

**CONSTRUCTION PHASING SCHEDULE**

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

**SEDIMENT AND EROSION CONTROL GENERAL NOTES:**

- CONTRACTOR/OWNER TO COMPLY WITH SEDIMENT AND EROSION CONTROL BY-LAW #46-2019.
- CONTRACTOR/OWNER TO COMPLY WITH MUD TRACKING BY-LAW #69-2002.
- BEFORE PROCEEDING ANY AREA GRADING THE FOLLOWING MUST BE CONSIDERED:
  - MUD MAT WHERE INDICATED.
  - TEMPORARY SWALES WITH ROCK FLOW CHECK DAMS.
  - SILT FENCE WHERE INDICATED.
  - TEMPORARY POND AS SHOWN ON DRAWING, WITH TURBIDITY CURTAIN.
  - SILT TRAPS.
- SILT CONTROL FENCE SHOULD BE INSTALLED AROUND PERIMETER OFFSET 0.60m INSIDE THE PROPERTY OF THE SITE AND MAINTAINED UNTIL THE COMPLETION OF LANDSCAPING.
- CATCHBASIN SILT TRAPS ARE TO BE INSTALLED AT ALL CATCHBASINS AND CATCHBASIN MANHOLE LOCATIONS UPON COMPLETION OF THE LANDSCAPING.
- ACCUMULATED SILT TO BE REMOVED OFF SITE PRIOR TO REMOVAL OF THE SILT CONTROL FENCE.
- 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.

- 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 SCARFED AND FLUSHED DAILY AS REQUIRED OR AS DIRECTED BY THE TOWN OR REGION.
- 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.
- THE OWNER WILL SEED, MULCH AND MAINTAIN THE ENTIRE SITE IF A BUILDING PERMIT IS NOT ISSUED.
- THE OWNER SHALL IMMEDIATELY SEED, MULCH AND STABILIZE AREAS THAT HAVE BEEN DISTURBED AND OTHERWISE UNFINISHED.
- UPON COMPLETION OF LANDSCAPING ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED.
- NO CONSTRUCTION ACTIVITY OR MACHINERY SHALL BE BEYOND THE SILT FENCE.
- ALL TOPSOIL STOCKPILES SHALL BE SURROUNDED WITH A SEDIMENT CONTROL FENCE.
- 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**

- The contractor shall monitor weather forecasts to ensure that the work is conducted in favourable weather. The contractor is responsible for removing all construction equipment and materials that would pose a hazard to the public or obstruction (i.e. fuel tanks, portable toilets, machinery, etc.) from the 100 year floodplain in the case of a large storm event.
- Site-specific storm event.
- Crossing an active watercourse or wetland by equipment, vehicles, personnel, is not permitted unless approved by CVC. All access to work sites shall be from either sides of the watercourse or wetland.
- All in-water and near water works will be conducted in the dry and must be staked with appropriate erosion and sediment controls. Plan the work accordingly with the weather forecast.
- An after-hours contact number is to be visibly posted on-site for emergencies. All the plans should have name and contact info of the person responsible for ESC measures.

