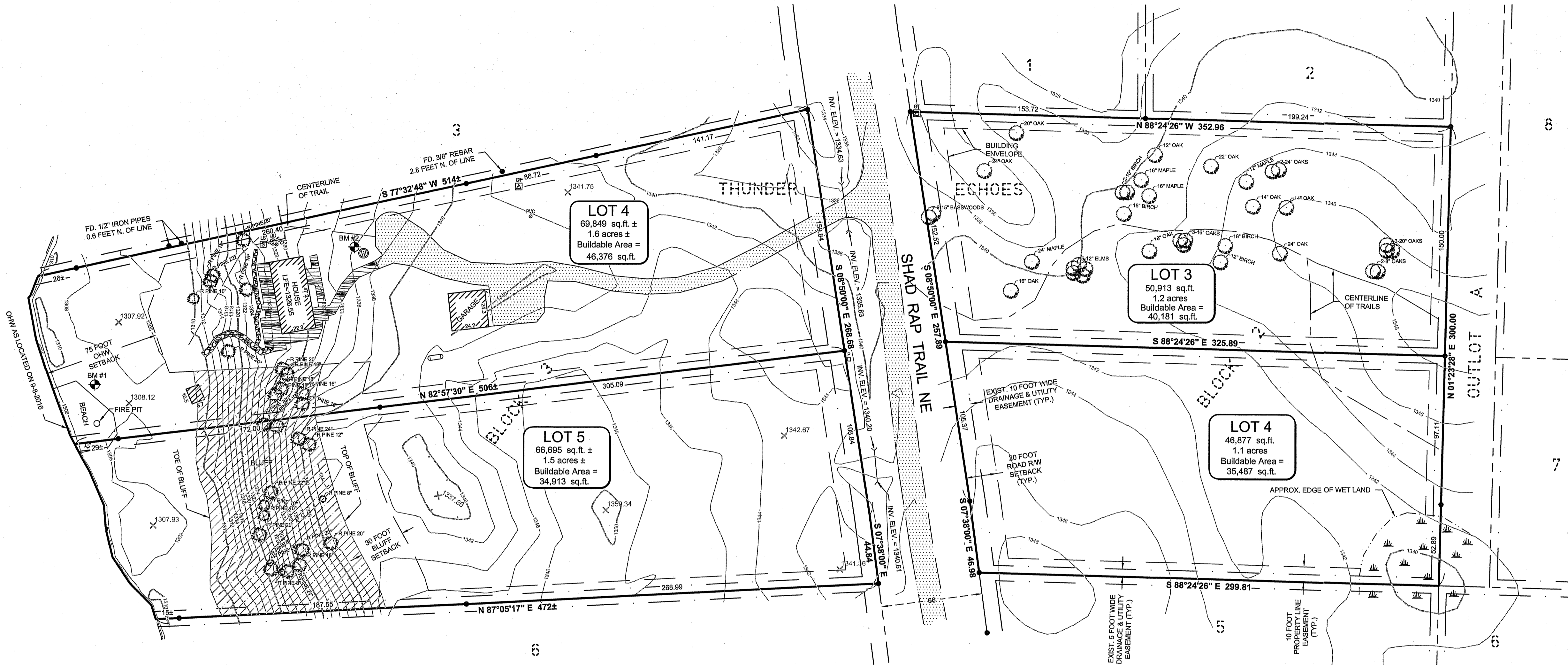


CERTIFICATE OF SURVEY

LOTS 3 & 4, BLOCK 2 AND
 LOTS 4 & 5, BLOCK 3, THUNDER ECHOES
 SECTION 10, TOWNSHIP 140 NORTH, RANGE 26 WEST,
 CASS COUNTY, MINNESOTA



LEGEND

- DENOTES EDGE OF EXISTING GRAVEL
- DENOTES EDGE OF EXISTING CONCRETE
- DENOTES EDGE OF EXISTING FLAGSTONE
- DENOTES EDGE OF EXISTING WOODEN DECKING
- DENOTES BLUFF AREA
- DENOTES EXISTING INTERMEDIATE CONTOURS
- DENOTES EXISTING INDEX CONTOURS
- DENOTES EXISTING INDEX CONTOURS (DEPRESSION)
- DENOTES SPOT ELEVATION (EXISTING GRADE)
- DENOTES WET LAND(S)
- DENOTES EXISTING CONIFEROUS TREE, TYPE & SIZE
- DENOTES EXISTING DECIDUOUS TREE, TYPE, & SIZE
- DENOTES EXISTING MOUNTED LIGHT
- DENOTES EXISTING GROUND TRANSFORMER
- DENOTES EXISTING LP TANK
- DENOTES EXISTING PHONE PEDESTAL & PHONE BOX
- DENOTES EXISTING WELL
- DENOTES EXISTING SEPTIC VENT, SEPTIC CLEANOUT, & SEPTIC TANK LID
- DENOTES EXISTING SEPTIC LIFT STATION
- DENOTES EXISTING CULVERT LOCATION
- DENOTES BENCHMARK #1: 60# NAIL TO 18" NORWAY PINE
ELEV. = 1309.78
- DENOTES BENCHMARK #2: HIGH POINT OF WELL
ELEV. = 1337.45
- DENOTES MONUMENT FOUND

