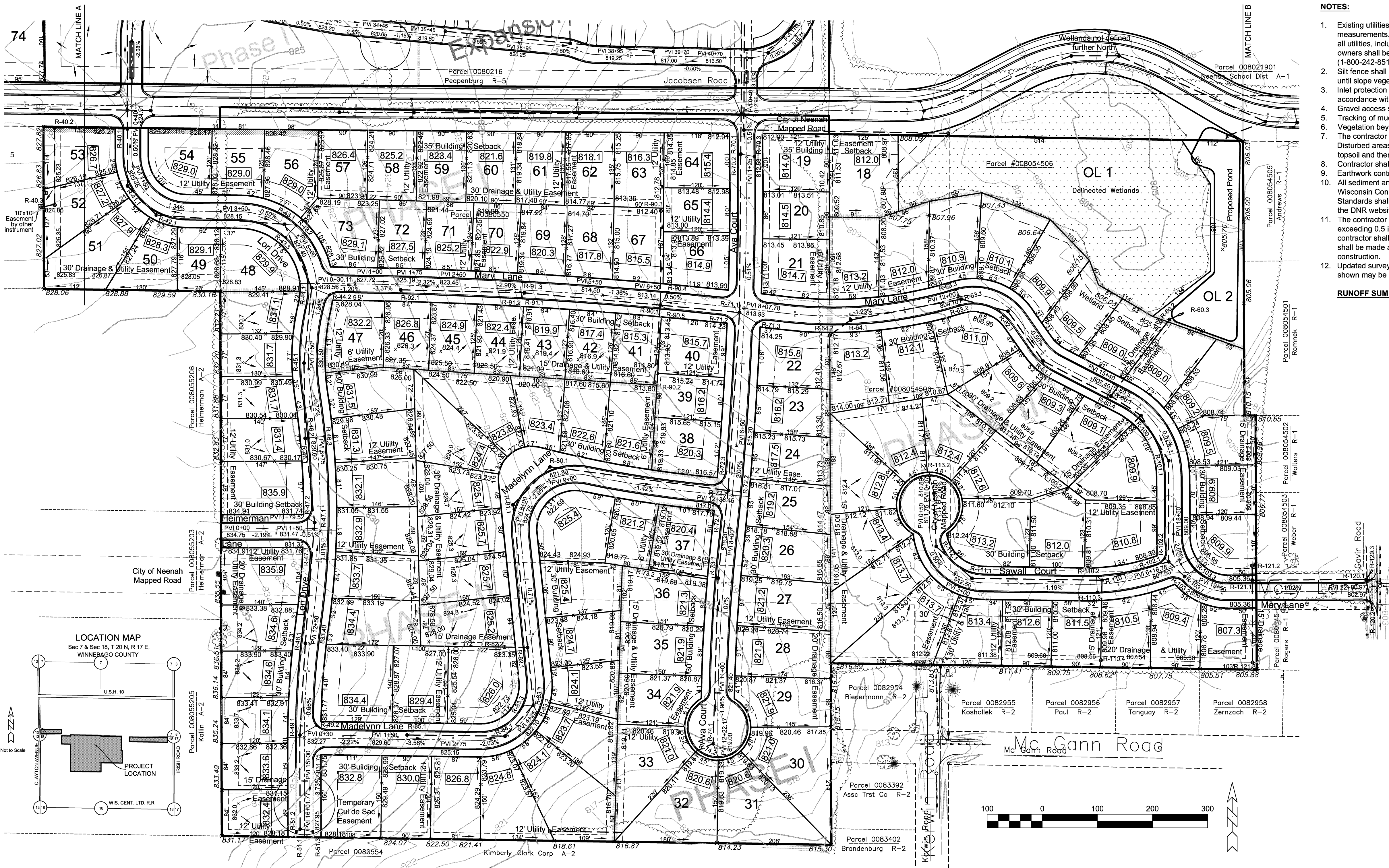


- NOTES:**
- Existing utilities shown are indicated in accordance with available records and field measurements. The contractor shall be responsible for obtaining exact locations & elevations of all utilities, including sewer and water from the owners of the respective utilities. All utility owners shall be notified by the contractor 72 hours prior to excavation. Contact Digger's Hotline (1-800-242-8511) for exact utility locations.
 - Silt fence shall be installed at the toe of all newly constructed fill slopes and shall be maintained until slope vegetation is established. Silt fence shall be installed prior to site grading.
 - Inlet protection shall be installed around the upstream end of new culvert pipes and inlets, in accordance with Wisconsin DOT Standard Detail Drawing 8E10-2.
 - Gravel access shall be provided to homes under construction.
 - Tracking of mud on existing streets shall be cleaned up daily.
 - Vegetation beyond slopes shall remain.
 - The contractor shall minimize the area disturbed by construction as the project is constructed. Disturbed areas shall be seeded as soon as final grade is established. Contractor shall replace topsoil and then seed, fertilize and mulch all lawn areas within 1 week of topsoil placement. Contractor shall remove all excess materials from the site.
 - Earthwork contractors shall verify topsoil depth.
 - All sediment and erosion control devices and methods shall be in accordance with the Wisconsin Construction Site Handbook and DNR Technical Standards. DNR Technical Standards shall supersede the construction site handbook as they are approved and posted on the DNR website.
 - The contractor shall make weekly inspections and inspections within 1 day of any rainfall exceeding 0.5 inches of the sediment and erosion control devices throughout construction. The contractor shall repair or maintain erosion control devices as necessary. The inspection reports shall be made available to the owner at the end of the construction or upon demand during construction.
