

EXISTING GRAVEL DRIVEWAY

EXISTING ASPHALT DRIVEWAY



PROPOSED TRAIL

PREPARED FOR:

EDGE OF GRAVEL
EDGE OF PAVEMENT

**FENCE** 

SIGN

**IRON PIN** 



PREPARED BY:

ONSITE
ENGINEERING LTD.
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COURTENAY OFFICE
#201- 780 GRANT AVENUE
COURTENAY, BC V9N 2T3
PH.: 778-647-5643 FAX: 866-235-6943
EGBC PERMIT TO PRACTICE No.: 1002678

## TRAIL LAYOUT FOR THE DENMAN ISLAND TRAIL

DWG No:1077-21-000	SHEET: 1 OF 25
DESIGN BY: MICHAEL HANSON, P.ENG. DESIGN DATE: MARCH 29, 2022 REVIEWED BY: JEREMY ARAKI, P.ENG. DRAWN BY: STEFANIE NOACK SITE VISIT: ONSITE ENGINEERING LTD. SITE VISIT DATES: DECEMBER 23, 2021 FILE NAME: 1077-21 DENMANTRAIL.DWG SCALE: AS NOTED REVISION NUMBER: 4 REVISION DATE: OCTOBER 27, 2022 ALL MEASUREMENTS IN m UNLESS OTHERWISE NOTED.	SEAL OF B.C. P.ENG.  M. J. HANSON  48148  2022-10-27
	TER VALVE
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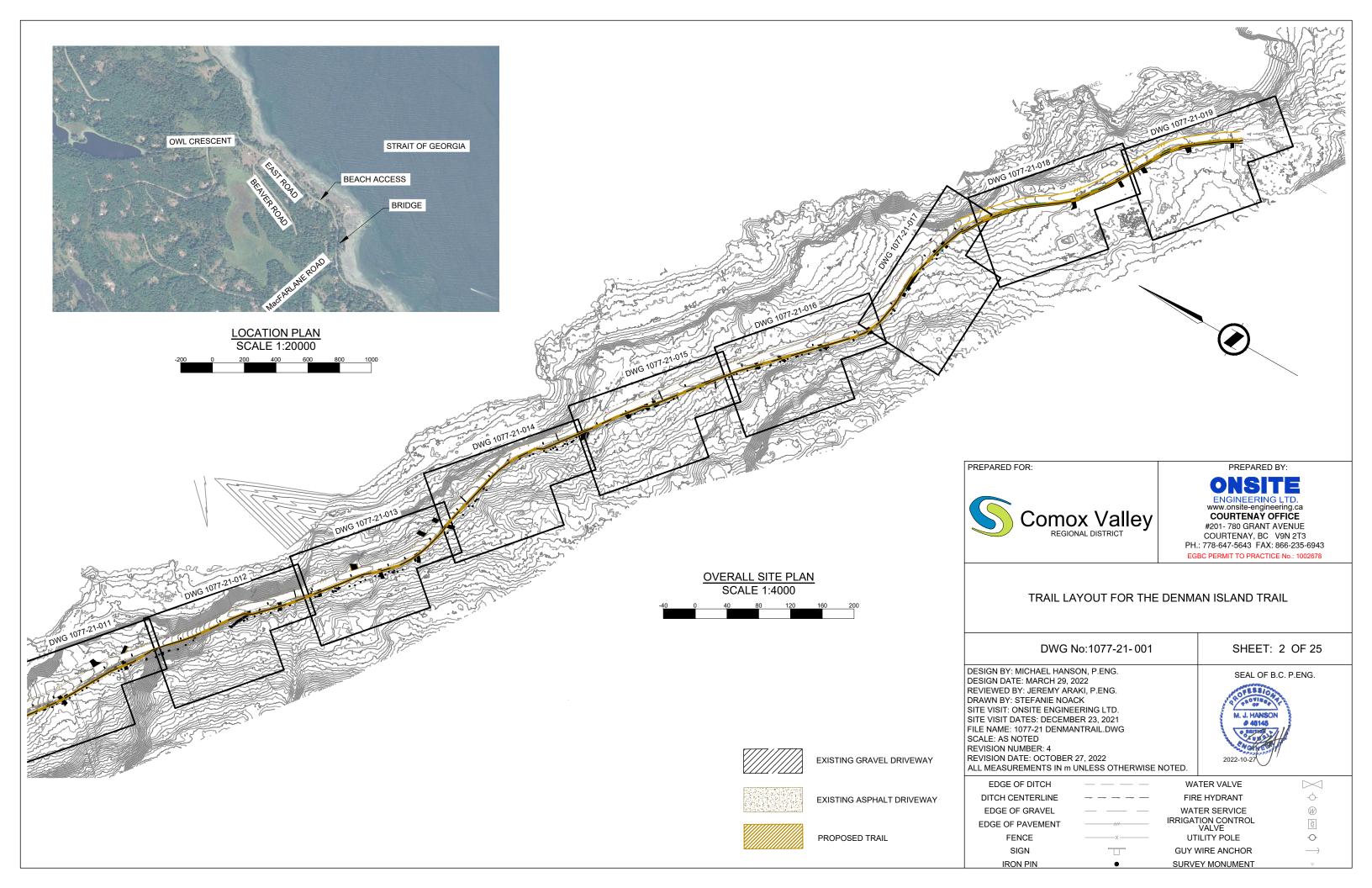
WATER SERVICE IRRIGATION CONTROL VALVE

UTILITY POLE

GUY WIRE ANCHOR

SURVEY MONUMENT

101



### GENERAL NOTES:

- 1. CONTACT BCI AND HAVE ALL UTILITIES MARKED PRIOR TO EXCAVATION. NOTE THAT WHERE EXCAVATION SPECIFICATIONS ON THESE DRAWINGS CONFLICT WITH WORKSAFE BC REGULATIONS, WORKSAFE BC REGULATIONS ARE TO GOVERN.
- 2. MINIMIZE ANY EXCAVATION OF THE EXISTING DITCHES. EXCAVATED DITCH SLOPES MUST MATCH EXISTING DITCH GRADE. THE PREFERRED DITCH SLOPE IS 4H:1V IF UNABLE TO MATCH EXISTING DITCH SLOPE.
- 3. ANY EXCAVATED DITCH SLOPES MUST BE REVEGETATED IMMEDIATELY WITH GRASS SEED.
- 4. TRAIL SURFACE ELEVATIONS MUST MATCH WITH EXISTING DRIVEWAY ELEVATIONS.
- 5. COMPACT ALL TRAIL SURFACE TO APPROXIMATELY 95% STANDARD PROCTOR DRY DENSITY. TESTING IS NOT REQUIRED. COMPACTION/COMPACTION METHODOLOGY MUST BE APPROVED BY THE DESIGN ENGINEER OR THEIR DESIGNATE.
- 6. ALL FILLS ARE IMPORTED GRANULAR PIT RUN GRAVEL LOCATED ON SWAN ROAD, DENMAN ISLAND.
- 7. HYDROSEED ANY DISTURBED AREAS AND STRIP ALONG CROSS SECTION D WITH QUALITY SEEDS ORCHARD STAR MIX.
- 8. SUBMITTALS: SAFETY PLAN, PIT RUN GRAVEL, 10mm OR BETTER CRUSHED AGGREGATE SURFACING GRAVEL, AND 19mm ROAD BASE GRAVEL SAMPLES AND SUPPLIER.
- 9. TESTING WILL BE PROVIDED BY OWNER ON AN AS NEED BASIS.
- 10. FINAL CLEAN UP TO SATISFACTION OF MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE.
- 11. NO STEEL TRACKED MACHINES ON ASPHALT WITHOUT PROTECTIVE MATTING.
- 12. TREES LOCATED WITHIN 1.0m OF THE EDGE OF THE TRAIL AS NOTED ON THE GENERAL TRAIL LAYOUT DRAWINGS SHALL BE PRUNED TO THE BOLES OF THE TREE, 3.5m ABOVE THE FINISHED TRAIL GROUND ELEVATION, UNLESS OTHERWISE NOTED. TREES AND SHRUBS LOCATED FURTHER THAN 1.0m AWAY FROM THE EDGE OF THE TRAIL WHOSE BRANCHES IMPACT THE TRAIL MUST BE PRUNED AT LEAST 1.0m BACK FROM THE EDGE OF THE TRAIL AND 3.5m ABOVE THE FINISHED TRAIL GROUND ELEVATION, UNLESS OTHERWISE NOTED.
- 13. PREFERRED TRAIL WIDTH IS 2.2m AND IS TO BE ACCOMMODATED WHEREVER POSSIBLE. WHERE NOT POSSIBLE, TRAIL WIDTH IS TO BE MAXIMIZED, AND IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.

### THE CONTRACTOR SHALL:

- 1. AS PER SECTION 20.0, GIVE ALL NECESSARY NOTICES, IDENTIFY ALL UNDERGROUND AND ABOVE GROUND SERVICES AND COMPLY WITH ALL RELATED CONSTRUCTION AND DIGGING GUIDELINES.
- 2. BE AWARE THAT IN THE EVENT THAT AN ACTIVITY OR EVENT OCCURS WHICH CONTRAVENES THE TERMS OF THE CONTRACT, THE CVRD MAY ISSUE A STOP WORK ORDER DIRECTING THE IMMEDIATE SUSPENSION OF ALL OR A PORTION OF THE ACTIVITIES OF CONCERN, AND MAY UNDERTAKE OR ORDER REMEDIAL MEASURES TO BE CONDUCTED AS DEEMED NECESSARY. THE COST OF ANY WORK STOPPAGES AND/OR REMEDIAL WORKS NECESSARY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 3. ENSURE ALL CONSTRUCTION EQUIPMENT USED IN CONJUNCTION WITH THE PROJECT IS IN GOOD REPAIR, HAS UNDERGONE A RECENT MECHANICAL INSPECTION AND IS INSPECTED DAILY TO ENSURE THEY ARE FREE OF LEAKS WHICH COULD RELEASE FUEL, OILS, HYDRAULIC FLUIDS, ANTIFREEZE OR OTHER SUBSTANCES DELETERIOUS TO AQUATIC LIFE AND TO THE MARINE ENVIRONMENT. ANY LEAKS SHALL BE REPORTED IMMEDIATELY AND REPAIRED PRIOR TO CONTINUING WORK.
- 4. BE RESPONSIBLE FOR ALL ENVIRONMENTAL PROTECTION PROCEDURES FOR HANDLING AND STORAGE OF ALL HAZARDOUS MATERIALS INCLUDING OIL, GREASE, AND FUELS. ANY SPILL SHALL BE REPORTED TO THE BC PROVINCIAL EMERGENCY PROGRAM (1-800-663-3456). SPILL CLEAN-UP IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DONE IMMEDIATELY AT THE SPILL SITE AND TO ALL AFFECTED SURROUNDING AREAS.
- 5. BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL MEASURES TO PREVENT THE RELEASE OF DELETERIOUS MATERIALS TO AQUATIC HABITAT.
- 6. PROTECT ALL SURVEY MONUMENTS WITHIN THE PROJECT BOUNDARIES DURING THE COURSE OF THE WORK. SURVEY PINS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY A BC LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 7. KEEP ALL PUBLIC ROADWAYS AFFECTED BY THE WORK IN A CLEAN STATE AT ALL TIMES AND FREE OF EQUIPMENT AND MATERIALS AT ALL TIMES WHEN CONSTRUCTION ACTIVITY IS NOT UNDERWAY. DUST CONTROL MEASURES SHALL ALSO BE EMPLOYED.
- 8. UNLESS OTHERWISE IDENTIFIED IN THE DRAWINGS, ALL GRASS AREAS TO BE REINSTATED WITH TOPSOIL AND SEEDING TO EXISTING OR BETTER CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR A 1 YEAR MAINTENANCE PERIOD OF ALL WORKS.
- 9. NOT RECEIVE COMPENSATION FOR ANY LOSSES THE CONTRACTOR MAY INCUR AS A RESULT OF WORK BEING DELAYED OR SUSPENDED FOR REASONS THAT ARE BEYOND THE CONTROL OF THE CVRD. THIS INCLUDES RESTRICTION OF ACCESS TO THE WORK SITE FOR REASONS OF EXTREME FIRE HAZARD OR WEATHER CONDITIONS.
- 10. DISPOSE OF ALL GRUBBED VEGETATION, PRUNED BRANCHES, EXCAVATED OVERBURDEN, AND ANY OTHER SUCH MATERIALS AT AN APPROVED LOCATION OFF SITE.

