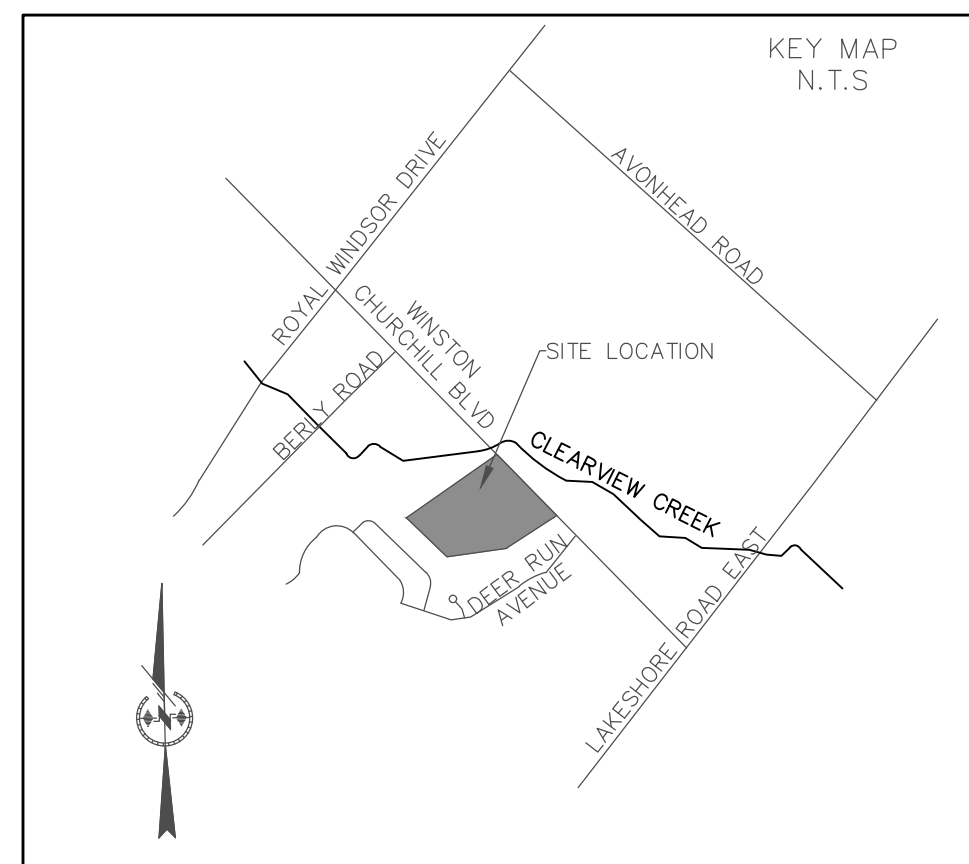
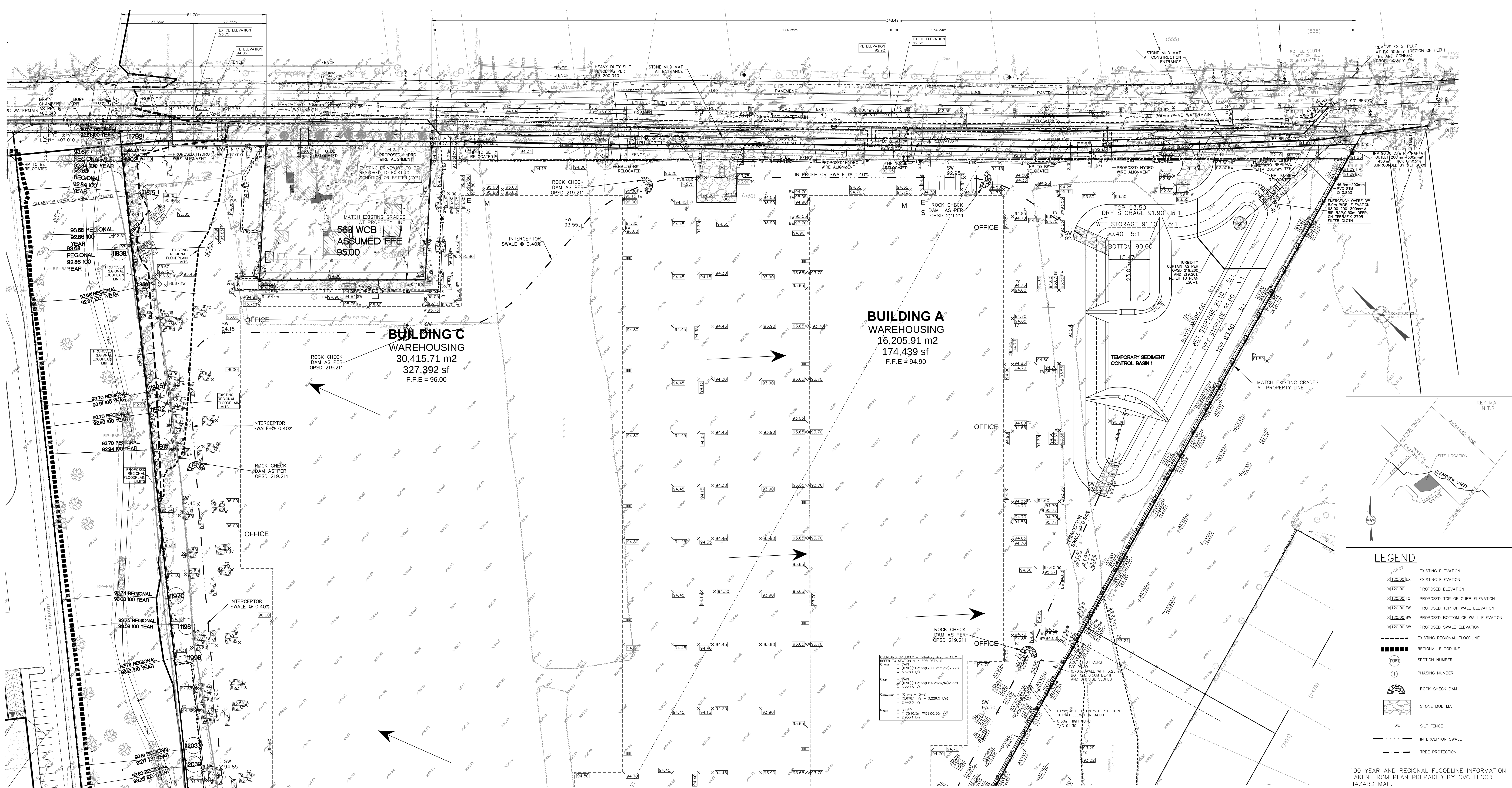
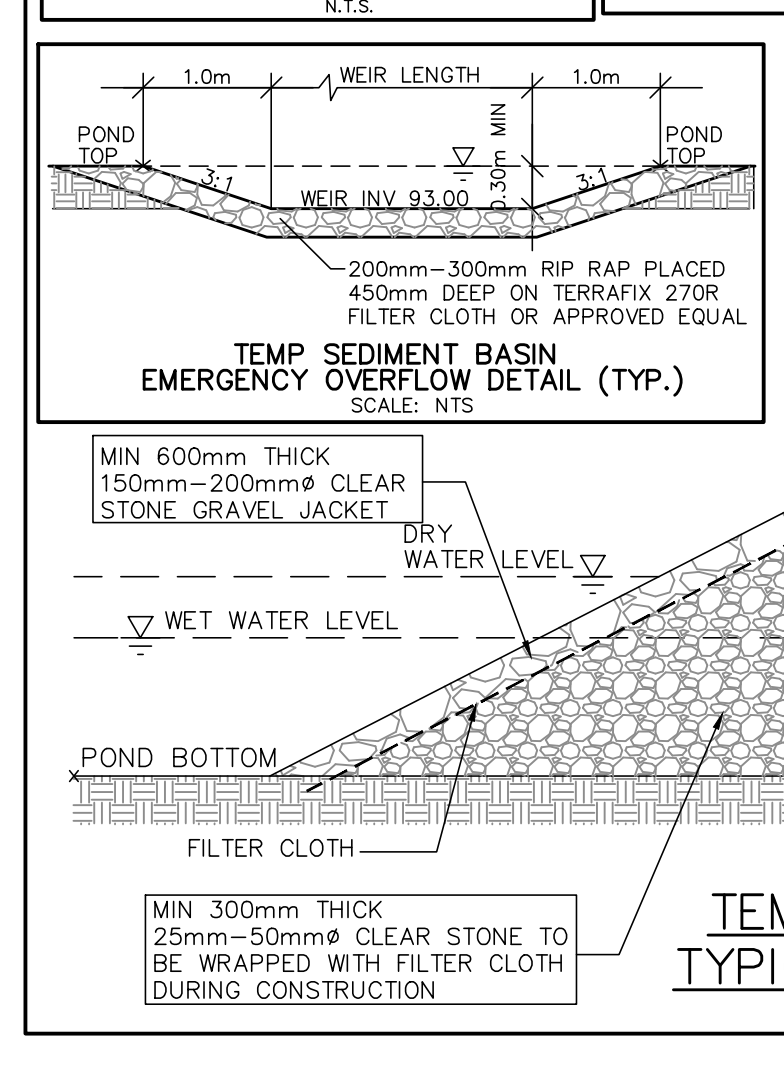
