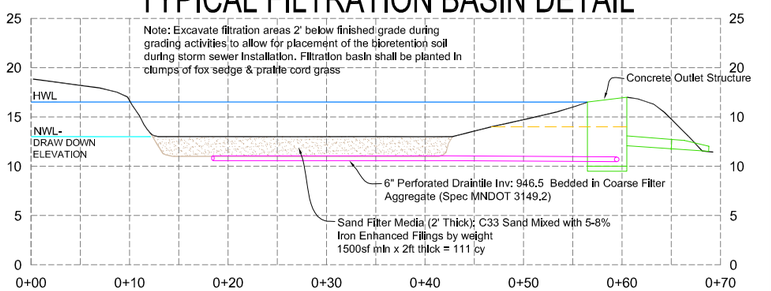
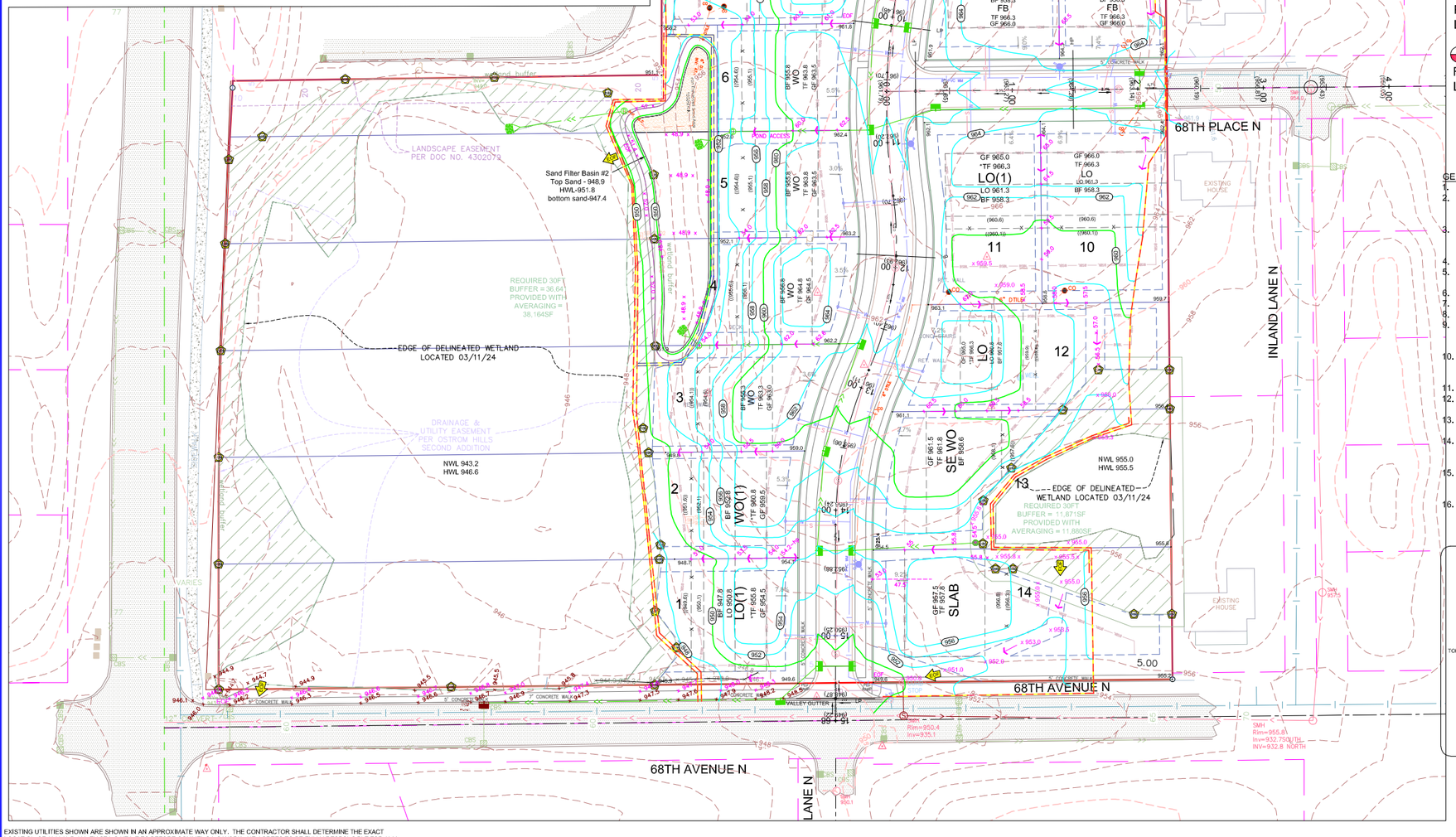
TYPICAL FILTRATION BASIN DETAIL



