# SOUTH BASIN DRAINAGE IMPROVEMENTS RE-GRADING SMITH ROAD

ISSUED FOR PROPOSAL

COV PROJECT NO.: 26-38-INF

LEL PROJECT NO.: 173-35

NOT FOR CONSTRUCTION

CITY OF VERNON

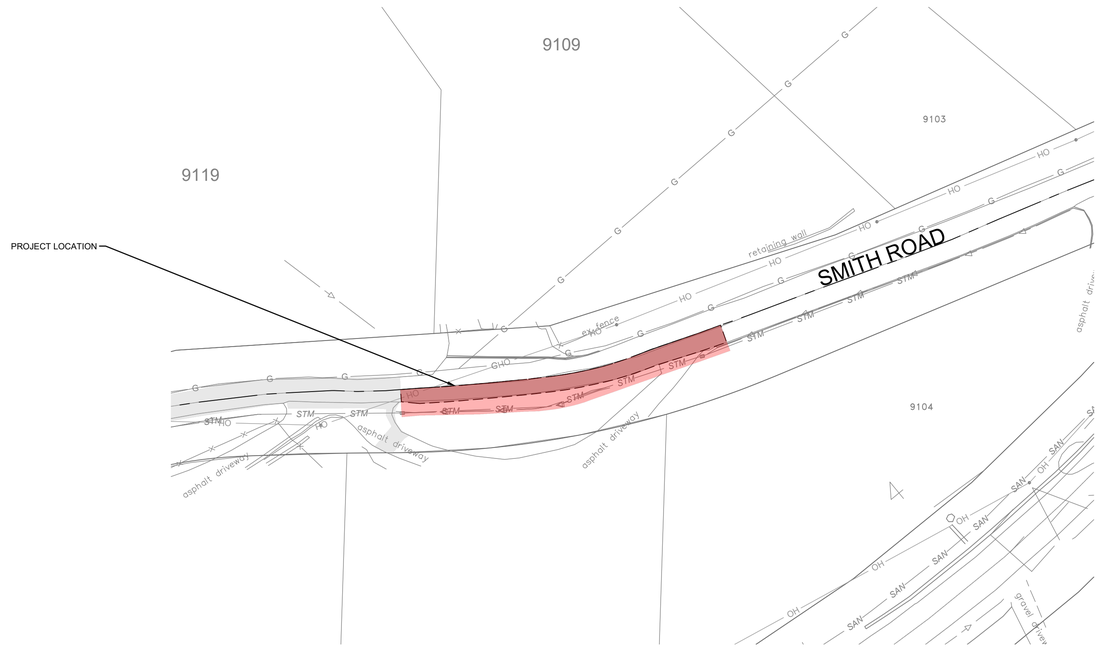

PROJECT LOCATION MAP
N.T.S

LAWSON ENGINEERING LTD.
UNIT B - 4705 29 STREET
VERNON, BC V1T 5C1
PH. (250) 832-3220

CITY OF Vernon

DRAWING INDEX:






OVERALL PROJECT
SCALE: 1:500

| ISSUE / REVISION INFORMATION | REV. No. | DATE | DESIGNED | DRAWN | CHECKED | DESCRIPTION |
|---|---|---|---|---|---|---|
| | A | 2026/07/16 | JKW | JKW | FDS | ISSUED FOR TENDER |
| | 0 | 2026/07/21 | JKW | JKW | FDS | ISSUED FOR PROPOSAL |

PERMIT NO: 1001279

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — F. D. SONMOR # 49549 — 2026

