

	ROCK ENTRANCE BERM
	SILT FENCE
	POST GRADING SILT FENCE
	INLET PROTECTION
	DESIGN NWL
	INFILTRATION BASIN
	POND ACCESS

GENERAL NOTES:

- INSTALL SILT FENCE AS SHOWN ON PLAN, AS REQUIRED BY THE CITY OF RAMSEY OR DIRECTED BY THE ENGINEER.
- THE WATER QUALITY POND MUST BE EXCAVATED AT THE BEGINNING OF GRADING OPERATIONS TO PROVIDE TEMPORARY STORM WATER DETENTION DURING CONSTRUCTION. SAND AND SILT MUST BE REMOVED FROM THE POND AS NECESSARY DURING CONSTRUCTION AND AT THE COMPLETION OF THE PROJECT.
- BEGIN GRADING, INSTALL PERFORATED RISER PIPE IN POND WHEN POND GRADING IS COMPLETE. TEMPORARY DRAINAGE PIPE SHALL BE USED FOR INTERMEDIATE DRAINAGE DURING THE CONSTRUCTION PERIOD AS NECESSARY AND DIRECTED BY THE ENGINEER. INSTALL SILT FENCE AROUND EXCAVATED PONDS.
- INSPECT POND, SILT FENCE, AND ROCK ENTRANCE BERM AFTER ALL RAINFALL EVENTS AS REQUIRED BY THE NPDES PERMIT.
- LINE ALL PONDS WITH A MINIMUM 3" ORGANIC SOILS & SEED SLOPES BETWEEN NWL AND 100 YR HWL WITH A WATER TOLERANT MIX. (OR AS NOTED)
- REMOVE PERFORATED RISER PIPE WHEN STORM SEWER AND OUTLET STRUCTURE FOR PONDS ARE INSTALLED.
- POND - 10:1 BENCH (1 FOOT) THEN 4:1 MAX
- LO & WO PADS 3:1 MAX. ALL OTHER SLOPES 4:1 MAX (UNLESS NOTED)
- THE GRADING CONTRACTOR IS RESPONSIBLE FOR ALL STORM WATER INSPECTIONS ACCORDING TO THE MPCA STORM WATER PERMIT. THIS INCLUDES BOTH WEEKLY INSPECTIONS AND INSPECTIONS DONE AFTER A 0.5" RAIN EVENT. A COPY OF THE INSPECTION REPORT MUST BE EMAILED TO THE ENGINEER AND DEVELOPER ON A WEEKLY BASIS.
- THE CONTRACTOR SHALL PLACE INLET PROTECTION DEVICES IN ACCORDANCE WITH THE CITY OF RAMSEY DETAILS FOR ALL STORM SEWER INLETS AND MAINTAIN THEM AS AN EFFECTIVE SILT CONTROL DEVICE. INLET PROTECTION SHALL BE REMOVED WHEN RESTORATION HAS BEEN ESTABLISHED.
- ALL RETAINING WALLS WILL REQUIRE A STRUCTURAL DESIGN, A BUILDING PERMIT & A FINAL INSPECTION REPORT.
- A 1"-2" CRUSHED ROCK ENTRANCE BERM SHALL BE PLACED AT THE SITE ENTRANCE, TO REPLACE SILT FENCE, AND MINIMIZE EROSION ON TO THE STREETS. THE ROCK BERMS SHALL BE THE WIDTH OF THE ENTRANCE AND 2 FEET HIGH WITH 4:1 SLOPES.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD AND STREET AREAS THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL ATTEMPT TO PREVENT SOIL MATERIALS FROM LEAVING THE SITE BY EROSION AND VEHICLE WHEEL TRACKING. HE SHALL BE RESPONSIBLE FOR CLEANING OF STREET, BOULEVARD AND UTILITY FACILITIES THAT RECEIVE ANY ERODED OR TRACKED SOIL MATERIAL OR OTHER CONSTRUCTION DEBRIS OR MATERIAL.
- EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.
- BUILDING PADS ARE 60" DEEP (SINGLE-FAMILY) & 70" DEEP (VILLA), UNLESS OTHERWISE NOTED. THE FRONT AND REAR BUILDING PAD LINES ARE SHOWN ON THE PLAN. THE ENGINEER SHOULD BE CONTACTED IF THE CONTRACTOR HAS ANY QUESTIONS REGARDING BUILDING PADS.