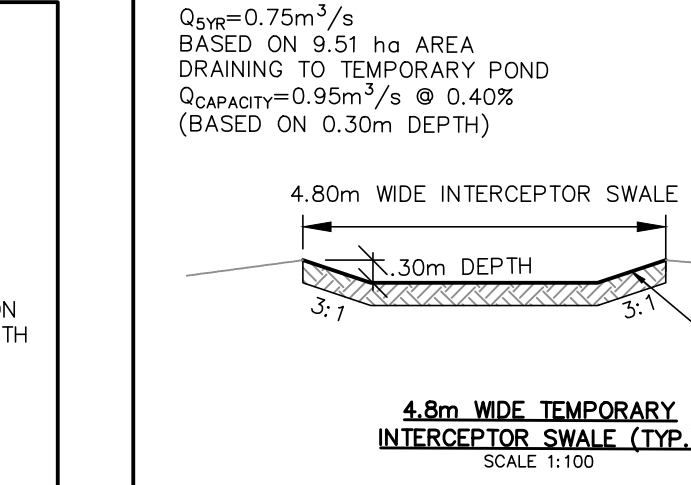
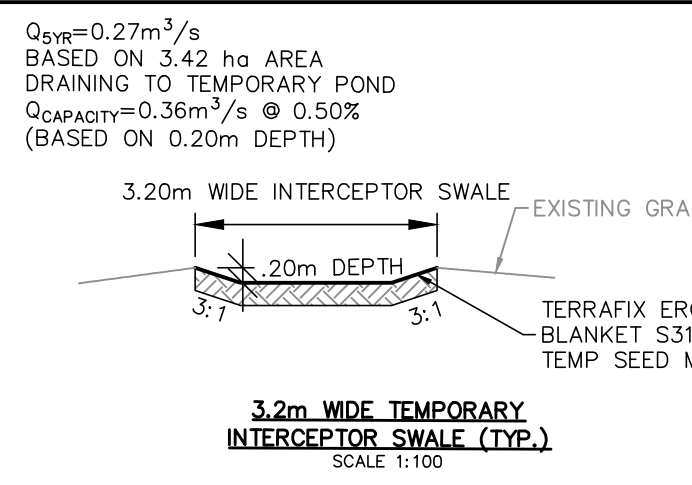
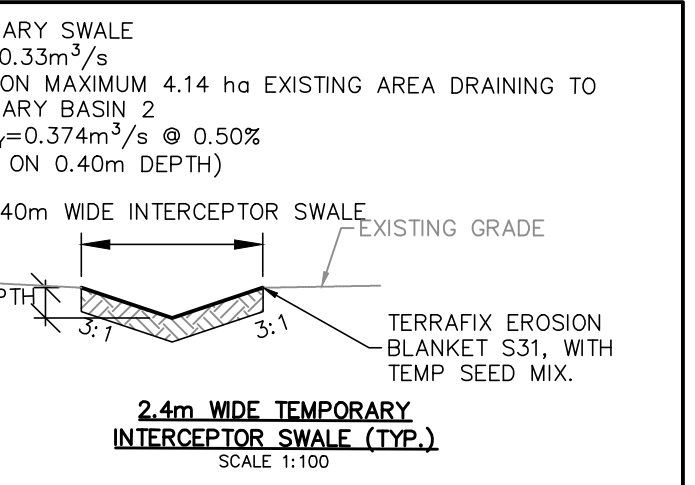
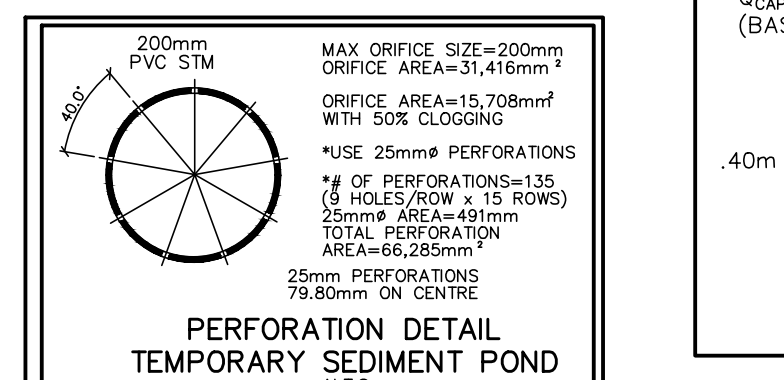