CITY OF Vernon

SCALE
H:N/A
V:N/A

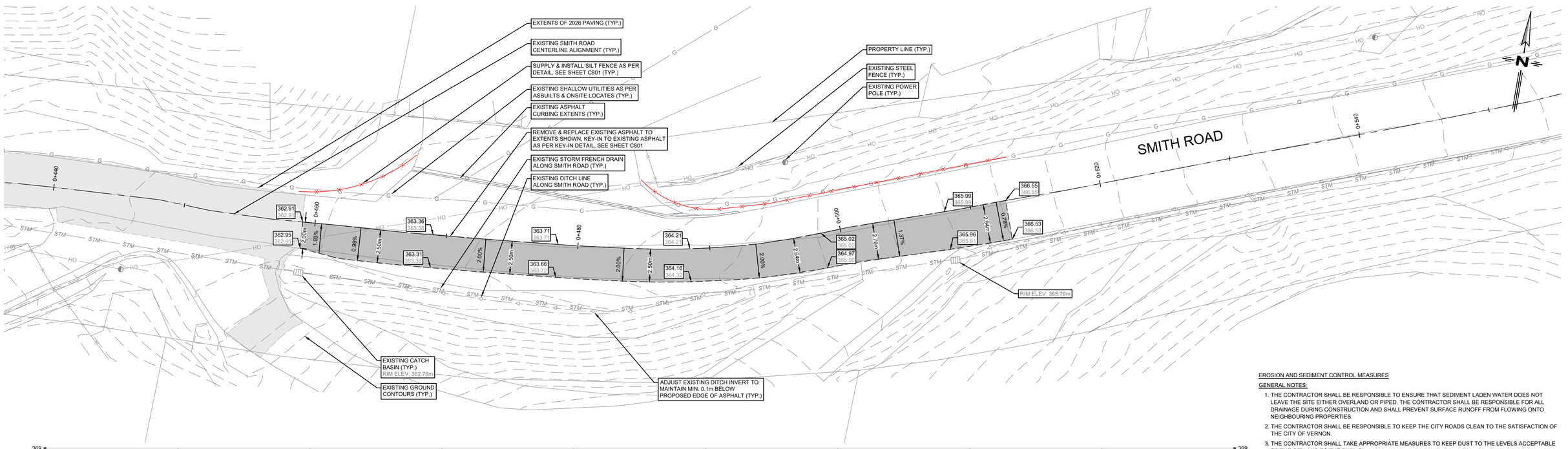
SHEET
1 OF 3

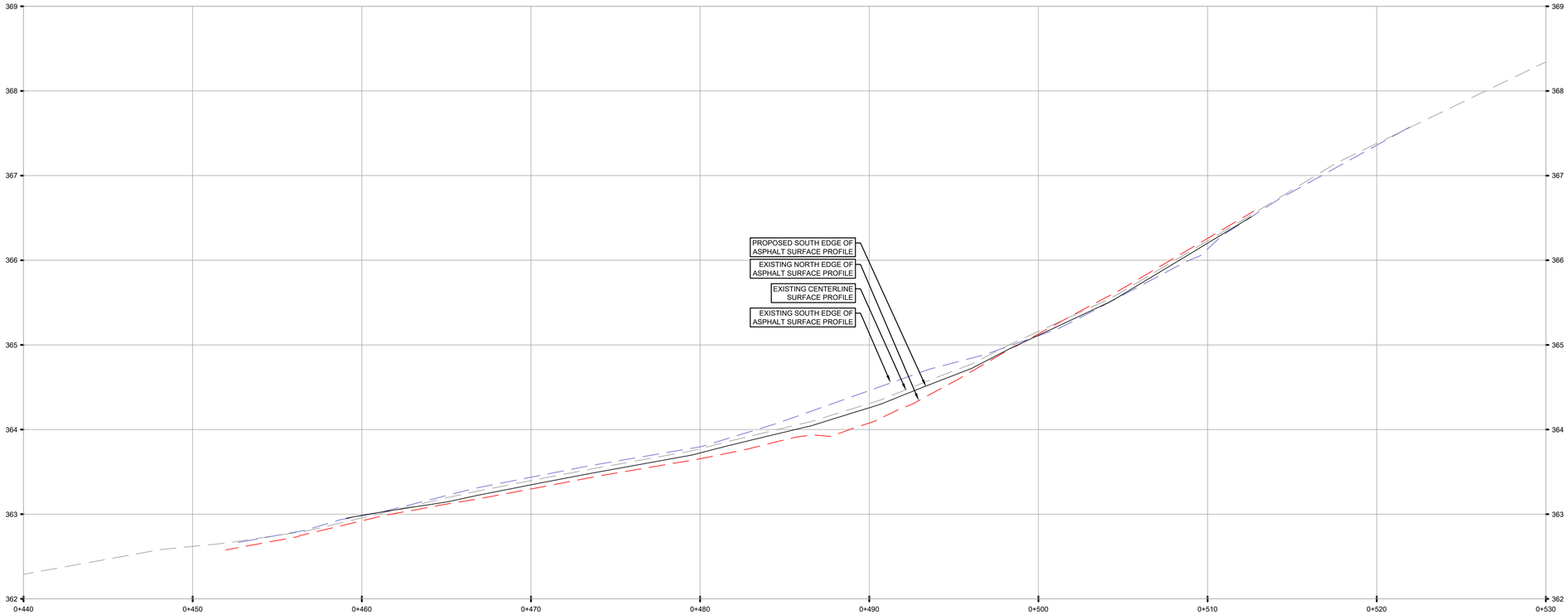
TITLE
TITLE PAGE

DRAWING NUMBER
C000

21.07.2026

Z:\Projects\173\35 - Eastside Culvert and Priority Drainage\1 - Civil Engineering\Drawings\1 - Design\173-35 - Smith Re-Grading - Design.dwg




EROSION AND SEDIMENT CONTROL MEASURES

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE EITHER OVERLAND OR PIPED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAINAGE DURING CONSTRUCTION AND SHALL PREVENT SURFACE RUNOFF FROM FLOWING ONTO NEIGHBOURING PROPERTIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THE CITY ROADS CLEAN TO THE SATISFACTION OF THE CITY OF VERNON.
3. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO KEEP DUST TO THE LEVELS ACCEPTABLE TO THE CITY AND TO THE PUBLIC.
4. UNPAVED ENTRANCES, ROADS AND PARKING AREA USED BY THE CONSTRUCTION TRAFFIC SHALL BE STABILIZED TO MINIMIZE EROSION AND TRACKING OF SEDIMENT OFFSITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REGULAR MAINTENANCE, INCLUDING REMOVAL OF SEDIMENT FROM SEDIMENT CONTROL STRUCTURES, REPAIRS AS REQUIRED TO ENSURE PROPER OPERATION OF THE SEDIMENTATION CONTROL SYSTEM, STORM SEWER FLUSHING (AND APPROPRIATE DISPOSAL OF WASTEWATER, NOT TO WATERCOURSE), STREET SWEEPING, AND DUST CONTROL DURING THE CONSTRUCTION OF THE WORKS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT RUNOFF FROM THE SITE CONFORMS TO DFO LAND DEVELOPMENT GUIDELINES AND THE CITY OF VERNON BYLAW.