RESTORATION NOTES

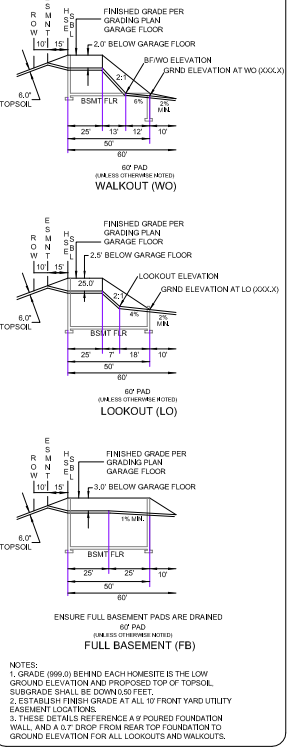
- RESTORATION - XX ACRES
- RESTORE ALL DISTURBED AREAS WITH 4" TO 6" OF TOPSOIL, OR EXISTING ON-SITE ORGANIC MTRL.
 - SEED POND SLOPES AND DETENTION AREAS WITH MNDOT 310 OR BWSR P8 SEED MIX AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE.
 - SEED BASIN AREAS WITH MNDOT 33-261 SEED MIX AT A RATE OF 35 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE.
 - SEED ALL OTHER DISTURBED AREAS WITH MNDOT 250 SEED MIX AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. (UNLESS OTHERWISE NOTED)
 - ONLY PHOSPHOROUS FREE FERTILIZER IS TO BE USED ON SITE.
 - MULCH WITH TYPE 1 AT A RATE OF 2 TONS/ACRE AND DISC ANCHOR IMMEDIATELY AFTER PLACEMENT. USE WOODFIBER BLANKET ON ALL SLOPES 3:1 (FT) OR GREATER.
 - PLACE APPROVED STORM SEWER INLET PROTECTION IN OR AROUND ALL STORM SEWER INLETS AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED. REFER TO CITY DETAILS ST-22 & ST-23 FOR APPROVED DEVICES.
 - MAINTAIN ALL SILT FENCE UNTIL TURF HAS BEEN ESTABLISHED.
 - RESTORATION WORK WILL BE COMPLETED WITHIN 72 HOURS OF GRADING COMPLETION.
 - SILT FENCE - BEFORE GRADING - 5,500 LF
AFTER GRADING - 3,860 LF
 - WOODFIBER BLANKET - 0 SY

ON-SITE BMPs

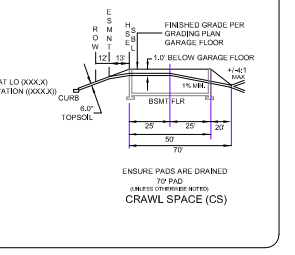
- NURP POND - NURP POND WILL BE UTILIZED TO MEET OR EXCEED QUALITY AND RATE CONTROL REQUIREMENTS.
- SKIMMERS - THE POND OUTLET STRUCTURE INCLUDES A SUBMERGED INLET PIPE TO ALLOW SKIMMING.
- RIP RAP - RIP RAP WILL BE UTILIZED AT ALL APRONS FOR ENERGY DISSIPATION AND PROVIDE SEDIMENT CONTROL.
- INLET PROTECTION - INLET PROTECTION WILL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS & REAR YARD STRUCTURES. REFER TO THE CITY DETAILS TO DETERMINE WHICH INLET PROTECTION DEVICE IS APPLICABLE.
- SLOPE STABILIZATION - SILT FENCE WILL BE INSTALLED ALONG DOWN GRADIENT GRADING LIMITS AND WOODFIBER BLANKET WILL BE UTILIZED ON ALL SLOPES 3:1 OR GREATER TO PROVIDE ADEQUATE SLOPE STABILIZATION.
- BIOROLLS - BIOROLLS WILL BE INSTALLED ALONG REAR YARD SWALES TO PREVENT SEDIMENT FROM REACHING THE NURP POND AND ULTIMATELY DOWNSTREAM WETLANDS.
- INFILTRATION/RETENTION AREAS - INFILTRATION/RETENTION AREAS WILL BE UTILIZED TO REDUCE/RETAIN THE RUNOFF FROM THE INCREASED HARD SURFACE.
- STREET SWEEPING - STREET SWEEPING WILL BE DONE A MINIMUM OF ONCE PER WEEK OR MORE FREQUENTLY TO MINIMIZE DUST CONTROL AND VEHICLE TRACKING.
- PHOSPHOROUS FREE FERTILIZER - PHOSPHOROUS FREE FERTILIZER WILL ALSO BE USED ON SITE.
- DITCH CHECKS SHALL BE INSTALLED EVERY 100' IN THE TEMPORARY DRAINAGE DITCHES AND AS SHOWN IN THE EROSION CONTROL PLANS.

