

CONSTRUCTION PHASING SCHEDULE

- PHASE 1 - "CUT & FILL" WORKS :**
- STAGE 1: SEDIMENT AND EROSION CONTROL WORKS**
1. INSTALL CONSTRUCTION ACCESS/STONE MUD MAT AT WINSTON CHURCHILL BOULEVARD AS SHOWN ON PLAN ESC-1.
 2. INSTALL PERIMETER SILT FENCES AS SHOWN ON PLAN ESC-1.
 3. INSTALL THE TEMPORARY EROSION AND SEDIMENT POND AS PER DETAIL ON PLAN ESC-1.
- STAGE 2: EARTHWORKS**
4. COMPLETE SITE CLEARING (CLEARING AND GRUBBING), TREE REMOVALS WITHIN THE OCTOBER 1ST TO MARCH 30TH TIMING WINDOW.
 5. STRIP TOPSOIL AND STOCKPILE.
 6. COMPLETE "CUT & FILL" WORKS.
 7. CONSTRUCT THE TEMPORARY INTERCEPTOR SWALES AND ESC SWM OUTLET TO WATERCOURSE.
 8. STABILIZE AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE IMMEDIATELY AS WORK PROGRESSES.

SEDIMENT AND EROSION CONTROL GENERAL NOTES:

1. CONTRACTOR/OWNER TO COMPLY WITH SEDIMENT AND EROSION CONTROL By-Law #46-2019.
2. CONTRACTOR/OWNER TO COMPLY WITH MUD TRACKING BY-LAW #69-2002.
3. BEFORE PROCEEDING ANY AREA GRADING THE FOLLOWING MUST BE CONSIDERED:
 - A. MUD MAT WHERE INDICATED,
 - B. TEMPORARY SWALES WITH ROCK FLOW CHECK DAMS,
 - C. SILT FENCE WHERE INDICATED
 - D. TREE PRESERVATION
 - E. TEMPORARY POND AS SHOWN ON DRAWING, WITH TURBIDITY CURTAIN,
 - F. SILT TRAPS
4. SILT CONTROL FENCE SHOULD BE INSTALLED AROUND PERIMETER OFFSET 0.60m INSIDE THE PROPERTY OF THE SITE AND MAINTAINED UNTIL THE COMPLETION OF LANDSCAPING.
5. CATCHBASIN SILT TRAPS ARE TO BE INSTALLED AT ALL CATCHBASINS AND CATCHBASIN MANHOLE LOCATIONS UPON COMPLETION OF THE LANDSCAPING.
6. ACCUMULATED SILT TO BE REMOVED OFF SITE PRIOR TO REMOVAL OF THE SILT CONTROL FENCE.
7. CONTRACTOR TO INSTALL AND MAINTAIN MUD MAT AT CONSTRUCTION ACCESS IN ORDER TO PREVENT MUD TRACKING ONTO ADJACENT ROADS. MUD MAT TO BE A MINIMUM 20.0m LONG AND 3.0m WIDE AND SHALL CONSIST OF 100mm CLEAR STONE AND 400 mm DEEP.
8. CONTRACTOR TO CLEAN ADJACENT ROADS ON A REGULAR BASIS TO THE SATISFACTION OF THE TOWN OF OAKVILLE OR HALTON REGION, WHICHEVER IS APPLICABLE. THE ROAD SHALL BE SCARPED AND FLUSHED DAILY AS REQUIRED OR AS DIRECTED BY THE TOWN OR REGION.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED WEEKLY AND IMMEDIATELY AFTER RAINFALL EVENTS FOR RIPS AND TEARS, BROKEN STAKES, BLOW OUTS (STRUCTURAL FAILURE) AND ACCUMULATION OF SEDIMENT. THE SILT FENCE MUST BE FIXED AND/OR REPLACED IMMEDIATELY WHEN DAMAGED. SEDIMENT MUST BE REMOVED FROM SILT FENCE WHEN ACCUMULATION REACHES 50% OF THE HEIGHT OF THE FENCE.
10. THE OWNER WILL SEED, MULCH AND MAINTAIN THE ENTIRE SITE IF A BUILDING PERMIT IS NOT ISSUED.
11. THE OWNER SHALL IMMEDIATELY SEED, MULCH AND STABILIZE AREAS THAT HAVE BEEN DISTURBED AND OUR OTHERWISE UNFINISHED.
12. UPON COMPLETION OF LANDSCAPING ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED.
13. NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL BE BEYOND THE SILT FENCE.
14. ALL TOPSOIL STOCKPILES SHALL BE SURROUNDED WITH A SEDIMENT CONTROL FENCE.
15. WASHING-WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADS. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CVC ESC - Mandatory Notes

