

# HILLSIDE SUBDIVISION

## TOWN OF THE BLUE MOUNTAINS COUNTY OF GREY



MUNICIPALITY

TOWN OF THE BLUE MOUNTAINS  
32 MILL STREET, BOX 310  
THORNBURY, ONTARIO, N0H2P0

DEVELOPER

TYROLEAN VILLAGE RESORTS Ltd.  
796455 GREY ROAD 19, UNIT 1  
BLUE MOUNTAINS, ONTARIO, L9Y 0N8

DEVELOPER'S ENGINEER



THE HARBOUREDGE BUILDING,  
40 HURON STREET, SUITE 301,  
COLLINGWOOD, ON L9Y 4R3  
705 446-3510 T  
705 446-3520 F  
WWW.CFCROZIER.CA  
INFO@CFCROZIER.CA

MASTER LEGEND

EXISTING FEATURES (EX.)

|  |                                     |
|--|-------------------------------------|
|  | EX. CONTOUR                         |
|  | EX. GRADE                           |
|  | EX. TREELINE                        |
|  | EX. WATERCOURSE                     |
|  | EX. DITCH                           |
|  | EX. WATERMAIN                       |
|  | EX. WATER SERVICE                   |
|  | EX. FIRE HYDRANT & VALVE            |
|  | EX. SANITARY SEWER & MANHOLE        |
|  | EX. SANITARY FORCEMAIN              |
|  | EX. SANITARY SERVICE                |
|  | EX. STORM SEWER & MANHOLE           |
|  | EX. STORM CATCHBASIN                |
|  | EX. STORM DOUBLE CATCHBASIN         |
|  | EX. STORM CATCHBASIN MANHOLE        |
|  | EX. STORM DOUBLE CATCHBASIN MANHOLE |
|  | EX. GAS MAIN                        |
|  | EX. BELL LINE                       |
|  | EX. BELL PEDESTAL                   |
|  | EX. CABLE TELEVISION PEDESTAL       |
|  | EX. HYDRO POLE                      |
|  | EX. LIGHT STANDARD                  |
|  | EX. SIGN                            |
|  | EX. BUILDING                        |
|  | EX. BENCHMARK NUMBER & LOCATION     |
|  | EX. BOREHOLE NUMBER & LOCATION      |
|  | EX. STORM DRAINAGE DIRECTION        |

PROPOSED FEATURES (PR.)

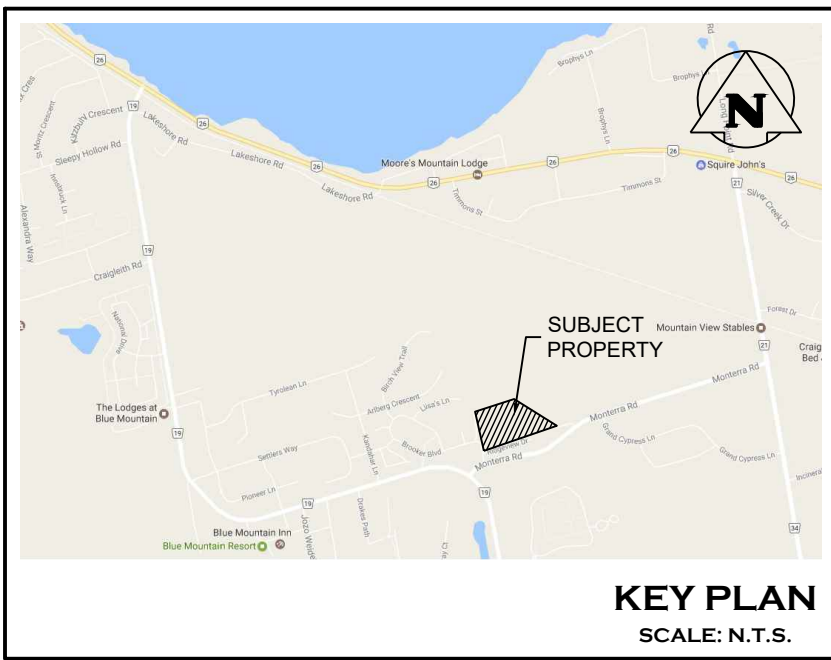
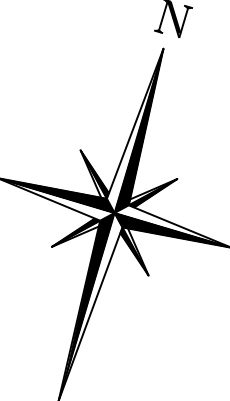
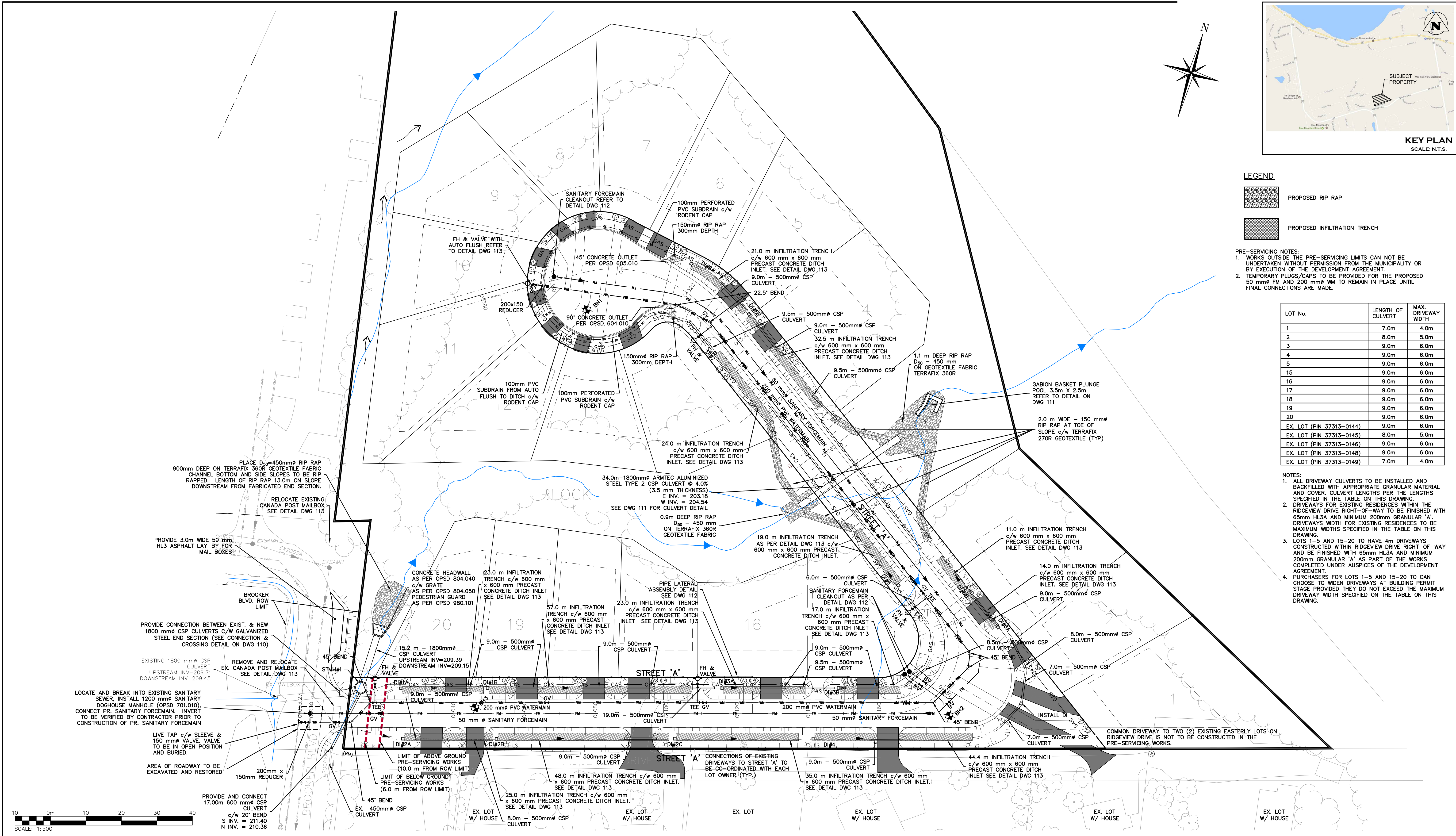
|  |                                         |
|--|-----------------------------------------|
|  | PR. PROPERTY LIMITS                     |
|  | PR. ELEVATION                           |
|  | PR. MINIMUM FIRST FLOOR ELEVATION       |
|  | PR. ELEVATION (MATCH EX. ELEVATION)     |
|  | PR. SWALE & SLOPE                       |
|  | PR. DITCH DRAINAGE                      |
|  | PR. WATERMAIN & VALVE                   |
|  | PR. WATER SERVICE                       |
|  | PR. FIRE HYDRANT & VALVE                |
|  | PR. WATERMAIN AUTOMATIC FLUSHING DEVICE |
|  | PR. SANITARY SEWER & MANHOLE            |
|  | PR. SANITARY FORCEMAIN                  |
|  | PR. SANITARY SERVICE                    |
|  | PR. SANITARY CATCHMENT                  |
|  | SANITARY CATCHMENT POPULATION (2.3ppu)  |
|  | SANITARY CATCHMENT AREA (ha)            |
|  | PR. STORM DITCH INLET                   |
|  | PR. STORM DRAINAGE DIRECTION            |
|  | PR. MAJOR OVERLAND FLOW ROUTE           |
|  | PR. STORM CATCHMENT                     |
|  | STORM CATCHMENT ID                      |
|  | STORM CATCHMENT AREA (ha)               |
|  | STORM RUNOFF COEFFICIENT                |
|  | PR. CURB CUT                            |
|  | PR. CANADA POST COMMUNITY MAIL BOX      |
|  | PR. TRANSFORMER                         |
|  | PR. STOP SIGN                           |
|  | PR. NAME SIGN                           |
|  | PR. NO PARKING SIGN                     |
|  | PR. LIGHT STANDARD                      |
|  | PR. FENCE                               |
|  | PR. BUILDING ENVELOPE                   |
|  | PR. LIGHT DUTY SILT FENCE               |
|  | PR. HEAVY DUTY SILT FENCE               |
|  | PR. STRAW BALE CHECK FLOW               |
|  | PR. ROCK CHECK DAM                      |
|  | PR. SLOPE (2:1 MAX.)                    |
|  | BOREHOLE                                |

DRAWING

TITLE

|      |                                                |
|------|------------------------------------------------|
| 101  | GENERAL SITE SERVICING PLAN                    |
| 102  | OVERALL LOT GRADING AND DRAINAGE PLAN          |
| 103  | PLAN & PROFILE STREET 'A' (STA. 0+000 – 0+190) |
| 104  | PLAN & PROFILE STREET 'A' (STA. 0+190 – 0+380) |
| 105  | STORMWATER DRAINAGE PLAN                       |
| 106  | SANITARY SEWAGE DRAINAGE PLAN                  |
| 107  | WATER DISTRIBUTION PLAN                        |
| 108A | SEDIMENT AND EROSION CONTROL PLAN              |
| 108B | TREE PRESERVATION & INTERIM GRADING PLAN       |
| 109  | CONSTRUCTION NOTES & STANDARD DETAILS          |
| 110  | BROOKER BLVD. 1800mmØ CULVERT EXTENSION        |
| 111  | STREET 'A' 1800mmØ CULVERT                     |
| 112  | SANITARY SEWER STANDARD DETAILS                |
| 113  | STANDARD DETAILS                               |
| 114  | COMPOSITE UTILITY PLAN                         |
| E100 | SITE PLAN – PHOTOMETRIC                        |
| E101 | LIGHTING DETAILS AND SCHEDULES                 |

PROJECT No.: 109-4336



- LEGEND**
- PROPOSED RIP RAP
  - PROPOSED INFILTRATION TRENCH

- PRE-SERVICING NOTES:**
- WORKS OUTSIDE THE PRE-SERVICING LIMITS CAN NOT BE UNDERTAKEN WITHOUT PERMISSION FROM THE MUNICIPALITY OR BY EXECUTION OF THE DEVELOPMENT AGREEMENT.
  - TEMPORARY PLUGS/CAPS TO BE PROVIDED FOR THE PROPOSED 50 mm FM AND 200 mm FM TO REMAIN IN PLACE UNTIL FINAL CONNECTIONS ARE MADE.

| LOT No.                  | LENGTH OF CULVERT | MAX. DRIVEWAY WIDTH |
|--------------------------|-------------------|---------------------|
| 1                        | 7.0m              | 4.0m                |
| 2                        | 8.0m              | 5.0m                |
| 3                        | 9.0m              | 6.0m                |
| 4                        | 9.0m              | 6.0m                |
| 5                        | 9.0m              | 6.0m                |
| 15                       | 9.0m              | 6.0m                |
| 16                       | 9.0m              | 6.0m                |
| 17                       | 9.0m              | 6.0m                |
| 18                       | 9.0m              | 6.0m                |
| 19                       | 9.0m              | 6.0m                |
| 20                       | 9.0m              | 6.0m                |
| EX. LOT (PIN 37313-0144) | 9.0m              | 6.0m                |
| EX. LOT (PIN 37313-0145) | 8.0m              | 5.0m                |
| EX. LOT (PIN 37313-0146) | 9.0m              | 6.0m                |
| EX. LOT (PIN 37313-0148) | 9.0m              | 6.0m                |
| EX. LOT (PIN 37313-0149) | 7.0m              | 4.0m                |

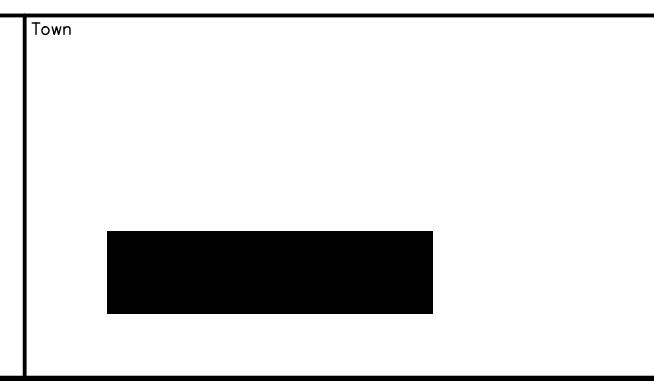
- NOTES:**
- ALL DRIVEWAY CULVERTS TO BE INSTALLED AND BACKFILLED WITH APPROPRIATE GRANULAR MATERIAL AND COVER. CULVERT LENGTHS PER THE LENGTHS SPECIFIED IN THE TABLE ON THIS DRAWING.
  - DRIVEWAYS FOR EXISTING RESIDENCES WITHIN THE RIDGEVIEW DRIVE RIGHT-OF-WAY TO BE FINISHED WITH 65mm HL3A AND MINIMUM 200mm GRANULAR 'A' DRIVEWAYS WIDTH FOR EXISTING RESIDENCES TO BE MAXIMUM WIDTHS SPECIFIED IN THE TABLE ON THIS DRAWING.
  - LOTS 1-5 AND 15-20 TO HAVE 4m DRIVEWAYS CONSTRUCTED WITHIN RIDGEVIEW DRIVE RIGHT-OF-WAY AND BE FINISHED WITH 65mm HL3A AND MINIMUM 200mm GRANULAR 'A' AS PART OF THE WORKS COMPLETED UNDER AUSPICES OF THE DEVELOPMENT AGREEMENT.
  - PURCHASERS FOR LOTS 1-5 AND 15-20 TO CAN CHOOSE TO WIDEN DRIVEWAYS AT BUILDING PERMIT STAGE PROVIDED THEY DO NOT EXCEED THE MAXIMUM DRIVEWAY WIDTH SPECIFIED ON THE TABLE ON THIS DRAWING.



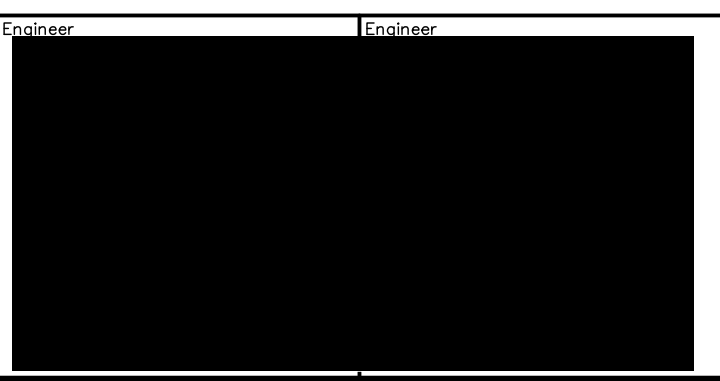
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3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
4. DO NOT SCALE THE DRAWINGS.
5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

**TEMPORARY BENCHMARKS**

TBM#1 - RAILWAY SPIKE IN NORTHWEST FACE OF HYDRO POLE AT SOUTHWEST CORNER OF SUBDIVISION.  
ELEVATION = 212.226m



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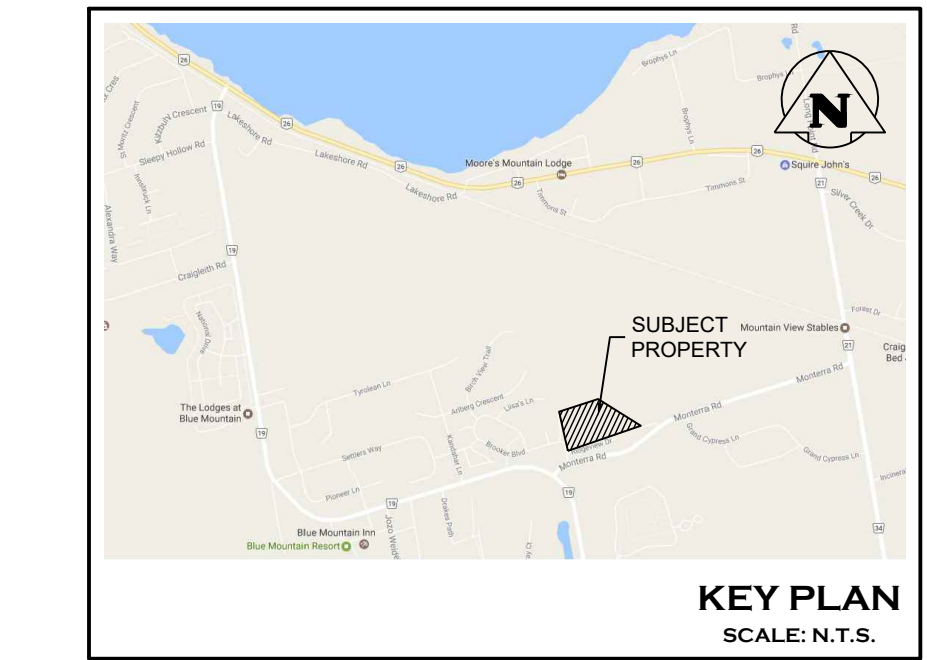
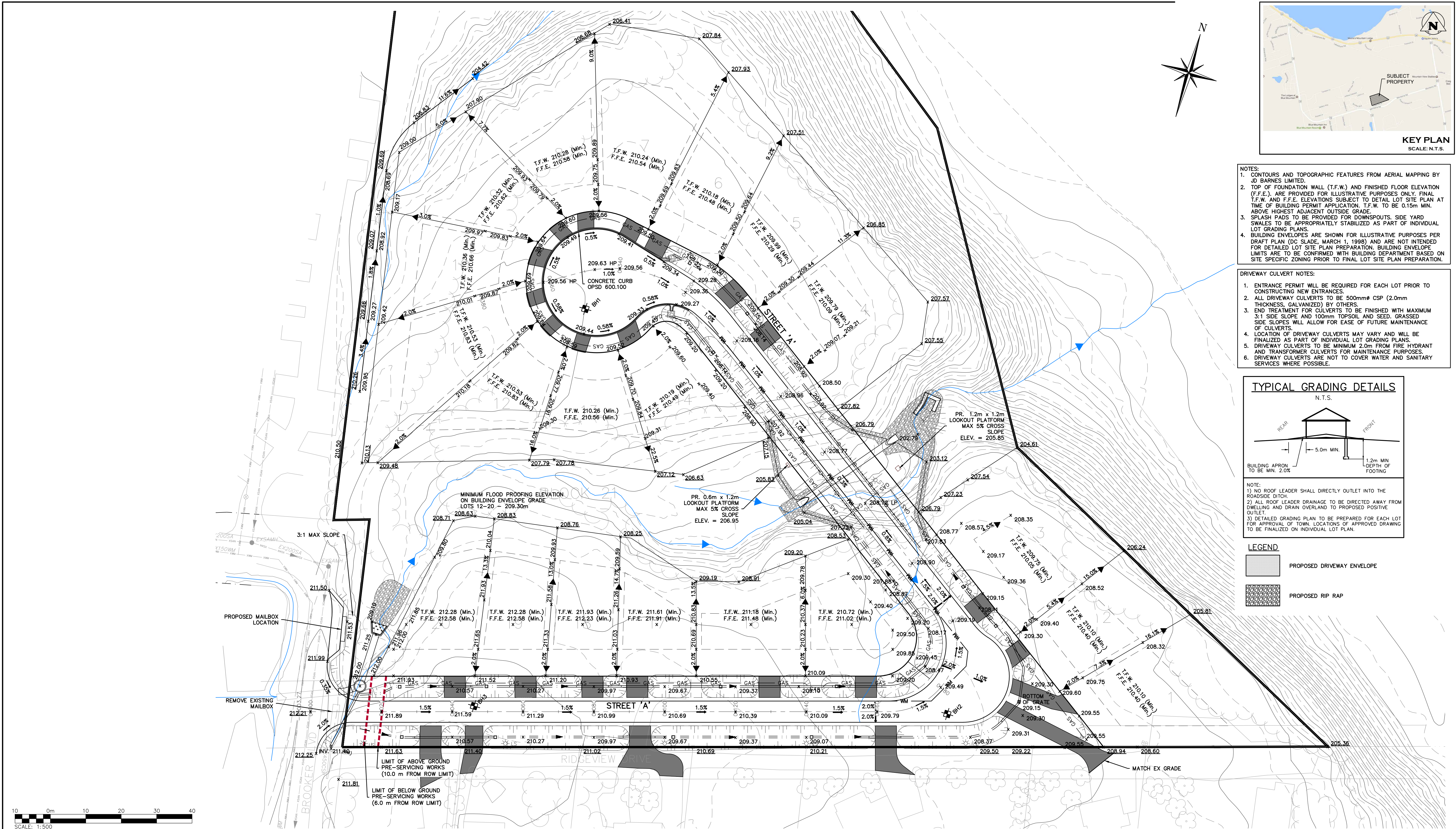
**HILLSIDE SUBDIVISION**  
**TOWN OF THE BLUE MOUNTAINS**

