

CERTIFICATE OF SURVEY

LOTS 1 AND 2, BLOCK 3, GULL LAKE HIGHLANDS,
SECTION 20, TOWNSHIP 135 NORTH, RANGE 29 WEST,
CASS COUNTY, MINNESOTA

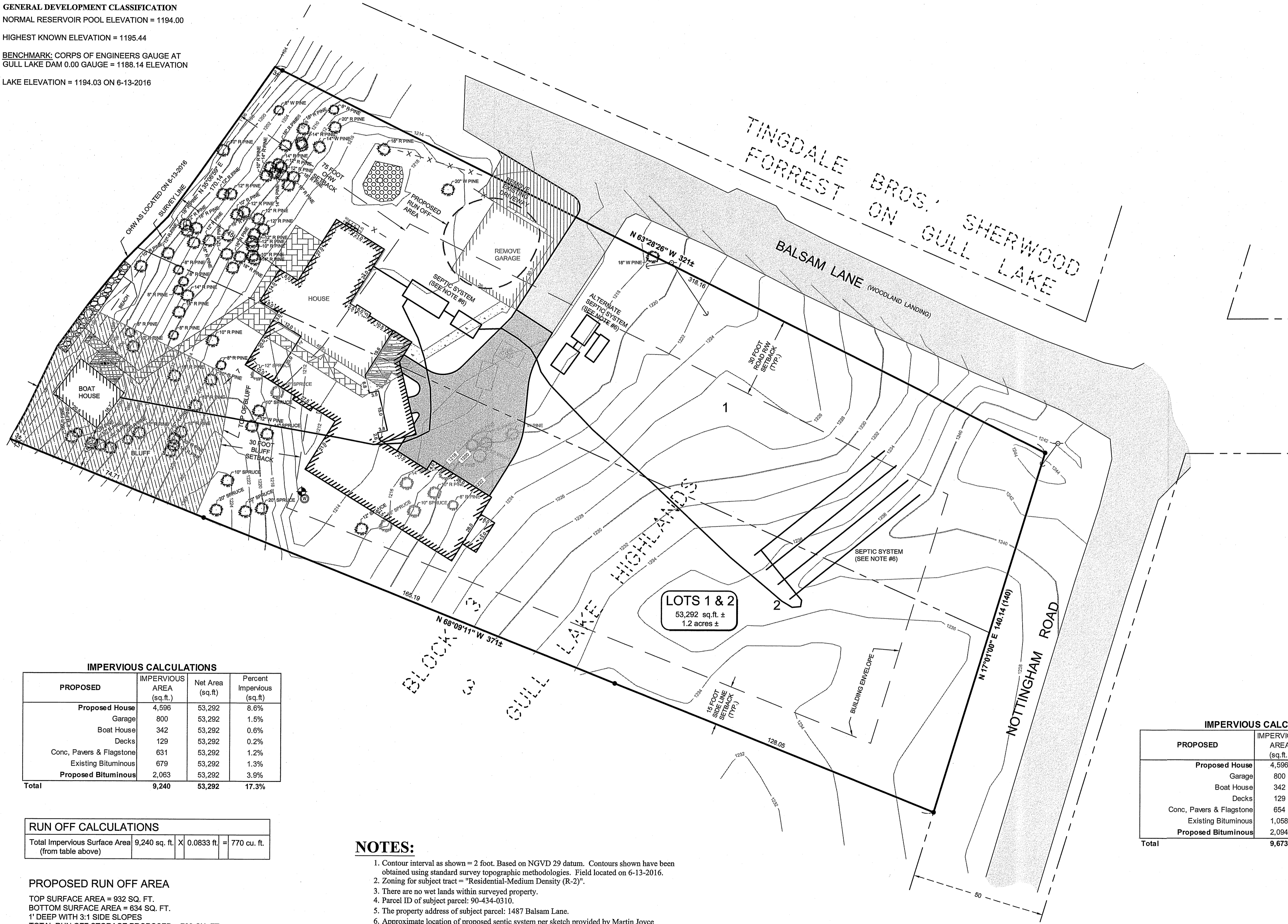
GULL LAKE

GENERAL DEVELOPMENT 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 = 1194.03 ON 6-13-2016