 - Updated survey and title search have not been authorized and the boundary and easements shown may be inaccurate or incomplete.

RUNOFF SUMMARY:

Table 1: Pre-Development Conditions			
Basin	Area (ac)	CN	
Total North Basin	23.18	60.2	
Total East Basin	155.00	61.7	
Total Pre-development	178.17	61.6	

Table 2: Post-Development Conditions			
Basin	Area (ac)	CN	
Total North Basin	128.24	72.0	
Total East Basin	49.93	72.0	
Total Post Development	178.17	72.0	

Table 3: Pre-Development Peak Flow Rates (cfs)				
Basin	24-Hour Rainfall Event			
	2-Year	10-Year	100-Year	100-Year
Total North Basin	1.05	6.50	17.40	
Total East Basin	8.45	39.94	100.25	
Total Pre-development	9.41	45.39	114.87	

Table 4: Post-Development Peak Flow Rates (cfs)				
Basin	24-Hour Rainfall Event			
	2-Year	10-Year	100-Year	100-Year
Total North Basin	0.19	0.34	2.75	
Total East Basin	(53.97)	(134.70)	(252.14)	
Total Post Development	7.67	19.47	54.45	
	(68.90)	(172.64)	(323.39)	

BENCHMARKS (USGS per Town of Menasha Records)

- BM 1 Fire Hydrant, Tag Bolt
NE cor Jacobsen Rd. and Irish Rd.
Elev 790.26
- BM 2 Fire Hydrant, Tag Bolt
NE cor Susan Ave. and Lee St.
Elev 794.19
- BM 3 Fire Hydrant, Tag Bolt
NE cor Kerwin Rd. and McGann Rd.
Elev 813.14
- BM 4 Nail in SW Face of PP # 78-0062
600+/- North of Int. of Fairview and Clayton
Elev 831.43
- BM 5 Nail in East Face of PP # 96-03110
840+/- North of Int. of Fairview and Clayton
Elev 823.90
- BM 6 Mag.Nail in Top of South end of 18" Culvert
East Side of Clayton Ave
200+/- South of HWY "110" Overpass
Nature Trail Crossing
Elev 824.25

DRAINAGE PLAN CERTIFICATION:

I, John R. Davel, Professional Engineer, hereby certify that this Drainage Plan will meet or exceed the requirements of the Winnebago County Subdivision Ordinance and the requirements of the Town of Menasha.

John R. Davel, P.E. E-25512

Date