

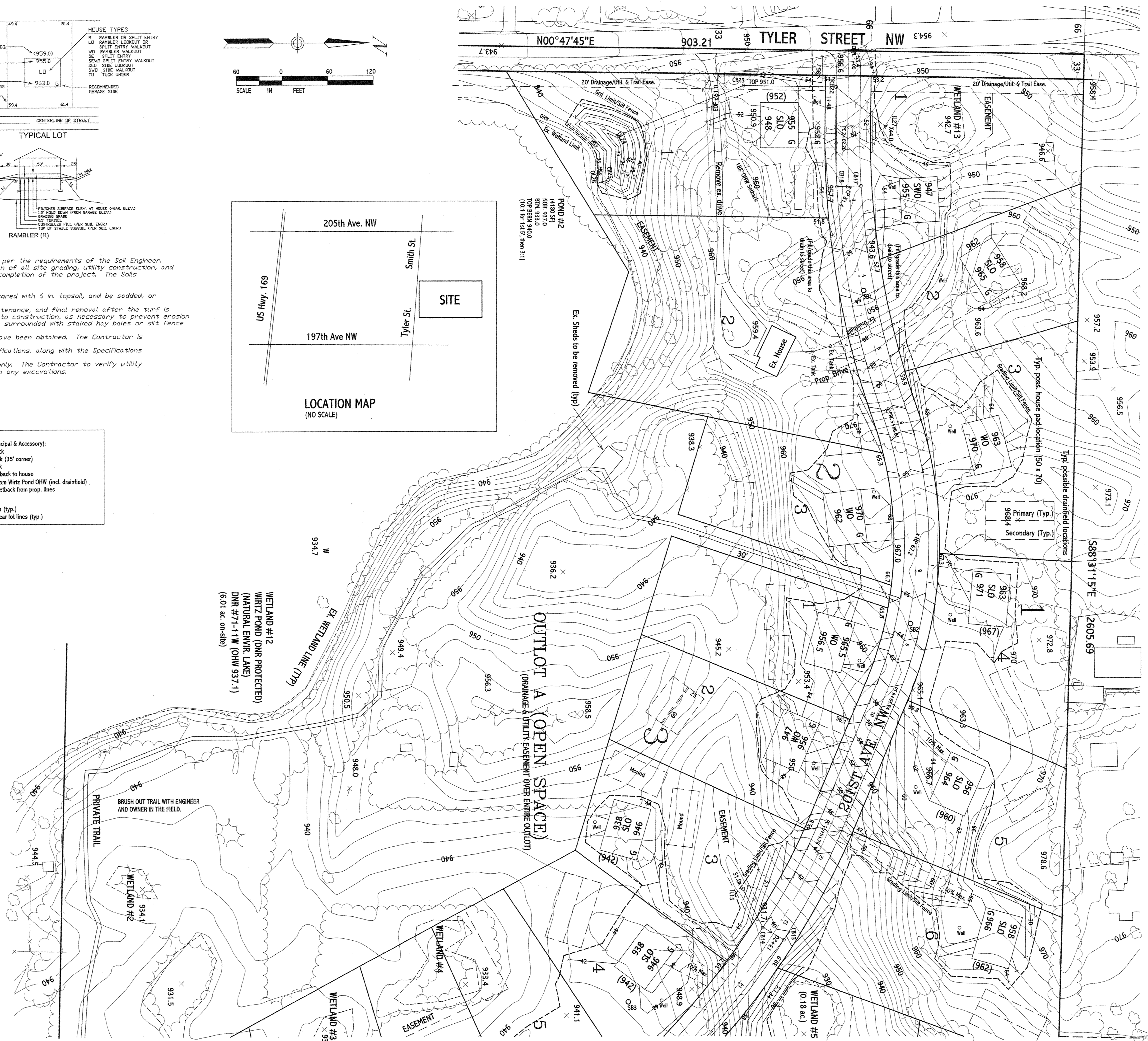
**NOTES**  
 \* All site grading, utility construction, and paving shall be completed per the requirements of the Soil Engineer. The Contractor shall schedule the Soils Engineer so that certification of all site grading, utility construction, and paving will be furnished to the Owner and Engineer during and upon completion of the project. The Soils Engineer is to be paid by the Owner.  
 \* Grading tolerance to be within 0.1 ft.  
 \* All disturbed areas (excluding building and paved areas) to be restored with 6 in. topsoil, and be sodded, or seeded & mulched, within 10 days after the site grading is completed.  
 \* The Contractor is responsible for erosion control installation, maintenance, and final removal after the turf is established. Silt fences are to be placed by the Contractor, prior to construction, as necessary to prevent erosion from leaving the site. All catch basins in disturbed areas are to be surrounded with staked hay bales or silt fence until paving is started.  
 \* The Contractor shall not start work until all necessary permits have been obtained. The Contractor is responsible for conforming to the requirements of these permits.  
 \* The City Standard Specifications and Details, MnDOT Standard Specifications, along with the Specifications and Details prepared by the Engineer shall govern this project.  
 \* The location of the underground utilities shown are approximate only. The Contractor to verify utility locations by contacting Gopher State One Call (800-252-1166) prior to any excavations.

**DEVELOPER:**  
 Neal Krzyzaniak & Steve Nelson  
 Bridgeland Development (612-985-5000)  
**CIVIL ENGINEER:**  
 Peter Knaeble, PE  
 Terra Engineering Inc. (612-593-9325)  
**SURVEYOR:**  
 Rick Blom, RLS  
 John Oliver & Associates (612-441-2072)  
**SOIL ENGINEER:**  
 Gary Larson  
 American Engineering Testing (651-659-1363)  
**WETLAND CONSULTANT:**  
 Mark Kjolhaug  
 Kjolhaug Environmental Services (612-472-4875)

**SETBACKS (Principal & Accessory):**  
 35' front setback  
 20' side setback (35' corner)  
 30' rear setback  
 30' wetland setback to house  
 188' setback from Wirtz Pond OHW (incl. drainfield)  
 10' drainfield setback from prop. lines

**EASEMENTS:**  
 5' side lot lines (typ.)  
 10' front and rear lot lines (typ.)

**STREET DESIGN:**  
 32" F-F w/ 4" bit. curb  
 1.5" 2341, 1.5" 2331, 6" C1.5  
 0.5' Centerline Crown



<b>TERRA ENGINEERING, INC.</b> 6001 Glenwood Ave. Minneapolis, MN 55422 (612-593-9325)		<b>Civil Engineering - Land Planning - Consulting</b>	
DESIGNED	P.J.K.	REVISIONS	10/12/99 Revise grades
DRAWN	H.A.L.		11/3/99 Revise storm
CHECKED	P.J.K.		12/9/99 Rev. Plan/Revised drainfields
I hereby certify that this plan or report was prepared by me, or under my direct supervision, and that I am a duly registered Professional Engineer in the State of Minnesota.		Peter J. Knaeble Date: 12/19/99 Reg. No. 14844	
<b>DEVELOPMENT PLAN</b>			
<b>GRADING/DRAINAGE PLAN (WEST)</b>			
<b>EROSION CONTROL PLAN</b>			
<b>PRESERVE ESTATES</b>			
<b>ELK RIVER, MINNESOTA</b>			
SHEET TITLE	DATE	PROJECT NO.	SHEET NO.
GRADING/DRAINAGE PLAN (WEST)	9/30/99	98-116	5