7. ALL SEDIMENT CONTROL FACILITIES TO REMAIN IN PLACE UNTIL 90% OF THE ONSITE CONSTRUCTION IS COMPLETE, OR AS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
8. DURING SUBDIVISION/DEVELOPMENT CONSTRUCTION AND ONCE ALL CIVIL SITE WORKS ARE COMPLETE, THE DEVELOPER IS RESPONSIBLE FOR ENSURING THAT SEDIMENT CONTROL FACILITIES ARE MAINTAINED AND WORKING ADEQUATELY TO CONTROL DISCHARGES FROM THE SITE.
9. ALL STOCKPILES MATERIAL ON SITE SHALL BE COVERED WITH POLY AND SURROUNDED WITH SILT FENCE.
10. PRIOR TO AND DURING CONSTRUCTION THE CONTRACTOR SHALL TAKE ADEQUATE STEPS INCLUDING BUT NOT LIMITED TO: DIVERTING FLOWS FROM EXPOSED AREAS, PROVIDING CHECK DAMS AND CHANNEL PROTECTION IN TEMPORARY ONSITE DRAINAGE COURSES, INSTALLATION OF SEDIMENT FENCES AROUND PERIMETER AND SOIL STOCKPILES, INSTALLATION OF FILTER OR COMPOST TUBES AROUND PERIMETER OF ALL CATCHBASINS AND LAWN DRAINS, STABILIZED CONSTRUCTION ENTRANCES, TEMPORARY SEDIMENT CONTROL PONDS, POLY SHEETING, HYDRO SEEDING, STRAWING, DITCHING OR ANY OTHER MEASURES AS MAY BE NECESSARY TO PREVENT SEDIMENT AND OTHER DELETERIOUS MATERIALS FROM THE WORKS ENTERING THE STORM SYSTEM AND RECEIVING WATERCOURSE.