**CVC ESC - Site-Specific Notes**

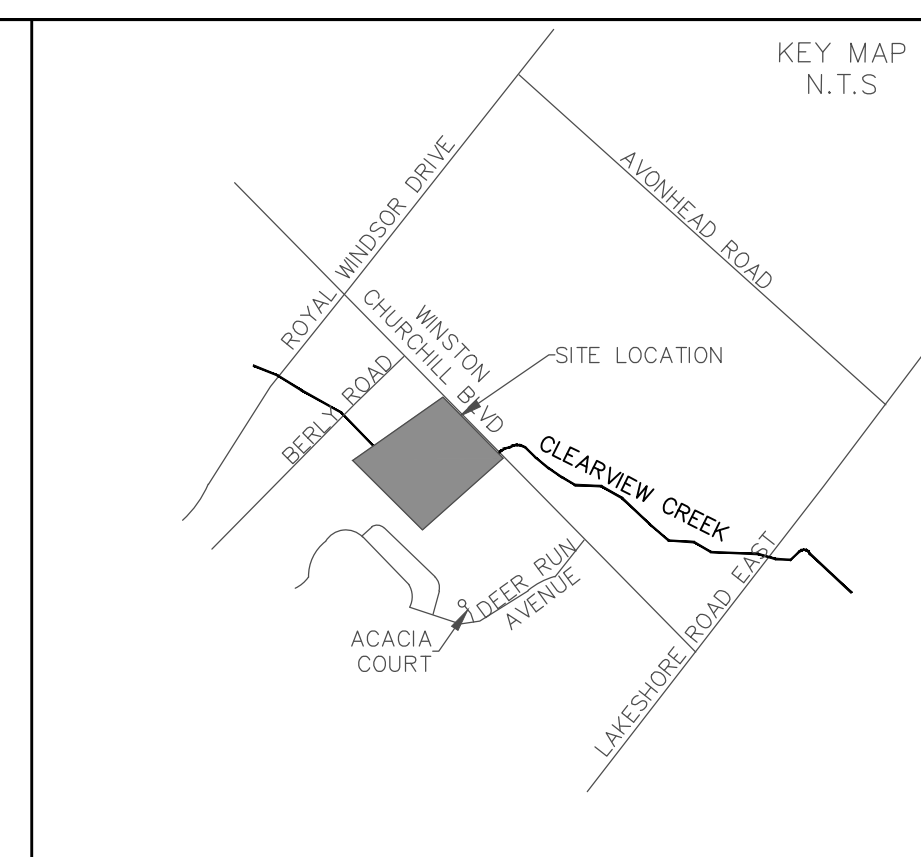
- ESC STAGING NOTES:
  - PRIOR TO INSTALLATION OF BELOW GROUND WORKS:
    - INSTALL ALL SILT FENCE ALONG TOP OF BANK OF WATERCOURSE AND SITE PERIMETER, AS DETAIL ON ESC-1 PLAN. SILT FENCE TO REMAIN IN PLACE UNTIL COMPLETION OF CONSTRUCTION AND STABILIZATION OF ALL DISTURBED AREAS.
    - CONSTRUCTION MUD MATS TO BE PLACED AT NORTH SITE ENTRANCE, AS PER PLAN ESC-1 AND CITY OF MISSISSAUGA STD. NO. 2930-030.
    - VEHICLE STORAGE AND REFUELING AREA TO BE PROVIDED NEAR CONSTRUCTION ENTRANCE, AS SHOWN ON PLAN ESC-1. STORAGE TO BE VISIBLY POSTED IDENTIFYING RE-FUELING AREA.
    - TEMPORARY ESC BASIN AND INTERIM ESC SWALES TO BE CONSTRUCTED. TEMPORARY OUTLET COMPLETE WITH CONTROLS TO BE INSTALLED, DISCHARGING TO WATERCOURSE.
    - FILL BROUGHT ON SITE TO BE PLACED AND COMPACTED IMMEDIATELY STOCK PILING OF MATERIAL NOT TO BE PERMITTED.
    - TEMPORARY ESC BASIN AND DIVERSION SWALES, INCLUDING TEMPORARY EX-PASS PUMPING OF CREEK FLOWS, AS DETAIL ON PLAN ESC-1. STABILIZE DISTURBED CREEK AREA.
  - INSTALLATION OF SITE SERVICES:
    - INSTALL BELOW GROUND SERVICES, CATCHBASINS TO BE EQUIPPED WITH TEMPORARY SEDIMENT CONTROL DEVICE AS PER CITY OF MISSISSAUGA STD. NO. 2930-040.
    - PERFORATION TRENCHES TO BE CONSTRUCTED AND KEPT OFF-LINE UNTIL COMPLETION OF CONSTRUCTION AND STABILIZATION OF SITE. BULKHEAD TO BE PROVIDED IN ALL INLET AND OUTLET FROM THE INFILTRATION TRENCHES UNTIL CONSTRUCTION AND STABILIZATION COMPLETE AND VEHICLE MUD TRACKING HAS ENDED.
    - TEMPORARY ESC BASIN AND DIVERSION SWALES TO BE DECOMMISSIONED AS SITE WORKS PROCEED TOWARD SOUTH END OF SITE.
    - COMPLETE BELOW GROUND SERVICE INSTALLATION. SITE ELEVATIONS TO BE BROUGHT TO PRE-GRADE, BELOW FINAL ASPHALT.
    - FINAL GRADING, ASPHALT AND SITE STABILIZATION TO BE COMPLETED.
    - UPON COMPLETION OF ALL ON-SITE CONSTRUCTION, ESC MEASURES MAY BE REMOVED.