**GENERAL SITE SERVICING PLAN**



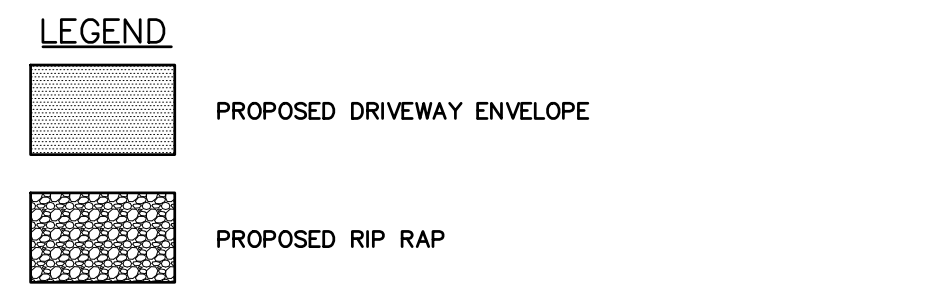
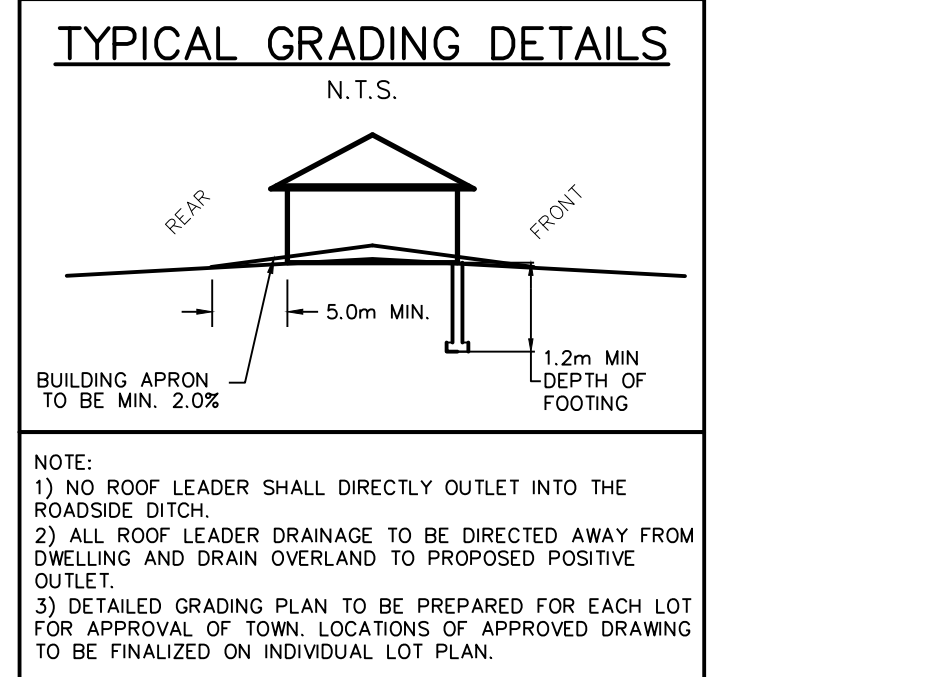
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705 446-3520 F  
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|          |             |           |             |         |          |
|----------|-------------|-----------|-------------|---------|----------|
| Drawn By | N.L./M.V.R. | Design By | C.F.C./B.H. | Project | 109-4336 |
| Check By | R.W.        | Check By  | B.H.        | Scale   | 1:500    |
|          |             |           |             | Drawing | 101      |



- NOTES:
1. CONTOURS AND TOPOGRAPHIC FEATURES FROM AERIAL MAPPING BY JD BARNES LIMITED.
  2. TOP OF FOUNDATION WALL (T.F.W.) AND FINISHED FLOOR ELEVATION (F.F.E.) ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY. FINAL T.F.W. AND F.F.E. ELEVATIONS SUBJECT TO DETAIL LOT SITE PLAN AT TIME OF BUILDING PERMIT APPLICATION. T.F.W. TO BE 0.15m MIN. ABOVE HIGHEST ADJACENT OUTSIDE GRADE.
  3. SPLASH PADS TO BE PROVIDED FOR DOWNSPOUTS. SIDE YARD SWALES TO BE APPROPRIATELY STABILIZED AS PART OF INDIVIDUAL LOT GRADING PLANS.
  4. BUILDING ENVELOPES ARE SHOWN FOR ILLUSTRATIVE PURPOSES PER DRAFT PLAN (DC SLIDE, MARCH 1, 1998) AND ARE NOT INTENDED FOR DETAILED LOT SITE PLAN PREPARATION. BUILDING ENVELOPE LIMITS ARE TO BE CONFIRMED WITH BUILDING DEPARTMENT BASED ON SITE SPECIFIC ZONING PRIOR TO FINAL LOT SITE PLAN PREPARATION.

- DRIVEWAY CULVERT NOTES:
1. ENTRANCE PERMIT WILL BE REQUIRED FOR EACH LOT PRIOR TO CONSTRUCTING NEW ENTRANCES.
  2. ALL DRIVEWAY CULVERTS TO BE 500mm $\varnothing$  CSP (2.0mm THICKNESS, GALVANIZED) BY OTHERS.
  3. END TREATMENT FOR CULVERTS TO BE FINISHED WITH MAXIMUM 3:1 SIDE SLOPE AND 100mm TOPSOIL AND SEED. GRASSED SIDE SLOPES WILL ALLOW FOR EASE OF FUTURE MAINTENANCE OF CULVERTS.
  4. LOCATION OF DRIVEWAY CULVERTS MAY VARY AND WILL BE FINALIZED AS PART OF INDIVIDUAL LOT GRADING PLANS.
  5. DRIVEWAY CULVERTS TO BE MINIMUM 2.0m FROM FIRE HYDRANT AND TRANSFORMER CULVERTS FOR MAINTENANCE PURPOSES.
  6. DRIVEWAY CULVERTS ARE NOT TO COVER WATER AND SANITARY SERVICES WHERE POSSIBLE.



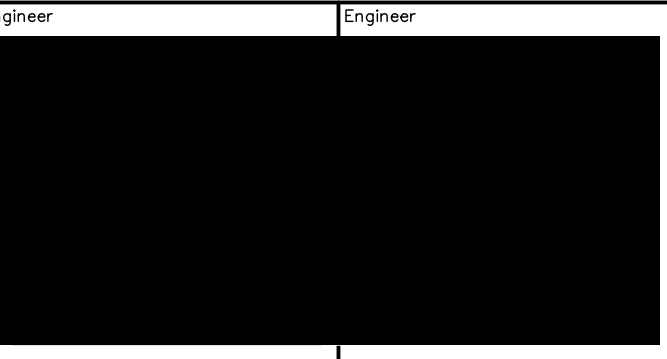
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**TEMPORARY BENCHMARKS**

TBM#1 - RAILWAY SPIKE IN NORTHWEST FACE OF HYDRO POLE AT SOUTHWEST CORNER OF SUBDIVISION. ELEVATION = 212.226m



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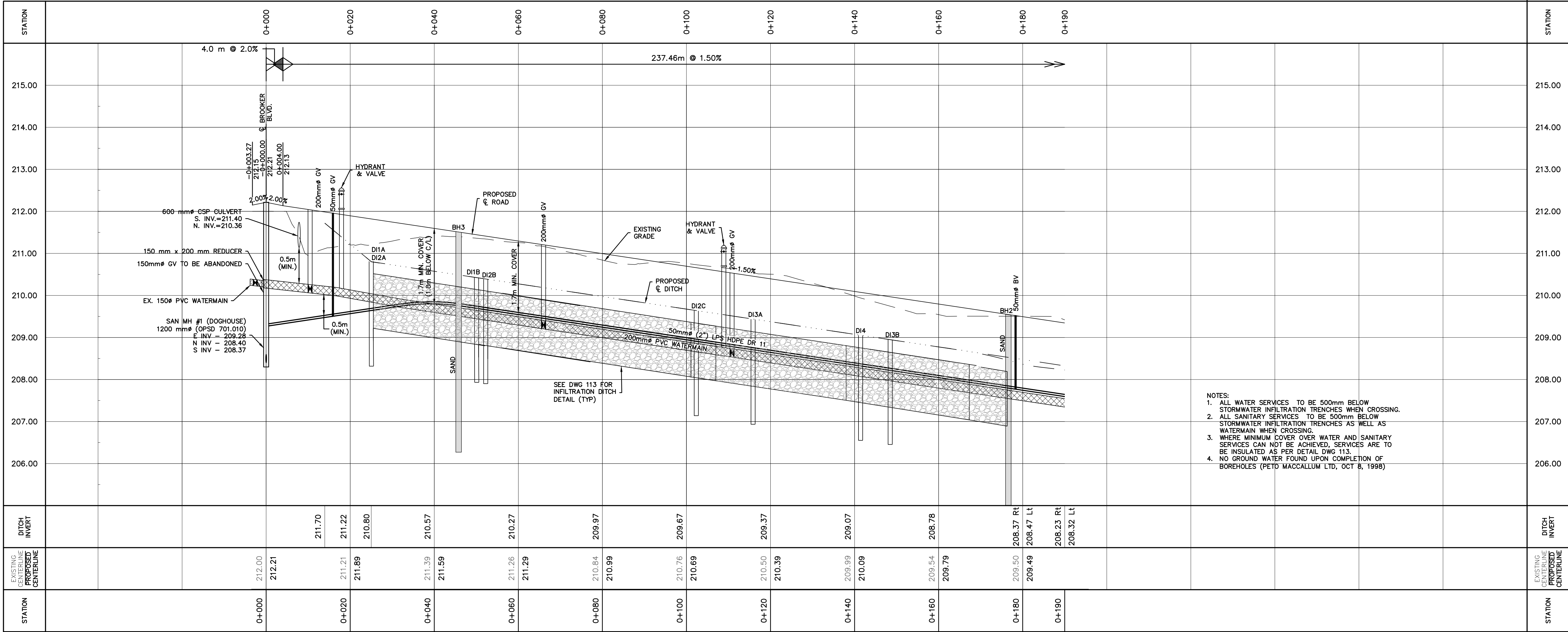
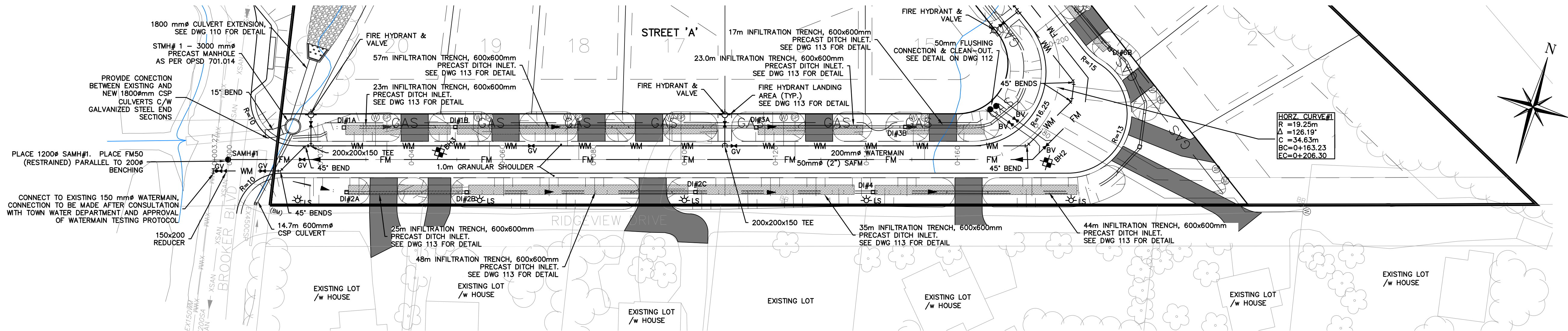
HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

OVERALL LOT GRADING  
AND DRAINAGE PLAN

**CROZIER**  
CONSULTING ENGINEERS

Drawn By: N.L./M.V.R. Design By: C.F.C./B.H. Project: 109-4336

Check By: R.W. Check By: B.H. Scale: 1:500 Drawing: 102



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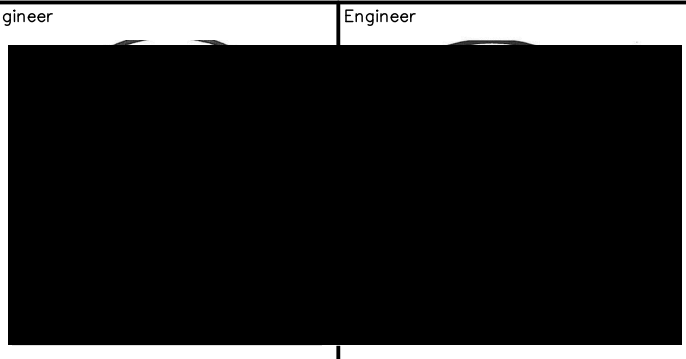
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Project: HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing: PLAN & PROFILE  
STREET 'A' (STA 0+000 - 0+190)

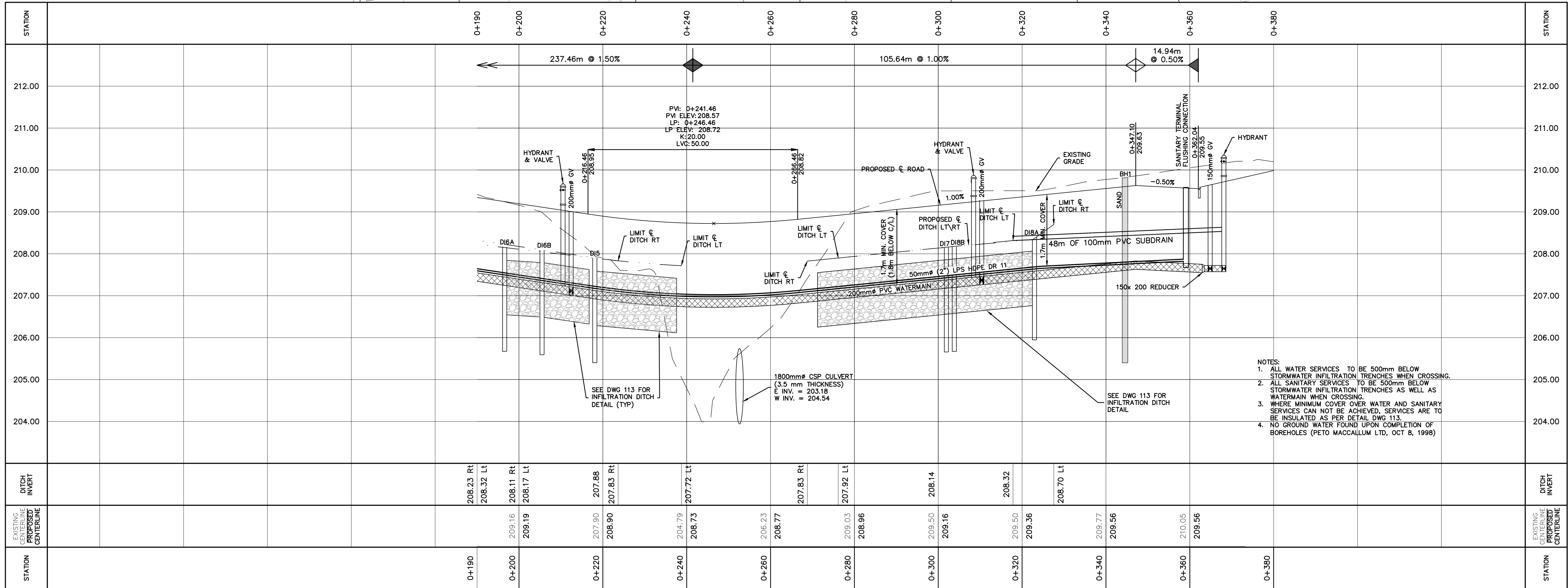
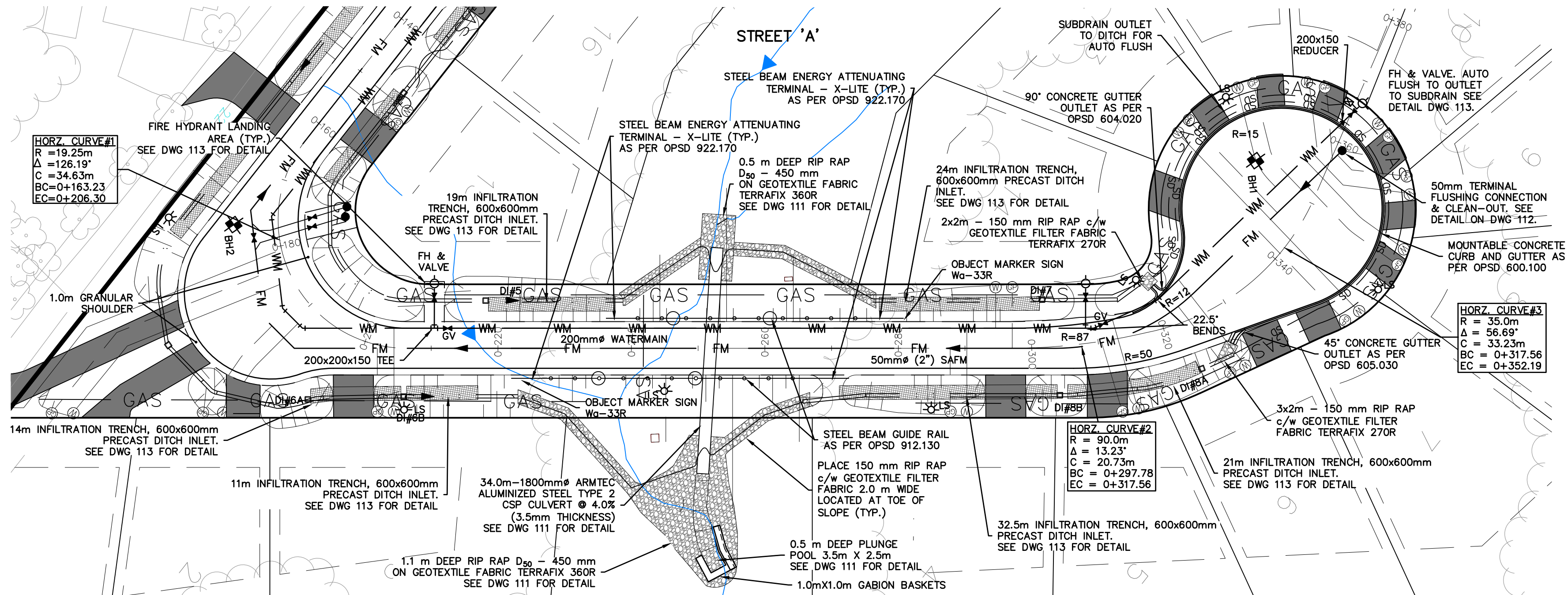


**CROZIER**  
CONSULTING ENGINEERS

|                       |                        |          |
|-----------------------|------------------------|----------|
| Drawn By: N.L./M.V.R. | Design By: C.F.C./B.H. | 109-4336 |
| Check By: R.W.        | Check By: B.H.         |          |

Scale: V=1:50  
H=1:500

103

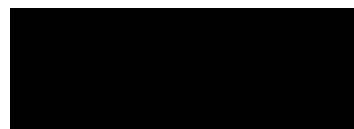


- NOTES:
1. ALL WATER SERVICES TO BE 500mm BELOW STORMWATER INFILTRATION TRENCHES WHEN CROSSING.
  2. ALL SANITARY SERVICES TO BE 500mm BELOW STORMWATER INFILTRATION TRENCHES AS WELL AS WATERMAIN WHEN CROSSING.
  3. WHERE MINIMUM COVER OVER WATER AND SANITARY SERVICES CAN NOT BE ACHIEVED, SERVICES ARE TO BE INSULATED AS PER DETAIL DWG 113.
  4. NO GROUND WATER FOUND UPON COMPLETION OF BOREHOLES (PETO MACCALLUM LTD, OCT 8, 1998)

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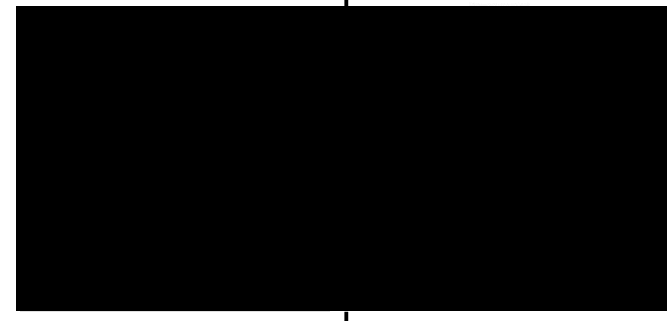
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Engineer



Engineer

Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

PLAN & PROFILE  
STREET 'A' (STA 0+190 - 0+380)

