

School Sisters
of Notre Dame

“WATER MANAGEMENT”

Southern Basin(s)

 MANDEL GROUP

Caroline Heights

Meadows of the Grove

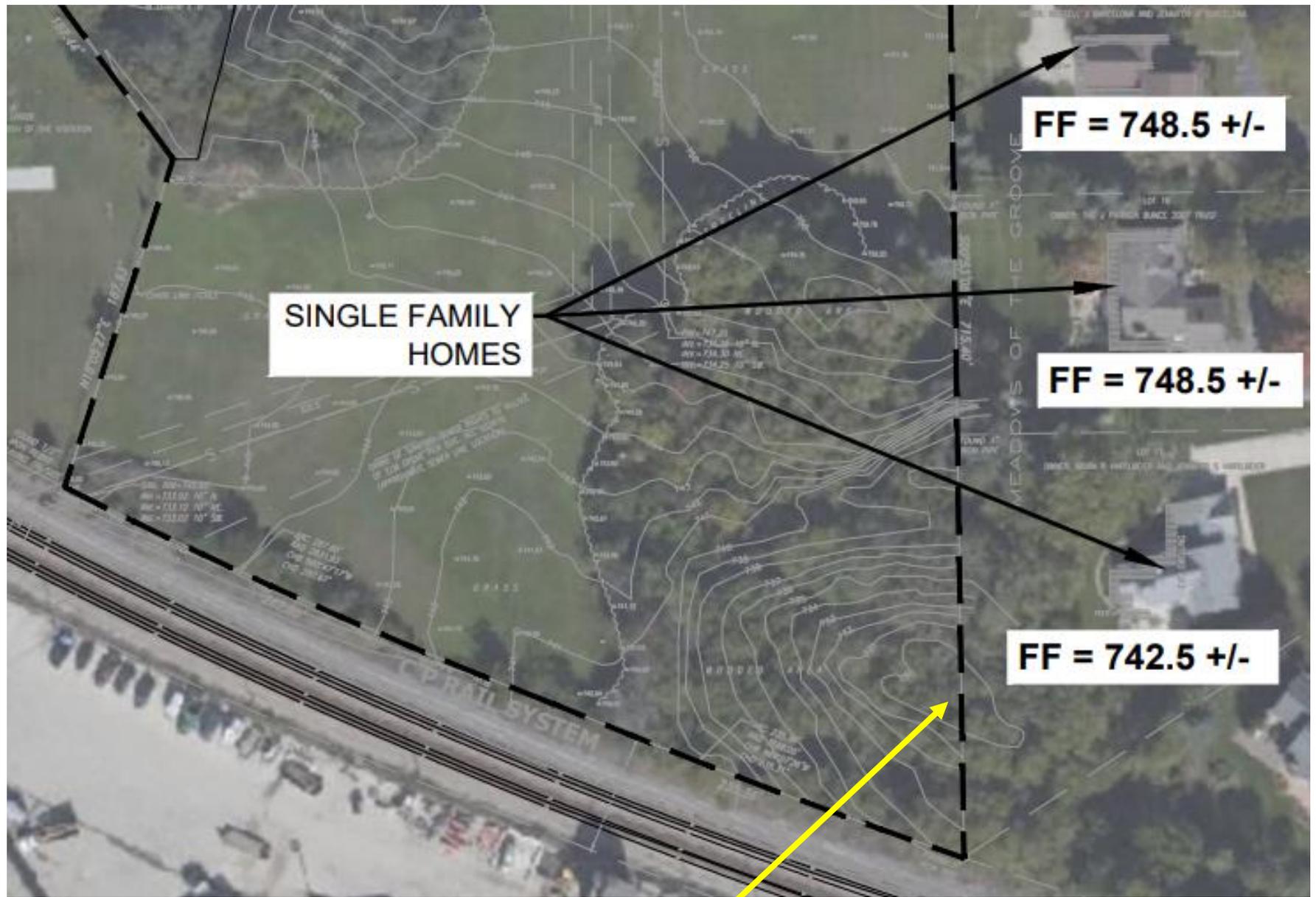


ELM GROVE