**STABILIZATION NOTES:**

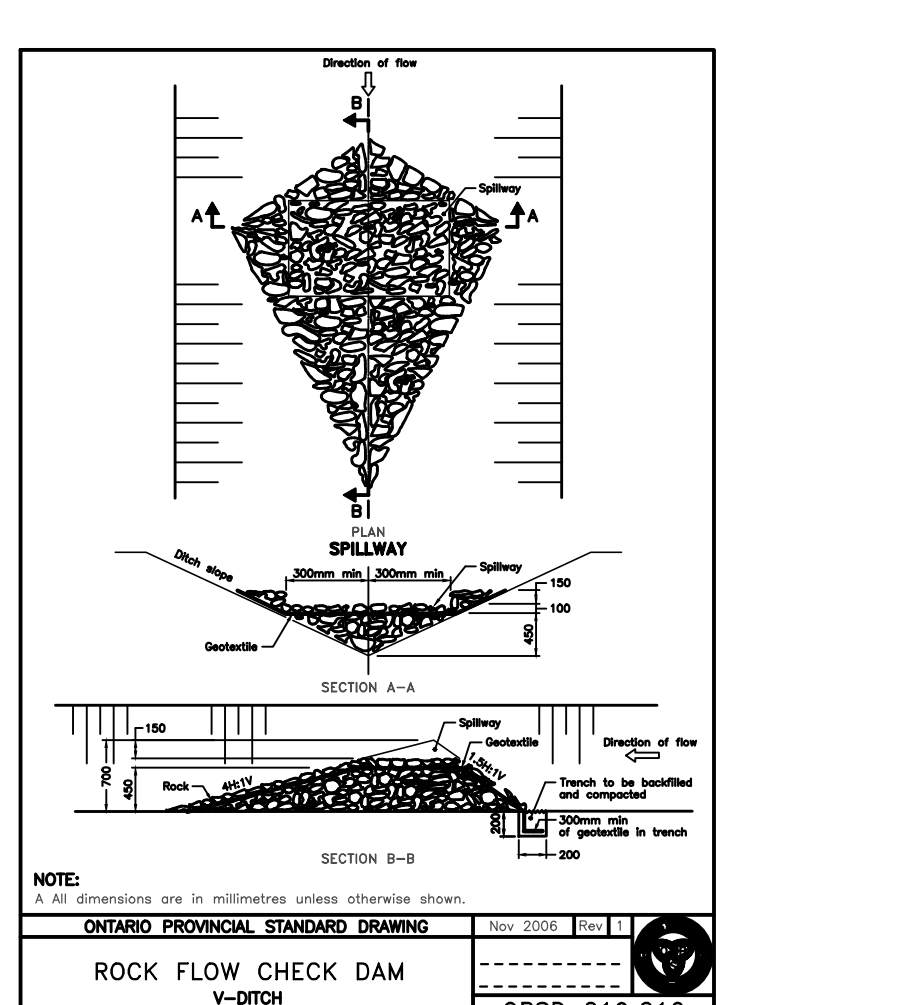
- PROVIDE TEMPORARY STABILIZATION FOR AREAS THAT ARE BEING DISTURBED.
- ALL ESC POND SLOPES AND INTERCEPTOR SWALES TO BE EFFECTIVELY STABILIZED WITH VEGETATION PRIOR TO RECEIVING ANY WATER FLOWS TO PREVENT SOIL EROSION. TEMP SEEDING TO CONSIST OF ANNUAL RYE GRASS, 25 kg/ha. ALTERNATE MEASURE TO BE PROVIDED 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 GROUND COVER 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 COMPACTATION TO BE COMPLETED TO THE SATISFACTION OF GEOTECHNICAL RECOMMENDATIONS.