DESCRIPTION	PROPOSED	EXISTING
MINOR CONTOUR		
MAJOR CONTOUR		
LOT LINE		
BUILDING SETBACK BOUNDARY		
PARCEL BOUNDARY LINE		
DRAINAGE AND UTILITY EASEMENTS		
CURB AND GUTTER		
RIGHT-OF-WAY		
BACKYARD CATCH BASIN		
CATCH BASIN		
STORM SEWER MANHOLE		
FLARED END SECTION WRAP/WRAP		
SANITARY SEWER MANHOLE		
HYDRANT		
GATE VALVE		
DRAIN FLOW/RUNOFF ARROW		
EMERGENCY OVERFLOW SWALE		
SILT FENCE - (PRE CONSTRUCTION)		
SILT FENCE - (POST CONSTRUCTION)		
SPOT ELEVATION	x 960.0	x 960.0
TBC SPOT ELEVATION	x 960.00	x 960.00

HOLDDOWN DETAILS



HOLDDOWN DETAILS



ENTIRE SITE GRADED WITH 1ST ADDITION

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TOW				
CHECKED BY				
ERJ				
DATE				
03/26/21				

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Eric R. Johnson
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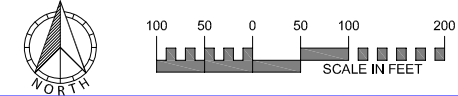
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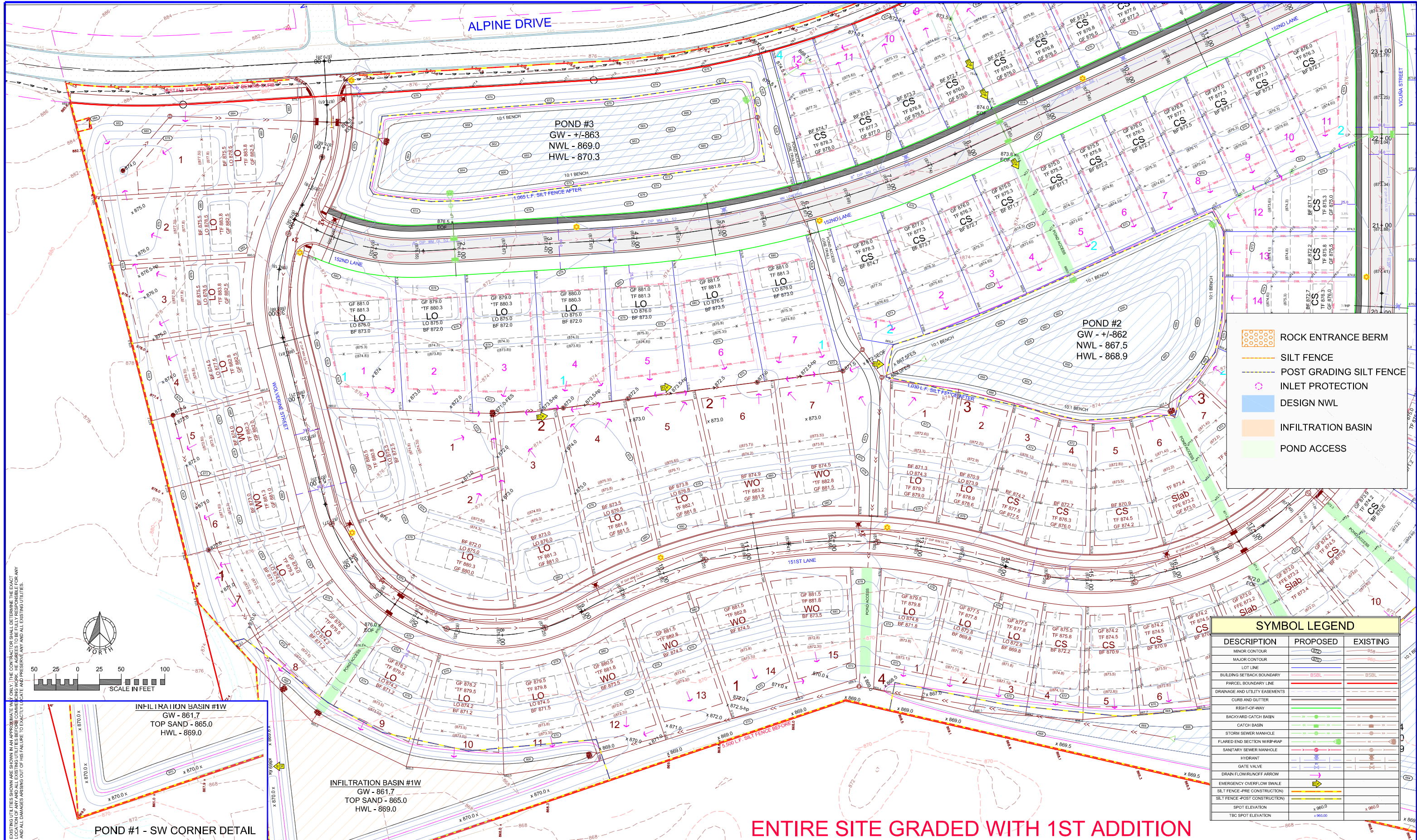
ENGINEERS SURVEYORS
DESIGNERS PLANNERS

