

CERTIFICATE OF SURVEY

LOT 2 AND PARTS OF LOTS 1 AND 3,
SHAFFER'S ROY LAKE 1ST ADDITION,
SECTION 9, TOWNSHIP 135 NORTH, RANGE 29 WEST,
CASS COUNTY, MINNESOTA

LEGAL DESCRIPTION

The Westerly 37.00 feet of Lot 1, all of Lot 2 and the East half of Lot 3, SHAFFER'S ROY LAKE 1ST ADDITION, according to the recorded plat thereof, Cass County, Minnesota.

Subject to easements, restrictions and reservations of record.



30176 Old Highway #371
Suite 2
P. O. Box 874
Pequot Lakes, MN 56472
Phone: 1-218-568-4940
www.stonemarksurvey.com

DATE: 8-17-2012
SCALE: 1"=20'
HORIZ: 1"=20'
VERT: NONE

PROJECT NO.: 12212
FILE NAME: C12212.dwg
FIELD BOOK: BOOK 415 PG. 36

CERTIFICATE OF SURVEY
SHEET 1 of 1
Glenn Oscarson
Northwoods Homes
P.O. Box 62
Nisswa, MN 56468

RAY/BASS LAKE

NATURAL ENVIRONMENT CLASSIFICATION
NORMAL RESERVOIR POOL ELEVATION = 1194.00
HIGHEST KNOWN ELEVATION = 1195.44
BENCHMARK: CORPS OF ENGINEERS GAUGE AT
GULL LAKE DAM 0.00 GAUGE = 1188.14 ELEVATION
LAKE ELEVATION = 1193.96 ON 8-15-2012

LEGEND

- DENOTES EDGE OF EXISTING BITUMINOUS
- DENOTES EDGE OF EXISTING CONCRETE
- DENOTES EDGE OF EXISTING WOODEN DECKING
- DENOTES EXISTING INTERMEDIATE CONTOURS
- DENOTES EXISTING INDEX CONTOURS
- DENOTES SPOT ELEVATION (EXISTING GRADE)
- DENOTES EXISTING UTILITY POLE
- DENOTES EXISTING PHONE PEDESTAL & PHONE BOX
- DENOTES EXISTING SEPTIC VENT, SEPTIC CLEANOUT, & SEPTIC TANK LID
- DENOTES EXISTING SURFACE DRAINAGE FLOW
- DENOTES EXISTING SILT FENCE LOCATION
- DENOTES POSSIBLE WELL LOCATION
- BENCHMARK:**
SET 1/2" REBAR IN EAST FACE OF 8" BIRCH
ELEV. = 1199.55
- DENOTES MONUMENT FOUND

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE EAST LINE OF LOT 1 TO HAVE AN ASSUMED BEARING OF N 01°30'42" W.