1. It is advised that the Credit Valley Conservation Authority may, at any time, without this permission, or in the option of the Authority, the conditions of the permit are not being complied with this approval does not exempt the property owner/applicant/agent from the provisions of any other Federal, Provincial or Municipal Statutes, regulations or by-laws, or any rights under common law.
2. Following installation of the proposed ESC measures a qualified agent of the proponent, preferably an Environmental Monitor, will conduct regular site visits to the site and will particularly be concerned in order to prevent mud in- or near-work areas. Should concerns arise, the Environmental Monitor will contact the proponent, CVC, and any other appropriate parties.
3. All construction activities, including maintenance procedures, will be controlled to prevent the entry of debris, sediments, or other deleterious products to the watercourse or wetland. Equipment maintenance will be conducted a minimum of 30 metres from the watercourse/wetland.
4. Sediment laden runoff from disturbed areas to the watercourse or natural feature is not allowed. All discharges shall be treated and contained 30 metres from watercourse or wetland. Discharge is to be released to an undisturbed natural area. These control measures shall be monitored and maintained or revised to ensure water quality targets are being achieved.
5. Please refer to ESC Guidelines for Urban Construction (December 2006) for the design and design objectives of ESC measures.
6. ESC measures will be implemented prior to, and maintained during the construction phases, to prevent entry of sediment into the watercourse/natural feature. ESC measures are to be evaluated and modified as necessary after any storm event. Any repairs required are to be rectified immediately.
7. The Erosion and Sediment Control (ESC) Plan is a dynamic document, which may be subject to change or modification as a result of site developments or changes on site. Any deviation from approved plans must be designed by a qualified professional.
8. Additional ESC materials (i.e. silt fence, filter socks, straw bales, clear stones, etc.) are to be kept on-site for emergencies and repairs.
9. The project proponent or their representative is ultimately responsible for controlling sediment and erosion within the construction site for the total period of the construction.
10. Disturbed areas will be minimized to the extent possible, and temporary or permanently stabilized or restored as the work progresses. All disturbed ground left exposed for more than 30 days shall be stabilized using appropriate erosion control measures and an appropriate native non-invasive seed mix or with the first approved restoration plan.
11. Any sediment spill from the site should be reported to Ministry of Environment (Spill Action Center) at 1-800-268-6060.
12. If excessive siltation results from the construction activities, the onsite supervisor/proponent or agent for CVC reserves the right to request additional ESC measures which would be installed prior to further construction activities.

STABILIZATION NOTES:

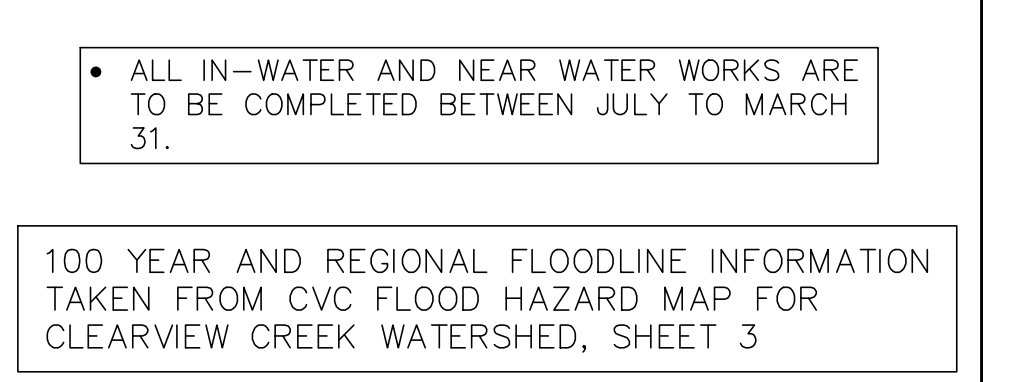
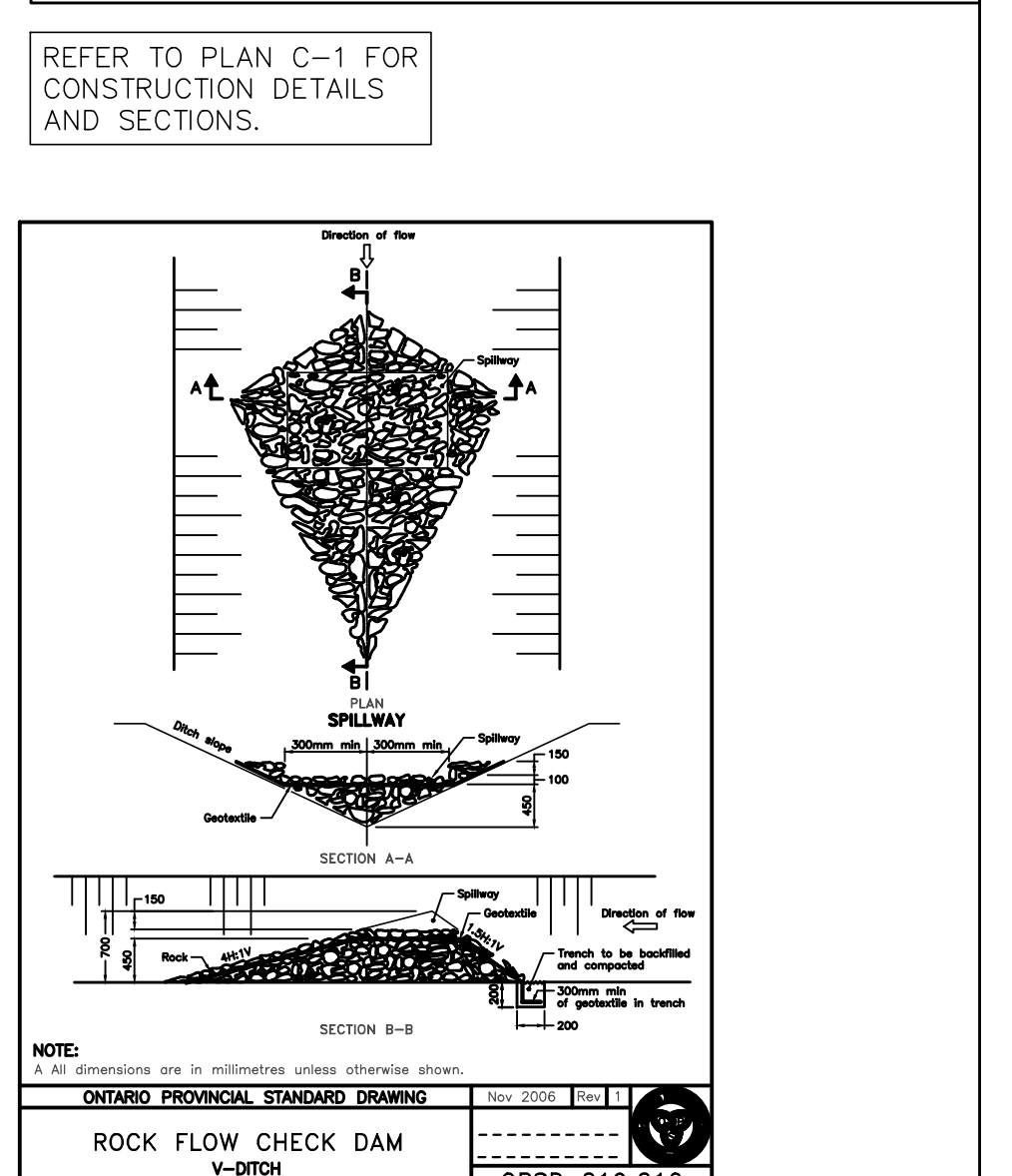
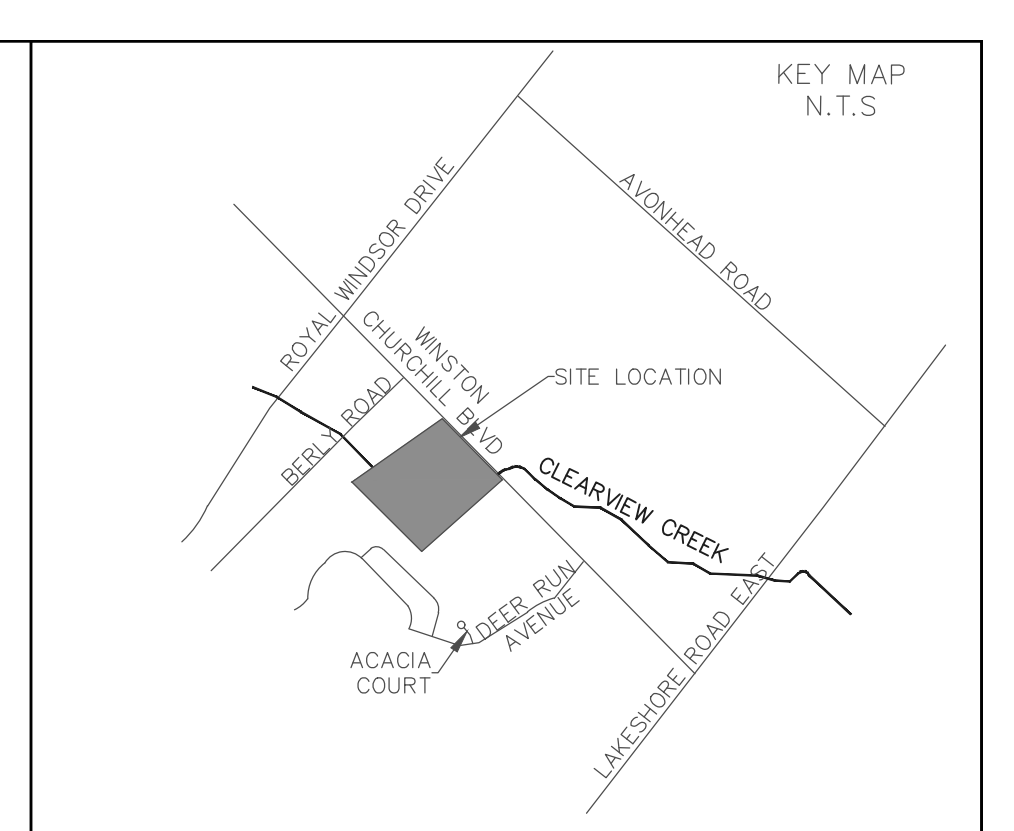
- PROVIDE TEMPORARY STABILIZATION FOR AREAS THAT ARE BEING DISTURBED.
- ALL ESC POND SLOPES AND INTERCEPTOR SWALES TO BE EFFECTIVELY STABILIZED WITH VEGETATION PRIOR TO RECEIVING ANY WATER FLOWS TO PREVENT SOIL EROSION. TEMP SEEDING TO CONSIST OF ANNUAL RYE GRASS, 25 kg/ha. ALTERNATE MEASURE TO BE PROVIDED OUTSIDE OF GROWING SEASON, SUCH AS EROSION CONTROL BLANKETS.
- SITE TO BE STABILIZED BEFORE RECEIVING FLOWS.
- MECHANICAL SEEDING TO BE APPLIED TO VEGETATE ANY DISTURBED SURFACE THAT IS TO BE LEFT EXPOSED FOR IMMEDIATELY AS THE WORK PROGRESSES AND FOR AREAS THAT ARE AT FINAL GRADE.
- THE LOWER HALF OF THE TOPSOIL PILES SHALL BE IMMEDIATELY STABILIZED USING GROUNDCOVER VEGETATION WITH A NON-INVASIVE SPECIES, I.E. SEEDED COMPOST OR SEEDED BIODEGRADABLE MATS. TEMP SEEDING MIX TO CONSIST OF ANNUAL RYE GRASS 25kg/ha, OR EROSION AND SEDIMENT CONTROL BLANKETS.