Site Overview

Area of interest





SINGLE FAMILY HOMES

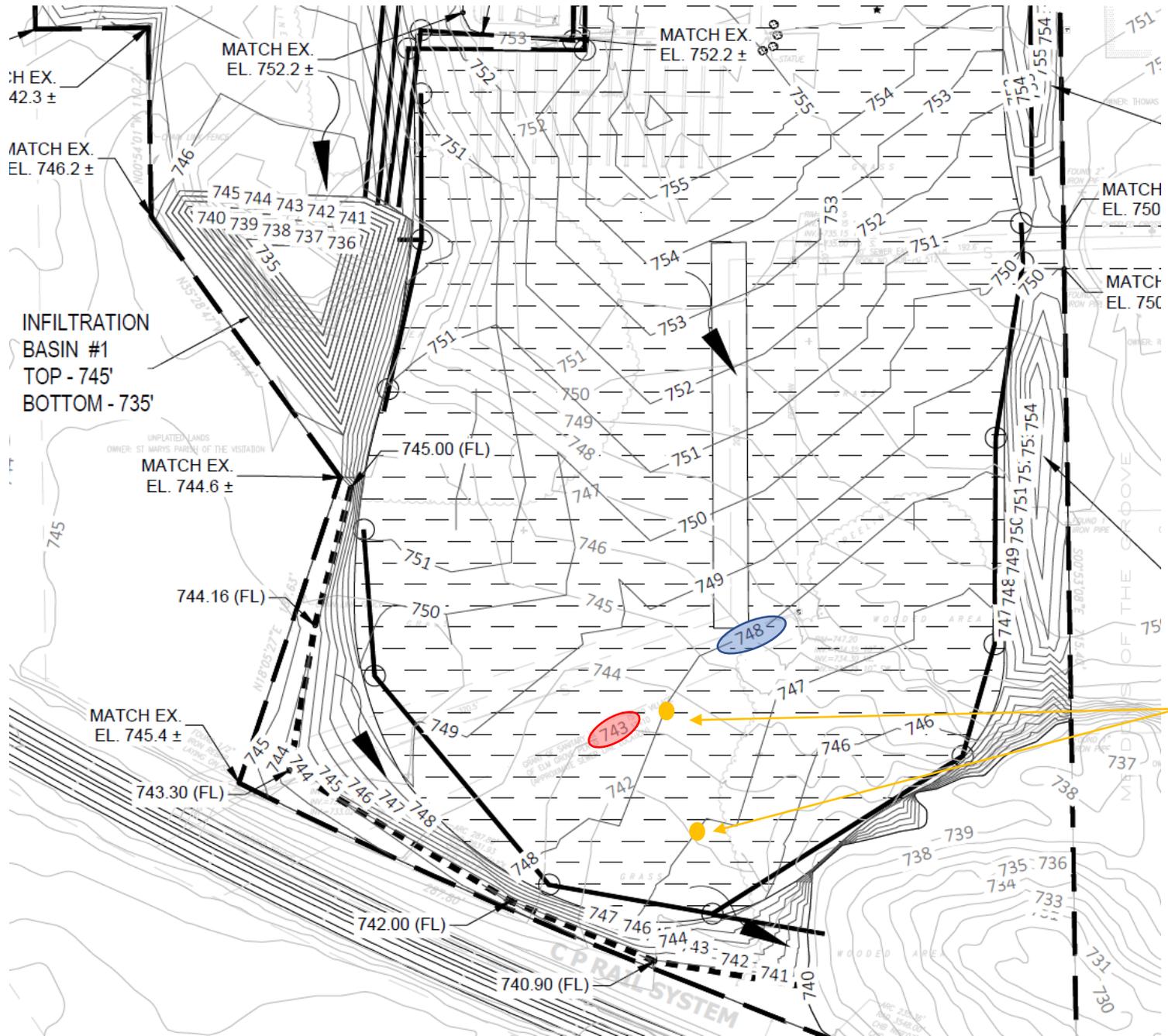
FF = 748.5 +/-

FF = 748.5 +/-

FF = 742.5 +/-

Lowest location on entire site (730)