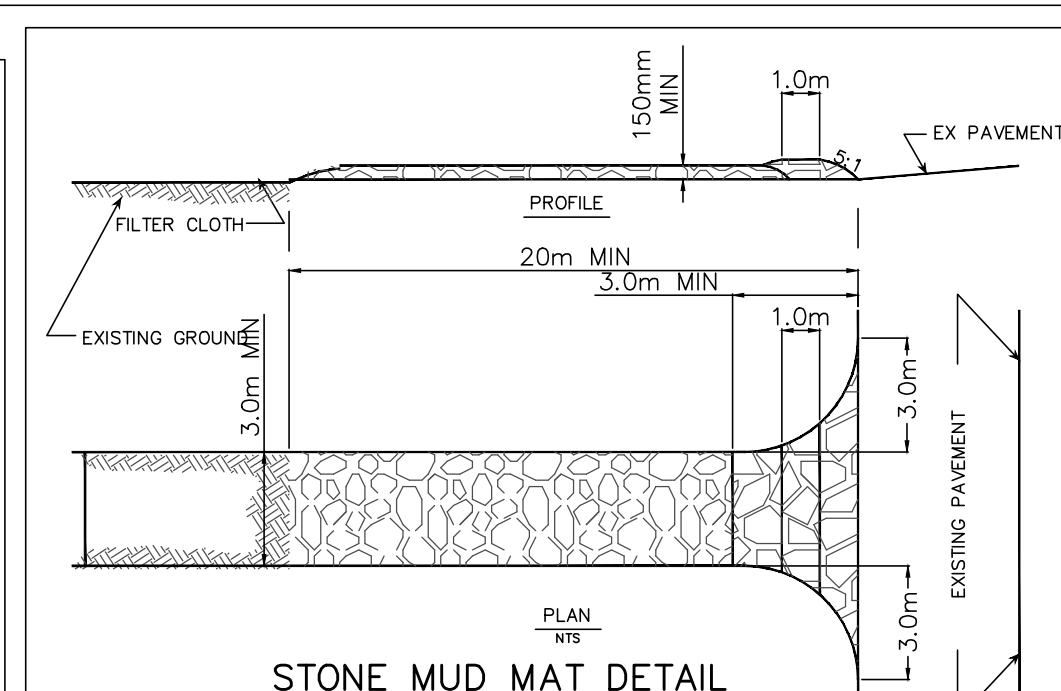
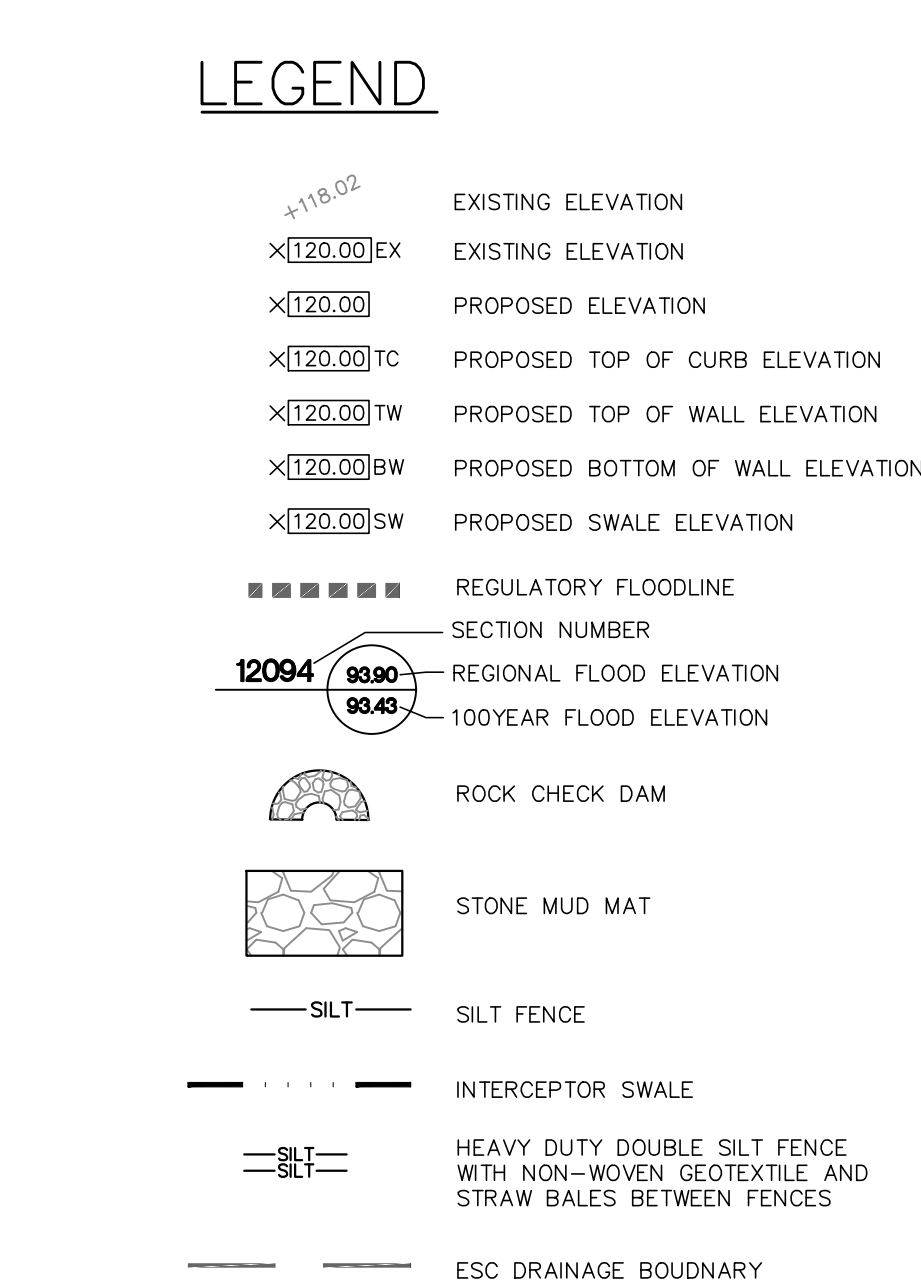
REFER TO PLAN C-1 FOR CONSTRUCTION DETAILS AND SECTIONS.



