

PLAT OF SURVEY & EROSION CONTROL PLAN

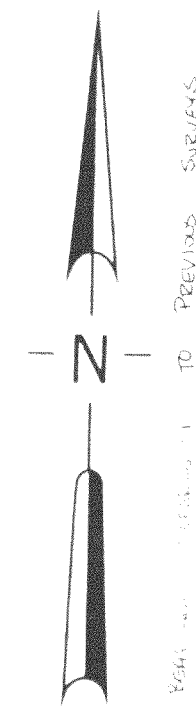
OF

LOTS 5 & 6 BLOCK 7 OF COOPERS MID-LAKES SUBDIVISION, LOCATED IN
SECTION 35, TOWN 4 NORTH, RANGE 16 EAST, TOWN OF LAGRANGE,
WALWORTH COUNTY, WISCONSIN.

SURVEYED FOR A.S. SIDA
2207 GREENVIEW ROAD
NORTH BROOK, ILLINOIS 60062

SURVEYED BY: JENSEN SURVEYING & MAPPING S.C.
45 SOUTH WISCONSIN STREET
ELKHORN, WISCONSIN 53121

MAAPPING DATE: OCTOBER 29, 1990



SCALE: 1" = 20'

LEGEND

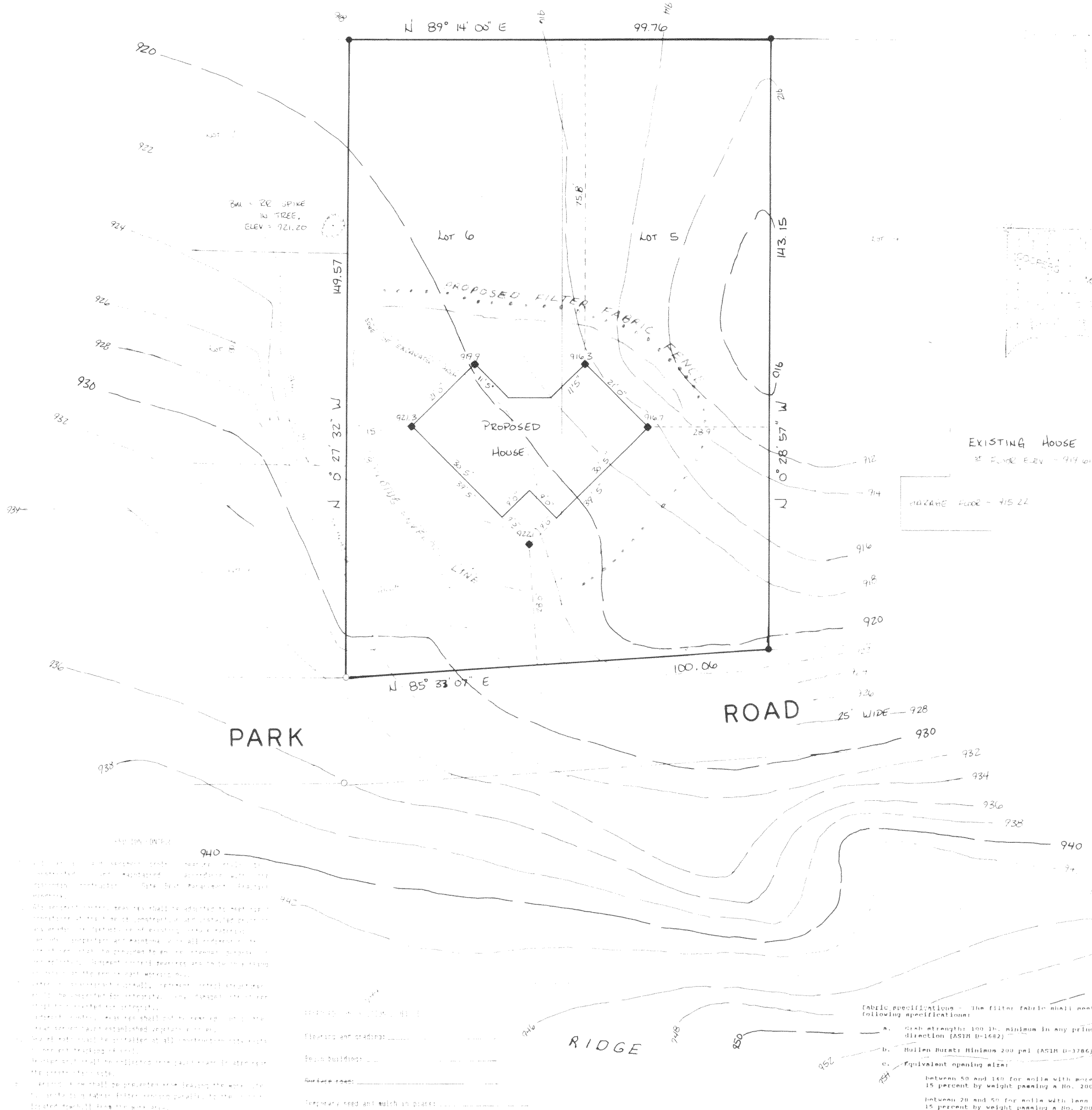
- FOUND IRON PIPE
- SET IRON ROD
- SET WOOD STAKE
- () RECORDED DIMENSION
- EXISTING OUTLINE
- PROPOSED OUTLINE
- SPOT ELEVATION