Existing Elevation Proposed Elevation

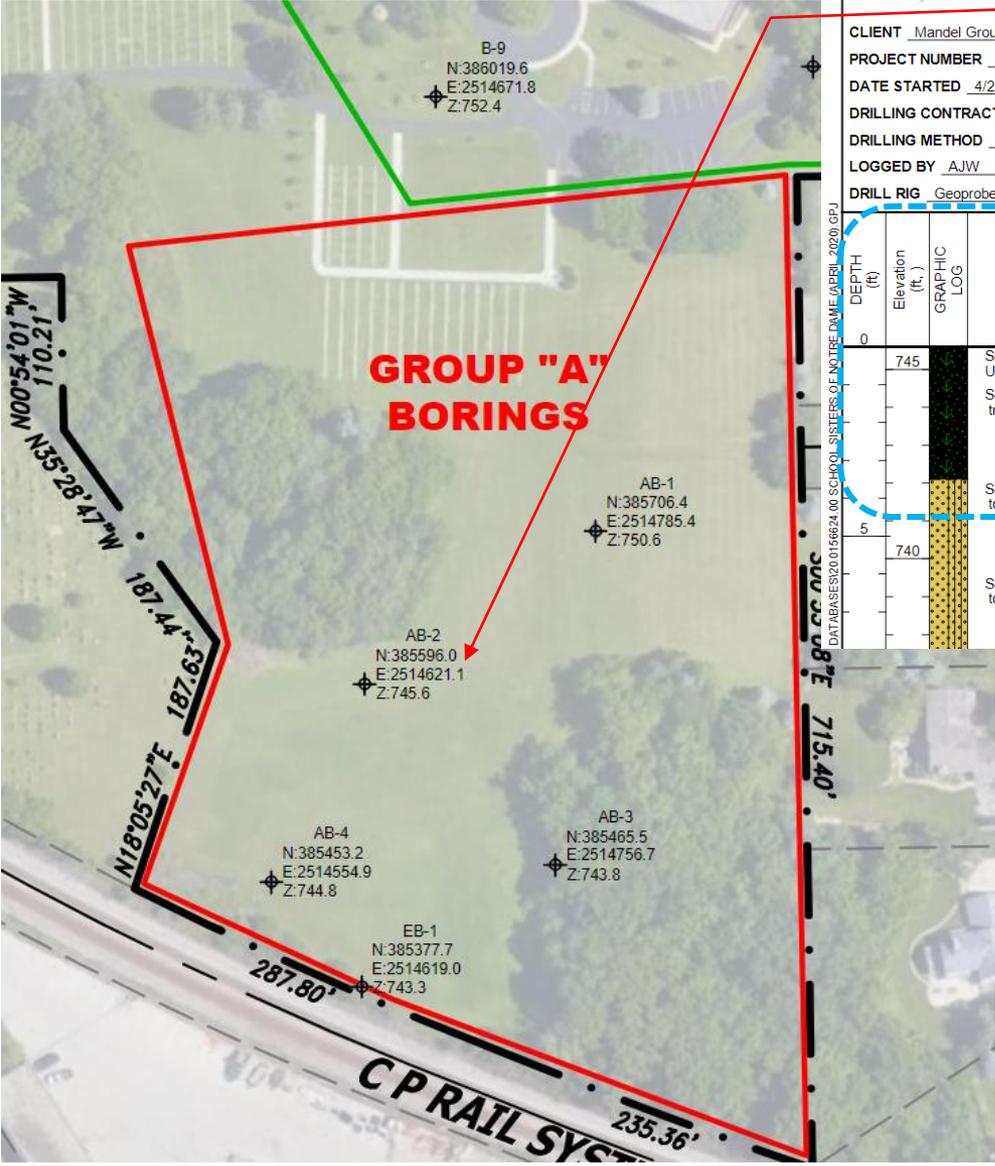


Five Feet Fill



CLIENT Mandel Group PROJECT NAME School Sisters of Notre Dame
 PROJECT NUMBER 20.0156624.00 PROJECT LOCATION 13105 Watertown Plank Rd., Elm Grove, WI
 DATE STARTED 4/21/20 COMPLETED 4/21/20 GROUND ELEVATION 745.6 ft. HOLE SIZE 4-1/4" inches
 DRILLING CONTRACTOR GeoServe
 DRILLING METHOD HSA GROUND WATER LEVELS (ft. bgs):
 LOGGED BY AJW CHECKED BY JDG
 DRILL RIG Geoprobe 7822DT