ROCK FLOW CHECK DAM SECTION B-B

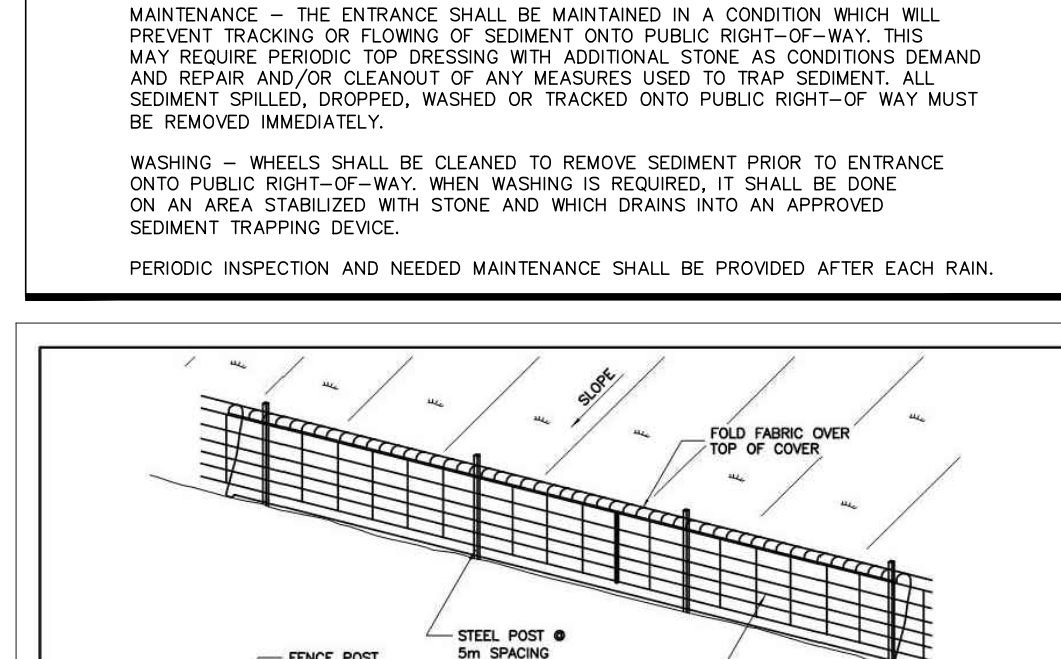
ALL IN-WATER AND NEAR WATER WORKS ARE TO BE COMPLETED BETWEEN JULY TO MARCH 31.

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



STONE MUD MAT DETAIL

STONE SIZE - USE 50mm STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.  
 LENGTH - AS REQUIRED, BUT NOT LESS THAN 15m (EXCEPT ON A SINGLE RESIDUE LOT WHERE A 10m MIN LENGTH MAY APPLY).  
 THICKNESS - NOT LESS THAN 150mm.  
 WIDTH - 3m MINIMUM, BUT NOT LESS THAN THE WIDTH AT POINTS WHERE INDESS OR EXPOSED CORNERS.  
 FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. FILTER CLOTH WILL NOT BE REQUIRED ON SINGLE FAMILY RESIDENCE LOT.  
 SURFACE WATER - ALL SURFACE WATER FLOWING TOWARD CONSTRUCTION ENTRANCES SHALL BE PAVED ACROSS THE ENTRANCE. IF PAVING IS IMPRACTICAL, A PORTABLE BARRIER SHALL BE INSTALLED.  
 MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANING OF ANY WEARS USED TO HOLD STONE IN PLACE. ALL SEDIMENT, DRIPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.  
 WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.  
 PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