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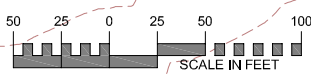
FINAL GRADING PLAN
THE PRESERVE AT NORTHFORK 2ND ADDITION
BK LAND DEVELOPMENT

FILE NO.
10945-003
13
22





EXISTING UTILITIES SHOWN IN AN APPROXIMATE MANNER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND ALL EXISTING UTILITIES.



INFILTRATION BASIN #1W
 GW - 861.7
 TOP SAND - 865.0
 HWL - 869.0

INFILTRATION BASIN #1W
 GW - 861.7
 TOP SAND - 865.0
 HWL - 869.0

POND #1 - SW CORNER DETAIL

- ROCK ENTRANCE BERM
- SILT FENCE
- POST GRADING SILT FENCE
- INLET PROTECTION
- DESIGN NWL
- INFILTRATION BASIN
- POND ACCESS

SYMBOL LEGEND		
DESCRIPTION	PROPOSED	EXISTING
MINOR CONTOUR		
MAJOR CONTOUR		
LOT LINE		
BUILDING SETBACK BOUNDARY		
PARCEL BOUNDARY LINE		
DRAINAGE AND UTILITY EASEMENTS		
CURB AND GUTTER		
RIGHT-OF-WAY		
BACKYARD CATCH BASIN		
CATCH BASIN		
STORM SEWER MANHOLE		
FLARED END SECTION WRAPAROUND		
SANITARY SEWER MANHOLE		
HYDRANT		
GATE VALVE		
DRAIN FLOW/ROFFLOW ARROW		
EMERGENCY OVERFLOW SWALE		
SILT FENCE - PRE CONSTRUCTION		
SILT FENCE - POST CONSTRUCTION		
SPOT ELEVATION		
TBC SPOT ELEVATION		

