DUNDALK & PROTON COMMUNITY SCHOOL IMPROVEMENTS

TOWNSHIP of SOUTHGATE **COUNTY OF GREY**

PRE-DEVELOPMENT STORMWATER CATCHMENT PLAN

POST DEVELOPMENT STORMWATER CATCHMENT PLAN

REMOVAL AND SEDIMENT & EROSION CONTROL PLAN



MUNICIPALITY

TOWNSHIP OF SOUTHGATE 185667 GREY COUNTY RD 9 DUNDALK, ONTARIO, NOC 1B0

<u>DEVELOPER</u>

BLUEWATER DISTRICT SCHOOL BOARD 351 1ST AVENUE NORTH CHESLEY, ONTARIO, NOG 1L0

DEVELOPER'S ENGINEER

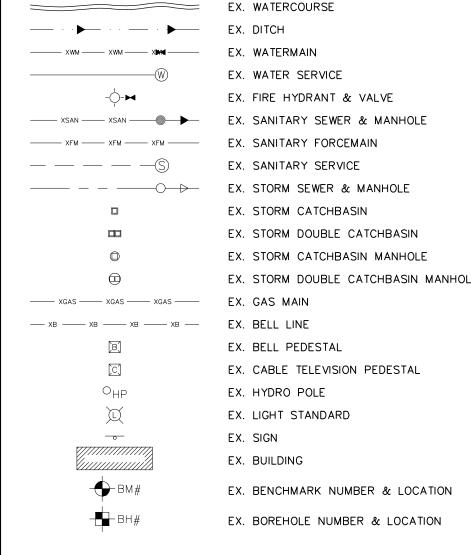


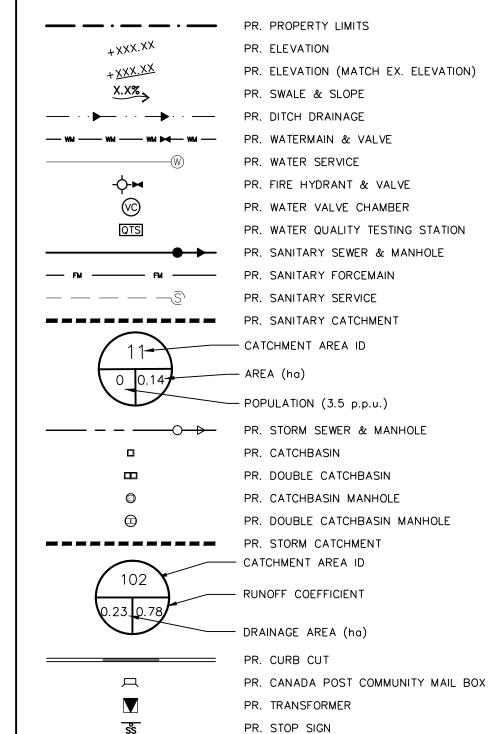
70 Huron Street, Suite 100 COLLINGWOOD, ON, L9Y 4L4 705-446-3510 WWW.CFCROZIER.CA



MASTER LEGEND

EXISTING FEATURES (EX.)





PR. STOP SIGN PR. NAME SIGN PR. NO PARKING SIGN PR. BUILDING ENVELOPE PR. HEAVY DUTY SILT FENCE PR. STRAW BALE CHECK FLOW PR. ROCK CHECK DAM

1111

PR. SLOPE (3:1 MAX.)