PREPARED FOR:

REVISION DATE: OCTOBER 27, 2022

EDGE OF DITCH

DITCH CENTERLINE

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SIGN IRON PIN

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ENGINEERING LTD. COURTENAY OFFICE #201- 780 GRANT AVENUE COURTENAY, BC V9N 2T3 PH.: 778-647-5643 FAX: 866-235-6943 EGBC PERMIT TO PRACTICE No : 1002678 TRAIL LAYOUT FOR THE DENMAN ISLAND TRAIL DWG No:1077-21-002 SHEET: 3 OF 25 DESIGN BY: MICHAEL HANSON, P.ENG. SEAL OF B.C. P.ENG. DESIGN DATE: MARCH 29, 2022 REVIEWED BY: JEREMY ARAKI, P.ENG. DRAWN BY: STEFANIE NOACK SITE VISIT: ONSITE ENGINEERING LTD. M J. HANSON SITE VISIT DATES: DECEMBER 23, 2021 # 45145 FILE NAME: 1077-21 DENMANTRAIL.DWG SCALE: AS NOTED **REVISION NUMBER: 4** 

WATER VALVE

FIRE HYDRANT

WATER SERVICE

IRRIGATION CONTROL VALVE
UTILITY POLE

**GUY WIRE ANCHOR** 

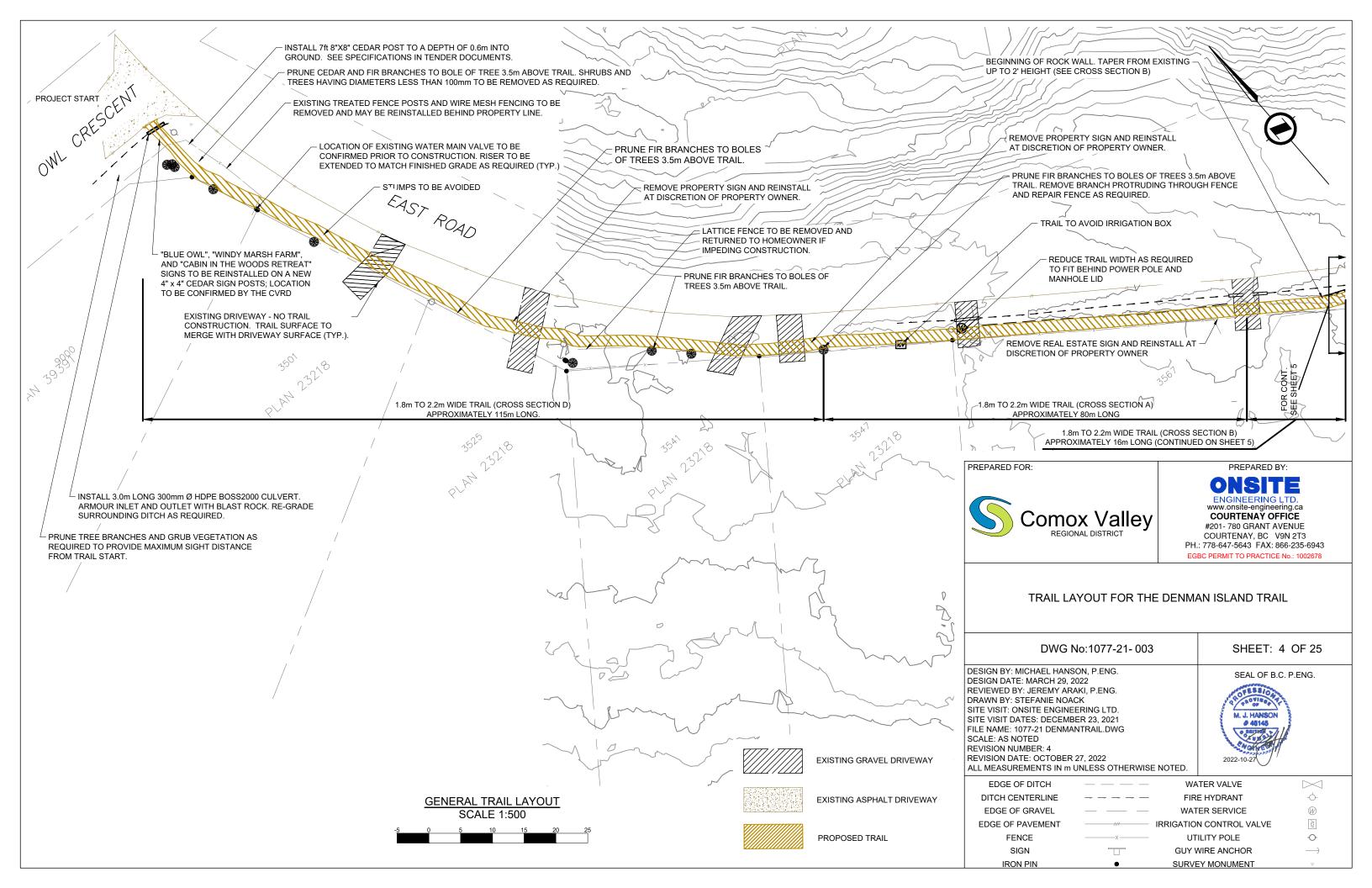
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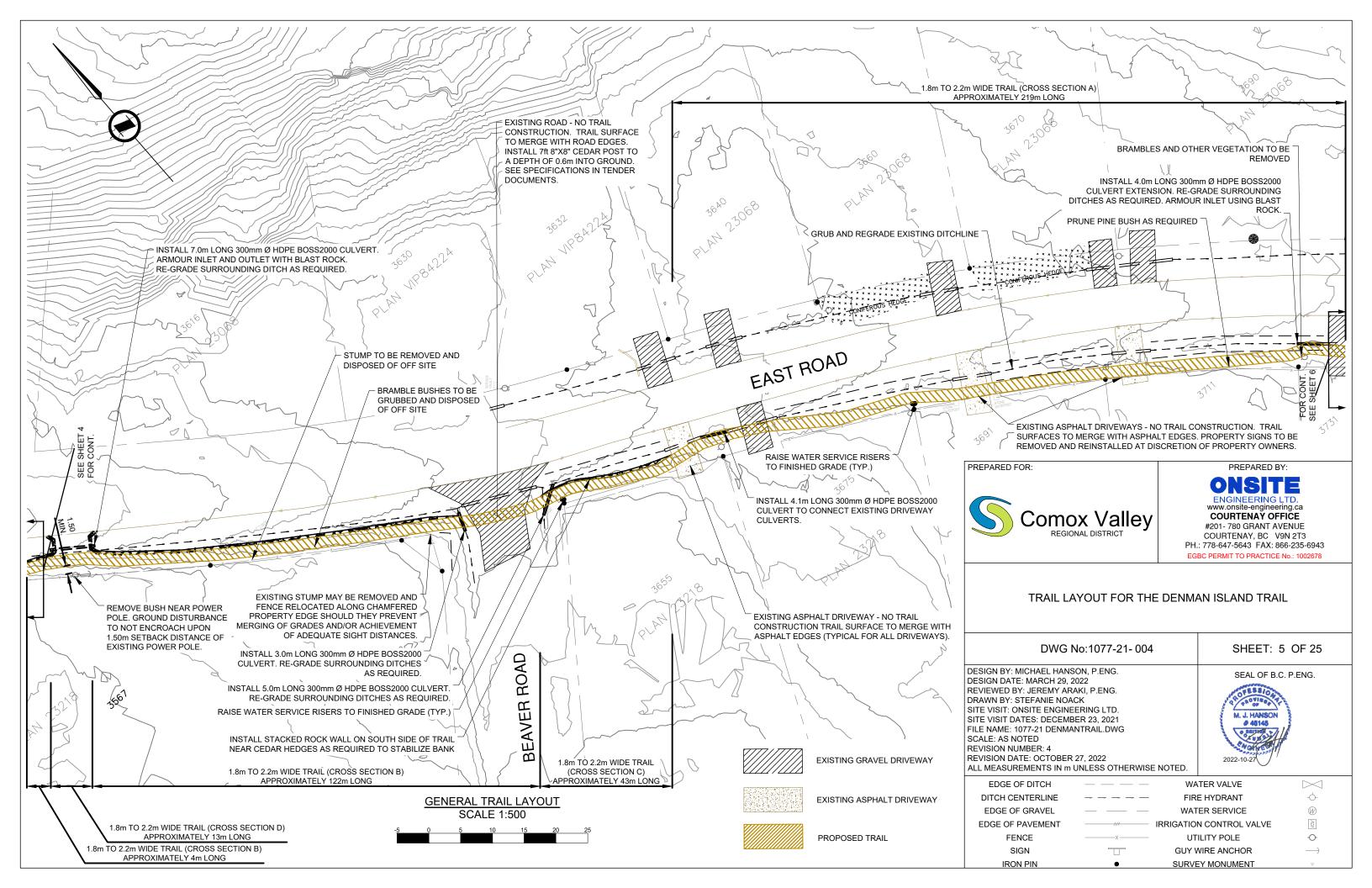
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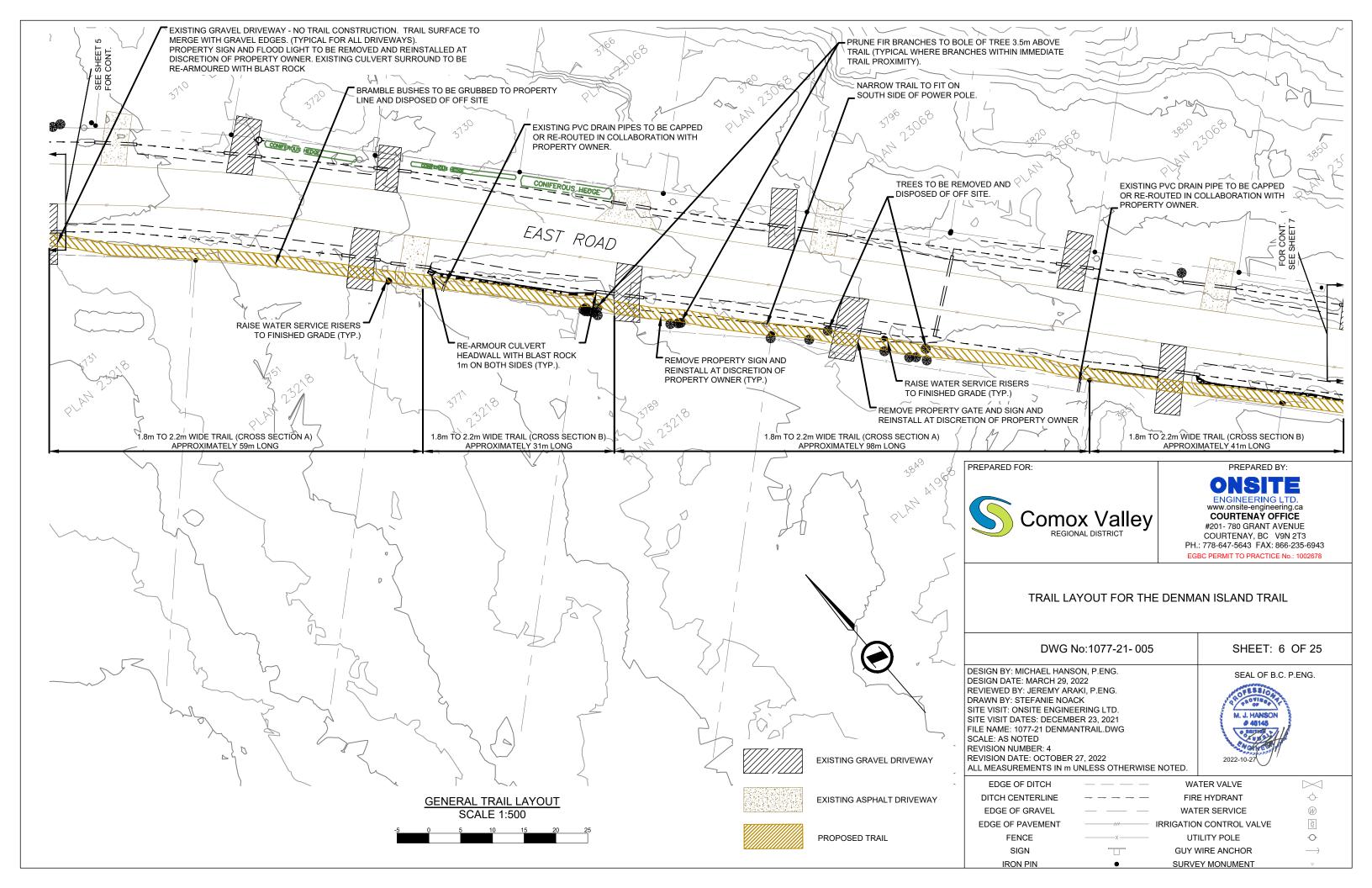
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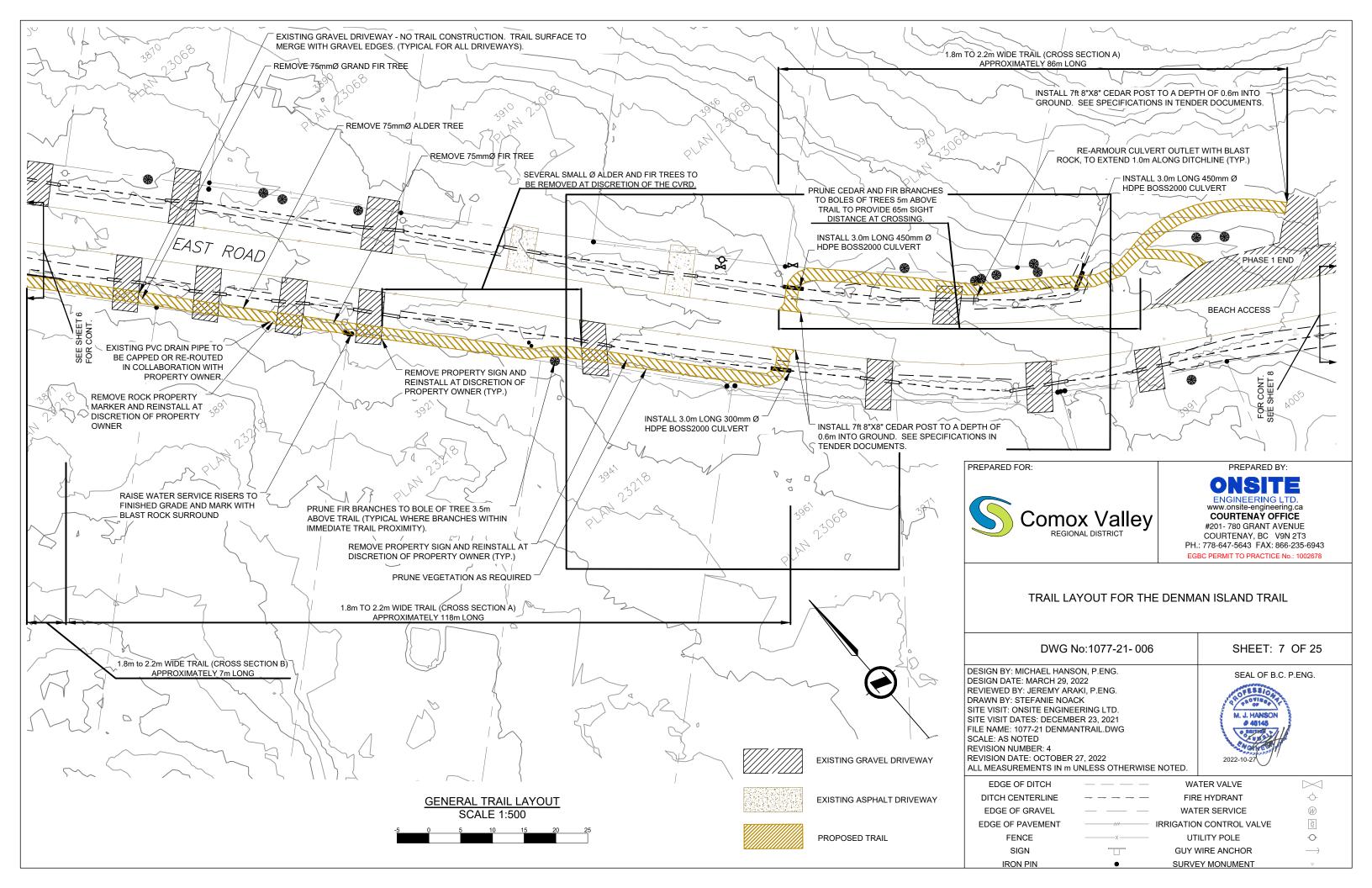
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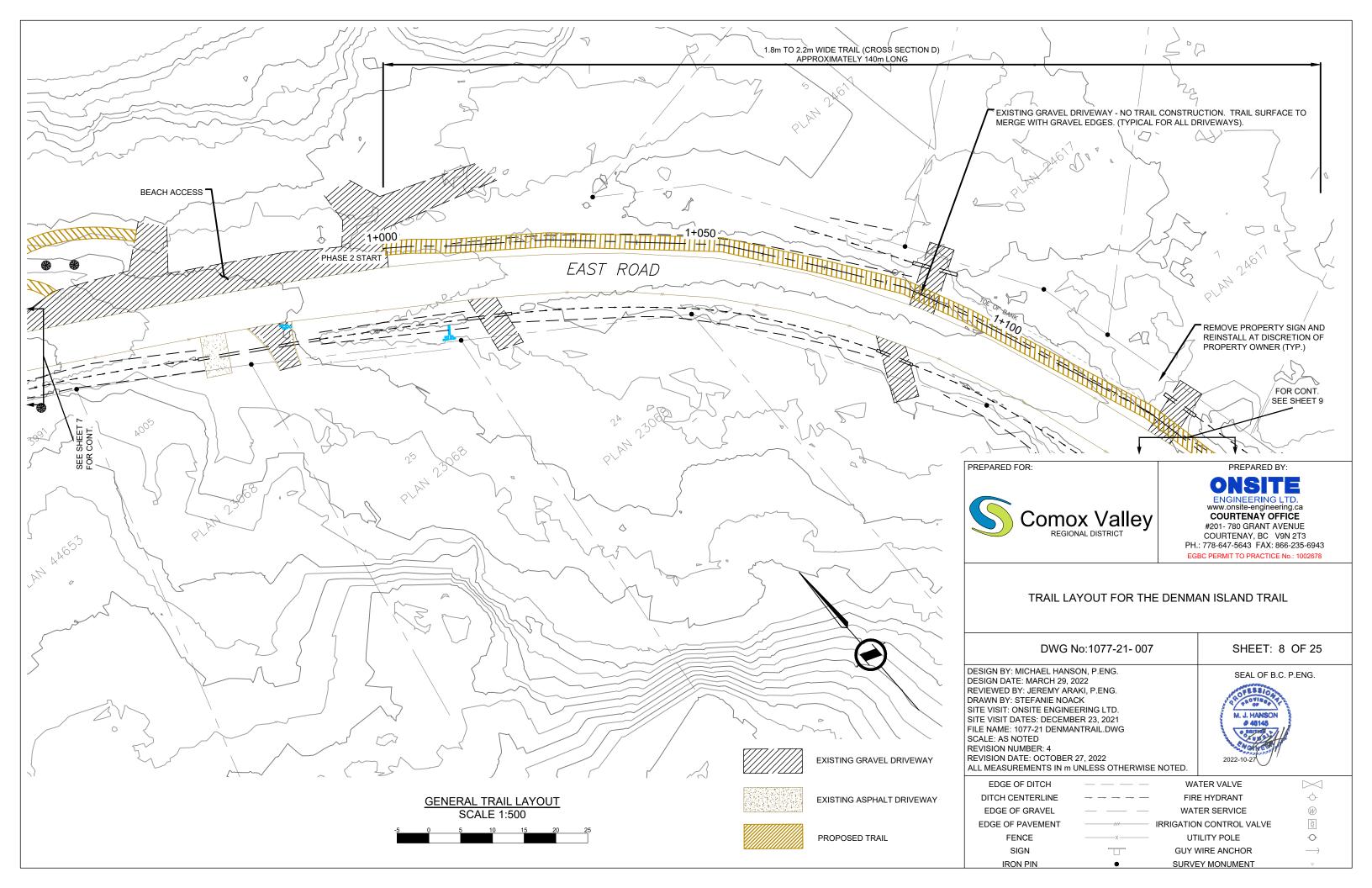
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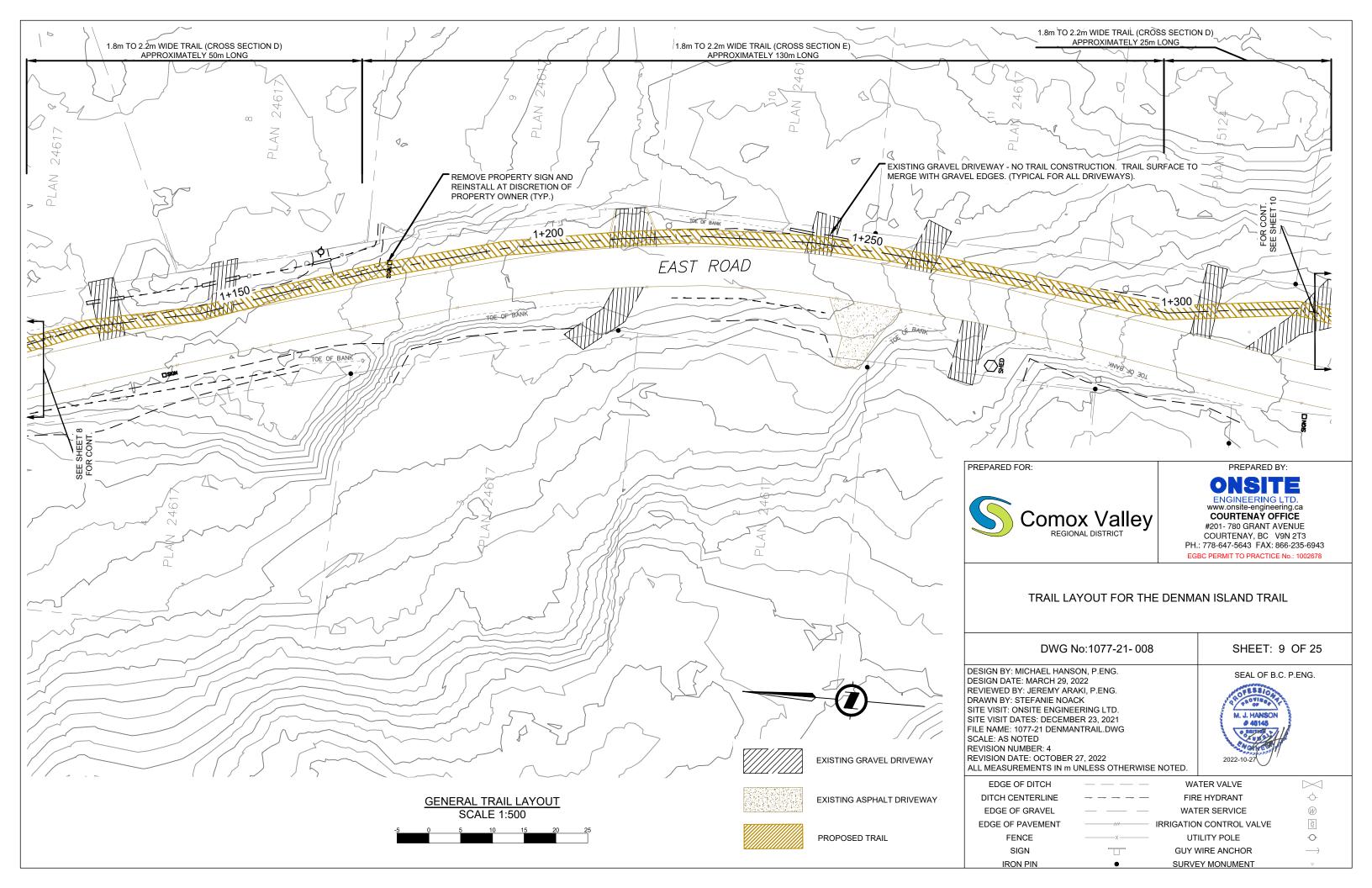