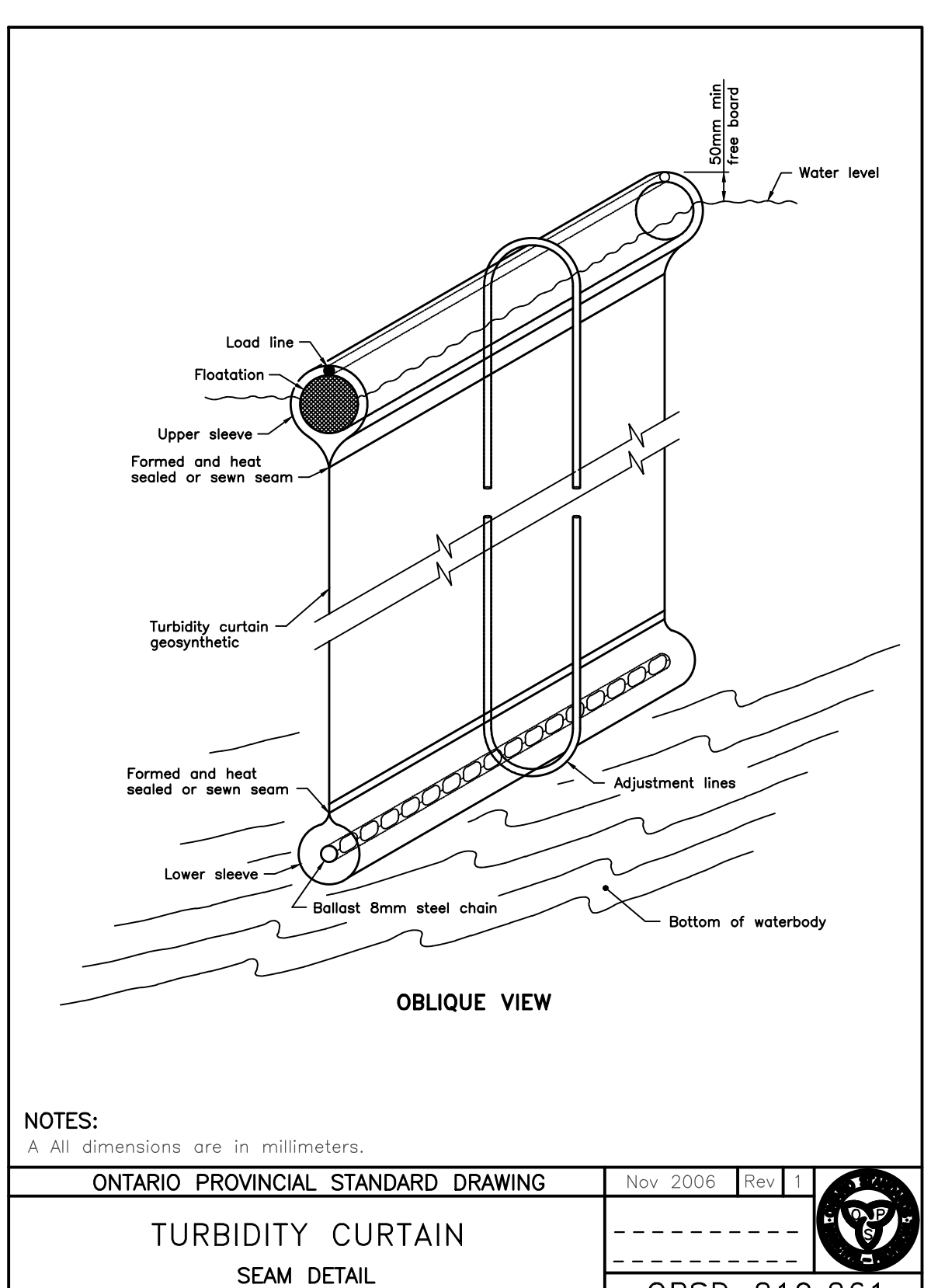
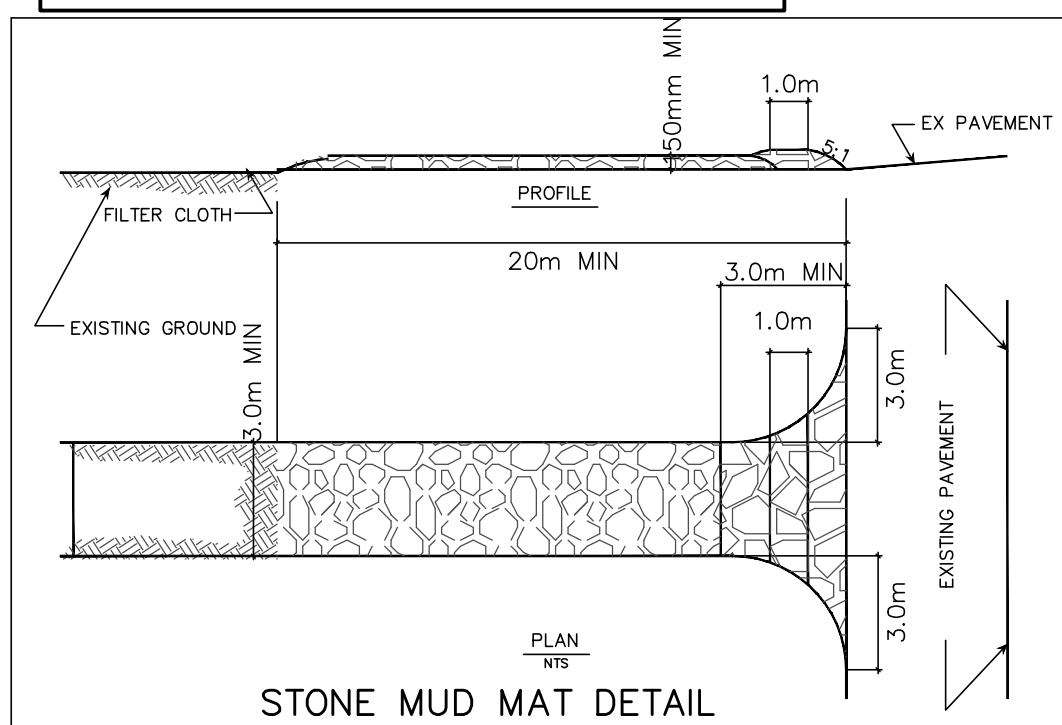
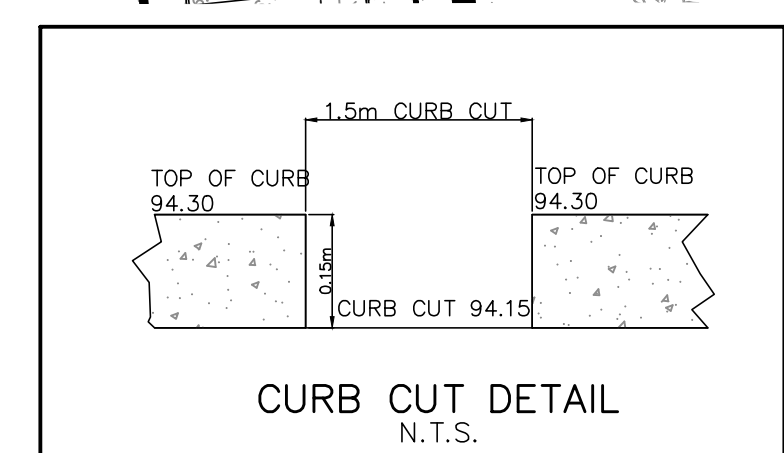