OWNER

Karl & Kacey Rasmussen
12938 Nicollet Ave. S. #301
Burnsville, MN 56468

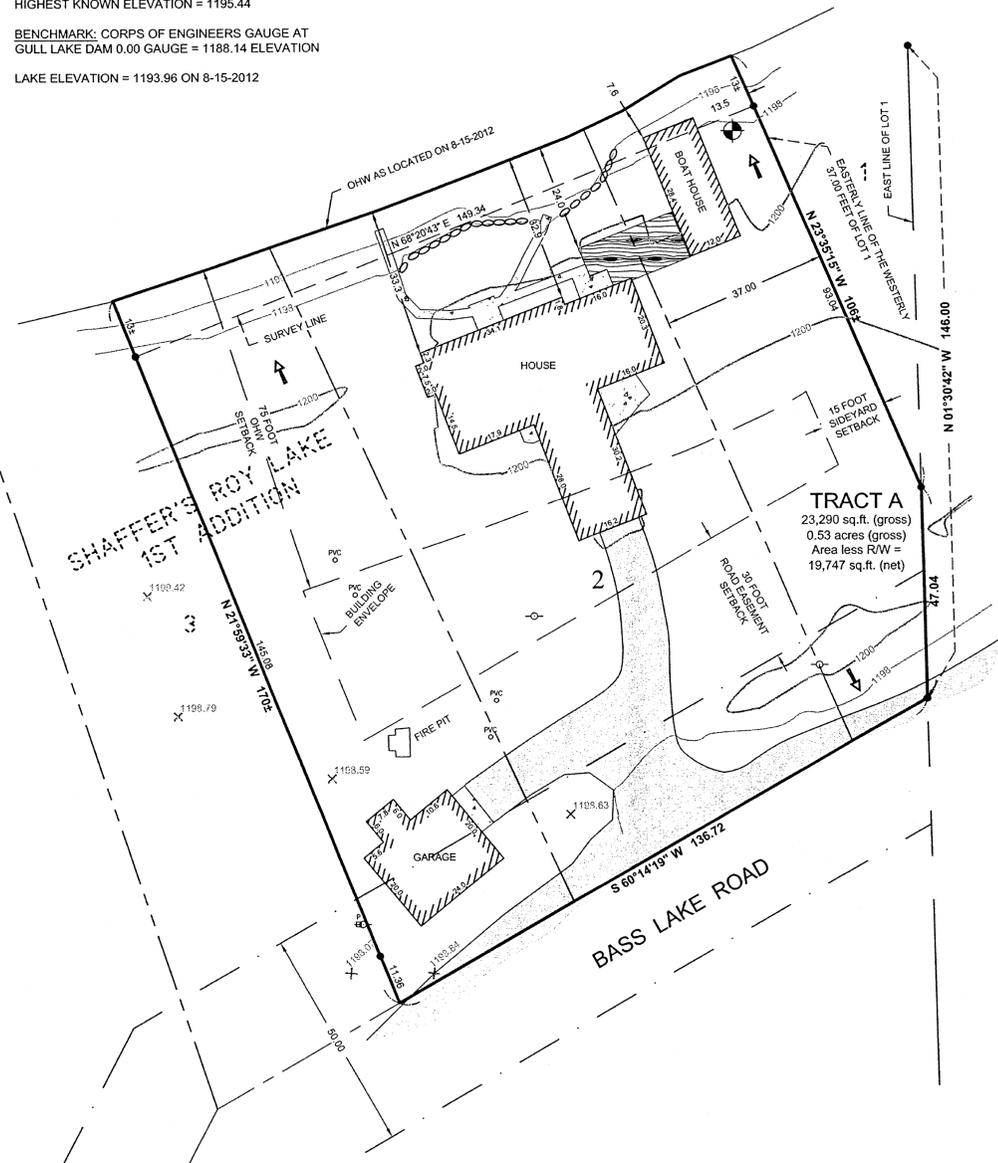
STORMWATER CALCULATIONS			
Total Impervious Surface Area	4831 sq. ft.	X	0.0833 ft. = 402 cu. ft. (from table below)

PROPOSED POND AREA
TOP SURFACE AREA = 558 SQ. FT.
BOTTOM SURFACE AREA = 279 SQ. FT.
1' DEEP WITH 3:1 SIDE SLOPES
TOTAL STORMWATER STORAGE PROPOSED = 419 CU. FT.