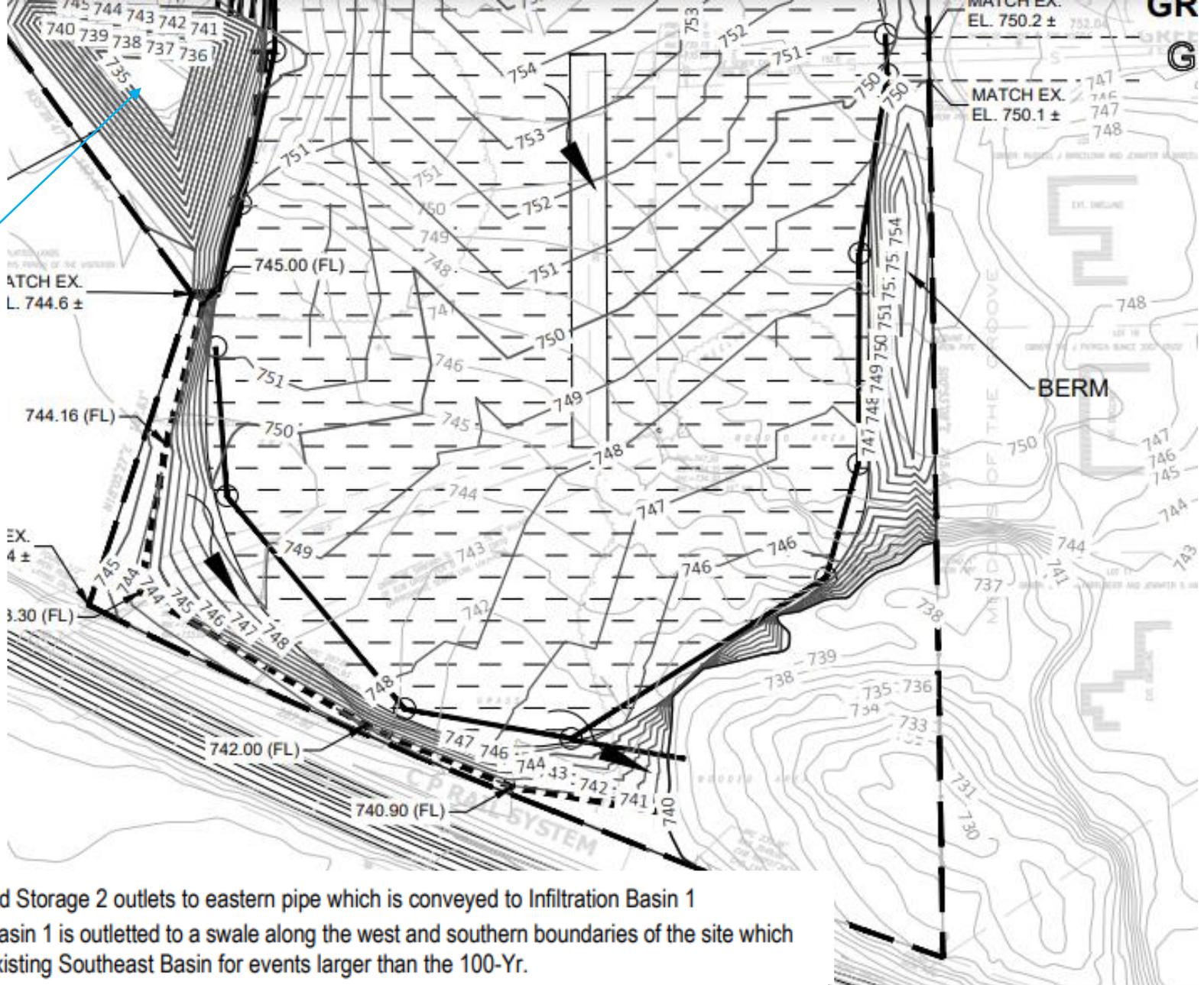
DATE	TIME	DEPTH	CASING	STAB



DEPTH (ft.)	Elevation (ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION	REMARKS	SAMPLE TYPE NUMBER (Depth Interval)	RECOVERY (inches)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS			FINES CONTENT (%)
											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	
0	745		Surface: Grassy Upper 12": Silty SAND (SM) TOPSOIL, dark brown, with rootlets											
1-2.5			S-1: TOPSOIL: Loose, clayey SAND (SC) fine to medium-grained; trace Gravel, fine, trace Organics; brown moist		S-1 (1-2.5)	12	2-3-5 (8)	1.0	26.0	NP	21	NP	34	
3-5			S-2: Medium dense, well-graded SAND with SILT (SW-SM), fine to coarse-grained, some Gravel, fine to coarse, tanish brown, dry		S-2 (3-5)	13	8-13-15 (28)							
6-7.5			S-3: Medium dense, well-graded SAND with SILT (SW-SM), fine to coarse-grained, some Gravel, fine to coarse, tanish brown, dry		S-3 (6-7.5)	15	7-12-10 (22)							