STAGE 1:

1. THE CONTRACTOR SHALL INSTALL CATCH BASIN SEDIMENT TRAPS BY LAYFIELD (OR APPROVED EQUIVALENT) AROUND ALL EXISTING CATCH BASINS PRIOR TO COMMENCING CONSTRUCTION.
2. THE CONTRACTOR IS TO INSTALL SILT FENCING, AS SHOWN ON THE ESC DRAWINGS (OR AS OTHERWISE APPROVED BY THE ENGINEER OF RECORD).
3. ALL DISTURBED AREAS SHALL BE RESTORED AND HYDROSEEDED OR MULCHED AS SOON AS POSSIBLE FOLLOWING SITE GRADING AND SITE SERVICING AS SOON AS POSSIBLE TO AVOID SOIL EROSION AND SEDIMENT LOSS THROUGHOUT THE SITE.

STAGE 2: CONSTRUCTION OF ROADS AND UNDERGROUND UTILITIES

1. STOCKPILES OF EXCAVATED MATERIALS ARE TO BE PROTECTED WITH 6mm THICK POLYETHYLENE SHEETING (OR APPROVED EQUIVALENT) AND SURROUNDED BY SILT FENCING TO MINIMIZE SOIL EROSION AND SEDIMENT LOSS DURING RAINFALL EVENTS. SILT FENCE TO BE PLACED A MINIMUM OF 0.6m FROM THE BASE OF THE STOCKPILE.
2. FOLLOWING INSTALLATION OF ALL ONSITE CATCH BASINS, INSTALL A "FILTERSOXX", "TERRATUBE" OR APPROVED EQUIVALENT AROUND THE CB TO PREVENT SEDIMENT FROM ENTERING THE NEW STORM SEWER SYSTEM.
3. DURING THE CONSTRUCTION PHASE, PROVIDE MECHANICAL STREET SWEEPING ALONG SMITH ROAD TO REMOVE ANY ACCUMULATION OF SEDIMENT AS A RESULT OF CONSTRUCTION ACTIVITIES, AS DIRECTED BY THE ENGINEER OF RECORD.

STAGE 3: DECOMMISSIONING

1. DECOMMISSIONING OF ALL EROSION AND SEDIMENT CONTROL FACILITIES WILL OCCUR UPON BUILDING COMPLETION, CIVIL CONSTRUCTION COMPLETION AND 90% OF THE PERMANENT LANDSCAPING IS COMPLETE (OR AS OTHERWISE APPROVED BY THE ENGINEER OF RECORD).

NOT FOR CONSTRUCTION

ISSUE / REVISION INFORMATION

| REV. No. | DATE | DESIGNED | DRAWN | CHECKED | DESCRIPTION |
|---|---|---|---|---|---|
| A | 2026/07/16 | JKW | JKW | FDS | ISSUED FOR TENDER |
| 0 | 2026/07/21 | JKW | JKW | FDS | ISSUED FOR PROPOSAL |

PERMIT NO: 1001279

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — F. D. SONMOR # 49549 — 2026/07/21