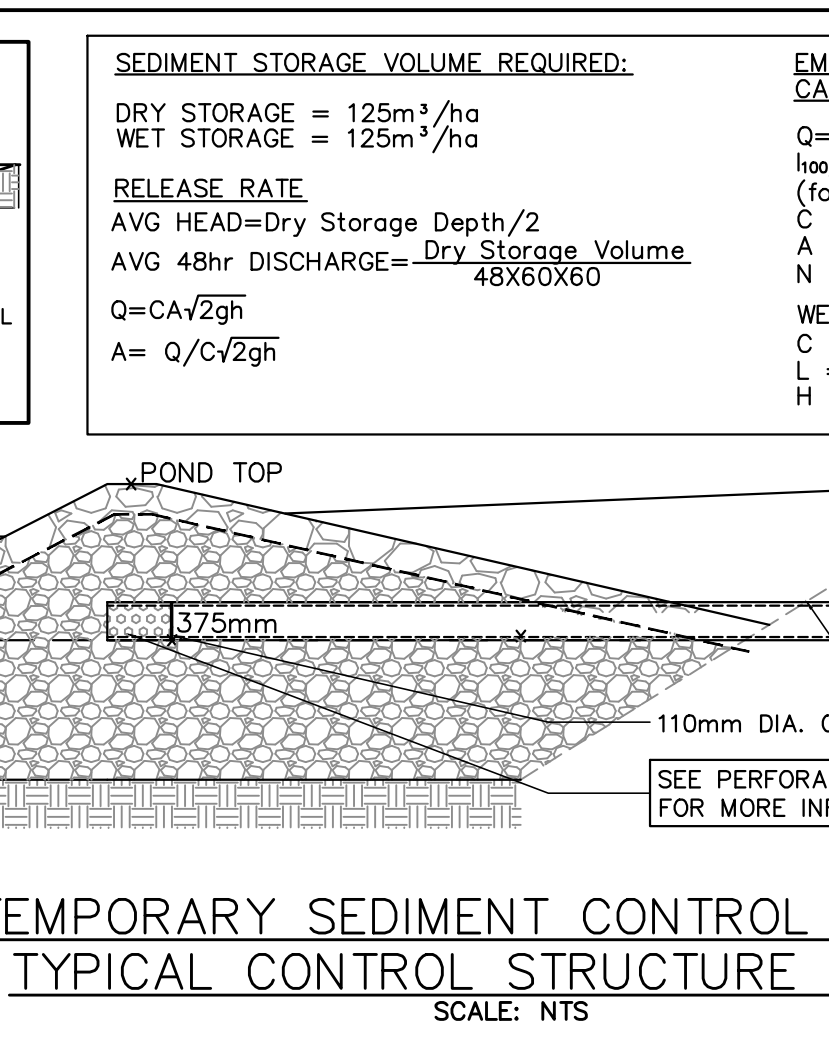
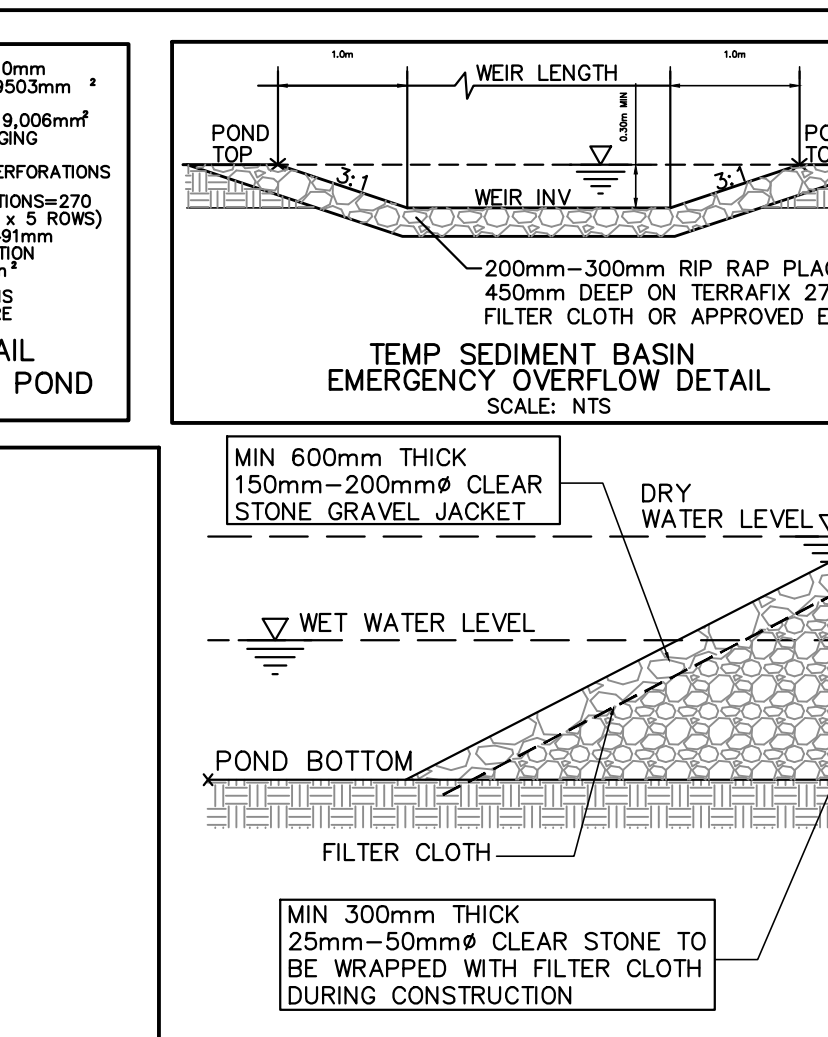