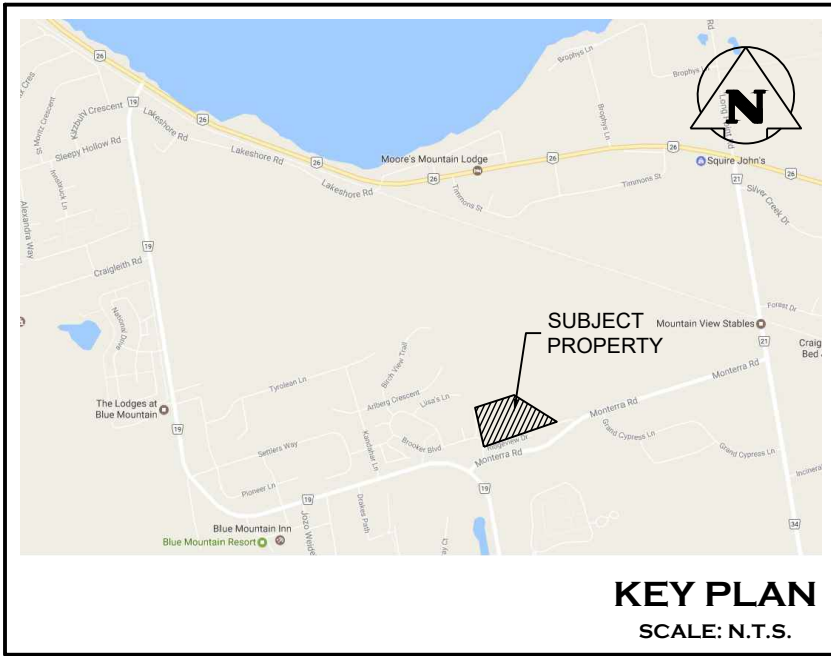
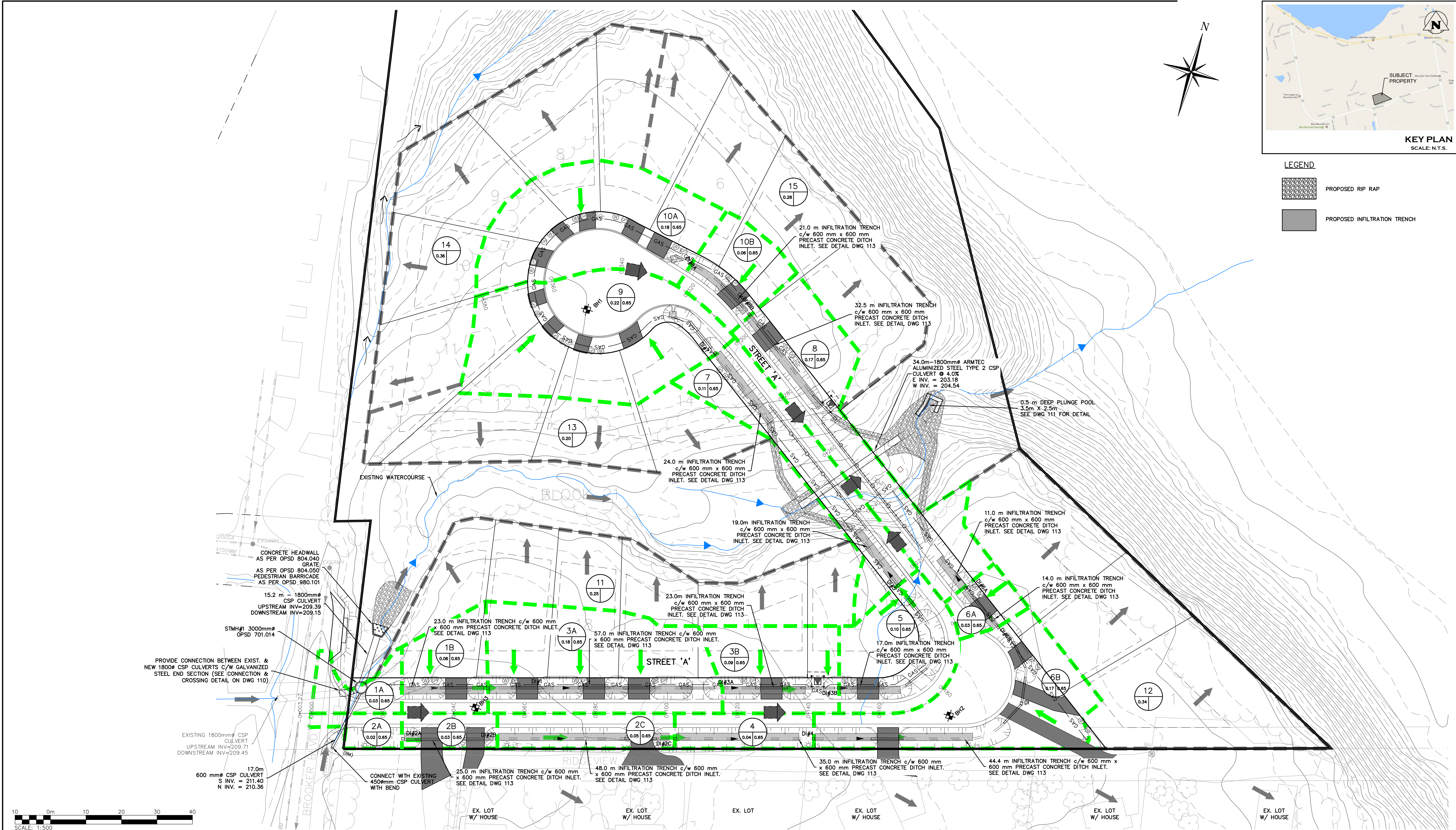


Drawn By N.L./M.V.R. Design By C.F.C./B.H.  
Check By R.W. Check By B.H.

Scale V=1:50  
H=1:500

109-4336

104



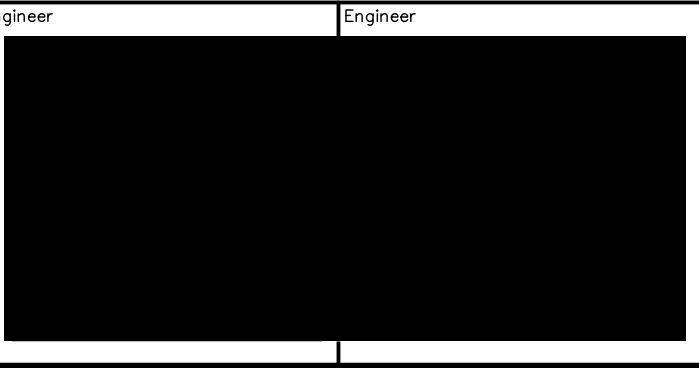
- LEGEND
- PROPOSED RIP RAP
  - PROPOSED INFILTRATION TRENCH

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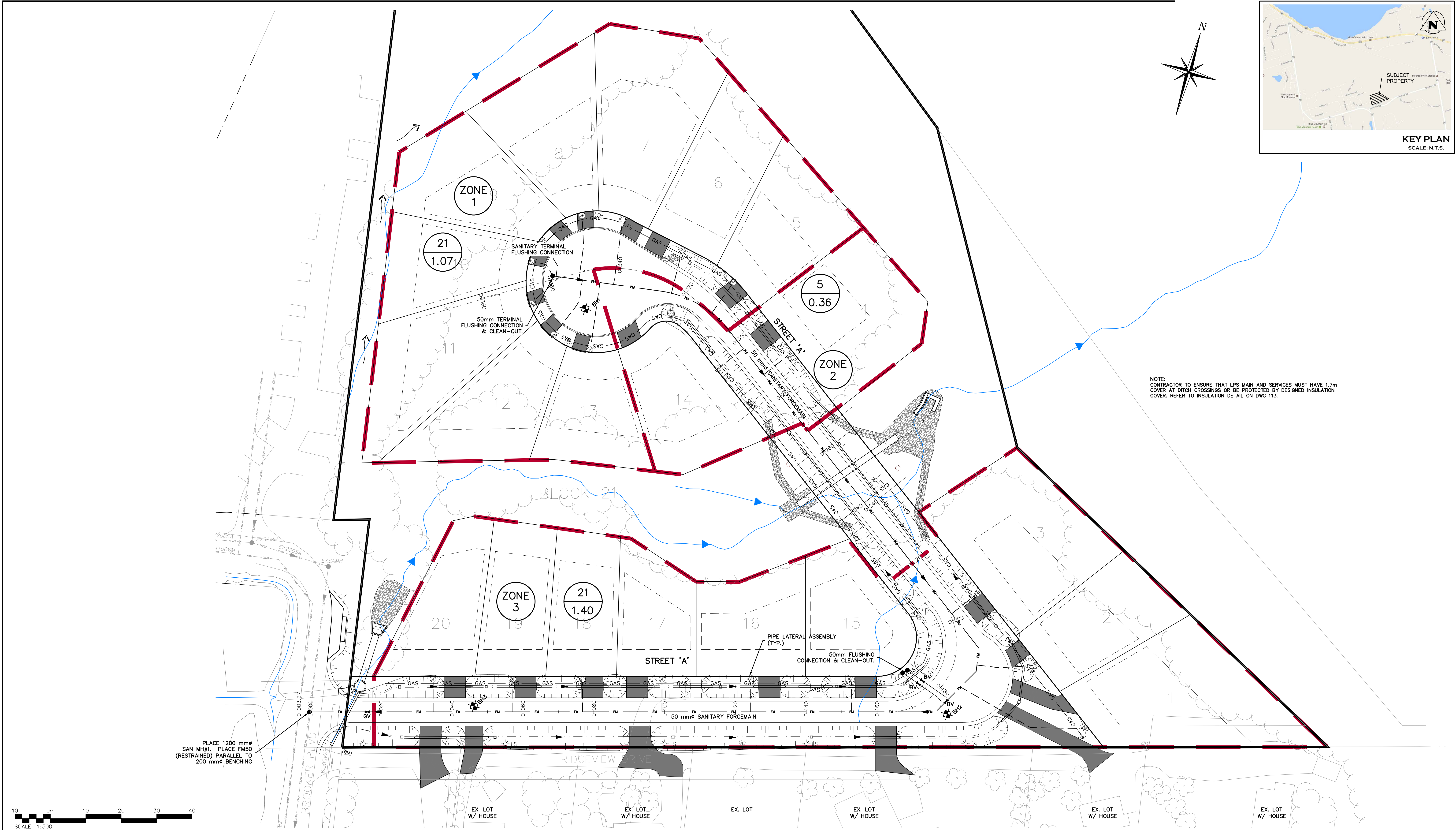


HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

STORMWATER  
DRAINAGE PLAN

**CROZIER CONSULTING ENGINEERS**

Drawn By: N.L./M.V.R. Design By: C.F.C./B.H. Project: 109-4336  
Check By: R.W. Check By: B.H. Scale: 1:500 Drawing: 105



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4. DO NOT SCALE THE DRAWINGS.

5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

TEMPORARY BENCHMARKS

TBM#1- RAILWAY SPIKE IN NORTHWEST FACE OF HYDRO POLE AT SOUTHWEST CORNER OF SUBDIVISION.  
ELEVATION = 212.226m

Town

| No. | ISSUE                      | DATE: MM/DD/YYYY |
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| 3   | ISSUED FOR 3rd SUBMISSION  | 09/26/2019       |
| 4   | ISSUED FOR 4th SUBMISSION  | 01/21/2020       |
| 5   | ISSUED FOR 5th SUBMISSION  | 05/01/2020       |
| 6   | ISSUED FOR 6th SUBMISSION  | 02/25/2021       |
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Engineer

Engineer

Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

SANITARY SEWAGE  
DRAINAGE PLAN

Drawn By

N.L./M.V.R.

Design By

C.F.C./B.H.

Project

109-4336

Check By

R.W.

Check By

B.H.

Scale

1:500

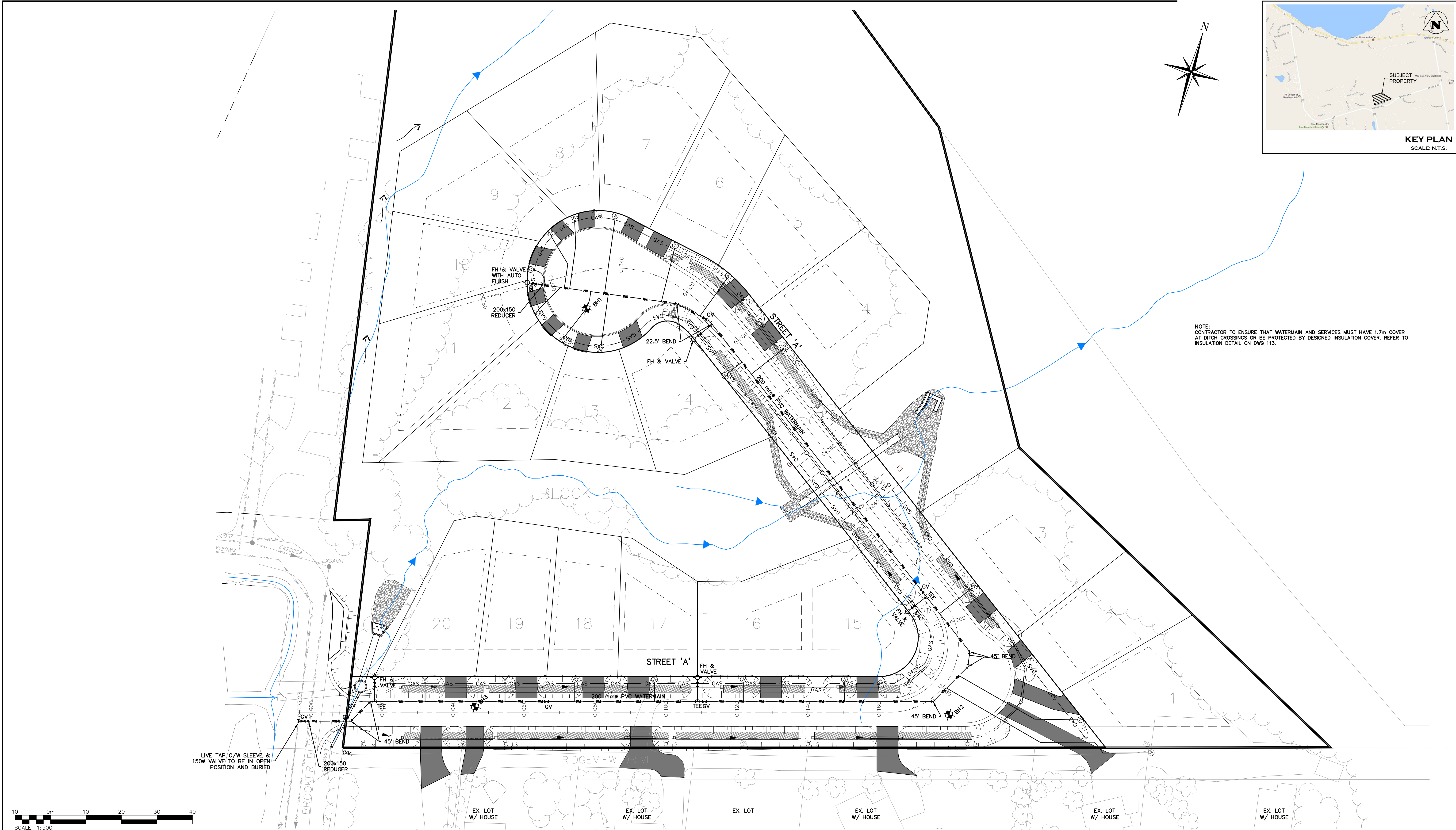
Drawing

106

CROZIER

CONSULTING ENGINEERS

NOTE:  
CONTRACTOR TO ENSURE THAT LPS MAIN AND SERVICES MUST HAVE 1.7m COVER AT DITCH CROSSINGS OR BE PROTECTED BY DESIGNED INSULATION COVER. REFER TO INSULATION DETAIL ON DWG 113.



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TEMPORARY BENCHMARKS

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Engineer

Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

WATER DISTRIBUTION PLAN

Drawn By

N.L./M.V.R.

Design By

C.F.C./B.H.

Project

109-4336

Check By

R.W.

Scale

1:500

Drawing

107

CROZIER

CONSULTING ENGINEERS

GENERAL

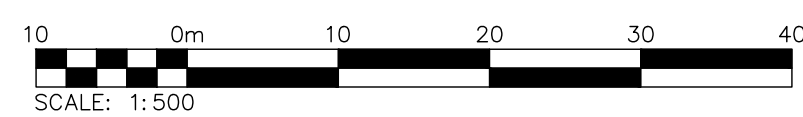
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4. MUD MAT TO BE CONSTRUCTED AT SITE ACCESS POINT FROM BROOKER BLVD.
5. NO MAINTENANCE, REPAIR WORK OR CONSTRUCTION EQUIPMENT IS ALLOWED WITHIN 20m OF AN EXISTING WATERCOURSE OR DITCH EXCEPT AS NOTED.
6. TEMPORARY TOPSOIL STOCKPILES ARE TO BE A MAXIMUM OF 5m HIGH WITH MAXIMUM 2:1 SIDE SLOPE AND BE PROVIDED WITH THE NECESSARY SEDIMENT AND EROSION CONTROL FEATURES PRIOR TO CONSTRUCTION. IF THE TOPSOIL STOCK PILES ARE TO REMAIN FOR A PERIOD LONGER THAN 30 DAYS, STOCKPILES SHALL BE SEED.
7. CONTRACTOR TO ENSURE POSITIVE DRAINAGE THROUGH SITE SUCH THAT NO UPSTREAM OR DOWNSTREAM IMPACT OCCURS DURING CONSTRUCTION ACTIVITIES.
8. THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN ALL ADJACENT ROADWAYS AS REQUIRED OR AS DIRECTED BY SITE ENGINEER OR MUNICIPALITY.

MAINTENANCE & OPERATION OF SEDIMENT CONTROLS

- A) SILT FENCE
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  2. SILT FENCE MUST BE INSPECTED IMMEDIATELY AFTER EVERY RAIN STORM EVENT OR AS DIRECTED BY SITE ENGINEER.
  3. SEDIMENT DEPOSITS MUST BE REMOVED FROM SILT FENCE WHEN ACCUMULATION REACHES 50% OF THE HEIGHT OF THE FENCE.
  4. ALL SILT FENCES MUST BE REMOVED ONLY WHEN THE ENTIRE SITE IS STABILIZED AND AS DIRECTED BY THE SITE ENGINEER.
  5. SILT FENCE TO BE INSTALLED 1.0m O/S FROM LIMIT OF DISTURBANCE AS SPECIFIED.
- B) MUD MAT
2. GEOTEXTILE (TERRAFIX 270R OR APPROVED EQUAL) TO BE PLACED AS SEPARATION BARRIER BETWEEN EXISTING GROUND AND CLEAR STONE.
  3. INSPECT MUD MAT WEEKLY TO ASSESS CONDITION AND TO ENSURE OPERATION EFFICIENCY.
  4. SUPPLY AND PLACE ADDITIONAL STONE TO PREVENT MUD TRACKING AS DIRECTED BY SITE ENGINEER.
  5. MUD MAT TO REMAIN IN PLACE UNTIL SITE IS STABILIZED OR AS DIRECTED BY SITE ENGINEER.
- C) STRAW BALE CHECK DAM
1. STRAW BALES MUST BE INSPECTED AFTER EACH SIGNIFICANT RAINFALL OR AS DIRECTED BY THE SITE ENGINEER. NECESSARY REPAIRS SHOULD BE MADE PROMPTLY.
  2. REMOVE ACCUMULATED SEDIMENT UPSTREAM OF BALES IF GREATER THAN ONE HALF OF DAM HEIGHT.
  3. STRAW BALES TO REMAIN IN PLACE UNTIL CONSTRUCTION OF ROADWAYS AND ROADSIDE DITCHES HAVE BEEN FINISHED WITH TOPSOIL AND SOD OR AS DIRECTED BY SITE ENGINEER.
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INFILTRATION TRENCH CONSTRUCTION SEQUENCING

1. ~~SEQUENCING AND TIMING FOR INSTALLATION OF THE INFILTRATION TRENCHES ARE AT THE DISCRETION OF THE CONTRACTOR.~~ INFILTRATION TRENCHES MUST BE IN PLACE PRIOR TO COMMENCEMENT OF UTILITY INSTALLATION. CONTRACTOR TO PROVIDE CONSTRUCTION SCHEDULE FOR REVIEW AND COMMENT BY OWNER AND ENGINEER.
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  5. PRIOR TO UTILITY CONSTRUCTION, CONTRACTOR TO STAKE LOCATION AND LIMITS OF INFILTRATION TRENCHES.
- SEQUENCING AND TIMING OF INFILTRATION TRENCHES SHALL BE TO THE SATISFACTION OF THE TOWN.