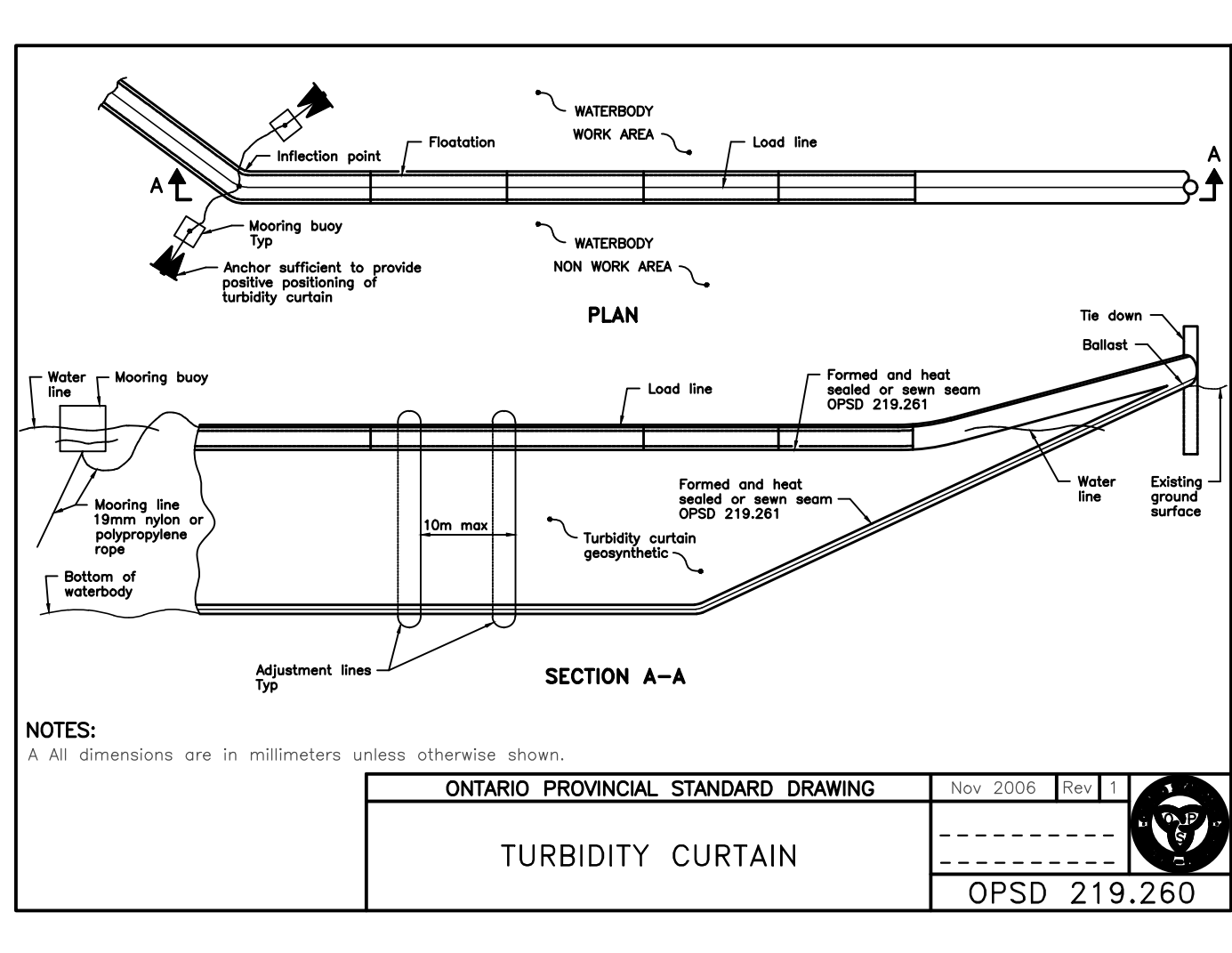
- LEGEND**
- EXISTING ELEVATION
  - PROPOSED ELEVATION
  - PROPOSED TOP OF CURB ELEVATION
  - PROPOSED TOP OF WALL ELEVATION
  - PROPOSED BOTTOM OF WALL ELEVATION
  - PROPOSED SWALE ELEVATION
  - EXISTING REGIONAL FLOODLINE
  - REGIONAL FLOODLINE
  - SECTION NUMBER
  - PHASING NUMBER
  - ROCK CHECK DAM
  - STONE MUD MAT
  - SILT FENCE
  - INTERCEPTOR SWALE
  - TREE PROTECTION