PR. TREE PRESERVATION AREA PR. TOPSOIL STOCKPILE LOCATION

<u>DRAWING</u> C002 C003 C200

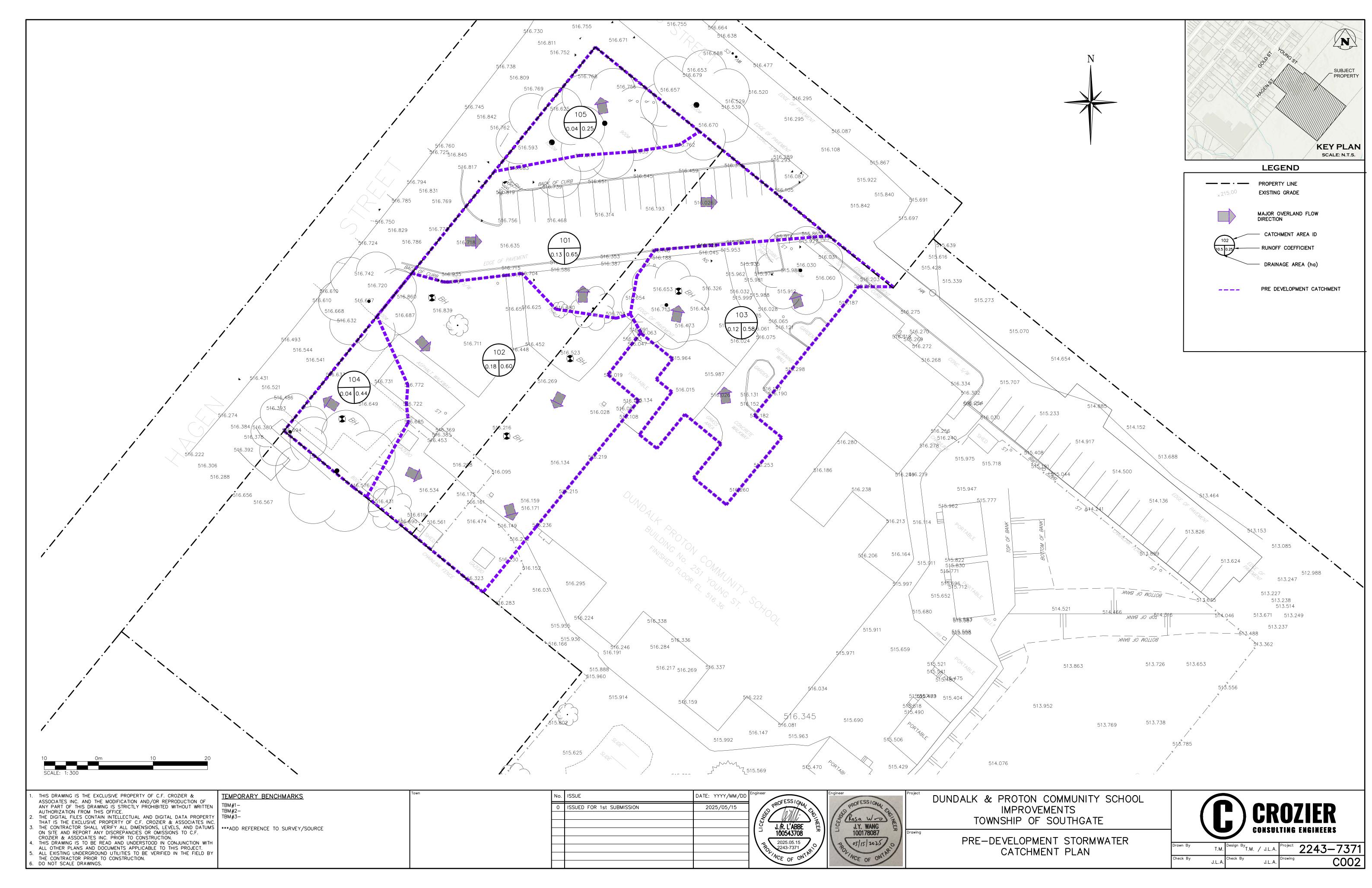
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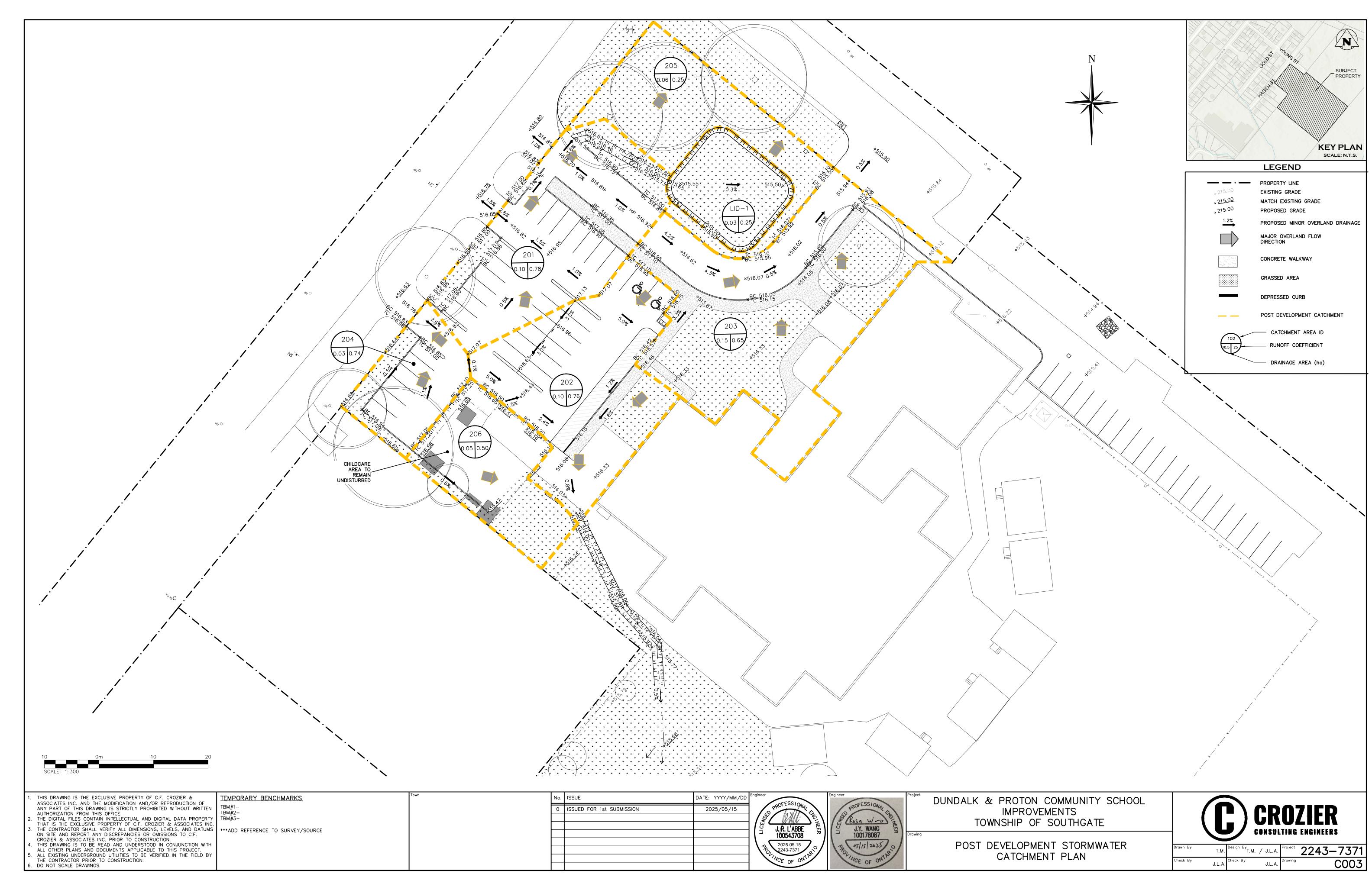
C900