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TEMPORARY BENCHMARKS

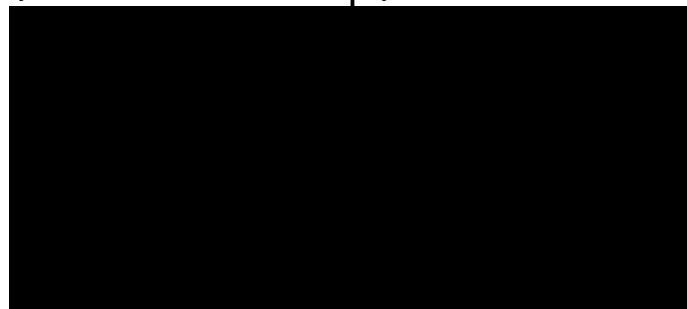
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Engineer



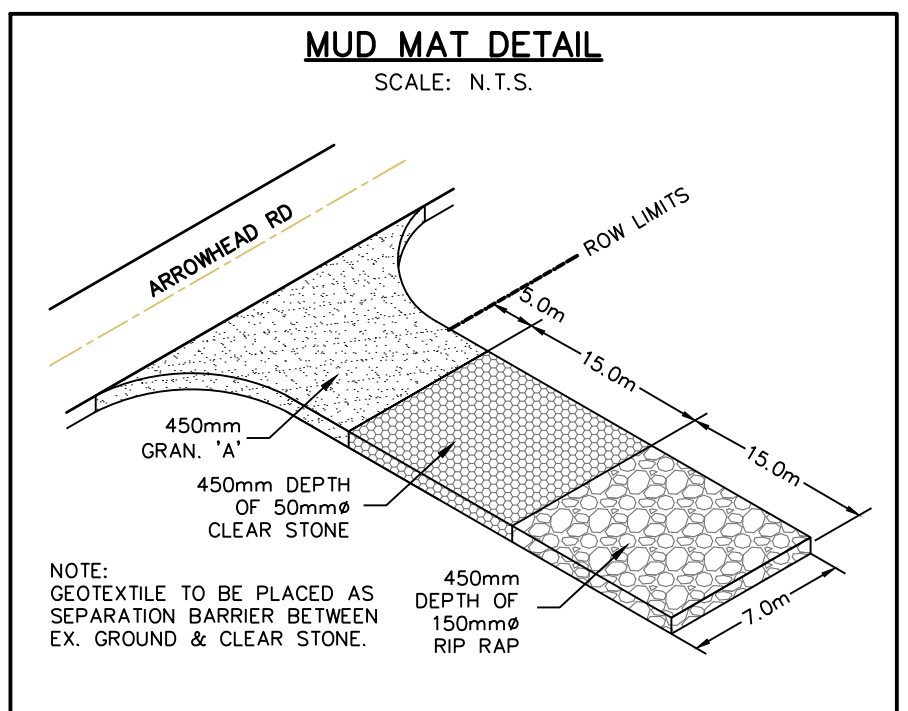
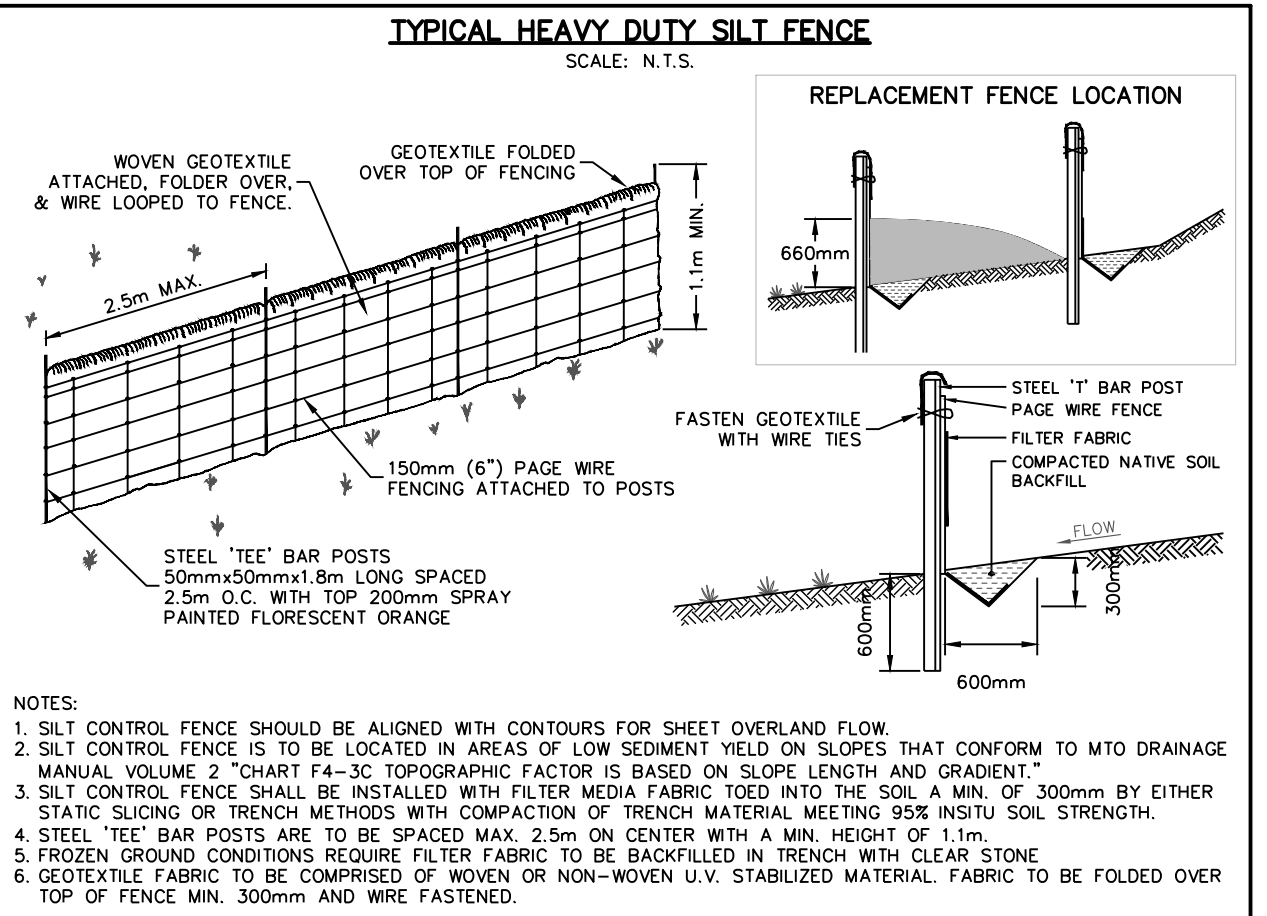
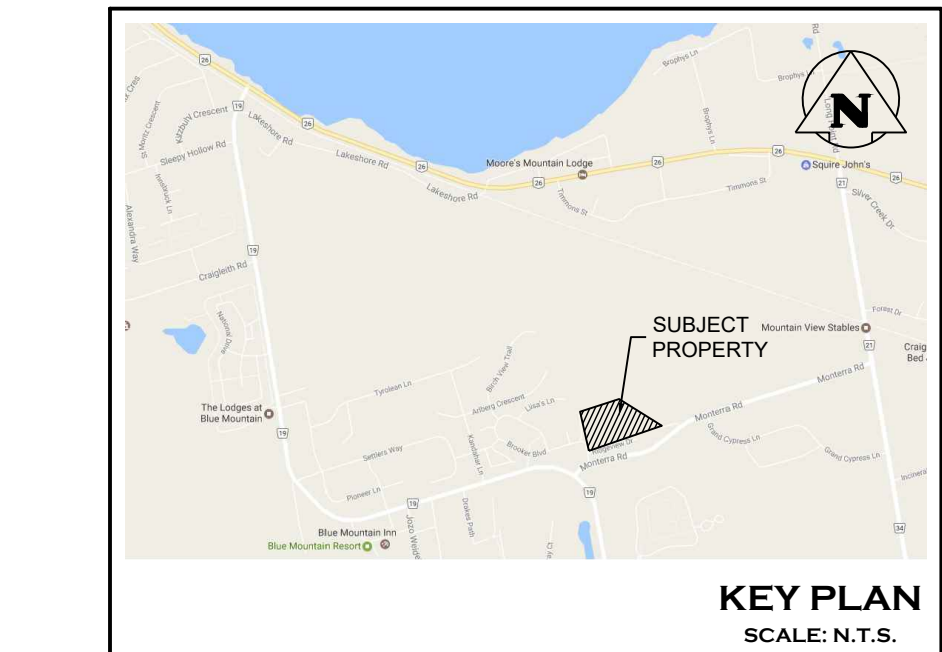
Engineer

Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

SEDIMENT AND EROSION  
CONTROL PLAN



|          |             |           |             |         |          |
|----------|-------------|-----------|-------------|---------|----------|
| Drawn By | N.L./M.V.R. | Design By | C.F.C./B.H. | Project | 109-4336 |
| Check By | R.W.        | Check By  | B.H.        | Scale   | 1:500    |
|          |             |           |             | Drawing | 108A     |

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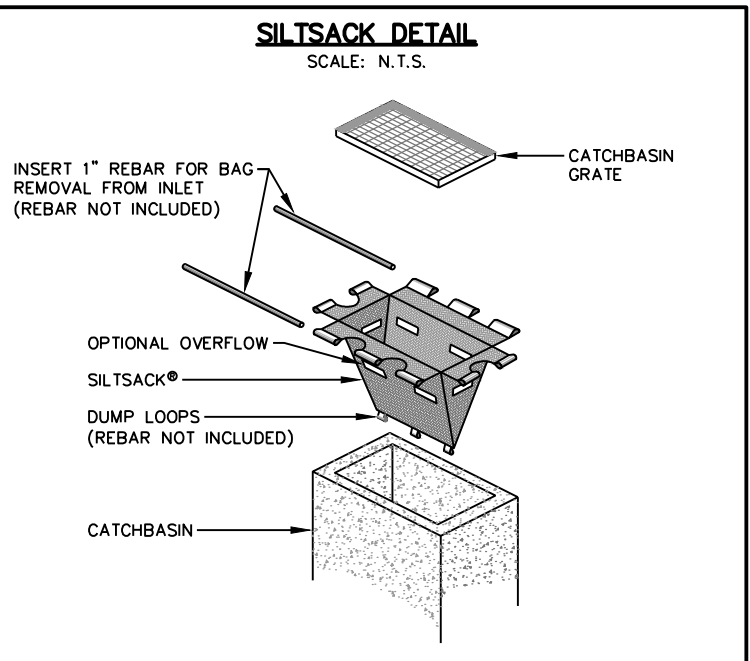
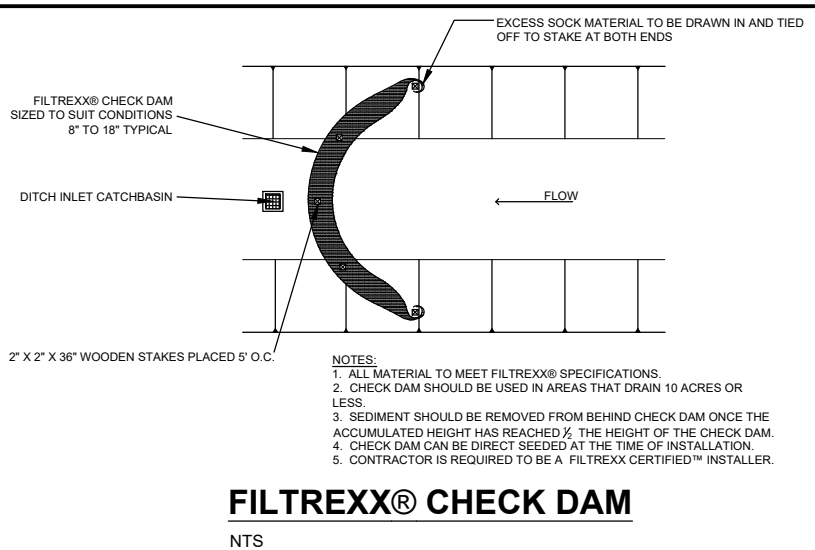
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Town

No.

ISSUE

DATE: MM/DD/YYYY

Engineer

Engineer

Project

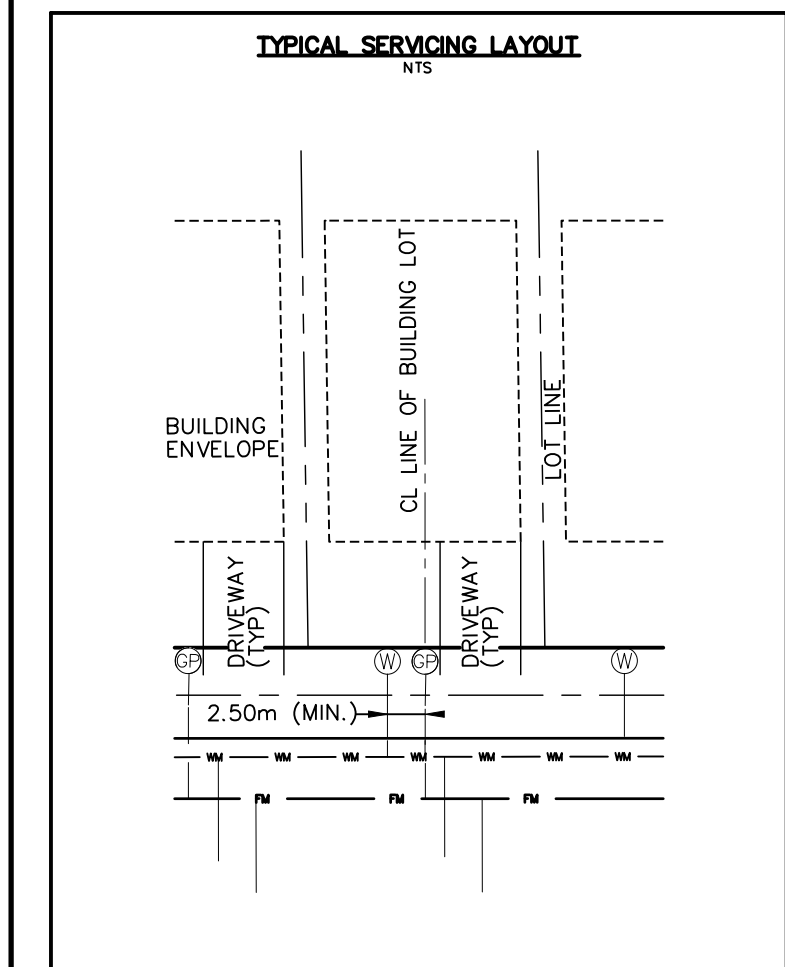
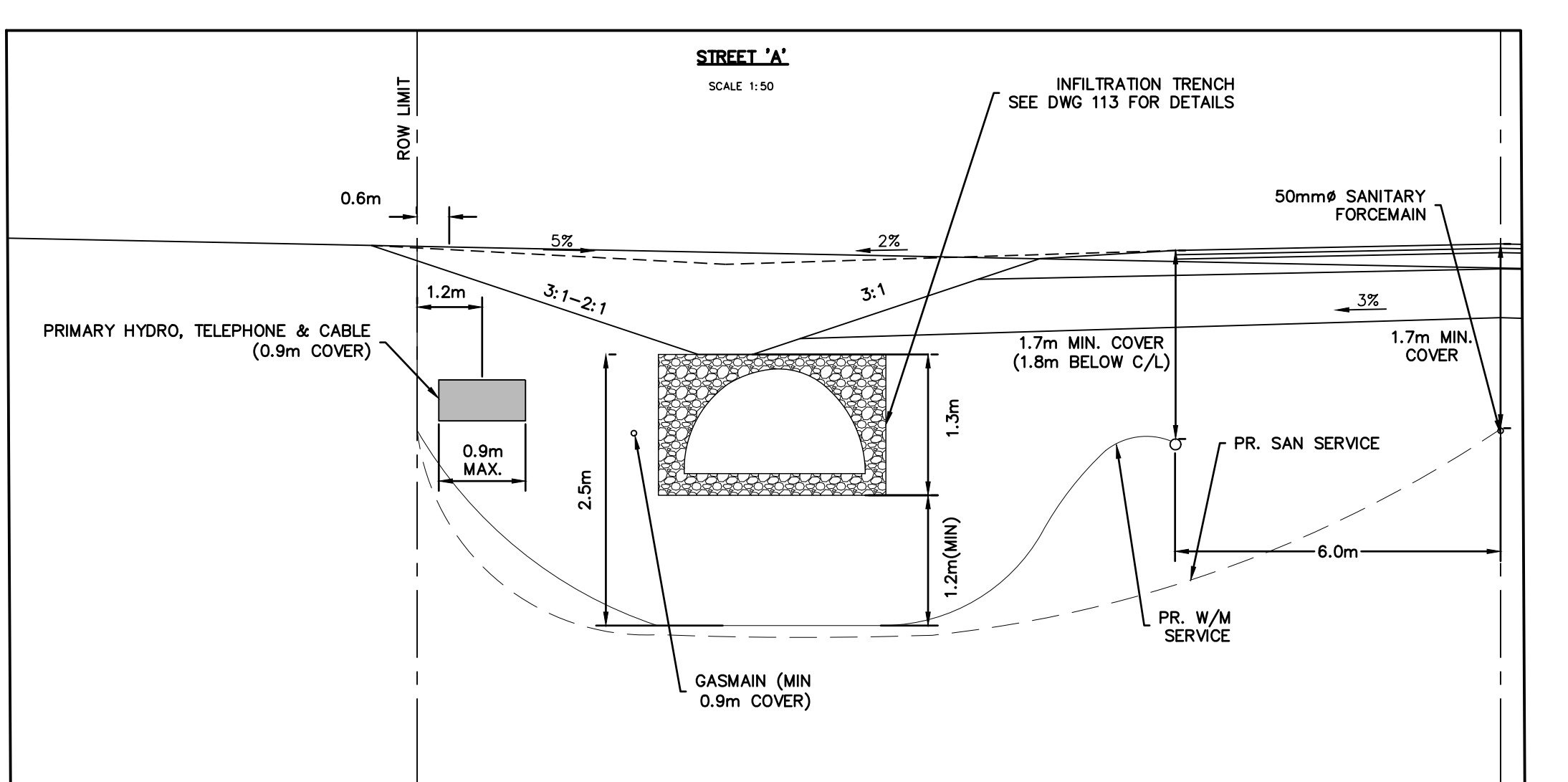
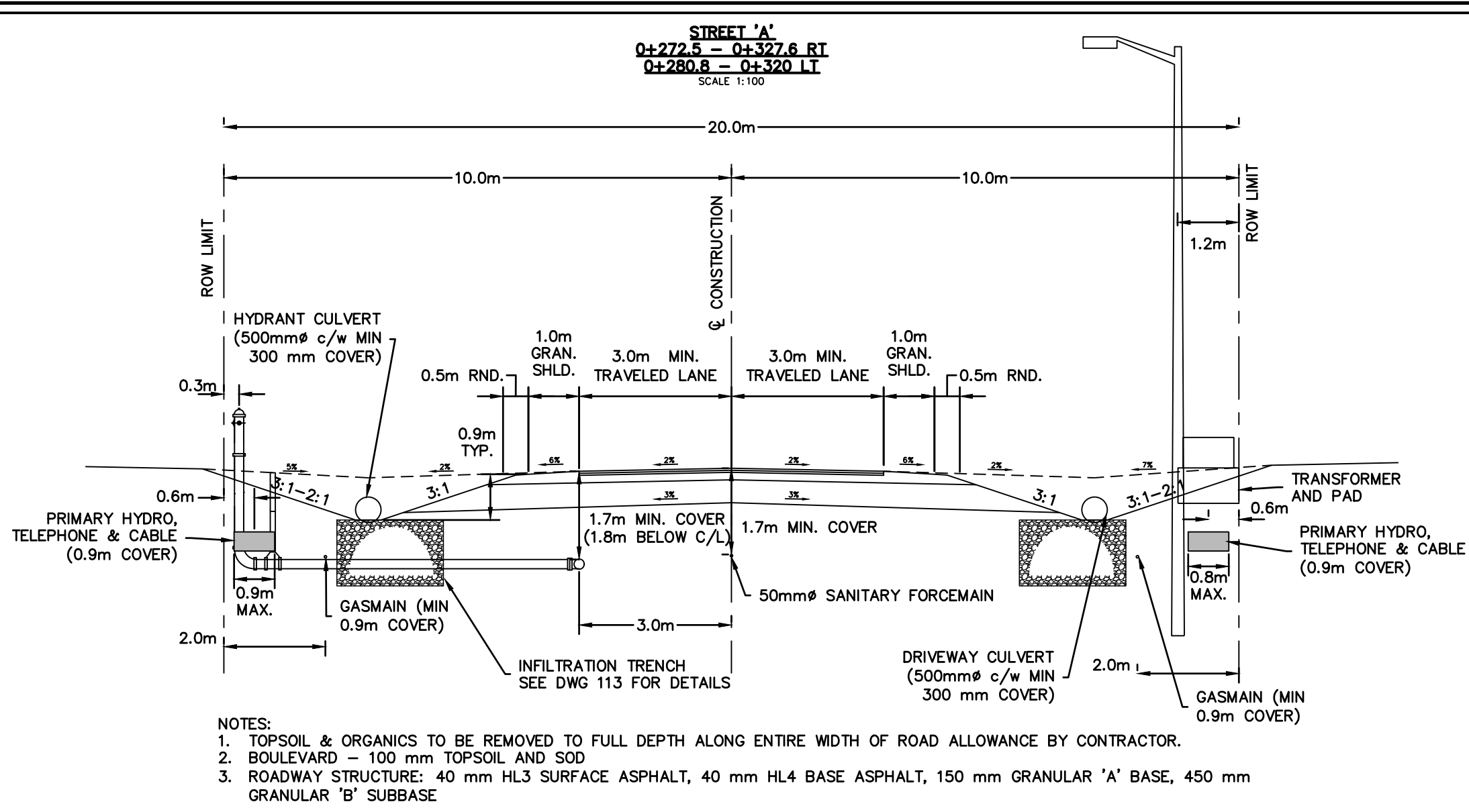
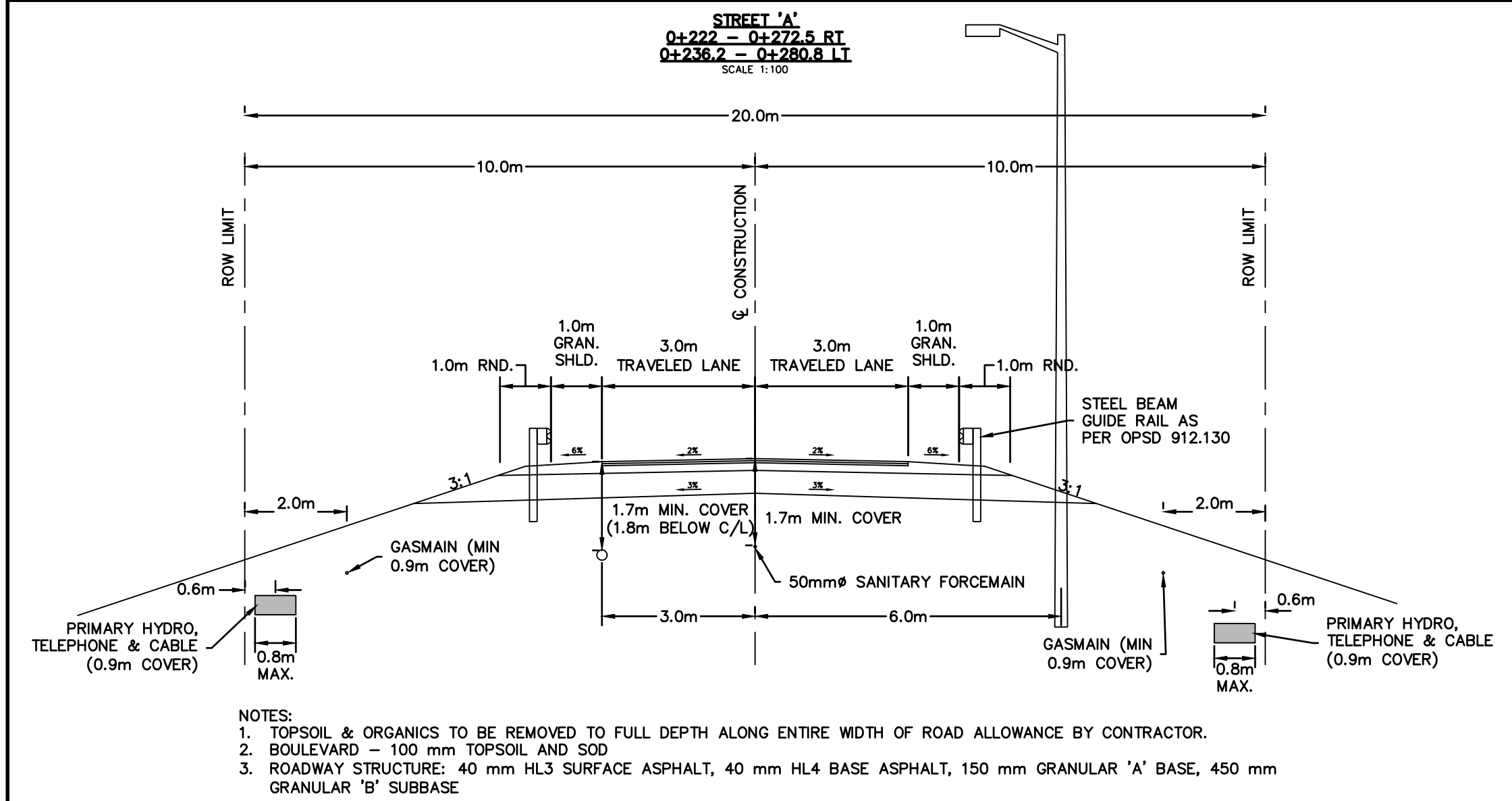
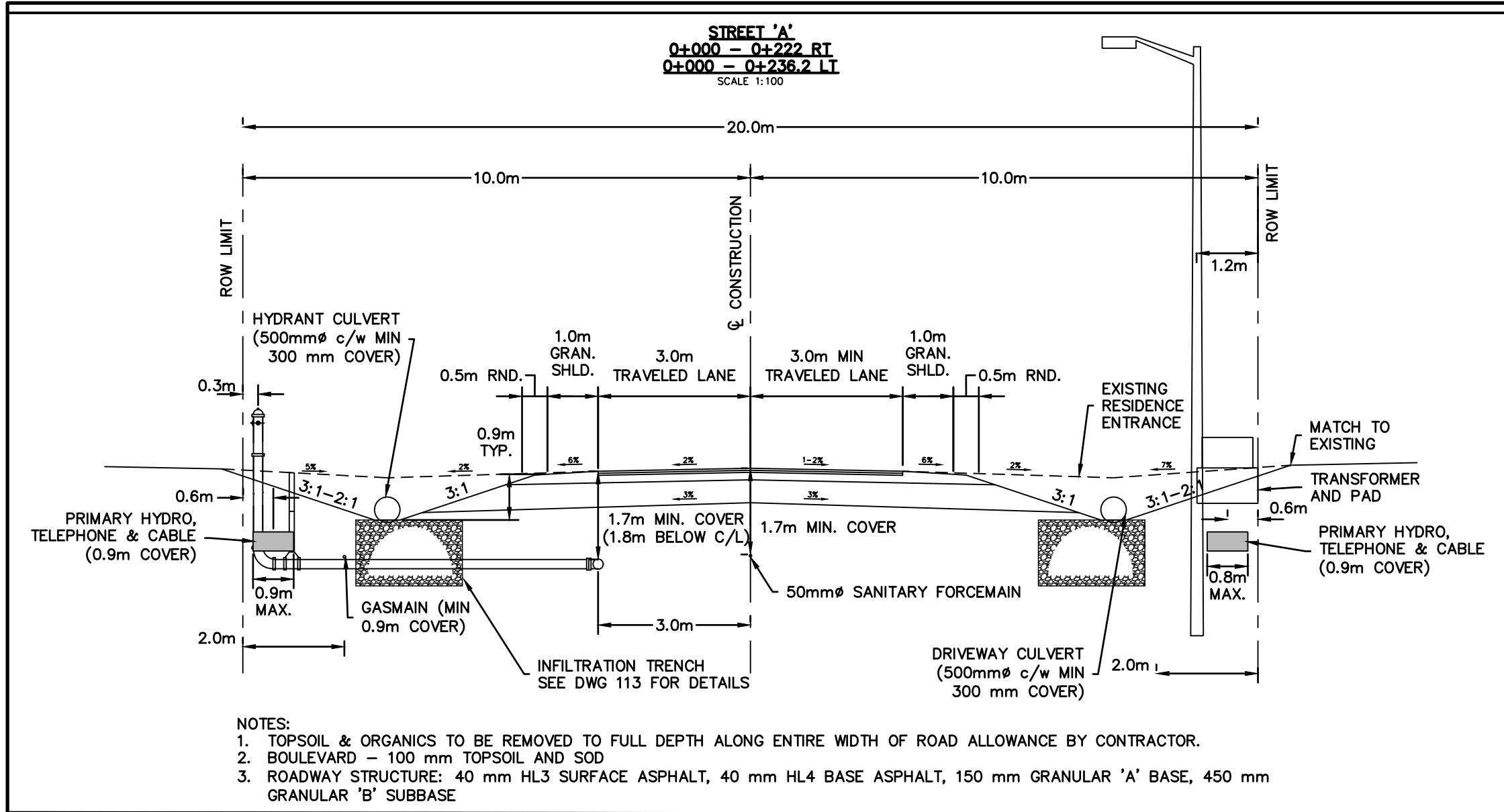
HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