100 YEAR AND REGIONAL FLOODLINE INFORMATION  
TAKEN FROM PLAN PREPARED BY CVC FLOOD  
HAZARD MAP.



**SEDIMENT BASIN SUMMARY TABLE**

| Item                   | Value  |
|------------------------|--------|
| Basin 1                |        |
| Area (ha)              | 12.93  |
| Wet Vol.-Required (m³) | 2,392  |
| Wet Vol.-Provided (m³) | 3,122  |
| Dry Vol.-Required (m³) | 2,392  |
| Dry Vol.-Provided (m³) | 3,925  |
| Bottom                 | 90.00  |
| Wet Water Level        | 91.10  |
| Dry Water Level        | 91.90  |
| Dry Storage Depth      | 0.80   |
| Avg 24hr Disch. (m³/s) | 0.0454 |
| Orifice Area (m²)      | 0.0314 |
| Orifice Size (mm)      | 200    |
| Drawdown Time (h)      | 29.2   |
| 100yr Flow (m³/s)      | 1.803  |
| Wet INV                | 93.00  |
| Wet Length (m)         | 5.0    |
| Head (m)               | 0.50   |
| Weir Capacity (m³/s)   | 3.01   |



**Professional Engineer**  
A.M. CANDABAS  
2022-06-17  
Professional Engineer  
Province of Ontario

4 JAN/22 J.M.N. ISSUED FOR FOURTH SUBMISSION  
3 NOV/21 J.M.N. ISSUED FOR THIRD SUBMISSION  
2 FEB/21 J.M.N. ISSUED FOR SECOND SUBMISSION  
1 JAN/21 J.M.N. ISSUED FOR SECOND SUBMISSION

No. Date By REVISIONS

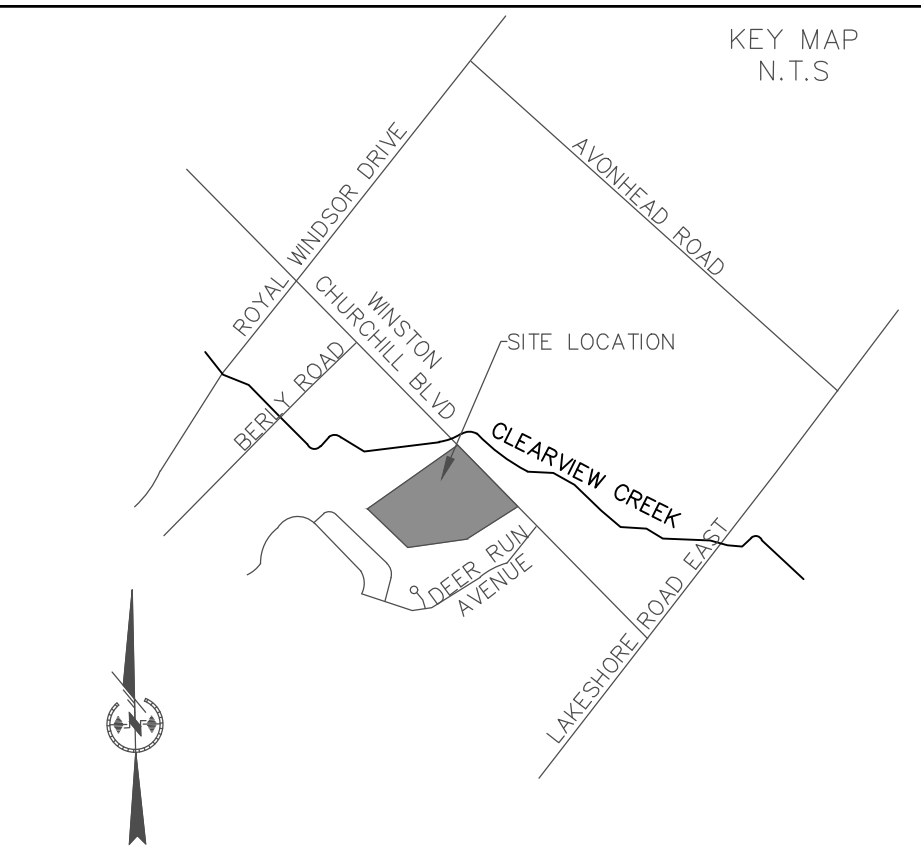
**560, 570 AND 580 WINSTON CHURCHILL BLVD.**

**TOWN OF OAKVILLE  
REGION OF HALTON**

**SEDIMENT AND EROSION CONTROL PLAN**

SCALE: 1:500 DATE: JANUARY 2020 PROJ No: 1870  
DRAWN: J.M.N. CHKD: A.M.C. PLAN No: ESC-1  
DESIGNED: A.M.C. SHEET 1 OF 1 OPSD 219,260





- LEGEND**
- EXISTING ELEVATION
  - PROPOSED ELEVATION
  - PROPOSED TOP OF CURB ELEVATION
  - PROPOSED TOP OF WALL ELEVATION
  - PROPOSED BOTTOM OF WALL ELEVATION
  - PROPOSED SWALE ELEVATION
  - REGIONAL FLOODLINE
  - SECTION NUMBER
  - ROCK CHECK DAM
  - STONE MUD MAT
  - SILT FENCE
  - INTERCEPTOR SWALE
  - TREE PROTECTION

- SEDIMENT AND EROSION CONTROL CVC MANDATORY NOTES:**
1. BE ADVISED THAT THE CREDIT VALLEY CONSERVATION AUTHORITY MAY, AT ANY TIME, WITHDRAW THIS PERMISSION, IF, IN THE OPINION 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 MONITOR ALL WORKS, PARTICULARLY THE CONDITION OF THE ESC MEASURES, DEWATERING, AND IN- OR NEAR-WATER WORKS. 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 DEWATERING SHALL BE TREATED AND THEN RELEASED XX METRES FROM A 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 GUIDELINE FOR URBAN CONSTRUCTION (DECEMBER 2006) FOR THE DESIGN AND DESIGN ALTERATION 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 AREAS. ESC MEASURES ARE TO BE EVALUATED ON A WEEKLY BASIS AND 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 MODIFICATIONS AS A RESULT OF SITE DEVELOPMENT 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 TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES. ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 30 DAYS SHALL BE STABILIZED USING APPROPRIATE EROSION CONTROL MEASURES AND AN APPROPRIATE NATIVE NON-INVASIVE SEED MIX OR WITH THE FINAL APPROVED RESTORATION PLAN.
  11. ANY SEDIMENT SPILL FROM THE SITE SHOULD BE REPORTED TO MINISTRY OF ENVIRONMENT (SPILL ACTION CENTRE) AT 1-800-268-6060.
  12. IF EXCESSIVE SILTATION RESULTS FROM THE CONSTRUCTION ACTIVITIES, THE ONSITE SUPERVISOR/INSPECTOR AND/OR CVC RESERVE THE RIGHT TO REQUEST ADDITIONAL ESC MEASURES WHICH WOULD BE INSTALLED PRIOR TO FURTHER CONSTRUCTION ACTIVITIES.