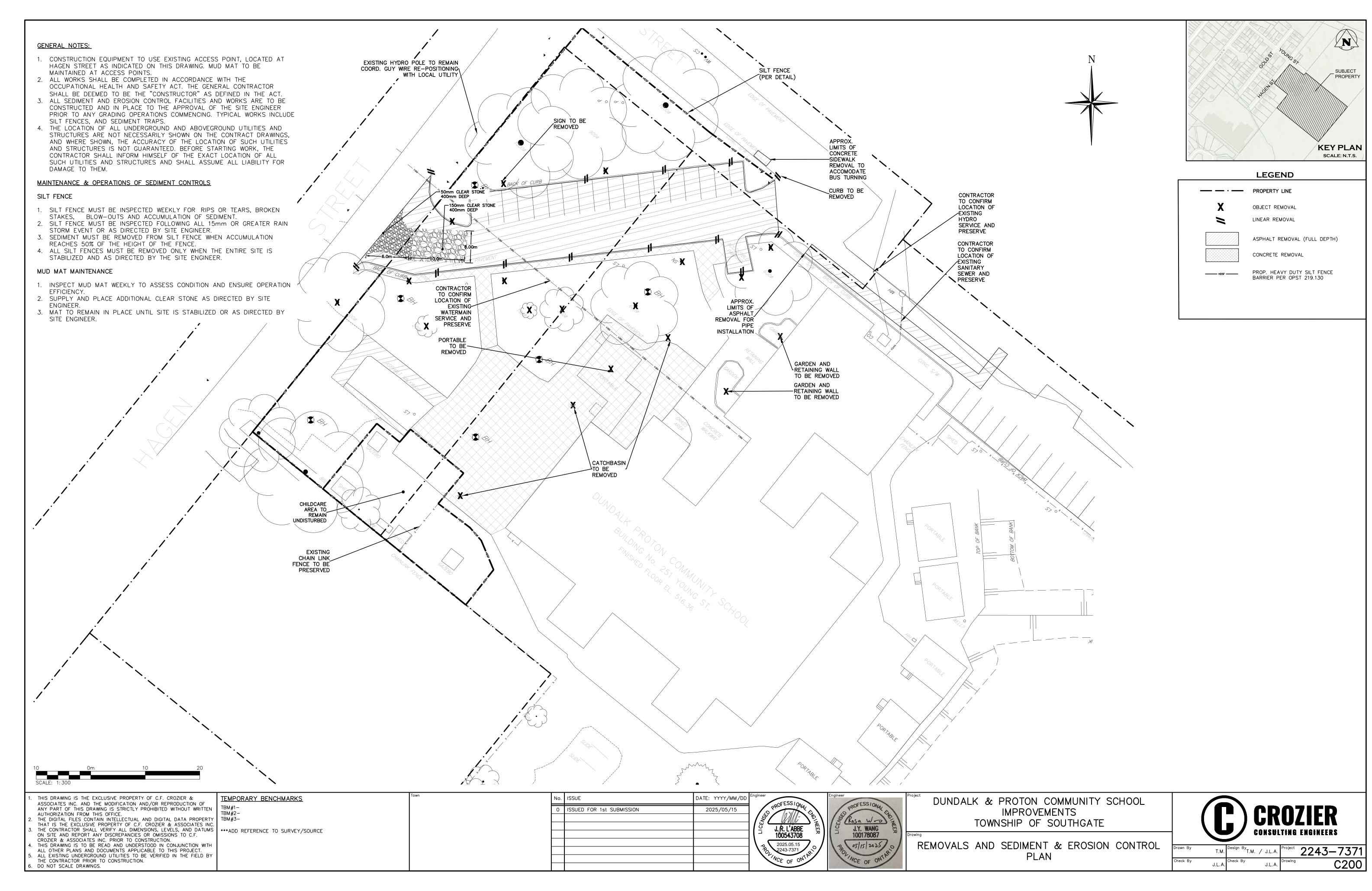
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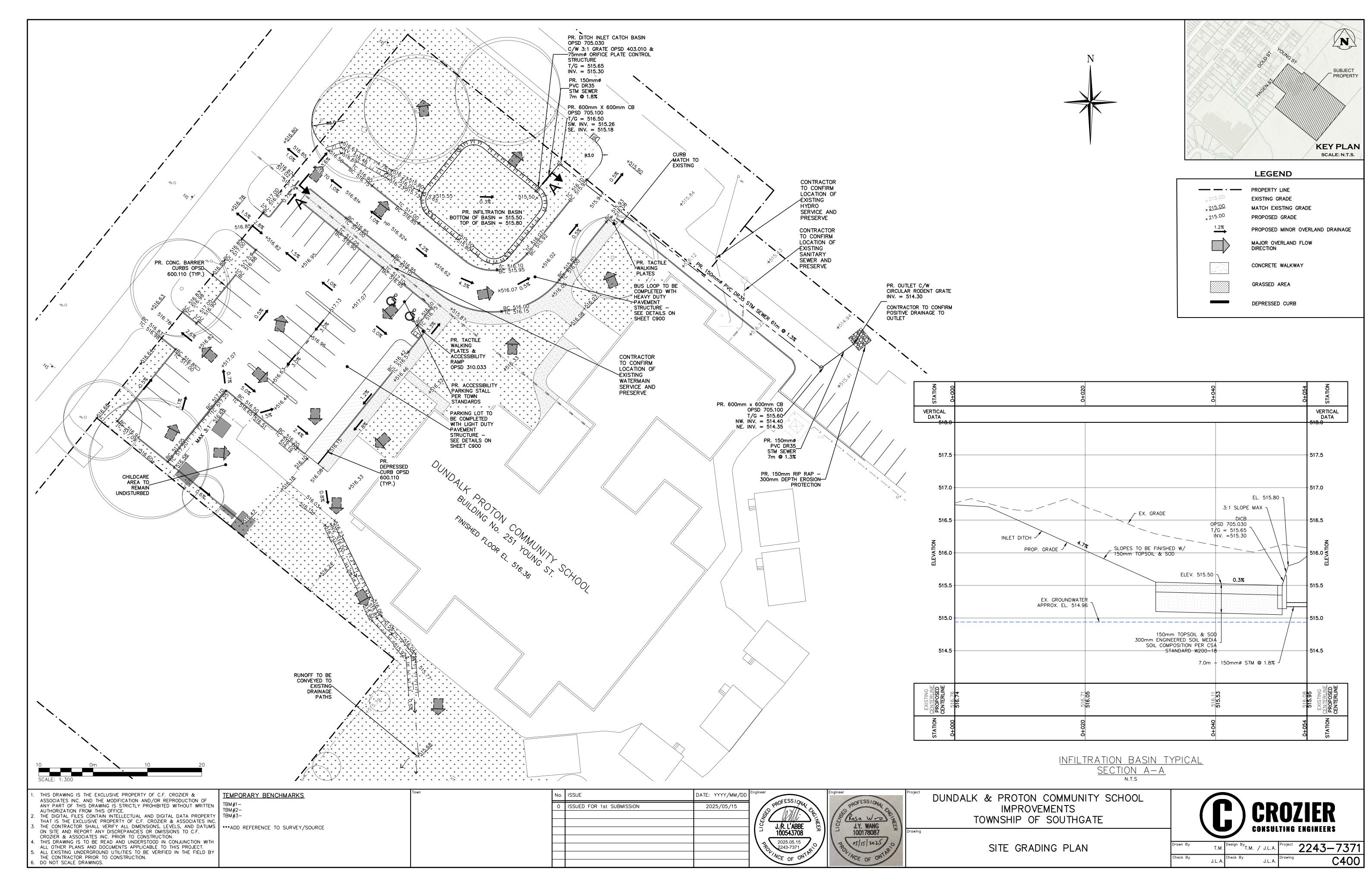
SITE GRADING PLAN