TREE PRESERVATION &  
INTERIM GRADING PLAN



Drawn By M.T./M.V.R. Design By M.T./M.V.R. Project 109-4336  
Check By B.H. Check By - Drawing 108B



## CONSTRUCTION NOTES

- GENERAL**
- ALL EXISTING UNDERGROUND UTILITIES AND SERVICES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
  - ANY SITE ILLUMINATION TO BE DIRECTED DOWNWARD AND INTERNAL TO SITE ONLY.
  - DETAILS ON PROPOSED PLANTING, RETAINING WALLS & SITE TREATMENTS ARE PREPARED BY LANDSCAPE ARCHITECT.
  - NATIVE SITE SOILS ARE CONSIDERED TYPE 3 SOILS AS PER OCCUPATIONAL HEALTH & SAFETY ACT; HOWEVER, WHERE SEEPAGE OCCURS AND/OR IF THE SOILS ARE BELOW THE WATER TABLE, THEN TYPE 4 SOIL CONDITIONS APPLY. REFER TO GEOTECHNICAL REPORT BY PETO MACCALLUM LTD., DATED NOVEMBER, 1998.
  - ROAD OCCUPANCY PERMIT IS REQUIRED FROM THE TOWN PRIOR TO ANY WORKS COMPLETED WITHIN THE MUNICIPAL RIGHT OF WAY (ROW). CONTRACTOR IS RESPONSIBLE TO RETAIN PERMIT.
  - ALL BOULEVARDS & DISTURBED AREAS ARE TO BE RESTORED TO EXISTING CONDITIONS OR BETTER, 100mm TOPSOIL & SEED UNLESS OTHERWISE NOTED.
  - CLEAR-STONE WRAPPED IN FILTER CLOTH CAN BE SUBSTITUTED FOR BEDDING MATERIAL IF APPROVED BY THE GEOTECHNICAL ENGINEER.
  - ALL PROPERTY BARS TO BE PROTECTED DURING CONSTRUCTION. BARS ARE TO BE PLACED BY O.L.S. AT CONTRACTOR'S EXPENSE IF DAMAGED OR REMOVED.
  - DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS-517 & 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING M.O.E. PERMIT IF REQUIRED.
  - ALL RIP RAP/GABION MATTRESSES TO BE PLACED ON FILTER CLOTH.
- ROADS**
- ALL EXCAVATION SHALL CONFORM TO THE CURRENT ONTARIO PROVINCIAL SPECIFICATION FOR GRADING OPSS MUNI. 208.
  - 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 LIFT.
  - ALL VEGETATION, BOULDERS OVER 150mm $\phi$ , TOPSOIL AND ORGANIC OR FROST-SUSCEPTIBLE MATERIALS, SHALL BE REMOVED FROM THE ROAD BASE TO A DEPTH OF AT LEAST 1.2m BELOW FINISHED GRADE AND REPLACED WITH SUITABLE MATERIAL.
  - 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 GRADUALLY COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF GRANULARS. COMPACTION TO BE MINIMUM 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMD).
  - 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 450mm 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% SPMD.
  - 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.
  - ALL GRANULAR CONSTRUCTION SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATION OPSS MUNI. 314.
  - 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.
  - THE ASPHALT COMPONENTS SHOULD BE COMPACTED TO 92% TO 96.5% OF MAXIMUM RELATIVE DENSITY IN ACCORDANCE WITH OPSS 310.
  - DURING AND BETWEEN CONSTRUCTION SEASONS, THE GRANULAR BASE SHALL BE MAINTAINED SUITABLE FOR VEHICLE AND PEDESTRIAN TRAFFIC INCLUDING DUST CONTROL BY CALCULUM CHLORIDE AND RENEWED IF REQUIRED TO THE SATISFACTION OF THE SITE ENGINEER.
  - CONCRETE CURB AND GUTTER SHALL CONFORM TO OPSS 600.100 AND SHALL BE INSTALLED IN CONFORMANCE WITH OPSS MUNI. 353.
  - ALL SERVICES, MANHOLES, VALVES, ETC. ARE TO BE INSTALLED TO MATCH GRADE OF BASE COURSE OF ASPHALT AND/OR LANDSCAPING. UPON COMPLETION OF SURFACE COURSE OF ASPHALT, ALL APPURTENANCES LOCATED IN ROADWAY SHALL BE RAISED TO MATCH FINISHED GRADE.
  - CENTRELINE CROSS CULVERTS SHALL GALVANIZED CORRUGATED STEEL PIPE WITH MINIMUM WALL THICKNESS OF 2.0 mm UNLESS OTHERWISE NOTED. ALL CULVERTS TO BE INSTALLED WITH FROST TAPER TREATMENT PER OPSS 803.030. MINIMUM COVER TO BE 300 mm AT ALL POINTS ALONG CULVERT.
- STORM SEWER**
- INFILTRATION PIPE SHALL BE PERFORMED 200 mm $\phi$  HDPE 320 kPa PIPE CERTIFIED TO CSA B182.8 WITH CSA LOGO. ALL PIPE TO BE JOINED WITH A BELL & SPIGOT SYSTEM.
  - PRECAST STORM MANHOLES SHALL BE PER OPSS 701.014 (3000mm) WITH FRAME AND GRATE PER OPSS 403.011 AND HOLLOW RECTANGULAR LADDER RUNGS OPSS 405.010.
  - PRECAST DITCH INLETS ARE TO BE OPSS 705.040 WITH FRAME AND GRATE OPSS 400.100. ALL DITCH INLETS SHALL HAVE Sumps.
  - FROST STRAPS REQUIRED ON ALL MANHOLES AS PER OPSS 701.100.
- WATERMAIN**
- A) PIPING**
- ALL CONSTRUCTION TO CONFORM TO AWWA C605-94 AND AWWA C600-99 STANDARDS.
  - WATERMAIN PIPE SHALL BE PVC DR18 (SIZES UP TO 300mm $\phi$ ), CONFORMING TO AWWA C900. A DIFFERENT PIPE STRENGTH OR TYPE MAY BE REQUIRED BY THE MUNICIPALITY FOR SPECIAL CONDITIONS.
  - WATERMAIN DEFLECTION NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS. WHERE DEFLECTION CAN NOT MEET MANUFACTURER'S RECOMMENDATIONS, CONTRACTOR TO INSTALL THE REQUIRED MANUFACTURED BEND AS NECESSARY.
  - WATERMAIN SHALL BE BEDDED IN ACCORDANCE WITH OPSS 802.010 WITH UNIFORM FINE SAND.
  - WATERMAIN TO BE TESTED AND APPROVED PER OPSS 701.014 - WATERMAIN COMMISSIONING PROTOCOL STANDARD (MAY 2007).
  - ALL TESTING REQUIRED NOTIFICATION IN WRITING, 48 HOURS PRIOR TO ALL TESTING.
  - ALL CONNECTIONS TO EXISTING MUNICIPAL SUPPLY MAINS MUST BE INSPECTED BY THE MUNICIPALITY OR REPRESENTATIVE AND GIVING 48 HOURS NOTICE PRIOR TO BACKFILLING OPERATIONS.
  - THE PVC PIPE INSTALLATION SHALL INCLUDE TRACER WIRE. TRACER WIRE TO BE 10 GAUGE, MULTI-STRAND WIRE, PLACED ON TOP & ATTACHED IN TWO PLACES ON EACH LENGTH OF PVC WATERMAIN. ALL CONNECTIONS SHALL BE MADE WITH "DRYCONN WATERPROOF CONNECTIONS" OR APPROVED EQUAL.
  - THE MINIMUM COVER ON WATERMAINS SHALL BE 1.7m. WHEN COVER IS LESS THAN 1.70m, CONTRACTOR TO PROVIDE INSULATION PER DETAIL ON DWG 113.
  - CATHODIC PROTECTION REQUIRED ON ALL METALLIC FITTINGS AND PIPE AS PER OPSS 442 & TOWN STANDARDS.
  - ALL FITTING BOLTS ARE TO BE FITTED WITH 19 mm "PROTECTO-CAPS" CAT. NO. 175P190 SACRIFICIAL ZINC CAPS OR APPROVED EQUAL.
  - CAST IRON MECHANICAL JOINT FITTINGS MEETING AWWA SPECIFICATIONS C-907 AND CSA B138.2 SHALL BE USED ON PVC WATERMAIN 150 TO 300mm IN DIAMETER.
  - CONCRETE THRUST BLOCKS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER, AS PER OPSS 1103.01, OR 1103.02 UNLESS NOTED OTHERWISE.
  - AT ALL THRUST BLOCK LOCATIONS IN FILL AREAS, ALL SEGMENTS OF THE FITTING AND THE WATERMAIN SHALL BE TIED USING EMCO UNDERGROUND BELL JOINT CLAMPS OR EQUIVALENT, OR THE RODS INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE THE DEFLECTION ANGLE AT THE THRUST BLOCK IS MORE THAN 45°, ADDITIONAL TIE-ROD ASSEMBLIES SHALL BE INSTALLED FOR AT LEAST 10m EACH SIDE OF THE THRUST BLOCK. IMPORTED GRANULAR FILL (GRANULAR "B" OR EQUIVALENT) IS TO BE USED BEHIND THE THRUST BLOCK. THE IMPORTED GRANULAR FILL IS TO BE COMPACTED TO A MINIMUM OF 100% STANDARD PROCTOR MAXIMUM DRY DENSITY. PRIOR TO CONSTRUCTION OF THE THRUST BLOCKS, THE CONTRACTOR SHALL OBTAIN THE WRITTEN APPROVAL FOR THE BACKFILL FROM A QUALIFIED GEOTECHNICAL ENGINEER. TIE-RODS AND CLAMPS SHALL BE GIVEN TWO (2) COATS OF BITUMASTIC PAINT.
- B) SERVICES**
- EACH HOUSING UNIT SHALL HAVE A SEPARATE 25mm $\phi$  REHAU'S MUNIPLX (BLUE) OR SERIES 160 POLYETHYLENE WATER SERVICE. A CURB STOP AND EXTENSION SERVICE BOX MUST BE INSTALLED ON EACH SERVICE USING COMPRESSION JOINT FITTINGS. TRACER WIRE SHALL BE PLACED ALONG THE ENTIRE LENGTH OF EACH SERVICE LINE.
  - WATER SERVICE FITTINGS SHALL BE AS FOLLOWS:
    - MAIN STOPS ARE TO BE MUELLER A-200.
    - CURB STOPS ARE TO BE SELF DRAINING, MUELLER A-6006.
    - SERVICE BOXES ARE TO BE OF ALL IRON/STEEL CONSTRUCTION AND SUPPLIED WITH STAINLESS STEEL RODS, MUELLER A-726 OR EQUIVALENT.
    - CURB STOPS SHALL BE LOCATED 300mm FROM STREET LINE & SUPPLIED WITH A 89mm X 38mm MARKER FROM THE INVERT OF THE SERVICE TO 600mm ABOVE GRADE, PAINTED BLUE.
    - SERVICE CONNECTIONS TO WATERMAINS SHALL BE MADE BY DIRECT TAPPING OR WITH BROAD BAND STAINLESS STEEL SADDLES. SERVICE SADDLES TO BE ROBAR 2706 DOUBLE STRAP & TAPPING SADDLE TO ROBAR 6906.
    - SERVICE CONNECTIONS SHALL BE LEFT WITH A TAIL UP TO GRADE & CAPPED OR CRIMPED.
- C) HYDRANT INSTALLATION**
- HYDRANTS SHALL BE CANADA VALVE, LEFT OPEN.
  - HYDRANTS SHALL BE LOCATED 300mm FROM STREET LINE AND INSTALLED AS SPECIFIED IN TOWN OF THE BLUE MOUNTAINS STANDARDS. HYDRANT SETS SHALL BE INSTALLED AT NOT LESS THAN 0.9m FROM CENTRE OF THE VALVE TO THE CENTRE OF THE HYDRANT.
  - ALL HYDRANTS SHALL BE PAINTED CHROME YELLOW. ALL HYDRANTS SHALL HAVE A FLEX STAKE HYDRANT MARKER MODEL FHVB04, 48" (1.2 m) LONG, COLOUR YELLOW WITH REFLECTIVE HYDRANT GRAPHIC ON BOTH SIDES AT THE TOP OF THE MARKER. THE HYDRANT MARKER IS TO BE POSITIONED ON THE RIGHT PORT AS VIEWED FROM THE STREET. A FIRE HYDRANT MARKER (0.3 m X 0.3 m REFLECTIVE SIGN WITH RED HYDRANT ON WHITE BACKGROUND) SHALL BE INSTALLED 0.3 m BEHIND EVERY HYDRANT MOUNTED 1.5 m ABOVE GRADE.
  - ISOLATION VALVES SHALL BE RESILIENT SEAT GATE VALVES WITH MECHANICAL JOINTS, OPENING LEFT, CLOW OR MUELLER. VALVE BOXES SHALL BE 5-SL-48 SLIDING OR MUELLER MVB COMPOSITE COMPLETE WITH GUIDE PLATE & DUCTILE ADJUSTABLE TOP AND LID OR APPROVED EQUAL WITH CAP PAINTED BLUE.
  - FIRE HYDRANTS REQUIRE STORTZ CONNECTIONS ON ALL STEAMER PORTS.
  - ALL VALVES AT POINTS OF TERMINATION OF A STAGE OF CONSTRUCTION SHALL BE BRACED WITH ONE ADDITIONAL LENGTH OF WATERMAIN PIPE BEYOND THE GATE VALVE. WATERMAIN PIPE TERMINATION SHALL BE FLUSHED AND THRUST RESTRAINED.
- SANITARY SEWERS**
- PRECAST SANITARY MANHOLES SHALL CONFORM WITH OPSS 701.010 (1200mm) WITH HOLLOW RECTANGULAR LADDER RUNGS OPSS 405.010. BENCHING SHALL BE PROVIDED IN ALL MANHOLES.
  - MANHOLE COVERS SHALL BE CAMRON DS579 (OR APPROVED EQUAL) AND INSTALLED AS PER MUNICIPAL STANDARD.
  - FROST STRAPS REQUIRED ON ALL MANHOLES AS PER OPSS 701.100.
  - LPS FORCEMAIN SEWERS SHALL BE HDPE DR 11 WITH RUBBER GASKET CONNECTIONS AND MIN. SIZE OF 50mm $\phi$ . TRACER WIRE TO BE INSTALLED WITH LOW PRESSURE FORCEMAIN AND BROUGHT TO SURFACE AT FLUSHING CONNECTIONS. TRACER WIRE TO BE 10 GAUGE, MULTI-STRAND SHALL BE PLACED ON TOP & ATTACHED IN TWO PLACES ON EACH LENGTH OF FORCEMAIN.
  - LPS FORCEMAIN SEWER BEDDING SHALL CONFORM WITH OPSS 802.010.
  - HOUSE SERVICE CONNECTIONS TO 1-1/4" HDPE DR 11-LPS FORCEMAIN LATERALS C/W LATERAL KIT PER E-ONE. REFER TO LATERAL KIT DETAIL ON DRAWING 112.
  - FLUSHING CONNECTIONS TO BE INSTALLED AT ALL SHARP BENDS (INCLUDING TEE INTERSECTIONS) AND A MINIMUM 300m SPACING. REFER TO FLUSHING CONNECTION DETAIL ON DRAWING 112.
  - ALL BENDS AND TEE CONNECTIONS TO BE FABRICATED HDPE DR 11.
  - CONTRACTOR TO ENSURE THAT EVERY LPS MAIN AND SERVICE MUST HAVE 1.7m COVER AT DITCH CROSSINGS OR BE PROTECTED BY DESIGNED INSULATION COVER. REFER TO INSULATION DETAIL ON DWG 113.
  - VALVE MARKER POST IS NEEDED AT ALL LPS ISOLATION VALVE BOXES NOT LOCATED ON THE GRAVEL SHOULDER OR ASPHALT PAVEMENT. THE MARKER POST MUST BE APPROVED PRIOR TO INSTALLATION.
  - INSULATION TO BE INSTALLED BETWEEN CULVERT AND LPS, WITHIN FLUSHING MANHOLES, AROUND FLUSHING VALVES AND WHERE LPS COVER IS LESS THAN 1.5m.
  - SANITARY SEWER SYSTEM TO BE TESTED TO 1,034 kPa (150 PSI) TO OPSS 412.