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE RECORDED PLAT OF THUNDER ECHOES.

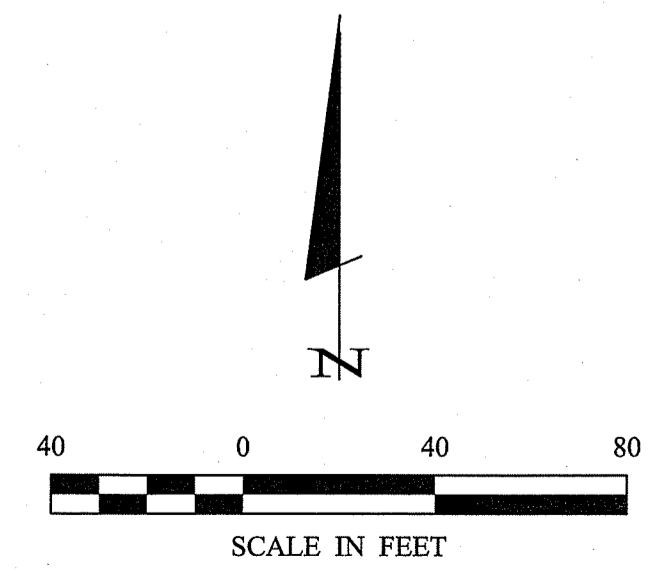
THUNDER LAKE
 GENERAL DEVELOPMENT CLASSIFICATION
 LAKE ELEVATION = 1305.02 ON 8-8-2016
 ORDINARY HIGH WATER ELEVATION = 1305.4
 BENCHMARK: Left end of right abutment above gage on outlet dam. Elevation = 1308.6
 BASED ON NGVD 29 DATUM
 INFORMATION OBTAINED FROM MNDNR

IMPERVIOUS CALCULATIONS

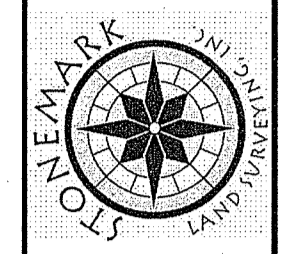
EXISTING LOT 4, BLOCK 3	IMPERVIOUS AREA (sq.ft.)	Net Area (sq.ft.)	Percent Impervious (sq.ft.)
House	1,054	69,849	1.5%
Garage	587	69,849	0.8%
Decks	1,329	69,849	1.9%
Flagstone & Concrete	448	69,849	0.6%
Gravel	5,066	69,849	7.3%
Total	8,484	69,849	12.1%

NOTES:

1. Contour interval as shown = 2 foot. Based on NGVD 29 datum. Contours shown on Lots 4 & 5, Block 3 have been obtained using standard survey topographic methodologies. Field located on 9-8-2016. Contours shown on Lots 3 & 4, Block 2 have been digitized from Cass County GIS Site.
2. Zoning for subject tracts = "Shoreline Residential".
3. Parcel ID of subject parcels: 42-389-0320, 42-389-0325, 42-389-0215 & 42-389-0220.
4. The property address of subject parcel: 4101 Shad Rap Trail NE.



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



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.
 Patricia A. Trottier
 Patricia A. Trottier, P.L.M. #1002
 10-06-2016
 41002
 L.S. NO.

REVISIONS	DATE	DESCRIPTION

PROJECT NO.:	16319
FILE NAME:	C:\6319.dwg
FIELD BOOK:	BOOK 438
DATE:	10-06-2016
SCALE:	1"=40'
HORIZ.:	NONE
VERT.:	NONE

PROJECT MANAGER:	PAT
CHECKED BY:	PAT
DRAWN BY:	RJF

CERTIFICATE OF SURVEY
 Ted Truitt
 2433 Tiffany Court
 St. Cloud, MN 56501
 SHEET
 1 OF 1