TEMPORARY SEDIMENT BASIN DECOMMISSIONING NOTES:

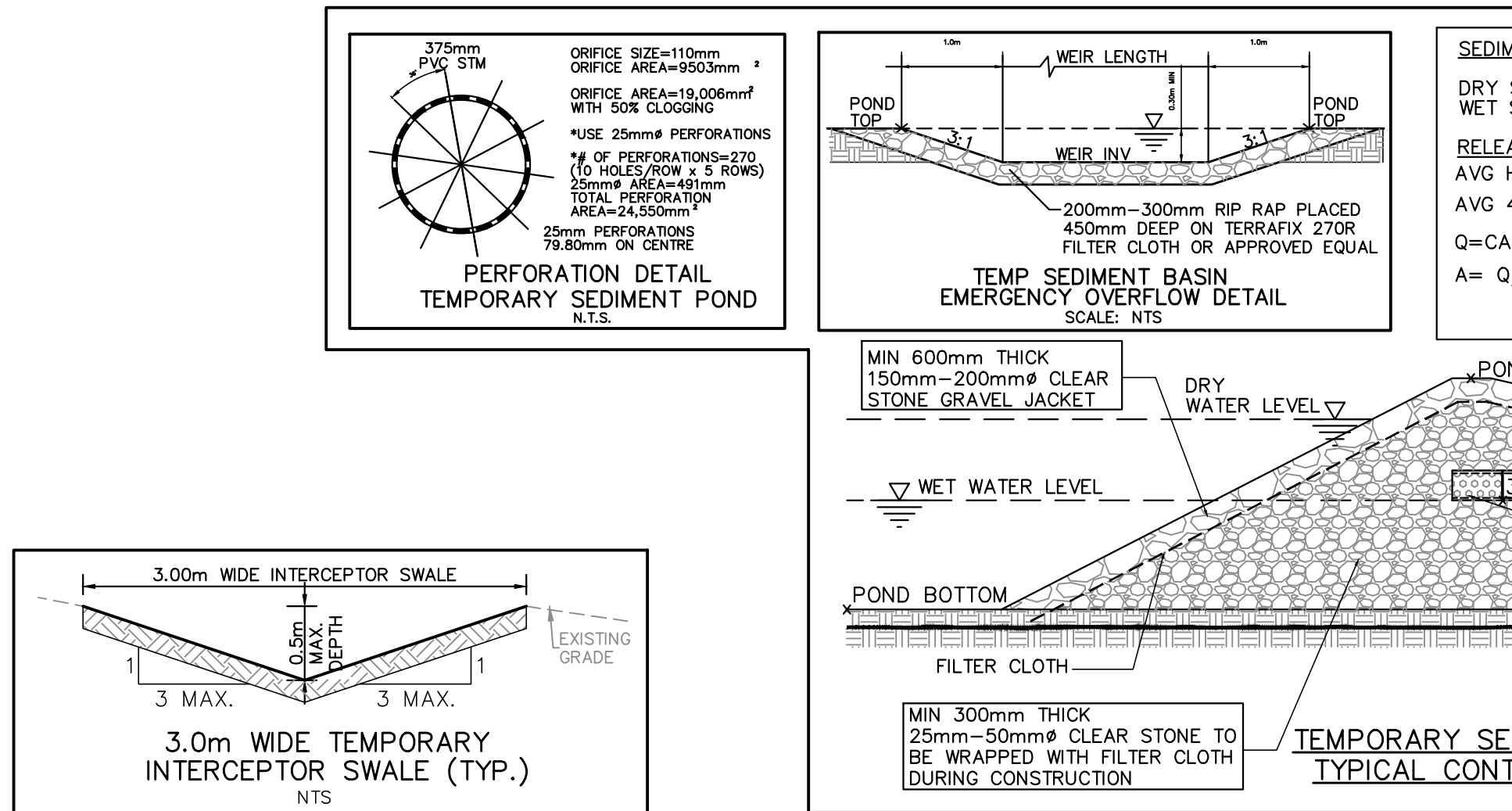
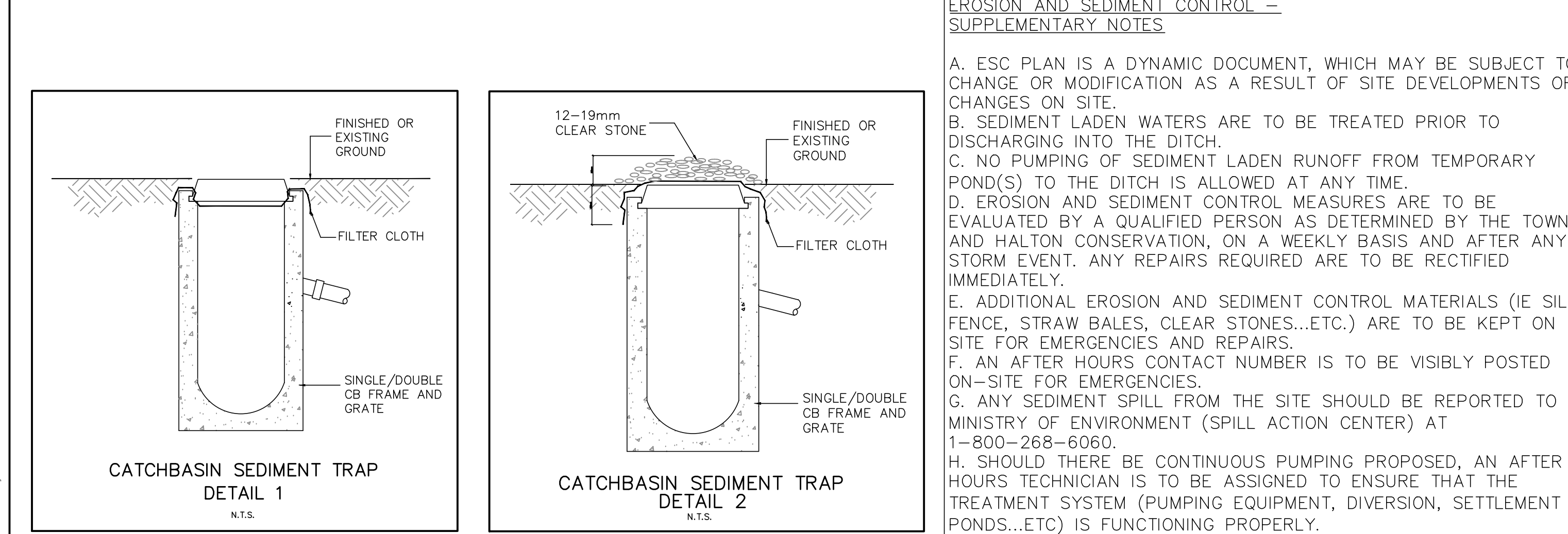
- ONCE SITE WORKS HAVE BEEN SUBSTANTIALLY STABILIZED, THE TEMPORARY SEDIMENT BASINS MAY BE DECOMMISSIONED.
- THE ESC BASIN ARE TO BE PUMPED THROUGH ENVIROBAGS UNTIL EMPTY. ENVIROBAGS TO BE LOCATED A MINIMUM OF 30m FROM ANY CREEK/WETLAND AND IN A WELL VEGETATED AREA.
- SEDIMENT AND DEBRIS TO BE REMOVED FROM THE BOTTOM OF THE ESC BASINS.
- ESC BASIN TO BE FILLED TO REQUIRED PRE-GRADE. FILL MATERIAL AND COMPACTION TO BE COMPLETED TO THE SATISFACTION OF GEOTECHNICAL RECOMMENDATIONS.