- 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.

- 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. SEED COMPOST OR SEEDED BIODEGRADABLE MATS. TEMP SEEDING MIX TO CONSIST OF ANNUAL RYE GRASS 25kg/ha, OR EROSION AND SEDIMENT CONTROL BLANKETS.

- SEDIMENT AND EROSION CONTROL CVC SITE-SPECIFIC NOTES:**
1. THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS TO ENSURE THAT THE WORKS WILL BE CONDUCTED IN FAVOURABLE WEATHER. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CONSTRUCTION EQUIPMENT AND MATERIALS THAT WOULD HAVE POTENTIAL TO CAUSE A SPILL OR OBSTRUCTION (I.E. FUEL TANKS, PORTABLE TOILETS, MACHINERY, ETC.), FROM THE 100 YEAR\* FLOODPLAIN (\* OR SITE-SPECIFIC STORM EVENT) IN THE CASE OF A LARGE STORM EVENT.
  2. CROSSING AN ACTIVE WATERCOURSE OR WETLAND BY EQUIPMENT, VEHICLES, PERSONNEL, ETC. IS NOT PERMITTED UNLESS APPROVED BY CVC. ALL ACCESS TO WORK SITES SHALL BE FROM EITHER SIDES OF THE WATERCOURSE OR WETLAND.
  3. ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY AND MUST BE STAGED WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS. PLAN THE WORK ACCORDINGLY WITH THE WEATHER FORECAST.
  4. AN AFTER-HOURS CONTACT NUMBER IS TO BE VISIBLY POSTED ON-SITE FOR EMERGENCIES. ALL THE PLANS TECHNICIAN IS TO BE ASSIGNED TO ENSURE THAT THE PERSON RESPONSIBLE FOR ESC MEASURES.

- EROSION AND SEDIMENT CONTROL - SUPPLEMENTARY NOTES:**
- A. ESC PLAN IS A DYNAMIC DOCUMENT, WHICH MAY BE SUBJECT TO CHANGE OR MODIFICATION AS A RESULT OF SITE DEVELOPMENTS OR CHANGES ON SITE.
  - B. SEDIMENT LADEN WATERS ARE TO BE TREATED PRIOR TO DISCHARGING INTO THE DITCH.
  - C. NO PUMPING OF SEDIMENT LADEN RUNOFF FROM TEMPORARY POND(S) TO THE DITCH IS ALLOWED AT ANY TIME.
  - D. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE EVALUATED BY A QUALIFIED PERSON AS DETERMINED BY THE TOWN AND CREDIT VALLEY CONSERVATION, ON A WEEKLY BASIS AND AFTER ANY STORM EVENT.
  - E. 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.
  - F. AN AFTER-HOURS CONTACT NUMBER IS TO BE VISIBLY POSTED ON-SITE FOR EMERGENCIES.
  - G. ANY SEDIMENT SPILL FROM THE SITE SHOULD BE REPORTED TO MINISTRY OF ENVIRONMENT (SPILL ACTION CENTER) AT 1-800-268-6060.
  - H. 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.

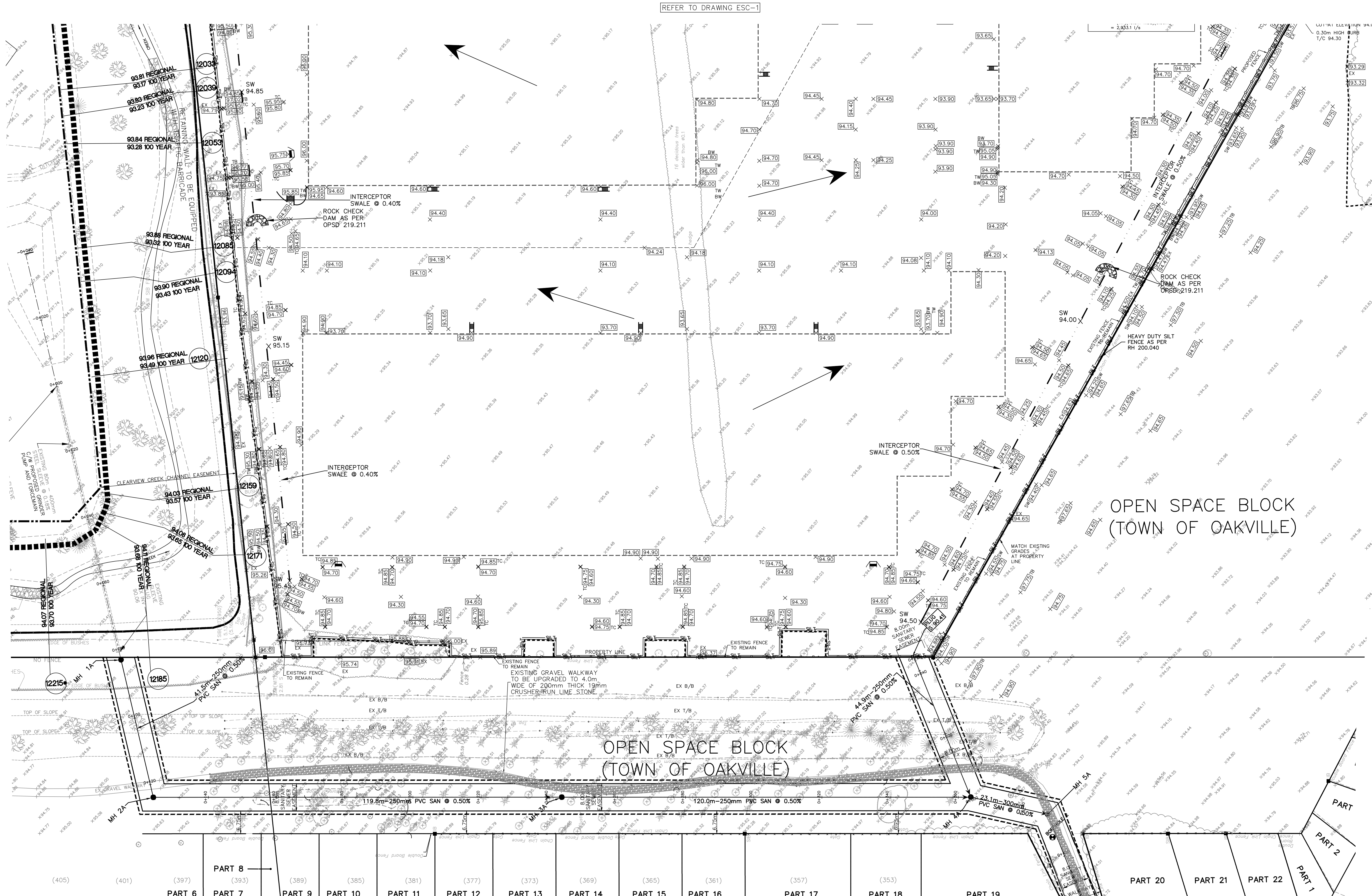
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| 4                                                                                                                                                                        | JAN/17/22 J.M.N. ISSUED FOR FOURTH SUBMISSION |
| 3                                                                                                                                                                        | NOV/25/21 J.M.N. ISSUED FOR THIRD SUBMISSION  |
| 2                                                                                                                                                                        | FEB/24/21 J.M.N. ISSUED FOR SECOND SUBMISSION |
| 1                                                                                                                                                                        | JAN/25/20 J.M.N. ISSUED FOR SECOND SUBMISSION |
| No.                                                                                                                                                                      | Date By REVISIONS                             |
|                                                                                                                                                                          |                                               |
| a.m.candabas associates inc.<br>consulting engineers<br>8551 Weston rd., suite 203<br>Woodbridge ont. L4L 9R4<br>905-850-8020 Fax 905-850-8099<br>Email: civil@amcni.com |                                               |