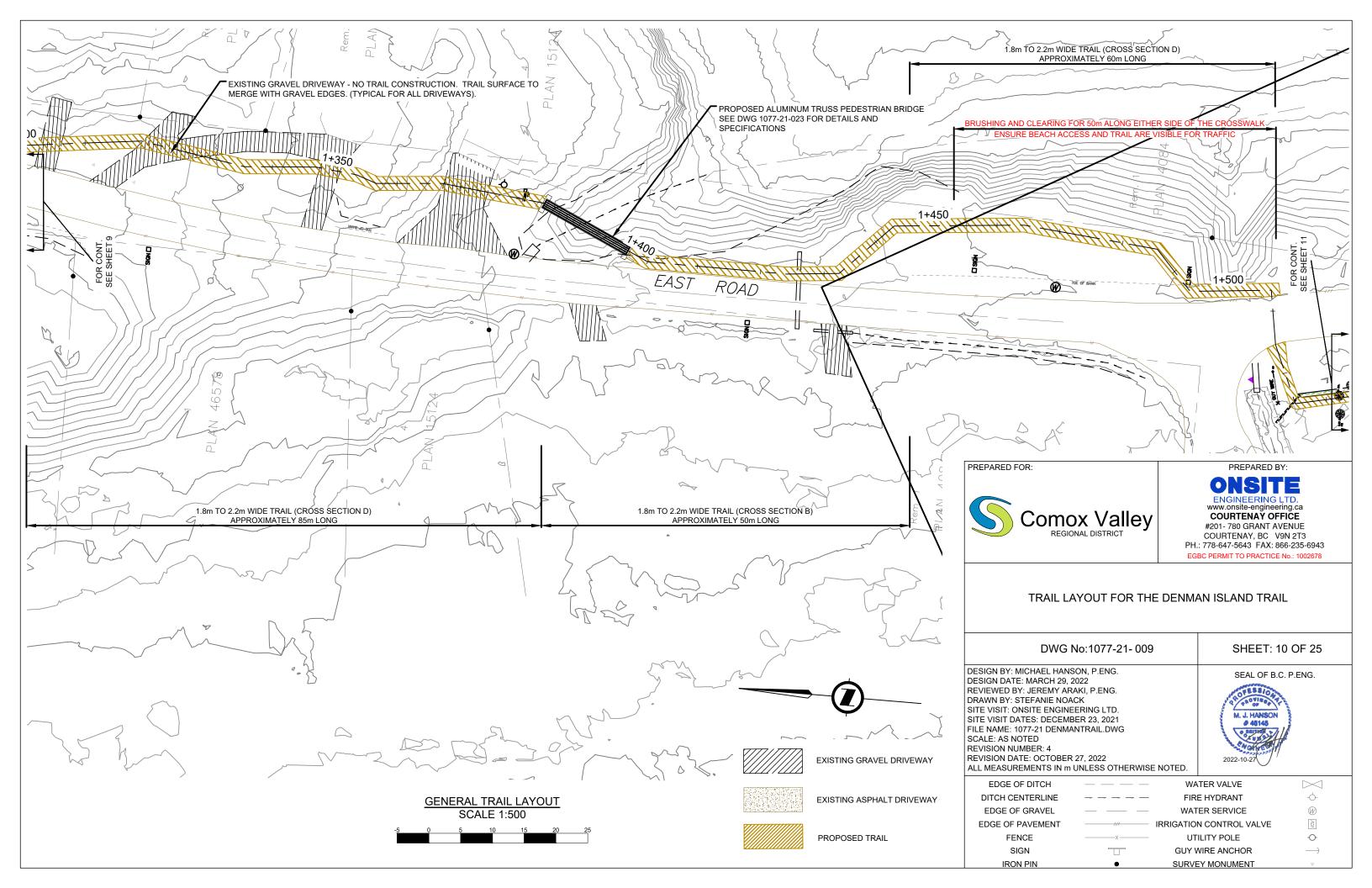


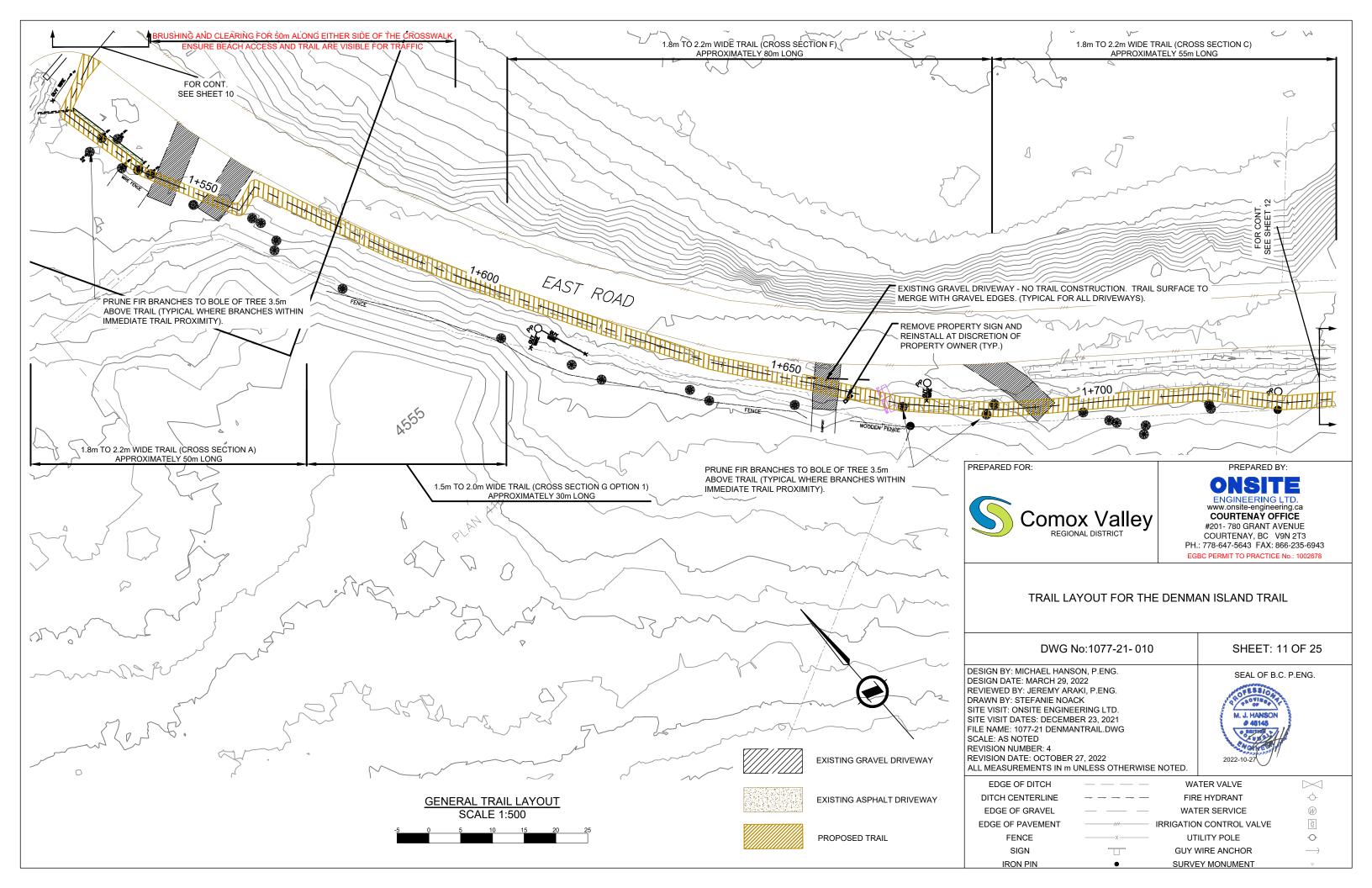


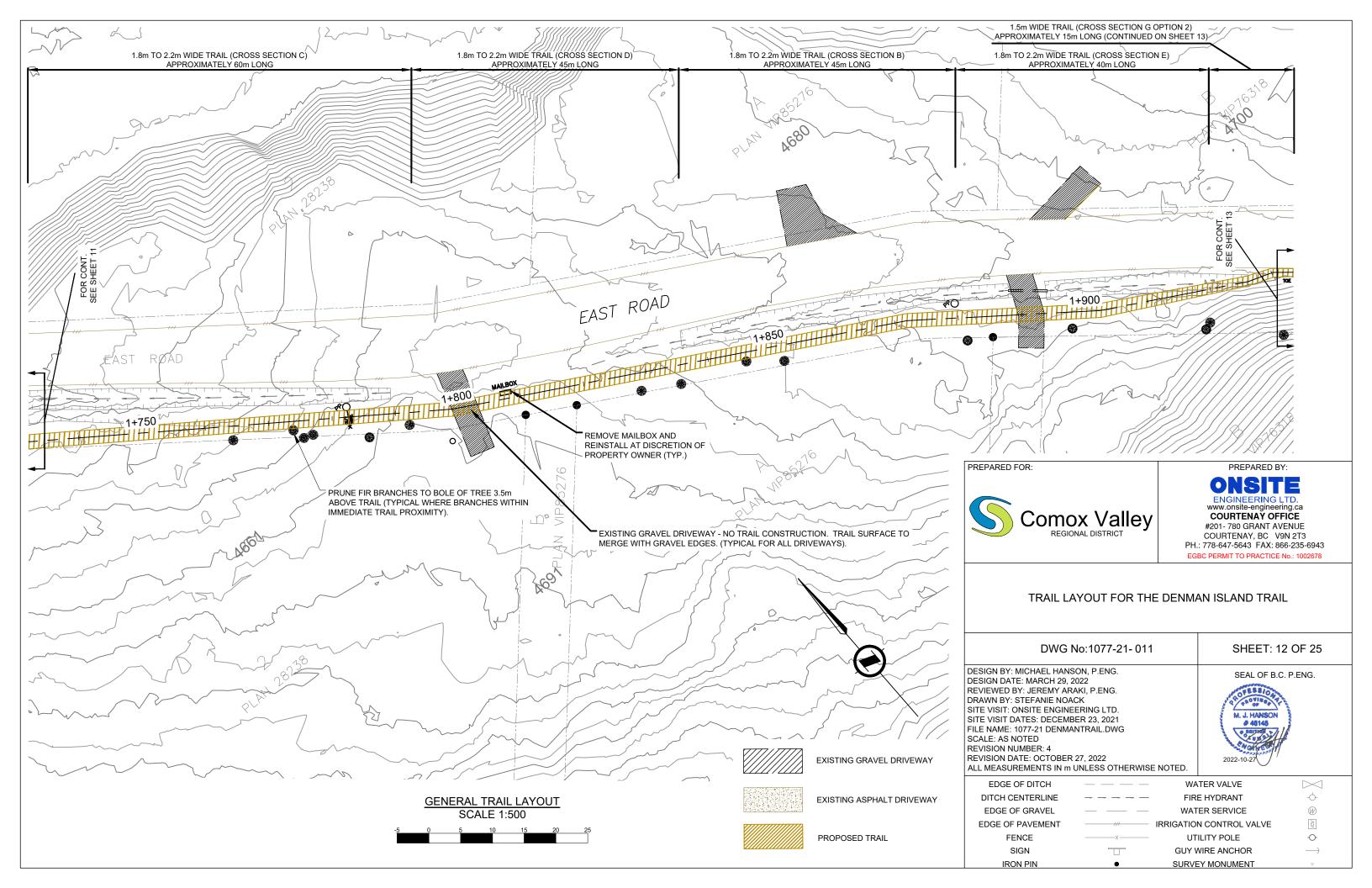


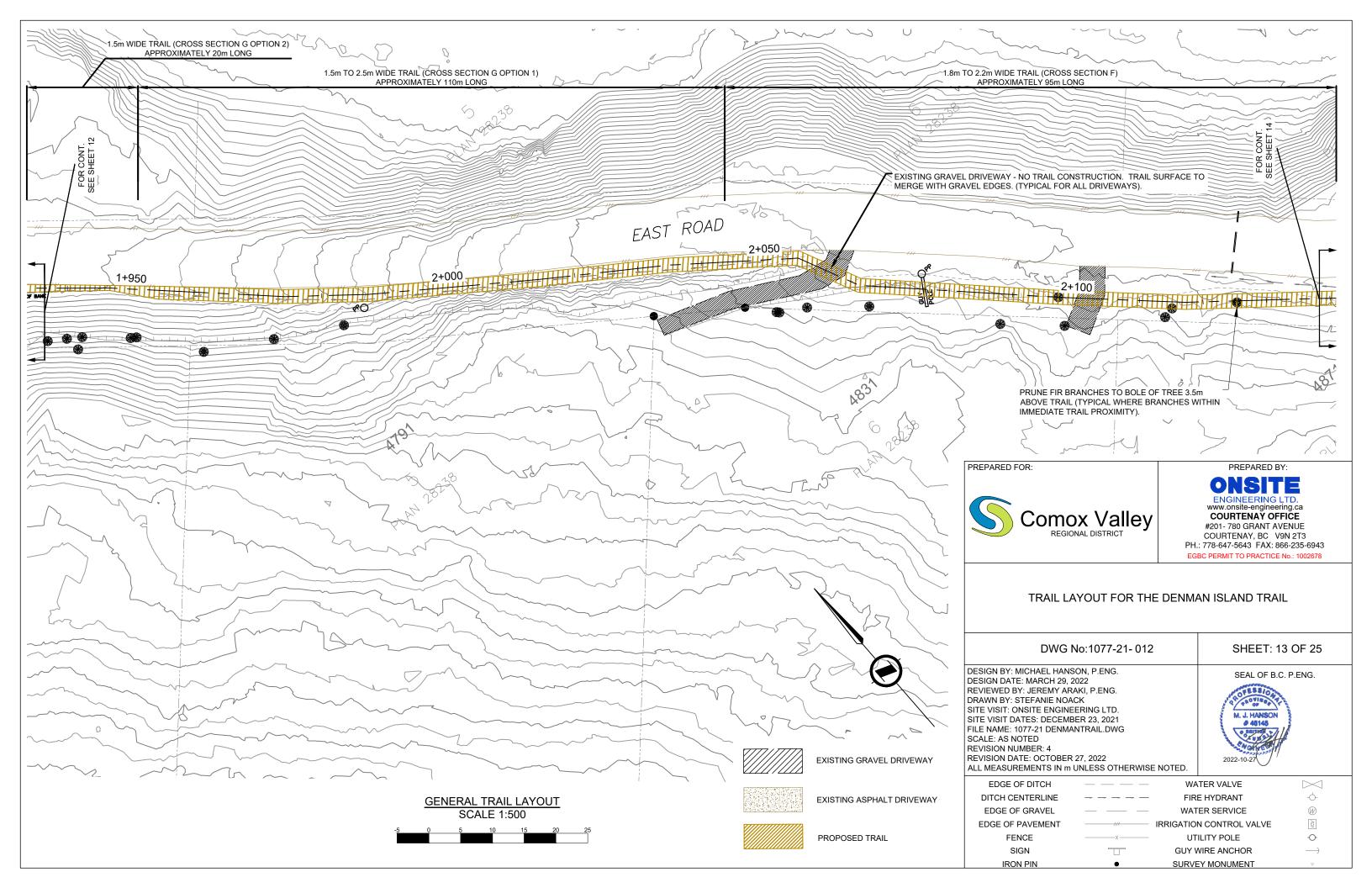


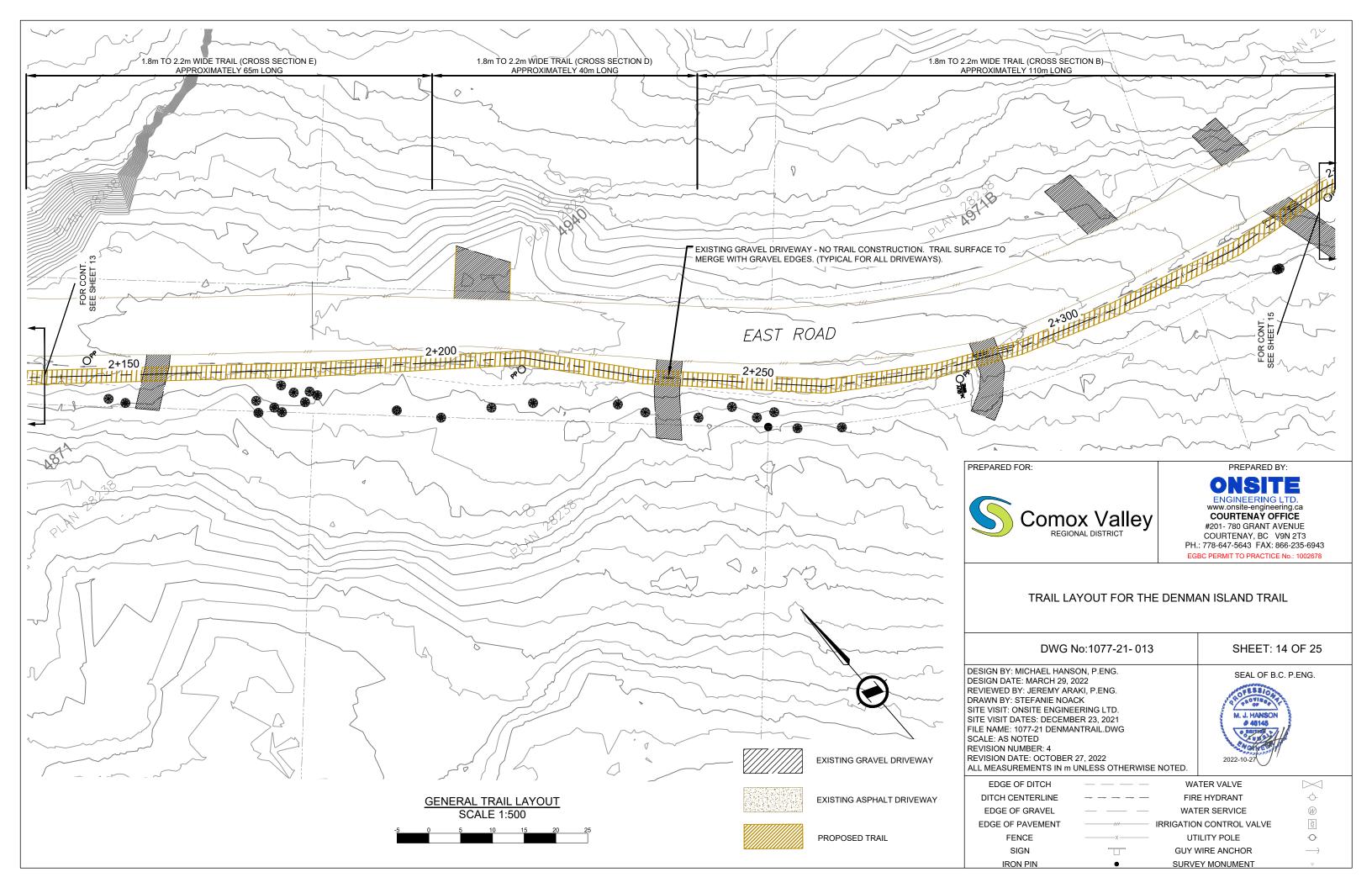