LEGEND

- X — X — DENOTES EXISTING FENCE LINE
- [Pattern] DENOTES EDGE OF EXISTING BITUMINOUS
- [Pattern] DENOTES EDGE OF EXISTING CONCRETE
- [Pattern] DENOTES EDGE OF EXISTING PAVING STONES
- [Pattern] DENOTES EDGE OF EXISTING WOODEN DECKING
- [Pattern] DENOTES EDGE OF EXISTING RIP-RAP
- [Pattern] DENOTES EXISTING FIELDSTONE
- 1208— DENOTES EXISTING INTERMEDIATE CONTOURS
- 1210— DENOTES EXISTING INDEX CONTOURS
- 10" W. PINE DENOTES EXISTING CONIFEROUS TREE, TYPE & SIZE
- 10" OAK DENOTES EXISTING DECIDUOUS TREE, TYPE, & SIZE
- ⊕ DENOTES EXISTING UTILITY POLE W/ GUY WIRE
- ⊙ DENOTES EXISTING WELL
- ⊙ 8" 2" 1" DENOTES EXISTING SEPTIC VENT, SEPTIC CLEANOUT, & SEPTIC TANK LID
- [Pattern] DENOTES EDGE OF PROPOSED BITUMINOUS
- ⊙ DENOTES BENCHMARK: HIGH POINT OF WELL. ELEV. = 1214.44
- (123.45) DENOTES PLAT AND/OR DEEDED MEASURE
- DENOTES MONUMENT FOUND

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE RECORDED PLAT OF GULL LAKE HIGHLANDS.

PROPOSED	IMPERVIOUS AREA (sq. ft.)	Net Area (sq. ft.)	Percent Impervious (sq. ft.)
Proposed House	4,596	53,292	8.6%
Garage	800	53,292	1.5%
Boat House	342	53,292	0.6%
Decks	129	53,292	0.2%
Conc. Pavers & Flagstone	631	53,292	1.2%
Existing Bituminous	679	53,292	1.3%
Proposed Bituminous	2,063	53,292	3.9%
Total	9,240	53,292	17.3%

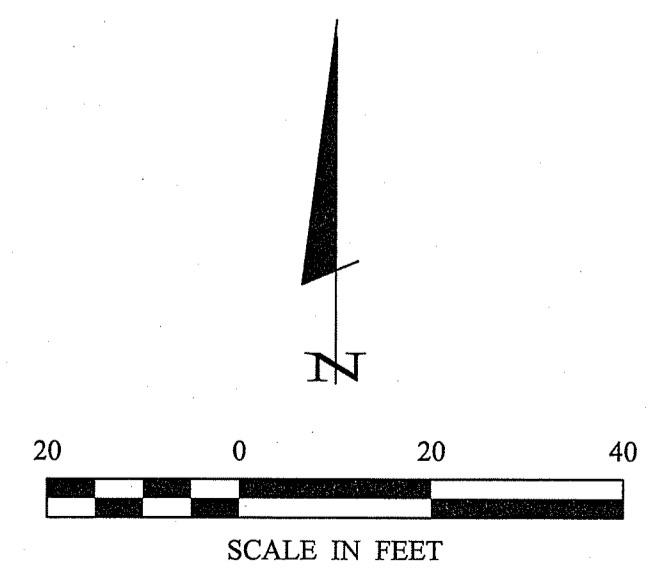
Total Impervious Surface Area	9,240 sq. ft.	X	0.0833 ft.	=	770 cu. ft.
(from table above)					

PROPOSED RUN OFF AREA
TOP SURFACE AREA = 932 SQ. FT.
BOTTOM SURFACE AREA = 634 SQ. FT.
1' DEEP WITH 3:1 SIDE SLOPES
TOTAL RUN OFF STORAGE PROPOSED = 783 CU. FT.

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 6-13-2016.
- Zoning for subject tract = "Residential-Medium Density (R-2)".
- There are no wet lands within surveyed property.
- Parcel ID of subject parcel: 90-434-0310.
- The property address of subject parcel: 1487 Balsam Lane.
- Approximate location of proposed septic system per sketch provided by Martin Joyce Septic Service, LLC.

PROPOSED	IMPERVIOUS AREA (sq. ft.)	Net Area (sq. ft.)	Percent Impervious (sq. ft.)
Proposed House	4,596	53,292	8.6%
Garage	800	53,292	1.5%
Boat House	342	53,292	0.6%
Decks	129	53,292	0.2%
Conc. Pavers & Flagstone	654	53,292	1.2%
Existing Bituminous	1,058	53,292	2.0%
Proposed Bituminous	2,094	53,292	3.9%
Total	9,673	53,292	18.2%



30176 Old Highway #371
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218-568-4940
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I HEREBY CERTIFY THAT THIS SURVEY PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

9/12/16
44881

REVISIONS	DESCRIPTION	DATE	BY

DATE:	9-12-2016	SCALE:	HORZ. 1"=20'	VERT. NONE
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PROJECT No.:	16180-1	FILE NAME:	C16180-1.dwg	BOOK:	436	PG.:	17
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PROJECT MANAGER:	CMH	CHECKED BY:	CMH	DRAWN BY:	RJF
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CERTIFICATE OF SURVEY
Dean Williamson
5711 Londenderry Road
Edina, MN 55436