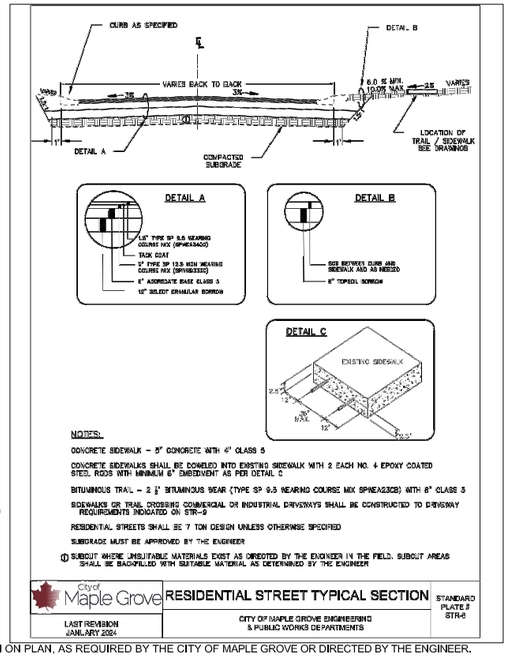


SYMBOL LEGEND

DESCRIPTION	PROPOSED	EXISTING
MINOR CONTOUR	972	958
MAJOR CONTOUR	970	960
LOT LINE		
BUILDING SETBACK LINE	BSBL	BSBL
GARAGE SETBACK LINE	GSBL	GSBL
PARCEL BOUNDARY LINE		
DRAINAGE AND UTILITY EASEMENTS		
CURB AND GUTTER		
RIGHT-OF-WAY		
BACKYARD CATCH BASIN		
CATCH BASIN		
STORM SEWER MANHOLE		
FLARED END SECTION W/RIP-RAP		
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	

PROPOSED BORING LOCATION

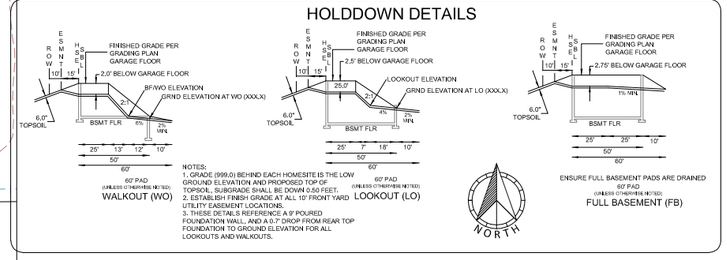
FIELD LOCATED BORING LOCATION



GENERAL NOTES:

1. INSTALL SILT FENCE AS SHOWN ON PLAN, AS REQUIRED BY THE CITY OF MAPLE GROVE OR DIRECTED BY THE ENGINEER.
2. 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.
3. 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.
4. INSPECT POND, SILT FENCE, AND ROCK ENTRANCE BERM AFTER ALL RAINFALL EVENTS AS REQUIRED BY THE NPDES PERMIT.
5. 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)
6. REMOVE PERFORATED RISER PIPE WHEN STORM SEWER AND OUTLET STRUCTURE FOR PONDS ARE INSTALLED.
7. POND - 10:1 BENCH (1 FOOT) THEN 4:1 MAX
8. LO & WO PADS 4:1 MAX. ALL OTHER SLOPES 4:1 MAX (UNLESS NOTED)
9. 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.
10. THE CONTRACTOR SHALL PLACE INLET PROTECTION DEVICES IN ACCORDANCE WITH THE CITY OF MAPLE GROVE DETAIL EROS-7 & EROS-8 FOR ALL STORM SEWER INLETS AND MAINTAIN THEM AS AN EFFECTIVE SILT CONTROL DEVICE. INLET PROTECTION SHALL BE REMOVED WHEN RESTORATION HAS BEEN ESTABLISHED.
11. ALL RETAINING WALLS 4' OR TALLER, WILL REQUIRE A STRUCTURAL DESIGN, A BUILDING PERMIT & A FINAL INSPECTION REPORT.
12. 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.
13. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD AND STREET AREAS THROUGHOUT CONSTRUCTION.
14. 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.
15. 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.
16. BUILDING PADS ARE 60' DEEP, 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.

HOLDDOWN DETAILS



50 25 0 25 50 100
SCALE IN FEET

ROUGH GRADING CUT/FILL
CUT = +/- 11,810 CY FILL = +/- 9,005 CY

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.

DRAWING NAME	NO.	BY	DATE	REVISION
14020-001	1			
DRAWN	2			
CAW	3			
CHECKED	4			
CAW	5			
DATE				
10/31/24				

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I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

CHARLES A. WIEMERSLAGE, P.E.
Date: 10/31/24 Lic. No. 49180

ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
14000 25TH AVE N #120 PLYMOUTH, MN. 55447 (952) 476-6000

CITY PROJECT NO.
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MAPLE GROVE, MINNESOTA

GRADING & DRAINAGE PLAN

HENNESSEY GROVE

RACHEL DEVELPMENT

FILE NO.
73618-001
14020-001

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