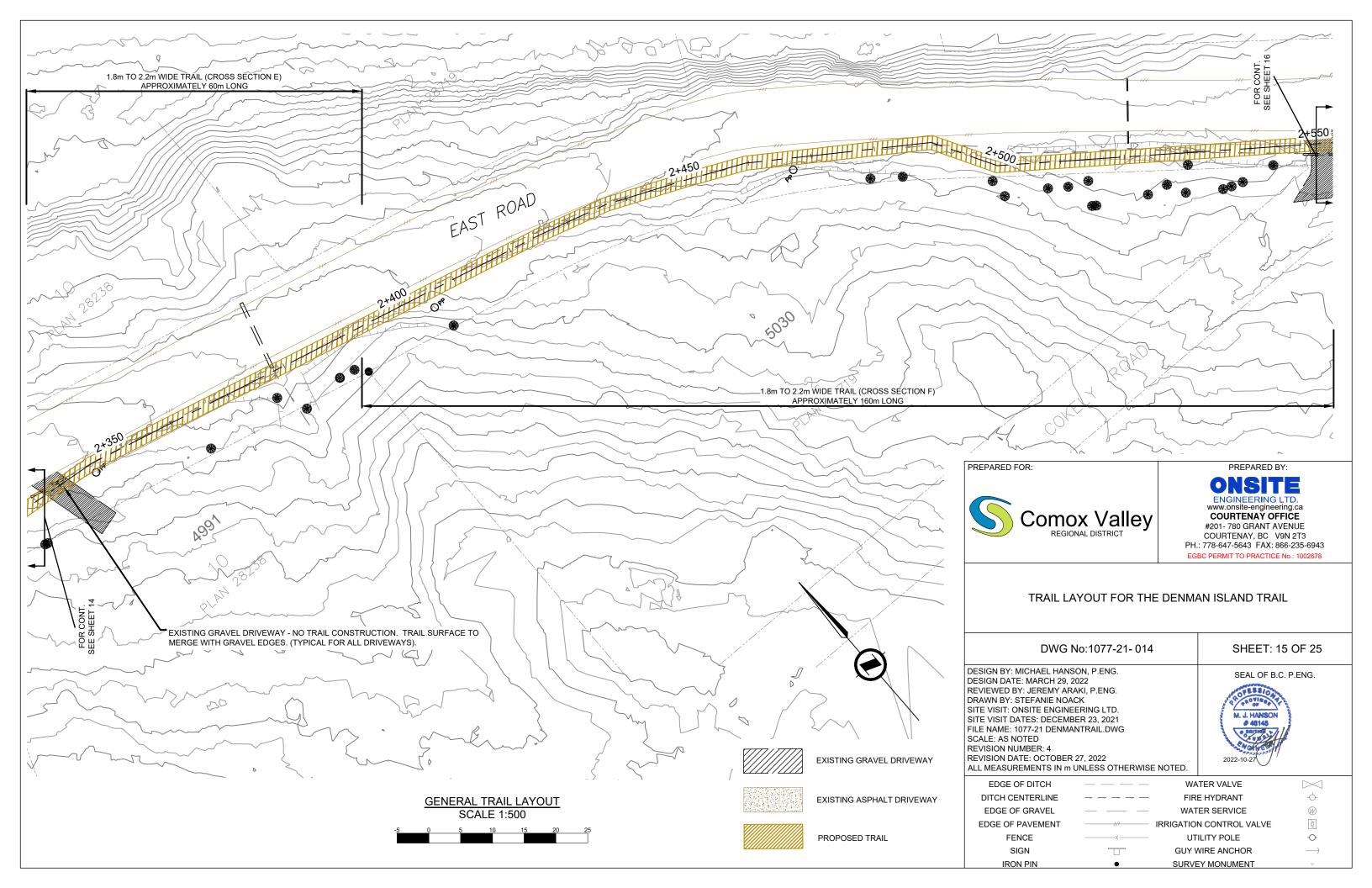


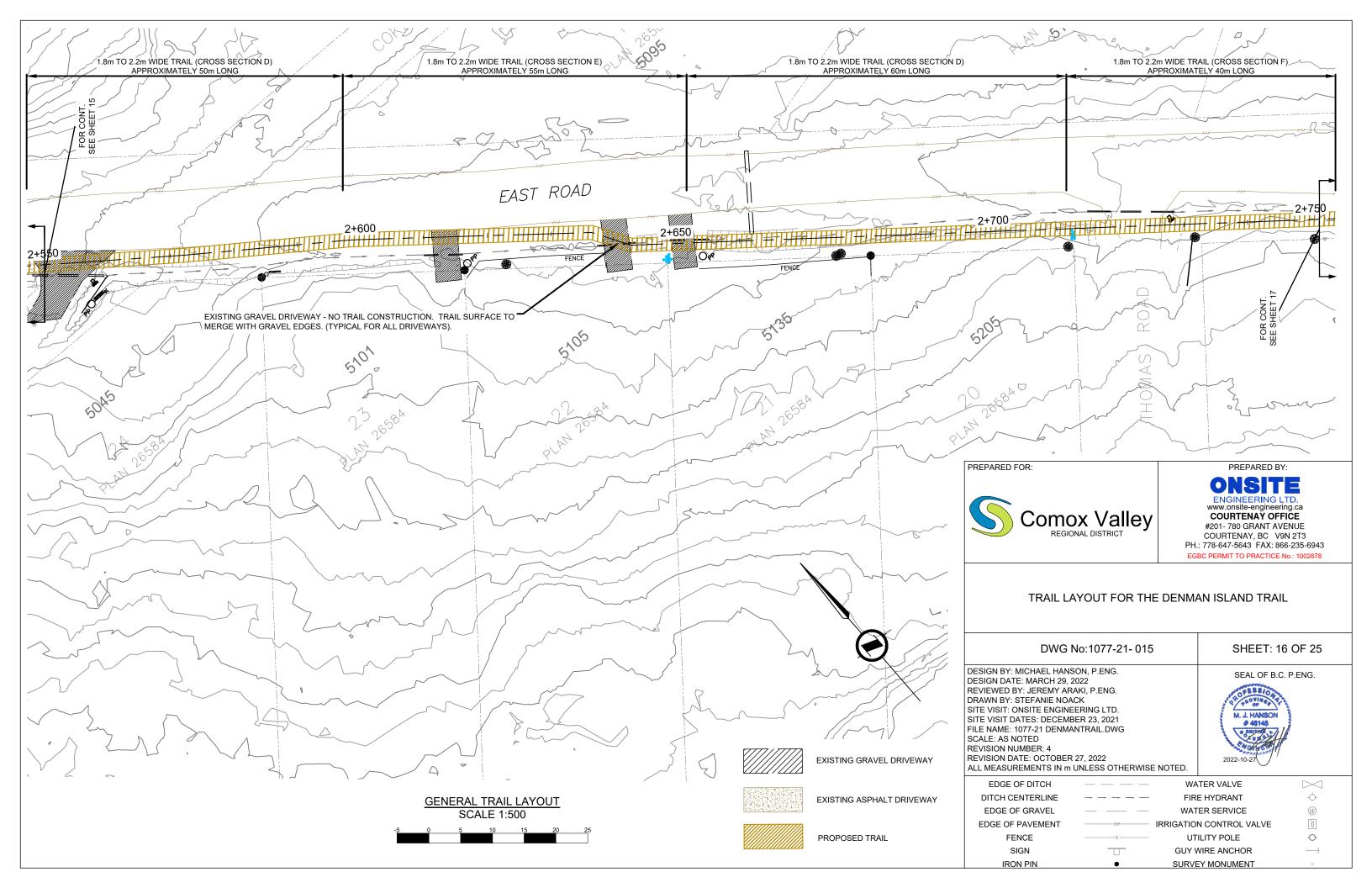


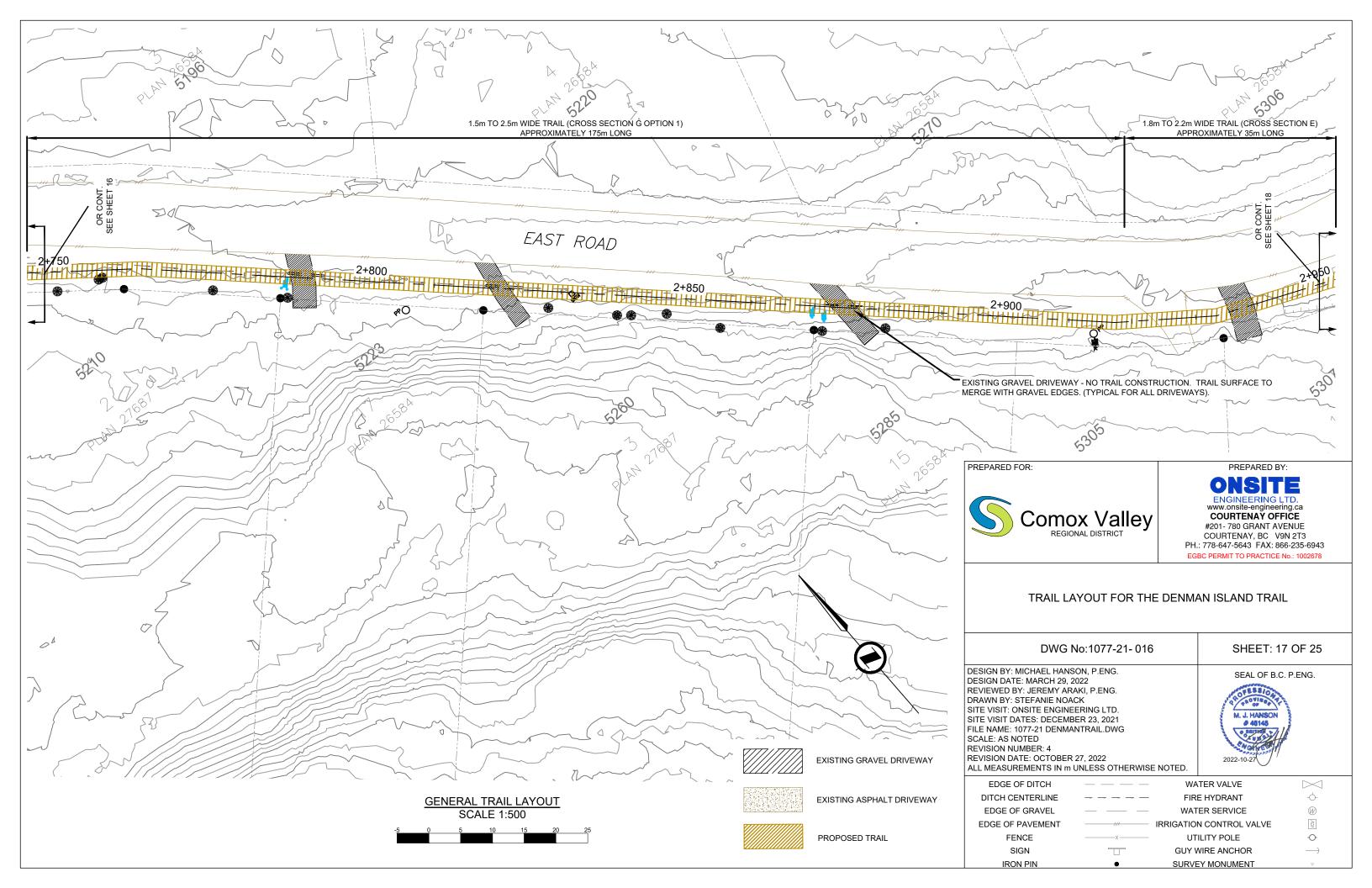


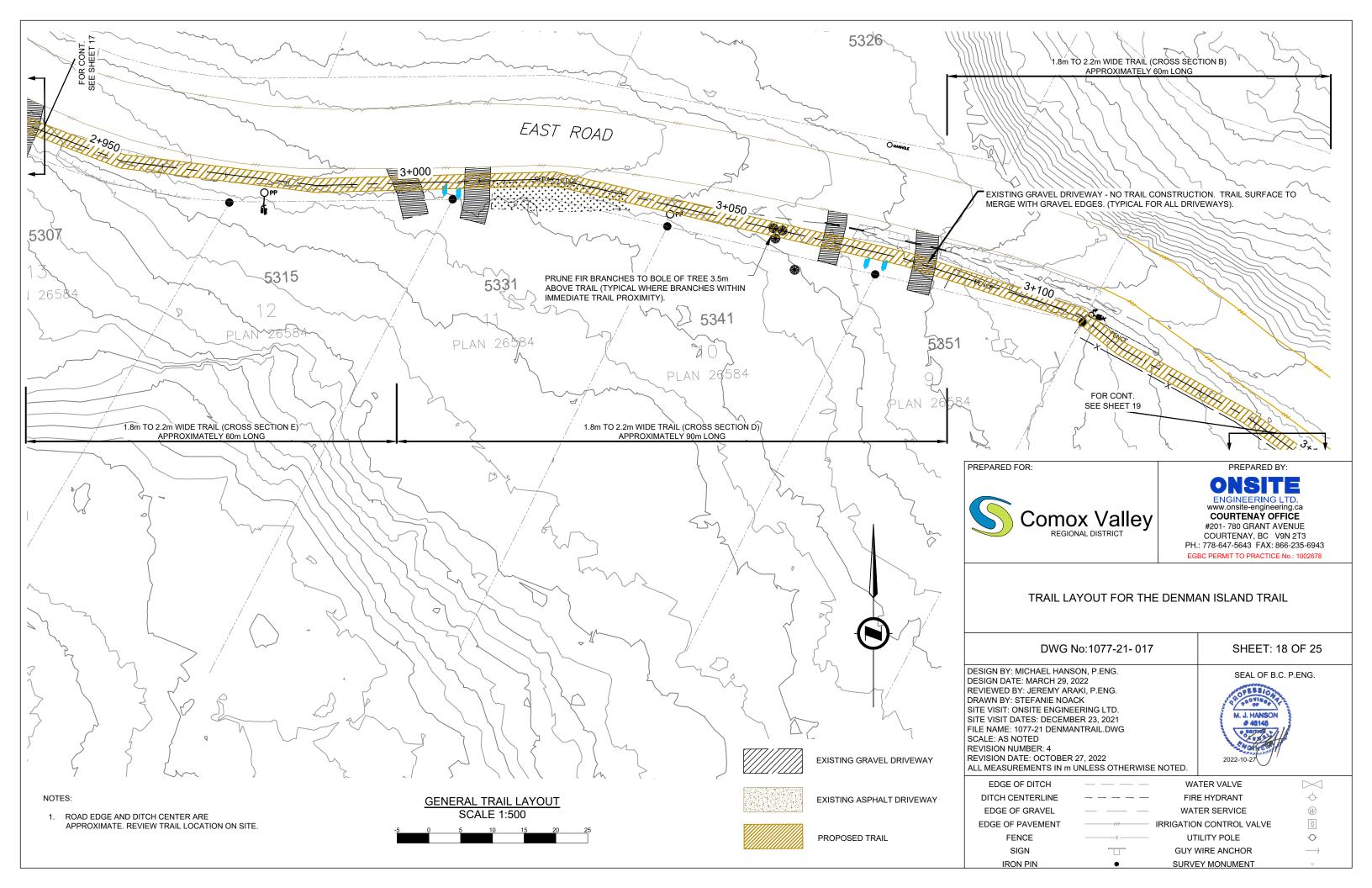


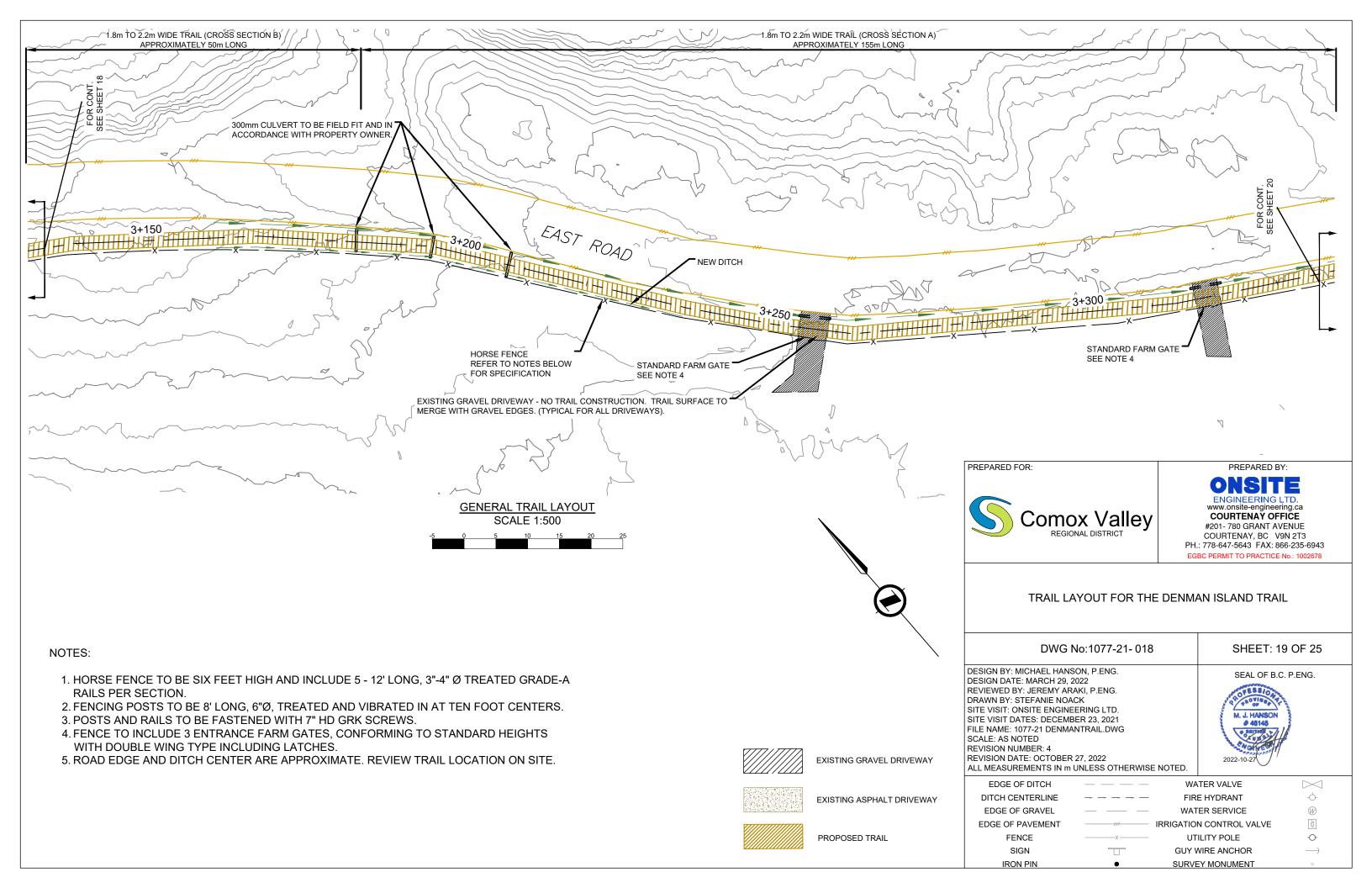