NOTES & DETAILS









CONSTRUCTION NOTES

GENERAL

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TOWNSHIP OF SOUTHGATE STANDARDS, OPSD AND OPSS. WHERE CONFLICT OCCURS, TOWNSHIP OF SOUTHGATE TO GOVERN. TRENCH BACKFILL (OPSD 802.010 & 802.013) TO BE SELECT NATIVE MATERIAL OR IMPORTED SELECT SUBGRADE TO OPSS
- BACKFILL TO BE PLACED IN MAXIMUM 200MM THICK LIFTS AND COMPACTED TO 95% OF THE MATERIAL'S PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- 3. PIPE COVER AND BEDDING TO BE CLASS B' COMPOSED OF COMPACTED GRANULAR IF EXTENSIVE DEWATERING IS REQUIRED CLASS 'A'.
- ALL TOPSOIL AND EARTH EXCAVATION TO BE STOCK PILED OR REMOVED TO AN APPROVED SITE AS DIRECTED BY
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK. THE DEVELOPER'S ENGINEER WILL
- ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY O.L.S. AT CONTRACTOR'S EXPENSE IF REMOVED DURING CONSTRUCTION
- THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS-517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY
- CONTRACTOR RESPONSIBLE FOR OBTAINING MECP PERMIT IF REQUIRED. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
- DISTURBED AREAS OUTSIDE THE DEVELOPABLE LANDS TO BE REINSTATED TO PREVIOUS CONDITION OR BETTER. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND CO-ORDINATE
- 12. ALL EXCAVATION MUST BE CARRIED OUT IN FULL COMPLIANCE WITH MOST RECENT GUIDELINES OF OHSA. NATIVE SOILS ARE CLASSIFIED AS TYPE 2, 3 & 4

13. SOIL AS PER GEOTECHNICAL REPORT (SIRATI & PARTNERS CONSULTANTS LIMITED, JANUARY 2017)

PARKING LOT AND ENTRANCES

CONDITION

SUBGRADE TO BE COMPACTED TO A MINIMUM DRY DENSITY OF AT LEAST 95% SPMDD. SUBGRADE TO BE PROOF ROLLED AND CERTIFIED PRIOR TO PLACING GRANULAR 'B'.