GENERAL DEWATERING NOTE:

- IF DEWATERING IS NECESSARY, ENSURE DEWATERING ACTIVITIES ARE PUMPED INTO A FILTER BAG PRIOR TO RELEASE INTO ANY WATERCOURSE/DRAINAGE FEATURE. FILTER BAG IS TO BE PLACED A MINIMUM OF 3.0m FROM THE WATERCOURSE/POND ON STABILIZED VEGETATED GROUND. THE DEWATERING ACTIVITIES IS TO BE MONITORED TO ENSURE THE FILTER DISCHARGE IS CLEAN AND FREE OF SUSPENDED SOLIDS.



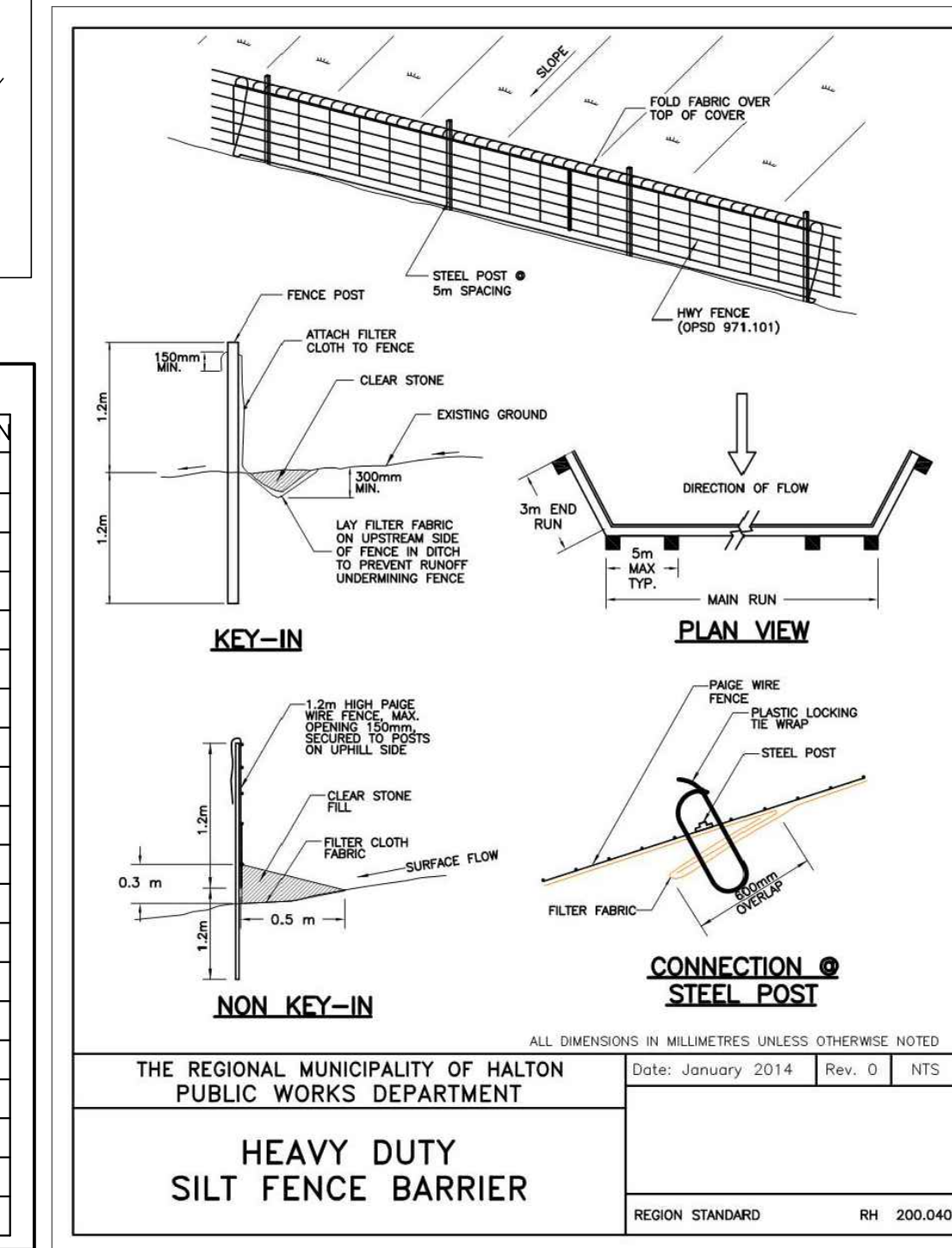
100 YEAR AND REGIONAL FLOODLINE INFORMATION TAKEN FROM CVC FLOOD HAZARD MAP FOR CLEARVIEW CREEK WATERSHED, SHEET 3