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## TEMPORARY BENCHMARKS

TBM#1 - RAILWAY SPIKE IN NORTHWEST FACE OF HYDRO POLE AT SOUTHWEST CORNER OF SUBDIVISION.  
ELEVATION = 212.226m

Town



| No. | ISSUE                      | DATE: MM/DD/YYYY |
|-----|----------------------------|------------------|
| 3   | ISSUED FOR 3rd SUBMISSION  | 09/26/2019       |
| 4   | ISSUED FOR 4th SUBMISSION  | 01/21/2020       |
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| 10  | ISSUED FOR 9th SUBMISSION  | 05/04/2023       |

| Engineer | Engineer |
|----------|----------|
|          |          |

Project

Drawing

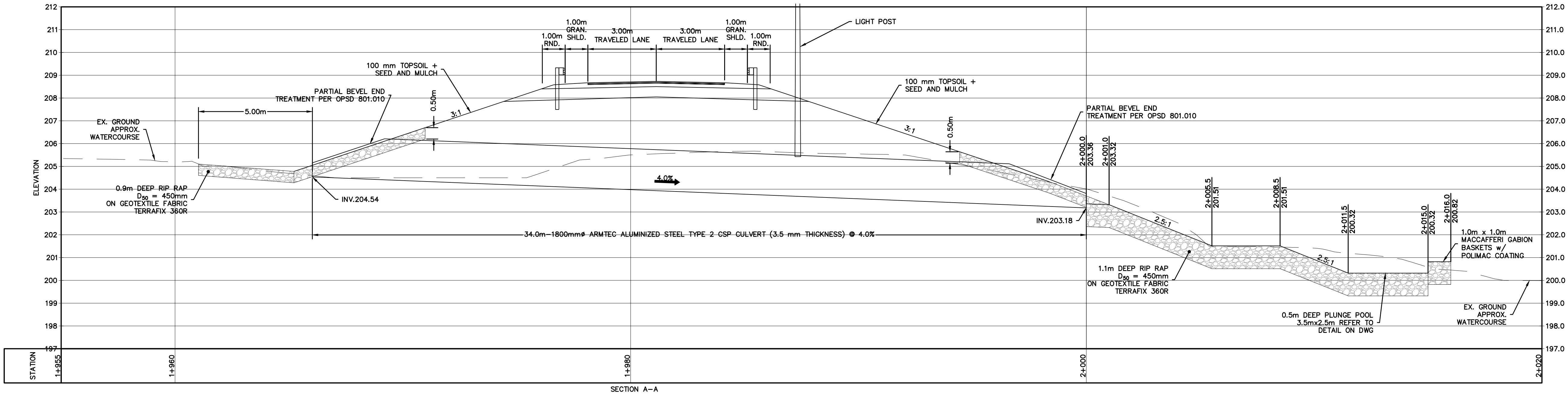
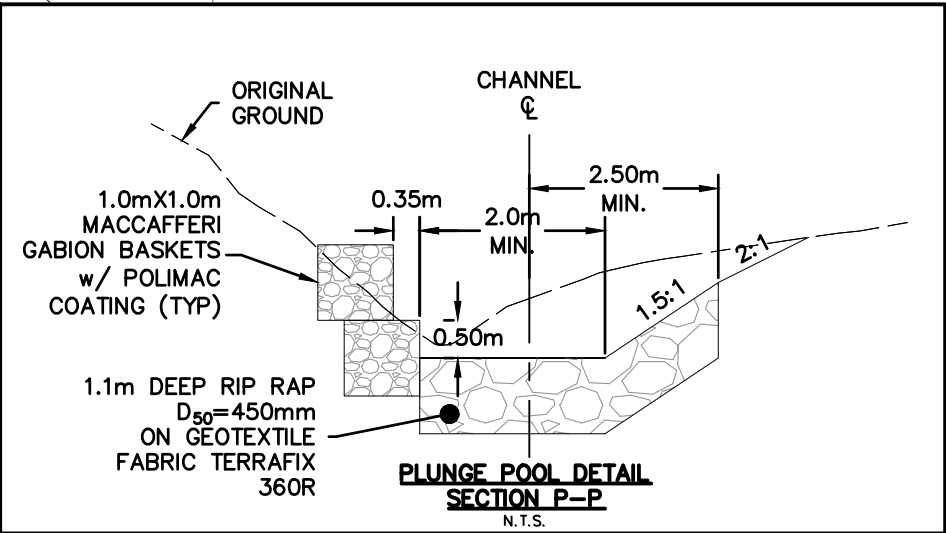
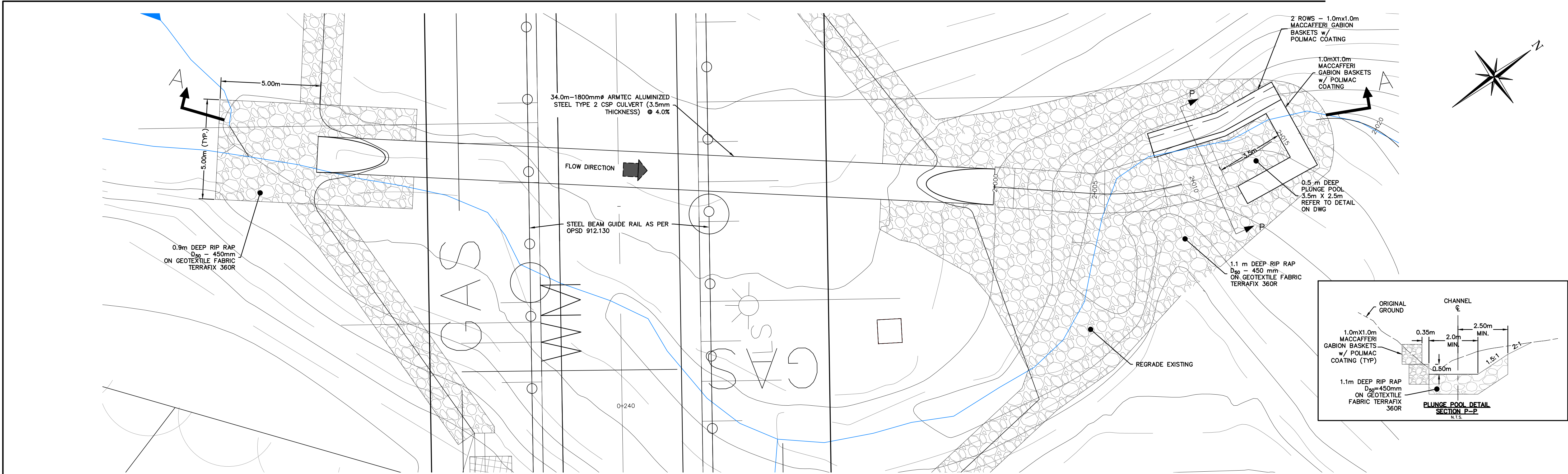
HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

CONSTRUCTION NOTES  
& STANDARD DETAILS



|          |        |           |        |         |          |
|----------|--------|-----------|--------|---------|----------|
| Drawn By | D.H.F. | Design By | D.H.F. | Project | 109-4336 |
| Check By | J.M.P. | Check By  | J.M.P. | Scale   | N/A      |
|          |        |           |        | Drawing | 109      |





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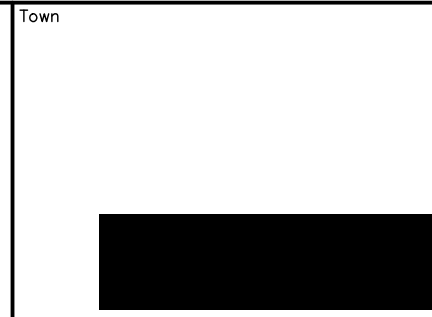
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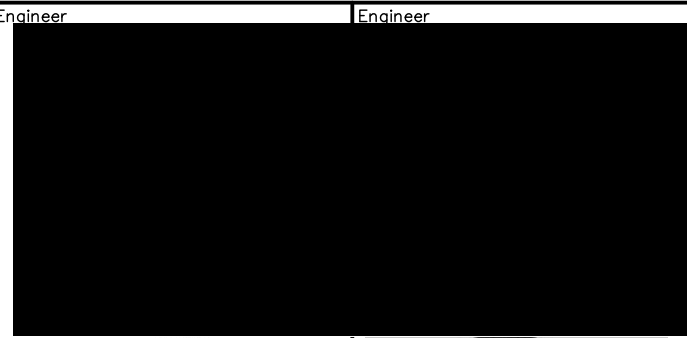
**TEMPORARY BENCHMARKS**

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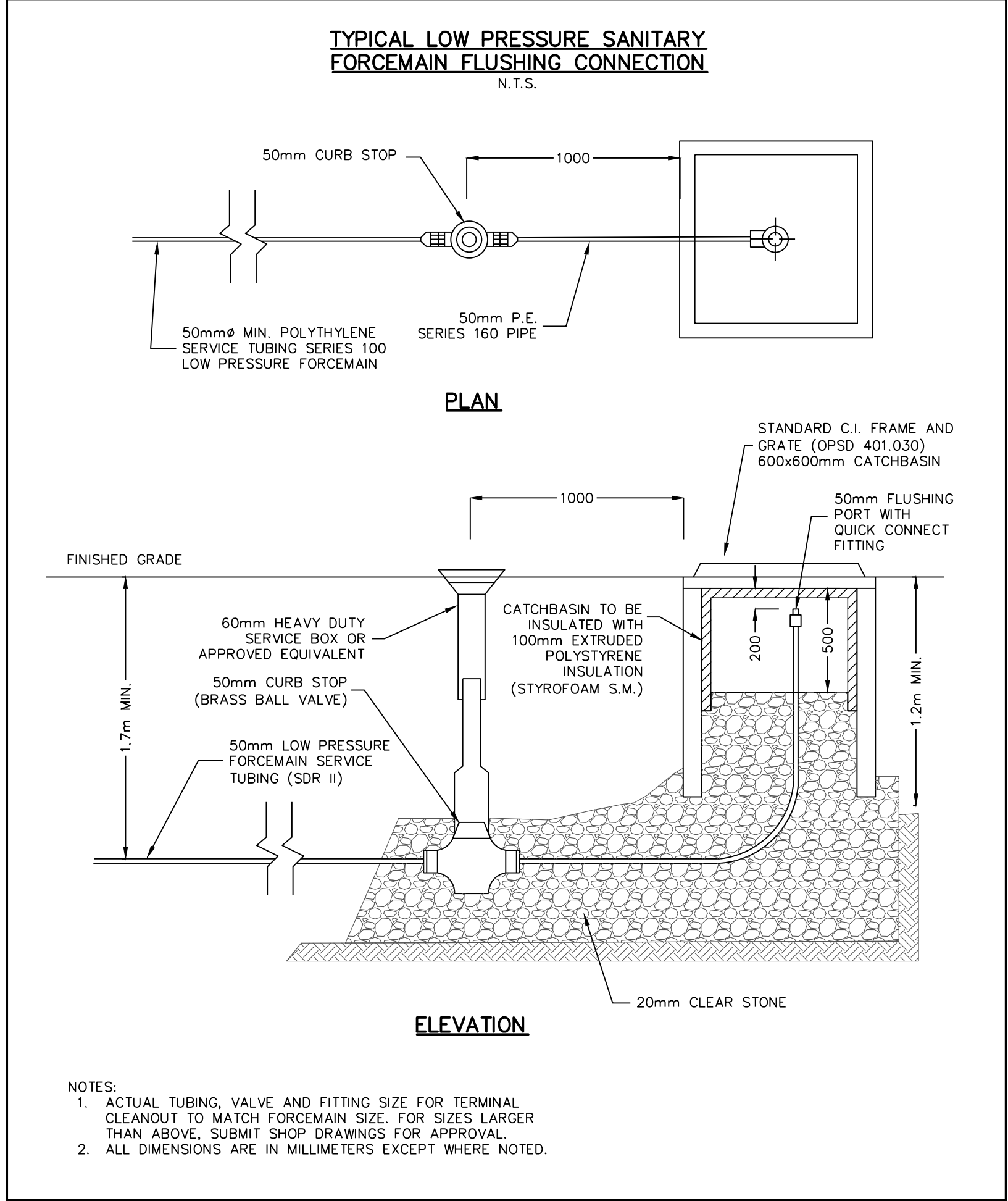
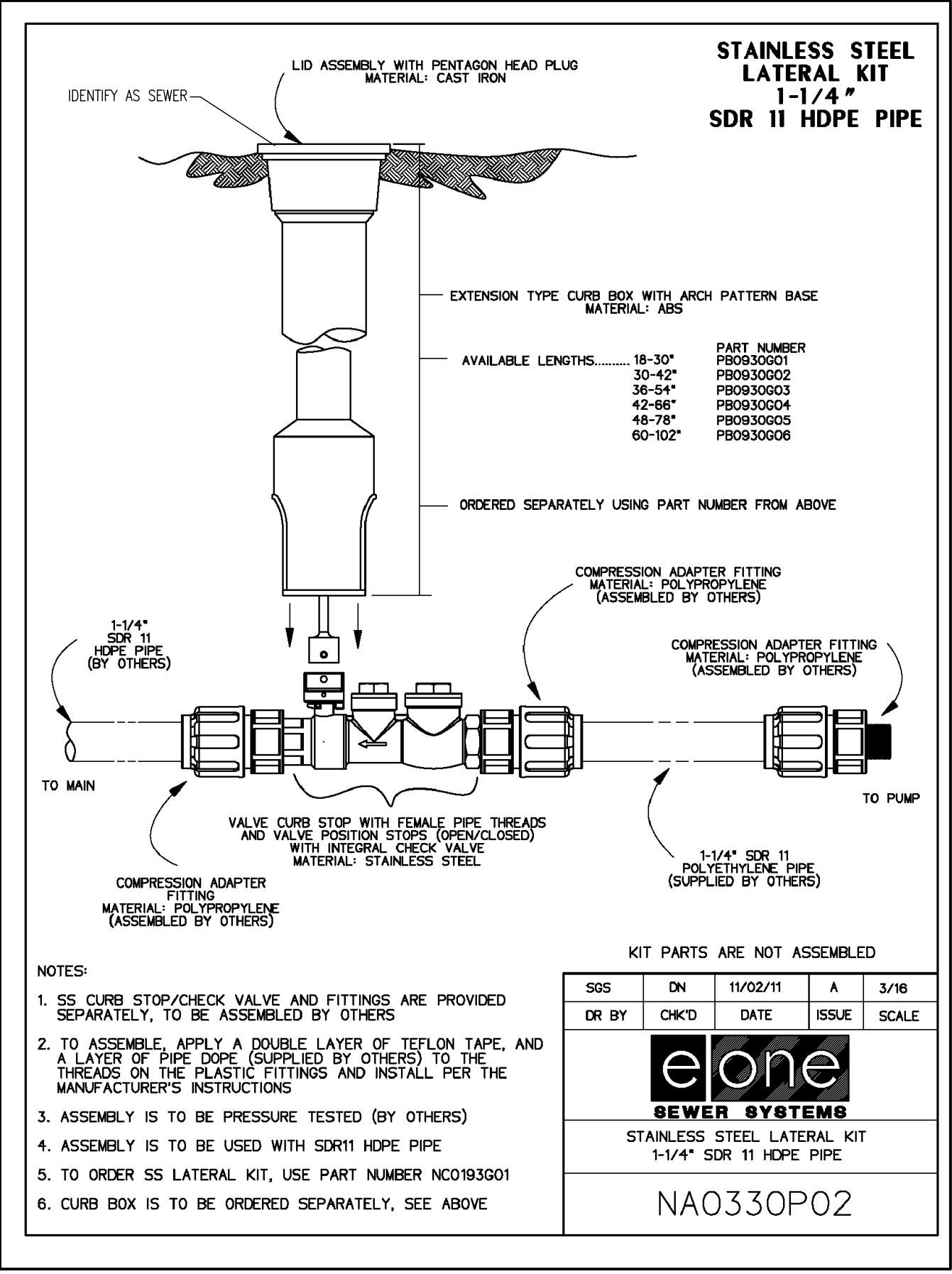
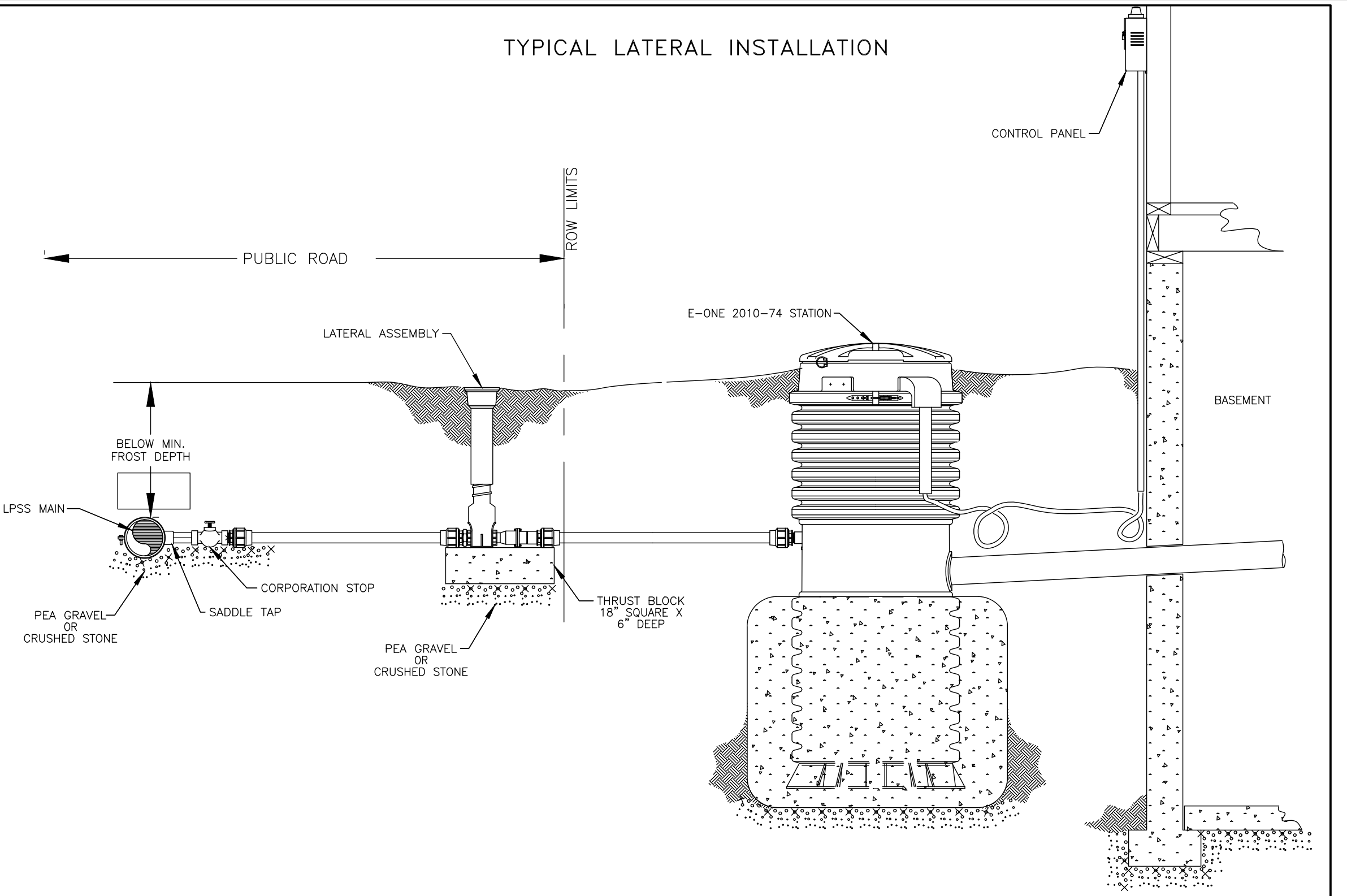
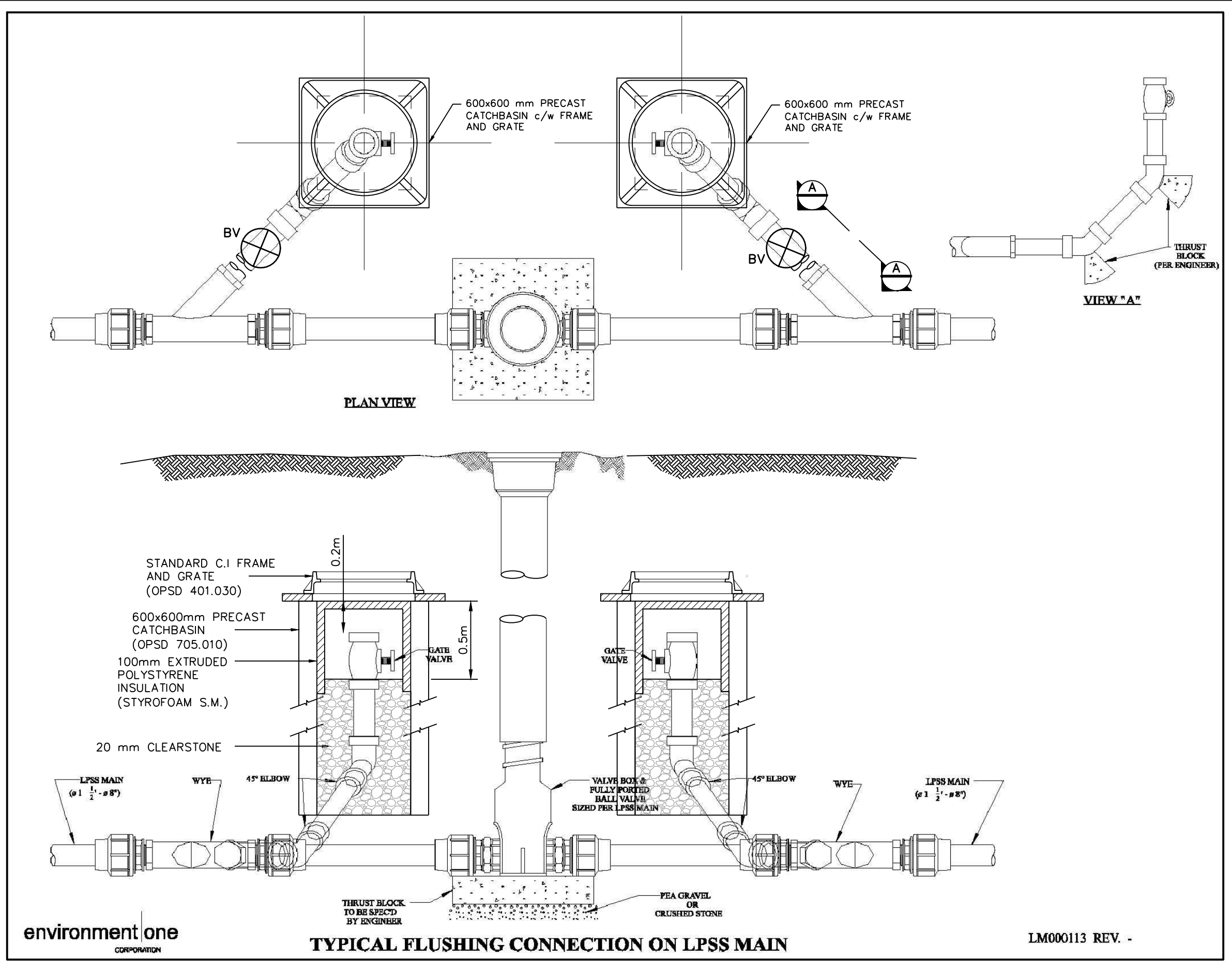


HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

STREET 'A' 1800 mmØ  
CULVERT



|          |             |           |             |         |          |
|----------|-------------|-----------|-------------|---------|----------|
| Drawn By | N.L./M.V.R. | Design By | C.F.C./B.H. | Project | 109-4336 |
| Check By | R.W.        | Check By  | B.H.        | Scale   | 1:100    |
|          |             |           |             | Drawing | 111      |



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ELEVATION = 212.226m

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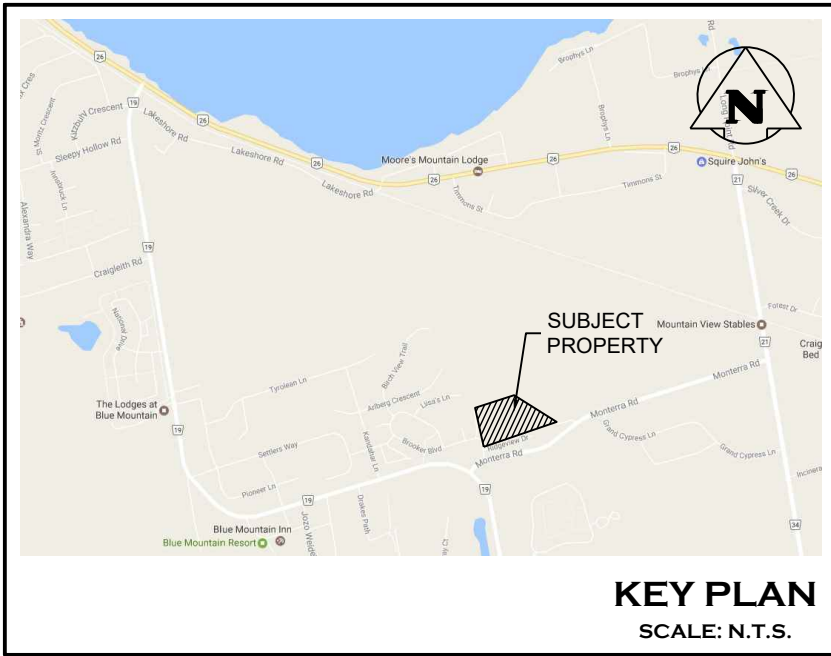
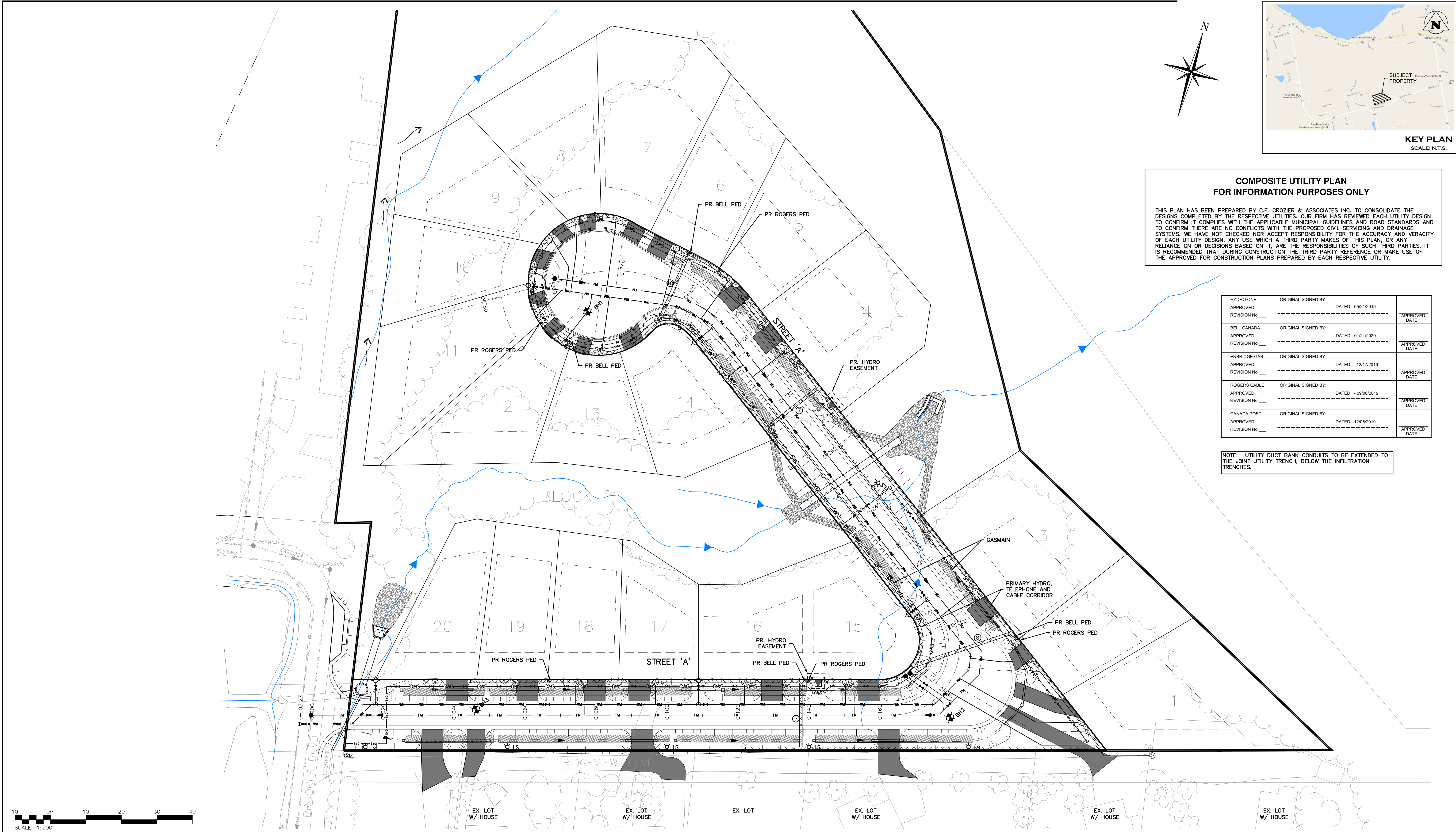
Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

SANITARY SEWER  
STANDARD DETAILS





**COMPOSITE UTILITY PLAN  
FOR INFORMATION PURPOSES ONLY**

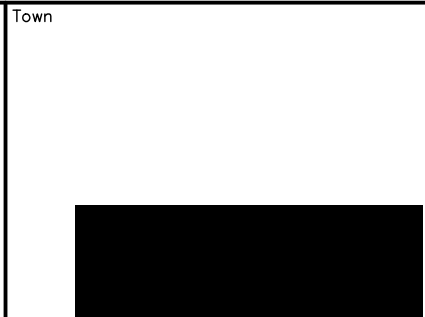
THIS PLAN HAS BEEN PREPARED BY C.F. CROZIER & ASSOCIATES INC. TO CONSOLIDATE THE DESIGNS COMPLETED BY THE RESPECTIVE UTILITIES. OUR FIRM HAS REVIEWED EACH UTILITY DESIGN TO CONFIRM IT COMPLIES WITH THE APPLICABLE MUNICIPAL GUIDELINES AND ROAD STANDARDS AND TO CONFIRM THERE ARE NO CONFLICTS WITH THE PROPOSED CIVIL SERVING AND DRAINAGE SYSTEMS. WE HAVE NOT CHECKED NOR ACCEPT RESPONSIBILITY FOR THE ACCURACY AND VERACITY OF EACH UTILITY DESIGN. ANY USE WHICH A THIRD PARTY MAKES OF THIS PLAN, OR ANY RELIANCE ON OR DECISIONS BASED ON IT, ARE THE RESPONSIBILITIES OF SUCH THIRD PARTIES. IT IS RECOMMENDED THAT DURING CONSTRUCTION THE THIRD PARTY REFERENCE OR MAKE USE OF THE APPROVED FOR CONSTRUCTION PLANS PREPARED BY EACH RESPECTIVE UTILITY.

|                                                |                                               |                        |
|------------------------------------------------|-----------------------------------------------|------------------------|
| HYDRO ONE<br>APPROVED<br>REVISION No. _____    | ORIGINAL SIGNED BY: _____<br>DATED 05/21/2019 | APPROVED<br>DATE _____ |
| BELL CANADA<br>APPROVED<br>REVISION No. _____  | ORIGINAL SIGNED BY: _____<br>DATED 01/21/2020 | APPROVED<br>DATE _____ |
| ENBRIDGE GAS<br>APPROVED<br>REVISION No. _____ | ORIGINAL SIGNED BY: _____<br>DATED 12/17/2019 | APPROVED<br>DATE _____ |
| ROGERS CABLE<br>APPROVED<br>REVISION No. _____ | ORIGINAL SIGNED BY: _____<br>DATED 09/06/2019 | APPROVED<br>DATE _____ |
| CANADA POST<br>APPROVED<br>REVISION No. _____  | ORIGINAL SIGNED BY: _____<br>DATED 12/05/2019 | APPROVED<br>DATE _____ |

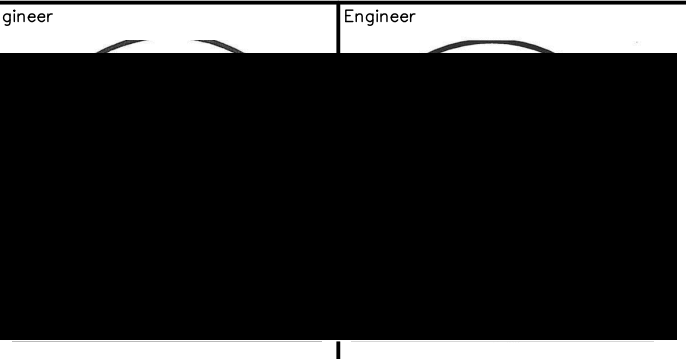
NOTE: UTILITY DUCT BANK CONDUITS TO BE EXTENDED TO THE JOINT UTILITY TRENCH, BELOW THE INFILTRATION TRENCHES.

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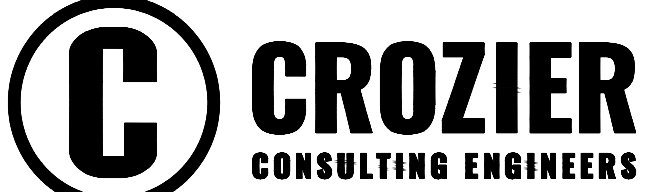


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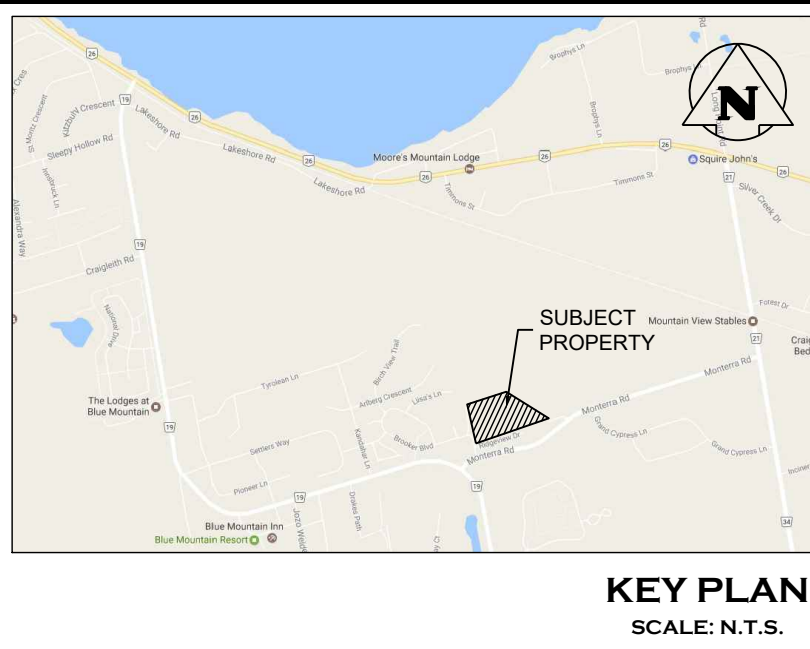
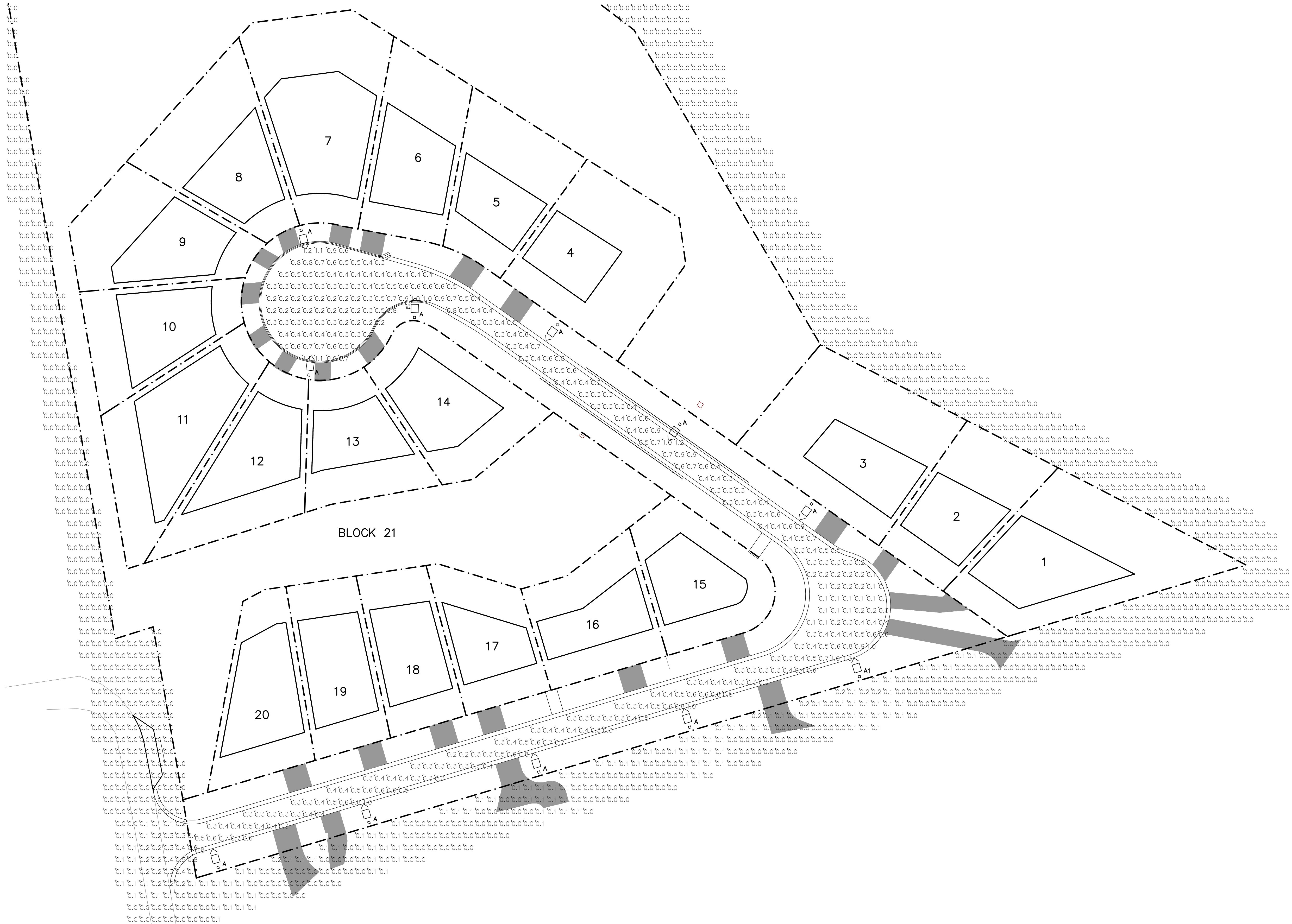


**HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS**

**COMPOSITE UTILITY PLAN**



Drawn By: N.L./M.V.R. Design By: C.F.C./B.H. Project: 109-4336  
Check By: R.W. Check By: B.H. Scale: 1:500 Drawing: 114



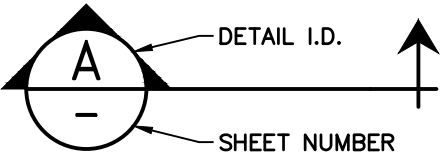
| ELECTRICAL LEGEND |                            |
|-------------------|----------------------------|
| LIGHTING          |                            |
|                   | POLE MOUNTED LIGHT FIXTURE |
| LINETYPES         |                            |
|                   | PROPERTY LINE              |



| No. | ISSUE / REVISION                 | DATE:       |
|-----|----------------------------------|-------------|
| 1   | *NOT ISSUED FOR THIS SUBMISSION* | AUG/03/2018 |
| 2   | ISSUED FOR 3rd SUBMISSION        | SEP/26/2019 |
| 3   | *NOT ISSUED FOR THIS SUBMISSION* | JAN/21/2020 |
| 4   | ISSUED FOR 5th SUBMISSION        | MAY/01/2020 |
| 5   | ISSUED FOR 6th SUBMISSION        | FEB/25/2021 |
| 6   | ISSUED FOR 7th SUBMISSION        | AUG/27/2021 |
| 7   | ISSUED FOR 8th SUBMISSION        | FEB/04/2022 |
| 8   | ISSUED FOR 9th SUBMISSION        | MAY/04/2023 |

North

Engineer



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HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