CITY OF Vernon

SCALE
H: 1:150
V: 1:30

SHEET
2 OF 3

TITLE
ROADWORKS PLAN/PROFILE
AND EROSION & SEDIMENT CONTROL PLAN

DRAWING NUMBER
C200

Z:\Projects\173_35 - Eastside Culvert and Priority Drainage\1 - Civil Engineering\Drawings\1 - Design\173-35 - Smith Re-Grading - Design.dwg

21.07.2026

GENERAL NOTES:

1. ALL WORKS TO CONFORM TO THE CITY OF VERNON BYLAWS AND THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND STANDARD DETAIL DRAWINGS, UNLESS OTHERWISE SPECIFIED.
2. ALL MATERIALS SHALL CONFORM TO THE CITY OF VERNON APPROVED PRODUCTS LIST.
3. SCHEDULE 40 AND SCHEDULE 80 PLASTIC PIPE SHALL NOT BE USED FOR ANY SITE APPLICATIONS IN THE SITE WORK.
4. ANY REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE DESIGN ENGINEER, WHO SHALL REVIEW ANY CHANGES WITH THE CITY OF VERNON DIRECTOR OF INFRASTRUCTURE SERVICES.
5. CONTRACTOR MUST REQUEST A UTILITY LOCATE THROUGH BC ONE CALL BEFORE EXCAVATING WITH ANY POWER EQUIPMENT.
6. WORKSAFE BC IS TO BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR SHALL BE REGISTERED WITH WORKSAFE BC.
7. CONTRACTOR TO EXPOSE ALL EXISTING UTILITIES AT ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO VERIFY LOCATION AND INVERTS AND REPORT TO ENGINEER ANY CONFLICTS OR DISCREPANCIES.
8. UTILITY TRENCH TO CONFORM TO MMCD STANDARD DRAWING G4.
9. EXISTING UNDERGROUND UTILITIES MAY NEED TO BE LOWERED OR RAISED TO SUIT THE FINAL DESIGN GRADES IN ACCORDANCE WITH MINIMUM AND MAXIMUM COVER REQUIREMENTS FOR EACH UTILITY.
10. RESIDENTS AND BUSINESS OWNERS AFFECTED BY THE PROPOSED CONSTRUCTION ARE TO BE NOTIFIED BY THE CONTRACTOR IN WRITING 48 HOURS PRIOR TO THE START OF CONSTRUCTION AND PROVIDED WITH THE CONTRACTORS PHONE NUMBER AND SCHEDULE.
11. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED TO EXISTING STREETS OR SERVICES BY CONSTRUCTION EQUIPMENT AND/OR TRUCKS HAULING MATERIALS TO THE SITE. THIS WILL INCLUDE DAILY CLEANING OR SWEEPING OF ALL EXISTING ROADS OF DIRT AND DEBRIS CAUSED BY CONSTRUCTION ACTIVITY.
12. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH SECTION 52 OF THE INDUSTRIAL HEALTH AND SAFETY REGULATIONS OF THE WORKER'S COMPENSATION BOARD OF B.C. THE DEVELOPER IS TO HAVE, ON SITE, A COPY OF THE CURRENT "B.C. TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" AS PUBLISHED BY THE MINISTRY OF TRANSPORTATION (MOT). VEHICULAR AND PEDESTRIAN ACCESS IS TO BE MAINTAINED ALONG EXISTING ROADS DURING CONSTRUCTION.
13. A TRAFFIC MANAGEMENT PLAN WITH LANE CLOSURES MUST BE APPROVED BY THE CITY OF VERNON PRIOR TO CONSTRUCTION.
14. LEGAL SURVEY MONUMENTS ARE TO BE PROTECTED. SHOULD THEY REQUIRE RAISING OR RELOCATING, THE CONTRACTOR MUST NOTIFY THE INSPECTOR AT LEAST 72 HOURS IN ADVANCE OF SCHEDULING WORK AFFECTING THEM.
15. PIPE BEDDING TO BE MMCD TYPE 1 GRANULAR PIPE BEDDING COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
16. PIPE BACKFILL TO BE IMPORTED 75mm MINUS PIT RUN GRAVEL COMPACTED TO 95% MODIFIED PROCTOR DENSITY. WHEN NATIVE SITE GRANULAR BACKFILL IS PROPOSED FOR USE IN TRENCHES THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROVIDE SAMPLES TO THE GEOTECHNICAL MATERIALS TESTING AGENCY FOR APPROVAL, BEFORE PROCEEDING WITH THE RE-USE OF NATIVE BACKFILL MATERIALS. THE SITE MATERIAL MUST BE APPROVED FOR RE-USE BY THE GEOTECHNICAL ENGINEER.
17. WHEN INFILLING OF EXISTING DITCHES, ETC., IS REQUIRED OR PROPOSED, AND WHERE SERVICES ARE CONSTRUCTED IN FILL SECTIONS, THE FILL MATERIAL IS TO BE APPROVED GRANULAR MATERIAL PLACED IN LIFTS NOT EXCEEDING 300mm AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
18. FIGURED DIMENSIONS SHALL GOVERN OVER SCALED DIMENSIONS.
19. AFTER CONSTRUCTION, RESTORE WORK AREAS AND EXISTING FEATURES TO THEIR ORIGINAL CONDITION OR BETTER.
20. ADJUST ALL PROPOSED AND EXISTING APPURTENANCES TO MEET FINAL DESIGN GRADES.
21. DEWATERING FOR UTILITY INSTALLATIONS WILL BE COMPLETED AT THE CONTRACTORS EXPENSE. DEWATERING IN THE TRENCHES SHALL BE COMPLETED AS OUTLINED IN THE GEOTECHNICAL REPORT FOR THE SITE, OR AS REQUIRED.
22. PROJECT COORDINATES ARE NOT IN UTM ZONING AND ARE ARBITRARILY ORIENTED. THE CONTRACTOR/PROJECT SURVEYOR IS TO REQUEST CONTROL FILES FROM LAWSON ENGINEERING LTD. (LEL) TO TIE-IN TO LOCAL PROJECT-SPECIFIC DATUM FOR ALL RELATED WORKS.