Typical two/ three feet of topsoil from test bore sample

Basin #1



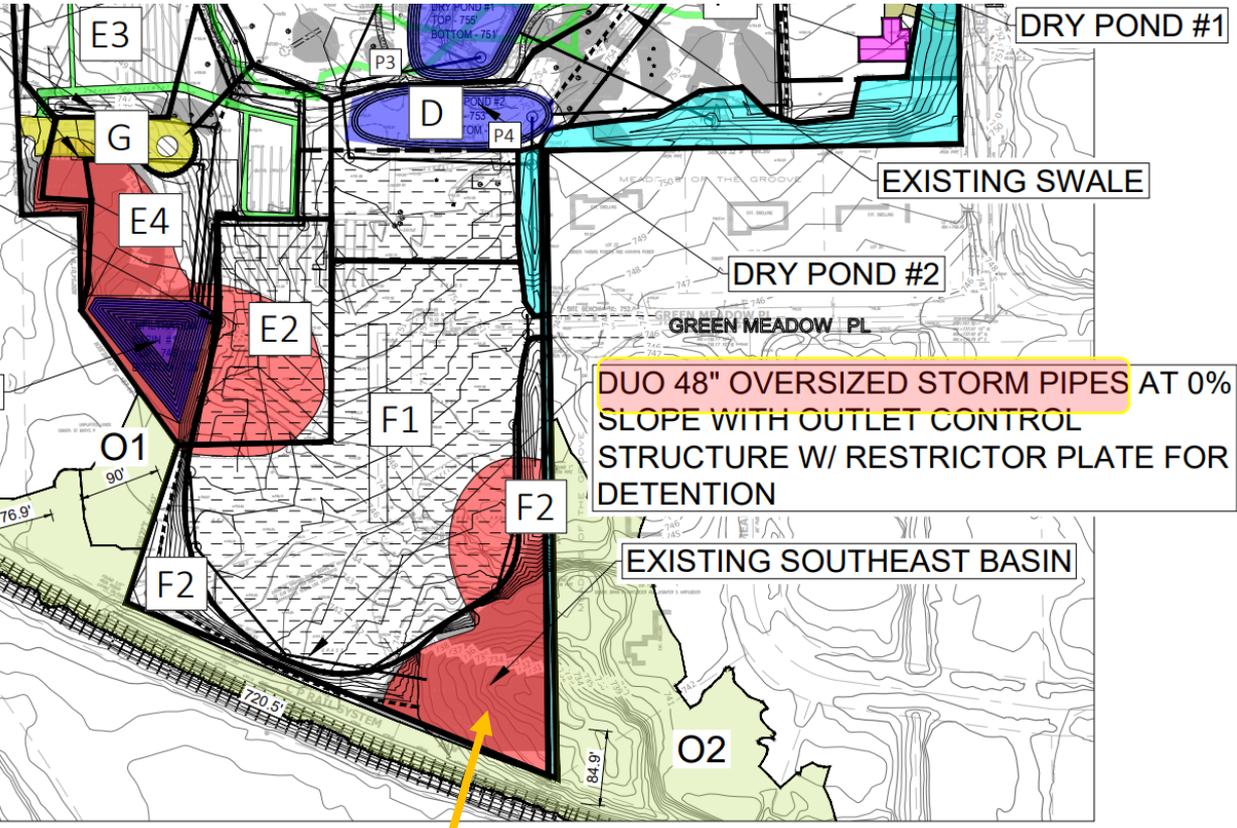
- Underground Storage 2 outlets to eastern pipe which is conveyed to Infiltration Basin 1
- Infiltration Basin 1 is outletted to a swale along the west and southern boundaries of the site which outlets to Existing Southeast Basin for events larger than the 100-Yr.
- Existing Cemetery Grounds and Expanded Parking Lot conveyed to Infiltration Basin 1 via Oversized Pipes
- Future Neighborhood South end of Site conveyed to Existing Southeast Basin

GRADING PLAN

SWALE OR SHEET FLOW ENTERS INLET AND ROUTES INTO STRUCTURE AND FLAT OVERSIZED PIPE TO INFILTRATION BASIN WITH RESTRICTING ORIFICES