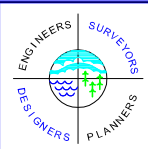
ENTIRE SITE GRADED WITH 1ST ADDITION

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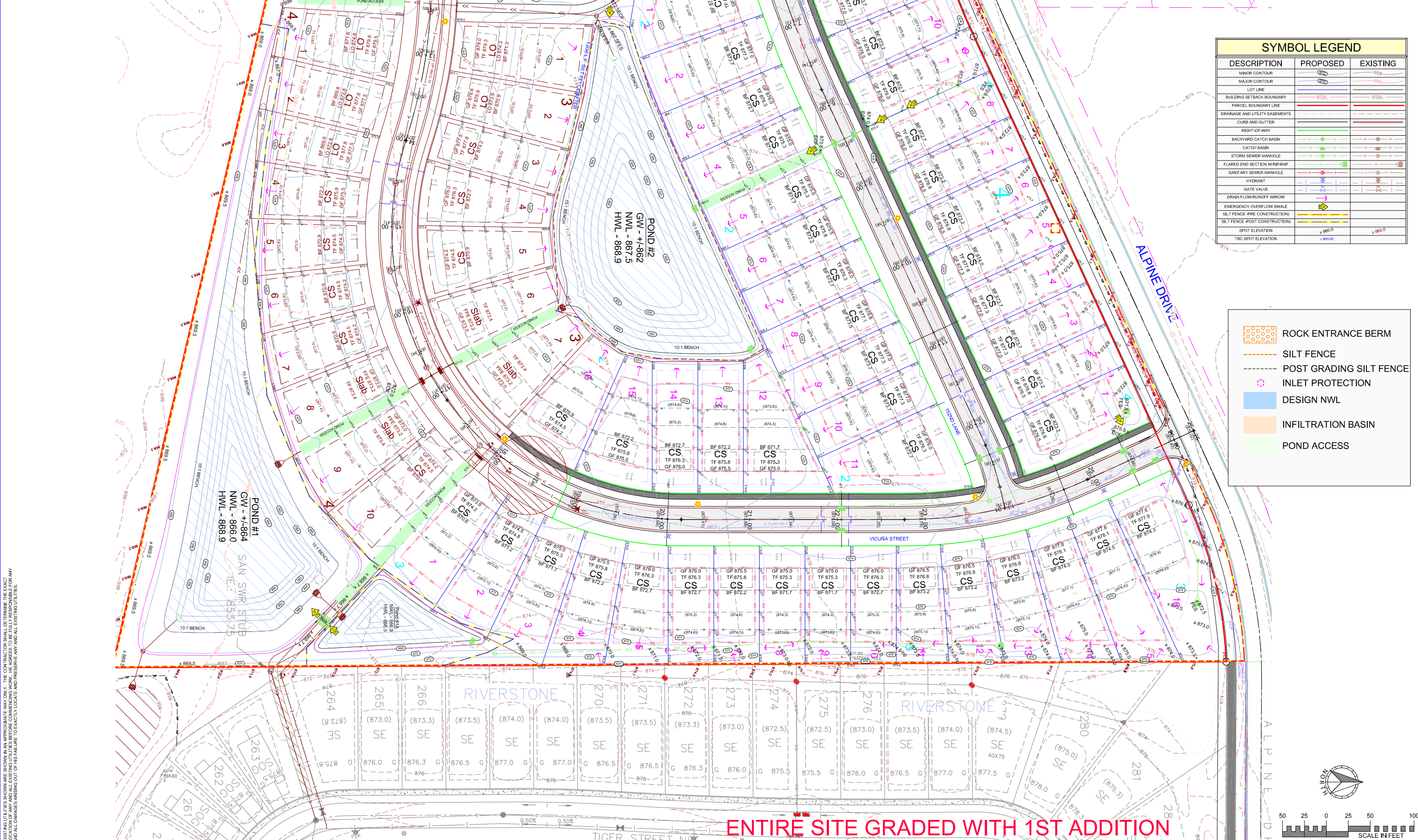


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FINAL GRADING PLAN
 THE PRESERVE AT NORTHFORK 2ND ADDITION
BK LAND DEVELOPMENT