ROADWORKS NOTES:

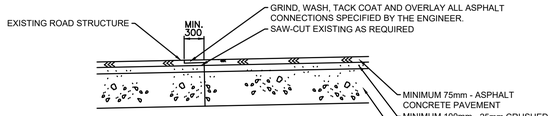
1. SEE PLAN AND PROFILE DRAWINGS FOR TYPICAL ROAD CROSS-SECTIONS. WHERE INDICATED, PROVIDE DRIVEWAY CROSSINGS IN CONFORMANCE WITH MMCD STANDARD DRAWING C7.
2. CHANGES OF GRADE ARE TO BE FORMED BY SMOOTH VERTICAL CURVES.
3. ALL LOOSE, ORGANIC, OTHERWISE DELETERIOUS MATERIALS OR SOFT SPOT(S) ARE TO BE EXCAVATED AND REMOVED FROM THE ROADWAY AND UTILITY TRENCHES IN THE ROADWAY.
4. SUB-BASE AND GRANULAR BASE MATERIALS SHALL BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
5. THE ROAD BASE SHALL EXTEND A MINIMUM OF 0.3m BEYOND THE CURB & GUTTER.
6. CATCH BASIN RIM ELEVATIONS GIVEN ARE THE ELEVATION OF THE SURFACE INLET.
7. EXISTING VALVE BOXES, MANHOLES, ETC. WITHIN THE ROAD R.O.W ARE TO BE ADJUSTED TO SUIT THE PROPOSED FINISHED GRADE.
8. THE CONDITIONS FOR PLACING ASPHALT PAVEMENT AND CONCRETE SHALL BE IN ACCORDANCE WITH CITY OF VERNON STANDARD CONSTRUCTION DOCUMENTS AND MMCD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS APPLICABLE AT THE TIME OF CONSTRUCTION. WEATHER CONDITIONS MUST ALSO BE IN CONFORMANCE WITH MMCD SPECIFICATIONS. SHOULD DEVIANCIES BE ALLOWED FROM THESE SPECIFICATIONS, THE CONTRACTOR IS TO ASSUME ALL RESPONSIBILITY FOR THESE PRODUCTS.
9. TIE-INS TO EXISTING PAVEMENT SHALL BE MADE BY CUTTING BACK THE EXISTING PAVEMENT TO SOUND MATERIAL AS NECESSARY TO PRODUCE A NEAT VERTICAL FACE AND PROVIDE A KEY-WAY. PRIOR TO PLACING ASPHALTIC CONCRETE, EXPOSED PAVEMENT FACES AND OTHER ABUTTING STRUCTURES SHALL BE TACK COATED WITH ASPHALT EMULSION.
10. ALL EXISTING ASPHALT TO BE REMOVED MUST BE DISPOSED OF AT AN APPROVED SITE.
11. REPAIR ANY PAVEMENT DAMAGE OR DAMAGE TO PRIVATE PROPERTY. PAVEMENT RESTORATION AS PER MMCD STANDARD DRAWING G5. REFER TO ROADWORKS PLAN DRAWINGS FOR SPECIFIED PAVEMENT STRUCTURE.