NORTH

ROAD

30' WIDE

LOCATION SKETCH



EXISTING HOUSE

25' ELEV. = 914.01

MAXIMUM FLOOR = 915.22

SHEET FLOW RUNOFF CALCULATIONS

Sheet flow runoff through the disturbed site from the South travel a distance of less than 170 feet. Hence Manning's formula equation can be used to calculate runoff velocity. (See Wisconsin Construction Site Best Management Practice Handbook, Chapter 6, page 11. Further page references are to Chapter 6 of this handbook.)

$$t = \frac{2.48 \times 10^{-5} (0.4)^{0.58}}{(1.49)^{0.58} \times 0.01} = \frac{0.0000248 \times 0.4 \times 170}{(1.49)^{0.58} \times 0.01} = 0.24 \text{ sec.}$$

where
 t = travel time (hrs.)

n = Manning's roughness coefficient = 0.40 for light underbrush (page 11).

L = flow length (ft.) = from 170 feet

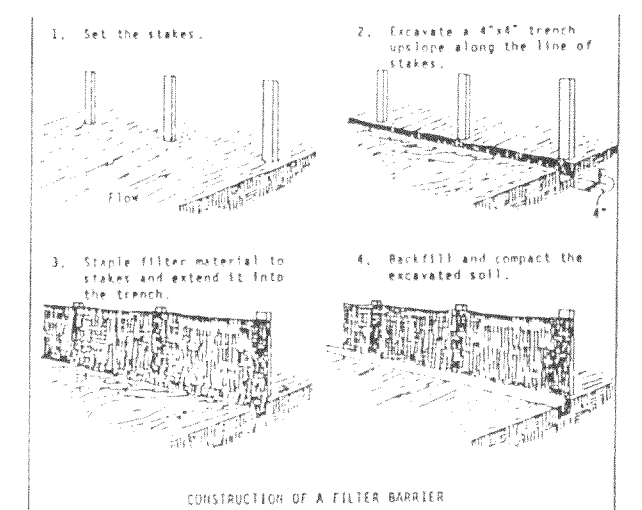
S = 10-year, 24 hour rainfall (in.) = 4.1" (page 6)

s = slope of hydraulic grades (land slope, ft./ft.) = 0.19 average

t = 0.1647 hrs.

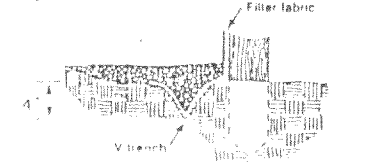
$$V = \frac{1}{3600 \times 0.1647} = \frac{1.5}{3600 \times 0.1647} = 0.24 \text{ ft./sec.}$$

Therefore, sheet flow runoff velocity over the disturbed site is less than 0.5 ft./sec., and diversion of such runoff is not necessary - see Walworth County Construction Site Erosion Control Ordinance, Sec. 59.974 (2)(e).

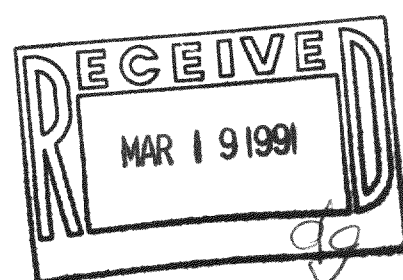


Source: Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant

Figure 2.



- Fabric specifications - The filter fabric shall meet the following specifications:
- Mesh strength: 100 lbs. minimum in any principal direction (ASTM D-1682)
 - ullen Burst: Minimum 200 psi (ASTM D-3786)
 - Equivalent opening size:
 - between 50 and 140 for soils with more than 15 percent by weight passing a No. 200 sieve
 - between 20 and 50 for soils with less than 15 percent by weight passing a No. 200 sieve
 - Water Flow Rate of 10 gal/min/ft² at 50 psi constant head as determined by multiplying permeability in sec⁻¹ as determined by ASTM D-4491 by a conversion factor of 74;
 - Ultra violet radiation stability of 501.
 - Fabric with support netting shall be reinforced with an industrial polypropylene netting with a 3/4 inch spacing or equivalent. A heavy duty nylon top support cord or equivalent is required.



Copyright © 1990 by Jensen Surveying & Mapping S.C.

All rights reserved. No part of this survey plat may be reproduced or transmitted in any form by any means - graphic, electronic, or mechanical, including photocopying, tracing, or information storage and retrieval systems - without permission in writing from Thomas P.A. Jensen, Jensen Surveying & Mapping S.C.

Note: This survey plat is not certified unless signed and sealed in red ink.

I, Thomas P.A. Jensen, Wisconsin Registered Land Surveyor, do hereby certify that this survey was performed by me, or under my direction, in full compliance with the owner's/agent's instructions and Chapter A-E 7 of the Wisconsin Administrative Code "Minimum Standards For Property Surveys"; and that this map is an accurate representation thereof to the best of my knowledge and belief.

Thomas P.A. Jensen R.L.S.-1084
Jensen Surveying & Mapping S.C.

JOB REFERENCE NO. 1990 1060

400 666 178