FILE NO.
 10945-003
14
22



SYMBOL LEGEND		
DESCRIPTION	PROPOSED	EXISTING
MINOR CONTOUR		
MAJOR CONTOUR		
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BUILDING SETBACK BOUNDARY		
PARCEL BOUNDARY LINE		
DRAINAGE AND UTILITY EASEMENTS		
CURB AND GUTTER		
RIGHT-OF-WAY		
BACKYARD CATCH BASIN		
CATCH BASIN		
STORM SEWER MANHOLE		
FLARED END SECTION WRAP		
SANITARY SEWER MANHOLE		
HYDRANT		
GATE VALVE		
DRAIN FLOW/RUNOFF ARROW		
EMERGENCY OVERFLOW SWALE		
SILT FENCE - PRE CONSTRUCTION		
SILT FENCE - POST CONSTRUCTION		
SPOT ELEVATION		
TBC SPOT ELEVATION		

	ROCK ENTRANCE BERM
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	POST GRADING SILT FENCE
	INLET PROTECTION
	DESIGN NWL
	INFILTRATION BASIN
	POND ACCESS

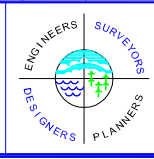
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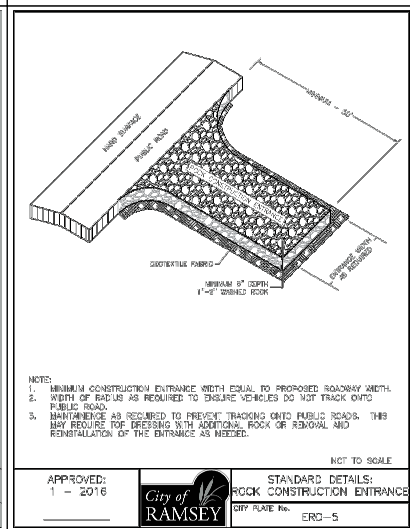
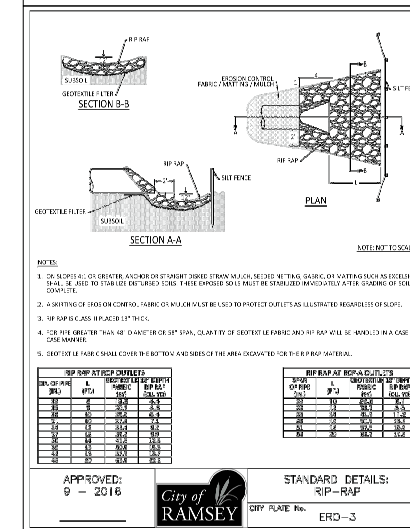
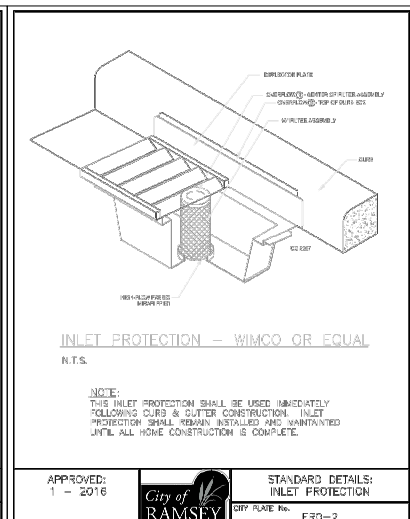
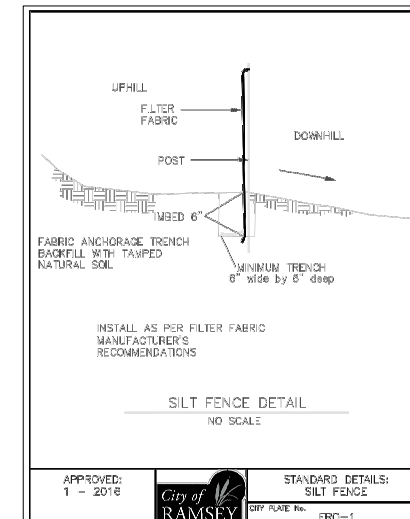
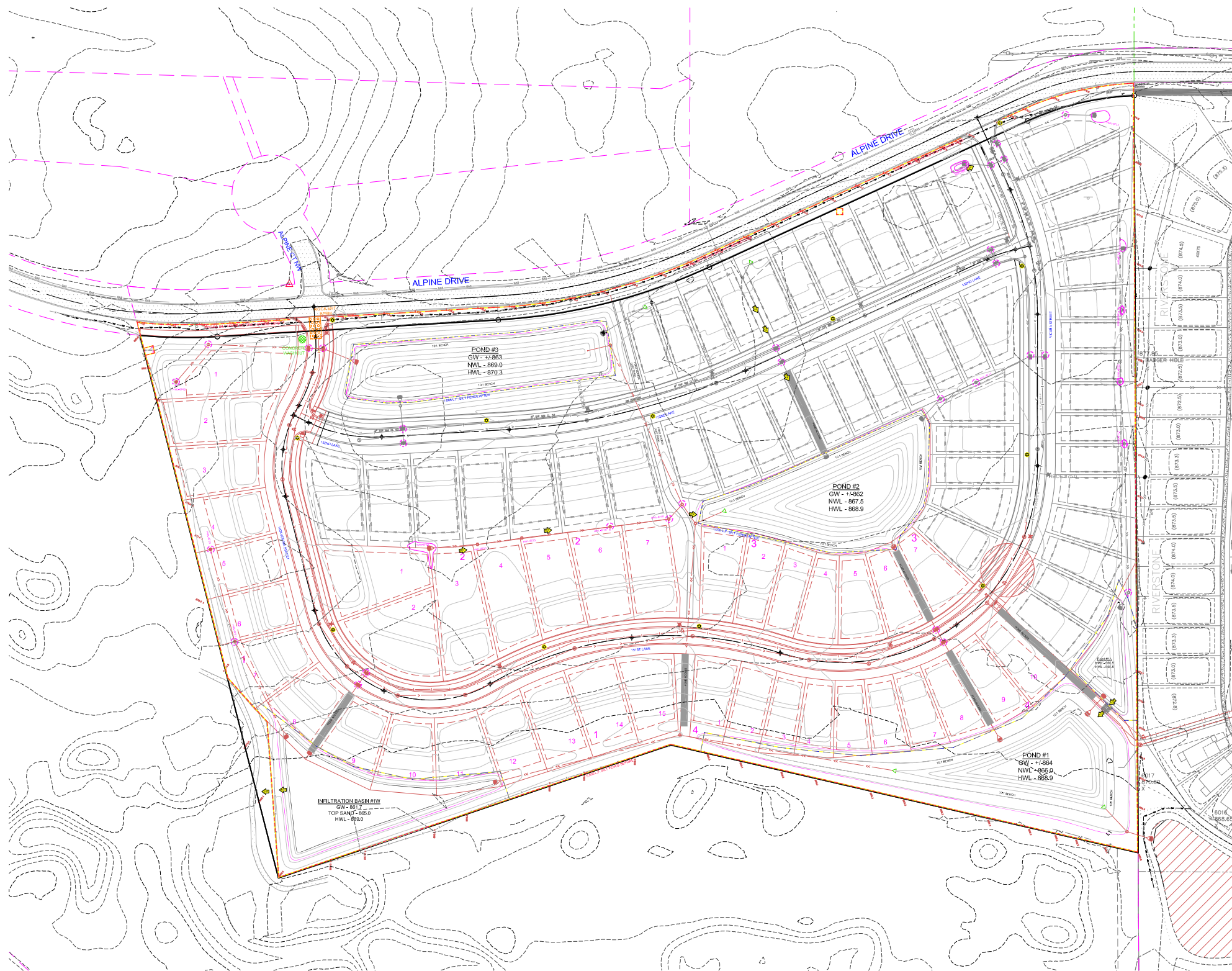


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CITY PROJECT NO. ---
RAMSEY, MINNESOTA

FINAL GRADING PLAN
THE PRESERVE AT NORTHFORK 2ND ADDITION
BK LAND DEVELOPMENT

FILE NO. 10945-003
15
22



- ROCK ENTRANCE BERM
- SILT FENCE
- POST GRADING SILT FENCE
- BIO-ROLL
- CONCRETE WASHOUT
- INLET PROTECTION
- WOODFIBER BLANKET
- POND ACCESS

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CITY PROJECT NO. ---
RAMSEY, MINNESOTA

FINAL EROSION CONTROL PLAN
 THE PRESERVE AT NORTHFORK 2ND ADDITION
 BK LAND DEVELOPMENT

FILE NO. 10945-003
 17
 22