SUBBASE TO CONSIST OF MIN. 150MM OF GRANULAR 'A' UNLESS THROUGH DRIVEWAYS.

ALL BENCH MARK ELEVATIONS AND HORIZONTAL ALIGNMENT FOR THE CONTRACTOR.

- GRANULAR 'A' AND 'B' BASE MATERIALS TO BE COMPACTED TO 100% OF THE MATERIAL'S RESPECTIVE SPMDD AND PLACED IN MAX. 150MM LIFTS.
- REFER TO PAVEMENT STRUCTURE DETAILS FOR INTERNAL ROADWAY, DRIVEWAYS AND PARKING AREAS. SELECT SUBGRADE MATERIAL, OR IMPORTED GRANULAR MATERIAL APPROVED BY THE ENGINEER, COMPACTED TO 98% SPMDD TO BE USED AS FILL IN ALL AREAS WHERE PROPOSED PIPE INVERTS ARE HIGHER THAN EXISTING GRADE OR AS
- ALL GRANULARS AND ASPHALT MATERIALS PLACEMENT TO BE IN ACCORDANCE WITH OPSS 314 AND OPSS 310. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT PRIOR TO PLACING NEW ASPHALT AND TACK COAT APPLIED TO EXISTING ASPHALT CONCRETE CURB TO OPSD 600.110 AND OPSS 353. CONCRETE SIDEWALK TO OPSD 310.010, 310.030, 350.010 AND OPSS 351.

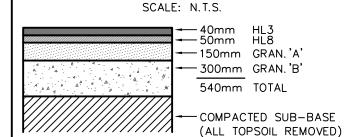
ROADS

- ALL EXCAVATION SHALL CONFORM TO THE CURRENT ONTARIO PROVINCIAL SPECIFICATION FOR GRADING OPSS 206. THE DEVELOPER SHALL RETAIN A QUALIFIED SOILS CONSULTANT TO CARRY OUT COMPACTION TESTS ON THE COMPLETED SUBGRADE AND SUBSEQUENT LIFTS OF GRANULAR BASE MATERIAL BEFORE PLACEMENT OF NEXT GRANULAR OR ASPHALT
- 3. ALL VEGETATION, BOULDERS OVER 150mmø, TOPSOIL AND ORGANIC OR FROST-SUSCEPTIBLE MATERIALS, SHALL BE REMOVED FROM THE ROAD BASE TO A DEPTH OF AT LEAST 1.20m BELOW FINISHED GRADE AND REPLACED WITH SUITABLE
- 4. ALL UNSUITABLE EXCAVATED MATERIAL SHALL BE REMOVED FROM THE ENTIRE "ROAD CORRIDOR" AND DEPOSITED OFF THE
- SITE TO A DISPOSAL AREA APPROVED BY THE SITE ENGINEER. THE SUB-GRADE SHALL BE SHAPED TO CONFORM TO THE REQUIRED LONGITUDINAL GRADE AND CROSS-SECTION AND SHALL HAVE A CROSSFALL OF 3% FROM THE CENTRELINE OF THE ROADWAY TO EACH SIDE. IF CONSIDERED NECESSARY BY THE TOWN ENGINEER AND QUALIFIED SOILS CONSULTANT, THE SUB-GRADE SHALL BE COMPACTED WITH SUITABLE MECHANICAL COMPACTION EQUIPMENT AS REQUIRED TO PRODUCE A SOLID BASE FOR THE ROAD GRAVEL. ALL IDENTIFIED SOFT AND WEAK
- SPOTS SHALL BE EXCAVATED AND BACKFILLED WITH A GRANULAR BASE MATERIAL. NATIVE SUB-GRADE TO BE GRADED, COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF GRANULARS. COMPACTION TO BE MINIMUM 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- THE GRANULAR BASE SHALL BE LAID ON DRY, SMOOTH, PROPERLY GRADED SUB-GRADE, AND SHALL BE SPREAD FOR THE REQUIRED WIDTH TO MEET THE EDGE OF SUB-GRADE. THE GRANULAR ROAD BASE SHALL CONSIST OF A BOTTOM COURSE OF 300mm MIN. CONSOLIDATED GRANULAR 'B" MATERIAL FULL WIDTH ACROSS THE ROADWAY AND A TOP COURSE OF 150mm GRANULAR 'A' MATERIAL FULL WIDTH ACROSS THE ROADWAY AND CONFORMING IN ALL RESPECTS TO THE MINISTRY OF TRANSPORTATION ONTARIO PROVINCIAL STANDARD SPECIFICATIONS OPSS 1010.
- THE GRANULAR MATERIAL SHALL BE SPREAD IN LAYERS OF 150mm MAXIMUM COMPACTED DEPTHS, AND EACH LAYER SHALL BE THOROUGHLY COMPACTED TO 100% SPMDD.
- NO GRANULAR BASE SHALL BE PLACED UNTIL THE GRADE ON WHICH IT IS TO BE LAID HAS BEEN INSPECTED AND APPROVED BY THE SOILS CONSULTANT.
- 10. ALL GRANULAR CONSTRUCTION SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATION 11. AS SOON AS THE GRANULAR BASE HAS BEEN COMPLETED IT SHALL BE THOROUGHLY COMPACTED AND SHAPED AND THE
- BASE COURSE ASPHALT PLACED. THE BASE COURSE SHALL CONSIST OF 40mm MIN. THICKNESS OF HL4 BASE COURSE ASPHALT. THE SURFACE COURSE SHALL CONSIST OF 40mm MIN. THICKNESS OF HL3 SURFACE COURSE ASPHALT. ASPHALT WORK SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS OPSS 310.
- 10. THE ASPHALT COMPONENTS SHOULD BE COMPACTED TO 92% TO 96.5% OF MAXIMUM RELATIVE DENSITY IN ACCORDANCE
- DURING AND BETWEEN CONSTRUCTION SEASONS, THE GRANULAR BASE SHALL BE MAINTAINED SUITABLE FOR VEHICLE AND PEDESTRIAN TRAFFIC INCLUDING DUST CONTROL BY CALCIUM CHLORIDE AND RENEWED IF REQUIRED TO THE SATISFACTION
- OF THE SITE ENGINEER. 12. CONCRETE CURB AND GUTTER SHALL CONFORM TO OPSD 600.100 AND SHALL BE INSTALLED IN CONFORMANCE WITH OPSS
- 16. ALL SERVICES, MANHOLES, VALVES, ETC. ARE TO BE INSTALLED TO MATCH GRADE OF BASE COURSE OF ASPHALT AND/OR LANDSCAPING. UPON PLACEMENT OF SURFACE COURSE OF ASPHALT. ALL APPURTENANCES LOCATED IN ROADWAY SHALL BE RAISED TO MATCH FINISHED GRADE