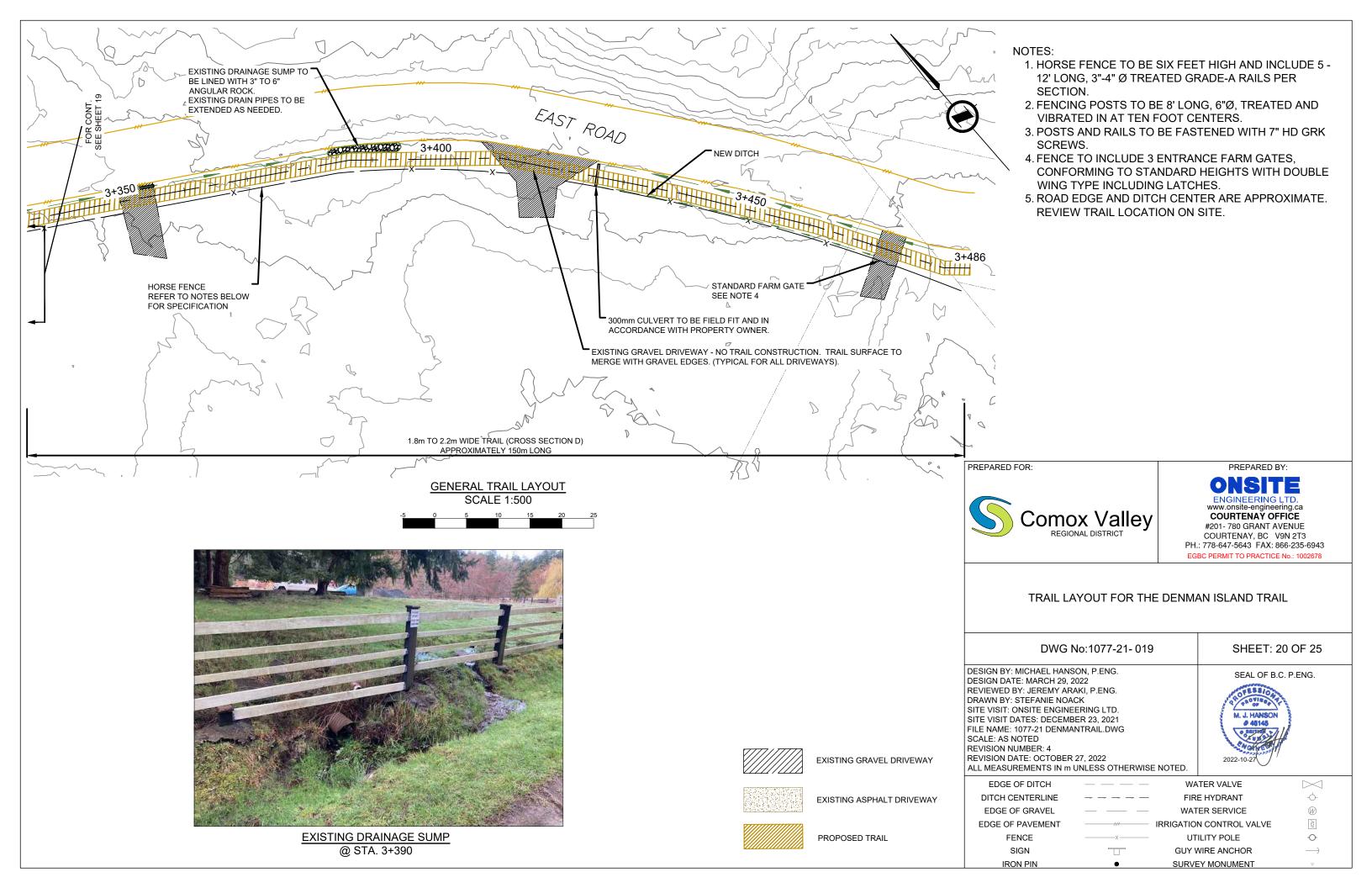


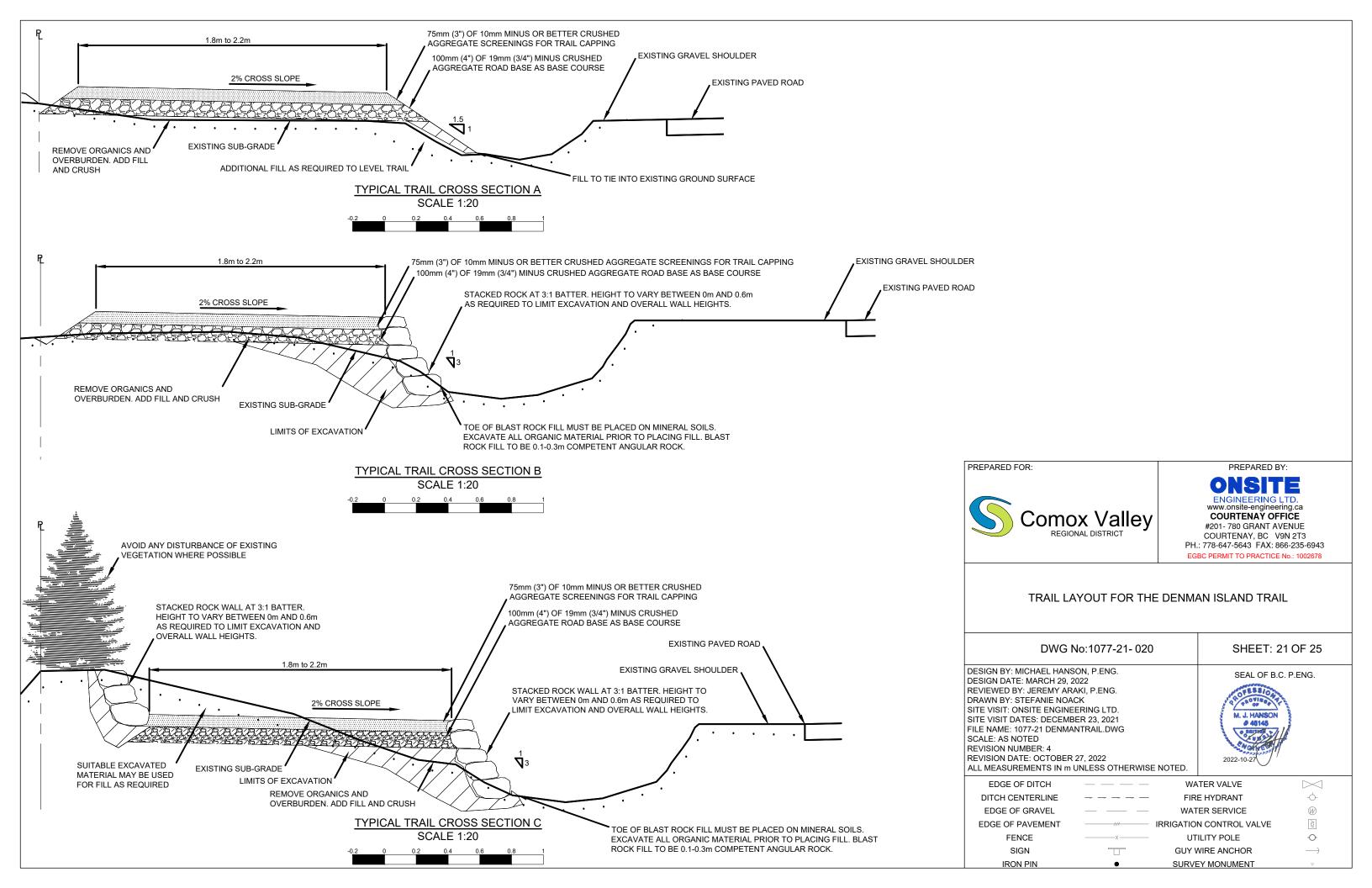


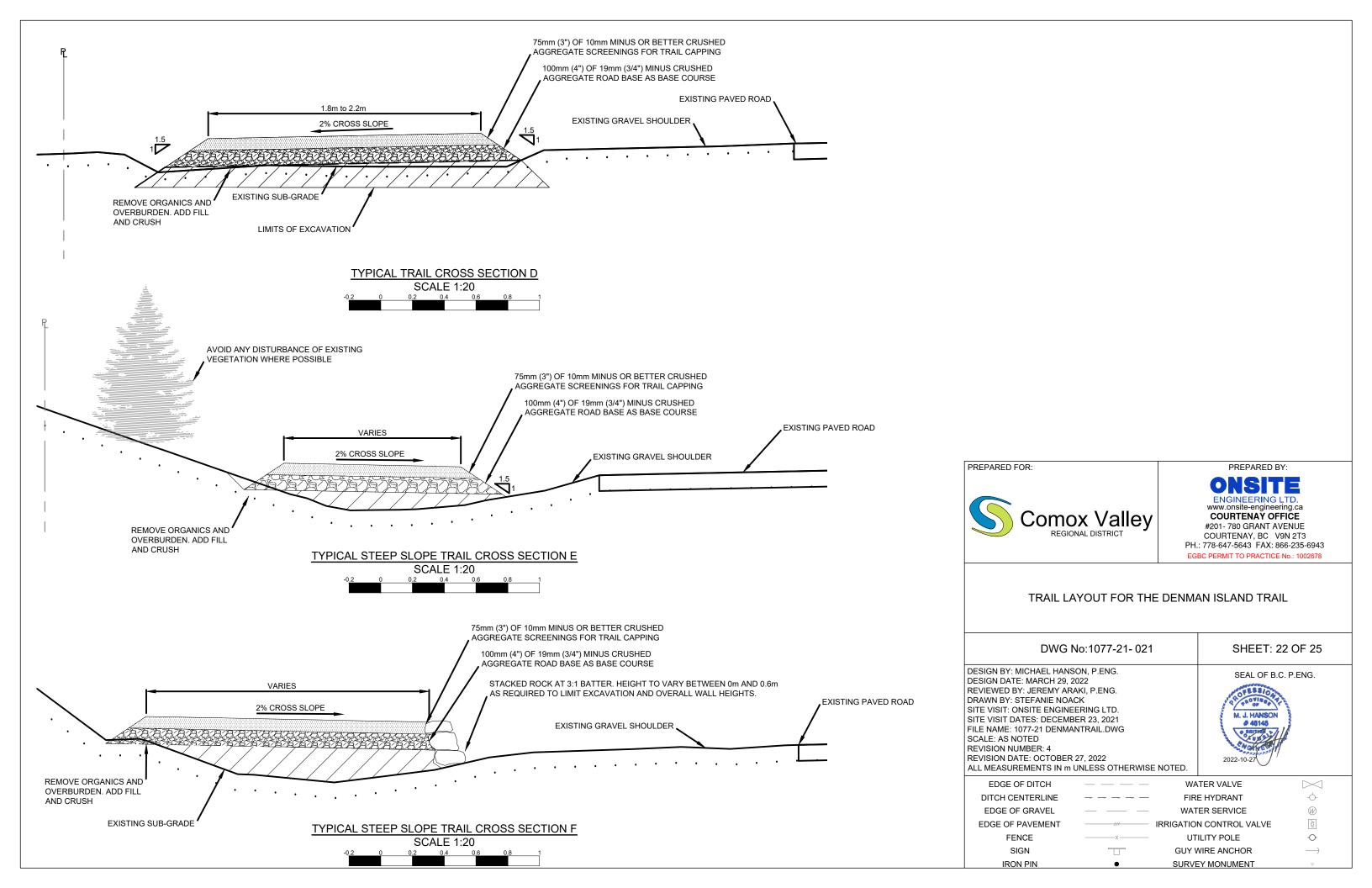


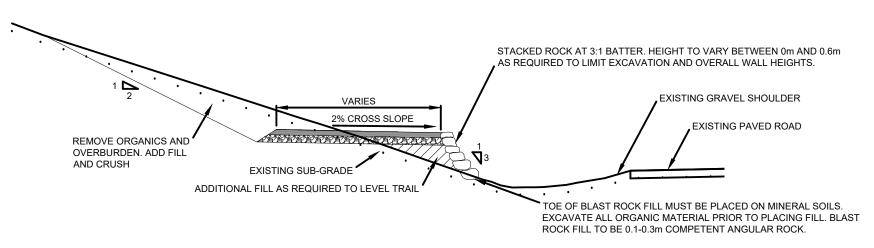




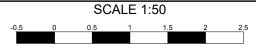


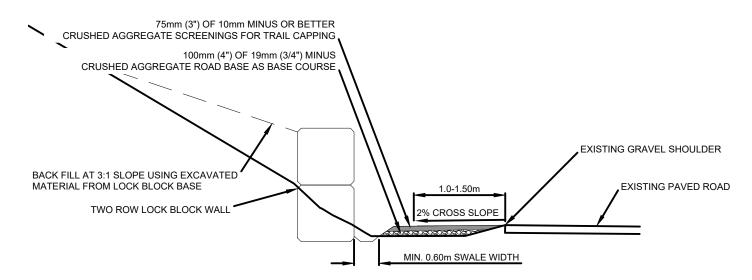






# TYPICAL STEEP SLOPE TRAIL CROSS SECTION G - OPTION 1





## TYPICAL STEEP SLOPE TRAIL CROSS SECTION G - OPTION 2 SCALE 1:50



PREPARED FOR:

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EDGE OF PAVEMENT

**FENCE** 

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### TRAIL LAYOUT FOR THE DENMAN ISLAND TRAIL

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