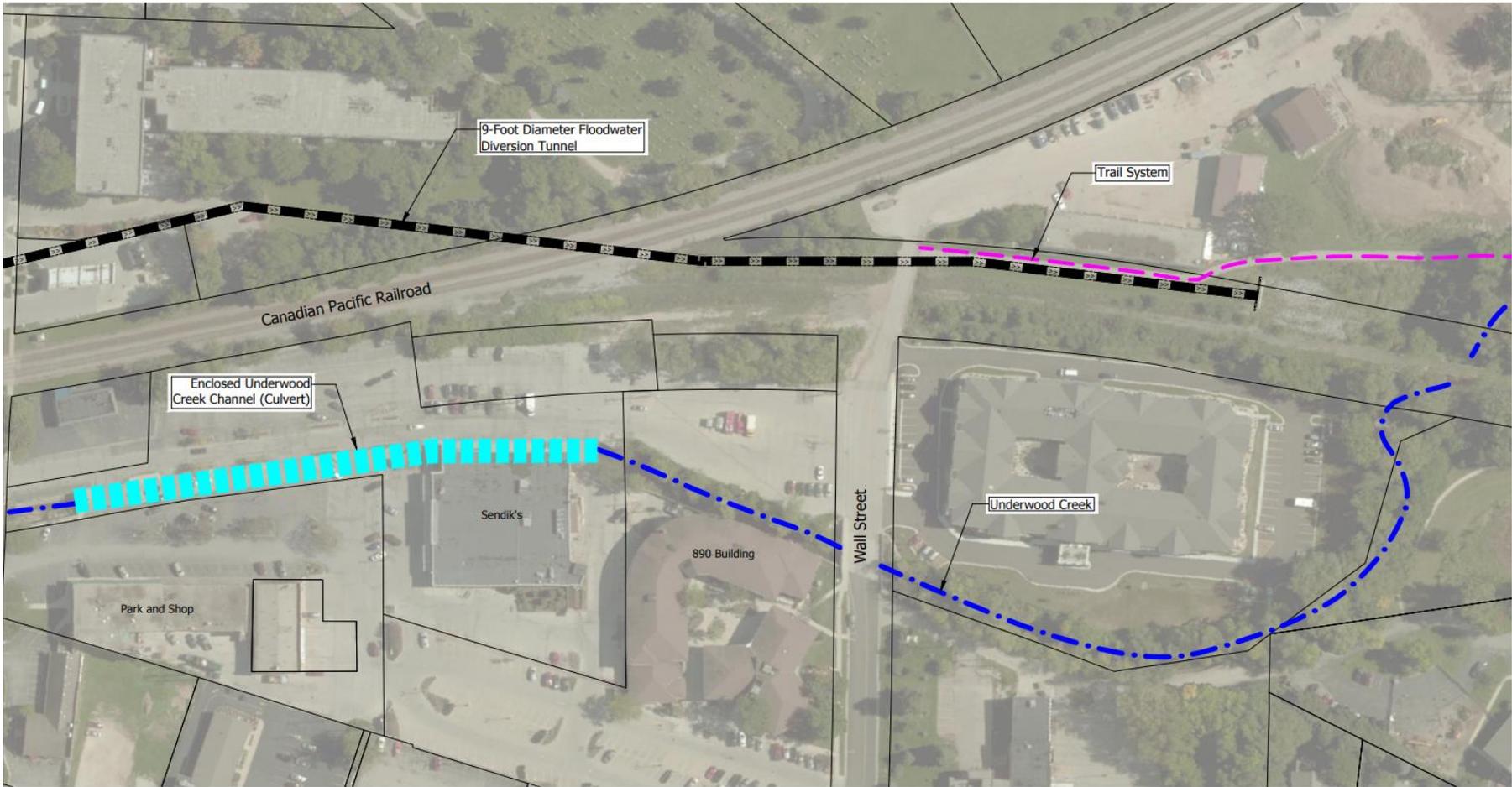
250 LF -48" DIAMETER OVERSIZED STORM PIPE AT IE=745.25 @ 0.00% WITH OUTLET CONTROL STRUCTURE W/ RESTRICTOR PLATE FOR DETENTION

INFILTRATION BASIN #1



DUO 48" OVERSIZED STORM PIPES AT 0% SLOPE WITH OUTLET CONTROL STRUCTURE W/ RESTRICTOR PLATE FOR DETENTION

All water flows to Southeast Basin
Once developed the permeable area
will be reduced with roadway
hard scape, homes, etc.



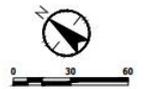
Underwood Creek Daylighting
Downtown Area Existing Conditions
 Village of Elm Grove





**Underwood Creek Daylighting
New Channel Alignment**
Village of Elm Grove

- Legend**
- Underwood Creek
 - Underwood Creek - Channel Side Slope
 - Green Space
 - 12 ft Wide Pedestrian Path
 - Channel Corridor Limits
 - Retaining Walls





Connection of Basin #1 water outlet to Underwood Creek