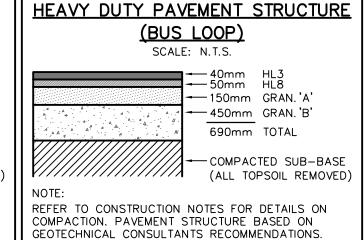
STORM SEWER

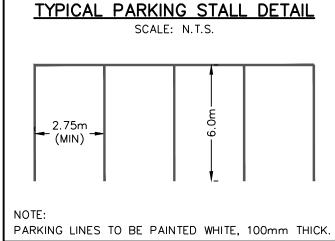
- SUMPS 450MM PIPES AND UNDER REQUIRE 600MM SUMP IN CATCHBASINS AND MAINTENANCE HOLES
- STEPS TO OPSD 405.010. M.H. FRAMES AND GRATES TO OPSD - 401.01 OPEN COVER.
- DICB'S TO OPSD 705.030, 705.040 (TYPE A).. PROTECTION DURING CONSTRUCTION TO OPSD - 808.010.
- BACKFILL AND EMBEDMENT TO OPSD 802.010 (FLEXIBLE PIPE) CLASS 'B', GRANULAR 'A' EMBEDMENT OR OPSD -
- 802.030, 802.031 AND 802.032 (RIGID PIPE) GRANULAR 'A' EMBEDMENT. REFER TO GENERAL NOTES. BACKFILL AND EMBEDMENT MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S
- FROST STRAPS PER OPSD 701.100. STORM SEWERS 375MMØ OR LESS TO BE PVC DR35. STORM SEWERS 450MM OR MORE TO BE CONCRETE CL-65D UNLESS
- 10. STORM SERVICES TO BE 100MMØ PVC DR28 COLORED WHITE, WHERE SHARED STORM SERVICES ARE USED, SERVICE
- BETWEEN STORM SEWER CONNECTION AND PIPE TO BE 125MMØ. MINIMUM SLOPE TO BE 1% AND MINIMUM COVER 1.2M. 11. INLINE AREA DRAINS (AD) TO BE NYLOPLAST 15" (DWG NO. 7003-110-026)

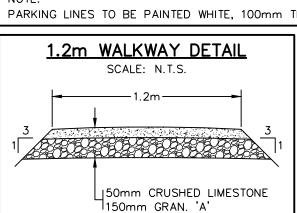
LIGHT DUTY PAVEMENT STRUCTURE (PARKING LOT)

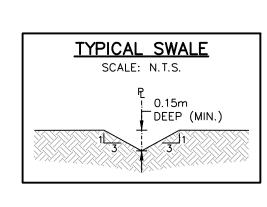


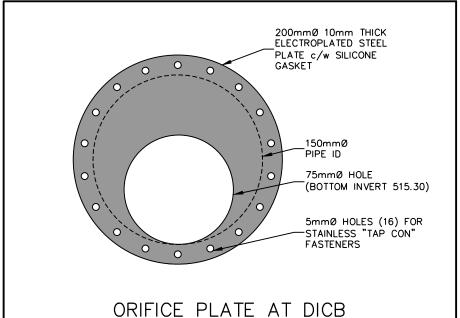
RFFER TO CONSTRUCTION NOTES FOR DETAILS ON COMPACTION. PAVEMENT STRUCTURE BASED ON GEOTECHNICAL CONSULTANTS RECOMMENDATIONS.