SEDIMENT STORAGE VOLUME REQUIRED:	
Dry Storage = 125m ³ /ha	Wet Storage = 125m ³ /ha
RELEASE RATE	1.480
AVG HEAD/Dry Storage Depth/2	A = AREA (ha)
AVG 48hr DISCHARGE = Dry Storage Volume	WET EON: Q=CvL ^{0.75}
	C = COEFF 1.705
	H = HEAD (m)

EMERGENCY OVERFLOW CALCULATIONS:	
Q=CvL ^{0.75}	160.0 m ³ /hr
WET EON: Q=CvL ^{0.75}	1549
C = COEFF 1.705	
H = HEAD (m)	

SEDIMENT BASIN SUMMARY TABLE	
Tributary Area (ha)	11.92
Wet Vol-Required (m ³)	1480
Wet Vol-Provided (m ³)	1549
Dry Vol-Required (m ³)	1490
Dry Vol-Provided (m ³)	1674
BOTTOM	92.30
Wet Water Level	93.00
Dry Water Level	93.60
POND TOP	94.00
Dry Storage Depth	0.60
Avg 48hr Disch. (m ³ /h)	0.0097
ORIFICE AREA (m ²)	0.0095
ORIFICE SIZE (mm)	110
DRAWDOWN TIME (h)	47.5
EMERGENCY OVERFLOW WEIR	
100% FLOW (m ³ /s)	1.325
WEIR INV	93.70
WEIR LENGTH (m)	5.0
HEAD (m)	0.30
WEIR CAPACITY (m ³ /s)	1.40



772 WINSTON CHURCHILL BLVD.

TOWN OF OAKVILLE REGION OF HALTON

EROSION AND SEDIMENT CONTROL PLAN - STAGE 1

SFA 1601.029/01
Region of Peel No. C602647

No.	Date	By	REVISIONS
4	DEC 14/23	RPA	FOURTH SUBMISSION
3	DEC 19/22	FP	THIRD SUBMISSION
2	DEC 15/21	FP	SECOND SUBMISSION
1	APR 9/22	FP	FIRST SUBMISSION

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2060

SCALE: 1:750 DATE: MAR 2021 PROJ No: 2060
DRAWN: F.P. CHKD: A.M.C. PLAN No: ESC-1
DESIGNED: A.M.C. SHEET 6 OF 6