SITE PLAN – PHOTOMETRIC



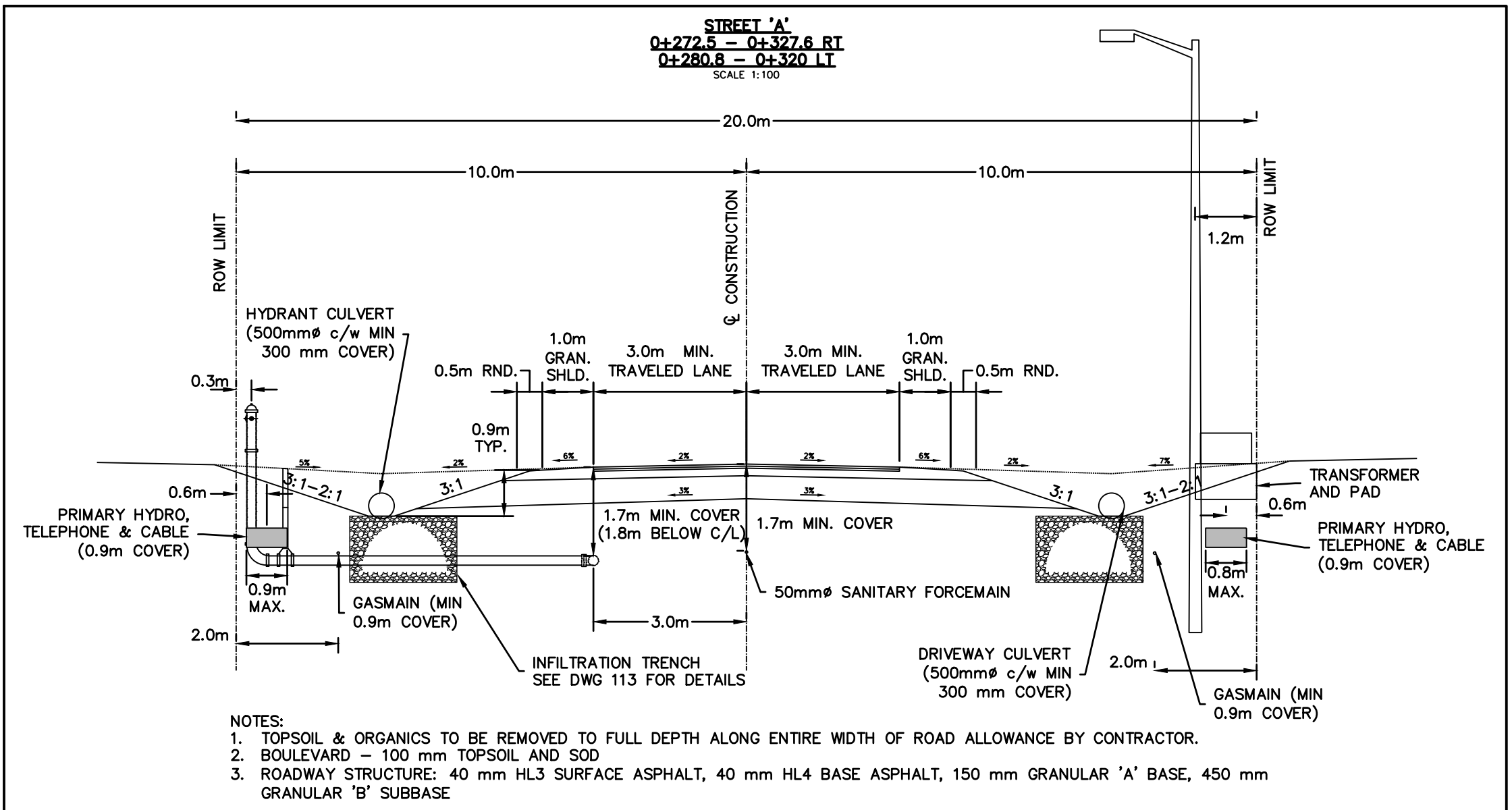
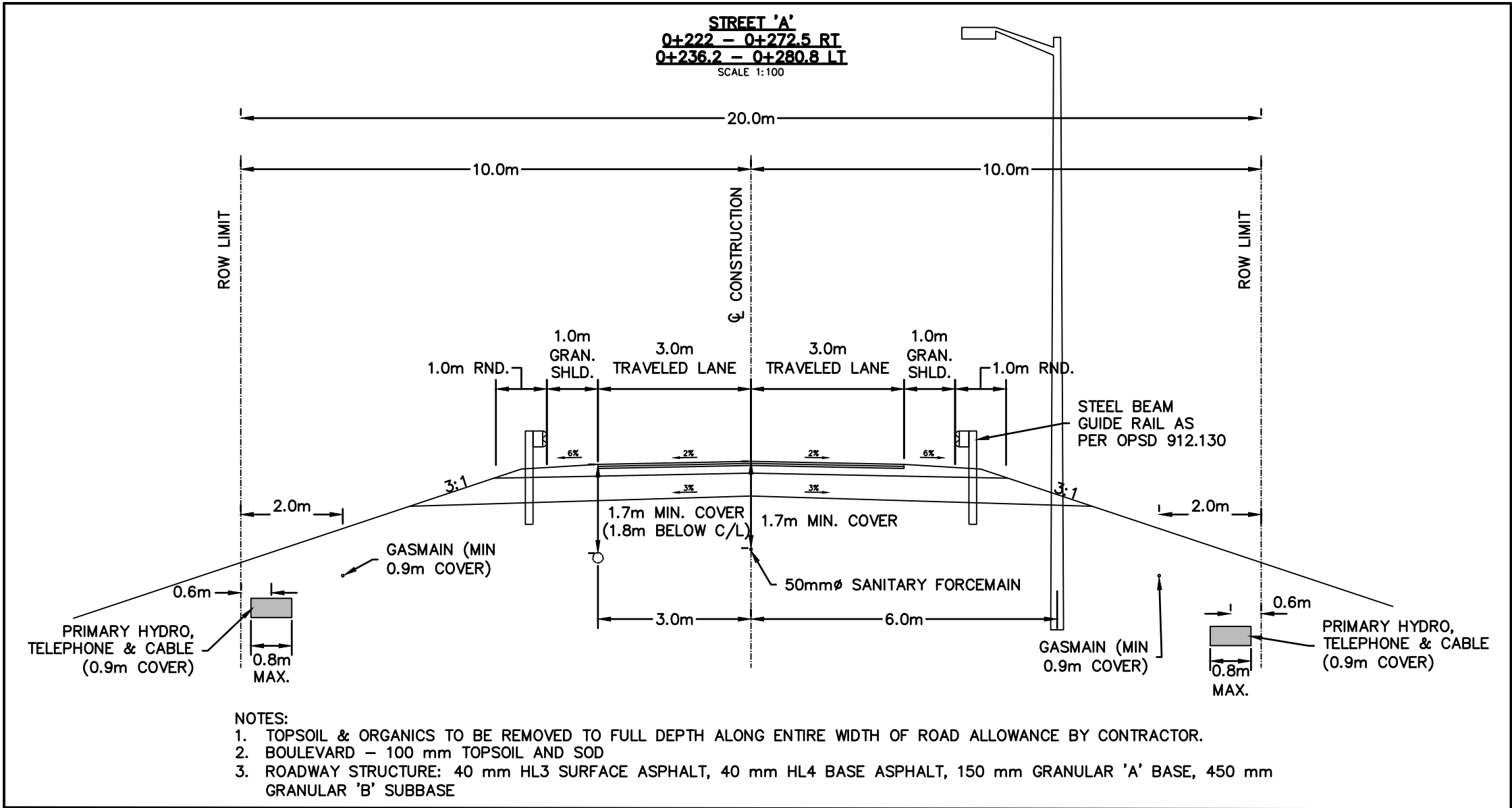
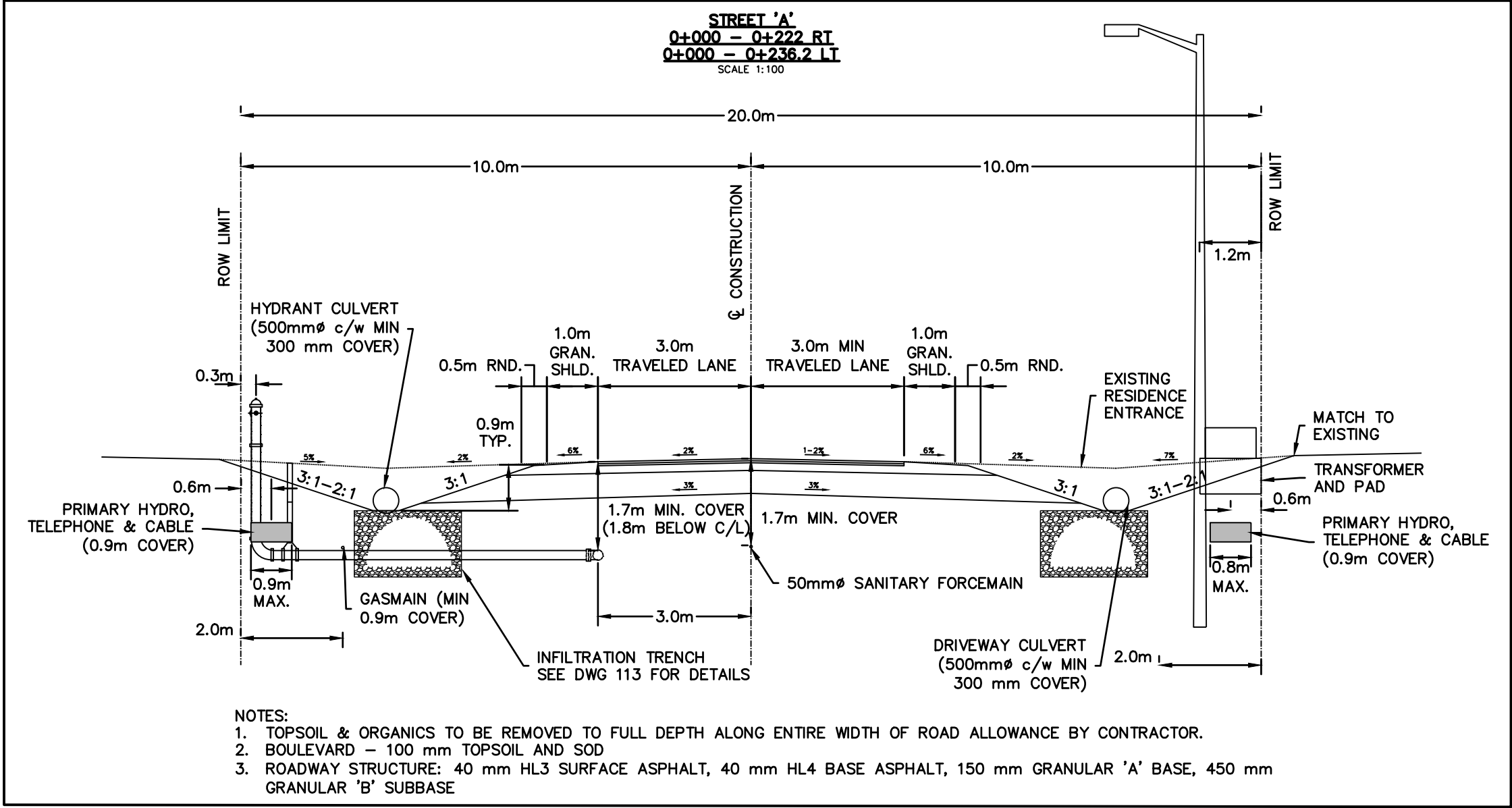
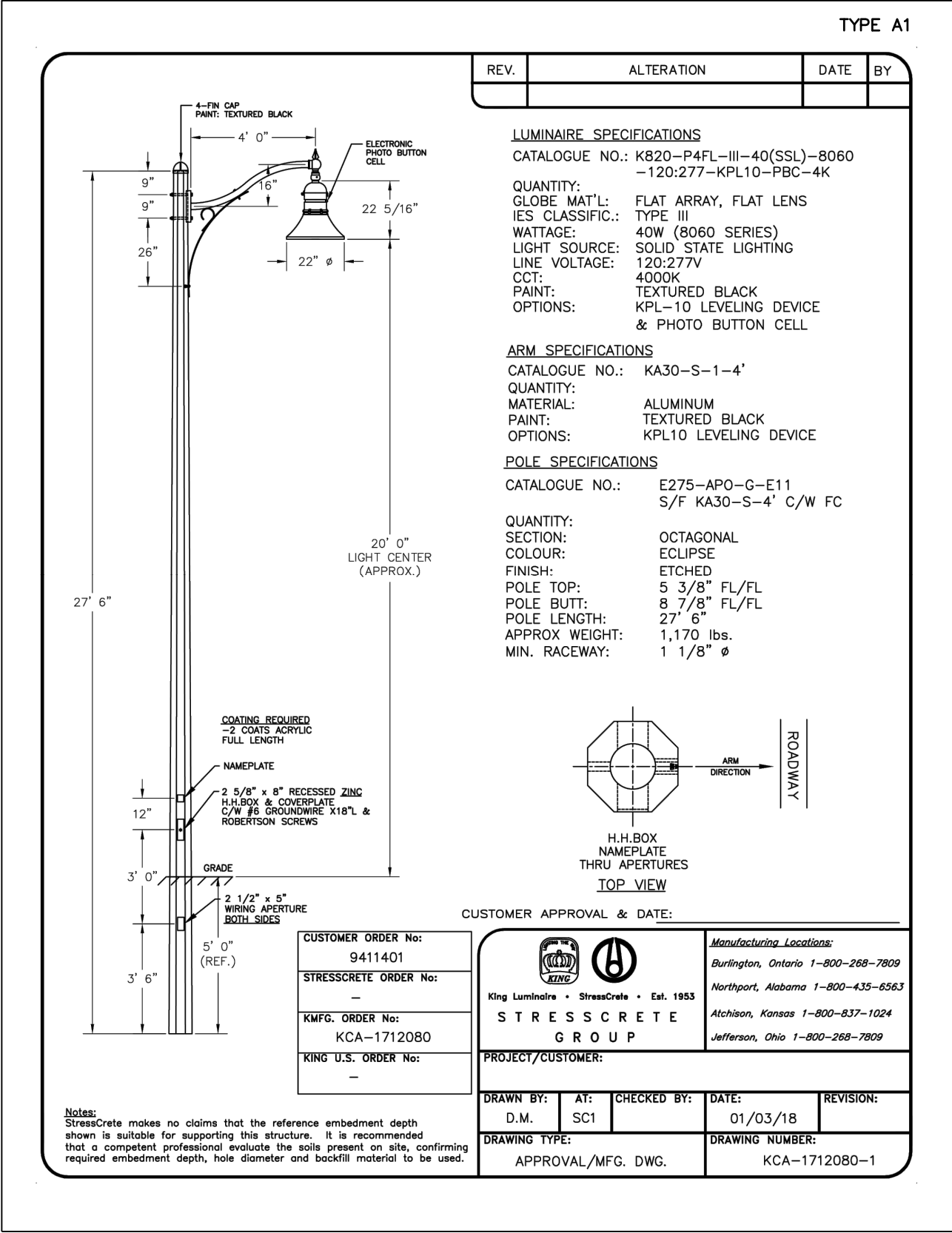
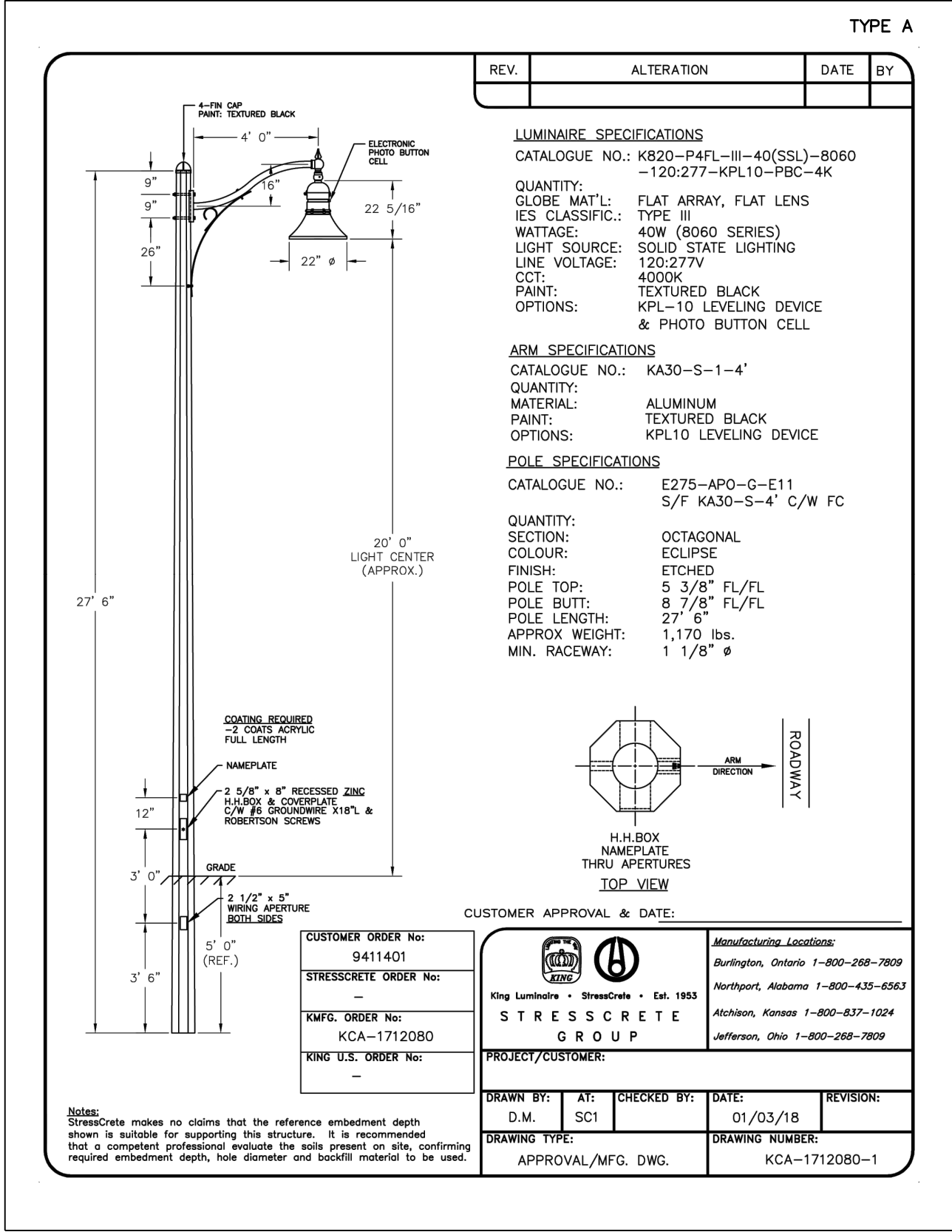
THE HARBOUREEDGE BUILDING,  
40 HURON STREET, SUITE 301,  
COLLINGWOOD, ON L9Y 4R3  
705 446-3510 T  
705 446-3520 F  
WWW.CFCROZIER.CA  
INFO@CFCROZIER.CA

|          |       |           |       |         |          |
|----------|-------|-----------|-------|---------|----------|
| Drawn By | J.R.B | Design By | J.R.B | Project | 109-4336 |
| Scale    | 1:500 | Check By  | P.W   | Drawing | E100     |

SITE PLAN – PHOTOMETRIC

SCALE: 1:500





| LUMINAIRE SCHEDULE |       |              |                                             |                   |                          |         |                                                                              |
|--------------------|-------|--------------|---------------------------------------------|-------------------|--------------------------|---------|------------------------------------------------------------------------------|
| SYMBOL             | LABEL | MANUFACTURER | CATALOG NUMBER                              | LIGHT LOSS FACTOR | MOUNTING HEIGHT          | WATTAGE | DESCRIPTION                                                                  |
| □ >                | A     | KING         | K802-P4FL-III-40(SSL)-8060-120:277-KPL10-4K | 0.81              | MOUNTED AT 20' ON 4' ARM | 40W     | K820 SERIES, 4000K, TYPE III, C/W KPL-10 LEVELING DEVICE & PHOTO BUTTON CELL |
| □ >                | A1    | KING         | K802-P4FL-III-60(SSL)-8060-120:277-KPL10-4K | 0.81              | MOUNTED AT 20' ON 4' ARM | 60W     | K820 SERIES, 4000K, TYPE III, C/W KPL-10 LEVELING DEVICE & PHOTO BUTTON CELL |

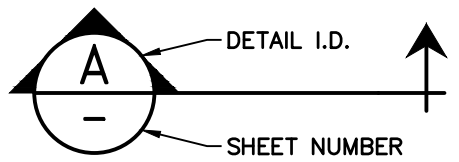
THE FOLLOWING NOTATIONS APPLY TO ALL LUMINAIRES IN SCHEDULE, UNLESS OTHERWISE NOTED:

- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE PHOTOCELLS AS REQUIRED. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH LIGHT MANUFACTURER.

| STATISTICS SCHEDULE |        |        |        |        |         |         |
|---------------------|--------|--------|--------|--------|---------|---------|
| DESCRIPTION         | SYMBOL | AVG    | MAX    | MIN    | AVG/MIN | MAX/AVG |
| STREET              | X      | 0.4 fc | 1.3 fc | 0.1 fc | 4.4:1   | 3.0:1   |

| No. | ISSUE / REVISION                 | DATE:       |
|-----|----------------------------------|-------------|
| 1   | *NOT ISSUED FOR THIS SUBMISSION* | AUG/03/2018 |
| 2   | ISSUED FOR 3rd SUBMISSION        | SEP/26/2019 |
| 3   | *NOT ISSUED FOR THIS SUBMISSION* | JAN/21/2020 |
| 4   | ISSUED FOR 5th SUBMISSION        | MAY/01/2020 |
| 5   | ISSUED FOR 6th SUBMISSION        | FEB/25/2021 |
| 6   | ISSUED FOR 7th SUBMISSION        | AUG/27/2021 |
| 7   | ISSUED FOR 8th SUBMISSION        | FEB/04/2022 |
| 8   | ISSUED FOR 9th SUBMISSION        | MAY/04/2023 |

|       |          |
|-------|----------|
| North | Engineer |
|       |          |



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Project

HILLSIDE SUBDIVISION  
TOWN OF THE BLUE MOUNTAINS

Drawing

LIGHTING DETAILS AND SCHEDULES

**C CROZIER**  
CONSULTING ENGINEERS

THE HARBOUREDGE BUILDING,  
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| Drawn By | J.R.B  | Design By | J.R.B | Project | 109-4336 |
| Scale    | N.T.S. | Check By  | P.W.  | Drawing | E101     |

