain to avoid conflicts with sanitary sewer, storm sewer, and services as required.
- All street repairs and patching shall be performed per the requirements of the County. All traffic control shall be provided by the contractor and shall be established per the requirements of the Minnesota Manual of Uniform Traffic Control Devices (MUTCD) and the County. This shall include all signage, barricades, flashers and flaggers as needed. All public streets shall be open to traffic at all times. No road closures shall be permitted without the expressed authority of the County.
- All new sanitary sewer and watermain must have a minimum of 8 feet of cover.
- Proposed Pipe Materials:
 Watermain POLYETHYLENE C901
 Sanitary Sewer POLYETHYLENE C901
 Storm Sewer 6" PVC - SCHEDULE 40
 Drain Tile 6" HDPE WITH SOCK

NOTES

- THE BASE BID TO INCLUDE INSTALLATION OF THE SEWAGE HOLDING TANK. CONTRACTOR IS RESPONSIBLE FOR NECESSARY PERMITS. TANK & TANK COMPONENTS SHALL BE IN ACCORDANCE WITH TOWNSHIP & STATE REQUIREMENTS
- ADD ALTERNATIVE #1 TO INCLUDE THE FORCEMAIN AND SEWAGE PUMP INSTALLATION IN A SANITARY MANHOLE.

Ordinary High Water Elevation: 912.2 ft per DNR Website December 1, 2010
 Top Water Elev = 907.66 November 29, 2010



ADD ALTERNATE 1:

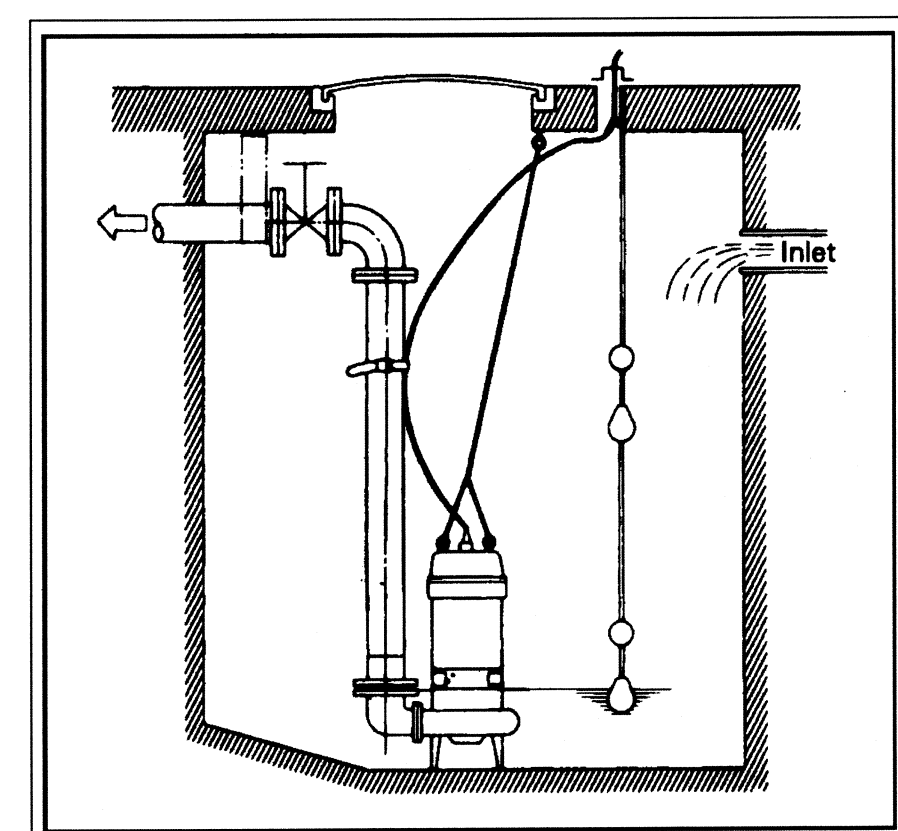


Fig. 1

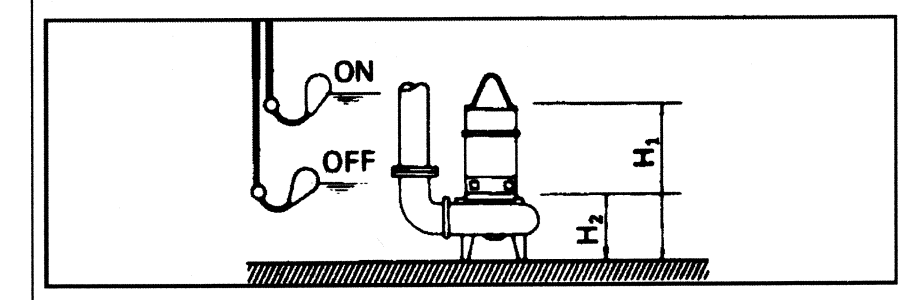
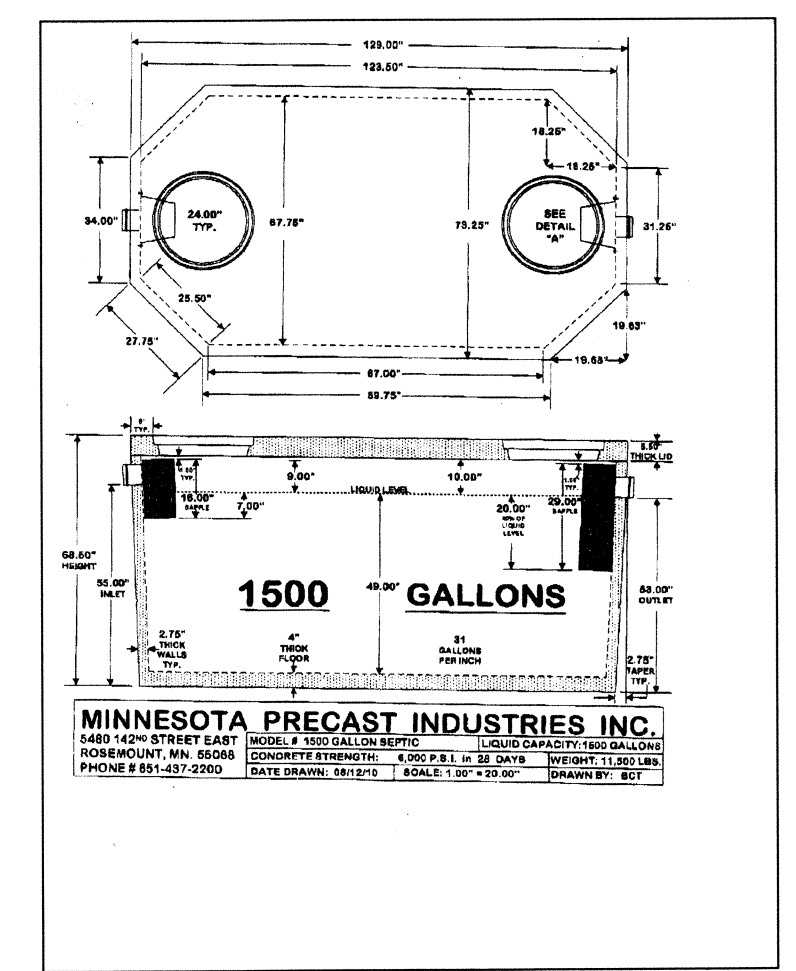
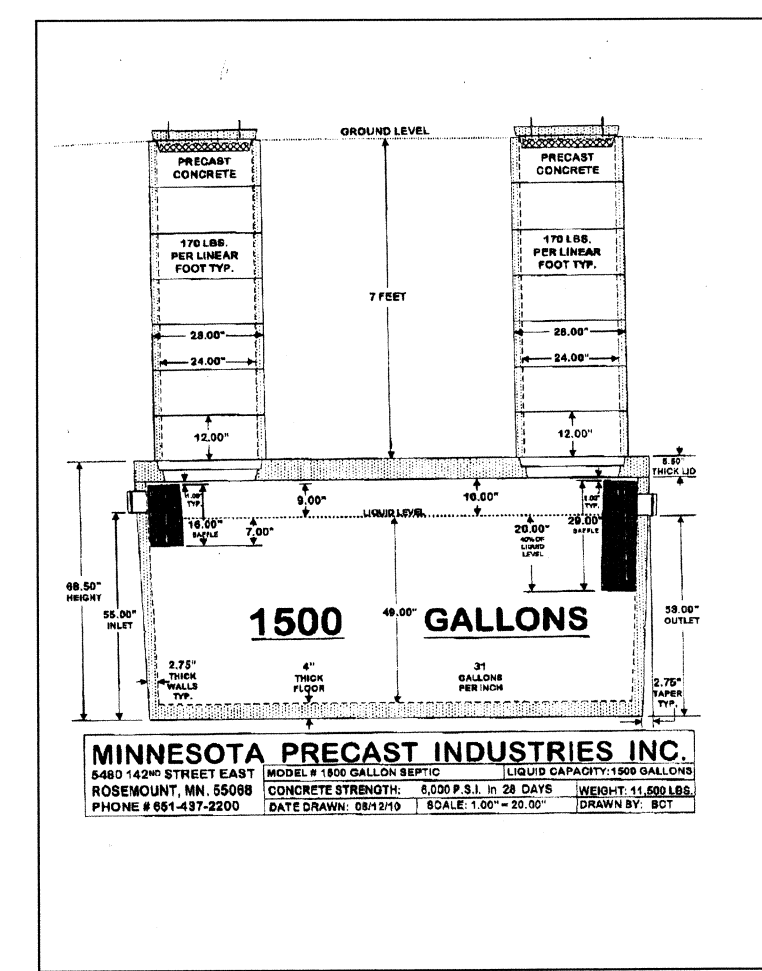


Fig. 2

H₁: Operating water level
 This must be above the top of the motor.
 H₂: Lowest water level (motor flange)



UTILITY RECORD PLAN
 (REVISED 3-27-12)

SanMH Rm=924.01 Inv=914.41
 +920.3 - Denotes Elevation Recorded on November 10, 2011 (NGVD 29 Datum)
 +920.3 - Denotes Elevation Recorded on March 27, 2012 (NGVD 29 Datum)

I hereby certify that the utility record plan information was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Richard L. Louck, PLS
 License No. 26724 November 10, 2011 Date