*GUTTER BUILDINGS TO DIRECT WATER TO PROPOSED POND

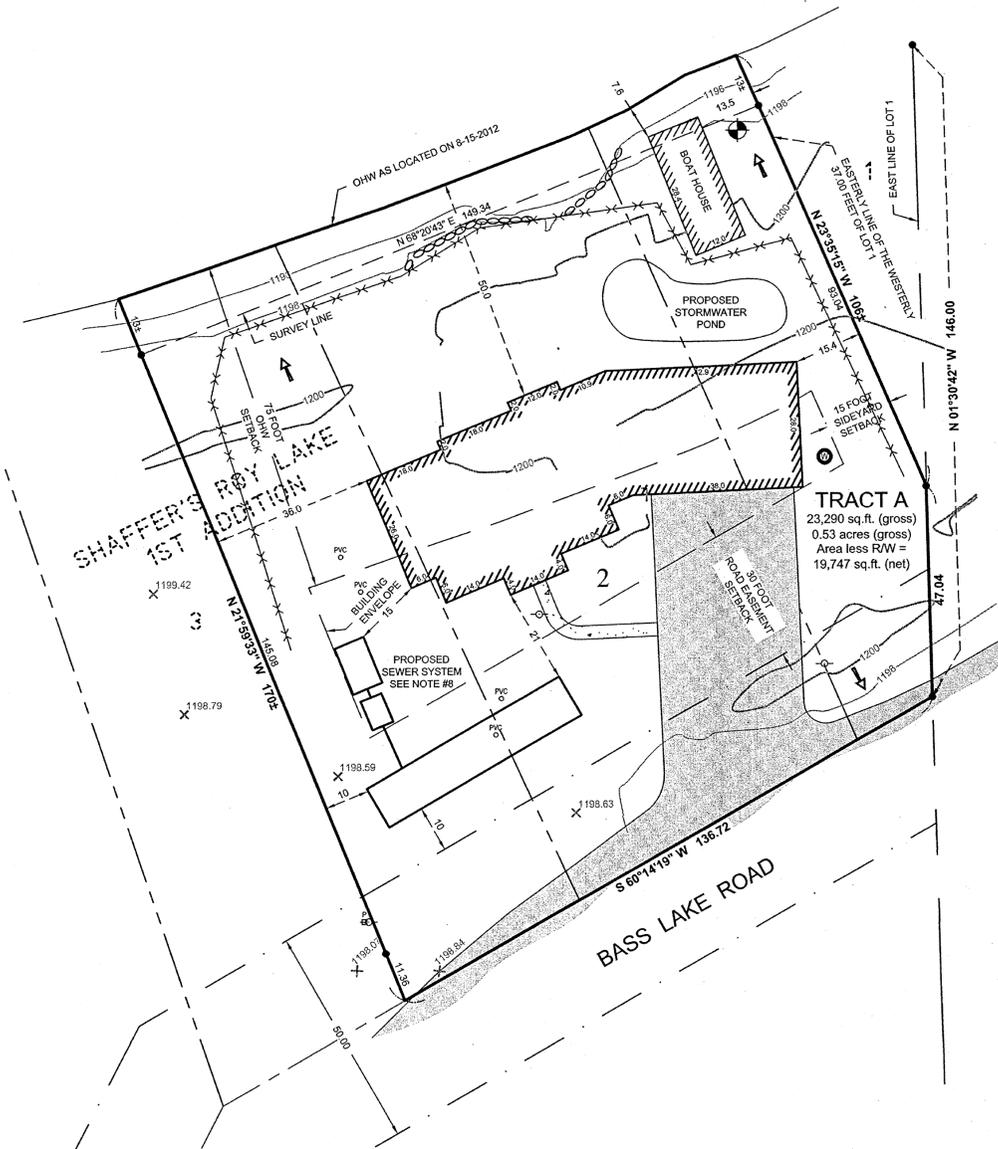
NOTES:

- Contour interval as shown = 2 foot. Based on NGVD 29 datum. Contours shown have been obtained using standard survey topographic methodologies. Field located on 8-15-2012.
- Zoning for subject tract = "Residential, Medium Density R-2 (Shoreland)".
- There are no bluffs or wet lands within surveyed property.
- Parcel ID of subject parcel: 90-378-0020.
- The property address of subject parcel: 906 Bass Lake Road.
- Existing well is inside house and will be capped.
- The Cass County Soils Survey indicates soil in the proposed platted area to be classified as "Mahtomed loamy sand, 1 to 8 percent slope (454B)". Drainage class: Excessively drained, Permeability: Rapid.
- Proposed sewer system shown as per Schrupp Excavating.



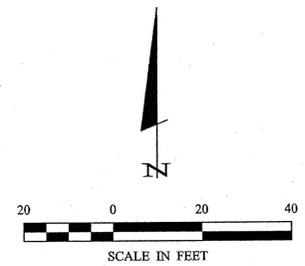
EXISTING CONDITIONS

IMPERVIOUS CALCULATIONS				
EXISTING	Impervious Area (sq.ft.)	Net Area (sq.ft.)	Percent Impervious (sq.ft.)	
Structures	House	1,623	19,747	8.2%
	Garage	270	19,747	1.4%
	Boat House	341	19,747	1.7%
	Deck	226	19,747	1.1%
Pavement	Driveway	912	19,747	4.6%
Other	Concrete Sidewalk	345	19,747	1.7%
Total	3,717	19,747	18.8%	



PROPOSED CONDITIONS

IMPERVIOUS CALCULATIONS				
PROPOSED	Impervious Area (sq.ft.)	Net Area (sq.ft.)	Percent Impervious (sq.ft.)	
Structures	Proposed House	3,010	19,747	15.2%
	Boat House	341	19,747	1.7%
Pavement	Driveway	1,381	19,747	7.0%
Other	Concrete Sidewalk	99	19,747	0.5%
Total	4,831	19,747	24.5%	



Roger Forcella 8/31/2012 9:48 AM - F:\Drawings\2012\12212 Oscarson\dwg\C12212.dwg