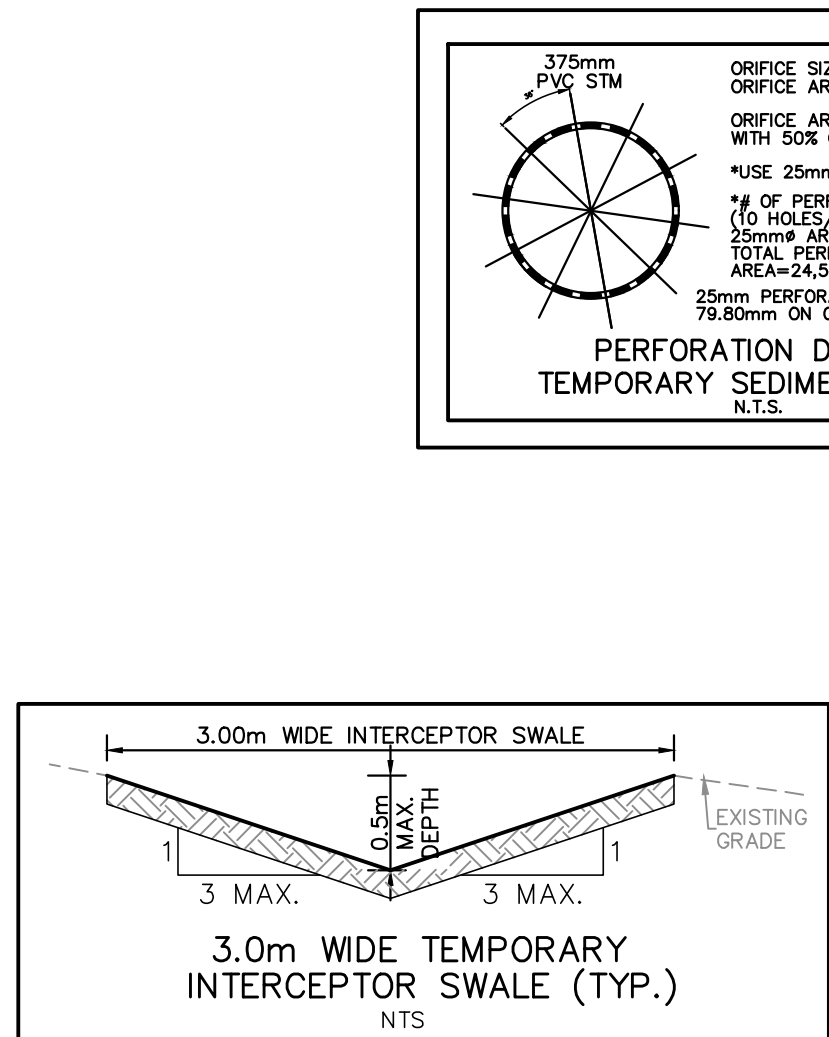
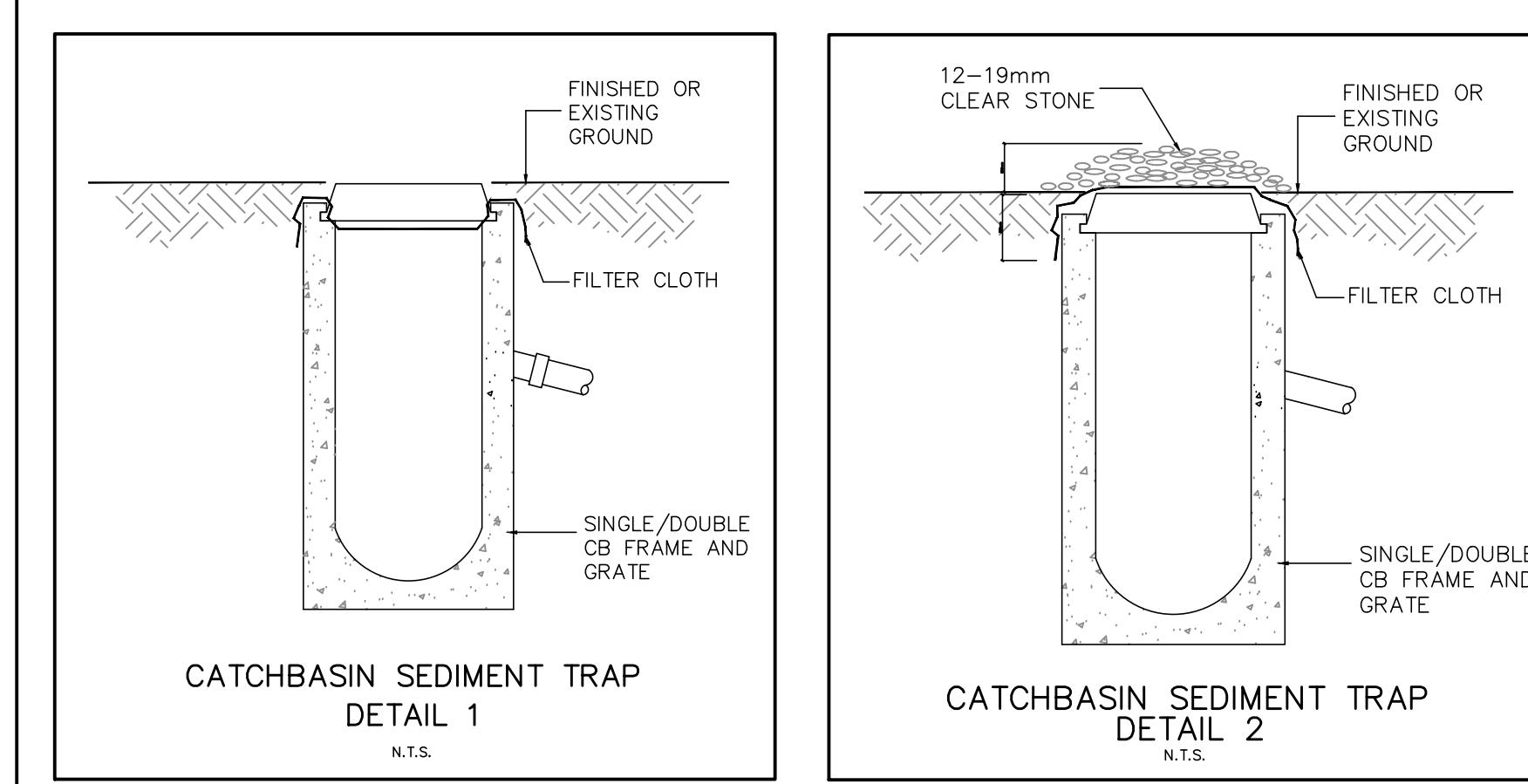
HEAVY DUTY SILT FENCE BARRIER