**560, 570 AND 580 WINSTON CHURCHILL BLVD.**

**TOWN OF OAKVILLE  
REGION OF HALTON**

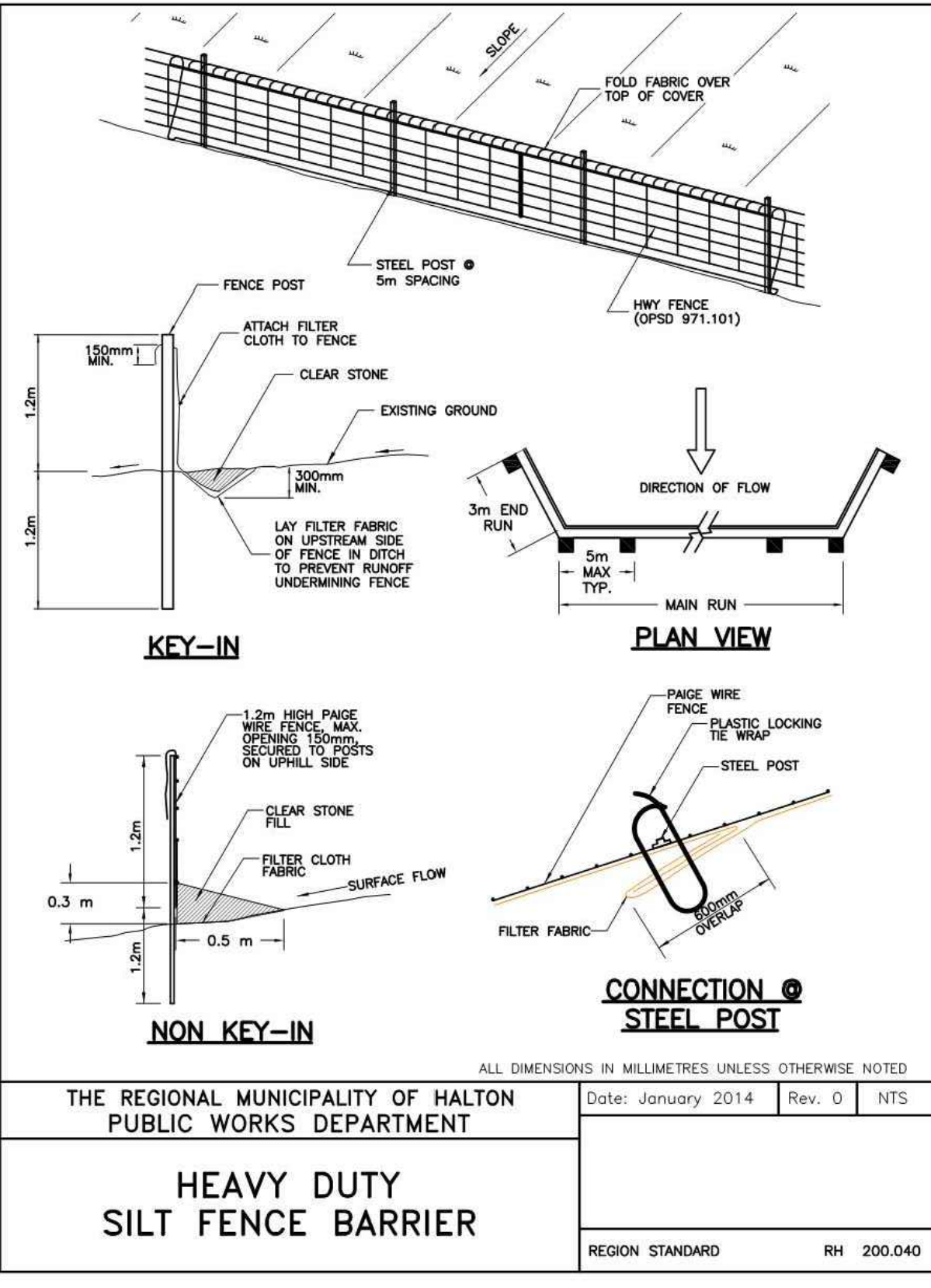
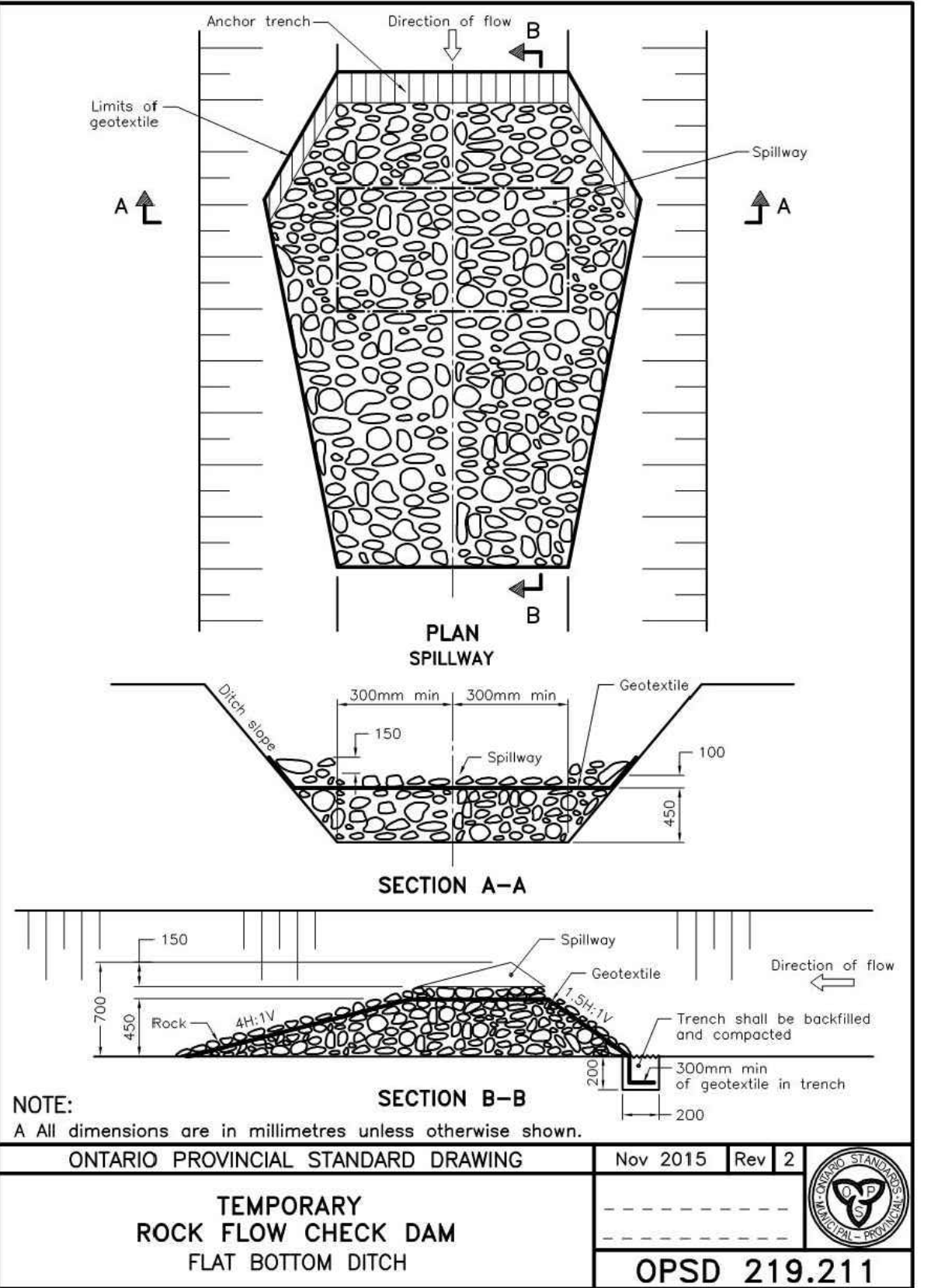
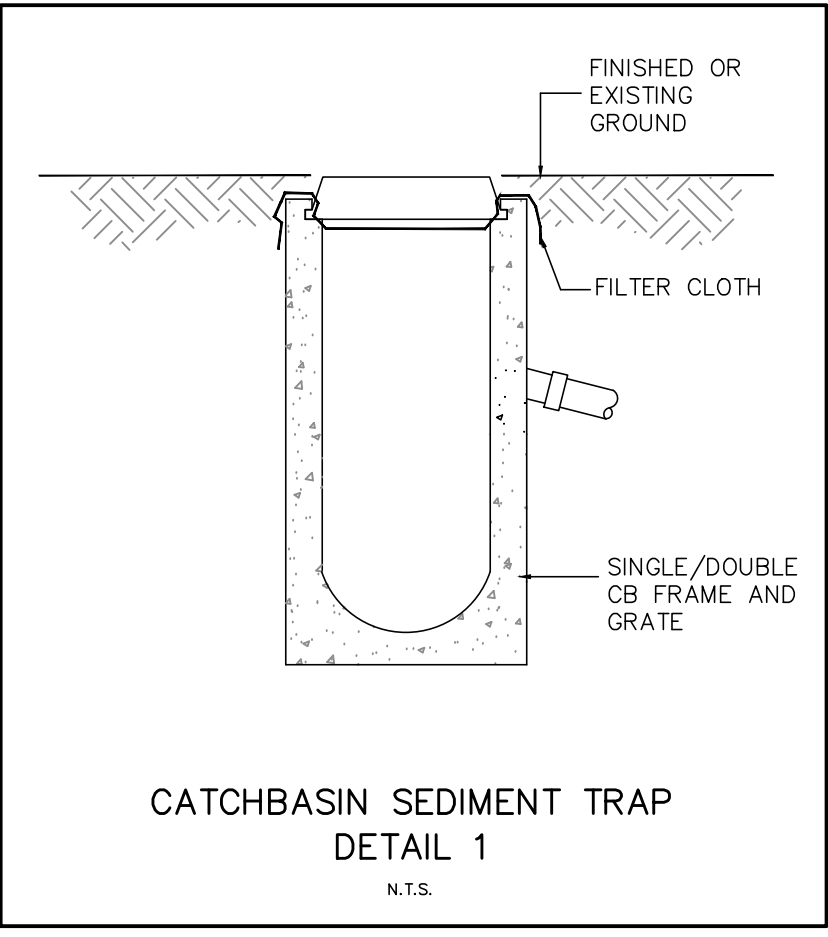
**SEDIMENT AND EROSION CONTROL PLAN**

|                  |                    |               |
|------------------|--------------------|---------------|
| SCALE: 1:500     | DATE: JANUARY 2020 | PROJ No. 1870 |
| DRAWN: J.M.N.    | CHK'D: A.M.C.      | PLAN No.      |
| DESIGNED: A.M.C. | SHEET 1 OF 1       | ESC-2         |



- CONSTRUCTION SCHEDULE**
- "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 AND ESC-2
  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 SWM OUTLET TO DITCH ON WINSTON CHURCHILL BOULEVARD.
  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 CONSTRUCTED:
    - 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 MUST 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 ON 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 SCARFED 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.



PREPARED BY: J.M.N. 01/20/2020  
CHECKED BY: A.M.C. 01/20/2020  
DESIGNED BY: A.M.C. 01/20/2020