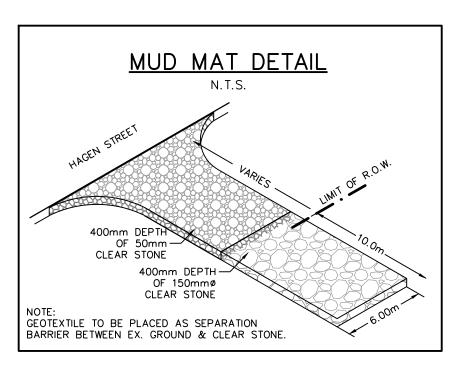


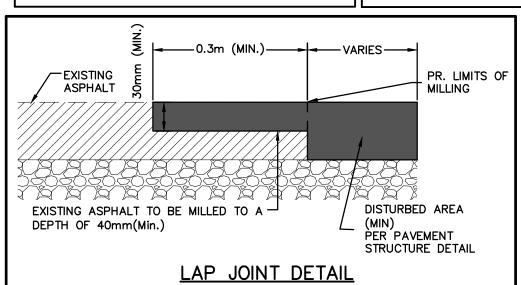


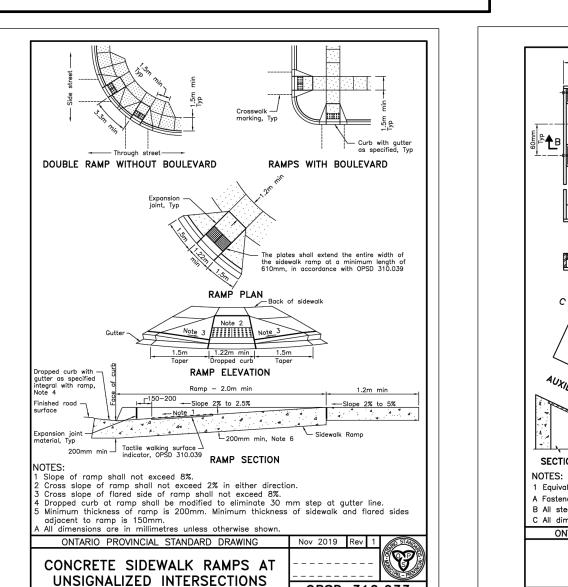
4mm +

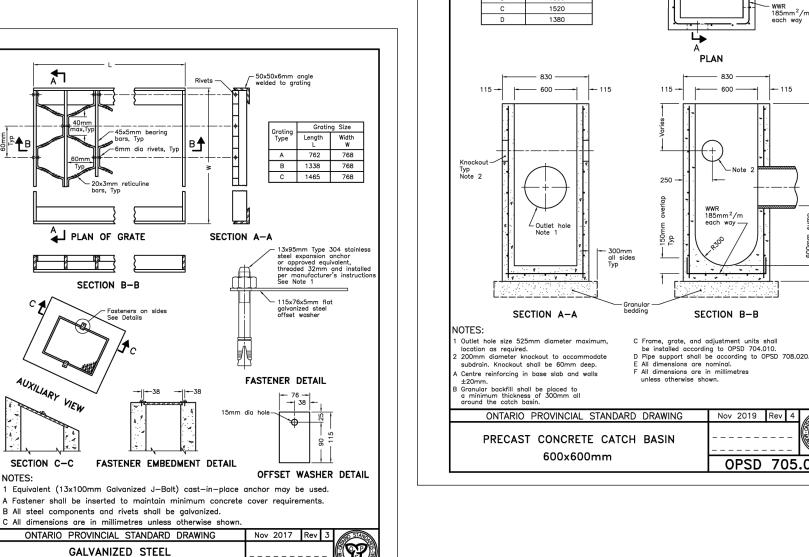
OPSD 310.039

SECTION A-A

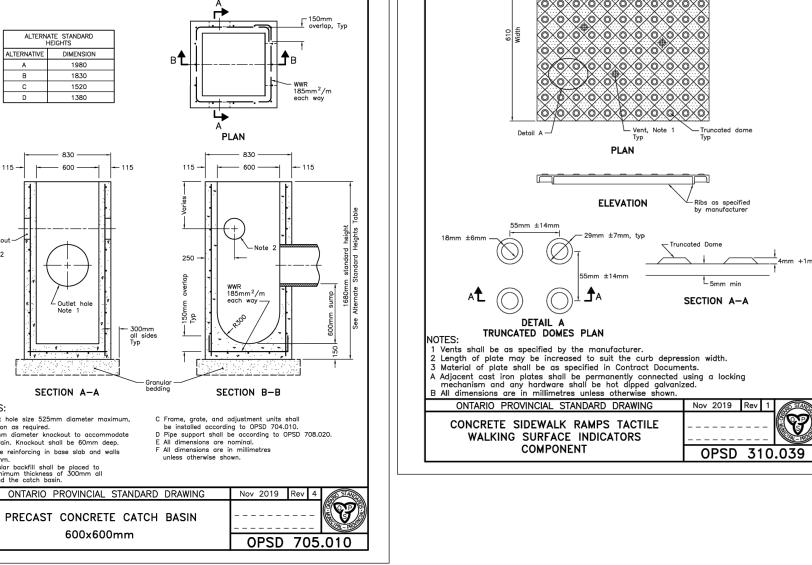


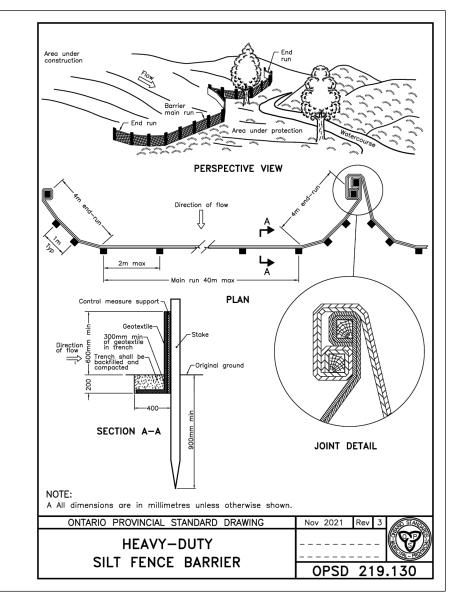


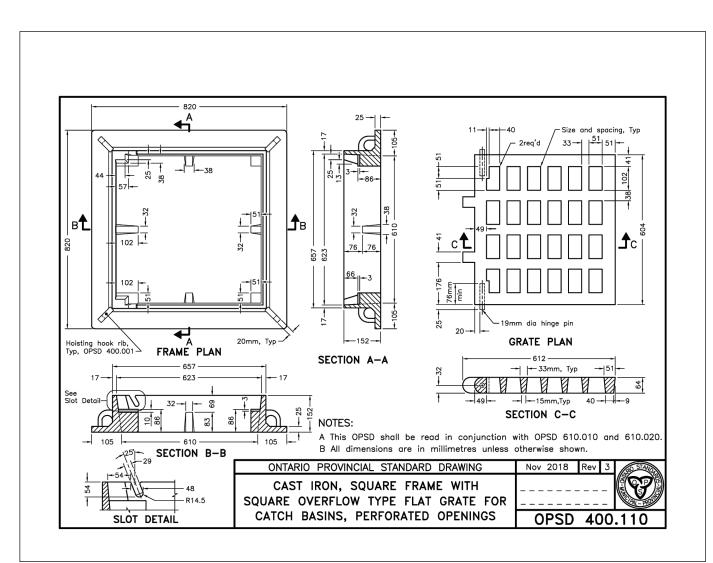


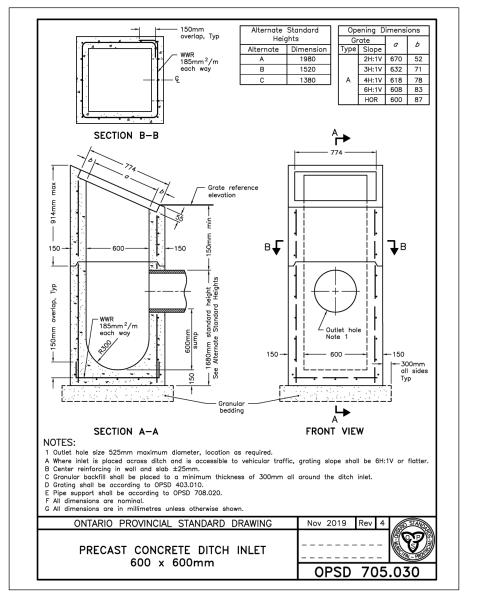


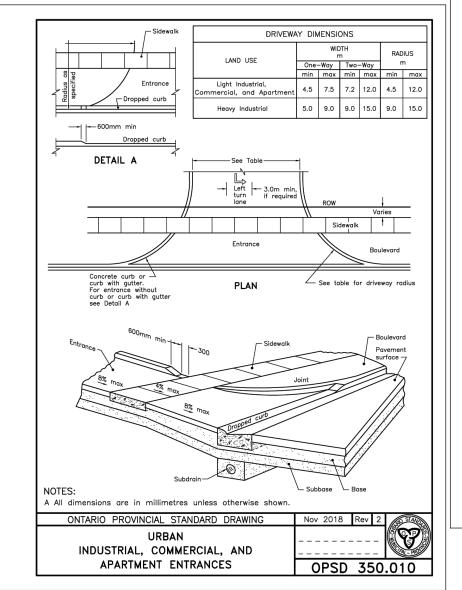
OPSD 403.010

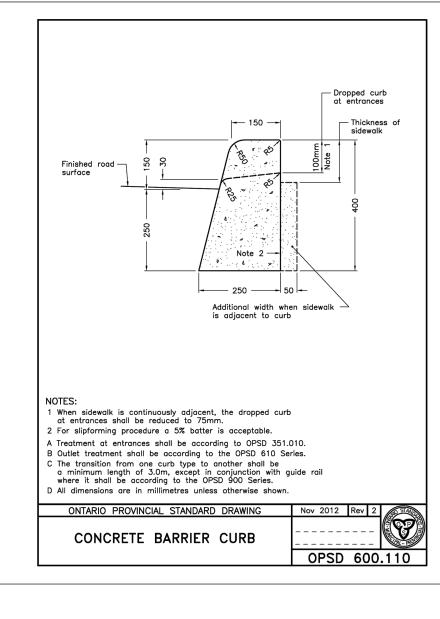












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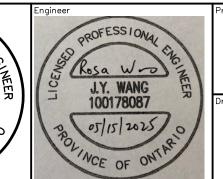
ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO C.F.

TEMPORARY BENCHMARKS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS | ***ADD REFERENCE TO SURVEY/SOURCE

DATE: YYYY/MM/DD ISSUE SSUED FOR 1st SUBMISSION 2025/05/15 J./R. L'ABBE 100543708 2025.05.15 2243-7371

HONEYCOMB GRATING FOR DITCH INLETS



DUNDALK & PROTON COMMUNITY SCHOOL **IMPROVEMENTS** TOWNSHIP OF SOUTHGATE

CONSULTING ENGINEERS

NOTES & DETAILS

Design By T.M. / J.L.A °ject 2243-7371 C900