SEDIMENT BASIN SUMMARY TABLE

TRIBUTARY AREA (ha)	ESC BASIN
1.480	1549
1.549	1490
1.674	1230
93.00	93.00
94.00	94.00
0.60	0.0097
0.0095	110
47.5	1.325
93.70	93.70
0.30	0.30
1.40	1.40

**EROSION AND SEDIMENT CONTROL - SUPPLEMENTARY NOTES**

- ESC PLAN IS A DYNAMIC DOCUMENT, WHICH MAY BE SUBJECT TO CHANGE OR MODIFICATION AS A RESULT OF SITE DEVELOPMENTS OR CHANGES ON SITE.
- SEDIMENT LADEN WATERS ARE TO BE TREATED PRIOR TO DISCHARGING INTO THE DITCH.
- NO PUMPING OF SEDIMENT LADEN RUNOFF FROM TEMPORARY POND(S) TO THE DITCH IS ALLOWED AT ANY TIME.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE EVALUATED BY A QUALIFIED PERSON AS DETERMINED BY THE TOWN AND HALTON CONSERVATION, ON A WEEKLY BASIS AND AFTER ANY STORM EVENT. ANY REPAIRS REQUIRED ARE TO BE RECTIFIED IMMEDIATELY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MATERIALS (I.E. SILT FENCE, STRAW BALES, CLEAR STONES...ETC.) ARE TO BE KEPT ON SITE FOR EMERGENCIES AND REPAIRS.
- AFTER HOURS CONTACT NUMBER IS TO BE VISIBLY POSTED ON-SITE FOR EMERGENCIES.
- ANY SEDIMENT SPILL FROM THE SITE SHOULD BE REPORTED TO MINISTRY OF ENVIRONMENT (SPILL ACTION CENTER) AT 1-800-268-6060.
- SHOULD THERE BE CONTINUOUS PUMPING PROPOSED, AN AFTER HOURS TECHNICIAN IS TO BE ASSIGNED TO ENSURE THAT THE TREATMENT SYSTEM (PUMPING EQUIPMENT, DIVERSION, SETTLEMENT PONDS...ETC) IS FUNCTIONING PROPERLY.



SEDIMENT STORAGE VOLUME REQUIRED.

EMERGENCY OVERFLOW CALCULATIONS.

Q=CAN = 1600 mm/hr (for 10-min)

WET VOL = REQUIRED (m³) = 1480

WET VOL = PROVIDED (m³) = 1549

DRY VOL = REQUIRED (m³) = 1490

DRY VOL = PROVIDED (m³) = 1674

WET EQN: Q=CAN<sup>0.75</sup> C = COEFF = 1.705 H = HEAD (m)

Professional Engineer Seal: A.M. CANDARAS, DEC 19/2002, CIVIL ENGINEER, PROVINCE OF ONTARIO.

772 WINSTON CHURCHILL BLVD. SPA 1601.029/01 Region of Peel No. C602647

TOWN OF OAKVILLE REGION OF HALTON

EROSION AND SEDIMENT CONTROL PLAN - STAGE 1

SCALE: 1:750 DATE: MAR 2021 PLAN No: 2060

DRAWN: F.P. CHK'D: A.M.C. PLAN No: 2060

DESIGNED: A.M.C. SHEET 6 OF 6 ESC-1