PAVEMENT MARKING AND SIGNAGE NOTES:

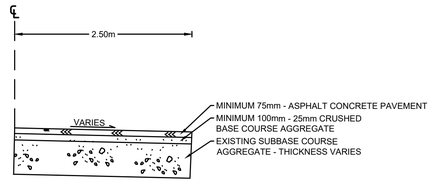
1. ALL PAVEMENT MARKINGS AND SIGNAGE TO BE MINISTRY OF TRANSPORTATION STANDARDS (MANUAL OF STANDARD TRAFFIC SIGNS & PAVEMENT MARKINGS).

EXISTING UTILITIES

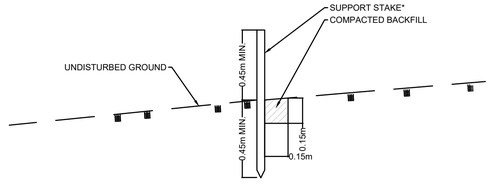
1. THE LOCATION OF EXISTING SERVICES IS NOT GUARANTEED TO BE ACCURATE. THE INFORMATION HAS BEEN COMPILED FROM THE CITY'S AS-CONSTRUCTED RECORDS AND FROM TOPOGRAPHIC SURVEY. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL INVESTIGATE THE WORK AREA. TO CONFIRM THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES. NOTIFY LAWSON ENGINEERING LTD. IMMEDIATELY IF THERE ARE ANY DISCREPANCIES.
2. NOTIFY TELUS, BC HYDRO, FORTIS BC, CITY WATER & SEWER AND CABLE 72 HOURS PRIOR TO CONSTRUCTION FOR LOCATION, IF APPLICABLE.
3. ALL DRAWING DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES PRIOR TO THE START OF EXCAVATION.




ROAD PAVEMENT RESTORATION AND KEY - IN DETAIL
SCALE: N.T.S




SMITH ROAD PAVEMENT STRUCTURE DETAIL
SCALE: NTS




STANDARD SILT FENCE DETAIL
N.T.S

NOT FOR CONSTRUCTION

21.07.2026

ISSUE / REVISION INFORMATION

| REV. No. | DATE | DESIGNED | DRAWN | CHECKED | DESCRIPTION |
|---|---|---|---|---|---|
| A | 2026/07/16 | JKW | JKW | FDS | ISSUED FOR TENDER |
| 0 | 2026/07/21 | JKW | JKW | FDS | ISSUED FOR PROPOSAL |

PERMIT NO: 1001279

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
F. D. SONMOR
# 49549
2026/07/21

CITY OF Vernon

SCALE
H: N/A
V: N/A

SHEET
3 OF 3

TITLE
GENERAL DRAWING NOTES & DETAILS

DRAWING NUMBER
C801